

Test Report No:  
2610461R-RFUSV23S-A

## TEST REPORT

### FCC Rules&Regulations

|                                 |                                                                                                                                                         |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name                    | Telematics Module                                                                                                                                       |
| Brand Name                      | Quanta Computer Inc.                                                                                                                                    |
| Model No.                       | QV28NUS                                                                                                                                                 |
| FCC ID                          | HFS-QV28NUS                                                                                                                                             |
| Applicant's Name / Address      | Quanta Computer Inc.<br>No. 188, Wenhua 2nd Road, Guishan District, Taoyuan City,<br>33377, Taiwan                                                      |
| Manufacturer's Name             | Quanta Computer Inc.                                                                                                                                    |
| Test Method Requested, Standard | FCC CFR Title 47 Part 22<br>FCC CFR Title 47 Part 24<br>FCC CFR Title 47 Part 27<br>FCC CFR Title 47 Part 90<br>ANSI/TIA-603-E-2016<br>ANSI C63.26-2015 |
| Verdict Summary                 | IN COMPLIANCE                                                                                                                                           |
| Documented By Genie Chang       | <i>Genie Chang</i>                                                                                                                                      |
| Approved By Will Chen           | <i>Will Chen</i>                                                                                                                                        |
| Date of Receipt                 | 2025/11/25                                                                                                                                              |
| Date of Issue                   | 2026/03/13                                                                                                                                              |
| Report Version                  | V1.0                                                                                                                                                    |

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## Competences and Guarantees

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DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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## General Conditions

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1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

| Version | Description             | Issued Date |
|---------|-------------------------|-------------|
| V1.0    | Initial issue of report | 2026/03/13  |

## Summary of Test Result

| Report Clause | Test Items                  | Band                                           | Ref Std. Clause                             | Limit                                                         | Result (PASS/FAIL) | Remark |
|---------------|-----------------------------|------------------------------------------------|---------------------------------------------|---------------------------------------------------------------|--------------------|--------|
| 3             | RF Output Power             | 2, 25                                          | §2.1033<br>§2.1046<br>§24.232               | < 2 Watts EIRP                                                | PASS               | -      |
|               |                             | 4, 66, 42                                      | §2.1033<br>§2.1046<br>§27.50                | < 1 Watts EIRP                                                | PASS               | -      |
|               |                             | 5, 26                                          | §2.1033<br>§2.1046<br>§22.913               | < 7 Watts ERP                                                 | PASS               | -      |
|               |                             | 7, 38                                          | §2.1033<br>§2.1046<br>§27.50                | < 2 Watts EIRP                                                | PASS               | -      |
|               |                             | 12, 13, 17, 71                                 | §2.1033<br>§2.1046<br>§27.50                | < 3 Watts ERP                                                 | PASS               | -      |
|               |                             | 26                                             | §2.1033<br>§2.1046<br>§90.635(b)<br>§22.913 | < 100 Watts ERP                                               | PASS               | -      |
| 4             | Occupied Bandwidth          | 2, 4, 5, 7, 12, 13, 17, 25, 26, 38, 42, 66, 71 | §2.1049                                     | N/A                                                           | PASS               | -      |
| 5             | Peak to Average Power Ratio | 2, 25                                          | §24.232                                     | $\leq$ 13 dB                                                  | PASS               | -      |
|               |                             | 4, 7, 12, 13, 17, 38, 42, 66, 71               | §27.50                                      | $\leq$ 13 dB                                                  | PASS               | -      |
|               |                             | 5, 26                                          | §22.913                                     | $\leq$ 13 dB                                                  | PASS               | -      |
| 6             | Spurious Emission           | 2,25                                           | §2.1053<br>§24.238                          | < -13 dBm                                                     | PASS               | -      |
|               |                             | 4, 12, 17, 42, 66, 71                          | §27.53                                      | < -13 dBm                                                     | PASS               | -      |
|               |                             | 5                                              | §22.917                                     | < -13 dBm                                                     | PASS               | -      |
|               |                             | 7, 38                                          | §27.53                                      | < -25 dBm                                                     | PASS               | -      |
|               |                             | 13                                             | §27.53                                      | < -13 dBm<br>< -70 dBW/MHz e.i.r.p. in the band 1559-1610 MHz | PASS               | -      |
|               |                             | 26                                             | §90.691<br>§22.917                          | < -13 dBm                                                     | PASS               | -      |

|   |                     |                                  |                               |                                                             |      |   |
|---|---------------------|----------------------------------|-------------------------------|-------------------------------------------------------------|------|---|
| 7 | Conducted Band Edge | 2, 25                            | §24.238                       | < -13 dBm                                                   | PASS | - |
|   |                     | 4, 12, 17, 42, 66, 71            | §2.1053<br>§27.53             | < -13 dBm                                                   | PASS | - |
|   |                     | 5, 26                            | §2.1053<br>§22.917            | < -13 dBm                                                   | PASS | - |
|   |                     | 7, 38                            | §2.1053<br>§27.53             | < 5 MHz: -10 dBm<br>5 to X MHz: -13 dBm<br>> X MHz: -25 dBm | PASS | - |
|   |                     | 13                               | §2.1053<br>§27.53             | < -13 dBm                                                   | PASS | - |
|   |                     | 26                               | §2.1053<br>§90.691<br>§22.917 | < -13 dBm                                                   | PASS | - |
| 8 | Frequency Stability | 2, 25                            | §2.1055<br>§24.235            | ± 2.5 ppm                                                   | PASS | - |
|   |                     | 4, 7, 12, 13, 17, 38, 42, 66, 71 | §2.1055<br>§27.54             | ± 2.5 ppm                                                   | PASS | - |
|   |                     | 5                                | §2.1055<br>§22.355            | ± 2.5 ppm                                                   | PASS | - |
|   |                     | 26                               | §2.1055<br>§90.213            | ± 2.5 ppm                                                   | PASS | - |

#### Comments and Explanations

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

#### Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.

## 1. General Information

### 1.1. EUT Description

|                                |                                                                                                                                                                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uplink Frequency Range (MHz)   | LTE Band 2: 1850~1910<br>LTE Band 4: 1710~1755<br>LTE Band 5: 824~849<br>LTE Band 7: 2500~2570<br>LTE Band 12: 699~716<br>LTE Band 13: 777~787<br>LTE Band 17: 704~716<br>LTE Band 25: 1850~1915<br>LTE Band 26: 814~849<br>LTE Band 38: 2570~2620<br>LTE Band 42: 3450~3550<br>LTE Band 66: 1710~1780<br>LTE Band 71: 663~698 |
| Downlink Frequency Range (MHz) | LTE Band 2: 1930~1990<br>LTE Band 4: 2110~2115<br>LTE Band 5: 869~894<br>LTE Band 7: 2620~2690<br>LTE Band 12: 729~746<br>LTE Band 13: 746~756<br>LTE Band 17: 734~746<br>LTE Band 25: 1930~1995<br>LTE Band 26: 859~894<br>LTE Band 38: 2570~2620<br>LTE Band 42: 3450~3550<br>LTE Band 66: 2110~2200<br>LTE Band 71: 617~652 |

