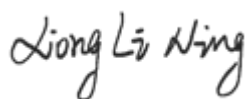


# TEST REPORT

**Applicant:** MediaTek Inc.  
**Address:** No. 1, Dusing 1st Rd., Hsinchu Science Park  
Hsinchu City 30078 Taiwan  
**Equipment Type:** 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card  
**Model Name:** MT7925B22M  
**Brand Name:** N/A  
**FCC ID:** RAS-MT7925B22M  
**Test Standard:** FCC 47 CFR Part 2.1093  
(refer to section 3.1)  
Body 2.4GHz(1 g): 0.95 W/kg  
Body 5GHz(1 g): 1.09 W/kg  
**Maximum SAR:** Body 6GHz(1 g): 0.56 W/kg  
Limbs 2.4GHz(10 g): 1.65 W/kg  
Limbs 5GHz(10 g): 1.00 W/kg  
Limbs 6GHz(10 g): 0.38 W/kg  
**Sample Arrival Date:** Mar. 06, 2025  
**Test Date:** Mar. 16, 2025 - Mar. 27, 2025  
**Date of Issue:** Apr. 21, 2025

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Xiong Lining**Checked by:** Xu Rui**Approved by:** Tolan Tu  
(Testing Director)

**Revision History**

| Version        | Issue Date           | Revisions Content    |
|----------------|----------------------|----------------------|
| <u>Rev. 01</u> | <u>Apr. 21, 2025</u> | <u>Initial Issue</u> |

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# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

|              |                                                                                                                              |
|--------------|------------------------------------------------------------------------------------------------------------------------------|
| Name         | Shenzhen BALUN Technology Co., Ltd.                                                                                          |
| Address      | Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China |
| Phone Number | +86 755 6685 0100                                                                                                            |

## 1.2 Test Location

|                           |                                                                                                                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name                      | Shenzhen BALUN Technology Co., Ltd.                                                                                                                                                                                                |
| Location                  | <input type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China                                                                              |
|                           | <input checked="" type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China |
| Accreditation Certificate | The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.                                                                                                   |

## 1.3 Test Environment Condition

|                           |              |
|---------------------------|--------------|
| Ambient Temperature       | 18°C to 25°C |
| Ambient Relative Humidity | 30% to 70%   |

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

|           |                                                                          |
|-----------|--------------------------------------------------------------------------|
| Applicant | MediaTek Inc.                                                            |
| Address   | No. 1, Dusing 1st Rd., Hsinchu Science Park Hsinchu City 30078<br>Taiwan |

### 2.2 Manufacturer Information

|              |                                                                          |
|--------------|--------------------------------------------------------------------------|
| Manufacturer | MediaTek Inc.                                                            |
| Address      | No. 1, Dusing 1st Rd., Hsinchu Science Park Hsinchu City 30078<br>Taiwan |

### 2.3 General Description for Equipment under Test (EUT)

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| EUT Name                                  | 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card |
| Model Name Under Test                     | MT7925B22M                                 |
| Series Model Name                         | N/A                                        |
| Description of Model name differentiation | N/A                                        |
| Hardware Version                          | N/A                                        |
| Software Version                          | N/A                                        |
| Dimensions (Approx.)                      | N/A                                        |
| Weight (Approx.)                          | N/A                                        |

#### 2.3.1 Host Information:

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| Product Name | Notebook Computer                                                         |
| Model Name   | Legion 5 15IRX10, Legion 5 15IAX10, Legion 5 15AHP10,<br>Legion 5 15AKP10 |
| Brand Name   | Lenovo                                                                    |

#### 2.3.2 Antenna Information:

| Antenna Port      | Model Name  | Antenna Manufacturer | Antenna Type | Antenna Gain (dBi) |               |               |                |                 |                 |                   |                   |                 |
|-------------------|-------------|----------------------|--------------|--------------------|---------------|---------------|----------------|-----------------|-----------------|-------------------|-------------------|-----------------|
|                   |             |                      |              | 2.4 GHz            | 5.15-5.25 GHz | 5.25-5.35 GHz | 5.47-5.725 GHz | 5.725-5.895 GHz | 5.925-6.425 GHz | 6.425 - 6.525 GHz | 6.525 - 6.875 GHz | 6.875 7.125 GHz |
| Main Antenna      | DC330027K00 | Amphenol             | PIFA         | 2.90               | 3.50          | 3.70          | 3.70           | 4.30            | 3.30            | 4.10              | 3.20              | 3.90            |
| Auxiliary Antenna | DC330027K00 |                      | PIFA         | 2.60               | 3.20          | 3.10          | 3.20           | 4.10            | 3.00            | 3.30              | 2.10              | 2.60            |
| Main Antenna      | DC330027H00 | Inpaq                | PIFA         | 2.54               | 1.91          | 1.68          | 2.73           | 2.71            | 2.61            | 1.38              | 1.28              | 1.84            |
| Auxiliary Antenna | DC330027H00 |                      | PIFA         | 1.42               | 1.34          | 1.34          | 1.67           | 1.13            | 2.73            | 1.83              | 1.62              | -0.33           |
| Main Antenna      | DC330027G00 | Speed                | PIFA         | 1.68               | 2.06          | 2.06          | 2.74           | 2.10            | 2.92            | 2.92              | 2.61              | 1.86            |
| Auxiliary Antenna | DC330027G00 |                      | PIFA         | 0.58               | 1.22          | 1.49          | 1.95           | 1.34            | 1.24            | 1.26              | 1.73              | 1.32            |

## 2.4 Ancillary Equipment

Note: Not applicable.

## 2.5 Technical Information

|                                   |                                                                                                         |
|-----------------------------------|---------------------------------------------------------------------------------------------------------|
| Network and Wireless connectivity | Bluetooth (BR+EDR+BLE)<br>WIFI 802.11a, 802.11b, 802.11g, 802.11n, VHT, 802.11ac, 802.11ax and 802.11be |
|-----------------------------------|---------------------------------------------------------------------------------------------------------|

The requirement for the following technical information of the EUT was tested in this report:

| Operating Mode  | 2.4G WLAN; 5G WLAN; 6G WLAN; Bluetooth                    |                 |
|-----------------|-----------------------------------------------------------|-----------------|
| Frequency Range | 802.11b/g                                                 | 2412 ~ 2472 MHz |
|                 | VHT20/VHT40                                               | 2412 ~ 2472 MHz |
|                 | 802.11ax(HE20/HE40)                                       | 2412 ~ 2472 MHz |
|                 | 802.11be(EHT20/EHT40)                                     | 2412 ~ 2472 MHz |
|                 | 802.11a                                                   | 5150 ~ 5250 MHz |
|                 |                                                           | 5250 ~ 5350 MHz |
|                 |                                                           | 5470 ~ 5725 MHz |
|                 |                                                           | 5725 ~ 5850 MHz |
|                 |                                                           | 5815 ~ 5885 MHz |
|                 | 802.11n(HT20/HT40)                                        | 5150 ~ 5250 MHz |
|                 |                                                           | 5250 ~ 5350 MHz |
|                 |                                                           | 5470 ~ 5725 MHz |
|                 |                                                           | 5725 ~ 5850 MHz |
|                 |                                                           | 5815 ~ 5885 MHz |
|                 | 802.11ac(VHT20/VHT40/VHT80)                               | 5150 ~ 5250 MHz |
|                 |                                                           | 5250 ~ 5350 MHz |
|                 |                                                           | 5470 ~ 5725 MHz |
|                 |                                                           | 5725 ~ 5850 MHz |
|                 |                                                           | 5815 ~ 5885 MHz |
|                 | 802.11ax(HE20/HE40/HE80)                                  | 5150 ~ 5250 MHz |
|                 |                                                           | 5250 ~ 5350 MHz |
|                 |                                                           | 5470 ~ 5725 MHz |
|                 |                                                           | 5725 ~ 5850 MHz |
|                 |                                                           | 5815 ~ 5885 MHz |
|                 | 802.11be(EHT20/EHT40/EHT80)                               | 5150 ~ 5250 MHz |
|                 |                                                           | 5250 ~ 5350 MHz |
|                 |                                                           | 5470 ~ 5725 MHz |
|                 |                                                           | 5725 ~ 5850 MHz |
|                 |                                                           | 5815 ~ 5885 MHz |
|                 | 802.11ac(VHT160)/<br>802.11ax(HE160)/<br>802.11be(EHT160) | 5150 ~ 5250 MHz |
|                 |                                                           | 5470 ~ 5725 MHz |
|                 |                                                           | 5815 ~ 5885 MHz |
|                 |                                                           | 5925 ~ 6425 MHz |

|                   |                                                     |                                              |
|-------------------|-----------------------------------------------------|----------------------------------------------|
|                   | 802.11ax(HE20/HE40/HE80/HE160)                      | 6425 ~ 6525 MHz                              |
|                   |                                                     | 6525 ~ 6875 MHz                              |
|                   | 802.11be(EHT20/EHT40/EHT80/EHT160)                  | 6875 ~ 7125 MHz                              |
|                   | Bluetooth                                           | 2402 ~ 2480 MHz                              |
| Antenna Type      | WLAN                                                | PIFA                                         |
|                   | Bluetooth                                           | PIFA                                         |
| Hotspot Function  | N/A                                                 |                                              |
| Exposure Category | General Population/Uncontrolled exposure            |                                              |
| Product Type      | Portable Device                                     |                                              |
| EUT Type          | <input checked="" type="checkbox"/> Production unit | <input type="checkbox"/> Identical prototype |

### 3 SUMMARY OF TEST RESULT

#### 3.1 Test Standards

| No. | Identity                 | Document Title                                                                                                                                                                                                                                                                  |
|-----|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | 47 CFR Part 2.1093       | Radiofrequency radiation exposure evaluation: portable devices                                                                                                                                                                                                                  |
| 2   | ANSI C95.1-1992          | IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz                                                                                                                                                      |
| 3   | KDB 447498 D04 v01       | 447498 D04 Interim General RF Exposure Guidance v01                                                                                                                                                                                                                             |
| 4   | KDB 865664 D01 v01r04    | SAR Measurement 100 MHz to 6 GHz                                                                                                                                                                                                                                                |
| 5   | KDB 865664 D02 v01r02    | RF Exposure Reporting                                                                                                                                                                                                                                                           |
| 6   | KDB 248227 D01 v02r02    | SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters                                                                                                                                                                                                                               |
| 7   | KDB 616217 D04 v01r02    | SAR for laptop and tablets                                                                                                                                                                                                                                                      |
| 8   | IEC/IEEE 62209-1528:2020 | Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz) |



### 3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

| Body Position                                                                       | SAR Value (W/Kg)                             |                                      |
|-------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------|
|                                                                                     | General Population/<br>Uncontrolled Exposure | Occupational/<br>Controlled Exposure |
| Whole-Body SAR<br>(averaged over the entire body)                                   | 0.08                                         | 0.4                                  |
| Partial-Body SAR<br>(averaged over any 1 gram of tissue)                            | 1.60                                         | 8.0                                  |
| SAR for hands, wrists, feet and<br>ankles<br>(averaged over any 10 grams of tissue) | 4.0                                          | 20.0                                 |

**NOTE:**

**General Population/Uncontrolled Exposure:** Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

**Occupational/Controlled Exposure:** Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure. In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

### 3.3 Test Result Summary

#### 3.3.1 Highest SAR (1 g Value)

| Equipment Class | Band      | Antenna | Maximum Scaled SAR (W/kg) | Maximum Report SAR (W/kg) |  |
|-----------------|-----------|---------|---------------------------|---------------------------|--|
|                 |           |         | Body (0mm)                | Body (0mm)                |  |
| DTS             | 2.4G WIFI | Aux.    | 0.80                      | 1.09                      |  |
|                 | 2.4G WIFI | Main    | 0.95                      |                           |  |
| U-NII-2A        | 5.3G WIFI | Aux.    | 0.45                      |                           |  |
|                 | 5.3G WIFI | Main    | 0.62                      |                           |  |
| U-NII-2C        | 5.6G WIFI | Aux.    | 0.67                      |                           |  |
|                 | 5.6G WIFI | Main    | 0.70                      |                           |  |
| U-NII-3         | 5.8G WIFI | Aux.    | 0.79                      |                           |  |
|                 | 5.8G WIFI | Main    | 0.71                      |                           |  |
| U-NII-4         | 5.9G WIFI | Aux.    | 1.09                      |                           |  |
|                 | 5.9G WIFI | Main    | 0.74                      |                           |  |
| U-NII-5/6/7/8   | 6G WIFI   | Aux.    | 0.56                      |                           |  |
|                 | 6G WIFI   | Main    | 0.56                      |                           |  |
| DSS             | Bluetooth | Aux.    | 0.45                      |                           |  |
| Limit (W/kg)    |           |         | 1.60                      |                           |  |
| Verdict         |           |         | Pass                      |                           |  |

#### 3.3.2 Highest Simultaneous Transmission SAR Values (1 g Value)

| Equipment Class | Maximum Report SAR (W/kg) | SPLSR       |
|-----------------|---------------------------|-------------|
|                 | Body (0mm)                |             |
| DTS             | 2.04                      | <b>0.01</b> |
| NII             | <b>2.28</b>               | <b>0.01</b> |
| DSS             | <b>2.28</b>               | <b>0.01</b> |
| Limit (W/kg)    | 1.60                      | 0.04        |
| Verdict         | Pass                      | Pass        |

Note: The simultaneous transmission SAR detail please refer to section 12.

## 3.3.3 Highest SAR (10 g Value)

| Equipment Class | Band      | Antenna | Maximum Scaled SAR (W/kg) | Maximum Report SAR (W/kg) |  |
|-----------------|-----------|---------|---------------------------|---------------------------|--|
|                 |           |         | Limbs (0mm)               | Limbs (0mm)               |  |
| DTS             | 2.4G WIFI | Aux.    | 1.65                      | 1.65                      |  |
|                 | 2.4G WIFI | Main    | 0.94                      |                           |  |
| U-NII-2A        | 5.3G WIFI | Aux.    | 0.40                      |                           |  |
|                 | 5.3G WIFI | Main    | 0.55                      |                           |  |
| U-NII-2C        | 5.6G WIFI | Aux.    | 0.39                      |                           |  |
|                 | 5.6G WIFI | Main    | 1.00                      |                           |  |
| U-NII-3         | 5.8G WIFI | Aux.    | 0.29                      |                           |  |
|                 | 5.8G WIFI | Main    | 0.56                      |                           |  |
| U-NII-4         | 5.9G WIFI | Aux.    | 0.52                      |                           |  |
|                 | 5.9G WIFI | Main    | 0.93                      |                           |  |
| U-NII-5/6/7/8   | 6G WIFI   | Aux.    | 0.30                      |                           |  |
|                 | 6G WIFI   | Main    | 0.38                      |                           |  |
| DSS             | Bluetooth | Aux.    | 0.80                      |                           |  |
| Limit (W/kg)    |           |         | 4.00                      |                           |  |
| Verdict         |           |         | Pass                      |                           |  |

## 3.3.4 Highest Simultaneous Transmission SAR Values (10 g Value)

| Equipment Class | Maximum Report SAR (W/kg) | SPLSR |
|-----------------|---------------------------|-------|
|                 | Limbs (0mm)               |       |
| DTS             | <b>2.65</b>               | /     |
| NII             | <b>2.65</b>               | /     |
| DSS             | 2.33                      | /     |
| Limit (W/kg)    | 4.00                      | 0.04  |
| Verdict         | Pass                      | Pass  |

Note: The simultaneous transmission SAR detail please refer to section 12.

### 3.4 Test Uncertainty

According to KDB 865664 D01, when the highest measured 1 g SAR within a frequency band is  $< 1.5$  W/kg, the extensive SAR measurement uncertainty analysis is not required in SAR reports submitted for equipment approval.

The maximum 1 g SAR for the EUT in this report is 1.09 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10 g SAR for the EUT in this report is 1.65 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

## 4 MEASUREMENT SYSTEM

### 4.1 Specific Absorption Rate (SAR) Definition

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 ( $\rho$ ). The equation description is as below:

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

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

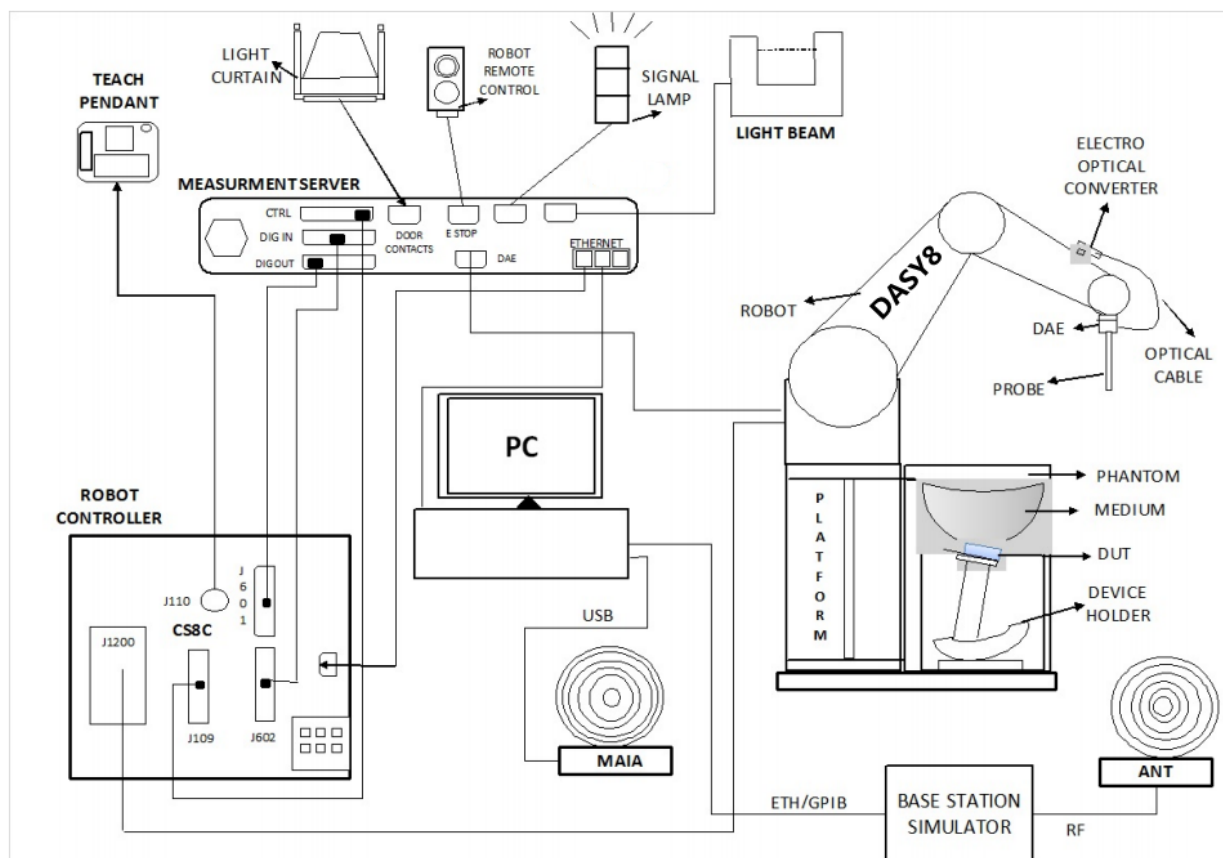
$$SAR = \frac{\sigma E^2}{\rho}$$

Where:  $\sigma$  is the conductivity of the tissue,

$\rho$  is the mass density of the tissue and E is the RMS electrical field strength.

## 4.2 DASY SAR System

### 4.2.1 DASY SAR System Diagram



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

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY measurement server.
6. The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

#### 4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



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

### 4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 SN: 7893 with following specifications is used.

|               |                                                                                                                                                                                                                     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction  | Symmetrical design with triangular core Built-in optical fiber for surface detection system<br>Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether) |
| Calibration   | ISO/IEC 17025 calibration service available                                                                                                                                                                         |
| Frequency     | 4 MHz to 10 GHz; Linearity: $\pm 0.2$ dB                                                                                                                                                                            |
| Directivity   | $\pm 0.2$ dB in HSL (rotation around probe axis); $\pm 0.4$ dB in HSL (rotation normal to probe axis)                                                                                                               |
| Dynamic range | 5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB                                                                                                                                                                  |
| Dimensions    | Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm                                                                                             |
| Application   | General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)                                                                                              |



### E-Field Probe Calibration Process

Probe calibration is realized, in compliance with IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.



#### 4.2.4 Data Acquisition Electronics

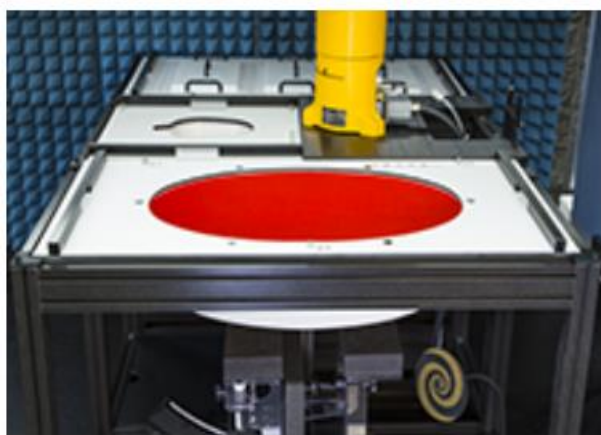
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



- Input Impedance: 200M $\Omega$ m
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

#### 4.2.5 Phantoms

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of below 10 GHz. ELI V8.0 is fully compatible with the latest draft of the standard IEC 62209 Part II and all known tissue simulating liquids. ELI V8.0 has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points.



• Flat phantom

Photo of Phantom SN 2159



| Serial Number    | Shell Thickness (mm) | Major ellipse axis (mm) | Minor axis(mm) |
|------------------|----------------------|-------------------------|----------------|
| SN 2159 ELI V8.0 | 2.0 ± 0.2            | 600                     | 400            |

#### 4.2.6 Device Holder

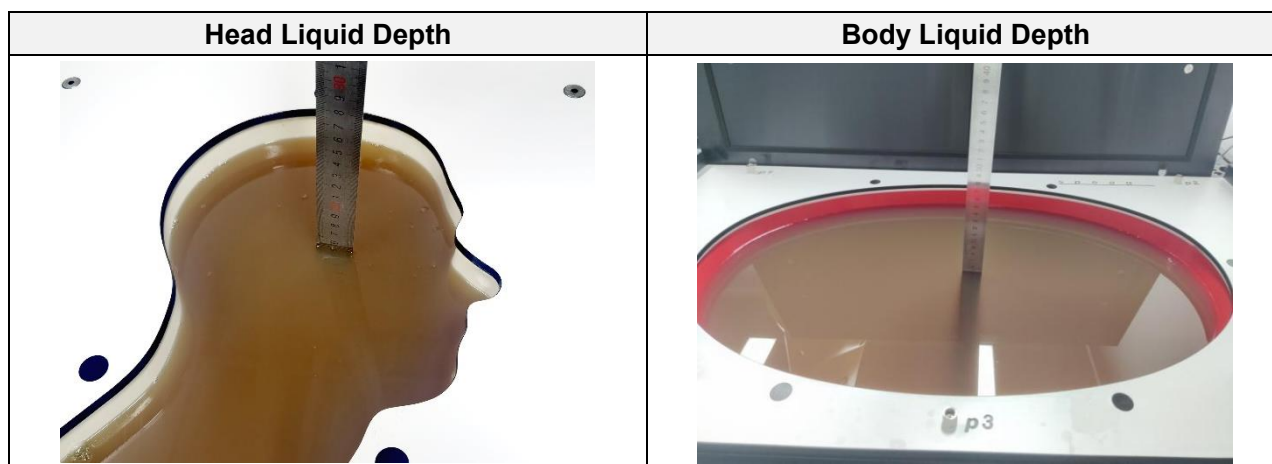
The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of  $65^\circ$ . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA"s only. If necessary an additional support of polystyrene material is used. Larger DUT"s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.



The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than  $1^\circ$ .

#### 4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.



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

The following table gives the recipes for tissue simulating liquid.

| TSL           | Manufacturer / Model  | Freq Range (MHz) | Main Ingredients                                                                                         |
|---------------|-----------------------|------------------|----------------------------------------------------------------------------------------------------------|
| Head WideBand | SPEAG HBBL600-10000V6 | 600-10000        | Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol |

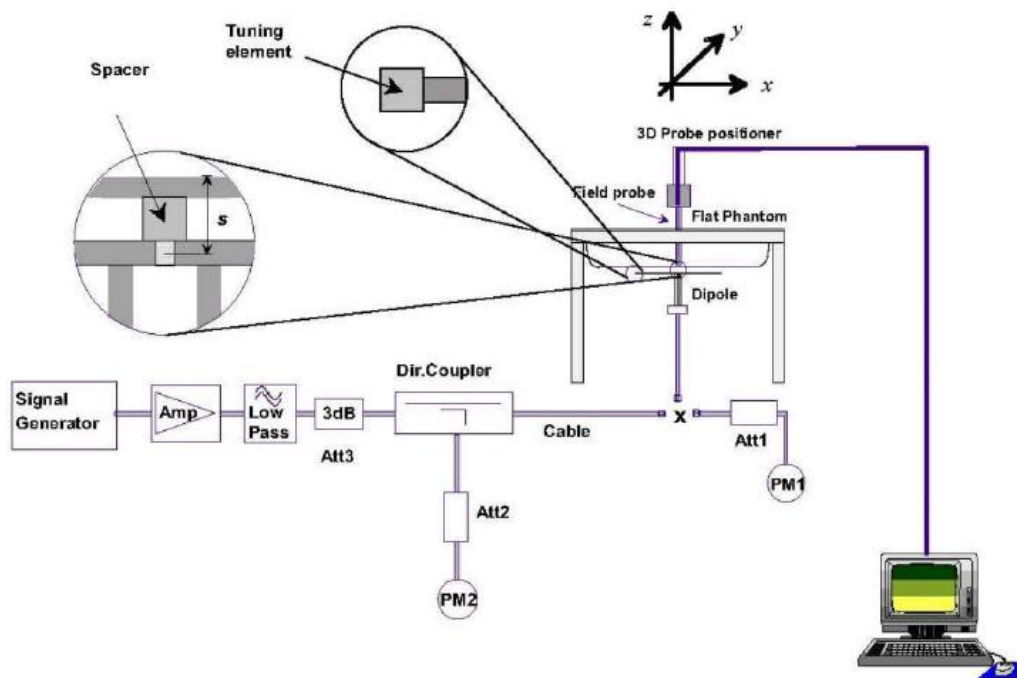
## 5 SYSTEM VERIFICATION

### 5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

### 5.2 System Check Setup

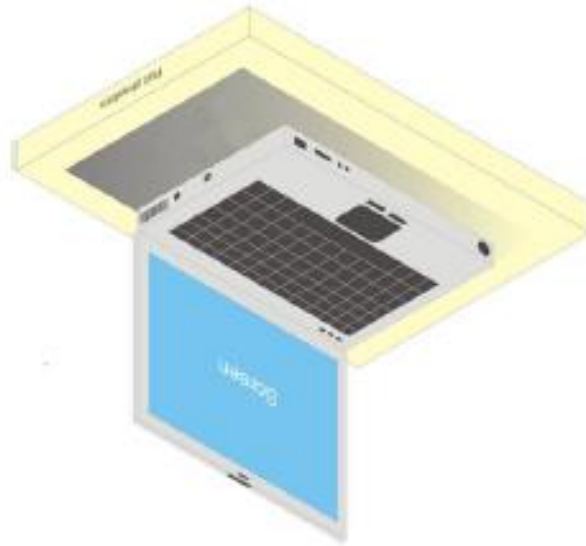
In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



## 6 TEST POSITION CONFIGURATIONS

### 6.1 Laptop Exposure Condition

This DUT should consider one position which is bottom of laptop touching with phantom 0 mm air gap and the screen portion of the device shall be an open position at a 90° angle.



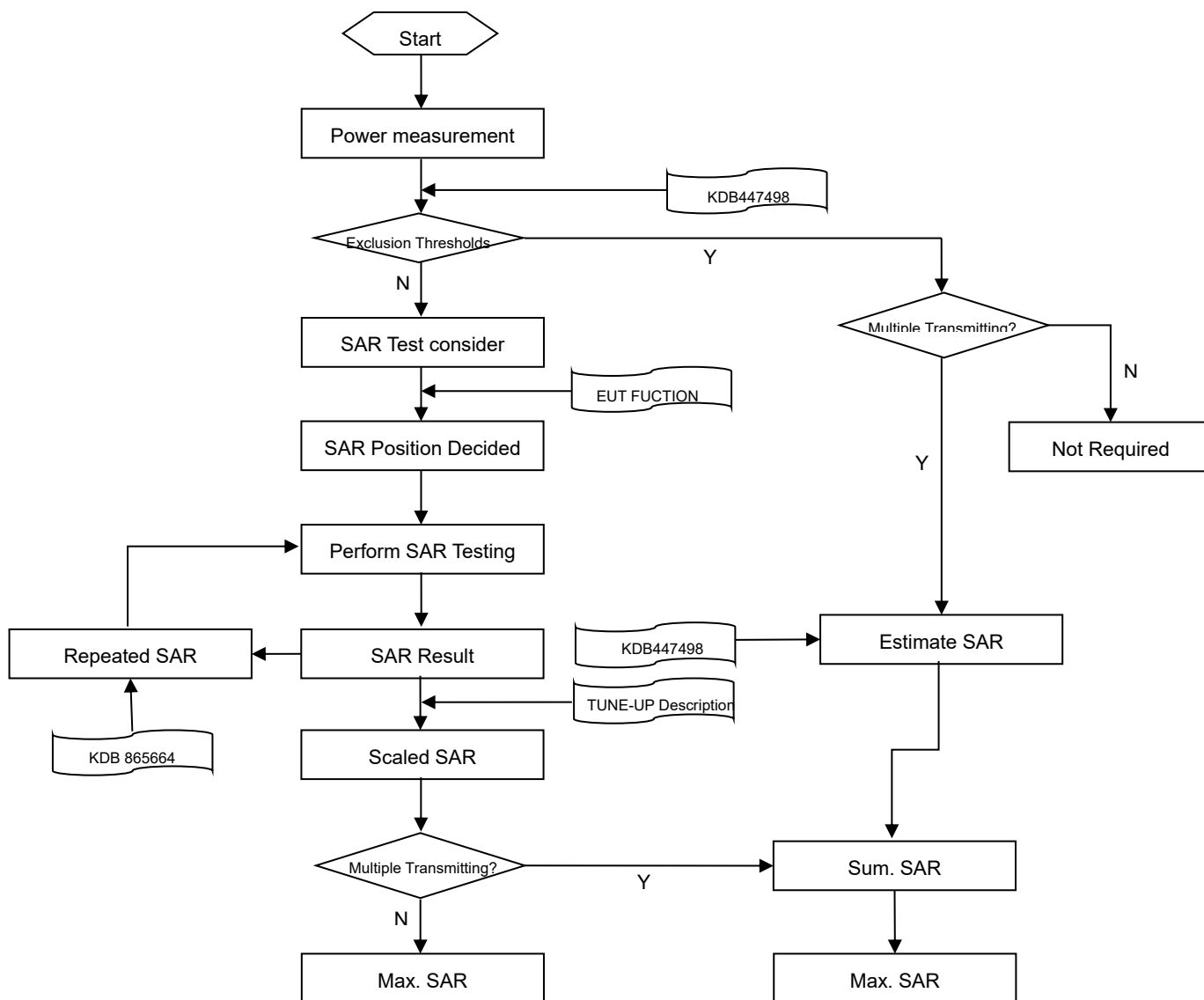
## 6.2 Product Specific 10g Exposure Consideration

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

## 7 MEASUREMENT PROCEDURE

### 7.1 Measurement Process Diagram





## 7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

|                                                                                                        |                                                  |                                                                        | ≤3GHz                                                                                                                                                                                                                                                                  | >3GHz                                              |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface |                                                  |                                                                        | 5±1 mm                                                                                                                                                                                                                                                                 | $\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location              |                                                  |                                                                        | 30°±1°                                                                                                                                                                                                                                                                 | 20°±1°                                             |
| Maximum area scan spatial resolution: $\Delta x$ Area , $\Delta y$ Area                                |                                                  |                                                                        | $\leq 2$ GHz: $\leq 15$ mm<br>2 – 3 GHz: $\leq 12$ mm                                                                                                                                                                                                                  | 3–4 GHz: $\leq 12$ mm<br>4 – 6 GHz: $\leq 10$ mm   |
|                                                                                                        |                                                  |                                                                        | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device. |                                                    |
| Maximum zoom scan spatial resolution: $\Delta x$ Zoom , $\Delta y$ Zoom                                |                                                  |                                                                        | $\leq 2$ GHz: $\leq 8$ mm<br>2 – 3 GHz: $\leq 5$ mm*                                                                                                                                                                                                                   | 3–4 GHz: $\leq 5$ mm*<br>4 – 6 GHz: $\leq 4$ mm*   |
| Maximum zoom scan spatial resolution, normal to phantom surface                                        | uniform grid: $\Delta z$ Zoom (n)                |                                                                        | $\leq 5$ mm                                                                                                                                                                                                                                                            | 3–4 GHz: $\leq 4$ mm                               |
|                                                                                                        |                                                  |                                                                        |                                                                                                                                                                                                                                                                        | 4–5 GHz: $\leq 3$ mm                               |
|                                                                                                        |                                                  |                                                                        |                                                                                                                                                                                                                                                                        | 5–6 GHz: $\leq 2$ mm                               |
|                                                                                                        | graded grid                                      | $\Delta z$ Zoom (1): between 1st two points closest to phantom surface | $\leq 4$ mm                                                                                                                                                                                                                                                            | 3–4 GHz: $\leq 3$ mm                               |
|                                                                                                        |                                                  |                                                                        |                                                                                                                                                                                                                                                                        | 4–5 GHz: $\leq 2.5$ mm                             |
|                                                                                                        |                                                  |                                                                        |                                                                                                                                                                                                                                                                        | 5–6 GHz: $\leq 2$ mm                               |
|                                                                                                        | $\Delta z$ Zoom (n>1): between subsequent points |                                                                        | $\leq 1.5 \cdot \Delta z$ Zoom (n-1)                                                                                                                                                                                                                                   |                                                    |
| Minimum zoom scan volume                                                                               | x, y, z                                          |                                                                        | $\geq 30$ mm                                                                                                                                                                                                                                                           | 3–4 GHz: $\geq 28$ mm                              |
|                                                                                                        |                                                  |                                                                        |                                                                                                                                                                                                                                                                        | 4–5 GHz: $\geq 25$ mm                              |
|                                                                                                        |                                                  |                                                                        |                                                                                                                                                                                                                                                                        | 5–6 GHz: $\geq 22$ mm                              |

### Note:

1.  $\delta$  is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. \* When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is  $\leq 1.4$  W/kg,  $\leq 8$  mm,  $\leq 7$  mm and  $\leq 5$  mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

## 7.3 Measurement Procedure

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 to 16 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.

## 7.4 Area & Zoom Scan Procedure

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 D01v01r04 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.

## 7.5 Interim Procedures for WIFI 6E

Interim procedures for FCC radio frequency (RF) exposure evaluations of U-NII 6-7 GHz band portable devices have been made available during the TCB workshop in April 2021. The procedure is summarized below:

- Evaluate SAR / APD with DASY6 Module SAR V16.0 or higher. The configurations to be tested are defined in the relevant Knowledge Database (KDB). The psSAR and absorbed psPD are reported.
- For the configuration with the highest SAR, evaluate the incident power density with DASY6 Module mmWave V2.4.2 or higher. The incident psPD must be adjusted per amount that the measurement uncertainty exceeds 30% before it is included in the test report.

## 8 CONDUCTED RF OUPUT POWER

### 8.1 WIFI

#### 8.1.1 2.4G WIFI (Aux. Antenna) (Laptop Mode)

| Band (GHz) | Mode                 | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|----------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 2.4        | 802.11b              | 1       | 2412        | 19.64                 | 20.00               | Yes               |
|            |                      | 6       | 2437        | <b>19.75</b>          | 20.00               | Yes               |
|            |                      | 11      | 2462        | 19.66                 | 20.00               | Yes               |
|            |                      | 12      | 2467        | 19.20                 | 20.00               | No                |
|            |                      | 13      | 2472        | 15.54                 | 16.00               | No                |
|            | 802.11g              | 1       | 2412        | 18.42                 | 19.00               | No                |
|            |                      | 6       | 2437        | 19.46                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.60                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.55                 | 18.00               | No                |
|            |                      | 13      | 2472        | 16.77                 | 17.00               | No                |
|            | VHT20                | 1       | 2412        | 17.39                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.61                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.27                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.20                 | 18.00               | No                |
|            |                      | 13      | 2472        | 15.58                 | 16.00               | No                |
|            | VHT40                | 3       | 2422        | 17.36                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.07                 | 20.00               | No                |
|            |                      | 9       | 2452        | 17.52                 | 18.00               | No                |
|            |                      | 10      | 2457        | 17.81                 | 18.00               | No                |
|            |                      | 11      | 2462        | 16.52                 | 17.00               | No                |
|            | 802.11ax(HE20) (SU)  | 1       | 2412        | 17.45                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.83                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.08                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.52                 | 18.00               | No                |
|            |                      | 13      | 2472        | 15.18                 | 16.00               | No                |
|            | 802.11ax(HE40) (SU)  | 3       | 2422        | 17.53                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.42                 | 20.00               | No                |
|            |                      | 9       | 2452        | 17.67                 | 18.00               | No                |
|            |                      | 10      | 2457        | 17.67                 | 18.00               | No                |
|            |                      | 11      | 2462        | 16.09                 | 17.00               | No                |
|            | 802.11be(EHT20) (SU) | 1       | 2412        | 17.60                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.53                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.07                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.45                 | 18.00               | No                |
|            |                      | 13      | 2472        | 15.36                 | 16.00               | No                |

|  |                               |    |      |       |       |    |
|--|-------------------------------|----|------|-------|-------|----|
|  | 802.11be(EHT40)<br>(SU)       | 3  | 2422 | 17.52 | 18.00 | No |
|  |                               | 6  | 2437 | 19.40 | 20.00 | No |
|  |                               | 9  | 2452 | 17.42 | 18.00 | No |
|  |                               | 10 | 2457 | 17.30 | 18.00 | No |
|  |                               | 11 | 2462 | 16.83 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0   | 1  | 2412 | 17.45 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/4   | 6  | 2437 | 19.38 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 11 | 2462 | 18.25 | 19.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 12 | 2467 | 17.70 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 13 | 2472 | 13.74 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37  | 1  | 2412 | 17.50 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/39  | 6  | 2437 | 19.25 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 11 | 2462 | 19.71 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 12 | 2467 | 17.12 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 13 | 2472 | 13.22 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 1  | 2412 | 17.48 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 6  | 2437 | 19.69 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 11 | 2462 | 18.31 | 19.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 12 | 2467 | 17.13 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 13 | 2472 | 13.06 | 14.00 | No |

Note: According KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.

Adjusted SAR = Report SAR \* (max power (OFDM)/ max power (DSSS)) = 0.795 \* (100.00mW/100.00mW) = 0.795 W/Kg, so the 2.4G OFDM SAR test is not required.

