SAR TEST REPORT

Applicant	Dspread Technology (Beijing) Inc
FCC ID	2AGQ6-QPOS-PLUS-L
Product	Mobile POS
Brand	DSPREAD
Model	QPOS Plus
Report No.	R2407A0983-S1V1
Issue Date	October 22, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528-2013, ANSI C95.1: 1992, IEEE C95.1: 1991.** The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Wei Fangying　　Fan Guangchang

Prepared by: Wei Fangying　　*Approved by: Fan Guangchang*

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
TEL: +86-021-50791141/2/3
FAX: +86-021-50791141/2/3-8000

Table of Contents

Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	October 18, 2024
Rev.1	Update description.	October 22, 2024
Note: This revised report (Report No.: R2407A0983-S1V1) supersedes and replaces the previously issued report (Report No.: R2407A0983-S1). Please discard or destroy the previously issued report and dispose of it accordingly.		

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Fan Guangchang
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	https://www.eurofins.com/electrical-and-electronics
E-mail:	Jack.Fan@cpt.eurofinscn.com

1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 20%, Max. = 80%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:
Table 1: Highest Reported SAR

Mode	Highest Reported SAR (W/kg)	
	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
GSM 850	**1.139**	**1.917**
GSM 1900	0.477	0.921
LTE FDD 2	0.937	1.356
LTE FDD 5	0.866	1.016
LTE FDD 7	0.724	1.383
LTE TDD 66 (LTE FDD 4)	0.875	1.035
Wi-Fi (2.4G)	0.019	0.039
Date of Testing: August 7, 2024 ~ September 15, 2024 Date of Sample Received: July 29, 2024		
Note: 1. The device is in compliance with SAR for Uncontrolled Environment /General Population exposure limits (1.6 W/kg and 4.0 W/kg) specified in ANSI C95.1: 1992/IEEE C95.1: 1991 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.		

1) For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.
2) According to TCB workshop October, 2014 RF Exposure Procedures Update (Overlapping LTE Bands):
   a) Main and Div Antenna SAR for LTE Band 4 (Frequency range 1710-1755 MHz) is covered by LTE Band 66 (Frequency range: 1710-1780 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits according to the FCC rule §2.1093, the ANSI C95.1: 1992/IEEE C95.1: 1991 and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013.

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.154	1.917
Note: The detail for simultaneous transmission consideration is described in chapter 10.3.		

3 Description of Equipment Under Test

Client Information

Applicant	Dspread Technology (Beijing) Inc
Applicant address	Rm 407, B12C, #10(Universal Business Park), Jiuxianqiao Road, Chaoyang District, Beijing, China
Manufacturer	Dspread Technology (Beijing) Inc
Manufacturer address	Rm 407, B12C, #10(Universal Business Park), Jiuxianqiao Road, Chaoyang District, Beijing, China

General Technologies

EUT Stage	Identical Prototype
Model	QPOS Plus
IMEI	867279060047919
Hardware Version	2.2.0
Software Version	2.3.0
Antenna Type	Internal Antenna
Wi-Fi Hotspot	Wi-Fi 2.4G
Power Class	GSM 850: 4 GSM 1900: 1 LTE FDD 2/4/5/7/66: 3
Power Level	GSM 850: level 5 GSM 1900: level 0 LTE FDD 2/4/5/7/66: max power
EUT Accessory	
Battery 1	Manufacturer: Beijing Guocai Huayang Technology Co., Ltd. Model: QPOS Plus
Battery 2	Manufacturer: SHEN ZHEN UTILITY ENERGY CO., LTD. Model: QPOS Plus
Note: The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.	

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)	Rx (MHz)
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK,8PSK)	☐Multi-slot Class:8-1UP ☐Multi-slot Class:10-2UP ☒Multi-slot Class:12-4UP ☐Multi-slot Class:33-4UP	824 ~ 849	869 ~ 894
	1900			1850 ~ 1910	1930 ~ 1990
	Does this device support DTM (Dual Transfer Mode)? ☐Yes ☒No				
LTE	FDD 2	QPSK, 16QAM	Rel.13 /Category 1	1850 ~ 1910	1930 ~ 1990
	FDD 4			1710 ~ 1755	2110 ~ 2155
	FDD 5			824 ~ 849	869 ~ 894
	FDD 7			2500 ~ 2570	2620 ~ 2690
	FDD 66			1710 ~ 1780	2110 ~ 2180
	Does this device support Carrier Aggregation (CA) ☐Yes ☒No				
	Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No				
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462	2412 ~ 2462
		OFDM	802.11n HT40	2422 ~ 2452	2422 ~ 2452
	Does this device support MIMO ☐Yes ☒No				
NFC	13.56MHz				

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

KDB 248227 D01 802.11Wi-Fi SAR v02r02
KDB 447498 D01 General RF Exposure Guidance v06
KDB 648474 D04 Handset SAR v01r03
KDB 690783 D01 SAR Listings on Grants v01r03
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02 RF Exposure Reporting v01r02
KDB 941225 D05 SAR for LTE Devices v02r05
KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 941225 D06 Hotspot Mode v02r01

5 Operational Conditions during Test

5.1 Test Positions

5.1.1 Body Worn Configuration

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

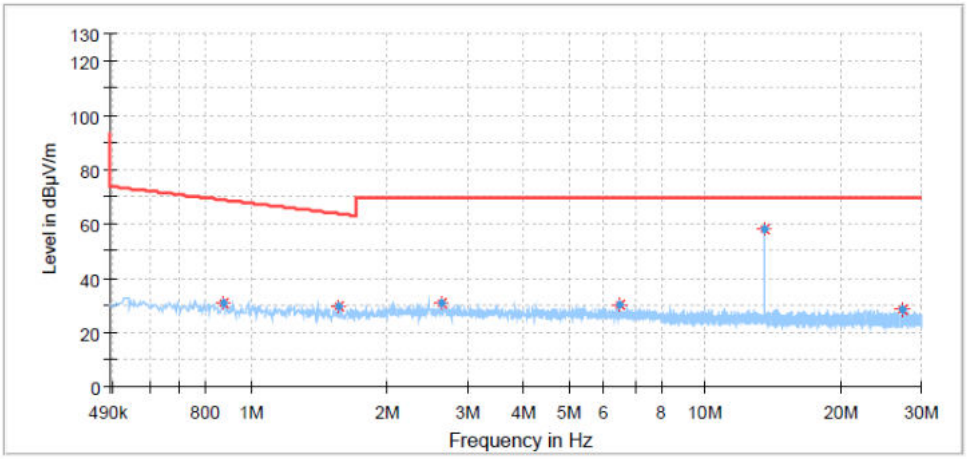
Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person’s face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

5.1.2 NFC Configuration

Output Power



Note: Test data comes from RF report and please refer to the RF report for testing related information.

Carrier Frequency (MHz)	Max.E-field strength (dBµV/m)
13.56	58.11

EIRP[dBm] = E[dBµV/m] − 95.2 = -37.09 dBm

Gain= 0 dBi

So

Maximum Output Power= EIRP - Gain = -37.09 dBm

Standalone SAR Test Exclusion Considerations

Per KDB 447498 D01 (4.3.1):

a) For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g *SAR test exclusion thresholds* are determined by the following:

[(*max. power of channel, including tune-up tolerance, mW*) / (*min. test separation distance, mm*)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,[30] where

f(GHz) is the RF channel transmit frequency in GHz

b) For 100 MHz to 6 GHz and *test separation distances* > 50 mm, the 1-g and 10-g *SAR test exclusion thresholds* are determined by the following (also illustrated in Appendix B):

1) {[Power allowed at *numeric threshold* for 50 mm in step a)] + [(test separation distance - 50 mm)·(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

2) {[Power allowed at *numeric threshold* for 50 mm in step a)] + [(test separation distance - 50 mm)·10]} mW, for > 1500 MHz and ≤ 6 GHz

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

1) For *test separation distances* > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]

2) For *test separation distances* ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½

3) SAR measurement procedures are not established below 100 MHz.

SAR Test Exclusion Thresholds for 13.56 MHz and < 50 mm is 474 mW.

Carrier Frequency (MHz)	Max output power (dBm)	Max output power (mW)	P_{max} (mW)	Low-power exclusion
13.56	-37.09	0.0002	474	Yes

Note: Based on SAR test exclusion, all values meet the SAR test exclusion thresholds and are exempt from routine evaluation.

5.2 Measurement Variability

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:
1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

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

5.3 Test Configuration

5.3.1 GSM Test Configuration

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Output power of reductions:

Table 3: The allowed power reduction in the multi-slot configuration

Number of timeslots in uplink assignment	Permissible nominal reduction of maximum output power (dB)
1	0
2	0 to 3,0
3	1,8 to 4,8
4	3,0 to 6,0

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. GSM voice and GPRS data use GMSK, which is a constant amplitude modulation with minimal peak to average power difference within the time-slot burst. For EDGE, GMSK is used for MCS 1 – MCS 4 and 8-PSK is used for MCS 5 – MCS 9; where 8-PSK has an inherently higher peak-to-average power ratio. The GMSK and 8-PSK EDGE configurations are considered separately for SAR compliance. The GMSK EDGE configurations are grouped with GPRS and considered with respect to time-averaged maximum output power to determine compliance. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.

5.3.2 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

A) Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

C) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

D) Largest Channel Bandwidth Standalone SAR Test Requirements

1) QPSK with 1 RB allocation

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. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

4) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) Other Channel Bandwidth Standalone SAR Test Requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5.3.3 Wi-Fi Test Configuration

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:

- ≤ 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 ≤ 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 ≤ 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.

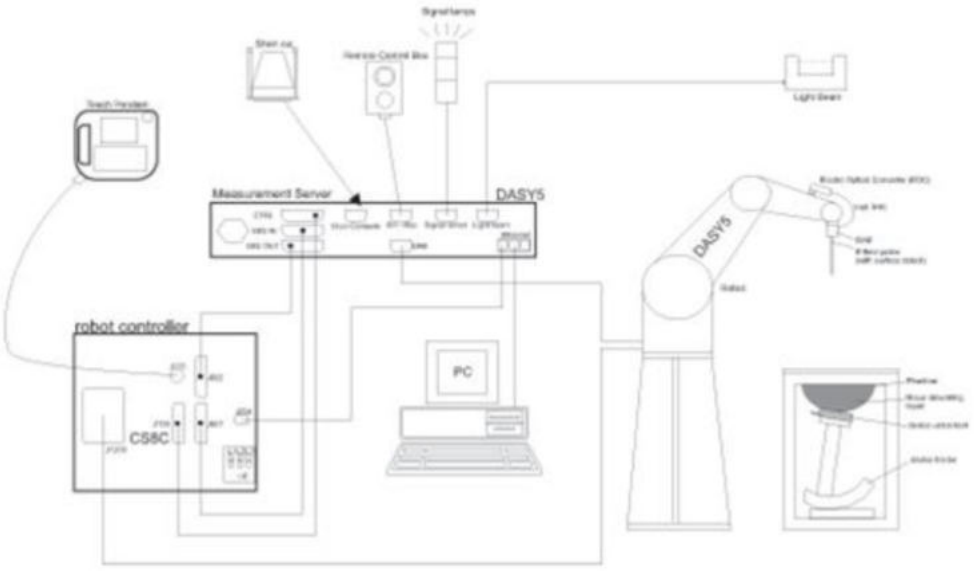
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

6 SAR Measurements System Configuration

6.1 SAR Measurement Set-up

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



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

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.

EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR=C\Delta T/\Delta t$$

Where: Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

Or

$$SAR=|E|^2\sigma/\rho$$

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

6.3 SAR Measurement Procedure

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. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

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 DASY software can find the maximum 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 parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

	≤3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 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: ΔxArea, ΔyArea	≤ 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.	

Zoom Scan

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes 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 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

			≤3GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\triangle x_{zoom} \triangle y_{zoom}$			≤2GHz: ≤8mm 2 – 3GHz: ≤5mm*	3 – 4GHz: ≤5mm* 4 – 6GHz: ≤4mm*
Maximum zoom scan spatial resolution, normal to phantom surface	Uniform grid: $\triangle z_{zoom}(n)$		≤5mm	3 – 4GHz: ≤4mm 4 – 5GHz: ≤3mm 5 – 6GHz: ≤2mm
	Graded grid	$\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface	≤4mm	3 – 4GHz: ≤3mm 4 – 5GHz: ≤2.5mm 5 – 6GHz: ≤2mm
		$\triangle z_{zoom}(n>1)$: between subsequent points	≤1.5•$\triangle z_{zoom}(n-1)$	
Minimum zoom scan volume	X, y, z		≥30mm	3 – 4GHz: ≥28mm 4 – 5GHz: ≥25mm 5 – 6GHz: ≥22mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4W/kg, ≤8mm, ≤7mm and ≤5mm zoom scan resolution may be applied, respectively, for 2GHz to 3GHz, 3GHz to 4GHz and 4GHz to 6GHz.				

Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Software Version	Last Cal.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42404014	/	2024-05-07	2025-05-06
Dielectric Probe Kit	SPEAG	DAK-12	1171	/	2024-07-15	2025-07-14
Power Meter	Agilent	E4417A	GB41291714	/	2024-05-07	2025-05-06
Power Sensor	Agilent	N8481H	MY50350004	/	2024-05-07	2025-05-06
Power Sensor	Agilent	E9327A	US40441622	/	2024-05-07	2025-05-06
Signal Generator	KEYSIGHT	N5182B-X07	MY51350303	/	2023-12-05	2024-12-04
Dual Directional Coupler	UCL	UCL-DDC056G-S	20010600118	/	/	/
Amplifier	R&S	SCU40F	100649	/	/	/
Wireless Communication Tester	Anritsu	MT8820C	6201342015	/	2023-12-05	2024-12-04
Wireless Communication Tester	Agilent	E5515C	MY48360988	/	2023-12-05	2024-12-04
Wireless Communication Tester	R&S	CMW 500	146734	/	2024-05-07	2025-05-06
E-field Probe	SPEAG	EX3DV4	7689	/	2024-06-04	2025-06-03
DAE	SPEAG	DAE4	1692	/	2023-11-08	2024-11-07
Validation Kit 835MHz	SPEAG	D835V2	4d020	/	2023-09-15	2026-09-14
Validation Kit 1750MHz	SPEAG	D1750V2	1033	/	2023-03-23	2026-03-22
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	/	2023-09-12	2026-09-11
Validation Kit 2450MHz	SPEAG	D2450V2	786	/	2023-09-12	2026-09-11
Validation Kit 2600MHz	SPEAG	D2600V2	1025	/	2024-05-08	2027-05-07
Software for Tissue	SPEAG	/	/	DAK 3.0.4.1	/	/
Temperature Probe	Auden	DTM3000	3905	/	2023-12-05	2024-12-04
Twin SAM Phantom	SPEAG	SAM1	1667	/	/	/
Twin SAM Phantom	SPEAG	SAM2	1666	/	/	/
Hygrothermograph	Anymetr	HTC - 1	TA2024A030	/	2024-05-06	2025-05-05
Test System	SPEAGA	TX90 XLspeag	F08/5AH5A1/A/01	52.10.4.1527	/	/

8 Tissue Dielectric Parameter Measurements & System Check

8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18℃ to 25℃ and within ± 2℃ 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 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	ε_r	σ(s/m)
835	41.5	0.90
1750	40.1	1.37
1900	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96

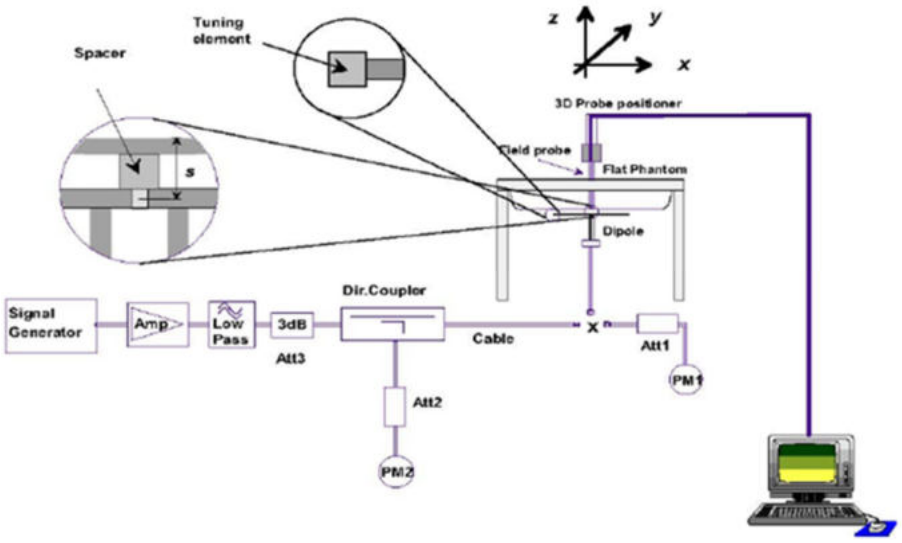
Measurements results

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
835	2024/8/7	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
1750	2024/8/10	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
1900	2024/8/14	21.5	40.1	1.41	40.0	1.40	0.25	0.71
2450	2024/8/19	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	2024/9/15	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm.								

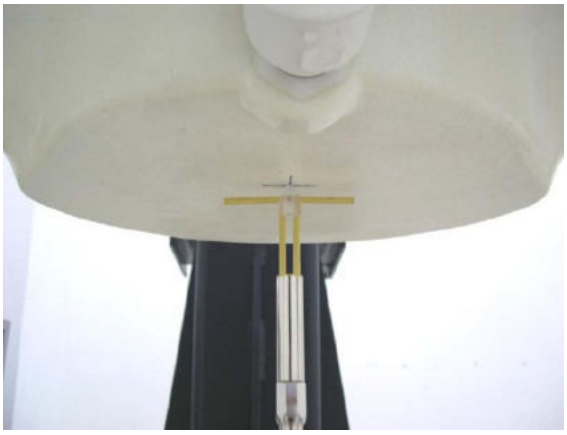
8.2 System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured using the dielectric probe kit and the network analyzer. A system check measurement for every day was made following the determination of the dielectric parameters of the Tissue simulates, using the dipole validation kit. The dipole antenna was placed under the flat section of the twin SAM phantom.

System check is performed regularly on all frequency bands where tests are performed with the DASY system.



Picture 1 System Check setup



Picture 2 Setup Photo

Justification for Extended SAR Dipole Calibrations

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

Dipole		Date of Measurement	Return Loss (dB)	Δ %	Impedance (Ω)			
					Real	ΔΩ	Imaginary	ΔΩ
Dipole D1750V2 SN: 1033	Head Liquid	3/23/2023	36.2	/	51.2	/	-0.98	/
		3/22/2024	35.4	-2.2	51.6	0.4	-1.28	-0.3

System Check Results

Frequency (MHz)	Test Date	Temp ℃	250mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
835	2024/8/7	21.5	2.44	9.76	9.75	0.10	1
1750	2024/8/10	21.5	8.95	35.80	36.80	-2.72	2
1900	2024/8/14	21.5	9.88	39.52	40.40	-2.18	3
2450	2024/8/19	21.5	13.70	54.80	52.60	4.18	4
2600	2024/9/15	21.5	13.90	55.60	56.10	-0.89	5
Note: Target Values used derive from the calibration certificate data storage and evaluation.							

