

# TEST REPORT



**Report No.** ..... : **CHTW24100054** Report verification:

**Project No.**..... : **SHT2407073402W**

**FCC ID**..... : **2AYEZ-MT-100**

**Applicant's name**..... : **Telo Communication (Shenzhen) Co., Ltd**

**Address**..... : 13th Floor, Building B, Union RSD Center, No. 287 Guangshen Rd., Bao'an District, Shenzhen, China

**Test item description** ..... : **Smart LTE Terminal**

**Trade Mark** ..... : TELOX

**Model/Type reference**..... : MT-100

**Listed Model(s)** ..... : MT-100L, MT-100M, MT-100X, MT-100P, MT-100K

**Standard** ..... : **FCC 47 CFR Part2.1093**  
**IEEE Std C95.1, 1999 Edition**  
**IEEE 1528: 2013**

**Date of receipt of test sample**..... : Aug. 15, 2024

**Date of testing**..... : Aug. 29, 2024- Sep. 06, 2024

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**Result**..... : **PASS**

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*The test report merely correspond to the test sample.*

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## 1. Statement of Compliance

Maximum Reported SAR (W/kg @1g)					
RF Exposure Conditions	WWAN	WIFI 2.4G	WIFI 5G	BT	Simultaneous TX
Head(Dist.= 25mm)	0.205	0.024	0.045	0.008	0.250
Body(Dist.= 10mm without Back clip or Dist.= 0mm with Back clip)	1.034	0.225	0.120	0.029	1.259
Hotspot(Dist.= 0mm)	1.034	0.225	0.120	0.029	1.259

Note:

1. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg@1g) specified in FCC 47 CFR part 2 (2.1093) and IEEE Std C95.1,
2. This device had been tested in accordance with the measurement methods and procedures specified in IEEE 1528 and FCC KDB publications.

## 2. Test Standards and Report version

### 2.1. Test Standards

The tests were performed according to following standards:

[FCC 47 Part 2.1093](#): Radiofrequency radiation exposure evaluation: portable devices.

[IEEE Std C95.1, 1999 Edition](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz

[IEEE Std 1528™-2013](#): IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

FCC published RF exposure KDB procedures:

[865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04](#): SAR Measurement Requirements for 100 MHz to 6 GHz

[865664 D02 RF Exposure Reporting v01r02](#): RF Exposure Compliance Reporting and Documentation Considerations

[447498 D04 Interim General RF Exposure Guidance v01](#): Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies

[248227 D01 802.11 Wi-Fi SAR v02r02](#): SAR Measurement Procedures for 802.11 a/b/g Transmitters

[941225 D01 3G SAR Procedures v03r01](#): SAR Measurement Procedures for 3G Devices

[941225 D05 SAR for LTE Devices v02r05](#): SAR Evaluation Considerations for LTE Devices

[TCB workshop](#) April, 2019; Page 19, Tissue Simulating Liquids (TSL)

### 2.2. Report version

Revision No.	Date of issue	Description
N/A	2024-10-17	Original

### 3. Summary

#### 3.1. Client Information

Applicant:	Telo Communication (Shenzhen) Co., Ltd
Address:	13th Floor, Building B, Union RSD Center, No. 287 Guangshen Rd., Bao'an District, Shenzhen, China
Manufacturer:	Telo Communication (Shenzhen) Co., Ltd
Address:	13th Floor, Building B, Union RSD Center, No. 287 Guangshen Rd., Bao'an District, Shenzhen, China
Factory:	Telo Communication (Shenzhen) Co., Ltd
Address:	13th Floor, Building B, Union RSD Center, No. 287 Guangshen Rd., Bao'an District, Shenzhen, China

#### 3.2. Product Description

Main unit	
Name of EUT:	Smart LTE Terminal
Trade Mark:	TELOX
Model No.:	MT-100
Listed Model(s):	MT-100L, MT-100M, MT-100X, MT-100P, MT-100K
Power supply:	DC 3.87V from Battery
Hardware version:	V1.0
Software version:	MT100_US_V1P_20240531
Device Dimension:	Length x Width x Thickness (mm): 113 x 52 x 20
Device Category:	Portable
Product stage:	Production unit
RF Exposure Environment:	General Population/Uncontrolled
HTW test sample No.:	YPHT24070734002
Support SIM card quantity:#1	<input type="checkbox"/> Single card <input checked="" type="checkbox"/> Double card
Ancillary unit	
Battery information: #2	3.87V 4000mAh 15.48Wh Model: TEB-4000T Limited Charge Voltage: 4.45V

**Note:**

#1: The Test EUT support two SIM card, so all the tests are performed at each SIM card mode, the datum recorded is the worst case for all the mode at SIM1 Card mode.

#2: The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power.

### 3.3. RF Specification Description

<b>GSM</b>				
Operation Band:	<input checked="" type="checkbox"/> GSM850	<input checked="" type="checkbox"/> PCS1900		
Support type:	<input checked="" type="checkbox"/> GSM	<input checked="" type="checkbox"/> GPRS	<input checked="" type="checkbox"/> EGPRS	
Modulation type:	<input checked="" type="checkbox"/> GMSK	<input checked="" type="checkbox"/> 8PSK		
Power Class:	<input checked="" type="checkbox"/> GSM850: Class 4		<input checked="" type="checkbox"/> PCS1900: Class 1	
Device Class:	B			
GPRS Multi-Slot Class:	12			
EGPRS Multi-Slot Class:	12			
<i>Note:</i> <i>This device doesn't support DTM (Dual Transfer Mode).</i>				
<b>WCDMA</b>				
Operation Band:	<input checked="" type="checkbox"/> Band II	<input checked="" type="checkbox"/> Band IV	<input checked="" type="checkbox"/> Band V	
Support type:	<input checked="" type="checkbox"/> UMTS Rel. 99 (Voice & Data)		<input checked="" type="checkbox"/> HSDPA	<input checked="" type="checkbox"/> HSUPA
Modulation type:	<input checked="" type="checkbox"/> QPSK			
Power Class:	Class 3			
<b>LTE</b>				
Operation Band:	<input checked="" type="checkbox"/> Band 2	<input checked="" type="checkbox"/> Band 4	<input checked="" type="checkbox"/> Band 5	<input checked="" type="checkbox"/> Band 7
	<input checked="" type="checkbox"/> Band 12	<input checked="" type="checkbox"/> Band 13	<input checked="" type="checkbox"/> Band 17	<input checked="" type="checkbox"/> Band 66
Support type:	<input checked="" type="checkbox"/> Single Carrier	<input type="checkbox"/> CA-UL	<input type="checkbox"/> CA-DL	<input type="checkbox"/> MIMO-UL
Modulation type:	<input checked="" type="checkbox"/> QPSK	<input checked="" type="checkbox"/> 16QAM		
Power Class:	<input checked="" type="checkbox"/> Class 3	<input type="checkbox"/> Class 2		
<i>Note:</i> <i>This device doesn't support SV-LTE (1xRTT-LTE).</i>				
<b>Wi-Fi 2.4G</b>				
Support type:	<input checked="" type="checkbox"/> 802.11b	<input checked="" type="checkbox"/> 802.11g	<input checked="" type="checkbox"/> 802.11n	<input type="checkbox"/> 802.11ax
Support bandwidth:	<input checked="" type="checkbox"/> 20MHz	<input checked="" type="checkbox"/> 40MHz		
<i>Note:</i> <i>This device 2.4GHz Wi-Fi support hotspot operation</i>				
<b>Wi-Fi 5G</b>				
Operation Band:	<input checked="" type="checkbox"/> U-NII-1	<input checked="" type="checkbox"/> U-NII-2A	<input type="checkbox"/> U-NII-2C	<input checked="" type="checkbox"/> U-NII-3
Support type:	<input checked="" type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n	<input type="checkbox"/> 802.11ac	<input type="checkbox"/> 802.11ax
Support bandwidth:	<input checked="" type="checkbox"/> 20MHz	<input checked="" type="checkbox"/> 40MHz	<input type="checkbox"/> 80MHz	<input type="checkbox"/> 160MHz
<i>Note:</i> <i>This device 5GHz Wi-Fi U-NII-2A doesn't support hotspot operation.</i>				
<b>Bluetooth</b>				
Support type:	<input checked="" type="checkbox"/> BR	<input checked="" type="checkbox"/> EDR	<input checked="" type="checkbox"/> BLE-1Mbps	<input type="checkbox"/> BLE-2Mbps
<i>Note:</i> <i>This device support Bluetooth Tethering.</i>				

### 3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China	
Contact information:	Phone: 86-755-26715499 E-mail: <a href="mailto:cs@szhtw.com.cn">cs@szhtw.com.cn</a> <a href="http://www.szhtw.com.cn">http://www.szhtw.com.cn</a>	
Qualifications	Type	Accreditation Number
	FCC Registration Number	762235
	FCC Designation Number	CN1181

### 3.5. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Ambient temperature	18 °C to 25 °C
Ambient humidity	30%RH to 70%RH
Air Pressure	950-1050mbar

#### 4. Equipments Used during the Test

Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Cal. date (YY-MM-DD)	Due date (YY-MM-DD)
●	Data Acquisition Electronics DAEx	SPEAG	HTWE0313-05	DAE4	1549	2024/04/16	2025/04/15
●	E-field Probe	SPEAG	HTWE0313-06	EX3DV4	7494	2024/06/07	2025/06/06
●	Phantoms	SPEAG	HTWE0313-12	ELI V8.0	2078	N/A	N/A
●	Head TSL	-	-	HBBL600-10000	-	N/A	N/A
●	Temperature & humidity	MIAO XIN	HTWE0319	TH20R-EX	-	2024/03/18	2025/03/17
●	Universal Radio Communication Tester	R&S	HTWE0323	CMW500	137681	2024/03/14	2025/03/13
<b>Tissue-equivalent liquids Validation</b>							
●	Dielectric Assessment Kit	SPEAG	HTWE0315-02	DAK-3.5	1267	N/A	N/A
●	Network analyzer	Keysight	HTWE0331	E5071C	MY46733048	2024/08/27	2025/08/26
●	Thermometer	LKM	HTWE0317	DTM3000	3693	2024/03/18	2025/03/17
<b>System Validation</b>							
●	System Validation Dipole	SPEAG	HTWE0314-03	D750V3	1180	2023/12/07	2026/12/06
●	System Validation Dipole	SPEAG	HTWE0314-04	D835V2	4d238	2023/12/08	2026/12/07
●	System Validation Dipole	SPEAG	HTWE0314-05	D1750V2	1164	2023/12/08	2026/12/07
●	System Validation Dipole	SPEAG	HTWE0314-06	D1900V2	5d226	2023/12/07	2026/12/06
●	System Validation Dipole	SPEAG	HTWE0314-07	D2450V2	1009	2023/12/06	2026/12/05
●	System Validation Dipole	SPEAG	HTWE0314-08	D2600V2	1150	2023/12/07	2026/12/06
●	System Validation Dipole	SPEAG	HTWE0314-09	D5GHzV2	1273	2023/12/06	2026/12/05
●	Signal Generator	R&S	HTWE0276	SMB100A	114360	2024/03/14	2025/03/13
●	Power Viewer for Windows	R&S		N/A	N/A	N/A	N/A
●	Power sensor	R&S	HTWE0278	NRP18A	101010	2024/03/14	2025/03/13
●	Power sensor	R&S	HTWE0389	NRP18A	101386	2024/03/14	2025/03/13
●	Power Amplifier	BONN	HTWE0336	BLWA 0160-2M	1811887	2023/11/09	2024/11/08
●	Dual Directional Coupler	Mini-Circuits	HTWE0335	ZHDC-10-62-S+	F975001814	2023/11/09	2024/11/08
●	Attenuator	Mini-Circuits	HTWE0333	VAT-3W2+	1819	2023/11/09	2024/11/08
●	Attenuator	Mini-Circuits	HTWE0334	VAT-10W2+	1741	2023/11/09	2024/11/08

**Note:**

1. The Probe, Dipole and DAE calibration reference to the Appendix E and F.
2. Referring to KDB865664 D01, the dipole calibration interval can be extended to 3 years with justification. The dipole are also not physically damaged or repaired during the interval.



## **5. Measurement Uncertainty**

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be  $\leq 30\%$ , for a confidence interval of  $k = 2$ . If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

Therefore, the measurement uncertainty is not required.

## 6. SAR Measurements System Configuration

### 6.1. SAR Measurement Set-up

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

A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).

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.

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.

A unit to operate the optical surface detector which is connected to the EOC.

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 DASY5 measurement server.

The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 2003.

DASY5 software and SEMCAD data evaluation software.

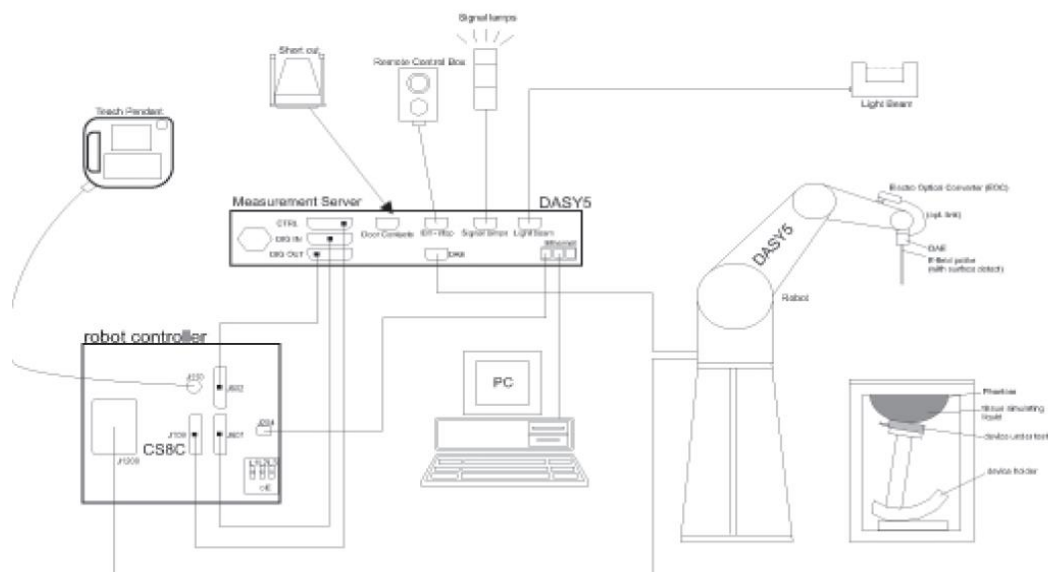
Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.

The generic twin phantom enabling the testing of left-hand and right-hand usage.

The device holder for handheld Mobile Phones.

Tissue simulating liquid mixed according to the given recipes.

System validation dipoles allowing to validate the proper functioning of the system.



## 6.2. DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

### ● Probe Specification

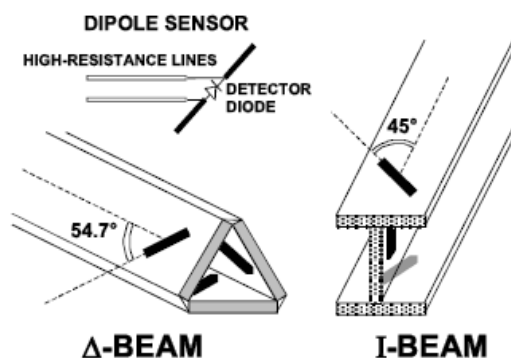
Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	4 MHz to 10 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)
Directivity	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 $\mu$ W/g to > 100 W/kg; Linearity: $\pm 0.2$ dB
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 6 GHz Dosimetry in strong gradient fields Compliance tests of Mobile Phones
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI



### ◆ Isotropic E-Field Probe

The isotropic E-Field probe has been fully calibrated and assessed for isotropicity, and boundary effect within a controlled environment. Depending on the frequency for which the probe is calibrated the method utilized for calibration will change.

The E-Field probe utilizes a triangular sensor arrangement as detailed in the diagram below:



### 6.3. Phantoms

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with standard and all known tissue-simulating liquids. ELI 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. The phantom is compatible with all SPEAG dosimetric probes and dipoles.



ELI4 Phantom

### 6.4. Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the DASY system.

The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.



Device holder supplied by SPEAG

## 7. SAR Test Procedure

### 7.1. Scanning Procedure

#### Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. Measure the local SAR at a test point within 8 mm of the phantom inner surface that is closest to the DUT. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

#### Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASYS software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

#### Area Scan Resolutions per FCC KDB Publication 865664 D01v04

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

**Step 3: Zoom Scan**

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1g and 10g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

**Zoom Scan Resolutions per FCC KDB Publication 865664 D01v04**

Maximum zoom scan spatial resolution: $\Delta x_{Zoom}$ , $\Delta y_{Zoom}$		$\leq 2$ GHz: $\leq 8$ mm 2 – 3 GHz: $\leq 5$ mm*	3 – 4 GHz: $\leq 5$ mm* 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 1 <sup>st</sup> 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	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$ mm	
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	
<p>Note: <math>\delta</math> is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.</p> <p>* When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB Publication 447498 is <math>\leq 1.4</math> W/kg, <math>\leq 8</math> mm, <math>\leq 7</math> mm and <math>\leq 5</math> mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</p>				

**Step 4: Power drift measurement**

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1. The SAR drift shall be kept within  $\pm 5$  %.

## 7.2. Data Storage and Evaluation

### Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors),s together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “.DA4”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [W/kg], [mW/cm<sup>2</sup>], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

### Data Evaluation

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	Sensitivity:	Normi, ai0, ai1, ai2
	Conversion factor:	ConvFi
	Diode compression point:	Dcpi
Device parameters:	Frequency:	f
	Crest factor:	cf
Media parameters:	Conductivity:	σ
	Density:	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

Vi:	compensated signal of channel ( i = x, y, z )
Ui:	input signal of channel ( i = x, y, z )
cf:	crest factor of exciting field (DASY parameter)
dcp <sub>i</sub> :	diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

$$E - \text{fieldprobes} : \quad E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$$

$$H - \text{fieldprobes} : \quad H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1}f + a_{i2}f^2}{f}$$

Vi:	compensated signal of channel ( i = x, y, z )
Norm <sub>i</sub> :	sensor sensitivity of channel ( i = x, y, z ), [mV/(V/m) <sup>2</sup> ] for E-field Probes
ConvF:	sensitivity enhancement in solution
a <sub>ij</sub> :	sensor sensitivity factors for H-field probes
f:	carrier frequency [GHz]
E <sub>i</sub> :	electric field strength of channel i in V/m
H <sub>i</sub> :	magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

The primary field data are used to calculate the derived field units.

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1'000}$$

SAR: local specific absorption rate in W/kg  
Etot: total field strength in V/m  
 $\sigma$ : conductivity in [mho/m] or [Siemens/m]  
 $\rho$ : equivalent tissue density in g/cm<sup>3</sup>

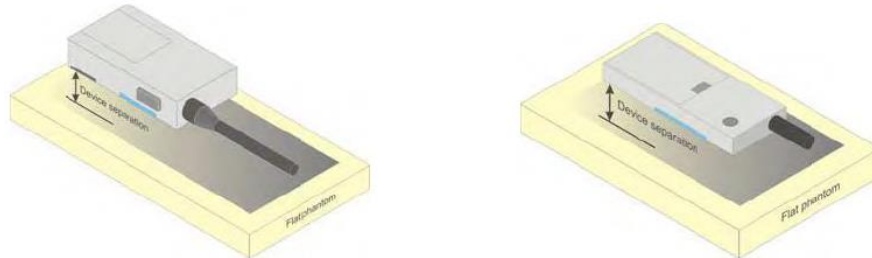
Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid.



## 8. Position of the wireless device in relation to the phantom

### 8.1. Front-of-face

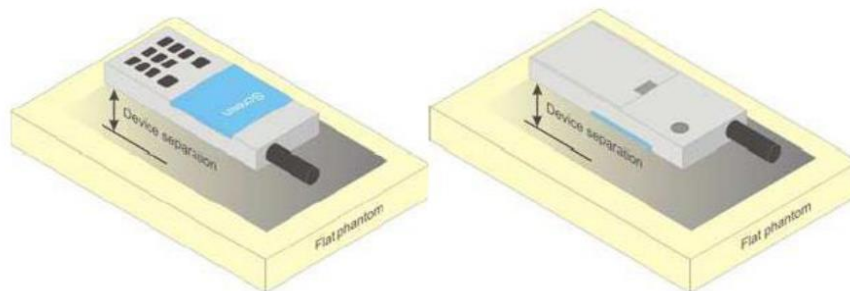
A typical example of a front-of-face device is a two-way radio that is held at a distance from the face of the user when transmitting. In these cases the device under test shall be positioned at the distance to the phantom surface that corresponds to the intended use as specified by the manufacturer in the user instructions. If the intended use is not specified, a separation distance of 25 mm between the phantom surface and the device shall be used.



