中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

# SAR TEST REPORT

**Applicant:** **TECNO MOBILE LIMITED**

Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

**FCC ID:** **2ADYY-CM7**

**Product Name:** **Mobile Phone**

**Standard(s):** **47 CFR Part 2(2.1093)**

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

**Report Number:** **2403A43118E-20**

**Date Of Issue:** **2025/1/13**

**Reviewed By:** **Ken Zong** Ken Zong

Title: SAR Engineer

**Approved By:** **Karl Gong** Karl Gong

Title: SAR Engineer

**Test Laboratory:** **China Certification ICT Co., Ltd (Dongguan)**

No. 113, Pingkang Road, Dalang Town, Dongguan,Guangdong, China
Tel:+86-769-83085888
www.ccttt.com.cn

# SAR TEST RESULTSSUMMARY

| Operation Frequency Bands | Highest Reported 1g SAR (W/kg) | | Limits (W/kg) |
|---|---|---|---|
| | Head SAR | Body SAR (Gap 10mm) | |
| **GSM 850** | 0.17 | 0.21 | **1.6** |
| **PCS 1900** | **0.91** | **0.66** | |
| **WCDMA Band 2** | 0.40 | 0.20 | |
| **WCDMA Band 4** | 0.37 | 0.32 | |
| **WCDMA Band 5** | 0.38 | 0.42 | |
| **LTE Band 2** | 0.27 | 0.15 | |
| **LTE Band 5** | 0.38 | 0.35 | |
| **LTEBand 7** | 0.23 | 0.09 | |
| **LTE Band 12&17** | 0.37 | 0.42 | |
| **LTE Band 13** | 0.38 | 0.54 | |
| **LTE Band 38** | 0.11 | 0.08 | |
| **LTE Band 41** | 0.12 | 0.07 | |
| **LTE Band 66&4** | 0.21 | 0.19 | |
| **WLAN 2.4G** | 0.25 | 0.14 | |
| **WLAN 5.2G** | 0.18 | 0.11 | |
| **WLAN 5.3G** | 0.23 | 0.15 | |
| **WLAN 5.6G** | 0.28 | 0.11 | |
| **WLAN 5.8G** | 0.14 | 0.06 | |

| **Maximum Simultaneous Transmission SAR** | | | | |
|---|---|---|---|---|
| **Items** | **Head SAR** | **Body SAR (Gap 10mm)** | **Hotspot (Gap 10mm)** | **Limits** |
| Sum SAR(W/kg) | 1.19 | 0.82 | 0.81 | 1.6 |
| SPLSR | NA | NA | NA | 0.04 |
| EUT Received Date: | 2024/12/10 | | | |
| Tested Date: | 2024/12/14~2024/12/25 | | | |
| Tested Result: | Pass | | | |

*Note▲: The test data of LTE Band 42/5G NR and LTE CA, please refer to FCC ID: 2ADYY-CM7, SAR report of2401A43118E-SA, issued by Bay Area Compliance Laboratories Corp. (Shenzhen).*

## Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

## Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk "★".

Each test item follows the test standard(s) without deviation.

# CONTENTS

DOCUMENT REVISION HISTORY ..... 6
1. GENERAL INFORMATION ..... 7
1.1 PRODUCT DESCRIPTION FOR DEVICE UNDER TEST (EUT) ..... 7
1.2TEST SPECIFICATION, METHODS AND PROCEDURES ..... 9
1.3 SAR LIMITS ..... 10
1.4 FACILITIES ..... 11
2. SAR MEASUREMENTSYSTEM ..... 12
3. EQUIPMENT LIST AND CALIBRATION ..... 19
3.1 EQUIPMENTS LIST & CALIBRATION INFORMATION ..... 19
4. SAR MEASUREMENT SYSTEM VERIFICATION ..... 20
4.1 LIQUID VERIFICATION ..... 20
4.2 SYSTEM ACCURACY VERIFICATION ..... 24
4.3 SAR SYSTEM VALIDATION DATA ..... 26
5. EUT TEST STRATEGY AND METHODOLOGY ..... 41
5.1 TEST POSITIONS FOR DEVICE OPERATING NEXT TO A PERSON'S EAR ..... 41
5.2 CHEEK/TOUCH POSITION ..... 42
5.3 EAR/TILT POSITION ..... 42
5.4 TEST POSITIONS FOR BODY-WORN AND OTHER CONFIGURATIONS ..... 43
5.5 TEST DISTANCE FOR SAR EVALUATION ..... 44
5.6 SAR EVALUATION PROCEDURE ..... 45
6. CONDUCTED OUTPUT POWER MEASUREMENT ..... 46
6.1 TEST PROCEDURE ..... 46
6.2 DESCRIPTION OF TEST CONFIGURATION ..... 47
6.3 MAXIMUM TARGET OUTPUT POWER ..... 52
6.4 TEST RESULTS: ..... 55
7. Standalone SAR test exclusion considerations ..... 85
7.1 ANTENNA DISTANCE TOEDGE ..... 86
7.2STANDALONE SAR TEST EXCLUSION CONSIDERATIONS ..... 87
7.3STANDALONE SAR ESTIMATION: ..... 88
7.4 SAR TEST EXCLUSION FOR THE EUT EDGE CONSIDERATIONS RESULT ..... 89
8. SAR MEASUREMENT RESULTS ..... 90

8.1 SAR TEST DATA ..... 90
9. Measurement Variability ..... 126
10. DUT HOLDER PERTURBATIONS ..... 127
11. SAR SIMULTANEOUS TRANSMISSION DESCRIPTION ..... 128
12. SAR Plots ..... 132
APPENDIX A MEASUREMENT UNCERTAINTY ..... 133
APPENDIX B EUT TEST POSITION PHOTOS ..... 134
APPENDIX C CALIBRATION CERTIFICATES ..... 135

# DOCUMENT REVISION HISTORY

| Revision Number | Report Number | Description of Revision | Date of Revision |
|---|---|---|---|
| 1.0 | 2403A43118E-20 | Original Report | 2025/1/13 |

# 1. GENERAL INFORMATION

## 1.1 Product Description for device under Test (EUT)

| | |
|---|---|
| **EUT Name:** | Mobile Phone |
| **EUT Model:** | CM7 |
| **Device Type:** | Portable |
| **Exposure Category:** | Population / Uncontrolled |
| **Antenna Type(s):** | Internal Antenna |
| **Body-Worn Accessories:** | None |
| **Proximity Sensor:** | None |
| **Carrier Aggregation:** | Support |
| **Operation modes:** | GSM Voice, GPRS/EDGE Data,<br>WCDMA( R99 (Voice+Data), HSUPA/HSDPA), FDD-LTE, TDD-LTE,<br>5G NR, LTE Carrier Aggregation, WLAN, Bluetooth, NFC |
| **Uplink Intra CA Bands:** | CA_7C; CA_38C; CA_41C; CA_66C; |
| **Uplink Inter CA Bands:** | CA_B7A-B5A, CA_B2A-B7A, CA_B2A-B4A, CA_B2A-B5A<br>CA_B4A-B5A, CA_B4A-B17A, CA_B4A-B7A |
| **EN-DC Bands:** | DC_2A_n7A,DC_4A_n7A,DC_5A_n7A,DC_7A_n7A,DC_66A_n7A,<br>DC_5A_n38A,DC_66A_n38A,DC_4A_n41A,DC_5A_n41A,DC_41A_n41A,<br>DC_66A_n41A,DC_2A_n66A,DC_5A_n66A,DC_7A_n66A,DC_12A_n66A,<br>DC_66A_n66A,DC_5A_n77A,DC_7A_n77A,DC_41A_n77A,DC_66A_n77A,<br>DC_2A_n78A,DC_4A_n78A,DC_5A_n78A,DC_7A_n78A,DC_38A_n78A,<br>DC_41A_n78A,DC_66A_n78A,DC_2A_7C_n78A |
| **Carrier Aggregation:** | DC_2A_7A_n78A,DC_2A_66A_n78A,DC_2A_38A_n78A,DC_5A_7A_n78A,<br>DC_7A_7A_n78A,DC_7A_66A_,n78A,DC_66A_n7A_n78A,DC_7C_n77A,<br>DC_7C_n78A,DC_41C_n41A,DC_41C_n77A,DC_41C_n78A, DC_7_n78C |
| **Frequency Band:** | GSM 850: 824-849 MHz(TX); 869-894 MHz(RX)<br>PCS 1900: 1850-1910 MHz(TX); 1930-1990 MHz(RX)<br>WCDMA Band 2: 1850-1910 MHz(TX); 1930-1990 MHz(RX)<br>WCDMA Band 4: 1710-1755MHz(TX) ; 2110-2155 MHz(RX)<br>WCDMA Band 5: 824-849 MHz(TX); 869-894 MHz(RX)<br>LTE Band 2: 1850-1910 MHz(TX); 1930-1990 MHz(RX)<br>LTE Band 4: 1710-1755MHz(TX) ; 2110-2155 MHz(RX)<br>LTE Band 5: 824-849 MHz(TX); 869-894 MHz(RX)<br>LTE Band 7: 2500-2570 MHz(TX); 2620-2690 MHz(RX)<br>LTE Band 12: 699-716 MHz(TX); 729-746 MHz(RX)<br>LTE Band 13: 777-787 MHz(TX); 746-756 MHz(RX)<br>LTE Band 17: 704-716 MHz(TX); 734-746 MHz(RX)<br>LTE Band 38: 2570-2620 MHz(TX/RX)<br>LTE Band 41: 2496-2690 MHz(TX/RX)<br>LTE Band 42: 3450-3550 MHz(TX/RX)<br>LTE Band 66: 1710-1780 MHz(TX) ; 2110-2200 MHz(RX)<br>5G NR n5: 824-849 MHz(TX); 869-894 MHz(RX)<br>5G NR n7:2500-2570 MHz(TX); 2620-2690 MHz(RX)<br>5G NR n12:699-716 MHz(TX); 729-746 MHz(RX)<br>5G NR n38: 2570-2620 MHz(TX/RX)<br>5G NR n41: 2496-2690 MHz(TX/RX)<br>5G NR n66: 1710-1780 MHz(TX) ; 2110-2200 MHz(RX)<br>5G NR n77 Lower: 3450-3550 MHz(TX/RX)<br>5G NR n77Middle: 3550-3700 MHz(TX/RX)<br>5G NR n77 Upper: 3700-3980 MHz(TX/RX)<br>5G NR n78 Lower:3450-3550 MHz(TX/RX)<br>5G NR n78Middle:3550-3700 MHz(TX/RX)<br>5G NR n78Upper:3700-3800 MHz(TX/RX)<br>WLAN 2.4G: 2412-2462 MHz(TX/RX) |

| | |
|---|---|
| | WLAN 5.2G: 5150-5250 MHz(TX/RX)<br>WLAN 5.3G: 5250-5350 MHz(TX/RX)<br>WLAN 5.6G: 5470-5725MHz(TX/RX)<br>WLAN 5.8G: 5725-5850 MHz(TX/RX)<br>Bluetooth(BDR/EDR): 2402-2480MHz(TX/RX)<br>BLE_1M: 2402-2480MHz(TX/RX)<br>BLE_2M: 2404-2478MHz(TX/RX)<br>NFC:13.56MHz |
| **Dimensions (L*W*H):** | 163mm (L) *73mm (W) *9mm (H) |
| **Rated Input Voltage:** | DC3.91V from Rechargeable Battery |
| **Sample Number:** | 2VG3-1 |
| **Normal Operation:** | Head and Body |

*Note▲: The test data of LTE Band 42/5G NR and LTE CA, please refer to FCC ID: 2ADYY-CM7, SAR report of2401A43118E-SA, issued by Bay Area Compliance Laboratories Corp. (Shenzhen).*

## 1.2Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528-2013, the following FCC Published RF exposure KDB procedures:

KDB 447498 D01 General RF Exposure Guidance v06
KDB 648474 D04 Handset SAR v01r03
KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
KDB865664 D02 RF Exposure Reporting v01r02
KDB941225 D01 3G SAR Procedures v03r01
KDB 941225 D05 SAR for LTE Devices v02r05
KDB941225 D06 Hotspot Mode v02r01
KDB 248227 D01 802.11 Wi-Fi SAR v02r02

TCB WorkshopApril2019:RF Exposure Procedures

## 1.3 SAR Limits

**FCC Limit**

| EXPOSURE LIMITS | SAR (W/kg) | |
|---|---|---|
| | (General Population / Uncontrolled Exposure Environment) | (Occupational / Controlled Exposure Environment) |
| Spatial Average (averaged over the whole body) | 0.08 | 0.4 |
| Spatial Peak (averaged over any 1 g of tissue) | **1.60** | 8.0 |
| Spatial Peak (hands/wrists/feet/ankles averaged over 10 g) | 4.0 | 20.0 |

Population/Uncontrolled Environments are defined as locations where there is the exposure ofindividual who have no knowledge or control of their exposure.

Occupational/Controlled Environments are defined as locations where there is exposure that maybe incurred by people who are aware of the potential for exposure (i.e. as a result of employmentor occupation).

General Population/Uncontrolled environments Spatial Peak limit 1.6W/kg for 1g SAR applied to the EUT.

## 1.4 FACILITIES

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan,Guangdong, China.

The test sites and measurement facilities used to collect data are located at:

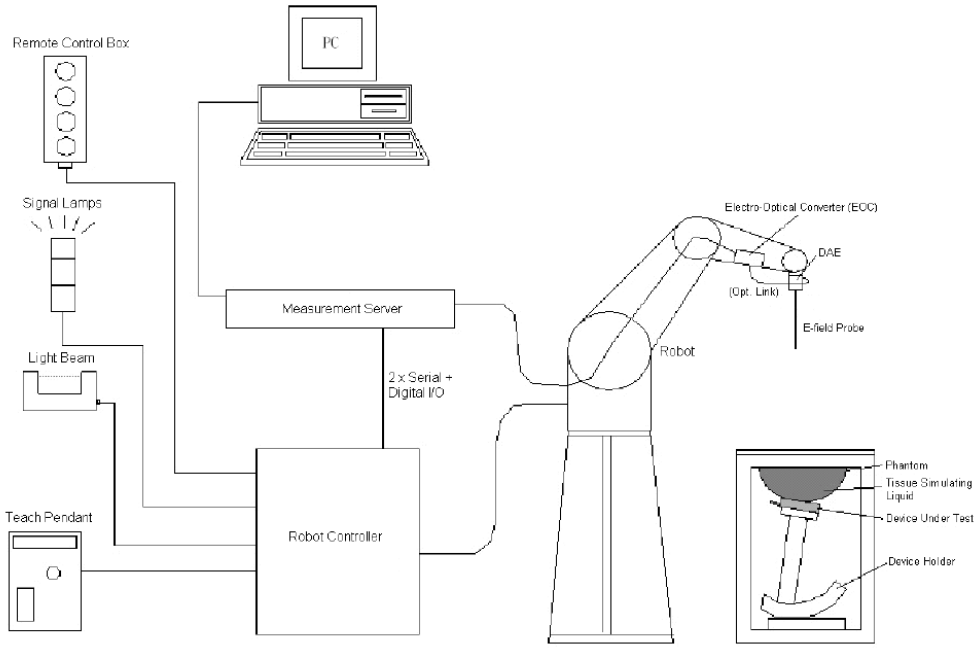
| | |
|---|---|
| ☒ SAR Lab 1 | ☐ SAR Lab 2 |

# 2. SAR MEASUREMENTSYSTEM

These measurements were performed with the automated near-field scanning system DASY5 from Schmid& Partner Engineering AG (SPEAG) which is the Fifth generation of the system shown in the figure hereinafter:

**DASY5 System Description**

The DASY5 system for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal application, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 professional operating system and the DASY52 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

**DASY5 Measurement Server**

The DASY5 measurement server is based on aPC/104 CPU board with a 400MHz Intel ULVCeleron, 128MB chip-disk and 128MB RAM.The necessary circuits for communication withthe DAE4 (or DAE3) electronics box, as well asthe 16 bit AD-converter system for optical detectionand digital I/O interface are contained on theDASY5 I/O board, which is directly connected tothe PC/104 bus of the CPU board.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized point out, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.

**Data Acquisition Electronics**

The data acquisition electronics (DAE4) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of both the DAE4 as well as of the DAE3 box is 200MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

**EX3DV4 E-Field Probes**

| | |
|---|---|
| **Frequency** | 4 MHz - 10 GHz<br>Linearity: ± 0.2 dB (30 MHz to 10 GHz) |
| **Directivity** | ± 0.1 dB in TSL (rotation around probe axis)<br>± 0.3 dB in TSL (rotation normal to probe axis) |
| **Dynamic Range** | 10 µW/g to > 100 mW/g<br>Linearity: ± 0.2 dB (noise: typically < 1 µW/g) |
| **Dimensions** | Overall length: 337 mm (Tip: 20 mm)<br>Tip diameter: 2.5 mm (Body: 12 mm)<br>Typical distance from probe tip to dipole centers: 1 mm |
| **Application** | High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%. |
| **Compatibility** | DASY3, DASY4, DASY52, DASY6, DASY8 SAR, EASY6, EASY4/MRI |

**Calibration Frequency Points for EX3DV4 E-Field Probes SN: 7329 Calibrated: 2024/3/27**

| Calibration Frequency Point(MHz) | Frequency Range(MHz) | | Conversion Factor | | |
|---|---|---|---|---|---|
| | From | To | X | Y | Z |
| 750 Head | 650 | 810 | 8.79 | 10.07 | 9.05 |
| 900 Head | 810 | 1000 | 8.42 | 9.50 | 8.93 |
| 1750 Head | 1650 | 1810 | 7.56 | 8.56 | 7.71 |
| 1900 Head | 1810 | 2000 | 7.37 | 8.32 | 7.54 |
| 2300 Head | 2200 | 2399 | 7.21 | 8.13 | 7.41 |
| 2450 Head | 2399 | 2500 | 7.05 | 7.92 | 7.22 |
| 2600 Head | 2500 | 2700 | 6.91 | 7.77 | 7.08 |
| 5250 Head | 5140 | 5360 | 4.96 | 5.61 | 5.16 |
| 5600 Head | 5490 | 5675 | 4.38 | 4.98 | 4.56 |
| 5750 Head | 5675 | 5860 | 4.54 | 5.16 | 4.70 |

**SAM Twin Phantom**

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region, where shellthickness increases to 6 mm). The phantom has three measurement areas:
_ Left Head
_ Right Head
_ Flat phantom

The phantom table for the DASY systems based on the robots have the size of 100 x 50 x 85 cm (L xWx H).
For easy dislocation these tables have fork lift cut outs at the bottom.
The bottom plate contains three pairs of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. Only one device holder is necessary if two phantoms are used (e.g., for different liquids)

A white cover is provided to cover the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. Free space scans of devices on top of this phantom cover are possible. Three reference marks are provided on the phantom counter. These reference marks are used to teach the absolute phantom position relative to the robot.

**Robots**

The DASY5 system uses the high precision industrial robot. The robot offers the same features important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchrony motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)

The above mentioned robots are controlled by the Staubli CS8c robot controllers. All information regarding the use and maintenance of the robot arm and the robot controller is contained on the CDs delivered along with the robot. Paper manuals are available upon request direct from Staubli.

**SAR Scan Procedures**

**Step 1: Power Reference Measurement**

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the deviceunder test in the batch process. The minimum distance of probe sensors to surface determines the closestmeasurement point to phantom surface. The minimum distance of probe sensors to surface is 1.4 mm. This distancecannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

**Step 2: Area Scans**

Area scans are defined prior to the measurementprocess being executed with a user definedvariable spacing between each measurementpoint (integral) allowing low uncertaintymeasurements to be conducted. Scans defined for FCC applications utilize a 15mm2 step integral, with 1.5mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

| | ≤ 3 GHz | > 3 GHz |
|---|---|---|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface | 5 mm ± 1 mm | ½·δ·ln(2) mm ± 0.5 mm |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location | 30° ± 1° | 20° ± 1° |
| Maximum area scan spatial resolution: $\Delta x_{Area}$, $\Delta y_{Area}$ | ≤ 2 GHz: ≤ 15 mm<br>2 – 3 GHz: ≤ 12 mm | 3 – 4 GHz: ≤ 12 mm<br>4 – 6 GHz: ≤ 10 mm |
| | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device. | |

**Step 3: Zoom Scan (Cube Scan Averaging)**

The averaging zoom scan volume utilized in the DASY5 software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m$^3$ is used to represent the head and body tissue density and not the phantomliquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1g cube is 5mm,with the side length of the 10g cube is 21.5mm.

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

| | | | ≤ 3 GHz | > 3 GHz |
|---|---|---|---|---|
| Maximum zoom scan spatial resolution: $\Delta x_{Zoom}$, $\Delta y_{Zoom}$ | | | ≤ 2 GHz: ≤ 8 mm<br>2 – 3 GHz: ≤ 5 mm* | 3 – 4 GHz: ≤ 5 mm*<br>4 – 6 GHz: ≤ 4 mm* |
| Maximum zoom scan spatial resolution, normal to phantom surface | uniform grid: $\Delta z_{Zoom}(n)$ | | ≤ 5 mm | 3 – 4 GHz: ≤ 4 mm<br>4 – 5 GHz: ≤ 3 mm<br>5 – 6 GHz: ≤ 2 mm |
| | graded grid | $\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface | ≤ 4 mm | 3 – 4 GHz: ≤ 3 mm<br>4 – 5 GHz: ≤ 2.5 mm<br>5 – 6 GHz: ≤ 2 mm |
| | | $\Delta z_{Zoom}(n>1)$: between subsequent points | $\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$ mm | |
| Minimum zoom scan volume | x, y, z | | ≥ 30 mm | 3 – 4 GHz: ≥ 28 mm<br>4 – 5 GHz: ≥ 25 mm<br>5 – 6 GHz: ≥ 22 mm |

Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

**Step 4: Power Drift Measurement**

The Power Drift Measurement measures the field at the same location as the most recent power referencemeasurement within the same procedure, and with the same settings. The Power Drift Measurement gives the fielddifference in dB from the reading conducted within the last Power Reference Measurement. This allows a user tomonitor the power drift of the device under test within a batch process. The measurement procedure is the same asStep 1.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 7 x7 x 7 (5mmx5mmx5mm) providing a volume of 30 mm in the X & Y & Z axis.

**Tissue Dielectric Parameters for Head and Body Phantoms**

The head tissue dielectric parameters recommended by the IEEE 1528-2013

**Recommended Tissue Dielectric Parameters for Head liquid**

**Table 3—Target dielectric properties of head tissue-equivalent material in the 300 MHz to 6000 MHz frequency range**

| Frequency (MHz) | Relative permittivity ($\varepsilon'_r$) | Conductivity ($\sigma$) (S/m) |
|---|---|---|
| 300 | 45.3 | 0.87 |
| 450 | 43.5 | 0.87 |
| *750* | *41.9* | *0.89* |
| 835 | 41.5 | 0.90 |
| 900 | 41.5 | 0.97 |
| 1450 | 40.5 | 1.20 |
| *1500* | *40.4* | *1.23* |
| *1640* | *40.2* | *1.31* |
| *1750* | *40.1* | *1.37* |
| 1800 | 40.0 | 1.40 |
| 1900 | 40.0 | 1.40 |
| 2000 | 40.0 | 1.40 |
| *2100* | *39.8* | *1.49* |
| *2300* | *39.5* | *1.67* |
| 2450 | 39.2 | 1.80 |
| *2600* | *39.0* | *1.96* |
| 3000 | 38.5 | 2.40 |
| *3500* | *37.9* | *2.91* |
| *4000* | *37.4* | *3.43* |
| *4500* | *36.8* | *3.94* |
| *5000* | *36.2* | *4.45* |
| *5200* | *36.0* | *4.66* |
| *5400* | *35.8* | *4.86* |
| *5600* | *35.5* | *5.07* |
| 5800 | 35.3 | 5.27 |
| *6000* | *35.1* | *5.48* |

NOTE—For convenience, permittivity and conductivity values at some frequencies that are not part of the original data from Drossos et al. [B60] or the extension to 5800 MHz are provided (i.e., the values shown in italics). These values were linearly interpolated between the values in this table that are immediately above and below these values, except the values at 6000 MHz that were linearly extrapolated from the values at 3000 MHz and 5800 MHz.

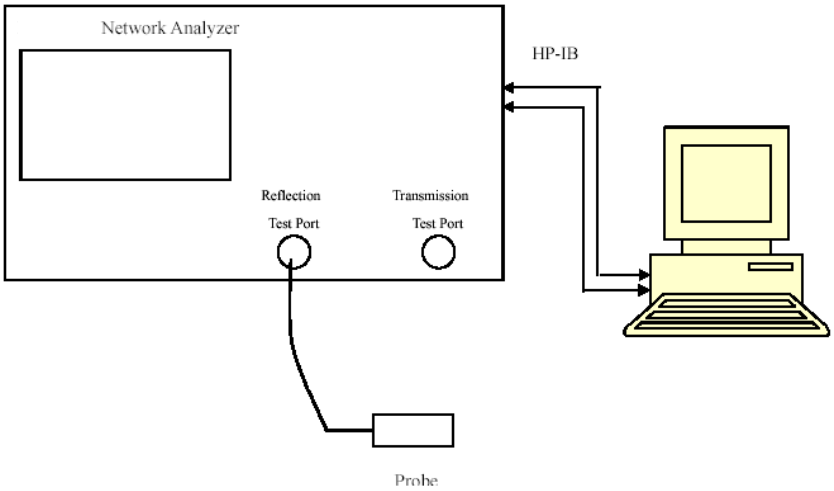
# 3. EQUIPMENT LIST AND CALIBRATION

## 3.1 Equipments List & Calibration Information

| Equipment | Model | S/N | Calibration Date | Calibration Due Date |
|---|---|---|---|---|
| DASY5 Test Software | DASY52.10 | N/A | NCR | NCR |
| DASY5 Measurement Server | DASY5 4.5.12 | 1567 | NCR | NCR |
| Data Acquisition Electronics | DAE4 | 1493 | 2024/3/27 | 2025/3/26 |
| E-Field Probe | EX3DV4 | 7329 | 2024/3/27 | 2025/3/26 |
| Mounting Device | MD4HHTV5 | BJPCTC0152 | NCR | NCR |
| Twin SAM | Twin SAM V5.0 | 1412 | NCR | NCR |
| Dipole, 750 MHz | D750V3 | 1230 | 2023/3/24 | 2026/3/23 |
| Dipole, 900 MHz | D900V2 | 1d217 | 2023/3/24 | 2026/3/23 |
| Dipole, 1750 MHz | D1750V2 | 1200 | 2023/3/27 | 2026/3/26 |
| Dipole, 1900 MHz | D1900V2 | 5d251 | 2023/3/27 | 2026/3/26 |
| Dipole, 2450 MHz | D2450V2 | 1102 | 2023/3/27 | 2026/3/26 |
| Dipole,2600 MHz | D2600V2 | 1206 | 2023/3/27 | 2026/3/26 |
| Dipole,5GHz | D5GHzV2 | 1245 | 2023/8/23 | 2026/8/22 |
| Simulated Tissue Liquid Head(500-9500 MHz) | HBBL600-10000V6 | 220420-2 | Each Time | / |
| Network Analyzer | 8753B | 2828A00170 | 2024/10/17 | 2025/10/16 |
| Dielectric assessment kit | 1319 | SM DAK 040 CA | NCR | NCR |
| MXG Vector Signal Generator | N5182B | MY51350144 | 2024/4/1 | 2025/3/31 |
| Power Meter | ML2495A | 1106009 | 2024/8/29 | 2025/8/28 |
| USB Power Sensor | U2001H | MY50000432 | 2024/4/1 | 2025/3/31 |
| Power Amplifier | ZHL-5W-202-S+ | 416402204 | NCR | NCR |
| Power Amplifier | ZVE-6W-83+ | 637202210 | NCR | NCR |
| Directional Coupler | 441493 | 520Z | NCR | NCR |
| Attenuator | 20dB, 100W | LN749 | NCR | NCR |
| Attenuator | 6dB, 150W | 2754 | NCR | NCR |
| Thermometer | DTM3000 | 3892 | 2024/4/1 | 2025/3/31 |
| Thermohygrometer | HTC-1 | N/A | 2024/4/1 | 2025/3/31 |
| Radio Communication Analyzer | MT8820C | 6201181458 | 2024/4/1 | 2025/3/31 |
| Spectrum Analyzer | FSU26 | 100147 | 2024/4/1 | 2025/3/31 |

# 4. SAR MEASUREMENT SYSTEM VERIFICATION

## 4.1 Liquid Verification




Liquid Verification Setup Block Diagram

**Liquid Verification Results**

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ | |
| 704 | Simulated Tissue Liquid Head | 43.634 | 0.876 | 42.15 | 0.89 | 3.52 | -1.57 | ±5 |
| 707.5 | Simulated Tissue Liquid Head | 43.594 | 0.883 | 42.13 | 0.89 | 3.47 | -0.79 | ±5 |
| 711 | Simulated Tissue Liquid Head | 43.544 | 0.887 | 42.11 | 0.89 | 3.41 | -0.34 | ±5 |
| 750 | Simulated Tissue Liquid Head | 43.152 | 0.902 | 41.9 | 0.89 | 2.99 | 1.35 | ±5 |

**Liquid Verification above was performed on 2024/12/15.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ | |
| 824.2 | Simulated Tissue Liquid Head | 43.1 | 0.906 | 41.55 | 0.9 | 3.73 | 0.67 | ±5 |
| 826.4 | Simulated Tissue Liquid Head | 42.843 | 0.922 | 41.54 | 0.9 | 3.14 | 2.44 | ±5 |
| 836.6 | Simulated Tissue Liquid Head | 42.657 | 0.929 | 41.5 | 0.9 | 2.79 | 3.22 | ±5 |
| 846.6 | Simulated Tissue Liquid Head | 42.532 | 0.949 | 41.5 | 0.91 | 2.49 | 4.29 | ±5 |
| 848.8 | Simulated Tissue Liquid Head | 42.239 | 0.951 | 41.5 | 0.91 | 1.78 | 4.51 | ±5 |
| 900 | Simulated Tissue Liquid Head | 42.149 | 0.997 | 41.5 | 0.97 | 1.56 | 2.78 | ±5 |