## 8.1.2 2.4G WIFI (Main Antenna) (Laptop Mode)

| Band (GHz) | Mode                 | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|----------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 2.4        | 802.11b              | 1       | 2412        | 19.66                 | 20.00               | Yes               |
|            |                      | 6       | 2437        | <b>19.80</b>          | 20.00               | Yes               |
|            |                      | 11      | 2462        | 19.69                 | 20.00               | Yes               |
|            |                      | 12      | 2467        | 19.82                 | 20.00               | No                |
|            |                      | 13      | 2472        | 15.30                 | 16.00               | No                |
|            | 802.11g              | 1       | 2412        | 18.28                 | 19.00               | No                |
|            |                      | 6       | 2437        | 19.66                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.68                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.30                 | 18.00               | No                |
|            |                      | 13      | 2472        | 16.08                 | 17.00               | No                |
|            | VHT20                | 1       | 2412        | 17.81                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.16                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.70                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.23                 | 18.00               | No                |
|            |                      | 13      | 2472        | 15.19                 | 16.00               | No                |
|            | VHT40                | 3       | 2422        | 17.46                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.41                 | 20.00               | No                |
|            |                      | 9       | 2452        | 17.16                 | 18.00               | No                |
|            |                      | 10      | 2457        | 17.12                 | 18.00               | No                |
|            |                      | 11      | 2462        | 16.45                 | 17.00               | No                |
|            | 802.11ax(HE20) (SU)  | 1       | 2412        | 17.43                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.85                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.20                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.09                 | 18.00               | No                |
|            |                      | 13      | 2472        | 15.08                 | 16.00               | No                |
|            | 802.11ax(HE40) (SU)  | 3       | 2422        | 17.26                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.33                 | 20.00               | No                |
|            |                      | 9       | 2452        | 17.16                 | 18.00               | No                |
|            |                      | 10      | 2457        | 17.78                 | 18.00               | No                |
|            |                      | 11      | 2462        | 16.20                 | 17.00               | No                |
|            | 802.11be(EHT20) (SU) | 1       | 2412        | 17.27                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.62                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.74                 | 20.00               | No                |
|            |                      | 12      | 2467        | 17.30                 | 18.00               | No                |
|            |                      | 13      | 2472        | 15.83                 | 16.00               | No                |
|            | 802.11be(EHT40) (SU) | 3       | 2422        | 17.82                 | 18.00               | No                |
|            |                      | 6       | 2437        | 19.32                 | 20.00               | No                |
|            |                      | 9       | 2452        | 17.29                 | 18.00               | No                |
|            |                      | 10      | 2457        | 17.29                 | 18.00               | No                |

|  |                               |    |      |       |       |    |
|--|-------------------------------|----|------|-------|-------|----|
|  |                               | 11 | 2462 | 16.20 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0   | 1  | 2412 | 17.28 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/4   | 6  | 2437 | 19.24 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 11 | 2462 | 18.32 | 19.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 12 | 2467 | 17.17 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 13 | 2472 | 13.23 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37  | 1  | 2412 | 17.69 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/39  | 6  | 2437 | 19.43 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 11 | 2462 | 19.19 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 12 | 2467 | 17.44 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 13 | 2472 | 13.12 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 1  | 2412 | 17.39 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 6  | 2437 | 19.09 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 11 | 2462 | 18.12 | 19.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 12 | 2467 | 17.42 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 13 | 2472 | 13.15 | 14.00 | No |

Note: According KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.

Adjusted SAR = Report SAR \* (max power (OFDM)/ max power (DSSS)) = 0.951 \* (100.00mW/100.00mW) = 0.951 W/Kg, so the 2.4G OFDM SAR test is not required.

## 8.1.3 2.4G WIFI (MIMO) (Laptop Mode)

| Band (GHz) | Mode                 | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|----------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 2.4        | 802.11b              | 1       | 2412        | 19.73                 | 20.00               | No                |
|            |                      | 6       | 2437        | 19.07                 | 20.00               | No                |
|            |                      | 11      | 2462        | 19.13                 | 20.00               | No                |
|            |                      | 12      | 2467        | 13.49                 | 14.00               | No                |
|            |                      | 13      | 2472        | 9.79                  | 10.00               | No                |
|            | 802.11g              | 1       | 2412        | 16.17                 | 17.00               | No                |
|            |                      | 6       | 2437        | 19.82                 | 20.00               | No                |
|            |                      | 11      | 2462        | 16.27                 | 17.00               | No                |
|            |                      | 12      | 2467        | 15.74                 | 16.00               | No                |
|            |                      | 13      | 2472        | 12.73                 | 13.00               | No                |
|            | VHT20                | 1       | 2412        | 16.77                 | 17.00               | No                |
|            |                      | 6       | 2437        | 19.62                 | 20.00               | No                |
|            |                      | 11      | 2462        | 17.20                 | 18.00               | No                |
|            |                      | 12      | 2467        | 16.37                 | 17.00               | No                |
|            |                      | 13      | 2472        | 14.41                 | 15.00               | No                |
|            | VHT40                | 3       | 2422        | 16.29                 | 17.00               | No                |
|            |                      | 6       | 2437        | 17.57                 | 18.00               | No                |
|            |                      | 9       | 2452        | 17.12                 | 18.00               | No                |
|            |                      | 10      | 2457        | 16.26                 | 17.00               | No                |
|            |                      | 11      | 2462        | 16.37                 | 17.00               | No                |
|            | 802.11ax(HE20) (SU)  | 1       | 2412        | 16.82                 | 17.50               | No                |
|            |                      | 6       | 2437        | 19.67                 | 20.00               | No                |
|            |                      | 11      | 2462        | 18.38                 | 19.00               | No                |
|            |                      | 12      | 2467        | 16.28                 | 17.00               | No                |
|            |                      | 13      | 2472        | 14.83                 | 15.50               | No                |
|            | 802.11ax(HE40) (SU)  | 3       | 2422        | 17.40                 | 18.00               | No                |
|            |                      | 6       | 2437        | 17.88                 | 18.50               | No                |
|            |                      | 9       | 2452        | 16.55                 | 17.00               | No                |
|            |                      | 10      | 2457        | 16.50                 | 17.00               | No                |
|            |                      | 11      | 2462        | 16.56                 | 17.00               | No                |
|            | 802.11be(EHT20) (SU) | 1       | 2412        | 16.97                 | 17.50               | No                |
|            |                      | 6       | 2437        | 19.36                 | 20.00               | No                |
|            |                      | 11      | 2462        | 18.21                 | 19.00               | No                |
|            |                      | 12      | 2467        | 16.42                 | 17.00               | No                |
|            |                      | 13      | 2472        | 15.19                 | 15.50               | No                |
|            | 802.11be(EHT40) (SU) | 3       | 2422        | 17.16                 | 18.00               | No                |
|            |                      | 6       | 2437        | 18.22                 | 18.50               | No                |
|            |                      | 9       | 2452        | 16.07                 | 17.00               | No                |
|            |                      | 10      | 2457        | 16.15                 | 17.00               | No                |

|  |                               |    |      |       |       |    |
|--|-------------------------------|----|------|-------|-------|----|
|  |                               | 11 | 2462 | 16.66 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0   | 1  | 2412 | 17.03 | 17.50 | No |
|  | 802.11be(EHT20)<br>(RU26)/4   | 6  | 2437 | 19.10 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 11 | 2462 | 16.09 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 12 | 2467 | 16.52 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8   | 13 | 2472 | 11.11 | 12.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37  | 1  | 2412 | 16.80 | 17.50 | No |
|  | 802.11be(EHT20)<br>(RU52)/39  | 6  | 2437 | 19.19 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 11 | 2462 | 17.42 | 18.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 12 | 2467 | 16.21 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40  | 13 | 2472 | 11.56 | 12.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 1  | 2412 | 17.14 | 17.50 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 6  | 2437 | 19.49 | 20.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 11 | 2462 | 16.13 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/53 | 12 | 2467 | 16.81 | 17.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 13 | 2472 | 11.31 | 12.00 | No |

Note: For WiFi SAR testing was performed on single antenna RF power in SISO mode that is larger to the single antenna RF power in MIMO mode, and for RF exposure assessment of MIMO mode simultaneous transmission used more conservative "Max. (main ant) + Max. (aux. ant) " method to determine SAR compliance. When the sum of 1-g SISO transmission SAR measurement is <1.6 W/kg, or the SPLSR value ≤0.04 the MIMO SAR test is not required.



## 8.1.4 5G WIFI (Aux. Antenna) (Laptop Mode)

| Band (GHz) | Mode                       | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|----------------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 5.2        | 802.11a                    | 36      | 5180        | 13.46                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.36                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.66                 | 14.00               | No                |
|            | 802.11n(HT20)              | 36      | 5180        | 13.80                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.10                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.14                 | 14.00               | No                |
|            | 802.11n(HT40)              | 38      | 5190        | 13.19                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.48                 | 14.00               | No                |
|            | 802.11ac(VHT20)            | 36      | 5180        | 13.14                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.35                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.49                 | 14.00               | No                |
|            | 802.11ac(VHT40)            | 38      | 5190        | 13.26                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.68                 | 14.00               | No                |
|            | 802.11ac(VHT80)            | 42      | 5210        | 13.83                 | 14.00               | No                |
|            | 802.11ac(VHT160)           | 50      | 5250        | 10.05                 | 11.00               | No                |
|            | 802.11ax(HE20)<br>(SU)     | 36      | 5180        | 13.37                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.53                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.62                 | 14.00               | No                |
|            | 802.11ax(HE40)<br>(SU)     | 38      | 5190        | 13.22                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.54                 | 14.00               | No                |
|            | 802.11ax(HE80)<br>(SU)     | 42      | 5210        | 13.43                 | 14.00               | No                |
|            | 802.11ax(HE160)<br>(SU)    | 50      | 5250        | 10.74                 | 11.00               | No                |
|            | 802.11be(EHT20)<br>(SU)    | 36      | 5180        | 13.57                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.08                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.06                 | 14.00               | No                |
|            | 802.11be(EHT40)<br>(SU)    | 38      | 5190        | 13.75                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.75                 | 14.00               | No                |
|            | 802.11be(EHT80)<br>(SU)    | 42      | 5210        | 13.66                 | 14.00               | No                |
|            | 802.11be(EHT160)<br>(SU)   | 50      | 5250        | 10.80                 | 11.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/0 | 36      | 5180        | 11.80                 | 12.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/4 | 40      | 5200        | 13.64                 | 14.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/8 | 48      | 5240        | 13.43                 | 14.00               | No                |
|            | 802.11ax(HE20)             | 36      | 5180        | 13.09                 | 14.00               | No                |

|     |                               |    |      |              |       |     |
|-----|-------------------------------|----|------|--------------|-------|-----|
|     | (RU52)/37                     |    |      |              |       |     |
|     | 802.11ax(HE20)<br>(RU52)/39   | 40 | 5200 | 13.74        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU52)/40   | 48 | 5240 | 13.41        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU106)/53  | 36 | 5180 | 13.08        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU106)/53  | 40 | 5200 | 13.53        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU106)/54  | 48 | 5240 | 13.57        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU26)/0   | 36 | 5180 | 11.82        | 12.00 | No  |
|     | 802.11be(EHT20)<br>(RU26)/4   | 40 | 5200 | 13.85        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU26)/8   | 48 | 5240 | 13.85        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/37  | 36 | 5180 | 13.81        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/39  | 40 | 5200 | 13.74        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/40  | 48 | 5240 | 13.39        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 36 | 5180 | 13.40        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 40 | 5200 | 13.27        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 48 | 5240 | 13.09        | 14.00 | No  |
| 5.3 | 802.11a                       | 52 | 5260 | 13.46        | 14.00 | No  |
|     |                               | 60 | 5300 | 13.05        | 14.00 | No  |
|     |                               | 64 | 5320 | 13.39        | 14.00 | No  |
|     | 802.11n(HT20)                 | 52 | 5260 | 13.26        | 14.00 | No  |
|     |                               | 60 | 5300 | 13.55        | 14.00 | No  |
|     |                               | 64 | 5320 | 13.50        | 14.00 | No  |
|     | 802.11n(HT40)                 | 54 | 5270 | 13.85        | 14.00 | No  |
|     |                               | 62 | 5310 | 13.36        | 14.00 | No  |
|     | 802.11ac(VHT20)               | 52 | 5260 | 13.46        | 14.00 | No  |
|     |                               | 60 | 5300 | 13.60        | 14.00 | No  |
|     |                               | 64 | 5320 | 13.12        | 14.00 | No  |
|     | 802.11ac(VHT40)               | 54 | 5270 | 13.84        | 14.00 | No  |
|     |                               | 62 | 5310 | 13.55        | 14.00 | No  |
|     | 802.11ac(VHT80)               | 58 | 5290 | <b>13.63</b> | 14.00 | Yes |

|  |                              |    |      |       |       |    |
|--|------------------------------|----|------|-------|-------|----|
|  | 802.11ax(HE20)<br>(SU)       | 52 | 5260 | 13.18 | 14.00 | No |
|  |                              | 60 | 5300 | 13.06 | 14.00 | No |
|  |                              | 64 | 5320 | 13.55 | 14.00 | No |
|  | 802.11ax(HE40)<br>(SU)       | 54 | 5270 | 13.81 | 14.00 | No |
|  |                              | 62 | 5310 | 13.18 | 14.00 | No |
|  | 802.11ax(HE80)<br>(SU)       | 58 | 5290 | 13.10 | 14.00 | No |
|  | 802.11be(EHT20)<br>(SU)      | 52 | 5260 | 13.84 | 14.00 | No |
|  |                              | 60 | 5300 | 13.42 | 14.00 | No |
|  |                              | 64 | 5320 | 13.50 | 14.00 | No |
|  | 802.11be(EHT40)<br>(SU)      | 54 | 5270 | 13.27 | 14.00 | No |
|  |                              | 62 | 5310 | 13.49 | 14.00 | No |
|  | 802.11be(EHT80)<br>(SU)      | 58 | 5290 | 13.69 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/0   | 52 | 5260 | 13.44 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/4   | 60 | 5300 | 13.82 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/8   | 64 | 5320 | 10.73 | 11.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/37  | 52 | 5260 | 13.06 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/39  | 60 | 5300 | 13.15 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/40  | 64 | 5320 | 13.30 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/53 | 52 | 5260 | 13.34 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/53 | 60 | 5300 | 13.61 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/54 | 64 | 5320 | 13.54 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0  | 52 | 5260 | 13.51 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/4  | 60 | 5300 | 13.52 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8  | 64 | 5320 | 10.20 | 11.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37 | 52 | 5260 | 13.13 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/39 | 60 | 5300 | 13.33 | 14.00 | No |
|  | 802.11be(EHT20)              | 64 | 5320 | 13.57 | 14.00 | No |

|     |                               |     |      |              |       |     |
|-----|-------------------------------|-----|------|--------------|-------|-----|
|     | (RU52)/40                     |     |      |              |       |     |
|     | 802.11be(EHT20)<br>(RU106)/53 | 52  | 5260 | 13.61        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 60  | 5300 | 13.38        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 64  | 5320 | 13.13        | 14.00 | No  |
| 5.6 | 802.11a                       | 100 | 5500 | 13.25        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.36        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.55        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.71        | 14.00 | No  |
|     | 802.11n(HT20)                 | 100 | 5500 | 13.70        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.25        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.81        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.77        | 14.00 | No  |
|     | 802.11n(HT40)                 | 102 | 5510 | 13.13        | 14.00 | No  |
|     |                               | 110 | 5550 | 13.73        | 14.00 | No  |
|     |                               | 134 | 5670 | 13.48        | 14.00 | No  |
|     |                               | 142 | 5710 | 13.43        | 14.00 | No  |
|     | 802.11ac(VHT20)               | 100 | 5500 | 13.53        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.23        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.55        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.24        | 14.00 | No  |
|     | 802.11ac(VHT40)               | 102 | 5510 | 13.67        | 14.00 | No  |
|     |                               | 110 | 5550 | 13.50        | 14.00 | No  |
|     |                               | 134 | 5670 | 13.46        | 14.00 | No  |
|     |                               | 142 | 5710 | 13.10        | 14.00 | No  |
|     | 802.11ac(VHT80)               | 106 | 5530 | 13.17        | 14.00 | No  |
|     |                               | 122 | 5610 | 13.52        | 14.00 | No  |
|     |                               | 138 | 5690 | 13.76        | 14.00 | No  |
|     | 802.11ac(VHT160)              | 114 | 5570 | <b>13.38</b> | 14.00 | Yes |
|     | 802.11ax(HE20)<br>(SU)        | 100 | 5500 | 13.16        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.41        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.19        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.77        | 14.00 | No  |
|     | 802.11ax(HE40)<br>(SU)        | 102 | 5510 | 13.67        | 14.00 | No  |
|     |                               | 110 | 5550 | 13.62        | 14.00 | No  |
|     |                               | 134 | 5670 | 13.34        | 14.00 | No  |
|     |                               | 142 | 5710 | 13.12        | 14.00 | No  |
|     | 802.11ax(HE80)<br>(SU)        | 106 | 5530 | 13.65        | 14.00 | No  |
|     |                               | 122 | 5610 | 13.15        | 14.00 | No  |
|     |                               | 138 | 5690 | 13.46        | 14.00 | No  |
|     | 802.11ax(HE160)               | 114 | 5570 | 13.12        | 14.00 | No  |

|                 |                              |      |      |       |       |    |
|-----------------|------------------------------|------|------|-------|-------|----|
|                 | (SU)                         |      |      |       |       |    |
|                 | 802.11be(EHT20)<br>(SU)      | 100  | 5500 | 13.79 | 14.00 | No |
|                 |                              | 116  | 5580 | 13.05 | 14.00 | No |
|                 |                              | 140  | 5700 | 13.35 | 14.00 | No |
|                 |                              | 144  | 5720 | 13.79 | 14.00 | No |
|                 | 802.11be(EHT40)<br>(SU)      | 102  | 5510 | 13.51 | 14.00 | No |
|                 |                              | 110  | 5550 | 13.61 | 14.00 | No |
|                 |                              | 134  | 5670 | 13.69 | 14.00 | No |
|                 |                              | 142  | 5710 | 13.57 | 14.00 | No |
|                 | 802.11be(EHT80)<br>(SU)      | 106  | 5530 | 13.65 | 14.00 | No |
|                 |                              | 122  | 5610 | 13.28 | 14.00 | No |
|                 |                              | 138  | 5690 | 13.15 | 14.00 | No |
|                 | 802.11be(EHT160)<br>(SU)     | 114  | 5570 | 13.46 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU26)/0   | 100  | 5500 | 9.59  | 10.00 | No |
|                 | 802.11ax(HE20)<br>(RU26)/4   | 116  | 5580 | 13.45 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU26)/8   | 140  | 5700 | 7.11  | 8.00  | No |
|                 | 802.11ax(HE20)<br>(RU26)/8   | 144  | 5720 | 13.36 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/37  | 100  | 5500 | 12.63 | 13.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/39  | 116  | 5580 | 13.10 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/40  | 140  | 5700 | 10.26 | 11.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/40  | 144  | 5720 | 13.68 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/53 | 100  | 5500 | 13.35 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/53 | 116  | 5580 | 13.27 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/54 | 140  | 5700 | 13.20 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/54 | 144  | 5720 | 13.61 | 14.00 | No |
|                 | 802.11be(EHT20)<br>(RU26)/0  | 100  | 5500 | 9.41  | 10.00 | No |
|                 | 802.11be(EHT20)<br>(RU26)/4  | 116  | 5580 | 13.71 | 14.00 | No |
| 802.11be(EHT20) | 140                          | 5700 | 8.47 | 9.00  | No    |    |

|     |                               |     |      |              |       |     |
|-----|-------------------------------|-----|------|--------------|-------|-----|
|     | (RU26)/8                      |     |      |              |       |     |
|     | 802.11be(EHT20)<br>(RU26)/8   | 144 | 5720 | 13.14        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/37  | 100 | 5500 | 12.11        | 13.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/39  | 116 | 5580 | 13.75        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/39  | 140 | 5700 | 10.27        | 11.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/40  | 144 | 5720 | 13.10        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 100 | 5500 | 13.11        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 116 | 5580 | 13.57        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 140 | 5700 | 13.54        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 144 | 5720 | 13.24        | 14.00 | No  |
| 5.8 | 802.11a                       | 149 | 5745 | 13.36        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.76        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.30        | 14.00 | No  |
|     | 802.11n(HT20)                 | 149 | 5745 | 13.58        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.40        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.53        | 14.00 | No  |
|     | 802.11n(HT40)                 | 151 | 5755 | 13.21        | 14.00 | No  |
|     |                               | 159 | 5795 | 13.48        | 14.00 | No  |
|     | 802.11ac(VHT20)               | 149 | 5745 | 13.28        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.49        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.73        | 14.00 | No  |
|     | 802.11ac(VHT40)               | 151 | 5755 | 13.78        | 14.00 | No  |
|     |                               | 159 | 5795 | 13.14        | 14.00 | No  |
|     | 802.11ac(VHT80)               | 155 | 5775 | <b>13.49</b> | 14.00 | Yes |
|     | 802.11ax(HE20)<br>(SU)        | 149 | 5745 | 13.33        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.70        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.72        | 14.00 | No  |
|     | 802.11ax(HE40)<br>(SU)        | 151 | 5755 | 13.50        | 14.00 | No  |
|     |                               | 159 | 5795 | 13.25        | 14.00 | No  |
|     | 802.11ax(HE80)<br>(SU)        | 155 | 5775 | 13.48        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(SU)       | 149 | 5745 | 13.23        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.32        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.08        | 14.00 | No  |

|     |                               |     |      |       |       |    |
|-----|-------------------------------|-----|------|-------|-------|----|
|     | 802.11be(EHT40)<br>(SU)       | 151 | 5755 | 13.60 | 14.00 | No |
|     |                               | 159 | 5795 | 13.26 | 14.00 | No |
|     | 802.11be(EHT80)<br>(SU)       | 155 | 5775 | 13.79 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/0    | 149 | 5745 | 13.81 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/4    | 157 | 5785 | 13.54 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/8    | 165 | 5825 | 13.65 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/37   | 149 | 5745 | 13.61 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/39   | 157 | 5785 | 13.24 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/40   | 165 | 5825 | 13.07 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/53  | 149 | 5745 | 13.49 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 157 | 5785 | 13.70 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 165 | 5825 | 13.60 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/0   | 149 | 5745 | 13.33 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/4   | 157 | 5785 | 13.53 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/8   | 165 | 5825 | 13.77 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/37  | 149 | 5745 | 13.42 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/39  | 157 | 5785 | 13.11 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/40  | 165 | 5825 | 13.77 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 149 | 5745 | 13.59 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 157 | 5785 | 13.45 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 165 | 5825 | 13.09 | 14.00 | No |
| 5.9 | 802.11a                       | 169 | 5845 | 13.16 | 14.00 | No |
|     |                               | 173 | 5865 | 13.19 | 14.00 | No |
|     |                               | 177 | 5885 | 13.39 | 14.00 | No |

|  |                              |     |      |              |       |     |
|--|------------------------------|-----|------|--------------|-------|-----|
|  | 802.11n(HT20)                | 169 | 5845 | 13.28        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.71        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.74        | 14.00 | No  |
|  | 802.11n(HT40)                | 167 | 5835 | 13.51        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.82        | 14.00 | No  |
|  | 802.11ac(VHT20)              | 169 | 5845 | 13.32        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.06        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.05        | 14.00 | No  |
|  | 802.11ac(VHT40)              | 167 | 5835 | 13.77        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.21        | 14.00 | No  |
|  | 802.11ac(VHT80)              | 171 | 5855 | 13.48        | 14.00 | No  |
|  | 802.11ac(VHT160)             | 163 | 5815 | <b>13.93</b> | 14.00 | Yes |
|  | 802.11ax(HE20)<br>(SU)       | 169 | 5845 | 13.72        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.13        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.55        | 14.00 | No  |
|  | 802.11ax(HE40)<br>(SU)       | 167 | 5835 | 13.35        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.83        | 14.00 | No  |
|  | 802.11ax(HE80)<br>(SU)       | 171 | 5855 | 13.06        | 14.00 | No  |
|  | 802.11ax(HE160)<br>(SU)      | 163 | 5815 | 13.57        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(SU)      | 169 | 5845 | 13.40        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.22        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.78        | 14.00 | No  |
|  | 802.11be(EHT40)<br>(SU)      | 167 | 5835 | 13.65        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.60        | 14.00 | No  |
|  | 802.11be(EHT80)<br>(SU)      | 171 | 5855 | 13.33        | 14.00 | No  |
|  | 802.11be(EHT160)<br>(SU)     | 163 | 5815 | 13.06        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(RU26)/0  | 169 | 5845 | 12.84        | 13.00 | No  |
|  | 802.11be(EHT20)<br>(RU26)/4  | 173 | 5865 | 12.79        | 13.00 | No  |
|  | 802.11be(EHT20)<br>(RU26)/8  | 177 | 5885 | 12.62        | 13.00 | No  |
|  | 802.11be(EHT20)<br>(RU52)/37 | 169 | 5845 | 13.63        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(RU52)/39 | 173 | 5865 | 13.49        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(RU52)/40 | 177 | 5885 | 13.74        | 14.00 | No  |
|  | 802.11be(EHT20)              | 169 | 5845 | 13.77        | 14.00 | No  |



|  |                               |     |      |       |       |    |
|--|-------------------------------|-----|------|-------|-------|----|
|  | (RU106)/53                    |     |      |       |       |    |
|  | 802.11be(EHT20)<br>(RU106)/54 | 173 | 5865 | 13.50 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 177 | 5885 | 13.44 | 14.00 | No |

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

## 8.1.5 5G WIFI (Main Antenna) (Laptop Mode)

| Band (GHz) | Mode                       | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|----------------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 5.2        | 802.11a                    | 36      | 5180        | 13.16                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.46                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.08                 | 14.00               | No                |
|            | 802.11n(HT20)              | 36      | 5180        | 13.69                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.68                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.55                 | 14.00               | No                |
|            | 802.11n(HT40)              | 38      | 5190        | 13.83                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.26                 | 14.00               | No                |
|            | 802.11ac(VHT20)            | 36      | 5180        | 13.05                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.09                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.08                 | 14.00               | No                |
|            | 802.11ac(VHT40)            | 38      | 5190        | 13.43                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.53                 | 14.00               | No                |
|            | 802.11ac(VHT80)            | 42      | 5210        | 13.05                 | 14.00               | No                |
|            | 802.11ac(VHT160)           | 50      | 5250        | 10.12                 | 11.00               | No                |
|            | 802.11ax(HE20)<br>(SU)     | 36      | 5180        | 13.11                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.69                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.24                 | 14.00               | No                |
|            | 802.11ax(HE40)<br>(SU)     | 38      | 5190        | 13.59                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.84                 | 14.00               | No                |
|            | 802.11ax(HE80)<br>(SU)     | 42      | 5210        | 13.16                 | 14.00               | No                |
|            | 802.11ax(HE160)<br>(SU)    | 50      | 5250        | 10.16                 | 11.00               | No                |
|            | 802.11be(EHT20)<br>(SU)    | 36      | 5180        | 13.34                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.39                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.08                 | 14.00               | No                |
|            | 802.11be(EHT40)<br>(SU)    | 38      | 5190        | 13.32                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.16                 | 14.00               | No                |
|            | 802.11be(EHT80)<br>(SU)    | 42      | 5210        | 13.61                 | 14.00               | No                |
|            | 802.11be(EHT160)<br>(SU)   | 50      | 5250        | 10.19                 | 11.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/0 | 36      | 5180        | 11.29                 | 12.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/4 | 40      | 5200        | 13.10                 | 14.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/8 | 48      | 5240        | 13.32                 | 14.00               | No                |
|            | 802.11ax(HE20)             | 36      | 5180        | 13.30                 | 14.00               | No                |

|     |                               |    |      |              |       |     |
|-----|-------------------------------|----|------|--------------|-------|-----|
|     | (RU52)/37                     |    |      |              |       |     |
|     | 802.11ax(HE20)<br>(RU52)/39   | 40 | 5200 | 13.76        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU52)/40   | 48 | 5240 | 13.46        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU106)/53  | 36 | 5180 | 13.70        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU106)/53  | 40 | 5200 | 13.13        | 14.00 | No  |
|     | 802.11ax(HE20)<br>(RU106)/54  | 48 | 5240 | 13.28        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU26)/0   | 36 | 5180 | 11.41        | 12.00 | No  |
|     | 802.11be(EHT20)<br>(RU26)/4   | 40 | 5200 | 13.53        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU26)/8   | 48 | 5240 | 13.11        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/37  | 36 | 5180 | 13.63        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/39  | 40 | 5200 | 13.19        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/40  | 48 | 5240 | 13.66        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 36 | 5180 | 13.37        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 40 | 5200 | 13.46        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 48 | 5240 | 13.11        | 14.00 | No  |
| 5.3 | 802.11a                       | 52 | 5260 | 13.34        | 14.00 | No  |
|     |                               | 60 | 5300 | 13.45        | 14.00 | No  |
|     |                               | 64 | 5320 | 13.42        | 14.00 | No  |
|     | 802.11n(HT20)                 | 52 | 5260 | 13.19        | 14.00 | No  |
|     |                               | 60 | 5300 | 13.66        | 14.00 | No  |
|     |                               | 64 | 5320 | 13.63        | 14.00 | No  |
|     | 802.11n(HT40)                 | 54 | 5270 | 13.78        | 14.00 | No  |
|     |                               | 62 | 5310 | 13.39        | 14.00 | No  |
|     | 802.11ac(VHT20)               | 52 | 5260 | 13.52        | 14.00 | No  |
|     |                               | 60 | 5300 | 13.65        | 14.00 | No  |
|     |                               | 64 | 5320 | 13.33        | 14.00 | No  |
|     | 802.11ac(VHT40)               | 54 | 5270 | 13.26        | 14.00 | No  |
|     |                               | 62 | 5310 | 13.79        | 14.00 | No  |
|     | 802.11ac(VHT80)               | 58 | 5290 | <b>13.26</b> | 14.00 | Yes |

|  |                              |    |      |       |       |    |
|--|------------------------------|----|------|-------|-------|----|
|  | 802.11ax(HE20)<br>(SU)       | 52 | 5260 | 13.27 | 14.00 | No |
|  |                              | 60 | 5300 | 13.57 | 14.00 | No |
|  |                              | 64 | 5320 | 13.36 | 14.00 | No |
|  | 802.11ax(HE40)<br>(SU)       | 54 | 5270 | 13.28 | 14.00 | No |
|  |                              | 62 | 5310 | 13.61 | 14.00 | No |
|  | 802.11ax(HE80)<br>(SU)       | 58 | 5290 | 13.38 | 14.00 | No |
|  | 802.11be(EHT20)<br>(SU)      | 52 | 5260 | 13.15 | 14.00 | No |
|  |                              | 60 | 5300 | 13.52 | 14.00 | No |
|  |                              | 64 | 5320 | 13.05 | 14.00 | No |
|  | 802.11be(EHT40)<br>(SU)      | 54 | 5270 | 13.78 | 14.00 | No |
|  |                              | 62 | 5310 | 13.18 | 14.00 | No |
|  | 802.11be(EHT80)<br>(SU)      | 58 | 5290 | 13.80 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/0   | 52 | 5260 | 13.18 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/4   | 60 | 5300 | 13.68 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/8   | 64 | 5320 | 10.74 | 11.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/37  | 52 | 5260 | 13.66 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/39  | 60 | 5300 | 13.47 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/40  | 64 | 5320 | 13.22 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/53 | 52 | 5260 | 13.38 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/53 | 60 | 5300 | 13.82 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/54 | 64 | 5320 | 13.37 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0  | 52 | 5260 | 13.76 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/4  | 60 | 5300 | 13.08 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8  | 64 | 5320 | 10.10 | 11.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37 | 52 | 5260 | 13.33 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/39 | 60 | 5300 | 13.16 | 14.00 | No |
|  | 802.11be(EHT20)              | 64 | 5320 | 13.74 | 14.00 | No |

|     |                               |     |      |              |       |     |
|-----|-------------------------------|-----|------|--------------|-------|-----|
|     | (RU52)/40                     |     |      |              |       |     |
|     | 802.11be(EHT20)<br>(RU106)/53 | 52  | 5260 | 13.49        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 60  | 5300 | 13.37        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 64  | 5320 | 13.46        | 14.00 | No  |
| 5.6 | 802.11a                       | 100 | 5500 | 13.15        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.51        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.09        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.15        | 14.00 | No  |
|     | 802.11n(HT20)                 | 100 | 5500 | 13.46        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.40        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.13        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.71        | 14.00 | No  |
|     | 802.11n(HT40)                 | 102 | 5510 | 13.37        | 14.00 | No  |
|     |                               | 110 | 5550 | 13.35        | 14.00 | No  |
|     |                               | 134 | 5670 | 13.07        | 14.00 | No  |
|     |                               | 142 | 5710 | 13.12        | 14.00 | No  |
|     | 802.11ac(VHT20)               | 100 | 5500 | 13.22        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.06        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.23        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.52        | 14.00 | No  |
|     | 802.11ac(VHT40)               | 102 | 5510 | 13.81        | 14.00 | No  |
|     |                               | 110 | 5550 | 13.08        | 14.00 | No  |
|     |                               | 134 | 5670 | 13.12        | 14.00 | No  |
|     |                               | 142 | 5710 | 13.24        | 14.00 | No  |
|     | 802.11ac(VHT80)               | 106 | 5530 | 13.54        | 14.00 | No  |
|     |                               | 122 | 5610 | 13.35        | 14.00 | No  |
|     |                               | 138 | 5690 | 13.36        | 14.00 | No  |
|     | 802.11ac(VHT160)              | 114 | 5570 | <b>13.30</b> | 14.00 | Yes |
|     | 802.11ax(HE20)<br>(SU)        | 100 | 5500 | 13.42        | 14.00 | No  |
|     |                               | 116 | 5580 | 13.55        | 14.00 | No  |
|     |                               | 140 | 5700 | 13.16        | 14.00 | No  |
|     |                               | 144 | 5720 | 13.57        | 14.00 | No  |
|     | 802.11ax(HE40)<br>(SU)        | 102 | 5510 | 13.29        | 14.00 | No  |
|     |                               | 110 | 5550 | 13.51        | 14.00 | No  |
|     |                               | 134 | 5670 | 13.73        | 14.00 | No  |
|     |                               | 142 | 5710 | 13.80        | 14.00 | No  |
|     | 802.11ax(HE80)<br>(SU)        | 106 | 5530 | 13.07        | 14.00 | No  |
|     |                               | 122 | 5610 | 13.57        | 14.00 | No  |
|     |                               | 138 | 5690 | 13.22        | 14.00 | No  |
|     | 802.11ax(HE160)               | 114 | 5570 | 13.09        | 14.00 | No  |

|                 |                              |      |      |       |       |    |
|-----------------|------------------------------|------|------|-------|-------|----|
|                 | (SU)                         |      |      |       |       |    |
|                 | 802.11be(EHT20)<br>(SU)      | 100  | 5500 | 13.46 | 14.00 | No |
|                 |                              | 116  | 5580 | 13.77 | 14.00 | No |
|                 |                              | 140  | 5700 | 13.20 | 14.00 | No |
|                 |                              | 144  | 5720 | 13.29 | 14.00 | No |
|                 | 802.11be(EHT40)<br>(SU)      | 102  | 5510 | 13.31 | 14.00 | No |
|                 |                              | 110  | 5550 | 13.35 | 14.00 | No |
|                 |                              | 134  | 5670 | 13.34 | 14.00 | No |
|                 |                              | 142  | 5710 | 13.57 | 14.00 | No |
|                 | 802.11be(EHT80)<br>(SU)      | 106  | 5530 | 13.11 | 14.00 | No |
|                 |                              | 122  | 5610 | 13.64 | 14.00 | No |
|                 |                              | 138  | 5690 | 13.80 | 14.00 | No |
|                 | 802.11be(EHT160)<br>(SU)     | 114  | 5570 | 13.70 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU26)/0   | 100  | 5500 | 9.49  | 10.00 | No |
|                 | 802.11ax(HE20)<br>(RU26)/4   | 116  | 5580 | 13.51 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU26)/8   | 140  | 5700 | 7.46  | 8.00  | No |
|                 | 802.11ax(HE20)<br>(RU26)/8   | 144  | 5720 | 13.05 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/37  | 100  | 5500 | 12.47 | 13.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/39  | 116  | 5580 | 13.08 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/40  | 140  | 5700 | 10.22 | 11.00 | No |
|                 | 802.11ax(HE20)<br>(RU52)/40  | 144  | 5720 | 13.49 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/53 | 100  | 5500 | 13.36 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/53 | 116  | 5580 | 13.20 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/54 | 140  | 5700 | 13.74 | 14.00 | No |
|                 | 802.11ax(HE20)<br>(RU106)/54 | 144  | 5720 | 13.68 | 14.00 | No |
|                 | 802.11be(EHT20)<br>(RU26)/0  | 100  | 5500 | 9.67  | 10.00 | No |
|                 | 802.11be(EHT20)<br>(RU26)/4  | 116  | 5580 | 13.50 | 14.00 | No |
| 802.11be(EHT20) | 140                          | 5700 | 8.43 | 9.00  | No    |    |

|     |                               |     |      |              |       |     |
|-----|-------------------------------|-----|------|--------------|-------|-----|
|     | (RU26)/8                      |     |      |              |       |     |
|     | 802.11be(EHT20)<br>(RU26)/8   | 144 | 5720 | 13.56        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/37  | 100 | 5500 | 12.46        | 13.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/39  | 116 | 5580 | 13.50        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/39  | 140 | 5700 | 10.60        | 11.00 | No  |
|     | 802.11be(EHT20)<br>(RU52)/40  | 144 | 5720 | 13.73        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 100 | 5500 | 13.14        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/53 | 116 | 5580 | 13.49        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 140 | 5700 | 13.76        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(RU106)/54 | 144 | 5720 | 13.70        | 14.00 | No  |
| 5.8 | 802.11a                       | 149 | 5745 | 13.39        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.72        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.45        | 14.00 | No  |
|     | 802.11n(HT20)                 | 149 | 5745 | 13.72        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.29        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.73        | 14.00 | No  |
|     | 802.11n(HT40)                 | 151 | 5755 | 13.61        | 14.00 | No  |
|     |                               | 159 | 5795 | 13.27        | 14.00 | No  |
|     | 802.11ac(VHT20)               | 149 | 5745 | 13.48        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.25        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.31        | 14.00 | No  |
|     | 802.11ac(VHT40)               | 151 | 5755 | 13.74        | 14.00 | No  |
|     |                               | 159 | 5795 | 13.72        | 14.00 | No  |
|     | 802.11ac(VHT80)               | 155 | 5775 | <b>13.43</b> | 14.00 | Yes |
|     | 802.11ax(HE20)<br>(SU)        | 149 | 5745 | 13.34        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.14        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.42        | 14.00 | No  |
|     | 802.11ax(HE40)<br>(SU)        | 151 | 5755 | 13.43        | 14.00 | No  |
|     |                               | 159 | 5795 | 13.55        | 14.00 | No  |
|     | 802.11ax(HE80)<br>(SU)        | 155 | 5775 | 13.47        | 14.00 | No  |
|     | 802.11be(EHT20)<br>(SU)       | 149 | 5745 | 13.54        | 14.00 | No  |
|     |                               | 157 | 5785 | 13.39        | 14.00 | No  |
|     |                               | 165 | 5825 | 13.67        | 14.00 | No  |

|     |                               |     |      |       |       |    |
|-----|-------------------------------|-----|------|-------|-------|----|
|     | 802.11be(EHT40)<br>(SU)       | 151 | 5755 | 13.70 | 14.00 | No |
|     |                               | 159 | 5795 | 13.50 | 14.00 | No |
|     | 802.11be(EHT80)<br>(SU)       | 155 | 5775 | 13.57 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/0    | 149 | 5745 | 13.22 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/4    | 157 | 5785 | 13.64 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/8    | 165 | 5825 | 13.24 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/37   | 149 | 5745 | 13.84 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/39   | 157 | 5785 | 13.06 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/40   | 165 | 5825 | 13.60 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/53  | 149 | 5745 | 13.59 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 157 | 5785 | 13.23 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 165 | 5825 | 13.41 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/0   | 149 | 5745 | 13.40 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/4   | 157 | 5785 | 13.18 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/8   | 165 | 5825 | 13.64 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/37  | 149 | 5745 | 13.15 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/39  | 157 | 5785 | 13.32 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/40  | 165 | 5825 | 13.58 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 149 | 5745 | 13.31 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 157 | 5785 | 13.67 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 165 | 5825 | 13.05 | 14.00 | No |
| 5.9 | 802.11a                       | 169 | 5845 | 13.78 | 14.00 | No |
|     |                               | 173 | 5865 | 13.31 | 14.00 | No |
|     |                               | 177 | 5885 | 13.62 | 14.00 | No |



|  |                              |     |      |              |       |     |
|--|------------------------------|-----|------|--------------|-------|-----|
|  | 802.11n(HT20)                | 169 | 5845 | 13.22        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.80        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.22        | 14.00 | No  |
|  | 802.11n(HT40)                | 167 | 5835 | 13.19        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.23        | 14.00 | No  |
|  | 802.11ac(VHT20)              | 169 | 5845 | 13.36        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.23        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.09        | 14.00 | No  |
|  | 802.11ac(VHT40)              | 167 | 5835 | 13.05        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.51        | 14.00 | No  |
|  | 802.11ac(VHT80)              | 171 | 5855 | 13.65        | 14.00 | No  |
|  | 802.11ac(VHT160)             | 163 | 5815 | <b>13.55</b> | 14.00 | Yes |
|  | 802.11ax(HE20)<br>(SU)       | 169 | 5845 | 13.43        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.79        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.38        | 14.00 | No  |
|  | 802.11ax(HE40)<br>(SU)       | 167 | 5835 | 13.77        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.11        | 14.00 | No  |
|  | 802.11ax(HE80)<br>(SU)       | 171 | 5855 | 13.75        | 14.00 | No  |
|  | 802.11ax(HE160)<br>(SU)      | 163 | 5815 | 13.62        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(SU)      | 169 | 5845 | 13.43        | 14.00 | No  |
|  |                              | 173 | 5865 | 13.41        | 14.00 | No  |
|  |                              | 177 | 5885 | 13.52        | 14.00 | No  |
|  | 802.11be(EHT40)<br>(SU)      | 167 | 5835 | 13.73        | 14.00 | No  |
|  |                              | 175 | 5875 | 13.50        | 14.00 | No  |
|  | 802.11be(EHT80)<br>(SU)      | 171 | 5855 | 13.75        | 14.00 | No  |
|  | 802.11be(EHT160)<br>(SU)     | 163 | 5815 | 13.83        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(RU26)/0  | 169 | 5845 | 11.60        | 13.00 | No  |
|  | 802.11be(EHT20)<br>(RU26)/4  | 173 | 5865 | 11.62        | 13.00 | No  |
|  | 802.11be(EHT20)<br>(RU26)/8  | 177 | 5885 | 11.73        | 13.00 | No  |
|  | 802.11be(EHT20)<br>(RU52)/37 | 169 | 5845 | 12.91        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(RU52)/39 | 173 | 5865 | 12.74        | 14.00 | No  |
|  | 802.11be(EHT20)<br>(RU52)/40 | 177 | 5885 | 12.70        | 14.00 | No  |
|  | 802.11be(EHT20)              | 169 | 5845 | 12.86        | 14.00 | No  |

|  |                               |     |      |       |       |    |
|--|-------------------------------|-----|------|-------|-------|----|
|  | (RU106)/53                    |     |      |       |       |    |
|  | 802.11be(EHT20)<br>(RU106)/54 | 173 | 5865 | 12.83 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 177 | 5885 | 12.42 | 14.00 | No |