Test positions for Front-of-face devices

### 8.2. Body Position

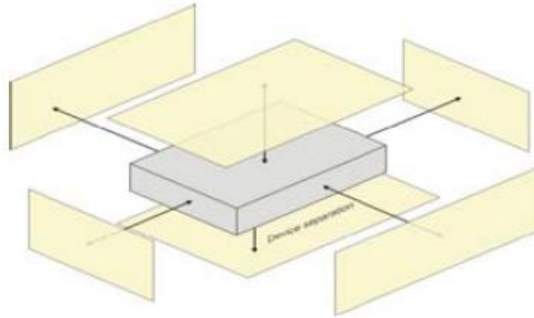
Devices that support transmission while used with body-worn accessories must be tested for body-worn accessory SAR compliance, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. Devices that are designed to operate on the body of users using lanyards and straps or without requiring additional body-worn accessories must be tested for SAR compliance using a conservative minimum test separation distance  $\leq 5\text{mm}$  to support compliance.



Picture 4 Test positions for body-worn devices

### 8.3. Hotspot Mode Exposure conditions

The hotspot mode and body-worn accessory SAR test configurations may overlap for handsets. When the same wireless mode transmission configurations for voice and data are required for SAR measurements, the more conservative configuration with a smaller separation distance should be tested for the overlapping SAR configurations. This typically applies to the back and front surfaces of a handset when SAR is required for both hotspot mode and body-worn accessory exposure conditions. Depending on the form factor and dimensions of a device, the test separation distance used for hotspot mode SAR measurement is either 10 mm or that used in the body-worn accessory configuration, whichever is less for devices with dimension > 9 cm x 5 cm. For smaller devices with dimensions  $\leq 9$  cm x 5 cm because of a greater potential for next to body use a test separation of  $\leq 5$  mm must be used.



Picture 5 Test positions for Hotspot Mode

## 9. Dielectric Property Measurements & System Check

### 9.1. Tissue Dielectric Parameters

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within  $\pm 2^\circ\text{C}$  of the temperature when the tissue parameters are characterized.

The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3-4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.

The dielectric constant ( $\epsilon_r$ ) and conductivity ( $\sigma$ ) of typical tissue-equivalent media recipes are expected to be within  $\pm 5\%$  of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for  $\epsilon_r$  and  $\sigma$  may be relaxed to  $\pm 10\%$ . This is limited to frequencies  $\leq 3$  GHz.

#### Tissue Dielectric Parameters

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Tissue dielectric parameters for Head		
Target Frequency (MHz)	Head	
	$\epsilon_r$	$\sigma(\text{S/m})$
750	41.9	0.89
835	41.5	0.90
1750	40.1	1.37
1800-2000	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96
5200	36.0	4.66
5300	35.9	4.76
5500	35.6	4.96
5600	35.5	5.07
5800	35.3	5.27

#### IEEE Std 1528-2013

Refer to Table 3 within the IEEE Std 1528-2013

**Measurement Results:**

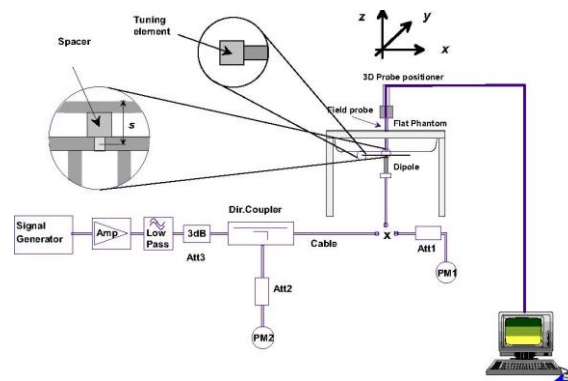
Dielectric performance of Head tissue simulating liquid									
Frequency (MHz)	$\epsilon_r$		$\sigma$ (S/m)		Delta ( $\epsilon_r$ )	Delta ( $\sigma$ )	Limit	Temp (°C)	Date
	Target	Measured	Target	Measured					
750	41.90	42.65	0.890	0.896	1.78%	0.67%	±5%	22.6	2024/8/29
835	41.50	42.30	0.900	0.902	1.93%	0.22%	±5%	22.5	2024/8/30
1750	40.10	40.26	1.370	1.364	0.41%	-0.44%	±5%	22.1	2024/9/2
1900	40.00	40.00	1.400	1.428	0.00%	2.00%	±5%	22.0	2024/9/3
2450	39.20	39.23	1.800	1.754	0.07%	-2.56%	±5%	22.2	2024/9/4
2600	39.00	39.00	1.960	1.948	0.00%	-0.61%	±5%	22.2	2024/9/4
5250	35.93	34.86	4.706	4.747	-2.98%	0.87%	±5%	22.3	2024/9/5
5750	35.36	34.08	5.219	5.327	-3.61%	2.07%	±5%	22.5	2024/9/6

## 9.2. System Check

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are re-measured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

### System Performance Check Measurement Conditions:

- ◆ The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness:  $2.0 \pm 0.2$  mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- ◆ The depth of tissue-equivalent liquid in a phantom must be  $\geq 15.0$  cm for SAR measurements  $\leq 3$  GHz and  $\geq 10.0$  cm for measurements  $> 3$  GHz.
- ◆ The DASY system with an E-Field Probe was used for the measurements.
- ◆ The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- ◆ The coarse grid with a grid spacing of 15 mm was aligned with the dipole.  
For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- ◆ Special 7x7x7 (below 3 GHz) and/or 8x8x7 (above 3 GHz) fine cube was chosen for the cube.
- ◆ The results are normalized to 1 W input power.



System Performance Check Setup



Photo of Dipole Setup

**Measurement Results:**

Head											
Frequency (MHz)	1g SAR			10g SAR			Delta (1g)	Delta (10g)	Limit	Temp (°C)	Date
	Target 1W	Normalize to 1W	Measured 250mW	Target 1W	Normalize to 1W	Measured 250mW					
750	8.32	8.68	2.17	5.48	5.92	1.48	4.33%	8.03%	±10%	23.5	2024/8/29
835	9.53	9.52	2.38	6.13	6.08	1.52	-0.10%	-0.82%	±10%	23.4	2024/8/30
1750	36.50	37.40	9.35	19.40	20.00	5.00	2.47%	3.09%	±10%	23.3	2024/9/2
1900	40.80	42.40	10.60	21.10	22.04	5.51	3.92%	4.45%	±10%	23.2	2024/9/3
2450	53.40	52.00	13.00	24.70	24.64	6.16	-2.62%	-0.24%	±10%	23.4	2024/9/4
2600	56.40	55.20	13.80	25.30	25.12	6.28	-2.13%	-0.71%	±10%	23.4	2024/9/4
Frequency (MHz)	1g SAR			10g SAR			Delta (1g)	Delta (10g)	Limit	Temp (°C)	Date
	Target 1W	Normalize to 1W	Measured 100mW	Target 1W	Normalize to 1W	Measured 100mW					
5250	77.50	79.00	7.90	21.80	21.60	2.16	1.94%	-0.92%	±10%	23.1	2024/9/5
5750	77.30	81.10	8.11	21.50	22.30	2.23	4.92%	3.72%	±10%	23.6	2024/9/6

*Note:*

*The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within ±10% of the manufacturer calibrated dipole SAR target.*

**Plots of System Performance Check**

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 8/29/2024

**SystemPerformanceCheck-Head 750MHz**

Communication System: UID 0, A-CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.896$  S/m;  $\epsilon_r = 42.645$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.5°C; Liquid Temperature: 22.6°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.74, 10.74, 10.74) @ 750 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Head/d=15mm, Pin=250mW/Area Scan (6x13x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 2.68 W/kg

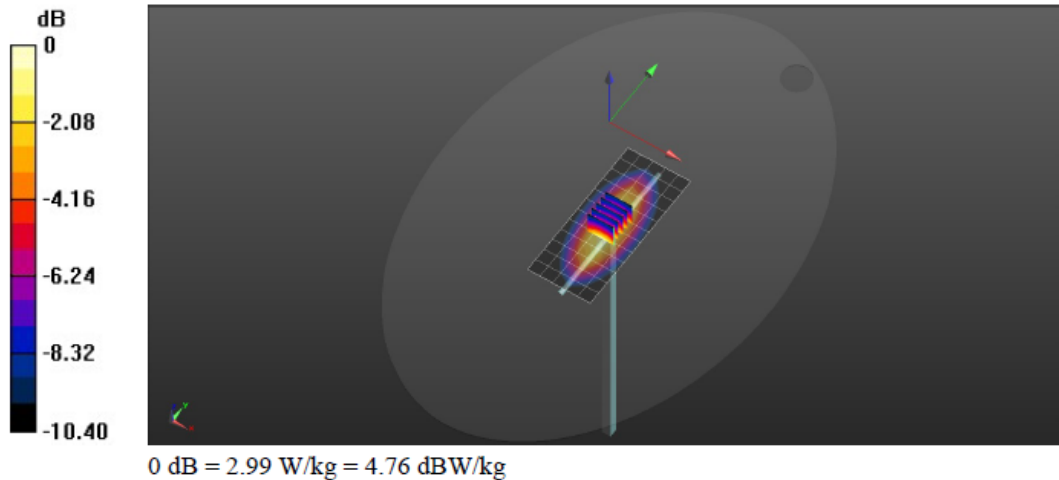
**Head/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 59.20 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 3.45 W/kg

SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.48 W/kg

Maximum value of SAR (measured) = 2.99 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 8/30/2024

**SystemPerformanceCheck-Head 835MHz**

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.902 \text{ S/m}$ ;  $\epsilon_r = 42.302$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature: 23.4°C; Liquid Temperature: 22.5°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.38, 10.38, 10.38) @ 835 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

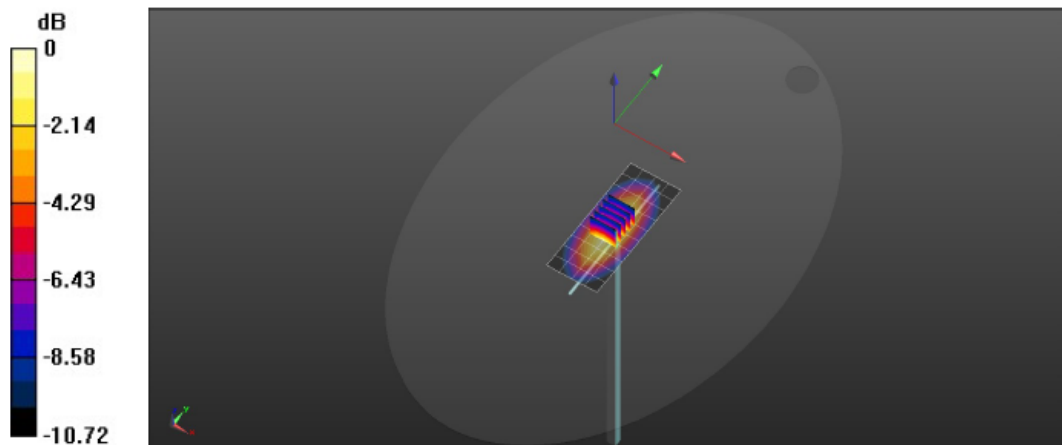
**Head/d=15mm, Pin=250mW/Area Scan (5x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 3.27 W/kg**Head/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 61.75 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.78 W/kg

SAR(1 g) = 2.38 W/kg; SAR(10 g) = 1.52 W/kg

Maximum value of SAR (measured) = 3.26 W/kg



0 dB = 3.26 W/kg = 5.13 dBW/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/2/2024

**SystemPerformanceCheck-Head 1750MHz**

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.364$  S/m;  $\epsilon_r = 40.264$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.3°C; Liquid Temperature: 22.1°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.94, 8.94, 8.94) @ 1750 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

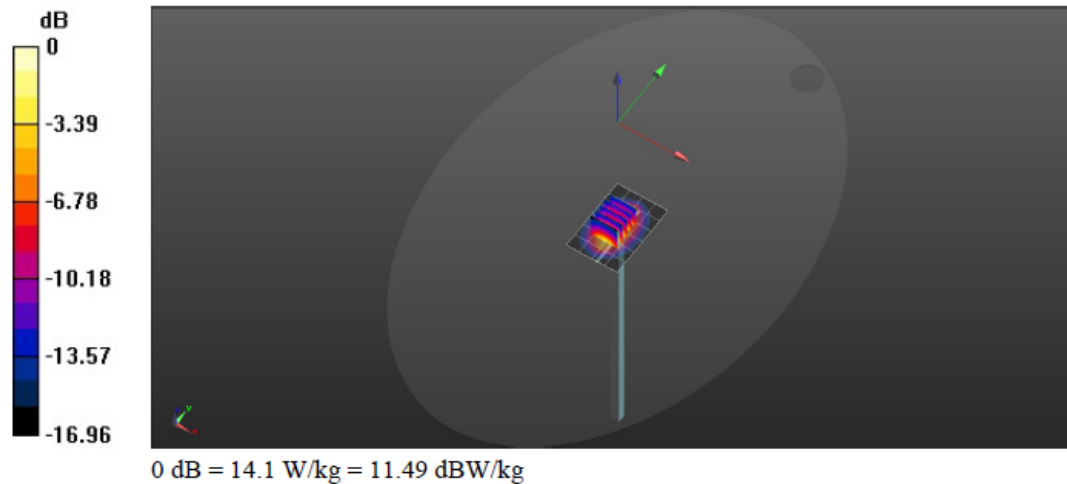
**Head/d=10mm,Pin=250mW/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 13.9 W/kg**Head/d=10mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 103.9 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.35 W/kg; SAR(10 g) = 5 W/kg

Maximum value of SAR (measured) = 14.1 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/3/2024

**SystemPerformanceCheck-Head 1900MHz**

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.428$  S/m;  $\epsilon_r = 39.999$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.6, 8.6, 8.6) @ 1900 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

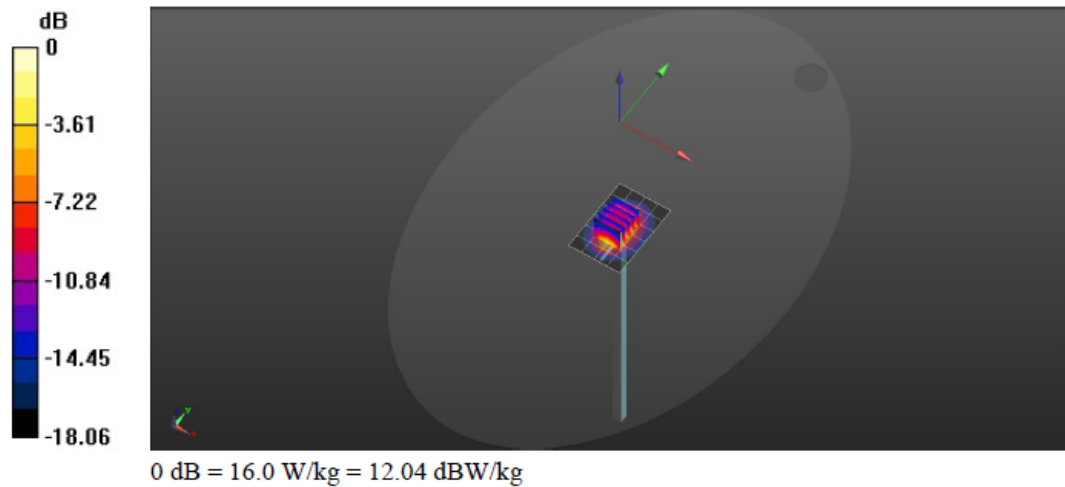
**Head/d=10mm,Pin=250mW/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 16.1 W/kg**Head/d=10mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm,  
dy=8mm, dz=5mm

Reference Value = 109.6 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 19.4 W/kg

SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.51 W/kg

Maximum value of SAR (measured) = 16.0 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/4/2024

**SystemPerformanceCheck-Head 2450MHz**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.754$  S/m;  $\epsilon_r = 39.228$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.4°C; Liquid Temperature: 22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.13, 8.13, 8.13) @ 2450 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Head/d=10mm,Pin=250mW/Area Scan (5x7x1):** Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 16.1 W/kg

**Head/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

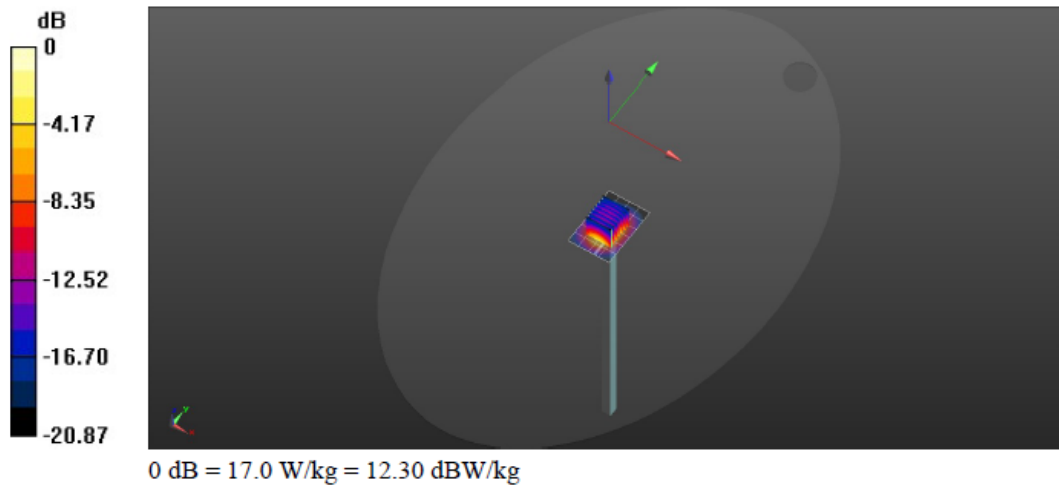
Reference Value = 96.47 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 26.2 W/kg

SAR(1 g) = 13 W/kg; SAR(10 g) = 6.16 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 17.0 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/4/2024

**System Performance Check-Head 2600MHz**

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.948$  S/m;  $\epsilon_r = 39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.4°C; Liquid Temperature: 22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(7.93, 7.93, 7.93) @ 2600 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Head/d=10mm, Pin=250mW/Area Scan (5x6x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 23.1 W/kg

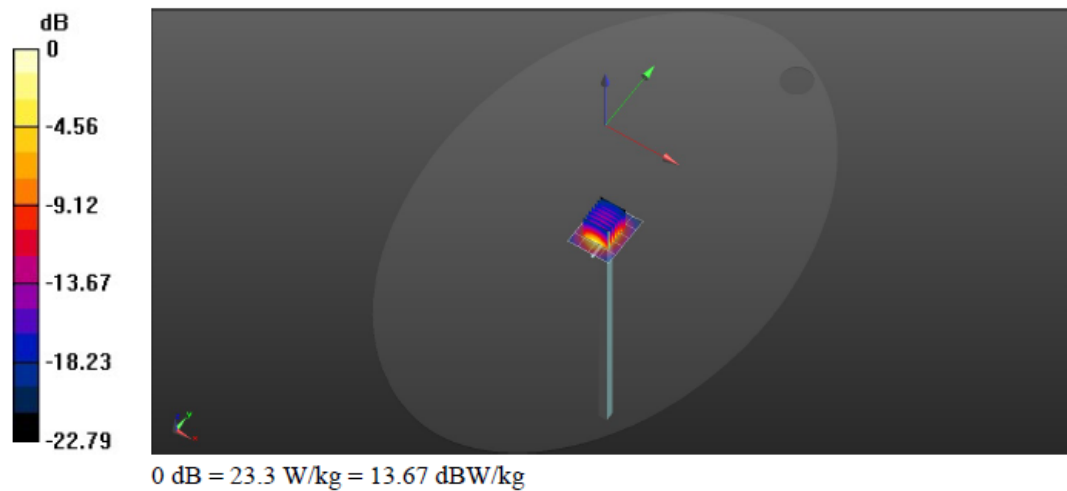
**Head/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 113.5 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 29.2 W/kg

SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.28 W/kg

Maximum value of SAR (measured) = 23.3 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/5/2024

**SystemPerformanceCheck-Head 5250MHz**

Communication System: UID 0, A-CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5250$  MHz;  $\sigma = 4.747$  S/m;  $\epsilon_r = 34.861$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.1°C; Liquid Temperature: 22.3°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.7, 5.7, 5.7) @ 5250 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Head/d=10mm, pin=100mW/Area Scan (4x4x1):** Measurement grid: dx=10mm, dy=10mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 14.3 W/kg

