



**SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch**

EMC-TRF-01 Rev 1.0

Report No.: GZCR210802080507

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FCC ID: 2AFD7-PST3

## TEST REPORT

**Application No.:** GZCR2108020805AT  
**Applicant:** Poynt, LLC  
**Address of Applicant:** 3032 Bunker Hill Lane Santa Clara California 95054 United States  
**Manufacturer:** Beijing Wiseasy Technology CO., Ltd.  
**Address of Manufacturer:** 7thFloor, Block B, Wangxin Mansion, No.28 Xiaoyun Road, Chaoyang District, 100027, Beijing, China.  
**Factory:** BYD Precision Manufacture Co., Ltd.  
**Address of factory:** Baolong Industrial Park, 3001 Baohe Rd., Longgang District, Shenzhen, P.R.C

**Equipment Under Test (EUT):**

**EUT Name:** Poynt Smart Terminal V3.0  
**Model No.:** PST3  
**Trade mark:** POYNT  
**Standard(s) :** 47 CFR Part 2  
47 CFR Part 22 subpart H  
47 CFR Part 24 subpart E  
47 CFR Part 27 subpart C  
47 CFR Part 90 subpart R  
47 CFR Part 90 subpart S

**Date of Receipt:** 2021-08-04  
**Date of Test:** 2021-08-04 to 2021-08-24  
**Date of Issue:** 2021-08-31

|                     |             |
|---------------------|-------------|
| <b>Test Result:</b> | <b>Pass</b> |
|---------------------|-------------|

\* In the configuration tested, the EUT complied with the standards specified above.

Kobe Jian  
EMC Laboratory Manager



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| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2021-08-31 |          | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |

|                         |  |                                                                                     |  |
|-------------------------|--|-------------------------------------------------------------------------------------|--|
| Authorized for issue by |  |                                                                                     |  |
|                         |  |  |  |
|                         |  | Lily Kuang/Project Engineer                                                         |  |
|                         |  |  |  |
|                         |  | Ricky Liu/Reviewer                                                                  |  |



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## 2 Test Summary

### LTE Band 5/26(824MHz-849MHz)

| Test Item                                        | FCC Rule No.       | Requirements                                                                                       | Verdict |
|--------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§22.913 | ERP≤7W (LTE Band 5, 26(824MHz-829MHz))                                                             | PASS    |
| Peak-Average Ratio                               | §2.1046<br>§22.913 | ≤13dB                                                                                              | PASS    |
| Modulation Characteristics                       | §2.1047            | Digital modulation                                                                                 | PASS    |
| Bandwidth                                        | §2.1049(h)         | OBW: No limit<br>EBW: No limit                                                                     | PASS    |
| Band Edge Compliance                             | §2.1051<br>§22.917 | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.           | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§22.917 | ≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges. | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§22.917 | ≤ -13dBm/100KHz                                                                                    | PASS    |
| Frequency stability                              | §2.1055<br>§22.355 | ≤ ±2.5ppm                                                                                          | PASS    |

### LTE Band 2/25

| Test Item                                        | FCC Rule No.       | Requirements                                                                                    | Verdict |
|--------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§24.232 | EIRP≤2W (LTE Band 2, 25)                                                                        | PASS    |
| Peak-Average Ratio                               | §2.1046<br>§24.232 | ≤13dB                                                                                           | PASS    |
| Modulation Characteristics                       | §2.1047            | Digital modulation                                                                              | PASS    |
| Bandwidth                                        | §2.1049(h)         | OBW: No limit<br>EBW: No limit                                                                  | PASS    |
| Band Edge Compliance                             | §2.1051<br>§24.238 | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.        | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§24.238 | ≤ -13 dBm/1MHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges. | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§24.238 | ≤ -13dBm/1MHz                                                                                   | PASS    |
| Frequency stability                              | §2.1055<br>§24.235 | ≤ ±2.5ppm                                                                                       | PASS    |



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## LTE Band 4

| Test Item                                        | FCC Rule No.         | Requirements                                                                                    | Verdict |
|--------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§27.50(d) | EIRP≤1W (LTE Band 4)                                                                            | PASS    |
| Peak-Average Ratio                               | §2.1046<br>§27.50(d) | ≤13dB                                                                                           | PASS    |
| Modulation Characteristics                       | §2.1047              | Digital modulation                                                                              | PASS    |
| Bandwidth                                        | §2.1049(h)           | OBW: No limit<br>EBW: No limit                                                                  | PASS    |
| Band Edge Compliance                             | §2.1051<br>§27.53(h) | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.        | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§27.53(h) | ≤ -13 dBm/1MHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges. | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§27.53(h) | ≤ -13dBm/1MHz                                                                                   | PASS    |
| Frequency stability                              | §2.1055<br>§27.54    | ≤ ±2.5ppm                                                                                       | PASS    |

## LTE Band 7/41

| Test Item                                        | FCC Rule No.         | Requirements                                                                                                                                                          | Verdict |
|--------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§27.50(h) | EIRP≤2W (LTE Band 7, 41)                                                                                                                                              | PASS    |
| Peak-Average Ratio                               | §2.1046<br>§27.50(a) | ≤13dB                                                                                                                                                                 | PASS    |
| Modulation Characteristics                       | §2.1047              | Digital modulation                                                                                                                                                    | PASS    |
| Bandwidth                                        | §2.1049(h)           | OBW: No limit<br>EBW: No limit                                                                                                                                        | PASS    |
| Band Edge Compliance                             | §2.1051<br>§27.53(m) | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block (LTE Band41)<br>≤ -13dBm (LTE Band7, <5.5MHz)<br>≤ -25dBm(LTE Band7, ≥5.5MHz) | PASS    |



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| Spurious emissions at antenna terminals | §2.1051<br>§27.53(m) | $\leq -13\text{dBm}/1\%*\text{EBW}$ , in 1 MHz bands immediately outside and adjacent to the frequency block (LTE Band41)<br>$\leq -13\text{dBm}$ (LTE Band7, $<5.5\text{MHz}$ )<br>$\leq -25\text{dBm}$ (LTE Band7, $\geq 5.5\text{MHz}$ ) | PASS |
| Field strength of spurious radiation    | §2.1053<br>§27.53(m) | $\leq -13\text{dBm}/1\%*\text{EBW}$ , in 1 MHz bands immediately outside and adjacent to the frequency block (LTE Band41)<br>$\leq -13\text{dBm}$ (LTE Band7, $<5.5\text{MHz}$ )<br>$\leq -25\text{dBm}$ (LTE Band7, $\geq 5.5\text{MHz}$ ) | PASS |
| Frequency stability                     | §2.1055<br>§27.54    | Within authorized bands of operation/ frequency block.                                                                                                                                                                                      | PASS |

## LTE Band 12/17

| Test Item                                        | FCC Rule No.         | Requirements                                                                                                         | Verdict |
|--------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§27.50(c) | $\text{ERP} \leq 3\text{W}$ (LTE Band 12,17)                                                                         | PASS    |
| Peak-Average Ratio                               | §2.1046<br>§27.50(c) | $\leq 13\text{dB}$                                                                                                   | PASS    |
| Modulation Characteristics                       | §2.1047              | Digital modulation                                                                                                   | PASS    |
| Bandwidth                                        | §2.1049(h)           | OBW: No limit<br>EBW: No limit                                                                                       | PASS    |
| Band Edge Compliance                             | §2.1051<br>§27.53(g) | $\leq -13\text{dBm}/1\%*\text{EBW}$ , in 1 MHz bands immediately outside and adjacent to the frequency block.        | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§27.53(g) | $\leq -13\text{dBm}/100\text{kHz}$ , from 9 kHz to 10th harmonics but outside authorized operating frequency ranges. | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§27.53(g) | $\leq -13\text{dBm}/100\text{KHz}$                                                                                   | PASS    |
| Frequency stability                              | §2.1055<br>§27.54    | $\leq \pm 2.5\text{ppm}$                                                                                             | PASS    |



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LTE Band 13

| Test Item                                        | FCC Rule No.            | Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Verdict |
|--------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§27.50(b)    | ERP≤3W (LTE Band 13)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PASS    |
| Peak-Average Ratio                               | §2.1046<br>§27.50(b)    | ≤13dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PASS    |
| Modulation Characteristics                       | §2.1047                 | Digital modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PASS    |
| Bandwidth                                        | §2.1049(h)              | OBW: No limit<br>EBW: No limit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PASS    |
| Band Edge Compliance                             | §2.1051<br>§27.53(c)    | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§27.53(c)(f) | ≤-13 dBm/100 kHz, from 9 kHz to 10 <sup>th</sup> harmonics but outside authorized operating frequency ranges. On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.<br>For operations in the 746-758 MHz, 775-788MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80dBW EIRP for discrete emissions of less than 700 Hz bandwidth. | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§27.53(c)(f) | ≤-13 dBm/100 kHz.<br>For operations in the 746-758 MHz, 775-788MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80dBW EIRP for discrete emissions of less than 700 Hz bandwidth.                                                                                                                                                                                                                                                                | PASS    |
| Frequency stability                              | §2.1055<br>§27.54       | Within authorized bands of operation/ frequency block.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PASS    |