**Liquid Verification above was performed on 2024/12/16.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ | |
| 750 | Simulated Tissue Liquid Head | 43.349 | 0.898 | 41.9 | 0.89 | 3.46 | 0.9 | ±5 |
| 782 | Simulated Tissue Liquid Head | 43.052 | 0.906 | 41.75 | 0.89 | 3.12 | 1.8 | ±5 |

**Liquid Verification above was performed on 2024/12/14.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ | |
| 829 | Simulated Tissue Liquid Head | 42.509 | 0.919 | 41.53 | 0.9 | 2.36 | 2.11 | ±5 |
| 836.5 | Simulated Tissue Liquid Head | 42.485 | 0.925 | 41.5 | 0.9 | 2.37 | 2.78 | ±5 |
| 844 | Simulated Tissue Liquid Head | 42.365 | 0.932 | 41.5 | 0.91 | 2.08 | 2.42 | ±5 |
| 900 | Simulated Tissue Liquid Head | 41.908 | 0.964 | 41.5 | 0.97 | 0.98 | -0.62 | ±5 |

**Liquid Verification above was performed on 2024/12/17.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ | |
| 1720 | Simulated Tissue Liquid Head | 40.701 | 1.341 | 40.13 | 1.35 | 1.42 | -0.67 | ±5 |
| 1745 | Simulated Tissue Liquid Head | 40.595 | 1.353 | 40.1 | 1.37 | 1.23 | -1.24 | ±5 |
| 1750 | Simulated Tissue Liquid Head | 40.259 | 1.379 | 40.1 | 1.37 | 0.4 | 0.66 | ±5 |
| 1770 | Simulated Tissue Liquid Head | 40.196 | 1.395 | 40.06 | 1.38 | 0.34 | 1.09 | ±5 |

**Liquid Verification above was performed on 2024/12/23.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 1712.4 | Simulated Tissue Liquid Head | 41.189 | 1.356 | 40.13 | 1.35 | 2.64 | 0.44 | ±5 |
| 1732.6 | Simulated Tissue Liquid Head | 41.116 | 1.361 | 40.12 | 1.36 | 2.48 | 0.07 | ±5 |
| 1750 | Simulated Tissue Liquid Head | 41.027 | 1.367 | 40.1 | 1.37 | 2.31 | -0.22 | ±5 |
| 1752.6 | Simulated Tissue Liquid Head | 40.972 | 1.374 | 40.09 | 1.37 | 2.2 | 0.29 | ±5 |
| 2412 | Simulated Tissue Liquid Head | 40.036 | 1.749 | 39.28 | 1.77 | 1.92 | -1.19 | ±5 |
| 2437 | Simulated Tissue Liquid Head | 39.914 | 1.761 | 39.23 | 1.79 | 1.74 | -1.62 | ±5 |
| 2450 | Simulated Tissue Liquid Head | 39.795 | 1.764 | 39.2 | 1.8 | 1.52 | -2 | ±5 |
| 2462 | Simulated Tissue Liquid Head | 39.735 | 1.797 | 39.18 | 1.81 | 1.42 | -0.72 | ±5 |

**Liquid Verification above was performed on 2024/12/24.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 1850.2 | Simulated Tissue Liquid Head | 40.845 | 1.391 | 40 | 1.4 | 2.11 | -0.64 | ±5 |
| 1852.4 | Simulated Tissue Liquid Head | 40.773 | 1.395 | 40 | 1.4 | 1.93 | -0.36 | ±5 |
| 1880 | Simulated Tissue Liquid Head | 40.638 | 1.408 | 40 | 1.4 | 1.6 | 0.57 | ±5 |
| 1900 | Simulated Tissue Liquid Head | 40.536 | 1.422 | 40 | 1.4 | 1.34 | 1.57 | ±5 |
| 1907.6 | Simulated Tissue Liquid Head | 40.367 | 1.425 | 40 | 1.4 | 0.92 | 1.79 | ±5 |
| 1909.8 | Simulated Tissue Liquid Head | 40.359 | 1.427 | 40 | 1.4 | 0.9 | 1.93 | ±5 |

**Liquid Verification above was performed on 2024/12/18.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 1860 | Simulated Tissue Liquid Head | 40.825 | 1.388 | 40 | 1.4 | 2.06 | -0.86 | ±5 |
| 1880 | Simulated Tissue Liquid Head | 40.597 | 1.396 | 40 | 1.4 | 1.49 | -0.29 | ±5 |
| 1900 | Simulated Tissue Liquid Head | 40.352 | 1.414 | 40 | 1.4 | 0.88 | 1 | ±5 |

**Liquid Verification above was performed on 2024/12/19.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 2510 | Simulated Tissue Liquid Head | 40.466 | 1.827 | 39.12 | 1.86 | 3.44 | -1.77 | ±5 |
| 2535 | Simulated Tissue Liquid Head | 39.902 | 1.871 | 39.09 | 1.89 | 2.08 | -1.01 | ±5 |
| 2560 | Simulated Tissue Liquid Head | 39.542 | 1.899 | 39.05 | 1.92 | 1.26 | -1.09 | ±5 |
| 2600 | Simulated Tissue Liquid Head | 38.873 | 1.958 | 39 | 1.96 | -0.33 | -0.1 | ±5 |

**Liquid Verification above was performed on 2024/12/20.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 2580 | Simulated Tissue Liquid Head | 40.236 | 1.893 | 39.03 | 1.94 | 3.09 | -2.42 | ±5 |
| 2595 | Simulated Tissue Liquid Head | 39.707 | 1.923 | 39.01 | 1.95 | 1.79 | -1.38 | ±5 |
| 2600 | Simulated Tissue Liquid Head | 39.626 | 1.945 | 39 | 1.96 | 1.61 | -0.77 | ±5 |
| 2610 | Simulated Tissue Liquid Head | 39.214 | 1.946 | 38.99 | 1.97 | 0.57 | -1.22 | ±5 |

**Liquid Verification above was performed on 2024/12/21.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 2506 | Simulated Tissue Liquid Head | 40.547 | 1.879 | 39.13 | 1.86 | 3.62 | 1.02 | ±5 |
| 2549.5 | Simulated Tissue Liquid Head | 40.326 | 1.907 | 39.07 | 1.91 | 3.21 | -0.16 | ±5 |
| 2593 | Simulated Tissue Liquid Head | 39.591 | 1.926 | 39.01 | 1.95 | 1.49 | -1.23 | ±5 |
| 2600 | Simulated Tissue Liquid Head | 39.471 | 1.935 | 39 | 1.96 | 1.21 | -1.28 | ±5 |
| 2636.5 | Simulated Tissue Liquid Head | 39.271 | 2.003 | 38.95 | 2 | 0.82 | 0.15 | ±5 |
| 2680 | Simulated Tissue Liquid Head | 38.097 | 2.024 | 38.9 | 2.05 | -2.06 | -1.27 | ±5 |

**Liquid Verification above was performed on 2024/12/22.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 5180 | Simulated Tissue Liquid Head | 36.867 | 4.686 | 36.02 | 4.64 | 2.35 | 0.99 | ±5 |
| 5200 | Simulated Tissue Liquid Head | 36.795 | 4.719 | 36 | 4.66 | 2.21 | 1.27 | ±5 |
| 5240 | Simulated Tissue Liquid Head | 36.746 | 4.772 | 35.96 | 4.7 | 2.19 | 1.53 | ±5 |
| 5250 | Simulated Tissue Liquid Head | 36.565 | 4.781 | 35.95 | 4.71 | 1.71 | 1.51 | ±5 |
| 5260 | Simulated Tissue Liquid Head | 36.427 | 4.793 | 35.94 | 4.72 | 1.36 | 1.55 | ±5 |
| 5280 | Simulated Tissue Liquid Head | 36.378 | 4.804 | 35.92 | 4.74 | 1.28 | 1.35 | ±5 |
| 5320 | Simulated Tissue Liquid Head | 36.212 | 4.836 | 35.88 | 4.78 | 0.93 | 1.17 | ±5 |

**Liquid Verification above was performed on 2024/12/25.*

| Frequency (MHz) | LiquidType | Liquid Parameter | | Target Value | | Delta (%) | | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|
| | | $\varepsilon_r$ | σ (S/m) | $\varepsilon_r$ | σ (S/m) | $\Delta\varepsilon_r$ | Δσ (S/m) | |
| 5500 | Simulated Tissue Liquid Head | 36.829 | 5.091 | 35.65 | 4.97 | 3.31 | 2.43 | ±5 |
| 5580 | Simulated Tissue Liquid Head | 36.678 | 5.143 | 35.53 | 5.05 | 3.23 | 1.84 | ±5 |
| 5600 | Simulated Tissue Liquid Head | 36.571 | 5.198 | 35.5 | 5.07 | 3.02 | 2.52 | ±5 |
| 5700 | Simulated Tissue Liquid Head | 36.379 | 5.247 | 35.4 | 5.17 | 2.77 | 1.49 | ±5 |
| 5745 | Simulated Tissue Liquid Head | 36.343 | 5.311 | 35.36 | 5.22 | 2.78 | 1.74 | ±5 |
| 5750 | Simulated Tissue Liquid Head | 36.224 | 5.327 | 35.35 | 5.22 | 2.47 | 2.05 | ±5 |
| 5785 | Simulated Tissue Liquid Head | 35.176 | 5.355 | 35.32 | 5.26 | -0.41 | 1.81 | ±5 |
| 5825 | Simulated Tissue Liquid Head | 35.028 | 5.413 | 35.28 | 5.3 | -0.71 | 2.13 | ±5 |

**Liquid Verification above was performed on 2024/12/25.*

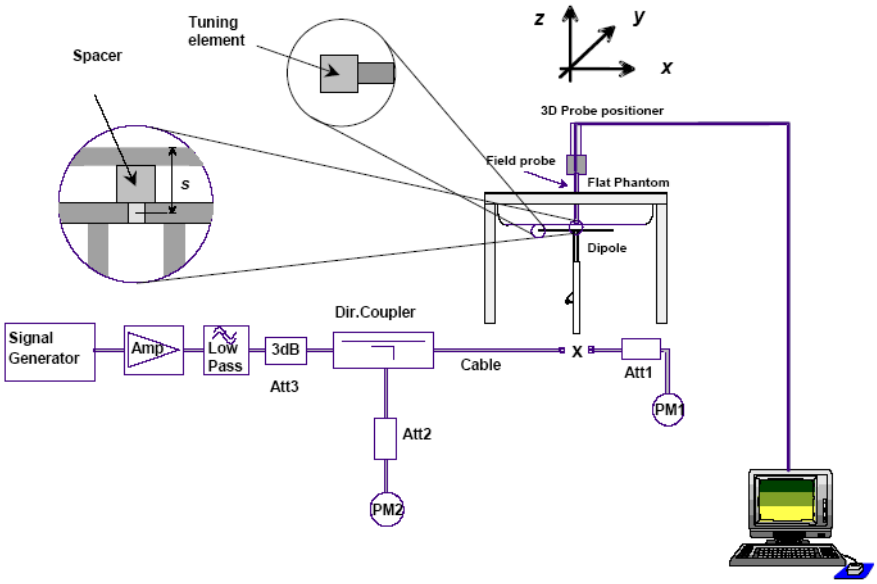
## 4.2 System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ±10%. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

The spacing distance*s* in the **System Verification Setup Block Diagram** is given by the following:

a) s = 15 mm ± 0,2 mm for 300 MHz ≤ f ≤ 1 000 MHz;
b) s = 10 mm ± 0,2 mm for 1 000 MHz < f ≤ 3 000 MHz;
c) s = 10 mm ± 0,2 mm for 3 000 MHz < f ≤ 6 000 MHz.

**System Verification Setup Block Diagram**




**System Accuracy Check Results**

| Date | Frequency Band | Liquid Type | Input Power (mW) | Measured SAR (W/kg) | | Normalized to 1W (W/kg) | Target Value (W/kg) | Delta (%) | Tolerance (%) |
|---|---|---|---|---|---|---|---|---|---|
| 2024/12/14 | 750 | Simulated Tissue Liquid Head | 100 | 1g | 0.827 | 8.27 | 8.49 | -2.591 | ±10 |
| 2024/12/15 | 750 | Simulated Tissue Liquid Head | 100 | 1g | 0.822 | 8.22 | 8.49 | -3.180 | ±10 |
| 2024/12/16 | 900 | Simulated Tissue Liquid Head | 100 | 1g | 1.05 | 10.5 | 10.9 | -3.670 | ±10 |
| 2024/12/17 | 900 | Simulated Tissue Liquid Head | 100 | 1g | 1.02 | 10.2 | 10.9 | -6.422 | ±10 |
| 2024/12/23 | 1750 | Simulated Tissue Liquid Head | 100 | 1g | 3.73 | 37.3 | 35.8 | 4.190 | ±10 |
| 2024/12/24 | 1750 | Simulated Tissue Liquid Head | 100 | 1g | 3.73 | 37.3 | 35.8 | 4.190 | ±10 |
| 2024/12/18 | 1900 | Simulated Tissue Liquid Head | 100 | 1g | 4.09 | 40.9 | 38.9 | 5.141 | ±10 |
| 2024/12/19 | 1900 | Simulated Tissue Liquid Head | 100 | 1g | 4.07 | 40.7 | 38.9 | 4.627 | ±10 |
| 2024/12/24 | 2450 | Simulated Tissue Liquid Head | 100 | 1g | 4.75 | 47.5 | 50.9 | -6.680 | ±10 |
| 2024/12/20 | 2600 | Simulated Tissue Liquid Head | 100 | 1g | 5.34 | 53.4 | 56.0 | -4.643 | ±10 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2024/12/21 | 2600 | Simulated Tissue Liquid Head | 100 | 1g | 5.28 | 52.8 | 56.0 | -5.714 | ±10 |
| 2024/12/22 | 2600 | Simulated Tissue Liquid Head | 100 | 1g | 5.27 | 52.7 | 56.0 | -5.893 | ±10 |
| 2024/12/25 | 5250 | Simulated Tissue Liquid Head | 100 | 1g | 7.68 | 76.8 | 78.0 | -1.538 | ±10 |
| 2024/12/25 | 5600 | Simulated Tissue Liquid Head | 100 | 1g | 7.76 | 77.6 | 81.0 | -4.198 | ±10 |
| 2024/12/25 | 5750 | Simulated Tissue Liquid Head | 100 | 1g | 7.45 | 74.5 | 77.8 | -4.242 | ±10 |

*The SAR values above are normalized to 1 Watt forward power.

## 4.3 SAR SYSTEM VALIDATION DATA

**System Performance 750 MHz Headwas performed on 2024/12/14**

**DUT: D750V3; Type: 750 MHz; Serial: 1230**

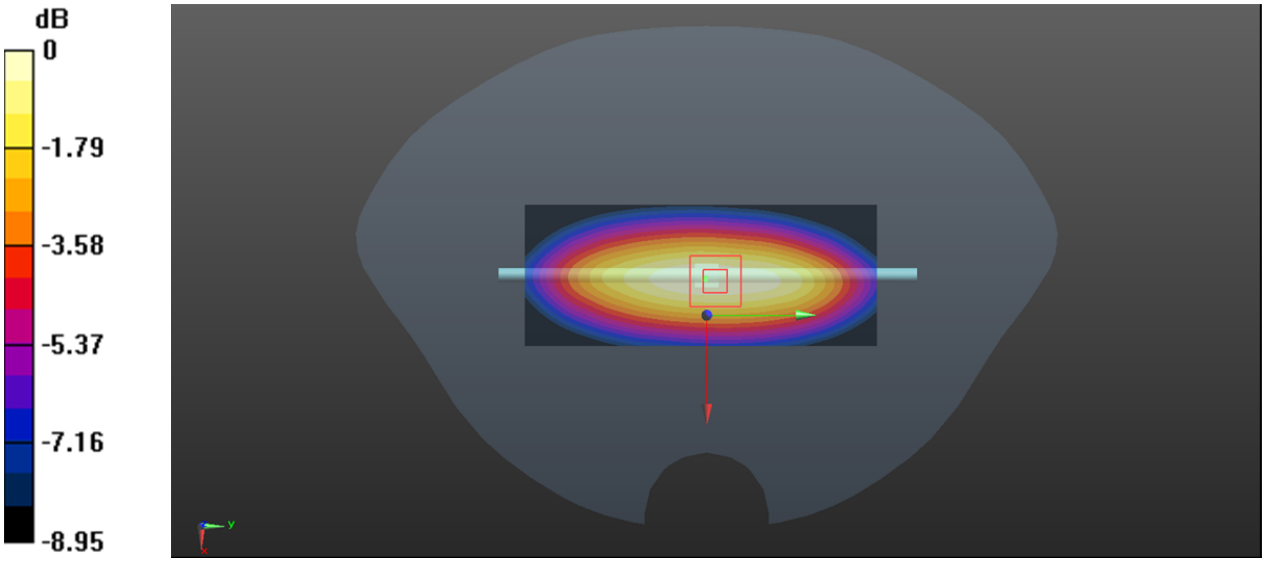
Communication System: CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; $\sigma$ = 0.898 S/m; $\varepsilon_r$ = 43.349; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.79, 10.07, 9.05) @750 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (5x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.16 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.06 V/m; Power Drift = -0.09dB
Peak SAR (extrapolated) = 1.31 W/kg
**SAR(1 g) = 0.827 W/kg; SAR(10 g) = 0.539 W/kg**
Maximum value of SAR (measured) = 1.15 W/kg




0 dB = 1.15 W/kg = 0.61 dBW/kg

**System Performance 750 MHz Headwas performed on 2024/12/15**

**DUT: D750V3; Type: 750 MHz; Serial: 1230**

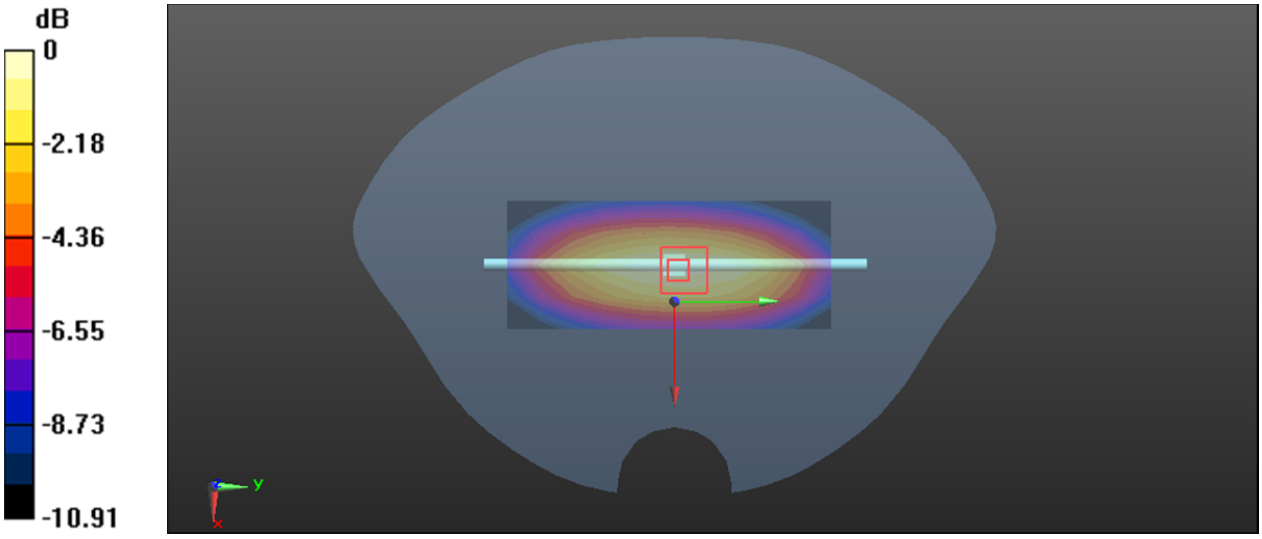
Communication System: CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; $\sigma$ = 0.902 S/m; $\varepsilon_r$ = 43.152; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.79, 10.07, 9.05) @750 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (5x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.10 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.55 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.28 W/kg
**SAR(1 g) = 0.822 W/kg; SAR(10 g) = 0.538 W/kg**
Maximum value of SAR (measured) = 1.12 W/kg




0 dB = 1.12 W/kg = 0.49 dBW/kg

**System Performance 900 MHz Head was performed on 2024/12/16**

**DUT: D900V2; Type: 900 MHz; Serial: 1d217**

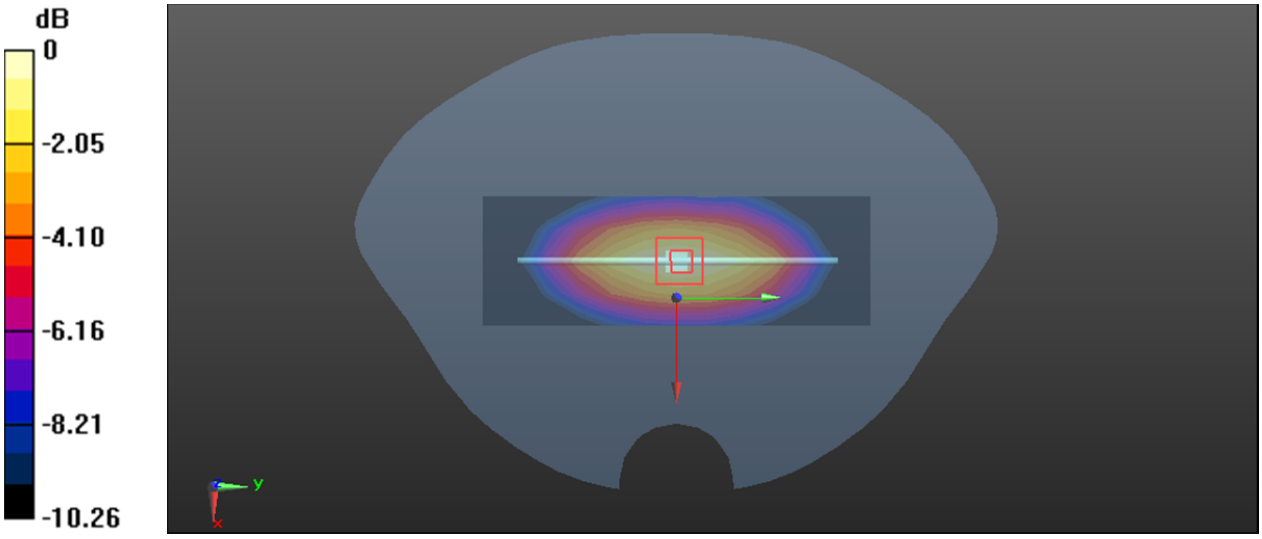
Communication System: UID 0, CW (0); Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz; $\sigma$ = 0.997 S/m; $\varepsilon_r$ = 42.149; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.42, 9.5, 8.93) @ 900 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (13x5x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.35 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.01 V/m; Power Drift = 0.15dB
Peak SAR (extrapolated) = 1.49 W/kg
**SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.695 W/kg**
Maximum value of SAR (measured) = 1.37 W/kg




0 dB = 1.37 W/kg = 1.37 dBW/kg

**System Performance 900 MHz Head was performed on 2024/12/17**

**DUT: D900V2; Type: 900 MHz; Serial: 1d217**

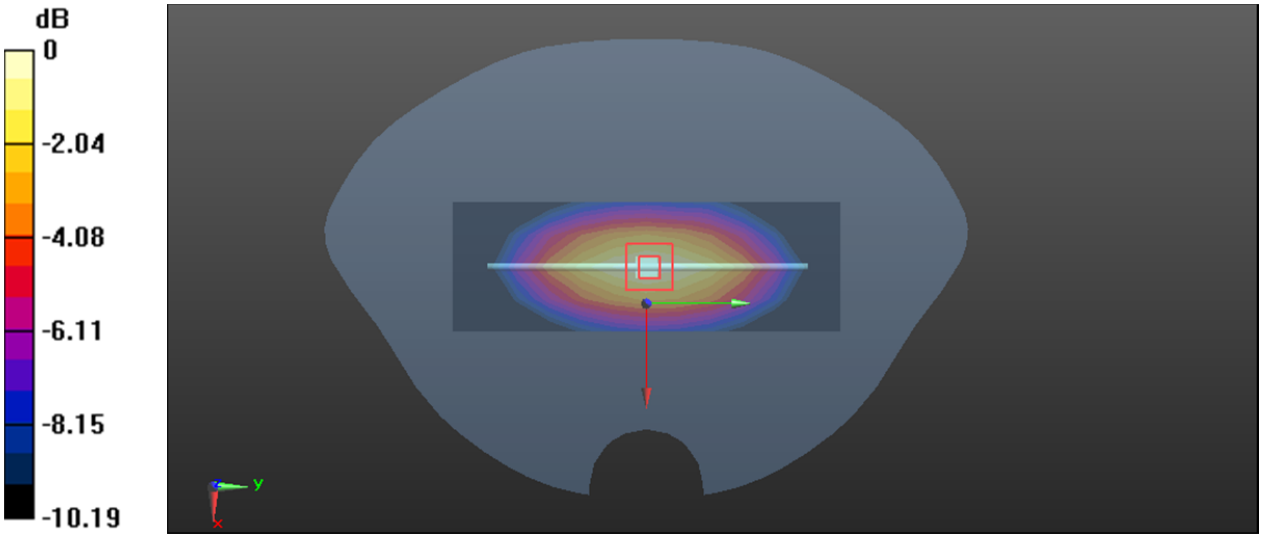
Communication System: UID 0, CW (0); Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz; $\sigma$ = 0.964 S/m; $\varepsilon_r$ = 41.908; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.42, 9.5, 8.93) @ 900 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (13x5x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.34 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.71 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.44 W/kg
**SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.678 W/kg**
Maximum value of SAR (measured) = 1.33 W/kg




0 dB = 1.33 W/kg = 1.24 dBW/kg

**System Performance 1750 MHz Headwas performed on 2024/12/23**

**DUT: D1750V2; Type: 1750 MHz; Serial: 1200**

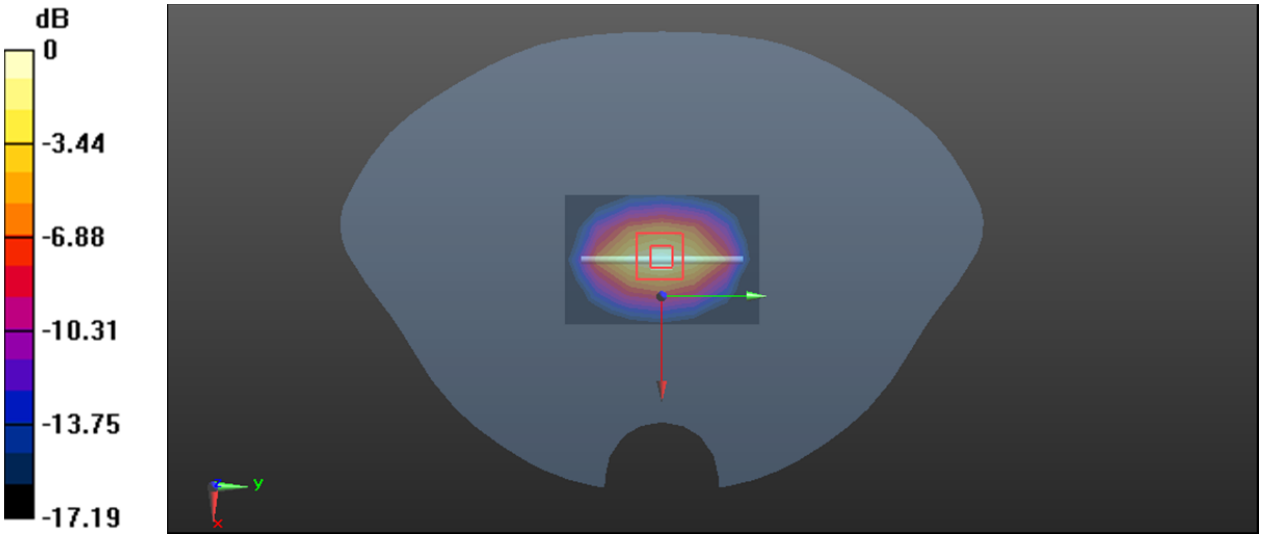
Communication System: CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; $\sigma$ = 1.379 S/m; $\varepsilon_r$ = 40.259; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.56, 8.56, 7.71) @1750 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x5x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 5.64 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 67.39 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.63 W/kg
**SAR(1 g) = 3.73 W/kg; SAR(10 g) = 1.98 W/kg**
Maximum value of SAR (measured) = 5.62 W/kg




0 dB = 5.62 W/kg = 7.50 dBW/kg

**System Performance 1750 MHz Headwas performed on 2024/12/24**

**DUT: D1750V2; Type: 1750 MHz; Serial: 1200**

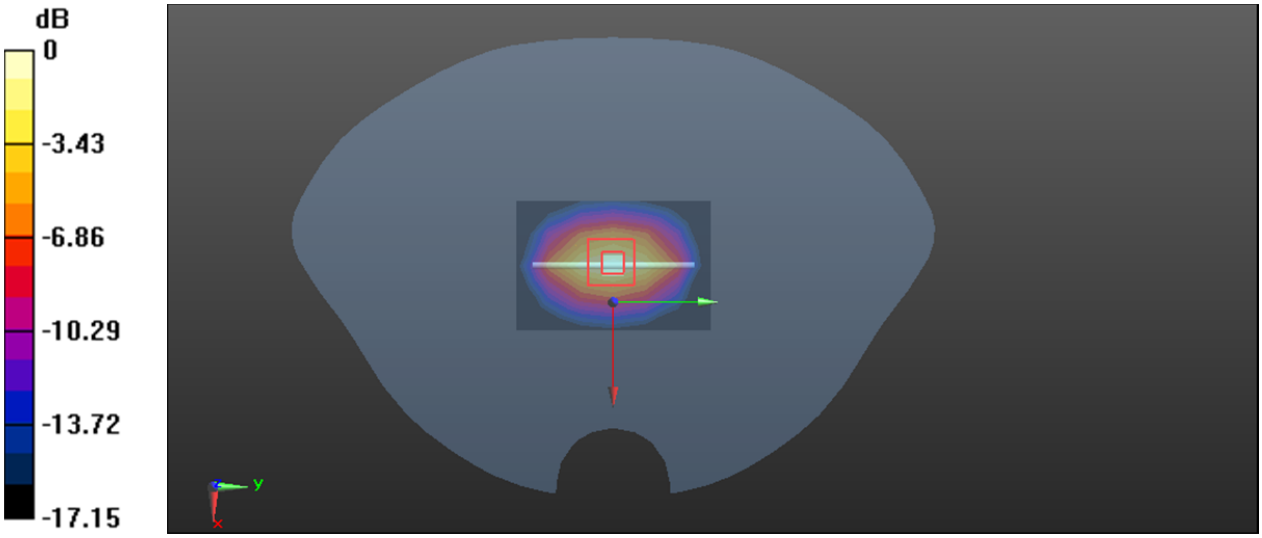
Communication System: CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; $\sigma$ = 1.367 S/m; $\varepsilon_r$ = 41.027; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.56, 8.56, 7.71) @1750 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x5x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 5.58 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 66.78 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 6.62 W/kg
**SAR(1 g) = 3.73 W/kg; SAR(10 g) = 1.98 W/kg**
Maximum value of SAR (measured) = 5.61 W/kg