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

## 8.1.6 5G WIFI (MIMO) (Laptop Mode)

| Band (GHz) | Mode                       | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|----------------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 5.2        | 802.11a                    | 36      | 5180        | 13.64                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.32                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.37                 | 14.00               | No                |
|            | 802.11n(HT20)              | 36      | 5180        | 13.25                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.46                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.17                 | 14.00               | No                |
|            | 802.11n(HT40)              | 38      | 5190        | 13.29                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.07                 | 14.00               | No                |
|            | 802.11ac(VHT20)            | 36      | 5180        | 13.05                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.24                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.49                 | 14.00               | No                |
|            | 802.11ac(VHT40)            | 38      | 5190        | 13.48                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.05                 | 14.00               | No                |
|            | 802.11ac(VHT80)            | 42      | 5210        | 13.46                 | 14.00               | No                |
|            | 802.11ac(VHT160)           | 50      | 5250        | 10.19                 | 11.00               | No                |
|            | 802.11ax(HE20)<br>(SU)     | 36      | 5180        | 13.24                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.38                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.37                 | 14.00               | No                |
|            | 802.11ax(HE40)<br>(SU)     | 38      | 5190        | 13.43                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.42                 | 14.00               | No                |
|            | 802.11ax(HE80)<br>(SU)     | 42      | 5210        | 13.53                 | 14.00               | No                |
|            | 802.11ax(HE160)<br>(SU)    | 50      | 5250        | 10.60                 | 11.00               | No                |
|            | 802.11be(EHT20)<br>(SU)    | 36      | 5180        | 13.55                 | 14.00               | No                |
|            |                            | 40      | 5200        | 13.43                 | 14.00               | No                |
|            |                            | 48      | 5240        | 13.06                 | 14.00               | No                |
|            | 802.11be(EHT40)<br>(SU)    | 38      | 5190        | 13.31                 | 14.00               | No                |
|            |                            | 46      | 5230        | 13.28                 | 14.00               | No                |
|            | 802.11be(EHT80)<br>(SU)    | 42      | 5210        | 13.07                 | 14.00               | No                |
|            | 802.11be(EHT160)<br>(SU)   | 50      | 5250        | 10.13                 | 11.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/0 | 36      | 5180        | 11.31                 | 12.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/4 | 40      | 5200        | 13.56                 | 14.00               | No                |
|            | 802.11ax(HE20)<br>(RU26)/8 | 48      | 5240        | 13.21                 | 14.00               | No                |
|            | 802.11ax(HE20)             | 36      | 5180        | 13.38                 | 14.00               | No                |

|     |                               |    |      |       |       |    |
|-----|-------------------------------|----|------|-------|-------|----|
|     | (RU52)/37                     |    |      |       |       |    |
|     | 802.11ax(HE20)<br>(RU52)/39   | 40 | 5200 | 13.50 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/40   | 48 | 5240 | 13.29 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/53  | 36 | 5180 | 13.28 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/53  | 40 | 5200 | 13.49 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 48 | 5240 | 13.29 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/0   | 36 | 5180 | 11.46 | 12.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/4   | 40 | 5200 | 13.11 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/8   | 48 | 5240 | 13.31 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/37  | 36 | 5180 | 13.25 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/39  | 40 | 5200 | 13.53 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/40  | 48 | 5240 | 13.23 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 36 | 5180 | 13.46 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 40 | 5200 | 13.05 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 48 | 5240 | 13.46 | 14.00 | No |
| 5.3 | 802.11a                       | 52 | 5260 | 13.34 | 14.00 | No |
|     |                               | 60 | 5300 | 13.56 | 14.00 | No |
|     |                               | 64 | 5320 | 13.14 | 14.00 | No |
|     | 802.11n(HT20)                 | 52 | 5260 | 13.35 | 14.00 | No |
|     |                               | 60 | 5300 | 13.34 | 14.00 | No |
|     |                               | 64 | 5320 | 13.24 | 14.00 | No |
|     | 802.11n(HT40)                 | 54 | 5270 | 13.41 | 14.00 | No |
|     |                               | 62 | 5310 | 13.33 | 14.00 | No |
|     | 802.11ac(VHT20)               | 52 | 5260 | 13.18 | 14.00 | No |
|     |                               | 60 | 5300 | 13.31 | 14.00 | No |
|     |                               | 64 | 5320 | 13.11 | 14.00 | No |
|     | 802.11ac(VHT40)               | 54 | 5270 | 13.62 | 14.00 | No |
|     |                               | 62 | 5310 | 13.42 | 14.00 | No |
|     | 802.11ac(VHT80)               | 58 | 5290 | 13.15 | 14.00 | No |

|  |                              |    |      |       |       |    |
|--|------------------------------|----|------|-------|-------|----|
|  | 802.11ax(HE20)<br>(SU)       | 52 | 5260 | 13.43 | 14.00 | No |
|  |                              | 60 | 5300 | 13.45 | 14.00 | No |
|  |                              | 64 | 5320 | 13.24 | 14.00 | No |
|  | 802.11ax(HE40)<br>(SU)       | 54 | 5270 | 13.62 | 14.00 | No |
|  |                              | 62 | 5310 | 13.05 | 14.00 | No |
|  | 802.11ax(HE80)<br>(SU)       | 58 | 5290 | 13.16 | 14.00 | No |
|  | 802.11be(EHT20)<br>(SU)      | 52 | 5260 | 13.34 | 14.00 | No |
|  |                              | 60 | 5300 | 13.60 | 14.00 | No |
|  |                              | 64 | 5320 | 13.05 | 14.00 | No |
|  | 802.11be(EHT40)<br>(SU)      | 54 | 5270 | 13.61 | 14.00 | No |
|  |                              | 62 | 5310 | 13.34 | 14.00 | No |
|  | 802.11be(EHT80)<br>(SU)      | 58 | 5290 | 13.47 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/0   | 52 | 5260 | 13.05 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/4   | 60 | 5300 | 13.60 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU26)/8   | 64 | 5320 | 10.16 | 11.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/37  | 52 | 5260 | 13.08 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/39  | 60 | 5300 | 13.20 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU52)/40  | 64 | 5320 | 13.40 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/53 | 52 | 5260 | 13.19 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/53 | 60 | 5300 | 13.18 | 14.00 | No |
|  | 802.11ax(HE20)<br>(RU106)/54 | 64 | 5320 | 13.35 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0  | 52 | 5260 | 13.26 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/4  | 60 | 5300 | 13.47 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8  | 64 | 5320 | 10.07 | 11.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37 | 52 | 5260 | 13.37 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/39 | 60 | 5300 | 13.38 | 14.00 | No |
|  | 802.11be(EHT20)              | 64 | 5320 | 13.51 | 14.00 | No |

|     |                               |     |      |       |       |    |
|-----|-------------------------------|-----|------|-------|-------|----|
|     | (RU52)/40                     |     |      |       |       |    |
|     | 802.11be(EHT20)<br>(RU106)/53 | 52  | 5260 | 13.51 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 60  | 5300 | 13.50 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 64  | 5320 | 13.11 | 14.00 | No |
| 5.6 | 802.11a                       | 100 | 5500 | 13.60 | 14.00 | No |
|     |                               | 116 | 5580 | 13.18 | 14.00 | No |
|     |                               | 140 | 5700 | 13.65 | 14.00 | No |
|     |                               | 144 | 5720 | 13.15 | 14.00 | No |
|     | 802.11n(HT20)                 | 100 | 5500 | 13.45 | 14.00 | No |
|     |                               | 116 | 5580 | 13.40 | 14.00 | No |
|     |                               | 140 | 5700 | 13.44 | 14.00 | No |
|     |                               | 144 | 5720 | 13.35 | 14.00 | No |
|     | 802.11n(HT40)                 | 102 | 5510 | 13.54 | 14.00 | No |
|     |                               | 110 | 5550 | 13.20 | 14.00 | No |
|     |                               | 134 | 5670 | 13.15 | 14.00 | No |
|     |                               | 142 | 5710 | 13.29 | 14.00 | No |
|     | 802.11ac(VHT20)               | 100 | 5500 | 13.32 | 14.00 | No |
|     |                               | 116 | 5580 | 13.55 | 14.00 | No |
|     |                               | 140 | 5700 | 13.49 | 14.00 | No |
|     |                               | 144 | 5720 | 13.37 | 14.00 | No |
|     | 802.11ac(VHT40)               | 102 | 5510 | 13.53 | 14.00 | No |
|     |                               | 110 | 5550 | 13.60 | 14.00 | No |
|     |                               | 134 | 5670 | 13.59 | 14.00 | No |
|     |                               | 142 | 5710 | 13.09 | 14.00 | No |
|     | 802.11ac(VHT80)               | 106 | 5530 | 13.20 | 14.00 | No |
|     |                               | 122 | 5610 | 13.35 | 14.00 | No |
|     |                               | 138 | 5690 | 13.63 | 14.00 | No |
|     | 802.11ac(VHT160)              | 114 | 5570 | 13.25 | 14.00 | No |
|     | 802.11ax(HE20)<br>(SU)        | 100 | 5500 | 13.64 | 14.00 | No |
|     |                               | 116 | 5580 | 13.24 | 14.00 | No |
|     |                               | 140 | 5700 | 13.64 | 14.00 | No |
|     |                               | 144 | 5720 | 13.42 | 14.00 | No |
|     | 802.11ax(HE40)<br>(SU)        | 102 | 5510 | 13.29 | 14.00 | No |
|     |                               | 110 | 5550 | 13.25 | 14.00 | No |
|     |                               | 134 | 5670 | 13.47 | 14.00 | No |
|     |                               | 142 | 5710 | 13.22 | 14.00 | No |
|     | 802.11ax(HE80)<br>(SU)        | 106 | 5530 | 13.49 | 14.00 | No |
|     |                               | 122 | 5610 | 13.35 | 14.00 | No |
|     |                               | 138 | 5690 | 13.26 | 14.00 | No |
|     | 802.11ax(HE160)               | 114 | 5570 | 13.38 | 14.00 | No |

|                              |      |      |       |       |    |  |
|------------------------------|------|------|-------|-------|----|--|
|                              | (SU) |      |       |       |    |  |
| 802.11be(EHT20)<br>(SU)      | 100  | 5500 | 13.13 | 14.00 | No |  |
|                              | 116  | 5580 | 13.56 | 14.00 | No |  |
|                              | 140  | 5700 | 13.07 | 14.00 | No |  |
|                              | 144  | 5720 | 13.49 | 14.00 | No |  |
| 802.11be(EHT40)<br>(SU)      | 102  | 5510 | 13.10 | 14.00 | No |  |
|                              | 110  | 5550 | 13.35 | 14.00 | No |  |
|                              | 134  | 5670 | 13.07 | 14.00 | No |  |
|                              | 142  | 5710 | 13.57 | 14.00 | No |  |
| 802.11be(EHT80)<br>(SU)      | 106  | 5530 | 13.54 | 14.00 | No |  |
|                              | 122  | 5610 | 13.39 | 14.00 | No |  |
|                              | 138  | 5690 | 13.44 | 14.00 | No |  |
| 802.11be(EHT160)<br>(SU)     | 114  | 5570 | 13.26 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU26)/0   | 100  | 5500 | 9.06  | 10.00 | No |  |
| 802.11ax(HE20)<br>(RU26)/4   | 116  | 5580 | 13.60 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU26)/8   | 140  | 5700 | 7.09  | 8.00  | No |  |
| 802.11ax(HE20)<br>(RU26)/8   | 144  | 5720 | 13.33 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU52)/37  | 100  | 5500 | 12.54 | 13.00 | No |  |
| 802.11ax(HE20)<br>(RU52)/39  | 116  | 5580 | 13.63 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU52)/40  | 140  | 5700 | 10.38 | 11.00 | No |  |
| 802.11ax(HE20)<br>(RU52)/40  | 144  | 5720 | 13.21 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU106)/53 | 100  | 5500 | 13.41 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU106)/53 | 116  | 5580 | 13.15 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU106)/54 | 140  | 5700 | 13.21 | 14.00 | No |  |
| 802.11ax(HE20)<br>(RU106)/54 | 144  | 5720 | 13.33 | 14.00 | No |  |
| 802.11be(EHT20)<br>(RU26)/0  | 100  | 5500 | 9.53  | 10.00 | No |  |
| 802.11be(EHT20)<br>(RU26)/4  | 116  | 5580 | 13.31 | 14.00 | No |  |
| 802.11be(EHT20)              | 140  | 5700 | 8.08  | 9.00  | No |  |

|     |                               |     |      |       |       |    |
|-----|-------------------------------|-----|------|-------|-------|----|
|     | (RU26)/8                      |     |      |       |       |    |
|     | 802.11be(EHT20)<br>(RU26)/8   | 144 | 5720 | 13.55 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/37  | 100 | 5500 | 12.14 | 13.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/39  | 116 | 5580 | 13.41 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/39  | 140 | 5700 | 10.07 | 11.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/40  | 144 | 5720 | 13.05 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 100 | 5500 | 13.27 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 116 | 5580 | 13.47 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 140 | 5700 | 13.43 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 144 | 5720 | 13.39 | 14.00 | No |
| 5.8 | 802.11a                       | 149 | 5745 | 13.49 | 14.00 | No |
|     |                               | 157 | 5785 | 13.61 | 14.00 | No |
|     |                               | 165 | 5825 | 13.61 | 14.00 | No |
|     | 802.11n(HT20)                 | 149 | 5745 | 13.29 | 14.00 | No |
|     |                               | 157 | 5785 | 13.11 | 14.00 | No |
|     |                               | 165 | 5825 | 13.61 | 14.00 | No |
|     | 802.11n(HT40)                 | 151 | 5755 | 13.28 | 14.00 | No |
|     |                               | 159 | 5795 | 13.36 | 14.00 | No |
|     | 802.11ac(VHT20)               | 149 | 5745 | 13.24 | 14.00 | No |
|     |                               | 157 | 5785 | 13.62 | 14.00 | No |
|     |                               | 165 | 5825 | 13.60 | 14.00 | No |
|     | 802.11ac(VHT40)               | 151 | 5755 | 13.64 | 14.00 | No |
|     |                               | 159 | 5795 | 13.14 | 14.00 | No |
|     | 802.11ac(VHT80)               | 155 | 5775 | 13.40 | 14.00 | No |
|     | 802.11ax(HE20)<br>(SU)        | 149 | 5745 | 13.55 | 14.00 | No |
|     |                               | 157 | 5785 | 13.65 | 14.00 | No |
|     |                               | 165 | 5825 | 13.23 | 14.00 | No |
|     | 802.11ax(HE40)<br>(SU)        | 151 | 5755 | 13.18 | 14.00 | No |
|     |                               | 159 | 5795 | 13.31 | 14.00 | No |
|     | 802.11ax(HE80)<br>(SU)        | 155 | 5775 | 13.35 | 14.00 | No |
|     | 802.11be(EHT20)<br>(SU)       | 149 | 5745 | 13.63 | 14.00 | No |
|     |                               | 157 | 5785 | 13.50 | 14.00 | No |
|     |                               | 165 | 5825 | 13.06 | 14.00 | No |



|     |                               |     |      |       |       |    |
|-----|-------------------------------|-----|------|-------|-------|----|
|     | 802.11be(EHT40)<br>(SU)       | 151 | 5755 | 13.24 | 14.00 | No |
|     |                               | 159 | 5795 | 13.58 | 14.00 | No |
|     | 802.11be(EHT80)<br>(SU)       | 155 | 5775 | 13.31 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/0    | 149 | 5745 | 13.18 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/4    | 157 | 5785 | 13.14 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU26)/8    | 165 | 5825 | 13.48 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/37   | 149 | 5745 | 13.12 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/39   | 157 | 5785 | 13.28 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU52)/40   | 165 | 5825 | 13.29 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/53  | 149 | 5745 | 13.12 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 157 | 5785 | 13.51 | 14.00 | No |
|     | 802.11ax(HE20)<br>(RU106)/54  | 165 | 5825 | 13.51 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/0   | 149 | 5745 | 13.52 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/4   | 157 | 5785 | 13.18 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU26)/8   | 165 | 5825 | 13.07 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/37  | 149 | 5745 | 13.09 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/39  | 157 | 5785 | 13.38 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU52)/40  | 165 | 5825 | 13.64 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 149 | 5745 | 13.53 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/53 | 157 | 5785 | 13.20 | 14.00 | No |
|     | 802.11be(EHT20)<br>(RU106)/54 | 165 | 5825 | 13.58 | 14.00 | No |
| 5.9 | 802.11a                       | 169 | 5845 | 13.40 | 14.00 | No |
|     |                               | 173 | 5865 | 13.60 | 14.00 | No |
|     |                               | 177 | 5885 | 13.19 | 14.00 | No |

|  |                              |     |      |       |       |    |
|--|------------------------------|-----|------|-------|-------|----|
|  | 802.11n(HT20)                | 169 | 5845 | 13.08 | 14.00 | No |
|  |                              | 173 | 5865 | 13.12 | 14.00 | No |
|  |                              | 177 | 5885 | 13.65 | 14.00 | No |
|  | 802.11n(HT40)                | 167 | 5835 | 13.42 | 14.00 | No |
|  |                              | 175 | 5875 | 13.47 | 14.00 | No |
|  | 802.11ac(VHT20)              | 169 | 5845 | 13.13 | 14.00 | No |
|  |                              | 173 | 5865 | 13.13 | 14.00 | No |
|  |                              | 177 | 5885 | 13.32 | 14.00 | No |
|  | 802.11ac(VHT40)              | 167 | 5835 | 13.21 | 14.00 | No |
|  |                              | 175 | 5875 | 13.27 | 14.00 | No |
|  | 802.11ac(VHT80)              | 171 | 5855 | 13.33 | 14.00 | No |
|  | 802.11ac(VHT160)             | 163 | 5815 | 13.07 | 14.00 | No |
|  | 802.11ax(HE20)<br>(SU)       | 169 | 5845 | 13.25 | 14.00 | No |
|  |                              | 173 | 5865 | 13.05 | 14.00 | No |
|  |                              | 177 | 5885 | 13.36 | 14.00 | No |
|  | 802.11ax(HE40)<br>(SU)       | 167 | 5835 | 13.22 | 14.00 | No |
|  |                              | 175 | 5875 | 13.38 | 14.00 | No |
|  | 802.11ax(HE80)<br>(SU)       | 171 | 5855 | 13.12 | 14.00 | No |
|  | 802.11ax(HE160)<br>(SU)      | 163 | 5815 | 13.55 | 14.00 | No |
|  | 802.11be(EHT20)<br>(SU)      | 169 | 5845 | 13.17 | 14.00 | No |
|  |                              | 173 | 5865 | 13.42 | 14.00 | No |
|  |                              | 177 | 5885 | 13.45 | 14.00 | No |
|  | 802.11be(EHT40)<br>(SU)      | 167 | 5835 | 13.15 | 14.00 | No |
|  |                              | 175 | 5875 | 13.07 | 14.00 | No |
|  | 802.11be(EHT80)<br>(SU)      | 171 | 5855 | 13.58 | 14.00 | No |
|  | 802.11be(EHT160)<br>(SU)     | 163 | 5815 | 13.34 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/0  | 169 | 5845 | 12.20 | 13.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/4  | 173 | 5865 | 12.48 | 13.00 | No |
|  | 802.11be(EHT20)<br>(RU26)/8  | 177 | 5885 | 12.54 | 13.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/37 | 169 | 5845 | 13.30 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/39 | 173 | 5865 | 13.07 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU52)/40 | 177 | 5885 | 13.43 | 14.00 | No |
|  | 802.11be(EHT20)              | 169 | 5845 | 13.30 | 14.00 | No |

|  |                               |     |      |       |       |    |
|--|-------------------------------|-----|------|-------|-------|----|
|  | (RU106)/53                    |     |      |       |       |    |
|  | 802.11be(EHT20)<br>(RU106)/54 | 173 | 5865 | 13.39 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU106)/54 | 177 | 5885 | 13.11 | 14.00 | No |

Note: For WiFi SAR testing was performed on single antenna RF power in SISO mode that is larger to the single antenna RF power in MIMO mode, and for RF exposure assessment of MIMO mode simultaneous transmission used more conservative "Max. (main ant) + Max. (aux. ant) " method to determine SAR compliance. When the sum of 1-g SISO transmission SAR measurement is <1.6 W/kg, or the SPLSR value  $\leq 0.04$  the MIMO SAR test is not required.

## 8.1.7 6G WIFI (Aux. Antenna) (Laptop Mode)

| Band (GHz) | Mode                | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|---------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 6          | 802.11a             | 1       | 5955        | 6.14                  | 7.00                | No                |
|            |                     | 49      | 6195        | 6.27                  | 7.00                | No                |
|            |                     | 93      | 6415        | 6.51                  | 7.00                | No                |
|            |                     | 97      | 6435        | 6.19                  | 7.00                | No                |
|            |                     | 105     | 6475        | 6.44                  | 7.00                | No                |
|            |                     | 113     | 6515        | 6.09                  | 7.00                | No                |
|            |                     | 117     | 6535        | 6.44                  | 7.00                | No                |
|            |                     | 149     | 6695        | 6.36                  | 7.00                | No                |
|            |                     | 181     | 6855        | 6.60                  | 7.00                | No                |
|            |                     | 185     | 6875        | 6.56                  | 7.00                | No                |
|            |                     | 189     | 6895        | 6.31                  | 7.00                | No                |
|            |                     | 209     | 6995        | 6.12                  | 7.00                | No                |
|            |                     | 229     | 7095        | 6.35                  | 7.00                | No                |
|            |                     | 233     | 7115        | 6.34                  | 7.00                | No                |
|            | 802.11ax(HE20) (SU) | 1       | 5955        | 6.54                  | 7.00                | No                |
|            |                     | 49      | 6195        | 6.85                  | 7.00                | No                |
|            |                     | 93      | 6415        | 6.36                  | 7.00                | No                |
|            |                     | 97      | 6435        | 6.20                  | 7.00                | No                |
|            |                     | 105     | 6475        | 6.80                  | 7.00                | No                |
|            |                     | 113     | 6515        | 7.80                  | 8.00                | No                |
|            |                     | 117     | 6535        | 6.37                  | 7.00                | No                |
|            |                     | 149     | 6695        | 6.18                  | 7.00                | No                |
|            |                     | 181     | 6855        | 6.71                  | 7.00                | No                |
|            |                     | 185     | 6875        | 6.15                  | 7.00                | No                |
|            |                     | 209     | 6995        | 6.76                  | 7.00                | No                |
|            |                     | 233     | 7115        | 6.50                  | 7.00                | No                |
|            | 802.11ax(HE40) (SU) | 3       | 5965        | 9.71                  | 10.00               | No                |
|            |                     | 51      | 6205        | 9.59                  | 10.00               | No                |
|            |                     | 91      | 6405        | 9.71                  | 10.00               | No                |
|            |                     | 99      | 6445        | 9.77                  | 10.00               | No                |
|            |                     | 107     | 6485        | 9.52                  | 10.00               | No                |
|            |                     | 115     | 6525        | 9.33                  | 10.00               | No                |
|            |                     | 123     | 6565        | 9.08                  | 10.00               | No                |
|            |                     | 147     | 6685        | 9.74                  | 10.00               | No                |
|            |                     | 179     | 6845        | 9.47                  | 10.00               | No                |
|            |                     | 187     | 6885        | 9.16                  | 10.00               | No                |
|            |                     | 195     | 6925        | 9.58                  | 10.00               | No                |
|            |                     | 211     | 7005        | 9.21                  | 10.00               | No                |
|            |                     | 227     | 7085        | 9.37                  | 10.00               | No                |

|  |                         |     |      |              |       |     |
|--|-------------------------|-----|------|--------------|-------|-----|
|  | 802.11ax(HE80)<br>(SU)  | 7   | 5985 | 10.91        | 11.50 | No  |
|  |                         | 55  | 6225 | 11.35        | 11.50 | No  |
|  |                         | 87  | 6385 | 11.18        | 11.50 | No  |
|  |                         | 103 | 6465 | 10.98        | 11.50 | No  |
|  |                         | 119 | 6545 | 11.29        | 11.50 | No  |
|  |                         | 135 | 6625 | 10.55        | 11.50 | No  |
|  |                         | 151 | 6705 | 10.83        | 11.50 | No  |
|  |                         | 167 | 6785 | 11.05        | 11.50 | No  |
|  |                         | 183 | 6865 | 10.82        | 11.50 | No  |
|  |                         | 199 | 6945 | 10.56        | 11.50 | No  |
|  |                         | 215 | 7025 | 10.70        | 11.50 | No  |
|  | 802.11ax(HE160)<br>(SU) | 15  | 6025 | <b>13.72</b> | 14.00 | Yes |
|  |                         | 47  | 6185 | 13.54        | 14.00 | Yes |
|  |                         | 79  | 6345 | 13.14        | 14.00 | Yes |
|  |                         | 111 | 6505 | 13.30        | 14.00 | Yes |
|  |                         | 143 | 6665 | 13.70        | 14.00 | Yes |
|  |                         | 175 | 6825 | 13.26        | 14.00 | Yes |
|  |                         | 207 | 6985 | 13.53        | 14.00 | Yes |
|  | 802.11be(EHT20)<br>(SU) | 1   | 5955 | 6.48         | 7.00  | No  |
|  |                         | 49  | 6195 | 6.52         | 7.00  | No  |
|  |                         | 93  | 6415 | 6.66         | 7.00  | No  |
|  |                         | 97  | 6435 | 6.63         | 7.00  | No  |
|  |                         | 105 | 6475 | 6.17         | 7.00  | No  |
|  |                         | 113 | 6515 | 6.68         | 7.00  | No  |
|  |                         | 117 | 6535 | 6.84         | 7.00  | No  |
|  |                         | 149 | 6695 | 6.05         | 7.00  | No  |
|  |                         | 181 | 6855 | 6.15         | 7.00  | No  |
|  |                         | 185 | 6875 | 6.30         | 7.00  | No  |
|  |                         | 209 | 6995 | 6.77         | 7.00  | No  |
|  |                         | 233 | 7115 | 6.06         | 7.00  | No  |
|  | 802.11be(EHT40)<br>(SU) | 3   | 5965 | 9.53         | 10.00 | No  |
|  |                         | 51  | 6205 | 9.31         | 10.00 | No  |
|  |                         | 91  | 6405 | 9.23         | 10.00 | No  |
|  |                         | 99  | 6445 | 9.34         | 10.00 | No  |
|  |                         | 107 | 6485 | 9.21         | 10.00 | No  |
|  |                         | 115 | 6525 | 9.29         | 10.00 | No  |
|  |                         | 123 | 6565 | 9.54         | 10.00 | No  |
|  |                         | 147 | 6685 | 9.60         | 10.00 | No  |
|  |                         | 179 | 6845 | 9.09         | 10.00 | No  |
|  |                         | 187 | 6885 | 9.64         | 10.00 | No  |
|  |                         | 195 | 6925 | 9.14         | 10.00 | No  |
|  |                         | 211 | 7005 | 9.13         | 10.00 | No  |
|  |                         | 227 | 7085 | 9.48         | 10.00 | No  |

|  |                           |     |      |       |       |    |
|--|---------------------------|-----|------|-------|-------|----|
|  | 802.11be(EHT80)<br>(SU)   | 7   | 5985 | 11.79 | 12.50 | No |
|  |                           | 55  | 6225 | 11.67 | 12.50 | No |
|  |                           | 87  | 6385 | 12.26 | 12.50 | No |
|  |                           | 103 | 6465 | 11.87 | 12.50 | No |
|  |                           | 119 | 6545 | 11.56 | 12.50 | No |
|  |                           | 135 | 6625 | 11.92 | 12.50 | No |
|  |                           | 151 | 6705 | 11.59 | 12.50 | No |
|  |                           | 167 | 6785 | 12.18 | 12.50 | No |
|  |                           | 183 | 6865 | 12.12 | 12.50 | No |
|  |                           | 199 | 6945 | 11.80 | 12.50 | No |
|  |                           | 215 | 7025 | 11.66 | 12.50 | No |
|  | 802.11be(EHT160)<br>(SU)  | 15  | 6025 | 13.34 | 14.00 | No |
|  |                           | 47  | 6185 | 13.08 | 14.00 | No |
|  |                           | 79  | 6345 | 13.47 | 14.00 | No |
|  |                           | 111 | 6505 | 13.41 | 14.00 | No |
|  |                           | 143 | 6665 | 13.62 | 14.00 | No |
|  |                           | 175 | 6825 | 13.78 | 14.00 | No |
|  |                           | 207 | 6985 | 13.42 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26) | 1   | 5955 | -1.76 | -1.00 | No |
|  |                           | 49  | 6195 | -1.26 | -1.00 | No |
|  |                           | 93  | 6415 | -1.33 | -1.00 | No |
|  |                           | 97  | 6435 | -1.80 | -1.00 | No |
|  |                           | 105 | 6475 | -1.88 | -1.00 | No |
|  |                           | 113 | 6515 | -1.62 | -1.00 | No |
|  |                           | 117 | 6535 | -1.80 | -1.00 | No |
|  |                           | 149 | 6695 | -1.62 | -1.00 | No |
|  |                           | 181 | 6855 | -1.54 | -1.00 | No |
|  |                           | 185 | 6875 | -1.34 | -1.00 | No |
|  |                           | 209 | 6995 | -1.61 | -1.00 | No |
|  |                           | 233 | 7115 | -1.49 | -1.00 | No |
|  | 802.11be(EHT20)<br>(RU52) | 1   | 5955 | 1.23  | 1.50  | No |
|  |                           | 49  | 6195 | 0.89  | 1.50  | No |
|  |                           | 93  | 6415 | 1.15  | 1.50  | No |
|  |                           | 97  | 6435 | 0.71  | 1.50  | No |
|  |                           | 105 | 6475 | 0.71  | 1.50  | No |
|  |                           | 113 | 6515 | 0.80  | 1.50  | No |
|  |                           | 117 | 6535 | 0.88  | 1.50  | No |
|  |                           | 149 | 6695 | 0.55  | 1.50  | No |
|  |                           | 181 | 6855 | 1.22  | 1.50  | No |
|  |                           | 185 | 6875 | 1.10  | 1.50  | No |
|  |                           | 209 | 6995 | 1.23  | 1.50  | No |
|  |                           | 233 | 7115 | 1.02  | 1.50  | No |
|  | 802.11be(EHT20)           | 1   | 5955 | 3.38  | 4.00  | No |

|  |         |     |      |      |      |    |
|--|---------|-----|------|------|------|----|
|  | (RU106) | 49  | 6195 | 3.51 | 4.00 | No |
|  |         | 93  | 6415 | 3.69 | 4.00 | No |
|  |         | 97  | 6435 | 3.75 | 4.00 | No |
|  |         | 105 | 6475 | 3.65 | 4.00 | No |
|  |         | 113 | 6515 | 3.57 | 4.00 | No |
|  |         | 117 | 6535 | 3.85 | 4.00 | No |
|  |         | 149 | 6695 | 3.38 | 4.00 | No |
|  |         | 181 | 6855 | 3.81 | 4.00 | No |
|  |         | 185 | 6875 | 3.70 | 4.00 | No |
|  |         | 209 | 6995 | 3.67 | 4.00 | No |
|  |         | 233 | 7115 | 3.84 | 4.00 | No |

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.