LTE Band 14

| Test Item                                        | FCC Rule No.             | Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                              | Verdict |
|--------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§90.365       | ERP≤3W (LTE Band 14)                                                                                                                                                                                                                                                                                                                                                                                                                                      | PASS    |
| Peak-Average Ratio                               | §2.1046                  | ≤13dB                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PASS    |
| Modulation Characteristics                       | §2.1047                  | Digital modulation                                                                                                                                                                                                                                                                                                                                                                                                                                        | PASS    |
| Bandwidth                                        | §2.1049(h)               | OBW: No limit<br>EBW: No limit                                                                                                                                                                                                                                                                                                                                                                                                                            | PASS    |
| Band Edge Compliance                             | §2.1051<br>§90.543(e)    | (1) On all frequencies between 769-775MHz and 799-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations. (2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations. (3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log(P)$ dB. | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§90.543(c)(f) | ≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges. For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated                                                                                                                                                                 | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§90.543(c)(f) | ≤-13 dBm/100 kHz.<br>For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.                                                                                                                                     | PASS    |
| Frequency stability                              | §2.1055<br>§90.213       | ≤ ±2.5ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PASS    |
| Emission Mask                                    | §2.1051<br>§90.210(n)    | Emission Mask B                                                                                                                                                                                                                                                                                                                                                                                                                                           | PASS    |





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## LTE Band 26(814MHz-824MHz)

| Test Item                                        | FCC Rule No.       | Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Verdict |
|--------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Effective (Isotropic) Radiated Power Output Data | §2.1046<br>§90.635 | ERP≤100W (LTE Band 26(814MHz-824MHz))                                                                                                                                                                                                                                                                                                                                                                                                                           | PASS    |
| Peak-Average Ratio                               | §2.1046            | ≤13dB                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PASS    |
| Modulation Characteristics                       | §2.1047            | Digital modulation                                                                                                                                                                                                                                                                                                                                                                                                                                              | PASS    |
| Bandwidth                                        | §2.1049(h)         | OBW: No limit<br>EBW: No limit                                                                                                                                                                                                                                                                                                                                                                                                                                  | PASS    |
| Band Edge Compliance                             | §2.1051<br>§90.691 | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.                                                                                                                                                                                                                                                                                                                                                                        | PASS    |
| Spurious emissions at antenna terminals          | §2.1051<br>§90.691 | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.                                                                                                                                                                                                                                                                                                                                                                        | PASS    |
| Field strength of spurious radiation             | §2.1053<br>§90.691 | ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.                                                                                                                                                                                                                                                                                                                                                                        | PASS    |
| Frequency stability                              | §2.1055<br>§90.213 | ≤ ±2.5ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PASS    |
| Emission Mask                                    | §2.1051<br>§90.691 | For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50+10\log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. | PASS    |



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SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch Testing Center EMC Laboratory

No.198 Kaizhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



## 4 General Information

### 4.1 Details of E.U.T.

Power supply:

Switching Adapter

Model: ASSA13W-050300

Input: AC 100-240V, 50/60Hz, 0.6A

Output: DC 5.0V, 3.0A, 15.0W

Battery

DESAY Model No.: 2532002

DC 3.7V, 5900mAh, 21.83Wh

DOCKING STATION

Rating: DC 5V, 3A

Test Voltage:

AC 120V, 60Hz or AC 240V, 50Hz

Note: Both nominal AC 120V, 60Hz and AC 240 V, 50Hz are required for testing in accordance with FCC KDB174176, this report only shows the results of the worst test result(AC 120V, 60Hz);

Cable(s):

DC cable:98cm unshielded

Sample Type:

Portable production

LTE Operation Frequency Band:

LTE FDD Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 41

Modulation Type:

QPSK, 16QAM

LTE Power Class:

Level 3

Antenna Type:

FPC

Antenna Gain:

-1dBi;



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## 4.2 Test Frequency

| Test Mode      | Nominal Bandwidth (MHz) | RF Channel |            |          |
|----------------|-------------------------|------------|------------|----------|
|                |                         | Low (L)    | Middle (M) | High (H) |
|                |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 2 | 1.4                     | 1850.7     | 1880       | 1909.3   |
|                | 3                       | 1851.5     | 1880       | 1908.5   |
|                | 5                       | 1852.5     | 1880       | 1907.5   |
|                | 10                      | 1855.0     | 1880       | 1905.0   |
|                | 15                      | 1857.5     | 1880       | 1902.5   |
|                | 20                      | 1860.0     | 1880       | 1900.0   |
| Test Mode      | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                |                         | Low (L)    | Middle (M) | High (H) |
|                |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 4 | 1.4                     | 1710.7     | 1732.5     | 1754.3   |
|                | 3                       | 1711.5     | 1732.5     | 1753.5   |
|                | 5                       | 1712.5     | 1732.5     | 1752.5   |
|                | 10                      | 1715.0     | 1732.5     | 1750.0   |
|                | 15                      | 1717.5     | 1732.5     | 1747.5   |
|                | 20                      | 1720.0     | 1732.5     | 1745.0   |
| Test Mode      | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                |                         | Low (L)    | Middle (M) | High (H) |
|                |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 5 | 1.4                     | 824.7      | 836.5      | 848.3    |
|                | 3                       | 825.5      | 836.5      | 847.5    |
|                | 5                       | 826.5      | 836.5      | 846.5    |
|                | 10                      | 829.0      | 836.5      | 844.0    |
| Test mode:     | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                |                         | Low (L)    | Middle (M) | High (H) |
|                |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 7 | 5                       | 2502.5     | 2535.0     | 2567.5   |
|                | 10                      | 2505.0     | 2535.0     | 2565.0   |
|                | 15                      | 2507.5     | 2535.0     | 2562.5   |
|                | 20                      | 2510.0     | 2535.0     | 2560.0   |







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| Test Mode       | Nominal Bandwidth (MHz) | RF Channel |            |          |
|-----------------|-------------------------|------------|------------|----------|
|                 |                         | Low (L)    | Middle (M) | High (H) |
|                 |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 12 | 1.4                     | 699.7      | 707.5      | 715.3    |
|                 | 3                       | 700.5      | 707.5      | 714.5    |
|                 | 5                       | 701.5      | 707.5      | 713.5    |
|                 | 10                      | 704.0      | 707.5      | 711.0    |
| Test mode:      | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                 |                         | Low (L)    | Middle (M) | High (H) |
|                 |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 13 | 5                       | 779.5      | 782.0      | 784.5    |
|                 | 10                      | /          | 782.0      | /        |
| Test mode:      | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                 |                         | Low (L)    | Middle (M) | High (H) |
|                 |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 14 | 5                       | 790.5      | 793.0      | 795.5    |
|                 | 10                      | /          | 793.0      | /        |
| Test mode:      | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                 |                         | Low (L)    | Middle (M) | High (H) |
|                 |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 17 | 5                       | 706.5      | 710.0      | 713.5    |
|                 | 10                      | 709.0      | 710.0      | 711.0    |
| Test Mode       | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                 |                         | Low (L)    | Middle (M) | High (H) |
|                 |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 25 | 1.4                     | 1850.7     | 1882.5     | 1914.3   |
|                 | 3                       | 1851.5     | 1882.5     | 1913.5   |
|                 | 5                       | 1852.5     | 1882.5     | 1912.5   |
|                 | 10                      | 1855.0     | 1882.5     | 1910.0   |
|                 | 15                      | 1857.5     | 1882.5     | 1907.5   |
|                 | 20                      | 1860.0     | 1882.5     | 1905.0   |



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Guangzhou Branch EMC Laboratory

No. 198 Kazhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com

| Test mode:                        | Nominal Bandwidth (MHz) | RF Channel |            |          |
|-----------------------------------|-------------------------|------------|------------|----------|
|                                   |                         | Low (L)    | Middle (M) | High (H) |
|                                   |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 26a (814MHz-824MHz)* | 1.4                     | 814.7      | 819.0      | 823.3    |
|                                   | 3                       | 815.5      | 819.0      | 822.5    |
|                                   | 5                       | 816.5      | 819.0      | 821.5    |
|                                   | 10                      | /          | 819.0      | /        |
| Test mode:                        | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                                   |                         | Low (L)    | Middle (M) | High (H) |
|                                   |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 26b (824MHz-849MHz)* | 1.4                     | 824.7      | 836.5      | 848.3    |
|                                   | 3                       | 825.5      | 836.5      | 847.5    |
|                                   | 5                       | 826.5      | 836.5      | 846.5    |
|                                   | 10                      | 829.0      | 836.5      | 844.0    |
| Test mode:                        | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                                   |                         | Low (L)    | Middle (M) | High (H) |
|                                   |                         | MHz        | MHz        | MHz      |
| LTE FDD Band 26c (814MHz-849MHz)* | 1.4                     | /          | /          | /        |
|                                   | 3                       | /          | /          | /        |
|                                   | 5                       | /          | /          | /        |
|                                   | 10                      | /          | /          | /        |
|                                   | 15                      | 821.5      | 831.5      | 841.5    |
| Test mode:                        | Nominal Bandwidth (MHz) | RF Channel |            |          |
|                                   |                         | Low (L)    | Middle (M) | High (H) |
|                                   |                         | MHz        | MHz        | MHz      |
| LTE TDD Band 41                   | 5                       | 2498.5     | 2593.0     | 2687.5   |
|                                   | 10                      | 2501.0     | 2593.0     | 2685.0   |
|                                   | 15                      | 2503.5     | 2593.0     | 2682.5   |
|                                   | 20                      | 2506.0     | 2593.0     | 2680.0   |

Note:

The frequency band of LTE Band26a is 814MHz-824MHz;

The frequency band of LTE Band26b is 824MHz-849MHz;

The frequency band of LTE Band26c is 814MHz-849MHz(only for Report Use);

The frequency band of LTE Band41 is 2496MHz-2690MHz;



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#### 4.3 Test Environment

| Environment Parameter | Selected Values During Tests |        |
|-----------------------|------------------------------|--------|
| Relative Humidity     | 52%                          |        |
| Atmospheric Pressure: | 1015Pa                       |        |
| Temperature:          | TL                           | -30°C  |
|                       | TN                           | +20°C  |
|                       | TH                           | +50°C  |
| Voltage:              | VL                           | 3.14 V |
|                       | VN                           | 3.7 V  |
|                       | VH                           | 4.25 V |

NOTE: 1. VL= lower extreme test voltage, VN= nominal voltage, VH= upper extreme test voltage  
TL= lower extreme test temperature, TN= normal temperature, TH= upper extreme test temperature  
2. According to ANSI C63.26 requirements, the limit test temperature should be between -30°C and 50 °C.