0 dB = 5.61 W/kg = 7.49 dBW/kg

**System Performance 1900 MHz Headwas performed on 2024/12/18**

**DUT: D1900V2; Type: 1900 MHz; Serial: 5d251**

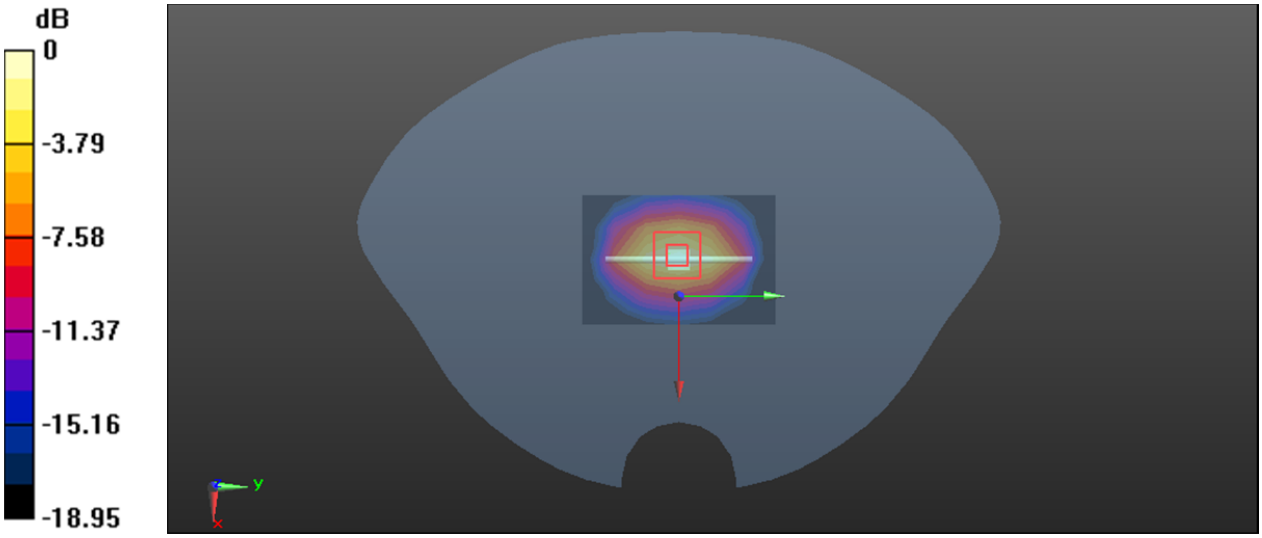
Communication System: CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.422 S/m; $\varepsilon_r$ = 40.536; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.37, 8.32, 7.54) @1900 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x5x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 6.05 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 68.36 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 7.41 W/kg
**SAR(1 g) = 4.09 W/kg; SAR(10 g) = 2.1 W/kg**
Maximum value of SAR (measured) = 6.15 W/kg




0 dB = 6.15 W/kg = 7.89 dBW/kg

**System Performance 1900 MHz Headwas performed on 2024/12/19**

**DUT: D1900V2; Type: 1900 MHz; Serial: 5d251**

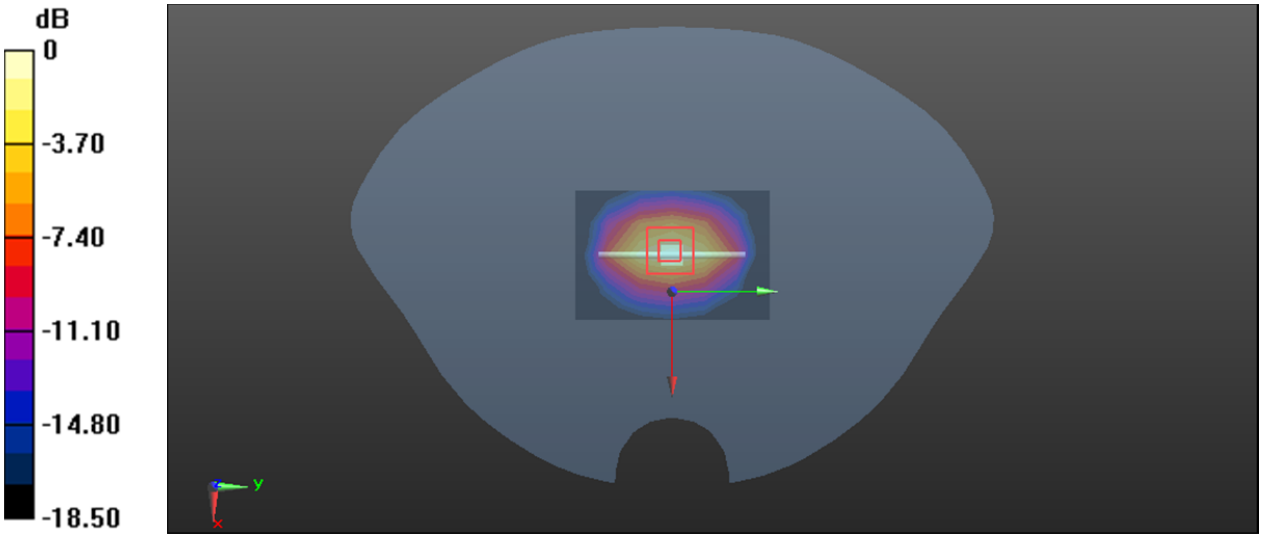
Communication System: CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.414 S/m; $\varepsilon_r$ = 40.352; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.37, 8.32, 7.54) @1900 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x5x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 6.01 W/kg

**Zoom Scan (5x5x7) /Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 68.54 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 7.38 W/kg
**SAR(1 g) = 4.07 W/kg; SAR(10 g) = 2.09 W/kg**
Maximum value of SAR (measured) = 6.23 W/kg




0 dB = 6.23 W/kg = 7.94 dBW/kg

**System Performance 2450 MHz Headwas performed on 2024/12/24**

**DUT: D2450V2; Type: 2450 MHz; Serial: 1102**

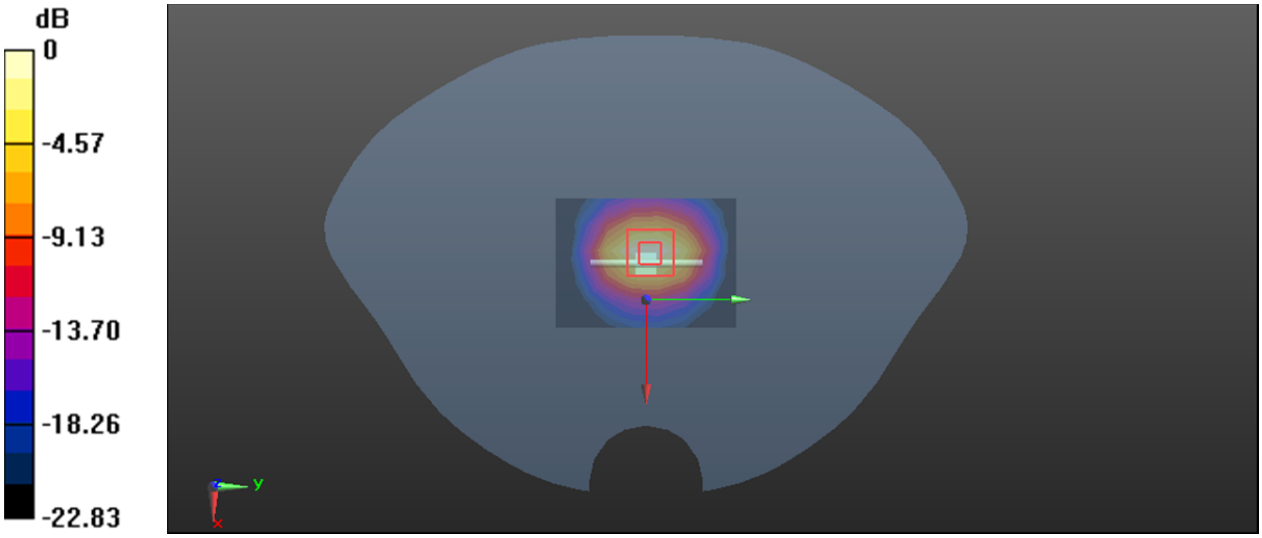
Communication System: CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; $\sigma$ = 1.764 S/m; $\varepsilon_r$ = 39.795; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.05, 7.92, 7.22) @2450 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (8x6x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 7.42 W/kg

**Zoom Scan (7x7x7) /Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 62.50 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 9.45 W/kg
**SAR(1 g) = 4.75 W/kg; SAR(10 g) = 2.19 W/kg**
Maximum value of SAR (measured) = 7.73 W/kg




0 dB = 7.73 W/kg = 8.88 dBW/kg

**System Performance 2600 MHz Headwas performed on 2024/12/20**

**DUT: D2600V2; Type: 2600 MHz; Serial: 1206**

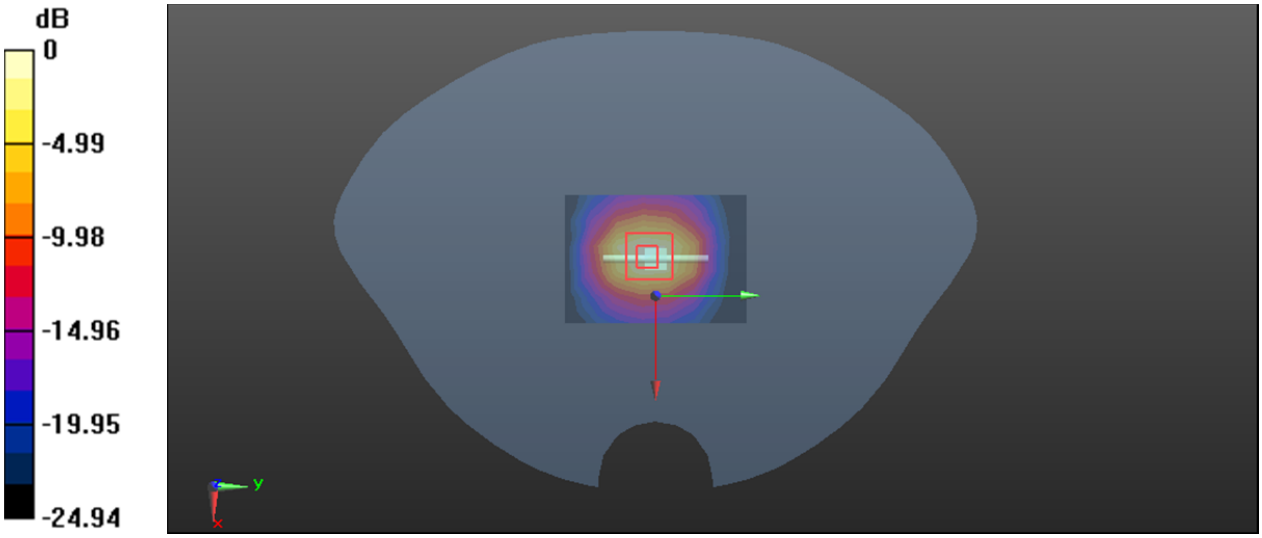
Communication System: CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.958 S/m; $\varepsilon_r$ = 38.873; ρ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(6.91, 7.77, 7.08) @2600 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (8x6x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 7.50 W/kg

**Zoom Scan (7x7x7) /Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 66.69 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 11.1 W/kg
**SAR(1 g) = 5.34 W/kg; SAR(10 g) = 2.41 W/kg**
Maximum value of SAR (measured) = 8.87 W/kg




0 dB = 8.87 W/kg = 9.48 dBW/kg

**System Performance 2600 MHz Headwas performed on 2024/12/21**

**DUT: D2600V2; Type: 2600 MHz; Serial: 1206**

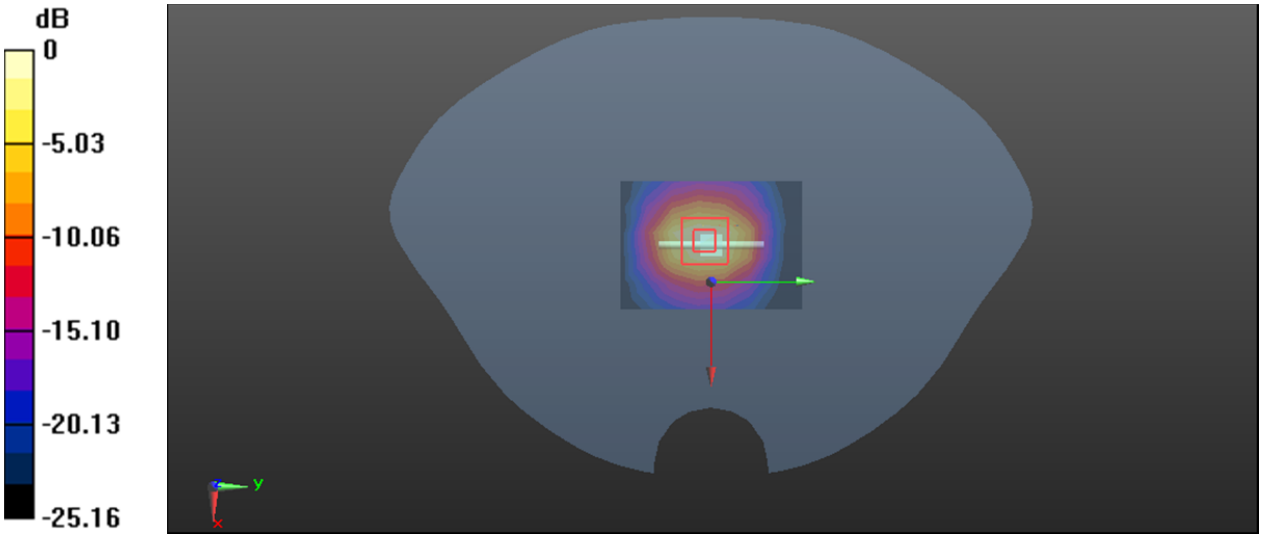
Communication System: CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; $\sigma$ = 1.945 S/m; $\varepsilon_r$ = 39.626; $\rho$ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(6.91, 7.77, 7.08) @2600 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (8x6x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 7.17 W/kg

**Zoom Scan (7x7x7) /Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 68.41 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 11.1 W/kg
**SAR(1 g) = 5.28 W/kg; SAR(10 g) = 2.37 W/kg**
Maximum value of SAR (measured) = 8.86 W/kg




0 dB = 8.86 W/kg = 9.47 dBW/kg

**System Performance 2600 MHz Headwas performed on 2024/12/22**

**DUT: D2600V2; Type: 2600 MHz; Serial: 1206**

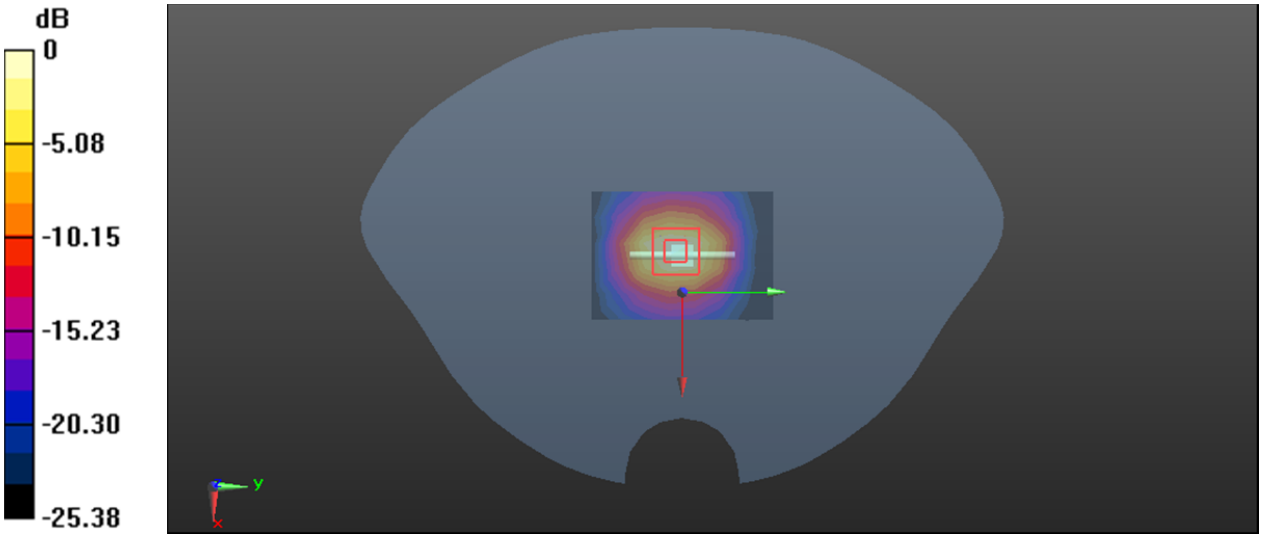
Communication System: CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.935 S/m; $\varepsilon_r$ = 39.471; ρ = 1000 kg/m$^3$;
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(6.91, 7.77, 7.08) @2600 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (8x6x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 7.21 W/kg

**Zoom Scan (7x7x7) /Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 68.86 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 11.1 W/kg
**SAR(1 g) = 5.27 W/kg; SAR(10 g) = 2.36 W/kg**
Maximum value of SAR (measured) = 8.88 W/kg




0 dB = 8.88 W/kg = 9.48 dBW/kg

**System Performance 5250MHz Head was performed on 2024/12/25**

**DUT: D5GHzV2; Type: 5250MHz; Serial: SN:1245**

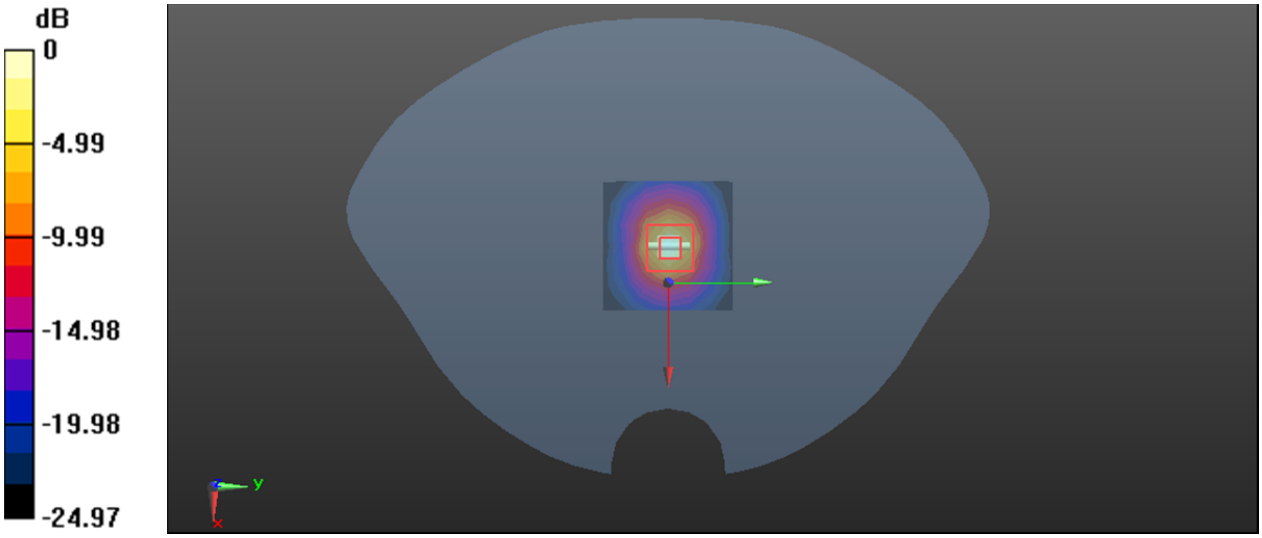
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; $\sigma$ = 4.781 S/m; $\varepsilon_r$ = 36.565; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.96, 5.61, 5.16) @ 5250 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 21.0 W/kg

**Zoom Scan (8x8x12) /Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 38.88 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 39.6 W/kg
**SAR(1 g) = 7.68 W/kg; SAR(10 g) = 2.13 W/kg**
Maximum value of SAR (measured) = 21.0 W/kg




0 dB = 21.0 W/kg = 13.22 dBW/kg

**System Performance 5600MHz Head was performed on 2024/12/25**

**DUT: D5GHzV2; Type: 5600MHz; Serial: SN:1245**

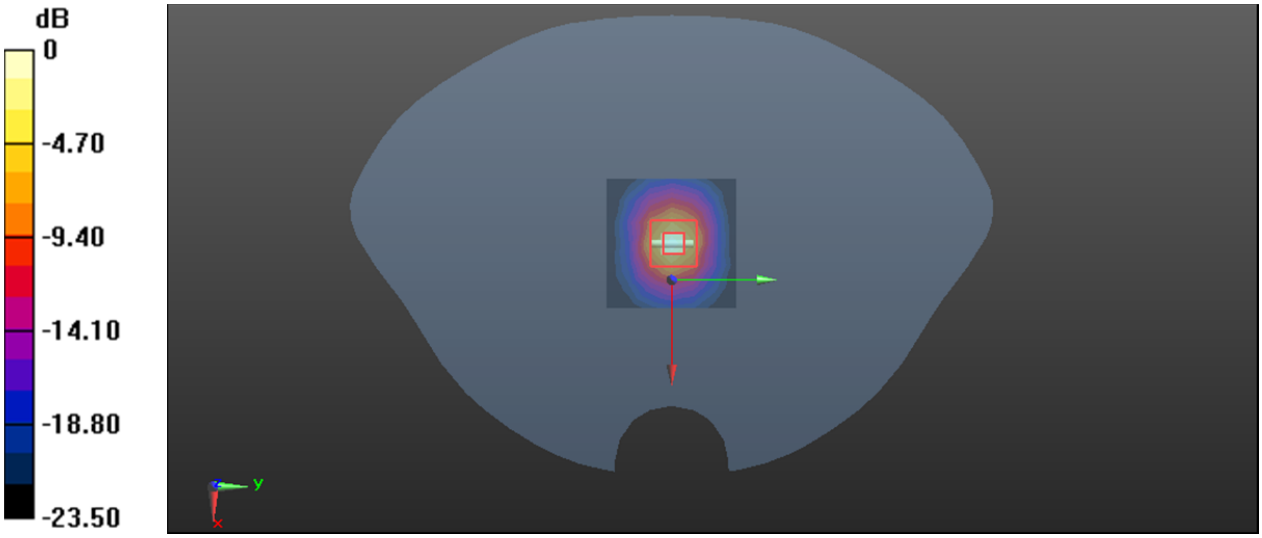
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.198 S/m; $\varepsilon_r$ = 36.571; ρ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.38, 4.98, 4.56) @ 5600 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 20.7 W/kg

**Zoom Scan (8x8x12) /Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 39.44 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 40.4 W/kg
**SAR(1 g) = 7.76 W/kg; SAR(10 g) = 2.17 W/kg**
Maximum value of SAR (measured) = 21.1 W/kg




0 dB = 21.1 W/kg = 13.24 dBW/kg

**System Performance 5750MHz Head was performed on 2024/12/25**

**DUT: D5GHzV2; Type: 5750MHz; Serial: SN:1245**

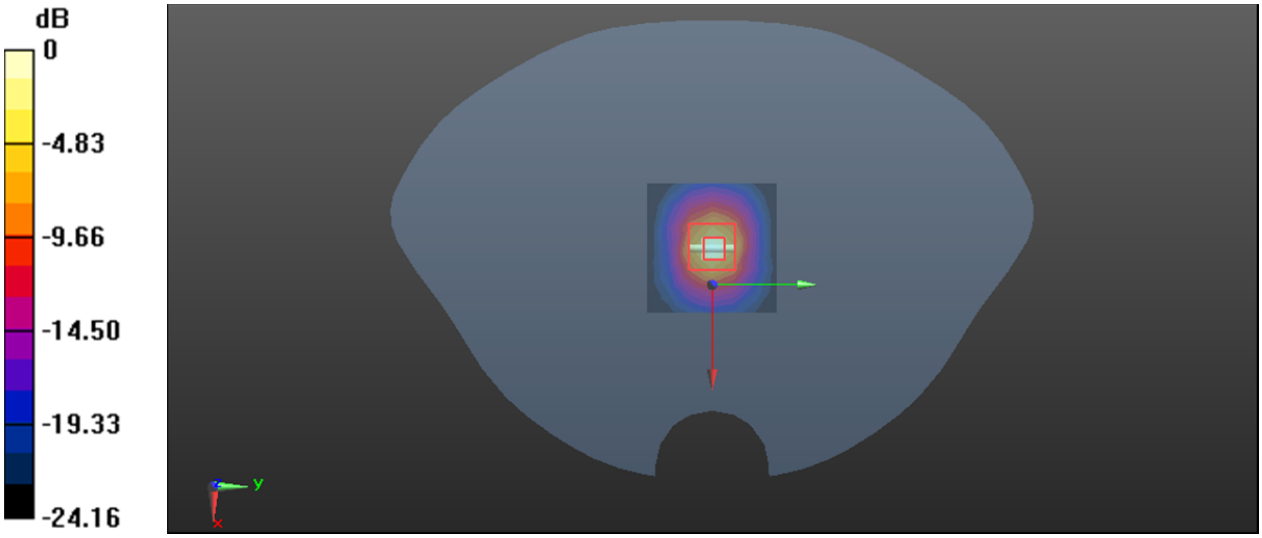
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.327 S/m; $\varepsilon_r$ = 36.224; ρ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.54, 5.16, 4.7) @ 5750 MHz; Calibrated: 2024/3/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1493; Calibrated: 2024/3/27
- Phantom: Twin SAM; Type: Twin SAM V5.0; Serial: TP:1412
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 20.0 W/kg

**Zoom Scan (8x8x12) /Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 38.65 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 37.5 W/kg
**SAR(1 g) = 7.45 W/kg; SAR(10 g) = 2.09 W/kg**
Maximum value of SAR (measured) = 20.1 W/kg



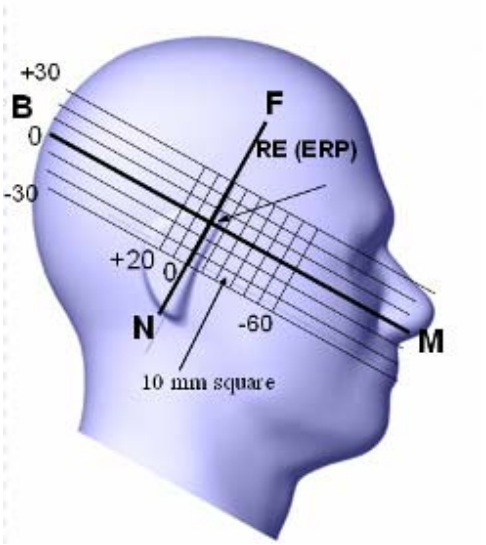

0 dB = 20.1 W/kg = 13.03 dBW/kg

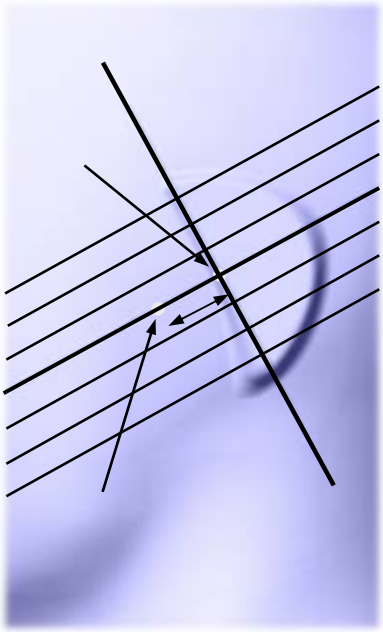
# 5. EUT TEST STRATEGY AND METHODOLOGY

## 5.1 Test Positions for Device Operating Next to a Person's Ear

This category includes most wireless handsets with fixed, retractable or internal antennas located toward the top half of the device, with or without a foldout, sliding or similar keypad cover. The handset should have its earpiece located within the upper ¼ of the device, either along the centerline or off-centered, as perceived by its users. This type of handset should be positioned in a normal operating position with the "test device reference point" located along the "vertical centerline" on the front of the device aligned to the "ear reference point". The "test device reference point" should be located at the same level as the center of the earpiece region. The "vertical centerline" should bisect the front surface of the handset at its top and bottom edges. A "ear reference point" is located on the outer surface of the head phantom on each ear spacer. It is located 1.5 cm above the center of the ear canal entrance in the "phantom reference plane" defined by the three lines joining the center of each "ear reference point" (left and right) and the tip of the mouth.

A handset should be initially positioned with the earpiece region pressed against the ear spacer of a head phantom. For the SCC-34/SC-2 head phantom, the device should be positioned parallel to the "N-F" line defined along the base of the ear spacer that contains the "ear reference point". For interim head phantoms, the device should be positioned parallel to the cheek for maximum RF energy coupling. The "test device reference point" is aligned to the "ear reference point" on the head phantom and the "vertical centerline" is aligned to the "phantom reference plane". This is called the "initial ear position". While maintaining these three alignments, the body of the handset is gradually adjusted to each of the following positions for evaluating SAR:



## 5.2 Cheek/Touch Position

The device is brought toward the mouth of the head phantom by pivoting against the "ear reference point" or along the "N-F" line for the SCC-34/SC-2 head phantom.