## 8.1.8 6G WIFI (Main Antenna) (Laptop Mode)

| Band (GHz) | Mode                   | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|------------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 6          | 802.11a                | 1       | 5955        | 6.54                  | 7.00                | No                |
|            |                        | 49      | 6195        | 6.78                  | 7.00                | No                |
|            |                        | 93      | 6415        | 6.33                  | 7.00                | No                |
|            |                        | 97      | 6435        | 6.68                  | 7.00                | No                |
|            |                        | 105     | 6475        | 6.76                  | 7.00                | No                |
|            |                        | 113     | 6515        | 6.14                  | 7.00                | No                |
|            |                        | 117     | 6535        | 6.34                  | 7.00                | No                |
|            |                        | 149     | 6695        | 6.47                  | 7.00                | No                |
|            |                        | 181     | 6855        | 6.07                  | 7.00                | No                |
|            |                        | 185     | 6875        | 6.58                  | 7.00                | No                |
|            |                        | 189     | 6895        | 6.63                  | 7.00                | No                |
|            |                        | 209     | 6995        | 6.65                  | 7.00                | No                |
|            |                        | 229     | 7095        | 6.56                  | 7.00                | No                |
|            |                        | 233     | 7115        | 6.68                  | 7.00                | No                |
|            | 802.11ax(HE20)<br>(SU) | 1       | 5955        | 6.75                  | 7.00                | No                |
|            |                        | 49      | 6195        | 6.33                  | 7.00                | No                |
|            |                        | 93      | 6415        | 6.12                  | 7.00                | No                |
|            |                        | 97      | 6435        | 6.27                  | 7.00                | No                |
|            |                        | 105     | 6475        | 6.45                  | 7.00                | No                |
|            |                        | 113     | 6515        | 7.05                  | 8.00                | No                |
|            |                        | 117     | 6535        | 6.09                  | 7.00                | No                |
|            |                        | 149     | 6695        | 6.84                  | 7.00                | No                |
|            |                        | 181     | 6855        | 6.80                  | 7.00                | No                |
|            |                        | 185     | 6875        | 6.64                  | 7.00                | No                |
|            |                        | 209     | 6995        | 6.37                  | 7.00                | No                |
|            |                        | 233     | 7115        | 6.27                  | 7.00                | No                |
|            | 802.11ax(HE40)<br>(SU) | 3       | 5965        | 9.08                  | 10.00               | No                |
|            |                        | 51      | 6205        | 9.67                  | 10.00               | No                |
|            |                        | 91      | 6405        | 9.28                  | 10.00               | No                |
|            |                        | 99      | 6445        | 9.70                  | 10.00               | No                |
|            |                        | 107     | 6485        | 9.73                  | 10.00               | No                |
|            |                        | 115     | 6525        | 9.34                  | 10.00               | No                |
|            |                        | 123     | 6565        | 9.15                  | 10.00               | No                |
|            |                        | 147     | 6685        | 9.73                  | 10.00               | No                |
|            |                        | 179     | 6845        | 9.08                  | 10.00               | No                |
|            |                        | 187     | 6885        | 9.42                  | 10.00               | No                |
|            |                        | 195     | 6925        | 9.85                  | 10.00               | No                |
|            |                        | 211     | 7005        | 9.08                  | 10.00               | No                |
|            |                        | 227     | 7085        | 9.78                  | 10.00               | No                |



|  |                         |     |      |              |       |     |
|--|-------------------------|-----|------|--------------|-------|-----|
|  | 802.11ax(HE80)<br>(SU)  | 7   | 5985 | 10.64        | 12.00 | No  |
|  |                         | 55  | 6225 | 10.78        | 12.00 | No  |
|  |                         | 87  | 6385 | 10.81        | 12.00 | No  |
|  |                         | 103 | 6465 | 11.35        | 12.00 | No  |
|  |                         | 119 | 6545 | 11.07        | 12.00 | No  |
|  |                         | 135 | 6625 | 11.11        | 12.00 | No  |
|  |                         | 151 | 6705 | 11.10        | 12.00 | No  |
|  |                         | 167 | 6785 | 10.90        | 12.00 | No  |
|  |                         | 183 | 6865 | 11.00        | 12.00 | No  |
|  |                         | 199 | 6945 | 10.61        | 12.00 | No  |
|  |                         | 215 | 7025 | 11.27        | 12.00 | No  |
|  | 802.11ax(HE160)<br>(SU) | 15  | 6025 | 13.73        | 14.00 | Yes |
|  |                         | 47  | 6185 | 13.23        | 14.00 | Yes |
|  |                         | 79  | 6345 | 13.33        | 14.00 | Yes |
|  |                         | 111 | 6505 | <b>13.79</b> | 14.00 | Yes |
|  |                         | 143 | 6665 | 13.52        | 14.00 | Yes |
|  |                         | 175 | 6825 | 13.44        | 14.00 | Yes |
|  |                         | 207 | 6985 | 13.33        | 14.00 | Yes |
|  | 802.11be(EHT20)<br>(SU) | 1   | 5955 | 6.28         | 7.00  | No  |
|  |                         | 49  | 6195 | 6.54         | 7.00  | No  |
|  |                         | 93  | 6415 | 6.42         | 7.00  | No  |
|  |                         | 97  | 6435 | 6.82         | 7.00  | No  |
|  |                         | 105 | 6475 | 6.39         | 7.00  | No  |
|  |                         | 113 | 6515 | 6.66         | 7.00  | No  |
|  |                         | 117 | 6535 | 6.83         | 7.00  | No  |
|  |                         | 149 | 6695 | 6.78         | 7.00  | No  |
|  |                         | 181 | 6855 | 6.39         | 7.00  | No  |
|  |                         | 185 | 6875 | 6.17         | 7.00  | No  |
|  |                         | 209 | 6995 | 6.62         | 7.00  | No  |
|  |                         | 233 | 7115 | 6.68         | 7.00  | No  |
|  | 802.11be(EHT40)<br>(SU) | 3   | 5965 | 9.46         | 10.00 | No  |
|  |                         | 51  | 6205 | 9.75         | 10.00 | No  |
|  |                         | 91  | 6405 | 9.66         | 10.00 | No  |
|  |                         | 99  | 6445 | 9.61         | 10.00 | No  |
|  |                         | 107 | 6485 | 9.82         | 10.00 | No  |
|  |                         | 115 | 6525 | 9.27         | 10.00 | No  |
|  |                         | 123 | 6565 | 9.07         | 10.00 | No  |
|  |                         | 147 | 6685 | 9.31         | 10.00 | No  |
|  |                         | 179 | 6845 | 9.19         | 10.00 | No  |
|  |                         | 187 | 6885 | 9.09         | 10.00 | No  |
|  |                         | 195 | 6925 | 9.69         | 10.00 | No  |
|  |                         | 211 | 7005 | 9.17         | 10.00 | No  |
|  |                         | 227 | 7085 | 9.68         | 10.00 | No  |

|  |                           |     |      |       |       |    |
|--|---------------------------|-----|------|-------|-------|----|
|  | 802.11be(EHT80)<br>(SU)   | 7   | 5985 | 11.84 | 12.50 | No |
|  |                           | 55  | 6225 | 11.90 | 12.50 | No |
|  |                           | 87  | 6385 | 11.55 | 12.50 | No |
|  |                           | 103 | 6465 | 12.06 | 12.50 | No |
|  |                           | 119 | 6545 | 11.78 | 12.50 | No |
|  |                           | 135 | 6625 | 12.19 | 12.50 | No |
|  |                           | 151 | 6705 | 12.18 | 12.50 | No |
|  |                           | 167 | 6785 | 12.06 | 12.50 | No |
|  |                           | 183 | 6865 | 11.62 | 12.50 | No |
|  |                           | 199 | 6945 | 12.32 | 12.50 | No |
|  |                           | 215 | 7025 | 11.76 | 12.50 | No |
|  | 802.11be(EHT160)<br>(SU)  | 15  | 6025 | 13.65 | 14.00 | No |
|  |                           | 47  | 6185 | 13.16 | 14.00 | No |
|  |                           | 79  | 6345 | 13.06 | 14.00 | No |
|  |                           | 111 | 6505 | 13.57 | 14.00 | No |
|  |                           | 143 | 6665 | 13.52 | 14.00 | No |
|  |                           | 175 | 6825 | 13.75 | 14.00 | No |
|  |                           | 207 | 6985 | 13.58 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26) | 1   | 5955 | -1.74 | -1.00 | No |
|  |                           | 49  | 6195 | -1.95 | -1.00 | No |
|  |                           | 93  | 6415 | -1.43 | -1.00 | No |
|  |                           | 97  | 6435 | -1.56 | -1.00 | No |
|  |                           | 105 | 6475 | -1.58 | -1.00 | No |
|  |                           | 113 | 6515 | -1.21 | -1.00 | No |
|  |                           | 117 | 6535 | -1.50 | -1.00 | No |
|  |                           | 149 | 6695 | -1.59 | -1.00 | No |
|  |                           | 181 | 6855 | -1.80 | -1.00 | No |
|  |                           | 185 | 6875 | -1.81 | -1.00 | No |
|  |                           | 209 | 6995 | -1.41 | -1.00 | No |
|  |                           | 233 | 7115 | -1.28 | -1.00 | No |
|  | 802.11be(EHT20)<br>(RU52) | 1   | 5955 | 1.32  | 1.50  | No |
|  |                           | 49  | 6195 | 1.10  | 1.50  | No |
|  |                           | 93  | 6415 | 0.84  | 1.50  | No |
|  |                           | 97  | 6435 | 0.82  | 1.50  | No |
|  |                           | 105 | 6475 | 0.56  | 1.50  | No |
|  |                           | 113 | 6515 | 0.62  | 1.50  | No |
|  |                           | 117 | 6535 | 1.24  | 1.50  | No |
|  |                           | 149 | 6695 | 1.31  | 1.50  | No |
|  |                           | 181 | 6855 | 0.95  | 1.50  | No |
|  |                           | 185 | 6875 | 1.14  | 1.50  | No |
|  |                           | 209 | 6995 | 0.99  | 1.50  | No |
|  |                           | 233 | 7115 | 0.98  | 1.50  | No |
|  | 802.11be(EHT20)           | 1   | 5955 | 3.77  | 4.00  | No |

|  |         |     |      |      |      |    |
|--|---------|-----|------|------|------|----|
|  | (RU106) | 49  | 6195 | 3.21 | 4.00 | No |
|  |         | 93  | 6415 | 3.74 | 4.00 | No |
|  |         | 97  | 6435 | 3.54 | 4.00 | No |
|  |         | 105 | 6475 | 3.48 | 4.00 | No |
|  |         | 113 | 6515 | 3.84 | 4.00 | No |
|  |         | 117 | 6535 | 3.51 | 4.00 | No |
|  |         | 149 | 6695 | 3.83 | 4.00 | No |
|  |         | 181 | 6855 | 3.59 | 4.00 | No |
|  |         | 185 | 6875 | 3.23 | 4.00 | No |
|  |         | 209 | 6995 | 3.42 | 4.00 | No |
|  |         | 233 | 7115 | 3.80 | 4.00 | No |

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.

## 8.1.9 6G WIFI (MIMO) (Laptop Mode)

| Band (GHz) | Mode                   | Channel | Freq. (MHz) | Conducted Power (dBm) | Tune-up Limit (dBm) | SAR Test Require. |
|------------|------------------------|---------|-------------|-----------------------|---------------------|-------------------|
| 6          | 802.11a                | 1       | 5955        | 3.31                  | 4.00                | No                |
|            |                        | 49      | 6195        | 3.59                  | 4.00                | No                |
|            |                        | 93      | 6415        | 3.48                  | 4.00                | No                |
|            |                        | 97      | 6435        | 3.28                  | 4.00                | No                |
|            |                        | 105     | 6475        | 3.51                  | 4.00                | No                |
|            |                        | 113     | 6515        | 3.29                  | 4.00                | No                |
|            |                        | 117     | 6535        | 3.41                  | 4.00                | No                |
|            |                        | 149     | 6695        | 3.69                  | 4.00                | No                |
|            |                        | 181     | 6855        | 3.70                  | 4.00                | No                |
|            |                        | 185     | 6875        | 3.57                  | 4.00                | No                |
|            |                        | 189     | 6895        | 3.11                  | 4.00                | No                |
|            |                        | 209     | 6995        | 3.58                  | 4.00                | No                |
|            |                        | 229     | 7095        | 3.59                  | 4.00                | No                |
|            |                        | 233     | 7115        | 3.77                  | 4.00                | No                |
|            | 802.11ax(HE20)<br>(SU) | 1       | 5955        | 6.05                  | 6.50                | No                |
|            |                        | 49      | 6195        | 6.17                  | 6.50                | No                |
|            |                        | 93      | 6415        | 6.12                  | 6.50                | No                |
|            |                        | 97      | 6435        | 6.07                  | 6.50                | No                |
|            |                        | 105     | 6475        | 6.19                  | 6.50                | No                |
|            |                        | 113     | 6515        | 6.27                  | 6.50                | No                |
|            |                        | 117     | 6535        | 6.39                  | 6.50                | No                |
|            |                        | 149     | 6695        | 6.24                  | 6.50                | No                |
|            |                        | 181     | 6855        | 6.58                  | 6.50                | No                |
|            |                        | 185     | 6875        | 6.30                  | 6.50                | No                |
|            |                        | 209     | 6995        | 6.11                  | 6.50                | No                |
|            |                        | 233     | 7115        | 6.49                  | 6.50                | No                |
|            | 802.11ax(HE40)<br>(SU) | 3       | 5965        | 9.20                  | 10.00               | No                |
|            |                        | 51      | 6205        | 9.76                  | 10.00               | No                |
|            |                        | 91      | 6405        | 9.05                  | 10.00               | No                |
|            |                        | 99      | 6445        | 9.56                  | 10.00               | No                |
|            |                        | 107     | 6485        | 9.43                  | 10.00               | No                |
|            |                        | 115     | 6525        | 9.57                  | 10.00               | No                |
|            |                        | 123     | 6565        | 9.33                  | 10.00               | No                |
|            |                        | 147     | 6685        | 9.84                  | 10.00               | No                |
|            |                        | 179     | 6845        | 8.96                  | 10.00               | No                |
|            |                        | 187     | 6885        | 9.11                  | 10.00               | No                |
|            |                        | 195     | 6925        | 9.31                  | 10.00               | No                |
|            |                        | 211     | 7005        | 9.28                  | 10.00               | No                |
|            |                        | 227     | 7085        | 9.30                  | 10.00               | No                |

|  |                         |     |      |       |       |    |
|--|-------------------------|-----|------|-------|-------|----|
|  | 802.11ax(HE80)<br>(SU)  | 7   | 5985 | 11.25 | 12.00 | No |
|  |                         | 55  | 6225 | 10.67 | 12.00 | No |
|  |                         | 87  | 6385 | 10.88 | 12.00 | No |
|  |                         | 103 | 6465 | 11.01 | 12.00 | No |
|  |                         | 119 | 6545 | 10.55 | 12.00 | No |
|  |                         | 135 | 6625 | 10.76 | 12.00 | No |
|  |                         | 151 | 6705 | 10.95 | 12.00 | No |
|  |                         | 167 | 6785 | 10.85 | 12.00 | No |
|  |                         | 183 | 6865 | 11.10 | 12.00 | No |
|  |                         | 199 | 6945 | 10.65 | 12.00 | No |
|  |                         | 215 | 7025 | 11.13 | 12.00 | No |
|  | 802.11ax(HE160)<br>(SU) | 15  | 6025 | 13.25 | 14.00 | No |
|  |                         | 47  | 6185 | 13.41 | 14.00 | No |
|  |                         | 79  | 6345 | 13.65 | 14.00 | No |
|  |                         | 111 | 6505 | 13.70 | 14.00 | No |
|  |                         | 143 | 6665 | 13.27 | 14.00 | No |
|  |                         | 175 | 6825 | 13.77 | 14.00 | No |
|  |                         | 207 | 6985 | 13.11 | 14.00 | No |
|  | 802.11be(EHT20)<br>(SU) | 1   | 5955 | 6.36  | 7.00  | No |
|  |                         | 49  | 6195 | 6.39  | 7.00  | No |
|  |                         | 93  | 6415 | 6.58  | 7.00  | No |
|  |                         | 97  | 6435 | 6.35  | 7.00  | No |
|  |                         | 105 | 6475 | 6.57  | 7.00  | No |
|  |                         | 113 | 6515 | 6.59  | 7.00  | No |
|  |                         | 117 | 6535 | 6.58  | 7.00  | No |
|  |                         | 149 | 6695 | 6.12  | 7.00  | No |
|  |                         | 181 | 6855 | 6.78  | 7.00  | No |
|  |                         | 185 | 6875 | 6.26  | 7.00  | No |
|  |                         | 209 | 6995 | 6.70  | 7.00  | No |
|  |                         | 233 | 7115 | 6.59  | 7.00  | No |
|  | 802.11be(EHT40)<br>(SU) | 3   | 5965 | 9.61  | 10.00 | No |
|  |                         | 51  | 6205 | 9.48  | 10.00 | No |
|  |                         | 91  | 6405 | 9.17  | 10.00 | No |
|  |                         | 99  | 6445 | 9.07  | 10.00 | No |
|  |                         | 107 | 6485 | 9.05  | 10.00 | No |
|  |                         | 115 | 6525 | 9.81  | 10.00 | No |
|  |                         | 123 | 6565 | 9.28  | 10.00 | No |
|  |                         | 147 | 6685 | 9.34  | 10.00 | No |
|  |                         | 179 | 6845 | 9.23  | 10.00 | No |
|  |                         | 187 | 6885 | 9.21  | 10.00 | No |
|  |                         | 195 | 6925 | 9.27  | 10.00 | No |
|  |                         | 211 | 7005 | 9.12  | 10.00 | No |
|  |                         | 227 | 7085 | 9.68  | 10.00 | No |

|  |                           |     |      |       |       |    |
|--|---------------------------|-----|------|-------|-------|----|
|  | 802.11be(EHT80)<br>(SU)   | 7   | 5985 | 11.57 | 12.50 | No |
|  |                           | 55  | 6225 | 12.09 | 12.50 | No |
|  |                           | 87  | 6385 | 12.23 | 12.50 | No |
|  |                           | 103 | 6465 | 11.58 | 12.50 | No |
|  |                           | 119 | 6545 | 11.56 | 12.50 | No |
|  |                           | 135 | 6625 | 12.32 | 12.50 | No |
|  |                           | 151 | 6705 | 12.25 | 12.50 | No |
|  |                           | 167 | 6785 | 11.85 | 12.50 | No |
|  |                           | 183 | 6865 | 12.29 | 12.50 | No |
|  |                           | 199 | 6945 | 12.25 | 12.50 | No |
|  |                           | 215 | 7025 | 11.88 | 12.50 | No |
|  | 802.11be(EHT160)<br>(SU)  | 15  | 6025 | 13.69 | 14.00 | No |
|  |                           | 47  | 6185 | 13.34 | 14.00 | No |
|  |                           | 79  | 6345 | 13.56 | 14.00 | No |
|  |                           | 111 | 6505 | 13.54 | 14.00 | No |
|  |                           | 143 | 6665 | 13.41 | 14.00 | No |
|  |                           | 175 | 6825 | 13.15 | 14.00 | No |
|  |                           | 207 | 6985 | 13.39 | 14.00 | No |
|  | 802.11be(EHT20)<br>(RU26) | 1   | 5955 | -1.49 | -1.00 | No |
|  |                           | 49  | 6195 | -1.32 | -1.00 | No |
|  |                           | 93  | 6415 | -1.88 | -1.00 | No |
|  |                           | 97  | 6435 | -1.45 | -1.00 | No |
|  |                           | 105 | 6475 | -1.81 | -1.00 | No |
|  |                           | 113 | 6515 | -1.52 | -1.00 | No |
|  |                           | 117 | 6535 | -1.47 | -1.00 | No |
|  |                           | 149 | 6695 | -1.73 | -1.00 | No |
|  |                           | 181 | 6855 | -1.54 | -1.00 | No |
|  |                           | 185 | 6875 | -1.81 | -1.00 | No |
|  |                           | 209 | 6995 | -1.39 | -1.00 | No |
|  |                           | 233 | 7115 | -1.84 | -1.00 | No |
|  | 802.11be(EHT20)<br>(RU52) | 1   | 5955 | 0.94  | 1.50  | No |
|  |                           | 49  | 6195 | 1.15  | 1.50  | No |
|  |                           | 93  | 6415 | 1.23  | 1.50  | No |
|  |                           | 97  | 6435 | 1.03  | 1.50  | No |
|  |                           | 105 | 6475 | 1.21  | 1.50  | No |
|  |                           | 113 | 6515 | 1.21  | 1.50  | No |
|  |                           | 117 | 6535 | 0.95  | 1.50  | No |
|  |                           | 149 | 6695 | 0.80  | 1.50  | No |
|  |                           | 181 | 6855 | 1.27  | 1.50  | No |
|  |                           | 185 | 6875 | 0.89  | 1.50  | No |
|  |                           | 209 | 6995 | 0.76  | 1.50  | No |
|  |                           | 233 | 7115 | 0.78  | 1.50  | No |
|  | 802.11be(EHT20)           | 1   | 5955 | 3.64  | 4.00  | No |

|  |         |     |      |      |      |    |
|--|---------|-----|------|------|------|----|
|  | (RU106) | 49  | 6195 | 3.79 | 4.00 | No |
|  |         | 93  | 6415 | 3.58 | 4.00 | No |
|  |         | 97  | 6435 | 3.71 | 4.00 | No |
|  |         | 105 | 6475 | 3.06 | 4.00 | No |
|  |         | 113 | 6515 | 3.78 | 4.00 | No |
|  |         | 117 | 6535 | 3.06 | 4.00 | No |
|  |         | 149 | 6695 | 3.73 | 4.00 | No |
|  |         | 181 | 6855 | 3.18 | 4.00 | No |
|  |         | 185 | 6875 | 3.77 | 4.00 | No |
|  |         | 209 | 6995 | 3.36 | 4.00 | No |
|  |         | 233 | 7115 | 3.08 | 4.00 | No |

Note: For WiFi SAR testing was performed on single antenna RF power in SISO mode that is larger to the single antenna RF power in MIMO mode, and for RF exposure assessment of MIMO mode simultaneous transmission used more conservative "Max. (main ant) + Max. (aux. ant) " method to determine SAR compliance. When the sum of 1-g SISO transmission SAR measurement is <1.6 W/kg, or the SPLSR value  $\leq 0.04$  the MIMO SAR test is not required.

## 8.2 Bluetooth

### 8.2.1 Bluetooth (Aux. Antenna)

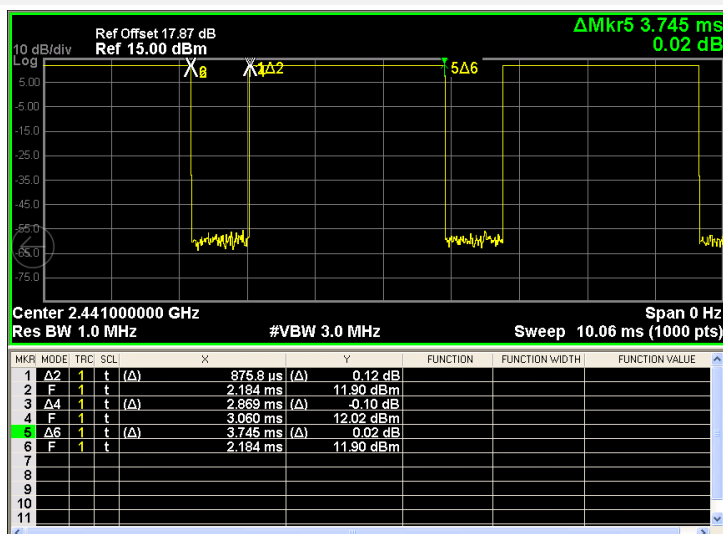
| Mode                | GFSK      |              |       | $\pi/4$ -DQPSK |       |       |
|---------------------|-----------|--------------|-------|----------------|-------|-------|
| Channel             | 0         | 39           | 78    | 0              | 39    | 78    |
| Frequency (MHz)     | 2402      | 2441         | 2480  | 2402           | 2441  | 2480  |
| Average Power (dBm) | 12.13     | <b>12.18</b> | 11.95 | 9.66           | 9.94  | 9.81  |
| Tune-Up Limit (dBm) | 12.50     | 12.50        | 12.50 | 10.50          | 10.50 | 10.50 |
| SAR Test Require    | Yes       | Yes          | Yes   | No             | No    | No    |
| Mode                | 8-DPSK    |              |       | /              |       |       |
| Channel             | 0         | 39           | 78    | /              | /     | /     |
| Frequency (MHz)     | 2402      | 2441         | 2480  | /              | /     | /     |
| Average Power (dBm) | 10.01     | 10.14        | 9.85  | /              | /     | /     |
| Tune-Up Limit (dBm) | 10.50     | 10.50        | 10.50 | /              | /     | /     |
| SAR Test Require    | No        | No           | No    | /              | /     | /     |
| Mode                | BLE-1Mbps |              |       | BLE-2Mbps      |       |       |
| Channel             | 0         | 19           | 39    | 1              | 19    | 38    |
| Frequency (MHz)     | 2402      | 2440         | 2480  | 2404           | 2440  | 2478  |
| Average Power (dBm) | 11.77     | 11.65        | 11.27 | 11.34          | 11.30 | 11.37 |
| Tune-Up Limit (dBm) | 12.00     | 12.00        | 12.00 | 12.00          | 12.00 | 12.00 |
| SAR Test Require    | No        | No           | No    | No             | No    | No    |

Note: Since Bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode.

The Bluetooth duty cycle is 76.61% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

#### Duty Cycle

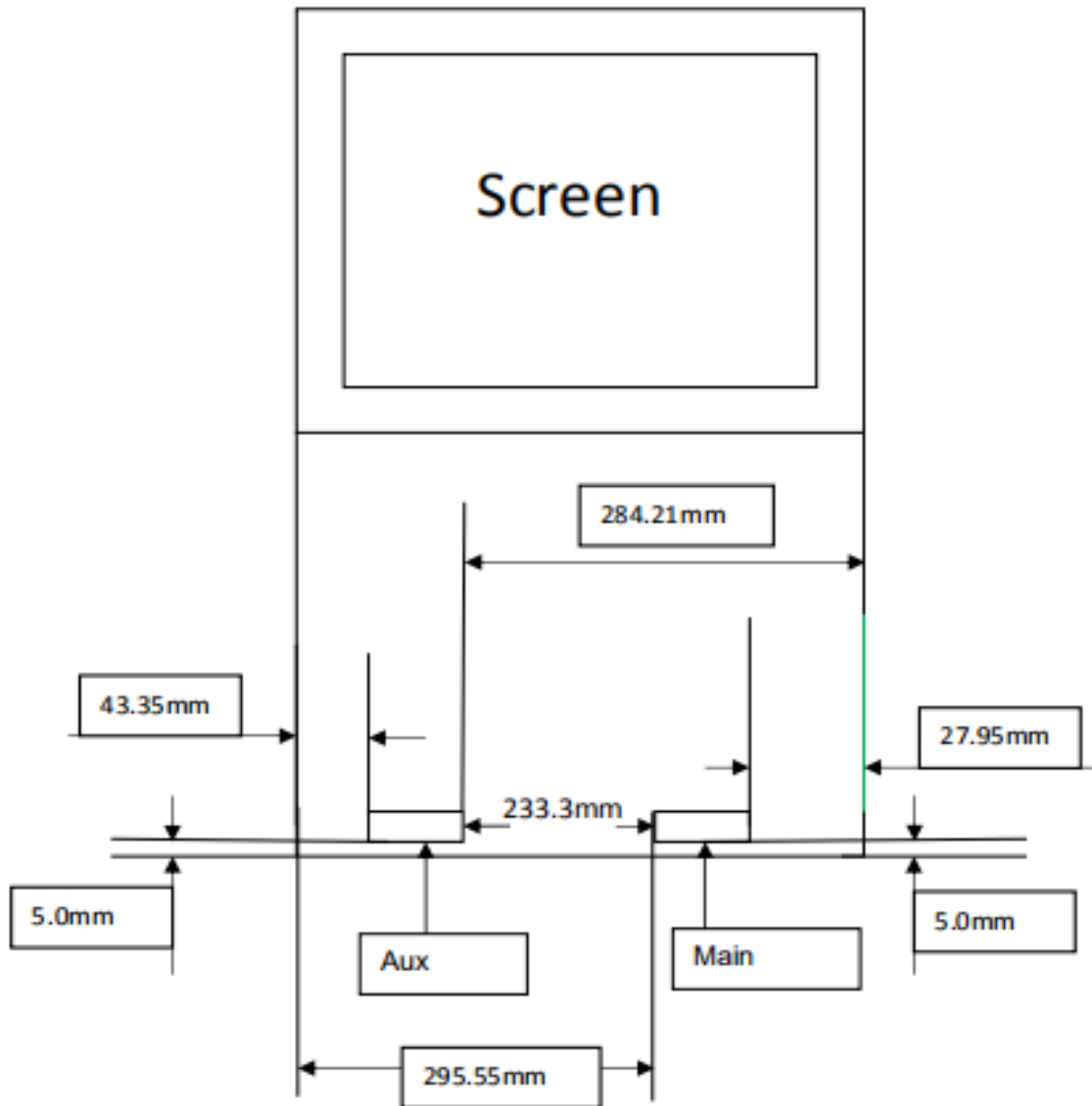
##### Bluetooth-GFSK

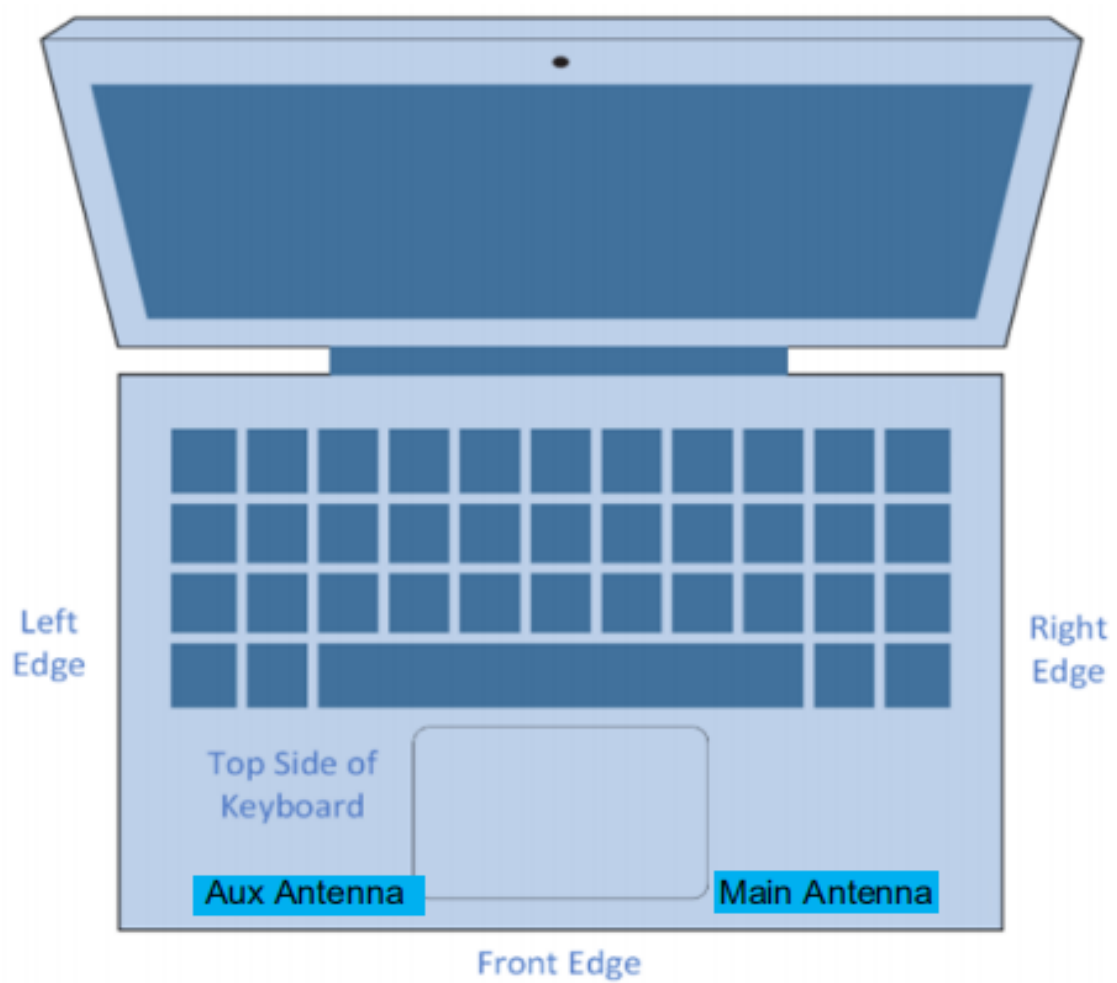


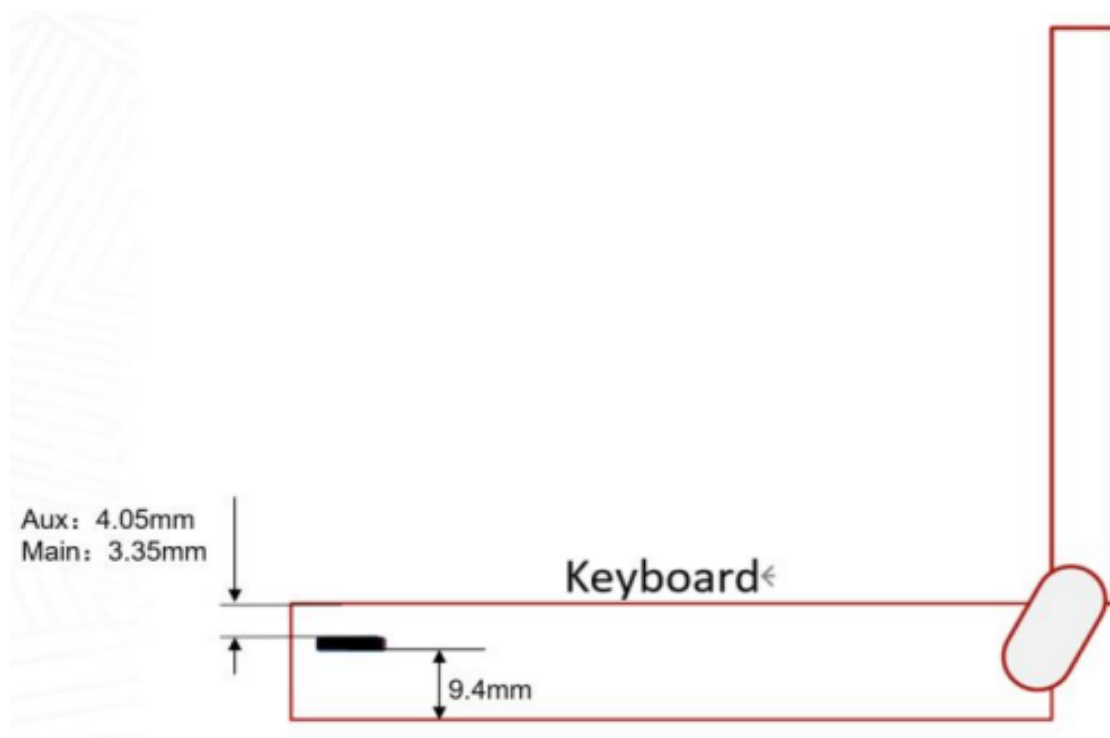


## 9 TEST EXCLUSION CONSIDERATION

### 9.1 Antenna Location Sketch







| Antenna | Support Bands      |
|---------|--------------------|
| Aux.    | WLAN 2.4G/5G/6G/BT |
| Main    | WLAN 2.4G/5G/6G    |

## 9.2 SAR Test Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). The following table shows the power threshold from 5mm to 50mm.

| Power Thresholds (mW) |                                       |                                 |                                 |                                 |                                 |
|-----------------------|---------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Frequency (MHz)       | At separation distance of $\leq 5$ mm | At separation distance of 10 mm | At separation distance of 15 mm | At separation distance of 20 mm | At separation distance of 25 mm |
| 300                   | 39 mW                                 | 65 mW                           | 88 mW                           | 110 mW                          | 129 mW                          |
| 450                   | 22 mW                                 | 44 mW                           | 67 mW                           | 89 mW                           | 112 mW                          |
| 835                   | 9 mW                                  | 25 mW                           | 44 mW                           | 66 mW                           | 90 mW                           |
| 1900                  | 3 mW                                  | 12 mW                           | 26 mW                           | 44 mW                           | 66 mW                           |
| 2450                  | 3 mW                                  | 10 mW                           | 22 mW                           | 38 mW                           | 59 mW                           |
| 3600                  | 2 mW                                  | 8 mW                            | 18 mW                           | 32 mW                           | 49 mW                           |
| 5800                  | 1 mW                                  | 6 mW                            | 14 mW                           | 25 mW                           | 40 mW                           |
| Frequency (MHz)       | At separation distance of 30 mm       | At separation distance of 35 mm | At separation distance of 40 mm | At separation distance of 45 mm | At separation distance of 50 mm |
| 300                   | 148 mW                                | 166 mW                          | 184 mW                          | 201 mW                          | 217 mW                          |
| 450                   | 135 mW                                | 158 mW                          | 180 mW                          | 203 mW                          | 226 mW                          |
| 835                   | 116 mW                                | 145 mW                          | 175 mW                          | 207 mW                          | 240 mW                          |
| 1900                  | 92 mW                                 | 122 mW                          | 157 mW                          | 195 mW                          | 236 mW                          |
| 2450                  | 83 mW                                 | 111 mW                          | 143 mW                          | 179 mW                          | 219 mW                          |
| 3600                  | 71 mW                                 | 96 mW                           | 125 mW                          | 158 mW                          | 195 mW                          |
| 5800                  | 58 mW                                 | 80 mW                           | 106 mW                          | 136 mW                          | 169 mW                          |

### 9.2.1 SAR Test Consideration

This host is a notebook computer, under normal use the RF exposure scenarios are shown in the table below:

| RF Exposure Position | RF Exposure Scenarios |
|----------------------|-----------------------|
| Bottom Side          | Body                  |
| Front Edge           | Body                  |
| Left Edge            | Limbs                 |
| Right Edge           | Limbs                 |
| Keyboard Side        | Limbs                 |

#### Aux. Antenna Body RF exposure scenarios

| Test Position Configurations | Mode                     | Bluetooth | WLAN 2.4GHz | U-NII-2A | U-NII-2C | U-NII-3 | U-NII-4 | U-NII-5/6/7/8 |
|------------------------------|--------------------------|-----------|-------------|----------|----------|---------|---------|---------------|
| Calculated Frequency (MHz)   |                          | 2480      | 2462        | 5320     | 5710     | 5825    | 5925    | 6000          |
| Bottom Side                  | Distance to User (mm)    | 9.4       |             |          |          |         |         |               |
|                              | Max. Peak Power (dBm)    | 12.50     | 20.00       | 14.00    | 14.00    | 14.00   | 14.00   | 14.00         |
|                              | Max. Peak Power (mW)     | 17.78     | 100.00      | 25.12    | 25.12    | 25.12   | 25.12   | 25.12         |
|                              | Exclusion Threshold (mW) | 9.04      | 9.09        | 5.45     | 5.20     | 5.13    | 5.07    | 5.03          |
|                              | SAR Test Required        | Yes       | Yes         | Yes      | Yes      | Yes     | Yes     | Yes           |
| Front Edge                   | Distance to User (mm)    | 5         |             |          |          |         |         |               |
|                              | Max. Peak Power (dBm)    | 12.50     | 20.00       | 14.00    | 14.00    | 14.00   | 14.00   | 14.00         |
|                              | Max. Peak Power (mW)     | 17.78     | 100.00      | 25.12    | 25.12    | 25.12   | 25.12   | 25.12         |
|                              | Exclusion Threshold (mW) | 2.72      | 2.73        | 1.47     | 1.39     | 1.37    | 1.35    | 1.34          |
|                              | SAR Test Required        | Yes       | Yes         | Yes      | Yes      | Yes     | Yes     | Yes           |

#### Main Antenna Body RF exposure scenarios

| Test Position Configurations | Mode                     | WLAN 2.4GHz | U-NII-2A | U-NII-2C | U-NII-3 | U-NII-4 | U-NII-5/6/7/8 |
|------------------------------|--------------------------|-------------|----------|----------|---------|---------|---------------|
| Calculated Frequency (MHz)   |                          | 2462        | 5320     | 5710     | 5825    | 5925    | 6000          |
| Bottom Side                  | Distance to User (mm)    | 9.4         |          |          |         |         |               |
|                              | Max. Peak Power (dBm)    | 20.00       | 14.00    | 14.00    | 14.00   | 14.00   | 14.00         |
|                              | Max. Peak Power (mW)     | 100.00      | 25.12    | 25.12    | 25.12   | 25.12   | 25.12         |
|                              | Exclusion Threshold (mW) | 9.09        | 5.45     | 5.20     | 5.13    | 5.07    | 5.03          |
|                              | SAR Test Required        | Yes         | Yes      | Yes      | Yes     | Yes     | Yes           |
| Front Edge                   | Distance to User (mm)    | 5           |          |          |         |         |               |
|                              | Max. Peak Power (dBm)    | 20.00       | 14.00    | 14.00    | 14.00   | 14.00   | 14.00         |
|                              | Max. Peak Power (mW)     | 100.00      | 25.12    | 25.12    | 25.12   | 25.12   | 25.12         |
|                              | Exclusion Threshold (mW) | 2.73        | 1.47     | 1.39     | 1.37    | 1.35    | 1.34          |
|                              | SAR Test Required        | Yes         | Yes      | Yes      | Yes     | Yes     | Yes           |

## Aux. Antenna Limbs RF exposure scenarios

| Test Position Configurations | Mode                     | Bluetooth | WLAN 2.4GHz | U-NII-2A | U-NII-2C | U-NII-3  | U-NII-4  | U-NII-5/6/7/8 |
|------------------------------|--------------------------|-----------|-------------|----------|----------|----------|----------|---------------|
| Calculated Frequency (MHz)   |                          | 2480      | 2462        | 5320     | 5710     | 5825     | 5925     | 6000          |
| Left Edge                    | Distance to User (mm)    | 43.35     |             |          |          |          |          |               |
|                              | Max. Peak Power (dBm)    | 12.50     | 20.00       | 14.00    | 14.00    | 14.00    | 14.00    | 14.00         |
|                              | Max. Peak Power (mW)     | 17.78     | 100.00      | 25.12    | 25.12    | 25.12    | 25.12    | 25.12         |
|                              | Exclusion Threshold (mW) | 332.57    | 333.38      | 258.13   | 252.14   | 250.47   | 249.06   | 248.02        |
|                              | SAR Test Required        | No        | No          | No       | No       | No       | No       | No            |
| Right Edge                   | Distance to User (mm)    | 284.21    |             |          |          |          |          |               |
|                              | Max. Peak Power (dBm)    | 12.50     | 20.00       | 14.00    | 14.00    | 14.00    | 14.00    | 14.00         |
|                              | Max. Peak Power (mW)     | 17.78     | 100.00      | 25.12    | 25.12    | 25.12    | 25.12    | 25.12         |
|                              | Exclusion Threshold (mW) | 11952.01  | 11945.37    | 12668.73 | 12737.30 | 12756.70 | 12773.28 | 12785.54      |
|                              | SAR Test Required        | No        | No          | No       | No       | No       | No       | No            |
| Keyboard Side                | Distance to User (mm)    | 4.05      |             |          |          |          |          |               |
|                              | Max. Peak Power (dBm)    | 12.50     | 20.00       | 14.00    | 14.00    | 14.00    | 14.00    | 14.00         |
|                              | Max. Peak Power (mW)     | 17.78     | 100.00      | 25.12    | 25.12    | 25.12    | 25.12    | 25.12         |
|                              | Exclusion Threshold (mW) | 3.64      | 3.66        | 1.91     | 1.80     | 1.77     | 1.74     | 1.72          |
|                              | SAR Test Required        | Yes       | Yes         | Yes      | Yes      | Yes      | Yes      | Yes           |