8.3 SAR System Validation

Per FCC KDB 865664 D02v01, SAR system verification is required to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles are used with the required tissue-equivalent media for system validation, according to the procedures outlined in FCC KDB 865664 D01 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point must be validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status, measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters has been included.

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation		
								Sensitivity	Probe Linearity	Probe Isotropy
835	2022/12/10	7689	EX3DV4	835	Head	41.5	0.90	PASS	PASS	PASS
1750	2022/12/10	7689	EX3DV4	1750	Head	40.1	1.37	PASS	PASS	PASS
1900	2022/12/10	7689	EX3DV4	1900	Head	40.0	.1.40	PASS	PASS	PASS
2450	2022/12/10	7689	EX3DV4	2450	Head	39.2	1.80	PASS	PASS	PASS
2600	2022/12/10	7689	EX3DV4	2600	Head	39.0	1.96	PASS	PASS	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664D01v01 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5dB), such as OFDM according to KDB 865664.

9 Normal and Maximum Output Power

KDB 447498 D01 at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit.

9.1 GSM Mode

GSM 850 Full Power--Main Ant		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency (MHz)				Tune-up	Channel/Frequency (MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GPRS/ EGPRS (GMSK)	1 Tx Slot	34.00	32.78	32.81	32.86	9.03	24.97	23.75	23.78	23.83
	2 Tx Slots	33.00	31.86	31.88	31.90	6.02	26.98	25.84	25.86	25.88
	3 Tx Slots	31.00	30.22	30.33	30.44	4.26	26.74	25.96	26.07	26.18
	4 Tx Slots	30.00	29.17	29.27	29.38	3.01	**26.99**	26.16	26.26	26.37
GSM 1900 Full Power--Main Ant		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency (MHz)				Tune-up	Channel/Frequency (MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GPRS/ EGPRS (GMSK)	1 Tx Slot	32.00	30.69	30.55	30.49	9.03	22.97	21.66	21.52	21.46
	2 Tx Slots	31.00	29.81	29.66	29.43	6.02	24.98	23.79	23.64	23.41
	3 Tx Slots	29.50	28.28	28.23	27.96	4.26	25.24	24.02	23.97	23.70
	4 Tx Slots	28.50	27.14	27.09	26.79	3.01	**25.49**	24.13	24.08	23.78
Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.										

9.2 LTE Mode

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

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

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

LTE Band 2							
Full Power-Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	23.61	24.71	24.52	25.00
		1	2	23.65	24.65	24.70	25.00
		1	5	23.02	23.93	23.87	25.00
		3	0	23.79	24.79	24.61	25.00
		3	2	24.00	24.95	24.76	25.00
		3	3	23.35	24.41	24.36	25.00
		6	0	22.08	23.50	23.47	24.00
	16QAM	1	0	22.75	23.90	23.75	24.00
		1	2	22.43	23.86	23.88	24.00
		1	5	22.09	23.27	23.26	24.00
		3	0	22.34	23.83	23.80	24.00
		3	2	22.59	23.99	23.93	24.00
		3	3	22.00	23.50	23.55	24.00
		6	0	21.02	22.17	22.76	23.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	24.02	24.95	24.97	25.00
		1	7	23.84	24.90	24.96	25.00
		1	14	22.52	23.54	23.88	25.00
		8	0	22.18	23.59	23.79	24.00
		8	4	22.23	23.76	23.96	24.00
		8	7	22.08	23.40	23.55	24.00
		15	0	22.08	23.48	23.66	24.00
	16QAM	1	0	23.33	23.91	23.94	24.00
		1	7	22.66	23.87	23.96	24.00
		1	14	21.34	22.86	23.35	24.00

		8	0	21.22	22.25	23.00	23.50
		8	4	21.52	22.45	23.21	23.50
		8	7	21.21	22.12	22.84	23.50
		15	0	21.17	22.14	22.86	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	23.84	24.87	24.92	25.00
		1	13	23.55	24.45	24.60	25.00
		1	24	23.11	24.53	24.32	25.00
		12	0	22.24	23.72	23.85	24.00
		12	6	22.06	23.58	23.85	24.00
		12	13	21.89	23.63	23.47	24.00
		25	0	22.00	23.43	23.66	24.00
	16QAM	1	0	23.04	23.88	23.97	24.00
		1	13	22.87	23.61	23.86	24.00
		1	24	22.44	23.82	23.59	24.00
		12	0	21.50	22.34	22.86	23.50
		12	6	21.38	22.27	22.92	23.50
		12	13	21.00	22.32	22.58	23.50
		25	0	21.09	22.00	22.70	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	24.22	24.86	24.33	25.00
		1	25	23.08	24.45	24.28	25.00
		1	49	22.99	24.35	24.74	25.00
		25	0	22.07	23.71	23.31	24.00
		25	13	22.20	23.45	23.21	24.00
		25	25	21.76	23.26	23.89	24.00
		50	0	22.01	23.50	23.49	24.00
	16QAM	1	0	23.44	23.92	23.54	24.00
		1	25	22.15	23.82	23.77	24.00
		1	49	22.21	23.81	23.90	24.00
		25	0	21.36	22.38	21.94	23.50
		25	13	21.31	22.14	21.85	23.50
		25	25	20.86	21.95	22.95	23.50
		50	0	21.12	22.11	22.57	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	24.39	24.94	23.71	25.00
		1	38	23.00	24.53	24.45	25.00
		1	74	23.90	24.31	24.86	25.00
		36	0	22.68	23.73	23.51	24.00
		36	18	22.73	23.40	23.38	24.00

		36	39	22.62	23.95	23.94	24.00
		75	0	21.96	23.64	23.52	24.00
	16QAM	1	0	23.70	23.94	23.09	24.00
		1	38	22.12	23.87	23.77	24.00
		1	74	23.33	23.72	23.89	24.00
		36	0	21.55	22.36	22.11	23.50
		36	18	21.69	21.97	21.92	23.50
		36	39	21.57	22.97	23.24	23.50
		75	0	22.84	23.42	23.38	23.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	**24.18**	24.66	23.32	25.00
		1	50	23.61	**24.75**	23.98	25.00
		1	99	24.02	23.79	**24.40**	25.00
		50	0	23.16	**23.80**	22.16	24.00
		50	25	23.41	23.66	22.08	24.00
		50	50	**23.82**	23.55	**23.51**	24.00
		100	0	22.03	**23.50**	22.60	24.00
	16QAM	1	0	23.39	23.94	22.64	24.00
		1	50	22.40	23.97	23.32	24.00
		1	99	23.27	23.03	23.72	24.00
		50	0	21.67	22.44	21.30	23.50
		50	25	21.96	22.18	21.35	23.50
		50	50	22.25	22.48	22.61	23.50
		100	0	22.30	23.46	23.06	23.50

LTE Band 4							
Full Power-Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	22.33	22.38	21.08	23.00
		1	2	22.51	22.14	21.89	23.00
		1	5	21.68	21.28	20.92	23.00
		3	0	22.20	22.27	21.44	23.00
		3	2	22.39	22.48	21.59	23.00
		3	3	22.12	21.81	21.40	23.00
		6	0	21.24	20.78	20.39	22.00
	16QAM	1	0	21.47	21.45	20.28	22.00
		1	2	21.82	21.40	20.92	22.00
		1	5	21.02	20.57	20.13	22.00
		3	0	21.24	21.29	20.44	22.00
		3	2	21.50	21.53	20.60	22.00
		3	3	21.21	20.86	20.44	22.00

		6	0	20.29	20.10	19.51	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	21.94	21.99	20.67	23.00
		1	7	22.79	22.46	22.01	23.00
		1	14	21.34	21.51	21.21	23.00
		8	0	21.31	20.89	20.70	22.00
		8	4	21.58	21.18	20.89	22.00
		8	7	21.27	20.86	20.53	22.00
		15	0	21.27	20.87	20.60	22.00
	16QAM	1	0	21.17	21.17	19.93	22.00
		1	7	21.98	21.64	21.32	22.00
		1	14	20.66	20.79	20.62	22.00
		8	0	20.36	19.94	19.73	21.00
		8	4	20.60	20.21	19.94	21.00
		8	7	20.29	19.89	19.57	21.00
		15	0	20.26	19.87	19.60	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	21.95	22.08	21.19	23.00
		1	13	22.21	21.81	21.46	23.00
		1	24	21.15	22.09	21.40	23.00
		12	0	20.85	20.55	20.09	22.00
		12	6	20.80	20.54	19.93	22.00
		12	13	20.20	20.87	20.01	22.00
		25	0	21.18	20.92	20.57	22.00
	16QAM	1	0	21.00	21.29	20.41	22.00
		1	13	21.31	21.12	20.72	22.00
		1	24	20.36	21.39	20.64	22.00
		12	0	19.77	19.55	19.11	21.00
		12	6	19.75	19.51	18.97	21.00
		12	13	19.26	19.75	19.03	21.00
		25	0	20.23	19.77	19.57	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	21.78	22.00	22.24	23.00
		1	25	21.99	22.12	22.16	23.00
		1	49	21.06	21.63	20.93	23.00
		25	0	20.47	20.57	20.72	22.00
		25	13	20.39	20.54	20.47	22.00
		25	25	20.42	21.18	20.07	22.00
		50	0	20.98	21.01	21.09	22.00
	16QAM	1	0	21.04	21.11	21.36	22.00

		1	25	21.31	21.39	21.41	22.00
		1	49	20.41	20.96	20.23	22.00
		25	0	19.57	19.50	19.71	21.00
		25	13	19.42	19.51	19.47	21.00
		25	25	19.45	20.14	19.07	21.00
		50	0	20.16	19.98	20.11	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	21.46	21.36	22.43	23.00
		1	38	21.55	22.07	22.38	23.00
		1	74	21.16	22.53	21.31	23.00
		36	0	20.28	20.34	21.46	22.00
		36	18	20.19	20.41	21.18	22.00
		36	39	20.17	21.53	20.78	22.00
		75	0	20.71	21.02	21.43	22.00
	16QAM	1	0	20.75	20.50	21.57	22.00
		1	38	20.89	21.27	21.59	22.00
		1	74	20.42	21.77	20.57	22.00
		36	0	19.25	19.30	20.44	21.00
		36	18	19.17	19.38	20.18	21.00
		36	39	19.16	20.51	19.78	21.00
		75	0	20.86	20.90	20.75	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	21.71	21.37	22.66	23.00
		1	50	**21.78**	**22.20**	**22.88**	23.00
		1	99	21.03	21.31	21.82	23.00
		50	0	20.92	20.53	21.61	22.00
		50	25	**20.94**	20.68	21.38	22.00
		50	50	20.62	**21.72**	**21.65**	22.00
		100	0	20.38	20.72	**21.40**	22.00
	16QAM	1	0	20.93	20.53	21.77	22.00
		1	50	21.04	21.44	21.90	22.00
		1	99	20.28	20.59	20.64	22.00
		50	0	19.93	19.48	20.48	21.00
		50	25	19.94	19.66	20.37	21.00
		50	50	19.61	20.72	20.66	21.00
		100	0	19.73	19.50	20.14	21.00

LTE Band 5							
Full Power-Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	23.56	23.54	22.47	24.00
		1	2	23.20	23.29	23.17	24.00
		1	5	22.65	22.89	23.72	24.00
		3	0	23.69	23.73	23.34	24.00
		3	2	23.96	23.96	23.54	24.00
		3	3	22.96	23.11	22.89	24.00
		6	0	21.91	22.12	21.90	23.20
	16QAM	1	0	22.88	22.94	21.60	23.20
		1	2	22.54	22.78	22.42	23.20
		1	5	22.03	22.32	23.13	23.20
		3	0	22.73	22.76	22.43	23.20
		3	2	23.03	23.00	22.61	23.20
		3	3	21.91	22.19	21.98	23.20
		6	0	21.02	21.03	21.08	22.40
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	22.03	23.49	23.00	24.00
		1	7	23.70	23.83	23.60	24.00
		1	14	22.73	23.15	22.01	24.00
		8	0	22.11	22.36	22.26	23.20
		8	4	22.45	22.69	22.44	23.20
		8	7	22.20	22.47	22.10	23.20
		15	0	22.12	22.39	22.15	23.20
	16QAM	1	0	21.23	22.86	22.26	23.20
		1	7	22.95	23.10	22.94	23.20
		1	14	22.01	22.53	21.25	23.20
		8	0	21.21	21.49	21.38	22.40
		8	4	21.54	21.82	21.58	22.40
		8	7	21.28	21.59	21.22	22.40
		15	0	21.17	21.49	21.27	22.40
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.66	23.67	23.30	24.00
		1	13	23.13	23.22	23.28	24.00
		1	24	22.86	23.68	23.71	24.00
		12	0	22.78	22.48	22.93	23.20
		12	6	22.87	22.60	22.86	23.20
		12	13	22.29	22.67	22.81	23.20

		25	0	22.15	22.45	22.18	23.20
	16QAM	1	0	22.85	22.95	22.52	23.20
		1	13	22.39	22.54	22.59	23.20
		1	24	22.15	23.00	23.03	23.20
		12	0	21.83	21.54	21.97	22.40
		12	6	21.91	21.67	21.91	22.40
		12	13	21.37	21.62	21.86	22.40
		25	0	21.21	21.45	21.28	22.40
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	**23.92**	23.46	22.48	24.00
		1	25	23.00	23.26	23.47	24.00
		1	49	22.84	**23.90**	**23.87**	24.00
		25	0	**22.49**	22.50	**23.18**	23.20
		25	13	22.47	22.83	23.11	23.20
		25	25	22.28	**22.89**	23.11	23.20
		50	0	22.02	**22.41**	22.37	23.20
	16QAM	1	0	22.94	22.82	21.66	23.20
		1	25	22.33	22.71	22.69	23.20
		1	49	22.22	23.18	23.15	23.20
		25	0	21.50	21.84	22.23	22.40
		25	13	21.50	21.88	22.15	22.40
		25	25	21.32	21.94	22.14	22.40
		50	0	21.11	21.47	21.50	22.40

LTE Band 7							
Full Power-Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	20.43	20.65	21.06	22.30
		1	13	20.80	20.26	21.36	22.30
		1	24	20.90	20.50	21.09	22.30
		12	0	19.48	19.67	19.93	21.30
		12	6	19.62	19.67	19.82	21.30
		12	13	19.39	19.32	19.66	21.30
		25	0	19.35	19.34	19.08	21.30
	16QAM	1	0	19.52	19.84	20.12	21.30
		1	13	19.98	19.38	20.63	21.30
		1	24	20.05	19.84	20.42	21.30
		12	0	18.50	18.70	18.90	20.30
		12	6	18.68	18.71	18.82	20.30
		12	13	18.43	18.38	18.68	20.30
		25	0	18.29	18.36	18.10	20.30

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	20.84	20.87	21.24	22.30
		1	25	20.73	20.55	20.22	22.30
		1	49	21.09	21.31	21.14	22.30
		25	0	19.68	19.63	19.75	21.30
		25	13	19.93	19.65	19.65	21.30
		25	25	19.97	20.54	19.71	21.30
		50	0	19.71	19.43	19.06	21.30
	16QAM	1	0	20.09	20.02	20.47	21.30
		1	25	20.09	19.74	19.45	21.30
		1	49	20.50	20.50	20.55	21.30
		25	0	18.74	18.43	18.93	20.30
		25	13	19.00	18.47	18.75	20.30
		25	25	19.05	19.34	18.82	20.30
		50	0	18.63	18.34	18.17	20.30
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	19.12	21.02	21.65	22.30
		1	38	20.87	20.47	20.34	22.30
		1	74	21.00	21.31	21.28	22.30
		36	0	19.66	19.34	19.99	21.30
		36	18	19.75	19.45	19.77	21.30
		36	39	19.68	20.02	19.77	21.30
		75	0	19.80	19.41	19.33	21.30
	16QAM	1	0	20.33	20.18	20.84	21.30
		1	38	20.17	19.74	19.57	21.30
		1	74	20.43	20.71	20.57	21.30
		36	0	18.72	18.42	18.99	20.30
		36	18	18.84	18.52	18.72	20.30
		36	39	18.77	19.12	18.84	20.30
		75	0	18.77	20.21	20.21	20.30
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	21.04	20.89	**21.57**	22.30
		1	50	**22.13**	20.73	20.66	22.30
		1	99	20.56	**21.40**	20.66	22.30
		50	0	20.64	20.21	**20.74**	21.30
		50	25	**20.95**	**20.41**	20.55	21.30
		50	50	20.09	20.37	20.56	21.30
		100	0	**19.63**	19.27	19.30	21.30
	16QAM	1	0	20.30	20.11	20.75	21.30
		1	50	21.26	20.07	20.05	21.30

		1	99	19.93	20.80	20.08	21.30
		50	0	19.64	19.33	19.73	20.30
		50	25	19.96	19.52	19.57	20.30
		50	50	19.12	19.50	19.61	20.30
		100	0	20.24	19.02	18.43	20.30

LTE Band 66							
Full Power-Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	21.66	22.15	22.82	23.00
		1	2	21.80	22.25	21.80	23.00
		1	5	21.51	21.76	21.69	23.00
		3	0	21.87	22.28	22.19	23.00
		3	2	22.07	22.45	22.30	23.00
		3	3	21.53	21.90	21.56	23.00
		6	0	20.51	20.92	20.68	22.00
	16QAM	1	0	20.84	21.42	21.95	22.00
		1	2	21.13	21.49	21.18	22.00
		1	5	20.78	21.09	21.07	22.00
		3	0	20.77	21.28	21.17	22.00
		3	2	21.04	21.47	21.32	22.00
		3	3	20.51	20.79	20.57	22.00
		6	0	19.66	19.90	19.86	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	21.40	22.20	21.80	23.00
		1	7	21.97	22.61	22.44	23.00
		1	14	21.22	21.82	21.99	23.00
		8	0	20.57	21.07	21.01	22.00
		8	4	20.82	21.29	21.23	22.00
		8	7	20.51	20.92	20.87	22.00
		15	0	20.53	20.98	21.07	22.00
	16QAM	1	0	20.75	21.37	21.09	22.00
		1	7	21.26	21.69	21.74	22.00
		1	14	20.53	20.98	21.37	22.00
		8	0	19.64	20.11	20.20	21.00
		8	4	19.87	20.30	20.42	21.00
		8	7	19.57	19.97	20.05	21.00
		15	0	19.55	19.98	20.07	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	21.88	22.40	21.18	23.00