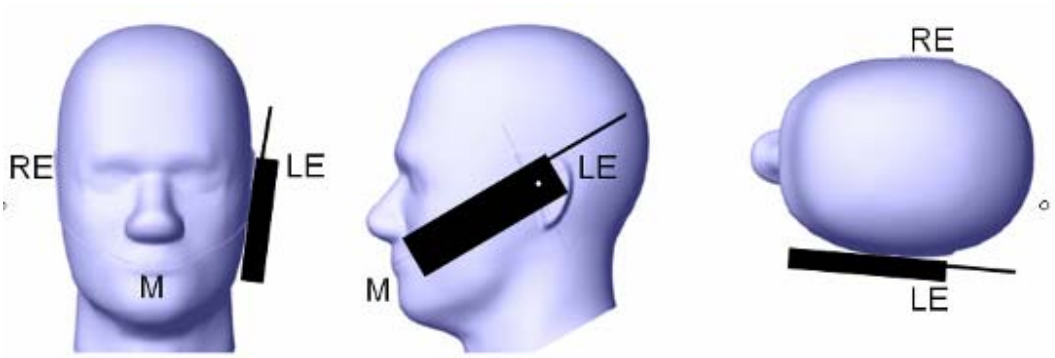
This test position is established:

When any point on the display, keypad or mouthpiece portions of the handset is in contact with the phantom.

(or) When any portion of a foldout, sliding or similar keypad cover opened to its intended self-adjusting normal use position is in contact with the cheek or mouth of the phantom.

For existing head phantoms – when the handset loses contact with the phantom at the pivoting point, rotation should continue until the device touches the cheek of the phantom or breaks its last contact from the ear spacer.

**Cheek /Touch Position**




## 5.3 Ear/Tilt Position

With the handset aligned in the "Cheek/Touch Position":

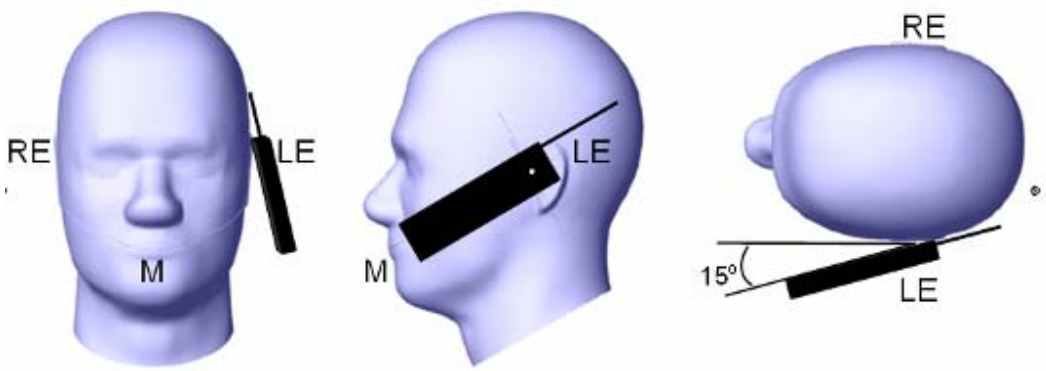
1) If the earpiece of the handset is not in full contact with the phantom's ear spacer (in the "Cheek/Touch position") and the peak SAR location for the "Cheek/Touch" position is located at the ear spacer region or corresponds to the earpiece region of the handset, the device should be returned to the "initial ear position" by rotating it away from the mouth until the earpiece is in full contact with the ear spacer.

2) (otherwise) The handset should be moved (translated) away from the cheek perpendicular to the line passes through both "ear reference points" (note: one of these ear reference points may not physically exist on a split head model) for approximate 2-3 cm. While it is in this position, the device handset is tilted away from the mouth with respect to the "test device reference point" until the inside angle between the vertical centerline on the front surface of the phone and the horizontal line passing through the ear reference point isby 15 80°. After the tilt, it is then moved (translated) back toward the head perpendicular to the line passes through both "ear reference points" until the device touches the phantom or the ear spacer. If the antenna touches the head first, the positioning process should be repeated with a tilt angle less than 15° so that the device and its antenna would touch the phantom simultaneously. This test position may require a device holder or positioner to achieve the translation and tilting with acceptable positioning repeatability.

If a device is also designed to transmit with its keypad cover closed for operating in the head position, such positions should also be considered in the SAR evaluation. The device should be tested on the left and

right side of the head phantom in the “Cheek/Touch” and “Ear/Tilt” positions. When applicable, each configuration should be tested with the antenna in its fully extended and fully retracted positions. These test configurations should be tested at the high, middle and low frequency channels of each operating mode; for example, AMPS, CDMA, and TDMA. If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tilt/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s). If the transmission band of the test device is less than 10 MHz, testing at the high and low frequency channels is optional.

**Ear /Tilt 15° Position**




## 5.4 Test positions for body-worn and other configurations

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. When multiple accessories that do not contain metallic components are supplied with the device, the device may be tested with only the accessory that dictates the closest spacing to the body. When multiple accessories that contain metallic components are supplied with the device, the device must be tested with each accessory that contains a unique metallic component. If multiple accessories share an identical metallic component (e.g., the same metallic belt-clip used with different holsters with no other metallic components), only the accessory that dictates the closest spacing to the body must be tested.

Body-worn accessories may not always be supplied or available as options for some devices that are intended to be authorized for body-worn use. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances. Other separation distances may be used, but they should not exceed 2.5 cm. In these cases, the device may use body-worn accessories that provide a separation distance greater than that tested for the device provided however that the accessory contains no metallic components.

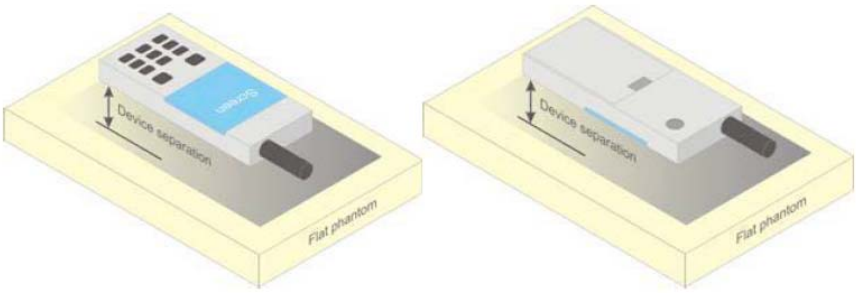



Figure 5 – Test positions for body-worn devices

## 5.5 Test Distance for SAR Evaluation

In this case the EUT(Equipment Under Test) is set 10mm away from the phantom, the test distance is 10mm.

## 5.6 SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop. The SAR at this point is measured at the start of the test and then again at the end of the testing.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the head or radiating structures of the EUT, the horizontal grid spacing was 15 mm x 15 mm, and the SAR distribution was determined by integrated grid of 1.5mm x 1.5mm. Based on these data, the area of the maximum absorption was determined by spline interpolation. The first Area Scan covers the entire dimension of the EUT to ensure that the hotspot was correctly identified.

Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7x 7 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

1) The data at the surface were extrapolated, since the center of the dipoles is 1.2 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

2) The maximum Measured value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one dimensional splines with the “Not a knot"-condition (in x, y and z-directions). The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were Measured to calculate the averages.

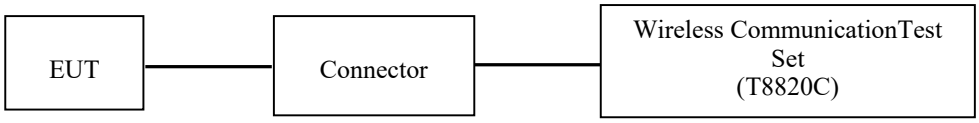
All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

# 6. CONDUCTED OUTPUT POWER MEASUREMENT

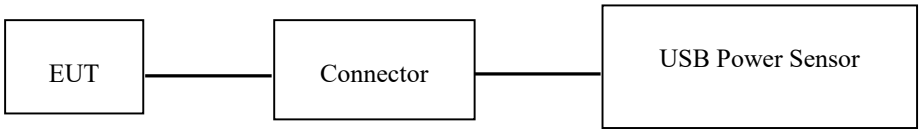
## 6.1 Test Procedure

The RF output of the transmitter was connected to the input of the Wireless Communication Test Set through Connector.




**GSM/WCDMA/LTE**

The RF output of the transmitter was connected to the input port of the USB Power Sensor through Connector.




**BT/WLAN**

## 6.2 Description of Test Configuration

**EUT Operation Condition:**

| | |
|---|---|
| **EUT Operation Mode:** | The system was configured for testing in each operation mode. |
| **Equipment Modifications:** | No |
| **EUT Exercise Software:** | No |

The maximum power was configured per 3GPP Standard for each operation modes as below setting:

GSM/GPRS/EGPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900
Press Connection control to choose the different menus
Press RESET > choose all the reset all settings
Connection Press Signal Off to turn off the signal and change settings
Network Support > GSM + GPRS or GSM + EGSM
Main Service > Packet Data
Service selection > Test Mode A – Auto Slot Config. off
MS Signal Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting
> Slot configuration > Uplink/Gamma
> 33 dBm for GPRS 850
> 30 dBm for GPRS 1900
> 27 dBm for EGPRS 850
> 26 dBm for EGPRS 1900
BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset > + 0 Hz
Mode > BCCH and TCH

BCCH Level > -85 dBm (May need to adjust if link is not stable)
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off
P0 > 4 dB
Slot Config> Unchanged (if already set under MS signal)
TCH > choose desired test channel
Hopping > Off
Main Timeslot > 3
Network Coding Scheme > CS4 (GPRS) and MCS5 (EGPRS)

Bit Stream > 2E9-1 PSR Bit Stream
AF/RF Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection Press Sign

**WCDMA-Release 99**

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

| | | |
|---|---|---|
| **WCDMA General Settings** | Loopback Mode | Test Mode 1 |
| | Rel99 RMC | 12.2kbps RMC |
| | Power Control Algorithm | Algorithm2 |
| | **β / βd** | 8/15 |

**WCDMA HSDPA**

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

| | Mode | HSDPA | HSDPA | HSDPA | HSDPA |
|---|---|---|---|---|---|
| | Subset | 1 | 2 | 3 | 4 |
| WCDMA General Set ings | Loopback Mode | Test Mode 1 | | | |
| | Rel99 RMC | 12.2kbps RMC | | | |
| | HSDPA FRC | H-Set1 | | | |
| | Power Control Algorithm | Algorithm2 | | | |
| | βc | 2/15 | 12/15 | 15/15 | 15/15 |
| | βd | 1 /15 | 15/15 | 8/15 | 4/15 |
| | βd (SF) | 64 | | | |
| | βc/βd | 2/15 | 12/15 | 15/8 | 15/4 |
| | βhs | 4/15 | 24/15 | 30/15 | 30/15 |
| | MPR(dB) | 0 | 0 | 0.5 | 0.5 |
| HSDPA Specific Settings | DACK | 8 | | | |
| | DNAK | 8 | | | |
| | DCQI | 8 | | | |
| | Ack-Nack repetition factor | 3 | | | |
| | CQI Feedback | 4ms | | | |
| | CQI Repetition Factor | 2 | | | |
| | Ahs=βhs/ βc | 30/15 | | | |

**WCDMA HSUPA**

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

| | **Mode** | **HSUPA** | **HSUPA** | **HSUPA** | **HSUPA** | **HSUPA** |
|---|---|---|---|---|---|---|
| | **Subset** | **1** | **2** | | **4** | **5** |
| **WCDMA General Settings** | Loopback Mode | Test Mode 1 | | | | |
| | Rel99 RMC | 12.2kbps RMC | | | | |
| | HSDPA FRC | H-Set1 | | | | |
| | HSUPA Test | HSUPA Loopback | | | | |
| | Power Control Algorithm | Algorithm2 | | | | |
| | βc | 11/15 | 6/15 | 15/15 | 2/15 | 15/15 |
| | βd | 15/15 | 15/15 | 9/15 | 15/15 | 0 |
| | βec | 209/225 | 12/15 | 30 15 | 2/15 | 5/15 |
| | βc/βd | 11/15 | 6/15 | 15/9 | 2/15 | - |
| | βhs | 22/15 | 12/15 | 30/15 | 4/15 | 5/15 |
| | CM(dB) | 1.0 | 3.0 | 2.0 | 3.0 | 1.0 |
| | MPR(dB) | 0 | 2 | 1 | 2 | 0 |
| **HSDPA Specific Settings** | DACK | 8 | | | | |
| | DNAK | 8 | | | | |
| | DCQI | 8 | | | | |
| | Ack-Nack repetition factor | 3 | | | | |
| | CQI Feedback | 4ms | | | | |
| | CQI Repetition Factor | 2 | | | | |
| | Ahs=βhs/ βc | 30/15 | | | | |
| **HSUPA Specific Settings** | DE-DPCCH | 6 | 8 | 8 | 5 | 7 |
| | DHARQ | 0 | 0 | 0 | 0 | 0 |
| | AG Index | 20 | 12 | 15 | 17 | 21 |
| | ETFCI | 75 | 67 | 92 | 71 | 81 |
| | Associated Max UL Data Rate k ps | 242.1 | 174.9 | 482.8 | 205.8 | 308.9 |
| | Reference E_FCls | E-TFCI 11 E<br>E-TFCI PO 4<br>E-TFCI 67<br>E-TFCI PO 18<br>E-TFCI 71<br>E-TFCI PO23<br>E-TFCI 75<br>E-TFCI PO26<br>E-TFCI 81<br>E-TFCI PO 27 | | E-TFCI 11<br>E-TFCI PO4<br>E-TFCI 92<br>E-TFCI PO 18 | E-TFCI 11 E<br>E-TFCI PO 4<br>E-TFCI 67<br>E-TFCI PO 18<br>E-TFCI 71<br>E-TFCI PO23<br>E-TFCI 75<br>E-TFCI PO26<br>E-TFCI 81<br>E-TFCI PO 27 | |

**LTE (FDD):**

The following tests were conducted according to the test requirements in 3GPP TS36.101

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3**

| Modulation | Channel bandwidth / Transmission bandwidth (RB) | | | | | | MPR (dB) |
|---|---|---|---|---|---|---|---|
| | 1.4 MHz | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | |
| QPSK | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 1 |
| 16 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | ≤ 1 |
| 16 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 2 |

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

**Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)**

| Network Signalling value | Requirements (sub-clause) | E-UTRA Band | Channel bandwidth (MHz) | Resources Blocks ($N_{RB}$) | A-MPR (dB) |
|---|---|---|---|---|---|
| NS_01 | 6.6.2.1.1 | Table 5.5-1 | 1.4, 3, 5, 10, 15, 20 | Table 5.6-1 | NA |
| NS_03 | 6.6.2.2.1 | 2, 4,10, 23, 25, 35, 36 | 3 | >5 | ≤ 1 |
| | | | 5 | >6 | ≤ 1 |
| | | | 10 | >6 | ≤ 1 |
| | | | 15 | >8 | ≤ 1 |
| | | | 20 | >10 | ≤ 1 |
| NS_04 | 6.6.2.2.2 | 41 | 5 | >6 | ≤ 1 |
| | | | 10, 15, 20 | See Table 6.2.4-4 | |
| NS_05 | 6.6.3.3.1 | 1 | 10,15,20 | ≥ 50 | ≤ 1 |
| NS_06 | 6.6.2.2.3 | 12, 13, 14, 17 | 1.4, 3, 5, 10 | Table 5.6-1 | n/a |
| NS_07 | 6.6.2.2.3<br>6.6.3.3.2 | 13 | 10 | Table 6.2.4-2 | Table 6.2.4-2 |
| NS_08 | 6.6.3.3.3 | 19 | 10, 15 | > 44 | ≤ 3 |
| NS_09 | 6.6.3.3.4 | 21 | 10, 15 | > 40 | ≤ 1 |
| | | | | > 55 | ≤ 2 |
| NS_10 | | 20 | 15, 20 | Table 6.2.4-3 | Table 6.2.4-3 |
| NS_11 | 6.6.2.2.1 | 23[1] | 1.4, 3, 5, 10 | Table 6.2.4-5 | Table 6.2.4-5 |
| .. | | | | | |
| NS_32 | - | - | - | - | - |
| Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region. | | | | | |

## TDD-LTE

P TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

| Special subframe configuration | Normal cyclic prefix in downlink | | | Extended cyclic prefix in downlink | | |
|---|---|---|---|---|---|---|
| | DwPTS | UpPTS | | DwPTS | UpPTS | |
| | | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink | | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |
| 0 | $6592 \cdot T_s$ | $2192 \cdot T_s$ | $2560 \cdot T_s$ | $7680 \cdot T_s$ | $2192 \cdot T_s$ | $2560 \cdot T_s$ |
| 1 | $19760 \cdot T_s$ | | | $20480 \cdot T_s$ | | |
| 2 | $21952 \cdot T_s$ | | | $23040 \cdot T_s$ | | |
| 3 | $24144 \cdot T_s$ | | | $25600 \cdot T_s$ | | |
| 4 | $26336 \cdot T_s$ | | | $7680 \cdot T_s$ | $4384 \cdot T_s$ | $5120 \cdot T_s$ |
| 5 | $6592 \cdot T_s$ | $4384 \cdot T_s$ | $5120 \cdot T_s$ | $20480 \cdot T_s$ | | |
| 6 | $19760 \cdot T_s$ | | | $23040 \cdot T_s$ | | |
| 7 | $21952 \cdot T_s$ | | | $12800 \cdot T_s$ | | |
| 8 | $24144 \cdot T_s$ | | | - | - | - |
| 9 | $13168 \cdot T_s$ | | | - | - | - |

Table 4.2-2: Uplink-downlink configurations.

| Uplink-downlink configuration | Downlink-to-Uplink Switch-point periodicity | Subframe number | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 5 ms | D | S | U | U | U | D | S | U | U | U |
| 1 | 5 ms | D | S | U | U | D | D | S | U | U | D |
| 2 | 5 ms | D | S | U | D | D | D | S | U | D | D |
| 3 | 10 ms | D | S | U | U | U | D | D | D | D | D |
| 4 | 10 ms | D | S | U | U | D | D | D | D | D | D |
| 5 | 10 ms | D | S | U | D | D | D | D | D | D | D |
| 6 | 5 ms | D | S | U | U | U | D | S | U | U | D |

**Calculated Duty Cycle**

| Uplink-Downlink Configuration | Downlink-to-Uplink Switch-point Periodicity | Subframe Number | | | | | | | | | | Calculated Duty Cycle (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 0 | 5 ms | D | S | U | U | U | D | S | U | U | U | 63.33 |
| 1 | 5 ms | D | S | U | U | D | D | S | U | U | D | 43.33 |
| 2 | 5 ms | D | S | U | D | D | D | S | U | D | D | 23.33 |
| 3 | 10 ms | D | S | U | U | U | D | D | D | D | D | 31.67 |
| 4 | 10 ms | D | S | U | U | D | D | D | D | D | D | 21.67 |
| 5 | 10 ms | D | S | U | D | D | D | D | D | D | D | 11.67 |
| 6 | 5 ms | D | S | U | U | U | D | S | U | U | D | 53.33 |

We used configuration 0 for LTE Band 41&38SAR test, that is 63.33%(1:1.58)for duty cycle.

## 6.3 Maximum Target Output Power

| Max Target Power(dBm) | | | |
|---|---|---|---|
| Mode/Band | Channel | | |
| | Low | Middle | High |
| GSM 850 | 32.8 | 32.8 | 32.8 |
| GPRS 1 TX Slot | 32.8 | 32.8 | 32.8 |
| GPRS 2 TX Slot | 32 | 32 | 32 |
| GPRS 3 TX Slot | 30.3 | 30.3 | 30.3 |
| GPRS 4 TX Slot | 29 | 29 | 29 |
| EDGE 1 TX Slot | 27.1 | 27.1 | 27.1 |
| EDGE 2 TX Slot | 25.8 | 25.8 | 25.8 |
| EDGE 3 TX Slot | 23.6 | 23.6 | 23.6 |
| EDGE 4 TX Slot | 22.5 | 22.5 | 22.5 |
| PCS 1900 | 29 | 29 | 29 |
| GPRS 1 TX Slot | 29 | 29 | 29 |
| GPRS 2 TX Slot | 27.9 | 27.9 | 27.9 |
| GPRS 3 TX Slot | 26.4 | 26.4 | 26.4 |
| GPRS 4 TX Slot | 25.3 | 25.3 | 25.3 |
| EDGE 1 TX Slot | 25.1 | 25.1 | 25.1 |
| EDGE 2 TX Slot | 23.8 | 23.8 | 23.8 |
| EDGE 3 TX Slot | 22.4 | 22.4 | 22.4 |
| EDGE 4 TX Slot | 21.2 | 21.2 | 21.2 |
| WCDMA Band 2 | 15.5 | 15.5 | 15.5 |
| HSDPA | 15.5 | 15.5 | 15.5 |
| HSUPA | 15.4 | 15.4 | 15.4 |
| WCDMA Band 4 | 17.6 | 17.6 | 17.6 |
| HSDPA | 17.6 | 17.6 | 17.6 |
| HSUPA | 17.5 | 17.5 | 17.5 |
| WCDMA Band 5 | 21.2 | 21.2 | 21.2 |
| HSDPA | 21.2 | 21.2 | 21.2 |
| HSUPA | 21.2 | 21.2 | 21.2 |
| LTE Band 2 | 16.1 | 16.1 | 16.1 |
| LTE Band 4 | 17.4 | 17.4 | 17.4 |
| LTE Band 5 | 19.7 | 19.7 | 19.7 |
| LTE Band 7 | 15.9 | 15.9 | 15.9 |
| LTE Band 12 | 24.5 | 24.5 | 24.5 |
| LTE Band 13 | 22.9 | 22.9 | 22.9 |
| LTEBand 17 | 23.6 | 23.6 | 23.6 |
| LTE Band 38 | 16.2 | 16.2 | 16.2 |
| LTE Band 41 | 17.3 | 17.3 | 17.3 |
| LTE Band 66 | 17.4 | 17.4 | 17.4 |

| Max Target Power(dBm) | | | | |
|---|---|---|---|---|
| Mode/Band | Channel | | | |
| | Low | Middle | High | Cross |
| WLAN 2.4G(802.11b)Chain 0 | 14.2 | 14.2 | 14.2 | / |
| WLAN 2.4G(802.11g) Chain 0 | 14.1 | 14.1 | 14.1 | / |
| WLAN 2.4G(802.11n ht20) Chain 0 | 14 | 14 | 14 | / |
| WLAN 2.4G(802.11ax20) Chain 0 | 13.9 | 13.9 | 13.9 | / |
| WLAN 2.4G(802.11b)Chain 1 | 13.9 | 13.9 | 13.9 | / |
| WLAN 2.4G(802.11g) Chain 1 | 13.8 | 13.8 | 13.8 | / |
| WLAN 2.4G(802.11n ht20) Chain 1 | 13.8 | 13.8 | 13.8 | / |
| WLAN 2.4G(802.11ax20) Chain 1 | 13.7 | 13.7 | 13.7 | / |
| WLAN5.2G(802.11a) | 9.5 | 9.5 | 9.5 | / |
| WLAN5.2G(802.11n ht20) | 9.6 | 9.6 | 9.6 | / |
| WLAN5.2G(802.11n ht40) | 9.3 | / | 9.3 | / |
| WLAN5.2G(802.11ac vht80) | / | 9.1 | / | / |
| WLAN5.2G(802.11ax hew20) | 9.5 | 9.5 | 9.5 | / |
| WLAN5.2G(802.11ax hew40) | 9.5 | / | 9.5 | / |
| WLAN5.2G(802.11ax hew80) | / | 9.2 | / | / |
| WLAN5.3G(802.11a) | 9.9 | 9.9 | 9.9 | / |
| WLAN5.3G(802.11n ht20) | 9.8 | 9.8 | 9.8 | / |
| WLAN5.3G(802.11n ht40) | 9.7 | / | 9.7 | / |
| WLAN5.3G(802.11ac vht80) | / | 9.5 | / | / |
| WLAN5.3G(802.11ax hew20) | 9.7 | 9.7 | 9.7 | / |
| WLAN5.3G(802.11ax hew40) | 9.7 | / | 9.7 | / |
| WLAN5.3G(802.11ax hew80) | / | 9.6 | / | / |
| WLAN5.6G(802.11a) | 7.5 | 7.5 | 7.5 | 7.5 |
| WLAN5.6G(802.11n ht20) | 7.4 | 7.4 | 7.4 | 7.4 |
| WLAN5.6G(802.11n ht40) | 7.3 | 7.3 | 7.3 | 7.3 |
| WLAN5.6G(802.11ac vht80) | 7.2 | / | 7.2 | 7.2 |
| WLAN5.6G(802.11ax hew20) | 7.2 | 7.2 | 7.2 | 7.2 |
| WLAN5.6G(802.11ax hew40) | 7.4 | 7.4 | 7.4 | 7.4 |
| WLAN5.6G(802.11ax hew80) | 7.3 | / | 7.3 | 7.3 |
| WLAN5.8G(802.11a) | 8.4 | 8.4 | 8.4 | / |
| WLAN5.8G(802.11n ht20) | 8.5 | 8.5 | 8.5 | / |
| WLAN5.8G(802.11n ht40) | 8.1 | / | 8.1 | / |
| WLAN5.8G(802.11ac vht80) | / | 8.1 | / | / |
| WLAN5.8G(802.11ax hew20) | 8.3 | 8.3 | 8.3 | / |
| WLAN5.8G(802.11ax hew40) | 8.4 | / | 8.4 | / |
| WLAN5.8G(802.11ax hew80) | / | 8.4 | / | / |
| Bluetooth BDR Chain 0 | 4.5 | 5.5 | 6.5 | / |
| BluetoothEDR Chain 0 | 3.5 | 4.5 | 5.5 | / |
| BLE 1M Chain 0 | 0 | 1.5 | 1.5 | / |

| | | | | |
|---|---|---|---|---|
| BLE 2M Chain 0 | 1 | 1.5 | -0.5 | / |
| Bluetooth BDR Chain 1 | 3.5 | 5.5 | 4.5 | / |
| BluetoothEDRChain 1 | 3.0 | 4.5 | 4.0 | / |
| BLE 1M Chain 1 | 1.0 | 2.5 | 2.0 | / |
| BLE 2MChain 1 | 1.5 | 2.5 | 0 | / |

Note: The Maximum Target Power for LTE bands corresponds to their maximum power in QPSK modes with maximum bandwidth.

## 6.4 Test Results:

**GSM:**

| Band | Channel No. | Frequency (MHz) | RF Output Power (dBm) |
|---|---|---|---|
| GSM 850 | 128 | 824.2 | 32.60 |
| | 190 | 836.6 | 32.67 |
| | 251 | 848.8 | **32.71** |
| PCS 1900 | 512 | 1850.2 | **28.93** |
| | 661 | 1880 | 28.63 |
| | 810 | 1909.8 | 28.74 |

**GPRS:**

| Band | Channel No. | Frequency (MHz) | RF Output Power (dBm) | | | |
|---|---|---|---|---|---|---|
| | | | 1 slot | 2 slots | 3 slots | 4 slots |
| GSM 850 | 128 | 824.2 | 32.46 | 31.69 | 29.96 | 28.51 |
| | 190 | 836.6 | 32.63 | 31.82 | 30.10 | 28.87 |
| | 251 | 848.8 | 32.66 | 31.92 | 30.15 | 28.83 |
| PCS 1900 | 512 | 1850.2 | 28.90 | 27.82 | 26.32 | 25.12 |
| | 661 | 1880 | 28.77 | 27.65 | 26.07 | 25.23 |
| | 810 | 1909.8 | 28.81 | 27.43 | 26.20 | 25.17 |

**EGPRS:**

| Band | Channel No. | Frequency (MHz) | RF Output Power (dBm) | | | |
|---|---|---|---|---|---|---|
| | | | 1 slot | 2 slots | 3 slots | 4 slots |
| GSM 850 | 128 | 824.2 | 26.98 | 25.53 | 23.25 | 22.13 |
| | 190 | 836.6 | 26.85 | 25.50 | 23.41 | 22.17 |
| | 251 | 848.8 | 27.03 | 25.73 | 23.54 | 22.38 |
| PCS 1900 | 512 | 1850.2 | 25.04 | 23.67 | 22.31 | 21.13 |
| | 661 | 1880 | 24.78 | 23.44 | 22.29 | 20.88 |
| | 810 | 1909.8 | 24.87 | 23.58 | 22.11 | 20.95 |

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

| Number of Time slot | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Duty Cycle | 1:8 | 1:4 | 1:2.66 | 1:2 |
| Time based Ave. power compared to slotted Ave. power | -9 dB | -6 dB | -4.25 dB | -3 dB |
| Crest Factor | 8 | 4 | 2.66 | 2 |

**The time based average power for GSM**

| Band | Channel No. | Frequency (MHz) | RF Output Power (dBm) |
|---|---|---|---|
| GSM 850 | 128 | 824.2 | 23.6 |
| | 190 | 836.6 | 23.67 |
| | 251 | 848.8 | 23.71 |
| PCS 1900 | 512 | 1850.2 | 19.93 |
| | 661 | 1880 | 19.63 |
| | 810 | 1909.8 | 19.74 |

**The time based average power for GPRS**

| Band | Channel No. | Frequency (MHz) | Time based average Power (dBm) | | | |
|---|---|---|---|---|---|---|
| | | | 1 slot | 2 slot | 3 slots | 4 slots |
| GSM 850 | 128 | 824.2 | 23.46 | 25.69 | 25.71 | 25.51 |
| | 190 | 836.6 | 23.63 | 25.82 | 25.85 | 25.87 |
| | 251 | 848.8 | 23.66 | **25.92** | 25.9 | 25.83 |
| PCS 1900 | 512 | 1850.2 | 19.9 | 21.82 | 22.07 | 22.12 |
| | 661 | 1880 | 19.77 | 21.65 | 21.82 | **22.23** |
| | 810 | 1909.8 | 19.81 | 21.43 | 21.95 | 22.17 |

**The time based average power for EGPRS**

| Band | Channel No. | Frequency (MHz) | Time based average Power (dBm) | | | |
|---|---|---|---|---|---|---|
| | | | 1 slot | 2 slot | 3 slots | 4 slots |
| GSM 850 | 128 | 824.2 | 17.98 | 19.53 | 19 | 19.13 |
| | 190 | 836.6 | 17.85 | 19.5 | 19.16 | 19.17 |
| | 251 | 848.8 | 18.03 | 19.73 | 19.29 | 19.38 |
| PCS 1900 | 512 | 1850.2 | 16.04 | 17.67 | 18.06 | 18.13 |
| | 661 | 1880 | 15.78 | 17.44 | 18.04 | 17.88 |
| | 810 | 1909.8 | 15.87 | 17.58 | 17.86 | 17.95 |

**Note:**

1. Radio Communication Analyzer (MT8820C) was used for the measurement of GSM peak and average output power for active timeslots.
2 .For GSM voice, 1 timeslot has been activated with power level 5 (850 MHz band) and 0 (1900 MHz band).
3 .For GPRS, 1, 2, 3 and 4timeslots has been activated separately with power level 3(850 MHz band) and 3(1900 MHz band).

