

SAR TEST REPORT

Applicant Dspread Technology (Beijing) Inc
FCC ID 2AGQ6-D20PRO
Product Smart POS
Model D20
Report No. EFTA25020102-IE-09-S1V2
Issue Date May 7, 2025

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 can demonstrate the compliance with the requirements as documented in this report.

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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	April 21, 2025
Rev.1	Updated information.	April 30, 2025
Rev.2	Updated information.	May 7, 2025
Note: This revised report (Report No.: EFTA25020102-IE-09-S1V2) supersedes and replaces the previously issued report (Report No.: EFTA25020102-IE-09-S1V1). 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

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.
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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 SAR

Mode	Highest Reported SAR (W/kg)	
	1g SAR Hotspot (Separation 10mm)	10g SAR Extremity (Separation 0mm)
GSM 850	1.071	1.483
GSM 1900	0.685	2.028
WCDMA Band II	0.727	2.478
WCDMA Band IV	0.847	2.748
WCDMA Band V	0.627	1.057
LTE FDD 4	0.777	2.807
LTE FDD 7/38	0.698	2.405
LTE FDD 12/17	0.345	0.59
LTE FDD 2/25	0.780	2.460
LTE FDD 5/26	0.509	0.890
LTE TDD 41	0.233	1.163
Wi-Fi (2.4GHz)	0.352	1.046
Wi-Fi (5GHz)	0.438	0.710
Bluetooth	0.057	0.122
Date of Testing: March 28,2025 ~ April 3,2025		
Date of Sample Received: February 19, 2025		
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. 3. According to TCB workshop October, 2014 RF Exposure Procedures Update (Overlapping LTE Bands): SAR for LTE Band 17 (Frequency range 704-716 MHz) is covered by LTE Band 12 (Frequency range 699-716 MHz); LTE Band 38 (Frequency range 2570 ~ 2620 MHz) is covered by LTE Band 41 (Frequency range 2496 ~ 2690 MHz); LTE Band 2 (Frequency range 1850 ~ 1910 MHz) is covered by LTE Band 25 (Frequency range 1850 ~ 1915 MHz) ; LTE Band 5 (Frequency range 824 ~ 849		

MHz) is covered by LTE Band 26 (Frequency range 814 ~ 849 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.

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)	1.509	3.853

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

General Technologies

EUT Stage	Identical Prototype
Model	D20
IMEI	IMEI1: 869096054993405 IMEI2: 869096054991748
Hardware Version	2.0.0
Software Version	2.1.1
Antenna Type	Internal Antenna
Power Class	GSM 850: 4 GSM 1900: 1 WCDMA Band II/IV/V: 3 LTE 2/4/5/7/12/17/25/26/38/41: 3
Power Level	GSM 850: level 5 GSM 1900: level 0 WCDMA Band II/IV/V: all up bits LTE 2/4/5/7/12/17/25/26/38/41: max power
EUT Accessory	
Battery	Manufacturer: Guangdong Fenghua New Energy Co.,Ltd. Model: D20
USB Cable	Manufacturer: ShenZhen FKY-QY Hardware&Electronics.,Ltd. Model: XC04W1000100
Adapter	Manufacturer: SHENZHEN TIANYIN ELECTRONICS CO., LTD. Model: TPA-46B050100UU
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)	☐ Multi-slot Class:8-1UP ☐ Multi-slot Class:10-2UP	824 ~ 849	869 ~ 894	
	1900	EGPRS(GMSK,8PSK)	☒ Multi-slot Class:12-4UP ☐ Multi-slot Class:33-4UP	1850 ~ 1910	1930 ~ 1990	
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No					
WCDMA	Band II	QPSK	HSDPA UE Category:24 HSUPA UE Category:7	1850 ~ 1910	1930 ~ 1990	
	Band IV			1710 ~ 1755	2110 ~ 2155	
	Band V			824 ~ 849	869 ~ 894	
LTE	FDD 2	QPSK, 16QAM, 64QAM	Category 4	1850 ~ 1910	1930 ~ 1990	
	FDD 4			1710 ~ 1755	2110 ~ 2155	
	FDD 5			824 ~ 849	869 ~ 894	
	FDD 7			2500 ~ 2570	2620 ~ 2690	
	FDD 12			699 ~ 716	729 ~ 746	
	FDD 17			704 ~ 716	734 ~ 746	
	FDD 25			1850 ~ 1915	1930 ~ 1995	
	FDD 26			814 ~ 849	859 ~ 894	
	TDD 38			2570 ~ 2620	2570 ~ 2620	
	TDD 41			2535 ~ 2655	2535 ~ 2655	
	Does this device support Carrier Aggregation (CA) ☐ Yes ☒ No					
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No					
Bluetooth	2.4GHz	Version 5.0 BR/EDR + LE		2402 ~2480	2402 ~2480	
Wi-Fi	2.4GHz	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462	2412 ~ 2462	
		OFDM	802.11n HT40	2422 ~ 2452	2422 ~ 2452	
	5GHz	OFDM	802.11a/n HT20/ HT40/ ac VHT20/ VHT40/ VHT80	5150 ~ 5250	5150 ~ 5250	
				5250 ~ 5350	5250 ~ 5350	
					5725 ~ 5850	5725 ~ 5850
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 D01 3G SAR Procedures v03r01
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 $> 1.2 \text{ W/kg}$, 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.

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

- a) The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
- b) The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at $\leq 25 \text{ mm}$ from that surface or edge, in direct contact with a flat phantom, for product specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR $> 1.2 \text{ W/kg}$; however, when power

reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Product specific 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode product specific 10-g SAR.

c) The simultaneous transmission operating configurations applicable to voice and data transmissions for both phone and mini-tablet modes must be taken into consideration separately for 1-g and 10-g SAR to determine the simultaneous transmission SAR test exclusion and measurement requirements for the relevant wireless modes and exposure conditions.

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 performed 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 WCDMA Test Configuration

5.3.2.1 3G SAR Test Reduction Procedure

The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations modes according to output power, exposure conditions and device operating capabilities. Maximum output power is verified by applying the applicable versions of 3GPP TS 34.121.

5.3.2.2 Head SAR

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest SAR configuration in 12.2 kbps RMC for head exposure.

5.3.2.3 Body SAR

SAR for Body SAR configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn

configurations supported by the EUT with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the EUT, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC

5.3.3 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 $> \frac{1}{2}$ 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 $> \frac{1}{2}$ 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.

5.3.4 Additional Requirements for TDD LTE Specification

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

TDD LTE Band supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table: Uplink-downlink configurations for uplink-downlink configurations and Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS) for Special subframe configurations.

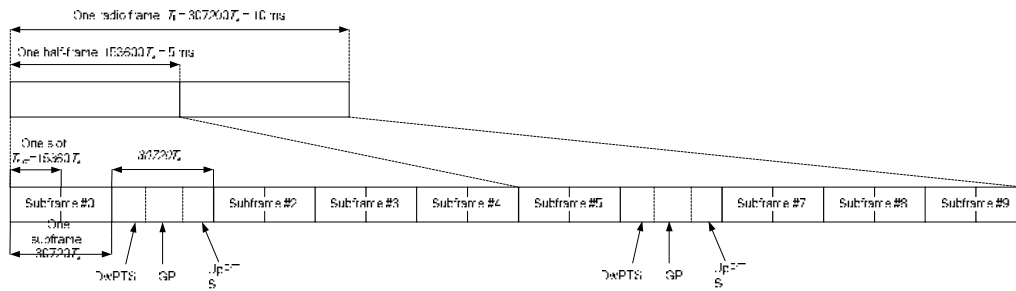


Figure 1: Frame structure type 2

Table 4: Configuration of Special Subframe (Lengths of DwPTS/GP/UpPTS)

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

Table 5: Uplink-Downlink Configurations

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

According to Figure 1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table: Uplink-downlink configurations:

$$\text{Duty cycle} = (\text{30720Ts} * \text{Ups} + \text{Uplink Component} * \text{Specials}) / (\text{307200Ts})$$

About the uplink component of Special subframes, we can figure out by Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS):

$$\text{Uplink Component} = \text{UpPTS}$$

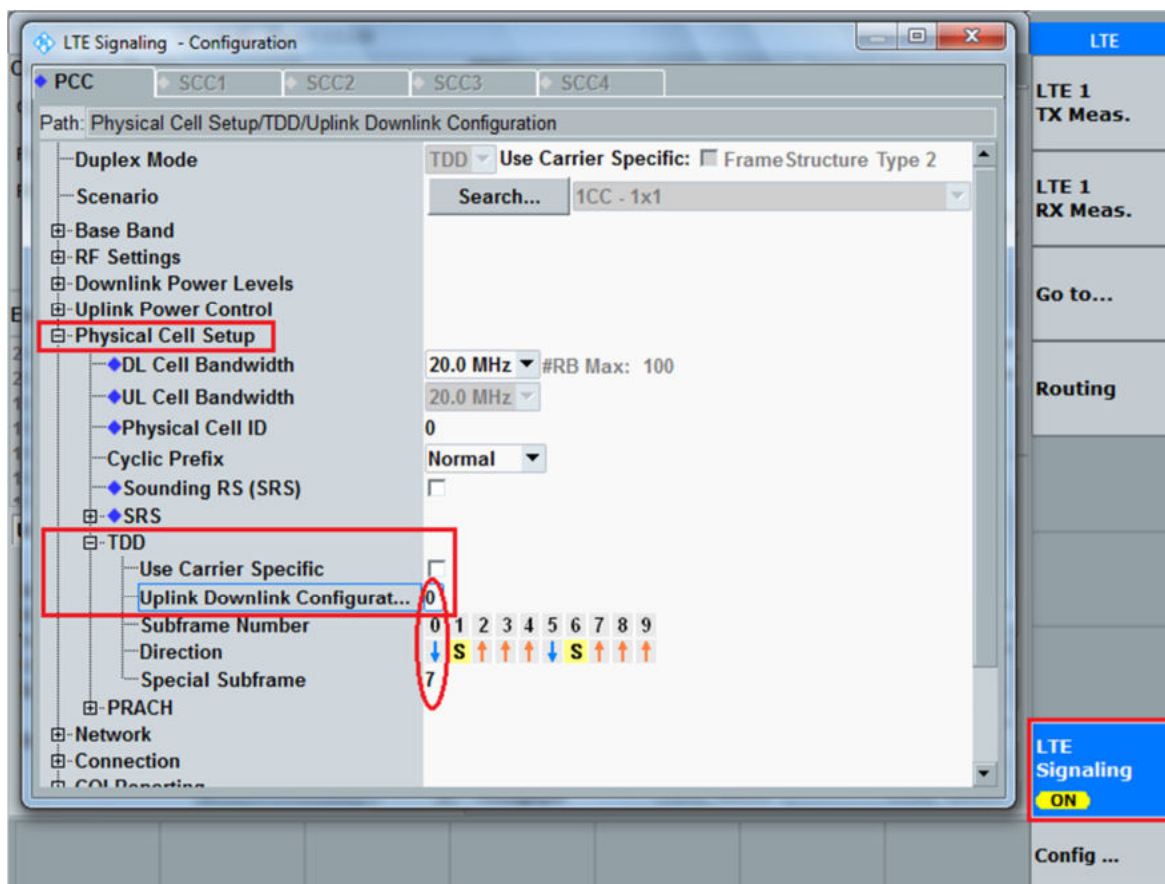
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

$$\text{Duty cycle} = [(\text{30720Ts} * \text{Ups}) + \text{UpPTS} * \text{Specials}] / (\text{307200Ts})$$

And we can get different Duty cycles under different configurations:

Uplink-downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
				Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink	
	D	S	U	configuration 0~4	configuration 5~9	configuration 0~4	configuration 5~9	configuration 0~3	configuration 4~7	configuration 0~3	configuration 4~7
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

SAR test Plan: For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type



5.3.5 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.

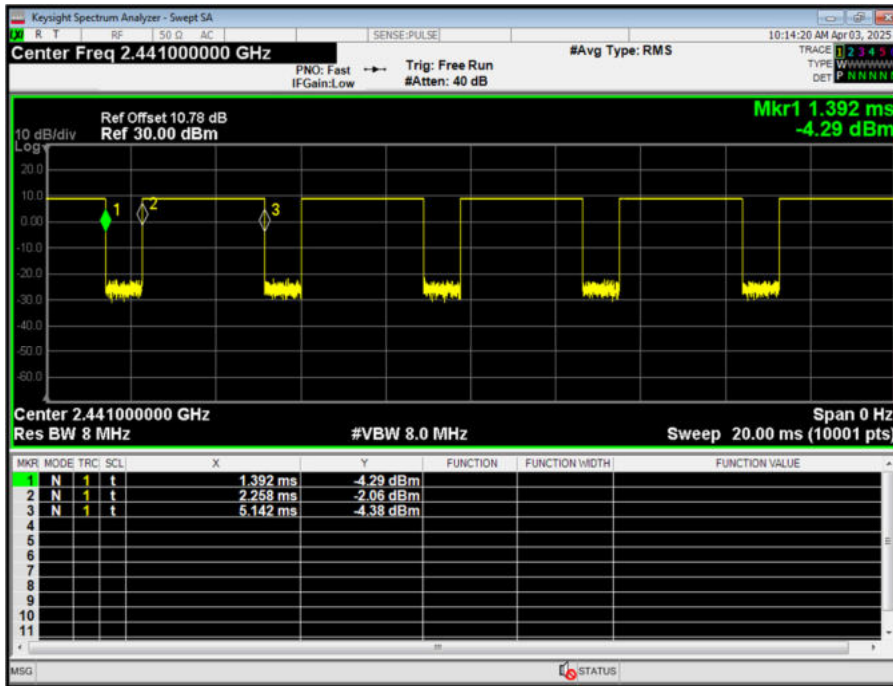
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

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.