**Head/d=10mm, pin=100mW/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

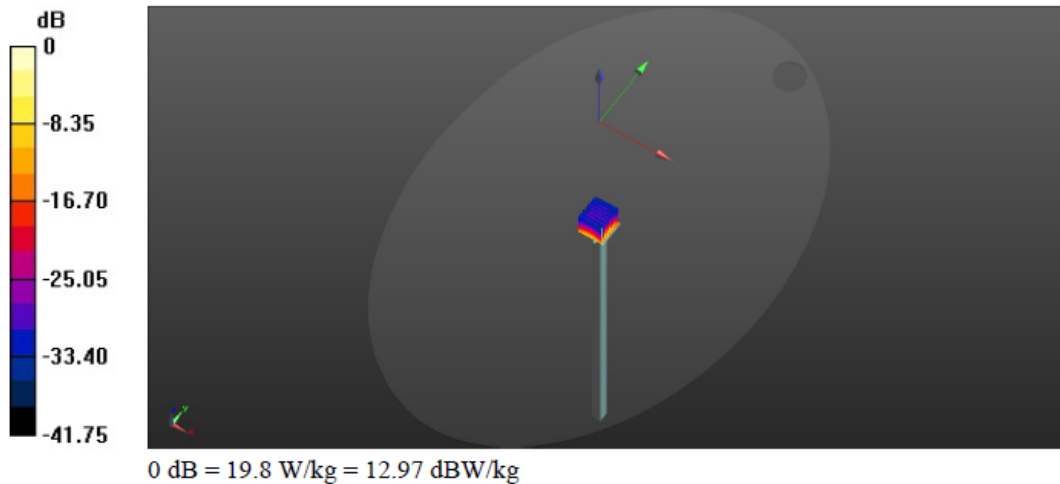
Reference Value = 69.86 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 32.9 W/kg

SAR(1 g) = 7.9 W/kg; SAR(10 g) = 2.16 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 19.8 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/6/2024

**System Performance Check-Head 5750MHz**

Communication System: UID 0, A-CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.327$  S/m;  $\epsilon_r = 34.084$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.6°C; Liquid Temperature: 22.5°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.19, 5.19, 5.19) @ 5750 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Head/d=10mm, Pin=100mW/Area Scan (5x5x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 20.7 W/kg

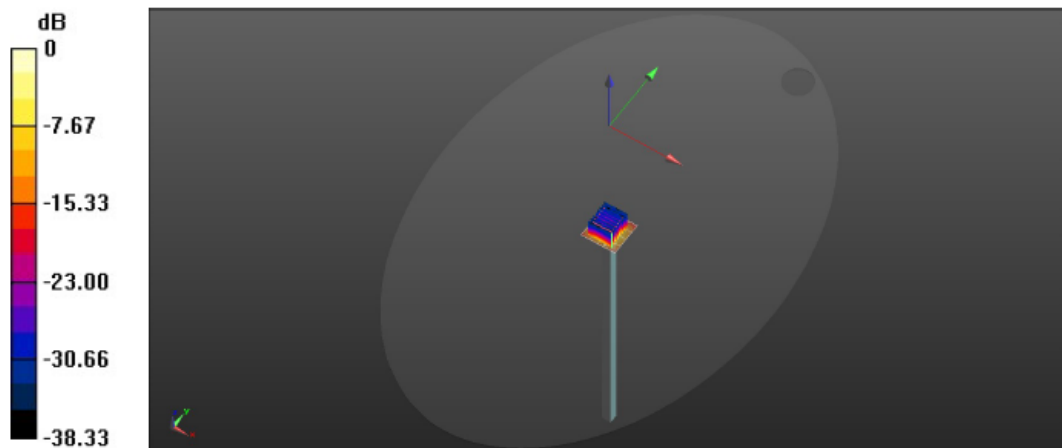
**Head/d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm,  
dy=4mm, dz=1.4mm

Reference Value = 68.53 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 38.8 W/kg

SAR(1 g) = 8.11 W/kg; SAR(10 g) = 2.23 W/kg

Maximum value of SAR (measured) = 20.6 W/kg



## 10. SAR Exposure Limits

SAR assessments have been made in line with the requirements of FCC 47 CFR § 2.1093.

Type Exposure	Limit (W/kg)	
	General Population/ Uncontrolled Exposure Environment	Occupational/ Controlled Exposure Environment
Spatial Average SAR (whole body)	0.08	0.4
Spatial Peak SAR (1g cube tissue for head and trunk)	1.6	8.0
Spatial Peak SAR (10g for limb)	4.0	20.0

*Note:*

- 1. Population/Uncontrolled Environments: are defined as locations where there is the exposure of individual who have no knowledge or control of their exposure.*
- 2. Occupational/Controlled Environments: are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure (i.e. as a result of employment or occupation).*

## 11. Conducted Power Measurement Results and Tune-up

Please refer to Appendix Report

Note:

### GSM

1. Per KDB 447498 D04, the maximum output power channel is used for SAR testing and further SAR test reduction.
2. Per KDB 941225 D01, considering the possibility of e.g. 3rd party VoIP operation for Head and Body-worn SAR test reduction for GSM and GPRS modes is determined by the source-base time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
3. Per KDB941225 D01, for hotspot SAR test reduction for GPRS modes is determined by the source-based time-averaged output power including tune-up tolerance, For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

### WCDMA

1. The following tests were conducted according to the test requirements outlines in 3GPP TS34.121 specification.
2. The procedures in KDB 941225 D01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode to determine SAR test exclusion

A summary of these settings are illustrated below:

### HSDPA Setup Configuration:

- a) The EUT was connected to base station RS CMU200 referred to the setup configuration
- b) The RF path losses were compensated into the measurements
- c) A call was established between EUT and base station with following setting:
  - i. Set Gain Factors ( $\beta_c$  and  $\beta_d$ ) and parameters were set according to each specific sub-test in the following table, C10.1.4, Quoted from the TS 34.121
  - ii. Set RMC 12.2Kbps + HSDPA mode
  - iii. Set Cell Power=-86dBm
  - iv. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
  - v. Select HSDPA uplink parameters
  - vi. Set Delta ACK, Delta NACK and Delta CQI=8
  - vii. Set Ack-Nack repetition Factor to 3
  - viii. Set CQI Feedback Cycle (K) to 4ms
  - ix. Set CQI repetition factor to 2
  - x. Power ctrl mode= all up bits
- d) The transmitter maximum output power was recorded.

**Table C.10.1.4:  $\beta$  values for transmitter characteristics tests with HS-DPCCH**

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$ (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1:  $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 30/15$  with  $\beta_{HS} = 30/15 * \beta_c$ .

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA,  $\Delta_{ACK}$  and  $\Delta_{NACK} = 30/15$  with  $\beta_{HS} = 30/15 * \beta_c$ , and  $\Delta_{CQI} = 24/15$  with  $\beta_{HS} = 24/15 * \beta_c$ .

Note 3: CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{HS}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ .

### Setup Configuration



**HSUPA Setup Configuration:**

- a) The EUT was connected to base station RS CMU200 referred to the setup configuration
- b) The RF path losses were compensated into the measurements
- c) A call was established between EUT and base station with following setting:
  - i. Call configs = 5.2b, 5.9b, 5.10b, and 5.13.2B with QPSK
  - ii. Set Gain Factors ( $\beta_c$  and  $\beta_d$ ) and parameters (AG index) were set according to each specific sub-test in the following table, C11.1.3, Quoted from the TS 34.121
  - iii. Set Cell Power=-86dBm
  - iv. Set channel type= 12.2Kbps + HSPA mode
  - v. Set UE Target power
  - vi. Set Ctrl mode=Alternating bits
  - vii. Set and observe the E-TFCI
  - viii. Confirm that E-TFCI is equal the target E-TFCI of 75 for Sub-test 1, and other subtest's E-TFCI
- d) The transmitter maximum output power was recorded.

**Table C.11.1.3:  $\beta$  values for transmitter characteristics tests with HS-DPCCH and E-DCH**

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$ (Note 1)	$\beta_{ec}$	$\beta_{ed}$ (Note 5) (Note 6)	$\beta_{ed}$ (SF)	$\beta_{ed}$ (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 6)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 (Note 4)	15/15 (Note 4)	64	15/15 (Note 4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1:  $\Delta_{ACK}, \Delta_{NACK}$  and  $\Delta_{DQI} = 30/15$  with  $\beta_{isc} = 30/15 * \beta_c$ .

Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15, \beta_{HS}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ .

Note 4: For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$ .

Note 5: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 6:  $\beta_{ed}$  can not be set directly, it is set by Absolute Grant Value.

**LTE****General:**

1. CMW500 base station simulator was used to setup the connection with EUT; the frequency band, channel, bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r03, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r03, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r03, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.

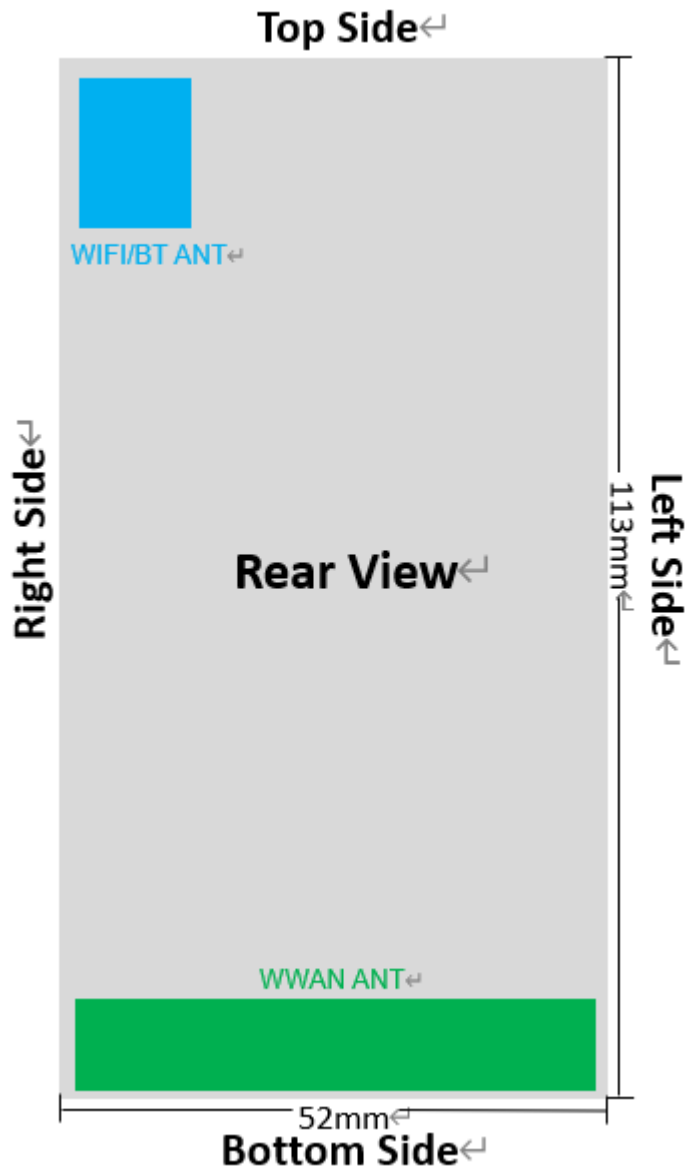
**Wi-Fi**

*For 2.4GHz Wi-Fi SAR testing, highest average RF output power channel for the lowest data rate for 802.11b were for SAR evaluation.*

*The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.*

*SAR testing is not required for OFDM mode(s) 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.*

## 12. Antenna Location



Distance of the Antenna to the EUT surface/edge(mm)						
Antenna	Rear	Front	Top side	Bottom side	Right side	Left side
WWAN	5	9	111	5	7	5
Wi-Fi/BT	5	6	10	89	6	44

Positions for SAR tests; Hotspot mode						
Antenna	Rear	Front	Top side	Bottom side	Right side	Left side
WWAN	Yes	Yes	No	Yes	Yes	Yes
Wi-Fi/BT	Yes	Yes	Yes	No	Yes	No

**Note:**

Referring to KDB941225 D06, when the overall device length and width are >9cm\*5cm, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

## 13. Measured and Reported SAR Results

### Measurement Results:

Please refer to Appendix Report

### Measurement data plots:

Please refer to Appendix D

Note:

#### **SAR Test Reduction criteria are as follows:**

- Reported SAR(W/kg) for WWAN = Measured SAR \* Tune-up Scaling Factor
- Reported SAR(W/kg) for Wi-Fi and Bluetooth = Measured SAR \* Tune-up scaling factor \* Duty Cycle scaling factor
- Duty Cycle scaling factor = 1 / Duty cycle (%)

#### **KDB 447498 D04 Interim General RF Exposure Guidance v01:**

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

#### **KDB 648474 D04 Handset SAR:**

With headset attached, when the reported SAR for body-worn accessory, measured without a headset connected to the handset, is  $> 1.2$  W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset. Additional 1-g SAR testing at 5 mm is not required when hotspot mode 10-g extremity SAR is not required for the surfaces and edges; since all 1-g reported SAR  $< 1.2$  W/kg.

#### **KDB 941225 D01 SAR test for 3G SAR Test Reduction Procedure:**

When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode.

#### **GSM Guidance**

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Please refer to section 9. for GSM power verification.

SAR is not required for EDGE (8PSK) mode because the maximum output power and tune-up limit is  $\leq 1/4$ dB higher than GPRS/EDGE (GMSK) or the adjusted SAR of the highest reported SAR of GPRS/EDGE (GMSK) is  $\leq 1.2$ W/kg.

#### **W-CDMA Guidance**

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC (Head) and other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC (Body-Worn Accessory) as the primary mode.

Per KDB 941225 D01 RMC12.2Kbps setting is used to evaluate SAR. If the maximum output power and Tune-up tolerance specified for production units in HSDPA/HSUPA is  $\leq 1/4$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio fo specified maximum output power and tune-up tolerance of HSDPA / HSUPA to RMC 12.2Kbps and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for HSDPA / HSUPA.

**KDB 941225 D05 SAR for LTE Devices:**

SAR test reduction is applied using the following criteria:

- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.
- When the reported SAR is  $> 0.8$  W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.
- Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are  $> 0.8$  W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation  $< 1.45$  W/kg.
- Testing for 16-QAM and 64-QAM modulation is not required because the reported SAR for QPSK is  $< 1.45$  W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.
- Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is  $< 1.45$  W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

**KDB 248227 D01 SAR meas for 802.11:**

When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for the initial test position is:

- $\leq 0.4$  W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- $> 0.4$  W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is  $\leq 0.8$  W/kg or all required test positions are tested.
  - For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
  - When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is  $> 0.8$  W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required test channels are considered.
  - The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.
- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is  $\leq 1.2$  W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is  $\leq 1.2$  W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

*To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.*

## 14. SAR Measurement Variability

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

- 1) Repeated measurement is not required when the original highest measured SAR is  $<0.8$  or  $2$  W/kg (1-g or 10-g respectively); steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.8$  or  $2$  W/kg (1-g or 10-g respectively), repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is  $> 1.20$  or when the original or repeated measurement is  $\geq 1.45$  or  $3.6$  W/kg (~ 10% from the 1-g or 10-g respective SAR limit).
- 4) Perform a third repeated measurement only if the original, first, or second repeated measurement is  $\geq 1.5$  or  $3.75$  W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ .

Band	Test Position	Frequency		Highest Measured SAR (W/kg)	First Repeated		Second Repeated	
		CH	MHz		Measured SAR(W/kg)	Largest to Smallest SAR Ratio	Measured SAR(W/kg)	Largest to Smallest SAR Ratio
WCDMA Band IV	Rear 10mm	1312	1712.4	0.926	0.926	1.008	N/A	N/A
LTE Band 4	Rear 10mm	20175	1732.5	0.894	0.881	1.015	N/A	N/A
LTE Band 66	Rear 10mm	132572	1770	0.823	0.811	1.015	N/A	N/A

## 15. Simultaneous Transmission analysis

No.	Simultaneous Transmission Configurations	Front-of-face	Body-worn	Hotspot
1	GSM(voice) + Bluetooth (data)	Yes	Yes	Yes
2	GSM(voice) + WLAN (data)	Yes	Yes	Yes
3	WCDMA(voice) + Bluetooth (data)	Yes	Yes	Yes
4	WCDMA(voice) + WLAN (data)	Yes	Yes	Yes
5	GPRS (data) + Bluetooth (data)	Yes	Yes	Yes
6	GPRS (data) + WLAN (data)	Yes	Yes	Yes
7	WCDMA (data) + Bluetooth (data)	Yes	Yes	Yes
8	WCDMA (data) + WLAN (data)	Yes	Yes	Yes
9	LTE + Bluetooth (data)	Yes	Yes	Yes
10	LTE + WLAN (data)	Yes	Yes	Yes

General note:

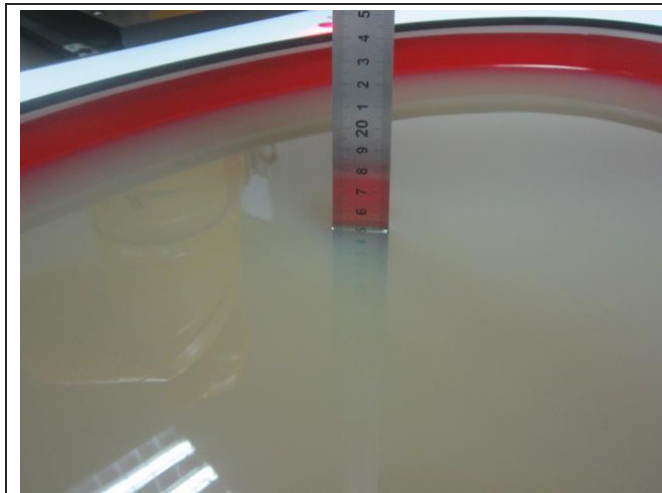
1. WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
2. EUT will choose either GSM or WCDMA LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
3. The reported SAR summation is calculated based on the same configuration and test position

### **Simultaneous Transmission data:**

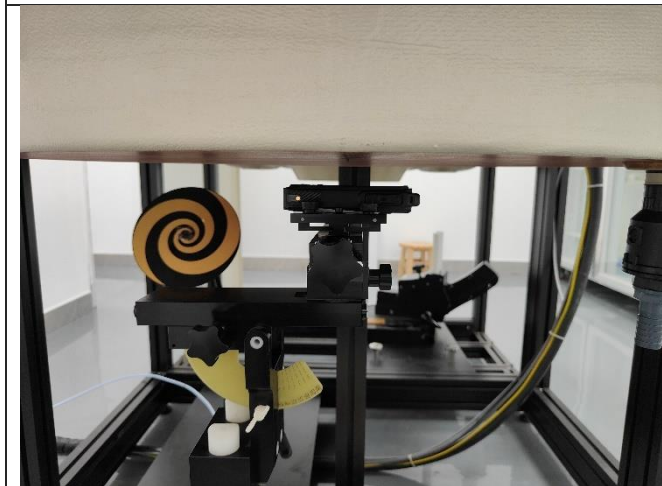
Please refer to Appendix Report



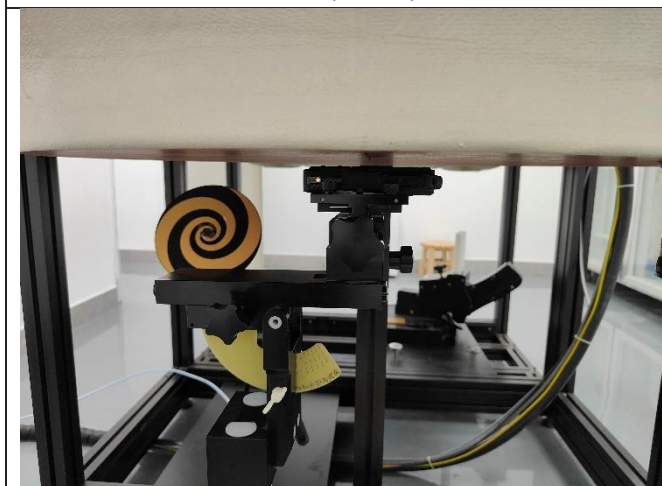
## 16. Test Setup Photos



Liquid depth in the ELI phantom



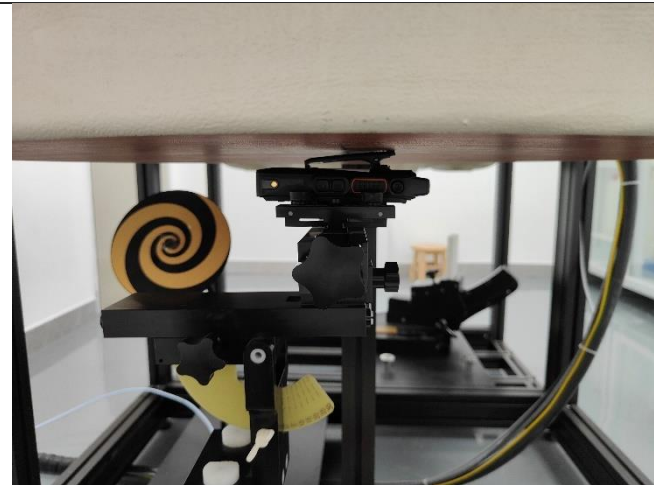
Front(25mm)