**WCDMA:**

**WCDMA Band 2:**

| Test Mode | Conducted Average Output Power(dBm) | | |
|---|---|---|---|
| | Lowest Channel | Middle Channel | Highest Channel |
| WCDMA R99 | 15.25 | **15.36** | 15.22 |
| HSDPA Subtest 1 | 15.15 | 15.35 | 15.06 |
| HSDPA Subtest 2 | 15.21 | 15.34 | 15.12 |
| HSDPA Subtest 3 | 15.27 | 15.33 | 15.20 |
| HSDPA Subtest 4 | 15.28 | 15.21 | 15.06 |
| HSUPA Subtest 1 | 15.31 | 15.24 | 15.25 |
| HSUPA Subtest 2 | 15.27 | 15.19 | 15.15 |
| HSUPA Subtest 3 | 15.20 | 15.32 | 15.17 |
| HSUPA Subtest 4 | 15.15 | 15.23 | 15.24 |
| HSUPA Subtest 5 | 15.14 | 15.29 | 15.17 |

**WCDMA Band 4:**

| Test Mode | Conducted Average Output Power(dBm) | | |
|---|---|---|---|
| | Lowest Channel | Middle Channel | Highest Channel |
| WCDMA R99 | **17.48** | 17.39 | 17.42 |
| HSDPA Subtest 1 | 17.34 | 17.37 | 17.30 |
| HSDPA Subtest 2 | 17.30 | 17.30 | 17.30 |
| HSDPA Subtest 3 | 17.47 | 17.34 | 17.36 |
| HSDPA Subtest 4 | 17.42 | 17.28 | 17.30 |
| HSUPA Subtest 1 | 17.31 | 17.31 | 17.33 |
| HSUPA Subtest 2 | 17.24 | 17.24 | 17.19 |
| HSUPA Subtest 3 | 17.21 | 17.20 | 17.24 |
| HSUPA Subtest 4 | 17.29 | 17.22 | 17.35 |
| HSUPA Subtest 5 | 17.30 | 17.32 | 17.32 |

**WCDMA Band 5:**

| Test Mode | Conducted Average Output Power(dBm) | | |
|---|---|---|---|
| | Lowest Channel | Middle Channel | Highest Channel |
| WCDMA R99 | **21.08** | 20.99 | 20.91 |
| HSDPA Subtest 1 | 20.98 | 21.00 | 20.86 |
| HSDPA Subtest 2 | 21.06 | 21.04 | 20.92 |
| HSDPA Subtest 3 | 20.99 | 20.97 | 20.97 |
| HSDPA Subtest 4 | 21.07 | 20.96 | 21.02 |
| HSUPA Subtest 1 | 21.03 | 21.06 | 20.88 |
| HSUPA Subtest 2 | 21.02 | 20.88 | 20.89 |
| HSUPA Subtest 3 | 21.04 | 20.87 | 20.91 |
| HSUPA Subtest 4 | 20.94 | 20.94 | 20.80 |
| HSUPA Subtest 5 | 21.05 | 20.99 | 20.79 |

**Note:**

1. The default test configuration is to measure SARwith an established radio link between the EUT and acommunicationtest set using a 12.2 kbps RMC (reference measurement Channel) Configured in TestLoop Model 1.
2. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPAwhen themaximumaverage output of each RFchannel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.

**LTE Band 2:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 1.4M | QPSK | RB1#0 | 0 | 0 | 15.23 | 14.55 | 15.07 |
| | | RB1#3 | 0 | 0 | 15.30 | 14.47 | 14.98 |
| | | RB1#5 | 0 | 0 | 15.32 | 14.52 | 14.91 |
| | | RB3#0 | 1 | 1 | 15.49 | 14.52 | 14.75 |
| | | RB3#3 | 1 | 1 | 15.48 | 14.50 | 14.74 |
| | | RB6#0 | 1 | 1 | 14.38 | 14.44 | 14.39 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.31 | 13.35 | 14.11 |
| | | RB1#3 | 1 | 1 | 14.27 | 13.29 | 14.05 |
| | | RB1#5 | 2 | 2 | 14.25 | 13.43 | 14.20 |
| | | RB3#0 | 2 | 2 | 14.55 | 13.60 | 14.20 |
| | | RB3#3 | 2 | 2 | 14.53 | 13.57 | 14.06 |
| | | RB6#0 | 2 | 2 | 13.53 | 12.62 | 12.60 |
| 3M | QPSK | RB1#0 | 0 | 0 | 15.48 | 14.79 | 15.11 |
| | | RB1#8 | 0 | 0 | 15.55 | 14.77 | 15.05 |
| | | RB1#14 | 0 | 0 | 15.55 | 14.68 | 15.06 |
| | | RB6#0 | 1 | 1 | 14.72 | 14.53 | 14.50 |
| | | RB6#9 | 1 | 1 | 14.69 | 14.48 | 14.41 |
| | | RB15#0 | 1 | 1 | 14.75 | 14.17 | 14.19 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.53 | 13.68 | 14.25 |
| | | RB1#8 | 1 | 1 | 14.33 | 13.78 | 14.16 |
| | | RB1#14 | 1 | 1 | 14.44 | 13.65 | 14.14 |
| | | RB6#0 | 2 | 2 | 13.69 | 12.81 | 13.15 |
| | | RB6#9 | 2 | 2 | 13.65 | 12.82 | 12.96 |
| | | RB15#0 | 2 | 2 | 13.67 | 12.78 | 12.97 |
| 5M | QPSK | RB1#0 | 0 | 0 | 15.59 | 14.96 | 15.14 |
| | | RB1#13 | 0 | 0 | 15.48 | 15.01 | 15.18 |
| | | RB1#24 | 0 | 0 | 15.46 | 14.95 | 15.07 |
| | | RB15#0 | 1 | 1 | 14.53 | 14.61 | 14.27 |
| | | RB15#10 | 1 | 1 | 14.43 | 14.54 | 14.18 |
| | | RB25#0 | 1 | 1 | 14.65 | 14.17 | 14.17 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.57 | 13.99 | 14.80 |
| | | RB1#13 | 1 | 1 | 14.61 | 13.88 | 14.73 |
| | | RB1#24 | 1 | 1 | 14.55 | 13.87 | 14.81 |
| | | RB15#0 | 2 | 2 | 13.70 | 12.90 | 13.42 |
| | | RB15#10 | 2 | 2 | 13.48 | 13.01 | 13.33 |
| | | RB25#0 | 2 | 2 | 13.58 | 12.91 | 13.43 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 10M | QPSK | RB1#0 | 0 | 0 | 15.08 | 14.50 | 15.02 |
| | | RB1#25 | 0 | 0 | 14.97 | 14.32 | 15.17 |
| | | RB1#49 | 1 | 1 | 15.03 | 14.38 | 15.09 |
| | | RB25#0 | 1 | 1 | 14.13 | 14.56 | 14.32 |
| | | RB25#25 | 1 | 1 | 14.16 | 14.40 | 14.37 |
| | | RB50#0 | 1 | 1 | 14.15 | 14.12 | 14.23 |
| | 16-QAM | RB1#0 | 1 | 1 | 13.92 | 13.45 | 14.28 |
| | | RB1#25 | 1 | 1 | 13.89 | 13.27 | 14.28 |
| | | RB1#49 | 1 | 1 | 13.82 | 13.29 | 14.33 |
| | | RB25#0 | 2 | 2 | 13.22 | 12.64 | 12.93 |
| | | RB25#25 | 2 | 2 | 13.19 | 12.53 | 13.04 |
| | | RB50#0 | 2 | 2 | 13.19 | 12.37 | 12.85 |
| 15M | QPSK | RB1#0 | 0 | 0 | 15.69 | 14.62 | 15.25 |
| | | RB1#38 | 0 | 0 | 15.43 | 14.64 | 15.12 |
| | | RB1#74 | 1 | 1 | 15.45 | 14.41 | 15.11 |
| | | RB36#0 | 1 | 1 | 14.60 | 14.57 | 14.78 |
| | | RB36#39 | 1 | 1 | 14.52 | 14.46 | 14.56 |
| | | RB75#0 | 1 | 1 | 14.58 | 14.25 | 14.26 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.71 | 13.68 | 14.42 |
| | | RB1#38 | 1 | 1 | 14.69 | 13.65 | 14.28 |
| | | RB1#74 | 2 | 2 | 14.52 | 13.42 | 14.27 |
| | | RB36#0 | 2 | 2 | 13.53 | 12.71 | 12.95 |
| | | RB36#39 | 2 | 2 | 13.38 | 12.68 | 13.09 |
| | | RB75#0 | 2 | 2 | 13.39 | 12.63 | 12.96 |
| 20M | QPSK | RB1#0 | 0 | 0 | 15.91 | 15.71 | 15.61 |
| | | RB1#50 | 0 | 0 | 15.88 | 15.54 | 15.48 |
| | | RB1#99 | 0 | 0 | **15.95** | 15.72 | 15.69 |
| | | RB50#0 | 1 | 1 | 15.10 | 15.31 | 15.03 |
| | | RB50#50 | 1 | 1 | 15.01 | 15.21 | 15.03 |
| | | RB100#0 | 1 | 1 | 15.06 | 14.85 | 14.74 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.46 | 14.55 | 14.73 |
| | | RB1#50 | 1 | 1 | 15.27 | 14.49 | 14.63 |
| | | RB1#99 | 2 | 2 | 15.30 | 14.38 | 14.53 |
| | | RB50#0 | 2 | 2 | 14.09 | 13.30 | 13.01 |
| | | RB50#50 | 2 | 2 | 14.03 | 13.17 | 13.19 |
| | | RB100#0 | 2 | 2 | 13.96 | 13.17 | 13.09 |

**LTE Band 4:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 1.4M | QPSK | RB1#0 | 0 | 0 | 17.22 | 16.25 | 17.02 |
| | | RB1#3 | 0 | 0 | 17.04 | 16.30 | 16.89 |
| | | RB1#5 | 0 | 0 | 17.04 | 16.28 | 16.90 |
| | | RB3#0 | 1 | 1 | 17.25 | 16.27 | 16.92 |
| | | RB3#3 | 1 | 1 | **17.26** | 16.19 | 16.98 |
| | | RB6#0 | 1 | 1 | 16.32 | 15.45 | 15.93 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.98 | 15.06 | 15.93 |
| | | RB1#3 | 1 | 1 | 15.96 | 15.13 | 15.82 |
| | | RB1#5 | 2 | 2 | 16.15 | 15.15 | 15.78 |
| | | RB3#0 | 2 | 2 | 16.29 | 15.39 | 16.19 |
| | | RB3#3 | 2 | 2 | 16.26 | 15.40 | 16.22 |
| | | RB6#0 | 2 | 2 | 15.31 | 14.36 | 15.26 |
| 3M | QPSK | RB1#0 | 0 | 0 | 16.82 | 16.22 | 16.61 |
| | | RB1#8 | 0 | 0 | 16.88 | 16.13 | 16.71 |
| | | RB1#14 | 0 | 0 | 16.71 | 16.20 | 16.67 |
| | | RB6#0 | 1 | 1 | 15.88 | 15.66 | 15.75 |
| | | RB6#9 | 1 | 1 | 15.97 | 15.75 | 15.66 |
| | | RB15#0 | 1 | 1 | 15.85 | 15.50 | 15.50 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.84 | 15.29 | 15.82 |
| | | RB1#8 | 1 | 1 | 15.66 | 15.27 | 15.90 |
| | | RB1#14 | 1 | 1 | 15.71 | 15.27 | 15.79 |
| | | RB6#0 | 2 | 2 | 14.90 | 14.25 | 14.61 |
| | | RB6#9 | 2 | 2 | 14.97 | 14.24 | 14.49 |
| | | RB15#0 | 2 | 2 | 14.84 | 14.40 | 14.54 |
| 5M | QPSK | RB1#0 | 0 | 0 | 17.07 | 16.78 | 16.49 |
| | | RB1#13 | 0 | 0 | 16.99 | 16.72 | 16.54 |
| | | RB1#24 | 0 | 0 | 16.98 | 16.83 | 16.61 |
| | | RB15#0 | 1 | 1 | 15.98 | 15.79 | 15.68 |
| | | RB15#10 | 1 | 1 | 15.91 | 15.64 | 15.57 |
| | | RB25#0 | 1 | 1 | 16.00 | 15.67 | 15.49 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.10 | 15.80 | 15.74 |
| | | RB1#13 | 1 | 1 | 15.98 | 15.72 | 15.76 |
| | | RB1#24 | 1 | 1 | 15.88 | 15.87 | 15.81 |
| | | RB15#0 | 2 | 2 | 15.04 | 14.84 | 14.24 |
| | | RB15#10 | 2 | 2 | 14.95 | 14.82 | 14.33 |
| | | RB25#0 | 2 | 2 | 15.06 | 14.67 | 14.22 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 10M | QPSK | RB1#0 | 0 | 0 | 17.02 | 16.62 | 16.46 |
| | | RB1#25 | 0 | 0 | 16.87 | 16.34 | 16.25 |
| | | RB1#49 | 1 | 1 | 17.11 | 16.53 | 16.42 |
| | | RB25#0 | 1 | 1 | 16.08 | 15.99 | 15.84 |
| | | RB25#25 | 1 | 1 | 16.21 | 15.73 | 15.79 |
| | | RB50#0 | 1 | 1 | 16.17 | 15.64 | 15.52 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.04 | 15.06 | 15.55 |
| | | RB1#25 | 1 | 1 | 15.89 | 15.03 | 15.33 |
| | | RB1#49 | 1 | 1 | 15.85 | 15.06 | 15.56 |
| | | RB25#0 | 2 | 2 | 15.14 | 14.08 | 14.09 |
| | | RB25#25 | 2 | 2 | 15.18 | 14.08 | 14.19 |
| | | RB50#0 | 2 | 2 | 15.20 | 14.06 | 14.11 |
| 15M | QPSK | RB1#0 | 0 | 0 | 16.46 | 15.98 | 16.55 |
| | | RB1#38 | 0 | 0 | 16.47 | 15.92 | 16.43 |
| | | RB1#74 | 1 | 1 | 16.45 | 15.98 | 16.61 |
| | | RB36#0 | 1 | 1 | 15.71 | 15.61 | 15.79 |
| | | RB36#39 | 1 | 1 | 15.66 | 15.53 | 15.67 |
| | | RB75#0 | 1 | 1 | 15.46 | 15.49 | 15.58 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.56 | 15.15 | 15.67 |
| | | RB1#38 | 1 | 1 | 15.64 | 15.12 | 15.67 |
| | | RB1#74 | 2 | 2 | 15.55 | 14.95 | 15.70 |
| | | RB36#0 | 2 | 2 | 14.41 | 14.13 | 14.29 |
| | | RB36#39 | 2 | 2 | 14.30 | 14.16 | 14.43 |
| | | RB75#0 | 2 | 2 | 14.49 | 14.06 | 14.34 |
| 20M | QPSK | RB1#0 | 0 | 0 | 16.88 | 16.71 | 17.21 |
| | | RB1#50 | 0 | 0 | 16.73 | 16.68 | 17.02 |
| | | RB1#99 | 0 | 0 | 16.85 | 16.52 | 17.20 |
| | | RB50#0 | 1 | 1 | 15.95 | 15.85 | 16.11 |
| | | RB50#50 | 1 | 1 | 15.80 | 15.83 | 16.21 |
| | | RB100#0 | 1 | 1 | 15.80 | 15.59 | 16.07 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.13 | 15.94 | 16.53 |
| | | RB1#50 | 1 | 1 | 16.01 | 15.96 | 16.57 |
| | | RB1#99 | 2 | 2 | 15.92 | 15.92 | 16.61 |
| | | RB50#0 | 2 | 2 | 14.70 | 14.34 | 15.21 |
| | | RB50#50 | 2 | 2 | 14.70 | 14.29 | 15.16 |
| | | RB100#0 | 2 | 2 | 14.67 | 14.24 | 15.12 |

**LTE Band 5:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 1.4M | QPSK | RB1#0 | 0 | 0 | 19.10 | **19.63** | 18.98 |
| | | RB1#3 | 0 | 0 | 19.06 | 19.60 | 18.86 |
| | | RB1#5 | 0 | 0 | 19.09 | 19.61 | 18.92 |
| | | RB3#0 | 1 | 1 | 19.20 | 19.39 | 18.97 |
| | | RB3#3 | 1 | 1 | 19.19 | 19.49 | 18.91 |
| | | RB6#0 | 1 | 1 | 18.04 | 18.33 | 18.00 |
| | 16-QAM | RB1#0 | 1 | 1 | 17.83 | 18.79 | 17.76 |
| | | RB1#3 | 1 | 1 | 17.88 | 18.86 | 17.81 |
| | | RB1#5 | 2 | 2 | 17.94 | 18.74 | 17.77 |
| | | RB3#0 | 2 | 2 | 18.20 | 18.67 | 18.00 |
| | | RB3#3 | 2 | 2 | 18.31 | 18.64 | 18.15 |
| | | RB6#0 | 2 | 2 | 17.31 | 17.35 | 17.14 |
| 3M | QPSK | RB1#0 | 0 | 0 | 18.63 | 18.91 | 19.23 |
| | | RB1#8 | 0 | 0 | 18.57 | 18.79 | 19.23 |
| | | RB1#14 | 0 | 0 | 18.75 | 18.75 | 19.09 |
| | | RB6#0 | 1 | 1 | 17.86 | 17.85 | 17.99 |
| | | RB6#9 | 1 | 1 | 17.80 | 17.93 | 18.06 |
| | | RB15#0 | 1 | 1 | 17.86 | 17.83 | 17.86 |
| | 16-QAM | RB1#0 | 1 | 1 | 17.62 | 17.89 | 18.31 |
| | | RB1#8 | 1 | 1 | 17.54 | 17.83 | 18.29 |
| | | RB1#14 | 1 | 1 | 17.52 | 17.79 | 18.23 |
| | | RB6#0 | 2 | 2 | 16.74 | 16.94 | 17.12 |
| | | RB6#9 | 2 | 2 | 16.67 | 16.98 | 17.13 |
| | | RB15#0 | 2 | 2 | 16.75 | 16.97 | 17.04 |
| 5M | QPSK | RB1#0 | 0 | 0 | 19.45 | 18.82 | 18.95 |
| | | RB1#13 | 0 | 0 | 19.47 | 18.80 | 18.91 |
| | | RB1#24 | 0 | 0 | 19.52 | 18.85 | 18.82 |
| | | RB15#0 | 1 | 1 | 18.58 | 17.71 | 17.95 |
| | | RB15#10 | 1 | 1 | 18.57 | 17.76 | 17.80 |
| | | RB25#0 | 1 | 1 | 18.55 | 17.82 | 18.04 |
| | 16-QAM | RB1#0 | 1 | 1 | 18.59 | 17.88 | 18.59 |
| | | RB1#13 | 1 | 1 | 18.48 | 17.79 | 18.53 |
| | | RB1#24 | 1 | 1 | 18.63 | 17.69 | 18.52 |
| | | RB15#0 | 2 | 2 | 17.65 | 16.74 | 17.17 |
| | | RB15#10 | 2 | 2 | 17.53 | 16.77 | 16.89 |
| | | RB25#0 | 2 | 2 | 17.44 | 16.78 | 17.16 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 10M | QPSK | RB1#0 | 0 | 0 | 18.99 | 19.17 | 19.09 |
| | | RB1#25 | 0 | 0 | 18.79 | 18.82 | 18.91 |
| | | RB1#49 | 1 | 1 | 18.62 | 18.68 | 18.84 |
| | | RB25#0 | 1 | 1 | 18.14 | 18.33 | 17.94 |
| | | RB25#25 | 1 | 1 | 17.85 | 17.91 | 17.87 |
| | | RB50#0 | 1 | 1 | 17.79 | 17.86 | 17.73 |
| | 16-QAM | RB1#0 | 1 | 1 | 17.33 | 17.57 | 17.94 |
| | | RB1#25 | 1 | 1 | 17.27 | 17.52 | 17.95 |
| | | RB1#49 | 1 | 1 | 17.30 | 17.51 | 17.76 |
| | | RB25#0 | 2 | 2 | 16.60 | 16.76 | 16.58 |
| | | RB25#25 | 2 | 2 | 16.62 | 16.75 | 16.47 |
| | | RB50#0 | 2 | 2 | 16.48 | 16.60 | 16.64 |

**LTE Band 7:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 5M | QPSK | RB1#0 | 0 | 0 | 15.03 | 15.49 | 15.78 |
| | | RB1#13 | 0 | 0 | 15.03 | 15.55 | 15.77 |
| | | RB1#24 | 0 | 0 | 15.07 | 15.51 | 15.67 |
| | | RB15#0 | 1 | 1 | 14.14 | 14.56 | 14.94 |
| | | RB15#10 | 1 | 1 | 14.22 | 14.6 | 14.86 |
| | | RB25#0 | 1 | 1 | 14.15 | 14.55 | 15 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.67 | 14.5 | 14.84 |
| | | RB1#13 | 1 | 1 | 14.68 | 14.64 | 14.99 |
| | | RB1#24 | 1 | 1 | 14.81 | 14.63 | 15.05 |
| | | RB15#0 | 2 | 2 | 13.27 | 13.76 | 13.86 |
| | | RB15#10 | 2 | 2 | 13.36 | 13.66 | 13.88 |
| | | RB25#0 | 2 | 2 | 13.4 | 13.57 | 13.87 |
| 10M | QPSK | RB1#0 | 0 | 0 | 15.11 | 15.55 | 15.25 |
| | | RB1#25 | 0 | 0 | 15.21 | 15.7 | 15.4 |
| | | RB1#49 | 0 | 0 | 15.31 | **15.8** | 15.38 |
| | | RB25#0 | 1 | 1 | 14.23 | 14.93 | 14.37 |
| | | RB25#25 | 1 | 1 | 14.07 | 14.98 | 14.5 |
| | | RB50#0 | 1 | 1 | 14.14 | 14.83 | 14.42 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.43 | 14.53 | 14.44 |
| | | RB1#25 | 1 | 1 | 14.62 | 14.73 | 14.41 |
| | | RB1#49 | 1 | 1 | 14.54 | 14.62 | 14.5 |
| | | RB25#0 | 2 | 2 | 13.13 | 13.97 | 13.55 |
| | | RB25#25 | 2 | 2 | 13.29 | 13.96 | 13.47 |
| | | RB50#0 | 2 | 2 | 13.16 | 13.84 | 13.44 |
| 15M | QPSK | RB1#0 | 0 | 0 | 15.14 | 14.94 | 15.69 |
| | | RB1#38 | 0 | 0 | 15.42 | 14.95 | 15.78 |
| | | RB1#74 | 0 | 0 | 15.24 | 14.92 | 15.72 |
| | | RB36#0 | 1 | 1 | 14.34 | 14.08 | 14.49 |
| | | RB36#39 | 1 | 1 | 14.27 | 14.21 | 14.43 |
| | | RB75#0 | 1 | 1 | 14.37 | 14.03 | 14.55 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.36 | 13.84 | 14.98 |
| | | RB1#38 | 1 | 1 | 14.47 | 14.08 | 14.91 |
| | | RB1#74 | 1 | 1 | 14.45 | 14 | 14.99 |
| | | RB36#0 | 2 | 2 | 13.39 | 13.08 | 13.64 |
| | | RB36#39 | 2 | 2 | 13.36 | 13.21 | 13.61 |
| | | RB75#0 | 2 | 2 | 13.31 | 13.18 | 13.51 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 20M | QPSK | RB1#0 | 0 | 0 | 14.92 | 15.24 | 15.16 |
| | | RB1#50 | 0 | 0 | 15.11 | 15.32 | 15.29 |
| | | RB1#99 | 0 | 0 | 14.97 | 15.13 | 14.99 |
| | | RB50#0 | 1 | 1 | 14.33 | 14.49 | 14.37 |
| | | RB50#50 | 1 | 1 | 14.17 | 14.35 | 14.26 |
| | | RB100#0 | 1 | 1 | 14.14 | 14.23 | 13.99 |
| | 16-QAM | RB1#0 | 1 | 1 | 13.92 | 14.41 | 14.65 |
| | | RB1#50 | 1 | 1 | 14.16 | 14.47 | 14.62 |
| | | RB1#99 | 1 | 1 | 14.25 | 14.37 | 14.61 |
| | | RB50#0 | 2 | 2 | 12.72 | 13.24 | 12.91 |
| | | RB50#50 | 2 | 2 | 12.75 | 13.28 | 12.95 |
| | | RB100#0 | 2 | 2 | 12.8 | 13.13 | 12.92 |

**LTE Band 12:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 1.4M | QPSK | RB1#0 | 0 | 0 | 24.23 | **24.41** | 23.87 |
| | | RB1#3 | 0 | 0 | 23.90 | 24.22 | 23.83 |
| | | RB1#5 | 0 | 0 | 24.12 | 24.38 | 23.95 |
| | | RB3#0 | 1 | 1 | 24.24 | 24.17 | 24.08 |
| | | RB3#3 | 1 | 1 | 24.27 | 24.23 | 24.11 |
| | | RB6#0 | 1 | 1 | 23.18 | 23.24 | 23.17 |
| | 16-QAM | RB1#0 | 1 | 1 | 22.93 | 23.57 | 22.95 |
| | | RB1#3 | 1 | 1 | 23.00 | 23.50 | 22.94 |
| | | RB1#5 | 2 | 2 | 23.19 | 23.63 | 22.90 |
| | | RB3#0 | 2 | 2 | 23.35 | 23.53 | 23.18 |
| | | RB3#3 | 2 | 2 | 23.28 | 23.40 | 23.12 |
| | | RB6#0 | 2 | 2 | 22.47 | 22.22 | 22.32 |
| 3M | QPSK | RB1#0 | 0 | 0 | 24.13 | 24.28 | 24.28 |
| | | RB1#8 | 0 | 0 | 24.14 | 24.21 | 24.17 |
| | | RB1#14 | 0 | 0 | 24.09 | 24.22 | 24.26 |
| | | RB6#0 | 1 | 1 | 23.31 | 23.22 | 23.13 |
| | | RB6#9 | 1 | 1 | 23.28 | 23.19 | 23.03 |
| | | RB15#0 | 1 | 1 | 23.28 | 23.11 | 23.06 |
| | 16-QAM | RB1#0 | 1 | 1 | 23.23 | 23.11 | 23.44 |
| | | RB1#8 | 1 | 1 | 23.07 | 23.05 | 23.51 |
| | | RB1#14 | 1 | 1 | 23.26 | 22.98 | 23.60 |
| | | RB6#0 | 2 | 2 | 22.39 | 22.20 | 22.15 |
| | | RB6#9 | 2 | 2 | 22.24 | 22.19 | 22.13 |
| | | RB15#0 | 2 | 2 | 22.21 | 22.25 | 22.10 |
| 5M | QPSK | RB1#0 | 0 | 0 | 24.08 | 24.08 | 24.01 |
| | | RB1#13 | 0 | 0 | 24.18 | 24.14 | 23.98 |
| | | RB1#24 | 0 | 0 | 24.14 | 24.09 | 23.95 |
| | | RB15#0 | 1 | 1 | 23.41 | 23.10 | 23.25 |
| | | RB15#10 | 1 | 1 | 23.27 | 22.98 | 23.27 |
| | | RB25#0 | 1 | 1 | 23.35 | 23.07 | 23.17 |
| | 16-QAM | RB1#0 | 1 | 1 | 23.40 | 23.25 | 23.89 |
| | | RB1#13 | 1 | 1 | 23.26 | 23.13 | 23.77 |
| | | RB1#24 | 1 | 1 | 23.24 | 23.11 | 23.74 |
| | | RB15#0 | 2 | 2 | 22.44 | 22.07 | 22.31 |
| | | RB15#10 | 2 | 2 | 22.45 | 22.08 | 22.28 |
| | | RB25#0 | 2 | 2 | 22.32 | 22.17 | 22.34 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 10M | QPSK | RB1#0 | 0 | 0 | 24.05 | 24.10 | 24.34 |
| | | RB1#25 | 0 | 0 | 23.86 | 23.97 | 24.29 |
| | | RB1#49 | 1 | 1 | 23.96 | 23.94 | 24.33 |
| | | RB25#0 | 1 | 1 | 23.11 | 22.92 | 23.30 |
| | | RB25#25 | 1 | 1 | 23.19 | 23.18 | 23.19 |
| | | RB50#0 | 1 | 1 | 23.20 | 22.82 | 23.29 |
| | 16-QAM | RB1#0 | 1 | 1 | 22.95 | 22.88 | 23.60 |
| | | RB1#25 | 1 | 1 | 22.86 | 22.74 | 23.52 |
| | | RB1#49 | 1 | 1 | 22.87 | 22.79 | 23.67 |
| | | RB25#0 | 2 | 2 | 22.21 | 21.93 | 22.31 |
| | | RB25#25 | 2 | 2 | 22.27 | 21.87 | 22.29 |
| | | RB50#0 | 2 | 2 | 22.27 | 21.78 | 22.29 |

**LTE Band 13:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 5M | QPSK | RB1#0 | 0 | 0 | 22.69 | / | 22.53 |
| | | RB1#13 | 0 | 0 | 22.6 | / | 22.66 |
| | | RB1#24 | 1 | 1 | **22.75** | / | 22.56 |
| | | RB15#0 | 1 | 1 | 21.61 | / | 21.61 |
| | | RB15#10 | 1 | 1 | 21.55 | / | 21.58 |
| | | RB25#0 | 1 | 1 | 21.73 | / | 21.72 |
| | 16-QAM | RB1#0 | 1 | 1 | 21.65 | / | 22.17 |
| | | RB1#13 | 1 | 1 | 21.71 | / | 22.33 |
| | | RB1#24 | 1 | 1 | 21.81 | / | 22.11 |
| | | RB15#0 | 2 | 2 | 20.8 | / | 20.85 |
| | | RB15#10 | 2 | 2 | 20.64 | / | 20.79 |
| | | RB25#0 | 2 | 2 | 20.75 | / | 20.76 |
| 10M | QPSK | RB1#0 | 0 | 0 | / | 22.45 | / |
| | | RB1#25 | 0 | 0 | / | 22.55 | / |
| | | RB1#49 | 1 | 1 | / | 22.39 | / |
| | | RB25#0 | 1 | 1 | / | 21.85 | / |
| | | RB25#25 | 1 | 1 | / | 22.12 | / |
| | | RB50#0 | 1 | 1 | / | 21.62 | / |
| | 16-QAM | RB1#0 | 1 | 1 | / | 21.43 | / |
| | | RB1#25 | 1 | 1 | / | 21.29 | / |
| | | RB1#49 | 1 | 1 | / | 21.41 | / |
| | | RB25#0 | 2 | 2 | / | 20.7 | / |
| | | RB25#25 | 2 | 2 | / | 20.72 | / |
| | | RB50#0 | 2 | 2 | / | 20.74 | / |