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bandwidth (MHz)    | LTE Band 2: 1.4 / 3 / 5 / 10 / 15 / 20<br>LTE Band 4: 1.4 / 3 / 5 / 10 / 15 / 20<br>LTE Band 5: 1.4 / 3 / 5 / 10<br>LTE Band 7: 5 / 10 / 15 / 20<br>LTE Band 12: 1.4 / 3 / 5 / 10<br>LTE Band 13: 5 / 10<br>LTE Band 17: 5 / 10<br>LTE Band 25: 1.4 / 3 / 5 / 10 / 15 / 20<br>LTE Band 26: 1.4 / 3 / 5 / 10 / 15<br>LTE Band 38: 5 / 10 / 15 / 20<br>LTE Band 42: 5 / 10 / 15 / 20<br>LTE Band 66: 1.4 / 3 / 5 / 10 / 15 / 20<br>LTE Band 71: 5 / 10 / 15 / 20 |
| CA Band            | 7C                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Type of Modulation | QPSK / 16QAM / 64QAM / 256QAM                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| IMEI No.           | 359918921148290                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Antenna Port                  | Supported Bands                                                                                                                                                            |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MIMO 1                        | WCDMA: B2 / B5<br>LTE: B2 / B4 / B5 / B7 / B12 / B13 / B17 / B25 / B26 / B38 / B42 / B48 / B66 / B71<br>5GNR: n2 / n5 / n7 / n12 / n25 / n41 / n48 / n66 / n71 / n77 / n78 |
| MIMO 2                        | LTE: B42 / B48<br>5GNR: n48 / n77 / n78                                                                                                                                    |
| MIMO 3                        | Only RX                                                                                                                                                                    |
| MIMO 4                        | Only RX                                                                                                                                                                    |
| Internal BUA (Backup Antenna) | WCDMA: B2 / B5<br>LTE: B2 / B4 / B5 / B7 / B25 / B26 / B38 / B66<br>5GNR: n2 / n5 / n7 / n25 / n41 / n66                                                                   |

Note: Since the Internal BUA uses the same antenna port as MIMO 1, only radiated testing was evaluated.

| Antenna Information |            |                            |      |                                                                                                                                                                                                                                                                                                                        |
|---------------------|------------|----------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item.               | Brand Name | Model No.                  | Type | Gain (dBi)                                                                                                                                                                                                                                                                                                             |
| 1                   | molex      | 5A7F527 (MIMO 1)           | PIFA | 1.90 dBi for LTE B2<br>3.30 dBi for LTE B4<br>-2.60 dBi for LTE B5<br>2.00 dBi for LTE B7<br>-5.40 dBi for LTE B12<br>-2.90 dBi for LTE B13<br>-5.40 dBi for LTE B17<br>1.90 dBi for LTE B25<br>-2.60 dBi for LTE B26<br>1.20 dBi for LTE B38<br>5.10 dBi for LTE B42<br>3.30 dBi for LTE B66<br>-4.90 dBi for LTE B71 |
|                     |            | 5A7F527 (MIMO 2)           |      | 5.90 dBi for LTE B42                                                                                                                                                                                                                                                                                                   |
| 2                   | AMO        | BMW ICON SF (Internal BUA) | PIFA | 2.99 dBi for LTE B2<br>2.72 dBi for LTE B4<br>2.09 dBi for LTE B5<br>0.45 dBi for LTE B7<br>2.99 dBi for LTE B25<br>2.09 dBi for LTE B26<br>0.45 dBi for LTE B38<br>2.72 dBi for LTE B66                                                                                                                               |

Note: Only the higher gain antenna was tested and recorded in this report.

| Maximum Output Power – LTE B25(2) |                    |                     |            |                        |                  |
|-----------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                        | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                   |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B25(2)<br>(1.4M)              | 1850.7 - 1914.3    | 1M09G7D             | QPSK       | 0.236                  | 23.72            |
|                                   |                    | 1M10W7D             | 16QAM      | 0.209                  | 23.20            |
|                                   |                    | 1M09W7D             | 64QAM      | 0.153                  | 21.84            |
|                                   |                    | 1M08W7D             | 256QAM     | 0.072                  | 18.58            |
| LTE B25(2)<br>(3M)                | 1851.5 - 1913.5    | 2M69G7D             | QPSK       | 0.229                  | 23.59            |
|                                   |                    | 2M70W7D             | 16QAM      | 0.191                  | 22.80            |
|                                   |                    | 2M70W7D             | 64QAM      | 0.146                  | 21.65            |
|                                   |                    | 2M70W7D             | 256QAM     | 0.070                  | 18.43            |
| LTE B25(2)<br>(5M)                | 1852.5 - 1912.5    | 4M49G7D             | QPSK       | 0.232                  | 23.65            |
|                                   |                    | 4M48W7D             | 16QAM      | 0.200                  | 23.02            |
|                                   |                    | 4M50W7D             | 64QAM      | 0.151                  | 21.78            |
|                                   |                    | 4M48W7D             | 256QAM     | 0.070                  | 18.48            |
| LTE B25(2)<br>(10M)               | 1855.0 - 1910.0    | 9M01G7D             | QPSK       | 0.225                  | 23.52            |
|                                   |                    | 8M95W7D             | 16QAM      | 0.190                  | 22.79            |
|                                   |                    | 8M99W7D             | 64QAM      | 0.148                  | 21.71            |
|                                   |                    | 8M97W7D             | 256QAM     | 0.071                  | 18.49            |
| LTE B25(2)<br>(15M)               | 1857.5 - 1907.5    | 13M5G7D             | QPSK       | 0.224                  | 23.50            |
|                                   |                    | 13M5W7D             | 16QAM      | 0.189                  | 22.76            |
|                                   |                    | 13M5W7D             | 64QAM      | 0.148                  | 21.70            |
|                                   |                    | 13M5W7D             | 256QAM     | 0.070                  | 18.46            |
| LTE B25(2)<br>(20M)               | 1860.0 – 1905.0    | 18M0G7D             | QPSK       | 0.225                  | 23.52            |
|                                   |                    | 18M0W7D             | 16QAM      | 0.190                  | 22.78            |
|                                   |                    | 18M0W7D             | 64QAM      | 0.146                  | 21.63            |
|                                   |                    | 17M9W7D             | 256QAM     | 0.072                  | 18.55            |