		1	13	21.59	22.03	22.05	23.00
		1	24	21.42	22.24	22.24	23.00
		12	0	20.59	21.12	20.73	22.00
		12	6	20.54	21.01	20.68	22.00
		12	13	20.05	21.11	20.55	22.00
		25	0	20.66	20.99	21.03	22.00
	16QAM	1	0	21.19	21.54	20.41	22.00
		1	13	20.84	21.31	21.31	22.00
		1	24	20.75	21.51	21.52	22.00
		12	0	19.59	20.11	19.86	21.00
		12	6	19.55	20.01	19.80	21.00
		12	13	19.05	20.12	19.68	21.00
		25	0	19.64	19.97	20.16	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	21.72	22.22	22.52	23.00
		1	25	21.51	22.16	21.93	23.00
		1	49	21.05	21.31	21.95	23.00
		25	0	20.03	20.79	20.80	22.00
		25	13	20.06	20.60	20.95	22.00
		25	25	20.10	20.76	21.06	22.00
		50	0	20.42	21.06	20.96	22.00
	16QAM	1	0	20.86	21.37	21.82	22.00
		1	25	20.89	21.37	21.29	22.00
		1	49	20.17	20.53	21.36	22.00
		25	0	19.02	19.78	19.76	21.00
		25	13	19.05	19.59	19.93	21.00
		25	25	19.09	19.76	20.05	21.00
		50	0	19.44	20.07	19.96	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	21.54	22.54	21.92	23.00
		1	38	21.14	22.09	21.68	23.00
		1	74	20.41	21.22	21.92	23.00
		36	0	20.05	21.00	20.06	22.00
		36	18	20.06	20.78	20.34	22.00
		36	39	20.05	20.67	21.17	22.00
		75	0	20.21	21.12	20.64	22.00
	16QAM	1	0	20.79	21.81	21.14	22.00
		1	38	20.41	21.33	20.93	22.00
		1	74	19.65	20.39	21.18	22.00
		36	0	19.04	19.97	19.03	21.00
		36	18	19.06	19.75	19.23	21.00

		36	39	19.04	19.67	20.04	21.00
		75	0	20.55	20.50	20.32	21.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency (MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	**21.29**	**22.42**	21.31	23.00
		1	50	21.24	22.14	21.52	23.00
		1	99	21.00	20.91	**21.88**	23.00
		50	0	20.64	**21.72**	20.14	22.00
		50	25	20.68	21.58	20.60	22.00
		50	50	**20.89**	21.21	**21.35**	22.00
		100	0	19.99	**20.72**	20.20	22.00
	16QAM	1	0	20.53	21.65	20.59	22.00
		1	50	20.55	21.41	20.82	22.00
		1	99	20.21	20.14	21.21	22.00
		50	0	19.68	20.73	19.17	21.00
		50	25	19.71	20.60	19.59	21.00
		50	50	19.93	20.23	20.38	21.00
		100	0	20.32	20.55	19.62	21.00

9.3 WLAN Mode

Wi-Fi 2.4G	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
Mode		Tune-up	Meas.
802.11b (1M)	1/2412	21.50	**21.02**
	6/2437	21.50	20.84
	11/2462	21.00	19.15
802.11g (6M)	1/2412	18.50	18.00
	6/2437	18.50	17.66
	11/2462	17.50	15.57
802.11n-HT20 (MCS0)	1/2412	16.00	15.03
	6/2437	16.00	15.05
	11/2462	16.00	14.24
Note: Initial test configuration is 802.11b mode.			

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations Refer to *Antenna Locations.*

Overall (Length x Width): 118 mm x 68 mm Overall Diagonal: 16 mm/Display Diagonal: 6.1 mm						
Distance of the Antenna to the EUT Surface/Edge						
Antenna	Back Side	Front Side	Left Edge	Right Edge	Top Edge	Bottom Edge
Main-Antenna	＜25mm	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm
Wi-Fi Antenna	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm	＞25mm
Hotspot mode, Positions for SAR Tests						
Mode	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Main-Antenna	Yes	Yes	Yes	Yes	N/A	Yes
QPOS Plus	Yes	Yes	Yes	N/A	Yes	N/A

Note:
1. Per KDB 941225 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.
2. For smart phones with an overall diagonal dimension is 16mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, product specific 10-g SAR must be tested as a phablet to determine SAR compliance. For Phablet, Since hotspot mode 1-g *reported* SAR <1.2W/kg, product specific 10-g SAR is no required.
3. Per FCC KDB 447498 D01, for each exposure position, testing of other requised 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:
a) ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100MHz
b) ≤ 0.6 W/kg or 1.5 W/kg, for1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
c) ≤ 0.4 W/kg or 1.0 Wkg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.
4. When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
5. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

10.2 Measured SAR Results

Note:

1. The value with blue color is the maximum SAR Value of each test band.
2. For GSM, when multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.
3. For LTE, QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

Hotspot SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
GSM850	Main	Back Side	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.963	-0.026	1.18	1.139	6
		Back Side (Battery 2)	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.832	0.021	1.18	0.984	/
		Back Side repeat	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.947	0.011	1.18	1.120	/
		Back Side	10	GPRS 4TX Slots	N/A	N/A	128/824.2	30.00	29.17	0.720	0.070	1.21	0.872	/
		Back Side	10	GPRS 4TX Slots	N/A	N/A	251/848.8	30.00	29.38	0.643	0.100	1.15	0.742	/
		Front Side	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.823	-0.034	1.18	0.974	/
		Front Side	10	GPRS 4TX Slots	N/A	N/A	128/824.2	30.00	29.17	0.808	0.026	1.21	0.978	/
		Front Side	10	GPRS 4TX Slots	N/A	N/A	251/848.8	30.00	29.38	0.625	0.020	1.15	0.721	/
		Left Edge	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.706	-0.130	1.18	0.835	/
		Left Edge	10	GPRS 4TX Slots	N/A	N/A	128/824.2	30.00	29.17	0.300	0.025	1.21	0.363	/
		Left Edge	10	GPRS 4TX Slots	N/A	N/A	251/848.8	30.00	29.38	0.605	0.090	1.15	0.698	/
		Right Edge	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.486	0.015	1.18	0.575	/
		Top Edge	10	GPRS 4TX Slots	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.161	0.023	1.18	0.190	/
GSM1900	Main	Back Side	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.313	0.190	1.38	0.433	/
		Front Side	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.345	-0.100	1.38	0.477	7
		Front Side (Battery 2)	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.291	0.032	1.38	0.403	/
		Left Edge	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.120	0.030	1.38	0.166	/
		Right Edge	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.129	0.020	1.38	0.178	/
		Top Edge	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.018	0.140	1.38	0.025	/
		Bottom Edge	10	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.279	0.130	1.38	0.386	/
LTE 2	Main	Back Side	10	QPSK	1	50	18900/1880	25.00	24.75	0.745	-0.029	1.06	0.789	/
			10	QPSK	50%	50	18700/1860	24.00	23.82	0.384	-0.070	1.04	0.400	/
		Front Side	10	QPSK	1	50	18900/1880	25.00	24.75	0.885	-0.180	1.06	0.937	8
			10	QPSK	1	0	18700/1860	25.00	24.18	0.486	-0.080	1.21	0.587	/
			10	QPSK	1	99	19100/1900	25.00	24.40	0.505	-0.100	1.15	0.580	/
			10	QPSK	50%	50	18700/1860	24.00	23.82	0.413	0.040	1.04	0.430	/
			10	QPSK	100%	0	18900/1880	24.00	23.50	0.668	0.044	1.12	0.750	/

		Front Side (Battery 2)	10	QPSK	1	50	18900/1880	25.00	24.75	0.640	0.120	1.06	0.678	/
		Front Side repeat	10	QPSK	1	50	18900/1880	25.00	24.75	0.878	0.015	1.06	0.930	/
		Left Edge	10	QPSK	1	50	18900/1880	25.00	24.75	0.298	0.058	1.06	0.316	/
			10	QPSK	50%	50	18700/1860	24.00	23.82	0.186	0.017	1.04	0.194	/
		Right Edge	10	QPSK	1	50	18900/1880	25.00	24.75	0.197	0.046	1.06	0.209	/
			10	QPSK	50%	50	18700/1860	24.00	23.82	0.187	-0.029	1.04	0.195	/
		Top Edge	10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	50	18900/1880	25.00	24.75	0.531	0.140	1.06	0.562	/
			10	QPSK	50%	50	18700/1860	24.00	23.82	0.420	0.050	1.04	0.438	/
LTE 5	Main	Back Side	10	QPSK	1	0	20450/829	24.00	23.92	0.850	0.050	1.02	0.866	9
			10	QPSK	1	49	20525/836.5	24.00	23.90	0.699	-0.100	1.02	0.715	/
			10	QPSK	1	49	20600/844	24.00	23.87	0.503	0.032	1.03	0.518	/
			10	QPSK	50%	0	20600/844	23.20	23.18	0.761	0.052	1.00	0.765	/
			10	QPSK	100%	0	20600/844	23.20	22.41	0.422	0.030	1.20	0.506	/
		Back Side (Battery 2)	10	QPSK	1	0	20450/829	24.00	23.92	0.660	0.040	1.02	0.672	/
		Back Side repeat	10	QPSK	1	0	20450/829	24.00	23.92	0.839	0.012	1.02	0.855	/
		Front Side	10	QPSK	1	0	20450/829	24.00	23.92	0.688	0.020	1.02	0.701	/
			10	QPSK	50%	0	20600/844	23.20	23.18	0.432	0.036	1.00	0.434	/
		Left Edge	10	QPSK	1	0	20450/829	24.00	23.92	0.782	-0.090	1.02	0.797	/
			10	QPSK	50%	0	20600/844	23.20	23.18	0.846	0.027	1.00	0.850	/
			10	QPSK	50%	0	20450/829	23.20	22.49	0.426	-0.030	1.18	0.502	/
			10	QPSK	50%	25	20525/836.5	23.20	22.89	0.397	-0.065	1.07	0.426	/
		Right Edge	10	QPSK	1	0	20450/829	24.00	23.92	0.561	0.080	1.02	0.571	/
			10	QPSK	50%	0	20600/844	23.20	23.18	0.514	0.012	1.00	0.516	/
		Top Edge	10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	0	20450/829	24.00	23.92	0.099	-0.028	1.02	0.101	/
			10	QPSK	50%	0	20600/844	23.20	23.18	0.077	0.018	1.00	0.077	/
LTE 7	Main	Back Side	10	QPSK	1	50	20850/2510	22.30	22.13	0.696	-0.028	1.04	0.724	10
			10	QPSK	50%	25	20850/2510	21.30	20.95	0.509	0.150	1.08	0.552	/
		Back Side (Battery 2)	10	QPSK	1	50	20850/2510	22.30	22.13	0.528	0.130	1.04	0.549	/
		Front Side	10	QPSK	1	50	20850/2510	22.30	22.13	0.317	0.110	1.04	0.330	/
			10	QPSK	50%	25	20850/2510	21.30	20.95	0.226	0.026	1.08	0.245	/
		Left Edge	10	QPSK	1	50	20850/2510	22.30	22.13	0.203	0.032	1.04	0.211	/
			10	QPSK	50%	25	20850/2510	21.30	20.95	0.159	0.015	1.08	0.172	/
		Right Edge	10	QPSK	1	50	20850/2510	22.30	22.13	0.144	0.080	1.04	0.150	/
			10	QPSK	50%	25	20850/2510	21.30	20.95	0.103	0.014	1.08	0.112	/

		Top Edge	10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	50	20850/2510	22.30	22.13	0.657	0.022	1.04	0.683	/
			10	QPSK	50%	25	20850/2510	21.30	20.95	0.503	-0.010	1.08	0.545	/
LTE 66 (LTE 4)	Main	Back Side	10	QPSK	1	50	132322/1745	23.00	22.42	0.480	0.010	1.14	0.549	/
			10	QPSK	50%	0	132322/1745	22.00	21.72	0.393	0.032	1.07	0.419	/
		Front Side	10	QPSK	1	50	132322/1745	23.00	22.42	0.766	-0.031	1.14	0.875	11
			10	QPSK	1	0	132072/1720	23.00	21.29	0.564	-0.039	1.48	0.836	/
			10	QPSK	1	99	132572/1770	23.00	21.88	0.552	-0.029	1.29	0.714	/
			10	QPSK	50%	0	132322/1745	22.00	21.72	0.653	0.190	1.07	0.696	/
			10	QPSK	100%	0	132322/1745	22.00	20.72	0.584	-0.030	1.34	0.784	/
		Front Side (Battery 2)	10	QPSK	1	50	132322/1745	23.00	22.42	0.757	0.040	1.14	0.865	/
		Left Edge	10	QPSK	1	50	132322/1745	23.00	22.42	0.292	0.100	1.14	0.334	/
			10	QPSK	50%	0	132322/1745	22.00	21.72	0.240	0.030	1.07	0.256	/
		Right Edge	10	QPSK	1	50	132322/1745	23.00	22.42	0.317	0.025	1.14	0.362	/
			10	QPSK	50%	0	132322/1745	22.00	21.72	0.253	-0.100	1.07	0.270	/
		Top Edge	10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	50	132322/1745	23.00	22.42	0.388	0.036	1.14	0.443	/
			10	QPSK	50%	0	132322/1745	22.00	21.72	0.288	0.052	1.07	0.307	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/kg)	Plot No.
2.4G	Wi-Fi	Back Side	10	802.11b	100.0%	1/2412	21.50	21.02	0.013	0.016	1.12	0.015	/
		Front Side	10	802.11b	100.0%	1/2412	21.50	21.02	0.017	0.130	1.12	0.019	12
		Front Side (Battery 2)	10	802.11b	100.0%	1/2412	21.50	21.02	0.013	0.020	1.12	0.015	/
		Left Edge	10	802.11b	100.0%	1/2412	21.50	21.02	0.001	0.020	1.12	0.001	/
		Right Edge	10	802.11b	100.0%	1/2412	21.50	21.02	0.015	0.090	1.12	0.017	/
		Top Edge	10	802.11b	100.0%	1/2412	21.50	21.02	0.013	-0.100	1.12	0.015	/
		Bottom Edge	10	802.11b	100.0%	1/2412	N/A	N/A	N/A	N/A	N/A	N/A	/

Product-specific 10g SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	RB	Offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/kg)	Plot No.
GSM850	Main	Back Side	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.936	0.052	1.18	1.107	/
		Front Side	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	1.420	-0.010	1.18	1.680	/
		Left Edge	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	1.620	-0.030	1.18	1.917	13
		Left Edge (Battery 2)	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.677	0.010	1.18	0.801	/
		Right Edge	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.882	0.038	1.18	1.043	/
		Top Edge	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.233	0.047	1.18	0.276	/
		Bottom Edge	0	GPRS 4TX Slots	N/A	N/A	190/836.6	30.00	29.27	0.490	-0.110	1.18	0.580	/
GSM1900	Main	Back Side	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.666	-0.010	1.38	0.921	14
		Back Side (Battery 2)	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.610	0.020	1.38	0.844	/
		Front Side	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.388	0.020	1.38	0.537	/
		Left Edge	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.629	0.058	1.38	0.870	/
		Right Edge	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.154	0.047	1.38	0.213	/
		Top Edge	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.000	0.190	1.38	0.000	/
		Bottom Edge	0	GPRS 4TX Slots	N/A	N/A	661/1880	28.50	27.09	0.515	0.074	1.38	0.713	/
LTE 2	Main	Back Side	0	QPSK	1	50	18900/1880	25.00	24.75	1.080	-0.023	1.06	1.144	/
			0	QPSK	50%	50	18700/1860	24.00	23.82	0.620	0.012	1.04	0.646	/
		Back Side (Battery 2)	0	QPSK	1	50	18900/1880	25.00	24.75	1.280	0.020	1.06	1.356	15
		Front Side	0	QPSK	1	50	18900/1880	25.00	24.75	0.868	0.024	1.06	0.919	/
			0	QPSK	50%	50	18700/1860	24.00	23.82	0.414	0.027	1.04	0.432	/
		Left Edge	0	QPSK	1	50	18900/1880	25.00	24.75	0.927	0.065	1.06	0.982	/
			0	QPSK	50%	50	18700/1860	24.00	23.82	0.511	0.028	1.04	0.533	/
		Right Edge	0	QPSK	1	50	18900/1880	25.00	24.75	0.444	0.040	1.06	0.470	/
			0	QPSK	50%	50	18700/1860	24.00	23.82	0.253	-0.033	1.04	0.264	/
		Top Edge	0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	18900/1880	25.00	24.75	1.030	0.029	1.06	1.091	/
			0	QPSK	50%	50	18700/1860	24.00	23.82	0.473	0.070	1.04	0.493	/
LTE 5	Main	Back Side	0	QPSK	1	0	20450/829	24.00	23.92	0.571	0.021	1.02	0.582	/
			0	QPSK	50%	0	20600/844	23.20	23.18	0.483	0.160	1.00	0.485	/
		Front Side	0	QPSK	1	0	20450/829	24.00	23.92	0.638	-0.150	1.02	0.650	/
			0	QPSK	50%	0	20600/844	23.20	23.18	0.542	0.010	1.00	0.545	/
		Left Edge	0	QPSK	1	0	20450/829	24.00	23.92	0.997	-0.090	1.02	1.016	16
			0	QPSK	50%	0	20600/844	23.20	23.18	0.793	0.053	1.00	0.797	/
		Left Edge (Battery 2)	0	QPSK	1	0	20450/829	24.00	23.92	0.832	0.130	1.02	0.847	/
		Right Edge	0	QPSK	1	0	20450/829	24.00	23.92	0.526	0.086	1.02	0.536	/

