# SAR Test Report

Report No.: STS2507019H02

Issued for

Plegium AB

Plegium AB,Kopmangatan 16,735 31 Surahammar,Sweden

| | |
|---|---|
| Product Name: | Plegium SafeConnect |
| Brand Name: | Plegium |
| Model Name: | SC-01 |
| Series Model(s): | N/A |
| FCC ID: | 2AP88-SC01 |
| Test Standard: | ANSI/IEEE Std. C95.1<br>FCC 47 CFR Part 2 (2.1093)<br>IEEE Std. 1528-2013 |
| Max. Report SAR (10&1g) | Body: 0.669 W/kg(1g) |

# TEST REPORT CERTIFICATION

**Applicant's name** ..... : Plegium AB

Address ..... : Plegium AB,Kopmangatan 16,735 31 Surahammar,Sweden

**Manufacturer's Name** ..... : Plegium AB

Address ..... : Plegium AB,Kopmangatan 16,735 31 Surahammar,Sweden

**Product description**

Product name ..... : Plegium SafeConnect

Brand name ..... : Plegium

Model name ..... : SC-01

Series Model(s) : ..... N/A

**Standards** ..... : ANSI/IEEE Std. C95.1
FCC 47 CFR Part 2 (2.1093)
IEEE Std. 1528-2013

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

**Date of Test** .....:

Date (s) of performance of tests ..... : 16 Jul 2025 ~ 17 Jul 2025

Date of Issue ..... : 31 Jul 2025

Test Result ..... : **Pass**

Testing Engineer : Xin Liu
(Xin.Liu)

Technical Manager : Shi fan. long
(Shifan. Long)

Authorized Signatory : Bovey Yang
(Bovey Yang)

SHENZHEN STS TEST SERVICES CO., LTD. TESTING APPROVAL

# Table of Contents

## Revision History

| Rev. | Issue Date | Report No. | Effect Page | Contents |
|---|---|---|---|---|
| 00 | 31 Jul 2025 | STS2507019H02 | ALL | Initial Issue |
| | | | | |

# 1. General Information

Environmental evaluation measurements of specific absorption rate (SAR) distributions in emulated human head and body tissues exposed to radio frequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).

## 1.1 EUT Description

| | | | |
|---|---|---|---|
| Product Name | Plegium SafeConnect | | |
| Brand Name | Plegium | | |
| Model Name | SC-01 | | |
| Series Model | N/A | | |
| Model Difference | N/A | | |
| Sample number | 250702006-1 | | |
| Battery | Rated Voltage:3.7V<br>Charge Limit Voltage:V<br>Capacity:mAh | | |
| Device Category | Portable | | |
| Product stage | Production unit | | |
| RF Exposure Environment | General Population / Uncontrolled | | |
| Hardware Version | N/A | | |
| Software Version | N/A | | |
| Frequency Range | Cat-NB LTE Band 2: 1850 MHz ~ 1910 MHz<br>Cat-NB LTE Band 4: 1710 MHz ~ 1755 MHz<br>Cat-NB LTE Band 5: 824 MHz ~ 849 MHz<br>Cat-NB LTE Band 12: 699 MHz ~ 716 MHz<br>Cat-NB LTE Band 13: 777 MHz ~ 787 MHz<br>Cat-NB LTE Band 17: 704 MHz ~ 716 MHz<br>Cat-NB LTE Band 26: 814 MHz ~ 824 MHz<br>Cat-NB LTE Band 66: 1710 MHz ~ 1780 MHz | | |
| Max. Reported SAR(1g): (Limit:1.6W/kg) Test distance: Body:0mm | Band | Mode | Body Worn (W/kg) |
| | PCB | Cat-NB LTE Band 2 | 0.669 |
| | PCB | Cat-NB LTE Band 4 | 0.549 |
| | PCB | Cat-NB LTE Band 5 | 0.165 |
| | PCB | Cat-NB LTE Band 12 | 0.068 |
| | PCB | Cat-NB LTE Band 13 | 0.068 |
| | PCB | Cat-NB LTE Band 17 | 0.057 |
| | PCB | Cat-NB LTE Band 26 | 0.425 |
| | PCB | Cat-NB LTE Band 66 | 0.249 |
| Limit | | | 1.6W/kg |
| FCC Equipment Class | Licensed Transmitter (PCB) | | |
| Operating Mode: | LTE: QPSK, 16QAM, 64QAM(downlink only) | | |
| Antenna Specification: | LTE: Internal Antenna | | |

| | |
|---|---|
| Hotspot Mode | Not Support |
| DTM Mode | Not Support |
| Note:<br>1. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power | |

## 1.2 Test Environment

Ambient conditions in the SAR laboratory:

| Items | Required |
|---|---|
| Temperature (℃) | 18-25 |
| Humidity (%RH) | 30-70 |

## 1.3 Test Factory

ShenZhen STS Test Services Co.,Ltd.

101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A

A2LA Certificate No.: 4338.01

## 2. Test Standards and Limits

| No. | Identity | Document Title |
|---|---|---|
| 1 | 47 CFR Part 2 | Frequency Allocations and Radio Treaty Matters; General Rules and Regulations |
| 2 | IEEE Std C95.1, 2019 | IEEE Standard for Safety Levels with Respect to Human Exposure to Electric,Magnetic, and Electromagnetic Fields,0 Hz to 300 GHz. It specifies the maximum exposure limit of 1.6 W/kg as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment. |
| 3 | IEEE Std. 1528-2013 | Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques |
| 4 | FCC KDB 447498 D04 v01 | RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices |
| 5 | FCC KDB 865664 D01 v01r04 | SAR Measurement 100 MHz to 6 GHz |
| 6 | FCC KDB 865664 D02 v01r02 | RF Exposure Reporting |

(A). Limits for Occupational/Controlled Exposure (W/kg)

| Whole-Body | Partial-Body | Hands, Wrists, Feet and Ankles |
|---|---|---|
| 0.4 | 8.0 | 20.0 |

(B). Limits for General Population/Uncontrolled Exposure (W/kg)

| Whole-Body | Partial-Body | Hands, Wrists, Feet and Ankles |
|---|---|---|
| 0.08 | 1.6 | 4.0 |

NOTE: Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

**Population/Uncontrolled Environments:**

Are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

**Occupational/Controlled Environments:**

Are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

**NOTE**

**GENERAL POPULATION/UNCONTROLLED EXPOSURE**

**PARTIAL BODY LIMIT**

**1.6 W/kg**

# 3. SAR Measurement System

## 3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.
The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\mathbf{SAR} = \frac{d}{dt}\left(\frac{dW}{dm}\right) = \frac{d}{dt}\left(\frac{dW}{\rho dv}\right)$$

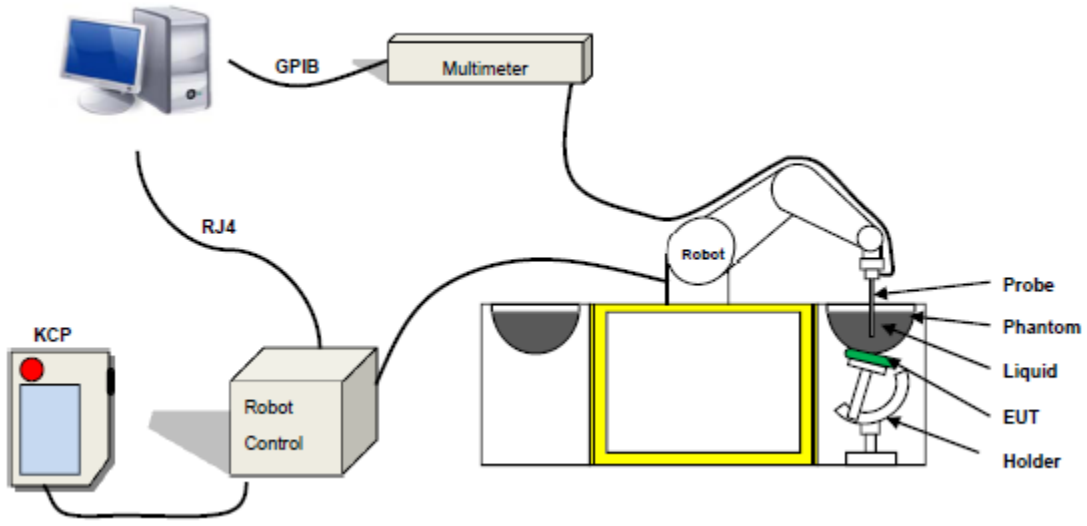
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,
ρ is the mass density of the tissue and E is the RMS electrical field strength.

## 3.2 SAR System

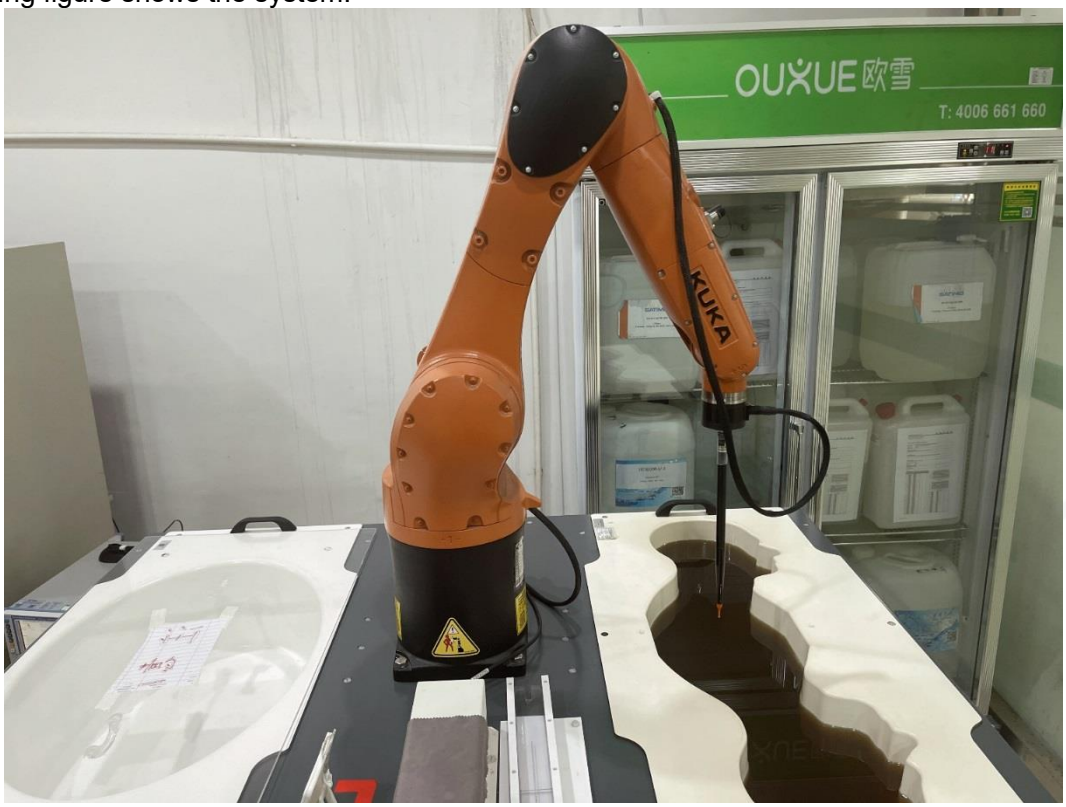
MVG SAR System Diagram:




COMOSAR is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The COMOSAR system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.




The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The Open SAR software computes the results to give a SAR value in a 1g or 10g mass.

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 08/21 EPGO352 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: ＜0.10 dB
- Spherical Isotropy: ＜0.10 dB
- Calibration range: 150 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°

Figure 1-MVG COMOSAR Dosimetric E field Dipole

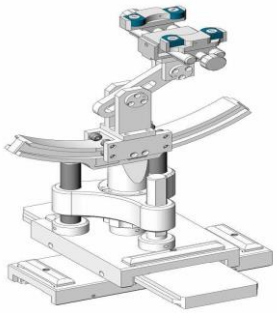
3.2.2 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

SN 32/14 SAM115

Figure-SN 21/21 ELLI48

3.2.3 Device Holder



The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.4. Tissue Simulating Liquids

# 4. Tissue Simulating Liquids

## 4.1 Simulating Liquids Parameter Check

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectric parameters are within the tolerances of the specified target values

The uncertainty due to the liquid conductivity and permittivity arises from two different sources. The first source of error is the deviation of the liquid conductivity from its target value (max _ 5 %) and the second source of error arises from the measurement procedures used to assess conductivity. The uncertainty shall be assessed using a rectangular probability For 1 g averaging, the maximum weighting coefficient for SAR is 0,5.

**IEEE SCC-34/SC-2 RECOMMENDED TISSUE DIELECTRIC PARAMETERS**

The head and body tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 have been incorporated in the following table.

| Frequency | εr | σ 10g 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 |
| 1800 to 2000 | 40.0 | 1.40 |
| 2100 | 39.8 | 1.49 |
| 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 |

The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

| Head (Reference IEEE1528) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Water (%) | Sugar (%) | Cellulose (%) | Salt (%) | Preventol (%) | DGBE (%) | Conductivity σ (S/m) | Permittivity ε |
| 750 | 41.1 | 57.0 | 0.2 | 1.4 | 0.2 | 0 | 0.89 | 41.9 |
| 835 | 40.3 | 57.9 | 0.2 | 1.4 | 0.2 | 0 | 0.90 | 41.5 |
| 900 | 40.3 | 57.9 | 0.2 | 1.4 | 0.2 | 0 | 0.97 | 41.5 |
| 1800, 1900, 2000 | 55.2 | 0 | 0 | 0.3 | 0 | 44.5 | 1.4 | 40.0 |
| 2450 | 55.0 | 0 | 0 | 0.1 | 0 | 44.9 | 1.80 | 39.2 |
| 2600 | 54.9 | 0 | 0 | 0.1 | 0 | 45.0 | 1.96 | 39.0 |
| Frequency (MHz) | Water (%) | Hexyl Carbitol (%) | | | Triton X-100 (%) | | Conductivity σ (S/m) | Permittivity ε |
| 5200 | 62.52 | 17.24 | | | 17.24 | | 4.66 | 36.0 |
| 5800 | 62.52 | 17.24 | | | 17.24 | | 5.27 | 35.3 |
| **Body (From instrument manufacturer)** | | | | | | | | |
| Frequency (MHz) | Water (%) | Sugar (%) | Cellulose (%) | Salt (%) | Preventol (%) | DGBE (%) | Conductivity σ (S/m) | Permittivity ε |
| 750 | 51.7 | 47.2 | 0 | 0.9 | 0.1 | 0 | 0.96 | 55.5 |
| 835 | 50.8 | 48.2 | 0 | 0.9 | 0.1 | 0 | 0.97 | 55.2 |
| 900 | 50.8 | 48.2 | 0 | 0.9 | 0.1 | 0 | 1.05 | 55.0 |
| 1800, 1900, 2000 | 70.2 | 0 | 0 | 0.4 | 0 | 29.4 | 1.52 | 53.3 |
| 2450 | 68.6 | 0 | 0 | 0.1 | 0 | 31.3 | 1.95 | 52.7 |
| 2600 | 68.2 | 0 | 0 | 0.1 | 0 | 31.7 | 2.16 | 52.5 |
| Frequency(MHz) | Water | DGBE (%) | | | Salt (%) | | Conductivity σ (S/m) | Permittivity ε |
| 5200 | 78.60 | 21.40 | | | / | | 5.30 | 49.00 |
| 5800 | 78.50 | 21.40 | | | 0.1 | | 6.00 | 48.20 |

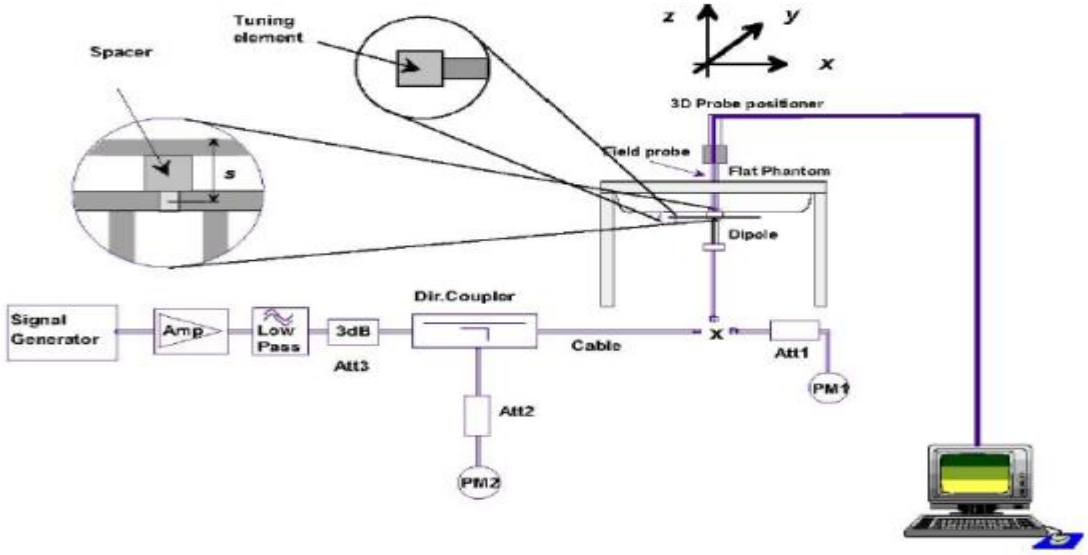
## LIQUID MEASUREMENT RESULTS

| Date | Ambient | | Simulating Liquid | | Parameters | Target | Measured | Deviation % | Limited % |
|---|---|---|---|---|---|---|---|---|---|
| | Temp. [°C] | Humidity % | Frequency (MHz) | Temp. [°C] | | | | | |
| 2025-07-16 | 23.5 | 52 | 707.5 | 23.2 | Permittivity | 42.13 | 43.01 | 2.10 | ±5 |
| | | | | | Conductivity | 0.89 | 0.85 | -4.19 | ±5 |
| 2025-07-16 | 23.5 | 52 | 710 | 23.2 | Permittivity | 42.11 | 42.80 | 1.63 | ±5 |
| | | | | | Conductivity | 0.89 | 0.90 | 1.43 | ±5 |
| 2025-07-16 | 23.5 | 53 | 728 | 23.2 | Permittivity | 42.02 | 42.06 | 0.10 | ±5 |
| | | | | | Conductivity | 0.89 | 0.85 | -4.34 | ±5 |
| 2025-07-16 | 23.5 | 53 | 750 | 23.3 | Permittivity | 41.90 | 43.09 | 2.84 | ±5 |
| | | | | | Conductivity | 0.89 | 0.90 | 1.12 | ±5 |
| 2025-07-16 | 23.6 | 53 | 782 | 23.2 | Permittivity | 41.73 | 42.79 | 2.54 | ±5 |
| | | | | | Conductivity | 0.89 | 0.86 | -3.60 | ±5 |
| 2025-07-17 | 22.9 | 46 | 835 | 22.7 | Permittivity | 41.50 | 41.10 | -0.96 | ±5 |
| | | | | | Conductivity | 0.90 | 0.94 | 4.44 | ±5 |
| 2025-07-17 | 23.0 | 46 | 836.5 | 22.7 | Permittivity | 41.49 | 41.04 | -1.09 | ±5 |
| | | | | | Conductivity | 0.90 | 0.92 | 2.20 | ±5 |
| 2025-07-17 | 23.0 | 46 | 1732.5 | 22.7 | Permittivity | 40.10 | 40.90 | 2.00 | ±5 |
| | | | | | Conductivity | 1.36 | 1.34 | -1.57 | ±5 |
| 2025-07-17 | 23.0 | 46 | 1745 | 22.7 | Permittivity | 40.08 | 41.16 | 2.70 | ±5 |
| | | | | | Conductivity | 1.37 | 1.39 | 1.57 | ±5 |
| 2025-07-17 | 23.0 | 46 | 1800 | 22.7 | Permittivity | 40.00 | 40.24 | 0.60 | ±5 |
| | | | | | Conductivity | 1.40 | 1.34 | -4.29 | ±5 |
| 2025-07-17 | 23.0 | 46 | 1800 | 22.7 | Permittivity | 40.00 | 40.24 | 0.60 | ±5 |
| | | | | | Conductivity | 1.40 | 1.34 | -4.29 | ±5 |
| 2025-07-17 | 23.0 | 46 | 1860 | 22.7 | Permittivity | 40.00 | 40.70 | 1.75 | ±5 |
| | | | | | Conductivity | 1.40 | 1.42 | 1.43 | ±5 |
| 2025-07-17 | 23.0 | 46 | 1880 | 22.7 | Permittivity | 40.00 | 40.12 | 0.30 | ±5 |
| | | | | | Conductivity | 1.40 | 1.43 | 2.14 | ±5 |

# 5. SAR System Validation

## 5.1 Validation System

Each MVG system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the MVG software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder.
The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system validation setup is shown as below.



## 5.2 Validation Result

### Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining retum loss (>20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

| Dipole | | Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
|---|---|---|---|---|---|---|
| SN 30/14 DIP0G750-331 | Head Liquid | 2023-07-04 | -25.47 | / | 55.2 | / |
| | | 2024-07-01 | -25.98 | 2.00 | 54.86 | -0.62 |
| SN 30/14 DIP0G835-332 | Head Liquid | 2023-07-04 | -28.13 | / | 51.4 | / |
| | | 2024-07-01 | -28.43 | 1.07 | 52.62 | 2.37 |
| 5023-DIP1G800-747 | Head Liquid | 2023-12-20 | -27.38 | / | 50.2 | / |
| | | 2024-12-11 | -29.08 | 6.21 | 46.36 | -7.65 |
| SN 30/14 DIP1G900-333 | Head Liquid | 2023-07-04 | -23.66 | / | 51.4 | / |
| | | 2024-07-01 | -23.62 | -0.17 | 50.73 | -1.30 |

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of 10 %.

| Date | Freq. | Power | Tested Value | Normalized SAR | Target SAR | Tolerance | Limit |
|---|---|---|---|---|---|---|---|
| | (MHz) | (mW) | (W/Kg) | (W/kg) | 1g(W/kg) | (%) | (%) |
| 2025-07-16 | 750 | 100 | 0.853 | 8.53 | 8.49 | 0.47 | 10 |
| 2025-07-17 | 835 | 100 | 1.005 | 10.05 | 9.63 | 4.36 | 10 |
| 2025-07-17 | 1800 | 100 | 3.663 | 36.63 | 38.40 | -4.61 | 10 |
| 2025-07-17 | 1900 | 100 | 4.042 | 40.42 | 39.84 | 1.46 | 10 |

Note:

1. The tolerance limit of System validation ±10%.
2. The dipole input power (forward power) was 100 mW.
3. The results are normalized to 1 W input power.