| Maximum Output Power – LTE B66(4) |                    |                     |            |                        |                  |
|-----------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                        | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                   |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B66(4)<br>(1.4M)              | 1710.7 - 1779.3    | 1M09G7D             | QPSK       | 0.248                  | 23.94            |
|                                   |                    | 1M10W7D             | 16QAM      | 0.219                  | 23.40            |
|                                   |                    | 1M09W7D             | 64QAM      | 0.164                  | 22.15            |
|                                   |                    | 1M08W7D             | 256QAM     | 0.073                  | 18.66            |
| LTE B66(4)<br>(3M)                | 1711.5 - 1778.5    | 2M71G7D             | QPSK       | 0.246                  | 23.91            |
|                                   |                    | 2M71W7D             | 16QAM      | 0.234                  | 23.69            |
|                                   |                    | 2M70W7D             | 64QAM      | 0.169                  | 22.27            |
|                                   |                    | 2M70W7D             | 256QAM     | 0.075                  | 18.76            |
| LTE B66(4)<br>(5M)                | 1712.5 - 1777.5    | 4M49G7D             | QPSK       | 0.246                  | 23.91            |
|                                   |                    | 4M48W7D             | 16QAM      | 0.225                  | 23.52            |
|                                   |                    | 4M50W7D             | 64QAM      | 0.164                  | 22.15            |
|                                   |                    | 4M49W7D             | 256QAM     | 0.074                  | 18.71            |
| LTE B66(4)<br>(10M)               | 1715.0 - 1775.0    | 9M00G7D             | QPSK       | 0.249                  | 23.96            |
|                                   |                    | 8M95W7D             | 16QAM      | 0.223                  | 23.48            |
|                                   |                    | 8M99W7D             | 64QAM      | 0.170                  | 22.30            |
|                                   |                    | 8M96W7D             | 256QAM     | 0.073                  | 18.65            |
| LTE B66(4)<br>(15M)               | 1717.5 - 1772.5    | 13M5G7D             | QPSK       | 0.251                  | 23.99            |
|                                   |                    | 13M5W7D             | 16QAM      | 0.226                  | 23.55            |
|                                   |                    | 13M5W7D             | 64QAM      | 0.167                  | 22.23            |
|                                   |                    | 13M5W7D             | 256QAM     | 0.072                  | 18.56            |
| LTE B66(4)<br>(20M)               | 1720.0 – 1770.0    | 17M9G7D             | QPSK       | 0.250                  | 23.98            |
|                                   |                    | 17M9W7D             | 16QAM      | 0.226                  | 23.55            |
|                                   |                    | 17M9W7D             | 64QAM      | 0.167                  | 22.23            |
|                                   |                    | 17M9W7D             | 256QAM     | 0.074                  | 18.67            |

| Maximum Output Power – LTE B26(5) (Part 22) |                    |                     |            |                        |                  |
|---------------------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                                  | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                             |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B26(5)<br>(1.4M)                        | 824.7 - 848.3      | 1M09G7D             | QPSK       | 0.195                  | 22.89            |
|                                             |                    | 1M10W7D             | 16QAM      | 0.178                  | 22.50            |
|                                             |                    | 1M09W7D             | 64QAM      | 0.129                  | 21.12            |
|                                             |                    | 1M08W7D             | 256QAM     | 0.068                  | 18.32            |
| LTE B26(5)<br>(3M)                          | 825.5 - 847.5      | 2M69G7D             | QPSK       | 0.194                  | 22.88            |
|                                             |                    | 2M71W7D             | 16QAM      | 0.171                  | 22.33            |
|                                             |                    | 2M70W7D             | 64QAM      | 0.139                  | 21.44            |
|                                             |                    | 2M70W7D             | 256QAM     | 0.066                  | 18.17            |
| LTE B26(5)<br>(5M)                          | 826.5 - 846.5      | 4M49G7D             | QPSK       | 0.193                  | 22.86            |
|                                             |                    | 4M48W7D             | 16QAM      | 0.193                  | 22.85            |
|                                             |                    | 4M50W7D             | 64QAM      | 0.129                  | 21.12            |
|                                             |                    | 4M49W7D             | 256QAM     | 0.066                  | 18.22            |
| LTE B26(5)<br>(10M)                         | 829.0 - 844.0      | 9M00G7D             | QPSK       | 0.197                  | 22.95            |
|                                             |                    | 8M95W7D             | 16QAM      | 0.179                  | 22.53            |
|                                             |                    | 8M99W7D             | 64QAM      | 0.139                  | 21.44            |
|                                             |                    | 8M97W7D             | 256QAM     | 0.065                  | 18.16            |
| LTE B26<br>(15M)                            | 831.5 - 841.5      | 13M5G7D             | QPSK       | 0.197                  | 22.95            |
|                                             |                    | 13M5W7D             | 16QAM      | 0.181                  | 22.58            |
|                                             |                    | 13M5W7D             | 64QAM      | 0.137                  | 21.38            |
|                                             |                    | 13M5W7D             | 256QAM     | 0.064                  | 18.07            |

| Maximum Output Power – LTE B26 (Part 90) |                    |                     |            |                        |                  |
|------------------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                               | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                          |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B26 (1.4M)                           | 814.7 - 823.3      | 1M09G7D             | QPSK       | 0.199                  | 22.98            |
|                                          |                    | 1M10W7D             | 16QAM      | 0.174                  | 22.41            |
|                                          |                    | 1M10W7D             | 64QAM      | 0.135                  | 21.30            |
|                                          |                    | 1M08W7D             | 256QAM     | 0.066                  | 18.21            |
| LTE B26 (3M)                             | 815.5 - 822.5      | 2M69G7D             | QPSK       | 0.203                  | 23.07            |
|                                          |                    | 2M71W7D             | 16QAM      | 0.187                  | 22.72            |
|                                          |                    | 2M70W7D             | 64QAM      | 0.138                  | 21.40            |
|                                          |                    | 2M70W7D             | 256QAM     | 0.065                  | 18.15            |
| LTE B26 (5M)                             | 816.5 - 821.5      | 4M48G7D             | QPSK       | 0.201                  | 23.04            |
|                                          |                    | 4M48W7D             | 16QAM      | 0.191                  | 22.82            |
|                                          |                    | 4M50W7D             | 64QAM      | 0.135                  | 21.30            |
|                                          |                    | 4M48W7D             | 256QAM     | 0.065                  | 18.15            |
| LTE B26 (10M)                            | 819                | 8M99G7D             | QPSK       | 0.191                  | 22.80            |
|                                          |                    | 8M95W7D             | 16QAM      | 0.182                  | 22.61            |
|                                          |                    | 8M98W7D             | 64QAM      | 0.122                  | 20.86            |
|                                          |                    | 8M95W7D             | 256QAM     | 0.066                  | 18.19            |

| Maximum Output Power – LTE B7 |                    |                     |            |                        |                  |
|-------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                    | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                               |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B7 (5M)                   | 2502.5 - 2567.5    | 4M49G7D             | QPSK       | 0.213                  | 23.29            |
|                               |                    | 4M48W7D             | 16QAM      | 0.182                  | 22.59            |
|                               |                    | 4M50W7D             | 64QAM      | 0.140                  | 21.45            |
|                               |                    | 4M48W7D             | 256QAM     | 0.067                  | 18.27            |
| LTE B7 (10M)                  | 2505.0 - 2565.0    | 9M01G7D             | QPSK       | 0.218                  | 23.38            |
|                               |                    | 8M95W7D             | 16QAM      | 0.189                  | 22.76            |
|                               |                    | 8M98W7D             | 64QAM      | 0.151                  | 21.78            |
|                               |                    | 8M96W7D             | 256QAM     | 0.067                  | 18.25            |
| LTE B7 (15M)                  | 2507.5 - 2562.5    | 13M5G7D             | QPSK       | 0.216                  | 23.35            |
|                               |                    | 13M5W7D             | 16QAM      | 0.185                  | 22.67            |
|                               |                    | 13M5W7D             | 64QAM      | 0.148                  | 21.71            |
|                               |                    | 13M4W7D             | 256QAM     | 0.068                  | 18.34            |
| LTE B7 (20M)                  | 2510.0 –2560.0     | 17M9G7D             | QPSK       | 0.218                  | 23.38            |
|                               |                    | 17M9W7D             | 16QAM      | 0.189                  | 22.76            |
|                               |                    | 17M9W7D             | 64QAM      | 0.151                  | 21.78            |
|                               |                    | 17M9W7D             | 256QAM     | 0.069                  | 18.37            |