5.3.6 Bluetooth Test Configuration

For Bluetooth SAR testing, Bluetooth engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power. And the CBT control the EUT operating with hopping off and data rate set for DH5.

The SAR measurement takes full account of the Bluetooth duty cycle and is reflected in the report, and the duty factor of the device is as follow:

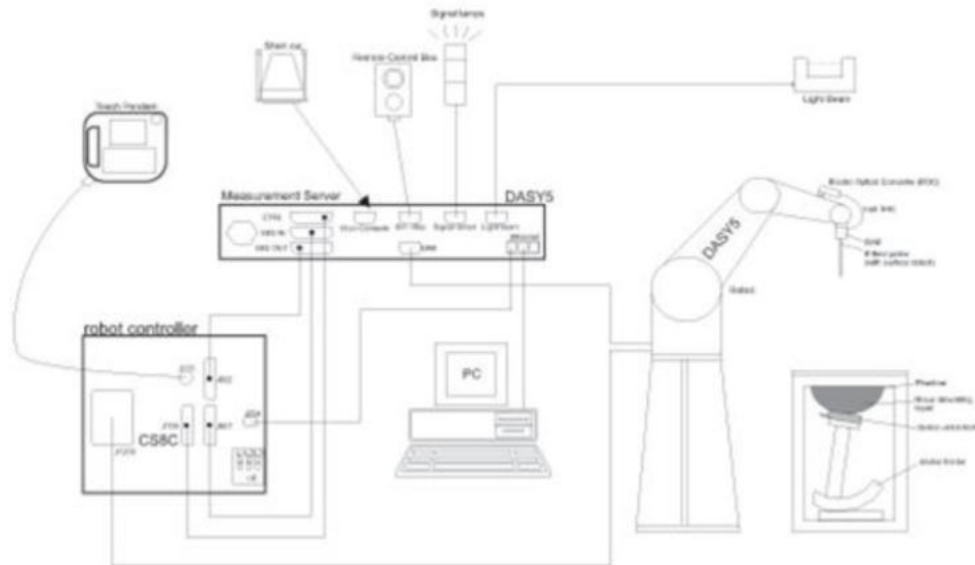


Note: Duty factor= Ton (ms)/ T(on+off) (ms)=76.9%

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 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/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 $\pm 10\%$. The spherical isotropy was evaluated and found to be better than ± 0.25 dB. 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 below 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.

$$\text{SAR} = C \Delta T / \Delta t$$

Where: Δt = Exposure time (30 seconds),

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

ΔT = Temperature increase due to RF exposure.

Or

$$\text{SAR} = |\mathbf{E}|^2 \sigma / \rho$$

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	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ 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 to 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 whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 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: $\Delta x_{\text{zoom}} \Delta y_{\text{zoom}}$			≤2GHz: ≤8mm 2 – 3GHz: ≤5mm*	3 – 4GHz: ≤5mm* 4 – 6GHz: ≤4mm*
Maximum zoom scan spatial resolution, normal to phantom surface	Uniform grid: $\Delta z_{\text{zoom}}(n)$		≤5mm	3 – 4GHz: ≤4mm 4 – 5GHz: ≤3mm 5 – 6GHz: ≤2mm
	Graded grid	$\Delta z_{\text{zoom}}(1)$: between 1 st two points closest to phantom surface	≤4mm	3 – 4GHz: ≤3mm 4 – 5GHz: ≤2.5mm 5 – 6GHz: ≤2mm
		$\Delta z_{\text{zoom}}(n > 1)$: between subsequent points	≤1.5• $\Delta z_{\text{zoom}}(n-1)$	
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 <u>reported</u> SAR from the <i>area scan based 1-g SAR estimation</i> 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 to 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	/	2024-12-02	2025-12-01
Dual Directional Coupler	UCL	UCL-DDC056G-S	20010600118	/	/	/
Amplifier	R&S	SCU18F	101022	/	2024-05-08	2025-05-07
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	1317	/	2024-09-10	2025-09-09
Validation Kit 750MHz	SPEAG	D750V3	1045	/	2023-09-12	2026-09-11
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
Validation Kit 5GHz	SPEAG	D5GHzV2	1203	/	2022-12-09	2025-12-08
Software for Tissue	SPEAG	DAK 3.0.4.1	/	3.0.4.1	/	/
Temperature Probe	Auden	DTM3000	3905	/	2024-12-03	2025-12-02
Hygrothermograph	Anymetr	HTC - 1	TA2024A031	/	2024-05-06	2025-05-05
Test System	SPEAG	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°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized.

The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	ϵ_r	$\sigma(\text{s/m})$
750	42.0	0.90
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
5250	35.9	4.71
5600	35.5	5.07
5750	35.4	5.22

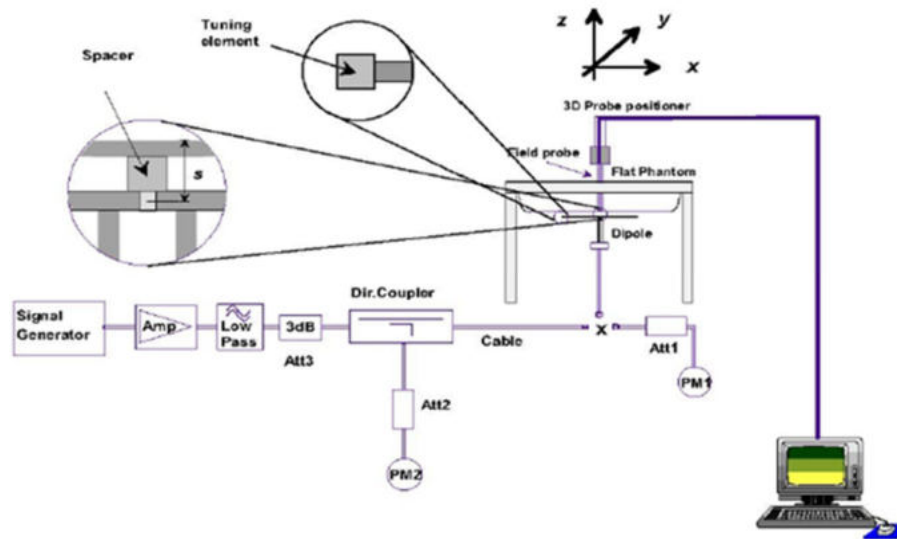
Measurements results

Frequency (MHz)	Test Date	Temp $^\circ\text{C}$	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within $\pm 5\%$)	
			ϵ_r	$\sigma(\text{s/m})$	ϵ_r	$\sigma(\text{s/m})$	Dev $\epsilon_r(\%)$	Dev $\sigma(\%)$
750	2025/4/2	21.5	42.3	0.88	42.0	0.90	0.95	-1.12
835	2025/3/28	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	2025/4/2	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
1750	2025/3/29	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	2025/4/3	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
1900	2025/3/29	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	2025/4/3	21.5	40.2	1.43	40.0	1.40	0.50	2.14
2450	2025/3/30	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	2025/3/31	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
5250	2025/4/1	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
5600	2025/4/1	21.5	34.2	5.21	35.5	5.07	-3.66	2.76
5750	2025/4/1	21.5	34.9	5.21	35.4	5.22	-1.41	-0.19
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	$\Delta\Omega$	Imaginary	$\Delta\Omega$
Dipole D835V2 SN: 4d020	Head	9/15/2023	28.3	/	50.6	/	-3.80	/
	Liquid	9/14/2024	28.9	2.0	51.4	0.8	-3.66	0.14
Dipole D1750V2 SN: 1033	Head	3/23/2023	36.2	/	51.2	/	-0.98	/
	Liquid	3/22/2024	35.4	-2.2	51.6	0.4	-1.28	-0.3
Dipole D1900V2 SN: 5d060	Head	9/12/2023	24.0	/	50.5	/	6.32	/
	Liquid	9/11/2024	24.1	0.6	50.9	0.4	6.83	0.51
Dipole D2450V2 SN:786	Head	9/12/2023	28.2	/	52.2	/	3.34	/
	Liquid	9/11/2024	28.6	1.4	52.8	0.6	3.43	0.09
Dipole D5GHzV2 (5250 MHz) SN: 1203	Head	12/9/2022	29.0	/	48.5	/	-3.20	/
	Liquid	12/8/2023	28.4	-2.1	48.4	-0.1	-3.4	-0.2
Dipole D5GHzV2 (5600 MHz) SN: 1203	Head	12/9/2022	30.4	/	51.7	/	2.60	/
	Liquid	12/8/2023	30.5	0.3%	51.5	-0.2	2.4	-0.2
Dipole D5GHzV2 (5750 MHz) SN: 1203	Head	12/9/2022	25.3	/	53.6	/	4.30	/
	Liquid	12/8/2023	25.7	1.6%	53.1	-0.5	4.7	0.4

System Check Results

Frequency (MHz)	Test Date	Temp °C	250mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
750	2025/4/2	21.5	2.13	8.52	8.47	0.01	1
835	2025/3/28	21.5	2.44	9.76	9.75	0.00	2
	2025/4/2	21.5	2.46	9.84	9.75	0.01	3
1750	2025/3/29	21.5	8.95	35.80	36.80	-0.03	4
	2025/4/3	21.5	9.11	36.44	36.80	-0.01	5
1900	2025/3/29	21.5	9.88	39.52	40.40	-0.02	6
	2025/4/3	21.5	9.85	39.40	40.40	-0.02	7
2450	2025/3/30	21.5	13.70	54.80	52.60	0.04	8
2600	2025/3/31	21.5	13.90	55.60	56.10	-0.01	9
Frequency (MHz)	Test Date	Temp °C	100mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
5250	2025/4/1	21.5	7.87	78.70	77.70	1.29	10
5600	2025/4/1	21.5	7.67	76.70	80.30	-4.48	11
5750	2025/4/1	21.5	7.66	76.60	76.80	-0.26	12
Note: Target Values used derive from the calibration certificate data storage and evaluation.							

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		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	32.00	31.51	31.62	31.64	9.03	22.97	22.48	22.59	22.61
	2 Tx Slots	31.50	30.99	31.07	31.16	6.02	25.48	24.97	25.05	25.14
	3 Tx Slots	30.00	29.47	29.58	29.67	4.26	25.74	25.21	25.32	25.41
	4 Tx Slots	29.00	28.34	28.46	28.58	3.01	25.99	25.33	25.45	25.57
EGPRS (8PSK)	1 Tx Slot	27.50	26.85	26.98	26.91	9.03	18.47	17.82	17.95	17.88
	2 Tx Slots	26.50	25.77	25.63	26.35	6.02	20.48	19.75	19.61	20.33
	3 Tx Slots	24.00	23.06	23.36	23.25	4.26	19.74	18.80	19.10	18.99
	4 Tx Slots	23.00	22.15	22.24	22.23	3.01	19.99	19.14	19.23	19.22
GSM 1900		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	29.50	28.70	28.59	28.51	9.03	20.47	19.67	19.56	19.48
	2 Tx Slots	29.00	28.06	27.98	27.94	6.02	22.98	22.04	21.96	21.92
	3 Tx Slots	27.00	26.36	26.32	26.35	4.26	22.74	22.10	22.06	22.09
	4 Tx Slots	26.00	25.25	25.26	25.31	3.01	22.99	22.24	22.25	22.30
EGPRS (8PSK)	1 Tx Slot	25.00	24.55	23.97	23.85	9.03	15.97	15.52	14.94	14.82
	2 Tx Slots	24.00	23.24	22.36	22.19	6.02	17.98	17.22	16.34	16.17
	3 Tx Slots	20.80	20.66	19.92	18.88	4.26	16.54	16.40	15.66	14.62
	4 Tx Slots	19.50	19.07	18.75	18.28	3.01	16.49	16.06	15.74	15.27
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 WCDMA Mode

The following tests were completed according to the test requirements outlined in the 3GPP TS34.121 specification.