Body&Hotspot Front(10mm)



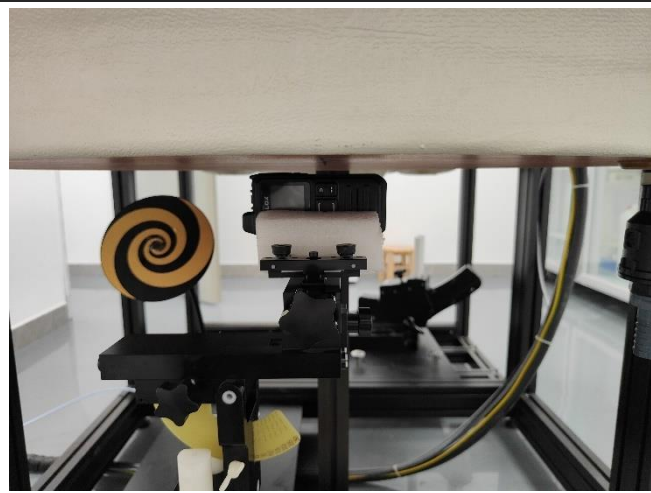
Body&Hotspot Rear(10mm)



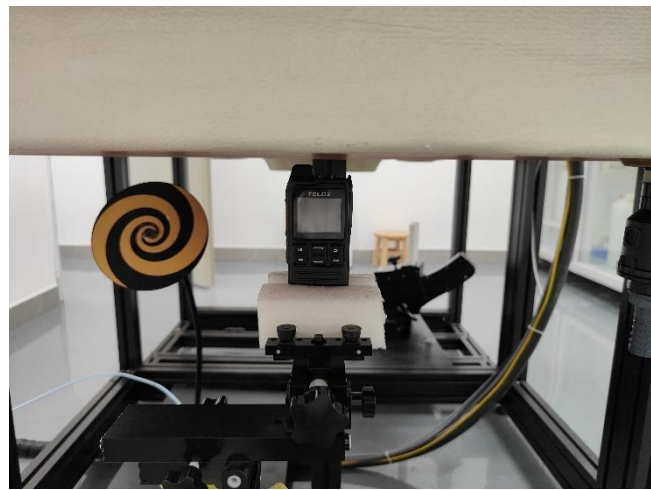
Body Rear(0mm)- With Belt clip



Body&Hotspot Left(10mm)



Body&amp;Hotspot Right(10mm)



Body&amp;Hotspot Top(10mm)



Body&amp;Hotspot Bottom(10mm)

## 17. External and Internal Photos of the EUT

Please reference to the report No.: CHTW24100045

-----End of Report-----

Project No.	SHT2407073402W		
Test sample No.	YPHT24070734002	Model No.	MT-100
Start test date	2024/8/29	Finish date	2024/9/6
Temperature	23.5°C	Humidity	56%
Test Engineer	Xiaodong Zhao	Auditor	<i>Xiaodong Zhao</i>

Appendix clause	Test Item	Result
A	Power Measurement Results	PASS
B	SAR Measurement Results	PASS
C	Simultaneous Transmission analysis	PASS

**Appendix A:Conducted Power Measurement Results-GSM**

GSM850		Burst Average Power (dBm)			Tune-up limit (dBm)	Division Factors	Frame-Average Power (dBm)			Tune-up limit (dBm)
		CH128	CH190	CH251			CH128	CH190	CH251	
		824.2MHz	836.6MHz	848.8MHz			824.2MHz	836.6MHz	848.8MHz	
GSM		34.67	34.65	34.49	35.00	-9.03	25.64	25.62	25.46	25.97
GPRS (GMSK)	1Tx slot	34.63	32.46	32.37	35.00	-9.03	25.60	23.43	23.34	25.97
	2Tx slots	33.78	31.49	31.37	34.00	-6.02	27.76	25.47	25.35	27.98
	3Tx slots	32.39	29.65	29.64	32.50	-4.26	28.13	25.39	25.38	28.24
	4Tx slots	31.74	28.94	28.88	32.00	-3.01	28.73	25.93	25.87	28.99
EGPRS (8PSK)	1Tx slot	29.07	28.90	28.59	29.50	-9.03	20.04	19.87	19.56	20.47
	2Tx slots	28.01	27.78	27.49	28.50	-6.02	21.99	21.76	21.47	22.48
	3Tx slots	25.94	25.68	25.40	26.00	-4.26	21.68	21.42	21.14	21.74
	4Tx slots	24.77	24.52	24.21	25.00	-3.01	21.76	21.51	21.20	21.99

GSM1900		Burst Average Power (dBm)			Tune-up limit (dBm)	Division Factors	Frame-Average Power (dBm)			Tune-up limit (dBm)
		CH512	CH661	CH810			CH512	CH661	CH810	
		1850.2MHz	1880MHz	1909.8MHz			1850.2MHz	1880.0MHz	1909.8MHz	
GSM		31.28	31.42	31.56	32.00	-9.03	22.25	22.39	22.53	22.97
GPRS (GMSK)	1Tx slot	31.41	31.25	31.08	31.50	-9.03	22.38	22.22	22.05	22.47
	2Tx slots	30.46	30.23	30.10	30.50	-6.02	24.44	24.21	24.08	24.48
	3Tx slots	28.59	28.36	28.16	29.00	-4.26	24.33	24.10	23.90	24.74
	4Tx slots	27.81	27.59	27.35	28.00	-3.01	24.80	24.58	24.34	24.99
EGPRS (8PSK)	1Tx slot	26.75	26.40	26.11	27.00	-9.03	17.72	17.37	17.08	17.97
	2Tx slots	25.45	25.23	24.87	25.50	-6.02	19.43	19.21	18.85	19.48
	3Tx slots	23.15	22.98	22.68	23.50	-4.26	18.89	18.72	18.42	19.24
	4Tx slots	21.93	21.75	21.42	22.00	-3.01	18.92	18.74	18.41	18.99

**Appendix A:Conducted Power Measurement Results-WCDMA**

WCDMA Band II		Conducted Power (dBm)			Tune-up limit (dBm)
		CH9262	CH9400	CH9538	
		1852.4MHz	1880MHz	1907.6MHz	
AMR 12.2K		24.35	24.38	24.31	24.50
RMC 12.2K		24.39	24.42	24.35	24.50
HSDPA	Subtest-1	23.00	22.76	22.48	23.50
	Subtest-2	23.29	22.69	22.52	23.50
	Subtest-3	23.02	22.54	22.54	23.50
	Subtest-4	22.63	22.51	22.47	23.00
HSUPA	Subtest-1	19.20	20.17	17.38	20.50
	Subtest-2	20.13	21.12	17.54	21.50
	Subtest-3	20.18	20.93	20.12	21.00
	Subtest-4	20.10	18.89	19.05	20.50
	Subtest-5	17.43	18.88	20.16	20.50

WCDMA Band IV		Conducted Power (dBm)			Tune-up limit (dBm)
		CH1312	CH1413	CH1513	
		1712.4MHz	1732.6MHz	1752.6MHz	
AMR 12.2K		23.63	23.58	23.62	24.00
RMC 12.2K		23.67	23.62	23.66	24.00
HSDPA	Subtest-1	22.87	22.16	22.19	23.00
	Subtest-2	22.75	22.24	22.22	23.00
	Subtest-3	22.75	22.21	22.18	23.00
	Subtest-4	22.21	22.25	22.18	22.50
HSUPA	Subtest-1	20.69	20.66	20.16	21.00
	Subtest-2	20.63	21.71	20.19	22.00
	Subtest-3	20.65	21.66	21.56	22.00
	Subtest-4	20.73	21.65	21.62	22.00
	Subtest-5	20.66	20.24	21.70	22.00

WCDMA Band V		Conducted Power (dBm)			Tune-up limit (dBm)
		CH4132	CH4183	CH4233	
		826.4MHz	836.6MHz	846.6MHz	
AMR 12.2K		24.43	24.56	24.46	25.00
RMC 12.2K		24.47	24.60	24.50	25.00
HSDPA	Subtest-1	23.40	22.98	22.90	23.50
	Subtest-2	23.54	22.91	22.89	24.00
	Subtest-3	23.41	22.82	23.00	23.50
	Subtest-4	22.78	22.99	22.89	23.00
HSUPA	Subtest-1	21.46	21.50	21.08	22.00
	Subtest-2	21.61	22.43	20.99	22.50
	Subtest-3	21.53	22.61	22.37	23.00
	Subtest-4	21.47	22.50	22.41	23.00
	Subtest-5	21.64	20.93	22.44	22.50

LTE-FDD Band 2				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width (MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
1.4	QPSK	1	0	22.95	22.95	22.75	23.50	
			2	23.07	23.02	22.97		
			5	23.00	22.87	22.70		
		3	0	22.94	22.88	22.83	23.50	
			1	22.94	22.88	22.84		
			3	23.00	22.93	22.79		
	6	0	21.95	21.97	21.84	22.00		
	16QAM	1	0	21.74	21.58	21.63	22.00	
			2	21.81	21.84	21.82		
			5	21.73	21.56	21.56		
		3	0	21.78	21.69	21.59	22.00	
			1	21.79	21.68	21.61		
			3	21.75	21.64	21.64		
		6	0	20.74	20.86	20.76	21.00	
		3	QPSK	1	0	22.82	22.92	22.86
8					22.86	22.91	22.85	
14	22.76				22.91	22.82		
8	0			21.82	21.83	21.86	22.00	
	4			21.80	21.85	21.87		
	7			21.80	21.78	21.83		
15	0		22.93	22.86	22.96	23.00		
16QAM	1		0	21.80	21.68	21.54	22.00	
			8	21.75	21.64	21.61		
			14	21.74	21.61	21.56		
	8		0	20.75	20.73	20.78	21.00	
			4	20.76	20.73	20.75		
			7	20.75	20.73	20.76		
	15		0	20.74	20.65	20.67	21.00	
	5		QPSK	1	0	22.84	22.84	22.74
		12			22.93	22.92	22.87	
24		22.78			22.81	22.74		
12		0		21.71	21.83	21.69	22.00	
		6		21.73	21.89	21.71		
		13		21.78	21.84	21.71		
25		0	21.79	21.84	21.75	22.00		
16QAM		1	0	21.66	21.82	21.59	22.00	
			12	21.73	21.92	21.76		
			24	21.67	21.81	21.62		
		12	0	20.67	20.81	20.69	21.00	
			6	20.73	20.81	20.67		
			13	20.72	20.83	20.70		
		25	0	20.75	20.77	20.73	21.00	
		10	QPSK	1	0	22.74	22.93	22.94
	24				22.84	23.11	23.09	
49	22.73				22.96	22.85		
25	0			21.72	21.90	21.92	22.00	
	12			21.70	21.92	21.92		
	25			21.77	21.98	21.98		
50	0		21.67	21.93	21.93	22.00		
16QAM	1		0	21.67	21.70	21.68	22.00	
			24	21.77	21.84	21.81		
			49	21.72	21.71	21.60		
	25		0	20.65	20.85	20.86	21.00	
			12	20.65	20.86	20.85		
			25	20.70	20.90	20.94		
	50		0	20.67	20.85	20.85	21.00	

15	QPSK	1	0	22.78	22.78	22.84	23.00
			38	22.85	22.94	22.94	
			74	22.78	22.78	22.77	
		38	0	21.80	21.98	21.95	22.00
			18	21.78	21.95	21.97	
			37	21.83	21.99	21.96	
	75	0	21.79	21.96	21.99	22.00	
	16QAM	1	0	21.71	21.88	21.54	22.50
			38	21.81	22.00	21.66	
			74	21.75	21.81	21.51	
		38	0	21.78	21.97	21.92	22.00
			18	21.79	21.95	21.96	
37			21.78	21.97	21.97		
75	0	20.72	20.92	20.88	21.00		
20	QPSK	1	0	22.59	22.73	22.65	23.50
			49	22.97	23.06	23.02	
			99	22.67	22.73	22.62	
		50	0	21.70	21.88	21.95	22.50
			25	21.69	21.88	21.95	
			50	21.70	21.95	22.01	
	100	0	21.68	21.93	21.98	22.00	
	16QAM	1	0	21.42	21.77	21.43	22.50
			49	21.80	22.07	21.77	
			99	21.51	21.75	21.38	
		50	0	20.66	20.82	20.93	21.00
			25	20.64	20.83	20.92	
			50	20.64	20.88	20.94	
	100	0	20.66	20.83	20.90	21.00	



LTE-FDD Band 4				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
1.4	QPSK	1	0	22.62	22.83	22.91	23.50	
			2	22.70	22.97	23.03		
			5	22.62	22.86	22.90		
		3	0	22.64	22.85	23.00	23.50	
			1	22.68	22.83	23.03		
			3	22.66	22.88	23.01		
	6	0	21.69	21.87	21.99	22.00		
	16QAM	1	0	21.46	21.59	21.61	22.00	
			2	21.64	21.75	21.76		
			5	21.49	21.54	21.65		
		3	0	21.47	21.63	21.77	22.00	
			1	21.45	21.65	21.76		
			3	21.44	21.63	21.79		
		6	0	20.70	20.72	20.97	21.00	
		3	QPSK	1	0	22.71	22.95	22.92
8					22.77	22.94	22.89	
14	22.77				22.95	22.89		
8	0			21.76	21.85	21.97	22.00	
	4			21.75	21.87	21.96		
	7			21.79	21.83	21.95		
15	0		23.23	22.92	22.31	23.50		
16QAM	1		0	21.69	21.71	21.59	22.00	
			8	21.76	21.64	21.67		
			14	21.73	21.64	21.66		
	8		0	20.78	20.80	20.96	21.00	
			4	20.74	20.77	20.93		
			7	20.79	20.78	20.90		
	15		0	20.76	20.71	20.80	21.00	
	5		QPSK	1	0	22.72	22.83	22.89
		12			22.89	22.94	22.96	
24		22.74			22.79	22.85		
12		0		21.76	21.74	21.87	22.00	
		6		21.75	21.81	21.82		
		13		21.74	21.81	21.77		
25		0	21.75	21.85	21.91	22.00		
16QAM		1	0	21.59	21.81	21.64	22.00	
			12	21.79	21.89	21.70		
			24	21.63	21.78	21.72		
		12	0	20.82	20.81	20.92	21.00	
			6	20.77	20.76	20.88		
			13	20.70	20.86	20.85		
		25	0	20.76	20.75	20.95	21.00	
		10	QPSK	1	0	22.74	22.89	22.85
	24				22.88	22.94	23.00	
49	22.77				22.85	22.89		
25	0			21.85	21.80	21.90	22.00	
	12			21.87	21.82	21.95		
	25			21.75	21.96	21.91		
50	0		21.84	21.85	21.84	22.00		
16QAM	1		0	21.67	21.60	21.58	22.00	
			24	21.76	21.79	21.77		
			49	21.71	21.61	21.56		
	25		0	20.85	20.79	20.93	21.00	
			12	20.83	20.81	20.92		
			25	20.74	20.92	20.90		
	50		0	20.84	20.84	20.95	21.00	

15	QPSK	1	0	22.64	22.72	22.79	23.00	
			38	22.78	22.81	22.86		
			74	22.72	22.72	22.82		
		38	0	21.83	21.89	21.91	22.00	
			18	21.83	21.88	21.92		
			37	21.84	21.88	21.89		
	75	0	21.85	21.88	21.92	22.00		
	16QAM	1	0	21.60	21.79	21.50	22.00	
			38	21.78	21.87	21.64		
			74	21.70	21.79	21.56		
		38	0	21.85	21.88	21.93	22.00	
			18	21.91	21.88	21.92		
37			21.82	21.88	21.94			
75		0	20.82	20.84	20.89	21.00		
20		QPSK	1	0	22.53	22.63	22.59	23.50
				49	22.83	23.00	22.93	
	99			22.66	22.67	22.66		
	50		0	21.89	21.65	21.76	22.00	
			25	21.87	21.67	21.78		
			50	21.81	21.95	21.79		
	100	0	21.86	21.85	21.78	22.00		
	16QAM	1	0	21.41	21.68	21.32	22.50	
			49	21.85	22.05	21.76		
			99	21.52	21.74	21.49		
		50	0	20.92	20.67	20.80	21.00	
			25	20.88	20.68	20.84		
			50	20.81	20.94	20.86		
		100	0	20.87	20.82	20.78	21.00	

LTE-FDD Band 5				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
1.4	QPSK	1	0	21.73	21.70	21.55	22.00	
			2	21.79	21.80	21.71		
			5	21.70	21.70	21.53		
		3	0	21.74	21.65	21.62	22.00	
			1	21.68	21.69	21.66		
			3	21.70	21.75	21.66		
	6	0	20.69	20.68	20.57	21.00		
	16QAM	1	0	20.66	20.52	20.30	21.00	
			2	20.76	20.61	20.46		
			5	20.61	20.58	20.28		
		3	0	20.56	20.54	20.43	21.00	
			1	20.53	20.56	20.42		
			3	20.52	20.61	20.38		
		6	0	19.66	19.54	19.55	20.00	
		3	QPSK	1	0	21.87	21.80	21.64
8					21.81	21.80	21.66	
14	21.74				21.83	21.65		
8	0			20.73	20.74	20.71	21.00	
	4			20.74	20.76	20.71		
	7			20.77	20.76	20.71		
15	0		21.55	21.64	22.03	22.50		
16QAM	1		0	20.77	20.72	20.39	21.00	
			8	20.72	20.65	20.35		
			14	20.72	20.68	20.44		
	8		0	19.71	19.70	19.62	20.00	
			4	19.75	19.70	19.62		
			7	19.69	19.69	19.60		
	15		0	19.68	19.63	19.50	20.00	
	5		QPSK	1	0	21.74	21.67	21.58
		12			21.86	21.79	21.73	
24		21.72			21.71	21.58		
12		0		20.64	20.74	20.49	21.00	
		6		20.62	20.82	20.55		
		13		20.69	20.72	20.53		
25		0	20.70	20.79	20.53	21.00		
16QAM		1	0	20.60	20.66	20.47	21.00	
			12	20.67	20.84	20.55		
			24	20.57	20.82	20.41		
		12	0	19.54	19.77	19.52	20.00	
			6	19.60	19.80	19.53		
			13	19.66	19.73	19.49		
		25	0	19.65	19.69	19.54	20.00	
		10	QPSK	1	0	21.77	21.70	21.80
	24				21.74	21.83	21.72	
49	21.69				21.73	21.65		
25	0			20.55	20.88	20.50	21.00	
	12			20.58	20.94	20.51		
	25			20.49	20.84	20.68		
50	0		20.53	20.90	20.57	21.00		
16QAM	1		0	20.72	20.51	20.55	21.00	
			24	20.72	20.63	20.38		
			49	20.68	20.64	20.32		
	25		0	19.55	19.93	19.48	20.00	
			12	19.51	19.87	19.49		
			25	19.50	19.90	19.66		
	50		0	19.44	19.86	19.49	20.00	

LTE-FDD Band 7				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
5	QPSK	1	0	22.84	22.89	23.09	23.50	
			12	22.99	23.00	23.17		
			24	22.90	22.86	23.10		
		12	0	21.83	21.95	22.17	22.50	
			6	21.85	21.94	22.11		
			13	21.81	21.83	22.01		
	25	0	22.22	21.97	22.16	22.50		
	16QAM	1	0	21.75	21.86	21.87	22.50	
			12	21.94	21.98	22.01		
			24	21.77	21.87	21.99		
		12	0	21.42	21.41	21.17	22.00	
			6	20.89	21.45	21.53		
			13	20.94	21.43	21.52		
		25	0	20.92	20.97	21.17	21.50	
		10	QPSK	1	0	22.58	22.94	23.01
24					23.07	23.05	23.19	
49	22.94				22.93	23.11		
25	0			21.95	21.95	22.11	22.50	
	12			21.93	21.94	22.15		
	25			22.04	21.86	21.96		
50	0		22.38	23.01	22.05	23.50		
16QAM	1		0	21.87	21.71	21.75	22.50	
			24	22.10	21.85	21.87		
			49	21.93	21.81	21.82		
	25		0	20.98	20.98	21.19	21.50	
			12	20.98	20.95	21.18		
			25	21.08	20.95	21.05		
	50		0	21.03	20.99	21.13	21.50	
	15		QPSK	1	0	22.90	22.79	22.98
		38			22.99	22.88	23.09	
74		22.83			22.82	23.04		
38		0		22.10	21.96	22.03	22.50	
		18		21.98	21.95	22.07		
		37		21.97	21.92	22.03		
75		0	21.97	21.93	22.04	22.50		
16QAM		1	0	21.82	21.78	21.35	22.50	
			38	21.92	22.01	21.79		
			74	21.80	21.96	21.75		
		38	0	21.94	21.94	22.05	22.50	
			18	21.95	21.96	22.05		
			37	21.98	21.90	22.08		
		75	0	20.98	20.91	21.05	21.50	
		20	QPSK	1	0	22.70	22.63	22.75
	49				23.08	23.06	23.06	
99	22.68				22.81	22.84		
50	0			21.91	21.96	21.87	22.50	
	25			21.83	22.00	21.94		
	50			22.04	21.87	21.95		
100	0		21.86	21.89	21.94	22.00		
16QAM	1		0	21.56	21.73	21.57	22.50	
			49	21.95	22.11	21.90		
			99	21.56	21.91	21.62		
	50		0	20.89	21.05	21.03	21.50	
			25	20.93	20.99	21.01		
			50	21.08	20.99	21.06		
	100		0	21.01	20.90	21.01	21.50	