| Maximum Output Power – LTE B12(17) |                    |                     |            |                        |                  |
|------------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                         | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                    |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B12 (1.4M)                     | 699.7 - 715.3      | 1M09G7D             | QPSK       | 0.204                  | 23.09            |
|                                    |                    | 1M10W7D             | 16QAM      | 0.180                  | 22.56            |
|                                    |                    | 1M09W7D             | 64QAM      | 0.137                  | 21.37            |
|                                    |                    | 1M09W7D             | 256QAM     | 0.073                  | 18.61            |
| LTE B12 (3M)                       | 700.5 - 714.5      | 2M69G7D             | QPSK       | 0.202                  | 23.05            |
|                                    |                    | 2M71W7D             | 16QAM      | 0.184                  | 22.64            |
|                                    |                    | 2M70W7D             | 64QAM      | 0.136                  | 21.32            |
|                                    |                    | 2M70W7D             | 256QAM     | 0.073                  | 18.61            |
| LTE B12(17) (5M)                   | 701.5 - 713.5      | 4M49G7D             | QPSK       | 0.208                  | 23.18            |
|                                    |                    | 4M48W7D             | 16QAM      | 0.171                  | 22.34            |
|                                    |                    | 4M50W7D             | 64QAM      | 0.138                  | 21.41            |
|                                    |                    | 4M48W7D             | 256QAM     | 0.073                  | 18.64            |
| LTE B12(17) (10M)                  | 704.0 - 711.0      | 9M00G7D             | QPSK       | 0.204                  | 23.09            |
|                                    |                    | 8M96W7D             | 16QAM      | 0.179                  | 22.53            |
|                                    |                    | 8M99W7D             | 64QAM      | 0.134                  | 21.28            |
|                                    |                    | 8M96W7D             | 256QAM     | 0.074                  | 18.71            |

| Maximum Output Power – LTE B13 |                    |                     |            |                        |                  |
|--------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                     | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B13 (5M)                   | 779.5 - 784.5      | 4M49G7D             | QPSK       | 0.205                  | 23.12            |
|                                |                    | 4M48W7D             | 16QAM      | 0.182                  | 22.60            |
|                                |                    | 4M50W7D             | 64QAM      | 0.136                  | 21.33            |
|                                |                    | 4M48W7D             | 256QAM     | 0.073                  | 18.62            |
| LTE B13 (10M)                  | 782                | 8M99G7D             | QPSK       | 0.202                  | 23.06            |
|                                |                    | 8M94W7D             | 16QAM      | 0.174                  | 22.41            |
|                                |                    | 8M97W7D             | 64QAM      | 0.132                  | 21.19            |
|                                |                    | 8M95W7D             | 256QAM     | 0.071                  | 18.54            |

| Maximum Output Power – LTE B38 |                    |                     |            |                        |                  |
|--------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                     | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B38 (5M)                   | 2572.5 - 2617.5    | 4M50G7D             | QPSK       | 0.211                  | 23.24            |
|                                |                    | 4M49W7D             | 16QAM      | 0.179                  | 22.52            |
|                                |                    | 4M51W7D             | 64QAM      | 0.136                  | 21.32            |
|                                |                    | 4M49W7D             | 256QAM     | 0.070                  | 18.43            |
| LTE B38 (10M)                  | 2575.0 - 2615.0    | 8M99G7D             | QPSK       | 0.213                  | 23.28            |
|                                |                    | 8M97W7D             | 16QAM      | 0.184                  | 22.64            |
|                                |                    | 8M98W7D             | 64QAM      | 0.137                  | 21.37            |
|                                |                    | 8M96W7D             | 256QAM     | 0.070                  | 18.44            |
| LTE B38 (15M)                  | 2577.5 - 2612.5    | 13M5G7D             | QPSK       | 0.214                  | 23.30            |
|                                |                    | 13M5W7D             | 16QAM      | 0.183                  | 22.62            |
|                                |                    | 13M5W7D             | 64QAM      | 0.137                  | 21.37            |
|                                |                    | 13M5W7D             | 256QAM     | 0.070                  | 18.43            |
| LTE B38 (20M)                  | 2580.0 –2610.0     | 18M0G7D             | QPSK       | 0.216                  | 23.34            |
|                                |                    | 17M9W7D             | 16QAM      | 0.185                  | 22.66            |
|                                |                    | 17M9W7D             | 64QAM      | 0.137                  | 21.38            |
|                                |                    | 17M9W7D             | 256QAM     | 0.070                  | 18.44            |

| Maximum Output Power – LTE B42 (Part 27) |                    |                     |            |                        |                  |
|------------------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                               | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                          |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B42 (5M)                             | 3452.5 - 3547.5    | 4M50G7D             | QPSK       | 0.224                  | 23.51            |
|                                          |                    | 4M49W7D             | 16QAM      | 0.207                  | 23.15            |
|                                          |                    | 4M51W7D             | 64QAM      | 0.158                  | 21.98            |
|                                          |                    | 4M50W7D             | 256QAM     | 0.080                  | 19.02            |
| LTE B42 (10M)                            | 3455.0 - 3545.0    | 8M99G7D             | QPSK       | 0.224                  | 23.50            |
|                                          |                    | 8M98W7D             | 16QAM      | 0.206                  | 23.13            |
|                                          |                    | 8M99W7D             | 64QAM      | 0.161                  | 22.06            |
|                                          |                    | 8M96W7D             | 256QAM     | 0.078                  | 18.94            |
| LTE B42 (15M)                            | 3457.5 - 3542.5    | 13M5G7D             | QPSK       | 0.232                  | 23.65            |
|                                          |                    | 13M5W7D             | 16QAM      | 0.207                  | 23.15            |
|                                          |                    | 13M5W7D             | 64QAM      | 0.158                  | 21.99            |
|                                          |                    | 13M5W7D             | 256QAM     | 0.079                  | 18.97            |
| LTE B42 (20M)                            | 3460.0 –3540.0     | 18M0G7D             | QPSK       | 0.228                  | 23.58            |
|                                          |                    | 18M0W7D             | 16QAM      | 0.204                  | 23.09            |
|                                          |                    | 18M0W7D             | 64QAM      | 0.156                  | 21.92            |
|                                          |                    | 17M9W7D             | 256QAM     | 0.080                  | 19.04            |