**LTE Band 17:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 5M | QPSK | RB1#0 | 0 | 0 | 22.63 | 23.28 | 22.91 |
| | | RB1#13 | 0 | 0 | 22.6 | 23.16 | 23.01 |
| | | RB1#24 | 1 | 1 | 22.61 | 23.38 | 23.09 |
| | | RB15#0 | 1 | 1 | 21.68 | 22.4 | 21.96 |
| | | RB15#10 | 1 | 1 | 21.71 | 22.4 | 21.99 |
| | | RB25#0 | 1 | 1 | 21.8 | 22.42 | 21.93 |
| | 16-QAM | RB1#0 | 1 | 1 | 22.33 | 22.24 | 21.98 |
| | | RB1#13 | 1 | 1 | 22.26 | 22.19 | 22.08 |
| | | RB1#24 | 1 | 1 | 22.35 | 22.28 | 22.09 |
| | | RB15#0 | 2 | 2 | 20.74 | 21.38 | 21.05 |
| | | RB15#10 | 2 | 2 | 20.86 | 21.46 | 21 |
| | | RB25#0 | 2 | 2 | 20.87 | 21.33 | 20.94 |
| 10M | QPSK | RB1#0 | 0 | 0 | 22.65 | 22.92 | **23.49** |
| | | RB1#25 | 0 | 0 | 22.73 | 22.86 | 23.27 |
| | | RB1#49 | 1 | 1 | 22.73 | 22.84 | 23.43 |
| | | RB25#0 | 1 | 1 | 21.86 | 21.94 | 22.19 |
| | | RB25#25 | 1 | 1 | 21.79 | 21.93 | 22.26 |
| | | RB50#0 | 1 | 1 | 21.84 | 21.97 | 22.25 |
| | 16-QAM | RB1#0 | 1 | 1 | 21.56 | 21.78 | 22.62 |
| | | RB1#25 | 1 | 1 | 21.62 | 21.74 | 22.59 |
| | | RB1#49 | 1 | 1 | 21.69 | 21.81 | 22.67 |
| | | RB25#0 | 2 | 2 | 20.75 | 20.76 | 20.92 |
| | | RB25#25 | 2 | 2 | 20.83 | 21 | 21.3 |
| | | RB50#0 | 2 | 2 | 20.73 | 20.89 | 21.27 |

**LTE Band 38:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 5M | QPSK | RB1#0 | 0 | 0 | 15.78 | 15.8 | 15.94 |
| | | RB1#13 | 0 | 0 | 15.7 | 15.6 | 15.81 |
| | | RB1#24 | 0 | 0 | 15.65 | 15.61 | 15.89 |
| | | RB15#0 | 1 | 1 | 14.59 | 14.65 | 14.77 |
| | | RB15#10 | 1 | 1 | 14.55 | 14.51 | 14.86 |
| | | RB25#0 | 1 | 1 | 14.61 | 14.54 | 14.87 |
| | 16-QAM | RB1#0 | 1 | 1 | 14.87 | 15.11 | 15.08 |
| | | RB1#13 | 1 | 1 | 14.7 | 14.97 | 15.04 |
| | | RB1#24 | 1 | 1 | 14.74 | 15.11 | 15.07 |
| | | RB15#0 | 2 | 2 | 13.45 | 13.62 | 13.83 |
| | | RB15#10 | 2 | 2 | 13.39 | 13.77 | 13.83 |
| | | RB25#0 | 2 | 2 | 13.66 | 13.63 | 13.67 |
| 10M | QPSK | RB1#0 | 0 | 0 | 15.95 | 15.13 | 15.51 |
| | | RB1#25 | 0 | 0 | 15.88 | 14.98 | 15.62 |
| | | RB1#49 | 0 | 0 | 15.86 | 15.13 | 15.51 |
| | | RB25#0 | 1 | 1 | 14.81 | 14.32 | 14.53 |
| | | RB25#25 | 1 | 1 | 14.94 | 14.49 | 14.49 |
| | | RB50#0 | 1 | 1 | 14.81 | 14.31 | 14.47 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.13 | 14.25 | 15 |
| | | RB1#25 | 1 | 1 | 15.04 | 14.37 | 14.97 |
| | | RB1#49 | 1 | 1 | 15.15 | 14.35 | 14.99 |
| | | RB25#0 | 2 | 2 | 13.96 | 13.03 | 13.58 |
| | | RB25#25 | 2 | 2 | 13.85 | 13.1 | 13.54 |
| | | RB50#0 | 2 | 2 | 13.88 | 13.22 | 13.48 |
| 15M | QPSK | RB1#0 | 0 | 0 | 15.81 | 15.91 | 15.6 |
| | | RB1#38 | 0 | 0 | 15.72 | 15.9 | 15.6 |
| | | RB1#74 | 0 | 0 | 15.67 | 15.92 | 15.51 |
| | | RB36#0 | 1 | 1 | 14.61 | 14.98 | 14.4 |
| | | RB36#39 | 1 | 1 | 14.64 | 14.93 | 14.4 |
| | | RB75#0 | 1 | 1 | 14.65 | 14.97 | 14.36 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.06 | 15.14 | 15.01 |
| | | RB1#38 | 1 | 1 | 15.19 | 15.2 | 14.88 |
| | | RB1#74 | 1 | 1 | 14.99 | 15.14 | 14.89 |
| | | RB36#0 | 2 | 2 | 13.65 | 14.11 | 13.42 |
| | | RB36#39 | 2 | 2 | 13.69 | 14.07 | 13.43 |
| | | RB75#0 | 2 | 2 | 13.73 | 14.11 | 13.43 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 20M | QPSK | RB1#0 | 0 | 0 | **16.05** | 15.74 | 15.99 |
| | | RB1#50 | 0 | 0 | 15.92 | 15.66 | 15.86 |
| | | RB1#99 | 0 | 0 | 16.05 | 15.54 | 15.77 |
| | | RB50#0 | 1 | 1 | 14.83 | 14.63 | 14.8 |
| | | RB50#50 | 1 | 1 | 14.92 | 14.85 | 14.94 |
| | | RB100#0 | 1 | 1 | 14.93 | 14.4 | 14.88 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.13 | 14.33 | 15.11 |
| | | RB1#50 | 1 | 1 | 15.13 | 14.53 | 15.1 |
| | | RB1#99 | 1 | 1 | 15.02 | 14.29 | 15.01 |
| | | RB50#0 | 2 | 2 | 14 | 13.16 | 13.75 |
| | | RB50#50 | 2 | 2 | 13.83 | 13.18 | 13.67 |
| | | RB100#0 | 2 | 2 | 13.92 | 13.02 | 13.73 |

**LTE Band 41:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | 2549.5 MHz (dBm) | Middle Channel (dBm) | 2636.5 MHz (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|---|---|
| 5M | QPSK | RB1#0 | 0 | 0 | 16.05 | 16.75 | 16.61 | 16.23 | 16.32 |
| | | RB1#13 | 0 | 0 | 15.99 | 16.77 | 16.74 | 16.31 | 16.28 |
| | | RB1#24 | 1 | 1 | 15.95 | 16.58 | 16.59 | 16.25 | 16.15 |
| | | RB15#0 | 1 | 1 | 15.61 | 15.65 | 15.57 | 15.54 | 15.68 |
| | | RB15#10 | 1 | 1 | 15.52 | 15.51 | 15.53 | 15.45 | 15.51 |
| | | RB25#0 | 1 | 1 | 15.41 | 15.6 | 15.49 | 15.36 | 15.43 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.18 | 16.17 | 16.07 | 15.42 | 15.4 |
| | | RB1#13 | 1 | 1 | 15.13 | 16.06 | 16.03 | 15.45 | 15.31 |
| | | RB1#24 | 1 | 1 | 15.15 | 16.01 | 16.09 | 15.54 | 15.4 |
| | | RB15#0 | 2 | 2 | 13.96 | 14.7 | 14.71 | 14.27 | 14.3 |
| | | RB15#10 | 2 | 2 | 13.92 | 14.76 | 14.64 | 14.18 | 14.14 |
| | | RB25#0 | 2 | 2 | 14.02 | 14.49 | 14.51 | 14.41 | 14.28 |
| 10M | QPSK | RB1#0 | 0 | 0 | 16.61 | 17.04 | 16.97 | 16.13 | 16.08 |
| | | RB1#25 | 0 | 0 | 16.56 | 17 | 16.91 | 15.98 | 15.88 |
| | | RB1#49 | 1 | 1 | 16.72 | 17.03 | 16.85 | 15.96 | 15.97 |
| | | RB25#0 | 1 | 1 | 15.62 | 16.06 | 15.98 | 15.75 | 15.69 |
| | | RB25#25 | 1 | 1 | 15.77 | 16 | 15.94 | 15.69 | 15.86 |
| | | RB50#0 | 1 | 1 | 15.72 | 15.96 | 16 | 15.45 | 15.31 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.07 | 16.22 | 16.19 | 15.04 | 15.08 |
| | | RB1#25 | 1 | 1 | 15.97 | 16.31 | 16.18 | 14.91 | 14.9 |
| | | RB1#49 | 1 | 1 | 16.13 | 16.15 | 16.26 | 14.96 | 14.93 |
| | | RB25#0 | 2 | 2 | 14.59 | 14.92 | 14.92 | 13.83 | 13.79 |
| | | RB25#25 | 2 | 2 | 14.57 | 14.92 | 15 | 13.88 | 13.78 |
| | | RB50#0 | 2 | 2 | 14.79 | 14.9 | 14.99 | 13.89 | 13.82 |
| 15M | QPSK | RB1#0 | 0 | 0 | 16.51 | 16.64 | 16.74 | 16.01 | 16.26 |
| | | RB1#38 | 0 | 0 | 16.51 | 16.75 | 16.63 | 15.93 | 16.15 |
| | | RB1#74 | 1 | 1 | 16.56 | 16.55 | 16.5 | 15.95 | 15.93 |
| | | RB36#0 | 1 | 1 | 15.48 | 15.57 | 15.67 | 15.69 | 15.71 |
| | | RB36#39 | 1 | 1 | 15.36 | 15.6 | 15.48 | 15.56 | 15.62 |
| | | RB75#0 | 1 | 1 | 15.49 | 15.47 | 15.54 | 15.41 | 15.46 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.77 | 16.08 | 15.97 | 15.07 | 15.11 |
| | | RB1#38 | 1 | 1 | 15.85 | 16.15 | 16.07 | 14.99 | 15.02 |
| | | RB1#74 | 1 | 1 | 15.88 | 15.89 | 15.91 | 15.07 | 15.1 |
| | | RB36#0 | 2 | 2 | 14.24 | 14.73 | 14.61 | 14.18 | 14.05 |
| | | RB36#39 | 2 | 2 | 14.27 | 14.67 | 14.59 | 14.1 | 14.12 |
| | | RB75#0 | 2 | 2 | 14.5 | 14.65 | 14.48 | 14.06 | 13.92 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | 2549.5 MHz (dBm) | Middle Channel (dBm) | 2636.5 MHz (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|---|---|
| 20M | QPSK | RB1#0 | 0 | 0 | 16.52 | 17.18 | 17.13 | 16.39 | 16.25 |
| | | RB1#50 | 0 | 0 | 16.61 | 17.2 | **17.23** | 16.71 | 16.59 |
| | | RB1#99 | 1 | 1 | 16.41 | 17.17 | 17.16 | 16.05 | 16.17 |
| | | RB50#0 | 1 | 1 | 15.82 | 16.05 | 16.13 | 15.72 | 15.65 |
| | | RB50#50 | 1 | 1 | 15.98 | 16.31 | 16.63 | 16.02 | 15.95 |
| | | RB100#0 | 1 | 1 | 15.35 | 15.98 | 15.96 | 15.51 | 15.44 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.43 | 16.43 | 16.43 | 15.33 | 15.28 |
| | | RB1#50 | 1 | 1 | 15.42 | 16.37 | 16.46 | 15.12 | 15.07 |
| | | RB1#99 | 1 | 1 | 15.49 | 16.32 | 16.28 | 14.98 | 14.91 |
| | | RB50#0 | 2 | 2 | 14.2 | 15.09 | 15.09 | 13.98 | 13.93 |
| | | RB50#50 | 2 | 2 | 14.37 | 15.03 | 15.02 | 14.01 | 13.87 |
| | | RB100#0 | 2 | 2 | 14.28 | 14.96 | 15.03 | 13.82 | 13.81 |

**LTE Band 66:**

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 1.4M | QPSK | RB1#0 | 0 | 0 | 16.70 | 16.32 | 16.68 |
| | | RB1#3 | 0 | 0 | 16.55 | 16.19 | 16.78 |
| | | RB1#5 | 0 | 0 | 16.70 | 16.18 | 16.80 |
| | | RB3#0 | 1 | 1 | 16.56 | 16.29 | 16.89 |
| | | RB3#3 | 1 | 1 | 16.45 | 16.26 | 16.82 |
| | | RB6#0 | 1 | 1 | 15.42 | 15.54 | 15.87 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.77 | 15.04 | 15.66 |
| | | RB1#3 | 1 | 1 | 15.74 | 15.01 | 15.72 |
| | | RB1#5 | 2 | 2 | 15.76 | 15.10 | 15.62 |
| | | RB3#0 | 2 | 2 | 15.71 | 15.42 | 16.04 |
| | | RB3#3 | 2 | 2 | 15.86 | 15.31 | 15.99 |
| | | RB6#0 | 2 | 2 | 14.28 | 14.45 | 15.02 |
| 3M | QPSK | RB1#0 | 0 | 0 | 17.04 | 16.13 | 16.55 |
| | | RB1#8 | 0 | 0 | 16.93 | 16.12 | 16.63 |
| | | RB1#14 | 0 | 0 | 16.97 | 15.96 | 16.59 |
| | | RB6#0 | 1 | 1 | 16.26 | 15.65 | 15.72 |
| | | RB6#9 | 1 | 1 | 16.13 | 15.64 | 15.65 |
| | | RB15#0 | 1 | 1 | 16.11 | 15.51 | 15.47 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.04 | 15.17 | 15.77 |
| | | RB1#8 | 1 | 1 | 15.84 | 15.17 | 15.78 |
| | | RB1#14 | 1 | 1 | 16.02 | 14.95 | 15.75 |
| | | RB6#0 | 2 | 2 | 15.14 | 14.24 | 14.52 |
| | | RB6#9 | 2 | 2 | 15.11 | 14.18 | 14.44 |
| | | RB15#0 | 2 | 2 | 15.14 | 14.06 | 14.49 |
| 5M | QPSK | RB1#0 | 0 | 0 | 16.52 | 16.40 | 16.57 |
| | | RB1#13 | 0 | 0 | 16.37 | 16.57 | 16.60 |
| | | RB1#24 | 0 | 0 | 16.47 | 16.44 | 16.45 |
| | | RB15#0 | 1 | 1 | 15.38 | 15.47 | 15.58 |
| | | RB15#10 | 1 | 1 | 15.48 | 15.54 | 15.44 |
| | | RB25#0 | 1 | 1 | 15.47 | 15.43 | 15.52 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.44 | 15.58 | 16.13 |
| | | RB1#13 | 1 | 1 | 15.47 | 15.57 | 16.13 |
| | | RB1#24 | 1 | 1 | 15.34 | 15.52 | 16.12 |
| | | RB15#0 | 2 | 2 | 14.54 | 14.58 | 14.55 |
| | | RB15#10 | 2 | 2 | 14.43 | 14.43 | 14.58 |
| | | RB25#0 | 2 | 2 | 14.45 | 14.48 | 14.57 |

| Test Bandwidth | Test Modulation | Resource Block & RB offset | Target MPR | Meas MPR | Low Channel (dBm) | Middle Channel (dBm) | High Channel (dBm) |
|---|---|---|---|---|---|---|---|
| 10M | QPSK | RB1#0 | 0 | 0 | 16.67 | 16.41 | 16.71 |
| | | RB1#25 | 0 | 0 | 16.54 | 16.47 | 16.52 |
| | | RB1#49 | 1 | 1 | 16.54 | 16.35 | 16.73 |
| | | RB25#0 | 1 | 1 | 15.79 | 15.60 | 15.78 |
| | | RB25#25 | 1 | 1 | 15.66 | 15.57 | 15.66 |
| | | RB50#0 | 1 | 1 | 15.67 | 15.49 | 15.44 |
| | 16-QAM | RB1#0 | 1 | 1 | 15.68 | 15.04 | 15.92 |
| | | RB1#25 | 1 | 1 | 15.55 | 15.11 | 15.90 |
| | | RB1#49 | 1 | 1 | 15.59 | 14.95 | 15.80 |
| | | RB25#0 | 2 | 2 | 14.88 | 14.20 | 14.43 |
| | | RB25#25 | 2 | 2 | 14.77 | 14.03 | 14.52 |
| | | RB50#0 | 2 | 2 | 14.77 | 14.07 | 14.48 |
| 15M | QPSK | RB1#0 | 0 | 0 | 17.07 | 16.73 | 16.07 |
| | | RB1#38 | 0 | 0 | 17.17 | 16.67 | 17.17 |
| | | RB1#74 | 1 | 1 | 17.07 | 16.73 | 17.09 |
| | | RB36#0 | 1 | 1 | 16.77 | 15.93 | 16.66 |
| | | RB36#39 | 1 | 1 | 16.75 | 15.89 | 16.45 |
| | | RB75#0 | 1 | 1 | 16.06 | 15.74 | 16.00 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.19 | 15.50 | 16.50 |
| | | RB1#38 | 1 | 1 | 16.22 | 15.48 | 16.36 |
| | | RB1#74 | 2 | 2 | 16.21 | 15.40 | 16.36 |
| | | RB36#0 | 2 | 2 | 14.98 | 14.42 | 15.03 |
| | | RB36#39 | 2 | 2 | 14.98 | 14.54 | 15.07 |
| | | RB75#0 | 2 | 2 | 14.94 | 14.37 | 15.07 |
| 20M | QPSK | RB1#0 | 0 | 0 | 17.13 | 16.97 | **17.26** |
| | | RB1#50 | 0 | 0 | 16.95 | 16.66 | 17.15 |
| | | RB1#99 | 0 | 0 | 16.86 | 16.75 | 17.16 |
| | | RB50#0 | 1 | 1 | 16.29 | 16.53 | 16.41 |
| | | RB50#50 | 1 | 1 | 16.14 | 16.22 | 16.39 |
| | | RB100#0 | 1 | 1 | 15.93 | 15.56 | 16.14 |
| | 16-QAM | RB1#0 | 1 | 1 | 16.27 | 16.17 | 16.51 |
| | | RB1#50 | 1 | 1 | 16.10 | 16.07 | 16.54 |
| | | RB1#99 | 2 | 2 | 16.04 | 16.13 | 16.52 |
| | | RB50#0 | 2 | 2 | 14.92 | 14.49 | 15.26 |
| | | RB50#50 | 2 | 2 | 14.78 | 14.43 | 15.12 |
| | | RB100#0 | 2 | 2 | 14.85 | 14.53 | 15.09 |

**WLAN 2.4G:**

| Mode | Channel frequency (MHz) | RU Config | Duty cycle (%) | RF Average Output Power(dBm) | |
|---|---|---|---|---|---|
| | | | | Chain 0 | Chain 1 |
| 802.11b | 2412 | / | 100 | 14.08 | 13.74 |
| | 2437 | / | | 13.66 | 13.69 |
| | 2462 | / | | 13.47 | 13.43 |
| 802.11g | 2412 | / | 100 | 13.96 | 13.67 |
| | 2437 | / | | 13.55 | 13.45 |
| | 2462 | / | | 13.57 | 13.47 |
| 802.11n ht20 | 2412 | / | 100 | 13.91 | 13.65 |
| | 2437 | / | | 13.64 | 13.52 |
| | 2462 | / | | 13.38 | 13.63 |
| 802.11ax hew20 | 2412 | 26/0 | / | 13.76 | 13.59 |
| | | 52/37 | | 13.68 | 13.49 |
| | | 106/53 | | 13.65 | 13.48 |
| | | RU_Full | | 16.72 | 13.54 |
| | 2437 | 26/0 | | 13.48 | 13.46 |
| | | 52/37 | | 13.45 | 13.32 |
| | | 106/53 | | 13.42 | 13.38 |
| | | RU_Full | | 13.39 | 13.32 |
| | 2462 | 26/8 | | 13.34 | 13.41 |
| | | 52/40 | | 13.18 | 13.34 |
| | | 106/54 | | 13.22 | 13.38 |
| | | RU_Full | | 13.27 | 13.37 |

*Note:WLAN 2.4G Duty Cycle please refer to RF Report Number: 2403A43118E-RF-00C*

**WLAN 5.2G:**

| Mode | Channel frequency (MHz) | RU Config | Duty cycle (%) | RF Average Output Power(dBm) |
|---|---|---|---|---|
| 802.11a | 5180 | / | 100 | 9.24 |
| | 5200 | / | | 9.19 |
| | 5240 | / | | 9.43 |
| 802.11n20 | 5180 | / | 100 | 9.28 |
| | 5200 | / | | 9.32 |
| | 5240 | / | | **9.48** |
| 802.11n40 | 5190 | / | 100 | 9.11 |
| | 5230 | / | | 9.14 |
| 802.11ac80 | 5210 | / | 100 | 9.02 |
| 802.11ax20 | 5180 | 26/0 | / | 9.22 |
| | | 52/37 | | 9.17 |
| | | 106/53 | | 9.23 |
| | | Full | | 9.17 |
| | 5200 | 26/0 | | 9.18 |
| | | 52/37 | | 9.06 |
| | | 106/53 | | 9.14 |
| | | Full | | 9.11 |
| | 5240 | 26/8 | | 9.39 |
| | | 52/40 | | 9.37 |
| | | 106/54 | | 9.35 |
| | | Full | | 9.36 |
| 802.11ax40 | 5190 | 26/0 | / | 9.26 |
| | | 52/37 | | 9.27 |
| | | 106/53 | | 9.21 |
| | | 242/61 | | 9.25 |
| | | Full | | 9.24 |
| | 5230 | 26/17 | | 9.35 |
| | | 52/44 | | 9.29 |
| | | 106/56 | | 9.32 |
| | | 242/62 | | 9.27 |
| | | Full | | 9.33 |
| 802.11ax80 | 5210 | 26/0 | / | 9.11 |
| | | 52/37 | | 9.05 |
| | | 106/53 | | 9.12 |
| | | 242/61 | | 9.07 |
| | | 484/65 | | 9.03 |
| | | Full | | 9.08 |

**WLAN 5.3G:**

| Mode | Channel frequency (MHz) | RU Config | Duty cycle (%) | RF Average Output Power(dBm) |
|---|---|---|---|---|
| 802.11a | 5260 | / | 100 | 9.32 |
| | 5280 | / | | 9.67 |
| | 5320 | / | | **9.75** |
| 802.11n20 | 5260 | / | 100 | 9.28 |
| | 5280 | / | | 9.53 |
| | 5320 | / | | 9.71 |
| 802.11n40 | 5270 | / | 100 | 9.36 |
| | 5310 | / | | 9.61 |
| 802.11ac80 | 5290 | / | 100 | 9.39 |
| 802.11ax20 | 5260 | 26/0 | / | 9.38 |
| | | 52/37 | | 9.33 |
| | | 106/53 | | 9.27 |
| | | Full | | 9.29 |
| | 5280 | 26/0 | | 9.47 |
| | | 52/37 | | 9.43 |
| | | 106/53 | | 9.36 |
| | | Full | | 9.41 |
| | 5320 | 26/8 | | 9.55 |
| | | 52/40 | | 9.52 |
| | | 106/54 | | 9.49 |
| | | Full | | 9.51 |
| 802.11ax40 | 5270 | 26/0 | / | 9.41 |
| | | 52/37 | | 9.37 |
| | | 106/53 | | 9.35 |
| | | 242/61 | | 9.32 |
| | | Full | | 9.37 |
| | 5310 | 26/17 | | 9.61 |
| | | 52/44 | | 9.57 |
| | | 106/56 | | 9.54 |
| | | 242/62 | | 9.59 |
| | | Full | | 9.58 |
| 802.11ax80 | 5290 | 26/0 | / | 9.53 |
| | | 52/37 | | 9.42 |
| | | 106/53 | | 9.38 |
| | | 242/61 | | 9.43 |
| | | 484/65 | | 9.41 |
| | | Full | | 9.47 |

**WLAN 5.6G:**

| Mode | Channel frequency (MHz) | RU Config | Duty cycle (%) | RF Average Output Power(dBm) |
|---|---|---|---|---|
| 802.11a | 5500 | / | 100 | 7.12 |
| | 5580 | / | | 7.28 |
| | 5700 | / | | 7.21 |
| | 5720 | / | | **7.37** |
| 802.11n20 | 5500 | / | 100 | 7.26 |
| | 5580 | / | | 7.29 |
| | 5700 | / | | 7.32 |
| | 5720 | / | | 7.31 |
| 802.11n40 | 5510 | / | 100 | 7.04 |
| | 5550 | / | | 7.15 |
| | 5670 | / | | 6.99 |
| | 5710 | / | | 7.12 |
| 802.11ac80 | 5530 | / | / | 7.05 |
| | 5610 | / | | 6.87 |
| | 5690 | / | | 7.06 |
| 802.11ax20 | 5500 | 26/0 | / | 6.98 |
| | | 52/37 | | 6.91 |
| | | 106/53 | | 6.99 |
| | | Full | | 6.95 |
| | 5580 | 26/0 | | 7.04 |
| | | 52/37 | | 6.95 |
| | | 106/53 | | 6.97 |
| | | Full | | 6.99 |
| | 5700 | 26/8 | | 6.87 |
| | | 52/40 | | 6.82 |
| | | 106/54 | | 6.81 |
| | | Full | | 6.85 |
| | 5720 | 26/8 | | 6.95 |
| | | 52/40 | | 6.92 |
| | | 106/54 | | 6.85 |
| | | Full | | 6.93 |
| 802.11ax40 | 5510 | 26/0 | / | 7.2 |
| | | 52/37 | | 7.15 |
| | | 106/53 | | 7.19 |
| | | 242/61 | | 7.14 |
| | | Full | | 7.18 |
| | 5550 | 26/17 | | 7.27 |
| | | 52/44 | | 7.22 |
| | | 106/56 | | 7.26 |
| | | 242/62 | | 7.23 |
| | | Full | | 7.25 |

| | | | | |
|---|---|---|---|---|
| 802.11ax40 | 5670 | 26/17 | / | 7.09 |
| | | 52/44 | | 7.02 |
| | | 106/56 | | 7.06 |
| | | 242/62 | | 7.01 |
| | | Full | | 7.08 |
| | 5710 | 26/17 | | 7.22 |
| | | 52/44 | | 7.16 |
| | | 106/56 | | 7.21 |
| | | 242/62 | | 7.19 |
| | | Full | | 7.14 |
| 802.11ax80 | 5530 | 26/0 | / | 7.06 |
| | | 52/37 | | 6.95 |
| | | 106/53 | | 7.02 |
| | | 242/61 | | 6.98 |
| | | 484/65 | | 7.01 |
| | | Full | | 7.04 |
| | 5610 | 26/0 | | 7.05 |
| | | 52/37 | | 6.97 |
| | | 106/53 | | 7.02 |
| | | 242/61 | | 7.08 |
| | | 484/65 | | 7.03 |
| | | Full | | 7.01 |
| | 5690 | 26/0 | | 7.14 |
| | | 52/37 | | 7.11 |
| | | 106/53 | | 7.06 |
| | | 242/61 | | 7.04 |
| | | 484/65 | | 7.11 |
| | | Full | | 7.09 |

**WLAN 5.8G:**

| Mode | Channel frequency (MHz) | RU Config | Duty cycle (%) | RF Average Output Power(dBm) |
|---|---|---|---|---|
| 802.11a | 5745 | / | 100 | 7.71 |
| | 5785 | / | | 8.29 |
| | 5825 | / | | 8.04 |
| 802.11n20 | 5745 | / | 100 | 8.19 |
| | 5785 | / | | **8.41** |
| | 5825 | / | | 8.06 |
| 802.11n40 | 5755 | / | 100 | 7.88 |
| | 5795 | / | | 7.96 |
| 802.11ac80 | 5775 | / | 100 | 8.01 |
| 802.11ax20 | 5745 | 26/0 | / | 7.98 |
| | | 52/37 | | 7.87 |
| | | 106/53 | | 7.92 |
| | | Full | | 7.96 |
| | 5785 | 26/0 | | 8.16 |
| | | 52/37 | | 8.13 |
| | | 106/53 | | 8.06 |
| | | Full | | 8.15 |
| | 5825 | 26/8 | | 7.84 |
| | | 52/40 | | 7.78 |
| | | 106/54 | | 7.82 |
| | | Full | | 7.79 |
| 802.11ax40 | 5755 | 26/0 | / | 8.13 |
| | | 52/37 | | 8.11 |
| | | 106/53 | | 8.06 |
| | | 242/61 | | 8.09 |
| | | Full | | 8.05 |
| | 5795 | 26/17 | | 8.31 |
| | | 52/44 | | 8.25 |
| | | 106/56 | | 8.16 |
| | | 242/62 | | 8.24 |
| | | Full | | 8.22 |
| 802.11ax80 | 5775 | 26/0 | / | 8.35 |
| | | 52/37 | | 8.31 |
| | | 106/53 | | 8.26 |
| | | 242/61 | | 8.29 |
| | | 484/65 | | 8.32 |
| | | Full | | 8.27 |