WCDMA		Band II(dBm)				Band IV(dBm)				Band V(dBm)			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-up	4132	4183	4233	Tune-up
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	Limit	826.4	836.6	846.6	Limit
RMC	12.2kbps	22.30	22.11	21.87	23.00	22.17	22.30	22.50	23.00	22.28	22.36	22.42	23.00
HSDPA	Sub 1	21.76	21.53	21.31	22.50	21.63	21.72	21.94	22.50	21.74	21.78	21.86	22.50
	Sub 2	21.75	21.55	21.28	22.50	21.62	21.74	21.91	22.50	21.73	21.80	21.83	22.50
	Sub 3	21.22	21.05	20.80	22.00	21.09	21.24	21.43	22.00	21.20	21.30	21.35	22.00
	Sub 4	21.23	21.06	20.78	22.00	21.10	21.25	21.41	22.00	21.21	21.31	21.33	22.00
HSUPA	Sub 1	21.72	21.52	21.26	22.50	21.59	21.71	21.89	22.50	21.70	21.77	21.81	22.50
	Sub 2	20.71	20.50	20.25	21.50	20.58	20.69	20.88	21.50	20.69	20.75	20.80	21.50
	Sub 3	21.18	20.98	20.74	21.50	21.05	21.17	21.37	21.50	21.16	21.23	21.29	21.50
	Sub 4	20.64	20.47	20.22	21.50	20.51	20.66	20.85	21.50	20.62	20.72	20.77	21.50
	Sub 5	21.65	21.45	21.20	22.50	21.52	21.64	21.83	22.50	21.63	21.70	21.75	22.50
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".													

9.3 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

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
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3

LTE B2							
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	22.15	22.08	21.80	23.00
		1	2	22.28	22.20	21.93	23.00
		1	5	22.18	22.07	21.79	23.00
		3	0	22.27	22.17	21.91	23.00
		3	2	22.31	22.18	21.94	23.00
		3	3	22.27	22.15	21.89	23.00
		6	0	21.29	21.19	20.91	22.00
	16QAM	1	0	21.36	21.44	21.07	22.00
		1	2	21.47	21.56	21.25	22.00
		1	5	21.45	21.40	21.16	22.00
		3	0	21.27	21.24	20.88	22.00
		3	2	21.26	21.25	21.00	22.00
		3	3	20.30	21.19	20.88	22.00
		6	0	20.41	20.30	20.01	21.00
	64QAM	1	0	20.41	20.39	20.09	21.00
		1	2	20.55	20.48	20.20	21.00
		1	5	20.47	20.30	19.97	21.00
		3	0	20.41	20.30	20.03	21.00

		3	2	20.43	20.37	20.04	21.00
		3	3	20.38	20.32	19.98	21.00
		6	0	19.30	19.22	18.95	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	22.22	22.13	21.75	23.00
		1	7	22.20	22.10	21.76	23.00
		1	14	22.20	22.08	21.71	23.00
		8	0	21.27	21.14	20.75	22.00
		8	4	21.31	21.17	20.78	22.00
		8	7	21.25	21.13	20.75	22.00
		15	0	21.29	21.13	20.76	22.00
	16QAM	1	0	21.49	21.54	21.02	22.00
		1	7	21.43	21.46	21.03	22.00
		1	14	21.52	21.45	21.04	22.00
		8	0	20.38	20.26	19.86	21.00
		8	4	20.43	20.28	19.87	21.00
		8	7	20.32	20.23	19.87	21.00
		15	0	20.30	20.18	19.80	21.00
	64QAM	1	0	20.51	20.36	19.98	21.00
		1	7	20.45	20.29	19.98	21.00
		1	14	20.42	20.34	19.97	21.00
		8	0	19.32	19.23	18.87	20.00
		8	4	19.38	19.28	18.92	20.00
		8	7	19.32	19.25	18.89	20.00
		15	0	19.29	19.16	18.84	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	22.11	22.06	21.68	23.00
		1	13	22.23	22.16	21.81	23.00
		1	24	22.09	22.01	21.64	23.00
		12	0	21.27	21.16	20.80	22.00
		12	6	21.30	21.21	20.83	22.00
		12	13	21.24	21.15	20.79	22.00
		25	0	21.26	21.17	20.80	22.00
	16QAM	1	0	21.50	21.27	21.08	22.00
		1	13	21.58	21.53	21.16	22.00
		1	24	21.44	21.31	21.02	22.00
		12	0	20.30	20.19	19.82	21.00
		12	6	20.32	20.23	19.88	21.00
		12	13	20.27	20.20	19.80	21.00
		25	0	20.30	20.23	19.85	21.00
	64QAM	1	0	20.36	20.23	19.93	21.00
		1	13	20.43	20.39	20.01	21.00

		1	24	20.30	20.17	19.91	21.00
		12	0	19.32	19.23	18.87	20.00
		12	6	19.36	19.29	18.92	20.00
		12	13	19.29	19.21	18.89	20.00
		25	0	19.30	19.25	18.85	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	22.25	22.20	21.82	23.00
		1	25	22.34	22.21	21.87	23.00
		1	49	22.23	22.05	21.76	23.00
		25	0	21.35	21.24	20.87	22.00
		25	13	21.28	21.22	20.86	22.00
		25	25	21.24	21.20	20.87	22.00
		50	0	21.29	21.22	20.89	22.00
	16QAM	1	0	21.45	21.60	21.13	22.00
		1	25	21.61	21.58	21.21	22.00
		1	49	21.50	21.33	21.02	22.00
		25	0	20.37	20.30	19.93	21.00
		25	13	20.32	20.27	19.92	21.00
		25	25	20.27	20.22	19.89	21.00
		50	0	20.32	20.26	19.93	21.00
	64QAM	1	0	20.46	20.44	19.98	21.00
		1	25	20.45	20.47	20.11	21.00
		1	49	20.49	20.22	20.00	21.00
		25	0	19.38	19.28	18.95	20.00
		25	13	19.30	19.28	18.94	20.00
		25	25	19.29	19.19	18.94	20.00
		50	0	19.32	19.25	18.95	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	22.18	22.18	21.79	23.00
		1	38	22.27	22.12	21.82	23.00
		1	74	22.21	21.95	21.71	23.00
		36	0	21.37	21.25	20.89	22.00
		36	18	21.31	21.24	20.88	22.00
		36	39	21.28	21.14	20.84	22.00
		75	0	21.30	21.21	20.88	22.00
	16QAM	1	0	21.44	21.47	21.19	22.00
		1	38	21.62	21.52	21.21	22.00
		1	74	21.59	21.29	20.98	22.00
		36	0	20.37	20.25	19.89	21.00
		36	18	20.30	20.25	19.88	21.00
		36	39	20.30	20.14	19.84	21.00
		75	0	20.32	20.23	19.92	21.00

	64QAM	1	0	20.41	20.46	20.05	21.00
		1	38	20.51	20.36	20.05	21.00
		1	74	20.43	20.17	19.86	21.00
		36	0	19.38	19.29	18.97	20.00
		36	18	19.34	19.29	18.93	20.00
		36	39	19.34	19.21	18.92	20.00
		75	0	19.32	19.22	18.96	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	22.07	22.05	21.72	23.00
		1	50	22.36	22.25	21.95	23.00
		1	99	22.03	21.73	21.57	23.00
		50	0	21.38	21.22	20.98	22.00
		50	25	21.33	21.24	20.90	22.00
		50	50	21.34	21.10	20.87	22.00
		100	0	21.34	21.16	20.91	22.00
	16QAM	1	0	21.24	21.43	21.08	22.00
		1	50	21.58	21.45	21.30	22.00
		1	99	21.34	21.04	20.77	22.00
		50	0	20.43	20.25	20.02	21.00
		50	25	20.39	20.26	19.94	21.00
		50	50	20.37	20.12	19.92	21.00
		100	0	20.39	20.18	19.95	21.00
	64QAM	1	0	20.23	20.23	19.92	21.00
		1	50	20.56	20.48	20.13	21.00
		1	99	20.23	19.98	19.70	21.00
		50	0	19.43	19.27	19.07	20.00
		50	25	19.37	19.29	18.95	20.00
		50	50	19.41	19.16	18.95	20.00
		100	0	19.42	19.21	19.03	20.00
LTE B4							
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	22.28	22.36	22.70	23.00
		1	2	22.40	22.45	22.82	23.00
		1	5	22.28	22.37	22.67	23.00
		3	0	22.39	22.46	22.81	23.00
		3	2	22.42	22.50	22.80	23.00
		3	3	22.38	22.46	22.78	23.00
		6	0	21.43	21.51	21.81	22.50
	16QAM	1	0	21.43	21.58	21.96	22.50
		1	2	21.56	21.73	22.17	22.50
		1	5	21.46	21.70	21.93	22.50

		3	0	21.32	21.50	21.74	22.50
		3	2	21.32	21.51	21.86	22.50
		3	3	21.34	21.44	21.78	22.50
		6	0	20.50	20.59	20.93	21.00
	64QAM	1	0	20.41	20.65	20.95	21.00
		1	2	20.54	20.68	20.98	21.00
		1	5	20.48	20.55	21.00	21.00
		3	0	20.51	20.58	20.91	21.00
		3	2	20.47	20.61	20.92	21.00
		3	3	20.44	20.58	20.87	21.00
		6	0	19.45	19.54	19.89	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	22.30	22.42	22.71	23.00
		1	7	22.33	22.45	22.74	23.00
		1	14	22.33	22.38	22.71	23.00
		8	0	21.33	21.46	21.75	22.50
		8	4	21.43	21.51	21.79	22.50
		8	7	21.37	21.47	21.78	22.50
		15	0	21.41	21.50	21.78	22.50
	16QAM	1	0	21.53	21.63	22.00	22.50
		1	7	21.57	21.69	22.00	22.50
		1	14	21.56	21.69	21.95	22.50
		8	0	20.38	20.55	20.86	21.00
		8	4	20.49	20.61	20.91	21.00
		8	7	20.45	20.55	20.86	21.00
		15	0	20.41	20.50	20.80	21.00
	64QAM	1	0	20.45	20.64	20.92	21.00
		1	7	20.56	20.65	20.98	21.00
		1	14	20.47	20.60	20.91	21.00
		8	0	19.46	19.55	19.89	20.00
		8	4	19.53	19.57	19.91	20.00
		8	7	19.47	19.57	19.92	20.00
		15	0	19.45	19.54	19.85	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	22.15	22.29	22.56	23.00
		1	13	22.35	22.43	22.76	23.00
		1	24	22.20	22.30	22.61	23.00
		12	0	21.36	21.46	21.74	22.50
		12	6	21.45	21.54	21.81	22.50
		12	13	21.40	21.51	21.77	22.50
		25	0	21.41	21.50	21.76	22.50
	16QAM	1	0	21.43	21.60	21.82	22.50

		1	13	21.56	21.67	21.98	22.50
		1	24	21.52	21.56	21.82	22.50
		12	0	20.38	20.45	20.74	21.00
		12	6	20.41	20.55	20.81	21.00
		12	13	20.41	20.50	20.80	21.00
		25	0	20.41	20.50	20.81	21.00
	64QAM	1	0	20.38	20.46	20.75	21.00
		1	13	20.59	20.67	20.91	21.00
		1	24	20.47	20.48	20.78	21.00
		12	0	19.44	19.47	19.82	20.00
		12	6	19.51	19.61	19.89	20.00
		12	13	19.48	19.55	19.87	20.00
		25	0	19.45	19.50	19.84	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	22.29	22.41	22.61	23.00
		1	25	22.51	22.52	22.80	23.00
		1	49	22.42	22.42	22.72	23.00
		25	0	21.46	21.49	21.77	22.50
		25	13	21.47	21.54	21.81	22.50
		25	25	21.56	21.57	21.85	22.50
		50	0	21.51	21.55	21.83	22.50
	16QAM	1	0	21.47	21.78	21.87	22.50
		1	25	21.68	21.85	22.04	22.50
		1	49	21.70	21.62	21.89	22.50
		25	0	20.44	20.51	20.77	21.00
		25	13	20.48	20.57	20.82	21.00
		25	25	20.55	20.57	20.86	21.00
		50	0	20.50	20.55	20.83	21.00
	64QAM	1	0	20.44	20.61	20.82	21.00
		1	25	20.67	20.67	20.95	21.00
		1	49	20.59	20.56	20.88	21.00
		25	0	19.50	19.51	19.84	20.00
		25	13	19.52	19.57	19.86	20.00
		25	25	19.62	19.52	19.89	20.00
		50	0	19.55	19.54	19.87	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	22.17	22.33	22.36	23.00
		1	38	22.40	22.43	22.56	23.00
		1	74	22.38	22.36	22.56	23.00
		36	0	21.43	21.47	21.62	22.50
		36	18	21.50	21.54	21.66	22.50
		36	39	21.53	21.56	21.69	22.50