# 6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps:
The following steps are used for each test position

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

➢ Area Scan& Zoom Scan

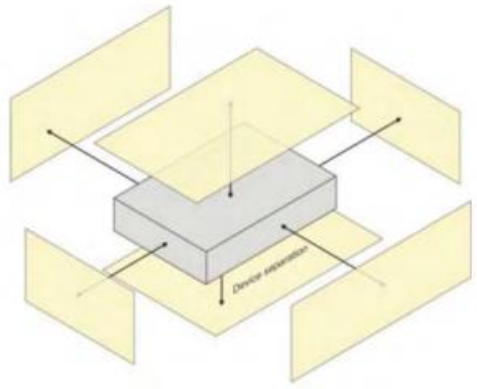
First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below. When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

# 7. EUT Test Position

This EUT was tested in Back Side, Front Side, Left Side, Right Side, Top Side and Bottom Side.

## 8.1 Body-worn Position Conditions

Body-worn Position Conditions:
Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D04 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported* SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest *reported* SAR configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.



# 8. Uncertainty

## 8.1 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| SATIMO Uncertainty- SN 08/21 EPGO352 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Measurement uncertainty for DUT averaged over 1 gram / 10 gram. | | | | | | | | | |
| Uncertainty Component | Sec. | Tol (+- %) | Prob. Dist. | Div. | Ci (1g) | Ci (10g) | 1g Ui (+- %) | 10g Ui (+- %) | vi |
| **Measurement System** | | | | | | | | | |
| Probe calibration | E.2.1 | 5.72 | N | 1.00 | 1.00 | 1.00 | 5.72 | 5.72 | ∞ |
| Axial Isotropy | E.2.2 | 0.18 | R | 1.73 | 0.71 | 0.71 | 0.07 | 0.07 | ∞ |
| Hemispherical Isotropy | E.2.2 | 1.04 | R | 1.73 | 0.71 | 0.71 | 0.42 | 0.42 | ∞ |
| Boundary effect | E.2.3 | 0.80 | R | 1.73 | 1.00 | 1.00 | 0.46 | 0.46 | ∞ |
| Linearity | E.2.4 | 1.25 | R | 1.73 | 1.00 | 1.00 | 0.72 | 0.72 | ∞ |
| System detection limits | E.2.4 | 1.20 | R | 1.73 | 1.00 | 1.00 | 0.69 | 0.69 | ∞ |
| Modulation response | E2.5 | 3.42 | R | 1.73 | 1.00 | 1.00 | 1.97 | 1.97 | ∞ |
| Readout Electronics | E.2.6 | 0.26 | N | 1.00 | 1.00 | 1.00 | 0.26 | 0.26 | ∞ |
| Response Time | E.2.7 | 0.17 | R | 1.73 | 1.00 | 1.00 | 0.10 | 0.10 | ∞ |
| Integration Time | E.2.8 | 1.43 | R | 1.73 | 1.00 | 1.00 | 0.83 | 0.83 | ∞ |
| RF ambient conditions-Noise | E.6.1 | 3.51 | R | 1.73 | 1.00 | 1.00 | 2.03 | 2.03 | ∞ |
| RF ambient conditions-reflections | E.6.1 | 3.15 | R | 1.73 | 1.00 | 1.00 | 1.82 | 1.82 | ∞ |
| Probe positioner mechanical tolerance | E.6.2 | 1.20 | R | 1.73 | 1.00 | 1.00 | 0.69 | 0.69 | ∞ |
| Probe positioning with respect to phantom shell | E.6.3 | 1.40 | R | 1.73 | 1.00 | 1.00 | 0.81 | 0.81 | ∞ |
| Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation | E.5 | 2.10 | R | 1.73 | 1.00 | 1.00 | 1.21 | 1.21 | ∞ |
| **Test sample Related** | | | | | | | | | |
| Test sample positioning | E.4.2 | 3.10 | N | 1.00 | 1.00 | 1.00 | 3.10 | 3.10 | ∞ |
| Device holder uncertainty | E.4.1 | 3.80 | N | 1.00 | 1.00 | 1.00 | 3.80 | 3.80 | ∞ |
| Output power variation—SAR drift measurement | E.2.9 | 4.50 | R | 1.73 | 1.00 | 1.00 | 2.60 | 2.60 | ∞ |
| SAR scaling | E.6.5 | 1.80 | R | 1.73 | 1.00 | 1.00 | 1.04 | 1.04 | ∞ |
| **Phantom and tissue parameters** | | | | | | | | | |
| Phantom shell uncertainty—shape, thickness, and permittivity | E.3.1 | 3.70 | R | 1.73 | 1.00 | 1.00 | 2.14 | 2.14 | ∞ |
| Uncertainty in SAR correction for deviations in permittivity and conductivity | E.3.2 | 1.90 | N | 1.00 | 1.00 | 0.84 | 1.90 | 1.60 | ∞ |
| Liquid conductivity measurement | E.3.3 | 2.40 | R | 1.73 | 0.78 | 0.71 | 1.08 | 0.98 | M |
| Liquid permittivity measurement | E.3.3 | 4.10 | N | 1.00 | 0.78 | 0.71 | 3.20 | 2.91 | M |
| Liquid conductivity—temperature uncertainty | E.3.4 | 2.70 | R | 1.73 | 0.23 | 0.26 | 0.36 | 0.41 | ∞ |
| Liquid permittivity—temperature uncertainty | E.3.4 | 4.80 | N | 1.00 | 0.23 | 0.26 | 1.10 | 1.25 | ∞ |
| Combined Standard Uncertainty | | | RSS | | | | 10.08 | 9.59 | |
| Expanded Uncertainty (95% Confidence interval) | | | K=2 | | | | 19.58 | 19.18 | |

| SATIMO Uncertainty- SN 08/21 EPGO352 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| System Validation uncertainty for DUT averaged over 1 gram / 10 gram. | | | | | | | | | |
| Uncertainty Component | Sec. | Tol (+- %) | Prob. Dist. | Div. | Ci (1g) | Ci (10g) | 1g Ui (+- %) | 10g Ui (+-%) | vi |
| **Measurement System** | | | | | | | | | |
| Probe calibration | E.2.1 | 5.72 | N | 1.00 | 1.00 | 1.00 | 5.72 | 5.72 | ∞ |
| Axial Isotropy | E.2.2 | 0.18 | R | 1.73 | 1.00 | 1.00 | 0.10 | 0.10 | ∞ |
| Hemispherical Isotropy | E.2.2 | 1.04 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Boundary effect | E.2.3 | 0.80 | R | 1.73 | 1.00 | 1.00 | 0.46 | 0.46 | ∞ |
| Linearity | E.2.4 | 1.25 | R | 1.73 | 1.00 | 1.00 | 0.72 | 0.72 | ∞ |
| System detection limits | E.2.4 | 1.20 | R | 1.73 | 1.00 | 1.00 | 0.69 | 0.69 | ∞ |
| Modulation response | E2.5 | 3.42 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Readout Electronics | E.2.6 | 0.26 | N | 1.00 | 1.00 | 1.00 | 0.26 | 0.26 | ∞ |
| Response Time | E.2.7 | 0.17 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Integration Time | E.2.8 | 1.43 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| RF ambient conditions-Noise | E.6.1 | 3.51 | R | 1.73 | 1.00 | 1.00 | 2.03 | 2.03 | ∞ |
| RF ambient conditions-reflections | E.6.1 | 3.15 | R | 1.73 | 1.00 | 1.00 | 1.82 | 1.82 | ∞ |
| Probe positioner mechanical tolerance | E.6.2 | 1.20 | R | 1.73 | 1.00 | 1.00 | 0.69 | 0.69 | ∞ |
| Probe positioning with respect to phantom shell | E.6.3 | 1.40 | R | 1.73 | 1.00 | 1.00 | 0.81 | 0.81 | ∞ |
| Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation | E.5 | 2.10 | R | 1.73 | 1.00 | 1.00 | 1.21 | 1.21 | ∞ |
| **System validation source** | | | | | | | | | |
| Deviation of experimental dipole from numerical dipole | E.6.4 | 4.80 | N | 1.00 | 1.00 | 1.00 | 4.80 | 4.80 | ∞ |
| Input power and SAR drift measurement | 8,6.6.4 | 5.10 | R | 1.73 | 1.00 | 1.00 | 2.94 | 2.94 | ∞ |
| Dipole axis to liquid distance | 8,E.6.6 | 2.40 | R | 1.73 | 1.00 | 1.00 | 1.39 | 1.39 | ∞ |
| **Phantom and set-up** | | | | | | | | | |
| Phantom shell uncertainty—shape, thickness, and permittivity | E.3.1 | 3.70 | R | 1.73 | 1.00 | 1.00 | 2.14 | 2.14 | ∞ |
| Uncertainty in SAR correction for deviations in permittivity and conductivity | E.3.2 | 1.90 | N | 1.00 | 1.00 | 0.84 | 1.90 | 1.60 | ∞ |
| Liquid conductivity （temperature uncertainty） | E.3.3 | 2.40 | R | 1.73 | 0.78 | 0.71 | 1.08 | 0.98 | ∞ |
| Liquid conductivity （measured） | E.3.3 | 4.10 | N | 1.00 | 0.78 | 0.71 | 3.20 | 2.91 | M |
| Liquid permittivity （temperature uncertainty） | E.3.4 | 2.70 | R | 1.73 | 0.23 | 0.26 | 0.36 | 0.41 | ∞ |
| Liquid permittivity （measured） | E.3.4 | 4.80 | N | 1.00 | 0.23 | 0.26 | 1.10 | 1.25 | M |
| Combined Standard Uncertainty | | | RSS | | | | 9.72 | 9.52 | |
| Expanded Uncertainty (95% Confidence interval) | | | K=2 | | | | 19.44 | 19.03 | |

SATIMO Uncertainty- SN 08/21 EPGO352

| ◦ System Check uncertainty for DUT averaged over 1 gram / 10 gram. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Uncertainty Component | Sec. | Tol | Prob. Dist. | Div. | Ci (1g) | Ci (10g) | 1g Ui (+-%) | 10g Ui (+-%) | vi |
| | | (+- %) | | | | | | | |
| **Measurement System** | | | | | | | | | |
| Probe calibration drift | E.2.1.3 | 5.72 | N | 1.00 | 1.00 | 1.00 | 5.72 | 5.72 | ∞ |
| Axial Isotropy | E.2.2 | 0.18 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Hemispherical Isotropy | E.2.2 | 1.04 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Boundary effect | E.2.3 | 0.8 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Linearity | E.2.4 | 1.25 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| System detection limits | E.2.4 | 1.20 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Modulation response | E2.5 | 3.42 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Readout Electronics | E.2.6 | 0.26 | N | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Response Time | E.2.7 | 0.17 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Integration Time | E.2.8 | 1.43 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| RF ambient conditions-Noise | E.6.1 | 3.51 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| RF ambient conditions-reflections | E.6.1 | 3.15 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| Probe positioner mechanical tolerance | E.6.2 | 1.2 | R | 1.73 | 1.00 | 1.00 | 0.69 | 0.69 | ∞ |
| Probe positioning with respect to phantom shell | E.6.3 | 1.4 | R | 1.73 | 1.00 | 1.00 | 0.81 | 0.81 | ∞ |
| Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation | E.5 | 3.9 | R | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 | ∞ |
| **System check source (dipole)** | | | | | | | | | |
| Deviation of experimental dipoles | E.6.4 | 4.8 | N | 1.00 | 1.00 | 1.00 | 4.80 | 4.80 | ∞ |
| Input power and SAR drift measurement | 8,6.6.4 | 5.1 | R | 1.73 | 1.00 | 1.00 | 2.94 | 2.94 | ∞ |
| Dipole axis to liquid distance | 8,E.6.6 | 2.4 | R | 1.73 | 1.00 | 1.00 | 1.39 | 1.39 | ∞ |
| **Phantom and tissue parameters** | | | | | | | | | |
| Phantom shell uncertainty—shape, thickness, and permittivity | E.3.1 | 3.7 | R | 1.73 | 1.00 | 1.00 | 2.14 | 2.14 | ∞ |
| Uncertainty in SAR correction for deviations in permittivity and conductivity | E.3.2 | 1.9 | N | 1.00 | 1.00 | 0.84 | 1.90 | 1.60 | ∞ |
| Liquid conductivity measurement | E.3.3 | 2.4 | R | 1.73 | 0.78 | 0.71 | 1.08 | 0.98 | ∞ |
| Liquid permittivity measurement | E.3.3 | 4.1 | N | 1.00 | 0.78 | 0.71 | 3.20 | 2.91 | M |
| Liquid conductivity—temperature uncertainty | E.3.4 | 2.7 | R | 1.73 | 0.23 | 0.26 | 0.36 | 0.41 | ∞ |
| Liquid permittivity—temperature uncertainty | E.3.4 | 4.8 | N | 1.00 | 0.23 | 0.26 | 1.10 | 1.25 | M |
| Combined Standard Uncertainty | | | RSS | | | | 5.56 | 5.20 | |
| Expanded Uncertainty (95% Confidence interval) | | | K=2 | | | | 11.12 | 10.41 | |