			0	QPSK	50%	0	20600/844	23.20	23.18	0.382	0.075	1.00	0.384	/
		Top Edge	0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	0	20450/829	24.00	23.92	0.266	0.096	1.02	0.271	/
			0	QPSK	50%	0	20600/844	23.20	23.18	0.193	0.084	1.00	0.194	/
LTE 7	Main	Back Side	0	QPSK	1	50	20850/2510	22.30	22.13	1.330	0.038	1.04	1.383	17
			0	QPSK	50%	25	20850/2510	21.30	20.95	1.040	0.043	1.08	1.127	/
		Back Side (Battery 2)	0	QPSK	1	50	20850/2510	22.30	22.13	1.250	0.100	1.04	1.300	/
		Front Side	0	QPSK	1	50	20850/2510	22.30	22.13	0.727	-0.068	1.04	0.756	/
			0	QPSK	50%	25	20850/2510	21.30	20.95	0.563	0.096	1.08	0.610	/
		Left Edge	0	QPSK	1	50	20850/2510	22.30	22.13	0.734	0.055	1.04	0.763	/
			0	QPSK	50%	25	20850/2510	21.30	20.95	0.557	-0.110	1.08	0.604	/
		Right Edge	0	QPSK	1	50	20850/2510	22.30	22.13	0.172	0.047	1.04	0.179	/
			0	QPSK	50%	25	20850/2510	21.30	20.95	0.135	0.063	1.08	0.146	/
		Top Edge	0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	20850/2510	22.30	22.13	0.904	0.050	1.04	0.940	/
			0	QPSK	50%	25	20850/2510	21.30	20.95	0.696	0.056	1.08	0.754	/
LTE 66	Main	Back Side	0	QPSK	1	50	132322/1745	23.00	22.42	0.469	0.096	1.14	0.536	/
			0	QPSK	50%	0	132322/1745	22.00	21.72	0.415	0.052	1.07	0.443	/
		Front Side	0	QPSK	1	50	132322/1745	23.00	22.42	0.861	0.080	1.14	0.984	
			0	QPSK	1	0	132072/1720	23.00	21.29	0.415	0.020	1.48	0.615	/
			0	QPSK	1	99	132572/1770	23.00	21.88	0.547	0.150	1.29	0.707	/
			0	QPSK	50%	0	132322/1745	22.00	21.72	0.647	0.041	1.07	0.690	/
			0	QPSK	100%	0	132322/1745	22.00	20.72	0.371	-0.100	1.34	0.499	/
		Front Side (Battery 2)	0	QPSK	1	50	132322/1745	23.00	22.42	0.906	0.150	1.14	1.035	18
		Left Edge	0	QPSK	1	50	132322/1745	23.00	22.42	0.674	0.036	1.14	0.771	/
			0	QPSK	50%	0	132322/1745	22.00	21.72	0.393	0.047	1.07	0.419	/
		Right Edge	0	QPSK	1	50	132322/1745	23.00	22.42	0.266	0.068	1.14	0.304	/
			0	QPSK	50%	0	132322/1745	22.00	21.72	0.224	-0.036	1.07	0.239	/
		Top Edge	0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	132322/1745	23.00	22.42	0.497	-0.110	1.14	0.568	/
			0	QPSK	50%	0	132322/1745	22.00	21.72	0.414	-0.010	1.07	0.441	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/kg)	Plot No.
2.4G	Wi-Fi	Back Side	0	802.11b	100.0%	1/2412	21.50	21.02	0.024	0.019	1.12	0.027	/
		Front Side	0	802.11b	100.0%	1/2412	21.50	21.02	0.035	0.027	1.12	0.039	19
		Front Side (Battery 2)	0	802.11b	100.0%	1/2412	21.50	21.02	0.028	0.060	1.12	0.031	/
		Left Edge	0	802.11b	100.0%	1/2412	21.50	21.02	0.000	-0.040	1.12	0.000	/
		Right Edge	0	802.11b	100.0%	1/2412	21.50	21.02	0.033	0.030	1.12	0.037	/
		Top Edge	0	802.11b	100.0%	1/2412	21.50	21.02	0.017	-0.011	1.12	0.019	/
		Bottom Edge	0	802.11b	100.0%	1/2412	N/A	N/A	N/A	N/A	N/A	N/A	/

10.3 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Hotspot	Product Specific 10-g SAR
GSM + Wi-Fi 2.4GHz	Yes	Yes
LTE + Wi-Fi 2.4GHz	Yes	Yes
GSM + LTE	NA	NA

General Note:

1. The Scaled SAR summation is calculated based on the same configuration and test position.
2. Per KDB 447498 D01, simultaneous transmission SAR is compliant if,

i) Scalar SAR summation < 1.6W/kg, simultaneously transmission SAR measurement is not necessary.

ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.

iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.

The Maximum SAR_{1g} Value for Main-Antenna

Test Position \ SAR_{1g}(W/kg)		GSM 850	GSM 1900	LTE 2	LTE 5	LTE 7	LTE 66 (LTE 4)	MAX. SAR_{1g}
Hotspot	Back Side	1.139	0.433	0.789	0.866	0.724	0.549	1.139
	Front Side	0.978	0.477	0.937	0.701	0.330	0.875	0.978
	Left Edge	0.835	0.166	0.316	0.850	0.211	0.334	0.850
	Right Edge	0.575	0.178	0.209	0.571	0.150	0.362	0.575
	Top Edge	N/A	0.025	N/A	N/A	N/A	N/A	0.025
	Bottom Edge	0.190	0.386	0.562	0.101	0.683	0.443	0.683
Product Specific 10-g SAR	Back Side	1.107	0.921	1.356	0.582	1.383	0.536	1.383
	Front Side	1.680	0.537	0.919	0.650	0.756	1.035	1.680
	Left Edge	1.917	0.870	0.982	1.016	0.763	0.771	1.917
	Right Edge	1.043	0.213	0.470	0.536	0.179	0.304	1.043
	Top Edge	0.276	N/A	N/A	N/A	N/A	N/A	0.276
	Bottom Edge	0.580	0.713	1.091	0.271	0.940	0.568	1.091

About Wi-Fi and Main-Antenna

Test Position \ $SAR_{1g/10g}$(W/kg)		Main-Antenna	Wi-Fi 2.4G	MAX. $\Sigma SAR_{1g/10g}$
Hotspot	Back Side	1.139	0.015	1.154
	Front Side	0.978	0.019	0.997
	Left Edge	0.850	0.001	0.851
	Right Edge	0.575	0.017	0.592
	Top Edge	0.025	0.015	0.040
	Bottom Edge	0.683	N/A	0.683
Product Specific 10-g SAR	Back Side	1.383	0.027	1.410
	Front Side	1.680	0.039	1.719
	Left Edge	1.917	0.000	1.917
	Right Edge	1.043	0.037	1.080
	Top Edge	0.276	0.019	0.295
	Bottom Edge	1.091	N/A	1.091

Note:

1. The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.
2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}
3. MAX. ΣSAR_{1g} =1.154W/kg<1.6W/kg and MAX. ΣSAR_{10g} =1.917W/kg<4 W/kg, so the Simultaneous transmission SAR with volume scan are not required for Wi-Fi and Main-Antenna.

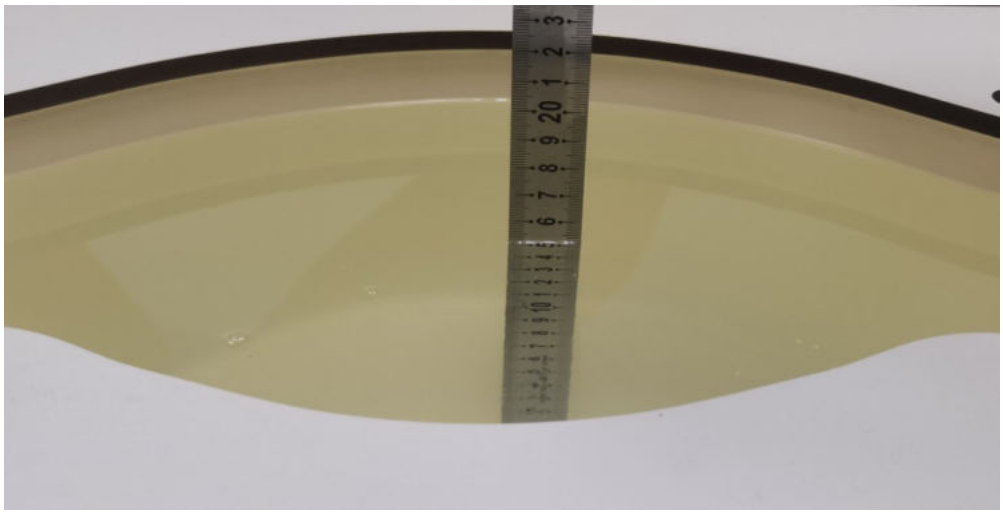
11 Measurement Uncertainty

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, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval. This also applies to the 10-g SAR required for phablets in KDB Publication 648474.

ANNEX A: Test Layout

Tissue Simulating Liquids

For the measurement of the field distribution inside the flat phantom with DASY, the phantom must be filled with around 25 liters of homogeneous tissue simulating liquid. For SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is ＞15 cm, which is shown as below.



Picture 3: Liquid depth in the flat Phantom

ANNEX B: System Check Results

Plot 1 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 2024/8/7

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; σ = 0.88 S/m; ε_r = 41.4; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.44, 9.92, 10.09); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.58 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.241 V/m; Power Drift = -0.076 dB

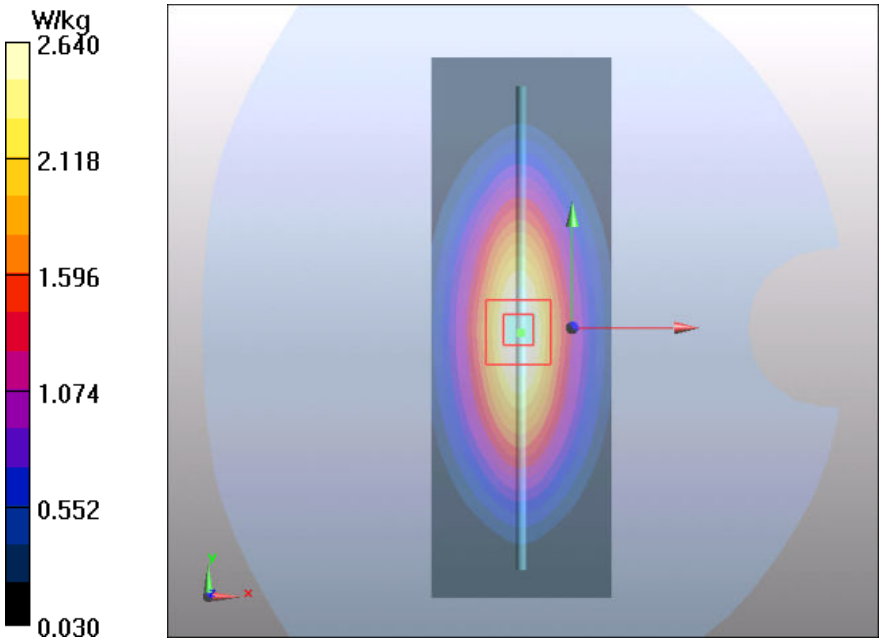
Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.6 W/kg

Smallest distance from peaks to all points 3 dB below = 16.6 mm

Ratio of SAR at M2 to SAR at M1 = 68.1%

Maximum value of SAR (measured) = 2.64 W/kg



Plot 2 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 2024/8/10

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; σ = 1.34 S/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(8.01, 8.42, 8.56); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.18 W/kg

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

Reference Value = 80.385 V/m; Power Drift = 0.075 dB

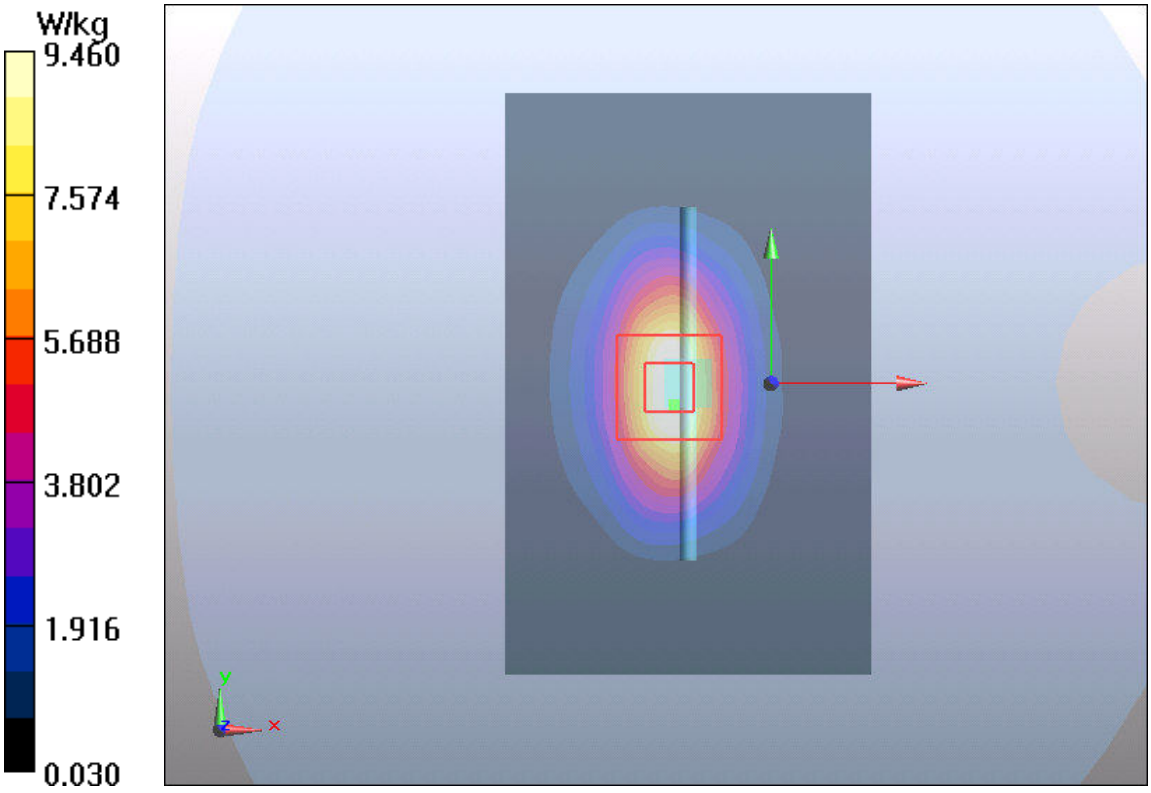
Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 8.95 W/kg; SAR(10 g) = 4.8 W/kg

Smallest distance from peaks to all points 3 dB below = 10mm

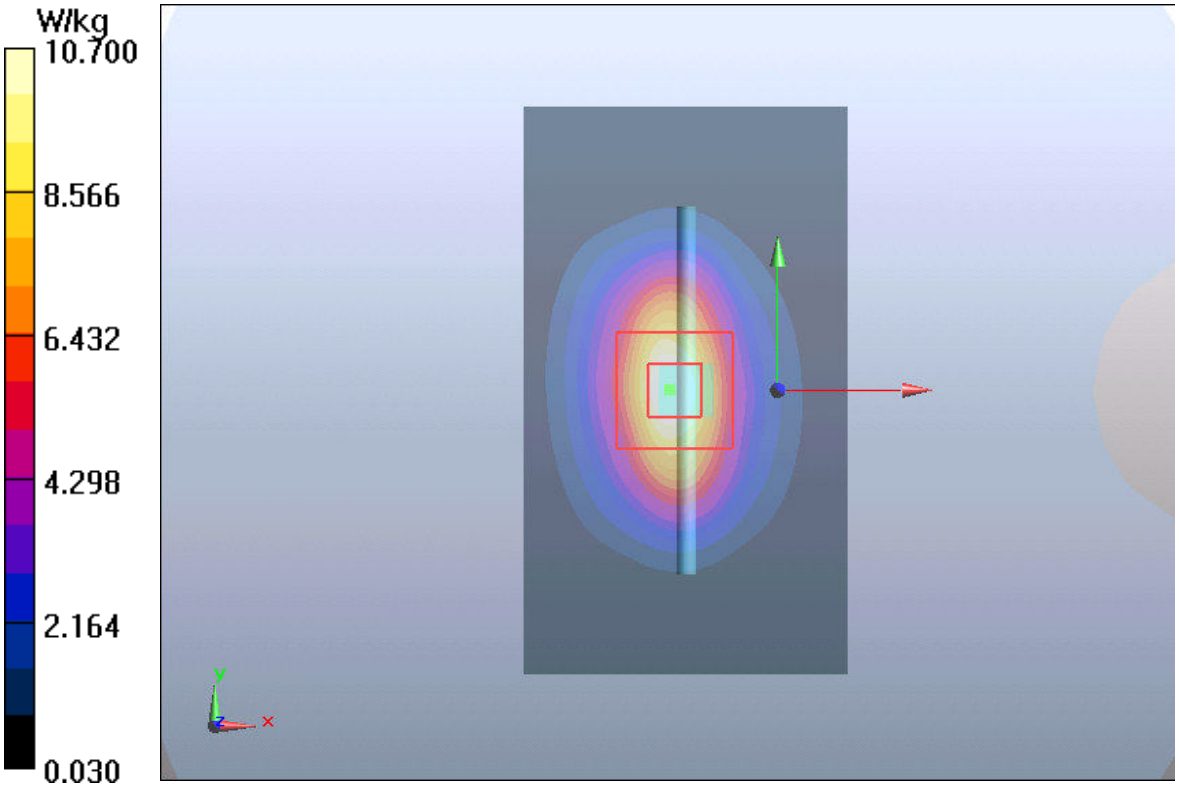
Ratio of SAR at M2 to SAR at M1 = 53.5%

Maximum value of SAR (measured) = 9.46 W/kg



Plot 3 System Performance Check at 1900 MHz TSL
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2
Date: 2024/8/14
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.41 S/m; ε_r = 40.1; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN7689; ConvF(7.88, 8.28, 8.42); Calibrated: 2024/6/4
Electronics: DAE4 SN1692; Calibrated: 2023/11/8
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.23 W/kg
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 85.857V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 17.84 W/kg
SAR(1 g) = 9.88 W/kg; SAR(10 g) = 4.9 W/kg
Smallest distance from peaks to all points 3 dB below = 11.4 mm
Ratio of SAR at M2 to SAR at M1 = 52.7%
Maximum value of SAR (measured) = 10.70 W/kg



Plot 4 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2

Date: 2024/8/19

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; σ = 1.81 S/m; ε_r = 38.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 14.26 W/kg

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

Reference Value = 88.834 V/m; Power Drift = 0.015 dB

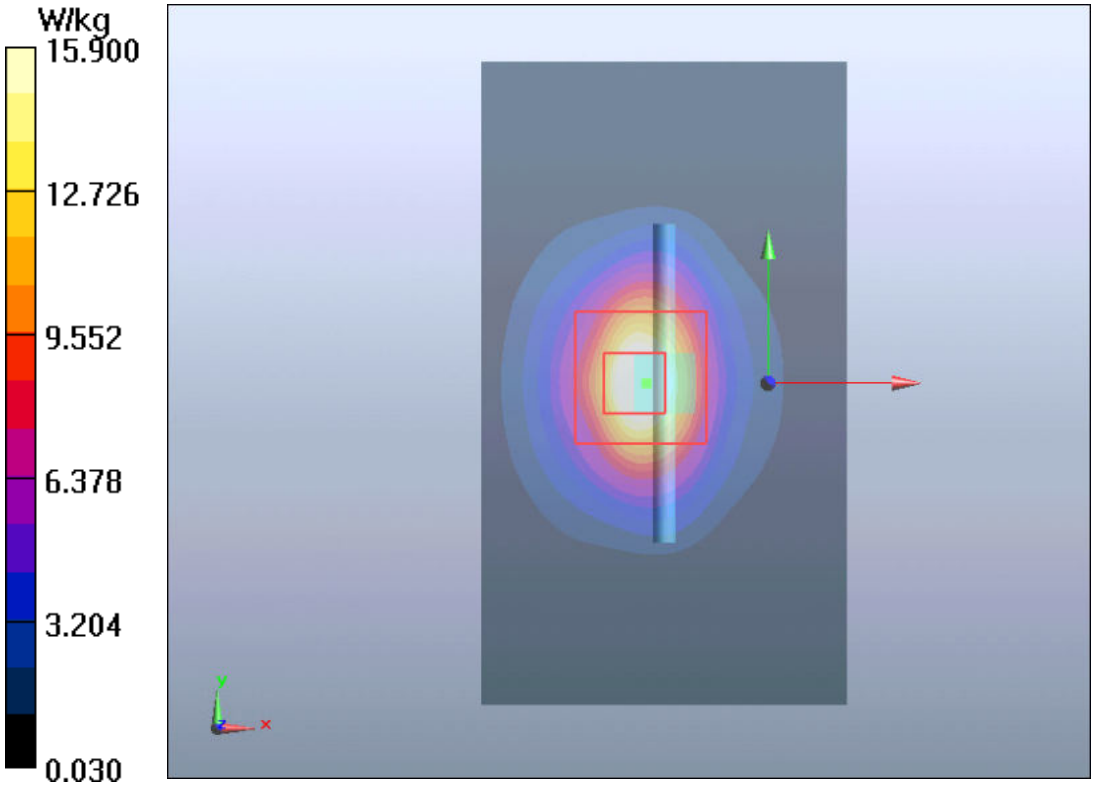
Peak SAR (extrapolated) = 30.10 W/kg

SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.22 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 15.90 W/kg