#### 4.4 Description of Support Units

The EUT has been tested independent unit.

#### 4.5 Measurement Uncertainty

| No. | Item                            | Measurement Uncertainty |
|-----|---------------------------------|-------------------------|
| 1   | Radio Frequency                 | $7.25 \times 10^{-8}$   |
| 2   | Duty cycle                      | 0.37%                   |
| 3   | Occupied Bandwidth              | 3%                      |
| 4   | RF conducted power              | 0.75dB                  |
| 5   | RF power density                | 2.84dB                  |
| 6   | Conducted Spurious emissions    | 0.75dB                  |
| 7   | RF Radiated power               | 5.14dB (below 1GHz)     |
|     |                                 | 5.08dB (above 1GHz)     |
| 8   | Radiated Spurious emission test | 5.14dB (below 1GHz)     |
|     |                                 | 5.08dB (above 1GHz)     |
| 9   | Temperature test                | 1°C                     |
| 10  | Humidity test                   | 3%                      |
| 11  | Supply voltages                 | 1.5%                    |
| 12  | Time                            | 3%                      |



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Guangzhou Branch Testing Center EEC Laboratory

No.198 Kezhu Road, Science Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



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### 4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,  
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,  
Guangzhou, China 510663

Tel: +86 20 82155555

Fax: +86 20 82075059

No tests were sub-contracted.



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Guangzhou Branch EMC Laboratory

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## 4.7 Test Facility

### • NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

### • ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

### • SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

### • CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

### • FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

### • ISED (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

### • VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

### • CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

## 4.8 Deviation from Standards

None

## 4.9 Abnormalities from Standard Conditions

None





## 5 Equipment List

| RF test system                                    |                         |             |              |            |              |
|---------------------------------------------------|-------------------------|-------------|--------------|------------|--------------|
| Equipment                                         | Manufacturer            | Model No    | Inventory No | Cal Date   | Cal Due Date |
| Power Meter<br>(U2021XA_Ch2)                      | Agilent<br>Technologies | U2021XA_Ch2 | SEM009-02    | 2021-05-19 | 2022-05-18   |
| 6dB Attenuator                                    | HP                      | 8491A       | EMC2062      | 2020-04-15 | 2022-04-14   |
| Test Software JS1120-3                            | HangTianXing            | V2.6        | GZE100-69    | N/A        | N/A          |
| MI CABLE                                          | SGS-EMC                 | 0.8M        | EMC2136      | 2019-11-02 | 2021-11-01   |
| EXA Signal<br>Analyzer(10Hz-44GHz)                | Agilent<br>Technologies | N9010A      | EMC2138      | 2020-09-17 | 2021-09-16   |
| Wideband Radio<br>Communication<br>Tester(CMW500) | R&S                     | CMW500      | EMC2215      | 2020-09-20 | 2021-09-19   |

| RE in Chamber(below 1GHz)                       |                                |               |              |            |              |
|-------------------------------------------------|--------------------------------|---------------|--------------|------------|--------------|
| Equipment                                       | Manufacturer                   | Model No      | Inventory No | Cal Date   | Cal Due Date |
| Chamber cable                                   | HangTianXing                   | N/A           | EMC0542      | 2020-09-09 | 2022-09-08   |
| Trilog Broadband<br>Antenna(25MHz-1GHz)-<br>Lab | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB 9168     | SEM003-18    | 2019-02-22 | 2022-02-22   |
| Amplifier(9kHz-1.3GHz)                          | HP                             | 8447F         | EMC2065      | 2021-05-19 | 2022-05-18   |
| 10m Semi-Anechoic<br>Chamber                    | ETS                            | N/A           | EMC0530      | 2019-10-20 | 2022-10-19   |
| Test Software E3                                | Audix                          | Ver.6.120110a | GZE100-61    | N/A        | N/A          |
| EMI Test Receiver(1Hz-<br>8GHz)                 | Rohde & Schwarz                | ESW8          | EMC2220      | 2021/5/26  | 2022/5/25    |
| Substitution Antenna                            | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB 9168     | SEM003-18    | 2019-02-22 | 2022-02-22   |
| Signal Generator<br>(10MHz-20GHz)               | Rohde & Schwarz                | SMR20         | EMC0516      | 2021-01-11 | 2022-01-10   |





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| RE in Chamber(above 1GHz)                   |                                |               |              |            |              |
|---------------------------------------------|--------------------------------|---------------|--------------|------------|--------------|
| Equipment                                   | Manufacturer                   | Model No      | Inventory No | Cal Date   | Cal Due Date |
| EMI Test Receiver(20Hz-26.5GHz)             | Rohde & Schwarz                | ESIB26        | EMC0522      | 2021-01-08 | 2022-01-07   |
| Chamber cable(Above 1GHz)                   | Scoflex                        | KMKM-8.0m     | EMC0545      | 2020-09-09 | 2022-09-08   |
| Horn Antenna(1GHz-18GHz)                    | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA 9120D    | EMC2026      | 2019-09-25 | 2022-09-24   |
| 1GHz-26.5 GHz Pre-Amplifier                 | Agilent                        | 8449B         | EMC0521      | 2021-01-08 | 2022-01-07   |
| 2.4GHz Filter                               | Micro-Tronics                  | BRM 50702     | EMC2069      | 2021-01-08 | 2022-01-07   |
| 966 Anechoic Chamber                        | C.R.T                          | 9m x 6m x 6m  | EMC2142      | 2020-12-20 | 2023-12-19   |
| MXE EMI Receiver(10Hz-8.4GHz)               | Keysight                       | N9038A        | EMC2139      | 2020-11-13 | 2021-11-12   |
| EXA Signal Analyzer(10Hz-44GHz)             | Keysight                       | N9010A        | EMC2138      | 2020-09-17 | 2021-09-16   |
| Test Software E3                            | Audix                          | Ver.6.120110a | GZE100-61    | N/A        | N/A          |
| Notch Filter (5150-5880)                    | Mico-Tronics                   | BRM50716      | EMC2168      | 2021-07-29 | 2022-07-28   |
| Horn Antenna(14-40GHz)                      | SCHWARZBECK                    | BBHA 9170     | EMC2041      | 2020-06-28 | 2023-06-27   |
| Microwave Broadband Preamplifier (18-40GHz) | SCHWARZBECK                    | BBV 9721      | EMC2172      | 2020-09-09 | 2021-09-08   |
| Substitution Antenna                        | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA 9120D    | EMC2026      | 2019-09-25 | 2022-09-24   |
| Signal Generator (10MHz-20GHz)              | Rohde & Schwarz                | SMR20         | EMC0516      | 2021-01-11 | 2022-01-10   |

| General used equipment |              |          |              |            |              |
|------------------------|--------------|----------|--------------|------------|--------------|
| Equipment              | Manufacturer | Model No | Inventory No | Cal Date   | Cal Due Date |
| DMM                    | Fluke        | 73       | EMC0006      | 2021-07-05 | 2022-07-05   |
| DMM                    | Fluke        | 73       | EMC0007      | 2021-07-05 | 2022-07-05   |



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## 6 Radio Spectrum Matter Test Results

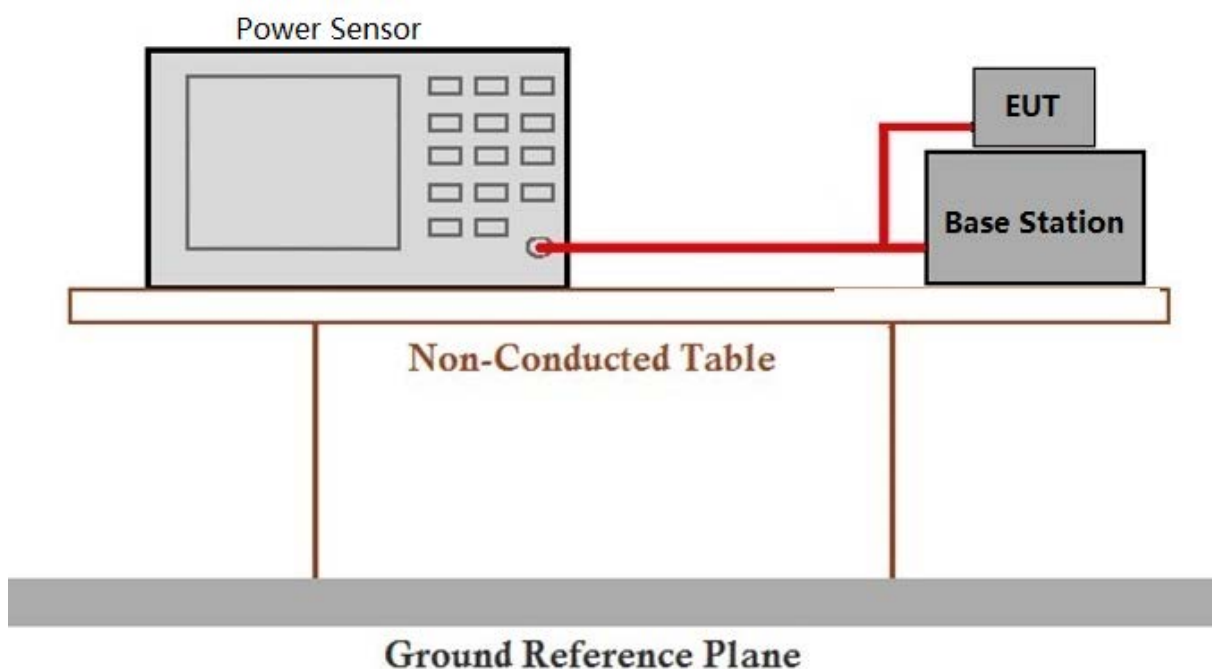
### 6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: Reference test summary