# 9. Conducted Power Measurement

## 9.1 Test Result

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | EIRP (dBm) | EIRP (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 2 | BPSK | 18601 | 3.75 | 1@0 | 6.27 | 3.0 | 9.27 | 0.008 | 2 | Pass |
| | | | | 1@47 | 6.23 | 3.0 | 9.23 | 0.008 | 2 | Pass |
| | | | 15 | 1@0 | 6.35 | 3.0 | 9.35 | 0.009 | 2 | Pass |
| | | | | 1@11 | 6.32 | 3.0 | 9.32 | 0.009 | 2 | Pass |
| Band 2 | BPSK | 18602 | 3.75 | 1@0 | 23.08 | 3.0 | 26.76 | 0.474 | 2 | Pass |
| | | | | 1@47 | 21.27 | 3.0 | 26.27 | 0.424 | 2 | Pass |
| | | | 15 | 1@0 | **23.76** | 3.0 | 24.11 | 0.258 | 2 | Pass |
| | | | | 1@11 | 21.08 | 3.0 | 24.08 | 0.256 | 2 | Pass |
| Band 2 | QPSK | 18601 | 3.75 | 1@0 | 6.27 | 3.0 | 9.27 | 0.008 | 2 | Pass |
| | | | | 1@47 | 6.25 | 3.0 | 9.25 | 0.008 | 2 | Pass |
| | | | 15 | 1@0 | 6.43 | 3.0 | 9.43 | 0.009 | 2 | Pass |
| | | | | 1@11 | 6.33 | 3.0 | 9.33 | 0.009 | 2 | Pass |
| | | | | 3@3 | 6.49 | 3.0 | 9.49 | 0.009 | 2 | Pass |
| Band 2 | QPSK | 18602 | 3.75 | 1@0 | 23.3 | 3.0 | 26.30 | 0.427 | 2 | Pass |
| | | | | 1@47 | 23.3 | 3.0 | 26.30 | 0.427 | 2 | Pass |
| | | | 15 | 1@0 | 21.25 | 3.0 | 24.25 | 0.266 | 2 | Pass |
| | | | | 1@11 | 21.18 | 3.0 | 24.18 | 0.262 | 2 | Pass |
| | | | | 3@3 | 23.53 | 3.0 | 26.53 | 0.450 | 2 | Pass |
| Band 2 | BPSK | 18900 | 3.75 | 1@0 | 23.30 | 3.0 | 26.30 | 0.427 | 2 | Pass |
| | | | | 1@47 | 23.25 | 3.0 | 26.25 | 0.422 | 2 | Pass |
| | | | 15 | 1@0 | 21.14 | 3.0 | 24.14 | 0.259 | 2 | Pass |
| | | | | 1@11 | 21.04 | 3.0 | 24.04 | 0.254 | 2 | Pass |
| Band 2 | QPSK | 18900 | 3.75 | 1@0 | 23.37 | 3.0 | 26.37 | 0.434 | 2 | Pass |
| | | | | 1@47 | 23.27 | 3.0 | 26.27 | 0.424 | 2 | Pass |
| | | | 15 | 1@0 | 21.29 | 3.0 | 24.29 | 0.269 | 2 | Pass |
| | | | | 1@11 | 21.20 | 3.0 | 24.20 | 0.263 | 2 | Pass |
| | | | | 3@3 | 23.50 | 3.0 | 26.50 | 0.447 | 2 | Pass |
| Band 2 | BPSK | 19198 | 3.75 | 1@0 | 22.67 | 3.0 | 25.67 | 0.369 | 2 | Pass |
| | | | | 1@47 | 22.53 | 3.0 | 25.53 | 0.357 | 2 | Pass |
| | | | 15 | 1@0 | 21.26 | 3.0 | 24.26 | 0.267 | 2 | Pass |
| | | | | 1@11 | 21.32 | 3.0 | 24.32 | 0.270 | 2 | Pass |
| Band 2 | BPSK | 19199 | 3.75 | 1@0 | 6.45 | 3.0 | 9.45 | 0.009 | 2 | Pass |
| | | | | 1@47 | 6.43 | 3.0 | 9.43 | 0.009 | 2 | Pass |
| | | | 15 | 1@0 | 6.45 | 3.0 | 9.45 | 0.009 | 2 | Pass |
| | | | | 1@11 | 6.41 | 3.0 | 9.41 | 0.009 | 2 | Pass |
| Band 2 | QPSK | 19198 | 3.75 | 1@0 | 22.79 | 3.0 | 25.79 | 0.379 | 2 | Pass |
| | | | | 1@47 | 22.78 | 3.0 | 25.78 | 0.378 | 2 | Pass |
| | | | 15 | 1@0 | **23.86** | 3.0 | 26.86 | 0.485 | 2 | Pass |
| | | | | 1@11 | 21.42 | 3.0 | 24.42 | 0.277 | 2 | Pass |
| | | | | 3@3 | 21.81 | 3.0 | 24.81 | 0.303 | 2 | Pass |
| Band 2 | QPSK | 19199 | 3.75 | 1@0 | 6.55 | 3.0 | 9.55 | 0.009 | 2 | Pass |
| | | | | 1@47 | 6.47 | 3.0 | 9.47 | 0.009 | 2 | Pass |
| | | | 15 | 1@0 | 6.52 | 3.0 | 9.52 | 0.009 | 2 | Pass |
| | | | | 1@11 | 6.48 | 3.0 | 9.48 | 0.009 | 2 | Pass |
| | | | | 3@3 | 6.51 | 3.0 | 9.51 | 0.009 | 2 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | EIRP (dBm) | EIRP (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 4 | BPSK | 19951 | 3.75 | 1@0 | 6.48 | 3.0 | 9.48 | 0.009 | 1 | Pass |
| | | | | 1@47 | 6.78 | 3.0 | 9.78 | 0.010 | 1 | Pass |
| | | | 15 | 1@0 | 6.46 | 3.0 | 9.46 | 0.009 | 1 | Pass |
| | | | | 1@11 | 6.11 | 3.0 | 9.11 | 0.008 | 1 | Pass |
| Band 4 | BPSK | 19952 | 3.75 | 1@0 | 22.34 | 3.0 | 25.34 | 0.342 | 1 | Pass |
| | | | | 1@47 | 23.70 | 3.0 | 26.70 | 0.468 | 1 | Pass |
| | | | 15 | 1@0 | **23.80** | 3.0 | 26.80 | 0.479 | 1 | Pass |
| | | | | 1@11 | 21.15 | 3.0 | 24.15 | 0.260 | 1 | Pass |
| Band 2 | QPSK | 19951 | 3.75 | 1@0 | 6.26 | 3.0 | 9.26 | 0.008 | 1 | Pass |
| | | | | 1@47 | 6.74 | 3.0 | 9.74 | 0.009 | 1 | Pass |
| | | | 15 | 1@0 | 6.00 | 3.0 | 9.00 | 0.008 | 1 | Pass |
| | | | | 1@11 | 6.33 | 3.0 | 9.33 | 0.009 | 1 | Pass |
| | | | | 3@3 | 6.74 | 3.0 | 9.74 | 0.009 | 1 | Pass |
| Band 4 | QPSK | 19952 | 3.75 | 1@0 | 23.06 | 3.0 | 26.06 | 0.404 | 1 | Pass |
| | | | | 1@47 | 23.21 | 3.0 | 26.21 | 0.418 | 1 | Pass |
| | | | 15 | 1@0 | **23.84** | 3.0 | 26.84 | 0.483 | 1 | Pass |
| | | | | 1@11 | 21.30 | 3.0 | 24.30 | 0.269 | 1 | Pass |
| | | | | 3@3 | 23.18 | 3.0 | 26.18 | 0.415 | 1 | Pass |
| Band 4 | BPSK | 20175 | 3.75 | 1@0 | 22.92 | 3.0 | 25.92 | 0.391 | 1 | Pass |
| | | | | 1@47 | 22.08 | 3.0 | 25.08 | 0.322 | 1 | Pass |
| | | | 15 | 1@0 | 21.23 | 3.0 | 24.23 | 0.265 | 1 | Pass |
| | | | | 1@11 | 21.20 | 3.0 | 24.20 | 0.263 | 1 | Pass |
| Band 4 | QPSK | 20175 | 3.75 | 1@0 | 22.95 | 3.0 | 25.95 | 0.394 | 1 | Pass |
| | | | | 1@47 | 23.03 | 3.0 | 26.03 | 0.401 | 1 | Pass |
| | | | 15 | 1@0 | 21.01 | 3.0 | 24.01 | 0.252 | 1 | Pass |
| | | | | 1@11 | 21.54 | 3.0 | 24.54 | 0.284 | 1 | Pass |
| | | | | 3@3 | 22.94 | 3.0 | 25.94 | 0.393 | 1 | Pass |
| Band 4 | BPSK | 20398 | 3.75 | 1@0 | 22.79 | 3.0 | 25.79 | 0.379 | 1 | Pass |
| | | | | 1@47 | 22.75 | 3.0 | 25.75 | 0.376 | 1 | Pass |
| | | | 15 | 1@0 | 21.70 | 3.0 | 24.70 | 0.295 | 1 | Pass |
| | | | | 1@11 | 22.47 | 3.0 | 25.47 | 0.352 | 1 | Pass |
| Band 4 | BPSK | 20399 | 3.75 | 1@0 | 6.59 | 3.0 | 9.59 | 0.009 | 1 | Pass |
| | | | | 1@47 | 6.36 | 3.0 | 9.36 | 0.009 | 1 | Pass |
| | | | 15 | 1@0 | 6.97 | 3.0 | 9.97 | 0.010 | 1 | Pass |
| | | | | 1@11 | 6.95 | 3.0 | 9.95 | 0.010 | 1 | Pass |
| Band 4 | QPSK | 20398 | 3.75 | 1@0 | 23.01 | 3.0 | 26.01 | 0.399 | 1 | Pass |
| | | | | 1@47 | 22.99 | 3.0 | 25.99 | 0.397 | 1 | Pass |
| | | | 15 | 1@0 | 21.96 | 3.0 | 24.96 | 0.313 | 1 | Pass |
| | | | | 1@11 | 22.66 | 3.0 | 25.66 | 0.368 | 1 | Pass |
| | | | | 3@3 | 23.40 | 3.0 | 26.40 | 0.437 | 1 | Pass |
| Band 4 | QPSK | 20399 | 3.75 | 1@0 | 7.06 | 3.0 | 10.06 | 0.010 | 1 | Pass |
| | | | | 1@47 | 6.65 | 3.0 | 9.65 | 0.009 | 1 | Pass |
| | | | 15 | 1@0 | 7.15 | 3.0 | 10.15 | 0.010 | 1 | Pass |
| | | | | 1@11 | 6.46 | 3.0 | 9.46 | 0.009 | 1 | Pass |
| | | | | 3@3 | 6.92 | 3.0 | 9.92 | 0.010 | 1 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | ERP (dBm) | (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 5 | BPSK | 20401 | 3.75 | 1@0 | 5.94 | 1.9 | 5.69 | 0.004 | 7 | Pass |
| | | | | 1@47 | 6.16 | 1.9 | 5.91 | 0.004 | 7 | Pass |
| | | | 15 | 1@0 | 6.49 | 1.9 | 6.24 | 0.004 | 7 | Pass |
| | | | | 1@11 | 6.45 | 1.9 | 6.20 | 0.004 | 7 | Pass |
| Band 5 | BPSK | 20402 | 3.75 | 1@0 | 22.39 | 1.9 | 22.14 | 0.164 | 7 | Pass |
| | | | | 1@47 | 22.73 | 1.9 | 22.48 | 0.177 | 7 | Pass |
| | | | 15 | 1@0 | **23.68** | 1.9 | 23.43 | 0.220 | 7 | Pass |
| | | | | 1@11 | 22.36 | 1.9 | 22.11 | 0.163 | 7 | Pass |
| Band 5 | QPSK | 20401 | 3.75 | 1@0 | 6.24 | 1.9 | 5.99 | 0.004 | 7 | Pass |
| | | | | 1@47 | 6.35 | 1.9 | 6.10 | 0.004 | 7 | Pass |
| | | | 15 | 1@0 | 6.50 | 1.9 | 6.25 | 0.004 | 7 | Pass |
| | | | | 1@11 | 5.76 | 1.9 | 5.51 | 0.004 | 7 | Pass |
| | | | | 3@3 | 5.82 | 1.9 | 5.57 | 0.004 | 7 | Pass |
| Band 5 | QPSK | 20402 | 3.75 | 1@0 | 22.92 | 1.9 | 22.67 | 0.185 | 7 | Pass |
| | | | | 1@47 | 22.99 | 1.9 | 22.74 | 0.188 | 7 | Pass |
| | | | 15 | 1@0 | **23.78** | 1.9 | 23.53 | 0.225 | 7 | Pass |
| | | | | 1@11 | 22.93 | 1.9 | 22.68 | 0.185 | 7 | Pass |
| | | | | 3@3 | 23.70 | 1.9 | 23.45 | 0.221 | 7 | Pass |
| Band 5 | BPSK | 20525 | 3.75 | 1@0 | 22.48 | 1.9 | 22.23 | 0.167 | 7 | Pass |
| | | | | 1@47 | 22.41 | 1.9 | 22.16 | 0.164 | 7 | Pass |
| | | | 15 | 1@0 | 21.49 | 1.9 | 21.24 | 0.133 | 7 | Pass |
| | | | | 1@11 | 22.22 | 1.9 | 21.97 | 0.157 | 7 | Pass |
| Band 5 | QPSK | 20525 | 3.75 | 1@0 | 22.89 | 1.9 | 22.64 | 0.184 | 7 | Pass |
| | | | | 1@47 | 23.01 | 1.9 | 22.76 | 0.189 | 7 | Pass |
| | | | 15 | 1@0 | 22.14 | 1.9 | 21.89 | 0.155 | 7 | Pass |
| | | | | 1@11 | 22.77 | 1.9 | 22.52 | 0.179 | 7 | Pass |
| | | | | 3@3 | 23.23 | 1.9 | 22.98 | 0.199 | 7 | Pass |
| Band 5 | BPSK | 20648 | 3.75 | 1@0 | 22.55 | 1.9 | 22.30 | 0.170 | 7 | Pass |
| | | | | 1@47 | 22.38 | 1.9 | 22.13 | 0.163 | 7 | Pass |
| | | | 15 | 1@0 | 22.65 | 1.9 | 22.40 | 0.174 | 7 | Pass |
| | | | | 1@11 | 22.52 | 1.9 | 22.27 | 0.169 | 7 | Pass |
| Band 5 | BPSK | 20649 | 3.75 | 1@0 | 6.52 | 1.9 | 6.27 | 0.004 | 7 | Pass |
| | | | | 1@47 | 6.71 | 1.9 | 6.46 | 0.004 | 7 | Pass |
| | | | 15 | 1@0 | 6.69 | 1.9 | 6.44 | 0.004 | 7 | Pass |
| | | | | 1@11 | 6.56 | 1.9 | 6.31 | 0.004 | 7 | Pass |
| Band 5 | QPSK | 20648 | 3.75 | 1@0 | 22.33 | 1.9 | 22.08 | 0.161 | 7 | Pass |
| | | | | 1@47 | 22.47 | 1.9 | 22.22 | 0.167 | 7 | Pass |
| | | | 15 | 1@0 | 21.52 | 1.9 | 21.27 | 0.134 | 7 | Pass |
| | | | | 1@11 | 23.42 | 1.9 | 23.17 | 0.207 | 7 | Pass |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 3@3 | 23.07 | 1.9 | 22.82 | 0.191 | 7 | Pass |
| Band 5 | QPSK | 20649 | 3.75 | 1@0 | 6.60 | 1.9 | 6.35 | 0.004 | 7 | Pass |
| | | | | 1@47 | 6.54 | 1.9 | 6.29 | 0.004 | 7 | Pass |
| | | | 15 | 1@0 | 6.79 | 1.9 | 6.54 | 0.005 | 7 | Pass |
| | | | | 1@11 | 6.87 | 1.9 | 6.62 | 0.005 | 7 | Pass |
| | | | | 3@3 | 5.90 | 1.9 | 5.65 | 0.004 | 7 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | ERP (dBm) | ERP (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 12 | BPSK | 23011 | 3.75 | 1@0 | 7.34 | 1.9 | 7.09 | 0.005 | 3 | Pass |
| | | | | 1@47 | 7.39 | 1.9 | 7.14 | 0.005 | 3 | Pass |
| | | | 15 | 1@0 | 7.03 | 1.9 | 6.78 | 0.005 | 3 | Pass |
| | | | | 1@11 | 6.68 | 1.9 | 6.43 | 0.004 | 3 | Pass |
| Band 12 | BPSK | 23012 | 3.75 | 1@0 | 23.00 | 1.9 | 22.75 | 0.188 | 3 | Pass |
| | | | | 1@47 | 22.89 | 1.9 | 22.64 | 0.184 | 3 | Pass |
| | | | 15 | 1@0 | 22.83 | 1.9 | 22.58 | 0.181 | 3 | Pass |
| | | | | 1@11 | 22.62 | 1.9 | 22.37 | 0.173 | 3 | Pass |
| Band 12 | QPSK | 23011 | 3.75 | 1@0 | 7.08 | 1.9 | 6.83 | 0.005 | 3 | Pass |
| | | | | 1@47 | 6.59 | 1.9 | 6.34 | 0.004 | 3 | Pass |
| | | | 15 | 1@0 | 7.47 | 1.9 | 7.22 | 0.005 | 3 | Pass |
| | | | | 1@11 | 6.78 | 1.9 | 6.53 | 0.004 | 3 | Pass |
| | | | | 3@3 | 6.85 | 1.9 | 6.60 | 0.005 | 3 | Pass |
| Band 12 | QPSK | 23012 | 3.75 | 1@0 | 22.88 | 1.9 | 22.63 | 0.183 | 3 | Pass |
| | | | | 1@47 | 22.50 | 1.9 | 22.25 | 0.168 | 3 | Pass |
| | | | 15 | 1@0 | 22.61 | 1.9 | 22.36 | 0.172 | 3 | Pass |
| | | | | 1@11 | 22.56 | 1.9 | 22.31 | 0.170 | 3 | Pass |
| | | | | 3@3 | 22.62 | 1.9 | 22.37 | 0.173 | 3 | Pass |
| Band 12 | BPSK | 23095 | 3.75 | 1@0 | 20.99 | 1.9 | 20.74 | 0.119 | 3 | Pass |
| | | | | 1@47 | 21.62 | 1.9 | 21.37 | 0.137 | 3 | Pass |
| | | | 15 | 1@0 | **23.75** | 1.9 | 23.50 | 0.224 | 3 | Pass |
| | | | | 1@11 | 21.41 | 1.9 | 21.16 | 0.131 | 3 | Pass |
| Band 12 | QPSK | 23095 | 3.75 | 1@0 | 21.61 | 1.9 | 21.36 | 0.137 | 3 | Pass |
| | | | | 1@47 | 22.07 | 1.9 | 21.82 | 0.152 | 3 | Pass |
| | | | 15 | 1@0 | **23.92** | 1.9 | 23.67 | 0.233 | 3 | Pass |
| | | | | 1@11 | 20.79 | 1.9 | 20.54 | 0.113 | 3 | Pass |
| | | | | 3@3 | 23.12 | 1.9 | 22.87 | 0.194 | 3 | Pass |
| Band 12 | BPSK | 23178 | 3.75 | 1@0 | 22.10 | 1.9 | 21.85 | 0.153 | 3 | Pass |
| | | | | 1@47 | 22.14 | 1.9 | 21.89 | 0.155 | 3 | Pass |
| | | | 15 | 1@0 | 23.06 | 1.9 | 22.81 | 0.191 | 3 | Pass |
| | | | | 1@11 | 22.43 | 1.9 | 22.18 | 0.165 | 3 | Pass |
| Band 12 | BPSK | 23178 | 3.75 | 1@0 | 7.63 | 1.9 | 7.38 | 0.005 | 3 | Pass |
| | | | | 1@47 | 6.94 | 1.9 | 6.69 | 0.005 | 3 | Pass |
| | | | 15 | 1@0 | 7.56 | 1.9 | 7.31 | 0.005 | 3 | Pass |
| | | | | 1@11 | 6.79 | 1.9 | 6.54 | 0.005 | 3 | Pass |
| Band 12 | QPSK | 23178 | 3.75 | 1@0 | 22.35 | 1.9 | 22.10 | 0.162 | 3 | Pass |
| | | | | 1@47 | 22.39 | 1.9 | 22.14 | 0.164 | 3 | Pass |
| | | | 15 | 1@0 | 20.52 | 1.9 | 20.27 | 0.106 | 3 | Pass |
| | | | | 1@11 | 22.31 | 1.9 | 22.06 | 0.161 | 3 | Pass |
| | | | | 3@3 | 23.05 | 1.9 | 22.80 | 0.191 | 3 | Pass |
| Band 12 | QPSK | 23179 | 3.75 | 1@0 | 6.98 | 1.9 | 6.73 | 0.005 | 3 | Pass |
| | | | | 1@47 | 7.66 | 1.9 | 7.41 | 0.006 | 3 | Pass |
| | | | 15 | 1@0 | 7.40 | 1.9 | 7.15 | 0.005 | 3 | Pass |
| | | | | 1@11 | 7.26 | 1.9 | 7.01 | 0.005 | 3 | Pass |
| | | | | 3@3 | 7.09 | 1.9 | 6.84 | 0.005 | 3 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | ERP (dBm) | ERP (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 13 | BPSK | 23181 | 3.75 | 1@0 | 6.56 | 1.9 | 6.31 | 0.004 | 3 | Pass |
| | | | | 1@47 | 6.30 | 1.9 | 6.05 | 0.004 | 3 | Pass |
| | | | 15 | 1@0 | 6.29 | 1.9 | 6.04 | 0.004 | 3 | Pass |
| | | | | 1@11 | 6.43 | 1.9 | 6.18 | 0.004 | 3 | Pass |
| Band 13 | BPSK | 23182 | 3.75 | 1@0 | 23.33 | 1.9 | 23.08 | 0.203 | 3 | Pass |
| | | | | 1@47 | 22.56 | 1.9 | 22.31 | 0.170 | 3 | Pass |
| | | | 15 | 1@0 | 23.12 | 1.9 | 22.87 | 0.194 | 3 | Pass |
| | | | | 1@11 | 22.50 | 1.9 | 22.25 | 0.168 | 3 | Pass |
| Band 13 | QPSK | 23181 | 3.75 | 1@0 | 7.16 | 1.9 | 6.91 | 0.005 | 3 | Pass |
| | | | | 1@47 | 6.49 | 1.9 | 6.24 | 0.004 | 3 | Pass |
| | | | 15 | 1@0 | 6.64 | 1.9 | 6.39 | 0.004 | 3 | Pass |
| | | | | 1@11 | 7.28 | 1.9 | 7.03 | 0.005 | 3 | Pass |
| | | | | 3@3 | 7.39 | 1.9 | 7.14 | 0.005 | 3 | Pass |
| Band 13 | QPSK | 23182 | 3.75 | 1@0 | 22.83 | 1.9 | 22.58 | 0.181 | 3 | Pass |
| | | | | 1@47 | 23.14 | 1.9 | 22.89 | 0.195 | 3 | Pass |
| | | | 15 | 1@0 | 23.42 | 1.9 | 23.17 | 0.207 | 3 | Pass |
| | | | | 1@11 | 22.55 | 1.9 | 22.30 | 0.170 | 3 | Pass |
| | | | | 3@3 | 23.14 | 1.9 | 22.89 | 0.195 | 3 | Pass |
| Band 13 | BPSK | 23230 | 3.75 | 1@0 | 21.08 | 1.9 | 20.83 | 0.121 | 3 | Pass |
| | | | | 1@47 | 21.61 | 1.9 | 21.36 | 0.137 | 3 | Pass |
| | | | 15 | 1@0 | **23.62** | 1.9 | 23.37 | 0.217 | 3 | Pass |
| | | | | 1@11 | 20.67 | 1.9 | 20.42 | 0.110 | 3 | Pass |
| Band 13 | QPSK | 23230 | 3.75 | 1@0 | 21.73 | 1.9 | 21.48 | 0.141 | 3 | Pass |
| | | | | 1@47 | 22.72 | 1.9 | 22.47 | 0.177 | 3 | Pass |
| | | | 15 | 1@0 | **23.78** | 1.9 | 23.53 | 0.225 | 3 | Pass |
| | | | | 1@11 | 21.10 | 1.9 | 20.85 | 0.122 | 3 | Pass |
| | | | | 3@3 | 21.67 | 1.9 | 21.42 | 0.139 | 3 | Pass |
| Band 13 | BPSK | 23278 | 3.75 | 1@0 | 22.67 | 1.9 | 22.42 | 0.175 | 3 | Pass |
| | | | | 1@47 | 22.69 | 1.9 | 22.44 | 0.175 | 3 | Pass |
| | | | 15 | 1@0 | 22.56 | 1.9 | 22.31 | 0.170 | 3 | Pass |
| | | | | 1@11 | 22.60 | 1.9 | 22.35 | 0.172 | 3 | Pass |
| Band 13 | BPSK | 23278 | 3.75 | 1@0 | 6.64 | 1.9 | 6.39 | 0.004 | 3 | Pass |
| | | | | 1@47 | 6.99 | 1.9 | 6.74 | 0.005 | 3 | Pass |
| | | | 15 | 1@0 | 7.11 | 1.9 | 6.86 | 0.005 | 3 | Pass |
| | | | | 1@11 | 6.73 | 1.9 | 6.48 | 0.004 | 3 | Pass |
| Band 13 | QPSK | 23279 | 3.75 | 1@0 | 22.76 | 1.9 | 22.51 | 0.178 | 3 | Pass |
| | | | | 1@47 | 23.01 | 1.9 | 22.76 | 0.189 | 3 | Pass |
| | | | 15 | 1@0 | 23.05 | 1.9 | 22.80 | 0.191 | 3 | Pass |
| | | | | 1@11 | 23.13 | 1.9 | 22.88 | 0.194 | 3 | Pass |
| | | | | 3@3 | 22.97 | 1.9 | 22.72 | 0.187 | 3 | Pass |
| Band 13 | QPSK | 23279 | 3.75 | 1@0 | 6.85 | 1.9 | 6.60 | 0.005 | 3 | Pass |
| | | | | 1@47 | 6.64 | 1.9 | 6.39 | 0.004 | 3 | Pass |
| | | | 15 | 1@0 | 7.45 | 1.9 | 7.20 | 0.005 | 3 | Pass |
| | | | | 1@11 | 6.64 | 1.9 | 6.39 | 0.004 | 3 | Pass |
| | | | | 3@3 | 7.35 | 1.9 | 7.10 | 0.005 | 3 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | ERP (dBm) | (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 17 | BPSK | 23730 | 3.75 | 1@0 | 6.42 | 1.9 | 6.17 | 0.004 | 1 | Pass |
| | | | | 1@47 | 6.74 | 1.9 | 6.49 | 0.004 | 1 | Pass |
| | | | 15 | 1@0 | 6.87 | 1.9 | 6.62 | 0.005 | 1 | Pass |
| | | | | 1@11 | 6.64 | 1.9 | 6.39 | 0.004 | 1 | Pass |
| Band 17 | BPSK | 23731 | 3.75 | 1@0 | 23.28 | 1.9 | 23.03 | 0.201 | 1 | Pass |
| | | | | 1@47 | 22.81 | 1.9 | 22.56 | 0.180 | 1 | Pass |
| | | | 15 | 1@0 | 22.93 | 1.9 | 22.68 | 0.185 | 1 | Pass |
| | | | | 1@11 | 22.31 | 1.9 | 22.06 | 0.161 | 1 | Pass |
| Band 17 | QPSK | 23730 | 3.75 | 1@0 | 6.78 | 1.9 | 6.53 | 0.004 | 1 | Pass |
| | | | | 1@47 | 6.40 | 1.9 | 6.15 | 0.004 | 1 | Pass |
| | | | 15 | 1@0 | 7.07 | 1.9 | 6.82 | 0.005 | 1 | Pass |
| | | | | 1@11 | 7.03 | 1.9 | 6.78 | 0.005 | 1 | Pass |
| | | | | 3@3 | 6.96 | 1.9 | 6.71 | 0.005 | 1 | Pass |
| Band 17 | QPSK | 23731 | 3.75 | 1@0 | 23.23 | 1.9 | 22.98 | 0.199 | 1 | Pass |
| | | | | 1@47 | 23.22 | 1.9 | 22.97 | 0.198 | 1 | Pass |
| | | | 15 | 1@0 | 22.78 | 1.9 | 22.53 | 0.179 | 1 | Pass |
| | | | | 1@11 | 22.89 | 1.9 | 22.64 | 0.184 | 1 | Pass |
| | | | | 3@3 | 23.66 | 1.9 | 23.41 | 0.219 | 1 | Pass |
| Band 17 | BPSK | 23789 | 3.75 | 1@0 | 21.89 | 1.9 | 21.64 | 0.146 | 1 | Pass |
| | | | | 1@47 | 21.84 | 1.9 | 21.59 | 0.144 | 1 | Pass |
| | | | 15 | 1@0 | **23.63** | 1.9 | 23.38 | 0.218 | 1 | Pass |
| | | | | 1@11 | 22.03 | 1.9 | 21.78 | 0.151 | 1 | Pass |
| Band 17 | QPSK | 23789 | 3.75 | 1@0 | 22.47 | 1.9 | 22.22 | 0.167 | 1 | Pass |
| | | | | 1@47 | 22.95 | 1.9 | 22.70 | 0.186 | 1 | Pass |
| | | | 15 | 1@0 | **23.95** | 1.9 | 23.70 | 0.234 | 1 | Pass |
| | | | | 1@11 | 21.07 | 1.9 | 20.82 | 0.121 | 1 | Pass |
| | | | | 3@3 | 20.99 | 1.9 | 20.74 | 0.119 | 1 | Pass |
| Band 17 | BPSK | 23848 | 3.75 | 1@0 | 22.88 | 1.9 | 22.63 | 0.183 | 1 | Pass |
| | | | | 1@47 | 22.67 | 1.9 | 22.42 | 0.175 | 1 | Pass |
| | | | 15 | 1@0 | 22.72 | 1.9 | 22.47 | 0.177 | 1 | Pass |
| | | | | 1@11 | 22.75 | 1.9 | 22.50 | 0.178 | 1 | Pass |
| Band 17 | BPSK | 23849 | 3.75 | 1@0 | 6.60 | 1.9 | 6.35 | 0.004 | 1 | Pass |
| | | | | 1@47 | 6.58 | 1.9 | 6.33 | 0.004 | 1 | Pass |
| | | | 15 | 1@0 | 6.60 | 1.9 | 6.35 | 0.004 | 1 | Pass |
| | | | | 1@11 | 6.70 | 1.9 | 6.45 | 0.004 | 1 | Pass |
| Band 17 | QPSK | 23848 | 3.75 | 1@0 | 23.30 | 1.9 | 23.05 | 0.202 | 1 | Pass |
| | | | | 1@47 | 23.16 | 1.9 | 22.91 | 0.195 | 1 | Pass |
| | | | 15 | 1@0 | 22.45 | 1.9 | 22.20 | 0.166 | 1 | Pass |
| | | | | 1@11 | 22.62 | 1.9 | 22.37 | 0.173 | 1 | Pass |
| | | | | 3@3 | 23.08 | 1.9 | 22.83 | 0.192 | 1 | Pass |
| Band 17 | QPSK | 23849 | 3.75 | 1@0 | 6.41 | 1.9 | 6.16 | 0.004 | 1 | Pass |
| | | | | 1@47 | 6.50 | 1.9 | 6.25 | 0.004 | 1 | Pass |
| | | | 15 | 1@0 | 6.64 | 1.9 | 6.39 | 0.004 | 1 | Pass |
| | | | | 1@11 | 6.72 | 1.9 | 6.47 | 0.004 | 1 | Pass |
| | | | | 3@3 | 7.39 | 1.9 | 7.14 | 0.005 | 1 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | ERP (dBm) | ERP (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 26 (Part22) | BPSK | 26791 | 3.75 | 1@0 | 6.14 | 1.9 | 5.89 | 0.004 | 7 | Pass |
| | | | | 1@47 | 5.65 | 1.9 | 5.40 | 0.003 | 7 | Pass |
| | | | 15 | 1@0 | 6.55 | 1.9 | 6.30 | 0.004 | 7 | Pass |
| | | | | 1@11 | 5.69 | 1.9 | 5.44 | 0.003 | 7 | Pass |
| Band 26 (Part22) | BPSK | 26792 | 3.75 | 1@0 | 22.61 | 1.9 | 22.36 | 0.172 | 7 | Pass |
| | | | | 1@47 | 22.66 | 1.9 | 22.41 | 0.174 | 7 | Pass |
| | | | 15 | 1@0 | 22.85 | 1.9 | 22.60 | 0.182 | 7 | Pass |
| | | | | 1@11 | 22.92 | 1.9 | 22.67 | 0.185 | 7 | Pass |
| Band 26 (Part22) | QPSK | 26791 | 3.75 | 1@0 | 5.83 | 1.9 | 5.58 | 0.004 | 7 | Pass |
| | | | | 1@47 | 5.63 | 1.9 | 5.38 | 0.003 | 7 | Pass |
| | | | 15 | 1@0 | 6.38 | 1.9 | 6.13 | 0.004 | 7 | Pass |
| | | | | 1@11 | 6.41 | 1.9 | 6.16 | 0.004 | 7 | Pass |
| | | | | 3@3 | 6.56 | 1.9 | 6.31 | 0.004 | 7 | Pass |
| Band 26 (Part22) | QPSK | 26792 | 3.75 | 1@0 | 23.11 | 1.9 | 22.86 | 0.193 | 7 | Pass |
| | | | | 1@47 | 22.42 | 1.9 | 22.17 | 0.165 | 7 | Pass |
| | | | 15 | 1@0 | 23.08 | 1.9 | 22.83 | 0.192 | 7 | Pass |
| | | | | 1@11 | 23.08 | 1.9 | 22.83 | 0.192 | 7 | Pass |
| | | | | 3@3 | 23.06 | 1.9 | 22.81 | 0.191 | 7 | Pass |
| Band 26 (Part22) | BPSK | 26915 | 3.75 | 1@0 | 23.22 | 1.9 | 22.97 | 0.198 | 7 | Pass |
| | | | | 1@47 | 22.32 | 1.9 | 22.07 | 0.161 | 7 | Pass |
| | | | 15 | 1@0 | **23.47** | 1.9 | 23.22 | 0.210 | 7 | Pass |
| | | | | 1@11 | 22.23 | 1.9 | 21.98 | 0.158 | 7 | Pass |
| Band 26 (Part22) | QPSK | 26915 | 3.75 | 1@0 | 23.01 | 1.9 | 22.76 | 0.189 | 7 | Pass |
| | | | | 1@47 | 22.81 | 1.9 | 22.56 | 0.180 | 7 | Pass |
| | | | 15 | 1@0 | **23.68** | 1.9 | 23.43 | 0.220 | 7 | Pass |
| | | | | 1@11 | 22.54 | 1.9 | 22.29 | 0.169 | 7 | Pass |
| | | | | 3@3 | 23.13 | 1.9 | 22.88 | 0.194 | 7 | Pass |
| Band 26 (Part22) | BPSK | 27038 | 3.75 | 1@0 | 22.36 | 1.9 | 22.11 | 0.163 | 7 | Pass |
| | | | | 1@47 | 21.99 | 1.9 | 21.74 | 0.149 | 7 | Pass |
| | | | 15 | 1@0 | 22.83 | 1.9 | 22.58 | 0.181 | 7 | Pass |
| | | | | 1@11 | 22.85 | 1.9 | 22.60 | 0.182 | 7 | Pass |
| Band 26 (Part22) | BPSK | 27039 | 3.75 | 1@0 | 6.72 | 1.9 | 6.47 | 0.004 | 7 | Pass |
| | | | | 1@47 | 5.97 | 1.9 | 5.72 | 0.004 | 7 | Pass |
| | | | 15 | 1@0 | 5.89 | 1.9 | 5.64 | 0.004 | 7 | Pass |
| | | | | 1@11 | 6.75 | 1.9 | 6.50 | 0.004 | 7 | Pass |
| Band 26 (Part22) | QPSK | 27038 | 3.75 | 1@0 | 22.92 | 1.9 | 22.67 | 0.185 | 7 | Pass |
| | | | | 1@47 | 22.87 | 1.9 | 22.62 | 0.183 | 7 | Pass |
| | | | 15 | 1@0 | 21.11 | 1.9 | 20.86 | 0.122 | 7 | Pass |
| | | | | 1@11 | 23.07 | 1.9 | 22.82 | 0.191 | 7 | Pass |
| | | | | 3@3 | 22.67 | 1.9 | 22.42 | 0.175 | 7 | Pass |
| Band 26 (Part22) | QPSK | 27039 | 3.75 | 1@0 | 6.48 | 1.9 | 6.23 | 0.004 | 7 | Pass |
| | | | | 1@47 | 5.93 | 1.9 | 5.68 | 0.004 | 7 | Pass |
| | | | 15 | 1@0 | 6.22 | 1.9 | 5.97 | 0.004 | 7 | Pass |
| | | | | 1@11 | 5.98 | 1.9 | 5.73 | 0.004 | 7 | Pass |
| | | | | 3@3 | 6.85 | 1.9 | 6.60 | 0.005 | 7 | Pass |