Plot 5 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 2024/9/15

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 38.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.39, 7.77, 7.89); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid:dx=12mm, dy=12mm

Maximum value of SAR (measured) = 14.43 W/kg

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

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

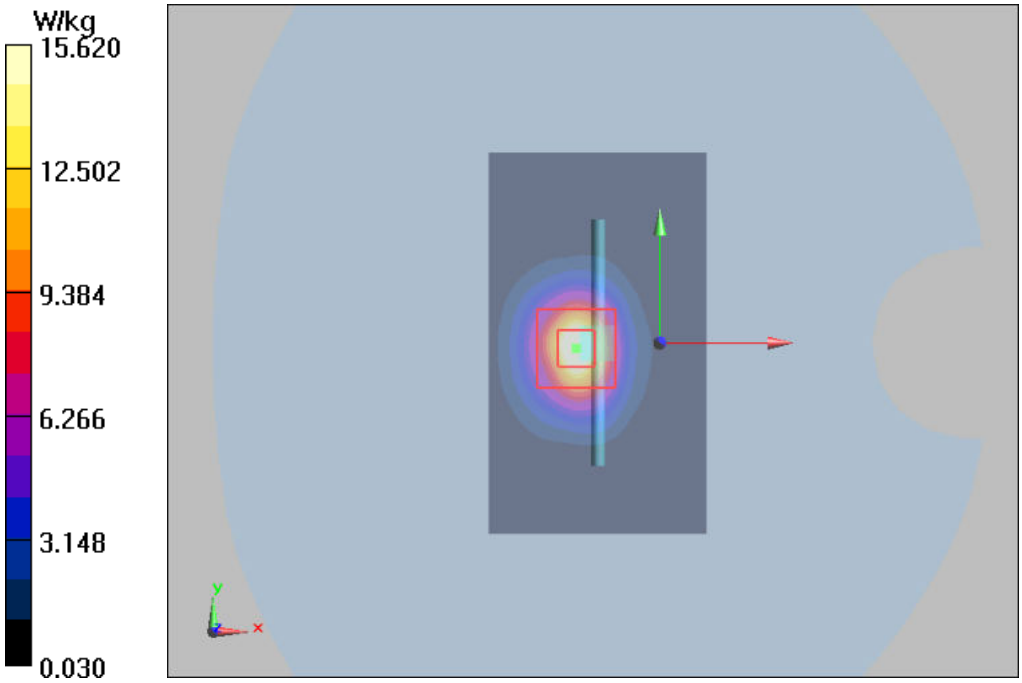
Peak SAR (extrapolated) = 31.85W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.07 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 44.2%

Maximum value of SAR (measured) = 15.62 W/kg



ANNEX C: Highest Graph Results

Plot 6 GSM 850 GPRS(4TX) Back Side 10mm Middle

Date: 2024/8/7

Communication System: UID 0, GPRS 4TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.07

Medium parameters used: f = 837 MHz; σ = 0.939 S/m; ε_r = 41.856; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.44, 9.92, 10.09); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.981 W/kg

Back Side 1Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.54 V/m; Power Drift = -0.026 dB

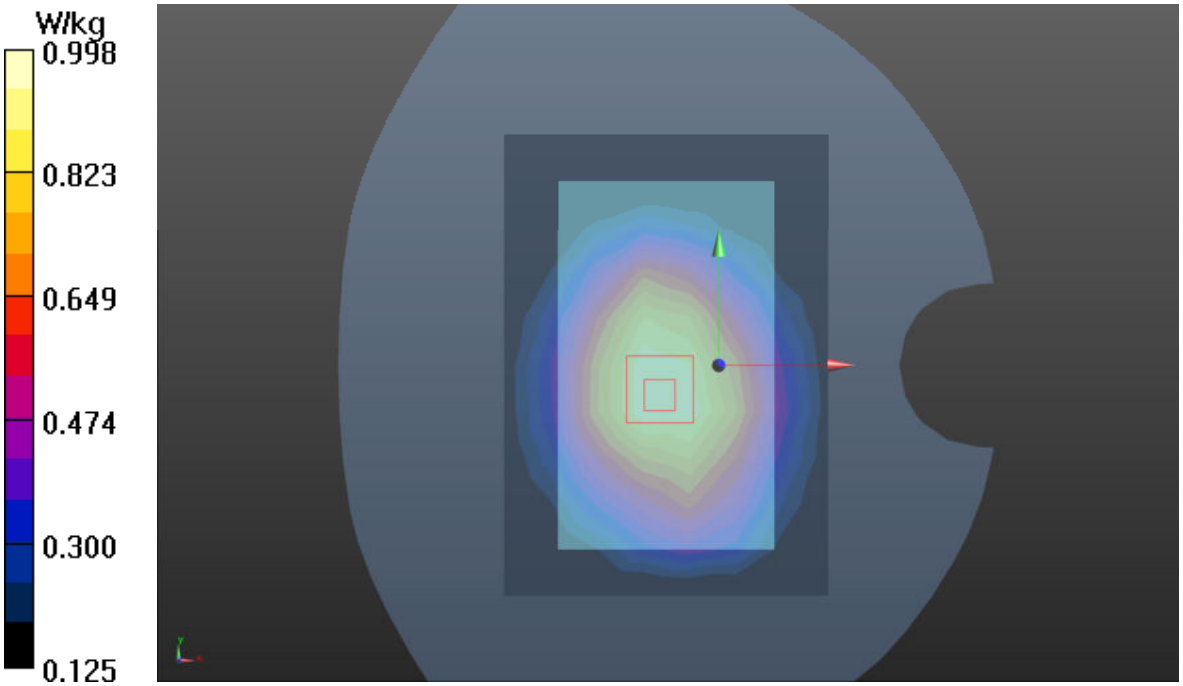
Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.963 W/kg; SAR(10 g) = 0.648 W/kg

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 80.2%

Maximum value of SAR (measured) = 0.998 W/kg



Plot 7 GSM 1900 GPRS(4TX) Front Side 10mm Middle

Date: 2024/8/14

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07

Medium parameters used: f = 1880 MHz; σ = 1.406 S/m; ε_r = 39.087; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.88, 8.28, 8.42); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.356 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.680 V/m; Power Drift = -0.10 dB

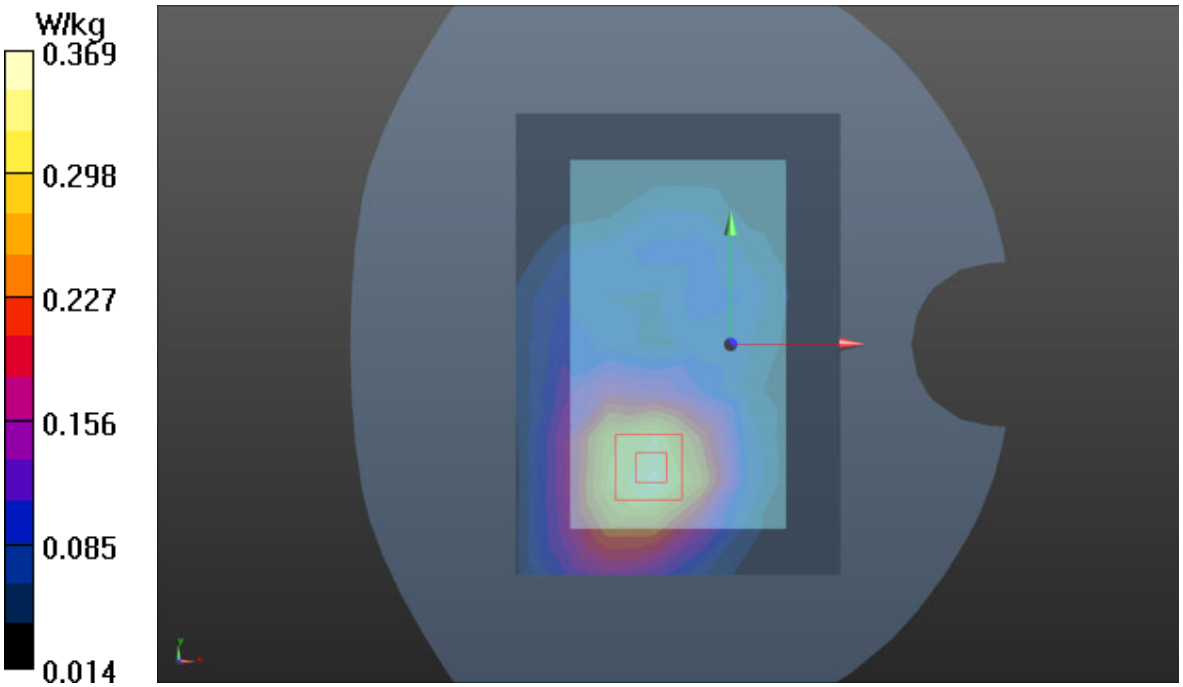
Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.345 W/kg; SAR(10 g) = 0.216 W/kg

Smallest distance from peaks to all points 3 dB below = 21.5 mm

Ratio of SAR at M2 to SAR at M1 = 63.4%

Maximum value of SAR (measured) = 0.369 W/kg



Plot 8 LTE Band 2 1RB Front Side 10mm Middle

Date: 2024/8/14

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

Medium parameters used: f = 1880 MHz; σ = 1.437 S/m; ε_r = 37.208; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.88, 8.28, 8.42); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.930 W/kg

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

Reference Value = 8.975 V/m; Power Drift = -0.18 dB

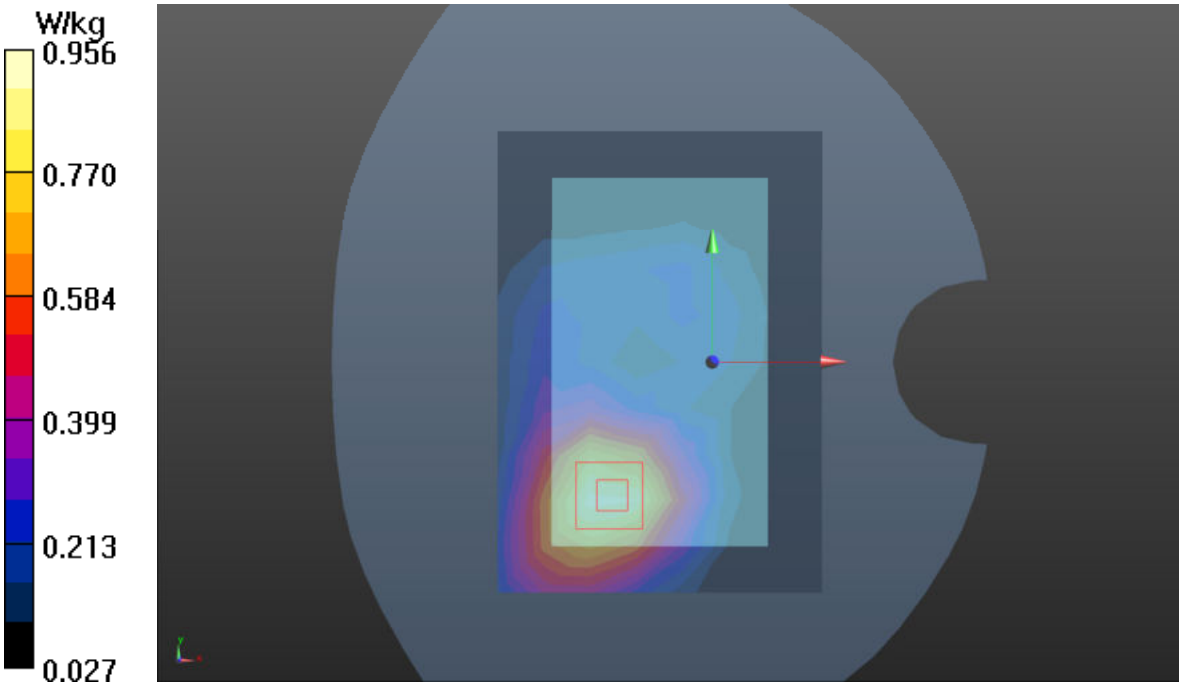
Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.885 W/kg; SAR(10 g) = 0.553 W/kg

Smallest distance from peaks to all points 3 dB below = 21.5 mm

Ratio of SAR at M2 to SAR at M1 = 63.4%

Maximum value of SAR (measured) = 0.956 W/kg



Plot 9 LTE Band 5 1RB Back Side 10mm Low

Date: 2024/8/7

Communication System: UID 0, LTE (0); Frequency: 829 MHz;Duty Cycle: 1:1

Medium parameters used: f = 829 MHz; σ = 0.939 S/m; ε_r = 41.351; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.44, 9.92, 10.09); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.881 W/kg

Back Side 1Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.77 V/m; Power Drift = 0.05 dB

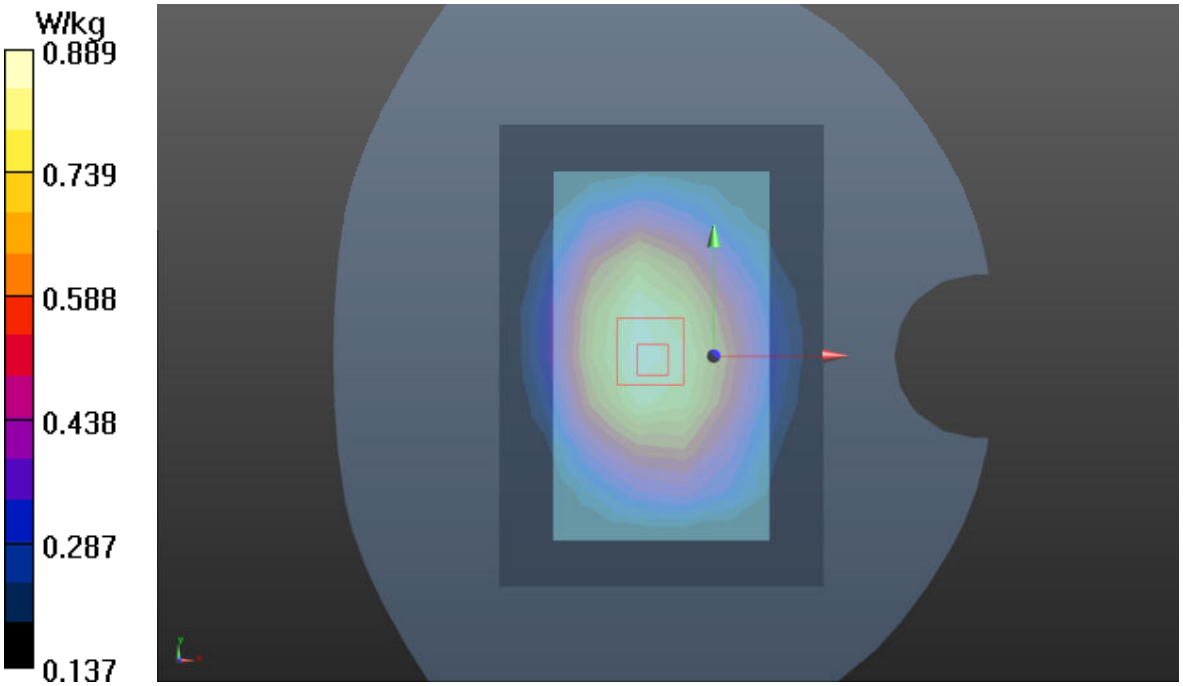
Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.850 W/kg; SAR(10 g) = 0.654 W/kg

Smallest distance from peaks to all points 3 dB below = 10.2 mm

Ratio of SAR at M2 to SAR at M1 = 80.8%

Maximum value of SAR (measured) = 0.889 W/kg



Plot 10 LTE Band 7 1RB Back Side 10mm Low

Date: 2024/9/15

Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2510 MHz; σ = 1.906 S/m; ε_r = 38.249; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.39, 7.77, 7.89); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (10x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.729 W/kg

Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.486 V/m; Power Drift = -0.028 dB

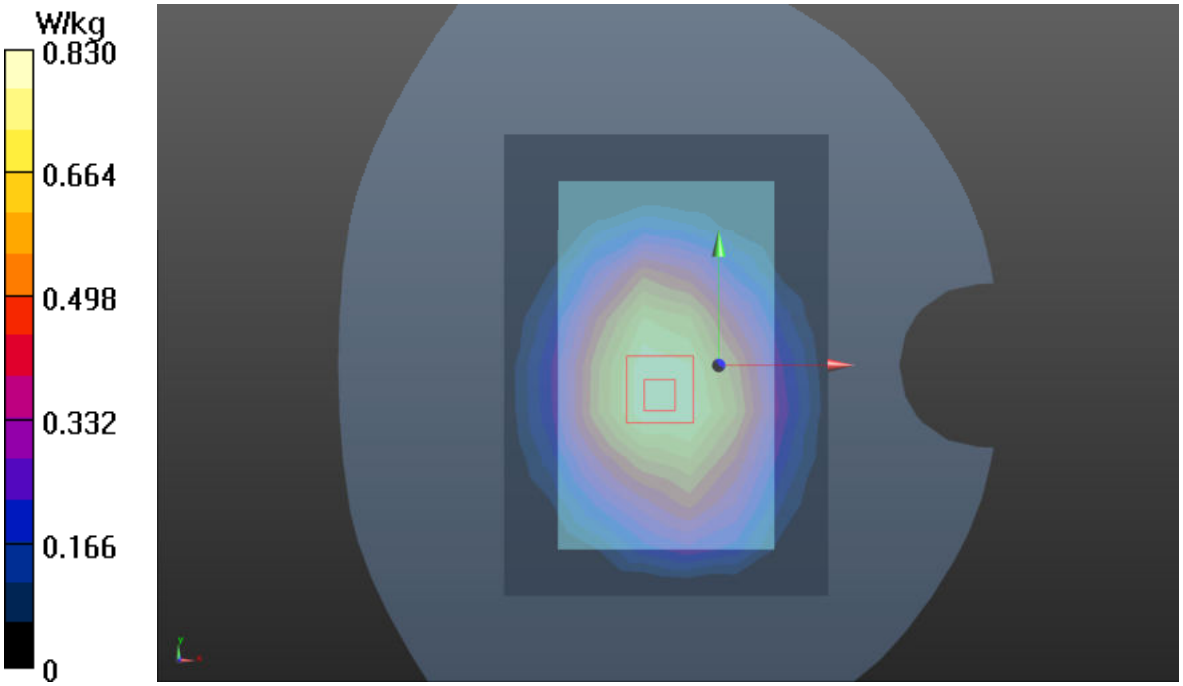
Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.696 W/kg; SAR(10 g) = 0.339 W/kg