#### 6.1.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

#### 6.1.2 Test Setup Diagram



#### 6.1.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_RF power



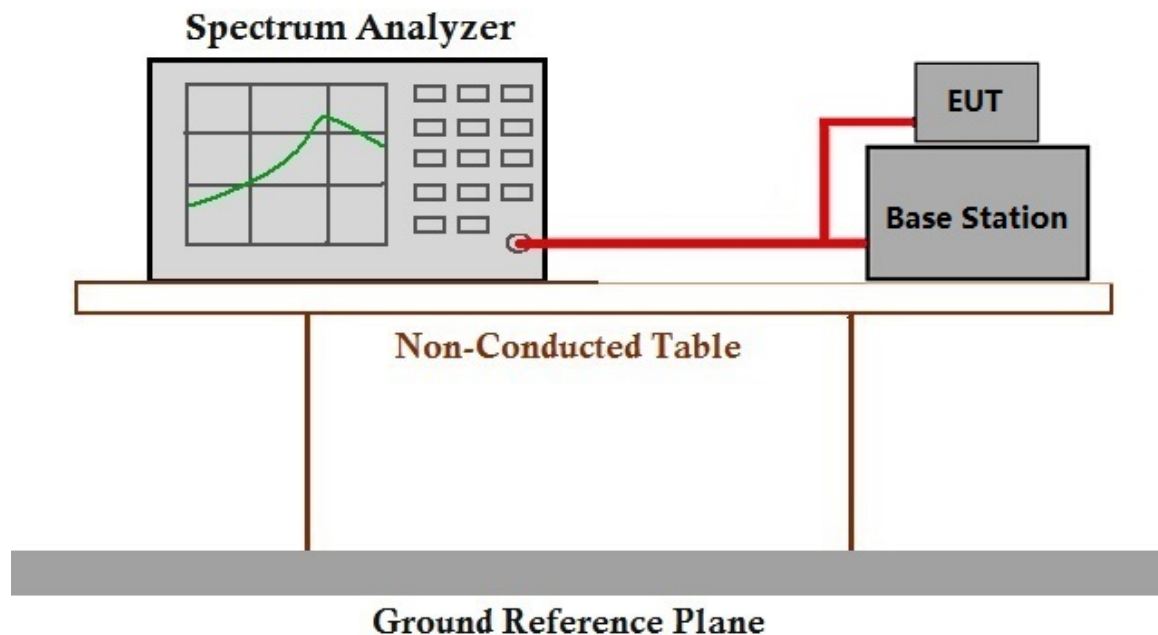
## 6.2 Peak-Average Ratio

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit:  $\leq 13\text{dB}$

### 6.2.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

### 6.2.2 Test Setup Diagram



### 6.2.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_PAR



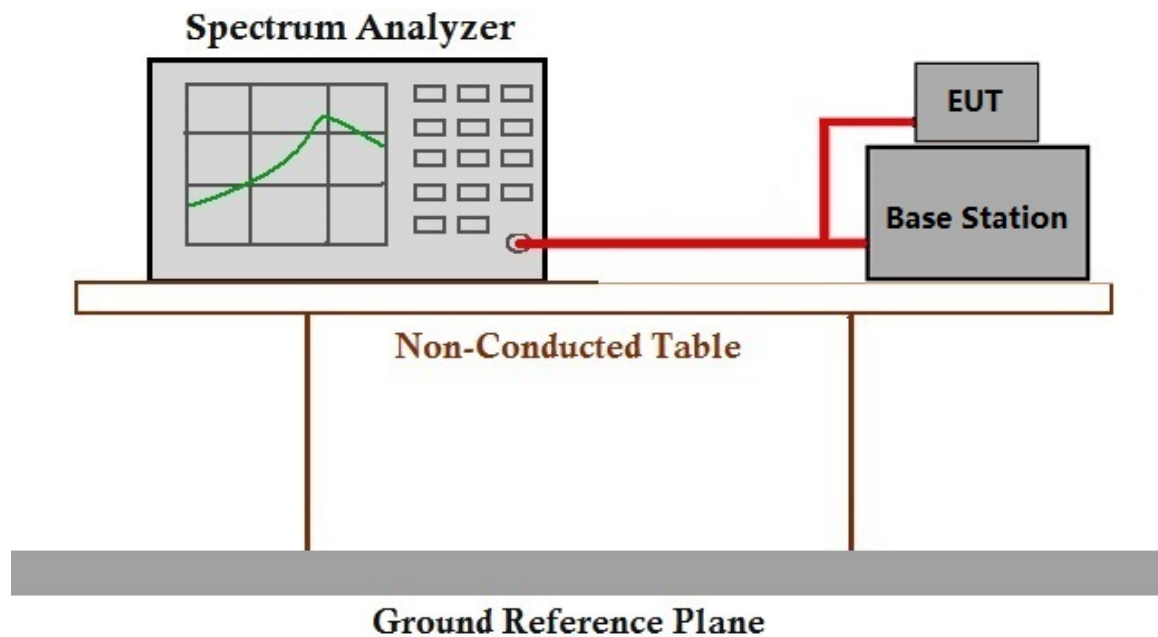
### 6.3 Bandwidth

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: OBW: No limit  
 EBW: No limit