| Band | Modulation | Channel | Subcarrier Space (KHz) | RB Configure | Result (dBm) | Gain (dBi) | EIRP (dBm) | EIRP (watts) | Limit (watts) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| Band 66 | BPSK | 131973 | 3.75 | 1@0 | 6.49 | 3.0 | 9.49 | 0.009 | 1 | Pass |
| | | | | 1@47 | 6.59 | 3.0 | 9.59 | 0.009 | 1 | Pass |
| | | | 15 | 1@0 | 6.74 | 3.0 | 9.74 | 0.009 | 1 | Pass |
| | | | | 1@11 | 6.02 | 3.0 | 9.02 | 0.008 | 1 | Pass |
| Band 66 | BPSK | 131974 | 3.75 | 1@0 | 23.54 | 3.0 | 26.54 | 0.451 | 1 | Pass |
| | | | | 1@47 | 23.66 | 3.0 | 26.66 | 0.463 | 1 | Pass |
| | | | 15 | 1@0 | 21.07 | 3.0 | 24.07 | 0.255 | 1 | Pass |
| | | | | 1@11 | 21.32 | 3.0 | 24.32 | 0.270 | 1 | Pass |
| Band 66 | QPSK | 131973 | 3.75 | 1@0 | 6.50 | 3.0 | 9.50 | 0.009 | 1 | Pass |
| | | | | 1@47 | 6.20 | 3.0 | 9.20 | 0.008 | 1 | Pass |
| | | | 15 | 1@0 | 6.12 | 3.0 | 9.12 | 0.008 | 1 | Pass |
| | | | | 1@11 | 6.88 | 3.0 | 9.88 | 0.010 | 1 | Pass |
| | | | | 3@3 | 6.78 | 3.0 | 9.78 | 0.010 | 1 | Pass |
| Band 66 | QPSK | 131974 | 3.75 | 1@0 | 23.15 | 3.0 | 26.15 | 0.412 | 1 | Pass |
| | | | | 1@47 | 23.50 | 3.0 | 26.50 | 0.447 | 1 | Pass |
| | | | 15 | 1@0 | 20.74 | 3.0 | 23.74 | 0.237 | 1 | Pass |
| | | | | 1@11 | 21.37 | 3.0 | 24.37 | 0.274 | 1 | Pass |
| | | | | 3@3 | **21.54** | 3.0 | 3.00 | 0.002 | 1 | Pass |
| Band 66 | BPSK | 132322 | 3.75 | 1@0 | 22.56 | 3.0 | 25.56 | 0.360 | 1 | Pass |
| | | | | 1@47 | 22.88 | 3.0 | 25.88 | 0.387 | 1 | Pass |
| | | | 15 | 1@0 | 20.95 | 3.0 | 23.95 | 0.248 | 1 | Pass |
| | | | | 1@11 | 21.60 | 3.0 | 24.60 | 0.288 | 1 | Pass |
| Band 66 | QPSK | 132322 | 3.75 | 1@0 | 22.84 | 3.0 | 25.84 | 0.384 | 1 | Pass |
| | | | | 1@47 | 23.02 | 3.0 | 26.02 | 0.400 | 1 | Pass |
| | | | 15 | 1@0 | 21.11 | 3.0 | 24.11 | 0.258 | 1 | Pass |
| | | | | 1@11 | 20.74 | 3.0 | 23.74 | 0.237 | 1 | Pass |
| | | | | 3@3 | 23.37 | 3.0 | 26.37 | 0.434 | 1 | Pass |
| Band 66 | BPSK | 132670 | 3.75 | 1@0 | 22.78 | 3.0 | 25.78 | 0.378 | 1 | Pass |
| | | | | 1@47 | 22.30 | 3.0 | 25.30 | 0.339 | 1 | Pass |
| | | | 15 | 1@0 | **23.81** | 3.0 | 26.81 | 0.480 | 1 | Pass |
| | | | | 1@11 | 22.34 | 3.0 | 25.34 | 0.342 | 1 | Pass |
| Band 66 | BPSK | 132671 | 3.75 | 1@0 | 6.41 | 3.0 | 9.41 | 0.009 | 1 | Pass |
| | | | | 1@47 | 6.06 | 3.0 | 9.06 | 0.008 | 1 | Pass |
| | | | 15 | 1@0 | 6.46 | 3.0 | 9.46 | 0.009 | 1 | Pass |
| | | | | 1@11 | 6.90 | 3.0 | 9.90 | 0.010 | 1 | Pass |
| Band 66 | QPSK | 132670 | 3.75 | 1@0 | 22.37 | 3.0 | 25.37 | 0.344 | 1 | Pass |
| | | | | 1@47 | 23.01 | 3.0 | 26.01 | 0.399 | 1 | Pass |
| | | | 15 | 1@0 | **23.95** | 3.0 | 26.95 | 0.495 | 1 | Pass |
| | | | | 1@11 | 22.42 | 3.0 | 25.42 | 0.348 | 1 | Pass |
| | | | | 3@3 | 23.13 | 3.0 | 26.13 | 0.410 | 1 | Pass |
| Band 66 | QPSK | 132671 | 3.75 | 1@0 | 6.17 | 3.0 | 9.17 | 0.008 | 1 | Pass |
| | | | | 1@47 | 6.65 | 3.0 | 9.65 | 0.009 | 1 | Pass |
| | | | 15 | 1@0 | 6.37 | 3.0 | 9.37 | 0.009 | 1 | Pass |
| | | | | 1@11 | 6.75 | 3.0 | 9.75 | 0.009 | 1 | Pass |
| | | | | 3@3 | 6.71 | 3.0 | 9.71 | 0.009 | 1 | Pass |

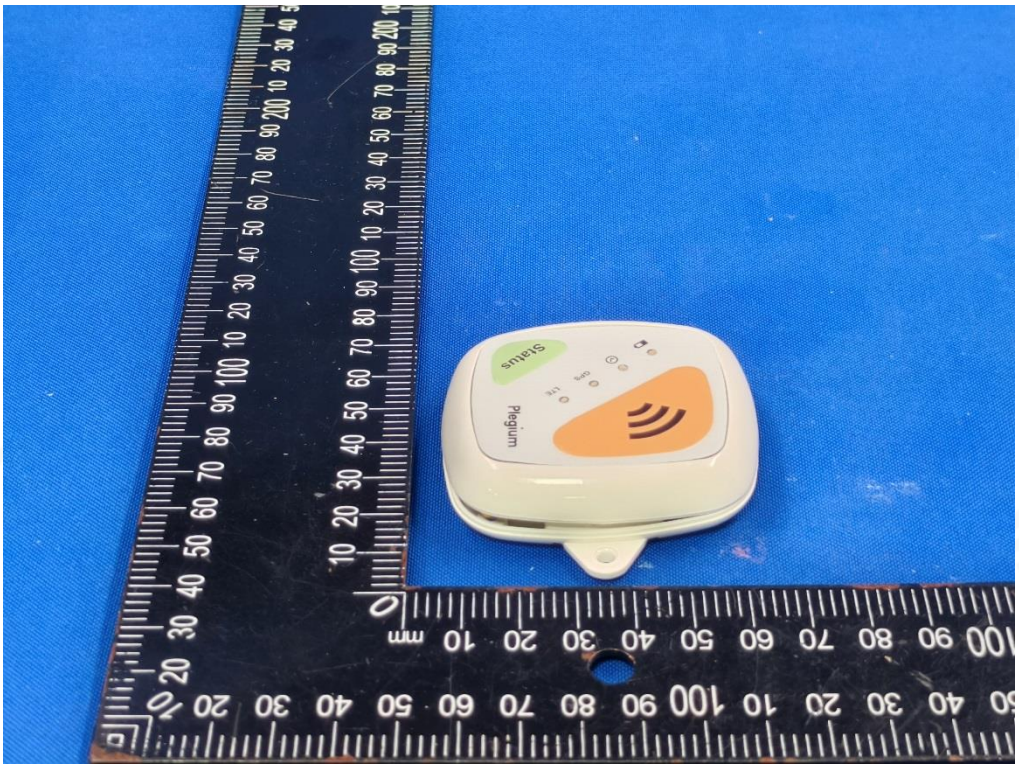
# 10. EUT and Test Setup Photo

## 10.1 EUT Photo

Front side

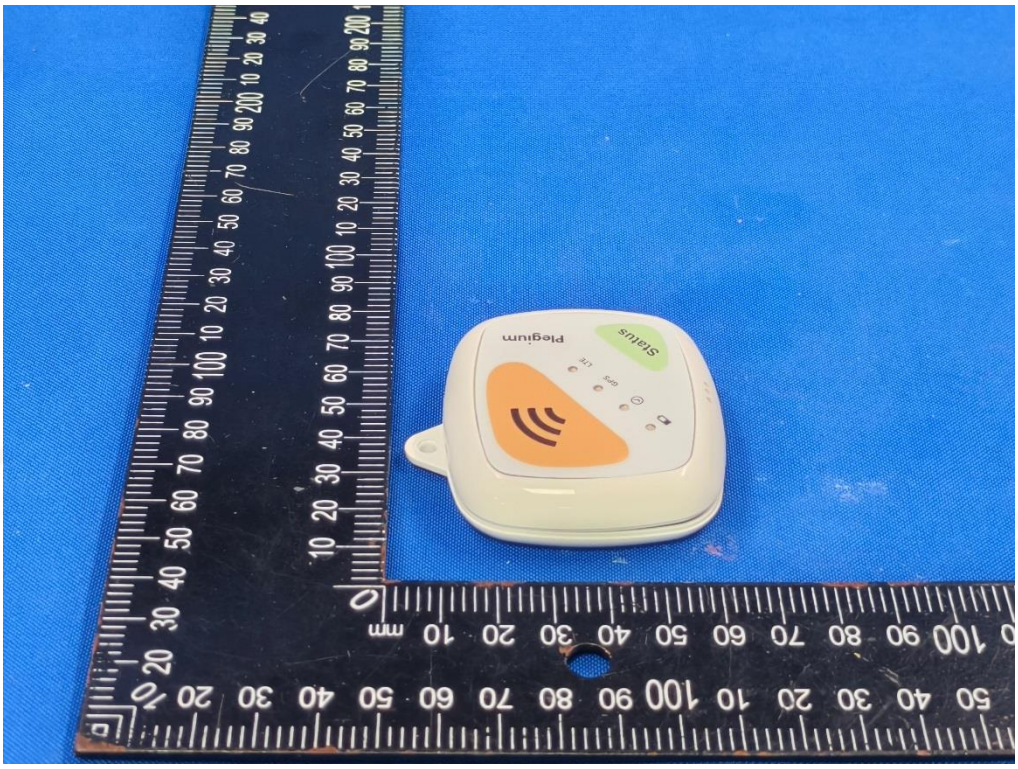

Back side

Top side

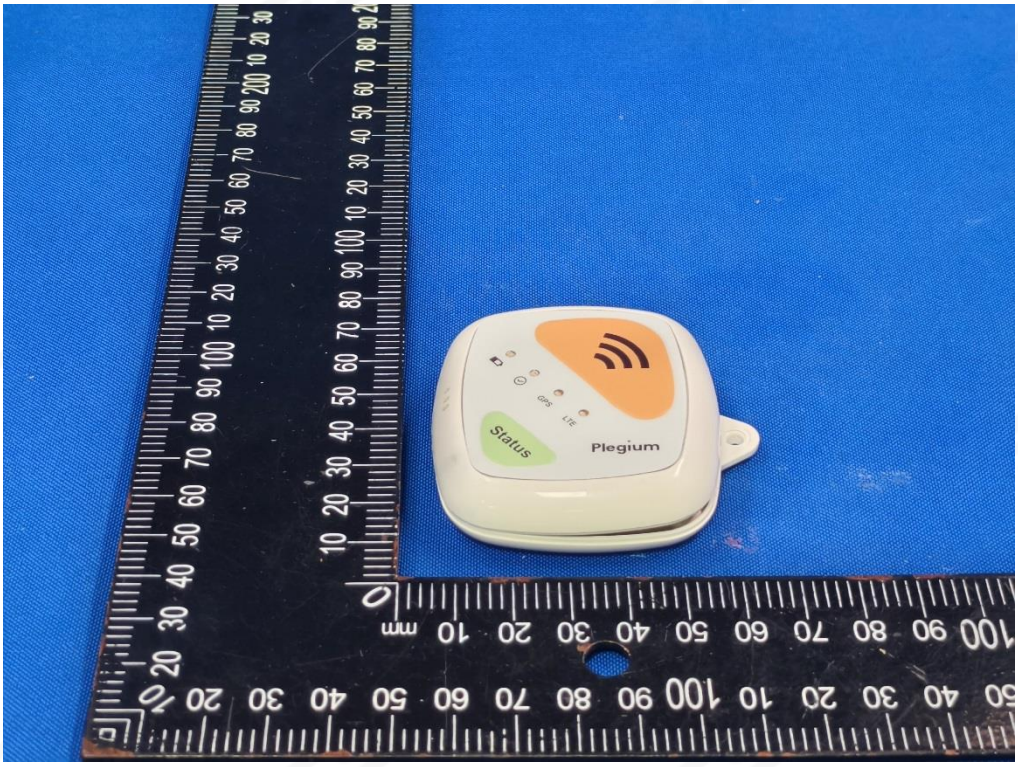



Bottom side

Left side

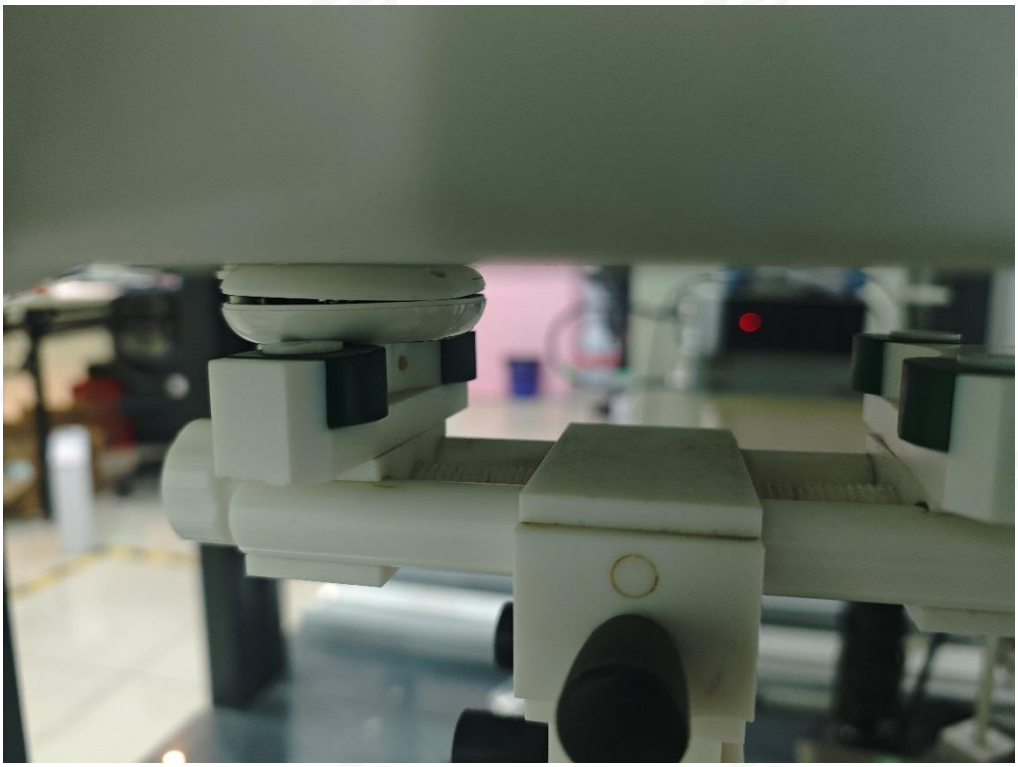



Right side



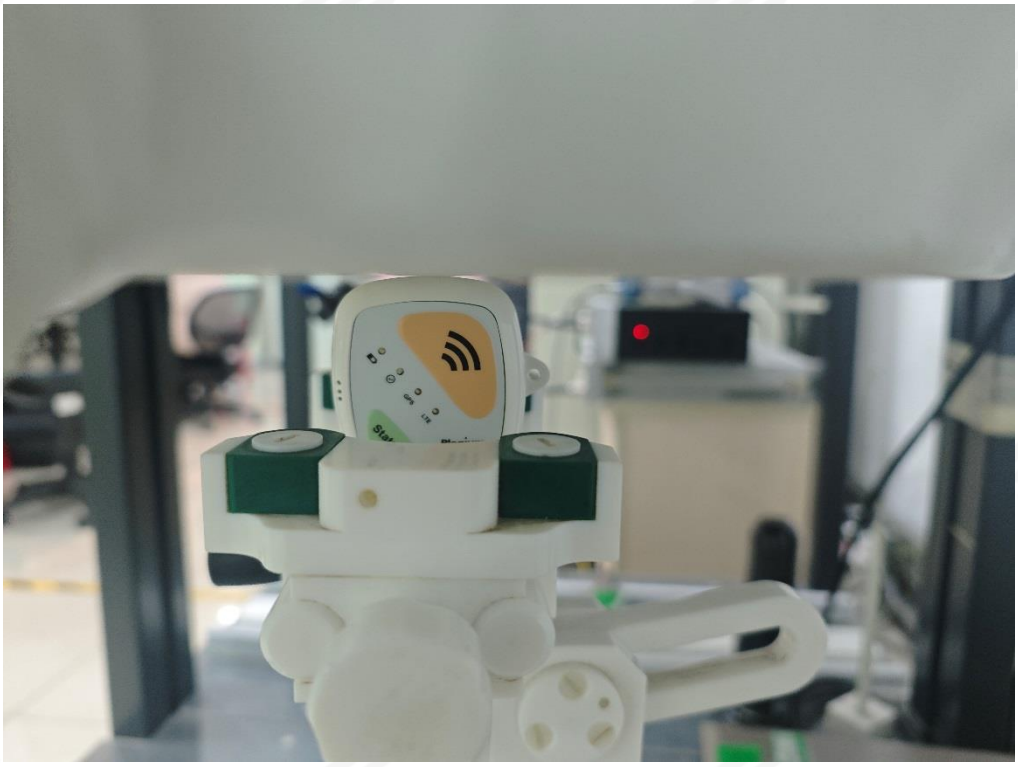
## 10.2 Setup Photo

Body Front side(separation distance is 0mm)