*Note:*
*1.WLAN 5G Duty Cycle please refer to RF Report Number: 2403A43118E-RF-00D*
*2.The system support 802.11a/n ht20/n ht40/ac vht20/vht40/vht80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40.*

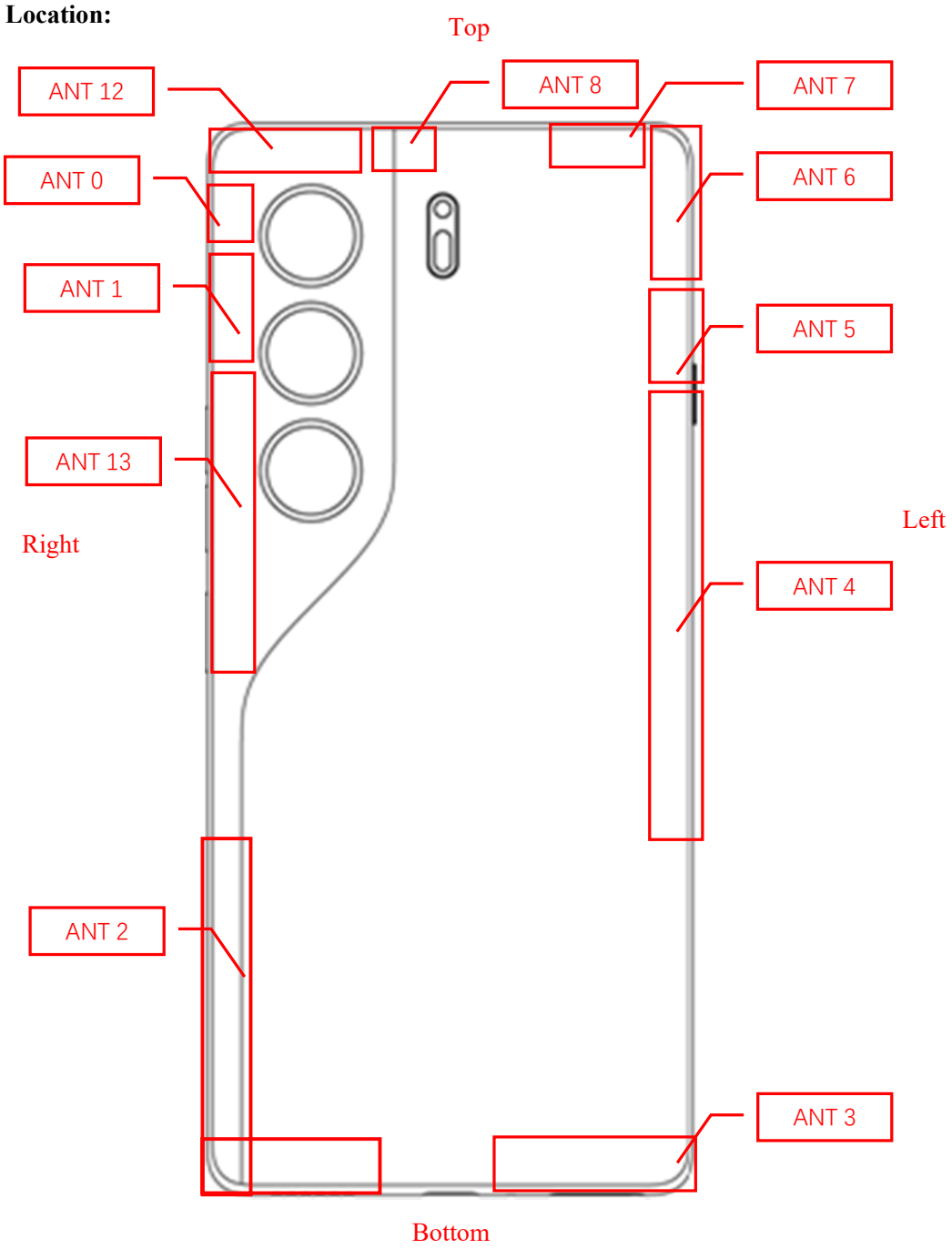
**Bluetooth:**

| Mode | Channel frequency (MHz) | RF Output Power (dBm) | |
|---|---|---|---|
| | | Chain 0 | Chain 1 |
| BDR(GFSK) | 2402 | 4.31 | 3.29 |
| | 2441 | 5.34 | 5.11 |
| | 2480 | 6.07 | 4.36 |
| EDR(π/4-DQPSK) | 2402 | 3.42 | 2.44 |
| | 2441 | 4.44 | 4.21 |
| | 2480 | 5.35 | 3.52 |
| EDR(8DPSK) | 2402 | 3.25 | 2.29 |
| | 2441 | 4.41 | 4.05 |
| | 2480 | 5.31 | 3.32 |
| BLE 1M | 2402 | -0.22 | 0.56 |
| | 2440 | 1.24 | 1.89 |
| | 2480 | 1.12 | 1.47 |
| BLE 2M | 2404 | 0.89 | 1.36 |
| | 2440 | 1.21 | 1.91 |
| | 2478 | -0.94 | -0.72 |

*Note▲: The test data of LTE Band 42/5G NR and LTE CA, please refer to FCC ID: 2ADYY-CM7, SAR report of2401A43118E-SA, issued by Bay Area Compliance Laboratories Corp. (Shenzhen).*

# 7. Standalone SAR test exclusion considerations

**Antennas Location:**




EUT Back View

### 7.1 Antenna Distance ToEdge

| Antenna Distance To Edge(mm) | | | | | | |
|---|---|---|---|---|---|---|
| **Antenna** | **Back** | **Front** | **Left** | **Right** | **Top** | **Bottom** |
| Ant 0 | < 5 | < 5 | 72 | < 5 | < 5 | 146 |
| Ant 2 | < 5 | < 5 | 45 | < 5 | 109 | < 5 |
| Ant 3 | < 5 | < 5 | < 5 | 44 | 154 | < 5 |
| Ant 4 | < 5 | < 5 | < 5 | 72 | 29 | 50 |
| Ant 6 | < 5 | < 5 | < 5 | 72 | < 5 | 137 |
| Ant 7 | < 5 | < 5 | < 5 | 49 | < 5 | 160 |
| Ant 8 | < 5 | < 5 | 40 | 21 | < 5 | 160 |
| Ant 12 | < 5 | < 5 | 52 | < 5 | < 5 | 158 |
| Ant 13 | < 5 | < 5 | 72 | < 5 | 39 | 56 |

| Antenna | Description |
|---|---|
| Ant 0 | LTE B42, 5G NR n77/78, WIFI 5G |
| Ant 2 | GSM 850, WCDMA B5<br>LTE B5/12/13/17, 5G NR n5/12 |
| Ant 3 | GSM 1900, WCDMA B2/4<br>LTE B2/4/7/38/41/66, 5G NR n7/38/41/66 |
| Ant 4 | GSM 850, WCDMA B5<br>LTE B5/12/13/17, 5G NR n5/12 |
| Ant 6 | LTE B42, 5G NR n77/78 |
| Ant 7 | GSM 1900, WCDMA B2/4<br>LTE B2/4/7/38/41/42/66, 5G NR n7/38/41/66/77/78 |
| Ant 8 | LTE B42, 5G NR n77/78 |
| Ant 12 | WIFI 2.4G (chain 0), Bluetooth(chain 0) |
| Ant 13 | WIFI 2.4G(chain 1), Bluetooth(chain 1) |

*Note: The above statistics only include antennas with transmitting*

**7.2Standalone SAR test exclusion considerations**

| Mode | Frequency (MHz) | Output Power (dBm) | Output Power (mW) | Distance (mm) | Calculated value | Threshold (1-g) | SAR Test Exclusion |
|---|---|---|---|---|---|---|---|
| Bluetooth | 2480 | 6.5 | 4.47 | 0 | 1.4 | 3.0 | YES |

***Note:*** *The Wi-Fi based average power for calculation,Thebluetooth based peak power for calculation.*

**NOTE:**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[( max. power of channel, including tune-up tolerance, mW )/( min. test separation distance, mm)] ·
[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤7.5 for 10-g extremity SAR, where

1. f(GHz) is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

According to KDB 447498 D01 General RF Exposure Guidance v06, clause 4.3. General SAR test exclusion guidance:

c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):

1) For test separation distances> 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]
2) For test separation distances≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½
3) SAR measurement procedures are not established below 100 MHz.

**Measurement Result:**

For NFC, the power of EUT: E Field@3m is 61.21dBuV/m =-33.99dBm(0.0004mW)
Note:E[dBμV/m] = EIRP[dBm] + 95.2for d = 3 m.

SAR test exclusion threshold for NFC(13.56MHz) separation distance < 50mm

$=[474*(1 + \log(100/f_{(MHz)}))]/2$

= 443mW

>0.0004mW

**Conclusion:**

The NFC SAR evaluation can be exempted.

*Note:E Field please refer to RF Report Number: 2403A43118E-RF-00G*

**7.3Standalone SAR estimation:**

| Mode | Frequency (MHz) | Output Power (dBm) | Output Power (mW) | Distance (mm) | Estimated 1-g (W/kg) |
|---|---|---|---|---|---|
| BT Head | 2480 | 6.5 | 4.47 | 0 | 0.19 |
| BT Body | 2480 | 6.5 | 4.47 | 10 | 0.10 |

***Note:*** *Thebluetooth based peak power for calculation.*

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with otherantennas, the standalone SAR must be estimated according to following to determine simultaneoustransmission SAR test exclusion:
[( max. power of channel, including tune-up tolerance , mW)/( min. test separation distance,mm)] · [√f(GHz)/x ]
W/kg for test separation distances ≤50 mm;
where x = 7.5 for 1-g SAR.
When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

**7.4 SAR test exclusion for the EUT edge considerations Result**

| Mode | Back | Front | Left | Right | Top | Bottom |
|---|---|---|---|---|---|---|
| Ant 0 | **Required** | **Required** | Exclusion | **Required** | **Required** | Exclusion |
| Ant 2 | **Required** | **Required** | Exclusion | **Required** | Exclusion | **Required** |
| Ant 3 | **Required** | **Required** | **Required** | Exclusion | Exclusion | **Required** |
| Ant 4 | **Required** | **Required** | **Required** | Exclusion | Exclusion | Exclusion |
| Ant 6 | **Required** | **Required** | **Required** | Exclusion | **Required** | Exclusion |
| Ant 7 | **Required** | **Required** | **Required** | Exclusion | **Required** | Exclusion |
| Ant 8 | **Required** | **Required** | Exclusion | **Required** | **Required** | Exclusion |
| Ant 12 | **Required** | **Required** | Exclusion | **Required** | **Required** | Exclusion |
| Ant 13 | **Required** | **Required** | Exclusion | **Required** | Exclusion | Exclusion |

**Note:**

**Required**: The distance to Edge is less than 25mm, testing is required.
**Exclusion**: The distance to Edge is more than 25 mm, testing is not required.

## Extremity Exposure Considerations

Per KDB 648474 D04 D04v01r03, thisdevice is considered a “Phablet” since the diagonal dimension is >160mm and < 200mm, when hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance is 1g SAR > 1.2W/kg)

| Extremity Exposure Condition | | |
|---|---|---|
| **Worst Mode** | **Hotspot SAR value** | **Extremity Condition Test** |
| PCS 1900 | 0.66W/kg@1g | Exclusion |

*Note▲: The test data of LTE Band 42/5G NR and LTE CA, please refer to FCC ID: 2ADYY-CM7, SAR report of2401A43118E-SA, issued by Bay Area Compliance Laboratories Corp. (Shenzhen).*

# 8. SAR MEASUREMENT RESULTS

This page summarizes the results ofthe performed dosimetric evaluation.

## 8.1 SAR Test Data

### Environmental Conditions

| | | | | | | |
|---|---|---|---|---|---|---|
| **Temperature:** | 21.7-22.6℃ | 21.2-21.9℃ | 21.7-22.5℃ | 21.3-22.2℃ | 20.9-21.6℃ | 20.5-22.2℃ |
| **Relative Humidity:** | 39% | 42% | 45% | 41 % | 38 % | 43% |
| **ATM Pressure:** | 102kPa | 101.1kPa | 101.3kPa | 101.6kPa | 101.6kPa | 101.2kPa |
| **Test Date:** | 2024/12/14 | 2024/12/15 | 2024/12/16 | 2024/12/17 | 2024/12/18 | 2024/12/19 |
| **Temperature:** | 20.7-21.6℃ | 21.1-21.8℃ | 20.9-22.1℃ | 21.2-22.2℃ | 20.7-21.8℃ | 20.9-21.6℃ |
| **Relative Humidity:** | 39% | 41% | 45% | 44 % | 45 % | 41 % |
| **ATM Pressure:** | 101.3kPa | 101.6kPa | 101.5kPa | 101.8kPa | 101.7kPa | 101.3kPa |
| **Test Date:** | 2024/12/20 | 2024/12/21 | 2024/12/22 | 2024/12/23 | 2024/12/24 | 2024/12/25 |

*Testing was performed by Wen Chen, Aixlee Li, Ken Zong.*

**GSM 850(Ant 2):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.046 | 0.05 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Head Left Tilt | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.028 | 0.03 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Head Right Cheek | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.047 | 0.05 | 1# |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Head Right Tilt | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.028 | 0.03 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Worn Front (10mm) | 824.2 | GSM | / | / | / | / | / | / |
| | 836.6 | GSM | 32.67 | 32.8 | 1.03 | 0.076 | 0.08 | / |
| | 848.8 | GSM | / | / | / | / | / | / |
| Body Worn Back (10mm) | 824.2 | GSM | / | / | / | / | / | / |
| | 836.6 | GSM | 32.67 | 32.8 | 1.03 | 0.108 | 0.11 | / |
| | 848.8 | GSM | / | / | / | / | / | / |
| Body Front (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.091 | 0.09 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Back (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.126 | 0.13 | 2# |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Right (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.047 | 0.05 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Bottom (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.059 | 0.06 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |

***The data above was performed on 2024/12/16.***

**GSM 850(Ant 4):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.108 | 0.11 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Head Left Tilt | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.027 | 0.03 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Head Right Cheek | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.163 | 0.17 | 3# |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Head Right Tilt | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.022 | 0.02 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Worn Front (10mm) | 824.2 | GSM | / | / | / | / | / | / |
| | 836.6 | GSM | 32.67 | 32.8 | 1.03 | 0.048 | 0.05 | / |
| | 848.8 | GSM | / | / | / | / | / | / |
| Body Worn Back (10mm) | 824.2 | GSM | / | / | / | / | / | / |
| | 836.6 | GSM | 32.67 | 32.8 | 1.03 | 0.102 | 0.11 | / |
| | 848.8 | GSM | / | / | / | / | / | / |
| Body Front (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.053 | 0.06 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Back (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.108 | 0.11 | / |
| | 848.8 | GPRS | / | / | / | / | / | / |
| Body Left (10mm) | 824.2 | GPRS | / | / | / | / | / | / |
| | 836.6 | GPRS | 31.82 | 32 | 1.042 | 0.2 | 0.21 | 4# |
| | 848.8 | GPRS | / | / | / | / | / | / |

***The data above was performed on 2024/12/16.***

**Note:**

1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is > 0.5 dB, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 3DL+2UL is the worst case.

**PCS 1900(Ant 3):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.073 | 0.07 | 5# |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Head Left Tilt | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.037 | 0.04 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Head Right Cheek | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.07 | 0.07 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Head Right Tilt | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.032 | 0.03 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Worn Front (10mm) | 1850.2 | GSM | / | / | / | / | / | / |
| | 1880 | GSM | 28.63 | 29 | 1.089 | 0.317 | 0.35 | / |
| | 1909.8 | GSM | / | / | / | / | / | / |
| Body Worn Back (10mm) | 1850.2 | GSM | / | / | / | / | / | / |
| | 1880 | GSM | 28.63 | 29 | 1.089 | 0.423 | 0.46 | / |
| | 1909.8 | GSM | / | / | / | / | / | / |
| Body Front (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.408 | 0.41 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Back (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.654 | 0.66 | 6# |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Left (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.186 | 0.19 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Bottom (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.651 | 0.66 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |

***The data above was performed on 2024/12/18.***

**PCS 1900(Ant 7):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.417 | 0.42 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Head Left Tilt | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.398 | 0.40 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Head Right Cheek | 1850.2 | GPRS | 25.12 | 25.3 | 1.042 | 0.8 | 0.83 | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.895 | 0.91 | 7# |
| | 1909.8 | GPRS | 25.17 | 25.3 | 1.03 | 0.884 | 0.91 | / |
| Head Right Tilt | 1850.2 | GPRS | 25.12 | 25.3 | 1.042 | 0.802 | 0.84 | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.834 | 0.85 | / |
| | 1909.8 | GPRS | 25.17 | 25.3 | 1.03 | 0.804 | 0.83 | / |
| Body Worn Front (10mm) | 1850.2 | GSM | / | / | / | / | / | / |
| | 1880 | GSM | 28.63 | 29 | 1.089 | 0.144 | 0.16 | / |
| | 1909.8 | GSM | / | / | / | / | / | / |
| Body Worn Back (10mm) | 1850.2 | GSM | / | / | / | / | / | / |
| | 1880 | GSM | 28.63 | 29 | 1.089 | 0.374 | 0.41 | / |
| | 1909.8 | GSM | / | / | / | / | / | / |
| Body Front (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.308 | 0.31 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Back (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.551 | 0.56 | 8# |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Left (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.101 | 0.10 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |
| Body Top (10mm) | 1850.2 | GPRS | / | / | / | / | / | / |
| | 1880 | GPRS | 25.23 | 25.3 | 1.016 | 0.448 | 0.46 | / |
| | 1909.8 | GPRS | / | / | / | / | / | / |

***The data above was performed on 2024/12/18.***

**Note:**

1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is > 0.5 dB, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 1DL+4UL is the worst case.

**WCDMA Band 2(Ant 3):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.049 | 0.05 | 9# |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Head Left Tilt | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | < 0.01 | 0.01 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Head Right Cheek | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.048 | 0.05 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Head Right Tilt | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | < 0.01 | 0.01 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Body Front (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.108 | 0.11 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| BodyBack (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.147 | 0.15 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Body Left (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.032 | 0.03 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Body Bottom (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.189 | 0.20 | 10# |
| | 1907.6 | RMC | / | / | / | / | / | / |

***The data above was performed on 2024/12/18.***

**WCDMA Band 2(Ant 7):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.166 | 0.17 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Head Left Tilt | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.188 | 0.19 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Head Right Cheek | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.347 | 0.36 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Head Right Tilt | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.383 | 0.40 | 11# |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Body Front (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.066 | 0.07 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| BodyBack (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.121 | 0.12 | 12# |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Body Left (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.024 | 0.02 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |
| Body Top (10mm) | 1852.4 | RMC | / | / | / | / | / | / |
| | 1880 | RMC | 15.36 | 15.5 | 1.033 | 0.115 | 0.12 | / |
| | 1907.6 | RMC | / | / | / | / | / | / |

***The data above was performed on 2024/12/18.***

**WCDMA Band 4(Ant 3):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.08 | 0.08 | 13# |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Head Left Tilt | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | < 0.01 | 0.01 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Head Right Cheek | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.053 | 0.06 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Head Right Tilt | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | < 0.01 | 0.01 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Body Front (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.188 | 0.20 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| BodyBack (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.25 | 0.26 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Body Left (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.061 | 0.06 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Body Bottom (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.306 | 0.32 | 14# |
| | 1752.6 | RMC | / | / | / | / | / | / |

***The data above was performed on 2024/12/24.***

**WCDMA Band 4(Ant 7):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.26 | 0.27 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Head Left Tilt | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.269 | 0.28 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Head Right Cheek | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.341 | 0.36 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Head Right Tilt | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.351 | 0.37 | 15# |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Body Front (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.076 | 0.08 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| BodyBack (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.118 | 0.12 | 16# |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Body Left (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.032 | 0.03 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |
| Body Top (10mm) | 1712.4 | RMC | / | / | / | / | / | / |
| | 1732.6 | RMC | 17.39 | 17.6 | 1.05 | 0.101 | 0.11 | / |
| | 1752.6 | RMC | / | / | / | / | / | / |

***The data above was performed on 2024/12/24.***

**WCDMA Band 5(Ant 2):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.026 | 0.03 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Head Left Tilt | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.011 | 0.01 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Head Right Cheek | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.033 | 0.03 | 17# |
| | 846.6 | RMC | / | / | / | / | / | / |
| Head Right Tilt | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.012 | 0.01 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Front (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.043 | 0.05 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Back (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.053 | 0.06 | 18# |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Right (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.026 | 0.03 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Bottom (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.03 | 0.03 | / |
| | 846.6 | RMC | / | / | / | / | / | / |

***The data above was performed on 2024/12/16.***

**WCDMA Band 5(Ant 4):**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.352 | 0.37 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Head Left Tilt | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.078 | 0.08 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Head Right Cheek | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.364 | 0.38 | 19# |
| | 846.6 | RMC | / | / | / | / | / | / |
| Head Right Tilt | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.08 | 0.08 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Front (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.189 | 0.20 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Back (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.352 | 0.37 | / |
| | 846.6 | RMC | / | / | / | / | / | / |
| Body Left (10mm) | 826.4 | RMC | / | / | / | / | / | / |
| | 836.6 | RMC | 20.99 | 21.2 | 1.05 | 0.403 | 0.42 | 20# |
| | 846.6 | RMC | / | / | / | / | / | / |

***The data above was performed on 2024/12/16.***

**Note:**

1. When the 1-g SAR is≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model.
4. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPAwhen the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.
5. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

**LTE Band 2(Ant 3):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.017 | 0.02 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.014 | 0.02 | / |
| Head Left Tilt | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | < 0.01 | 0.01 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | < 0.01 | 0.01 | / |
| Head Right Cheek | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.028 | 0.03 | 21# |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.023 | 0.03 | / |
| Head Right Tilt | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.013 | 0.01 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | < 0.01 | 0.01 | / |
| Body Front (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.076 | 0.08 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.058 | 0.07 | / |
| Body Back (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.106 | 0.12 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.082 | 0.10 | / |
| Body Left (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.026 | 0.03 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.019 | 0.02 | / |
| Body Bottom (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.136 | 0.15 | 22# |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.105 | 0.13 | / |

***The data above was performed on 2024/12/19.***

**LTE Band 2(Ant 7):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.088 | 0.10 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.071 | 0.09 | / |
| Head Left Tilt | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.098 | 0.11 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.079 | 0.09 | / |
| Head Right Cheek | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.248 | 0.27 | 23# |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.196 | 0.24 | / |
| Head Right Tilt | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.247 | 0.27 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.182 | 0.22 | / |
| Body Front (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.043 | 0.05 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.036 | 0.04 | / |
| Body Back (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.104 | 0.11 | 24# |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.078 | 0.09 | / |
| Body Left (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.017 | 0.02 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.014 | 0.02 | / |
| Body Top (10mm) | 1860 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 1RB | 15.72 | 16.1 | 1.091 | 0.081 | 0.09 | / |
| | 1900 | 20 | 1RB | / | / | / | / | / | / |
| | 1880 | 20 | 50%RB | 15.31 | 16.1 | 1.199 | 0.064 | 0.08 | / |

***The data above was performed on 2024/12/19.***

**LTE Band 5(Ant 2):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.014 | 0.02 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.012 | 0.02 | / |
| Head Left Tilt | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | < 0.01 | 0.01 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | < 0.01 | 0.01 | / |
| Head Right Cheek | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.02 | 0.02 | 25# |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.011 | 0.02 | / |
| Head Right Tilt | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.012 | 0.01 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.010 | 0.01 | / |
| Body Front (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.036 | 0.04 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.02 | 0.03 | / |
| Body Back (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.055 | 0.06 | 26# |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.041 | 0.06 | / |
| Body Right (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.017 | 0.02 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.017 | 0.02 | / |
| Body Bottom (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.021 | 0.02 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.018 | 0.02 | / |

***The data above was performed on 2024/12/17.***

**LTE Band 5(Ant 4):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.336 | 0.38 | 27# |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.272 | 0.37 | / |
| Head Left Tilt | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.1 | 0.11 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.079 | 0.11 | / |
| Head Right Cheek | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.311 | 0.35 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.265 | 0.36 | / |
| Head Right Tilt | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.092 | 0.10 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.076 | 0.10 | / |
| Body Front (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.123 | 0.14 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.101 | 0.14 | / |
| Body Back (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.191 | 0.22 | / |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.157 | 0.22 | / |
| Body Left (10mm) | 829 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 1RB | 19.17 | 19.7 | 1.13 | 0.314 | 0.35 | 28# |
| | 844 | 10 | 1RB | / | / | / | / | / | / |
| | 836.5 | 10 | 50%RB | 18.33 | 19.7 | 1.371 | 0.257 | 0.35 | / |

***The data above was performed on 2024/12/17.***

**LTE Band 7(Ant 3):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | < 0.01 | 0.01 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | < 0.01 | 0.01 | / |
| Head Left Tilt | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | < 0.01 | 0.01 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | < 0.01 | 0.01 | / |
| Head Right Cheek | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | < 0.01 | 0.01 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | < 0.01 | 0.01 | / |
| Head Right Tilt | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | < 0.01 | 0.01 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | < 0.01 | 0.01 | / |
| Body Front (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.047 | 0.05 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.039 | 0.05 | / |
| Body Back (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.077 | 0.09 | 29# |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.062 | 0.09 | / |
| Body Left (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.012 | 0.01 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.011 | 0.02 | / |
| Body Bottom (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.063 | 0.07 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.052 | 0.07 | / |

***The data above was performed on 2024/12/20.***

**LTE Band 7(Ant 7):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.099 | 0.11 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.087 | 0.12 | / |
| Head Left Tilt | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.106 | 0.12 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.087 | 0.12 | / |
| Head Right Cheek | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.163 | 0.19 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.127 | 0.18 | / |
| Head Right Tilt | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.199 | 0.23 | 30# |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.16 | 0.22 | / |
| Body Front (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.027 | 0.03 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.018 | 0.02 | / |
| Body Back (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.052 | 0.06 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.043 | 0.06 | / |
| Body Left (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | < 0.01 | 0.01 | / |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | < 0.01 | 0.01 | / |
| Body Top (10mm) | 2510 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 1RB | 15.32 | 15.9 | 1.143 | 0.055 | 0.06 | 31# |
| | 2560 | 20 | 1RB | / | / | / | / | / | / |
| | 2535 | 20 | 50%RB | 14.49 | 15.9 | 1.384 | 0.043 | 0.06 | / |

***The data above was performed on 2024/12/20.***

**LTE Band 12&17(Ant 2):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.025 | 0.03 | 32# |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.019 | 0.03 | / |
| Head Left Tilt | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | < 0.01 | 0.01 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | < 0.01 | 0.01 | / |
| Head Right Cheek | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.016 | 0.02 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.01 | 0.01 | / |
| Head Right Tilt | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | < 0.01 | 0.01 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | < 0.01 | 0.01 | / |
| Body Front (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.036 | 0.04 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.035 | 0.05 | / |
| Body Back (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.058 | 0.06 | 33# |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.047 | 0.06 | / |
| Body Right (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.016 | 0.02 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | < 0.01 | 0.01 | / |
| Body Bottom (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.017 | 0.02 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.014 | 0.02 | / |

***The data above was performed on 2024/12/15.***

*Note: The E-UTRAOperatingBand 17 is a subset of band 12, and they are same in modulation type and band 12 has a higher rated output power than band 17, therefore, they were considered as one frequency band during SAR measurement.*

**LTE Band 12&17(Ant 4):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.289 | 0.32 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.27 | 0.37 | 34# |
| Head Left Tilt | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.071 | 0.08 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.061 | 0.08 | / |
| Head Right Cheek | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.288 | 0.32 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.239 | 0.32 | / |
| Head Right Tilt | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.079 | 0.09 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.064 | 0.09 | / |
| Body Front (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.158 | 0.17 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.131 | 0.18 | / |
| Body Back (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.288 | 0.32 | / |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.24 | 0.33 | / |
| Body Left (10mm) | 704 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 1RB | 24.1 | 24.5 | 1.096 | 0.381 | 0.42 | 35# |
| | 711 | 10 | 1RB | / | / | / | / | / | / |
| | 707.5 | 10 | 50%RB | 23.18 | 24.5 | 1.355 | 0.311 | 0.42 | / |

***The data above was performed on 2024/12/15.***

*Note: The E-UTRAOperatingBand 17 is a subset of band 12, and they are same in modulation type and band 12 has a higher rated output power than band 17, therefore, they were considered as one frequency band during SAR measurement.*

**LTE Band 13(Ant 2):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.073 | 0.08 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.056 | 0.07 | / |
| Head Left Tilt | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.044 | 0.05 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.034 | 0.04 | / |
| Head Right Cheek | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.105 | 0.11 | 36# |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.081 | 0.1 | / |
| Head Right Tilt | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.065 | 0.07 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.048 | 0.06 | / |
| Body Front (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.144 | 0.16 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.114 | 0.14 | / |
| Body Back (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.177 | 0.19 | 37# |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.140 | 0.17 | / |
| Body Right (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.145 | 0.16 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.117 | 0.14 | / |
| Body Bottom (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.082 | 0.09 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.064 | 0.08 | / |

***The data above was performed on 2024/12/14.***

**LTE Band 13(Ant 4):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.324 | 0.35 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.315 | 0.38 | 38# |
| Head Left Tilt | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.117 | 0.13 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.096 | 0.11 | / |
| Head Right Cheek | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.23 | 0.25 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.218 | 0.26 | / |
| Head Right Tilt | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.121 | 0.13 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.097 | 0.12 | / |
| Body Front (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.127 | 0.14 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.123 | 0.15 | / |
| Body Back (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.26 | 0.28 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.255 | 0.31 | / |
| Body Left (10mm) | 782 | 10 | 1RB | 22.55 | 22.9 | 1.084 | 0.492 | 0.53 | / |
| | 782 | 10 | 50%RB | 22.12 | 22.9 | 1.197 | 0.453 | 0.54 | 39# |

***The data above was performed on 2024/12/14.***

**LTE Band 38(Ant 3):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | < 0.01 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Head Left Tilt | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | < 0.01 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Head Right Cheek | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | < 0.01 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Head Right Tilt | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | < 0.01 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Body Front (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.036 | 0.04 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.03 | 0.04 | / |
| Body Back (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.068 | 0.08 | 40# |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.057 | 0.08 | / |
| Body Left (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | < 0.01 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Body Bottom (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.037 | 0.04 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.03 | 0.04 | / |

***The data above was performed on 2024/12/21.***

**LTE Band 38(Ant 7):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.04 | 0.04 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.033 | 0.05 | / |
| Head Left Tilt | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.04 | 0.04 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.031 | 0.04 | / |
| Head Right Cheek | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.089 | 0.10 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.071 | 0.10 | / |
| Head Right Tilt | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.102 | 0.11 | 41# |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.084 | 0.11 | / |
| Body Front (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.012 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Body Back (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.026 | 0.03 | 42# |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.021 | 0.03 | / |
| Body Left (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | < 0.01 | 0.01 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | < 0.01 | 0.01 | / |
| Body Top (10mm) | 2580 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 1RB | 15.74 | 16.2 | 1.112 | 0.026 | 0.03 | / |
| | 2610 | 20 | 1RB | / | / | / | / | / | / |
| | 2595 | 20 | 50%RB | 14.85 | 16.2 | 1.365 | 0.02 | 0.03 | / |

***The data above was performed on 2024/12/21.***

**LTE Band 41(Ant3):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | < 0.01 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | < 0.01 | 0.01 | / |
| Head Left Tilt | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | < 0.01 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | < 0.01 | 0.01 | / |
| Head Right Cheek | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | < 0.01 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | < 0.01 | 0.01 | / |
| Head Right Tilt | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | < 0.01 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | < 0.01 | 0.01 | / |
| Body Front (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.047 | 0.05 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.037 | 0.04 | / |
| Body Back (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.073 | 0.07 | 43# |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.054 | 0.06 | / |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Body Left (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.012 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | < 0.01 | 0.01 | / |
| Body Bottom (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.052 | 0.05 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.042 | 0.05 | / |

***The data above was performed on 2024/12/22.***

*Note: 1.The frequency range of LTE Band 41 is 2496~ 2690MHz. Per KDB 447498 D01, according to the following formulacalculateNc is 5.*

*KDB procedures*, the following should be applied to determine the number of required test channels. The test channels should be evenly spread across the transmission frequency band of each wireless mode.[14]

$$N_c = Round\left\{\left[100\left(f_{high} - f_{low}\right)/f_c\right]^{0.5} \times \left(f_c/100\right)^{0.2}\right\},$$

where

- $N_c$ is the number of test channels, rounded to the nearest integer,
- $f_{high}$ and $f_{low}$ are the highest and lowest channel frequencies within the transmission band,
- $f_c$ is the mid-band channel frequency,
- all frequencies are in MHz.