#### 6.3.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

#### 6.3.2 Test Setup Diagram



#### 6.3.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_Bandwidth

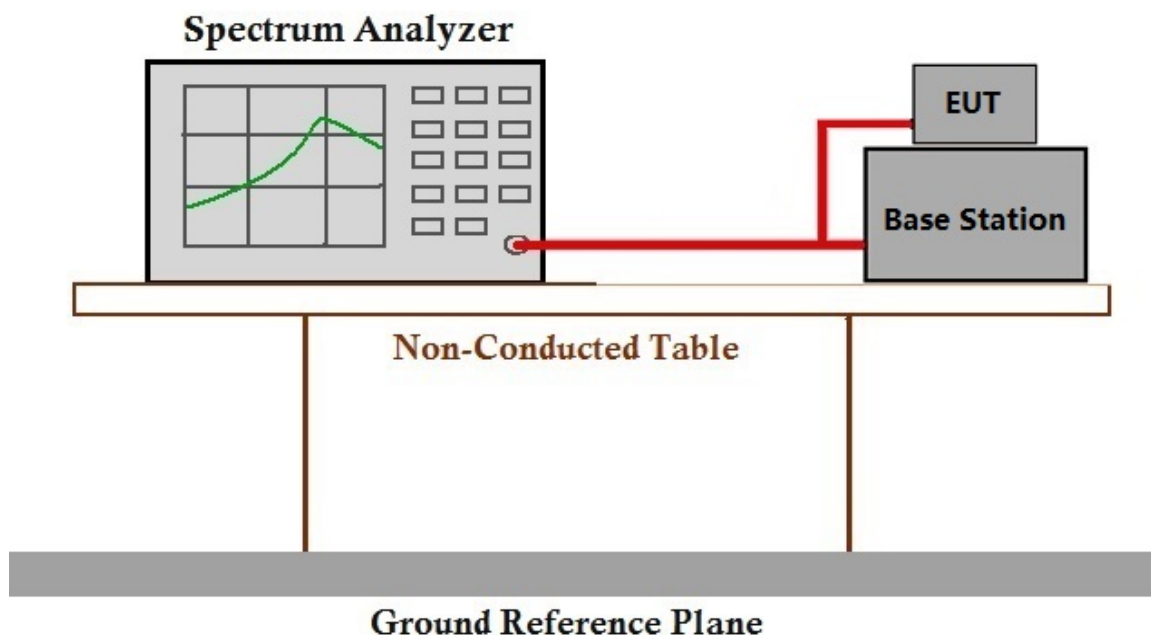
#### 6.4 Band Edge Compliance

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: Reference test summary

##### 6.4.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

##### 6.4.2 Test Setup Diagram



##### 6.4.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_Bandedge

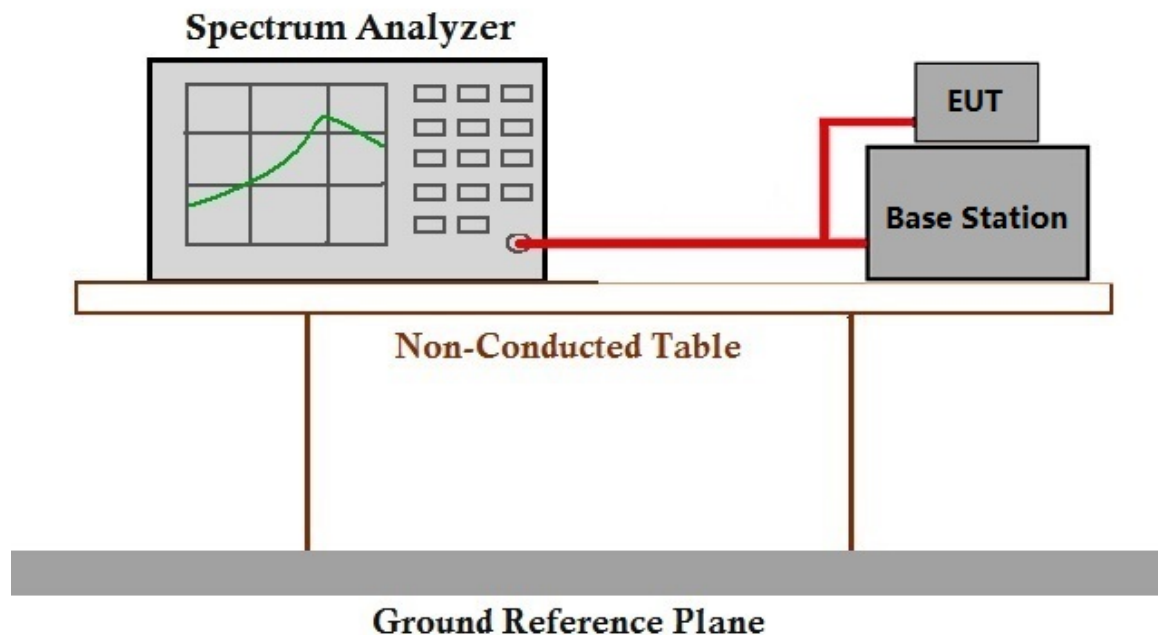
## 6.5 Spurious emissions at antenna terminals

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: Reference test summary

### 6.5.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

### 6.5.2 Test Setup Diagram



### 6.5.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_Spurious emission

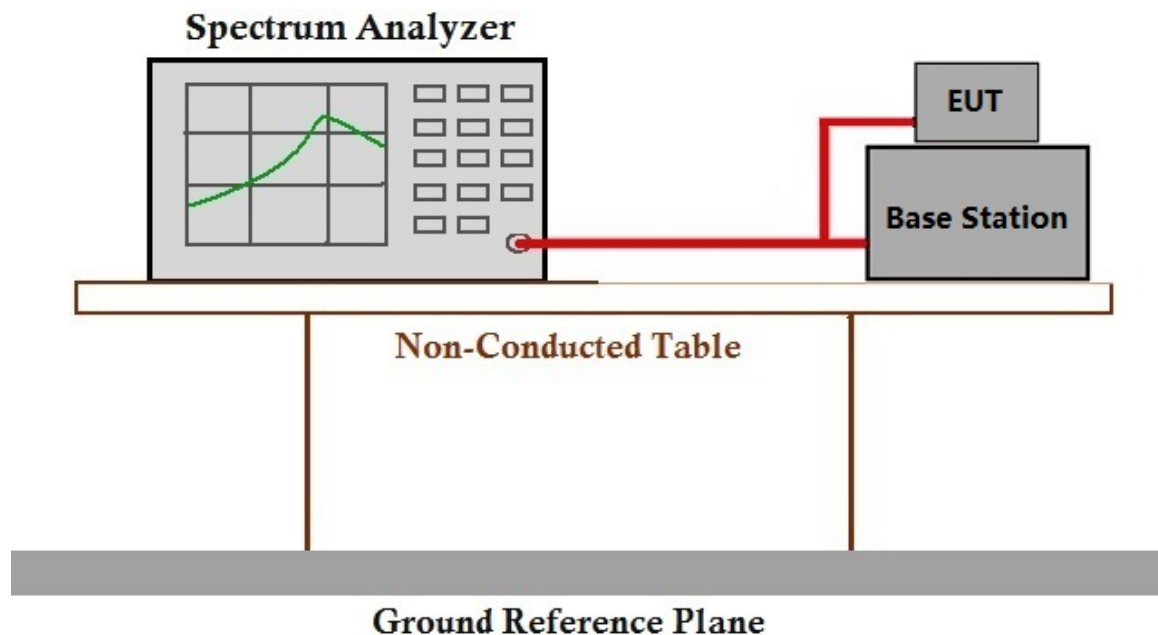
## 6.6 Emission Mask

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: Reference test summary

### 6.6.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

### 6.6.2 Test Setup Diagram



### 6.6.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_Spurious emission

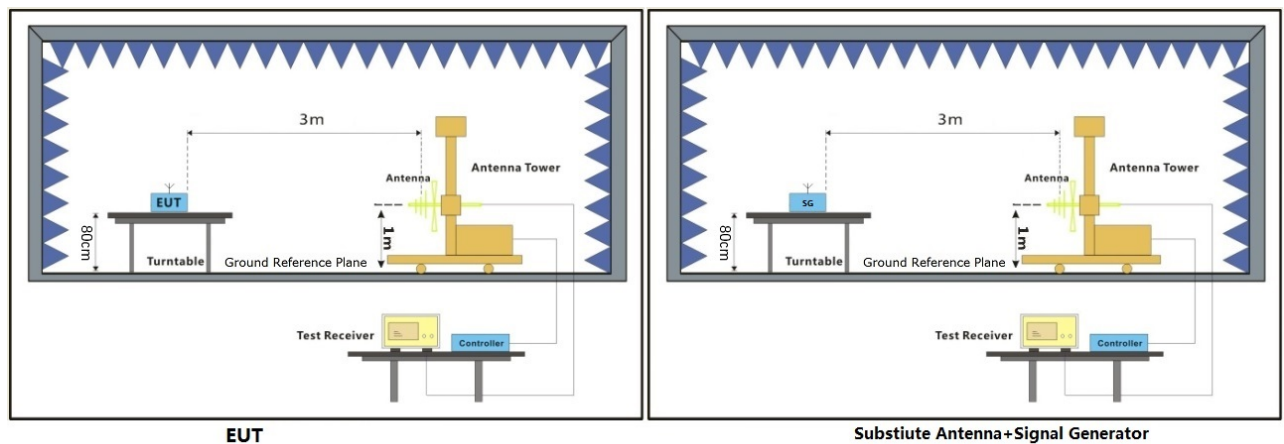
## 6.7 Field strength of spurious radiation

Test Requirement: Reference test summary  
Test Method: ANSI C63.26, KDB 971168 D01 v03  
Limit: Reference test summary

### 6.7.1 E.U.T. Operation

Operating Environment:  
Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
Test mode 46: Tx mode, Keep the EUT in transmitting mode.

### 6.7.2 Test Setup Diagram







### 6.7.3 Measurement Procedure and Data

#### Test Procedure:

- (1) On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- (2) The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- (3) The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- (4) The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- (5) The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- (6) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7) The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9) The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15) The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17) The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.





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| LTE Band 2-20MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3702                                                           | -51.4      | -13        | -38.4           | -61.08           | 2.92            | 12.6               | Horizontal         | Pass   |
| 5553                                                           | -47.6      | -13        | -34.6           | -57.55           | 3.15            | 13.1               | Horizontal         | Pass   |
| 7404                                                           | -44.43     | -13        | -31.43          | -52.73           | 3.4             | 11.7               | Horizontal         | Pass   |
| 3702                                                           | -50.43     | -13        | -37.43          | -60.11           | 2.92            | 12.6               | Vertical           | Pass   |
| 5553                                                           | -46.93     | -13        | -33.93          | -56.88           | 3.15            | 13.1               | Vertical           | Pass   |
| 7404                                                           | -44.37     | -13        | -31.37          | -52.67           | 3.4             | 11.7               | Vertical           | Pass   |

| LTE Band 2-20MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                   | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3742                                                              | -50.71     | -13        | -37.71          | -60.39           | 2.92            | 12.6               | Horizontal         | Pass   |
| 5613                                                              | -48.01     | -13        | -35.01          | -57.96           | 3.15            | 13.1               | Horizontal         | Pass   |
| 7484                                                              | -44.32     | -13        | -31.32          | -52.62           | 3.4             | 11.7               | Horizontal         | Pass   |
| 3742                                                              | -51.66     | -13        | -38.66          | -61.34           | 2.92            | 12.6               | Vertical           | Pass   |
| 5613                                                              | -47.99     | -13        | -34.99          | -57.94           | 3.15            | 13.1               | Vertical           | Pass   |
| 7484                                                              | -44.8      | -13        | -31.8           | -53.1            | 3.4             | 11.7               | Vertical           | Pass   |

| LTE Band 2-20MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3782                                                            | -49.86     | -13        | -36.86          | -59.54           | 2.92            | 12.6               | Horizontal         | Pass   |
| 5673                                                            | -47.99     | -13        | -34.99          | -57.94           | 3.15            | 13.1               | Horizontal         | Pass   |
| 7564                                                            | -44.79     | -13        | -31.79          | -52.34           | 3.85            | 11.4               | Horizontal         | Pass   |
| 3782                                                            | -50.55     | -13        | -37.55          | -60.23           | 2.92            | 12.6               | Vertical           | Pass   |
| 5673                                                            | -47.16     | -13        | -34.16          | -57.11           | 3.15            | 13.1               | Vertical           | Pass   |
| 7564                                                            | -44.76     | -13        | -31.76          | -52.31           | 3.85            | 11.4               | Vertical           | Pass   |