| Maximum Output Power – LTE B71 |                    |                     |            |                        |                  |
|--------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                     | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B71 (5M)                   | 665.5 - 695.5      | 4M49G7D             | QPSK       | 0.218                  | 23.38            |
|                                |                    | 4M48W7D             | 16QAM      | 0.186                  | 22.69            |
|                                |                    | 4M50W7D             | 64QAM      | 0.146                  | 21.64            |
|                                |                    | 4M48W7D             | 256QAM     | 0.078                  | 18.93            |
| LTE B71 (10M)                  | 668.0 - 693.0      | 9M00G7D             | QPSK       | 0.217                  | 23.36            |
|                                |                    | 8M95W7D             | 16QAM      | 0.179                  | 22.54            |
|                                |                    | 8M99W7D             | 64QAM      | 0.140                  | 21.45            |
|                                |                    | 8M96W7D             | 256QAM     | 0.078                  | 18.93            |
| LTE B71 (15M)                  | 670.5 - 690.5      | 13M5G7D             | QPSK       | 0.216                  | 23.34            |
|                                |                    | 13M5W7D             | 16QAM      | 0.182                  | 22.61            |
|                                |                    | 13M5W7D             | 64QAM      | 0.140                  | 21.47            |
|                                |                    | 13M5W7D             | 256QAM     | 0.080                  | 19.02            |
| LTE B71 (20M)                  | 673.0 –688.0       | 17M9G7D             | QPSK       | 0.216                  | 23.35            |
|                                |                    | 17M9W7D             | 16QAM      | 0.185                  | 22.66            |
|                                |                    | 17M9W7D             | 64QAM      | 0.144                  | 21.58            |
|                                |                    | 17M9W7D             | 256QAM     | 0.079                  | 18.98            |

| Maximum Output Power – LTE B7C |                    |                     |            |                        |                  |
|--------------------------------|--------------------|---------------------|------------|------------------------|------------------|
| Mode (MHz)                     | Tx Frequency (MHz) | Emission Designator | Modulation | Conducted Output Power |                  |
|                                |                    |                     |            | Max. Power (W)         | Max. Power (dBm) |
| LTE B7<br>(10+20M)             | 2505.5 - 2560.0    | 27M9G7D             | QPSK       | 0.195                  | 22.91            |
|                                |                    | 27M8W7D             | 16QAM      | 0.159                  | 22.01            |
|                                |                    | 27M9W7D             | 64QAM      | 0.126                  | 20.99            |
|                                |                    | 27M8W7D             | 256QAM     | 0.075                  | 18.73            |
| LTE B7<br>(15+10M)             | 2507.5 - 2564.7    | 23M2G7D             | QPSK       | 0.199                  | 22.98            |
|                                |                    | 23M2W7D             | 16QAM      | 0.164                  | 22.14            |
|                                |                    | 23M2W7D             | 64QAM      | 0.131                  | 21.17            |
|                                |                    | 23M2W7D             | 256QAM     | 0.077                  | 18.87            |
| LTE B7<br>(15+15M)             | 2507.5 - 2562.5    | 28M5G7D             | QPSK       | 0.193                  | 22.86            |
|                                |                    | 28M5W7D             | 16QAM      | 0.160                  | 22.04            |
|                                |                    | 28M5W7D             | 64QAM      | 0.125                  | 20.98            |
|                                |                    | 28M5W7D             | 256QAM     | 0.074                  | 18.72            |
| LTE B7<br>(15+20M)             | 2507.8 - 2560.0    | 32M8G7D             | QPSK       | 0.192                  | 22.84            |
|                                |                    | 32M8W7D             | 16QAM      | 0.158                  | 21.98            |
|                                |                    | 32M8W7D             | 64QAM      | 0.129                  | 21.10            |
|                                |                    | 32M8W7D             | 256QAM     | 0.074                  | 18.71            |
| LTE B7<br>(20+10M)             | 2510.0 - 2564.5    | 27M9G7D             | QPSK       | 0.191                  | 22.82            |
|                                |                    | 27M9W7D             | 16QAM      | 0.157                  | 21.95            |
|                                |                    | 27M9W7D             | 64QAM      | 0.129                  | 21.09            |
|                                |                    | 27M9W7D             | 256QAM     | 0.076                  | 18.81            |
| LTE B7<br>(20+15M)             | 2510.0 - 2562.2    | 33M0G7D             | QPSK       | 0.194                  | 22.87            |
|                                |                    | 32M9W7D             | 16QAM      | 0.159                  | 22.01            |
|                                |                    | 32M9W7D             | 64QAM      | 0.131                  | 21.18            |
|                                |                    | 32M9W7D             | 256QAM     | 0.075                  | 18.76            |
| LTE B7<br>(20+20M)             | 2510.0 - 2560.0    | 37M7G7D             | QPSK       | 0.191                  | 22.81            |
|                                |                    | 37M8W7D             | 16QAM      | 0.153                  | 21.84            |
|                                |                    | 37M7W7D             | 64QAM      | 0.127                  | 21.03            |
|                                |                    | 37M7W7D             | 256QAM     | 0.076                  | 18.79            |

## 1.2. EUT Information

|                |                      |
|----------------|----------------------|
| EUT Power Type | From DC power supply |
|----------------|----------------------|

## 1.3. Testing Location Information

|        |                                                                  |
|--------|------------------------------------------------------------------|
| USA    | FCC Designation Number: TW0033 / FCC Registration Number: 647365 |
| Canada | CAB Identifier Number: TW3023 / Company Number: 26930            |

|                  |                         |
|------------------|-------------------------|
| Site Description | Accredited by TAF       |
|                  | Accredited Number: 3023 |

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Test Laboratory    | DEKRA Testing and Certification Co., Ltd.                                   |
|                    | Linkou Laboratory                                                           |
| Address            | No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C. |
| Performed Location | No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C.   |
| Phone Number       | +886-3-275-7255                                                             |
| Fax Number         | +886-3-327-8031                                                             |

Ambient conditions in the laboratory:

| Performed Item     | Items            | Required | Actual       | Test Date             | Tested by                 |
|--------------------|------------------|----------|--------------|-----------------------|---------------------------|
| Conducted Emission | Temperature (°C) | 15~35 °C | 21.4~22.5 °C | 2025/12/01~2026/03/05 | Joe Wang                  |
|                    | Humidity (%RH)   | 20~75 %  | 54.3~55.2 %  |                       |                           |
| Radiated Emission  | Temperature (°C) | 15~35 °C | 19.8~23.3°C  | 2026/02/09~2026/03/02 | Ashton Chiu<br>Rock Liang |
|                    | Humidity (%RH)   | 20~75 %  | 51.5~64.2 %  |                       |                           |

#### 1.4. Measurement Uncertainty

Uncertainties have been calculated according to the DEKRA internal document with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

| Test Item                         | Uncertainty                                                                                                                      |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| RF Output Power                   | $\pm 1.30$ dB                                                                                                                    |
| Occupied Bandwidth                | $\pm 1580.61$ Hz                                                                                                                 |
| Peak to Average Power Ratio       | $\pm 2.12$ dB                                                                                                                    |
| Conducted Band Edge               | $\pm 2.12$ dB                                                                                                                    |
| Spurious Emission at Antenna Port | $\pm 2.12$ dB                                                                                                                    |
| Radiated Spurious Emissions       | $\pm 4.72$ dB for 30MHz~180MHz<br>$\pm 2.99$ dB for 180MHz~1GHz<br>$\pm 2.98$ dB for 1GHz~18GHz<br>$\pm 2.99$ dB for 18GHz~40GHz |
| Frequency Stability               | $\pm 0.52$ ppm                                                                                                                   |