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 52.3%

Maximum value of SAR (measured) = 0.830 W/kg



Plot 11 LTE Band 66 1RB Front Side 10mm Middle

Date: 2024/8/10

Communication System: UID 0, LTE (0); Frequency: 1745 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1745 MHz; σ = 1.338 S/m; ε_r = 37.717; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(8.01, 8.42, 8.56); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.817 W/kg

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

Reference Value = 9.768 V/m; Power Drift = -0.031 dB

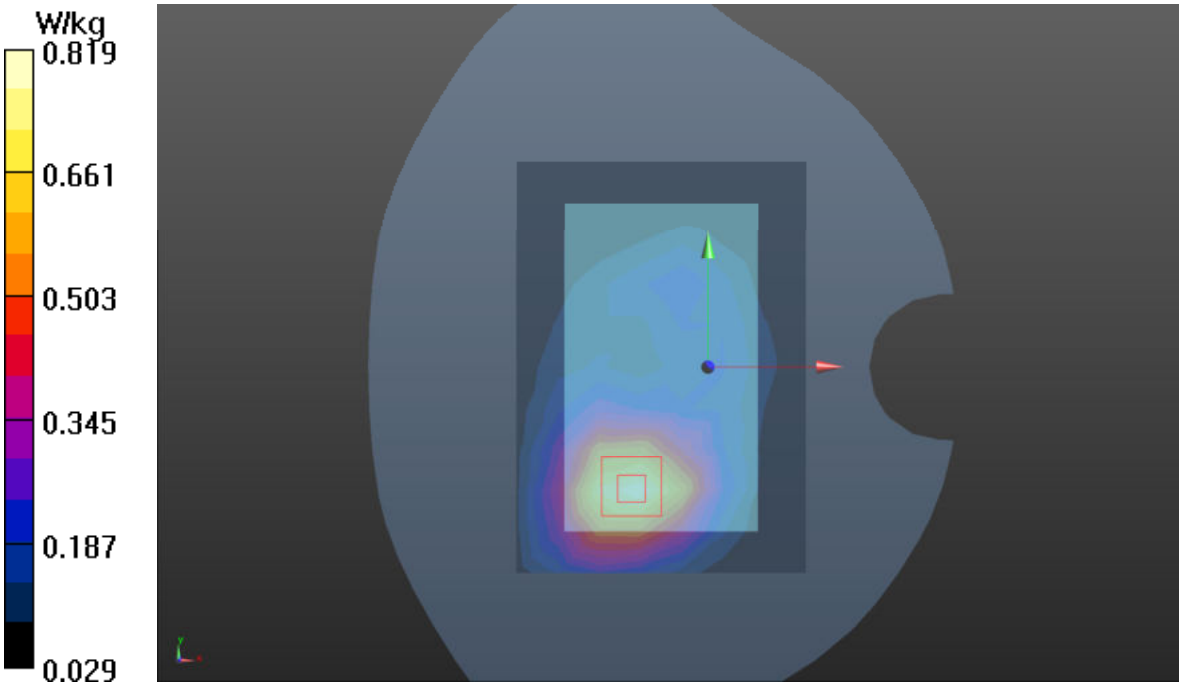
Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.766 W/kg; SAR(10 g) = 0.484 W/kg

Smallest distance from peaks to all points 3 dB below = 26 mm

Ratio of SAR at M2 to SAR at M1 = 65.1%

Maximum value of SAR (measured) = 0.819 W/kg



Plot 12 802.11b Front Side 10mm Low

Date: 2024/8/19

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2412 MHz; σ = 1.738 S/m; ε_r = 40.892; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (10x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0184 W/kg

Front Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.357 V/m; Power Drift = 0.13 dB

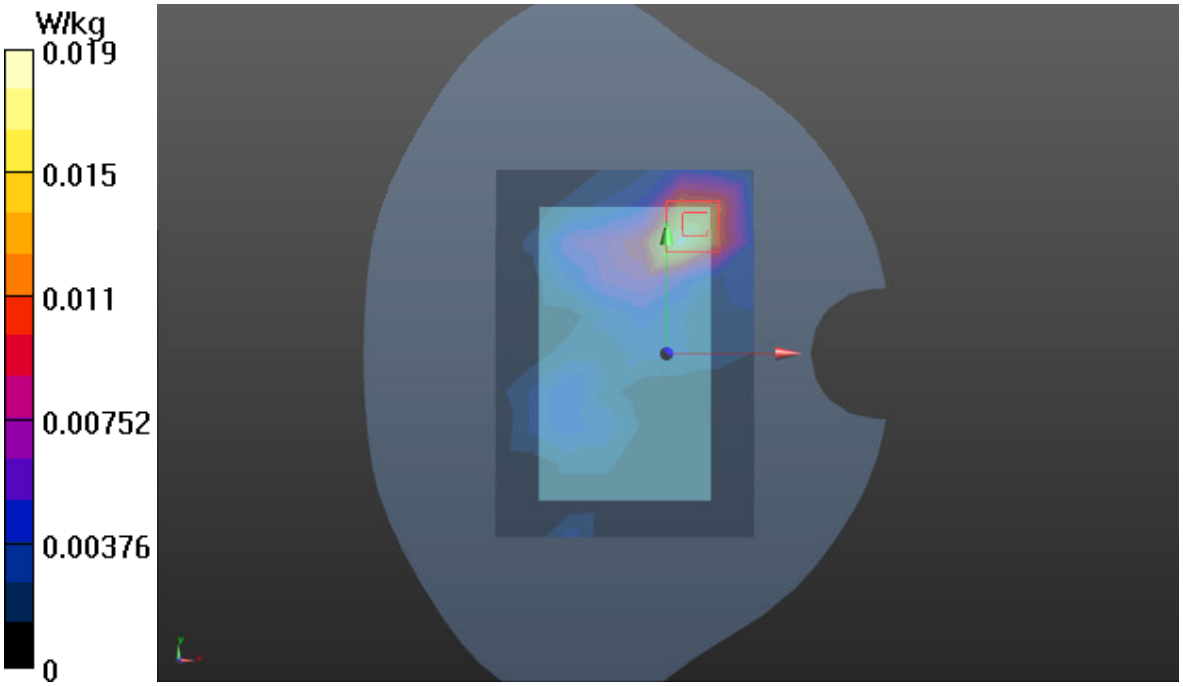
Peak SAR (extrapolated) = 0.0340 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.009 W/kg

Smallest distance from peaks to all points 3 dB below = 10.5 mm

Ratio of SAR at M2 to SAR at M1 = 53.5%

Maximum value of SAR (measured) = 0.019W/kg



Plot 13 GSM 850 GPRS(4TX) Left Edge 0mm Middle

Date: 2024/8/7

Communication System: UID 0, GPRS 4TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.07

Medium parameters used: f = 837 MHz; σ = 0.939 S/m; ε_r = 41.856; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.44, 9.92, 10.09); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Middle/Area Scan (5x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.79 W/kg

Left Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.47 V/m; Power Drift = -0.03 dB

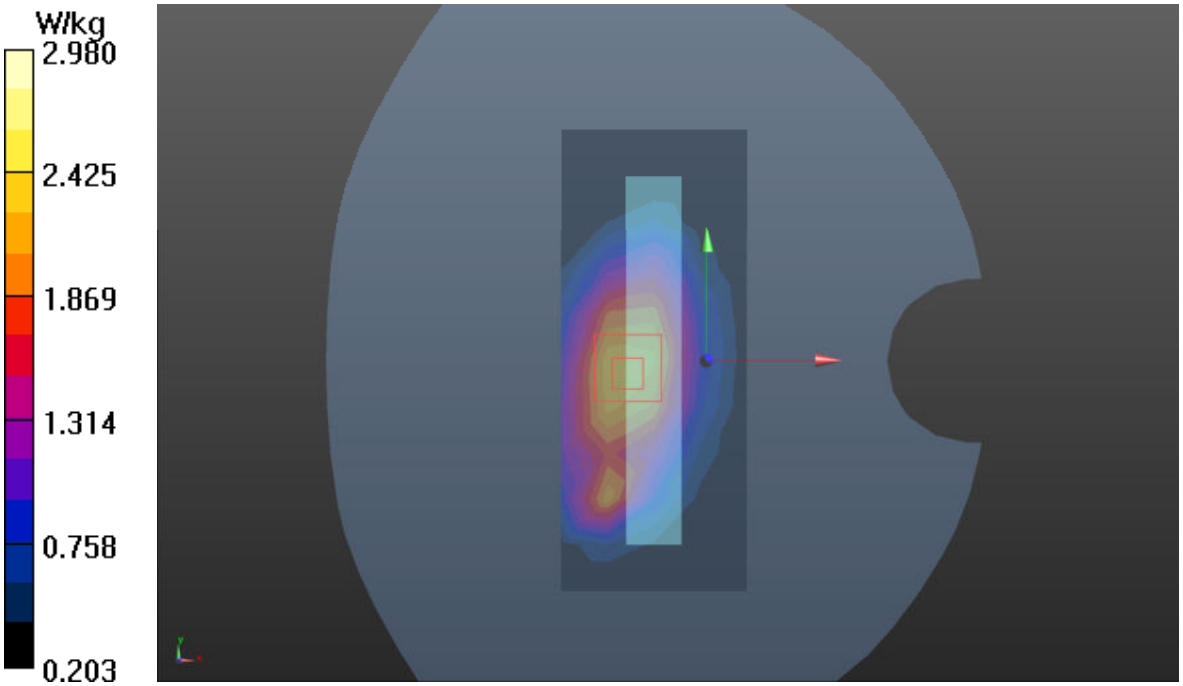
Peak SAR (extrapolated) = 3.53 W/kg

SAR(1 g) = 2.69 W/kg; SAR(10 g) = 1.62 W/kg

Smallest distance from peaks to all points 3 dB below = 18.2 mm

Ratio of SAR at M2 to SAR at M1 = 69.7%

Maximum value of SAR (measured) = 2.98 W/kg



Plot 14 GSM 1900 GPRS(4TX) Back Side 0mm Middle

Date: 2024/8/14

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07

Medium parameters used: f = 1880 MHz; σ = 1.406 S/m; ε_r = 39.087; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.88, 8.28, 8.42); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.53 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.273 V/m; Power Drift = -0.01 dB

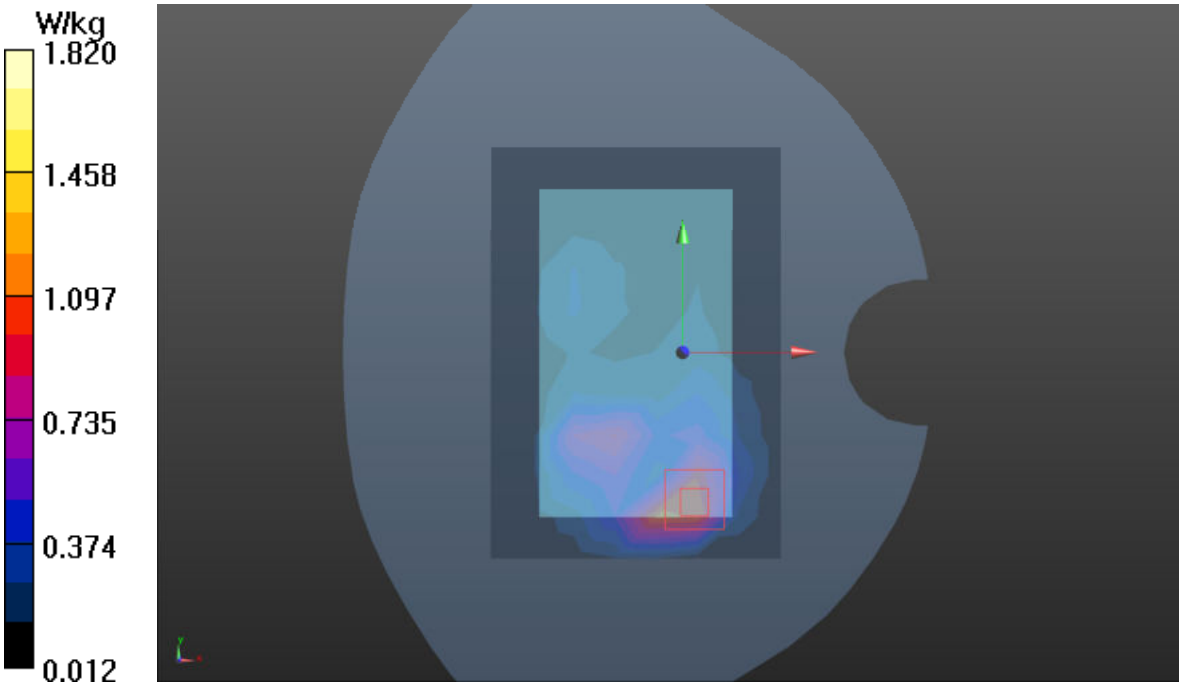
Peak SAR (extrapolated) = 3.37 W/kg

SAR(1 g) = 1.53 W/kg; SAR(10 g) = 0.666 W/kg

Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 44.7%

Maximum value of SAR (measured) = 1.82 W/kg



Plot 15 LTE Band 2 1RB Back Side 0mm Middle

Date: 2024/8/14

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

Medium parameters used: f = 1880 MHz; σ = 1.437 S/m; ε_r = 37.208; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.88, 8.28, 8.42); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.39 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.17 V/m; Power Drift = 0.02 dB

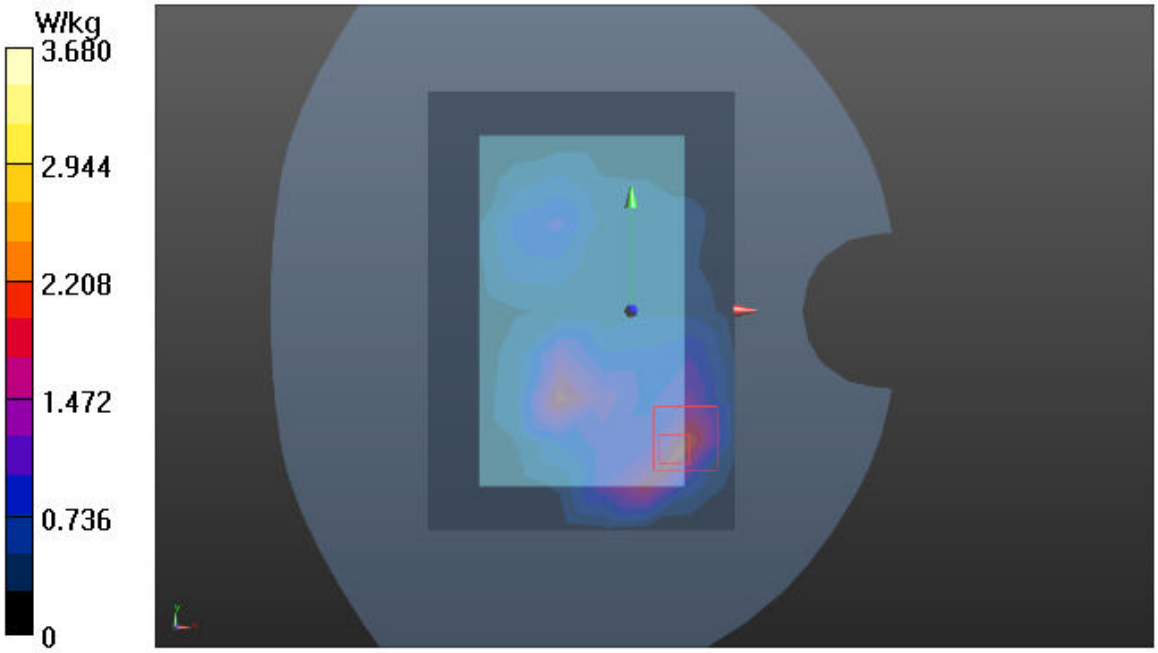
Peak SAR (extrapolated) = 13.7 W/kg

SAR(1 g) = 3.20 W/kg; SAR(10 g) = 1.28 W/kg

Smallest distance from peaks to all points 3 dB below = 12.3 mm

Ratio of SAR at M2 to SAR at M1 = 43.6%

Maximum value of SAR (measured) = 3.68 W/kg



Plot 16 LTE Band 7 1RB Back Side 0mm Low

Date: 2024/9/15

Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2510 MHz; σ = 1.906 S/m; ε_r = 38.249; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.39, 7.77, 7.89) @ 2510 MHz; Calibrated: 2024/6/4

Electronics: DAE4 Sn1648; Calibrated: 2023/1/9

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (10x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.78 W/kg

Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.36 V/m; Power Drift = 0.038 dB

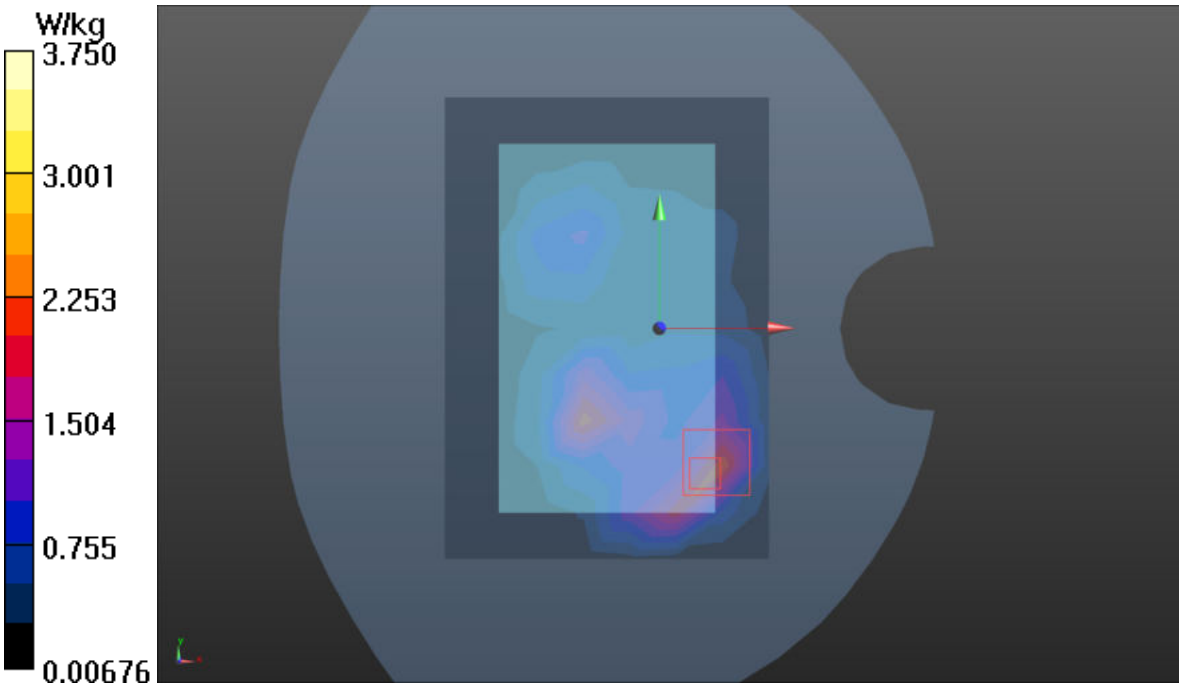
Peak SAR (extrapolated) = 7.27 W/kg

SAR(1 g) = 3.13 W/kg; SAR(10 g) = 1.33 W/kg

Smallest distance from peaks to all points 3 dB below = 16.4 mm

Ratio of SAR at M2 to SAR at M1 = 45%

Maximum value of SAR (measured) = 3.75 W/kg



Plot 17 LTE Band 5 1RB Left Edge 0mm Low

Date: 2024/8/7

Communication System: UID 0, LTE (0); Frequency: 829 MHz;Duty Cycle: 1:1

Medium parameters used: f = 829 MHz; σ = 0.939 S/m; ε_r = 41.351; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.39, 7.77, 7.89); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Low/Area Scan (5x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.51 W/kg