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| LTE Band 4-20MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3422                                                           | -50.18     | -13        | -37.18          | -58.69           | 2.99            | 11.5               | Horizontal         | Pass   |
| 5133                                                           | -46.64     | -13        | -33.64          | -56.34           | 3               | 12.7               | Horizontal         | Pass   |
| 6844                                                           | -46.92     | -13        | -33.92          | -56.34           | 3.08            | 12.5               | Horizontal         | Pass   |
| 3422                                                           | -50.32     | -13        | -37.32          | -58.83           | 2.99            | 11.5               | Vertical           | Pass   |
| 5133                                                           | -47.02     | -13        | -34.02          | -56.72           | 3               | 12.7               | Vertical           | Pass   |
| 6844                                                           | -47.39     | -13        | -34.39          | -56.81           | 3.08            | 12.5               | Vertical           | Pass   |

| LTE Band 4-20MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                   | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3447                                                              | -50.97     | -13        | -37.97          | -59.48           | 2.99            | 11.5               | Horizontal         | Pass   |
| 5170.5                                                            | -47.56     | -13        | -34.56          | -57.26           | 3               | 12.7               | Horizontal         | Pass   |
| 6894                                                              | -46.32     | -13        | -33.32          | -55.74           | 3.08            | 12.5               | Horizontal         | Pass   |
| 3447                                                              | -49.79     | -13        | -36.79          | -58.3            | 2.99            | 11.5               | Vertical           | Pass   |
| 5170.5                                                            | -47.26     | -13        | -34.26          | -56.96           | 3               | 12.7               | Vertical           | Pass   |
| 6894                                                              | -45.4      | -13        | -32.4           | -54.82           | 3.08            | 12.5               | Vertical           | Pass   |

| LTE Band 4-20MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3472                                                            | -51.01     | -13        | -38.01          | -59.52           | 2.99            | 11.5               | Horizontal         | Pass   |
| 5208                                                            | -47.42     | -13        | -34.42          | -57.12           | 3               | 12.7               | Horizontal         | Pass   |
| 6944                                                            | -46.18     | -13        | -33.18          | -55.6            | 3.08            | 12.5               | Horizontal         | Pass   |
| 3472                                                            | -50.7      | -13        | -37.7           | -59.21           | 2.99            | 11.5               | Vertical           | Pass   |
| 5208                                                            | -46.66     | -13        | -33.66          | -56.36           | 3               | 12.7               | Vertical           | Pass   |
| 6944                                                            | -46.43     | -13        | -33.43          | -55.85           | 3.08            | 12.5               | Vertical           | Pass   |



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| FDD LTE Band 5-10MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|--------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                    | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1649                                                               | -54.32     | -13        | -41.32          | -59.49           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2473.5                                                             | -51.54     | -13        | -38.54          | -58.54           | 3.4             | 10.4               | Horizontal         | Pass   |
| 3298                                                               | -49.55     | -13        | -36.55          | -58.06           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1649                                                               | -54.82     | -13        | -41.82          | -59.99           | 3.33            | 8.5                | Vertical           | Pass   |
| 2473.5                                                             | -53.05     | -13        | -40.05          | -60.05           | 3.4             | 10.4               | Vertical           | Pass   |
| 3298                                                               | -50.1      | -13        | -37.1           | -58.61           | 2.99            | 11.5               | Vertical           | Pass   |

| FDD LTE Band 5-10MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                       | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1664                                                                  | -56.77     | -13        | -43.77          | -61.94           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2496                                                                  | -52.66     | -13        | -39.66          | -59.66           | 3.4             | 10.4               | Horizontal         | Pass   |
| 3328                                                                  | -49.27     | -13        | -36.27          | -57.78           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1664                                                                  | -55.95     | -13        | -42.95          | -61.12           | 3.33            | 8.5                | Vertical           | Pass   |
| 2496                                                                  | -52.96     | -13        | -39.96          | -59.96           | 3.4             | 10.4               | Vertical           | Pass   |
| 3328                                                                  | -49.96     | -13        | -36.96          | -58.47           | 2.99            | 11.5               | Vertical           | Pass   |

| FDD LTE Band 5-10MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|---------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                     | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1679                                                                | -56.19     | -13        | -43.19          | -61.36           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2518.5                                                              | -52.8      | -13        | -39.8           | -60.19           | 3.21            | 10.6               | Horizontal         | Pass   |
| 3358                                                                | -50.39     | -13        | -37.39          | -58.9            | 2.99            | 11.5               | Horizontal         | Pass   |
| 1679                                                                | -57.36     | -13        | -44.36          | -62.53           | 3.33            | 8.5                | Vertical           | Pass   |
| 2518.5                                                              | -53.29     | -13        | -40.29          | -60.68           | 3.21            | 10.6               | Vertical           | Pass   |
| 3358                                                                | -49.04     | -13        | -36.04          | -57.55           | 2.99            | 11.5               | Vertical           | Pass   |



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| LTE Band 7-20MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 5002                                                           | -47.66     | -25        | -22.66          | -57.36           | 3               | 12.7               | Horizontal         | Pass   |
| 7503                                                           | -43.9      | -25        | -18.9           | -51.45           | 3.85            | 11.4               | Horizontal         | Pass   |
| 10004                                                          | -43.63     | -25        | -18.63          | -52.04           | 3.69            | 12.1               | Horizontal         | Pass   |
| 5002                                                           | -48.15     | -25        | -23.15          | -57.85           | 3               | 12.7               | Vertical           | Pass   |
| 7503                                                           | -44.33     | -25        | -19.33          | -51.88           | 3.85            | 11.4               | Vertical           | Pass   |
| 10004                                                          | -43.69     | -25        | -18.69          | -52.1            | 3.69            | 12.1               | Vertical           | Pass   |

| LTE Band 7-20MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                   | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 5052                                                              | -47.25     | -25        | -22.25          | -56.95           | 3               | 12.7               | Horizontal         | Pass   |
| 7578                                                              | -45.25     | -25        | -20.25          | -52.8            | 3.85            | 11.4               | Horizontal         | Pass   |
| 10104                                                             | -41.33     | -25        | -16.33          | -49.74           | 3.69            | 12.1               | Horizontal         | Pass   |
| 5052                                                              | -47.2      | -25        | -22.2           | -56.9            | 3               | 12.7               | Vertical           | Pass   |
| 7578                                                              | -45.56     | -25        | -20.56          | -53.11           | 3.85            | 11.4               | Vertical           | Pass   |
| 10104                                                             | -41.77     | -25        | -16.77          | -50.18           | 3.69            | 12.1               | Vertical           | Pass   |

| LTE Band 7-20MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 5102                                                            | -47.45     | -25        | -22.45          | -57.15           | 3               | 12.7               | Horizontal         | Pass   |
| 7653                                                            | -45.16     | -25        | -20.16          | -52.71           | 3.85            | 11.4               | Horizontal         | Pass   |
| 10204                                                           | -43.26     | -25        | -18.26          | -51.67           | 3.69            | 12.1               | Horizontal         | Pass   |
| 5102                                                            | -46.53     | -25        | -21.53          | -56.23           | 3               | 12.7               | Vertical           | Pass   |
| 7653                                                            | -44.7      | -25        | -19.7           | -52.25           | 3.85            | 11.4               | Vertical           | Pass   |
| 10204                                                           | -42.27     | -25        | -17.27          | -50.68           | 3.69            | 12.1               | Vertical           | Pass   |



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| FDD LTE Band 12-10MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|---------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                     | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1399                                                                | -54.57     | -13        | -41.57          | -58              | 2.57            | 6                  | Horizontal         | Pass   |
| 2098.5                                                              | -47.98     | -13        | -34.98          | -54.98           | 3.4             | 10.4               | Horizontal         | Pass   |
| 2798                                                                | -52.82     | -13        | -39.82          | -60.21           | 3.21            | 10.6               | Horizontal         | Pass   |
| 1399                                                                | -51.19     | -13        | -38.19          | -54.62           | 2.57            | 6                  | Vertical           | Pass   |
| 2098.5                                                              | -49.72     | -13        | -36.72          | -56.72           | 3.4             | 10.4               | Vertical           | Pass   |
| 2798                                                                | -52.41     | -13        | -39.41          | -59.8            | 3.21            | 10.6               | Vertical           | Pass   |

| FDD LTE Band 12-10MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                        | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1406                                                                   | -55.36     | -13        | -42.36          | -58.79           | 2.57            | 6                  | Horizontal         | Pass   |
| 2109                                                                   | -47.58     | -13        | -34.58          | -54.58           | 3.4             | 10.4               | Horizontal         | Pass   |
| 2812                                                                   | -50.75     | -13        | -37.75          | -58.14           | 3.21            | 10.6               | Horizontal         | Pass   |
| 1406                                                                   | -51.76     | -13        | -38.76          | -55.19           | 2.57            | 6                  | Vertical           | Pass   |
| 2109                                                                   | -48.83     | -13        | -35.83          | -55.83           | 3.4             | 10.4               | Vertical           | Pass   |
| 2812                                                                   | -51.01     | -13        | -38.01          | -58.4            | 3.21            | 10.6               | Vertical           | Pass   |

| FDD LTE Band 12-10MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|----------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                      | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1413                                                                 | -55.99     | -13        | -42.99          | -59.42           | 2.57            | 6                  | Horizontal         | Pass   |
| 2119.5                                                               | -54.4      | -13        | -41.4           | -61.4            | 3.4             | 10.4               | Horizontal         | Pass   |
| 2826                                                                 | -50.15     | -13        | -37.15          | -57.54           | 3.21            | 10.6               | Horizontal         | Pass   |
| 1413                                                                 | -56.7      | -13        | -43.7           | -60.13           | 2.57            | 6                  | Vertical           | Pass   |
| 2119.5                                                               | -54.91     | -13        | -41.91          | -61.91           | 3.4             | 10.4               | Vertical           | Pass   |
| 2826                                                                 | -52.31     | -13        | -39.31          | -59.7            | 3.21            | 10.6               | Vertical           | Pass   |