LTE-FDD Band 12				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
1.4	QPSK	1	0	21.50	21.43	21.37	22.00	
			2	21.73	21.42	21.54		
			5	21.52	21.39	21.40		
		3	0	21.53	21.49	21.37	22.00	
			1	21.58	21.49	21.37		
			3	21.60	21.44	21.42		
	6	0	20.61	20.55	20.44	21.00		
	16QAM	1	0	20.30	20.33	20.13	21.00	
			2	20.55	20.50	20.27		
			5	20.30	20.33	20.15		
		3	0	20.36	20.33	20.21	20.50	
			1	20.36	20.29	20.22		
			3	20.41	20.27	20.22		
		6	0	19.48	19.43	19.21	19.50	
		3	QPSK	1	0	21.56	21.54	21.44
8					21.59	21.52	21.38	
14	21.57				21.50	21.40		
8	0			20.58	20.48	20.40	21.00	
	4			20.57	20.50	20.42		
	7			20.60	20.45	20.43		
15	0		20.57	21.44	20.59	21.50		
16QAM	1		0	20.60	20.35	20.12	21.00	
			8	20.58	20.31	20.10		
			14	20.55	20.25	20.15		
	8		0	19.55	19.42	19.39	20.00	
			4	19.50	19.44	19.38		
			7	19.54	19.37	19.38		
	15		0	19.55	19.32	19.19	20.00	
	5		QPSK	1	0	21.64	21.60	21.47
		12			21.75	21.68	21.60	
24		21.61			21.55	21.48		
12		0		20.67	20.59	20.57	21.00	
		6		20.69	20.59	20.55		
		13		20.70	20.53	20.50		
25		0	20.76	20.56	20.54	21.00		
16QAM		1	0	20.48	20.49	20.52	21.00	
			12	20.59	20.57	20.66		
			24	20.49	20.47	20.49		
		12	0	19.66	19.54	19.57	20.00	
			6	19.61	19.52	19.56		
			13	19.68	19.47	19.49		
		25	0	19.70	19.55	19.51	20.00	
		10	QPSK	1	0	21.54	21.57	21.46
	24				21.66	21.67	21.59	
49	21.47				21.52	21.39		
25	0			20.57	20.46	20.69	21.00	
	12			20.56	20.46	20.60		
	25			20.55	20.49	20.57		
50	0		20.54	20.51	20.53	21.00		
16QAM	1		0	20.53	20.42	20.26	21.00	
			24	20.65	20.58	20.34		
			49	20.49	20.37	20.18		
	25		0	19.52	19.52	19.65	20.00	
			12	19.53	19.48	19.62		
			25	19.47	19.43	19.49		
	50		0	19.52	19.49	19.49	20.00	

LTE-FDD Band 13				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
5	QPSK	1	0	21.70	21.67	21.66	22.00	
			12	21.86	21.76	21.79		
			24	21.76	21.63	21.68		
		12	0	20.66	20.66	20.54	21.00	
			6	20.66	20.69	20.57		
			13	20.64	20.80	20.59		
	25	0	20.72	20.76	20.61	21.00		
	16QAM	1	0	20.63	20.69	20.53	21.00	
			12	20.66	20.78	20.62		
			24	20.57	20.64	20.46		
		12	0	19.74	19.70	19.55	20.00	
			6	19.70	19.77	19.56		
			13	19.68	19.85	19.64		
		25	0	19.76	19.74	19.70	20.00	
		10	QPSK	1	0	-	21.70	-
24					-	21.87	-	
49	-				21.73	-		
25	0			-	20.77	-	21.00	
	12			-	20.77	-		
	25			-	20.96	-		
50	0		-	20.80	-	21.00		
16QAM	1		0	-	20.65	-	21.00	
			24	-	20.81	-		
			49	-	20.66	-		
	25		0	-	19.77	-	20.00	
			12	-	19.76	-		
			25	-	19.92	-		
	50		0	-	19.81	-	20.00	

LTE-FDD Band 17				Conducted Power (dBm)			Tune-up Limit(dBm)
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High	
5	QPSK	1	0	21.61	21.56	21.47	22.00
			12	21.66	21.60	21.60	
			24	21.59	21.54	21.48	
		12	0	20.52	20.58	20.51	21.00
			6	20.51	20.58	20.51	
			13	20.55	20.50	20.41	
	25	0	20.59	20.60	20.47	21.00	
	16QAM	1	0	20.52	20.54	20.37	21.00
			12	20.56	20.63	20.46	
			24	20.52	20.53	20.35	
		12	0	19.49	19.60	19.49	20.00
			6	19.48	19.54	19.49	
13			19.47	19.47	19.41		
25	0	19.52	19.48	19.50	20.00		
10	QPSK	1	0	21.54	21.56	21.48	22.00
			24	21.58	21.60	21.56	
			49	21.47	21.50	21.46	
		25	0	20.54	20.60	20.62	21.00
			12	20.58	20.63	20.65	
			25	20.48	20.55	20.52	
	50	0	20.54	21.48	20.54	21.50	
	16QAM	1	0	20.47	20.32	20.23	21.00
			24	20.54	20.45	20.29	
			49	20.46	20.26	20.21	
		25	0	19.47	19.58	19.61	20.00
			12	19.45	19.56	19.61	
			25	19.37	19.48	19.51	
		50	0	19.46	19.51	19.52	20.00

LTE-FDD Band 66				Conducted Power (dBm)			Tune-up Limit(dBm)	
Band-width(MHz)	Modulation	RB allocation	RB offset	Low	Middle	High		
1.4	QPSK	1	0	22.47	22.63	22.89	23.00	
			2	22.59	22.70	22.99		
			5	22.46	22.67	22.87		
		3	0	22.58	22.65	22.92	23.00	
			1	22.58	22.60	22.90		
			3	22.57	22.66	22.94		
	6	0	21.52	21.61	21.95	22.00		
	16QAM	1	0	21.33	21.34	21.62	22.00	
			2	21.51	21.49	21.75		
			5	21.34	21.43	21.59		
		3	0	21.40	21.47	21.71	22.00	
			1	21.39	21.46	21.68		
			3	21.35	21.48	21.66		
		6	0	20.55	20.47	20.89	21.00	
		3	QPSK	1	0	22.63	22.89	22.58
8					22.70	22.99	22.55	
14	22.67				22.87	22.57		
8	0			22.65	22.92	22.56	23.00	
	4			22.60	22.90	22.16		
	7			22.66	22.94	22.18		
15	0		21.61	21.95	21.54	22.00		
16QAM	1		0	21.34	21.62	21.57	22.00	
			8	21.49	21.75	21.54		
			14	21.43	21.59	21.54		
	8		0	21.47	21.71	21.45	22.00	
			4	21.46	21.68	21.55		
			7	21.48	21.66	21.64		
	15		0	20.47	20.89	20.60	21.00	
	5		QPSK	1	0	22.49	22.46	22.77
		12			22.46	22.56	22.87	
24		22.36			22.43	22.79		
12		0		21.45	21.50	21.80	22.00	
		6		21.40	21.48	21.74		
		13		21.35	21.43	21.77		
25		0	21.45	21.48	21.77	22.00		
16QAM		1	0	21.49	21.48	21.64	22.00	
			12	21.36	21.58	21.78		
			24	21.28	21.52	21.63		
		12	0	20.42	20.51	20.81	21.00	
			6	20.44	20.56	20.82		
			13	20.39	20.49	20.81		
		25	0	20.44	20.49	20.81	21.00	
		10	QPSK	1	0	22.47	22.57	22.81
	24				22.63	22.69	22.84	
49	22.53				22.62	22.80		
25	0			21.59	21.57	21.89	22.00	
	12			21.58	21.54	21.89		
	25			21.54	21.53	21.84		
50	0		21.58	21.52	21.81	22.00		
16QAM	1		0	21.46	21.32	21.48	22.00	
			24	21.48	21.43	21.67		
			49	21.52	21.40	21.50		
	25		0	20.60	20.59	20.90	21.00	
			12	20.56	20.58	20.86		
			25	20.54	20.54	20.88		
	50		0	20.55	20.56	20.83	21.00	

15	QPSK	1	0	22.39	22.38	22.70	23.00	
			38	22.53	22.53	22.83		
			74	22.46	22.35	22.73		
		38	0	21.54	21.52	21.82	22.00	
			18	21.53	21.56	21.89		
			37	21.54	21.56	21.83		
	75	0	21.55	21.60	21.84	22.00		
	16QAM	1	0	21.40	21.49	21.45	22.00	
			38	21.43	21.59	21.61		
			74	21.38	21.55	21.51		
		38	0	21.55	21.56	21.89	22.00	
			18	21.57	21.57	21.88		
37			21.55	21.53	21.86			
75		0	20.51	20.58	20.86	21.00		
20		QPSK	1	0	22.21	22.28	22.48	23.00
				49	22.60	22.64	22.83	
	99			22.36	22.37	22.56		
	50		0	21.57	21.45	21.93	22.00	
			25	21.60	21.47	21.90		
			50	21.56	21.41	21.77		
	100	0	21.58	21.47	21.81	22.00		
	16QAM	1	0	21.11	21.32	21.25	22.00	
			49	21.48	21.90	21.73		
			99	21.19	21.51	21.37		
		50	0	20.58	20.49	20.98	21.00	
			25	20.58	20.45	20.97		
			50	20.56	20.43	20.83		
		100	0	20.57	20.50	20.84	21.00	



**Appendix A:Conducted Power Measurement Results-WIFI/Bluetooth**

WIFI 2.4G					
Mode	Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)	Tune-up limit (dBm)
802.11b	1	2412	16.52	14.84	15.50
	6	2437	16.98	15.23	16.00
	11	2462	16.99	15.25	16.00
802.11g	1	2412	18.31	16.60	17.00
	6	2437	18.63	16.94	17.00
	11	2462	17.98	16.29	17.00
802.11n (HT20)	1	2412	18.37	16.68	17.00
	6	2437	18.56	16.86	17.00
	11	2462	18.03	16.37	17.00
802.11n (HT40)	3	2422	17.87	16.15	16.50
	6	2437	17.30	15.63	16.50
	9	2452	17.53	15.80	16.50

WIFI 5G U-NII-1					
Bandwidth	Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up limit (dBm)
20	802.11n	36	5180	14.52	15.00
		44	5220	13.65	15.00
		48	5240	14.16	15.00
	802.11a	36	5180	14.79	15.00
		44	5220	14.56	15.00
		48	5240	14.35	15.00
40	802.11n	38	5190	11.65	12.00
		46	5230	11.53	12.00

WIFI 5G U-NII-2A					
Bandwidth	Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up limit (dBm)
20	802.11n	52	5260	13.94	14.00
		56	5280	13.81	14.00
		64	5320	13.35	14.00
	802.11a	52	5260	14.16	14.50
		56	5280	14.19	14.50
		64	5320	13.58	14.50
40	802.11n	54	5270	11.63	12.00
		62	5310	10.99	12.00

WIFI 5G U-NII-3					
Bandwidth	Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up limit (dBm)
20	802.11n	149	5745	13.64	14.00
		157	5785	13.24	14.00
		165	5825	13.41	14.00
	802.11a	149	5745	13.52	14.00
		157	5785	13.68	14.00
		165	5825	13.54	14.00
40	802.11n	151	5755	10.79	11.00
		159	5795	10.52	11.00

Bluetooth						
Mode		Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)	Tune-up limit (dBm)
EDR	GFSK	0	2402	3.96	3.78	4.50
		39	2441	4.54	4.32	5.00
		78	2480	3.28	3.26	4.00
	$\pi/4$ QPSK	0	2402	2.52	2.37	3.00
		39	2441	3.73	3.55	4.50
		78	2480	3.11	2.96	3.50
	8DPSK	0	2402	3.24	3.04	4.00
		39	2441	3.68	3.45	4.00
		78	2480	2.54	2.26	3.00
BLE	GFSK	0	2402	4.06	3.87	4.50
		19	2440	4.70	4.52	5.00
		39	2480	4.08	3.89	4.50

**Appendix B:SAR Measurement Results-Front of face**

GSM850										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 4Tx slots	Front	128	824.2	31.74	32.00	1.062	-0.05	0.105	0.111	1
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-

PCS1900										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 4Tx slots	Front	512	1850.2	27.81	28.00	1.045	-0.07	0.151	0.158	2
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-

WCDMA Band II										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	-0.08	0.151	0.154	3
		9538	1907.6	24.35	24.50	1.035	-	-	-	-

WCDMA Band IV										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	1312	1712.4	23.67	24.00	1.079	-0.02	0.190	0.205	4
		1413	1732.6	23.62	24.00	1.091	-	-	-	-
		1513	1752.6	23.66	24.00	1.081	-	-	-	-

WCDMA Band V										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	-0.09	0.113	0.124	5
		4233	846.6	24.50	25.00	1.122	-	-	-	-

LTE Band 2										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	-0.06	0.142	0.157	6
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
20M QPSK 50RB	Front	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	0.08	0.119	0.133	-

LTE Band 4										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	-0.07	0.180	0.202	7
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
20M QPSK 50RB	Front	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	0.04	0.141	0.143	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-

**LTE Band 5**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-0.03	0.099	0.103	8
		20600	844.0	21.72	22.00	1.067	-	-	-	-
10M QPSK 25RB	Front	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	0.05	0.079	0.080	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-

**LTE Band 7**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	20850	2510.0	23.08	23.50	1.102	-0.07	0.091	0.100	9
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
20M QPSK 50RB	Front	20850	2510.0	22.04	22.50	1.112	0.08	0.066	0.073	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-

**LTE Band 12**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-0.01	0.006	0.007	10
		23130	711.0	21.59	22.00	1.099	-	-	-	-
10M QPSK 25RB	Front	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	-0.05	0.004	0.004	-

**LTE Band 13**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23230	782.0	21.87	22.00	1.030	-0.11	0.037	0.038	11
10M QPSK 25RB	Front	23230	782.0	20.96	21.00	1.009	-0.06	0.022	0.022	-

**LTE Band 17**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	-0.03	0.007	0.007	12
		23800	711.0	21.56	22.00	1.107	-	-	-	-
10M QPSK 25RB	Front	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.15	0.006	0.007	-

**LTE Band 66**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	-0.09	0.178	0.185	13
20M QPSK 50RB	Front	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	0.03	0.140	0.142	-

**WIFI 2.4G**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11b 1Mbps	Front	1	2412	14.84	15.50	1.164	0.981	1.019	-	-	-	-
		6	2437	15.23	16.00	1.194	0.981	1.019	-	-	-	-
		11	2462	15.25	16.00	1.189	0.981	1.019	-0.08	0.020	0.024	14

**WIFI 5G U-NII-1**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	36	5180	14.79	15.00	1.050	0.890	1.124	-0.03	0.028	0.033	15
		44	5220	14.56	15.00	1.107	0.890	1.124	-	-	-	-
		48	5240	14.35	15.00	1.161	0.890	1.124	-	-	-	-

**WIFI 5G U-NII-2A**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	52	5260	14.16	14.50	1.081	0.889	1.125	-	-	-	-
		56	5280	14.19	14.50	1.074	0.889	1.125	-0.12	0.029	0.035	16
		64	5320	13.58	14.50	1.236	0.889	1.125	-	-	-	-

**WIFI 5G U-NII-3**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	149	5745	13.52	14.00	1.117	0.890	1.124	-	-	-	-
		157	5785	13.68	14.00	1.076	0.890	1.124	-0.01	0.037	0.045	17
		165	5825	13.54	14.00	1.112	0.890	1.124	-	-	-	-

**Bluetooth**

Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
GFSK	Front	0	2402	3.87	4.50	1.156	0.613	1.632	-	-	-	-
		19	2440	4.52	5.00	1.117	0.613	1.632	-0.04	0.004	0.008	18
		39	2480	3.89	4.50	1.151	0.613	1.632	-	-	-	-

**Appendix B:SAR Measurement Results-Body-worn**

GSM850										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 4Tx slots	Front	128	824.2	31.74	32.00	1.062	0.07	0.223	0.237	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Rear	128	824.2	31.74	32.00	1.062	-0.01	0.373	0.396	19
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Rear (With Belt clip)	128	824.2	31.74	32.00	1.062	0.05	0.312	0.331	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-

PCS1900										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 4Tx slots	Front	512	1850.2	27.81	28.00	1.045	0.06	0.388	0.405	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Rear	512	1850.2	27.81	28.00	1.045	-0.08	0.708	0.740	20
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Rear (With Belt clip)	512	1850.2	27.81	28.00	1.045	-0.13	0.600	0.627	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-

WCDMA Band II										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	0.07	0.345	0.351	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Rear	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	0.06	0.677	0.690	21
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Rear (With Belt clip)	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	0.04	0.590	0.601	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-

WCDMA Band IV										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	1312	1712.4	23.67	24.00	1.079	0.08	0.556	0.600	-
		1413	1732.6	23.62	24.00	1.091	-	-	-	-
		1513	1752.6	23.66	24.00	1.081	-	-	-	-
	Rear	1312	1712.4	23.67	24.00	1.079	-0.14	0.926	0.999	22
		1413	1732.6	23.62	24.00	1.091	0.06	0.911	0.994	-
		1513	1752.6	23.66	24.00	1.081	0.05	0.899	0.972	-
	Rear (With Belt clip)	1312	1712.4	23.67	24.00	1.079	0.04	0.785	0.847	-
		1413	1732.6	23.62	24.00	1.091	0.05	0.774	0.845	-
		1513	1752.6	23.66	24.00	1.081	0.18	0.768	0.831	-

WCDMA Band V										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	0.09	0.224	0.246	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Rear	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	-0.07	0.401	0.440	23
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Rear (With Belt clip)	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	0.19	0.289	0.317	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-

LTE Band 2										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	-0.03	0.487	0.539	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Rear	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	-0.07	0.702	0.777	24
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Rear (With Belt clip)	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	0.07	0.627	0.694	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
20M QPSK 50RB	Front	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	0.19	0.389	0.435	-
	Rear	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	-0.05	0.545	0.610	-
	Rear (With Belt clip)	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	0.03	0.492	0.551	-

LTE Band 4										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	0.17	0.454	0.509	-
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
	Rear	20050	1720.0	22.83	23.50	1.167	0.07	0.886	1.034	25
		20175	1732.5	23.00	23.50	1.122	-0.12	0.894	1.003	-
		20300	1745.0	22.93	23.50	1.140	0.05	0.865	0.986	-
	Rear (With Belt clip)	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	-0.05	0.711	0.798	-
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
20M QPSK 50RB	Front	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	-0.15	0.366	0.370	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Rear	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	-0.13	0.711	0.719	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Rear (With Belt clip)	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	0.11	0.558	0.565	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
20M QPSK 100RB	Rear	20050	1720.0	21.86	22.00	1.033	0.16	0.702	0.725	-

LTE Band 5										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	0.07	0.235	0.244	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Rear	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-0.03	0.403	0.419	26
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Rear (With Belt clip)	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	0.05	0.341	0.355	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
10M QPSK 25RB	Front	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-0.05	0.196	0.199	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Rear	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-0.09	0.359	0.364	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Rear (With Belt clip)	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-0.14	0.299	0.303	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-

LTE Band 7										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	20850	2510.0	23.08	23.50	1.102	-0.04	0.432	0.476	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Rear	20850	2510.0	23.08	23.50	1.102	-0.01	0.671	0.739	27
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Rear (With Belt clip)	20850	2510.0	23.08	23.50	1.102	0.05	0.639	0.704	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
20M QPSK 50RB	Front	20850	2510.0	22.04	22.50	1.112	0.06	0.340	0.378	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Rear	20850	2510.0	22.04	22.50	1.112	-0.01	0.528	0.587	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Rear (With Belt clip)	20850	2510.0	22.04	22.50	1.112	-0.05	0.503	0.559	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-



LTE Band 12										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-0.08	0.012	0.013	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Rear	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-0.11	0.031	0.034	28
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Rear (With Belt clip)	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-0.05	0.029	0.031	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
10M QPSK 25RB	Front	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	-0.02	0.010	0.011	-
	Rear	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	0.05	0.026	0.028	-
	Rear (With Belt clip)	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	0.06	0.020	0.021	-