## Main Antenna Limbs RF exposure scenarios

| Test Position Configurations | Mode                     | WLAN 2.4GHz | U-NII-2A | U-NII-2C | U-NII-3  | U-NII-4  | U-NII-5/6/7/8 |
|------------------------------|--------------------------|-------------|----------|----------|----------|----------|---------------|
| Calculated Frequency (MHz)   |                          | 2462        | 5320     | 5710     | 5825     | 5925     | 6000          |
| Left Edge                    | Distance to User (mm)    | 295.55      |          |          |          |          |               |
|                              | Max. Peak Power (dBm)    | 20.00       | 14.00    | 14.00    | 14.00    | 14.00    | 14.00         |
|                              | Max. Peak Power (mW)     | 100.00      | 25.12    | 25.12    | 25.12    | 25.12    | 25.12         |
|                              | Exclusion Threshold (mW) | 12868.81    | 13737.72 | 13820.38 | 13843.77 | 13863.77 | 13878.57      |
|                              | SAR Test Required        | No          | No       | No       | No       | No       | No            |
| Right Edge                   | Distance to User (mm)    | 27.95       |          |          |          |          |               |
|                              | Max. Peak Power (dBm)    | 20.00       | 14.00    | 14.00    | 14.00    | 14.00    | 14.00         |
|                              | Max. Peak Power (mW)     | 100.00      | 25.12    | 25.12    | 25.12    | 25.12    | 25.12         |
|                              | Exclusion Threshold (mW) | 144.60      | 104.04   | 100.94   | 100.08   | 99.36    | 98.82         |
|                              | SAR Test Required        | No          | No       | No       | No       | No       | No            |
| Keyboard Side                | Distance to User (mm)    | 3.35        |          |          |          |          |               |
|                              | Max. Peak Power (dBm)    | 20.00       | 14.00    | 14.00    | 14.00    | 14.00    | 14.00         |
|                              | Max. Peak Power (mW)     | 100.00      | 25.12    | 25.12    | 25.12    | 25.12    | 25.12         |
|                              | Exclusion Threshold (mW) | 2.55        | 1.29     | 1.21     | 1.19     | 1.17     | 1.16          |
|                              | SAR Test Required        | Yes         | Yes      | Yes      | Yes      | Yes      | Yes           |

## Note:

1. Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D04, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
4. Per KDB 447498 D04, for separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive), the threshold P<sub>th</sub> (mW) is given by Following:

$$P_{th}(mW) = \begin{cases} ERP_{20cm}(d/20cm)^x & d \leq 20cm \\ ERP_{20cm} & 20cm < d \leq 40cm \end{cases}$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20cm}\sqrt{f}} \right)$$

- a. f(GHz) is the RF channel transmit frequency in GHz
- b. d is the separation distance (cm), The result is rounded to one decimal place for comparison
- c.  $ERP_{20cm}$  are determined by:

$$ERP_{20cm}(mW) = f(x) = \begin{cases} 2040f & 0.3GHz \leq f < 1.5GHz \\ 3060 & 1.5GHz \leq f \leq 6GHz \end{cases}$$

5. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
6. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
  - a. When KDB Publication 447498 D04 SAR test exclusion applies to the OFDM configuration.
  - b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.
7. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
  - a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
  - b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is  $\leq 1.2$  W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

## 10 TEST RESULT

1. 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. For SAR testing of WIFI signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)".
  - c. For WIFI/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor
2. Absorbed power density (APD) using a 4cm<sup>2</sup> averaging area is reported based on SAR measurements.
3. Per KDB 447498 D04, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - $\leq 0.8$  W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
  - $\leq 0.4$  W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
4. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg



10.1Bluetooth

| Mode                                                                           | Antenna<br>Manufact<br>urer | Antenna | Test State | Position    | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 1g Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>cycle<br>Factor | 1g<br>Scaled<br>SAR<br>(W/kg) | Meas.<br>No. |
|--------------------------------------------------------------------------------|-----------------------------|---------|------------|-------------|---------------|-----|----------------|------------------------|--------------------------|-------------------------|-----------------------------------|-------------------|----------------------|-------------------------|-------------------------------|--------------|
| Body                                                                           |                             |         |            |             |               |     |                |                        |                          |                         |                                   |                   |                      |                         |                               |              |
| DH5                                                                            | Amphenol                    | Aux.    | Laptop     | Bottom Side | 0             | 39  | 2441           | 0.14                   | 0.101                    | 12.18                   | 12.50                             | 1.076             | 76.61                | 1.305                   | 0.142                         | /            |
|                                                                                | INPAQ                       | Aux.    | Laptop     | Bottom Side | 0             | 39  | 2441           | 0.03                   | 0.088                    | 12.18                   | 12.50                             | 1.076             | 76.61                | 1.305                   | 0.124                         | /            |
|                                                                                | Speed                       | Aux.    | Laptop     | Bottom Side | 0             | 39  | 2441           | -0.06                  | 0.096                    | 12.18                   | 12.50                             | 1.076             | 76.61                | 1.305                   | 0.135                         | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Front Edge  | 0             | 39  | 2441           | -0.06                  | 0.318                    | 12.18                   | 12.50                             | 1.076             | 76.61                | 1.305                   | 0.447                         | 1#           |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Front Edge  | 0             | 78  | 2480           | 0.14                   | 0.277                    | 11.95                   | 12.50                             | 1.135             | 76.61                | 1.305                   | 0.410                         | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Front Edge  | 0             | 0   | 2402           | 0.01                   | 0.286                    | 12.13                   | 12.50                             | 1.089             | 76.61                | 1.305                   | 0.406                         | /            |
|                                                                                | INPAQ                       | Aux.    | Laptop     | Front Edge  | 0             | 39  | 2441           | -0.03                  | 0.226                    | 12.18                   | 12.50                             | 1.076             | 76.61                | 1.305                   | 0.317                         | /            |
|                                                                                | Speed                       | Aux.    | Laptop     | Front Edge  | 0             | 39  | 2441           | 0.15                   | 0.267                    | 12.18                   | 12.50                             | 1.076             | 76.61                | 1.305                   | 0.375                         | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                             |         |            |             |               |     |                |                        |                          |                         |                                   |                   |                      |                         |                               |              |

| Mode                                                                           | Antenna<br>Manufact<br>urer | Antenna | Test State | Position      | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 10g Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>cycle<br>Factor | 10g<br>Scaled<br>SAR<br>(W/kg) | Meas.<br>No. |
|--------------------------------------------------------------------------------|-----------------------------|---------|------------|---------------|---------------|-----|----------------|------------------------|---------------------------|-------------------------|-----------------------------------|-------------------|----------------------|-------------------------|--------------------------------|--------------|
| Limbs                                                                          |                             |         |            |               |               |     |                |                        |                           |                         |                                   |                   |                      |                         |                                |              |
| DH5                                                                            | Amphenol                    | Aux.    | Laptop     | Keyboard Side | 0             | 78  | 2480           | -0.04                  | 0.412                     | 11.60                   | 12.50                             | 1.230             | 76.61                | 1.305                   | 0.661                          | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Keyboard Side | 0             | 0   | 2402           | -0.14                  | 0.412                     | 12.13                   | 12.50                             | 1.089             | 76.61                | 1.305                   | 0.586                          | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Keyboard Side | 0             | 39  | 2441           | 0.00                   | 0.543                     | 11.97                   | 12.50                             | 1.130             | 76.61                | 1.305                   | 0.801                          | 14#          |
|                                                                                | INPAQ                       | Aux.    | Laptop     | Keyboard Side | 0             | 0   | 2402           | -0.15                  | 0.501                     | 12.13                   | 12.50                             | 1.089             | 76.61                | 1.305                   | 0.712                          | /            |
|                                                                                | Speed                       | Aux.    | Laptop     | Keyboard Side | 0             | 0   | 2402           | 0.04                   | 0.513                     | 12.13                   | 12.50                             | 1.089             | 76.61                | 1.305                   | 0.729                          | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                             |         |            |               |               |     |                |                        |                           |                         |                                   |                   |                      |                         |                                |              |

10.2WIFI 2.4GHz

| Mode                                                                           | Antenna<br>Manufact<br>urer | Antenna | Test State | Position    | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 1g Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>cycle<br>Factor | 1g<br>Scaled<br>SAR<br>(W/kg) | Meas.<br>No. |
|--------------------------------------------------------------------------------|-----------------------------|---------|------------|-------------|---------------|-----|----------------|------------------------|--------------------------|-------------------------|-----------------------------------|-------------------|----------------------|-------------------------|-------------------------------|--------------|
| Body                                                                           |                             |         |            |             |               |     |                |                        |                          |                         |                                   |                   |                      |                         |                               |              |
| 802.11b                                                                        | Amphenol                    | Aux.    | Laptop     | Bottom Side | 0             | 6   | 2437           | 0.19                   | 0.324                    | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 0.356                         | /            |
|                                                                                | Amphenol                    | Main    | Laptop     | Bottom Side | 0             | 6   | 2437           | 0.03                   | 0.242                    | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.263                         | /            |
|                                                                                | INPAQ                       | Aux.    | Laptop     | Bottom Side | 0             | 6   | 2437           | 0.05                   | 0.314                    | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 0.345                         | /            |
|                                                                                | INPAQ                       | Main    | Laptop     | Bottom Side | 0             | 6   | 2437           | 0.18                   | 0.241                    | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.262                         | /            |
|                                                                                | Speed                       | Aux.    | Laptop     | Bottom Side | 0             | 6   | 2437           | -0.19                  | 0.301                    | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 0.331                         | /            |
|                                                                                | Speed                       | Main    | Laptop     | Bottom Side | 0             | 6   | 2437           | 0.10                   | 0.266                    | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.289                         | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Front Edge  | 0             | 6   | 2437           | 0.17                   | 0.625                    | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 0.686                         | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Front Edge  | 0             | 1   | 2412           | -0.07                  | 0.706                    | 19.64                   | 20.00                             | 1.086             | 96.43                | 1.037                   | 0.795                         | 2#           |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Front Edge  | 0             | 11  | 2462           | 0.06                   | 0.683                    | 19.66                   | 20.00                             | 1.081             | 96.43                | 1.037                   | 0.766                         | /            |
|                                                                                | Amphenol                    | Main    | Laptop     | Front Edge  | 0             | 6   | 2437           | 0.04                   | 0.772                    | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.838                         | /            |
|                                                                                | INPAQ                       | Aux.    | Laptop     | Front Edge  | 0             | 6   | 2437           | 0.03                   | 0.523                    | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 0.574                         | /            |
|                                                                                | INPAQ                       | Main    | Laptop     | Front Edge  | 0             | 6   | 2437           | -0.12                  | 0.741                    | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.805                         | /            |
|                                                                                | INPAQ                       | Main    | Laptop     | Front Edge  | 0             | 1   | 2412           | -0.04                  | 0.848                    | 19.66                   | 20.00                             | 1.081             | 96.43                | 1.037                   | 0.951                         | 3#           |
|                                                                                | INPAQ                       | Main    | Laptop     | Front Edge  | 0             | 11  | 2462           | 0.10                   | 0.712                    | 19.69                   | 20.00                             | 1.074             | 96.43                | 1.037                   | 0.793                         | /            |
|                                                                                | Speed                       | Aux.    | Laptop     | Front Edge  | 0             | 6   | 2437           | -0.14                  | 0.512                    | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 0.562                         | /            |
|                                                                                | Speed                       | Main    | Laptop     | Front Edge  | 0             | 6   | 2437           | -0.02                  | 0.736                    | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.799                         | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                             |         |            |             |               |     |                |                        |                          |                         |                                   |                   |                      |                         |                               |              |

| Mode                                                                           | Antenna<br>Manufact<br>urer | Antenna | Test State | Position      | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 10g Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>cycle<br>Factor | 10g<br>Scaled<br>SAR<br>(W/kg) | Meas.<br>No. |
|--------------------------------------------------------------------------------|-----------------------------|---------|------------|---------------|---------------|-----|----------------|------------------------|---------------------------|-------------------------|-----------------------------------|-------------------|----------------------|-------------------------|--------------------------------|--------------|
| Limbs                                                                          |                             |         |            |               |               |     |                |                        |                           |                         |                                   |                   |                      |                         |                                |              |
| 802.11b                                                                        | Amphenol                    | Aux.    | Laptop     | Keyboard Side | 0             | 11  | 2462           | -0.04                  | 1.500                     | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 1.647                          | 15#          |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Keyboard Side | 0             | 1   | 2412           | 0.07                   | 1.010                     | 19.64                   | 20.00                             | 1.086             | 96.43                | 1.037                   | 1.137                          | /            |
|                                                                                | Amphenol                    | Aux.    | Laptop     | Keyboard Side | 0             | 6   | 2437           | -0.07                  | 1.330                     | 19.66                   | 20.00                             | 1.081             | 96.43                | 1.037                   | 1.491                          | /            |
|                                                                                | Amphenol                    | Main    | Laptop     | Keyboard Side | 0             | 6   | 2437           | 0.01                   | 0.863                     | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.937                          | 16#          |
|                                                                                | Amphenol                    | Main    | Laptop     | Keyboard Side | 0             | 1   | 2412           | 0.18                   | 0.742                     | 19.66                   | 20.00                             | 1.081             | 96.43                | 1.037                   | 0.832                          | /            |
|                                                                                | Amphenol                    | Main    | Laptop     | Keyboard Side | 0             | 11  | 2462           | 0.13                   | 0.772                     | 19.69                   | 20.00                             | 1.074             | 96.43                | 1.037                   | 0.860                          | /            |
|                                                                                | INPAQ                       | Aux.    | Laptop     | Keyboard Side | 0             | 11  | 2462           | 0.19                   | 1.110                     | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 1.219                          | /            |
|                                                                                | INPAQ                       | Main    | Laptop     | Keyboard Side | 0             | 6   | 2437           | 0.00                   | 0.736                     | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.799                          | /            |
|                                                                                | Speed                       | Aux.    | Laptop     | Keyboard Side | 0             | 11  | 2462           | 0.04                   | 1.320                     | 19.75                   | 20.00                             | 1.059             | 96.43                | 1.037                   | 1.450                          | /            |
|                                                                                | Speed                       | Main    | Laptop     | Keyboard Side | 0             | 6   | 2437           | -0.18                  | 0.693                     | 19.80                   | 20.00                             | 1.047             | 96.43                | 1.037                   | 0.752                          | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                             |         |            |               |               |     |                |                        |                           |                         |                                   |                   |                      |                         |                                |              |

## 10.3WIFI 5GHz

| Fre. Band   | Mode         | Antenna Manufacturer | Antenna | Test State | Position    | Dist. (mm) | Ch. | Freq. (MHz) | Power Drift (dB) | 1g Meas SAR (W/kg) | Meas. Power (dBm) | Max. tune-up power (dBm) | Scaling Factor | Duty cycle (%) | Duty cycle Factor | 1g Scaled SAR (W/kg) | Meas. No. |
|-------------|--------------|----------------------|---------|------------|-------------|------------|-----|-------------|------------------|--------------------|-------------------|--------------------------|----------------|----------------|-------------------|----------------------|-----------|
| <b>Body</b> |              |                      |         |            |             |            |     |             |                  |                    |                   |                          |                |                |                   |                      |           |
| 5.3G        | 802.11 ac80  | Amphenol             | Aux.    | Laptop     | Bottom Side | 0          | 58  | 5290        | 0.16             | 0.180              | 13.63             | 14.00                    | 1.089          | 98.50          | 1.015             | 0.199                | /         |
|             |              | Amphenol             | Main    | Laptop     | Bottom Side | 0          | 58  | 5290        | -0.02            | 0.211              | 13.26             | 14.00                    | 1.186          | 98.50          | 1.015             | 0.254                | /         |
|             |              | INPAQ                | Aux.    | Laptop     | Bottom Side | 0          | 58  | 5290        | -0.07            | 0.176              | 13.63             | 14.00                    | 1.089          | 98.50          | 1.015             | 0.195                | /         |
|             |              | INPAQ                | Main    | Laptop     | Bottom Side | 0          | 58  | 5290        | -0.09            | 0.196              | 13.26             | 14.00                    | 1.186          | 98.50          | 1.015             | 0.236                | /         |
|             |              | Speed                | Aux.    | Laptop     | Bottom Side | 0          | 58  | 5290        | -0.07            | 0.166              | 13.63             | 14.00                    | 1.089          | 98.50          | 1.015             | 0.183                | /         |
|             |              | Speed                | Main    | Laptop     | Bottom Side | 0          | 58  | 5290        | -0.15            | 0.184              | 13.26             | 14.00                    | 1.186          | 98.50          | 1.015             | 0.221                | /         |
|             |              | Amphenol             | Aux.    | Laptop     | Front Edge  | 0          | 58  | 5290        | -0.15            | 0.410              | 13.63             | 14.00                    | 1.089          | 98.50          | 1.015             | <b>0.453</b>         | 4#        |
|             |              | Amphenol             | Main    | Laptop     | Front Edge  | 0          | 58  | 5290        | -0.06            | 0.514              | 13.26             | 14.00                    | 1.186          | 98.50          | 1.015             | <b>0.619</b>         | 5#        |
|             |              | INPAQ                | Aux.    | Laptop     | Front Edge  | 0          | 58  | 5290        | -0.18            | 0.346              | 13.63             | 14.00                    | 1.089          | 98.50          | 1.015             | 0.382                | /         |
|             |              | INPAQ                | Main    | Laptop     | Front Edge  | 0          | 58  | 5290        | -0.16            | 0.485              | 13.26             | 14.00                    | 1.186          | 98.50          | 1.015             | 0.584                | /         |
|             |              | Speed                | Aux.    | Laptop     | Front Edge  | 0          | 58  | 5290        | -0.12            | 0.355              | 13.63             | 14.00                    | 1.089          | 98.50          | 1.015             | 0.392                | /         |
|             |              | Speed                | Main    | Laptop     | Front Edge  | 0          | 58  | 5290        | -0.16            | 0.449              | 13.26             | 14.00                    | 1.186          | 98.50          | 1.015             | 0.541                | /         |
| 5.6G        | 802.11 ac160 | Amphenol             | Aux.    | Laptop     | Bottom Side | 0          | 114 | 5570        | -0.10            | 0.309              | 13.38             | 14.00                    | 1.153          | 96.70          | 1.034             | 0.368                | /         |
|             |              | Amphenol             | Main    | Laptop     | Bottom Side | 0          | 114 | 5570        | 0.04             | 0.312              | 13.30             | 14.00                    | 1.175          | 96.70          | 1.034             | 0.379                | /         |
|             |              | INPAQ                | Aux.    | Laptop     | Bottom Side | 0          | 114 | 5570        | -0.19            | 0.303              | 13.38             | 14.00                    | 1.153          | 96.70          | 1.034             | 0.361                | /         |
|             |              | INPAQ                | Main    | Laptop     | Bottom Side | 0          | 114 | 5570        | -0.19            | 0.322              | 13.30             | 14.00                    | 1.175          | 96.70          | 1.034             | 0.391                | /         |
|             |              | Speed                | Aux.    | Laptop     | Bottom Side | 0          | 114 | 5570        | 0.12             | 0.389              | 13.38             | 14.00                    | 1.153          | 96.70          | 1.034             | 0.464                | /         |
|             |              | Speed                | Main    | Laptop     | Bottom Side | 0          | 114 | 5570        | -0.04            | 0.399              | 13.30             | 14.00                    | 1.175          | 96.70          | 1.034             | 0.485                | /         |
|             |              | Amphenol             | Aux.    | Laptop     | Front Edge  | 0          | 114 | 5570        | -0.07            | 0.565              | 13.38             | 14.00                    | 1.153          | 96.70          | 1.034             | <b>0.674</b>         | 6#        |
|             |              | Amphenol             | Main    | Laptop     | Front Edge  | 0          | 114 | 5570        | -0.03            | 0.542              | 13.30             | 14.00                    | 1.175          | 96.70          | 1.034             | 0.659                | /         |
|             |              | INPAQ                | Aux.    | Laptop     | Front Edge  | 0          | 114 | 5570        | 0.03             | 0.546              | 13.38             | 14.00                    | 1.153          | 96.70          | 1.034             | 0.651                | /         |
|             |              | INPAQ                | Main    | Laptop     | Front Edge  | 0          | 114 | 5570        | -0.12            | 0.576              | 13.30             | 14.00                    | 1.175          | 96.70          | 1.034             | <b>0.700</b>         | 7#        |
|             |              | Speed                | Aux.    | Laptop     | Front Edge  | 0          | 114 | 5570        | -0.07            | 0.543              | 13.38             | 14.00                    | 1.153          | 96.70          | 1.034             | 0.647                | /         |
|             |              | Speed                | Main    | Laptop     | Front Edge  | 0          | 114 | 5570        | 0.00             | 0.559              | 13.30             | 14.00                    | 1.175          | 96.70          | 1.034             | 0.679                | /         |
| 5.8G        | 802.11 ac80  | Amphenol             | Aux.    | Laptop     | Bottom Side | 0          | 155 | 5775        | 0.07             | 0.146              | 13.49             | 14.00                    | 1.125          | 98.50          | 1.015             | 0.167                | /         |
|             |              | Amphenol             | Main    | Laptop     | Bottom Side | 0          | 155 | 5775        | -0.19            | 0.213              | 13.43             | 14.00                    | 1.140          | 98.50          | 1.015             | 0.246                | /         |
|             |              | INPAQ                | Aux.    | Laptop     | Bottom Side | 0          | 155 | 5775        | -0.02            | 0.196              | 13.49             | 14.00                    | 1.125          | 98.50          | 1.015             | 0.224                | /         |
|             |              | INPAQ                | Main    | Laptop     | Bottom Side | 0          | 155 | 5775        | 0.10             | 0.223              | 13.43             | 14.00                    | 1.140          | 98.50          | 1.015             | 0.258                | /         |
|             |              | Speed                | Aux.    | Laptop     | Bottom Side | 0          | 155 | 5775        | -0.19            | 0.196              | 13.49             | 14.00                    | 1.125          | 98.50          | 1.015             | 0.224                | /         |
|             |              | Speed                | Main    | Laptop     | Bottom Side | 0          | 155 | 5775        | 0.00             | 0.234              | 13.43             | 14.00                    | 1.140          | 98.50          | 1.015             | 0.271                | /         |
|             |              | Amphenol             | Aux.    | Laptop     | Front Edge  | 0          | 155 | 5775        | 0.06             | 0.586              | 13.49             | 14.00                    | 1.125          | 98.50          | 1.015             | 0.669                | /         |
|             |              | Amphenol             | Main    | Laptop     | Front Edge  | 0          | 155 | 5775        | -0.10            | 0.615              | 13.43             | 14.00                    | 1.140          | 98.50          | 1.015             | <b>0.712</b>         | 8#        |
|             |              | INPAQ                | Aux.    | Laptop     | Front Edge  | 0          | 155 | 5775        | -0.19            | 0.689              | 13.49             | 14.00                    | 1.125          | 98.50          | 1.015             | <b>0.787</b>         | 9#        |

|                                                                                |                 |          |      |        |             |   |     |      |       |       |       |       |       |       |       |              |     |
|--------------------------------------------------------------------------------|-----------------|----------|------|--------|-------------|---|-----|------|-------|-------|-------|-------|-------|-------|-------|--------------|-----|
|                                                                                |                 | INPAQ    | Main | Laptop | Front Edge  | 0 | 155 | 5775 | 0.08  | 0.576 | 13.43 | 14.00 | 1.140 | 98.50 | 1.015 | 0.666        | /   |
|                                                                                |                 | Speed    | Aux. | Laptop | Front Edge  | 0 | 155 | 5775 | 0.07  | 0.556 | 13.49 | 14.00 | 1.125 | 98.50 | 1.015 | 0.635        | /   |
|                                                                                |                 | Speed    | Main | Laptop | Front Edge  | 0 | 155 | 5775 | 0.02  | 0.579 | 13.43 | 14.00 | 1.140 | 98.50 | 1.015 | 0.670        | /   |
| 5.9G                                                                           | 802.11<br>ac160 | Amphenol | Aux. | Laptop | Bottom Side | 0 | 163 | 5815 | 0.04  | 0.114 | 13.93 | 14.00 | 1.016 | 96.70 | 1.034 | 0.120        | /   |
|                                                                                |                 | Amphenol | Main | Laptop | Bottom Side | 0 | 163 | 5815 | 0.06  | 0.253 | 13.55 | 14.00 | 1.109 | 96.70 | 1.034 | 0.290        | /   |
|                                                                                |                 | INPAQ    | Aux. | Laptop | Bottom Side | 0 | 163 | 5815 | -0.10 | 0.109 | 13.93 | 14.00 | 1.016 | 96.70 | 1.034 | 0.115        | /   |
|                                                                                |                 | INPAQ    | Main | Laptop | Bottom Side | 0 | 163 | 5815 | 0.13  | 0.273 | 13.55 | 14.00 | 1.109 | 96.70 | 1.034 | 0.313        | /   |
|                                                                                |                 | Speed    | Aux. | Laptop | Bottom Side | 0 | 163 | 5815 | -0.03 | 0.123 | 13.93 | 14.00 | 1.016 | 96.70 | 1.034 | 0.129        | /   |
|                                                                                |                 | Speed    | Main | Laptop | Bottom Side | 0 | 163 | 5815 | -0.18 | 0.289 | 13.55 | 14.00 | 1.109 | 96.70 | 1.034 | 0.331        | /   |
|                                                                                |                 | Amphenol | Aux. | Laptop | Front Edge  | 0 | 163 | 5815 | 0.18  | 0.812 | 13.93 | 14.00 | 1.016 | 96.70 | 1.034 | 0.853        | /   |
|                                                                                |                 | Amphenol | Main | Laptop | Front Edge  | 0 | 163 | 5815 | -0.07 | 0.488 | 13.55 | 14.00 | 1.109 | 96.70 | 1.034 | 0.560        | /   |
|                                                                                |                 | INPAQ    | Aux. | Laptop | Front Edge  | 0 | 163 | 5815 | 0.06  | 0.912 | 13.93 | 14.00 | 1.016 | 96.70 | 1.034 | 0.958        | /   |
|                                                                                |                 | INPAQ    | Main | Laptop | Front Edge  | 0 | 163 | 5815 | 0.16  | 0.512 | 13.55 | 14.00 | 1.109 | 96.70 | 1.034 | 0.587        | /   |
|                                                                                |                 | Speed    | Aux. | Laptop | Front Edge  | 0 | 163 | 5815 | -0.11 | 1.040 | 13.93 | 14.00 | 1.016 | 96.70 | 1.034 | <b>1.093</b> | 10# |
|                                                                                |                 | Speed    | Main | Laptop | Front Edge  | 0 | 163 | 5815 | -0.15 | 0.644 | 13.55 | 14.00 | 1.109 | 96.70 | 1.034 | <b>0.738</b> | 11# |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                 |          |      |        |             |   |     |      |       |       |       |       |       |       |       |              |     |

| Fre.<br>Band                                                                   | Mode            | Antenna<br>Manufact<br>urer | Antenna | Test<br>State | Position      | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 10g<br>Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>cycle<br>Factor | 10g<br>Scaled<br>SAR<br>(W/kg) | Meas.<br>No. |
|--------------------------------------------------------------------------------|-----------------|-----------------------------|---------|---------------|---------------|---------------|-----|----------------|------------------------|------------------------------|-------------------------|-----------------------------------|-------------------|----------------------|-------------------------|--------------------------------|--------------|
| Limbs                                                                          |                 |                             |         |               |               |               |     |                |                        |                              |                         |                                   |                   |                      |                         |                                |              |
| 5.3G                                                                           | 802.11<br>ac80  | Amphenol                    | Aux.    | Laptop        | Keyboard Side | 0             | 58  | 5290           | 0.11                   | 0.312                        | 13.63                   | 14.00                             | 1.089             | 98.50                | 1.015                   | 0.345                          | /            |
|                                                                                |                 | Amphenol                    | Main    | Laptop        | Keyboard Side | 0             | 58  | 5290           | 0.16                   | 0.375                        | 13.26                   | 14.00                             | 1.186             | 98.50                | 1.015                   | 0.451                          | /            |
|                                                                                |                 | INPAQ                       | Aux.    | Laptop        | Keyboard Side | 0             | 58  | 5290           | -0.19                  | 0.299                        | 13.63                   | 14.00                             | 1.089             | 98.50                | 1.015                   | 0.330                          | /            |
|                                                                                |                 | INPAQ                       | Main    | Laptop        | Keyboard Side | 0             | 58  | 5290           | -0.03                  | 0.365                        | 13.26                   | 14.00                             | 1.186             | 98.50                | 1.015                   | 0.439                          | /            |
|                                                                                |                 | Speed                       | Aux.    | Laptop        | Keyboard Side | 0             | 58  | 5290           | -0.08                  | 0.364                        | 13.63                   | 14.00                             | 1.089             | 98.50                | 1.015                   | 0.402                          | 17#          |
|                                                                                |                 | Speed                       | Main    | Laptop        | Keyboard Side | 0             | 58  | 5290           | -0.02                  | 0.456                        | 13.26                   | 14.00                             | 1.186             | 98.50                | 1.015                   | 0.549                          | 18#          |
| 5.6G                                                                           | 802.11<br>ac160 | Amphenol                    | Aux.    | Laptop        | Keyboard Side | 0             | 114 | 5570           | -0.05                  | 0.330                        | 13.38                   | 14.00                             | 1.153             | 96.70                | 1.034                   | 0.393                          | 19#          |
|                                                                                |                 | Amphenol                    | Main    | Laptop        | Keyboard Side | 0             | 114 | 5570           | 0.01                   | 0.823                        | 13.30                   | 14.00                             | 1.175             | 96.70                | 1.034                   | 1.000                          | 20#          |
|                                                                                |                 | INPAQ                       | Aux.    | Laptop        | Keyboard Side | 0             | 114 | 5570           | 0.19                   | 0.301                        | 13.38                   | 14.00                             | 1.153             | 96.70                | 1.034                   | 0.359                          | /            |
|                                                                                |                 | INPAQ                       | Main    | Laptop        | Keyboard Side | 0             | 114 | 5570           | -0.10                  | 0.712                        | 13.30                   | 14.00                             | 1.175             | 96.70                | 1.034                   | 0.865                          | /            |
|                                                                                |                 | Speed                       | Aux.    | Laptop        | Keyboard Side | 0             | 114 | 5570           | 0.18                   | 0.311                        | 13.38                   | 14.00                             | 1.153             | 96.70                | 1.034                   | 0.371                          | /            |
|                                                                                |                 | Speed                       | Main    | Laptop        | Keyboard Side | 0             | 114 | 5570           | -0.08                  | 0.756                        | 13.30                   | 14.00                             | 1.175             | 96.70                | 1.034                   | 0.919                          | /            |
| 5.8G                                                                           | 802.11<br>ac80  | Amphenol                    | Aux.    | Laptop        | Keyboard Side | 0             | 155 | 5775           | -0.08                  | 0.250                        | 13.49                   | 14.00                             | 1.125             | 98.50                | 1.015                   | 0.285                          | 21#          |
|                                                                                |                 | Amphenol                    | Main    | Laptop        | Keyboard Side | 0             | 155 | 5775           | 0.01                   | 0.487                        | 13.43                   | 14.00                             | 1.140             | 98.50                | 1.015                   | 0.564                          | 22#          |
|                                                                                |                 | INPAQ                       | Aux.    | Laptop        | Keyboard Side | 0             | 155 | 5775           | 0.06                   | 0.211                        | 13.49                   | 14.00                             | 1.125             | 98.50                | 1.015                   | 0.241                          | /            |
|                                                                                |                 | INPAQ                       | Main    | Laptop        | Keyboard Side | 0             | 155 | 5775           | -0.18                  | 0.399                        | 13.43                   | 14.00                             | 1.140             | 98.50                | 1.015                   | 0.462                          | /            |
|                                                                                |                 | Speed                       | Aux.    | Laptop        | Keyboard Side | 0             | 155 | 5775           | 0.08                   | 0.201                        | 13.49                   | 14.00                             | 1.125             | 98.50                | 1.015                   | 0.230                          | /            |
|                                                                                |                 | Speed                       | Main    | Laptop        | Keyboard Side | 0             | 155 | 5775           | 0.17                   | 0.442                        | 13.43                   | 14.00                             | 1.140             | 98.50                | 1.015                   | 0.511                          | /            |
| 5.9G                                                                           | 802.11<br>ac160 | Amphenol                    | Aux.    | Laptop        | Keyboard Side | 0             | 163 | 5815           | 0.03                   | 0.494                        | 13.93                   | 14.00                             | 1.016             | 96.70                | 1.034                   | 0.519                          | 23#          |
|                                                                                |                 | Amphenol                    | Main    | Laptop        | Keyboard Side | 0             | 163 | 5815           | -0.02                  | 0.810                        | 13.55                   | 14.00                             | 1.109             | 96.70                | 1.034                   | 0.929                          | 24#          |
|                                                                                |                 | INPAQ                       | Aux.    | Laptop        | Keyboard Side | 0             | 163 | 5815           | -0.19                  | 0.412                        | 13.93                   | 14.00                             | 1.016             | 96.70                | 1.034                   | 0.433                          | /            |
|                                                                                |                 | INPAQ                       | Main    | Laptop        | Keyboard Side | 0             | 163 | 5815           | -0.10                  | 0.772                        | 13.55                   | 14.00                             | 1.109             | 96.70                | 1.034                   | 0.885                          | /            |
|                                                                                |                 | Speed                       | Aux.    | Laptop        | Keyboard Side | 0             | 163 | 5815           | -0.03                  | 0.432                        | 13.93                   | 14.00                             | 1.016             | 96.70                | 1.034                   | 0.454                          | /            |
|                                                                                |                 | Speed                       | Main    | Laptop        | Keyboard Side | 0             | 163 | 5815           | -0.06                  | 0.795                        | 13.55                   | 14.00                             | 1.109             | 96.70                | 1.034                   | 0.912                          | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                 |                             |         |               |               |               |     |                |                        |                              |                         |                                   |                   |                      |                         |                                |              |

10.4WIFI 6GHz

| Mode                                                                           | Antenna<br>Manufacturer | Antenna | Test<br>Position | Position    | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 1g<br>Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>Factor | 1g<br>Scaled<br>SAR<br>(W/kg) | Measure<br>d APD<br>4cm <sup>2</sup><br>[W/m <sup>2</sup> ] | Scaled<br>APD<br>[W/m <sup>2</sup> ] | Meas.<br>No. |
|--------------------------------------------------------------------------------|-------------------------|---------|------------------|-------------|---------------|-----|----------------|------------------------|-----------------------------|-------------------------|-----------------------------------|-------------------|----------------------|----------------|-------------------------------|-------------------------------------------------------------|--------------------------------------|--------------|
| Body                                                                           |                         |         |                  |             |               |     |                |                        |                             |                         |                                   |                   |                      |                |                               |                                                             |                                      |              |
| 802.11<br>ax160                                                                | Amphenol                | Aux.    | Laptop           | Bottom Side | 0             | 15  | 6025           | -0.15                  | 0.126                       | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.136                         | 0.930                                                       | 1.007                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Bottom Side | 0             | 111 | 6505           | 0.09                   | 0.276                       | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.294                         | 2.050                                                       | 2.185                                | /            |
|                                                                                | INPAQ                   | Aux.    | Laptop           | Bottom Side | 0             | 15  | 6025           | -0.09                  | 0.132                       | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.143                         | 0.980                                                       | 1.061                                | /            |
|                                                                                | INPAQ                   | Main    | Laptop           | Bottom Side | 0             | 111 | 6505           | -0.15                  | 0.187                       | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.199                         | 1.390                                                       | 1.481                                | /            |
|                                                                                | Speed                   | Aux.    | Laptop           | Bottom Side | 0             | 15  | 6025           | 0.07                   | 0.129                       | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.140                         | 0.960                                                       | 1.040                                | /            |
|                                                                                | Speed                   | Main    | Laptop           | Bottom Side | 0             | 111 | 6505           | -0.06                  | 0.177                       | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.189                         | 1.310                                                       | 1.396                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 15  | 6025           | 0.13                   | 0.406                       | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.440                         | 3.010                                                       | 3.260                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 47  | 6185           | -0.10                  | 0.499                       | 13.54                   | 14.00                             | 1.112             | 98.50                | 1.015          | 0.563                         | 3.620                                                       | 4.086                                | 12#          |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 79  | 6345           | 0.02                   | 0.421                       | 13.14                   | 14.00                             | 1.219             | 98.50                | 1.015          | 0.521                         | 3.120                                                       | 3.860                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 111 | 6505           | 0.08                   | 0.386                       | 13.30                   | 14.00                             | 1.175             | 98.50                | 1.015          | 0.460                         | 2.860                                                       | 3.411                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 143 | 6665           | 0.19                   | 0.305                       | 13.70                   | 14.00                             | 1.072             | 98.50                | 1.015          | 0.332                         | 2.250                                                       | 2.448                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 175 | 6825           | -0.15                  | 0.339                       | 13.26                   | 14.00                             | 1.186             | 98.50                | 1.015          | 0.408                         | 2.510                                                       | 3.022                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Front Edge  | 0             | 207 | 6985           | 0.00                   | 0.420                       | 13.53                   | 14.00                             | 1.114             | 98.50                | 1.015          | 0.475                         | 3.100                                                       | 3.505                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 15  | 6025           | -0.09                  | 0.352                       | 13.73                   | 14.00                             | 1.064             | 98.50                | 1.015          | 0.380                         | 2.610                                                       | 2.819                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 47  | 6185           | -0.08                  | 0.460                       | 13.23                   | 14.00                             | 1.194             | 98.50                | 1.015          | 0.557                         | 3.410                                                       | 4.133                                | 13#          |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 79  | 6345           | -0.14                  | 0.330                       | 13.33                   | 14.00                             | 1.167             | 98.50                | 1.015          | 0.391                         | 2.450                                                       | 2.902                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 111 | 6505           | -0.19                  | 0.401                       | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.427                         | 2.970                                                       | 3.165                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 143 | 6665           | -0.07                  | 0.421                       | 13.52                   | 14.00                             | 1.117             | 98.50                | 1.015          | 0.477                         | 3.120                                                       | 3.537                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 175 | 6825           | -0.14                  | 0.386                       | 13.44                   | 14.00                             | 1.138             | 98.50                | 1.015          | 0.446                         | 2.860                                                       | 3.304                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Front Edge  | 0             | 207 | 6985           | -0.08                  | 0.324                       | 13.33                   | 14.00                             | 1.167             | 98.50                | 1.015          | 0.384                         | 2.400                                                       | 2.843                                | /            |
|                                                                                | INPAQ                   | Aux.    | Laptop           | Front Edge  | 0             | 15  | 6025           | 0.16                   | 0.289                       | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.313                         | 2.140                                                       | 2.318                                | /            |
|                                                                                | INPAQ                   | Main    | Laptop           | Front Edge  | 0             | 15  | 6025           | 0.18                   | 0.345                       | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.368                         | 2.560                                                       | 2.728                                | /            |
|                                                                                | Speed                   | Aux.    | Laptop           | Front Edge  | 0             | 15  | 6025           | 0.15                   | 0.311                       | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.337                         | 2.300                                                       | 2.491                                | /            |
|                                                                                | Speed                   | Main    | Laptop           | Front Edge  | 0             | 15  | 6025           | -0.05                  | 0.403                       | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.429                         | 2.990                                                       | 3.187                                | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                         |         |                  |             |               |     |                |                        |                             |                         |                                   |                   |                      |                |                               |                                                             |                                      |              |

| Mode                                                                           | Antenna<br>Manufacturer | Antenna | Test<br>Position | Position      | Dist.<br>(mm) | Ch. | Freq.<br>(MHz) | Power<br>Drift<br>(dB) | 10g<br>Meas<br>SAR<br>(W/kg) | Meas.<br>Power<br>(dBm) | Max.<br>tune-up<br>power<br>(dBm) | Scaling<br>Factor | Duty<br>cycle<br>(%) | Duty<br>Factor | 10g<br>Scaled<br>SAR<br>(W/kg) | Measure<br>d APD<br>4cm <sup>2</sup><br>[W/m <sup>2</sup> ] | Scaled<br>APD<br>[W/m <sup>2</sup> ] | Meas.<br>No. |
|--------------------------------------------------------------------------------|-------------------------|---------|------------------|---------------|---------------|-----|----------------|------------------------|------------------------------|-------------------------|-----------------------------------|-------------------|----------------------|----------------|--------------------------------|-------------------------------------------------------------|--------------------------------------|--------------|
| Limbs                                                                          |                         |         |                  |               |               |     |                |                        |                              |                         |                                   |                   |                      |                |                                |                                                             |                                      |              |
| 802.11<br>ax160                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 15  | 6025           | 0.00                   | 0.254                        | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.275                          | 5.880                                                       | 6.368                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 47  | 6185           | -0.02                  | 0.262                        | 13.54                   | 14.00                             | 1.112             | 98.50                | 1.015          | <b>0.296</b>                   | 6.060                                                       | 6.840                                | 25#          |
|                                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 79  | 6345           | 0.09                   | 0.213                        | 13.14                   | 14.00                             | 1.219             | 98.50                | 1.015          | 0.264                          | 4.930                                                       | 6.100                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 111 | 6505           | -0.13                  | 0.189                        | 13.30                   | 14.00                             | 1.175             | 98.50                | 1.015          | 0.225                          | 4.370                                                       | 5.212                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 143 | 6665           | 0.01                   | 0.192                        | 13.70                   | 14.00                             | 1.072             | 98.50                | 1.015          | 0.209                          | 4.440                                                       | 4.831                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 175 | 6825           | 0.16                   | 0.241                        | 13.26                   | 14.00                             | 1.186             | 98.50                | 1.015          | 0.290                          | 5.570                                                       | 6.705                                | /            |
|                                                                                | Amphenol                | Aux.    | Laptop           | Keyboard Side | 0             | 207 | 6985           | 0.12                   | 0.239                        | 13.53                   | 14.00                             | 1.114             | 98.50                | 1.015          | 0.270                          | 5.530                                                       | 6.253                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 15  | 6025           | -0.03                  | 0.288                        | 13.73                   | 14.00                             | 1.064             | 98.50                | 1.015          | 0.311                          | 6.660                                                       | 7.193                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 47  | 6185           | -0.08                  | 0.311                        | 13.23                   | 14.00                             | 1.194             | 98.50                | 1.015          | <b>0.377</b>                   | 7.230                                                       | 8.762                                | 26#          |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 79  | 6345           | -0.03                  | 0.301                        | 13.33                   | 14.00                             | 1.167             | 98.50                | 1.015          | 0.357                          | 6.960                                                       | 8.244                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 111 | 6505           | 0.19                   | 0.255                        | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.272                          | 5.900                                                       | 6.288                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 143 | 6665           | -0.06                  | 0.269                        | 13.52                   | 14.00                             | 1.117             | 98.50                | 1.015          | 0.305                          | 6.220                                                       | 7.052                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 175 | 6825           | 0.06                   | 0.253                        | 13.44                   | 14.00                             | 1.138             | 98.50                | 1.015          | 0.292                          | 5.850                                                       | 6.757                                | /            |
|                                                                                | Amphenol                | Main    | Laptop           | Keyboard Side | 0             | 207 | 6985           | -0.04                  | 0.301                        | 13.33                   | 14.00                             | 1.167             | 98.50                | 1.015          | 0.357                          | 6.960                                                       | 8.244                                | /            |
|                                                                                | INPAQ                   | Aux.    | Laptop           | Keyboard Side | 0             | 15  | 6025           | 0.03                   | 0.245                        | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.265                          | 5.670                                                       | 6.141                                | /            |
|                                                                                | INPAQ                   | Main    | Laptop           | Keyboard Side | 0             | 111 | 6505           | 0.11                   | 0.286                        | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.305                          | 6.620                                                       | 7.055                                | /            |
|                                                                                | Speed                   | Aux.    | Laptop           | Keyboard Side | 0             | 15  | 6025           | -0.09                  | 0.211                        | 13.72                   | 14.00                             | 1.067             | 98.50                | 1.015          | 0.229                          | 4.880                                                       | 5.285                                | /            |
|                                                                                | Speed                   | Main    | Laptop           | Keyboard Side | 0             | 111 | 6505           | 0.09                   | 0.277                        | 13.79                   | 14.00                             | 1.050             | 98.50                | 1.015          | 0.295                          | 6.410                                                       | 6.831                                | /            |
| Note: Refer to ANNEX C for the detailed test data for each test configuration. |                         |         |                  |               |               |     |                |                        |                              |                         |                                   |                   |                      |                |                                |                                                             |                                      |              |