		75	0	21.48	21.49	21.65	22.50
	16QAM	1	0	21.39	21.70	21.64	22.50
		1	38	21.60	21.78	21.85	22.50
		1	74	21.65	21.62	21.90	22.50
		36	0	20.43	20.46	20.59	21.00
		36	18	20.48	20.50	20.61	21.00
		36	39	20.55	20.51	20.68	21.00
		75	0	20.47	20.51	20.65	21.00
		64QAM	1	0	20.37	20.50	20.57
	1		38	20.64	20.67	20.78	21.00
	1		74	20.59	20.54	20.70	21.00
	36		0	19.48	19.50	19.64	20.00
	36		18	19.55	19.55	19.69	20.00
	36		39	19.57	19.54	19.73	20.00
	75		0	19.51	19.48	19.70	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	22.03	22.10	22.15	23.00
		1	50	22.59	22.48	22.63	23.00
		1	99	22.16	22.19	22.35	23.00
		50	0	21.42	21.43	21.65	22.50
		50	25	21.50	21.54	21.65	22.50
		50	50	21.57	21.53	21.68	22.50
		100	0	21.49	21.46	21.64	22.50
	16QAM	1	0	21.26	21.39	21.48	22.50
		1	50	21.84	21.82	21.92	22.50
		1	99	21.38	21.52	21.71	22.50
		50	0	20.43	20.43	20.63	21.00
		50	25	20.50	20.55	20.62	21.00
		50	50	20.60	20.52	20.68	21.00
		100	0	20.47	20.46	20.62	21.00
	64QAM	1	0	20.25	20.34	20.25	21.00
		1	50	20.75	20.74	20.79	21.00
		1	99	20.42	20.35	20.62	21.00
		50	0	19.45	19.47	19.67	20.00
		50	25	19.54	19.57	19.68	20.00
		50	50	19.63	19.57	19.72	20.00
		100	0	19.52	19.48	19.68	20.00
LTE B5							
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	22.42	22.39	22.35	23.00
		1	2	22.54	22.50	22.47	23.00

		1	5	22.41	22.39	22.32	23.00
		3	0	22.54	22.46	22.45	23.00
		3	2	22.59	22.50	22.49	23.00
		3	3	22.55	22.44	22.45	23.00
		6	0	21.54	21.47	21.47	22.00
	16QAM	1	0	21.55	21.68	21.54	22.00
		1	2	21.69	21.80	21.65	22.00
		1	5	21.47	21.68	21.52	22.00
		3	0	21.46	21.52	21.43	22.00
		3	2	21.46	21.42	21.46	22.00
		3	3	21.43	21.46	21.41	22.00
		6	0	20.59	20.58	20.59	21.00
	64QAM	1	0	20.54	20.57	20.61	21.00
		1	2	20.61	20.70	20.71	21.00
		1	5	20.52	20.63	20.53	21.00
		3	0	20.56	20.55	20.59	21.00
		3	2	20.55	20.54	20.53	21.00
		3	3	20.52	20.57	20.56	21.00
		6	0	19.48	19.48	19.48	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	22.45	22.38	22.36	23.00
		1	7	22.42	22.38	22.39	23.00
		1	14	22.46	22.37	22.36	23.00
		8	0	21.48	21.42	21.43	22.00
		8	4	21.51	21.46	21.48	22.00
		8	7	21.48	21.41	21.45	22.00
		15	0	21.51	21.44	21.44	22.00
	16QAM	1	0	21.63	21.73	21.58	22.00
		1	7	21.51	21.60	21.68	22.00
		1	14	21.56	21.67	21.66	22.00
		8	0	20.47	20.51	20.51	21.00
		8	4	20.50	20.53	20.56	21.00
		8	7	20.48	20.50	20.51	21.00
		15	0	20.46	20.45	20.48	21.00
	64QAM	1	0	20.50	20.60	20.54	21.00
		1	7	20.53	20.60	20.60	21.00
		1	14	20.51	20.49	20.52	21.00
		8	0	19.50	19.51	19.48	20.00
		8	4	19.55	19.53	19.55	20.00
		8	7	19.47	19.50	19.52	20.00
		15	0	19.47	19.45	19.48	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	

5MHz	QPSK	1	0	22.35	22.32	22.23	23.00
		1	13	22.45	22.44	22.41	23.00
		1	24	22.34	22.26	22.29	23.00
		12	0	21.44	21.43	21.41	22.00
		12	6	21.50	21.50	21.49	22.00
		12	13	21.50	21.42	21.47	22.00
		25	0	21.49	21.44	21.47	22.00
	16QAM	1	0	21.55	21.61	21.29	22.00
		1	13	21.65	21.69	21.66	22.00
		1	24	21.48	21.50	21.55	22.00
		12	0	20.37	20.42	20.39	21.00
		12	6	20.47	20.51	20.48	21.00
		12	13	20.44	20.41	20.47	21.00
		25	0	20.47	20.46	20.47	21.00
	64QAM	1	0	20.44	20.47	20.37	21.00
		1	13	20.53	20.60	20.60	21.00
		1	24	20.49	20.39	20.47	21.00
		12	0	19.41	19.46	19.44	20.00
		12	6	19.50	19.52	19.51	20.00
		12	13	19.51	19.48	19.52	20.00
		25	0	19.48	19.50	19.47	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	22.43	22.39	22.32	23.00
		1	25	22.55	22.54	22.42	23.00
		1	49	22.37	22.29	22.35	23.00
		25	0	21.47	21.49	21.56	22.00
		25	13	21.55	21.51	21.50	22.00
		25	25	21.51	21.46	21.47	22.00
		50	0	21.53	21.49	21.53	22.00
	16QAM	1	0	21.59	21.72	21.48	22.00
		1	25	21.67	21.84	21.54	22.00
		1	49	21.70	21.36	21.57	22.00
		25	0	20.43	20.51	20.45	21.00
		25	13	20.53	20.52	20.42	21.00
		25	25	20.49	20.43	20.47	21.00
		50	0	20.48	20.50	20.45	21.00
	64QAM	1	0	20.53	20.59	20.46	21.00
		1	25	20.65	20.75	20.48	21.00
		1	49	20.56	20.45	20.61	21.00
		25	0	19.45	19.55	19.51	20.00
		25	13	19.55	19.52	19.47	20.00
		25	25	19.54	19.48	19.46	20.00
		50	0	19.52	19.53	19.48	20.00

LTE B7							
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	22.10	21.83	21.83	23.00
		1	13	22.21	21.93	21.98	23.00
		1	24	22.11	21.80	21.90	23.00
		12	0	21.30	21.04	21.14	22.00
		12	6	21.34	21.08	21.14	22.00
		12	13	21.30	21.03	21.04	22.00
		25	0	21.31	21.05	21.12	22.00
	16QAM	1	0	21.25	21.03	21.04	22.00
		1	13	21.40	21.17	21.09	22.00
		1	24	21.24	21.00	21.09	22.00
		12	0	20.28	20.04	20.12	21.00
		12	6	20.32	20.07	20.14	21.00
		12	13	20.30	20.03	20.04	21.00
		25	0	20.30	20.05	20.11	21.00
	64QAM	1	0	20.27	20.01	20.07	21.00
		1	13	20.42	20.21	20.12	21.00
		1	24	20.30	20.04	20.04	21.00
		12	0	19.32	19.09	19.18	20.00
		12	6	19.38	19.10	19.19	20.00
		12	13	19.32	19.05	19.10	20.00
		25	0	19.37	19.05	19.13	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	22.16	21.94	21.93	23.00
		1	25	22.32	22.06	22.04	23.00
		1	49	22.20	21.83	21.98	23.00
		25	0	21.38	21.14	21.18	22.00
		25	13	21.39	21.11	21.15	22.00
		25	25	21.41	21.08	21.11	22.00
		50	0	21.38	21.13	21.15	22.00
	16QAM	1	0	21.30	21.14	21.23	22.00
		1	25	21.56	21.25	21.24	22.00
		1	49	21.43	21.13	21.11	22.00
		25	0	20.39	20.13	20.18	21.00
		25	13	20.39	20.10	20.14	21.00
		25	25	20.42	20.07	20.07	21.00
		50	0	20.41	20.11	20.14	21.00
	64QAM	1	0	20.30	20.16	20.23	21.00
		1	25	20.60	20.14	20.25	21.00

		1	49	20.42	20.10	20.10	21.00
		25	0	19.39	19.14	19.20	20.00
		25	13	19.39	19.10	19.16	20.00
		25	25	19.42	19.11	19.12	20.00
		50	0	19.41	19.13	19.16	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	22.07	21.94	21.95	23.00
		1	38	22.26	21.94	22.01	23.00
		1	74	22.10	21.78	21.90	23.00
		36	0	21.36	21.15	21.13	22.00
		36	18	21.38	21.11	21.16	22.00
		36	39	21.37	21.06	21.12	22.00
		75	0	21.35	21.10	21.10	22.00
	16QAM	1	0	21.26	21.17	21.17	22.00
		1	38	21.51	21.12	21.22	22.00
		1	74	21.38	21.03	21.11	22.00
		36	0	20.32	20.11	20.11	21.00
		36	18	20.36	20.07	20.12	21.00
		36	39	20.35	20.03	20.10	21.00
		75	0	20.34	20.07	20.09	21.00
	64QAM	1	0	20.26	20.07	20.09	21.00
		1	38	20.47	20.17	20.25	21.00
		1	74	20.38	20.03	20.11	21.00
		36	0	19.35	19.14	19.14	20.00
		36	18	19.38	19.12	19.17	20.00
		36	39	19.36	19.07	19.13	20.00
		75	0	19.36	19.10	19.09	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	21.94	21.76	21.80	23.00
		1	50	22.38	22.05	22.09	23.00
		1	99	21.88	21.63	21.74	23.00
		50	0	21.35	21.15	21.06	22.00
		50	25	21.37	21.16	21.16	22.00
		50	50	21.36	21.03	21.03	22.00
		100	0	21.34	21.09	21.05	22.00
	16QAM	1	0	21.19	21.05	21.03	22.00
		1	50	21.62	21.19	21.42	22.00
		1	99	21.23	20.87	20.97	22.00
		50	0	20.35	20.11	20.11	21.00
		50	25	20.41	20.13	20.14	21.00
		50	50	20.37	20.01	20.03	21.00
		100	0	20.35	20.07	20.04	21.00

	64QAM	1	0	20.12	20.00	20.00	21.00
		1	50	20.65	20.26	20.32	21.00
		1	99	20.10	19.94	19.94	21.00
		50	0	19.35	19.17	19.07	20.00
		50	25	19.42	19.12	19.12	20.00
		50	50	19.37	19.05	19.05	20.00
		100	0	19.35	19.12	19.04	20.00
LTE B12							
Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23017/699.7	23095/707.5	23173/715.3	
1.4MHz	QPSK	1	0	22.25	22.30	22.29	23.00
		1	2	22.38	22.47	22.37	23.00
		1	5	22.30	22.31	22.25	23.00
		3	0	22.35	22.38	22.37	23.00
		3	2	22.39	22.42	22.40	23.00
		3	3	22.40	22.38	22.33	23.00
		6	0	21.38	21.41	21.43	22.00
	16QAM	1	0	21.59	21.66	21.52	22.00
		1	2	21.65	21.70	21.55	22.00
		1	5	21.59	21.65	21.52	22.00
		3	0	21.35	21.37	21.44	22.00
		3	2	21.36	21.43	21.37	22.00
		3	3	21.43	21.46	21.39	22.00
		6	0	20.47	20.60	20.54	21.00
	64QAM	1	0	20.54	20.60	20.47	21.00
		1	2	20.66	20.63	20.65	21.00
		1	5	20.58	20.58	20.47	21.00
		3	0	20.54	20.55	20.49	21.00
		3	2	20.51	20.55	20.57	21.00
		3	3	20.60	20.49	20.53	21.00
		6	0	19.42	19.46	19.39	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23025/700.5	23095/707.5	23165/714.5	
3MHz	QPSK	1	0	22.32	22.35	22.36	23.00
		1	7	22.33	22.36	22.34	23.00
		1	14	22.34	22.33	22.30	23.00
		8	0	21.38	21.43	21.42	22.00
		8	4	21.41	21.44	21.43	22.00
		8	7	21.39	21.40	21.39	22.00
		15	0	21.38	21.39	21.39	22.00
	16QAM	1	0	21.57	21.64	21.61	22.00
		1	7	21.60	21.62	21.66	22.00
		1	14	21.67	21.73	21.67	22.00