*2. The power class 3 used for LTE Band 41 SAR testing.*

**LTE Band 41(Ant7):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.052 | 0.05 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.042 | 0.05 | / |
| Head Left Tilt | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.048 | 0.05 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.042 | 0.05 | / |
| Head Right Cheek | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.117 | 0.12 | 44# |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.102 | 0.12 | / |
| Head Right Tilt | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.116 | 0.12 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.105 | 0.12 | / |
| Body Front (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.014 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.013 | 0.02 | / |
| Body Back (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.032 | 0.03 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.026 | 0.03 | / |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Body Left (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | < 0.01 | 0.01 | / |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | < 0.01 | 0.01 | / |
| Body Top (10mm) | 2506 | 20 | 1RB | / | / | / | / | / | / |
| | 2549.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 1RB | 17.23 | 17.3 | 1.016 | 0.035 | 0.04 | 45# |
| | 2636.5 | 20 | 1RB | / | / | / | / | / | / |
| | 2680 | 20 | 1RB | / | / | / | / | / | / |
| | 2593 | 20 | 50%RB | 16.63 | 17.3 | 1.167 | 0.028 | 0.03 | / |

***The data above was performed on 2024/12/22.***

*Note: 1.The frequency range of LTE Band 41 is 2496~ 2690MHz. Per KDB 447498 D01, according to the following formulacalculateNc is 5.*

*KDB procedures*, the following should be applied to determine the number of required test channels. The test channels should be evenly spread across the transmission frequency band of each wireless mode.[14]

$$N_c = Round\left\{\left[100\left(f_{high} - f_{low}\right)/f_c\right]^{0.5} \times \left(f_c/100\right)^{0.2}\right\},$$

where

- $N_c$ is the number of test channels, rounded to the nearest integer,
- $f_{high}$ and $f_{low}$ are the highest and lowest channel frequencies within the transmission band,
- $f_c$ is the mid-band channel frequency,
- all frequencies are in MHz.

*2. The power class 3 used for LTE Band 41 SAR testing.*

**LTE Band 66&4 (Ant 3):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.058 | 0.06 | 46# |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.053 | 0.06 | / |
| Head Left Tilt | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.029 | 0.03 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.032 | 0.04 | / |
| Head Right Cheek | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.03 | 0.03 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.022 | 0.03 | / |
| Head Right Tilt | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | < 0.01 | 0.01 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | < 0.01 | 0.01 | / |
| Body Front (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.101 | 0.11 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.082 | 0.10 | / |
| Body Back (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.148 | 0.16 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.118 | 0.14 | / |
| Body Left (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.042 | 0.05 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.033 | 0.04 | / |
| Body Bottom (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.168 | 0.19 | 47# |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.133 | 0.16 | / |

***The data above was performed on 2024/12/23.***

*Note: The E-UTRAOperatingBand 4 is a subset of band 66, and they are same in modulation type and rated output power, therefore, they were considered as one frequency band during SAR measurement.*

**LTE Band 66&4 (Ant 7):**

| EUT Position | Frequency (MHz) | Bandwidth (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Scaled Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.093 | 0.10 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.065 | 0.08 | / |
| Head Left Tilt | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.093 | 0.10 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.068 | 0.08 | / |
| Head Right Cheek | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.186 | 0.21 | 48# |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.138 | 0.17 | / |
| Head Right Tilt | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.17 | 0.19 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.133 | 0.16 | / |
| Body Front (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.041 | 0.05 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.031 | 0.04 | / |
| Body Back (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.072 | 0.08 | 49# |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.055 | 0.07 | / |
| Body Left (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.014 | 0.02 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | < 0.01 | 0.01 | / |
| Body Top (10mm) | 1720 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 1RB | 16.97 | 17.4 | 1.104 | 0.057 | 0.06 | / |
| | 1770 | 20 | 1RB | / | / | / | / | / | / |
| | 1745 | 20 | 50%RB | 16.53 | 17.4 | 1.222 | 0.045 | 0.05 | / |

***The data above was performed on 2024/12/23.***

*Note: The E-UTRAOperatingBand 4 is a subset of band 66, and they are same in modulation type and rated output power, therefore, they were considered as one frequency band during SAR measurement.*

**Note:**

1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
3. KDB941225D05-SAR for higher order modulation is required only when the highest maximum output power for the configuration in the higher order modulation is > 0.5 dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg
4. KDB941225D05-For QPSK with 100% RB allocation, when the reported SAR measured for the Highest output power channel is <1.45 W/kg, tests for the remaining required test channels are optional.
5.KDB941225D05- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
6. KDB941225D05- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offset the upper edge, middle and lower edge of each required test channel.
7. KDB941225D05- other channel bandwidths SAR test is required when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > 0.5 dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

**WLAN 2.4GChain 0:**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Duty cycle Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.16 | 0.18 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Head Left Tilt | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.168 | 0.19 | 50# |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Head RightCheek | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.097 | 0.11 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Head Right Tilt | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.11 | 0.12 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Front (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.026 | 0.03 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Back (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.048 | 0.05 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Right (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.018 | 0.02 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Top (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.66 | 14.2 | 1.132 | 1 | 0.052 | 0.06 | 51# |
| | 2462 | 802.11b | / | / | / | / | / | / | / |

***The data above was performed on 2024/12/24.***

**Note**:
1. When the 1-g SAR is≤ 0.8W/kg, testing for other channels are optional.
2.When SAR or MPE is not measured at the maximum power level allowed for production units, theresults must be scaled to the maximum tune-up tolerance limit according to the power applied to theindividual channels tested to determine compliance.
3.According KDB 248227 D01, for SAR testing of 2.4 WIFI signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to “1/( duty cycle)”.

**WLAN 2.4GChain 1:**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Duty cycle Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.236 | 0.25 | 52# |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Head Left Tilt | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.051 | 0.05 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Head RightCheek | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.131 | 0.14 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Head Right Tilt | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.025 | 0.03 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Front (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.053 | 0.06 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Back (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.134 | 0.14 | 53# |
| | 2462 | 802.11b | / | / | / | / | / | / | / |
| Body Right (10mm) | 2412 | 802.11b | / | / | / | / | / | / | / |
| | 2437 | 802.11b | 13.69 | 13.9 | 1.05 | 1 | 0.086 | 0.09 | / |
| | 2462 | 802.11b | / | / | / | / | / | / | / |

***The data above was performed on 2024/12/24.***

**Note**:
1. When the 1-g SAR is≤ 0.8W/kg, testing for other channels are optional.
2.When SAR or MPE is not measured at the maximum power level allowed for production units, theresults must be scaled to the maximum tune-up tolerance limit according to the power applied to theindividual channels tested to determine compliance.
3.According to KDB 248227 D01, for SAR testing of WLAN with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to “1/( duty cycle)”.

**WLAN 5.2G:**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Duty cycle Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.168 | 0.18 | 54# |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Head Left Tilt | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.064 | 0.07 | / |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Head Right Cheek | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.031 | 0.03 | / |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Head Right Tilt | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.029 | 0.03 | / |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Body Front (10mm) | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.034 | 0.04 | / |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Body Back (10mm) | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.066 | 0.07 | / |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Body Right (10mm) | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.104 | 0.11 | 55# |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |
| Body Top (10mm) | 5180 | 802.11n20 | / | / | / | / | / | / | / |
| | 5200 | 802.11n20 | 9.32 | 9.6 | 1.067 | 1 | 0.013 | 0.01 | / |
| | 5240 | 802.11n20 | / | / | / | / | / | / | / |

***The data above was performed on 2024/12/25.***

**Note**:

1. When the 1-g SAR is≤ 0.8W/kg, testing for other channels are optional.
2.When SAR or MPE is not measured at the maximum power level allowed for production units, theresults must be scaled to the maximum tune-up tolerance limit according to the power applied to theindividual channels tested to determine compliance.
3.For 802.11n20 mode power is the largest among802.11a/n/ac/ax, 802.11 n20mode as initial test configuration is selected to test.
4.According to KDB 248227 D01, for SAR testing of WLAN with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to “1/( duty cycle)”.

**WLAN 5.3G:**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Duty cycle Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.215 | 0.23 | 56# |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Head Left Tilt | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.048 | 0.05 | / |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Head Right Cheek | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.053 | 0.06 | / |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Head Right Tilt | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.019 | 0.02 | / |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Body Front (10mm) | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.029 | 0.03 | / |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Body Back (10mm) | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.071 | 0.08 | / |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Body Right (10mm) | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.139 | 0.15 | 57# |
| | 5320 | 802.11a | / | / | / | / | / | / | / |
| Body Top (10mm) | 5260 | 802.11a | / | / | / | / | / | / | / |
| | 5280 | 802.11a | 9.67 | 9.9 | 1.054 | 1 | 0.02 | 0.02 | / |
| | 5320 | 802.11a | / | / | / | / | / | / | / |

***The data above was performed on 2024/12/25.***

**Note**:

1. When the 1-g SAR is≤ 0.8W/kg, testing for other channels are optional.
2.When SAR or MPE is not measured at the maximum power level allowed for production units, theresults must be scaled to the maximum tune-up tolerance limit according to the power applied to theindividual channels tested to determine compliance.
3.For 802.11a mode power is the largest among802.11a/n/ac/ax, 802.11a mode as initial test configuration is selected to test.
4.According to KDB 248227 D01, for SAR testing of WLAN with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to “1/( duty cycle)”.

**WLAN 5.6G:**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Duty cycle Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.265 | 0.28 | 58# |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Head Left Tilt | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.069 | 0.07 | / |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Head Right Cheek | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.097 | 0.10 | / |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Head Right Tilt | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.064 | 0.07 | / |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Body Front (10mm) | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.033 | 0.03 | / |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Body Back (10mm) | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.051 | 0.05 | / |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Body Right (10mm) | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | 0.105 | 0.11 | 59# |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |
| Body Top (10mm) | 5500 | 802.11a | / | / | / | / | / | / | / |
| | 5580 | 802.11a | 7.28 | 7.5 | 1.052 | 1 | < 0.01 | 0.01 | / |
| | 5700 | 802.11a | / | / | / | / | / | / | / |
| | 5720 | 802.11a | / | / | / | / | / | / | / |

***The data above was performed on 2024/12/25.***

**Note**:

1. When the 1-g SAR is≤ 0.8W/kg, testing for other channels are optional.
2.When SAR or MPE is not measured at the maximum power level allowed for production units, theresults must be scaled to the maximum tune-up tolerance limit according to the power applied to theindividual channels tested to determine compliance.
3.For 802.11a mode power is the largest among802.11a/n/ac/ax, 802.11 a mode as initial test configuration is selected to test.

4.According to KDB 248227 D01, for SAR testing of WLAN with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to “1/( duty cycle)”.

**WLAN 5.8G:**

| EUT Position | Frequency (MHz) | Test Mode | Max. Meas. Power (dBm) | Max. Rated Power (dBm) | 1g SAR (W/kg) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Scaled Factor | Duty cycle Factor | Meas. SAR | Scaled SAR | Plot |
| Head Left Cheek | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.14 | 0.14 | 60# |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Head Left Tilt | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.074 | 0.08 | / |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Head Right Cheek | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.056 | 0.06 | / |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Head Right Tilt | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.05 | 0.05 | / |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Body Front (10mm) | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.025 | 0.03 | / |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Body Back (10mm) | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.028 | 0.03 | / |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Body Right (10mm) | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.057 | 0.06 | 61# |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |
| Body Top (10mm) | 5745 | 802.11n20 | / | / | / | / | / | / | / |
| | 5785 | 802.11n20 | 8.41 | 8.5 | 1.021 | 1 | 0.016 | 0.02 | / |
| | 5825 | 802.11n20 | / | / | / | / | / | / | / |

***The data above was performed on 2024/12/25.***

**Note**:

1. When the 1-g SAR is≤ 0.8W/kg, testing for other channels are optional.
2.When SAR or MPE is not measured at the maximum power level allowed for production units, theresults must be scaled to the maximum tune-up tolerance limit according to the power applied to theindividual channels tested to determine compliance.
3.For 802.11n20 mode power is the largest among802.11a/n/ac/ax, 802.11 n20 mode as initial test configuration is selected to test.
4.According to KDB 248227 D01, for SAR testing of WLAN with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to “1/( duty cycle)”.

# 9. Measurement Variability

In accordance with published RF Exposure KDB procedure 865664 D01 SAR measurement 100 MHz to 6 GHz v01. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

*Note: The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposureand a factor of 5 for occupational exposure to the corresponding SAR thresholds.*

**The Highest Measured SAR Configuration in Each Frequency Band**

**Head**

| **SAR probe calibration point** | Frequency Band | Freq.(MHz) | EUT Position | Meas. SAR (W/kg) | | Largest toSmallestSARRatio |
|---|---|---|---|---|---|---|
| | | | | Original | Repeated | |
| 1900MHz (1850-2000MHz) | PCS 1900 | 1880 | Head Right Cheek | 0.895 | 0.879 | 1.02 |

**Body**

| **SAR probe calibration point** | Frequency Band | Freq.(MHz) | EUT Position | Meas. SAR (W/kg) | | Largest toSmallestSARRatio |
|---|---|---|---|---|---|---|
| | | | | Original | Repeated | |
| / | / | / | / | / | / | / |

**Note:**

1. Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20.
2. The measured SAR results **do not** have to be scaled to the maximum tune-up tolerance to determine if repeated measurements are required.
3. SAR measurement variability must be assessed for each frequency band, which is determined by the **SAR probe calibration point and tissue-equivalent medium** used for the device measurements.

# 10. DUT HOLDER PERTURBATIONS

In accordance with TCB workshop October 2016:

1) SAR perturbation due to test device holders,depending on antenna locations, buttons locations on phones or device, form factor (e.g. dongles etc.), the measured SAR could be influenced by the relative positions of the test device and its holder
2) SAR measurement standards have included protocols to evaluate this with a flat phantom, with and without the device holder
3) When the highest reported SAR of an antenna is > 1.2 W/kg, holderperturbation verification is required for each antenna, using the highest SAR configuration among all applicable frequency bandsin the same exact device and holder positions used for head and body SAR measurements; i.e. same device/button locations in the holder

PerIEEE 1528: 2013/Annex E/E.4.1.1:Device holder perturbation tolerance for a specific test device: Type B

When it is unknown if a device holder perturbs the fields of a test device, the SAR uncertainty shall be assessed with a flat phantom (see Clause 5) by comparing the SAR with and without the device holder according to the following tests:

The SAR tolerance for device holder disturbance is computed using Equation (E.21) and entered in the corresponding row of the appropriate uncertainty table with an assumed rectangular probability distributionand $vi = \infty$ degrees of freedom:

$$SAR_{\text{tolerance}}[\%] = 100 \times \left( \frac{SAR_{\text{w/ holder}} - SAR_{\text{w/o holder}}}{SAR_{\text{w/o holder}}} \right) \quad \text{(E.21)}$$

**The Highest Measured SAR Configuration among allapplicable Frequency Band**

| Frequency Band | Freq.(MHz) | EUT Position | Meas. SAR (W/kg) | | The Device holder perturbationuncertainty |
|---|---|---|---|---|---|
| | | | With holder | Without holder | |
| / | / | / | / | / | / |

# 11. SAR SIMULTANEOUS TRANSMISSION DESCRIPTION

**Simultaneous Transmission:**

| Description of Simultaneous Transmit Capabilities | | |
|---|---|---|
| **Transmitter Combination** | **Simultaneous?** | **Hotspot?** |
| WWAN(GSM/WCDMA/LTE/5G NR)Antenna + WIFI 2.4G Chain 0+ NFC | √ | √ |
| WWAN(GSM/WCDMA/LTE/5G NR)Antenna + WIFI 2.4G Chain 1+ NFC | √ | √ |
| WWAN(GSM/WCDMA/LTE/5G NR)Antenna + WIFI 5G + NFC | √ | √ |
| WWAN(GSM/WCDMA/LTE/5G NR)Antenna + Bluetooth+ NFC | √ | × |
| WIFI 2.4G Chain 0 + WIFI 2.4G Chain 1+ NFC | × | × |
| WLAN2.4G+Bluetooth+ NFC | × | × |
| WLAN 5G + Bluetooth+ NFC | × | × |
| WLAN2.4G +WLAN 5G+ NFC | × | × |

**Note:**WLAN 5.3G/5.6G do not support hotspots

| EN-DC Carrier Aggregation Possible Combinations | |
|---|---|
| LTE Anchor Bands for NR band n7 | LTE Band 2/4/5/7/66 |
| LTE Anchor Bands for NR band n38 | LTE Band 5/66 |
| LTE Anchor Bands for NR band n41 | LTE Band 4/5/41/66/41C |
| LTE Anchor Bands for NR band n66 | LTE Band 2/5/7/12/66 |
| LTE Anchor Bands for NR band n77 | LTE Band 5/7/41/66/7C/41C |
| LTE Anchor Bands for NR band n78 | LTE Band 2/4/5/7/38/41/66/7C/41C |

Note:5G NR bands supports SA Band 5/7/12/38/41/66/71/77/78 and NSA DC_2A_n7A/DC_4A_n7A/DC_5A_n7A/DC_7A_n7A/DC_66A_n7A/DC_5A_n38A/DC_66A_n38A/DC_4A_n41A /DC_5A_n41A/DC_41A_n41A/DC_66A_n41A/DC_2A_n66A/DC_5A_n66A/DC_7A_n66A/DC_12A_n66A/ DC_66A_n66A/DC_5A_n77A/DC_7A_n77A/DC_41A_N77A/DC_66A_n77A/DC_2A_n78A/DC_4A_n78A/ DC_5A_n78A/DC_7A_n78A/DC_38A_n78A/DC_41A_n78A/DC_66A_n78A/DC_7C_n78A/DC_7C_n77A/ DC_41C_n41A/DC_41C_n77A/DC_41C_n78A/DC_2A_7A_n78A/DC_7A_7A_n78A/DC_2A_7C_n78A/DC_2A_6 6A_n78A/DC_2A_38A_n78A/DC_5A_7A_n78A/DC_7A_66A_n78/DC_66A_n7A_n78A/DC_7_n78C mode; Among them, the DC_7C_n78A/DC_7C_n77A/DC_41C_n41A/DC_41C_n77A/DC_41C_n78A/DC_2A_7A_n78A/ DC_7A_7A_n78A/DC_2A_7C_n78A/DC_2A_66A_n78A/DC_2A_38A_n78A/DC_5A_7A_n78A/ DC_7A_66A_n78/ DC_66A_n7A_n78A/DC_7_n78C mode only supports DL reception.

**EN-DC SAR Assessment:**

| Mode(SAR1+SAR2) | Position | Reported SAR(W/kg) | | ΣSAR < 1.6W/kg |
|---|---|---|---|---|
| | | SAR1 | SAR2 | |
| DC_2A_n7A | Head | 0.27 | 0.28 | 0.55 |
| | Body | 0.15 | 0.07 | 0.22 |
| DC_4A_n7A | Head | 0.21 | 0.28 | 0.49 |
| | Body | 0.19 | 0.07 | 0.26 |
| DC_5A_n7A | Head | 0.38 | 0.28 | 0.66 |
| | Body | 0.35 | 0.07 | 0.42 |
| DC_7A_n7A | Head | 0.23 | 0.28 | 0.51 |
| | Body | 0.09 | 0.07 | 0.16 |
| DC_66A_n7A | Head | 0.21 | 0.28 | 0.49 |
| | Body | 0.19 | 0.07 | 0.26 |
| DC_5A_n38A | Head | 0.38 | 0.32 | 0.70 |
| | Body | 0.35 | 0.07 | 0.42 |
| DC_66A_n38A | Head | 0.21 | 0.32 | 0.53 |
| | Body | 0.19 | 0.07 | 0.26 |
| DC_4A_n41A | Head | 0.21 | 0.36 | 0.57 |
| | Body | 0.19 | 0.32 | 0.51 |
| DC_5A_n41A | Head | 0.38 | 0.36 | **0.74** |
| | Body | 0.35 | 0.32 | **0.67** |
| DC_41A_n41A | Head | 0.12 | 0.36 | 0.48 |
| | Body | 0.07 | 0.32 | 0.39 |
| DC_66A_n41A | Head | 0.21 | 0.36 | 0.57 |
| | Body | 0.19 | 0.32 | 0.51 |
| DC_2A_n66A | Head | 0.27 | 0.21 | 0.48 |
| | Body | 0.15 | 0.16 | 0.31 |
| DC_5A_n66A | Head | 0.38 | 0.21 | 0.59 |
| | Body | 0.35 | 0.16 | 0.51 |
| DC_7A_n66A | Head | 0.23 | 0.21 | 0.44 |
| | Body | 0.09 | 0.16 | 0.25 |
| DC_12A_n66A | Head | 0.37 | 0.21 | 0.58 |
| | Body | 0.42 | 0.16 | 0.58 |
| DC_66A_n66A | Head | 0.21 | 0.21 | 0.42 |
| | Body | 0.19 | 0.16 | 0.35 |

| Mode(SAR1+SAR2) | Position | Reported SAR(W/kg) | | ΣSAR < 1.6W/kg |
|---|---|---|---|---|
| | | SAR1 | SAR2 | |
| DC_5A_n77A | Head | 0.38 | 0.35 | 0.73 |
| | Body | 0.35 | 0.19 | 0.54 |
| DC_7A_n77A | Head | 0.23 | 0.35 | 0.58 |
| | Body | 0.09 | 0.19 | 0.28 |
| DC_41A_n77A | Head | 0.12 | 0.35 | 0.47 |
| | Body | 0.07 | 0.19 | 0.26 |
| DC_66A_n77A | Head | 0.21 | 0.35 | 0.56 |
| | Body | 0.19 | 0.19 | 0.38 |
| DC_2A_n78A | Head | 0.27 | 0.35 | 0.62 |
| | Body | 0.15 | 0.19 | 0.34 |
| DC_4A_n78A | Head | 0.21 | 0.35 | 0.56 |
| | Body | 0.19 | 0.19 | 0.38 |
| DC_5A_n78A | Head | 0.38 | 0.35 | 0.73 |
| | Body | 0.35 | 0.19 | 0.54 |
| DC_7A_n78A | Head | 0.23 | 0.35 | 0.58 |
| | Body | 0.09 | 0.19 | 0.28 |
| DC_38A_n78A | Head | 0.11 | 0.35 | 0.46 |
| | Body | 0.08 | 0.19 | 0.27 |
| DC_41A_n78A | Head | 0.12 | 0.35 | 0.47 |
| | Body | 0.07 | 0.19 | 0.26 |
| DC_66A_n78A | Head | 0.21 | 0.35 | 0.56 |
| | Body | 0.19 | 0.19 | 0.38 |

**SimultaneousSAR test exclusion considerations:**

| Mode(SAR1+SAR2) | Position | Reported SAR(W/kg) | | ΣSAR < 1.6W/kg |
|---|---|---|---|---|
| | | SAR1 | SAR2 | |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+Bluetooth | Head | 0.91 | 0.19 | 1.10 |
| | Body | 0.67 | 0.10 | 0.77 |

| Mode(SAR1+SAR2) | Position | Reported SAR(W/kg) | | ΣSAR < 1.6W/kg |
|---|---|---|---|---|
| | | SAR1 | SAR2 | |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+WIFI2.4G | Head | 0.91 | 0.25 | 1.16 |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 2.4G (Hotspot) | Body | 0.67 | 0.14 | **0.81** |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.2G | Head | 0.91 | 0.18 | 1.09 |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.2G (Hotspot) | Body | 0.67 | 0.11 | 0.78 |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.3G | Head | 0.91 | 0.23 | 1.14 |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.3G | Body | 0.67 | 0.15 | **0.82** |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.6G | Head | 0.91 | 0.28 | **1.19** |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.6G | Body | 0.67 | 0.11 | 0.78 |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.8G | Head | 0.91 | 0.14 | 1.05 |
| MAX.WWAN(GSM/WCDMA/LTE/5G NR)+ WIFI 5.8G (Hotspot) | Body | 0.67 | 0.06 | 0.73 |

*Note:For the EIRP of NFC is 0.0004mW, per KDB447498 D01 clause 4.3, the estimated SAR is so lower, so theNFCalmost have no influence on the results of simultaneous transmission.*

**Conclusion:**
Sum of SAR:**ΣSAR ≤1.6 W/kg** therefore simultaneous transmission SAR with Volume Scans is **not required**.

*Note▲: The test data of LTE Band 42/5G NR and LTE CA, please refer to FCC ID: 2ADYY-CM7, SAR report of2401A43118E-SA, issued by Bay Area Compliance Laboratories Corp. (Shenzhen).*

# 12. SAR Plots

**Please Refer to the Attachment.**

# APPENDIX A MEASUREMENT UNCERTAINTY

The uncertainty budget has been determined for the measurement system and is given in the following Table.

**Measurement uncertainty evaluation for IEEE1528-2013 SAR test**

| Source of uncertainty | Tolerance/ uncertainty ± % | Probability distribution | Divisor | ci (1 g) | ci (10 g) | Standard uncertainty ± %, (1 g) | Standard uncertainty ± %, (10 g) |
|---|---|---|---|---|---|---|---|
| **Measurement system** | | | | | | | |
| Probe calibration | 6.55 | N | 1 | 1 | 1 | 6.3 | 6.3 |
| Axial Isotropy | 4.7 | R | √3 | 1 | 1 | 2.7 | 2.7 |
| Hemispherical Isotropy | 9.6 | R | √3 | 0 | 0 | 0.0 | 0.0 |
| Boundary effect | 1.0 | R | √3 | 1 | 1 | 0.6 | 0.6 |
| Linearity | 4.7 | R | √3 | 1 | 1 | 2.7 | 2.7 |
| Detection limits | 1.0 | R | √3 | 1 | 1 | 0.6 | 0.6 |
| Readout electronics | 0.3 | N | 1 | 1 | 1 | 0.3 | 0.3 |
| Response time | 0.0 | R | √3 | 1 | 1 | 0.0 | 0.0 |
| Integration time | 0.0 | R | √3 | 1 | 1 | 0.0 | 0.0 |
| RF ambientconditions – noise | 1.0 | R | √3 | 1 | 1 | 0.6 | 0.6 |
| RF ambient conditions– reflections | 1.0 | R | √3 | 1 | 1 | 0.6 | 0.6 |
| Probe positioner mech. Restrictions | 0.8 | R | √3 | 1 | 1 | 0.5 | 0.5 |
| Probe positioning with respect to phantom shell | 6.7 | R | √3 | 1 | 1 | 3.9 | 3.9 |
| Post-processing | 2.0 | R | √3 | 1 | 1 | 1.2 | 1.2 |
| **Test sample related** | | | | | | | |
| Test sample positioning | 2.8 | N | 1 | 1 | 1 | 2.8 | 2.8 |
| Device holder uncertainty | 6.3 | N | 1 | 1 | 1 | 6.3 | 6.3 |
| Drift of output power | 5.0 | R | √3 | 1 | 1 | 2.9 | 2.9 |
| **Phantom and set-up** | | | | | | | |
| Phantom uncertainty (shape and thickness tolerances) | 4.0 | R | √3 | 1 | 1 | 2.3 | 2.3 |
| Liquid conductivity target) | 5.0 | R | √3 | 0.64 | 0.43 | 1.8 | 1.2 |
| Liquid conductivity meas.) | 2.5 | N | 1 | 0.64 | 0.43 | 1.6 | 1.1 |
| Liquid permittivity target) | 5.0 | R | √3 | 0.6 | 0.49 | 1.7 | 1.4 |
| Liquid permittivity meas.) | 2.5 | N | 1 | 0.6 | 0.49 | 1.5 | 1.2 |
| Combined standard uncertainty | | RSS | | | | 12.2 | 12.0 |
| Expanded uncertainty 95 % confidence interval) | | | | | | 24.1 | 23.7 |

# APPENDIX B EUT TEST POSITION PHOTOS

**Please Refer to the Attachment.**

# APPENDIX C CALIBRATION CERTIFICATES

**Please Refer to the Attachment.**

******* END OF REPORT *******