LTE Band 13										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23230	782.0	21.87	22.00	1.030	-0.06	0.077	0.079	-
	Rear	23230	782.0	21.87	22.00	1.030	-0.02	0.147	0.151	29
	Rear (With Belt clip)	23230	782.0	21.87	22.00	1.030	-0.08	0.101	0.104	-
10M QPSK 25RB	Right	23230	782.0	20.96	21.00	1.009	0.03	0.068	0.069	-
	Top	23230	782.0	20.96	21.00	1.009	0.17	0.139	0.140	-
	Rear (With Belt clip)	23230	782.0	20.96	21.00	1.009	0.19	0.098	0.099	-

LTE Band 17										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	0.02	0.017	0.019	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Rear	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	-0.13	0.032	0.035	30
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Rear (With Belt clip)	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	0.14	0.026	0.029	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
10M QPSK 25RB	Front	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	0.13	0.015	0.016	-
	Rear	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.02	0.030	0.033	-
	Rear (With Belt clip)	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.10	0.027	0.029	-

LTE Band 66										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	0.07	0.338	0.351	-
	Rear	132072	1720.0	22.60	23.00	1.096	0.05	0.788	0.864	-
		132322	1745.0	22.64	23.00	1.086	0.09	0.799	0.868	31
		132572	1770.0	22.83	23.00	1.040	0.03	0.823	0.856	-
	Rear (With Belt clip)	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	0.05	0.704	0.732	-
20M QPSK 50RB	Front	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	-0.03	0.301	0.306	-
	Rear	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	0.19	0.780	0.793	-
	Rear (With Belt clip)	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	-0.10	0.687	0.698	-
20M QPSK 100RB	Rear	132572	1770.0	21.81	22.00	1.045	-0.12	0.744	0.777	-

WIFI 2.4G												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11b 1Mbps	Front	1	2412	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462	15.25	16.00	1.189	0.98	1.019	0.06	0.081	0.098	-
	Rear	1	2412	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462	15.25	16.00	1.189	0.98	1.019	-0.12	0.186	0.225	32
	Rear (With Belt clip)	1	2412	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462	15.25	16.00	1.189	0.98	1.019	0.08	0.123	0.149	-

WIFI 5G U-NII-1												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	36	5180	14.79	15.00	1.050	0.89	1.124	0.05	0.043	0.051	-
		44	5220	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Rear	36	5180	14.79	15.00	1.050	0.89	1.124	-0.10	0.075	0.088	33
		44	5220	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Rear (With Belt clip)	36	5180	14.79	15.00	1.050	0.89	1.124	0.09	0.069	0.081	-
		44	5220	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240	14.35	15.00	1.161	0.89	1.124	-	-	-	-

WIFI 5G U-NII-2A												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	52	5260	14.16	14.50	1.081	0.89	1.125	-	-	-	-
		56	5280	14.19	14.50	1.074	0.89	1.125	0.06	0.038	0.046	-
		64	5320	13.58	14.50	1.236	0.89	1.125	-	-	-	-
	Rear	52	5260	14.16	14.50	1.081	0.89	1.125	-	-	-	-
		56	5280	14.19	14.50	1.074	0.89	1.125	-0.04	0.079	0.095	34
		64	5320	13.58	14.50	1.236	0.89	1.125	-	-	-	-
	Rear (With Belt clip)	52	5260	14.16	14.50	1.081	0.89	1.125	-	-	-	-
		56	5280	14.19	14.50	1.074	0.89	1.125	0.09	0.065	0.079	-
		64	5320	13.58	14.50	1.236	0.89	1.125	-	-	-	-

WIFI 5G U-NII-3												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	149	5745	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785	13.68	14.00	1.076	0.89	1.124	0.05	0.064	0.077	-
		165	5825	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Rear	149	5745	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785	13.68	14.00	1.076	0.89	1.124	-0.02	0.099	0.120	35
		165	5825	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Rear (With Belt clip)	149	5745	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785	13.68	14.00	1.076	0.89	1.124	0.07	0.082	0.099	-
		165	5825	13.54	14.00	1.112	0.89	1.124	-	-	-	-

Bluetooth												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
GFSK	Front	0	2402	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440	4.52	5.00	1.117	0.61	1.632	0.01	0.007	0.013	-
		39	2480	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Rear	0	2402	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440	4.52	5.00	1.117	0.61	1.632	-0.04	0.016	0.029	36
		39	2480	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Rear (With Belt clip)	0	2402	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440	4.52	5.00	1.117	0.61	1.632	0.08	0.010	0.018	-
		39	2480	3.89	4.50	1.151	0.61	1.632	-	-	-	-

**Appendix B:SAR Measurement Results-Hotspot**

GSM850										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 4Tx slots	Front	128	824.2	31.74	32.00	1.062	0.07	0.223	0.237	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Rear	128	824.2	31.74	32.00	1.062	-0.01	0.373	0.396	19
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Left	128	824.2	31.74	32.00	1.062	0.09	0.098	0.104	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Right	128	824.2	31.74	32.00	1.062	0.15	0.074	0.079	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Top	128	824.2	31.74	32.00	1.062	-	-	-	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-
	Bottom	128	824.2	31.74	32.00	1.062	0.10	0.365	0.388	-
		190	836.6	28.94	32.00	2.023	-	-	-	-
		251	848.8	28.88	32.00	2.051	-	-	-	-

PCS1900										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 4Tx slots	Front	512	1850.2	27.81	28.00	1.045	0.06	0.388	0.405	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Rear	512	1850.2	27.81	28.00	1.045	-0.08	0.708	0.740	20
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Left	512	1850.2	27.81	28.00	1.045	0.04	0.116	0.121	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Right	512	1850.2	27.81	28.00	1.045	0.01	0.098	0.102	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Top	512	1850.2	27.81	28.00	1.045	-	-	-	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-
	Bottom	512	1850.2	27.81	28.00	1.045	-0.02	0.659	0.688	-
		661	1880.0	27.59	28.00	1.099	-	-	-	-
		810	1909.8	27.35	28.00	1.161	-	-	-	-

WCDMA Band II										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	0.07	0.345	0.351	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Rear	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	0.06	0.677	0.690	21
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Left	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	0.16	0.100	0.102	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Right	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	-0.05	0.081	0.083	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Top	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	-	-	-	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-
	Bottom	9262	1852.4	24.39	24.50	1.026	-	-	-	-
		9400	1880.0	24.42	24.50	1.019	-0.04	0.628	0.640	-
		9538	1907.6	24.35	24.50	1.035	-	-	-	-

WCDMA Band IV										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	1312	1712.4	23.67	24.00	1.079	0.08	0.556	0.600	-
		1413	1732.6	23.62	24.00	1.091	-	-	-	-
		1513	1752.6	23.66	24.00	1.081	-	-	-	-
	Rear	1312	1712.4	23.67	24.00	1.079	-0.14	0.926	0.999	22
		1413	1732.6	23.62	24.00	1.091	0.06	0.911	0.994	-
		1513	1752.6	23.66	24.00	1.081	0.05	0.899	0.972	-
	Left	1312	1712.4	23.67	24.00	1.079	0.08	0.142	0.153	-
		1413	1732.6	23.62	24.00	1.091	-	-	-	-
		1513	1752.6	23.66	24.00	1.081	-	-	-	-
	Right	1312	1712.4	23.67	24.00	1.079	0.10	0.102	0.110	-
		1413	1732.6	23.62	24.00	1.091	-	-	-	-
		1513	1752.6	23.66	24.00	1.081	-	-	-	-
	Top	1312	1712.4	23.67	24.00	1.079	-	-	-	-
		1413	1732.6	23.62	24.00	1.091	-	-	-	-
		1513	1752.6	23.66	24.00	1.081	-	-	-	-
	Bottom	1312	1712.4	23.67	24.00	1.079	0.13	0.845	0.912	-
		1413	1732.6	23.62	24.00	1.091	0.06	0.836	0.912	-
		1513	1752.6	23.66	24.00	1.081	0.04	0.869	0.940	-

WCDMA Band V										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Front	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	0.09	0.224	0.246	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Rear	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	-0.07	0.401	0.440	23
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Left	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	0.13	0.069	0.076	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Right	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	0.10	0.042	0.046	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Top	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	-	-	-	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-
	Bottom	4132	826.4	24.47	25.00	1.130	-	-	-	-
		4183	836.6	24.60	25.00	1.096	-0.10	0.388	0.425	-
		4233	846.6	24.50	25.00	1.122	-	-	-	-

LTE Band 2										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	-0.03	0.487	0.539	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Rear	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	-0.07	0.702	0.777	24
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Left	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	0.05	0.092	0.102	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Right	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	0.17	0.120	0.133	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Top	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	-	-	-	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
	Bottom	18700	1860.0	22.97	23.50	1.130	-	-	-	-
		18900	1880.0	23.06	23.50	1.107	0.13	0.655	0.725	-
		19100	1900.0	23.02	23.50	1.117	-	-	-	-
20M QPSK 50RB	Front	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	0.19	0.389	0.435	-
	Rear	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	-0.05	0.545	0.610	-
	Left	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	-0.06	0.072	0.081	-
	Right	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	-0.05	0.090	0.101	-
	Top	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	-	-	-	-
	Bottom	18700	1860.0	21.70	22.50	1.202	-	-	-	-
		18900	1880.0	21.95	22.50	1.135	-	-	-	-
		19100	1900.0	22.01	22.50	1.119	-0.14	0.510	0.571	-



LTE Band 4										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	0.17	0.454	0.509	-
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
	Rear	20050	1720.0	22.83	23.50	1.167	0.07	0.886	1.034	25
		20175	1732.5	23.00	23.50	1.122	-0.12	0.894	1.003	-
		20300	1745.0	22.93	23.50	1.140	0.05	0.865	0.986	-
	Left	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	0.04	0.118	0.132	-
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
	Right	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	0.06	0.130	0.146	-
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
	Top	20050	1720.0	22.83	23.50	1.167	-	-	-	-
		20175	1732.5	23.00	23.50	1.122	-	-	-	-
		20300	1745.0	22.93	23.50	1.140	-	-	-	-
	Bottom	20050	1720.0	22.83	23.50	1.167	0.05	0.845	0.986	-
		20175	1732.5	23.00	23.50	1.122	-0.03	0.876	0.983	-
		20300	1745.0	22.93	23.50	1.140	0.03	0.869	0.991	-
20M QPSK 50RB	Front	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	-0.15	0.366	0.370	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Rear	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	-0.13	0.711	0.719	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Left	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	0.08	0.093	0.094	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Right	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	0.07	0.108	0.109	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Top	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	-	-	-	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
	Bottom	20050	1720.0	21.81	22.00	1.045	-	-	-	-
		20175	1732.5	21.95	22.00	1.012	-0.09	0.688	0.696	-
		20300	1745.0	21.79	22.00	1.050	-	-	-	-
20M QPSK 100RB	Rear	20050	1720.0	21.86	22.00	1.033	0.08	0.722	0.746	-
	Bottom	20050	1720.0	21.86	22.00	1.033	0.04	0.699	0.721	-

LTE Band 5										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	0.07	0.235	0.244	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Rear	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-0.03	0.403	0.419	26
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Left	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-0.04	0.052	0.054	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Right	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-0.17	0.075	0.078	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Top	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-	-	-	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
	Bottom	20450	829.0	21.74	22.00	1.062	-	-	-	-
		20525	836.5	21.83	22.00	1.040	-0.02	0.385	0.400	-
		20600	844.0	21.72	22.00	1.067	-	-	-	-
10M QPSK 25RB	Front	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-0.05	0.196	0.199	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Rear	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-0.09	0.359	0.364	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Left	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-0.18	0.040	0.041	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Right	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	0.09	0.064	0.065	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Top	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	-	-	-	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-
	Bottom	20450	829.0	20.58	21.00	1.102	-	-	-	-
		20525	836.5	20.94	21.00	1.014	0.11	0.302	0.306	-
		20600	844.0	20.51	21.00	1.119	-	-	-	-

LTE Band 7										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	20850	2510.0	23.08	23.50	1.102	-0.04	0.432	0.476	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Rear	20850	2510.0	23.08	23.50	1.102	-0.01	0.671	0.739	27
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Left	20850	2510.0	23.08	23.50	1.102	-0.03	0.300	0.330	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Right	20850	2510.0	23.08	23.50	1.102	-0.01	0.147	0.162	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Top	20850	2510.0	23.08	23.50	1.102	-	-	-	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
	Bottom	20850	2510.0	23.08	23.50	1.102	0.04	0.655	0.722	-
		21100	2535.0	23.06	23.50	1.107	-	-	-	-
		21350	2560.0	23.06	23.50	1.107	-	-	-	-
20M QPSK 50RB	Front	20850	2510.0	22.04	22.50	1.112	0.06	0.340	0.378	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Rear	20850	2510.0	22.04	22.50	1.112	-0.01	0.528	0.587	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Left	20850	2510.0	22.04	22.50	1.112	-0.02	0.240	0.267	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Right	20850	2510.0	22.04	22.50	1.112	0.06	0.115	0.128	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Top	20850	2510.0	22.04	22.50	1.112	-	-	-	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-
	Bottom	20850	2510.0	22.04	22.50	1.112	0.08	0.511	0.568	-
		21100	2535.0	21.87	22.50	1.156	-	-	-	-
		21350	2560.0	21.95	22.50	1.135	-	-	-	-

LTE Band 12										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-0.08	0.012	0.013	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Rear	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-0.11	0.031	0.034	28
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Left	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	0.03	0.006	0.006	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Right	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	0.06	0.004	0.004	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Top	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	-	-	-	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
	Bottom	23060	704.0	21.66	22.00	1.081	-	-	-	-
		23095	707.5	21.67	22.00	1.079	0.03	0.030	0.032	-
		23130	711.0	21.59	22.00	1.099	-	-	-	-
10M QPSK 25RB	Front	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	-0.02	0.010	0.011	-
	Rear	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	0.05	0.026	0.028	-
	Left	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	0.12	0.006	0.006	-
	Right	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	0.16	0.004	0.004	-
	Top	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	-	-	-	-
	Bottom	23060	704.0	20.57	21.00	1.104	-	-	-	-
		23095	707.5	20.46	21.00	1.132	-	-	-	-
		23130	711.0	20.69	21.00	1.074	-0.05	0.029	0.031	-

LTE Band 13										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23230	782.0	21.87	22.00	1.030	-0.06	0.077	0.079	-
	Rear	23230	782.0	21.87	22.00	1.030	-0.02	0.147	0.151	29
	Left	23230	782.0	21.87	22.00	1.030	0.19	0.052	0.054	-
	Right	23230	782.0	21.87	22.00	1.030	-0.05	0.024	0.025	-
	Top	23230	782.0	21.87	22.00	1.030	-	-	-	-
	Bottom	23230	782.0	21.87	22.00	1.030	0.02	0.145	0.149	-
10M QPSK 25RB	Front	23230	782.0	20.96	21.00	1.009	0.03	0.068	0.069	-
	Rear	23230	782.0	20.96	21.00	1.009	0.17	0.139	0.140	-
	Left	23230	782.0	20.96	21.00	1.009	0.06	0.045	0.045	-
	Right	23230	782.0	20.96	21.00	1.009	0.13	0.020	0.020	-
	Top	23230	782.0	20.96	21.00	1.009	-	-	-	-
	Bottom	23230	782.0	20.96	21.00	1.009	-0.10	0.132	0.133	-

LTE Band 17										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
10M QPSK 1RB	Front	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	0.02	0.017	0.019	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Rear	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	-0.13	0.032	0.035	30
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Left	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	0.10	0.009	0.010	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Right	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	0.08	0.007	0.008	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Top	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	-	-	-	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
	Bottom	23780	709.0	21.58	22.00	1.102	-	-	-	-
		23790	710.0	21.60	22.00	1.096	0.19	0.031	0.034	-
		23800	711.0	21.56	22.00	1.107	-	-	-	-
10M QPSK 25RB	Front	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	0.13	0.015	0.016	-
	Rear	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.02	0.030	0.033	-
	Left	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.02	0.008	0.009	-
	Right	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.16	0.007	0.008	-
	Top	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-	-	-	-
	Bottom	23780	709.0	20.58	21.00	1.102	-	-	-	-
		23790	710.0	20.63	21.00	1.089	-	-	-	-
		23800	711.0	20.65	21.00	1.084	-0.17	0.029	0.031	-

LTE Band 66										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
20M QPSK 1RB	Front	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	0.07	0.338	0.351	-
	Rear	132072	1720.0	22.60	23.00	1.096	0.05	0.788	0.864	-
		132322	1745.0	22.64	23.00	1.086	0.09	0.799	0.868	31
		132572	1770.0	22.83	23.00	1.040	0.03	0.823	0.856	-
	Left	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	-0.05	0.165	0.172	-
	Right	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	0.17	0.112	0.116	-
	Top	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	-	-	-	-
	Bottom	132072	1720.0	22.60	23.00	1.096	-	-	-	-
		132322	1745.0	22.64	23.00	1.086	-	-	-	-
		132572	1770.0	22.83	23.00	1.040	0.11	0.768	0.799	-
20M QPSK 50RB	Front	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	-0.03	0.301	0.306	-
	Rear	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	0.19	0.780	0.793	-
	Left	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	-0.13	0.153	0.155	-
	Right	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	-0.07	0.100	0.102	-
	Top	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	-	-	-	-
	Bottom	132072	1720.0	21.57	22.00	1.104	-	-	-	-
		132322	1745.0	21.45	22.00	1.135	-	-	-	-
		132572	1770.0	21.93	22.00	1.016	0.15	0.760	0.772	-
20M QPSK 100RB	Rear	132572	1770.0	21.81	22.00	1.045	-0.12	0.744	0.777	-

WIFI 2.4G												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11b	Front	1	2412.0	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437.0	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462.0	15.25	16.00	1.189	0.98	1.019	0.060	0.081	0.098	-
	Rear	1	2412.0	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437.0	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462.0	15.25	16.00	1.189	0.98	1.019	-0.120	0.186	0.225	32
	Left	1	2412.0	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437.0	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462.0	15.25	16.00	1.189	0.98	1.019	-	-	-	-
	Right	1	2412.0	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437.0	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462.0	15.25	16.00	1.189	0.98	1.019	0.030	0.045	0.055	-
	Top	1	2412.0	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437.0	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462.0	15.25	16.00	1.189	0.98	1.019	-0.130	0.086	0.104	-
	Bottom	1	2412.0	14.84	15.50	1.164	0.98	1.019	-	-	-	-
		6	2437.0	15.23	16.00	1.194	0.98	1.019	-	-	-	-
		11	2462.0	15.25	16.00	1.189	0.98	1.019	-	-	-	-

WIFI 5G U-NII-1												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	36	5180.0	14.79	15.00	1.050	0.89	1.124	0.050	0.043	0.051	-
		44	5220.0	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240.0	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Rear	36	5180.0	14.79	15.00	1.050	0.89	1.124	-0.100	0.075	0.088	33
		44	5220.0	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240.0	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Left	36	5180.0	14.79	15.00	1.050	0.89	1.124	-	-	-	-
		44	5220.0	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240.0	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Right	36	5180.0	14.79	15.00	1.050	0.89	1.124	-0.070	0.020	0.024	-
		44	5220.0	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240.0	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Top	36	5180.0	14.79	15.00	1.050	0.89	1.124	0.030	0.068	0.080	-
		44	5220.0	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240.0	14.35	15.00	1.161	0.89	1.124	-	-	-	-
	Bottom	36	5180.0	14.79	15.00	1.050	0.89	1.124	-	-	-	-
		44	5220.0	14.56	15.00	1.107	0.89	1.124	-	-	-	-
		48	5240.0	14.35	15.00	1.161	0.89	1.124	-	-	-	-

WIFI 5G U-NII-3												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11a	Front	149	5745.0	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785.0	13.68	14.00	1.076	0.89	1.124	0.050	0.064	0.077	-
		165	5825.0	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Rear	149	5745.0	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785.0	13.68	14.00	1.076	0.89	1.124	-0.020	0.099	0.120	35
		165	5825.0	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Left	149	5745.0	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785.0	13.68	14.00	1.076	0.89	1.124	-	-	-	-
		165	5825.0	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Right	149	5745.0	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785.0	13.68	14.00	1.076	0.89	1.124	0.040	0.053	0.064	-
		165	5825.0	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Top	149	5745.0	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785.0	13.68	14.00	1.076	0.89	1.124	-0.080	0.072	0.087	-
		165	5825.0	13.54	14.00	1.112	0.89	1.124	-	-	-	-
	Bottom	149	5745.0	13.52	14.00	1.117	0.89	1.124	-	-	-	-
		157	5785.0	13.68	14.00	1.076	0.89	1.124	-	-	-	-
		165	5825.0	13.54	14.00	1.112	0.89	1.124	-	-	-	-