Left Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 38.37 V/m; Power Drift = -0.09 dB

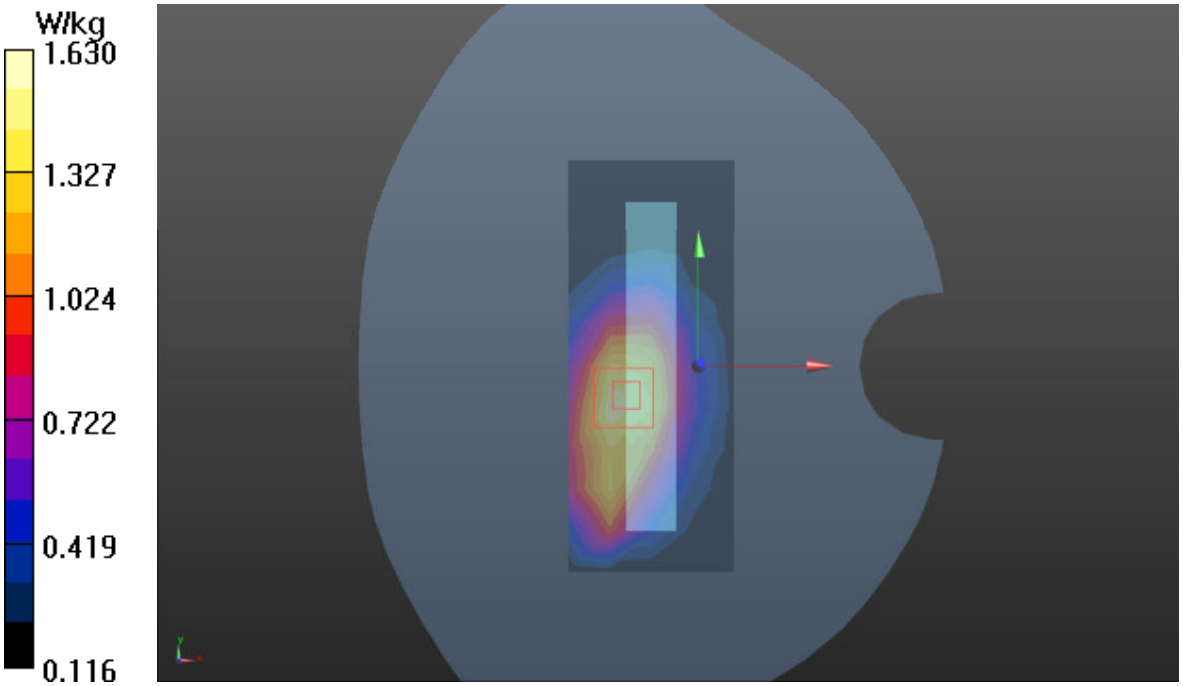
Peak SAR (extrapolated) = 2.19 W/kg

SAR(1 g) = 1.5 W/kg; SAR(10 g) = 0.997 W/kg

Smallest distance from peaks to all points 3 dB below = 20.5 mm

Ratio of SAR at M2 to SAR at M1 = 68.5%

Maximum value of SAR (measured) = 1.63 W/kg



Plot 18 LTE Band 66 1RB Front Side 0mm Middle

Date: 2024/8/10

Communication System: UID 0, LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1745 MHz; σ = 1.311 S/m; ε_r = 39.407; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(8.01, 8.42, 8.56); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.47 W/kg

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

Reference Value = 9.516 V/m; Power Drift = 0.15 dB

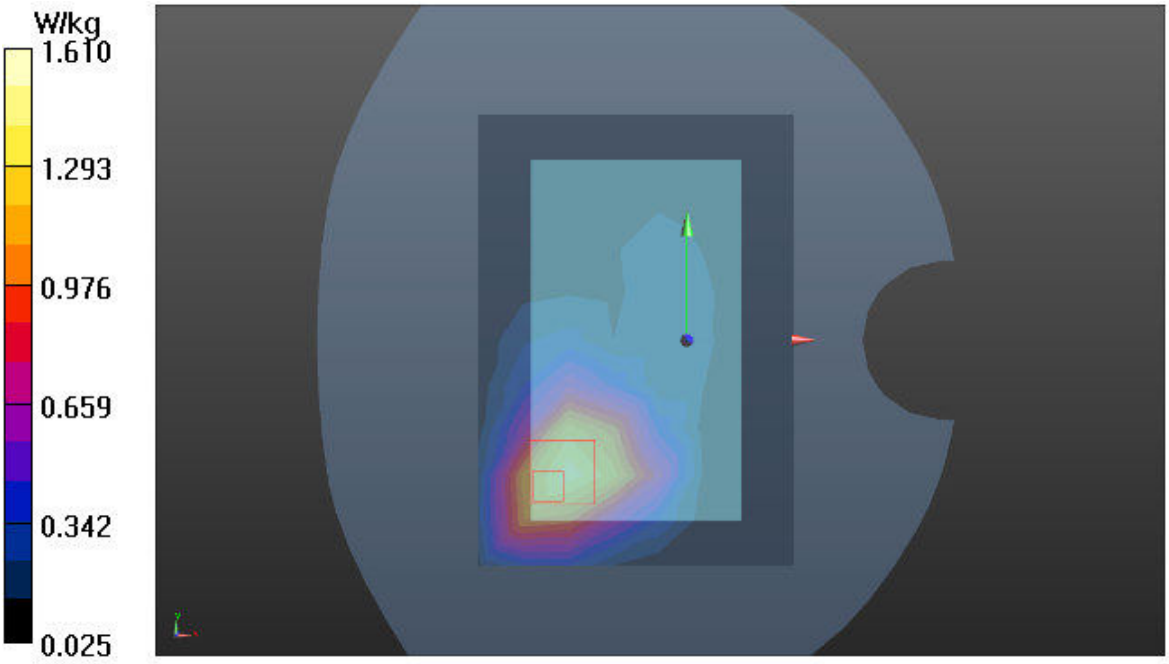
Peak SAR (extrapolated) = 2.66 W/kg

SAR(1 g) = 1.59 W/kg; SAR(10 g) = 0.906 W/kg

Smallest distance from peaks to all points 3 dB below = 13.2 mm

Ratio of SAR at M2 to SAR at M1 = 56%

Maximum value of SAR (measured) = 1.61 W/kg



Plot 19 802.11b Front Side 0mm Low

Date: 2024/8/19

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2412 MHz; σ = 1.738 S/m; ε_r = 40.892; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1692; Calibrated: 2023/11/8

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0945 W/kg

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

Reference Value = 2.846 V/m; Power Drift = 0.027 dB

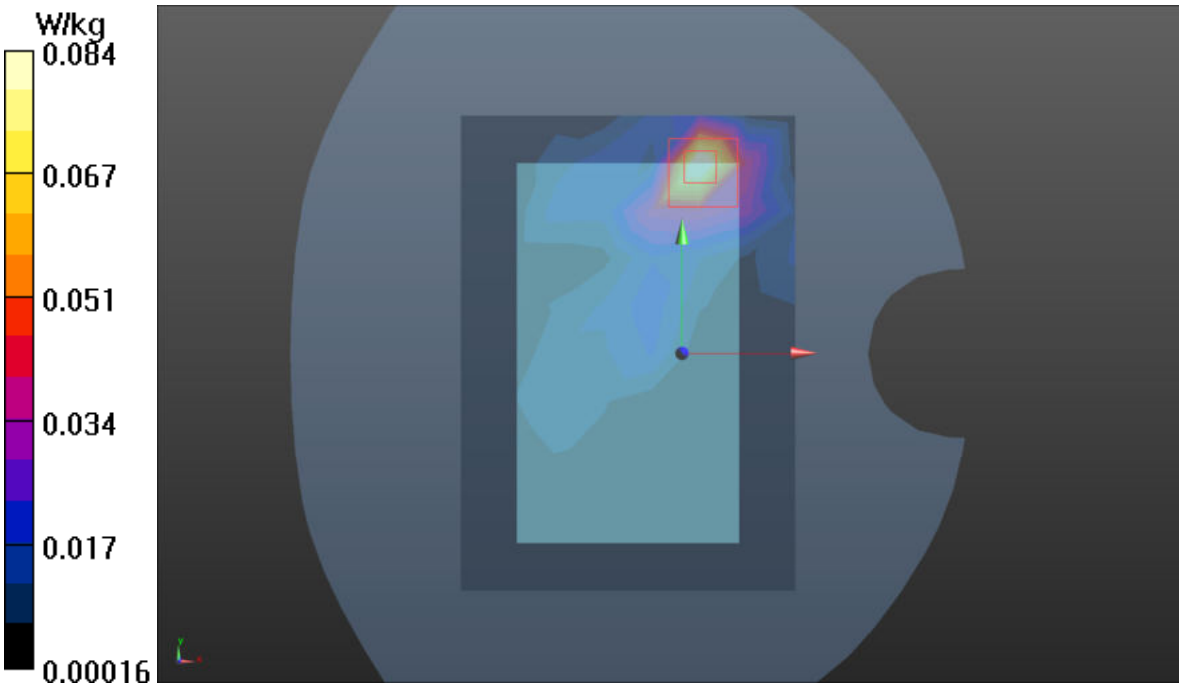
Peak SAR (extrapolated) = 0.190 W/kg

SAR(1 g) = 0.080 W/kg; SAR(10 g) = 0.035 W/kg

Smallest distance from peaks to all points 3 dB below = 12 mm

Ratio of SAR at M2 to SAR at M1 = 45.6%

Maximum value of SAR (measured) = 0.084 W/kg



ANNEX D: Probe Calibration Certificate (SN: 7689)

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client	TA Shanghai	Certificate No.	EX-7689_Jun24

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7689
Calibration procedure(s)	QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, QA CAL-25.v8 Calibration procedure for dosimetric E-field probes
Calibration date	June 04, 2024

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	26-Mar-24 (No. 217-04036/04037)	Mar-25
Power sensor NRP-Z91	SN: 103244	26-Mar-24 (No. 217-04036)	Mar-25
OCP DAK-3.5 (weighted)	SN: 1249	05-Oct-23 (OCP-DAK3.5-1249_Oct23)	Oct-24
OCP DAK-12	SN: 1016	05-Oct-23 (OCP-DAK12-1016_Oct23)	Oct-24
Reference 20 dB Attenuator	SN: CC2552 (20x)	26-Mar-24 (No. 217-04046)	Mar-25
DAE4	SN: 660	23-Feb-24 (No. DAE4-660_Feb24)	Feb-25
Reference Probe EX3DV4	SN: 7349	03-Nov-23 (No. EX3-7349_Nov23)	Nov-24

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24

	Name	Function	Signature
Calibrated by	Joanna Lleshaj	Laboratory Technician	
Approved by	Sven Kühn	Technical Manager	

Issued: June 4, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: EX-7689_Jun24 Page 1 of 22

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z*: Assessed for E-field polarization $\vartheta = 0$ ($f \le 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- *DCPx,y,z*: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- *PAR*: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters*: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \le 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ±50 MHz to ±100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

EX3DV4 - SN:7689 June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc ($k = 2$)
Norm ($\mu V/(V/m)^2$) [A]	0.56	0.61	0.60	±10.1%
DCP (mV) [B]	102.7	103.5	104.8	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B $dB\sqrt{\mu V}$	C	D dB	VR mV	Max dev.	Max Unc[E] $k = 2$
0	CW	X	0.00	0.00	1.00	0.00	123.5	±1.1%	±4.7%
		Y	0.00	0.00	1.00		119.7		
		Z	0.00	0.00	1.00		140.9		
10352	Pulse Waveform (200Hz, 10%)	X	1.60	61.02	6.64	10.00	60.0	±2.5%	±9.6%
		Y	1.42	60.16	6.02		60.0		
		Z	1.73	61.65	6.95		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	0.79	60.00	4.97	6.99	80.0	±2.2%	±9.6%
		Y	0.82	60.00	4.79		80.0		
		Z	10.00	72.00	9.00		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	0.32	149.82	0.95	3.98	95.0	±2.8%	±9.6%
		Y	20.00	72.00	7.00		95.0		
		Z	0.20	139.27	0.20		95.0		
10355	Pulse Waveform (200Hz, 60%)	X	0.29	60.00	2.80	2.22	120.0	±1.7%	±9.6%
		Y	8.70	158.89	15.99		120.0		
		Z	9.34	158.65	18.11		120.0		
10387	QPSK Waveform, 1 MHz	X	0.72	66.25	13.93	1.00	150.0	±3.8%	±9.6%
		Y	0.59	64.27	12.38		150.0		
		Z	0.79	67.02	14.20		150.0		
10388	QPSK Waveform, 10 MHz	X	1.50	66.93	14.73	0.00	150.0	±1.3%	±9.6%
		Y	1.37	65.88	13.93		150.0		
		Z	1.55	67.15	14.85		150.0		
10396	64-QAM Waveform, 100 kHz	X	1.72	64.78	16.18	3.01	150.0	±0.9%	±9.6%
		Y	1.71	64.79	15.98		150.0		
		Z	1.75	65.00	16.24		150.0		
10399	64-QAM Waveform, 40 MHz	X	2.95	66.69	15.41	0.00	150.0	±1.6%	±9.6%
		Y	2.86	66.30	15.09		150.0		
		Z	2.87	66.14	15.14		150.0		
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.96	66.18	15.49	0.00	150.0	±3.0%	±9.6%
		Y	3.86	65.92	15.26		150.0		
		Z	4.05	66.38	15.59		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Linearization parameter uncertainty for maximum specified field strength.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

EX3DV4 - SN:7689 June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms\,V^{-2}$	T2 $ms\,V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
x	10.8	78.12	33.65	2.19	0.00	4.90	0.42	0.00	1.00
y	10.5	76.45	33.69	3.63	0.00	4.91	0.50	0.00	1.00
z	11.2	81.08	33.46	3.12	0.00	4.90	0.41	0.00	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	-2.4°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Note: Measurement distance from surface can be increased to 3–4 mm for an *Area Scan* job.

EX3DV4 - SN:7689 June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz)[C]	Relative Permittivity[F]	Conductivity[F] (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unc[H] ($k = 2$)
13	55.0	0.75	14.55	15.41	17.14	0.00	1.25	±13.3%
750	41.9	0.89	9.58	10.07	10.24	0.34	1.27	±11.0%
835	41.5	0.90	9.44	9.92	10.09	0.34	1.27	±11.0%
1750	40.1	1.37	8.01	8.42	8.56	0.35	1.27	±11.0%
1900	40.0	1.40	7.88	8.28	8.42	0.35	1.27	±11.0%
2000	40.0	1.40	7.78	8.18	8.32	0.35	1.27	±11.0%
2300	39.5	1.67	7.65	8.04	8.17	0.35	1.27	±11.0%
2450	39.2	1.80	7.62	8.01	8.14	0.35	1.27	±11.0%
2600	39.0	1.96	7.39	7.77	7.89	0.35	1.27	±11.0%
3300	38.2	2.71	6.80	7.15	7.27	0.36	1.27	±13.1%
3500	37.9	2.91	6.76	7.11	7.22	0.36	1.27	±13.1%
3700	37.7	3.12	6.71	7.05	7.17	0.36	1.27	±13.1%
3900	37.5	3.32	6.51	6.84	6.95	0.37	1.27	±13.1%
4100	37.2	3.53	6.39	6.72	6.83	0.37	1.27	±13.1%
4400	36.9	3.84	6.31	6.63	6.74	0.37	1.27	±13.1%
4600	36.7	4.04	6.28	6.59	6.70	0.37	1.27	±13.1%
4800	36.4	4.25	6.21	6.53	6.64	0.37	1.27	±13.1%
4950	36.3	4.40	6.11	6.42	6.53	0.36	1.27	±13.1%
5250	35.9	4.71	5.87	6.17	6.27	0.33	1.27	±13.1%
5600	35.5	5.07	5.33	5.60	5.70	0.29	1.27	±13.1%
5750	35.4	5.22	5.31	5.59	5.68	0.28	1.27	±13.1%

[C] Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

[F] The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ and σ by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if SAR correction is applied.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

[H] The stated uncertainty is the total calibration uncertainty ($k = 2$) of Norm-ConvF. Therefore, The uncertainty stated is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7689 June 04, 2024