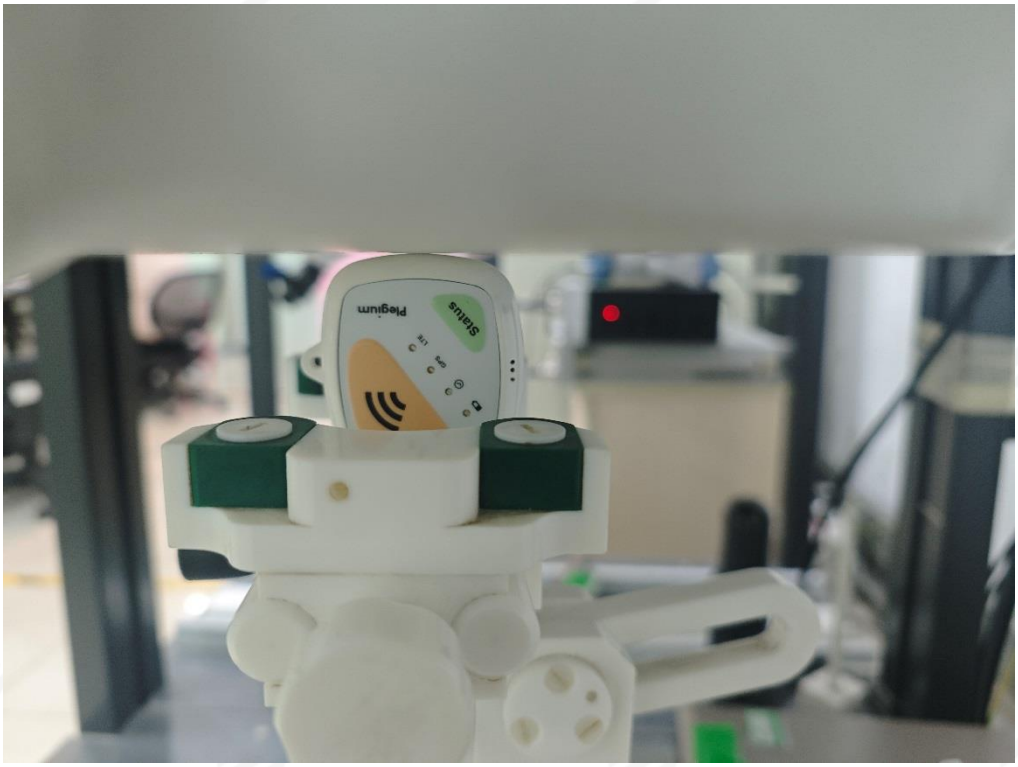


Body Back Side (separation distance is 0mm)

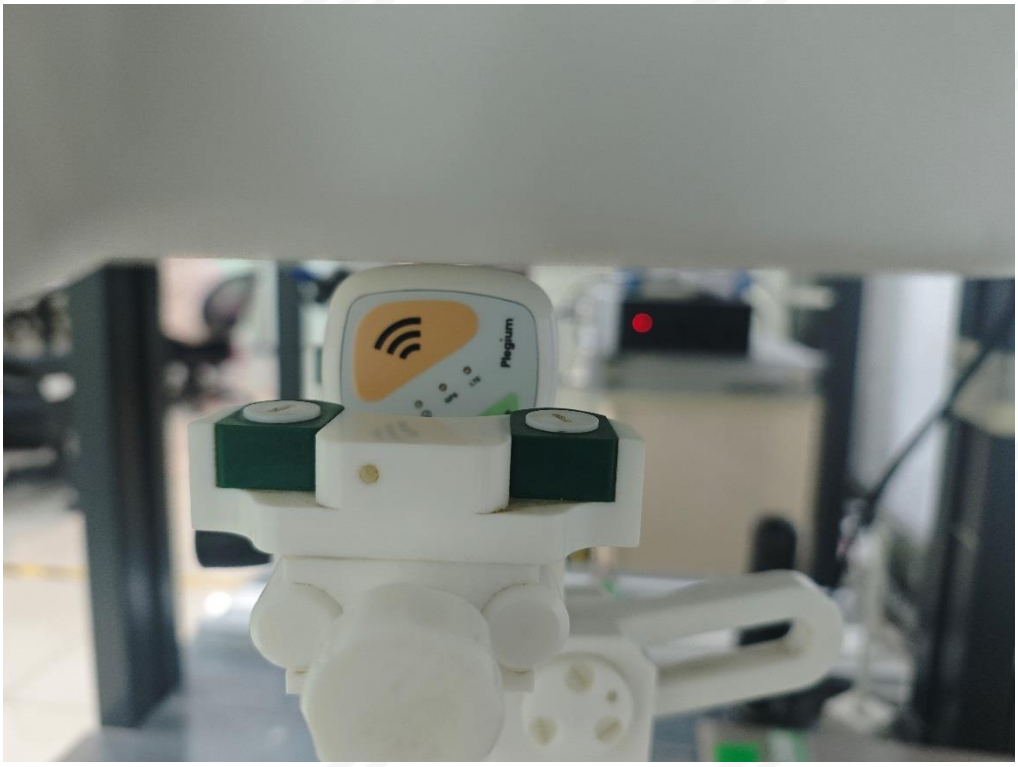
Body Left side(separation distance is 0mm)



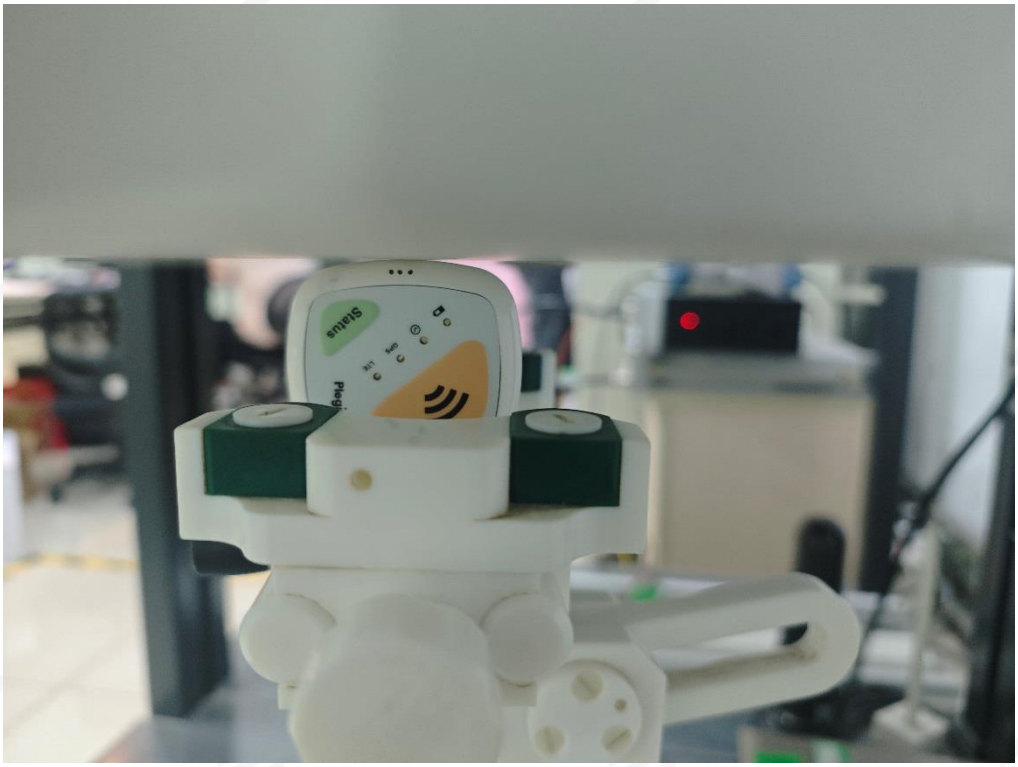
Body Right Side (separation distance is 0mm)



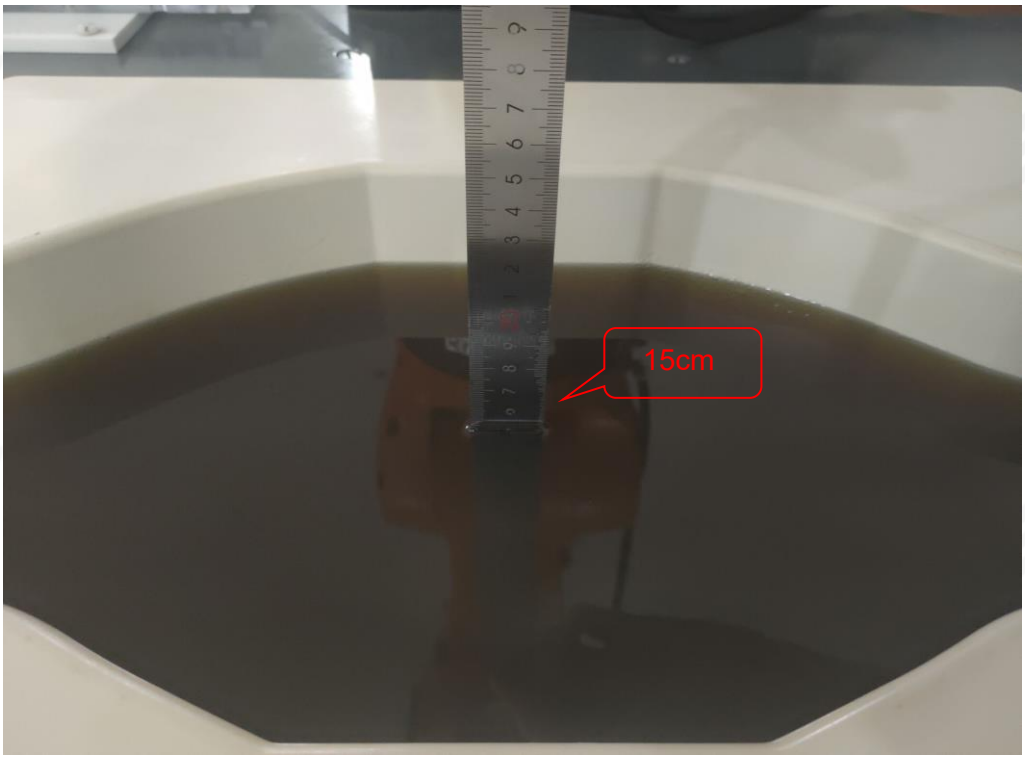
Body Top side(separation distance is 0mm)



Body Bottom Side (separation distance is 0mm)



Liquid depth (15 cm)



# 11. SAR Result Summary

## 11.1 Body SAR

| Band | Mod. | Subcarrier Space (KHz) | RB offset | Test Position | Freq. | Result 1g (W/Kg) | Power Drift(%) | Max. Turn-up Power(dBm) | Meas. Output Power(dBm) | Scaling Factor | Scaled SAR (W/Kg) | Meas. No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LTE Band 2 | QPSK | 15 | 1@0 | Front side | 1860 | 0.442 | 3.16 | 24.00 | 23.86 | 1.033 | 0.456 | / |
| | | 15 | 1@0 | Back Side | 1860 | 0.648 | 3.00 | 24.00 | 23.86 | 1.033 | **0.669** | **1** |
| | | 15 | 1@0 | Back Side | 1880 | 0.612 | -0.97 | 21.50 | 21.42 | 1.019 | 0.623 | / |
| | | 15 | 1@0 | Back Side | 1900 | 0.606 | 2.67 | 22.00 | 21.81 | 1.045 | 0.633 | / |
| | | 15 | 1@0 | Left Side | 1860 | 0.234 | -3.91 | 24.00 | 23.86 | 1.033 | 0.242 | / |
| | | 15 | 1@0 | Right Side | 1860 | 0.205 | 3.48 | 24.00 | 23.86 | 1.033 | 0.212 | / |
| | | 15 | 1@0 | Top Side | 1860 | 0.178 | 2.46 | 24.00 | 23.86 | 1.033 | 0.184 | / |
| | | 15 | 1@0 | Bottom Side | 1860 | 0.156 | 1.89 | 24.00 | 23.86 | 1.033 | 0.161 | / |
| LTE Band 4 | QPSK | 15 | 1@0 | Front side | 1732.5 | 0.359 | -3.34 | 24.00 | 23.84 | 1.038 | 0.372 | / |
| | | 15 | 1@0 | Back Side | 1732.5 | 0.529 | -1.84 | 24.00 | 23.84 | 1.038 | **0.549** | **2** |
| | | 15 | 1@0 | Left Side | 1732.5 | 0.188 | 1.66 | 24.00 | 23.84 | 1.038 | 0.195 | / |
| | | 15 | 1@0 | Right Side | 1732.5 | 0.174 | -3.57 | 24.00 | 23.84 | 1.038 | 0.181 | / |
| | | 15 | 1@0 | Top Side | 1732.5 | 0.125 | 1.07 | 24.00 | 23.84 | 1.038 | 0.130 | / |
| | | 15 | 1@0 | Bottom Side | 1732.5 | 0.119 | -3.71 | 24.00 | 23.84 | 1.038 | 0.123 | / |
| LTE Band 5 | QPSK | 15 | 1@0 | Front side | 836.5 | 0.085 | 2.62 | 24.00 | 23.78 | 1.052 | 0.089 | / |
| | | 15 | 1@0 | Back Side | 836.5 | 0.157 | -0.08 | 24.00 | 23.78 | 1.052 | **0.165** | **3** |
| | | 15 | 1@0 | Left Side | 836.5 | 0.062 | -3.90 | 24.00 | 23.78 | 1.052 | 0.065 | / |
| | | 15 | 1@0 | Right Side | 836.5 | 0.055 | 0.93 | 24.00 | 23.78 | 1.052 | 0.058 | / |
| | | 15 | 1@0 | Top Side | 836.5 | 0.038 | 3.80 | 24.00 | 23.78 | 1.052 | 0.040 | / |
| | | 15 | 1@0 | Bottom Side | 836.5 | 0.031 | -3.43 | 24.00 | 23.78 | 1.052 | 0.033 | / |
| LTE Band 12 | QPSK | 15 | 1@0 | Front side | 707.5 | 0.054 | -0.79 | 24.00 | 23.92 | 1.019 | 0.055 | / |
| | | 15 | 1@0 | Back Side | 707.5 | 0.067 | -2.98 | 24.00 | 23.92 | 1.019 | **0.068** | **4** |
| | | 15 | 1@0 | Left Side | 707.5 | 0.040 | 1.32 | 24.00 | 23.92 | 1.019 | 0.041 | / |
| | | 15 | 1@0 | Right Side | 707.5 | 0.035 | -2.26 | 24.00 | 23.92 | 1.019 | 0.036 | / |
| | | 15 | 1@0 | Top Side | 707.5 | 0.027 | -0.89 | 24.00 | 23.92 | 1.019 | 0.028 | / |
| | | 15 | 1@0 | Bottom Side | 707.5 | 0.022 | 3.60 | 24.00 | 23.92 | 1.019 | 0.022 | / |
| LTE Band 13 | QPSK | 15 | 1@0 | Front side | 782 | 0.051 | -3.82 | 24.00 | 23.78 | 1.052 | 0.054 | / |
| | | 15 | 1@0 | Back Side | 782 | 0.065 | -1.15 | 24.00 | 23.78 | 1.052 | **0.068** | **5** |
| | | 15 | 1@0 | Left Side | 782 | 0.036 | -3.81 | 24.00 | 23.78 | 1.052 | 0.038 | / |
| | | 15 | 1@0 | Right Side | 782 | 0.029 | 0.51 | 24.00 | 23.78 | 1.052 | 0.031 | / |
| | | 15 | 1@0 | Top Side | 782 | 0.019 | 2.27 | 24.00 | 23.78 | 1.052 | 0.020 | / |
| | | 15 | 1@0 | Bottom Side | 782 | 0.015 | -0.26 | 24.00 | 23.78 | 1.052 | 0.016 | / |
| LTE Band 17 | QPSK | 15 | 1@0 | Front side | 710 | 0.033 | -0.02 | 24.00 | 23.95 | 1.012 | 0.033 | / |
| | | 15 | 1@0 | Back Side | 710 | 0.056 | -3.04 | 24.00 | 23.95 | 1.012 | **0.057** | **6** |
| | | 15 | 1@0 | Left Side | 710 | 0.021 | 2.40 | 24.00 | 23.95 | 1.012 | 0.021 | / |
| | | 15 | 1@0 | Right Side | 710 | 0.018 | -3.65 | 24.00 | 23.95 | 1.012 | 0.018 | / |
| | | 15 | 1@0 | Top Side | 710 | 0.010 | -3.99 | 24.00 | 23.95 | 1.012 | 0.010 | / |
| | | 15 | 1@0 | Bottom Side | 710 | 0.009 | -1.27 | 24.00 | 23.95 | 1.012 | 0.009 | / |

| Band | Mod. | Subcarrier Space (KHz) | RB offset | Test Position | Freq. | Result 1g (W/Kg) | Power Drift(%) | Max. Turn-up Power(dBm) | Meas. Output Power(dBm) | Scaling Factor | Scaled SAR (W/Kg) | Meas. No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LTE Band 26 | QPSK | 15 | 1@0 | Front side | 728 | 0.333 | -0.02 | 24.00 | 23.68 | 1.076 | 0.358 | / |
| | | 15 | 1@0 | Back Side | 728 | 0.395 | -0.21 | 24.00 | 23.68 | 1.076 | **0.425** | **7** |
| | | 15 | 1@0 | Left Side | 728 | 0.214 | 1.14 | 24.00 | 23.68 | 1.076 | 0.230 | / |
| | | 15 | 1@0 | Right Side | 728 | 0.189 | -2.38 | 24.00 | 23.68 | 1.076 | 0.203 | / |
| | | 15 | 1@0 | Top Side | 728 | 0.115 | -0.74 | 24.00 | 23.68 | 1.076 | 0.124 | / |
| | | 15 | 1@0 | Bottom Side | 728 | 0.102 | 3.85 | 24.00 | 23.68 | 1.076 | 0.110 | / |
| LTE Band 66 | QPSK | 15 | 1@0 | Front side | 1745 | 0.218 | -2.37 | 24.00 | 23.95 | 1.012 | 0.221 | / |
| | | 15 | 1@0 | Back Side | 1745 | 0.246 | -0.71 | 24.00 | 23.95 | 1.012 | **0.249** | **8** |
| | | 15 | 1@0 | Left Side | 1745 | 0.148 | -2.53 | 24.00 | 23.95 | 1.012 | 0.150 | / |
| | | 15 | 1@0 | Right Side | 1745 | 0.123 | -2.81 | 24.00 | 23.95 | 1.012 | 0.124 | / |
| | | 15 | 1@0 | Top Side | 1745 | 0.098 | 0.63 | 24.00 | 23.95 | 1.012 | 0.099 | / |
| | | 15 | 1@0 | Bottom Side | 1745 | 0.087 | 1.42 | 24.00 | 23.95 | 1.012 | 0.088 | / |

Note:

1. The test separation of all above table is 0mm.
2. Per KDB 447498 D04, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
3. When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The “Portable Hotspot” feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

# 12. Equipment List

| Kind of Equipment | Manufacturer | Type No. | Serial No. | Last Calibration | Calibrated Until |
|---|---|---|---|---|---|
| 750MHz Dipole | MVG | SID750 | SN 30/14 DIP0G750-331 | 2023.07.04 | 2026.07.03 |
| 835MHz Dipole | MVG | SID835 | SN 30/14 DIP0G835-332 | 2023.07.04 | 2026.07.03 |
| 1800MHz Dipole | MVG | SID1800 | 5023-DIP1G800-747 | 2023.12.20 | 2026.12.19 |
| 1900MHz Dipole | MVG | SID1900 | SN 30/14 DIP1G900-333 | 2023.09.14 | 2026.09.13 |
| E-Field Probe | MVG | SSE2 | SN 08/21 EPGO352 | 2024.09.18 | 2025.09.17 |
| Dielectric Probe Kit | MVG | SCLMP | SN 32/14 OCPG67 | 2024.09.18 | 2025.09.17 |
| Antenna | MVG | ANTA3 | SN 07/13 ZNTA52 | N/A | N/A |
| Phantom1 | MVG | SAM | SN 32/14 SAM115 | N/A | N/A |
| Phantom3 | MVG | SAM | SN 21/21 ELLI48 | N/A | N/A |
| Phone holder | MVG | N/A | SN 32/14 MSH97 | N/A | N/A |
| Laptop holder | MVG | N/A | SN 32/14 LSH29 | N/A | N/A |
| Attenuator | Agilent | HXT-10-8-SMA | 240327017 | 2025-02-22 | 2026-02-21 |
| Directional coupler | Xi'an Xingbo | XBOH-OA08-20dB | 211123-4-3 | 2025-02-22 | 2026-02-21 |
| Network Analyzer | Agilent | E5071C | MY46520378 | 2024-09-25 | 2025-09-26 |
| Multi Meter | Keithley | Multi Meter 2000 | 4050073 | 2024-09-25 | 2025-09-26 |
| Signal Generator | Agilent | N5182A | MY50140530 | 2024-09-25 | 2025-09-26 |
| Wireless Communication Test Set | Agilent | 8960-E5515C | MY48360751 | 2025-02-22 | 2026-02-21 |
| Wireless Communication Test Set | R&S | CMW500 | 156324 | 2024-09-25 | 2025-09-26 |
| Power Amplifier | DESAY | ZHL-42W | 9638 | 2024-09-25 | 2025-09-26 |
| Power Meter | R&S | NRP | 100510 | 2024-09-25 | 2025-09-26 |
| Power Sensor | R&S | NRP-Z11 | 101919 | 2024-09-25 | 2025-09-26 |
| Power Sensor | Keysight | U2021XA | MY56280002 | 2024-09-25 | 2025-09-26 |
| Temperature hygrometer | SuWei | SW-108 | N/A | 2024.10.15 | 2025.10.14 |
| Thermograph | Elitech | RC-4 | S/N EF7176501537 | 2024.10.15 | 2025.10.14 |