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| FDD LTE Band 13-10MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                        | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1555                                                                   | -56.21     | -13        | -43.21          | -61.38           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2332.5                                                                 | -51.71     | -13        | -38.71          | -58.71           | 3.4             | 10.4               | Horizontal         | Pass   |
| 3110                                                                   | -49.58     | -13        | -36.58          | -58.09           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1555                                                                   | -58.44     | -13        | -45.44          | -63.61           | 3.33            | 8.5                | Vertical           | Pass   |
| 2332.5                                                                 | -52.03     | -13        | -39.03          | -59.03           | 3.4             | 10.4               | Vertical           | Pass   |
| 3110                                                                   | -51.37     | -13        | -38.37          | -59.88           | 2.99            | 11.5               | Vertical           | Pass   |

| FDD LTE Band 14-10MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                        | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1577                                                                   | -57.03     | -13        | -44.03          | -62.2            | 3.33            | 8.5                | Horizontal         | Pass   |
| 2365.5                                                                 | -53.88     | -13        | -40.88          | -60.88           | 3.4             | 10.4               | Horizontal         | Pass   |
| 3154                                                                   | -49.98     | -13        | -36.98          | -58.49           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1577                                                                   | -56.24     | -13        | -43.24          | -61.41           | 3.33            | 8.5                | Vertical           | Pass   |
| 2365.5                                                                 | -55.63     | -13        | -42.63          | -62.63           | 3.4             | 10.4               | Vertical           | Pass   |
| 3154                                                                   | -51.34     | -13        | -38.34          | -59.85           | 2.99            | 11.5               | Vertical           | Pass   |

| LTE Band 26a(814MHz-849MHz)-10MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|---------------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1670.3                                                                          | -56.85     | -13        | -43.85          | -62.02           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2505.45                                                                         | -54.16     | -13        | -41.16          | -61.55           | 3.21            | 10.6               | Horizontal         | Pass   |
| 3340.6                                                                          | -49.45     | -13        | -36.45          | -57.96           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1670.3                                                                          | -56.49     | -13        | -43.49          | -61.66           | 3.33            | 8.5                | Vertical           | Pass   |
| 2505.45                                                                         | -53.36     | -13        | -40.36          | -60.75           | 3.21            | 10.6               | Vertical           | Pass   |
| 3340.6                                                                          | -50.06     | -13        | -37.06          | -58.57           | 2.99            | 11.5               | Vertical           | Pass   |



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| FDD LTE Band 17-10MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|---------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                     | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1409                                                                | -53.78     | -13        | -40.78          | -57.21           | 2.57            | 6                  | Horizontal         | Pass   |
| 2113.5                                                              | -45.68     | -13        | -32.68          | -52.68           | 3.4             | 10.4               | Horizontal         | Pass   |
| 2818                                                                | -50.86     | -13        | -37.86          | -58.25           | 3.21            | 10.6               | Horizontal         | Pass   |
| 1409                                                                | -51.53     | -13        | -38.53          | -54.96           | 2.57            | 6                  | Vertical           | Pass   |
| 2113.5                                                              | -50.59     | -13        | -37.59          | -57.59           | 3.4             | 10.4               | Vertical           | Pass   |
| 2818                                                                | -52.06     | -13        | -39.06          | -59.45           | 3.21            | 10.6               | Vertical           | Pass   |

| FDD LTE Band 17-10MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                        | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1411                                                                   | -53.27     | -13        | -40.27          | -56.7            | 2.57            | 6                  | Horizontal         | Pass   |
| 2116.5                                                                 | -47.04     | -13        | -34.04          | -54.04           | 3.4             | 10.4               | Horizontal         | Pass   |
| 2822                                                                   | -51.15     | -13        | -38.15          | -58.54           | 3.21            | 10.6               | Horizontal         | Pass   |
| 1411                                                                   | -48.81     | -13        | -35.81          | -52.24           | 2.57            | 6                  | Vertical           | Pass   |
| 2116.5                                                                 | -48.31     | -13        | -35.31          | -55.31           | 3.4             | 10.4               | Vertical           | Pass   |
| 2822                                                                   | -51.7      | -13        | -38.7           | -59.09           | 3.21            | 10.6               | Vertical           | Pass   |

| FDD LTE Band 17-10MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|----------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                      | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1413                                                                 | -52.26     | -13        | -39.26          | -55.69           | 2.57            | 6                  | Horizontal         | Pass   |
| 2119.5                                                               | -48.63     | -13        | -35.63          | -55.63           | 3.4             | 10.4               | Horizontal         | Pass   |
| 2826                                                                 | -50.69     | -13        | -37.69          | -58.08           | 3.21            | 10.6               | Horizontal         | Pass   |
| 1413                                                                 | -51.2      | -13        | -38.2           | -54.63           | 2.57            | 6                  | Vertical           | Pass   |
| 2119.5                                                               | -48.17     | -13        | -35.17          | -55.17           | 3.4             | 10.4               | Vertical           | Pass   |
| 2826                                                                 | -50.98     | -13        | -37.98          | -58.37           | 3.21            | 10.6               | Vertical           | Pass   |



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| LTE Band 25-20MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3702                                                            | -50        | -13        | -37             | -59.68           | 2.92            | 12.6               | Horizontal         | Pass   |
| 5553                                                            | -46.78     | -13        | -33.78          | -56.73           | 3.15            | 13.1               | Horizontal         | Pass   |
| 7404                                                            | -45.43     | -13        | -32.43          | -53.73           | 3.4             | 11.7               | Horizontal         | Pass   |
| 3702                                                            | -50.39     | -13        | -37.39          | -60.07           | 2.92            | 12.6               | Vertical           | Pass   |
| 5553                                                            | -46.85     | -13        | -33.85          | -56.8            | 3.15            | 13.1               | Vertical           | Pass   |
| 7404                                                            | -44.41     | -13        | -31.41          | -52.71           | 3.4             | 11.7               | Vertical           | Pass   |

| LTE Band 25-20MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|--------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                    | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3747                                                               | -50.57     | -13        | -37.57          | -60.25           | 2.92            | 12.6               | Horizontal         | Pass   |
| 5620.5                                                             | -47.11     | -13        | -34.11          | -57.06           | 3.15            | 13.1               | Horizontal         | Pass   |
| 7494                                                               | -44.85     | -13        | -31.85          | -53.15           | 3.4             | 11.7               | Horizontal         | Pass   |
| 3747                                                               | -51.67     | -13        | -38.67          | -61.35           | 2.92            | 12.6               | Vertical           | Pass   |
| 5620.5                                                             | -47.01     | -13        | -34.01          | -56.96           | 3.15            | 13.1               | Vertical           | Pass   |
| 7494                                                               | -45.04     | -13        | -32.04          | -53.34           | 3.4             | 11.7               | Vertical           | Pass   |

| LTE Band 25-20MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                  | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 3792                                                             | -50.11     | -13        | -37.11          | -59.79           | 2.92            | 12.6               | Horizontal         | Pass   |
| 5688                                                             | -47.28     | -13        | -34.28          | -57.23           | 3.15            | 13.1               | Horizontal         | Pass   |
| 7584                                                             | -44.04     | -13        | -31.04          | -51.59           | 3.85            | 11.4               | Horizontal         | Pass   |
| 3792                                                             | -49.53     | -13        | -36.53          | -59.21           | 2.92            | 12.6               | Vertical           | Pass   |
| 5688                                                             | -48.05     | -13        | -35.05          | -58              | 3.15            | 13.1               | Vertical           | Pass   |
| 7584                                                             | -45.4      | -13        | -32.4           | -52.95           | 3.85            | 11.4               | Vertical           | Pass   |



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| LTE Band 26(824MHz-849MHz)-10MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|--------------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                                | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1692.3                                                                         | -56.38     | -13        | -43.38          | -61.55           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2538.45                                                                        | -52.59     | -13        | -39.59          | -59.98           | 3.21            | 10.6               | Horizontal         | Pass   |
| 3384.6                                                                         | -48.99     | -13        | -35.99          | -57.5            | 2.99            | 11.5               | Horizontal         | Pass   |
| 1692.3                                                                         | -57.18     | -13        | -44.18          | -62.35           | 3.33            | 8.5                | Vertical           | Pass   |
| 2538.45                                                                        | -52.83     | -13        | -39.83          | -60.22           | 3.21            | 10.6               | Vertical           | Pass   |
| 3384.6                                                                         | -48.89     | -13        | -35.89          | -57.4            | 2.99            | 11.5               | Vertical           | Pass   |

| LTE Band 26(824MHz-849MHz)-10MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                                   | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1648.5                                                                            | -56.59     | -13        | -43.59          | -61.76           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2472.75                                                                           | -52.63     | -13        | -39.63          | -59.63           | 3.4             | 10.4               | Horizontal         | Pass   |
| 3297                                                                              | -50.51     | -13        | -37.51          | -59.02           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1648.5                                                                            | -55.98     | -13        | -42.98          | -61.15           | 3.33            | 8.5                | Vertical           | Pass   |
| 2472.75                                                                           | -52.49     | -13        | -39.49          | -59.49           | 3.4             | 10.4               | Vertical           | Pass   |
| 3297                                                                              | -49.76     | -13        | -36.76          | -58.27           | 2.99            | 11.5               | Vertical           | Pass   |

| LTE Band 26(824MHz-849MHz)-10MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|---------------------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 1668.5                                                                          | -56.05     | -13        | -43.05          | -61.22           | 3.33            | 8.5                | Horizontal         | Pass   |
| 2502.75                                                                         | -53.69     | -13        | -40.69          | -61.08           | 3.21            | 10.6               | Horizontal         | Pass   |
| 3337                                                                            | -49.95     | -13        | -36.95          | -58.46           | 2.99            | 11.5               | Horizontal         | Pass   |
| 1668.5                                                                          | -58.33     | -13        | -45.33          | -63.5            | 3.33            | 8.5                | Vertical           | Pass   |
| 2504.25                                                                         | -54.12     | -13        | -41.12          | -61.51           | 3.21            | 10.6               | Vertical           | Pass   |
| 3390                                                                            | -49.04     | -13        | -36.04          | -57.55           | 2.99            | 11.5               | Vertical           | Pass   |