		8	0	20.45	20.51	20.50	21.00
		8	4	20.51	20.53	20.55	21.00
		8	7	20.50	20.48	20.48	21.00
		15	0	20.41	20.44	20.43	21.00
	64QAM	1	0	20.56	20.62	20.62	21.00
		1	7	20.56	20.57	20.56	21.00
		1	14	20.59	20.58	20.58	21.00
		8	0	19.46	19.52	19.52	20.00
		8	4	19.50	19.53	19.48	20.00
		8	7	19.48	19.45	19.45	20.00
		15	0	19.43	19.45	19.41	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23035/701.5	23095/707.5	23155/713.5	
5MHz	QPSK	1	0	22.20	22.25	22.27	23.00
		1	13	22.38	22.38	22.39	23.00
		1	24	22.22	22.22	22.18	23.00
		12	0	21.35	21.47	21.45	22.00
		12	6	21.44	21.47	21.47	22.00
		12	13	21.46	21.36	21.36	22.00
		25	0	21.42	21.40	21.42	22.00
	16QAM	1	0	21.46	21.64	21.60	22.00
		1	13	21.74	21.75	21.69	22.00
		1	24	21.62	21.61	21.58	22.00
		12	0	20.34	20.48	20.47	21.00
		12	6	20.46	20.47	20.48	21.00
		12	13	20.50	20.37	20.41	21.00
		25	0	20.44	20.46	20.46	21.00
	64QAM	1	0	20.42	20.48	20.53	21.00
		1	13	20.68	20.69	20.65	21.00
		1	24	20.45	20.47	20.39	21.00
		12	0	19.44	19.52	19.50	20.00
		12	6	19.48	19.52	19.51	20.00
		12	13	19.50	19.41	19.45	20.00
		25	0	19.48	19.46	19.46	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23060/704	23095/707.5	23130/711	
10MHz	QPSK	1	0	22.32	22.37	22.38	23.00
		1	25	22.42	22.43	22.47	23.00
		1	49	22.33	22.39	22.31	23.00
		25	0	21.35	21.47	21.51	22.00
		25	13	21.45	21.46	21.48	22.00
		25	25	21.39	21.37	21.45	22.00
		50	0	21.41	21.45	21.53	22.00
	16QAM	1	0	21.51	21.71	21.73	22.00

		1	25	21.80	21.67	21.88	22.00
		1	49	21.69	21.66	21.63	22.00
		25	0	20.39	20.52	20.57	21.00
		25	13	20.49	20.49	20.52	21.00
		25	25	20.43	20.43	20.48	21.00
		50	0	20.44	20.49	20.56	21.00
	64QAM	1	0	20.55	20.63	20.61	21.00
		1	25	20.70	20.75	20.70	21.00
		1	49	20.60	20.63	20.57	21.00
		25	0	19.39	19.53	19.57	20.00
		25	13	19.50	19.50	19.53	20.00
		25	25	19.45	19.45	19.50	20.00
		50	0	19.44	19.48	19.57	20.00
LTE B17							
Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23755/706.5	23790/710	23825/713.5	
5MHz	QPSK	1	0	22.30	22.36	22.34	23.00
		1	13	22.41	22.45	22.45	23.00
		1	24	22.28	22.37	22.31	23.00
		12	0	21.47	21.51	21.52	22.00
		12	6	21.49	21.55	21.52	22.00
		12	13	21.43	21.43	21.48	22.00
		25	0	21.44	21.49	21.49	22.00
	16QAM	1	0	21.70	21.61	21.73	22.00
		1	13	21.71	21.73	21.84	22.00
		1	24	21.69	21.70	21.58	22.00
		12	0	20.46	20.54	20.54	21.00
		12	6	20.52	20.58	20.54	21.00
		12	13	20.45	20.47	20.50	21.00
		25	0	20.49	20.54	20.54	21.00
	64QAM	1	0	20.53	20.60	20.57	21.00
		1	13	20.67	20.72	20.72	21.00
		1	24	20.58	20.67	20.56	21.00
		12	0	19.53	19.57	19.57	20.00
		12	6	19.55	19.64	19.59	20.00
		12	13	19.48	19.50	19.55	20.00
		25	0	19.50	19.53	19.53	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23780/709	23790/710	23800/711	
10MHz	QPSK	1	0	22.42	22.46	22.40	23.00
		1	25	22.54	22.53	22.56	23.00
		1	49	22.44	22.40	22.40	23.00
		25	0	21.57	21.63	21.63	22.00

		25	13	21.56	21.53	21.56	22.00	
		25	25	21.44	21.50	21.50	22.00	
		50	0	21.57	21.57	21.59	22.00	
	16QAM	1	0	21.68	21.79	21.76	22.00	
		1	25	21.95	21.86	21.99	22.00	
		1	49	21.76	21.67	21.78	22.00	
		25	0	20.64	20.64	20.69	21.00	
		25	13	20.58	20.57	20.61	21.00	
		25	25	20.50	20.54	20.55	21.00	
		50	0	20.59	20.60	20.64	21.00	
		64QAM	1	0	20.69	20.70	20.66	21.00
			1	25	20.80	20.77	20.84	21.00
	1		49	20.70	20.75	20.67	21.00	
	25		0	19.63	19.68	19.68	20.00	
	25		13	19.59	19.57	19.60	20.00	
	25		25	19.52	19.55	19.55	20.00	
	50		0	19.60	19.61	19.64	20.00	
LTE B25								
Main Ant				Maximum Output Power (dBm)			Tune-up	
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)				
				26047/1850.7	26365/1882.5	26683/1914.3		
1.4MHz	QPSK	1	0	22.40	22.23	22.02	23.00	
		1	2	22.50	22.38	22.15	23.00	
		1	5	22.39	22.23	22.01	23.00	
		3	0	22.48	22.34	22.10	23.00	
		3	2	22.49	22.36	22.12	23.00	
		3	3	22.50	22.31	22.11	23.00	
		6	0	21.49	21.34	21.10	22.00	
	16QAM	1	0	21.67	21.48	21.27	22.00	
		1	2	21.75	21.58	21.43	22.00	
		1	5	21.64	21.59	21.31	22.00	
		3	0	21.41	21.35	21.11	22.00	
		3	2	21.46	21.37	21.16	22.00	
		3	3	21.44	21.31	21.13	22.00	
		6	0	20.58	20.46	20.25	21.00	
	64QAM	1	0	20.60	20.48	20.25	21.00	
		1	2	20.68	20.46	20.34	21.00	
		1	5	20.59	20.39	20.14	21.00	
		3	0	20.56	20.44	20.23	21.00	
		3	2	20.63	20.46	20.20	21.00	
		3	3	20.63	20.41	20.22	21.00	
		6	0	19.48	19.37	19.16	20.00	
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up	
				26055/1851.5	26365/1882.5	26675/1913.5		

3MHz	QPSK	1	0	22.45	22.33	22.11	23.00
		1	7	22.46	22.31	22.12	23.00
		1	14	22.48	22.29	22.07	23.00
		8	0	21.50	21.37	21.14	22.00
		8	4	21.52	21.36	21.14	22.00
		8	7	21.48	21.32	21.09	22.00
		15	0	21.49	21.35	21.13	22.00
	16QAM	1	0	21.76	21.62	21.38	22.00
		1	7	21.73	21.54	21.33	22.00
		1	14	21.70	21.63	21.33	22.00
		8	0	20.54	20.46	20.22	21.00
		8	4	20.58	20.45	20.22	21.00
		8	7	20.55	20.39	20.22	21.00
		15	0	20.51	20.37	20.16	21.00
	64QAM	1	0	20.62	20.54	20.28	21.00
		1	7	20.67	20.49	20.32	21.00
		1	14	20.69	20.49	20.32	21.00
		8	0	19.52	19.46	19.23	20.00
		8	4	19.60	19.43	19.23	20.00
		8	7	19.55	19.41	19.17	20.00
		15	0	19.52	19.39	19.14	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26065/1852.5	26365/1882.5	26665/1912.5	
5MHz	QPSK	1	0	22.33	22.24	21.97	23.00
		1	13	22.50	22.35	22.11	23.00
		1	24	22.36	22.15	21.98	23.00
		12	0	21.48	21.37	21.19	22.00
		12	6	21.53	21.39	21.15	22.00
		12	13	21.47	21.31	21.00	22.00
		25	0	21.47	21.33	21.10	22.00
	16QAM	1	0	21.62	21.48	21.29	22.00
		1	13	21.76	21.62	21.25	22.00
		1	24	21.69	21.44	21.25	22.00
		12	0	20.48	20.37	20.20	21.00
		12	6	20.53	20.39	20.18	21.00
		12	13	20.48	20.32	20.00	21.00
		25	0	20.52	20.39	20.13	21.00
	64QAM	1	0	20.54	20.37	20.14	21.00
		1	13	20.68	20.60	20.23	21.00
		1	24	20.49	20.32	20.13	21.00
		12	0	19.52	19.46	19.25	20.00
		12	6	19.57	19.45	19.23	20.00
		12	13	19.52	19.38	19.05	20.00
		25	0	19.52	19.39	19.14	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26090/1855	26365/1882.5	26640/1910	
10MHz	QPSK	1	0	22.41	22.38	21.99	23.00
		1	25	22.52	22.36	22.19	23.00
		1	49	22.44	22.16	22.03	23.00
		25	0	21.56	21.45	21.07	22.00
		25	13	21.54	21.34	21.10	22.00
		25	25	21.47	21.28	20.93	22.00
		50	0	21.53	21.39	21.02	22.00
	16QAM	1	0	21.66	21.59	21.27	22.00
		1	25	21.89	21.74	21.52	22.00
		1	49	21.73	21.42	21.31	22.00
		25	0	20.58	20.47	20.12	21.00
		25	13	20.54	20.39	20.14	21.00
		25	25	20.51	20.30	19.96	21.00
		50	0	20.54	20.42	20.05	21.00
	64QAM	1	0	20.56	20.60	20.14	21.00
		1	25	20.72	20.63	20.39	21.00
		1	49	20.67	20.43	20.18	21.00
		25	0	19.57	19.52	19.16	20.00
		25	13	19.55	19.39	19.16	20.00
		25	25	19.53	19.34	18.98	20.00
		50	0	19.57	19.44	19.07	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26115/1857.5	26365/1882.5	26615/1907.5	
15MHz	QPSK	1	0	22.33	22.35	21.88	23.00
		1	38	22.47	22.33	22.00	23.00
		1	74	22.40	22.09	21.90	23.00
		36	0	21.58	21.48	21.02	22.00
		36	18	21.57	21.37	21.04	22.00
		36	39	21.49	21.28	20.93	22.00
		75	0	21.55	21.36	20.96	22.00
	16QAM	1	0	21.66	21.61	21.24	22.00
		1	38	21.79	21.60	21.35	22.00
		1	74	21.71	21.43	21.21	22.00
		36	0	20.55	20.45	20.01	21.00
		36	18	20.56	20.38	20.02	21.00
		36	39	20.50	20.26	19.92	21.00
		75	0	20.56	20.36	19.98	21.00
	64QAM	1	0	20.60	20.55	20.07	21.00
		1	38	20.69	20.57	20.26	21.00
		1	74	20.63	20.34	20.05	21.00
		36	0	19.60	19.52	19.07	20.00

		36	18	19.57	19.41	19.07	20.00
		36	39	19.53	19.34	18.98	20.00
		75	0	19.57	19.38	19.03	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26140/1860	26365/1882.5	26590/1905	
20MHz	QPSK	1	0	22.19	22.21	21.79	23.00
		1	50	22.56	22.38	22.08	23.00
		1	99	22.21	21.86	21.71	23.00
		50	0	21.61	21.43	21.01	22.00
		50	25	21.54	21.40	21.03	22.00
		50	50	21.54	21.21	20.87	22.00
		100	0	21.57	21.33	20.94	22.00
	16QAM	1	0	21.44	21.57	21.08	22.00
		1	50	21.94	21.76	21.37	22.00
		1	99	21.60	21.12	21.04	22.00
		50	0	20.66	20.46	20.05	21.00
		50	25	20.57	20.41	20.05	21.00
		50	50	20.57	20.22	19.89	21.00
		100	0	20.58	20.35	19.98	21.00
	64QAM	1	0	20.38	20.48	20.05	21.00
		1	50	20.80	20.60	20.27	21.00
		1	99	20.38	20.03	19.93	21.00
		50	0	19.66	19.48	19.10	20.00
		50	25	19.54	19.45	19.09	20.00
		50	50	19.60	19.25	18.96	20.00
		100	0	19.59	19.37	19.02	20.00
LTE B26							
Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26740/819	26783/823.3	
1.4MHz	QPSK	1	0	22.43	22.43	22.40	23.00
		1	2	22.55	22.55	22.48	23.00
		1	5	22.43	22.41	22.34	23.00
		3	0	22.53	22.52	22.47	23.00
		3	2	22.56	22.55	22.52	23.00
		3	3	22.55	22.53	22.47	23.00
		6	0	21.54	21.53	21.53	22.00
	16QAM	1	0	21.68	21.72	21.58	22.00
		1	2	21.83	21.84	21.66	22.00
		1	5	21.70	21.75	21.51	22.00
		3	0	21.54	21.56	21.42	22.00
		3	2	21.51	21.51	21.42	22.00
		3	3	21.54	21.52	21.42	22.00
		6	0	20.65	20.65	20.53	21.00