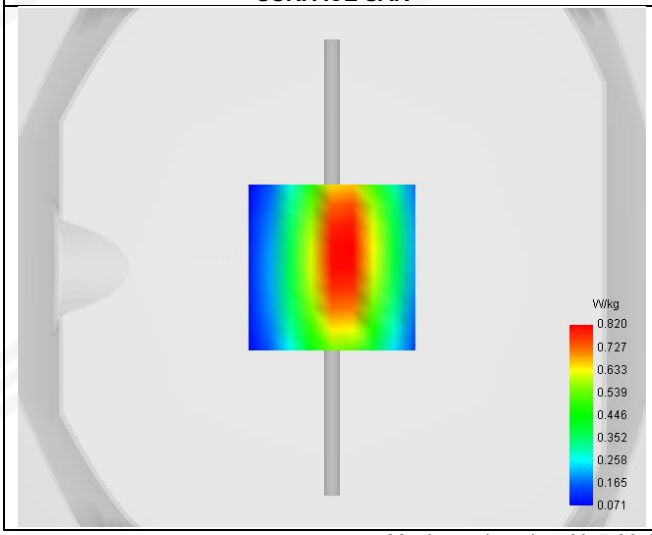
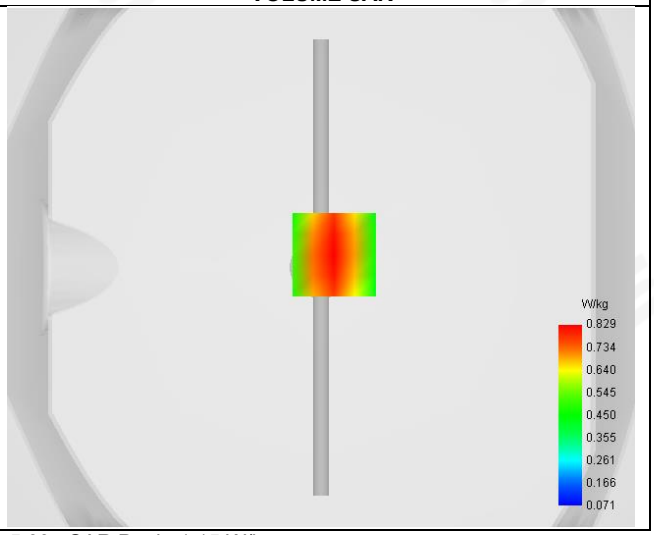
# Appendix A. System Validation Plots

## System Performance Check Data (750MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-07-16

**Experimental conditions.**

| Device Position | Validation plane |
|---|---|
| Band | 750 MHz |
| Channels | - |
| Signal | CW |
| Frequency (MHz) | 750 |
| Relative permittivity | 43.09 |
| Conductivity (S/m) | 0.90 |
| Probe | SN 08/21 EPGO352 |
| ConvF | 1.56 |
| Crest factor: | 1:1 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

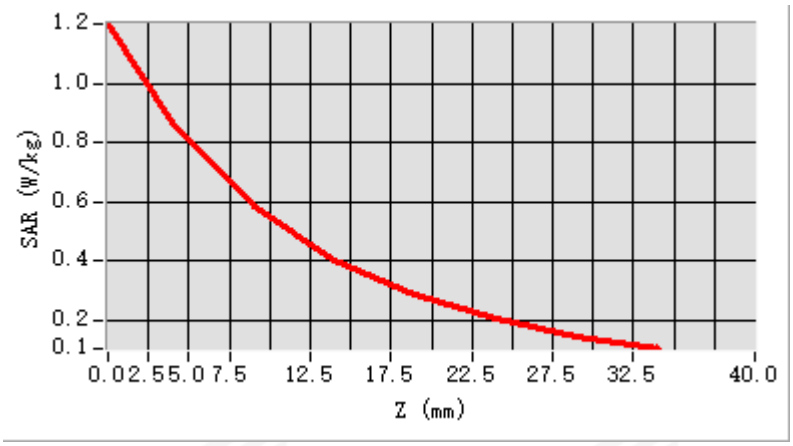


Maximum location: X=5.00, Y=5.00 ; SAR Peak: 1.15 W/kg

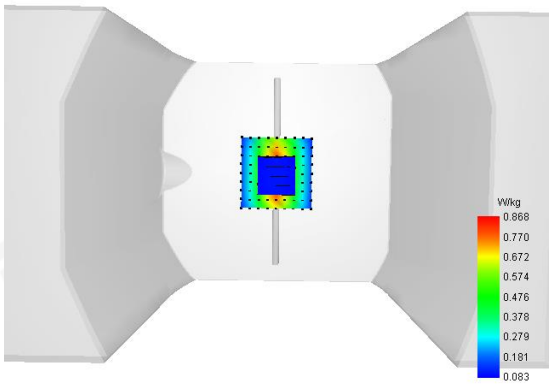
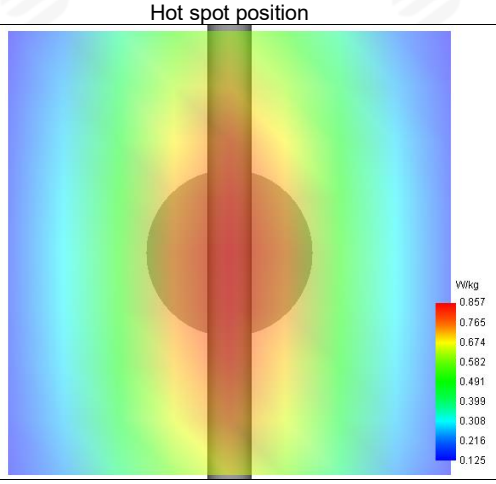
## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.553 |
| SAR 1g (W/Kg) | 0.853 |
| Horizontal validation criteria: minimum distance (mm) | 8.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 72.024332 |

## E. Z Axis Scan




## F. 3D Image

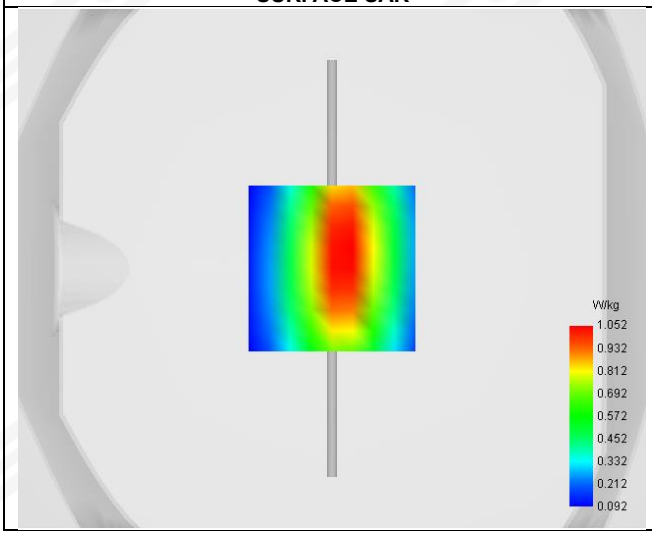
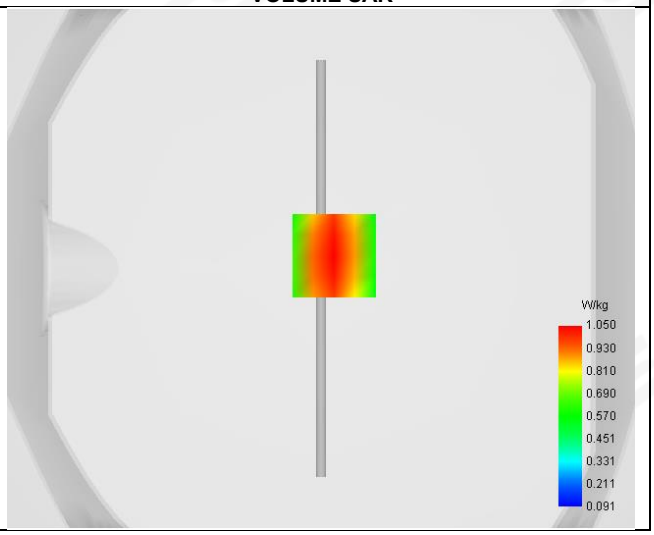
| 3D screen shot | Hot spot position |
|---|---|
|  |  |

## System Performance Check Data (835MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-07-17

### Experimental conditions.

| Device Position | Validation plane |
|---|---|
| Band | 835 MHz |
| Channels | - |
| Signal | CW |
| Frequency (MHz) | 835 |
| Relative permittivity | 41.10 |
| Conductivity (S/m) | 0.94 |
| Probe | SN 08/21 EPGO352 |
| ConvF | 1.44 |
| Crest factor: | 1:1 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

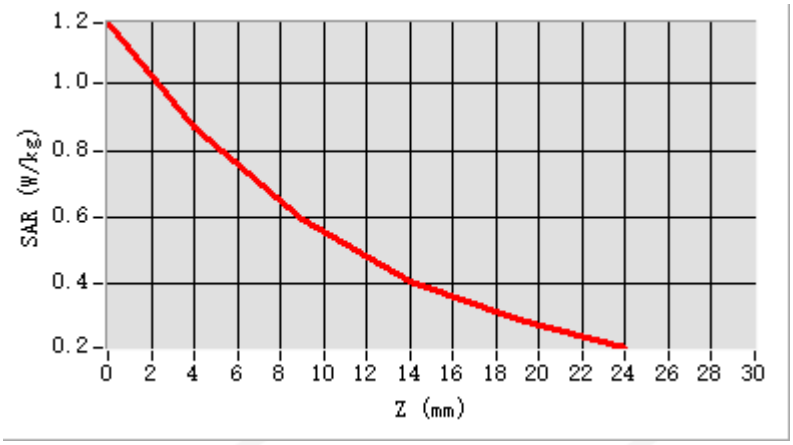


Maximum location: X=5.00, Y=5.00 ; SAR Peak: 1.43 W/kg

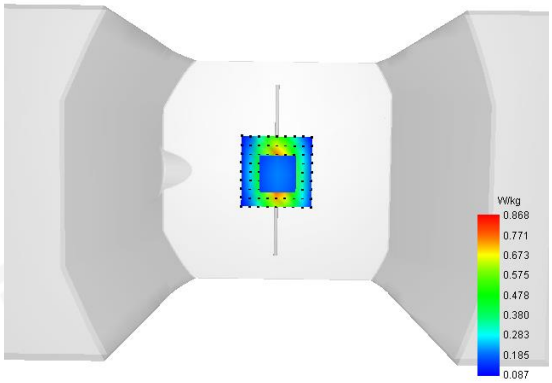
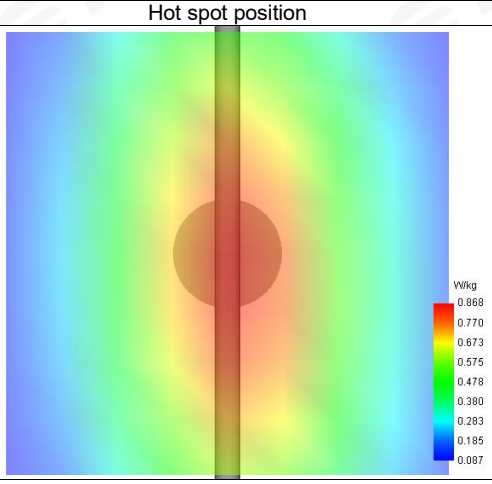
## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 0.661 |
| SAR 1g (W/Kg) | 1.005 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 67.714282 |

## E. Z Axis Scan




## F. 3D Image

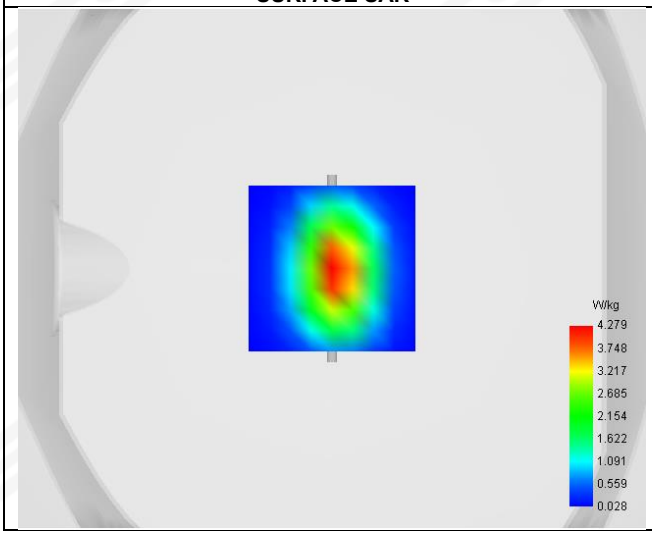
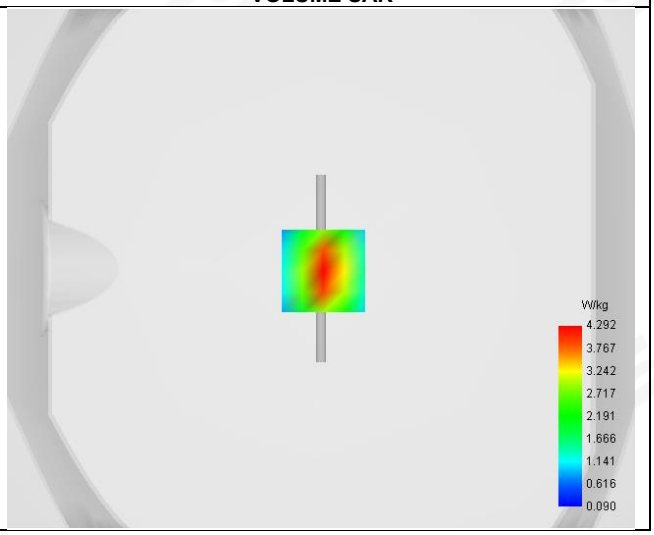
| 3D screen shot | Hot spot position |
|---|---|
|  |  |

## System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-07-17

**Experimental conditions.**

| Device Position | Validation plane |
|---|---|
| Band | 1800 MHz |
| Channels | - |
| Signal | CW |
| Frequency (MHz) | 1800 |
| Relative permittivity | 40.24 |
| Conductivity (S/m) | 1.34 |
| Probe | SN 08/21 EPGO352 |
| ConvF | 1.58 |
| Crest factor: | 1:1 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

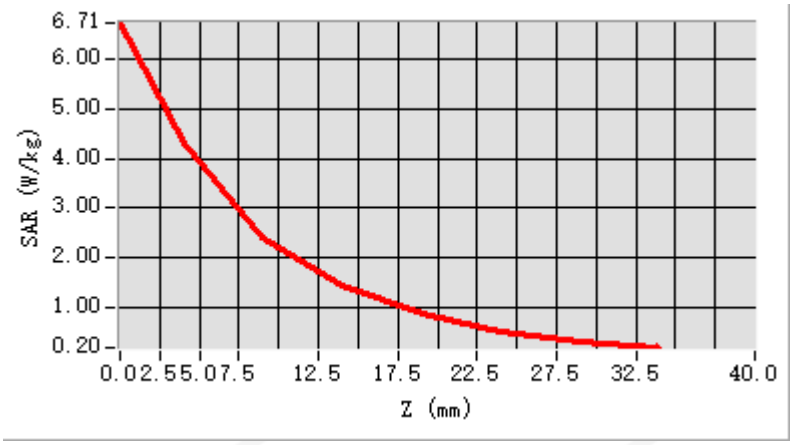


Maximum location: X=1.00, Y=-1.00 ; SAR Peak: 6.66 W/kg

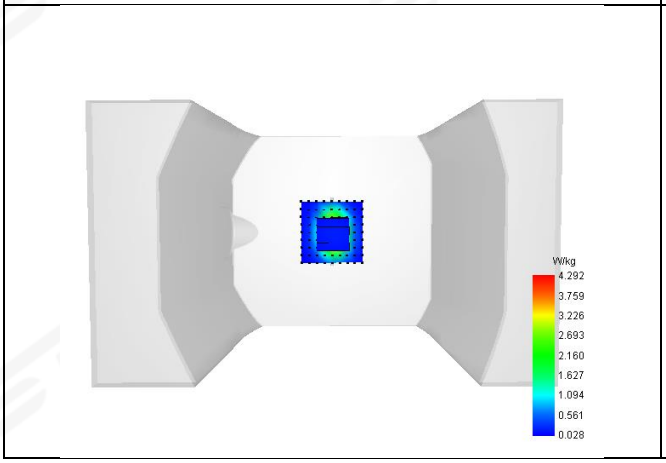
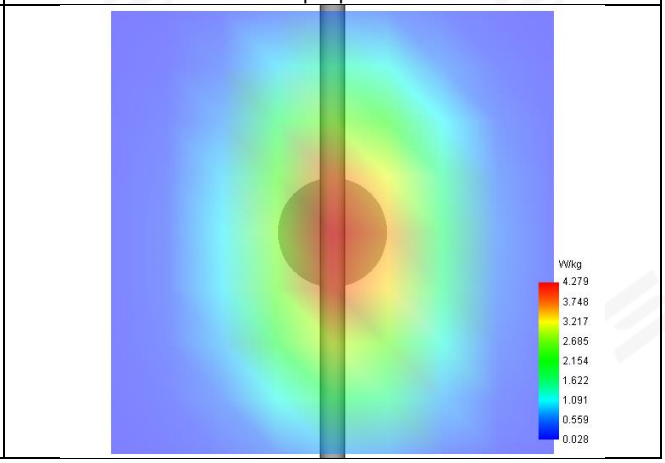
## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 1.897 |
| SAR 1g (W/Kg) | 3.663 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 56.649833 |

## E. Z Axis Scan




## F. 3D Image

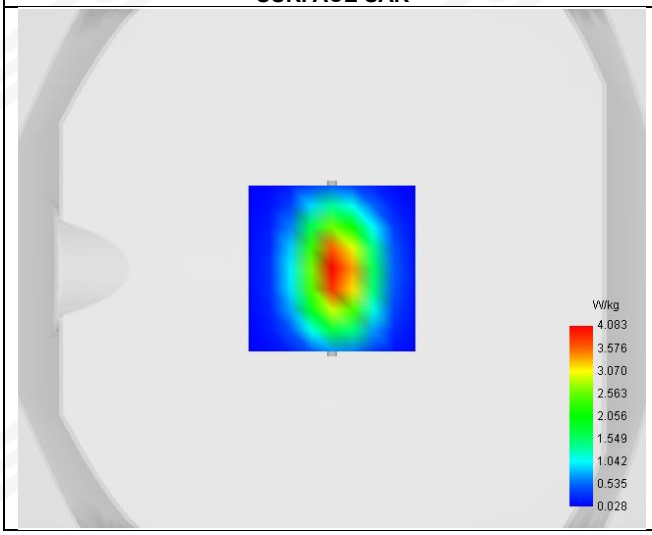
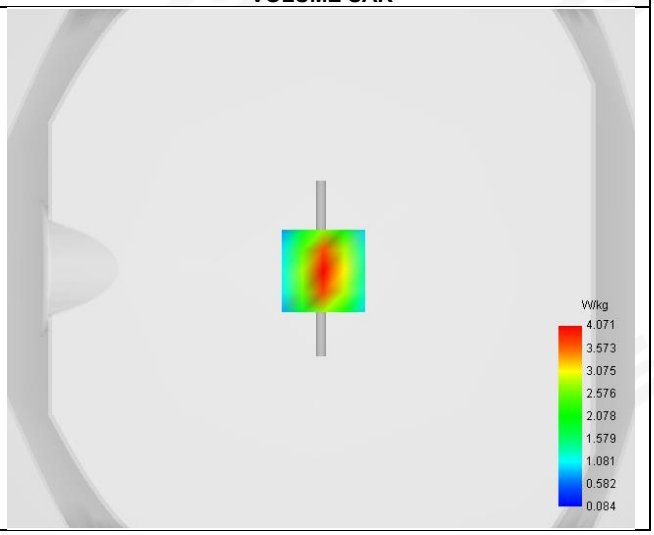
| 3D screen shot | Hot spot position |
|---|---|
|  |  |

## System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-07-17

### Experimental conditions.

| Device Position | Validation plane |
|---|---|
| Band | 1900 MHz |
| Channels | - |
| Signal | CW |
| Frequency (MHz) | 1900 |
| Relative permittivity | 40.09 |
| Conductivity (S/m) | 1.42 |
| Probe | SN 08/21 EPGO352 |
| ConvF | 1.72 |
| Crest factor: | 1:1 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |

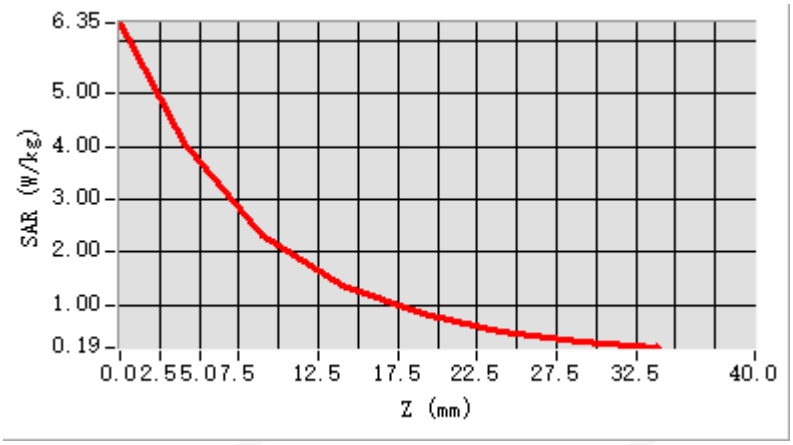


Maximum location: X=1.00, Y=-1.00 ; SAR Peak: 6.29 W/kg

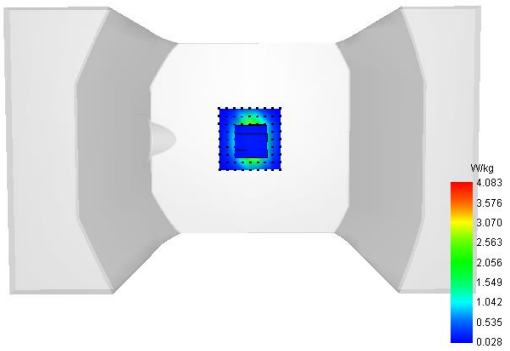
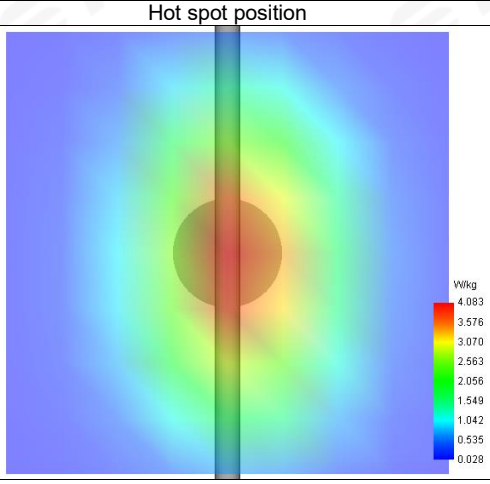
## D. SAR 1g & 10g

| | |
|---|---|
| SAR 10g (W/Kg) | 1.908 |
| SAR 1g (W/Kg) | 4.042 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 56.851180 |