## 11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are  $\leq 1.45$  W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is  $\leq 1.10$ , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is  $< 0.80$  W/kg, repeated measurement is not required.
2. When the highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is  $> 1.20$ , or when the original or repeated measurement is  $\geq 1.45$  W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ , and the original, first or second repeated measurement is  $\geq 1.5$  W/kg, perform a third repeated measurement.

| Frequency Band (MHz) | Wireless Band | Antenna manufacturer | Test Mode | Antenna | RF Exposure Conditions | Test Position | Highest Measured SAR (W/kg) | Repeated SAR (Yes/No) | Highest Measured SAR (W/kg) | Largest to Smallest SAR Ratio |
|----------------------|---------------|----------------------|-----------|---------|------------------------|---------------|-----------------------------|-----------------------|-----------------------------|-------------------------------|
| 2412                 | 802.11b       | INPAQ                | Laptop    | Main    | Body                   | Front Edge    | 0.848                       | Yes                   | 0.807                       | 1.05                          |
| 5815                 | 802.11ac160   | Amphenol             | Laptop    | Aux.    | Body                   | Front Edge    | 0.812                       | Yes                   | 0.786                       | 1.03                          |
| 5815                 | 802.11ac160   | INPAQ                | Laptop    | Aux.    | Body                   | Front Edge    | 0.912                       | Yes                   | 0.886                       | 1.03                          |
| 5815                 | 802.11ac160   | Speed                | Laptop    | Aux.    | Body                   | Front Edge    | 1.040                       | Yes                   | 0.985                       | 1.06                          |

Note: The ratio of largest to smallest SAR for the original and first repeated measurements is  $< 1.20$ , the second repeated measurement is not required.



## 12 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

According KDB 447498 D04, simultaneous transmission:

- a)  $SPLSR = (SAR1 + SAR2)^{1.5} / R_i$  (min. separation distance, mm), and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.  
SAR1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.  
SAR2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition as the first.
- b) If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary.
- c) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

## 12.1 Simultaneous Transmission Mode Considerations

| No. | Simultaneous Tx Combination                                          | Body&Limbs |
|-----|----------------------------------------------------------------------|------------|
| 1   | Bluetooth + WLAN 2.4GHz (Antenna Main)                               | Yes        |
| 2   | WLAN 2.4GHz (Antenna Auxiliary) + WLAN 2.4GHz (Antenna Main)         | Yes        |
| 3   | Bluetooth + WLAN 5GHz (Antenna Auxiliary)                            | Yes        |
| 4   | Bluetooth + WLAN 5GHz (Antenna Main)                                 | Yes        |
| 5   | WLAN 2.4GHz (Antenna Auxiliary) + WLAN 5GHz (Antenna Main)           | Yes        |
| 6   | WLAN 2.4GHz (Antenna Main) + WLAN 5GHz (Antenna Auxiliary)           | Yes        |
| 7   | WLAN 5GHz (Antenna Auxiliary) + WLAN 5GHz (Antenna Main)             | Yes        |
| 8   | Bluetooth + WLAN 5GHz (Antenna Auxiliary) + WLAN 5GHz (Antenna Main) | Yes        |
| 9   | Bluetooth + WLAN 6GHz (Antenna Auxiliary)                            | Yes        |
| 10  | Bluetooth + WLAN 6GHz (Antenna Main)                                 | Yes        |
| 11  | WLAN 2.4GHz (Antenna Auxiliary) + WLAN 6GHz (Antenna Main)           | Yes        |
| 12  | WLAN 2.4GHz (Antenna Main) + WLAN 6GHz (Antenna Auxiliary)           | Yes        |
| 13  | WLAN 6GHz (Antenna Auxiliary) + WLAN 6GHz (Antenna Main)             | Yes        |
| 14  | Bluetooth + WLAN 6GHz (Antenna Auxiliary) + WLAN 6GHz (Antenna Main) | Yes        |
| 15  | WLAN 5GHz (Antenna Auxiliary) + WLAN 6GHz (Antenna Main)             | Yes        |
| 16  | WLAN 5GHz (Antenna Main) + WLAN 6GHz (Antenna Auxiliary)             | Yes        |

**Note:**

1. The EUT supports the Antenna Auxiliary with TX/RX diversity function for WLAN and Bluetooth, the Antenna Main with TX/RX diversity function for WLAN.
2. WLAN 2.4GHz and Bluetooth will not be transmitting from the Antenna Auxiliary at same time.

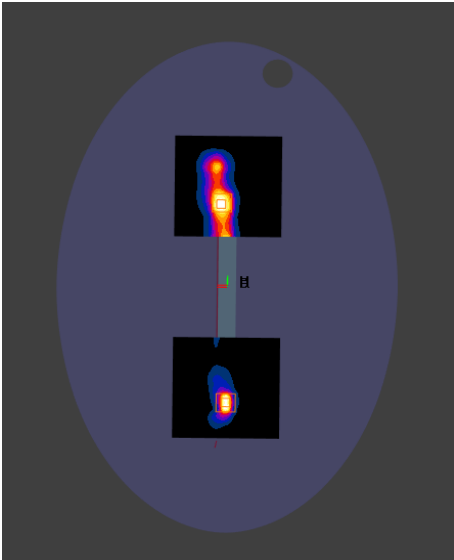
12.2Body Simultaneous Transmission SAR Evaluation

| State                                                                                                                                                              |                     |                     | Position            |                     | Stand alone SAR     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                       |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------------------------|-------------------------------|-----------------------------------------|---------------------------------|-------------------------------------|-----------------------------|---------------------|---------------------|-----------------------|-----------------------|
|                                                                                                                                                                    |                     |                     |                     |                     | 1                   | 2                                     | 3                             | 4                                       | 5                               | 6                                   | 7                           |                     |                     |                       |                       |
|                                                                                                                                                                    |                     |                     |                     |                     | Bluetooth           | WLAN 2.4GHz<br>(Antenna<br>Auxiliary) | WLAN 2.4GHz<br>(Antenna Main) | WLAN 5GHz MAX<br>(Antenna<br>Auxiliary) | WLAN 5GHz MAX<br>(Antenna Main) | WLAN 6GHz<br>(Antenna<br>Auxiliary) | WLAN 6GHz<br>(Antenna Main) |                     |                     |                       |                       |
| Laptop                                                                                                                                                             | Bottom Side         |                     | 0.142               | 0.356               | 0.289               | 0.464                                 | 0.485                         | 0.143                                   | 0.294                           |                                     |                             |                     |                     |                       |                       |
| Laptop                                                                                                                                                             | Front Side          |                     | 0.447               | 0.795               | 0.951               | 1.093                                 | 0.738                         | 0.563                                   | 0.557                           |                                     |                             |                     |                     |                       |                       |
| SUM SAR                                                                                                                                                            |                     |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                       |                       |
| Sum<br>SAR<br>(1+3)                                                                                                                                                | Sum<br>SAR<br>(1+4) | Sum<br>SAR<br>(1+5) | Sum<br>SAR<br>(1+6) | Sum<br>SAR<br>(1+7) | Sum<br>SAR<br>(2+3) | Sum<br>SAR<br>(2+5)                   | Sum<br>SAR<br>(3+4)           | Sum<br>SAR<br>(2+7)                     | Sum<br>SAR<br>(3+6)             | Sum<br>SAR<br>(4+7)                 | Sum<br>SAR<br>(5+6)         | Sum<br>SAR<br>(4+5) | Sum<br>SAR<br>(6+7) | Sum<br>SAR<br>(1+4+5) | Sum<br>SAR<br>(1+6+7) |
| 0.431                                                                                                                                                              | 0.606               | 0.627               | 0.285               | 0.436               | 0.645               | 0.841                                 | 0.753                         | 0.650                                   | 0.432                           | 0.758                               | 0.628                       | 0.949               | 0.437               | 1.091                 | 0.579                 |
| 1.398                                                                                                                                                              | 1.540               | 1.185               | 1.010               | 1.004               | 1.746               | 1.533                                 | 2.044                         | 1.352                                   | 1.514                           | 1.650                               | 1.301                       | 1.831               | 1.120               | 2.278                 | 1.567                 |
| SPLSR SAR                                                                                                                                                          |                     |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                       |                       |
| Sum SAR<br>(2+3)                                                                                                                                                   |                     |                     | Sum SAR<br>(3+4)    |                     |                     | Sum SAR<br>(4+7)                      |                               |                                         | Sum SAR<br>(4+5)                |                                     |                             | Sum SAR<br>(1+4+5)  |                     |                       |                       |
| /                                                                                                                                                                  |                     |                     | /                   |                     |                     | /                                     |                               |                                         | /                               |                                     |                             | /                   |                     |                       |                       |
| 0.01 <sup>1#</sup>                                                                                                                                                 |                     |                     | 0.01 <sup>2#</sup>  |                     |                     | 0.01 <sup>3#</sup>                    |                               |                                         | 0.01 <sup>4#</sup>              |                                     |                             | 0.01 <sup>5#</sup>  |                     |                       |                       |
| Note:                                                                                                                                                              |                     |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                       |                       |
| 1: The highest Summed 1g SAR is 2.278 W/Kg > 1.6 W/kg, so Simultaneous Transmission SAR test exclusion is determined by the SAR to peak location separation ratio. |                     |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                       |                       |
| 2: The SPLSR is 0.01 < 0.04, so Simultaneous Transmission SAR test is not required.                                                                                |                     |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                       |                       |

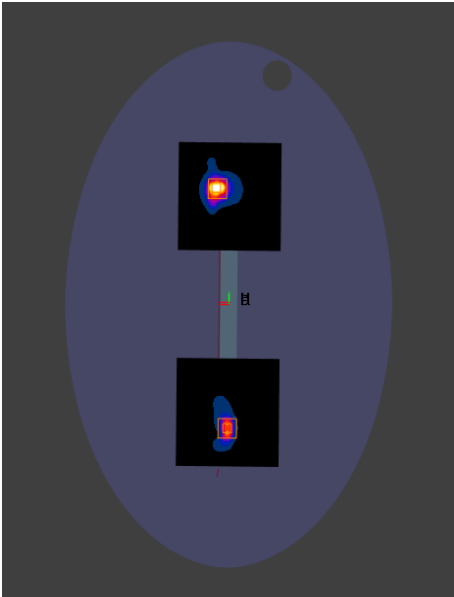
12.3Limbs Simultaneous Transmission SAR Evaluation

| State                                                                                                                                                               |                     | Position            |                     | Stand alone SAR     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                     |                       |                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------------------------|-------------------------------|-----------------------------------------|---------------------------------|-------------------------------------|-----------------------------|---------------------|---------------------|---------------------|-----------------------|-----------------------|
|                                                                                                                                                                     |                     |                     |                     | 1                   | 2                                     | 3                             | 4                                       | 5                               | 6                                   | 7                           |                     |                     |                     |                       |                       |
|                                                                                                                                                                     |                     |                     |                     | Bluetooth           | WLAN 2.4GHz<br>(Antenna<br>Auxiliary) | WLAN 2.4GHz<br>(Antenna Main) | WLAN 5GHz MAX<br>(Antenna<br>Auxiliary) | WLAN 5GHz MAX<br>(Antenna Main) | WLAN 6GHz<br>(Antenna<br>Auxiliary) | WLAN 6GHz<br>(Antenna Main) |                     |                     |                     |                       |                       |
| Laptop                                                                                                                                                              | Keyboard Side       | 0.806               | 1.647               | 0.937               | 0.519                                 | 1.000                         | 0.296                                   | 0.377                           |                                     |                             |                     |                     |                     |                       |                       |
| SUM SAR                                                                                                                                                             |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                     |                       |                       |
| Sum<br>SAR<br>(1+3)                                                                                                                                                 | Sum<br>SAR<br>(1+4) | Sum<br>SAR<br>(1+5) | Sum<br>SAR<br>(1+6) | Sum<br>SAR<br>(1+7) | Sum<br>SAR<br>(2+3)                   | Sum<br>SAR<br>(2+5)           | Sum<br>SAR<br>(3+4)                     | Sum<br>SAR<br>(2+7)             | Sum<br>SAR<br>(3+6)                 | Sum<br>SAR<br>(4+7)         | Sum<br>SAR<br>(5+6) | Sum<br>SAR<br>(4+5) | Sum<br>SAR<br>(6+7) | Sum<br>SAR<br>(1+4+5) | Sum<br>SAR<br>(1+6+7) |
| 1.743                                                                                                                                                               | 1.325               | 1.806               | 1.102               | 1.183               | 2.584                                 | 2.647                         | 1.456                                   | 2.024                           | 1.233                               | 0.896                       | 1.296               | 1.519               | 0.673               | 2.325                 | 1.479                 |
| Note:                                                                                                                                                               |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                     |                       |                       |
| 1: The highest Summed 10g SAR is 2.647 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test exclusion is determined by the SAR to peak location separation ratio. |                     |                     |                     |                     |                                       |                               |                                         |                                 |                                     |                             |                     |                     |                     |                       |                       |

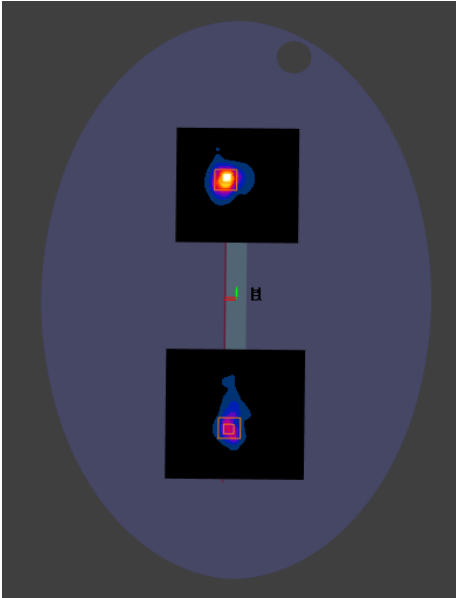
| Case 1# | Band              | Position   | SAR (W/kg) | SAR peak location (m) |           |           | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|-------------------|------------|------------|-----------------------|-----------|-----------|------------------|-------------------|---------------|------------------|
| Plot No |                   |            |            | X                     | Y         | Z         |                  |                   |               |                  |
| 1       | WIFI2.4G Aux.Ant  | Front edge | 0.795      | -0.014401             | 0.112987  | -0.175579 | 251.6            | 1.75              | 0.01          | Not required     |
| 2       | WIFI2.4G Main.Ant |            | 0.951      | -5.00E-06             | -0.138183 | -0.175571 |                  |                   |               |                  |



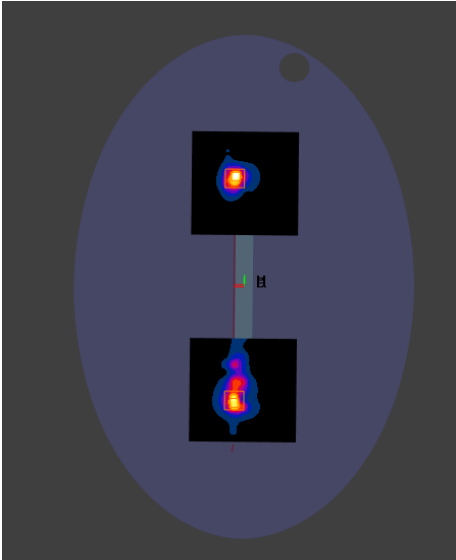
| Case 2# | Band              | Position   | SAR (W/kg) | SAR peak location (m) |           |           | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|-------------------|------------|------------|-----------------------|-----------|-----------|------------------|-------------------|---------------|------------------|
| Plot No |                   |            |            | X                     | Y         | Z         |                  |                   |               |                  |
| 1       | WIFI5G Aux.Ant    | Front edge | 1.093      | -0.014002             | 0.124984  | -0.175584 | 263.5            | 2.04              | 0.01          | Not required     |
| 2       | WIFI2.4G Main.Ant |            | 0.951      | -5.00E-06             | -0.138183 | -0.175571 |                  |                   |               |                  |



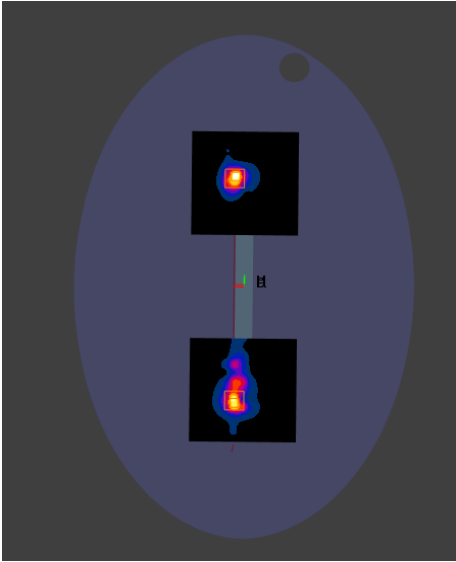
| Case 3# | Band            | Position   | SAR (W/kg) | SAR peak location (m) |           |           | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|-----------------|------------|------------|-----------------------|-----------|-----------|------------------|-------------------|---------------|------------------|
| Plot No |                 |            |            | X                     | Y         | Z         |                  |                   |               |                  |
| 1       | WIFI5G Aux.Ant  | Front edge | 1.093      | -0.014002             | 0.124984  | -0.175584 | 253.6            | 1.65              | 0.01          | Not required     |
| 2       | WIFI6G Main.Ant |            | 0.557      | -5.95E-03             | -0.128484 | -0.175586 |                  |                   |               |                  |



| Case 4# | Band            | Position   | SAR (W/kg) | SAR peak location (m) |           |           | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|-----------------|------------|------------|-----------------------|-----------|-----------|------------------|-------------------|---------------|------------------|
| Plot No |                 |            |            | X                     | Y         | Z         |                  |                   |               |                  |
| 1       | WIFI5G Aux.Ant  | Front edge | 1.093      | -0.014002             | 0.124984  | -0.175584 | 256.0            | 1.83              | 0.01          | Not required     |
| 2       | WIFI5G Main.Ant |            | 0.738      | -0.011001             | -0.130985 | -0.175598 |                  |                   |               |                  |



| Case 5# | Band              | Position   | SAR (W/kg) | SAR peak location (m) |           |           | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|-------------------|------------|------------|-----------------------|-----------|-----------|------------------|-------------------|---------------|------------------|
| Plot No |                   |            |            | X                     | Y         | Z         |                  |                   |               |                  |
| 1       | BT+WIFI5G Aux.Ant | Front edge | 1.565      | -0.014002             | 0.124984  | -0.175584 | 256.0            | 2.30              | 0.01          | Not required     |
| 2       | WIFI5G Main.Ant   |            | 0.738      | -0.011001             | -0.130985 | -0.175598 |                  |                   |               |                  |



## 13 TEST EQUIPMENTS LIST

| Description                   | Manufacturer  | Model       | Serial No./Version | Cal. Date  | Cal. Due   |
|-------------------------------|---------------|-------------|--------------------|------------|------------|
| PC                            | Dell          | N/A         | N/A                | N/A        | N/A        |
| Test Software                 | Speag         | DASY8       | 16.2.2.1588        | N/A        | N/A        |
| 2450MHz Validation Dipole     | Speag         | D2450V2     | SN: 952            | 2024/05/07 | 2027/05/06 |
| 5GHz Validation Dipole        | Speag         | D5GHzV2     | SN: 1200           | 2024/05/09 | 2027/05/08 |
| 6.5GHz Validation Dipole      | Speag         | D6.5GHzV2   | SN: 1037           | 2024/05/28 | 2027/05/27 |
| Data Acquisition Electronicsr | Speag         | DAE4        | SN: 878            | 2025/03/05 | 2026/03/04 |
| E-Field Probe                 | Speag         | EX3DV4      | SN: 7893           | 2024/09/05 | 2025/09/04 |
| Signal Generator              | Keysight      | N5173B      | MY62150163         | 2024/08/12 | 2025/08/11 |
| Power Meter                   | R&S           | NRVD-B2     | 835843/014         | 2024/08/08 | 2025/08/07 |
| Power Sensor                  | R&S           | NRV-Z4      | 100381             | 2024/08/08 | 2025/08/07 |
| Power Sensor                  | R&S           | NRV-Z2      | 100211             | 2024/08/08 | 2025/08/07 |
| Network Analyzer              | Agilent       | E5071C      | MY46103472         | 2024/09/11 | 2025/09/10 |
| Thermometer                   | Elitech       | RC-4HC      | EF7216002985       | 2024/10/31 | 2025/10/30 |
| Thermometer                   | Elitech       | RC-4HC      | EF720B004811       | 2024/10/31 | 2025/10/30 |
| Power Amplifier               | Mini-Circuits | ZVA-183W-S+ | 932502132          | N/A        | N/A        |
| Dielectric Probe Kit          | Speag         | DAK3.5      | SN: 1312           | N/A        | N/A        |
| Phantom                       | Speag         | ELI V8.0    | SN: 2159           | N/A        | N/A        |
| Attenuator                    | COM-MW        | ZA-S1-31    | 1305003187         | N/A        | N/A        |
| Directional coupler           | AA-MCS        | AAMCS-UDC   | 000272             | N/A        | N/A        |

Note: For dipole antennas, BALUN has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

## ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using a DAK3.5 Dielectric Probe Kit.

| Date                                                                      | Liquid Type | Fre. (MHz) | Temp. (°C) | Meas. Conductivity ( $\sigma$ ) (S/m) | Meas. Permittivity ( $\epsilon$ ) | Target Conductivity ( $\sigma$ ) (S/m) | Target Permittivity ( $\epsilon$ ) | Conductivity Tolerance (%) | Permittivity Tolerance (%) |
|---------------------------------------------------------------------------|-------------|------------|------------|---------------------------------------|-----------------------------------|----------------------------------------|------------------------------------|----------------------------|----------------------------|
| 2025.03.16                                                                | Head        | 2450       | 21.6       | 1.80                                  | 39.54                             | 1.80                                   | 39.20                              | 0.00                       | 0.87                       |
| 2025.03.20                                                                | Head        | 5250       | 21.8       | 4.70                                  | 35.93                             | 4.71                                   | 35.93                              | -0.21                      | 0.00                       |
| 2025.03.23                                                                | Head        | 5600       | 21.5       | 5.05                                  | 35.38                             | 5.07                                   | 35.53                              | -0.39                      | -0.42                      |
| 2025.03.26                                                                | Head        | 5750       | 21.5       | 5.18                                  | 35.54                             | 5.22                                   | 35.36                              | -0.77                      | 0.51                       |
| 2025.03.27                                                                | Head        | 6500       | 21.5       | 6.14                                  | 33.95                             | 6.07                                   | 34.46                              | 1.15                       | -1.48                      |
| Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$ . |             |            |            |                                       |                                   |                                        |                                    |                            |                            |



## ANNEX B SYSTEM CHECK RESULT

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

### Head liquid 1g

| Date       | Liquid Type | Freq. (MHz) | Power (mW) | Measured SAR (W/kg) | Normalized SAR (W/kg) | Dipole SAR (W/kg) | Tolerance (%) |
|------------|-------------|-------------|------------|---------------------|-----------------------|-------------------|---------------|
| 2025.03.16 | Head        | 2450        | 100        | 5.240               | 52.40                 | 52.60             | -0.38         |
| 2025.03.20 | Head        | 5250        | 100        | 7.420               | 74.20                 | 77.70             | -4.50         |
| 2025.03.23 | Head        | 5600        | 100        | 8.230               | 82.30                 | 81.30             | 1.23          |
| 2025.03.26 | Head        | 5750        | 100        | 7.710               | 77.10                 | 77.60             | -0.64         |
| 2025.03.27 | Head        | 6500        | 100        | 29.400              | 294.00                | 299.00            | -1.67         |

Note: The tolerance limit of System validation  $\pm 10\%$ .

### Head liquid 10g

| Date       | Liquid Type | Freq. (MHz) | Power (mW) | Measured SAR (W/kg) | Normalized SAR (W/kg) | Dipole SAR (W/kg) | Tolerance (%) |
|------------|-------------|-------------|------------|---------------------|-----------------------|-------------------|---------------|
| 2025.03.16 | Head        | 2450        | 100        | 2.510               | 25.10                 | 24.70             | 1.62          |
| 2025.03.20 | Head        | 5250        | 100        | 2.140               | 21.40                 | 22.00             | -2.73         |
| 2025.03.23 | Head        | 5600        | 100        | 2.370               | 23.70                 | 23.10             | 2.60          |
| 2025.03.26 | Head        | 5750        | 100        | 2.150               | 21.50                 | 21.90             | -1.83         |
| 2025.03.27 | Head        | 6500        | 100        | 5.530               | 55.30                 | 55.20             | 0.18          |

Note: The tolerance limit of System validation  $\pm 10\%$ .

System Performance Check Data (2450MHz)

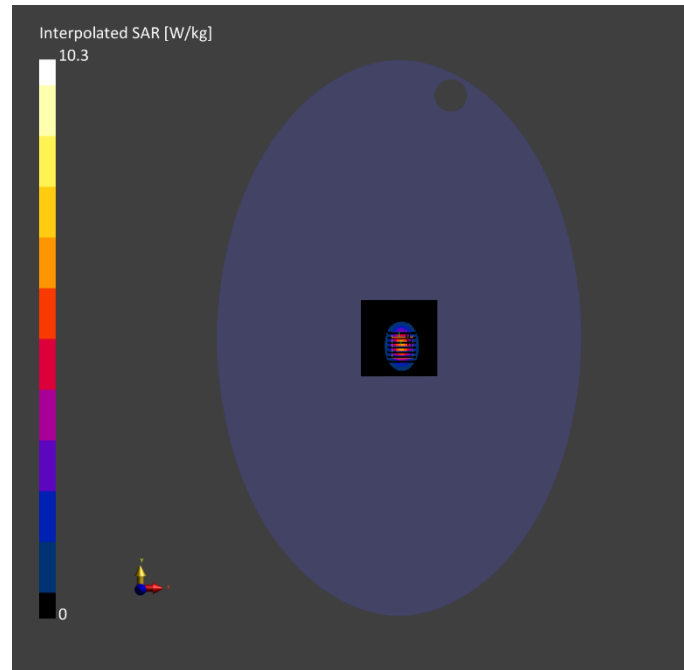
Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band      | Group,<br>UID | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-----------|---------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               |                                       | D245<br>0 | CW,<br>0--    | 2450.0,<br>2450                           | 6.98                     | 1.80                             | 39.5                    | 22.5                               | 21.6                              |

Hardware Setup

| Phantom                               | TSL, Measured Date   |          | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|----------------------|----------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000<br>16 | 2025-03- | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

| Scan Setup    |         |             |                 | Measurement Results |               |               |
|---------------|---------|-------------|-----------------|---------------------|---------------|---------------|
|               |         | Area Scan   | Zoom Scan       |                     |               |               |
| Grid          | Extents | 96.0 x 96.0 | 30.0 x 30.0 x   | Date                | 2025-03-16    | 2025-03-16    |
|               | [mm]    |             | 30.0            | psSAR1g             | 5.35          | 5.24          |
| Grid          | Steps   | 12.0 x 12.0 | 5.0 x 5.0 x 5.0 | [W/kg]              |               |               |
|               | [mm]    |             |                 | psSAR10g            | 2.44          | 2.51          |
| Sensor        |         | 3.0         | 1.4             | [W/kg]              |               |               |
| Surface [mm]  |         |             |                 | Power Drift         | -0.06         | 0.02          |
| Graded Grid   |         | Yes         | Yes             | [dB]                |               |               |
| Grading Ratio |         | 1.5         | 1.5             | Power Scaling       | Disabled      | Disabled      |
| MAIA          |         | N/A         | N/A             | Scaling Factor      |               |               |
| Surface       |         | VMS + 6p    | VMS + 6p        | [dB]                |               |               |
| Detection     |         |             |                 | TSL                 | No correction | No correction |
| Scan Method   |         | Measured    | Measured        | Correction          |               |               |
|               |         |             |                 | M2/M1 [%]           |               | 60.7          |
|               |         |             |                 | Dist 3dB Peak       |               | 8.5           |
|               |         |             |                 | [mm]                |               |               |



System Performance Check Data (5250MHz)

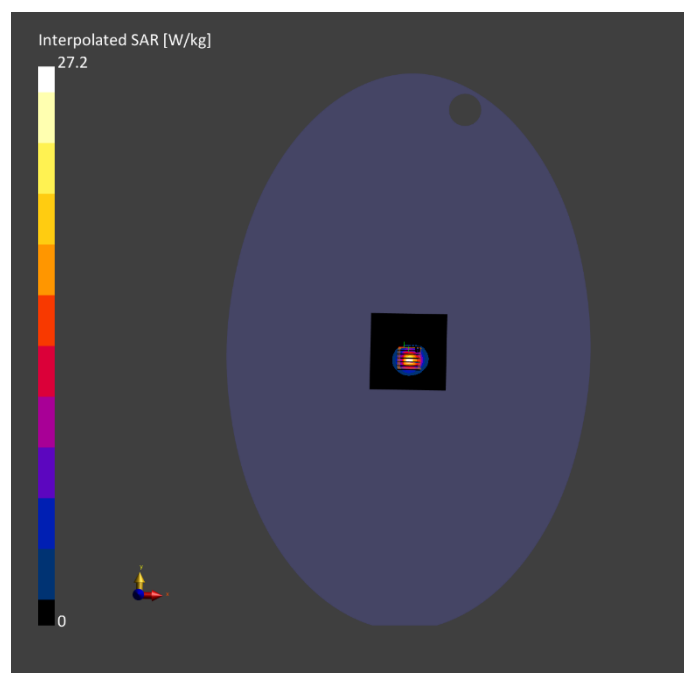
Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band      | Group,<br>UID | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-----------|---------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               |                                       | D5GH<br>z | CW,<br>0--    | 5250.0,<br>5250                           | 5.44                     | 4.70                             | 35.9                    | 22.6                               | 21.8                              |

Hardware Setup

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-20 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

| Scan Setup    |         |             |                 | Measurement Results |               |               |
|---------------|---------|-------------|-----------------|---------------------|---------------|---------------|
|               |         | Area Scan   | Zoom Scan       |                     |               |               |
| Grid          | Extents | 80.0 x 80.0 | 22.0 x 22.0 x   | Date                | 2025-03-20    | 2025-03-20    |
|               | [mm]    |             | 22.0            | psSAR1g             | 7.31          | 7.42          |
| Grid          | Steps   | 10.0 x 10.0 | 4.0 x 4.0 x 1.4 | [W/kg]              |               |               |
|               | [mm]    |             |                 | psSAR10g            | 2.14          | 2.14          |
| Sensor        |         | 3.0         | 1.4             | [W/kg]              |               |               |
| Surface [mm]  |         |             |                 | Power Drift         | -0.04         | 0.01          |
| Graded Grid   |         | Yes         | Yes             | [dB]                |               |               |
| Grading Ratio |         | 1.5         | 1.4             | Power Scaling       | Disabled      | Disabled      |
| MAIA          |         | N/A         | N/A             | Scaling Factor      |               |               |
| Surface       |         | All points  | All points      | [dB]                |               |               |
| Detection     |         |             |                 | TSL                 | No correction | No correction |
| Scan Method   |         | Measured    | Measured        | Correction          |               |               |
|               |         |             |                 | M2/M1 [%]           |               | 59.1          |
|               |         |             |                 | Dist 3dB Peak       |               | 8.3           |
|               |         |             |                 | [mm]                |               |               |



System Performance Check Data (5600MHz)

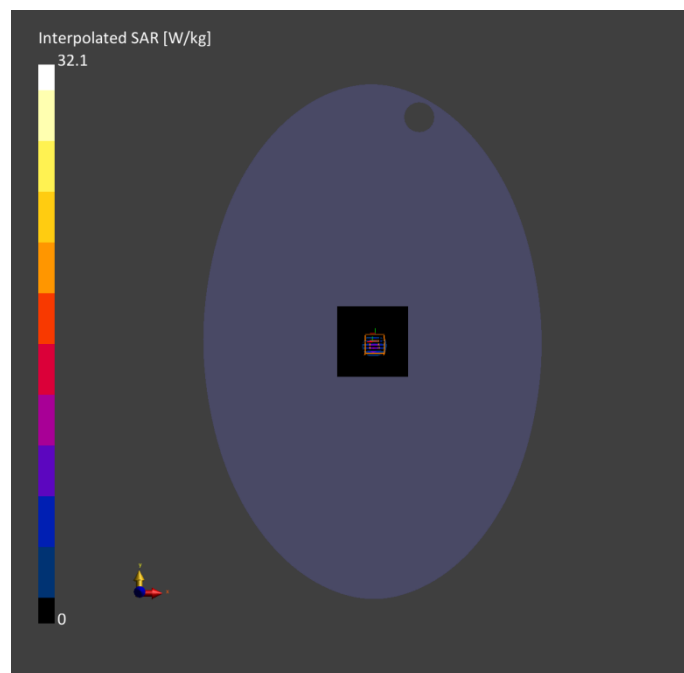
Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band      | Group,<br>UID | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-----------|---------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               |                                       | D5GH<br>z | CW,<br>0--    | 5600.0,<br>60                             | 4.91                     | 5.05                             | 35.4                    | 22.6                               | 21.5                              |

Hardware Setup

| Phantom                               | TSL, Measured Date   |          | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|----------------------|----------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000<br>23 | 2025-03- | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

| Scan Setup    |         |             |                 | Measurement Results |               |               |
|---------------|---------|-------------|-----------------|---------------------|---------------|---------------|
|               |         | Area Scan   | Zoom Scan       |                     |               |               |
| Grid          | Extents | 80.0 x 80.0 | 22.0 x 22.0 x   | Date                | 2025-03-23    | 2025-03-23    |
|               | [mm]    |             | 22.0            | psSAR1g             | 8.05          | 8.23          |
| Grid          | Steps   | 10.0 x 10.0 | 4.0 x 4.0 x 1.4 | [W/kg]              |               |               |
|               | [mm]    |             |                 | psSAR10g            | 2.21          | 2.37          |
| Sensor        |         | 3.0         | 1.4             | [W/kg]              |               |               |
| Surface [mm]  |         |             |                 | Power Drift         | 0.07          | 0.02          |
| Graded Grid   |         | Yes         | Yes             | [dB]                |               |               |
| Grading Ratio |         | 1.5         | 1.4             | Power Scaling       | Disabled      | Disabled      |
| MAIA          |         | N/A         | N/A             | Scaling Factor      |               |               |
| Surface       |         | VMS + 6p    | VMS + 6p        | [dB]                |               |               |
| Detection     |         |             |                 | TSL                 | No correction | No correction |
| Scan Method   |         | Measured    | Measured        | Correction          |               |               |
|               |         |             |                 | M2/M1 [%]           |               | 62.5          |
|               |         |             |                 | Dist 3dB Peak       |               | 7.5           |
|               |         |             |                 | [mm]                |               |               |



System Performance Check Data (5750MHz)

Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band      | Group,<br>UID | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-----------|---------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               |                                       | D5GH<br>z | CW,<br>0--    | 5750.0,<br>5750                           | 4.98                     | 5.18                             | 35.5                    | 22.5                               | 21.5                              |

Hardware Setup

| Phantom                               | TSL, Measured Date   |          | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|----------------------|----------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000<br>26 | 2025-03- | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