	64QAM	1	0	20.69	20.66	20.55	21.00
		1	2	20.81	20.71	20.61	21.00
		1	5	20.64	20.62	20.59	21.00
		3	0	20.69	20.65	20.53	21.00
		3	2	20.70	20.65	20.56	21.00
		3	3	20.65	20.60	20.49	21.00
		6	0	19.60	19.57	19.51	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26740/819	26775/822.5	
3MHz	QPSK	1	0	22.47	22.48	22.43	23.00
		1	7	22.47	22.45	22.39	23.00
		1	14	22.47	22.44	22.38	23.00
		8	0	21.49	21.47	21.45	22.00
		8	4	21.53	21.50	21.46	22.00
		8	7	21.50	21.47	21.42	22.00
		15	0	21.50	21.49	21.48	22.00
	16QAM	1	0	21.72	21.82	21.72	22.00
		1	7	21.68	21.65	21.57	22.00
		1	14	21.78	21.74	21.52	22.00
		8	0	20.59	20.58	20.52	21.00
		8	4	20.62	20.60	20.52	21.00
		8	7	20.59	20.55	20.46	21.00
		15	0	20.53	20.51	20.46	21.00
	64QAM	1	0	20.70	20.72	20.56	21.00
		1	7	20.68	20.68	20.57	21.00
		1	14	20.69	20.69	20.53	21.00
		8	0	19.57	19.55	19.52	20.00
		8	4	19.59	19.57	19.53	20.00
		8	7	19.57	19.55	19.46	20.00
		15	0	19.55	19.53	19.48	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26740/819	26765/821.5	
5MHz	QPSK	1	0	22.38	22.37	22.37	23.00
		1	13	22.46	22.48	22.43	23.00
		1	24	22.35	22.33	22.29	23.00
		12	0	21.46	21.48	21.50	22.00
		12	6	21.56	21.54	21.52	22.00
		12	13	21.48	21.47	21.38	22.00
		25	0	21.48	21.51	21.47	22.00
	16QAM	1	0	21.68	21.61	21.69	22.00
		1	13	21.68	21.69	21.61	22.00
		1	24	21.66	21.61	21.46	22.00
		12	0	20.47	20.51	20.46	21.00
		12	6	20.55	20.54	20.48	21.00

		12	13	20.46	20.49	20.39	21.00
		25	0	20.50	20.53	20.44	21.00
		64QAM	1	0	20.59	20.59	20.50
1	13		20.67	20.63	20.64	21.00	
1	24		20.59	20.52	20.39	21.00	
12	0		19.52	19.54	19.51	20.00	
12	6		19.60	19.61	19.57	20.00	
12	13		19.52	19.52	19.43	20.00	
25	0		19.53	19.53	19.48	20.00	
Bandwidth	Modulation		RB Allocation	Offset	Channel/Frequency(MHz)		
		/			26740/819	/	
10MHz	QPSK	1	0	/	22.49	/	23.00
		1	25	/	22.56	/	23.00
		1	49	/	22.38	/	23.00
		25	0	/	21.51	/	22.00
		25	13	/	21.55	/	22.00
		25	25	/	21.44	/	22.00
		50	0	/	21.51	/	22.00
	16QAM	1	0	/	21.80	/	22.00
		1	25	/	21.89	/	22.00
		1	49	/	21.62	/	22.00
		25	0	/	20.55	/	21.00
		25	13	/	20.56	/	21.00
		25	25	/	20.45	/	21.00
		50	0	/	20.51	/	21.00
	64QAM	1	0	/	20.63	/	21.00
		1	25	/	20.68	/	21.00
		1	49	/	20.55	/	21.00
		25	0	/	19.57	/	20.00
		25	13	/	19.57	/	20.00
		25	25	/	19.46	/	20.00
		50	0	/	19.54	/	20.00
LTE B26							
Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26797/824.7	26915/836.5	27033/848.3	
1.4MHz	QPSK	1	0	21.98	23.79	23.62	24.00
		1	2	22.19	23.91	23.58	24.00
		1	5	22.06	23.83	23.43	24.00
		3	0	22.09	23.89	23.65	24.00
		3	2	22.19	23.97	23.64	24.00
		3	3	22.16	23.93	23.56	24.00
		6	0	21.16	22.94	22.66	23.50
	16QAM	1	0	21.13	23.08	22.82	23.50

		1	2	21.20	23.13	22.70	23.50
		1	5	21.04	22.95	22.50	23.50
		3	0	20.95	22.92	22.64	23.50
		3	2	21.07	22.97	22.51	23.50
		3	3	21.03	22.84	22.39	23.50
		6	0	20.14	22.03	21.73	22.50
	64QAM	1	0	20.05	22.02	21.82	22.50
		1	2	20.19	22.10	21.76	22.50
		1	5	20.05	22.03	21.47	22.50
		3	0	20.07	22.01	21.81	22.50
		3	2	20.17	22.03	21.70	22.50
		3	3	20.14	22.01	21.57	22.50
		6	0	19.11	20.99	20.69	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26915/836.5	26915/836.5	27025/847.5	
3MHz	QPSK	1	0	21.98	23.76	23.87	24.00
		1	7	22.15	23.83	23.69	24.00
		1	14	22.31	23.86	23.42	24.00
		8	0	21.11	22.85	22.83	23.50
		8	4	21.22	22.92	22.76	23.50
		8	7	21.29	22.91	22.62	23.50
		15	0	21.23	22.90	22.73	23.50
	16QAM	1	0	21.13	23.11	23.18	23.50
		1	7	21.16	22.98	22.88	23.50
		1	14	21.28	22.95	22.53	23.50
		8	0	20.09	21.93	21.92	22.50
		8	4	20.14	21.97	21.85	22.50
		8	7	20.18	21.90	21.70	22.50
		15	0	20.10	21.89	21.75	22.50
	64QAM	1	0	20.07	21.96	22.08	22.50
		1	7	20.20	22.03	21.89	22.50
		1	14	20.26	21.93	21.50	22.50
		8	0	19.09	20.96	20.88	21.50
		8	4	19.19	21.02	20.84	21.50
		8	7	19.23	20.97	20.72	21.50
		15	0	19.16	20.91	20.76	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26815/826.5	26915/836.5	27015/846.5	
5MHz	QPSK	1	0	21.90	23.55	23.86	24.00
		1	13	22.31	23.86	23.85	24.00
		1	24	22.55	23.18	23.35	24.00
		12	0	21.21	22.81	22.88	23.50
		12	6	21.42	22.95	22.96	23.50
		12	13	21.55	22.86	22.79	23.50

		25	0	21.39	22.87	22.88	23.50
	16QAM	1	0	21.05	22.88	22.87	23.50
		1	13	21.29	23.05	23.17	23.50
		1	24	21.53	22.70	22.41	23.50
		12	0	20.05	21.81	21.90	22.50
		12	6	20.22	21.91	21.97	22.50
		12	13	20.36	21.80	21.78	22.50
		25	0	20.25	21.90	21.90	22.50
	64QAM	1	0	20.01	21.70	21.85	22.50
		1	13	20.27	22.05	22.13	22.50
		1	24	20.47	21.71	21.46	22.50
		12	0	19.12	20.87	20.96	21.50
		12	6	19.32	20.97	21.00	21.50
		12	13	19.42	20.87	20.87	21.50
		25	0	19.30	20.90	20.93	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26840/829	26915/836.5	26990/844	
10MHz	QPSK	1	0	22.03	23.19	22.61	24.00
		1	25	22.81	23.92	23.54	24.00
		1	49	23.45	21.97	23.49	24.00
		25	0	21.54	22.77	22.28	23.50
		25	13	21.87	22.93	23.21	23.50
		25	25	22.16	22.87	23.16	23.50
		50	0	21.90	22.85	23.21	23.50
	16QAM	1	0	21.14	22.45	22.44	23.50
		1	25	21.72	23.15	23.01	23.50
		1	49	22.85	21.80	22.62	23.50
		25	0	20.34	21.80	21.98	22.50
		25	13	20.68	21.94	22.06	22.50
		25	25	21.09	21.76	22.15	22.50
		50	0	20.74	21.82	22.10	22.50
	64QAM	1	0	20.05	21.38	21.78	22.50
		1	25	20.73	22.12	21.97	22.50
		1	49	21.70	21.77	21.62	22.50
		25	0	19.37	20.84	20.99	21.50
		25	13	19.73	20.95	21.08	21.50
		25	25	20.10	20.83	21.15	21.50
		50	0	19.73	20.87	21.12	21.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26865/831.5	26915/836.5	26965/841.5	
15MHz	QPSK	1	0	21.96	22.75	23.63	24.00
		1	38	23.15	23.87	21.90	24.00
		1	74	23.62	22.60	23.48	24.00
		36	0	21.66	22.52	23.16	23.50

		36	18	22.28	22.89	22.64	23.50
		36	39	22.64	22.91	23.24	23.50
		75	0	22.17	22.72	23.22	23.50
	16QAM	1	0	21.10	21.74	22.86	23.50
		1	38	22.40	23.08	21.79	23.50
		1	74	22.79	22.45	22.57	23.50
		36	0	20.47	21.50	22.03	22.50
		36	18	21.21	21.85	21.95	22.50
		36	39	21.62	21.72	22.09	22.50
		75	0	21.09	21.67	22.05	22.50
	64QAM	1	0	20.05	20.67	21.84	22.50
		1	38	21.30	22.04	21.70	22.50
		1	74	21.75	21.77	21.63	22.50
		36	0	19.55	20.55	21.04	21.50
		36	18	20.27	20.91	20.92	21.50
		36	39	20.66	20.80	21.13	21.50
		75	0	20.09	20.69	21.05	21.50
LTE B38							
Main Ant				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	22.18	22.36	22.43	23.00
		1	13	22.29	22.44	22.50	23.00
		1	24	22.17	22.33	22.45	23.00
		12	0	21.27	21.38	21.45	22.00
		12	6	21.29	21.42	21.52	22.00
		12	13	21.26	21.36	21.48	22.00
		25	0	21.27	21.41	21.50	22.00
	16QAM	1	0	21.38	21.53	21.58	22.00
		1	13	21.49	21.64	21.69	22.00
		1	24	21.38	21.51	21.62	22.00
		12	0	20.28	20.39	20.49	21.00
		12	6	20.32	20.44	20.55	21.00
		12	13	20.28	20.39	20.51	21.00
		25	0	20.32	20.45	20.55	21.00
	64QAM	1	0	20.18	20.30	20.37	21.00
		1	13	20.29	20.39	20.45	21.00
		1	24	20.18	20.27	20.39	21.00
		12	0	19.28	19.44	19.53	20.00
		12	6	19.35	19.48	19.57	20.00
		12	13	19.30	19.47	19.55	20.00
		25	0	19.30	19.48	19.59	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	

10MHz	QPSK	1	0	22.28	22.43	22.45	23.00
		1	25	22.41	22.57	22.57	23.00
		1	49	22.32	22.40	22.53	23.00
		25	0	21.35	21.47	21.49	22.00
		25	13	21.34	21.47	21.49	22.00
		25	25	21.36	21.45	21.57	22.00
		50	0	21.32	21.44	21.50	22.00
	16QAM	1	0	21.48	21.63	21.65	22.00
		1	25	21.61	21.77	21.79	22.00
		1	49	21.52	21.61	21.72	22.00
		25	0	20.39	20.52	20.55	21.00
		25	13	20.39	20.50	20.54	21.00
		25	25	20.39	20.49	20.60	21.00
		50	0	20.39	20.51	20.58	21.00
	64QAM	1	0	20.26	20.37	20.39	21.00
		1	25	20.39	20.52	20.53	21.00
		1	49	20.28	20.34	20.47	21.00
		25	0	19.38	19.60	19.59	20.00
		25	13	19.41	19.57	19.60	20.00
		25	25	19.41	19.55	19.67	20.00
		50	0	19.32	19.51	19.55	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	22.20	22.38	22.31	23.00
		1	38	22.33	22.45	22.43	23.00
		1	74	22.24	22.32	22.42	23.00
		36	0	21.30	21.45	21.41	22.00
		36	18	21.33	21.44	21.43	22.00
		36	39	21.31	21.42	21.48	22.00
		75	0	21.31	21.42	21.44	22.00
	16QAM	1	0	21.39	21.57	21.49	22.00
		1	38	21.52	21.64	21.64	22.00
		1	74	21.44	21.52	21.61	22.00
		36	0	20.27	20.43	20.37	21.00
		36	18	20.30	20.39	20.39	21.00
		36	39	20.30	20.39	20.42	21.00
		75	0	20.34	20.45	20.47	21.00
	64QAM	1	0	20.16	20.32	20.26	21.00
		1	38	20.30	20.41	20.38	21.00
		1	74	20.20	20.28	20.36	21.00
		36	0	19.26	19.44	19.39	20.00
		36	18	19.30	19.45	19.43	20.00
		36	39	19.29	19.42	19.47	20.00
		75	0	19.30	19.46	19.48	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	22.05	22.20	22.12	23.00
		1	50	22.38	22.53	22.53	23.00
		1	99	22.11	22.15	22.24	23.00
		50	0	21.27	21.41	21.36	22.00
		50	25	21.31	21.41	21.44	22.00
		50	50	21.31	21.40	21.40	22.00
		100	0	21.32	21.44	21.42	22.00
	16QAM	1	0	21.24	21.38	21.30	22.00
		1	50	21.58	21.72	21.72	22.00
		1	99	21.33	21.37	21.46	22.00
		50	0	20.32	20.47	20.41	21.00
		50	25	20.38	20.46	20.50	21.00
		50	50	20.37	20.45	20.46	21.00
		100	0	20.37	20.48	20.48	21.00
	64QAM	1	0	19.98	20.14	20.05	21.00
		1	50	20.38	20.47	20.48	21.00
		1	99	20.07	20.09	20.19	21.00
		50	0	19.29	19.46	19.41	20.00
		50	25	19.34	19.44	19.48	20.00
		50	50	19.32	19.44	19.47	20.00
		100	0	19.32	19.47	19.48	20.00