Bluetooth												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
GFSK	Front	0	2402.0	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440.0	4.52	5.00	1.117	0.61	1.632	0.010	0.007	0.013	-
		39	2480.0	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Rear	0	2402.0	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440.0	4.52	5.00	1.117	0.61	1.632	-0.040	0.016	0.029	36
		39	2480.0	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Left	0	2402.0	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440.0	4.52	5.00	1.117	0.61	1.632	-	-	-	-
		39	2480.0	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Right	0	2402.0	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440.0	4.52	5.00	1.117	0.61	1.632	-0.040	0.009	0.016	-
		39	2480.0	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Top	0	2402.0	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440.0	4.52	5.00	1.117	0.61	1.632	0.030	0.006	0.011	-
		39	2480.0	3.89	4.50	1.151	0.61	1.632	-	-	-	-
	Bottom	0	2402.0	3.87	4.50	1.156	0.61	1.632	-	-	-	-
		19	2440.0	4.52	5.00	1.117	0.61	1.632	-	-	-	-
		39	2480.0	3.89	4.50	1.151	0.61	1.632	-	-	-	-

**Appendix C: Simultaneous Transmission analysis-Front of face**

WWAN + WLAN 2.4G					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	WLAN 2.4G	
GSM	GSM850	Front	0.111	0.024	0.135
	PCS1900	Front	0.158	0.024	0.182
WCDMA	Band II	Front	0.154	0.024	0.178
	Band IV	Front	0.205	0.024	<b>0.229</b>
	Band V	Front	0.124	0.024	0.148
LTE	Band 2	Front	0.157	0.024	0.181
	Band 4	Front	0.202	0.024	0.226
	Band 5	Front	0.103	0.024	0.127
	Band 7	Front	0.100	0.024	0.124
	Band 12	Front	0.007	0.024	0.031
	Band 13	Front	0.038	0.024	0.062
	Band 17	Front	0.007	0.024	0.031
	Band 66	Front	0.185	0.024	0.209

WWAN + WLAN 5G					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	WLAN 5G	
GSM	GSM850	Front	0.111	0.045	0.156
	PCS1900	Front	0.158	0.045	0.203
WCDMA	Band II	Front	0.154	0.045	0.199
	Band IV	Front	0.205	0.045	<b>0.250</b>
	Band V	Front	0.124	0.045	0.169
LTE	Band 2	Front	0.157	0.045	0.202
	Band 4	Front	0.202	0.045	0.247
	Band 5	Front	0.103	0.045	0.148
	Band 7	Front	0.100	0.045	0.145
	Band 12	Front	0.007	0.045	0.052
	Band 13	Front	0.038	0.045	0.083
	Band 17	Front	0.007	0.045	0.052
	Band 66	Front	0.185	0.045	0.230

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	BT	
GSM	GSM850	Front	0.111	0.008	0.119
	PCS1900	Front	0.158	0.008	0.166
WCDMA	Band II	Front	0.154	0.008	0.162
	Band IV	Front	0.205	0.008	<b>0.213</b>
	Band V	Front	0.124	0.008	0.132
LTE	Band 2	Front	0.157	0.008	0.165
	Band 4	Front	0.202	0.008	0.210
	Band 5	Front	0.103	0.008	0.111
	Band 7	Front	0.100	0.008	0.108
	Band 12	Front	0.007	0.008	0.015
	Band 13	Front	0.038	0.008	0.046
	Band 17	Front	0.007	0.008	0.015
	Band 66	Front	0.185	0.008	0.193

**Appendix C: Simultaneous Transmission analysis-Body-worn**

WWAN + WLAN 2.4G					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	WLAN 2.4G	
GSM	GSM850	Front	0.237	0.098	0.335
		Rear	0.396	0.225	0.621
		Rear(With Belt clip)	0.331	0.149	0.480
	PCS1900	Front	0.405	0.098	0.503
		Rear	0.740	0.225	0.965
		Rear(With Belt clip)	0.627	0.149	0.776
WCDMA	Band II	Front	0.351	0.098	0.449
		Rear	0.690	0.225	0.915
		Rear(With Belt clip)	0.601	0.149	0.750
	Band IV	Front	0.600	0.098	0.698
		Rear	0.999	0.225	1.224
		Rear(With Belt clip)	0.847	0.149	0.996
	Band V	Front	0.246	0.098	0.344
		Rear	0.440	0.225	0.665
		Rear(With Belt clip)	0.317	0.149	0.466
LTE	Band 2	Front	0.539	0.098	0.637
		Rear	0.777	0.225	1.002
		Rear(With Belt clip)	0.694	0.149	0.843
	Band 4	Front	0.509	0.098	0.607
		Rear	1.034	0.225	1.259
		Rear(With Belt clip)	0.798	0.149	0.947
	Band 5	Front	0.244	0.098	0.342
		Rear	0.419	0.225	0.644
		Rear(With Belt clip)	0.355	0.149	0.504
	Band 7	Front	0.476	0.098	0.574
		Rear	0.739	0.225	0.964
		Rear(With Belt clip)	0.704	0.149	0.853
	Band 12	Front	0.013	0.098	0.111
		Rear	0.034	0.225	0.259
		Rear(With Belt clip)	0.031	0.149	0.180
	Band 13	Front	0.079	0.098	0.177
		Rear	0.151	0.225	0.376
		Rear(With Belt clip)	0.104	0.149	0.253
	Band 17	Front	0.019	0.098	0.117
		Rear	0.035	0.225	0.260
		Rear(With Belt clip)	0.029	0.149	0.178
Band 66	Front	0.351	0.098	0.449	
	Rear	0.868	0.225	1.093	
	Rear(With Belt clip)	0.732	0.149	0.881	

WWAN + WLAN 5G					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	WLAN 5G	
GSM	GSM850	Front	0.237	0.077	0.314
		Rear	0.396	0.120	0.516
		Rear(With Belt clip)	0.331	0.099	0.430
	PCS1900	Front	0.405	0.077	0.482
		Rear	0.740	0.120	0.860
		Rear(With Belt clip)	0.627	0.099	0.726
WCDMA	Band II	Front	0.351	0.077	0.428
		Rear	0.690	0.120	0.810
		Rear(With Belt clip)	0.601	0.099	0.700
	Band IV	Front	0.600	0.077	0.677
		Rear	0.999	0.120	1.119
		Rear(With Belt clip)	0.847	0.099	0.946
	Band V	Front	0.246	0.077	0.323
		Rear	0.440	0.120	0.560
		Rear(With Belt clip)	0.317	0.099	0.416
LTE	Band 2	Front	0.539	0.077	0.616
		Rear	0.777	0.120	0.897
		Rear(With Belt clip)	0.694	0.099	0.793
	Band 4	Front	0.509	0.077	0.586
		Rear	1.034	0.120	1.154
		Rear(With Belt clip)	0.798	0.099	0.897
	Band 5	Front	0.244	0.077	0.321
		Rear	0.419	0.120	0.539
		Rear(With Belt clip)	0.355	0.099	0.454
	Band 7	Front	0.476	0.077	0.553
		Rear	0.739	0.120	0.859
		Rear(With Belt clip)	0.704	0.099	0.803
	Band 12	Front	0.013	0.077	0.090
		Rear	0.034	0.120	0.154
		Rear(With Belt clip)	0.031	0.099	0.130
	Band 13	Front	0.079	0.077	0.156
		Rear	0.151	0.120	0.271
		Rear(With Belt clip)	0.104	0.099	0.203
	Band 17	Front	0.019	0.077	0.096
		Rear	0.035	0.120	0.155
		Rear(With Belt clip)	0.029	0.099	0.128
Band 66	Front	0.351	0.077	0.428	
	Rear	0.868	0.120	0.988	
	Rear(With Belt clip)	0.732	0.099	0.831	

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	BT	
GSM	GSM850	Front	0.237	0.013	0.250
		Rear	0.396	0.029	0.425
		Rear(With Belt clip)	0.331	0.018	0.349
	PCS1900	Front	0.405	0.013	0.418
		Rear	0.740	0.029	0.769
		Rear(With Belt clip)	0.627	0.018	0.645
WCDMA	Band II	Front	0.351	0.013	0.364
		Rear	0.690	0.029	0.719
		Rear(With Belt clip)	0.601	0.018	0.619
	Band IV	Front	0.600	0.013	0.613
		Rear	0.999	0.029	1.028
		Rear(With Belt clip)	0.847	0.018	0.865
	Band V	Front	0.246	0.013	0.259
		Rear	0.440	0.029	0.469
		Rear(With Belt clip)	0.317	0.018	0.335
LTE	Band 2	Front	0.539	0.013	0.552
		Rear	0.777	0.029	0.806
		Rear(With Belt clip)	0.694	0.018	0.712
	Band 4	Front	0.509	0.013	0.522
		Rear	1.034	0.029	1.063
		Rear(With Belt clip)	0.798	0.018	0.816
	Band 5	Front	0.244	0.013	0.257
		Rear	0.419	0.029	0.448
		Rear(With Belt clip)	0.355	0.018	0.373
	Band 7	Front	0.476	0.013	0.489
		Rear	0.739	0.029	0.768
		Rear(With Belt clip)	0.704	0.018	0.722
	Band 12	Front	0.013	0.013	0.026
		Rear	0.034	0.029	0.063
		Rear(With Belt clip)	0.031	0.018	0.049
	Band 13	Front	0.079	0.013	0.092
		Rear	0.151	0.029	0.180
		Rear(With Belt clip)	0.104	0.018	0.122
	Band 17	Front	0.019	0.013	0.032
		Rear	0.035	0.029	0.064
		Rear(With Belt clip)	0.029	0.018	0.047
Band 66	Front	0.351	0.013	0.364	
	Rear	0.868	0.029	0.897	
	Rear(With Belt clip)	0.732	0.018	0.750	

**Appendix C: Simultaneous Transmission analysis-Hotspot**

WWAN + WLAN 2.4G					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	WLAN 2.4G	
GSM	GSM850	Front	0.237	0.098	0.335
		Rear	0.396	0.225	0.621
		Left	0.104	-	0.104
		Right	0.079	0.055	0.134
		Top	-	0.104	0.104
		Bottom	0.388	-	0.388
	PCS1900	Front	0.405	0.098	0.503
		Rear	0.740	0.225	0.965
		Left	0.121	-	0.121
		Right	0.102	0.055	0.157
		Top	-	0.104	0.104
		Bottom	0.688	-	0.688
WCDMA	Band II	Front	0.351	0.098	0.449
		Rear	0.690	0.225	0.915
		Left	0.102	-	0.102
		Right	0.083	0.055	0.138
		Top	-	0.104	0.104
		Bottom	0.640	-	0.640
	Band IV	Front	0.600	0.098	0.698
		Rear	0.999	0.225	1.224
		Left	0.153	-	0.153
		Right	0.110	0.055	0.165
		Top	-	0.104	0.104
		Bottom	0.940	-	0.940
	Band V	Front	0.246	0.098	0.344
		Rear	0.440	0.225	0.665
		Left	0.076	-	0.076
		Right	0.046	0.055	0.101
		Top	-	0.104	0.104
		Bottom	0.425	-	0.425

LTE	Band 2	Front	0.539	0.098	0.637
		Rear	0.777	0.225	1.002
		Left	0.102	-	0.102
		Right	0.133	0.055	0.188
		Top	-	0.104	0.104
		Bottom	0.725	-	0.725
	Band 4	Front	0.509	0.098	0.607
		Rear	1.034	0.225	1.259
		Left	0.132	-	0.132
		Right	0.146	0.055	0.201
		Top	-	0.104	0.104
		Bottom	0.991	-	0.991
	Band 5	Front	0.244	0.098	0.342
		Rear	0.419	0.225	0.644
		Left	0.054	-	0.054
		Right	0.078	0.055	0.133
		Top	-	0.104	0.104
		Bottom	0.400	-	0.400
	Band 7	Front	0.476	0.098	0.574
		Rear	0.739	0.225	0.964
		Left	0.330	-	0.330
		Right	0.162	0.055	0.217
		Top	-	0.104	0.104
		Bottom	0.722	-	0.722
	Band 12	Front	0.013	0.098	0.111
		Rear	0.034	0.225	0.259
		Left	0.006	-	0.006
		Right	0.004	0.055	0.059
		Top	-	0.104	0.104
		Bottom	0.032	-	0.032
	Band 13	Front	0.079	0.098	0.177
		Rear	0.151	0.225	0.376
		Left	0.054	-	0.054
		Right	0.025	0.055	0.080
		Top	-	0.104	0.104
		Bottom	0.149	-	0.149
	Band 17	Front	0.019	0.098	0.117
		Rear	0.035	0.225	0.260
		Left	0.010	-	0.010
		Right	0.008	0.055	0.063
		Top	-	0.104	0.104
		Bottom	0.034	-	0.034
Band 66	Front	0.351	0.098	0.449	
	Rear	0.868	0.225	1.093	
	Left	0.172	-	0.172	
	Right	0.116	0.055	0.171	
	Top	-	0.104	0.104	
	Bottom	0.799	-	0.799	

WWAN + WLAN 5G					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	WLAN 5G	
GSM	GSM850	Front	0.237	0.077	0.314
		Rear	0.396	0.120	0.516
		Left	0.104	-	0.104
		Right	0.079	0.064	0.143
		Top	-	0.087	0.087
		Bottom	0.388	-	0.388
	PCS1900	Front	0.405	0.077	0.482
		Rear	0.740	0.120	0.860
		Left	0.121	-	0.121
		Right	0.102	0.064	0.166
		Top	-	0.087	0.087
		Bottom	0.688	-	0.688
WCDMA	Band II	Front	0.351	0.077	0.428
		Rear	0.690	0.120	0.810
		Left	0.102	-	0.102
		Right	0.083	0.064	0.147
		Top	-	0.087	0.087
		Bottom	0.640	-	0.640
	Band IV	Front	0.600	0.077	0.677
		Rear	0.999	0.120	1.119
		Left	0.153	-	0.153
		Right	0.110	0.064	0.174
		Top	-	0.087	0.087
		Bottom	0.940	-	0.940
	Band V	Front	0.246	0.077	0.323
		Rear	0.440	0.120	0.560
		Left	0.076	-	0.076
		Right	0.046	0.064	0.110
		Top	-	0.087	0.087
		Bottom	0.425	-	0.425



LTE	Band 2	Front	0.539	0.077	0.616
		Rear	0.777	0.120	0.897
		Left	0.102	-	0.102
		Right	0.133	0.064	0.197
		Top	-	0.087	0.087
		Bottom	0.725	-	0.725
	Band 4	Front	0.509	0.077	0.586
		Rear	1.034	0.120	1.154
		Left	0.132	-	0.132
		Right	0.146	0.064	0.210
		Top	-	0.087	0.087
		Bottom	0.991	-	0.991
	Band 5	Front	0.244	0.077	0.321
		Rear	0.419	0.120	0.539
		Left	0.054	-	0.054
		Right	0.078	0.064	0.142
		Top	-	0.087	0.087
		Bottom	0.400	-	0.400
	Band 7	Front	0.476	0.077	0.553
		Rear	0.739	0.120	0.859
		Left	0.330	-	0.330
		Right	0.162	0.064	0.226
		Top	-	0.087	0.087
		Bottom	0.722	-	0.722
	Band 12	Front	0.013	0.077	0.090
		Rear	0.034	0.120	0.154
		Left	0.006	-	0.006
		Right	0.004	0.064	0.068
		Top	-	0.087	0.087
		Bottom	0.032	-	0.032
	Band 13	Front	0.079	0.077	0.156
		Rear	0.151	0.120	0.271
		Left	0.054	-	0.054
		Right	0.025	0.064	0.089
		Top	-	0.087	0.087
		Bottom	0.149	-	0.149
Band 17	Front	0.019	0.077	0.096	
	Rear	0.035	0.120	0.155	
	Left	0.010	-	0.010	
	Right	0.008	0.064	0.072	
	Top	-	0.087	0.087	
	Bottom	0.034	-	0.034	
Band 66	Front	0.351	0.077	0.428	
	Rear	0.868	0.120	0.988	
	Left	0.172	-	0.172	
	Right	0.116	0.064	0.180	
	Top	-	0.087	0.087	
	Bottom	0.799	-	0.799	

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	BT	
GSM	GSM850	Front	0.237	0.013	0.250
		Rear	0.396	0.029	0.425
		Left	0.104	-	0.104
		Right	0.079	0.016	0.095
		Top	-	0.011	0.011
		Bottom	0.388	-	0.388
	PCS1900	Front	0.405	0.013	0.418
		Rear	0.740	0.029	0.769
		Left	0.121	-	0.121
		Right	0.102	0.016	0.118
		Top	-	0.011	0.011
		Bottom	0.688	-	0.688
WCDMA	Band II	Front	0.351	0.013	0.364
		Rear	0.690	0.029	0.719
		Left	0.102	-	0.102
		Right	0.083	0.016	0.099
		Top	-	0.011	0.011
		Bottom	0.640	-	0.640
	Band IV	Front	0.600	0.013	0.613
		Rear	0.999	0.029	1.028
		Left	0.153	-	0.153
		Right	0.110	0.016	0.126
		Top	-	0.011	0.011
		Bottom	0.940	-	0.940
	Band V	Front	0.246	0.013	0.259
		Rear	0.440	0.029	0.469
		Left	0.076	-	0.076
		Right	0.046	0.016	0.062
		Top	-	0.011	0.011
		Bottom	0.425	-	0.425

LTE	Band 2	Front	0.539	0.013	0.552
		Rear	0.777	0.029	0.806
		Left	0.102	-	0.102
		Right	0.133	0.016	0.149
		Top	-	0.011	0.011
		Bottom	0.725	-	0.725
	Band 4	Front	0.509	0.013	0.522
		Rear	1.034	0.029	1.063
		Left	0.132	-	0.132
		Right	0.146	0.016	0.162
		Top	-	0.011	0.011
		Bottom	0.991	-	0.991
	Band 5	Front	0.244	0.013	0.257
		Rear	0.419	0.029	0.448
		Left	0.054	-	0.054
		Right	0.078	0.016	0.094
		Top	-	0.011	0.011
		Bottom	0.400	-	0.400
	Band 7	Front	0.476	0.013	0.489
		Rear	0.739	0.029	0.768
		Left	0.330	-	0.330
		Right	0.162	0.016	0.178
		Top	-	0.011	0.011
		Bottom	0.722	-	0.722
	Band 12	Front	0.013	0.013	0.026
		Rear	0.034	0.029	0.063
		Left	0.006	-	0.006
		Right	0.004	0.016	0.020
		Top	-	0.011	0.011
		Bottom	0.032	-	0.032
	Band 13	Front	0.079	0.013	0.092
		Rear	0.151	0.029	0.180
		Left	0.054	-	0.054
		Right	0.025	0.016	0.041
		Top	-	0.011	0.011
		Bottom	0.149	-	0.149
	Band 17	Front	0.019	0.013	0.032
		Rear	0.035	0.029	0.064
		Left	0.010	-	0.010
		Right	0.008	0.016	0.024
		Top	-	0.011	0.011
		Bottom	0.034	-	0.034
Band 66	Front	0.351	0.013	0.364	
	Rear	0.868	0.029	0.897	
	Left	0.172	-	0.172	
	Right	0.116	0.016	0.132	
	Top	-	0.011	0.011	
	Bottom	0.799	-	0.799	

**GSM850 Front-of-face**

Communication System: UID 0, Generic GPRS(TDMA, GMSK, TN 0-1-2-3) (0); Frequency: 824.2 MHz; Duty Cycle: 1:2.00447

Medium parameters used:  $f = 825$  MHz;  $\sigma = 0.898$  S/m;  $\epsilon_r = 42.346$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.4°C; Liquid Temperature: 22.5°C

**DASY Configuration:**

- Probe: EX3DV4 - SN7494; ConvF(10.38, 10.38, 10.38) @ 824.2 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH128/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.140 W/kg