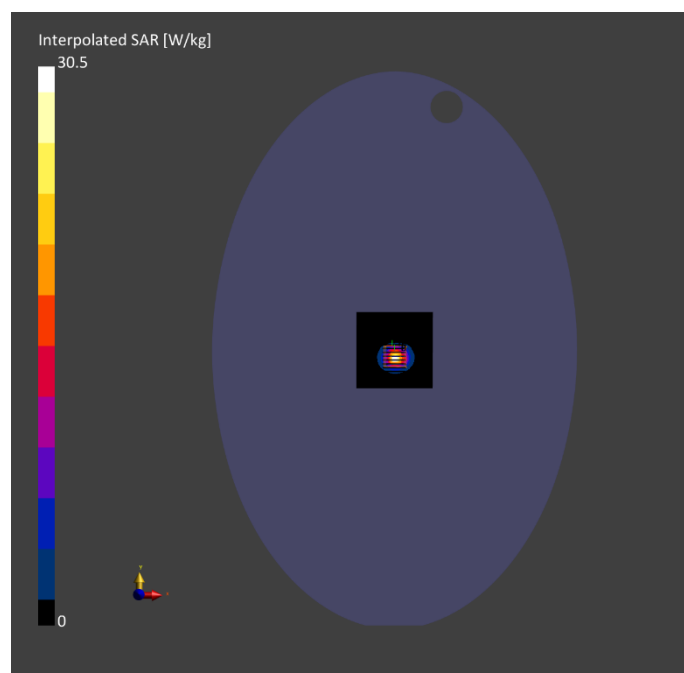
Scan Setup

|               |         | Area Scan   | Zoom Scan       |
|---------------|---------|-------------|-----------------|
| Grid          | Extents | 80.0 x 80.0 | 22.0 x 22.0 x   |
|               | [mm]    |             | 22.0            |
| Grid          | Steps   | 10.0 x 10.0 | 4.0 x 4.0 x 1.4 |
|               | [mm]    |             |                 |
| Sensor        |         | 3.0         | 1.4             |
| Surface [mm]  |         |             |                 |
| Graded Grid   |         | Yes         | Yes             |
| Grading Ratio |         | 1.5         | 1.4             |
| MAIA          |         | N/A         | N/A             |
| Surface       |         | All points  | All points      |
| Detection     |         |             |                 |
| Scan Method   |         | Measured    | Measured        |

Measurement Results

|                |       | Area Scan     | Zoom Scan     |
|----------------|-------|---------------|---------------|
| Date           |       | 2025-03-26    | 2025-03-26    |
| psSAR1g        |       | 6.81          | 7.71          |
| [W/kg]         |       |               |               |
| psSAR10g       |       | 2.01          | 2.15          |
| [W/kg]         |       |               |               |
| Power          | Drift | -0.04         | 0.02          |
| [dB]           |       |               |               |
| Power Scaling  |       | Disabled      | Disabled      |
| Scaling Factor |       |               |               |
| [dB]           |       |               |               |
| TSL            |       | No correction | No correction |
| Correction     |       |               |               |
| M2/M1 [%]      |       |               | 54.6          |
| Dist 3dB Peak  |       |               | 7.2           |
| [mm]           |       |               |               |





System Performance Check Data (6500MHz)

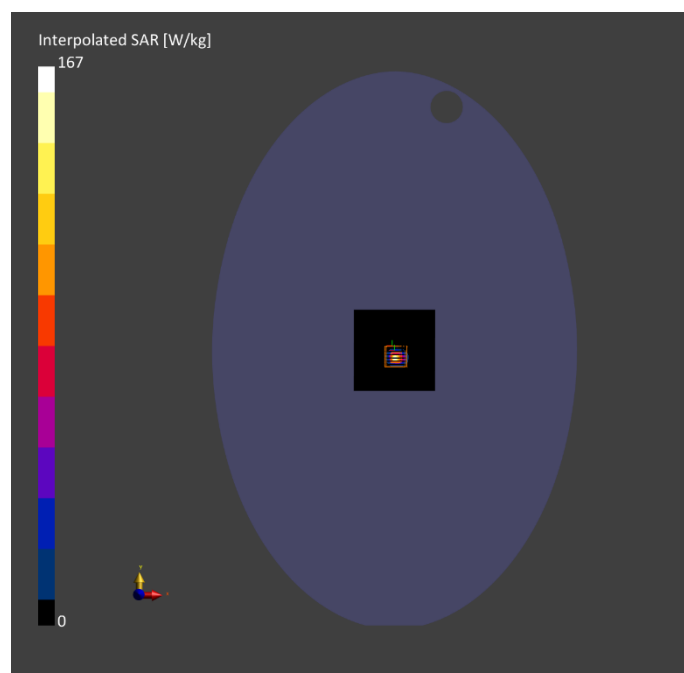
Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                   | Group,<br>UID | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------------|---------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               |                                       | Valida<br>tion<br>band | CW,<br>0--    | 6500.0,<br>6500                           | 5.11                     | 6.14                             | 33.9                    | 22.6                               | 21.5                              |

Hardware Setup

| Phantom                               | TSL, Measured Date |            | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|--------------------|------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000     | 2025-03-27 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

| Scan Setup    |         |             |                 | Measurement Results  |               |               |
|---------------|---------|-------------|-----------------|----------------------|---------------|---------------|
|               |         | Area Scan   | Zoom Scan       |                      |               |               |
| Grid          | Extents | 85.0 x 85.0 | 22.0 x 22.0 x   | Date                 | 2025-03-27    | 2025-03-27    |
|               | [mm]    |             | 22.0            | psSAR1g              | 28.7          | 29.4          |
| Grid          | Steps   | 8.5 x 8.5   | 3.4 x 3.4 x 1.4 | [W/kg]               |               |               |
|               | [mm]    |             |                 | psSAR10g             | 5.23          | 5.53          |
| Sensor        |         | 3.0         | 1.4             | [W/kg]               |               |               |
| Surface [mm]  |         |             |                 | APD 4cm <sup>2</sup> |               | 139           |
| Graded Grid   |         | Yes         | Yes             | [W/m <sup>2</sup> ]  |               |               |
| Grading Ratio |         | 1.5         | 1.4             | Power Drift          | 0.04          | 0.05          |
| MAIA          |         | N/A         | N/A             | [dB]                 |               |               |
| Surface       |         | All points  | All points      | Power Scaling        | Disabled      | Disabled      |
| Detection     |         |             |                 | Scaling Factor       |               |               |
| Scan Method   |         | Measured    | Measured        | [dB]                 |               |               |
|               |         |             |                 | TSL                  | No correction | No correction |
|               |         |             |                 | Correction           |               |               |
|               |         |             |                 | M2/M1 [%]            |               | 53.3          |
|               |         |             |                 | Dist 3dB Peak        |               | 5.8           |
|               |         |             |                 | [mm]                 |               |               |



ANNEX C TEST DATA

Meas.1 Body Plane with Front Edge 0mm on 39 Channel in Bluetooth mode with Antenna Auxiliary

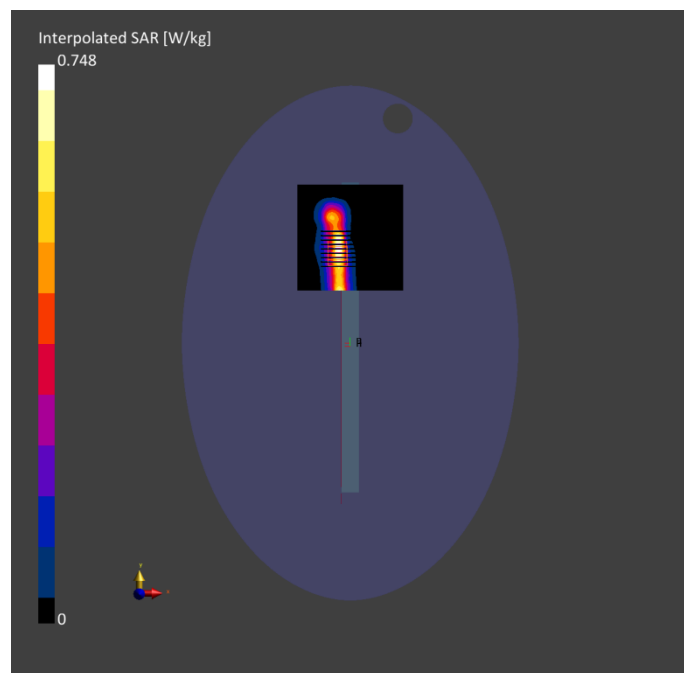
Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                      | Group,<br>UID               | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|---------------------------|-----------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | ISM<br>2.4<br>GHz<br>Band | Bluetooth,<br>10032-<br>CAA | 2441.0,<br>39                             | 6.98                     | 1.79                             | 39.6                    | 22.5                               | 21.6                              |

Hardware Setup

| Phantom                               | TSL, Measured Date |            | Probe, Calibration Date |            | DAE, Calibration Date  |
|---------------------------------------|--------------------|------------|-------------------------|------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000     | 2025-03-16 | EX3DV4 - SN7893,        | 2024-09-05 | DAE4 Sn878, 2025-03-05 |

| Scan Setup    |         |               |                 | Measurement Results |               |               |
|---------------|---------|---------------|-----------------|---------------------|---------------|---------------|
|               |         | Area Scan     | Zoom Scan       |                     |               |               |
| Grid          | Extents | 120.0 x 120.0 | 30.0 x 30.0 x   | Date                | 2025-03-16    | 2025-03-16    |
|               | [mm]    |               | 30.0            | psSAR1g             | 0.334         | 0.318         |
| Grid          | Steps   | 12.0 x 12.0   | 5.0 x 5.0 x 5.0 | [W/kg]              |               |               |
|               | [mm]    |               |                 | psSAR10g            | 0.157         | 0.151         |
| Sensor        |         | 3.0           | 1.4             | [W/kg]              |               |               |
| Surface [mm]  |         |               |                 | Power Drift         | 0.01          | -0.06         |
| Graded Grid   |         | Yes           | Yes             | [dB]                |               |               |
| Grading Ratio |         | 1.5           | 1.5             | Power Scaling       | Disabled      | Disabled      |
| MAIA          |         | N/A           | N/A             | Scaling Factor      |               |               |
| Surface       |         | VMS + 6p      | VMS + 6p        | [dB]                |               |               |
| Detection     |         |               |                 | TSL                 | No correction | No correction |
| Scan Method   |         | Measured      | Measured        | Correction          |               |               |
|               |         |               |                 | M2/M1 [%]           |               | 39.9          |
|               |         |               |                 | Dist 3dB Peak       |               | 6.0           |
|               |         |               |                 | [mm]                |               |               |



**Meas.2 Body Plane with Front Edge 0mm on 1 Channel in IEEE802.11b mode with Antenna Auxiliary**
**Exposure Conditions**

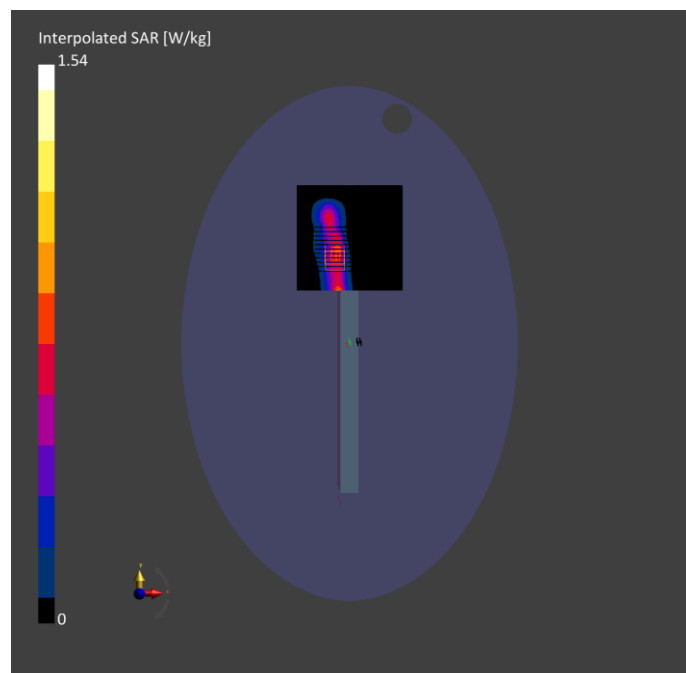
| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                   | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>2.4G<br>Hz | WLAN,<br>10012-<br>CAB | 2412.0,<br>1                              | 6.98                     | 1.73                             | 39.9                    | 22.5                               | 21.6                              |

**Hardware Setup**

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-16 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**
**Measurement Results**

|               |         | Area Scan     | Zoom Scan       |                |  | Area Scan     | Zoom Scan     |
|---------------|---------|---------------|-----------------|----------------|--|---------------|---------------|
| Grid          | Extents | 120.0 x 120.0 | 30.0 x 30.0 x   | Date           |  | 2025-03-16    | 2025-03-16    |
|               | [mm]    |               | 30.0            | psSAR1g        |  | 0.640         | 0.706         |
| Grid          | Steps   | 12.0 x 12.0   | 5.0 x 5.0 x 5.0 | [W/kg]         |  |               |               |
|               | [mm]    |               |                 | psSAR10g       |  | 0.332         | 0.348         |
| Sensor        |         | 3.0           | 1.4             | [W/kg]         |  |               |               |
| Surface [mm]  |         |               |                 | Power Drift    |  | -0.07         | -0.07         |
| Graded Grid   |         | Yes           | Yes             | [dB]           |  |               |               |
| Grading Ratio |         | 1.5           | 1.5             | Power Scaling  |  | Disabled      | Disabled      |
| MAIA          |         | N/A           | N/A             | Scaling Factor |  |               |               |
| Surface       |         | VMS + 6p      | VMS + 6p        | [dB]           |  |               |               |
| Detection     |         |               |                 | TSL            |  | No correction | No correction |
| Scan Method   |         | Measured      | Measured        | Correction     |  |               |               |
|               |         |               |                 | M2/M1 [%]      |  |               | 42.2          |
|               |         |               |                 | Dist 3dB Peak  |  |               | 5.4           |
|               |         |               |                 | [mm]           |  |               |               |



**Meas.3 Body Plane with Front Edge 0mm on 1 Channel in IEEE802.11b mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                   | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>2.4G<br>Hz | WLAN,<br>10012-<br>CAB | 2412.0,<br>1                              | 6.98                     | 1.73                             | 39.9                    | 22.5                               | 21.6                              |

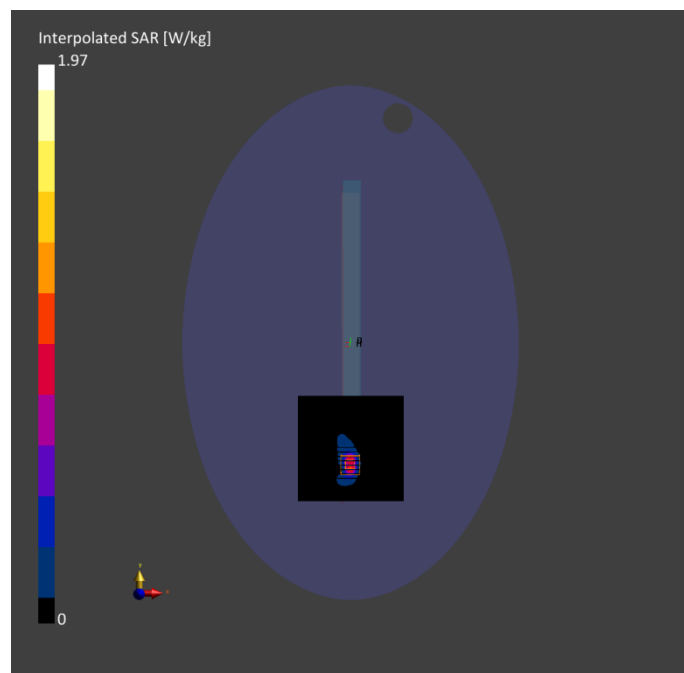
**Hardware Setup**

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-16 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**
**Measurement Results**

|               |         | Area Scan     | Zoom Scan       |                |  | Area Scan     | Zoom Scan     |
|---------------|---------|---------------|-----------------|----------------|--|---------------|---------------|
| Grid          | Extents | 120.0 x 120.0 | 30.0 x 30.0 x   | Date           |  | 2025-03-16    | 2025-03-16    |
|               | [mm]    |               | 30.0            | psSAR1g        |  | 0.766         | 0.848         |
| Grid          | Steps   | 12.0 x 12.0   | 5.0 x 5.0 x 5.0 | [W/kg]         |  |               |               |
|               | [mm]    |               |                 | psSAR10g       |  | 0.308         | 0.323         |
| Sensor        |         | 3.0           | 1.4             | [W/kg]         |  |               |               |
| Surface [mm]  |         |               |                 | Power Drift    |  | -0.00         | -0.04         |
| Graded Grid   |         | Yes           | Yes             | [dB]           |  |               |               |
| Grading Ratio |         | 1.5           | 1.5             | Power Scaling  |  | Disabled      | Disabled      |
| MAIA          |         | N/A           | N/A             | Scaling Factor |  |               |               |
| Surface       |         | VMS + 6p      | VMS + 6p        | [dB]           |  |               |               |
| Detection     |         |               |                 | TSL            |  | No correction | No correction |
| Scan Method   |         | Measured      | Measured        | Correction     |  |               |               |
|               |         |               |                 | M2/M1 [%]      |  |               | 44.3          |
|               |         |               |                 | Dist 3dB Peak  |  |               | 6.0           |
|               |         |               |                 | [mm]           |  |               |               |





**Meas.4 Body Plane with Front Edge 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>5GHz | WLAN,<br>10544-<br>AAD | 5290.0,<br>58                             | 5.44                     | 4.79                             | 35.4                    | 22.6                               | 21.8                              |

**Hardware Setup**

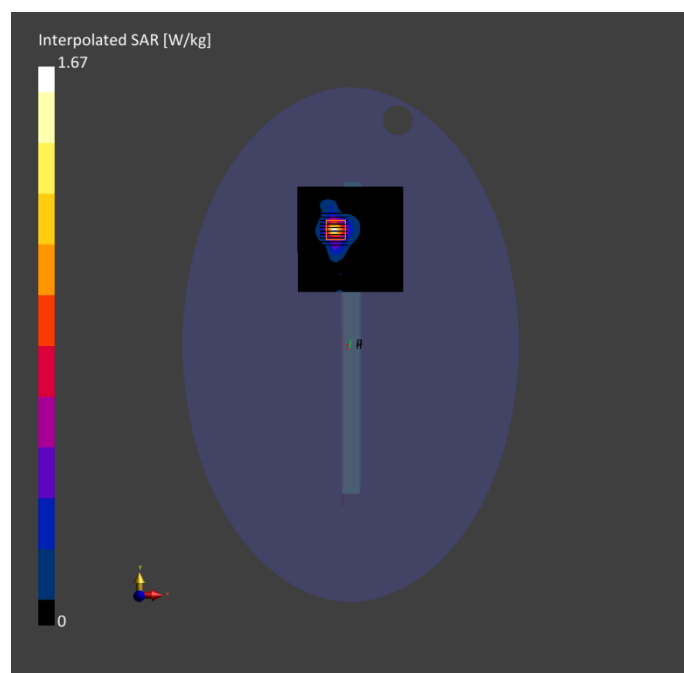
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-20 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-20    | 2025-03-20    |
| psSAR1g [W/kg]      | 0.372         | 0.410         |
| psSAR10g [W/kg]     | 0.121         | 0.126         |
| Power Drift [dB]    | -0.10         | -0.15         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 50.5          |
| Dist 3dB Peak [mm]  |               | 7.4           |



**Meas.5 Body Plane with Front Edge 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>5GHz | WLAN,<br>10544-<br>AAD | 5290.0,<br>58                             | 5.44                     | 4.79                             | 35.4                    | 22.6                               | 21.8                              |

**Hardware Setup**

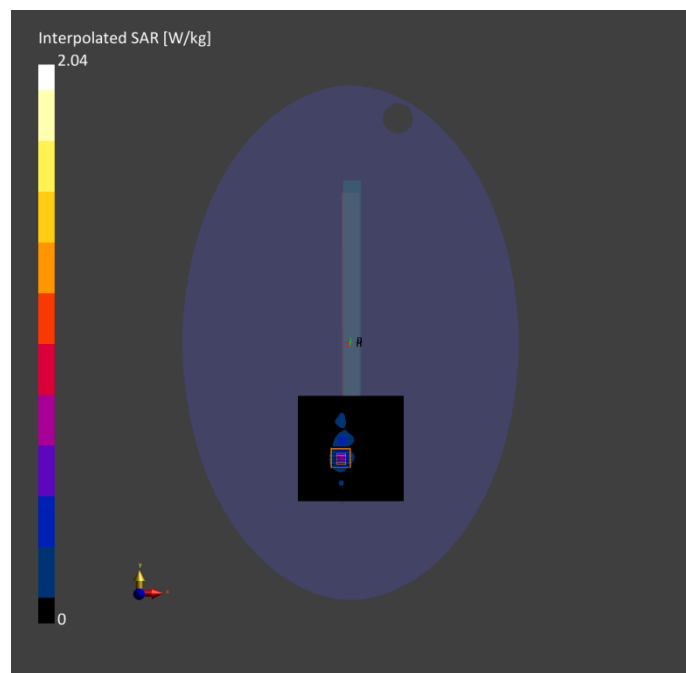
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-20 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-20    | 2025-03-20    |
| psSAR1g [W/kg]      | 0.474         | 0.514         |
| psSAR10g [W/kg]     | 0.147         | 0.150         |
| Power Drift [dB]    | 0.10          | -0.06         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 53.6          |
| Dist 3dB Peak [mm]  |               | 6.8           |



**Meas.6 Body Plane with Front Edge 0mm on 114 Channel in IEEE802.11ac160 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>5GHz | WLAN,<br>10554-<br>AAE | 5570.0,<br>114                            | 4.91                     | 5.02                             | 35.8                    | 22.6                               | 21.5                              |

**Hardware Setup**

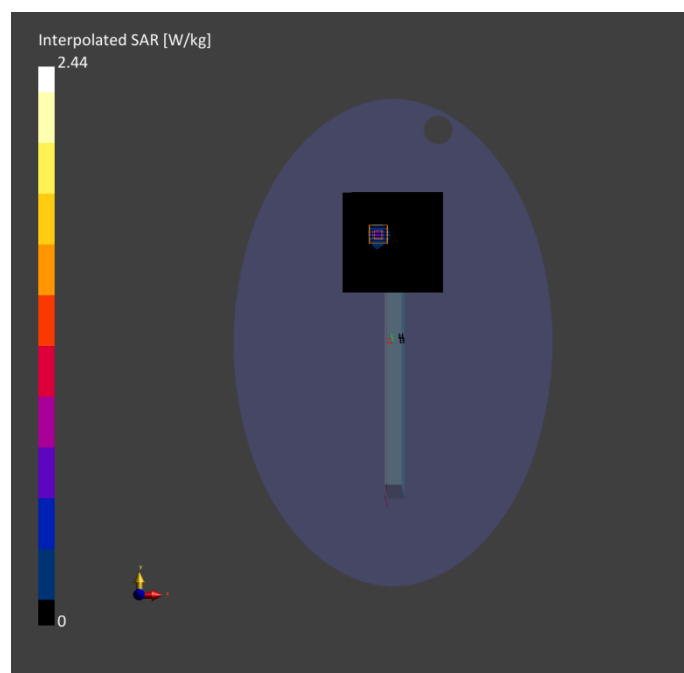
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-23 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-23    | 2025-03-23    |
| psSAR1g [W/kg]      | 0.498         | 0.565         |
| psSAR10g [W/kg]     | 0.155         | 0.164         |
| Power Drift [dB]    | -0.03         | -0.07         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 49.0          |
| Dist 3dB Peak [mm]  |               | 7.4           |



**Meas.7 Body Plane with Front Edge 0mm on 114 Channel in IEEE802.11ac160 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>5GHz | WLAN,<br>10554-<br>AAE | 5570.0,<br>114                            | 4.91                     | 5.02                             | 35.8                    | 22.6                               | 21.5                              |

**Hardware Setup**

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-23 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

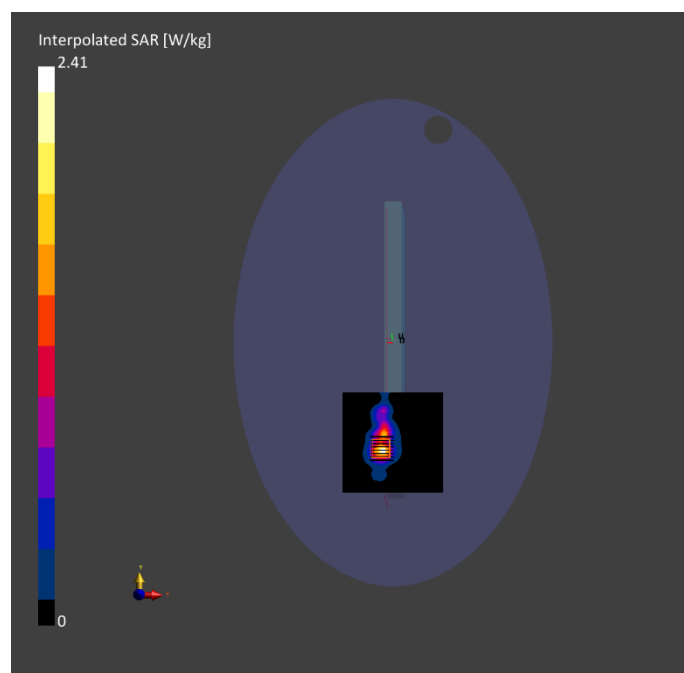
**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-23    | 2025-03-23    |
| psSAR1g [W/kg]      | 0.488         | 0.576         |
| psSAR10g [W/kg]     | 0.163         | 0.171         |
| Power Drift [dB]    | -0.11         | -0.12         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 50.0          |
| Dist 3dB Peak [mm]  |               | 6.2           |





**Meas.8 Body Plane with Front Edge 0mm on 155 Channel in IEEE802.11ac80 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>5GHz | WLAN,<br>10554-<br>AAE | 5775.0,<br>155                            | 4.98                     | 5.22                             | 35.2                    | 22.5                               | 21.5                              |

**Hardware Setup**

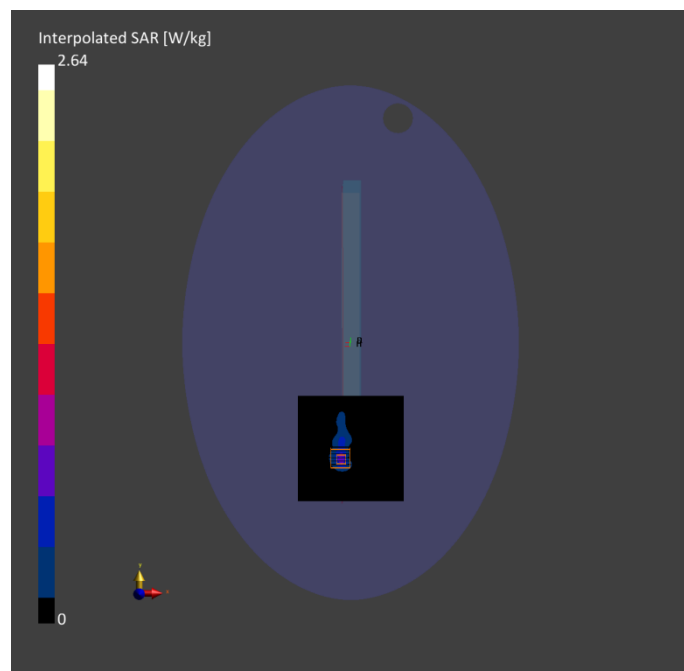
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-26 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-26    | 2025-03-26    |
| psSAR1g [W/kg]      | 0.577         | 0.615         |
| psSAR10g [W/kg]     | 0.185         | 0.182         |
| Power Drift [dB]    | 0.04          | -0.10         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 47.1          |
| Dist 3dB Peak [mm]  |               | 5.8           |



**Meas.9 Body Plane with Front Edge 0mm on 155 Channel in IEEE802.11ac80 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | WLA<br>N<br>5GHz | WLAN,<br>10544-<br>AAD | 5775.0,<br>155                            | 4.98                     | 5.22                             | 35.2                    | 22.5                               | 21.5                              |

**Hardware Setup**

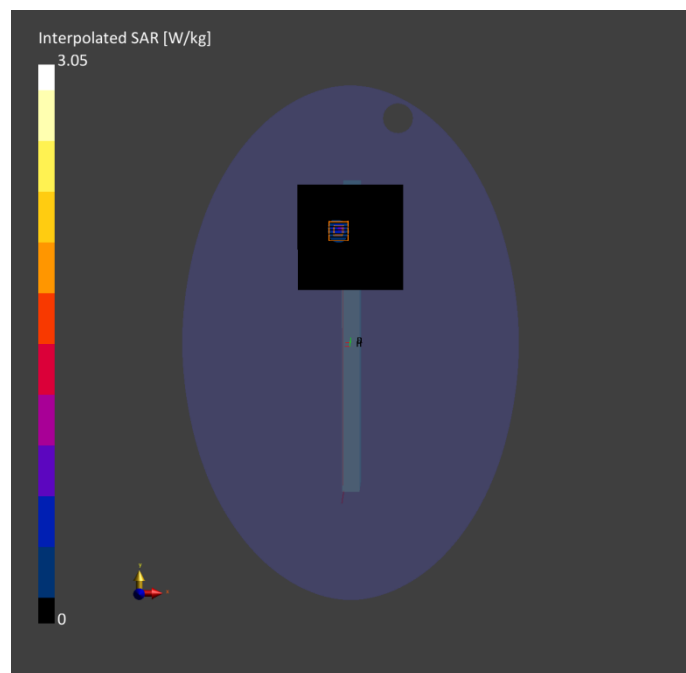
| Phantom                               | TSL, Measured Date            | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|-------------------------------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-<br>26 | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                      | Area Scan     | Zoom Scan             |
|----------------------|---------------|-----------------------|
| Grid Extents<br>[mm] | 120.0 x 120.0 | 24.0 x 24.0 x<br>22.0 |
| Grid Steps<br>[mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0       |
| Sensor               | 3.0           | 1.4                   |
| Surface [mm]         |               |                       |
| Graded Grid          | Yes           | Yes                   |
| Grading Ratio        | 1.5           | 1.4                   |
| MAIA                 | Y             | N/A                   |
| Surface              | VMS + 6p      | VMS + 6p              |
| Detection            |               |                       |
| Scan Method          | Measured      | Measured              |

**Measurement Results**

|                        | Area Scan     | Zoom Scan     |
|------------------------|---------------|---------------|
| Date                   | 2025-03-26    | 2025-03-26    |
| psSAR1g<br>[W/kg]      | 0.568         | 0.689         |
| psSAR10g<br>[W/kg]     | 0.181         | 0.185         |
| Power Drift<br>[dB]    | -0.10         | -0.19         |
| Power Scaling          | Disabled      | Disabled      |
| Scaling Factor<br>[dB] |               |               |
| TSL                    | No correction | No correction |
| Correction             |               |               |
| M2/M1 [%]              |               | 50.1          |
| Dist 3dB Peak<br>[mm]  |               | 6.8           |



**Meas.10 Body Plane with Front Edge 0mm on 163 Channel in IEEE802.11ac160 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band               | Group,<br>UID        | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|--------------------|----------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | Custo<br>m<br>Band | CW,<br>10554-<br>AAE | 5815.0,<br>5815000                        | 4.98                     | 5.38                             | 35.0                    | 22.5                               | 21.5                              |

**Hardware Setup**

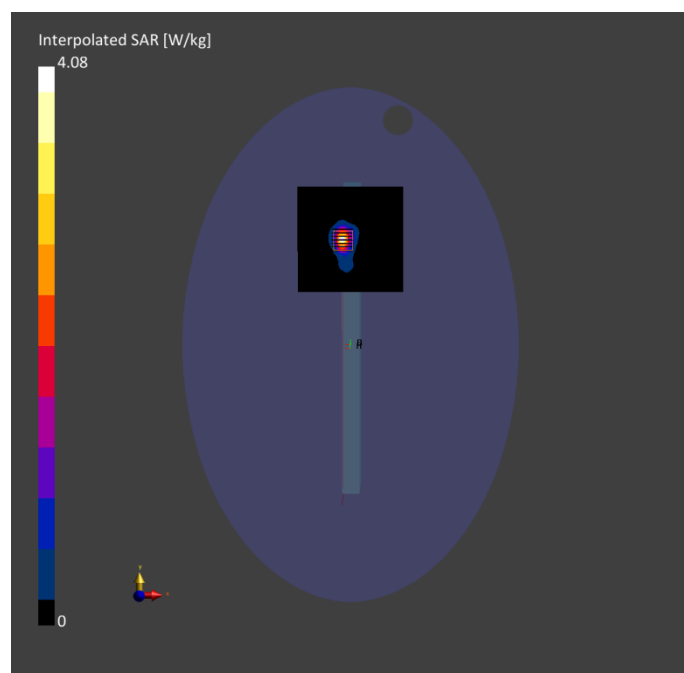
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-26 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-26    | 2025-03-26    |
| psSAR1g [W/kg]      | 0.937         | 1.04          |
| psSAR10g [W/kg]     | 0.281         | 0.306         |
| Power Drift [dB]    | 0.07          | -0.11         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 53.0          |
| Dist 3dB Peak [mm]  |               | 6.4           |



**Meas.11 Body Plane with Front Edge 0mm on 163 Channel in IEEE802.11ac160 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band               | Group,<br>UID        | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|--------------------|----------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | Custo<br>m<br>Band | CW,<br>10554-<br>AAE | 5815.0,<br>5815000                        | 4.98                     | 5.38                             | 35.0                    | 22.5                               | 21.5                              |

**Hardware Setup**

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-26 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

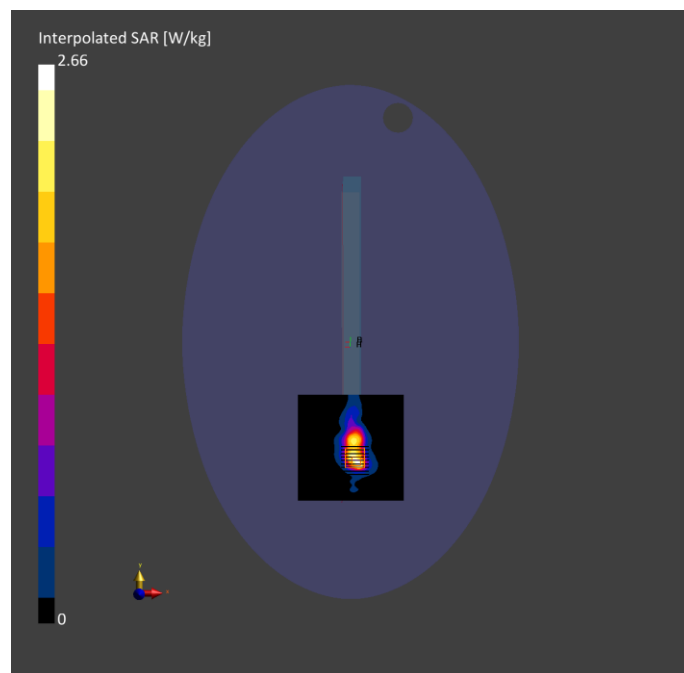
**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-26    | 2025-03-26    |
| psSAR1g [W/kg]      | 0.495         | 0.644         |
| psSAR10g [W/kg]     | 0.185         | 0.192         |
| Power Drift [dB]    | -0.00         | -0.15         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 52.9          |
| Dist 3dB Peak [mm]  |               | 6.1           |





**Meas.12 Body Plane with Front Edge 0mm on 47 Channel in IEEE802.11ax160 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band        | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | U-NII-<br>5 | WLAN,<br>10743-<br>AAC | 6185.0,<br>47                             | 5.11                     | 5.65                             | 34.4                    | 22.6                               | 21.5                              |

**Hardware Setup**

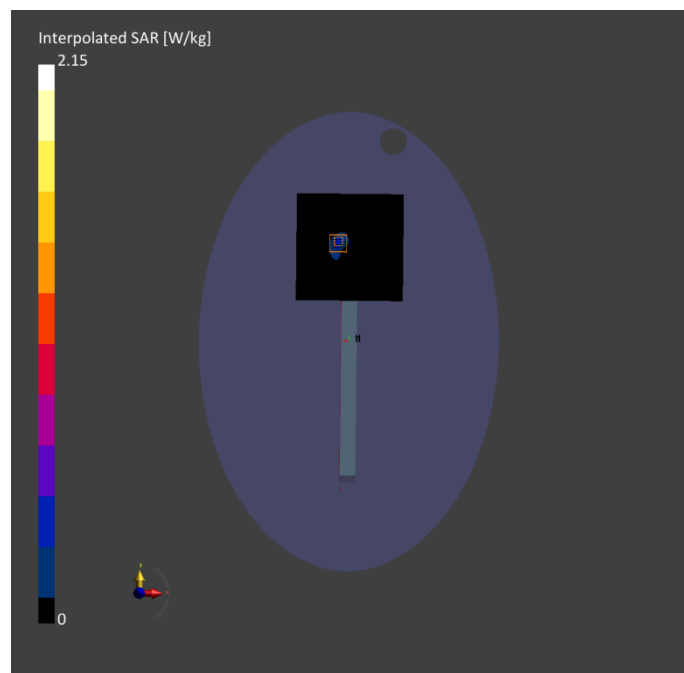
| Phantom                               | TSL, Measured Date            | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|-------------------------------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-<br>27 | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan             |
|-------------------|---------------|-----------------------|
| Grid Extents [mm] | 136.0 x 136.0 | 23.8 x 23.8 x<br>22.0 |
| Grid Steps [mm]   | 8.5 x 8.5     | 3.4 x 3.4 x 1.4       |
| Sensor            | 3.0           | 1.4                   |
| Surface [mm]      |               |                       |
| Graded Grid       | Yes           | Yes                   |
| Grading Ratio     | 1.5           | 1.4                   |
| MAIA              | Y             | Y                     |
| Surface           | VMS + 6p      | VMS + 6p              |
| Detection         |               |                       |
| Scan Method       | Measured      | Measured              |

**Measurement Results**

|                                         | Area Scan     | Zoom Scan     |
|-----------------------------------------|---------------|---------------|
| Date                                    | 2025-03-27    | 2025-03-27    |
| psSAR1g [W/kg]                          | 0.437         | 0.499         |
| psSAR10g [W/kg]                         | 0.136         | 0.159         |
| APD4cm <sup>2</sup> [W/m <sup>2</sup> ] |               | 3.62          |
| Power Drift [dB]                        | 0.02          | -0.10         |
| Power Scaling                           | Disabled      | Disabled      |
| Scaling Factor [dB]                     |               |               |
| TSL Correction                          | No correction | No correction |
| M2/M1 [%]                               |               | 55.0          |
| Dist 3dB Peak [mm]                      |               | 7.2           |



**Meas.13 Body Plane with Front Edge 0mm on 47 Channel in IEEE802.11ax160 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band        | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | BOTTOM<br>,<br>0.00                   | U-NII-<br>5 | WLAN,<br>10743-<br>AAC | 6185.0,<br>47                             | 5.11                     | 5.65                             | 34.4                    | 22.6                               | 21.5                              |