LTE B41								
Main Ant				Maximum Output Power (dBm)				Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)				
				40065/2537.5	40385/2569.5	40705/2601.5	41215/2652.5	
5MHz	QPSK	1	0	22.16	22.43	22.60	22.68	23.50
		1	13	22.09	22.44	22.89	22.69	23.50
		1	24	21.76	22.49	22.37	22.63	23.50
		12	0	21.38	21.62	21.84	21.34	22.50
		12	6	21.33	21.39	21.60	21.54	22.50
		12	13	21.27	21.66	21.67	21.55	22.50
		25	0	21.15	21.57	22.09	21.77	22.50
	16QAM	1	0	21.18	21.17	21.42	21.78	22.50
		1	13	21.39	21.71	21.75	21.77	22.50
		1	24	21.26	21.11	21.97	21.95	22.50
		12	0	19.83	20.76	20.99	20.47	21.50
		12	6	20.06	20.35	20.90	21.00	21.50
		12	13	20.53	20.59	20.46	20.96	21.50
		25	0	20.33	20.41	20.69	20.53	21.50
	64QAM	1	0	19.72	20.00	20.48	20.22	21.50

		1	13	20.21	20.26	20.40	20.86	21.50
		1	24	19.96	19.77	20.73	20.31	21.50
		12	0	19.06	19.08	19.78	19.74	20.50
		12	6	19.30	19.78	19.87	19.78	20.50
		12	13	19.33	19.64	19.41	19.52	20.50
		25	0	19.52	19.53	19.58	19.39	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)				Tune-up
				40090/2540	40390/2570	40690/2600	41190/2650	
10MHz	QPSK	1	0	21.94	22.43	22.62	22.74	23.50
		1	25	22.21	22.76	22.67	23.05	23.50
		1	49	21.80	22.61	22.59	22.77	23.50
		25	0	21.14	21.82	21.76	21.46	22.50
		25	13	21.27	21.45	21.80	21.48	22.50
		25	25	21.31	21.66	21.95	21.91	22.50
		50	0	21.31	21.61	21.77	21.85	22.50
	16QAM	1	0	21.26	21.51	21.50	21.44	22.50
		1	25	21.25	21.49	21.97	21.75	22.50
		1	49	21.12	21.15	21.89	21.83	22.50
		25	0	20.05	20.52	20.95	20.79	21.50
		25	13	20.46	20.43	21.00	20.78	21.50
		25	25	20.45	20.57	20.72	20.62	21.50
		50	0	20.55	20.53	20.81	20.71	21.50
	64QAM	1	0	19.68	19.88	20.48	20.04	21.50
		1	25	20.29	20.30	20.74	20.64	21.50
		1	49	20.12	20.23	20.59	20.41	21.50
		25	0	19.28	19.54	19.38	19.92	20.50
		25	13	19.38	19.86	19.41	19.56	20.50
		25	25	19.71	19.52	19.39	19.54	20.50
		50	0	19.52	19.61	19.74	19.25	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)				Tune-up
				40115/2542.5	40395/2570.5	40685/2599.5	2647.5/4114.0	
15MHz	QPSK	1	0	22.06	22.35	22.54	22.76	23.50
		1	38	22.27	22.84	22.93	22.81	23.50
		1	74	21.94	22.55	22.47	22.71	23.50
		36	0	21.24	21.72	21.84	21.44	22.50
		36	18	21.05	21.63	21.88	21.72	22.50
		36	39	21.51	21.70	21.85	21.83	22.50
		75	0	21.23	21.57	21.89	21.73	22.50
	16QAM	1	0	21.12	21.43	21.64	21.52	22.50
		1	38	21.43	21.65	21.91	21.75	22.50
		1	74	20.88	21.45	21.77	21.75	22.50
		36	0	20.19	20.68	20.81	20.79	21.50

		36	18	20.42	20.55	21.04	20.78	21.50
		36	39	20.67	20.59	20.76	20.68	21.50
		75	0	20.65	20.71	20.83	20.53	21.50
	64QAM	1	0	19.62	20.10	20.38	20.10	21.50
		1	38	20.45	20.40	20.52	20.78	21.50
		1	74	19.86	20.11	20.35	20.39	21.50
		36	0	19.06	19.52	19.56	19.88	20.50
		36	18	19.58	19.56	19.65	19.54	20.50
		36	39	19.51	19.62	19.33	19.60	20.50
		75	0	19.68	19.57	19.68	19.29	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)				Tune-up
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	22.06	22.33	22.60	22.62	23.50
		1	50	22.31	22.68	22.75	22.93	23.50
		1	99	21.92	22.45	22.55	22.71	23.50
		50	0	21.20	21.60	21.76	21.56	22.50
		50	25	21.09	21.53	21.84	21.66	22.50
		50	50	21.47	21.56	21.83	21.83	22.50
		100	0	21.15	21.49	21.93	21.75	22.50
	16QAM	1	0	21.10	21.31	21.48	21.50	22.50
		1	50	21.37	21.65	21.87	21.75	22.50
		1	99	20.98	21.29	21.77	21.81	22.50
		50	0	20.11	20.66	20.89	20.77	21.50
		50	25	20.26	20.41	20.90	20.86	21.50
		50	50	20.55	20.59	20.68	20.72	21.50
		100	0	20.53	20.63	20.73	20.59	21.50
	64QAM	1	0	19.74	19.94	20.32	20.22	21.50
		1	50	20.27	20.24	20.56	20.74	21.50
		1	99	19.90	20.01	20.41	20.49	21.50
		50	0	19.16	19.38	19.48	19.74	20.50
		50	25	19.46	19.66	19.55	19.52	20.50
		50	50	19.49	19.44	19.25	19.60	20.50
		100	0	19.50	19.45	19.78	19.33	20.50

9.4 WLAN Mode

Wi-Fi 2.4GHz Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	19.50	19.14
	6/2437	19.50	19.11
	11/2462	19.50	19.04
802.11g (6M)	1/2412	17.50	16.34
	6/2437	17.50	16.61
	11/2462	17.50	16.49
802.11n (HT20,800ns) (MCS0)	1/2412	17.50	16.84
	6/2437	17.50	16.91
	11/2462	17.50	17.03
802.11n (HT40,400ns) (MCS0)	3/2422	16.00	14.77
	6/2437	16.00	14.84
	9/2452	16.00	14.89
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 5GHz (U-NII-1) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	36/5180	17.50	16.97
	40/5200	17.50	16.81
	48/5240	17.50	16.58
802.11nHT20(MCS0)	36/5180	16.50	15.57
	40/5200	16.50	15.53
	48/5240	16.50	15.67
802.11nHT40(MCS0)	38/5190	16.50	15.37
	46/5230	16.50	15.49
802.11ac- VHT20(MCS0)	36/5180	14.50	13.88
	40/5200	15.00	13.91
	48/5240	15.00	13.89
802.11ac- VHT40(MCS0)	38/5190	15.50	14.45
	46/5230	15.50	14.58
802.11ac- VHT80(MCS0)	42/5210	15.00	14.07

Wi-Fi 5GHz (U-NII-2A)	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11a(6M)	52/5260	17.50	16.90
	60/5300	17.50	16.87
	64/5320	17.50	16.92
802.11nHT20(MCS0)	52/5260	16.50	15.51
	60/5300	16.50	15.66
	64/5320	16.50	15.68
802.11nHT40(MCS0)	54/5270	16.50	15.62
	62/5310	16.50	15.67
802.11ac- VHT20(MCS0)	52/5260	15.00	13.89
	60/5300	15.00	14.17
	64/5320	15.00	14.23
802.11ac- VHT40(MCS0)	54/5270	15.00	14.14
	62/5310	15.00	14.17
802.11ac- VHT80(MCS0)	58/5290	15.50	14.57
Note. Initial test configuration is 802.11a mode.			

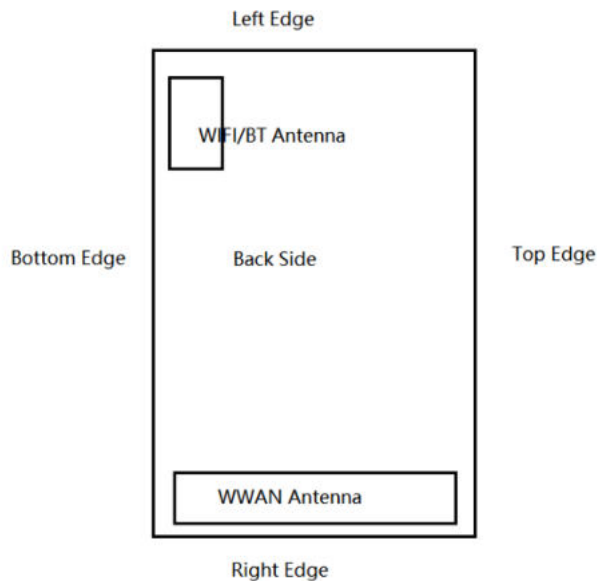
Wi-Fi 5GHz (U-NII-3)	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11a(6M)	149/5745	17.50	16.81
	157/5785	17.50	16.88
	165/5825	17.50	16.84
802.11nHT20(MCS0)	149/5745	16.50	15.57
	157/5785	16.50	15.44
	165/5825	16.50	15.25
802.11nHT40(MCS0)	151/5755	16.50	15.59
	159/5795	16.50	15.70
802.11ac- VHT20(MCS0)	149/5745	15.00	14.07
	157/5785	15.00	14.11
	165/5825	15.00	14.06
802.11ac- VHT40(MCS0)	151/5755	15.00	14.33
	159/5795	15.00	14.56
802.11ac- VHT80(MCS0)	155/5775	15.50	14.35
Note. Initial test configuration is 802.11a mode.			

9.5 Bluetooth Mode

Bluetooth	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency(MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	12.14	11.70	12.48	13.00
π/4DQPSK	11.51	10.90	11.56	12.00
8DPSK	11.42	10.96	11.63	12.00
BLE	0/2402	19/2440	39/2480	/
GFSK(1M)	-0.53	-0.50	-0.87	1.00

10. Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations



Overall (Length x Width): 129 mm x 70 mm						
Overall Diagonal: 138 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
Bluetooth/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
Bluetooth/Wi-Fi Antenna	Yes	Yes	N/A	Yes	Yes	N/A
Note:						
1. Per KDB 941225 D06, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, 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. Per FCC KDB 447498 D01, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:						
a) $\leq 0.8 \text{ W/kg}$ or 2.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\leq 100\text{MHz}$						
b) $\leq 0.6 \text{ W/kg}$ or 1.5 W/kg , for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.						
c) $\leq 0.4 \text{ W/kg}$ or 1.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\geq 200 \text{ MHz}$.						
3. When the original highest measured SAR is $\geq 0.80 \text{ W/kg}$, the measurement was repeated once.						