## 1.5. List of Test Equipment

### Conducted / HY-SR04

| Instrument                                | Manufacturer | Model No.   | Serial No. | Cal. Date  | Next Cal. Date |
|-------------------------------------------|--------------|-------------|------------|------------|----------------|
| Spectrum Analyzer                         | KEYSIGHT     | N9010A      | MY54510357 | 2025/05/05 | 2026/05/04     |
| Spectrum Analyzer                         | KEYSIGHT     | N9020B      | MY59050510 | 2025/08/13 | 2026/08/12     |
| Temperature &<br>Humidity Test<br>Chamber | KSON         | THS-D4T-100 | A0606      | 2026/02/24 | 2027/02/23     |
| DC Power Supply                           | GWInstek     | SPD-3606    | GEQ820915  | 2025/07/08 | 2026/07/07     |
| DC Power Supply                           | Agilent      | E3646A      | MY53020023 | 2025/10/27 | 2026/10/26     |
| Radio<br>Communication<br>Analyzer        | Anritsu      | MT8821C     | 6262044740 | 2025/06/23 | 2026/06/22     |
| Radio<br>communication test<br>station    | R&S          | CMW500      | 157304     | 2025/03/13 | 2026/03/12     |

**Radiated / HY-CB03**

| Instrument                       | Manufacturer | Model No.              | Serial No.   | Cal. Date  | Next Cal. Date |
|----------------------------------|--------------|------------------------|--------------|------------|----------------|
| Bi-Log Antenna                   | SCHWARZBECK  | VULB9168               | 9168-0675    | 2025/08/14 | 2027/08/13     |
| Horn Antenna                     | Com-Power    | AH-840                 | 101100       | 2025/10/07 | 2027/10/06     |
| Horn Antenna                     | RF SPIN      | DRH18-E                | 210507A18ES  | 2024/05/15 | 2026/05/14     |
| Pre-Amplifier                    | SGH          | SGH0301-9              | 20211007-11  | 2026/01/10 | 2027/01/09     |
| Pre-Amplifier                    | SGH          | PRAMP118               | 20200701     | 2026/01/10 | 2027/01/09     |
| Pre-Amplifier                    | EMCI         | EMC184045SE            | 980369       | 2026/01/10 | 2027/01/09     |
| Coaxial Cable                    | EMCI         | EMC102-KM-KM-600       | 160311       | 2026/01/10 | 2027/01/09     |
| Coaxial Cable                    | SGH          | HC360-2.92M/2.92M-7.0M | 202108-1     | 2026/01/10 | 2027/01/09     |
| EMI Test Receiver                | R&S          | ESR3                   | 102793       | 2025/12/01 | 2026/11/30     |
| Spectrum Analyzer                | R&S          | FSV3044                | 101113       | 2025/12/23 | 2026/12/22     |
| Coaxial Cable                    | SGH          | SGH18                  | 2021005-1    | 2026/01/10 | 2027/01/09     |
| Coaxial Cable                    | SGH          | SGH18                  | 202108-4     | 2026/01/10 | 2027/01/09     |
| Coaxial Cable                    | SGH          | HA800                  | GD20110223-1 | 2026/01/10 | 2027/01/09     |
| Coaxial Cable                    | SGH          | HA800                  | GD20110222-8 | 2026/01/10 | 2027/01/09     |
| Radio communication test station | R&S          | CMW500                 | 157304       | 2025/03/13 | 2026/03/12     |
| DC Power Supply                  | KEYSIGHT     | E36234A                | MY59001234   | 2025/10/27 | 2026/10/26     |

Note: Test Software Version: e3 230303 dekra V9.

## 2. Test Configuration of EUT

### 2.1. Test Condition

| EUT Operational Condition |         |
|---------------------------|---------|
| Testing Voltage           | DC 4.1V |

### 2.2. Measurement Configuration

| Test Mode | Mode 1: LTE Band 25(2)<br>Mode 2: LTE Band 66(4)<br>Mode 3: LTE Band 26(5) (Part 22)<br>Mode 4: LTE Band 26 (Part 90)<br>Mode 5: LTE Band 7<br>Mode 6: LTE Band 12(17)<br>Mode 7: LTE Band 13<br>Mode 8: LTE Band 38<br>Mode 9: LTE Band 42<br>Mode 10: LTE Band 71<br>Mode 11: LTE Band 7C |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Note:**

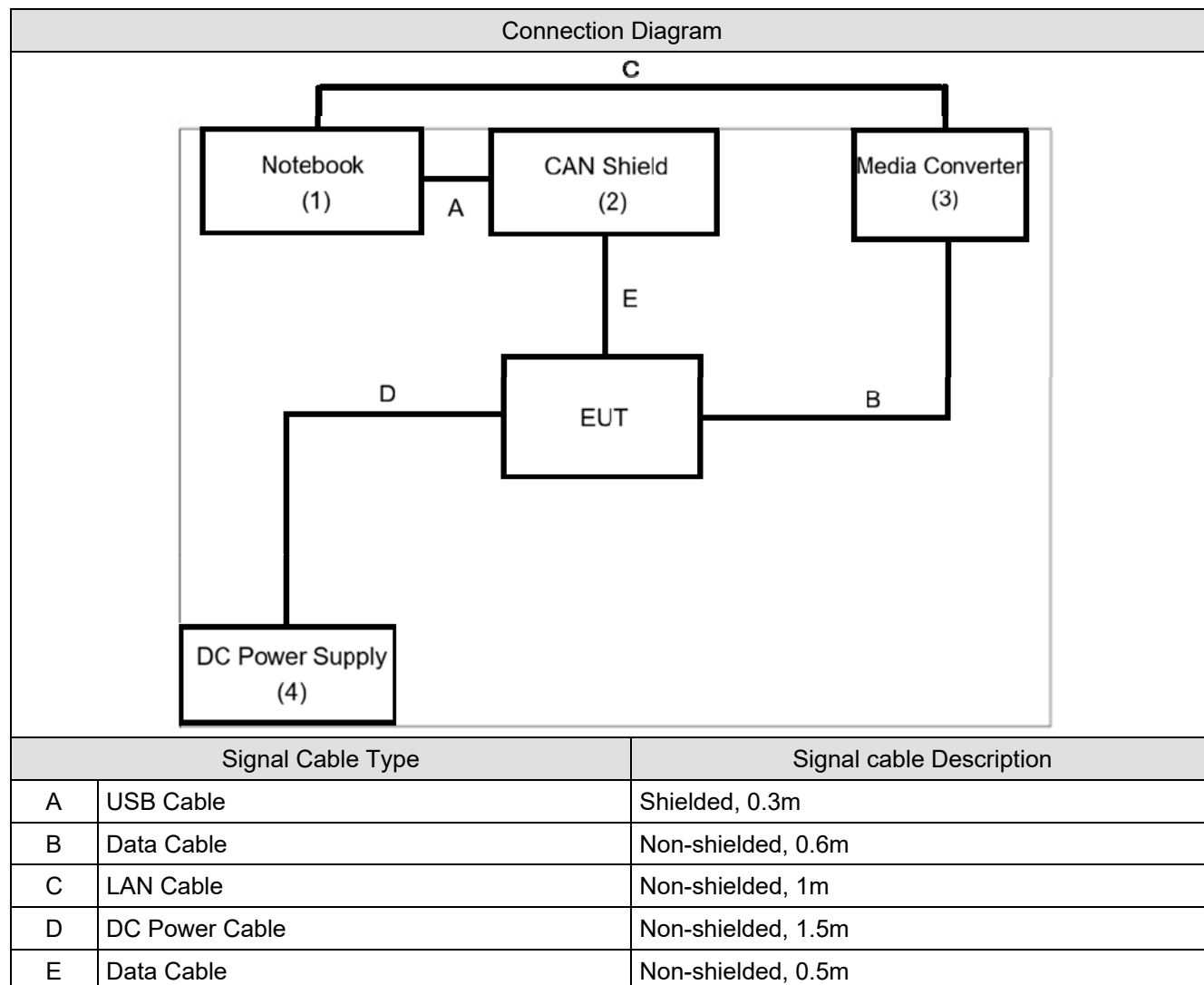
- Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- LTE B25 overlaps the entire frequency range of LTE B2.
- LTE B66 overlaps the entire frequency range of LTE B4.
- LTE B26 overlaps the entire frequency range of LTE B5.
- LTE B12 overlaps the entire frequency range of LTE B17.
- For LTE B42, RF output power was evaluated for both MIMO 1 and MIMO 2. Since MIMO 2 represents the worst-case condition, all test items were performed under MIMO 2.
- According to the manufacturer's declaration, when the device is connected to the antenna (Brand: Molex, Model No.: 5A7F527), the LTE B42 supports a power backoff mechanism. The transmit power is backed off by 1 dB for MIMO 2. Therefore, the EIRP for LTE B42 takes this backoff factor into account.
- The EUT was performed at X axis, Y axis and Z axis position for radiated spurious emission test. The worst case was found at X axis, so the measurement will follow this same test configuration.
- The device was tested under all configurations, bandwidths, RB configurations and modulations. The worst-case results are presented in the table below.