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| LTE Band 41-20MHz Low channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|-----------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                 | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 5012                                                            | -46.54     | -25        | -21.54          | -56.24           | 3               | 12.7               | Horizontal         | Pass   |
| 7518                                                            | -46.67     | -25        | -21.67          | -54.22           | 3.85            | 11.4               | Horizontal         | Pass   |
| 10024                                                           | -43.71     | -25        | -18.71          | -52.12           | 3.69            | 12.1               | Horizontal         | Pass   |
| 5012                                                            | -47.81     | -25        | -22.81          | -57.51           | 3               | 12.7               | Vertical           | Pass   |
| 7518                                                            | -46.12     | -25        | -21.12          | -53.67           | 3.85            | 11.4               | Vertical           | Pass   |
| 10024                                                           | -43.41     | -25        | -18.41          | -51.82           | 3.69            | 12.1               | Vertical           | Pass   |

| LTE Band 41-20MHz Middle channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|--------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                    | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 5186                                                               | -46.74     | -25        | -21.74          | -56.44           | 3               | 12.7               | Horizontal         | Pass   |
| 7779                                                               | -45.81     | -25        | -20.81          | -53.36           | 3.85            | 11.4               | Horizontal         | Pass   |
| 10372                                                              | -43.6      | -25        | -18.6           | -52.01           | 3.69            | 12.1               | Horizontal         | Pass   |
| 5186                                                               | -47.44     | -25        | -22.44          | -57.14           | 3               | 12.7               | Vertical           | Pass   |
| 7779                                                               | -44.49     | -25        | -19.49          | -52.04           | 3.85            | 11.4               | Vertical           | Pass   |
| 10372                                                              | -42.69     | -25        | -17.69          | -51.1            | 3.69            | 12.1               | Vertical           | Pass   |

| LTE Band 41-20MHz High channel, Modulation: QPSK, 1 RB, 0 Offset |            |            |                 |                  |                 |                    |                    |        |
|------------------------------------------------------------------|------------|------------|-----------------|------------------|-----------------|--------------------|--------------------|--------|
| Frequency (MHz)                                                  | EIRP (dBm) | Limit(dBm) | Over Limit (dB) | S.G. Power (dBm) | Cable loss (dB) | Antenna Gain (dBi) | Polarization (H/V) | Result |
| 5360                                                             | -47.22     | -25        | -22.22          | -56.92           | 3               | 12.7               | Horizontal         | Pass   |
| 8040                                                             | -44.37     | -25        | -19.37          | -52.21           | 3.46            | 11.3               | Horizontal         | Pass   |
| 10720                                                            | -44.29     | -25        | -19.29          | -52.32           | 3.77            | 11.8               | Horizontal         | Pass   |
| 5360                                                             | -47.87     | -25        | -22.87          | -57.57           | 3               | 12.7               | Vertical           | Pass   |
| 8040                                                             | -44.62     | -25        | -19.62          | -52.46           | 3.46            | 11.3               | Vertical           | Pass   |
| 10720                                                            | -45.18     | -25        | -20.18          | -53.21           | 3.77            | 11.8               | Vertical           | Pass   |

Note: All modes have been tested and we found QPSK test mode has the worst test result. Only record the worst test result.

EIRP= S.G. Power- Cable loss+ Antenna Gain



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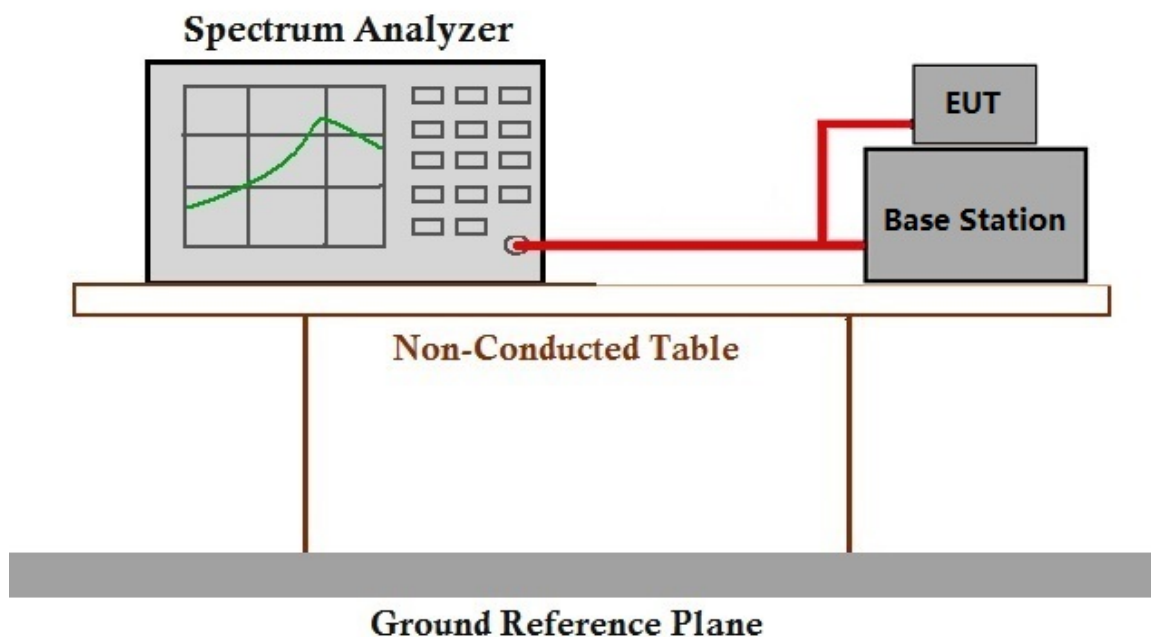
## 6.8 Frequency stability

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: Reference test summary

### 6.8.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

### 6.8.2 Test Setup Diagram



### 6.8.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_Frequency stability

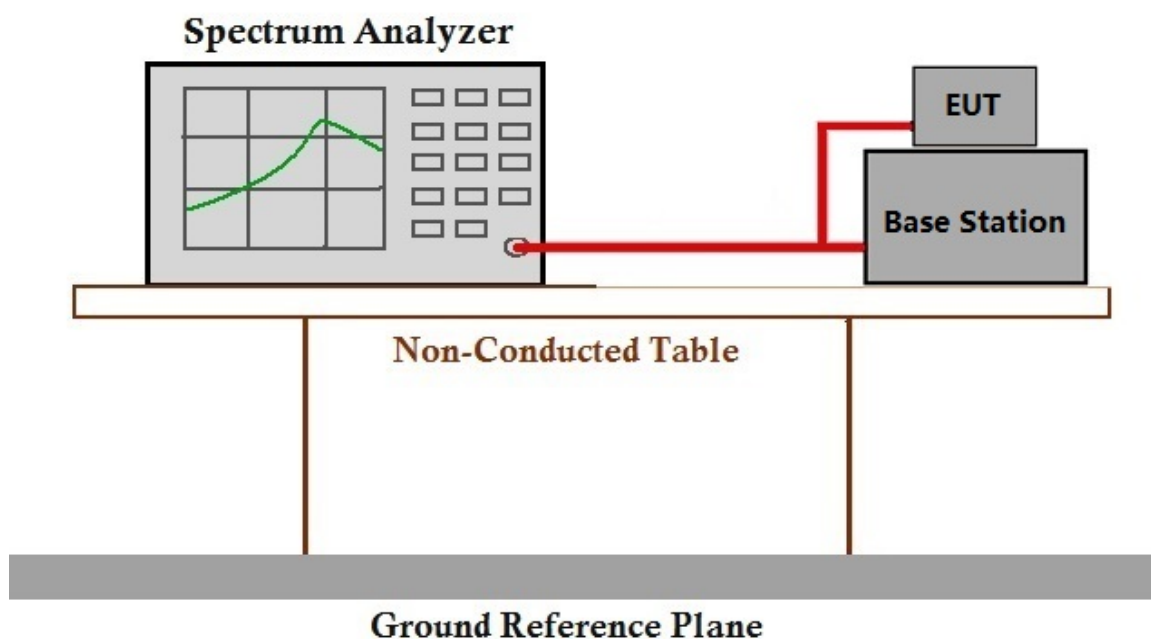
## 6.9 Modulation Characteristics

Test Requirement: Reference test summary  
 Test Method: ANSI C63.26, KDB 971168 D01 v03  
 Limit: Digital modulation

### 6.9.1 E.U.T. Operation

Operating Environment:  
 Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar  
 Test mode 46: Tx mode, Keep the EUT in transmitting mode.

### 6.9.2 Test Setup Diagram



### 6.9.3 Measurement Data

Please refer to Appendix\_FCC\_LTE\_4G\_Modulation Characteristics





## 7 Test Setup Photo

Refer to appendix - setup photos for GZCR2108020805AT

## 8 EUT Constructional Details (EUT Photos)

Refer to appendix - external and internal photos for GZCR2108020805AT

- End of the Report -



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