**Hardware Setup**

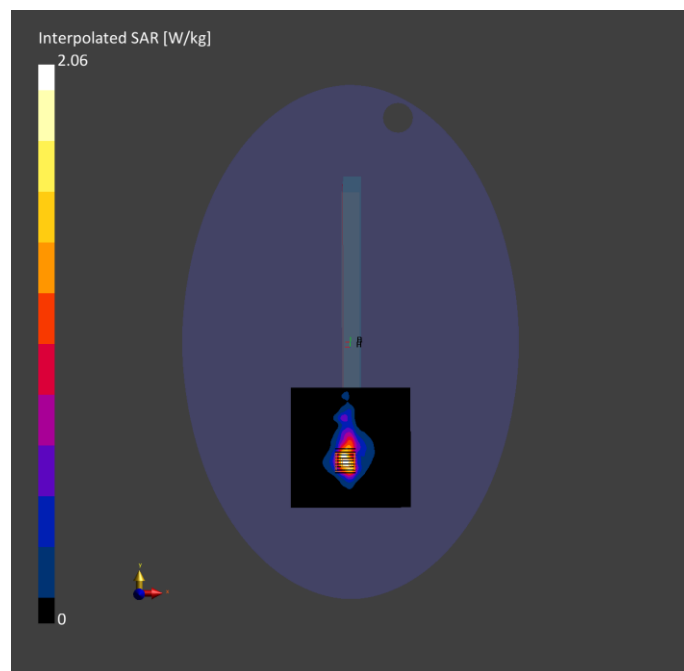
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-27 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 136.0 x 136.0 | 23.8 x 23.8 x 22.0 |
| Grid Steps [mm]   | 8.5 x 8.5     | 3.4 x 3.4 x 1.4    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | Y                  |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                                         | Area Scan     | Zoom Scan     |
|-----------------------------------------|---------------|---------------|
| Date                                    | 2025-03-27    | 2025-03-27    |
| psSAR1g [W/kg]                          | 0.397         | 0.46          |
| psSAR10g [W/kg]                         | 0.140         | 0.143         |
| APD4cm <sup>2</sup> [W/m <sup>2</sup> ] |               | 3.41          |
| Power Drift [dB]                        | -0.06         | -0.08         |
| Power Scaling                           | Disabled      | Disabled      |
| Scaling Factor [dB]                     |               |               |
| TSL Correction                          | No correction | No correction |
| M2/M1 [%]                               |               | 54.9          |
| Dist 3dB Peak [mm]                      |               | 5.4           |



**Meas.14 Limbs Plane with Keyboard Side 0mm on 39 Channel in Bluetooth mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                      | Group,<br>UID               | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|---------------------------|-----------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | ISM<br>2.4<br>GHz<br>Band | Bluetooth,<br>10032-<br>CAA | 2441.0,<br>39                             | 7.98                     | 1.79                             | 39.6                    | 22.5                               | 21.6                              |

**Hardware Setup**

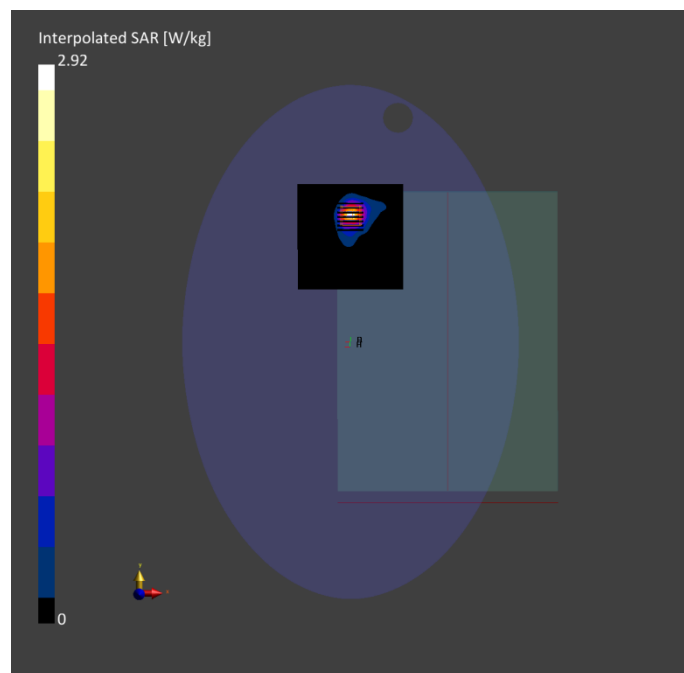
| Phantom                               | TSL, Measured Date               | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|----------------------------------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000<br>2025-03-<br>16 | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                        | Area Scan     | Zoom Scan             |
|------------------------|---------------|-----------------------|
| Grid Extents<br>[mm]   | 120.0 x 120.0 | 30.0 x 30.0 x<br>30.0 |
| Grid Steps<br>[mm]     | 12.0 x 12.0   | 5.0 x 5.0 x 5.0       |
| Sensor<br>Surface [mm] | 3.0           | 1.4                   |
| Graded Grid            | Yes           | Yes                   |
| Grading Ratio          | 1.5           | 1.5                   |
| MAIA                   | N/A           | N/A                   |
| Surface<br>Detection   | VMS + 6p      | VMS + 6p              |
| Scan Method            | Measured      | Measured              |

**Measurement Results**

|                        | Area Scan     | Zoom Scan     |
|------------------------|---------------|---------------|
| Date                   | 2025-03-16    | 2025-03-16    |
| psSAR1g<br>[W/kg]      | 1.18          | 1.30          |
| psSAR10g<br>[W/kg]     | 0.507         | 0.543         |
| Power Drift<br>[dB]    | 0.00          | 0.00          |
| Power Scaling          | Disabled      | Disabled      |
| Scaling Factor<br>[dB] |               |               |
| TSL<br>Correction      | No correction | No correction |
| M2/M1 [%]              |               | 44.0          |
| Dist 3dB Peak<br>[mm]  |               | 6.1           |



**Meas.15 Limbs Plane with Keyboard Side 0mm on 11 Channel in IEEE802.11b mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                   | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>2.4G<br>Hz | WLAN,<br>10012-<br>CAB | 2462.0,<br>11                             | 6.98                     | 1.81                             | 39.5                    | 22.5                               | 21.6                              |

**Hardware Setup**

| Phantom                               | TSL, Measured Date               | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|----------------------------------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000<br>2025-03-<br>16 | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

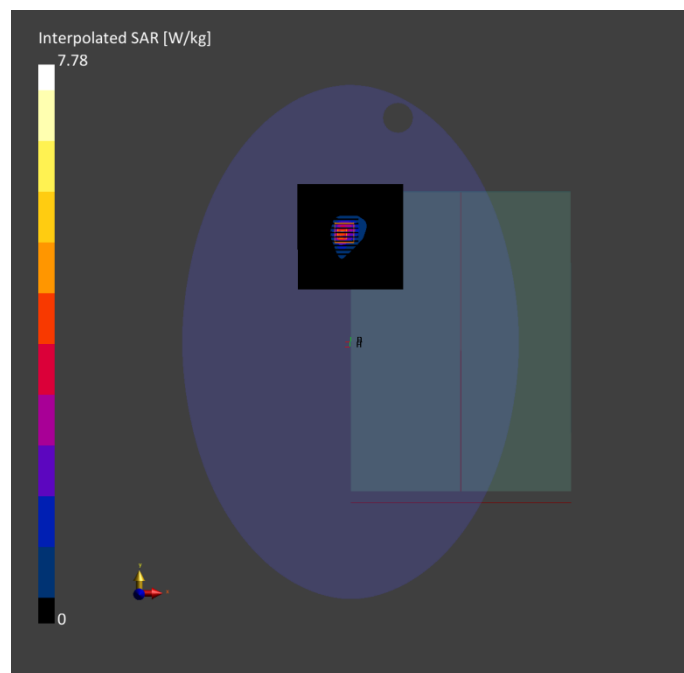
**Scan Setup**

|                        | Area Scan     | Zoom Scan             |
|------------------------|---------------|-----------------------|
| Grid Extents<br>[mm]   | 120.0 x 120.0 | 30.0 x 30.0 x<br>30.0 |
| Grid Steps<br>[mm]     | 12.0 x 12.0   | 5.0 x 5.0 x 5.0       |
| Sensor<br>Surface [mm] | 3.0           | 1.4                   |
| Graded Grid            | Yes           | Yes                   |
| Grading Ratio          | 1.5           | 1.5                   |
| MAIA                   | N/A           | N/A                   |
| Surface<br>Detection   | VMS + 6p      | VMS + 6p              |
| Scan Method            | Measured      | Measured              |

**Measurement Results**

|                       | Area Scan     | Zoom Scan     |
|-----------------------|---------------|---------------|
| Date                  | 2025-03-16    | 2025-03-16    |
| psSAR1g<br>[W/kg]     | 3.37          | 3.51          |
| psSAR10g<br>[W/kg]    | 1.55          | 1.50          |
| Power Drift<br>[dB]   | -0.01         | -0.04         |
| Power Scaling         | Disabled      | Disabled      |
| Scaling Factor        |               |               |
| [dB]                  |               |               |
| TSL                   | No correction | No correction |
| Correction            |               |               |
| M2/M1 [%]             |               | 45.2          |
| Dist 3dB Peak<br>[mm] |               | 6.7           |





**Meas.16 Limbs Plane with Keyboard Side 0mm on 6 Channel in IEEE802.11b mode with Antenna Main**
**Exposure Conditions**

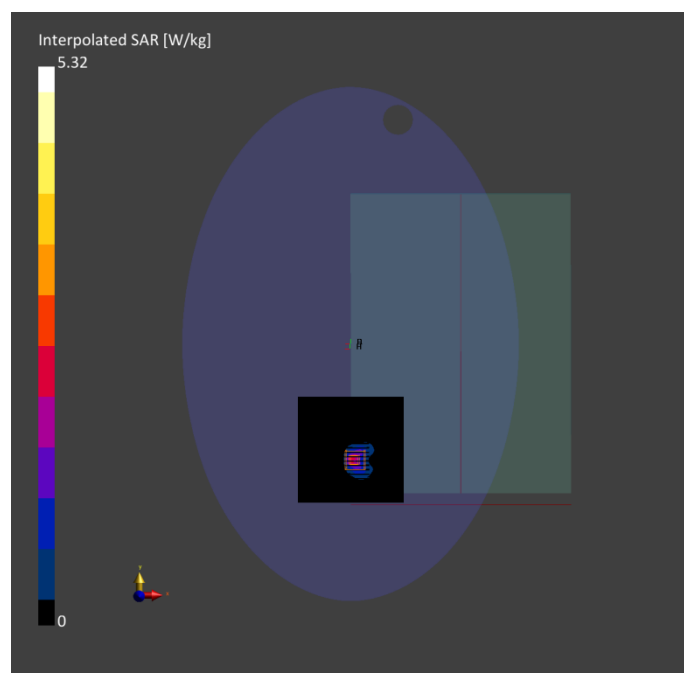
| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band                   | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>2.4G<br>Hz | WLAN,<br>10012-<br>CAB | 2437.0,<br>6                              | 6.98                     | 1.76                             | 39.8                    | 22.5                               | 21.6                              |

**Hardware Setup**

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-16 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**
**Measurement Results**

|               |         | Area Scan     | Zoom Scan       |                |  | Area Scan     | Zoom Scan     |
|---------------|---------|---------------|-----------------|----------------|--|---------------|---------------|
| Grid          | Extents | 120.0 x 120.0 | 30.0 x 30.0 x   | Date           |  | 2025-03-16    | 2025-03-16    |
|               | [mm]    |               | 30.0            | psSAR1g        |  | 1.79          | 2.26          |
| Grid          | Steps   | 12.0 x 12.0   | 5.0 x 5.0 x 5.0 | [W/kg]         |  |               |               |
|               | [mm]    |               |                 | psSAR10g       |  | 0.789         | 0.863         |
| Sensor        |         | 3.0           | 1.4             | [W/kg]         |  |               |               |
| Surface [mm]  |         |               |                 | Power Drift    |  | -0.07         | 0.01          |
| Graded Grid   |         | Yes           | Yes             | [dB]           |  |               |               |
| Grading Ratio |         | 1.5           | 1.5             | Power Scaling  |  | Disabled      | Disabled      |
| MAIA          |         | N/A           | N/A             | Scaling Factor |  |               |               |
| Surface       |         | VMS + 6p      | VMS + 6p        | [dB]           |  |               |               |
| Detection     |         |               |                 | TSL            |  | No correction | No correction |
| Scan Method   |         | Measured      | Measured        | Correction     |  |               |               |
|               |         |               |                 | M2/M1 [%]      |  |               | 42.0          |
|               |         |               |                 | Dist 3dB Peak  |  |               | 5.0           |
|               |         |               |                 | [mm]           |  |               |               |



**Meas.17 Limbs Plane with Keyboard Side 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>5GHz | WLAN,<br>10544-<br>AAD | 5290.0,<br>58                             | 5.44                     | 4.79                             | 35.4                    | 22.6                               | 21.8                              |

**Hardware Setup**

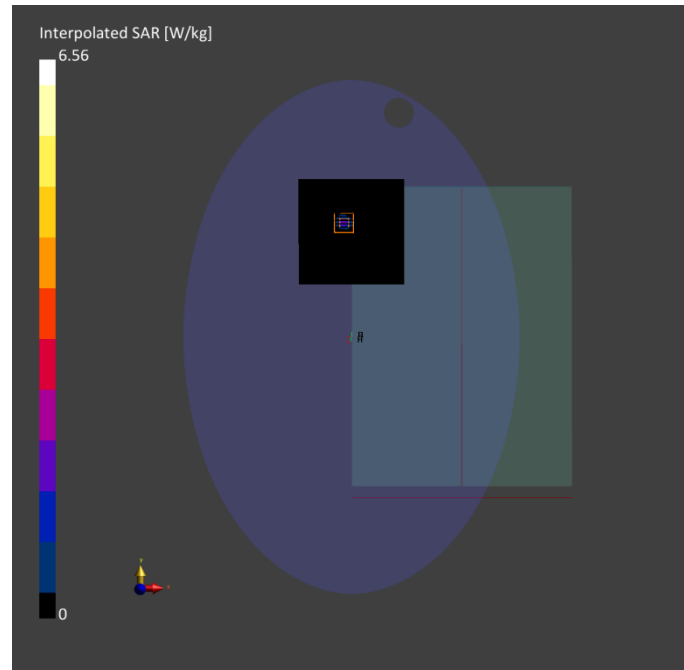
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-20 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-20    | 2025-03-20    |
| psSAR1g [W/kg]      | 1.30          | 1.54          |
| psSAR10g [W/kg]     | 0.315         | 0.364         |
| Power Drift [dB]    | 0.05          | -0.08         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 53.1          |
| Dist 3dB Peak [mm]  |               | 5.6           |



**Meas.18 Limbs Plane with Keyboard Side 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>5GHz | WLAN,<br>10544-<br>AAD | 5290.0,<br>58                             | 5.44                     | 4.79                             | 35.4                    | 22.6                               | 21.8                              |

**Hardware Setup**

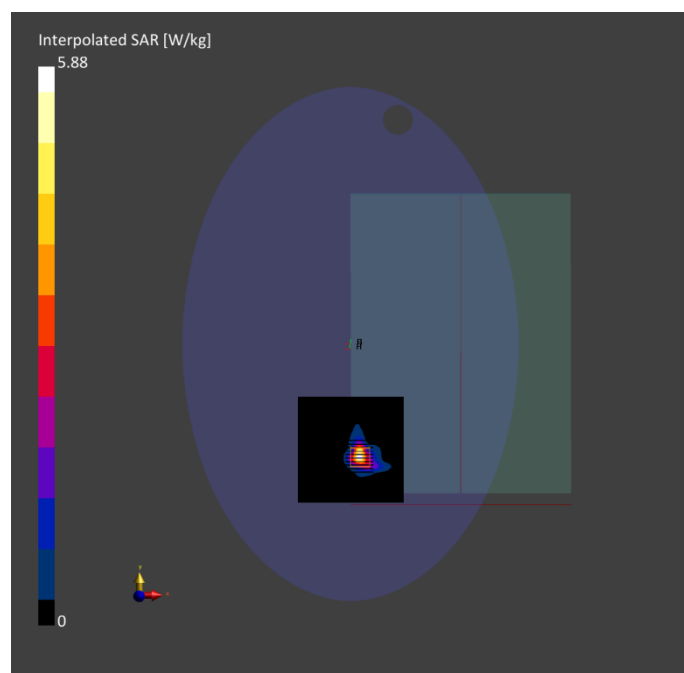
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-20 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-20    | 2025-03-20    |
| psSAR1g [W/kg]      | 1.39          | 1.49          |
| psSAR10g [W/kg]     | 0.438         | 0.456         |
| Power Drift [dB]    | -0.05         | -0.02         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 51.4          |
| Dist 3dB Peak [mm]  |               | 6.4           |



Meas.19 Limbs Plane with Keyboard Side 0mm on 114 Channel in IEEE802.11ac160 mode with Antenna Auxiliary

#### Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>5GHz | WLAN,<br>10554-<br>AAE | 5570.0,<br>114                            | 4.91                     | 5.02                             | 35.8                    | 22.6                               | 21.5                              |

#### Hardware Setup

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-23 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

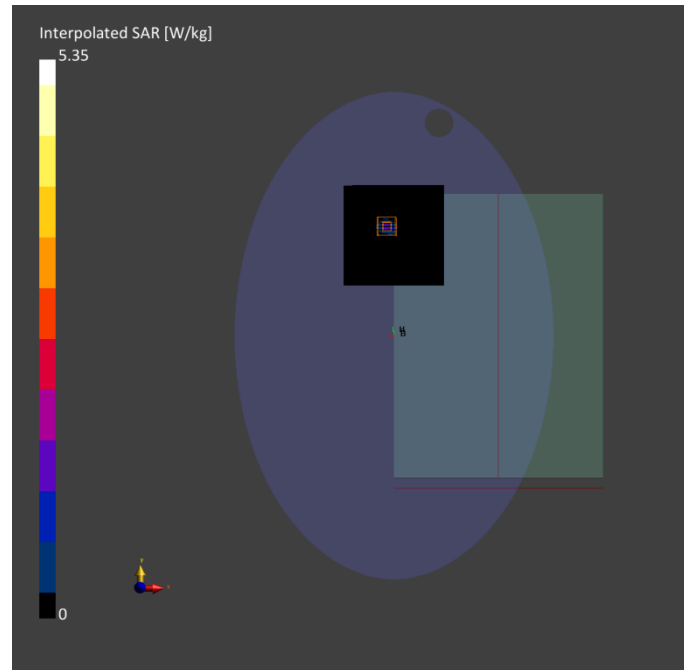
#### Scan Setup

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

#### Measurement Results

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-23    | 2025-03-23    |
| psSAR1g [W/kg]      | 1.07          | 1.25          |
| psSAR10g [W/kg]     | 0.290         | 0.330         |
| Power Drift [dB]    | -0.01         | -0.05         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 50.7          |
| Dist 3dB Peak [mm]  |               | 6.4           |





Meas.20 Limbs Plane with Keyboard Side 0mm on 114 Channel in IEEE802.11ac160 mode with Antenna Main

#### Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>5GHz | WLAN,<br>10554-<br>AAE | 5570.0,<br>114                            | 4.91                     | 5.02                             | 35.8                    | 22.6                               | 21.5                              |

#### Hardware Setup

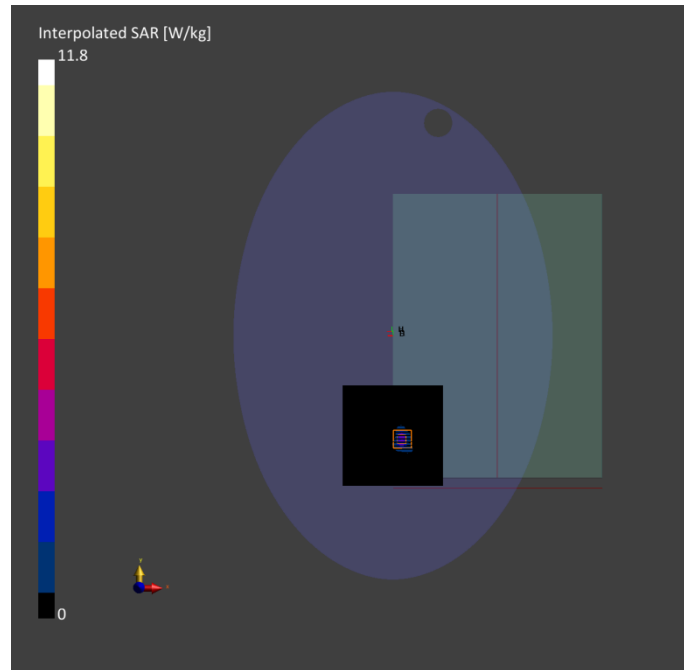
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-23 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

#### Scan Setup

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

#### Measurement Results

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-23    | 2025-03-23    |
| psSAR1g [W/kg]      | 2.59          | 2.82          |
| psSAR10g [W/kg]     | 0.792         | 0.823         |
| Power Drift [dB]    | -0.00         | 0.01          |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 48.2          |
| Dist 3dB Peak [mm]  |               | 6.1           |



**Meas.21 Limbs Plane with Keyboard Side 0mm on 155 Channel in IEEE802.11ac80 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>5GHz | WLAN,<br>10554-<br>AAE | 5775.0,<br>155                            | 4.98                     | 5.22                             | 35.2                    | 22.5                               | 21.5                              |

**Hardware Setup**

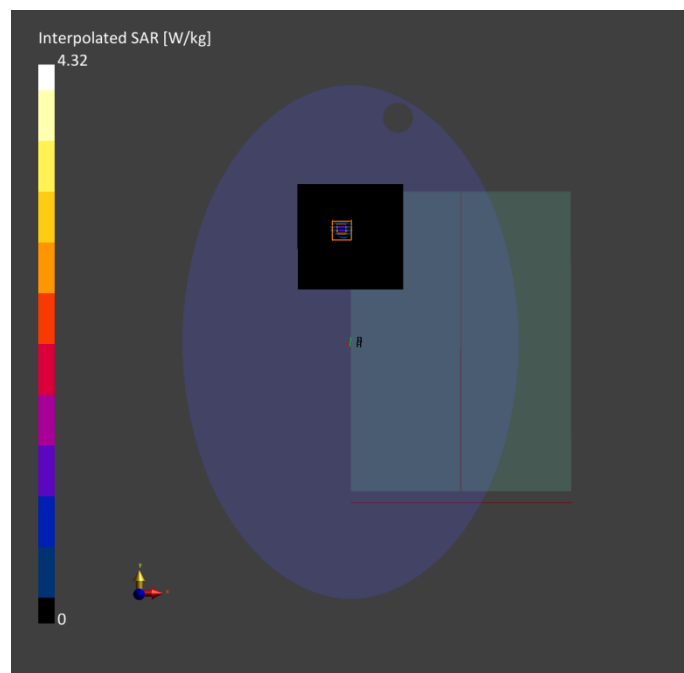
| Phantom                               | TSL, Measured Date            | Probe, Calibration Date         | DAE, Calibration Date  |
|---------------------------------------|-------------------------------|---------------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-<br>26 | EX3DV4 - SN7893, 2024-09-<br>05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                      | Area Scan     | Zoom Scan             |
|----------------------|---------------|-----------------------|
| Grid Extents<br>[mm] | 120.0 x 120.0 | 24.0 x 24.0 x<br>22.0 |
| Grid Steps<br>[mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0       |
| Sensor               | 3.0           | 1.4                   |
| Surface [mm]         |               |                       |
| Graded Grid          | Yes           | Yes                   |
| Grading Ratio        | 1.5           | 1.4                   |
| MAIA                 | N/A           | N/A                   |
| Surface              | VMS + 6p      | VMS + 6p              |
| Detection            |               |                       |
| Scan Method          | Measured      | Measured              |

**Measurement Results**

|                        | Area Scan     | Zoom Scan     |
|------------------------|---------------|---------------|
| Date                   | 2025-03-26    | 2025-03-26    |
| psSAR1g<br>[W/kg]      | 0.830         | 0.936         |
| psSAR10g<br>[W/kg]     | 0.226         | 0.250         |
| Power Drift<br>[dB]    | 0.07          | -0.08         |
| Power Scaling          | Disabled      | Disabled      |
| Scaling Factor<br>[dB] |               |               |
| TSL                    | No correction | No correction |
| Correction             |               |               |
| M2/M1 [%]              |               | 46.2          |
| Dist 3dB Peak<br>[mm]  |               | 6.4           |



**Meas.22 Limbs Plane with Keyboard Side 0mm on 155 Channel in IEEE802.11ac80 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band             | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|------------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | WLA<br>N<br>5GHz | WLAN,<br>10544-<br>AAD | 5775.0,<br>155                            | 4.98                     | 5.22                             | 35.2                    | 22.5                               | 21.5                              |

**Hardware Setup**

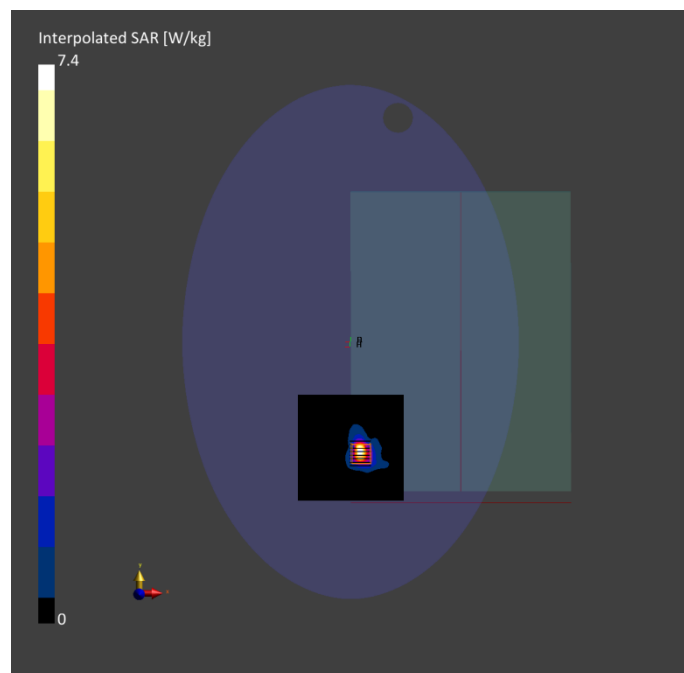
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-26 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-26    | 2025-03-26    |
| psSAR1g [W/kg]      | 1.52          | 1.69          |
| psSAR10g [W/kg]     | 0.464         | 0.487         |
| Power Drift [dB]    | -0.03         | 0.01          |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 47.1          |
| Dist 3dB Peak [mm]  |               | 6.4           |



**Meas.23 Limbs Plane with Keyboard Side 0mm on 163 Channel in IEEE802.11ac80 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band               | Group,<br>UID        | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|--------------------|----------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | Custo<br>m<br>Band | CW,<br>10554-<br>AAE | 5815.0,<br>5815000                        | 4.98                     | 5.38                             | 35.0                    | 22.5                               | 21.5                              |

**Hardware Setup**

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-26 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

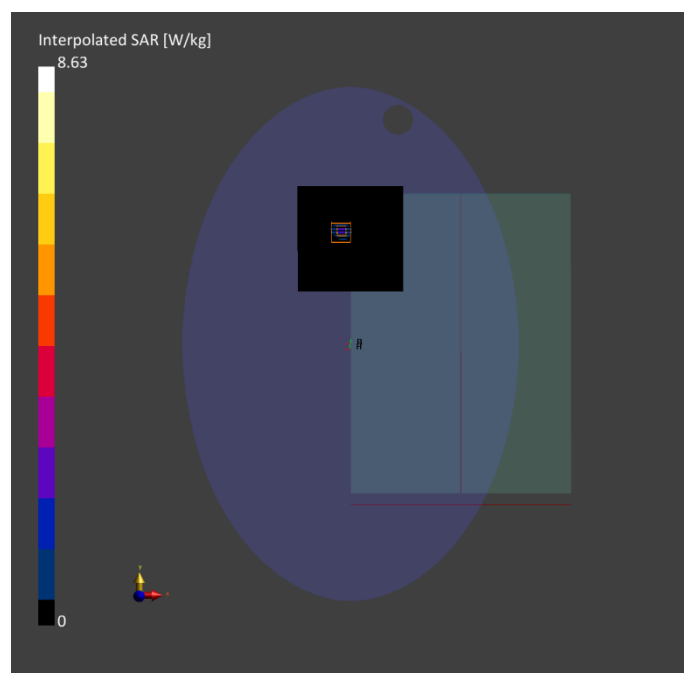
**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-26    | 2025-03-26    |
| psSAR1g [W/kg]      | 1.61          | 1.88          |
| psSAR10g [W/kg]     | 0.433         | 0.494         |
| Power Drift [dB]    | 0.08          | 0.03          |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 46.8          |
| Dist 3dB Peak [mm]  |               | 6.1           |





**Meas.24 Limbs Plane with Keyboard Side 0mm on 163 Channel in IEEE802.11ac80 mode with Antenna Main**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band               | Group,<br>UID        | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|--------------------|----------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | Custo<br>m<br>Band | CW,<br>10554-<br>AAE | 5815.0,<br>5815000                        | 4.98                     | 5.38                             | 35.0                    | 22.5                               | 21.5                              |

**Hardware Setup**

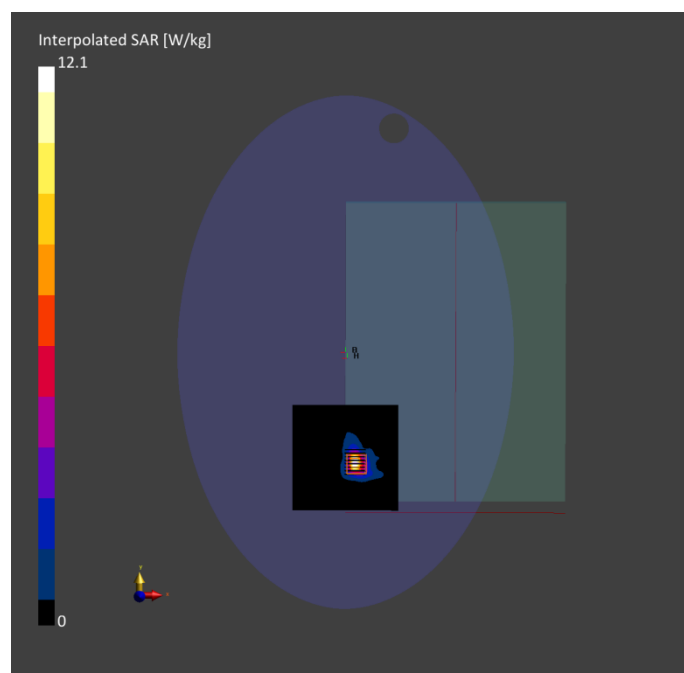
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-26 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 120.0 x 120.0 | 24.0 x 24.0 x 22.0 |
| Grid Steps [mm]   | 10.0 x 10.0   | 4.0 x 4.0 x 2.0    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | N/A           | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                     | Area Scan     | Zoom Scan     |
|---------------------|---------------|---------------|
| Date                | 2025-03-26    | 2025-03-26    |
| psSAR1g [W/kg]      | 2.57          | 2.79          |
| psSAR10g [W/kg]     | 0.789         | 0.81          |
| Power Drift [dB]    | -0.01         | -0.02         |
| Power Scaling       | Disabled      | Disabled      |
| Scaling Factor [dB] |               |               |
| TSL                 | No correction | No correction |
| Correction          |               |               |
| M2/M1 [%]           |               | 46.8          |
| Dist 3dB Peak [mm]  |               | 6.4           |



Meas.25 Limbs Plane with Keyboard Side 0mm on 47 Channel in IEEE802.11ax160 mode with Antenna Auxiliary

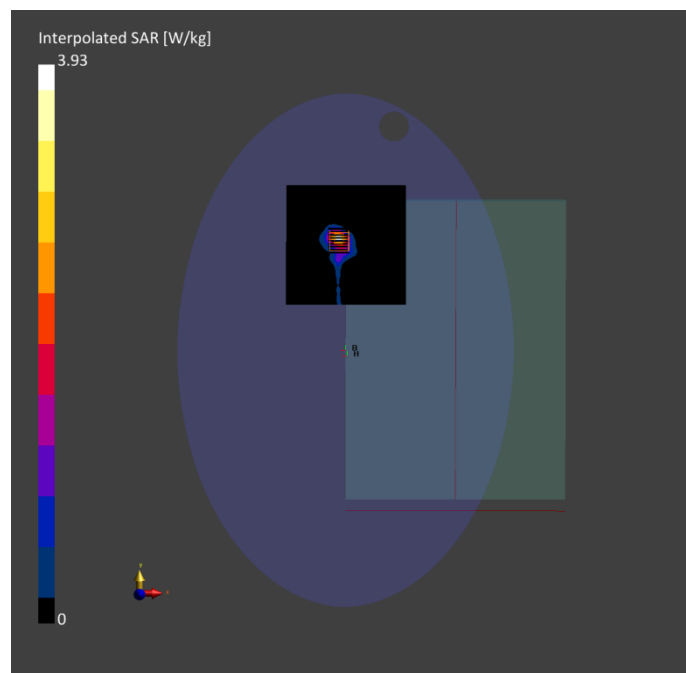
Exposure Conditions

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band        | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | U-NII-<br>5 | WLAN,<br>10743-<br>AAC | 6185.0,<br>47                             | 5.11                     | 5.65                             | 34.4                    | 22.6                               | 21.5                              |

Hardware Setup

| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-27 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

| Scan Setup    |         |               |                 | Measurement Results |               |               |
|---------------|---------|---------------|-----------------|---------------------|---------------|---------------|
|               |         | Area Scan     | Zoom Scan       |                     |               |               |
| Grid          | Extents | 136.0 x 136.0 | 23.8 x 23.8 x   | Date                | 2025-03-27    | 2025-03-27    |
|               |         |               | 22.0            | psSAR1g             | 0.788         | 0.874         |
| Grid          | Steps   | 8.5 x 8.5     | 3.4 x 3.4 x 1.4 | [W/kg]              |               |               |
|               |         |               |                 | psSAR10g            | 0.239         | 0.262         |
| Sensor        |         | 3.0           | 1.4             | [W/kg]              |               |               |
| Surface [mm]  |         |               |                 | APD4cm <sup>2</sup> |               | 6.06          |
| Graded Grid   |         | Yes           | Yes             | [W/m <sup>2</sup> ] |               |               |
| Grading Ratio |         | 1.5           | 1.4             | Power Drift         | -0.08         | -0.02         |
| MAIA          |         | Y             | N/A             | [dB]                |               |               |
| Surface       |         | VMS + 6p      | VMS + 6p        | Power Scaling       | Disabled      | Disabled      |
| Detection     |         |               |                 | Scaling Factor      |               |               |
| Scan Method   |         | Measured      | Measured        | [dB]                |               |               |
|               |         |               |                 | TSL                 | No correction | No correction |
|               |         |               |                 | Correction          |               |               |
|               |         |               |                 | M2/M1 [%]           |               | 56.6          |
|               |         |               |                 | Dist 3dB Peak       |               | 6.7           |
|               |         |               |                 | [mm]                |               |               |



**Meas.26 Limbs Plane with Keyboard Side 0mm on 47 Channel in IEEE802.11ax160 mode with Antenna Auxiliary**
**Exposure Conditions**

| Phantom<br>Section,<br>TSL | Position,<br>Test<br>Distance<br>[mm] | Band        | Group,<br>UID          | Frequenc<br>y [MHz],<br>Channel<br>Number | Conversi<br>on<br>Factor | TSL<br>Conduct<br>ivity<br>[S/m] | TSL<br>Permitti<br>vity | Ambient<br>Tempera<br>ture<br>[°C] | Liquid<br>Tempera<br>ture<br>[°C] |
|----------------------------|---------------------------------------|-------------|------------------------|-------------------------------------------|--------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Flat,<br>HSL               | FRONT,<br>0.00                        | U-NII-<br>5 | WLAN,<br>10743-<br>AAC | 6185.0,<br>47                             | 5.11                     | 5.65                             | 34.4                    | 22.6                               | 21.5                              |

**Hardware Setup**

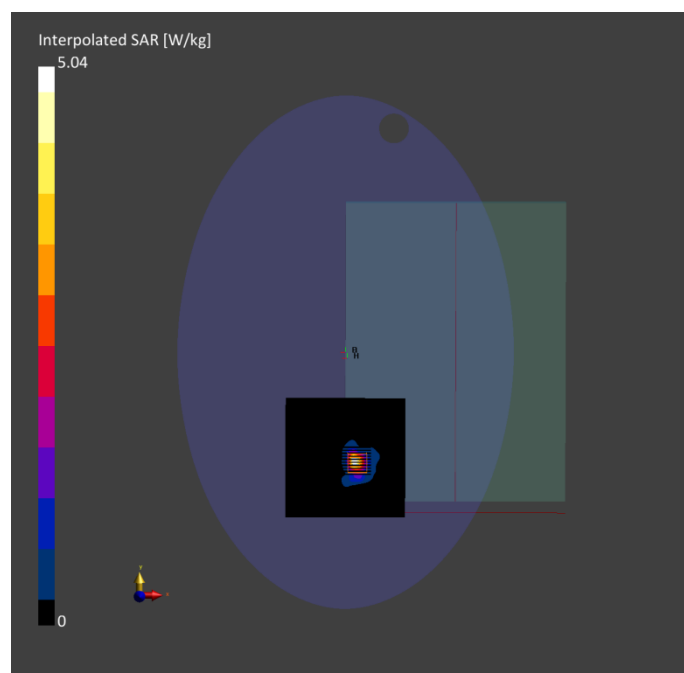
| Phantom                               | TSL, Measured Date        | Probe, Calibration Date     | DAE, Calibration Date  |
|---------------------------------------|---------------------------|-----------------------------|------------------------|
| ELI V8.0 (20deg probe<br>tilt) - 2159 | HBBL-600-10000 2025-03-27 | EX3DV4 - SN7893, 2024-09-05 | DAE4 Sn878, 2025-03-05 |

**Scan Setup**

|                   | Area Scan     | Zoom Scan          |
|-------------------|---------------|--------------------|
| Grid Extents [mm] | 136.0 x 136.0 | 23.8 x 23.8 x 22.0 |
| Grid Steps [mm]   | 8.5 x 8.5     | 3.4 x 3.4 x 1.4    |
| Sensor            | 3.0           | 1.4                |
| Surface [mm]      |               |                    |
| Graded Grid       | Yes           | Yes                |
| Grading Ratio     | 1.5           | 1.4                |
| MAIA              | Y             | N/A                |
| Surface           | VMS + 6p      | VMS + 6p           |
| Detection         |               |                    |
| Scan Method       | Measured      | Measured           |

**Measurement Results**

|                                         | Area Scan     | Zoom Scan     |
|-----------------------------------------|---------------|---------------|
| Date                                    | 2025-03-27    | 2025-03-27    |
| psSAR1g [W/kg]                          | 1.04          | 1.08          |
| psSAR10g [W/kg]                         | 0.306         | 0.311         |
| APD4cm <sup>2</sup> [W/m <sup>2</sup> ] |               | 7.23          |
| Power Drift [dB]                        | -0.02         | -0.08         |
| Power Scaling                           | Disabled      | Disabled      |
| Scaling Factor [dB]                     |               |               |
| TSL Correction                          | No correction | No correction |
| M2/M1 [%]                               |               | 55.3          |
| Dist 3dB Peak [mm]                      |               | 5.4           |



## **ANNEX D EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ2530219-AW.pdf”.

## **ANNEX E SAR TEST SETUP PHOTOS**

Please refer the document “BL-SZ2530219-AS-1.pdf”.

## **ANNEX F CALIBRATION REPORT**

Please refer the document “BL-SZ2530219-AC-1.pdf”.

## **ANNEX G TUNE-UP PROCEDURE**

Please refer the document “BL-SZ2530219-AT-1.pdf”.



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