| Worst Case                        |                               |                               |                      |                |
|-----------------------------------|-------------------------------|-------------------------------|----------------------|----------------|
| Test Item                         | Modulation                    | Bandwidth                     | RB Size              | Test Channel   |
| RF Output Power                   | QPSK / 16QAM / 64QAM / 256QAM | All supported                 | 1RB, Mid RB, Full RB | Low, Mid, High |
| Occupied Bandwidth                | QPSK / 16QAM / 64QAM / 256QAM | All supported                 | Full RB              | Mid            |
| Conducted Band Edge               | QPSK                          | All supported                 | 1RB, Full RB         | Low, High      |
| Peak to Average Power Ratio       | QPSK / 16QAM / 64QAM / 256QAM | All supported                 | Full RB              | Mid            |
| Spurious Emission at Antenna Port | QPSK                          | All supported                 | 1RB                  | Low, Mid, High |
| Radiated Spurious Emissions       | QPSK                          | Max. output power combination |                      | Low, Mid, High |
| Frequency Stability               | QPSK                          | All supported                 | Full RB              | Mid            |

### 2.3. Tested System Details

| No. | Equipment       | Brand Name | Model No. | Serial No. |
|-----|-----------------|------------|-----------|------------|
| 1   | Notebook        | DELL       | P62G      | CY9FJC2    |
| 2   | CAN Shield      | N/A        | N/A       | N/A        |
| 3   | Media Converter | N/A        | N/A       | N/A        |
| 4   | DC Power Supply | KEYSIGHT   | E36234A   | MY59001234 |

### 2.4. Configuration of Tested System

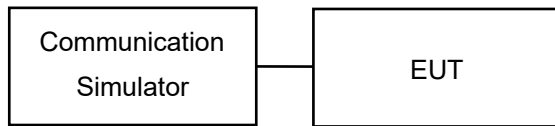


**2.5. EUT Operating Procedures**

|    |                                                              |
|----|--------------------------------------------------------------|
| 1. | Setup the EUT as shown in Section 2.4.                       |
| 2. | Setup the EUT connect to the base station.                   |
| 3. | Setup the parameter (band, channel, frequency).              |
| 4. | The EUT will continue receive the signal from WWAN function. |
| 5. | Verify that the EUT works properly.                          |

### 3. RF Output Power

#### 3.1. Test Setup



#### 3.2. Test Procedure

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum conducted RF output power under transmission mode and specific channel frequency. The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$$

where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as  $P_{\text{Meas}}$ , typically dBW or dBm);

$P_{\text{Meas}}$  = measured transmitter output power or PSD, in dBm or dBW;

$G_T$  = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

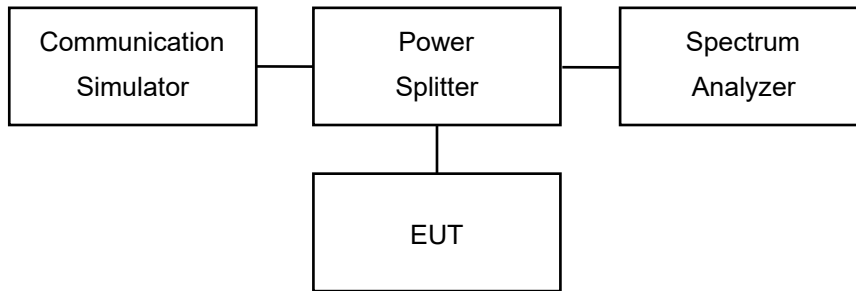
$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna, in dB

#### 3.3. Test Result of RF Output Power

Refer as Appendix A

## 4. Occupied Bandwidth

### 4.1. Test Setup



### 4.2. Test Procedures

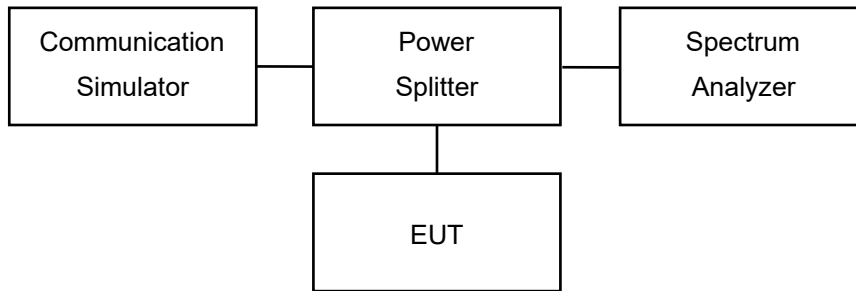
The EUT makes a call to the communication simulator. The 26dB bandwidth and 99% occupied bandwidth measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. The path loss was compensated to the results for each measurement.

### 4.3. Test Result of Occupied Bandwidth

Refer as Appendix B

## 5. Peak to Average Power Ratio

### 5.1. Test Setup



### 5.2. Test Procedure

1. The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. The path loss was compensated to the results for each measurement.
2. Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth.
3. Set the number of counts to a value that stabilizes the measured CCDF curve.
4. Record the maximum PAPR level associated with a probability of 0.1 %.