## E. Z Axis Scan



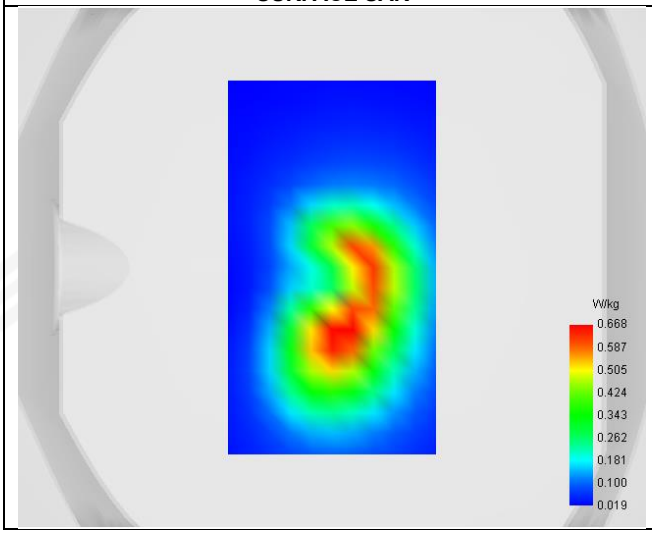
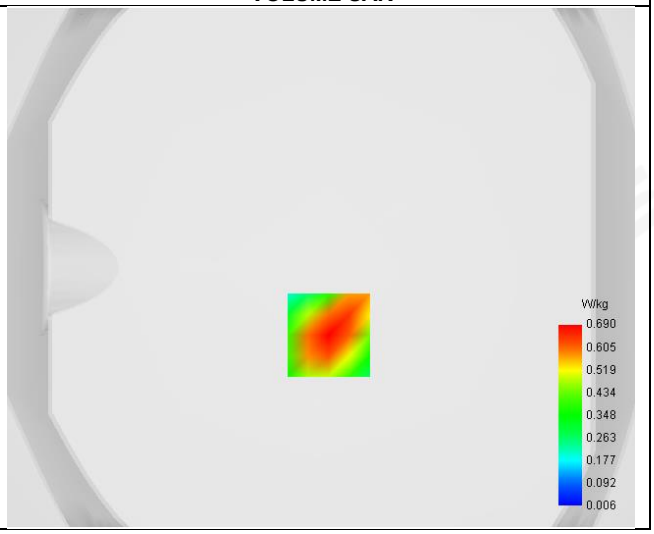

## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

# Appendix B. SAR Test Plots

**Plot 1: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-17 |
| ConvF | 1.72 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 2 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 1860 |
| Relative permittivity (real part) | 40.70 |
| Conductivity (S/m) | 1.42 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



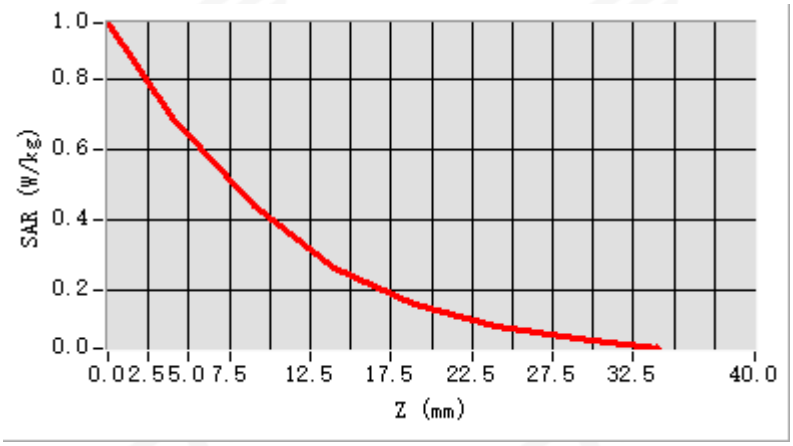
Maximum location: X=3.00, Y=-26.00 ; SAR Peak: 0.97 W/kg

## D. SAR 1g & 10g

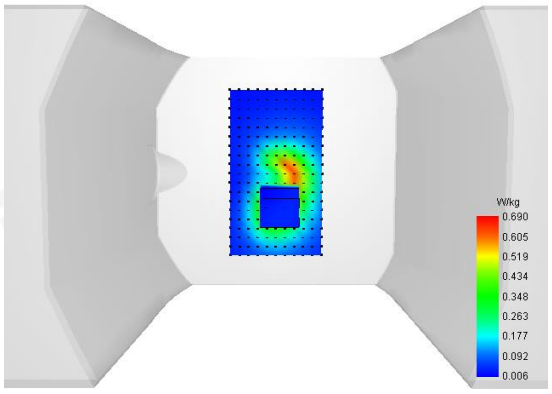
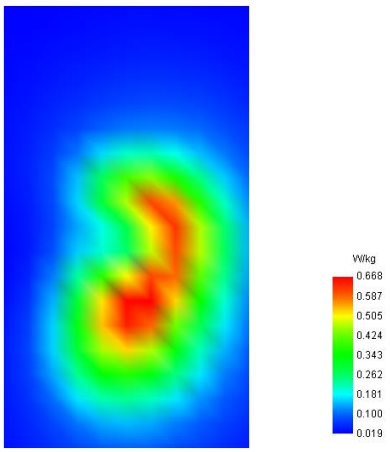
| | |
|---|---|
| SAR 10g (W/Kg) | 0.382 |
| SAR 1g (W/Kg) | 0.648 |
| Horizontal validation criteria: minimum distance (mm) | 17.888544 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 64.264366 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.959 | 0.690 | 0.444 | 0.267 | 0.165 | 0.102 | 0.063 |

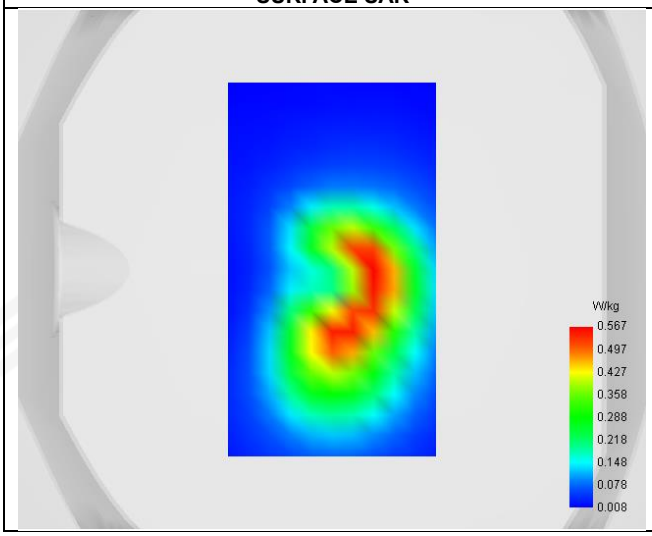
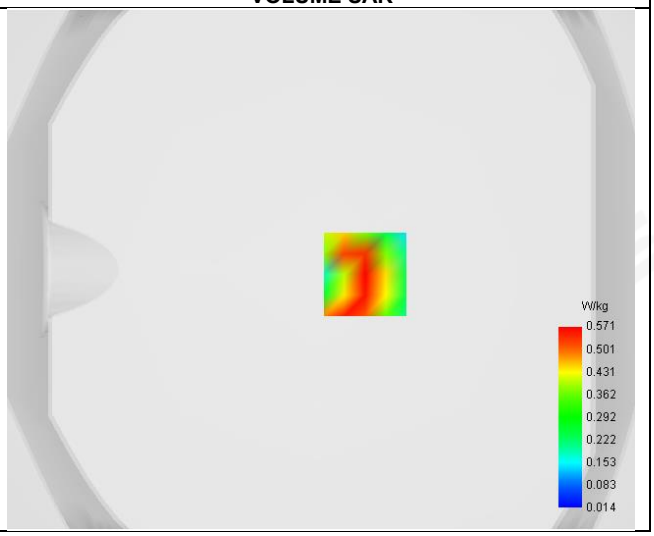



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 2: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-17 |
| ConvF | 1.58 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 4 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 1732.5 |
| Relative permittivity (real part) | 40.90 |
| Conductivity (S/m) | 1.34 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |





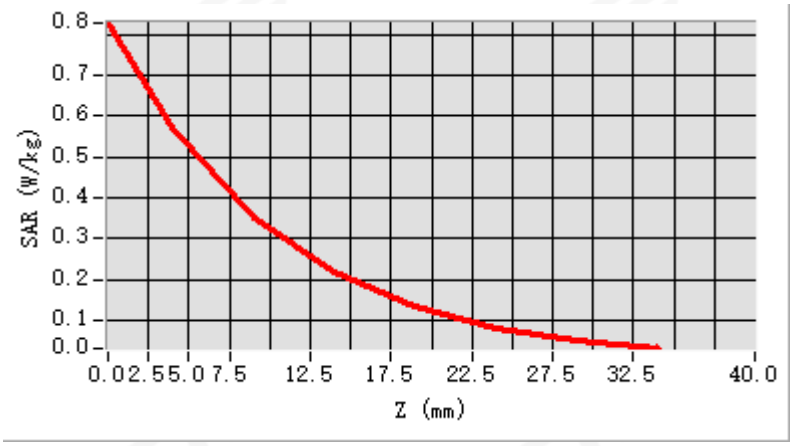
Maximum location: X=17.00, Y=-2.00 ; SAR Peak: 0.82 W/kg

## D. SAR 1g & 10g

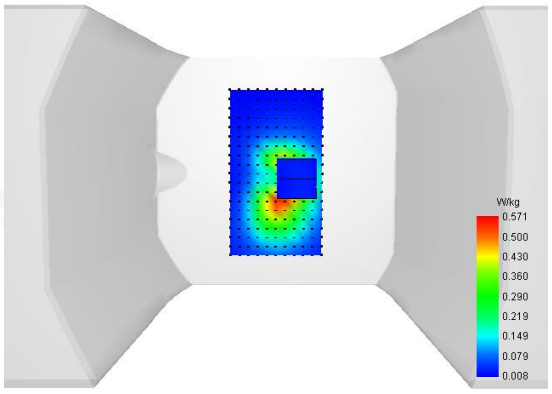
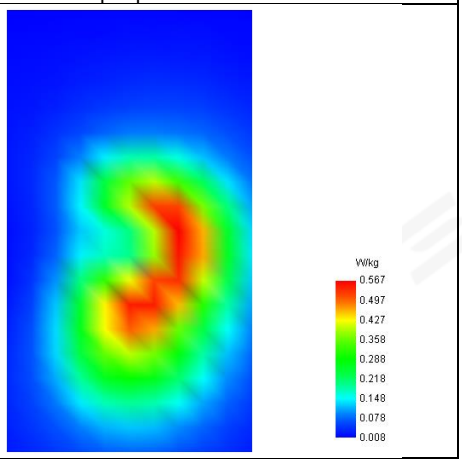
| | |
|---|---|
| SAR 10g (W/Kg) | 0.298 |
| SAR 1g (W/Kg) | 0.529 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 62.057611 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.827 | 0.571 | 0.353 | 0.217 | 0.133 | 0.082 | 0.051 |

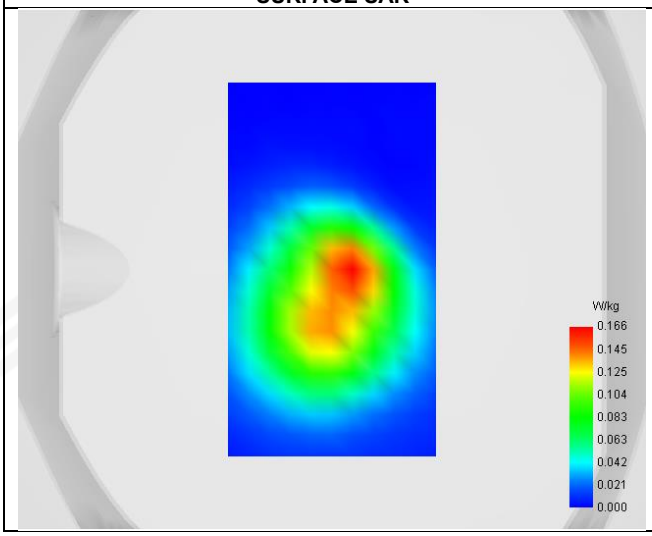
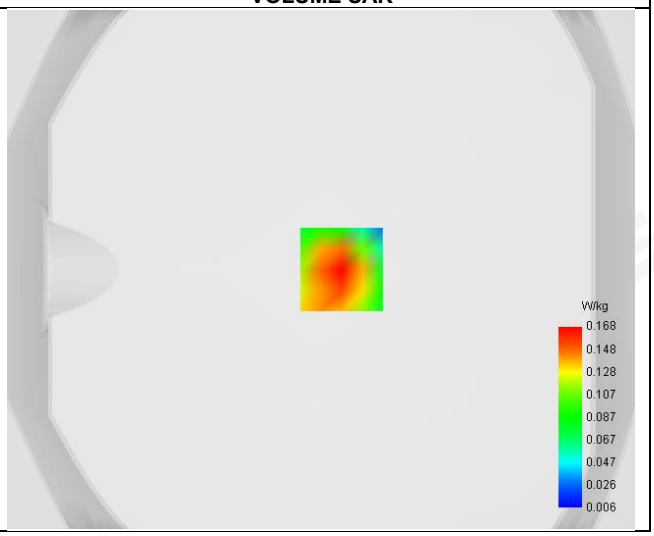



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 3: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-17 |
| ConvF | 1.44 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 5 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 836.5 |
| Relative permittivity (real part) | 41.04 |
| Conductivity (S/m) | 0.92 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



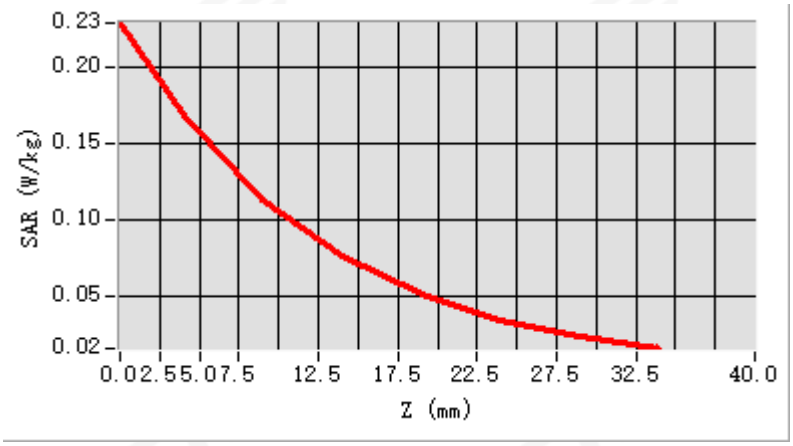
Maximum location: X=8.00, Y=0.00 ; SAR Peak: 0.23 W/kg

## D. SAR 1g & 10g

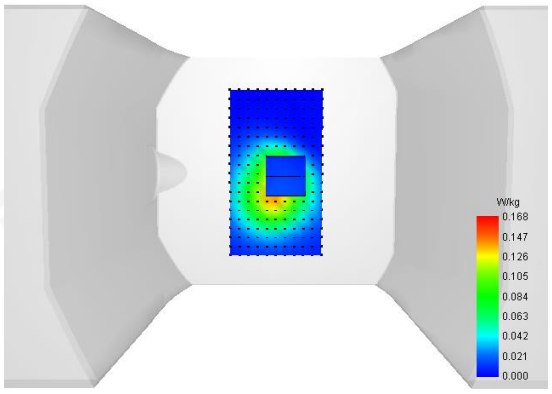
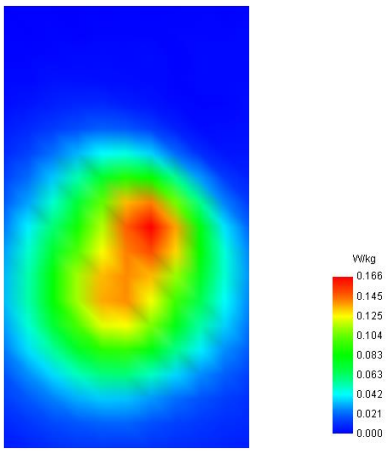
| | |
|---|---|
| SAR 10g (W/Kg) | 0.097 |
| SAR 1g (W/Kg) | 0.157 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 67.455659 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.228 | 0.168 | 0.113 | 0.076 | 0.051 | 0.034 | 0.023 |

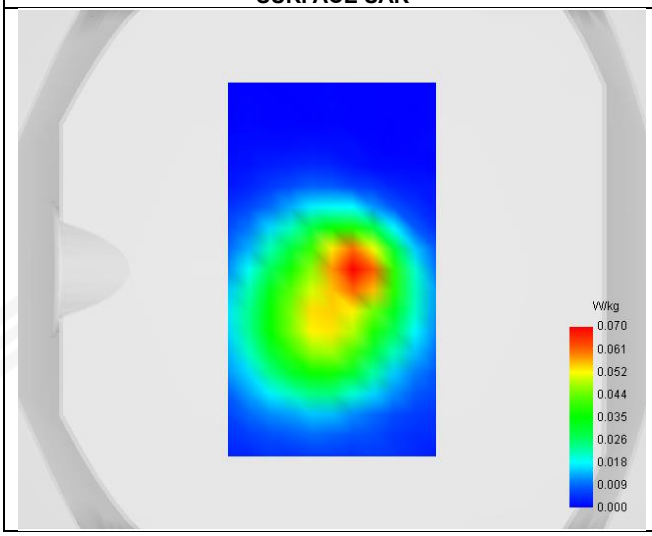
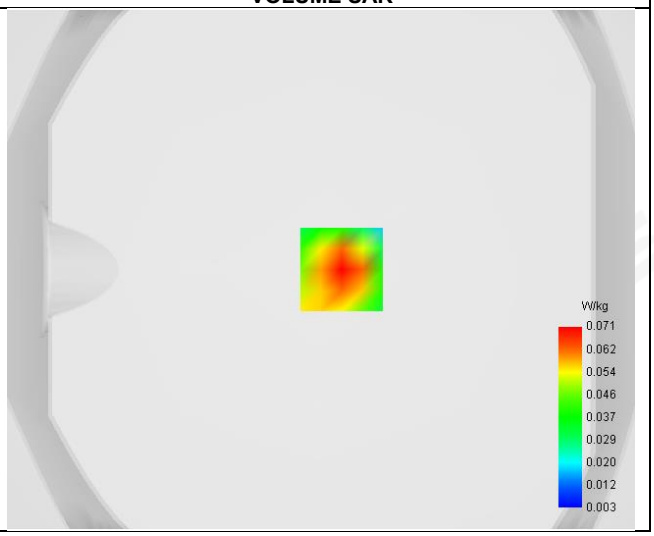



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 4: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-16 |
| ConvF | 1.56 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 12 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 707.5 |
| Relative permittivity (real part) | 43.01 |
| Conductivity (S/m) | 0.85 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



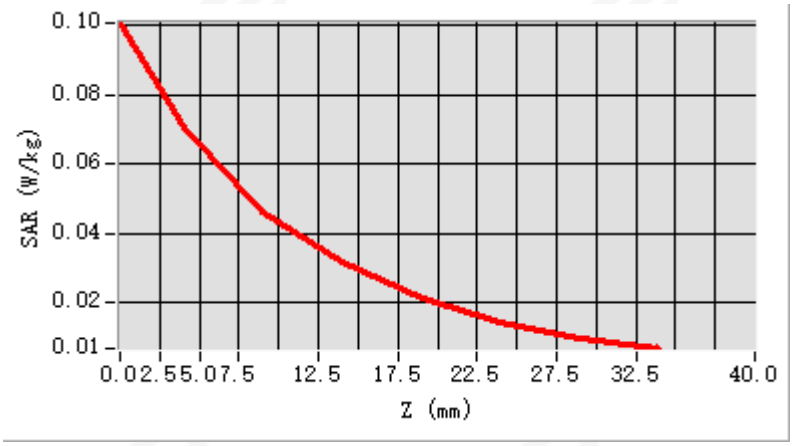
Maximum location: X=8.00, Y=0.00 ; SAR Peak: 0.10 W/kg

## D. SAR 1g & 10g

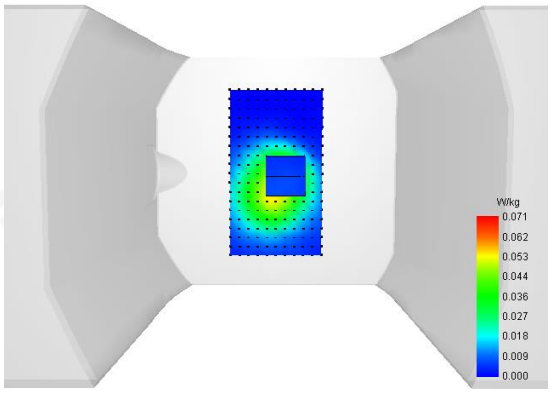
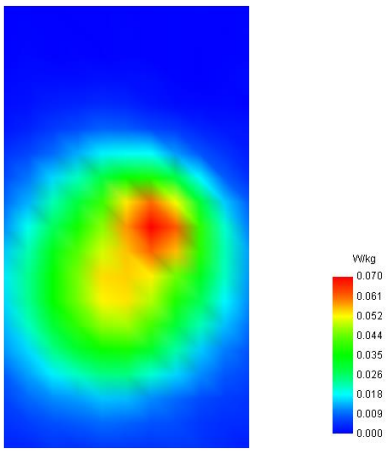
| | |
|---|---|
| SAR 10g (W/Kg) | 0.041 |
| SAR 1g (W/Kg) | 0.067 |
| Horizontal validation criteria: minimum distance (mm) | 17.888544 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 65.091063 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.101 | 0.071 | 0.046 | 0.032 | 0.022 | 0.015 | 0.010 |