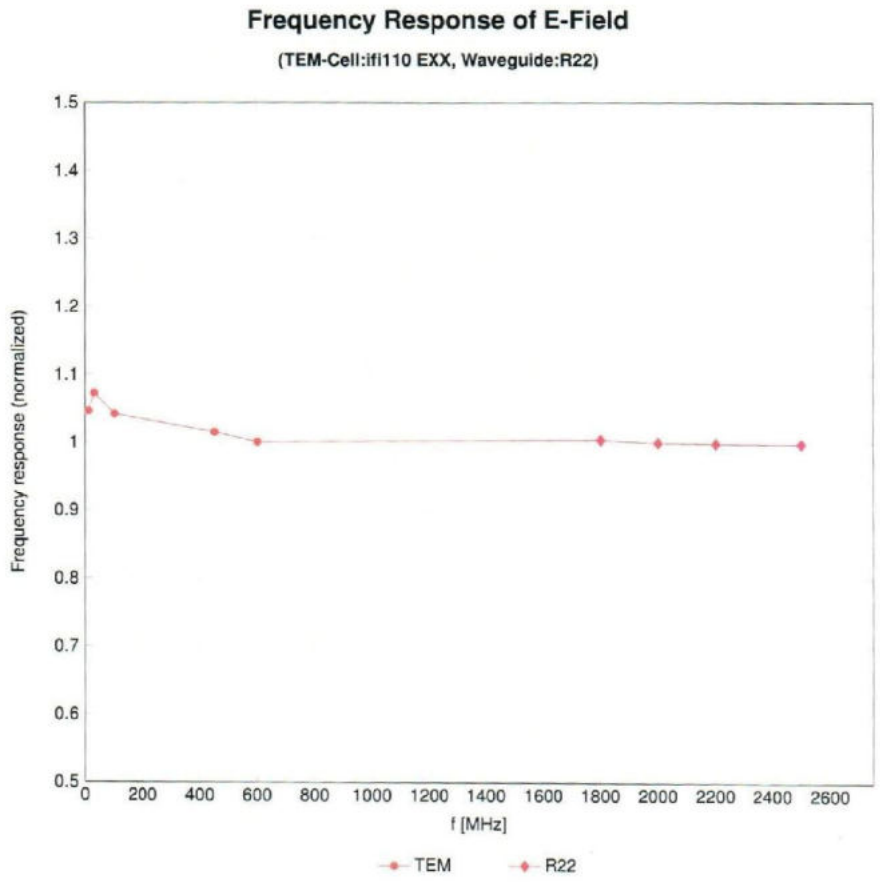
Parameters of Probe: EX3DV4 - SN:7689

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz)[C]	Relative Permittivity[F]	Conductivity[F] (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unc[H] ($k = 2$)
6500	34.5	6.07	6.03	6.33	6.44	0.20	1.27	±18.6%

[C] Frequency validity at 6.5 GHz is −600/+700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ and σ by less than ±10% from the target values (typically better than ±6%) and are valid for TSL with deviations of up to ±10%.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–6 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger than half the probe tip diameter from the boundary.
[H] The stated uncertainty is the total calibration uncertainty ($k = 2$) of Norm·ConvF. Therefore, The uncertainty stated is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

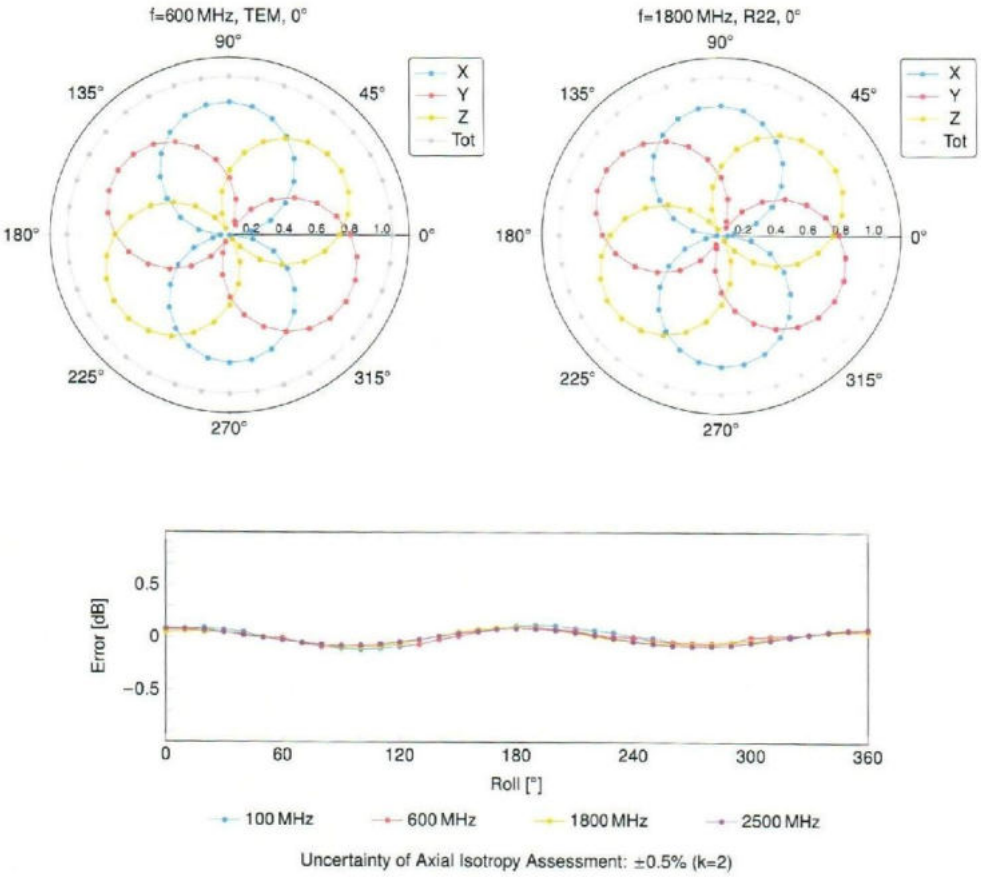
EX3DV4 - SN:7689 June 04, 2024



Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

EX3DV4 - SN:7689 June 04, 2024

Receiving Pattern (ϕ), $\vartheta = 0°$

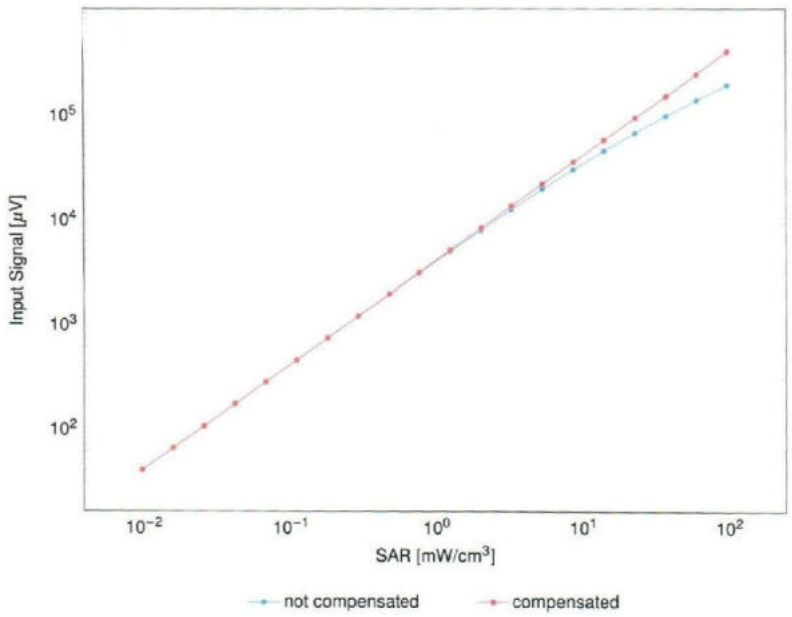


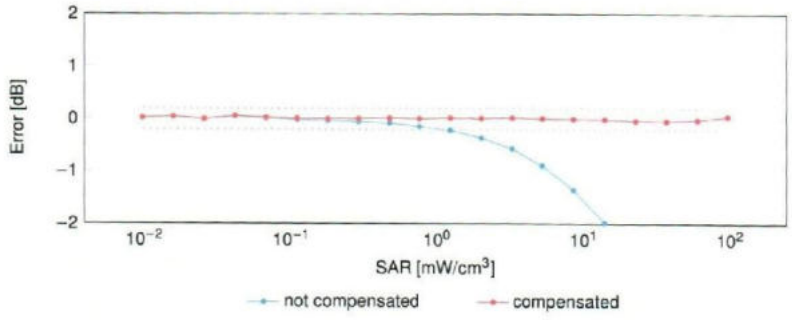
Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

EX3DV4 - SN:7689 June 04, 2024

Dynamic Range f(SAR_{head})

(TEM cell, f_{eval} = 1900MHz)

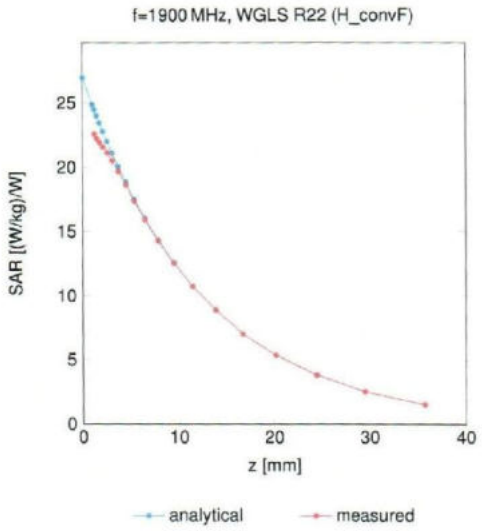




Uncertainty of Linearity Assessment: ±0.6% (k=2)

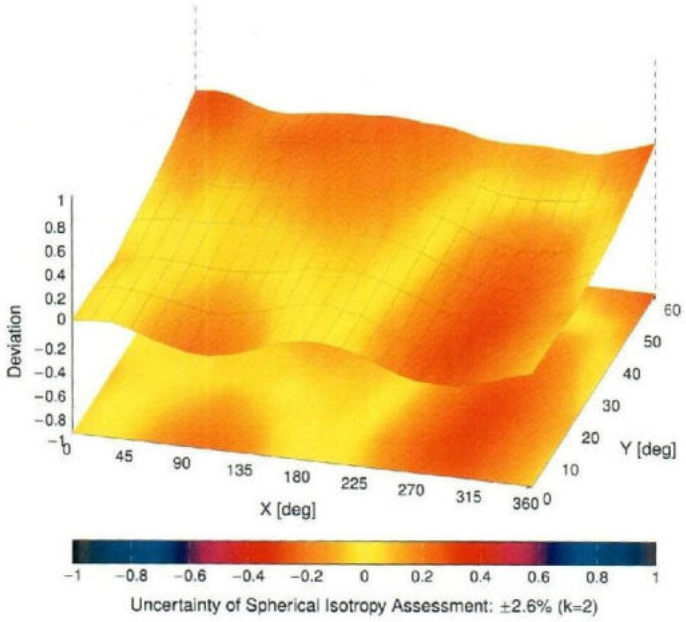
EX3DV4 - SN:7689 June 04, 2024

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



EX3DV4 - SN:7689 June 04, 2024

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k = 2$
0		CW	CW	0.00	±4.7
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.6
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	±9.6
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	±9.6
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	±9.6
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	±9.6
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	±9.6
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	±9.6
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	±9.6
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	±9.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.6
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	±9.6
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.6
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	±9.6
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	±9.6
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	±9.6
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.6
10062	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
10063	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
10064	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
10065	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10066	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.6
10067	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.6
10068	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
10069	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	±9.6
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.6
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	±9.6
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	±9.6
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
10098	CAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
10100	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	±9.6
10101	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10103	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
10104	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
10105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
10108	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
10109	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10110	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6
10111	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k = 2$
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10114	CAE	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6
10115	CAE	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6
10116	CAE	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
10117	CAE	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6
10118	CAE	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
10119	CAE	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6
10140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9.6
10169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±9.6
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9.6
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
10186	AAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	CAE	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6
10197	CAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6
10198	CAE	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
10219	CAE	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220	CAE	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
10221	CAE	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
10222	CAE	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
10223	CAE	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6
10224	CAE	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6
10238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	±9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±9.6
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
10275	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6
10278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	±9.6
10279	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	±9.6
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6
10297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6
10298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
10299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
10300	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10301	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	WiMAX	12.03	±9.6
10302	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	±9.6
10303	AAA	IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	12.52	±9.6
10304	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	11.86	±9.6
10305	AAA	IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	±9.6
10306	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)	WiMAX	14.67	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10307	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	±9.6
10308	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6
10309	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	±9.6
10310	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	±9.6
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.08	±9.6
10313	AAA	iDEN 1:3	iDEN	10.51	±9.6
10314	AAA	iDEN 1:6	iDEN	13.48	±9.6
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10317	AAE	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	±9.6
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	±9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	±9.6
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	±9.6
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	±9.6
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	±9.6
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.6
10400	AAF	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
10401	AAF	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	±9.6
10402	AAF	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	±9.6
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.6
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	±9.6
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	±9.6
10414	AAA	WLAN CCDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10417	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	±9.6
10422	AAD	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	±9.6
10423	AAD	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6
10424	AAD	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	±9.6
10425	AAD	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAD	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAD	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
10432	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	±9.6
10435	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10447	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
10450	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
10451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
10456	AAD	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	±9.6
10457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAB	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
10461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	±9.6
10463	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10466	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10467	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10468	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10469	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10470	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10471	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E k = 2
10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	±9.6
10481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±9.6
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±9.6
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
10485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±9.6
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	±9.6
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±9.6
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	±9.6
10489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	±9.6
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	±9.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	±9.6
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	±9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	±9.6
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10518	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10519	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	±9.6
10520	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	±9.6
10521	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	±9.6
10522	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10523	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	±9.6
10525	AAD	IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.36	±9.6
10526	AAD	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
10527	AAD	IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.21	±9.6
10528	AAD	IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.36	±9.6
10529	AAD	IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.6
10531	AAD	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.6
10532	AAD	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10533	AAD	IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	±9.6
10534	AAD	IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.6
10535	AAD	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6
10536	AAD	IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.6
10537	AAD	IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
10538	AAD	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6
10540	AAD	IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10541	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.46	±9.6
10542	AAD	IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6
10543	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9.6
10544	AAD	IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6
10545	AAD	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10546	AAD	IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6
10547	AAD	IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9.6
10548	AAD	IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.37	±9.6
10550	AAD	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.38	±9.6
10551	AAD	IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.50	±9.6
10552	AAD	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.42	±9.6
10553	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.45	±9.6
10554	AAE	IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.48	±9.6
10555	AAE	IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
10556	AAE	IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.50	±9.6
10557	AAE	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.52	±9.6
10558	AAE	IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.61	±9.6
10560	AAE	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.73	±9.6
10561	AAE	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6
10562	AAE	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9.6
10563	AAE	IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9.6
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	±9.6
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	±9.6
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	±9.6
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	±9.6
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10583	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10584	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10585	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10586	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10587	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10588	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10589	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10590	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10591	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±9.6
10592	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10593	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6
10594	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10595	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
10596	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
10597	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.6
10598	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6
10599	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6
10600	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10601	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	8.82	±9.6
10602	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.6
10603	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
10604	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9.6
10605	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)	WLAN	8.97	±9.6
10606	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10607	AAD	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±9.6
10608	AAD	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k = 2$
10609	AAD	IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6
10610	AAD	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6
10611	AAD	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10612	AAD	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10613	AAD	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6
10614	AAD	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.59	±9.6
10615	AAD	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10616	AAD	IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
10617	AAD	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.81	±9.6
10618	AAD	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.58	±9.6
10619	AAD	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.86	±9.6
10620	AAD	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.87	±9.6
10621	AAD	IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10622	AAD	IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.68	±9.6
10623	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10624	AAD	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.96	±9.6
10625	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.96	±9.6
10626	AAD	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6
10627	AAD	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10628	AAD	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.71	±9.6
10629	AAD	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
10630	AAD	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.72	±9.6
10631	AAD	IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.81	±9.6
10632	AAD	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
10633	AAD	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.83	±9.6
10634	AAD	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.80	±9.6
10635	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6
10636	AAE	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6
10637	AAE	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10638	AAE	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.86	±9.6
10639	AAE	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
10640	AAE	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.98	±9.6
10641	AAE	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	9.06	±9.6
10642	AAE	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6
10643	AAE	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.89	±9.6
10644	AAE	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6
10645	AAE	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	9.11	±9.6
10646	AAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6
10647	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
10652	AAF	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6
10653	AAF	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±9.6
10654	AAE	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	±9.6
10655	AAF	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6
10658	AAB	Pulse Waveform (200Hz, 10%)	Test	10.00	±9.6
10659	AAB	Pulse Waveform (200Hz, 20%)	Test	6.99	±9.6
10660	AAB	Pulse Waveform (200Hz, 40%)	Test	3.98	±9.6
10661	AAB	Pulse Waveform (200Hz, 60%)	Test	2.22	±9.6
10662	AAB	Pulse Waveform (200Hz, 80%)	Test	0.97	±9.6
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	±9.6
10671	AAC	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	9.09	±9.6
10672	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.57	±9.6
10673	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.78	±9.6
10674	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10675	AAC	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.90	±9.6
10676	AAC	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10677	AAC	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.73	±9.6
10678	AAC	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.78	±9.6
10679	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.89	±9.6
10680	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	±9.6
10681	AAC	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	8.62	±9.6
10682	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.83	±9.6
10683	AAC	IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10684	AAC	IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.26	±9.6
10685	AAC	IEEE 802.11ax (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
10686	AAC	IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.28	±9.6

EX3DV4 - SN:7689 June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10687	AAC	IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.45	±9.6
10688	AAC	IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	8.29	±9.6
10689	AAC	IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.55	±9.6
10690	AAC	IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10691	AAC	IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.25	±9.6
10692	AAC	IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	8.29	±9.6
10693	AAC	IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9.6
10694	AAC	IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle)	WLAN	8.57	±9.6
10695	AAC	IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.78	±9.6
10696	AAC	IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.91	±9.6
10697	AAC	IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.61	±9.6
10698	AAC	IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.89	±9.6
10699	AAC	IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.82	±9.6
10700	AAC	IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±9.6
10701	AAC	IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.86	±9.6
10702	AAC	IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.70	±9.6
10703	AAC	IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10704	AAC	IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.56	±9.6
10705	AAC	IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle)	WLAN	8.69	±9.6
10706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle)	WLAN	8.66	±9.6
10707	AAC	IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.32	±9.6
10708	AAC	IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
10710	AAC	IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.29	±9.6
10711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6
10712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	8.67	±9.6
10713	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.33	±9.6
10714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.26	±9.6
10715	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.45	±9.6
10716	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.30	±9.6
10717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	8.48	±9.6
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	8.24	±9.6
10719	AAC	IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	±9.6
10720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.87	±9.6
10721	AAC	IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.76	±9.6
10722	AAC	IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.55	±9.6
10723	AAC	IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10724	AAC	IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.90	±9.6
10725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
10726	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.72	±9.6
10727	AAC	IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.66	±9.6
10728	AAC	IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.65	±9.6
10729	AAC	IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle)	WLAN	8.64	±9.6
10730	AAC	IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle)	WLAN	8.67	±9.6
10731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10732	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.46	±9.6
10733	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.40	±9.6
10734	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.25	±9.6
10735	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.33	±9.6
10736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	8.27	±9.6
10737	AAC	IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.36	±9.6
10738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.42	±9.6
10739	AAC	IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.29	±9.6
10740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.48	±9.6
10741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	8.40	±9.6
10742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	8.43	±9.6
10743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.94	±9.6
10744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle)	WLAN	9.16	±9.6
10745	AAC	IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.93	±9.6
10746	AAC	IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle)	WLAN	9.11	±9.6
10747	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle)	WLAN	9.04	±9.6
10748	AAC	IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.93	±9.6
10749	AAC	IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle)	WLAN	8.90	±9.6
10750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.79	±9.6
10751	AAC	IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10752	AAC	IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6