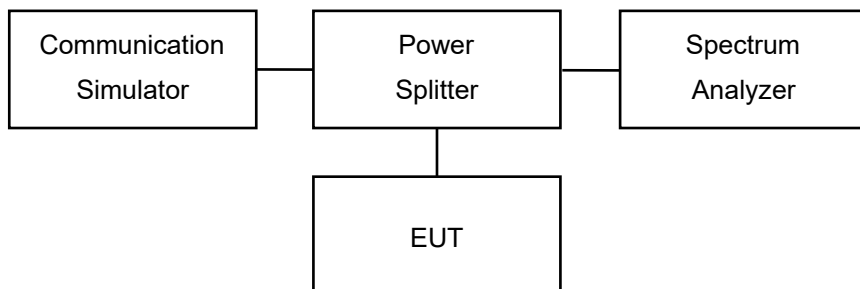
### 5.3. Test Result of Peak to Average Power Ratio

Refer as Appendix C

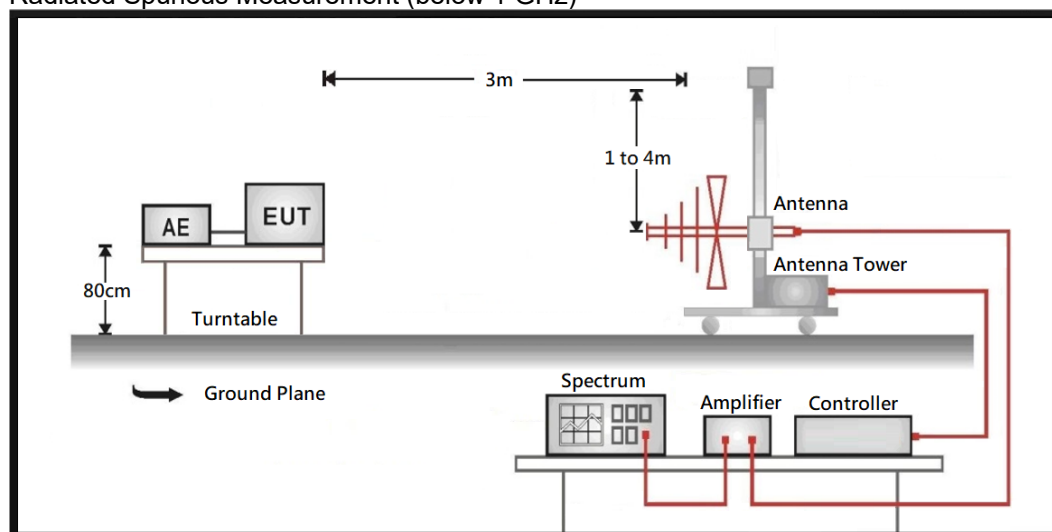
## 6. Spurious Emission

### 6.1. Test Setup

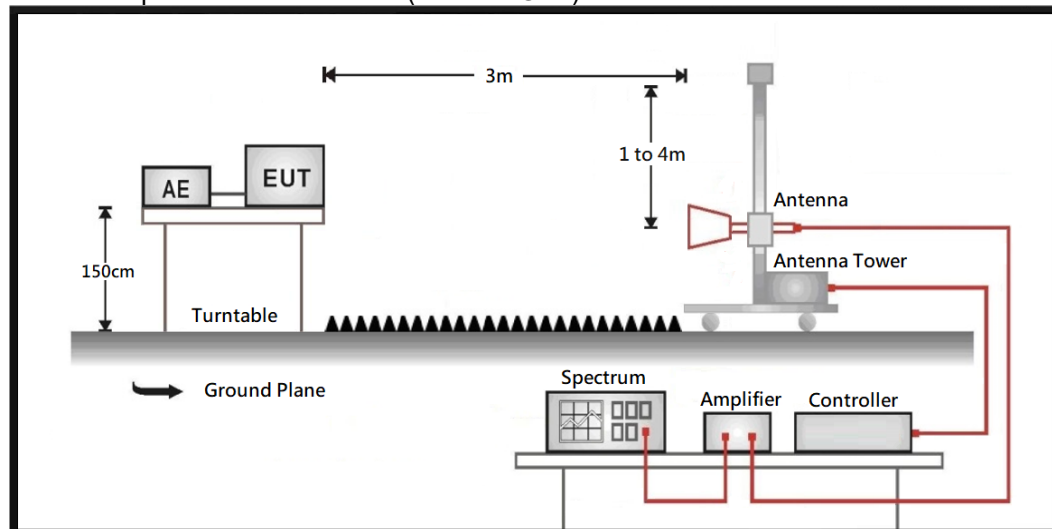
#### Conducted Spurious Measurement



#### Radiated Spurious Measurement (below 1 GHz)



#### Radiated Spurious Measurement (above 1 GHz)



## **6.2. Test Procedure**

### **Conducted Spurious Measurement:**

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. The path loss was compensated to the results for each measurement. The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10<sup>th</sup> harmonic.

### **Radiated Spurious Measurement:**

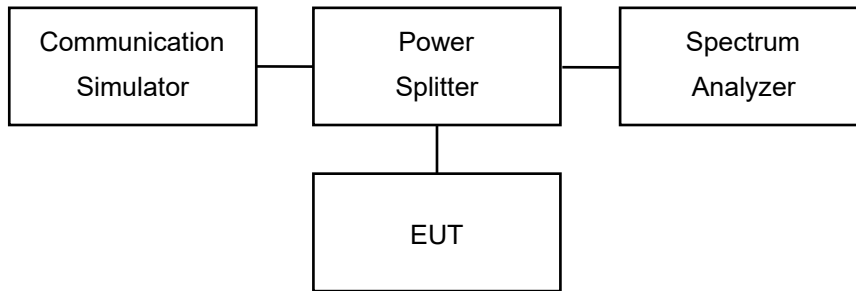
The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations. The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic. Taking the record of maximum spurious emission.

## **6.3. Test Result of Spurious Emission**

Refer as Appendix D

## 7. Conducted Band Edge

### 7.1. Test Setup



### 7.2. Test Procedure

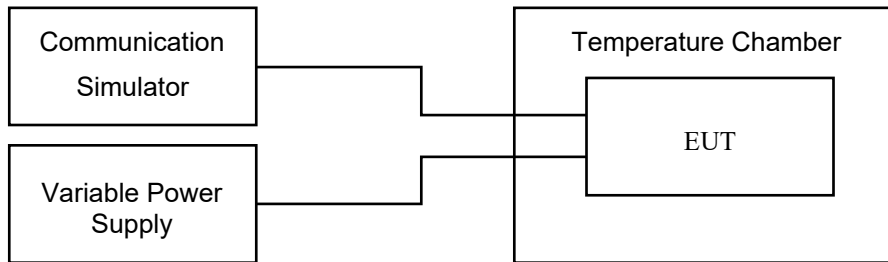
1. The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. The path loss was compensated to the results for each measurement.
2. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.

### 7.3. Test Result of Conducted Band Edge

Refer as Appendix E

## 8. Frequency Stability

### 8.1. Test Setup



### 8.2. Test Procedures

#### Frequency Stability under Temperature Variations:

The EUT under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a communication simulator. The EUT was placed inside the temperature chamber. Set the EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

#### Frequency Stability under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC or DC power supply to power the EUT and set the voltage to rated voltage. Reduce the input voltage to specify extreme voltage variation ( $\pm 15\%$ ) and endpoint, record the maximum frequency change.

### 8.3. Test Result of Frequency Stability

Refer as Appendix F