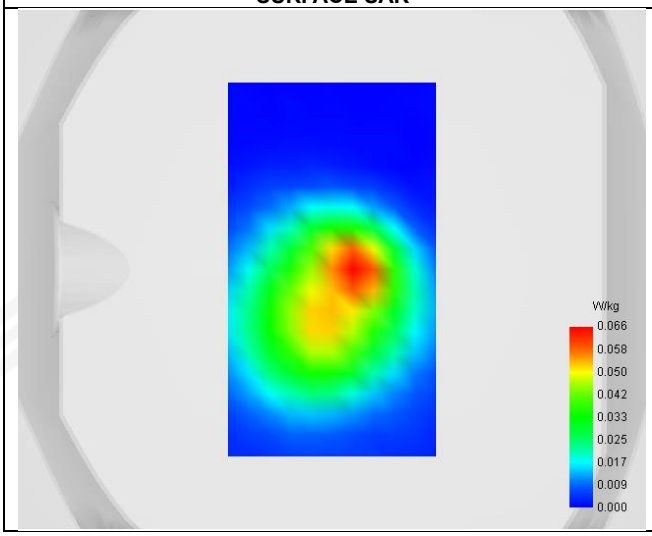
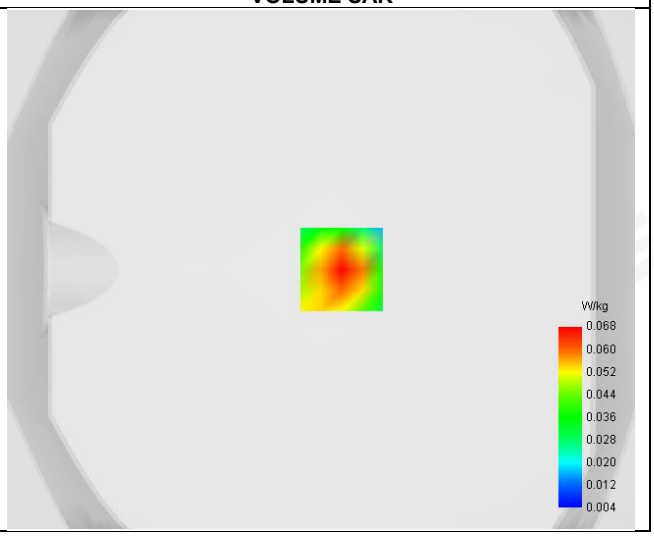



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 5: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-16 |
| ConvF | 1.44 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 13 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 782 |
| Relative permittivity (real part) | 42.79 |
| Conductivity (S/m) | 0.86 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



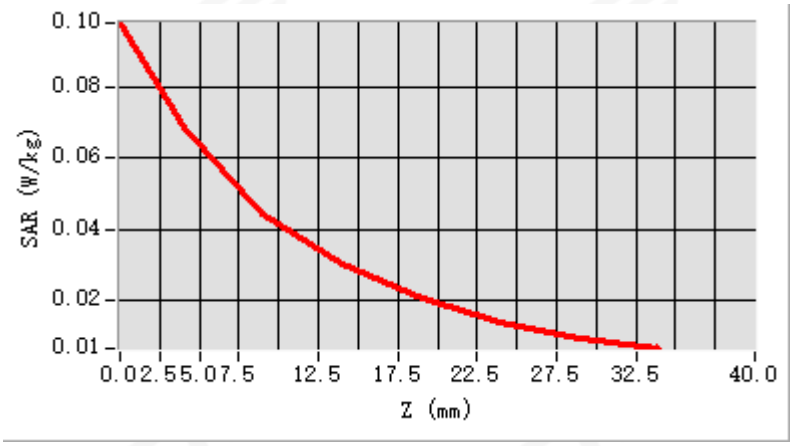
Maximum location: X=8.00, Y=0.00 ; SAR Peak: 0.10 W/kg

## D. SAR 1g & 10g

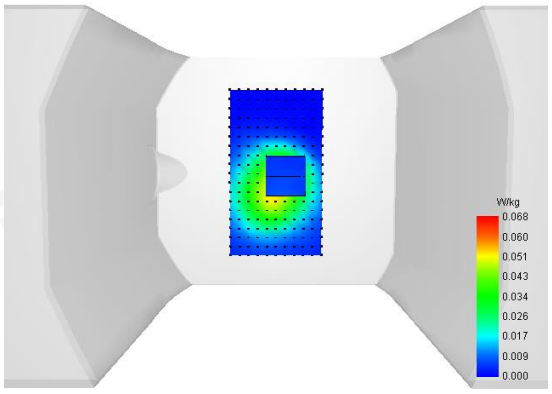
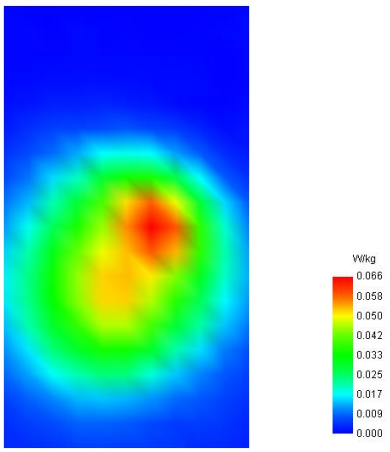
| | |
|---|---|
| SAR 10g (W/Kg) | 0.038 |
| SAR 1g (W/Kg) | 0.065 |
| Horizontal validation criteria: minimum distance (mm) | 17.888544 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 64.330131 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.098 | 0.068 | 0.044 | 0.030 | 0.020 | 0.014 | 0.009 |

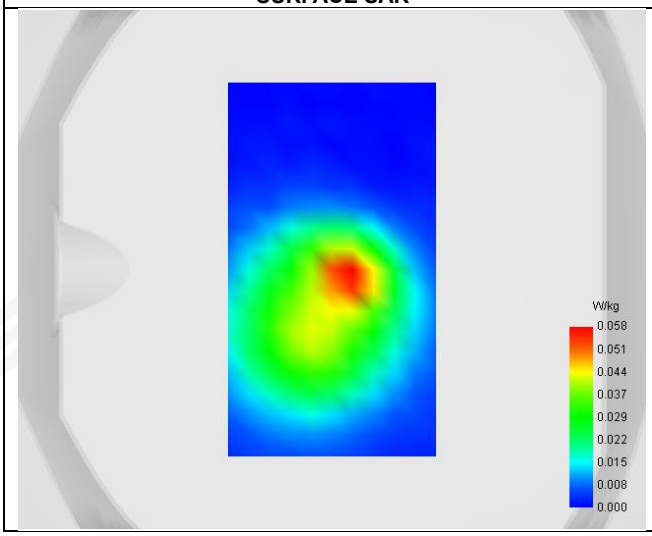
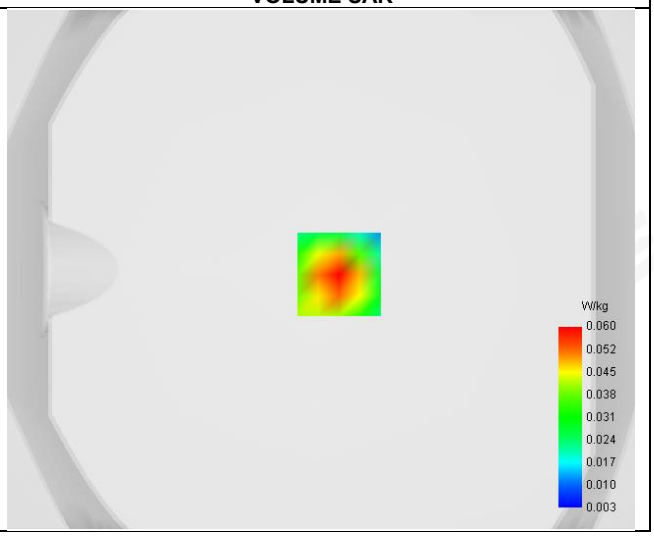



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 6: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-16 |
| ConvF | 1.56 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | LTE band 17 |
| Signal | Cat-NB LTE (Crest factor: 1.0) |
| Frequency (MHz) | 710 |
| Relative permittivity (real part) | 42.80 |
| Conductivity (S/m) | 0.90 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



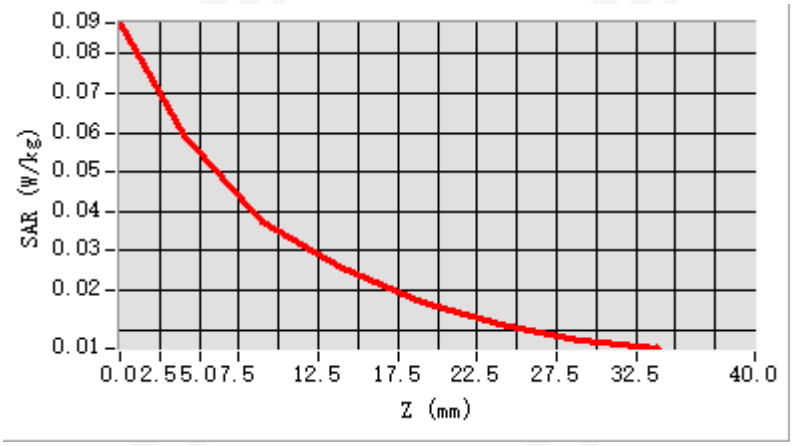
Maximum location: X=7.00, Y=-2.00 ; SAR Peak: 0.09 W/kg

## D. SAR 1g & 10g

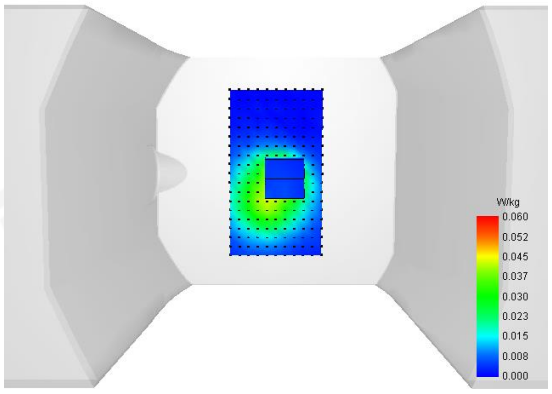
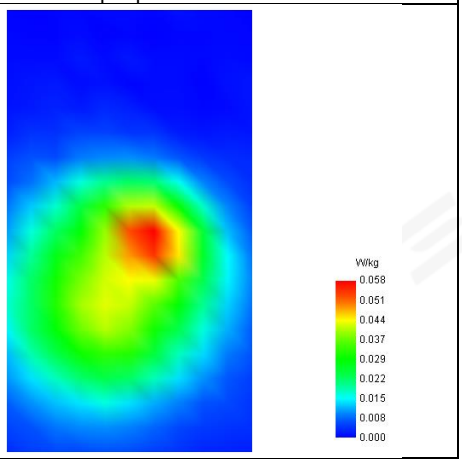
| | |
|---|---|
| SAR 10g (W/Kg) | 0.033 |
| SAR 1g (W/Kg) | 0.056 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 62.468735 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.088 | 0.060 | 0.037 | 0.026 | 0.017 | 0.011 | 0.008 |

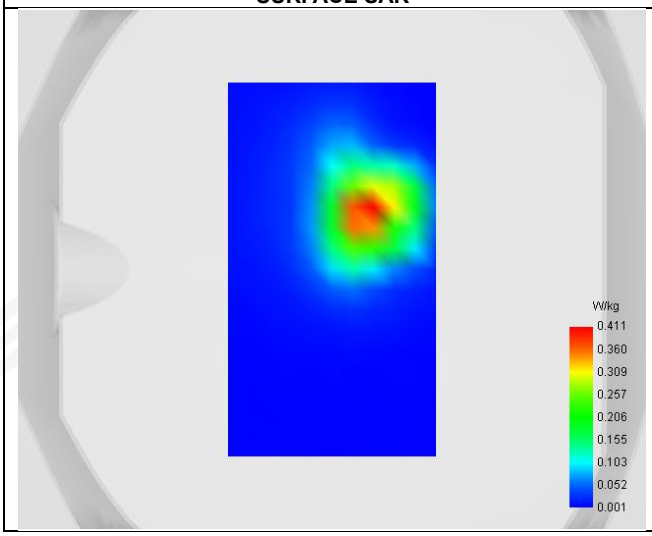
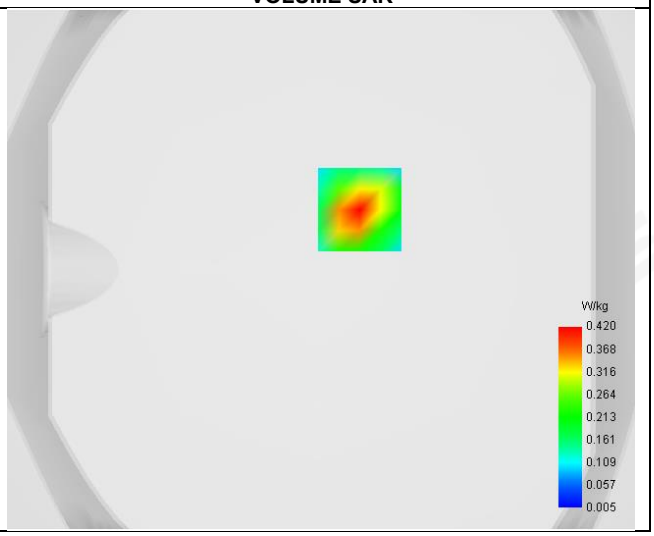



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 7: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-16 |
| ConvF | 1.44 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 26 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 728 |
| Relative permittivity (real part) | 42.06 |
| Conductivity (S/m) | 0.85 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



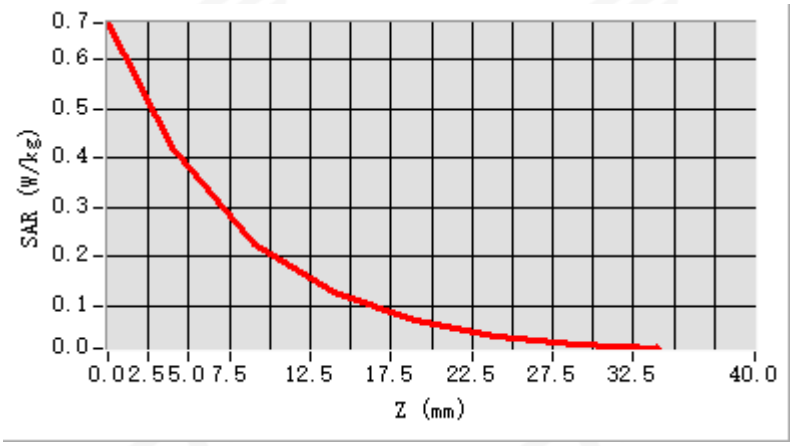
Maximum location: X=15.00, Y=23.00 ; SAR Peak: 0.67 W/kg

## D. SAR 1g & 10g

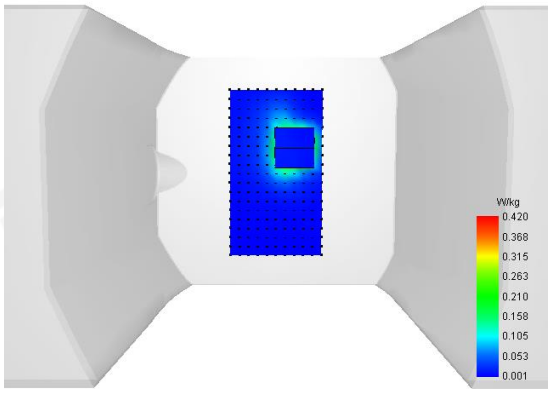
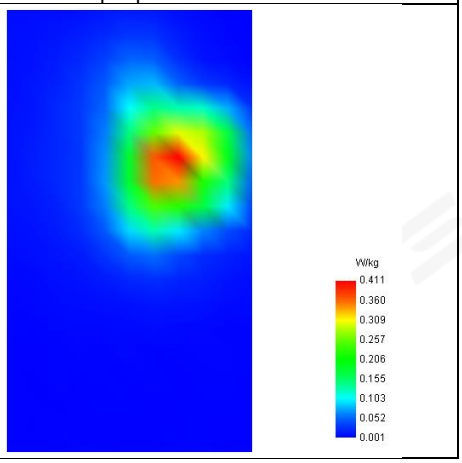
| | |
|---|---|
| SAR 10g (W/Kg) | 0.198 |
| SAR 1g (W/Kg) | 0.395 |
| Horizontal validation criteria: minimum distance (mm) | 16.000000 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 53.697901 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.675 | 0.420 | 0.226 | 0.128 | 0.071 | 0.040 | 0.022 |

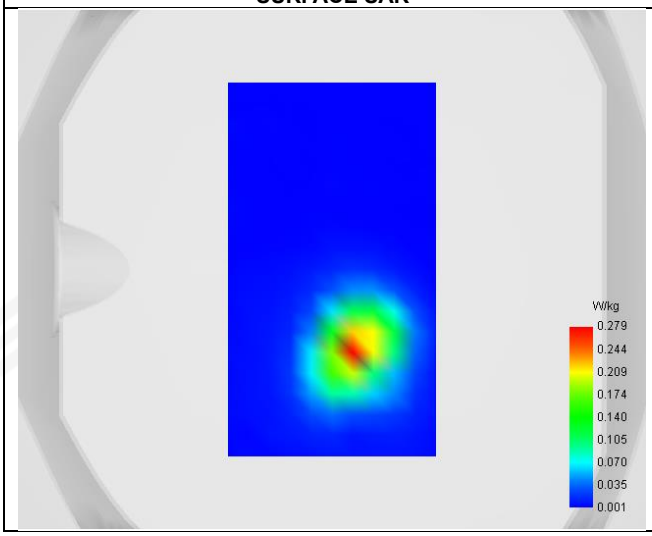
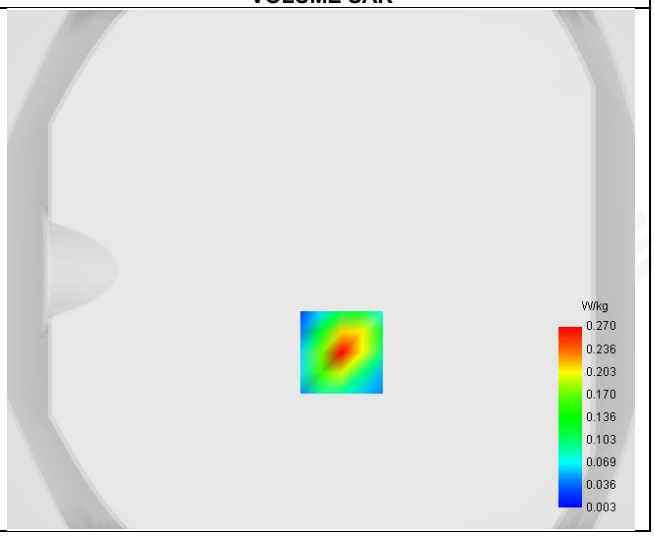



## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

**Plot 8: DUT: Plegium SafeConnect; EUT Model: SC-01**

| | |
|---|---|
| Test Date | 2025-07-17 |
| ConvF | 1.58 |
| Probe | SN 08/21 EPGO352 |
| Area Scan | dx=8mm dy=8mm, Complete |
| Zoom Scan | 5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete |
| Phantom | Body |
| Device Position | Back |
| Band | Cat-NB LTE band 66 |
| Signal | LTE (Crest factor: 1.0) |
| Frequency (MHz) | 1745 |
| Relative permittivity (real part) | 41.16 |
| Conductivity (S/m) | 1.39 |

| SURFACE SAR | VOLUME SAR |
|---|---|
|  |  |



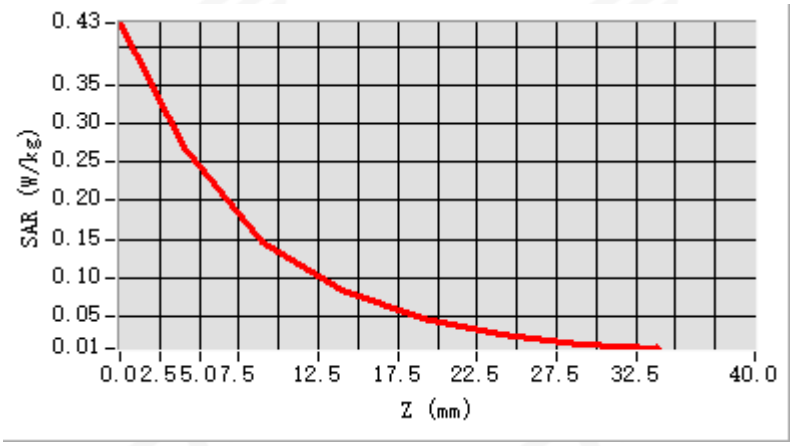
Maximum location: X=8.00, Y=-32.00 ; SAR Peak: 0.43 W/kg

## D. SAR 1g & 10g

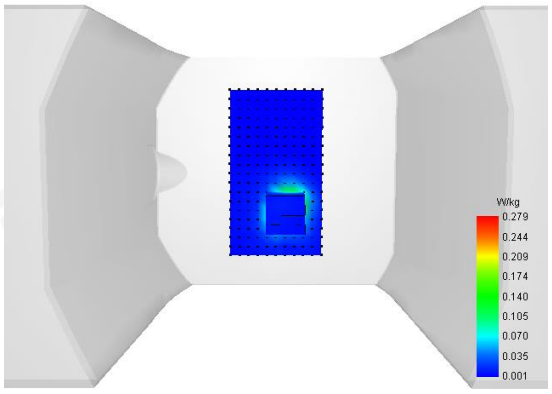
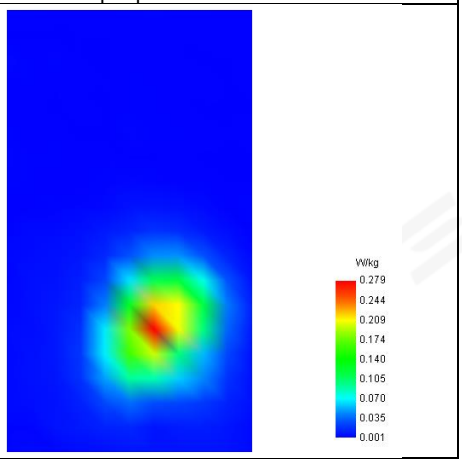
| | |
|---|---|
| SAR 10g (W/Kg) | 0.116 |
| SAR 1g (W/Kg) | 0.246 |
| Horizontal validation criteria: minimum distance (mm) | 11.313708 |
| Vertical validation criteria: SAR ratio M2/M1 (%) | 54.326003 |

## E. Z Axis Scan

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|---|---|---|---|---|---|---|---|
| SAR (W/Kg) | 0.430 | 0.270 | 0.147 | 0.083 | 0.047 | 0.026 | 0.015 |




## F. 3D Image

| 3D screen shot | Hot spot position |
|---|---|
|  |  |

# Appendix C. Probe Calibration and Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※※END OF THE REPORT※※※※※