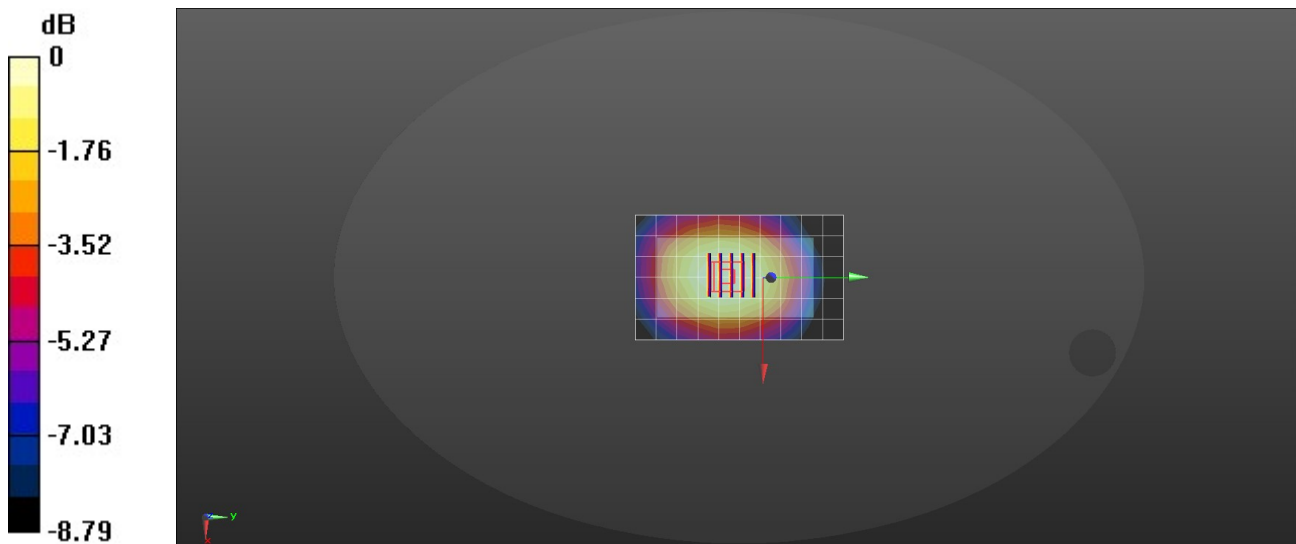
**Front 25mm/CH128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.19 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.161 W/kg

**SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.076 W/kg**

Maximum value of SAR (measured) = 0.138 W/kg



0 dB = 0.138 W/kg = -8.60 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/3/2024

### GSM1900 Front-of-face

Communication System: UID 0, Generic GPRS(TDMA, GMSK, TN 0-1-2-3) (0); Frequency: 1850.2 MHz; Duty Cycle: 1:2.00447

Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.419$  S/m;  $\epsilon_r = 40.066$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.6, 8.6, 8.6) @ 1850.2 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH512/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.206 W/kg

**Front 25mm/CH512/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

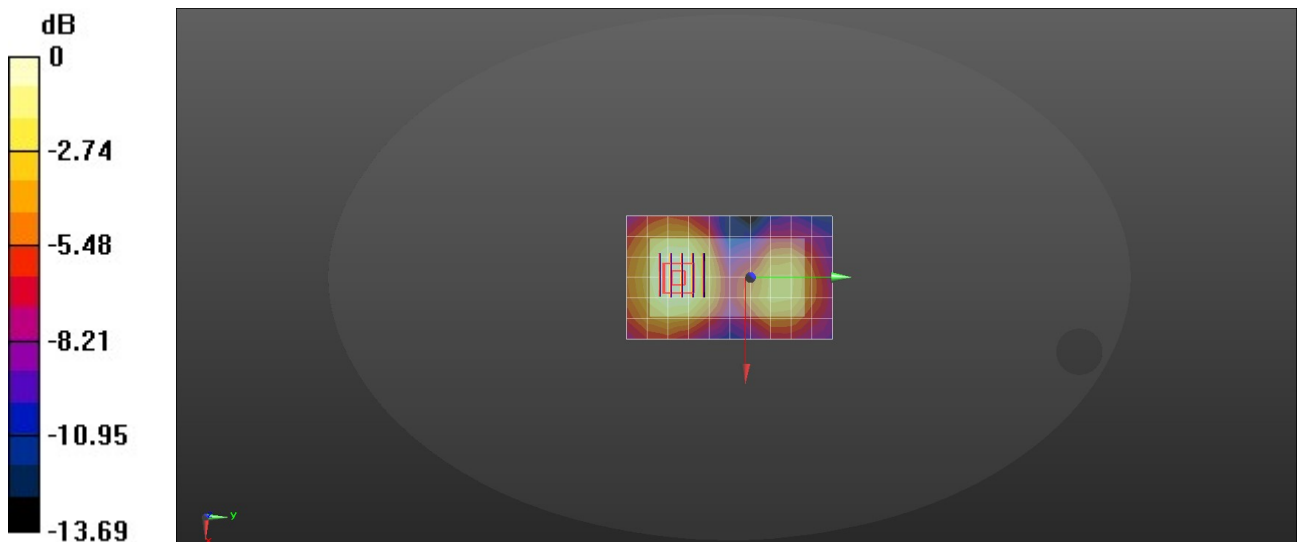
Reference Value = 4.999 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.255 W/kg

**SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.096 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.211 W/kg



0 dB = 0.211 W/kg = -6.76 dBW/kg

**WCDMA Band II Front-of-face**

Communication System: UID 0, Generic UMTS (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.417$  S/m;  $\epsilon_r = 40.019$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.6, 8.6, 8.6) @ 1880 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH9400/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.207 W/kg

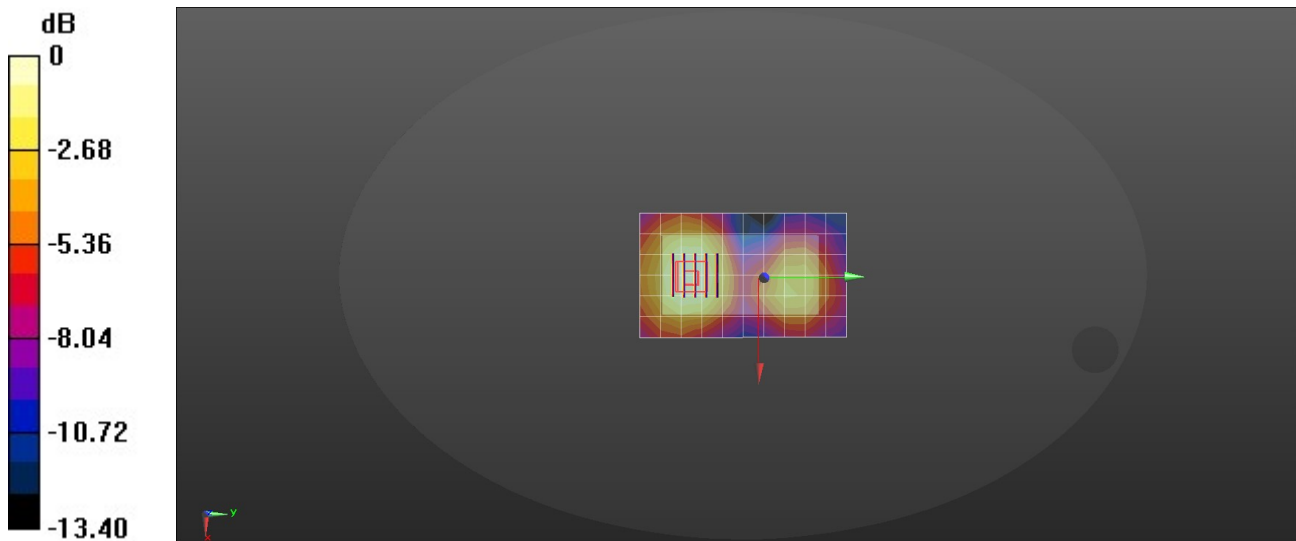
**Front 25mm/CH9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.151 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.258 W/kg

**SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.096 W/kg**

Maximum value of SAR (measured) = 0.215 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/2/2024

**WCDMA Band IV Front-of-face**

Communication System: UID 0, Generic UMTS (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.342$  S/m;  $\epsilon_r = 40.294$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.3°C; Liquid Temperature: 22.1°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.94, 8.94, 8.94) @ 1712.4 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH1312/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm**Info:** Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.262 W/kg

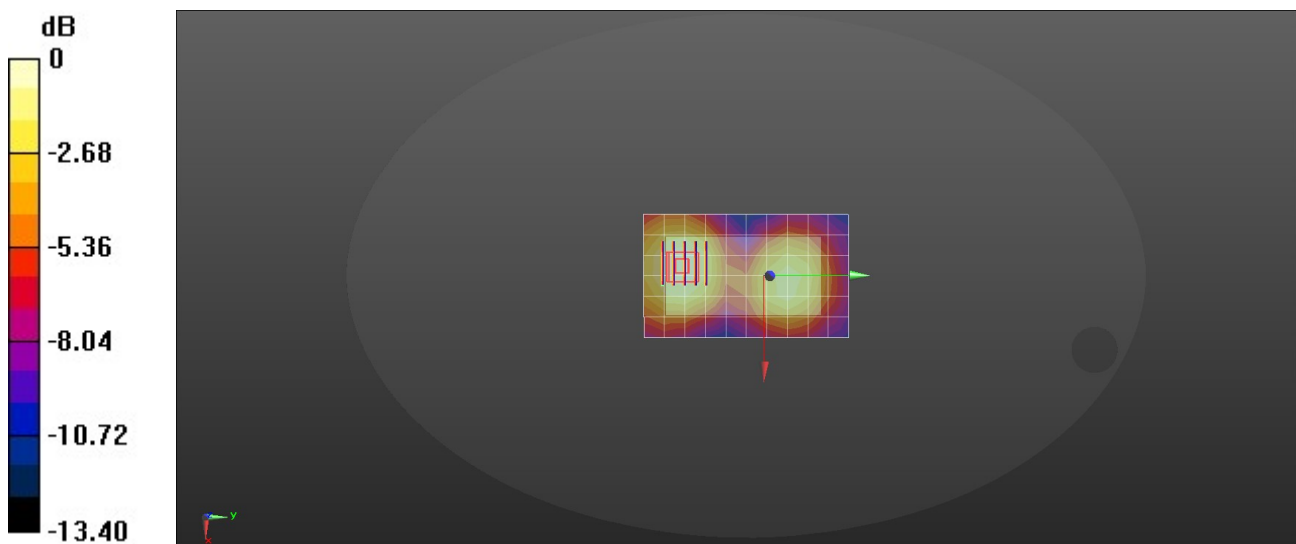
**Front 25mm/CH1312/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.783 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.320 W/kg

**SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.122 W/kg****Info:** Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.266 W/kg



**WCDMA Band V Front-of-face**

Communication System: UID 0, Generic UMTS (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.902$  S/m;  $\epsilon_r = 42.298$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.4°C; Liquid Temperature: 22.5°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.38, 10.38, 10.38) @ 836.6 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH4183/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.147 W/kg

**Front 25mm/CH4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

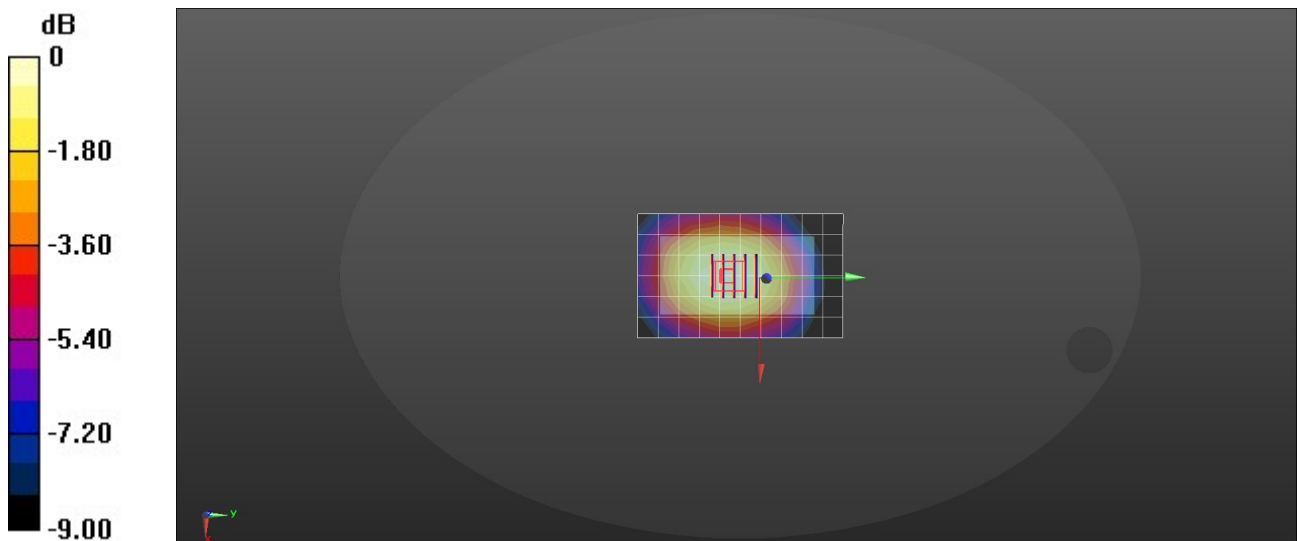
Reference Value = 12.94 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.175 W/kg

**SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.082 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.149 W/kg



0 dB = 0.149 W/kg = -8.27 dBW/kg



**LTE Band 2 Front-of-face**

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.417$  S/m;  $\epsilon_r = 40.019$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.6, 8.6, 8.6) @ 1880 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH18900/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.228 W/kg

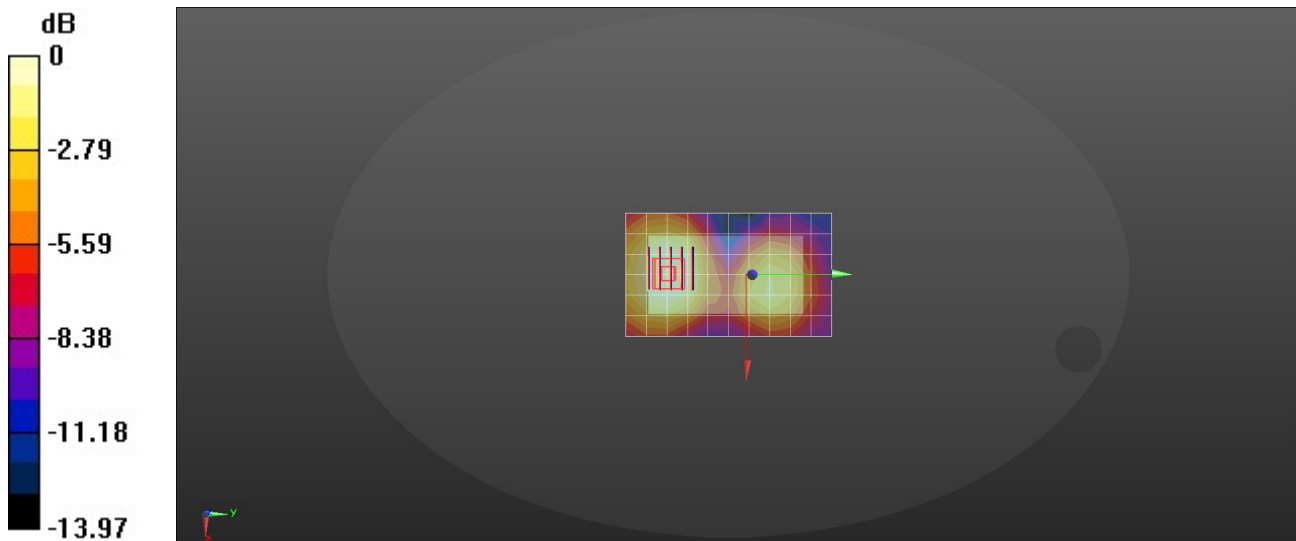
**Front 25mm/CH18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.431 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.238 W/kg

**SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.090 W/kg**

Maximum value of SAR (measured) = 0.198 W/kg



0 dB = 0.198 W/kg = -7.03 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 9/2/2024

**LTE Band 4 Front-of-face**

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.354$  S/m;  $\epsilon_r = 40.283$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 23.3°C; Liquid Temperature: 22.1°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.94, 8.94, 8.94) @ 1732.5 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH20175/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.233 W/kg

**Front 25mm/CH20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

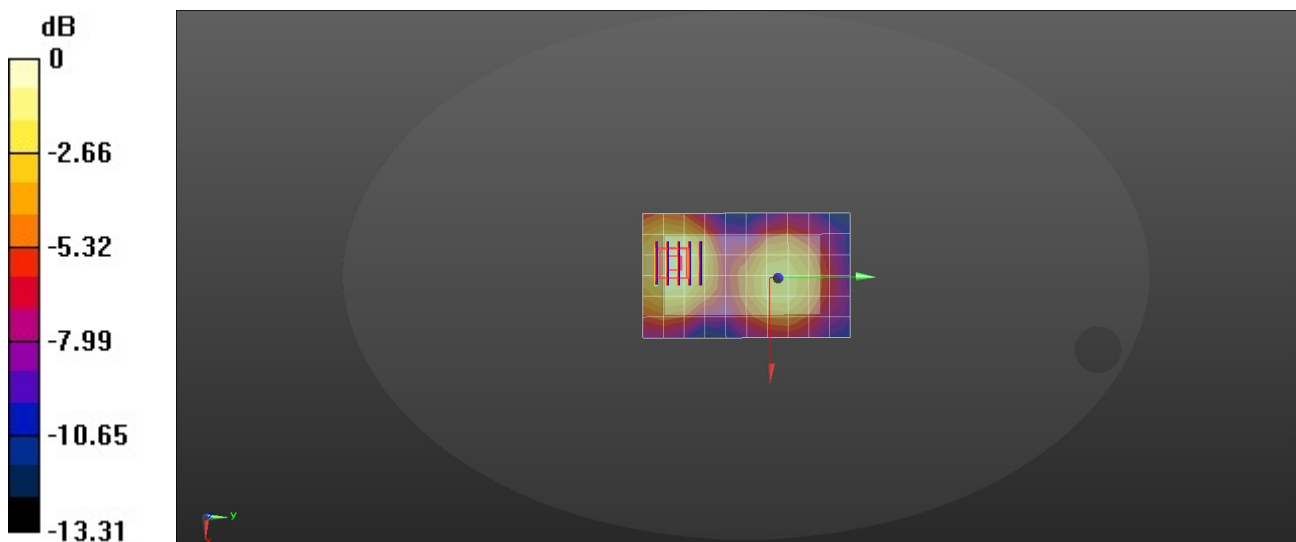
Reference Value = 8.276 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.307 W/kg

**SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.116 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.255 W/kg



0 dB = 0.255 W/kg = -5.93 dBW/kg

**LTE Band 5 Front-of-face**

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 836.5 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.902$  S/m;  $\epsilon_r = 42.298$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Ambient Temperature: 23.4°C; Liquid Temperature: 22.5°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.38, 10.38, 10.38) @ 836.5 MHz; Calibrated: 6/7/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 4/16/2024
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Front 25mm/CH20525/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.128 W/kg

**Front 25mm/CH20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

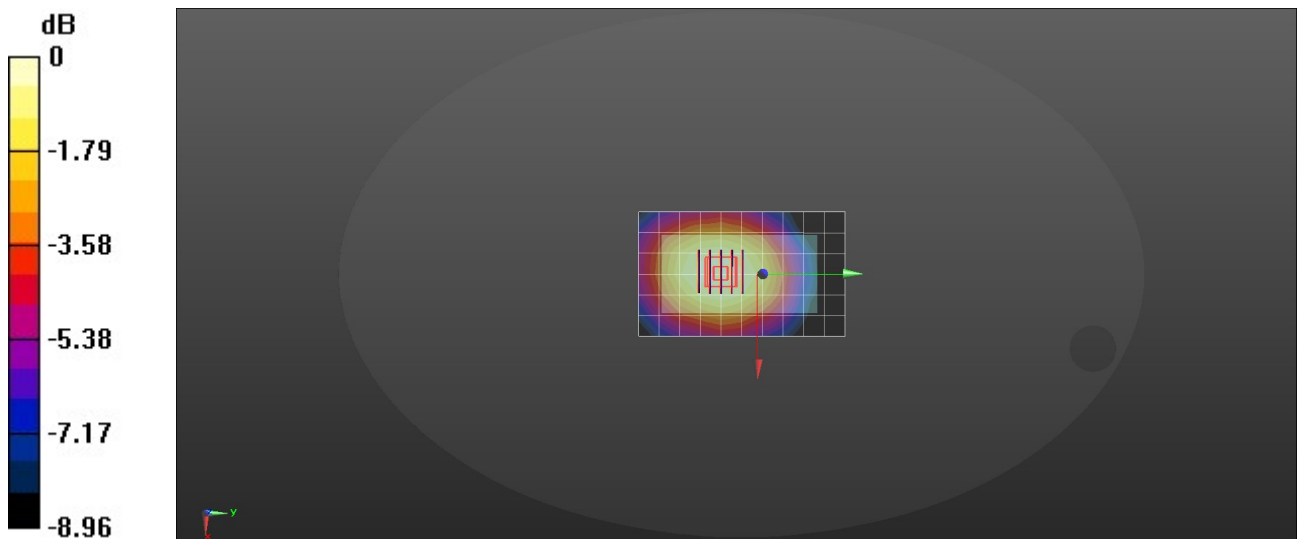
Reference Value = 11.71 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.071 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.131 W/kg



0 dB = 0.131 W/kg = -8.83 dBW/kg