10.2 Standalone SAR Test Exclusion Considerations

Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$
 ≤ 3.0 for 1-g SAR and ≤ 7.5 for product specific 10-g SAR

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Bluetooth	Distance (mm)	MAX Power (dBm)	Frequency (MHz)	Ratio	Evaluation
Hotspot	10	13	2480	3.1	No
Product Specific 10-g SAR	5	13	2480	6.3	No

10.3 Measured SAR Results

Note:

2. The value with blue color is the maximum SAR Value of each test band.
3. For GSM, when multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.
4. For WCDMA, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.
5. 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 $\geq 50\%$ limit(1g).
6. Per 248227, for band U-NII-1 and U-NII-2A, when the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

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	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.712	0.040	1.13	0.806	/
		Back Side	10	4TX Slots	N/A	N/A	128/824.2	29.00	28.34	0.920	-0.030	1.16	1.071	13
		Back Side	10	4TX Slots	N/A	N/A	251/848.8	29.00	28.58	0.669	-0.100	1.10	0.737	/
		Back Side Repeat	10	4TX Slots	N/A	N/A	128/824.2	29.00	28.34	0.913	0.021	1.16	1.063	/
		Front Side	10	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.244	0.015	1.13	0.276	/
		Left Edge	10	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.113	0.027	1.13	0.128	/
		Right Edge	10	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.161	0.039	1.13	0.182	/
		Top Edge	10	4TX Slots	N/A	N/A	190/836.6	N/A	N/A	N/A	N/A	N/A	N/A	/
GSM1900	Main	Bottom Edge	10	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.205	0.026	1.13	0.232	/
		Back Side	10	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.578	-0.040	1.19	0.685	14
		Front Side	10	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.182	0.013	1.19	0.216	/
		Left Edge	10	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.064	0.090	1.19	0.076	/
		Right Edge	10	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.063	-0.051	1.19	0.075	/
		Top Edge	10	4TX Slots	N/A	N/A	661/1880	N/A	N/A	N/A	N/A	N/A	N/A	/
WCDMA II	Main	Bottom Edge	10	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.508	0.098	1.19	0.602	/
		Back Side	10	RMC	N/A	N/A	9400/1880	23.00	22.11	0.592	-0.033	1.23	0.727	15
		Front Side	10	RMC	N/A	N/A	9400/1880	23.00	22.11	0.203	0.010	1.23	0.249	/
		Left Edge	10	RMC	N/A	N/A	9400/1880	23.00	22.11	0.094	0.024	1.23	0.115	/
		Right Edge	10	RMC	N/A	N/A	9400/1880	23.00	22.11	0.042	-0.090	1.23	0.052	/
		Top Edge	10	RMC	N/A	N/A	9400/1880	N/A	N/A	N/A	N/A	N/A	N/A	/
WCDMA IV	Main	Bottom Edge	10	RMC	N/A	N/A	9400/1880	23.00	22.11	0.524	0.024	1.23	0.643	/
		Back Side	10	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.710	0.010	1.17	0.834	/
		Back Side	10	RMC	N/A	N/A	1312/1712.4	23.00	22.17	0.633	0.051	1.21	0.766	/

		Back Side	10	RMC	N/A	N/A	1513/1752.6	23.00	22.50	0.755	-0.039	1.12	0.847	16
		Front Side	10	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.451	-0.038	1.17	0.530	/
		Left Edge	10	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.167	0.026	1.17	0.196	/
		Right Edge	10	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.060	0.050	1.17	0.070	/
		Top Edge	10	RMC	N/A	N/A	1413/1732.6	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.704	0.089	1.17	0.827	/
		Bottom Edge	10	RMC	N/A	N/A	1312/1712.4	23.00	22.17	0.513	0.064	1.21	0.621	/
		Bottom Edge	10	RMC	N/A	N/A	1513/1752.6	23.00	22.50	0.748	0.063	1.12	0.839	/
WCDMA V	Main	Back Side	10	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.541	-0.060	1.16	0.627	17
		Front Side	10	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.130	0.029	1.16	0.151	/
		Left Edge	10	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.047	0.070	1.16	0.054	/
		Right Edge	10	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.046	0.027	1.16	0.053	/
		Top Edge	10	RMC	N/A	N/A	4183/836.6	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.076	0.012	1.16	0.088	/
LTE 4	Main	Back Side	10	QPSK	1	50	20300/1745	23.00	22.63	0.714	-0.034	1.09	0.777	18
			10	QPSK	50%	50	20300/1745	22.50	21.68	0.618	0.017	1.21	0.746	/
		Front Side	10	QPSK	1	50	20300/1745	23.00	22.63	0.504	0.050	1.09	0.549	/
			10	QPSK	50%	0	20300/1745	22.50	21.68	0.409	0.032	1.21	0.494	/
		Left Edge	10	QPSK	1	50	20300/1745	23.00	22.63	0.184	-0.031	1.09	0.200	/
			10	QPSK	50%	0	20300/1745	22.50	21.68	0.156	0.150	1.21	0.188	/
		Right Edge	10	QPSK	1	50	20300/1745	23.00	22.63	0.052	0.031	1.09	0.057	/
			10	QPSK	50%	0	20300/1745	22.50	21.68	0.049	0.070	1.21	0.059	/
		Top Edge	10	QPSK	1	50	20300/1745	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	50%	0	20300/1745	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	50	20300/1745	23.00	22.63	0.698	0.030	1.09	0.760	/
			10	QPSK	50%	0	20300/1745	22.50	21.68	0.625	0.016	1.21	0.755	/
LTE 7	Main	Back Side	10	QPSK	1	50	20850/2510	23.00	22.38	0.605	-0.033	1.15	0.698	19
			10	QPSK	50%	25	20850/2510	22.00	21.37	0.551	0.028	1.16	0.637	/
		Front Side	10	QPSK	1	50	20850/2510	23.00	22.38	0.238	0.030	1.15	0.275	/
			10	QPSK	50%	25	20850/2510	22.00	21.37	0.185	0.058	1.16	0.214	/
		Left Edge	10	QPSK	1	50	20850/2510	23.00	22.38	0.233	0.020	1.15	0.269	/
			10	QPSK	50%	25	20850/2510	22.00	21.37	0.197	0.011	1.16	0.228	/
		Right Edge	10	QPSK	1	50	20850/2510	23.00	22.38	0.001	0.035	1.15	0.001	/
			10	QPSK	50%	25	20850/2510	22.00	21.37	0.001	-0.100	1.16	0.001	/
		Top Edge	10	QPSK	1	50	20850/2510	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	50%	25	20850/2510	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	50	20850/2510	23.00	22.38	0.472	0.055	1.15	0.544	/
			10	QPSK	50%	25	20850/2510	22.00	21.37	0.409	-0.020	1.16	0.473	/
LTE 12	Main	Back Side	10	QPSK	1	25	23130/711	23.00	22.47	0.305	-0.052	1.13	0.345	20
			10	QPSK	50%	0	23130/711	22.00	21.51	0.263	0.035	1.12	0.294	/
		Front Side	10	QPSK	1	25	23130/711	23.00	22.47	0.134	-0.080	1.13	0.151	/
			10	QPSK	50%	0	23130/711	22.00	21.51	0.108	0.037	1.12	0.121	/
		Left Edge	10	QPSK	1	25	23130/711	23.00	22.47	0.051	0.062	1.13	0.058	/

			10	QPSK	50%	0	23130/711	22.00	21.51	0.045	0.014	1.12	0.050	/
		Right Edge	10	QPSK	1	25	23130/711	23.00	22.47	0.046	0.024	1.13	0.052	/
			10	QPSK	50%	0	23130/711	22.00	21.51	0.051	0.070	1.12	0.057	/
		Top Edge	10	QPSK	1	25	23130/711	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	50%	0	23130/711	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	25	23130/711	23.00	22.47	0.063	-0.100	1.13	0.071	/
			10	QPSK	50%	0	23130/711	22.00	21.51	0.054	0.048	1.12	0.060	/
LTE 25	Main	Back Side	10	QPSK	1	50	26140/1860	23.00	22.56	0.705	-0.084	1.11	0.780	21
			10	QPSK	50%	0	26140/1860	22.00	21.61	0.540	0.100	1.09	0.591	/
		Front Side	10	QPSK	1	50	26140/1860	23.00	22.56	0.281	0.070	1.11	0.311	/
			10	QPSK	50%	0	26140/1860	22.00	21.61	0.219	0.040	1.09	0.240	/
		Left Edge	10	QPSK	1	50	26140/1860	23.00	22.56	0.089	-0.024	1.11	0.098	/
			10	QPSK	50%	0	26140/1860	22.00	21.61	0.065	0.010	1.09	0.071	/
		Right Edge	10	QPSK	1	50	26140/1860	23.00	22.56	0.032	0.033	1.11	0.035	/
			10	QPSK	50%	0	26140/1860	22.00	21.61	0.046	0.021	1.09	0.050	/
		Top Edge	10	QPSK	1	50	26140/1860	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	50%	0	26140/1860	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	50	26140/1860	23.00	22.56	0.649	0.030	1.11	0.718	/
			10	QPSK	50%	0	26140/1860	22.00	21.61	0.428	0.010	1.09	0.468	/
LTE 26	Main	Back Side	10	QPSK	1	38	26915/836.5	24.00	23.87	0.494	0.040	1.03	0.509	22
			10	QPSK	50%	39	26965/841.5	23.50	23.24	0.368	-0.045	1.06	0.391	/
		Back Side	10	QPSK	1	25	26740/819	23.00	22.56	0.423	-0.020	1.11	0.468	/
			10	QPSK	50%	13	26740/819	22.00	21.55	0.335	0.018	1.11	0.372	/
		Front Side	10	QPSK	1	38	26915/836.5	24.00	23.87	0.175	-0.100	1.03	0.180	/
			10	QPSK	50%	39	26965/841.5	23.50	23.24	0.123	0.052	1.06	0.131	/
		Left Edge	10	QPSK	1	38	26915/836.5	24.00	23.87	0.058	-0.031	1.03	0.060	/
			10	QPSK	50%	39	26965/841.5	23.50	23.24	0.055	-0.046	1.06	0.058	/
		Right Edge	10	QPSK	1	38	26915/836.5	24.00	23.87	0.047	0.038	1.03	0.048	/
			10	QPSK	50%	39	26965/841.5	23.50	23.24	0.038	0.011	1.06	0.040	/
		Top Edge	10	QPSK	1	38	26915/836.5	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	50%	39	26965/841.5	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	10	QPSK	1	38	26915/836.5	24.00	23.87	0.095	0.090	1.03	0.098	/
			10	QPSK	50%	39	26965/841.5	23.50	23.24	0.082	0.051	1.06	0.087	/
LTE 41	Main	Back Side	10	QPSK	1	50	41140/2645	23.50	22.93	0.204	0.020	1.14	0.233	23
			10	QPSK	50%	25	40670/2598	22.50	21.84	0.170	0.023	1.16	0.198	/
		Front Side	10	QPSK	1	50	41140/2645	23.50	22.93	0.069	0.041	1.14	0.079	/
			10	QPSK	50%	25	40670/2598	22.50	21.84	0.040	0.037	1.16	0.047	/
		Left Edge	10	QPSK	1	50	41140/2645	23.50	22.93	0.068	0.030	1.14	0.078	/
			10	QPSK	50%	25	40670/2598	22.50	21.84	0.053	0.024	1.16	0.062	/
		Right Edge	10	QPSK	1	50	41140/2645	23.50	22.93	0.001	-0.090	1.14	0.001	/
			10	QPSK	50%	25	40670/2598	22.50	21.84	0.001	0.080	1.16	0.001	/
		Top Edge	10	QPSK	1	50	41140/2645	N/A	N/A	N/A	N/A	N/A	N/A	/
			10	QPSK	50%	25	40670/2598	N/A	N/A	N/A	N/A	N/A	N/A	/

		Bottom Edge	10	QPSK	1	50	41140/2645	23.50	22.93	0.105	0.010	1.14	0.120	/
			10	QPSK	50%	25	40670/2598	22.50	21.84	0.083	0.019	1.16	0.097	/

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.
Wi-Fi 2.4G	Wi-Fi	Back Side	10	11b	100.0%	1/2412	19.50	19.14	0.299	-0.140	1.09	0.325	/
		Front Side	10	11b	100.0%	1/2412	19.50	19.14	0.163	0.045	1.09	0.177	/
		Left Edge	10	11b	100.0%	1/2412	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	10	11b	100.0%	1/2412	19.50	19.14	0.324	-0.040	1.09	0.352	24
		Top Edge	10	11b	100.0%	1/2412	19.50	19.14	0.157	0.047	1.09	0.171	/
		Bottom Edge	10	11b	100.0%	1/2412	N/A	N/A	N/A	N/A	N/A	N/A	/
Wi-Fi 5G U-NII-2A	Wi-Fi	Back Side	10	11a	100.0%	64/5320	17.50	16.92	0.140	-0.110	1.14	0.160	/
		Front Side	10	11a	100.0%	64/5320	17.50	16.92	0.043	0.025	1.14	0.049	/
		Left Edge	10	11a	100.0%	64/5320	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	10	11a	100.0%	64/5320	17.50	16.92	0.113	-0.180	1.14	0.129	/
		Top Edge	10	11a	100.0%	64/5320	17.50	16.92	0.103	0.061	1.14	0.118	/
		Bottom Edge	10	11a	100.0%	64/5320	N/A	N/A	N/A	N/A	N/A	N/A	/
Wi-Fi 5G U-NII-3	Wi-Fi	Back Side	10	11a	100.0%	157/5785	17.50	16.88	0.380	0.100	1.15	0.438	/
		Front Side	10	11a	100.0%	157/5785	17.50	16.88	0.121	-0.027	1.15	0.140	/
		Left Edge	10	11a	100.0%	157/5785	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	10	11a	100.0%	157/5785	17.50	16.88	0.214	0.022	1.15	0.247	/
		Top Edge	10	11a	100.0%	157/5785	17.50	16.88	0.098	0.095	1.15	0.113	/
		Bottom Edge	10	11a	100.0%	157/5785	N/A	N/A	N/A	N/A	N/A	N/A	/
Bluetooth	Bluetooth	Back Side	10	DH5	76.9%	78/2480	13.00	12.48	0.039	0.056	1.47	0.057	25
		Front Side	10	DH5	76.9%	78/2480	13.00	12.48	0.015	0.010	1.47	0.022	/
		Left Edge	10	DH5	76.9%	78/2480	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	10	DH5	76.9%	78/2480	13.00	12.48	0.035	-0.015	1.47	0.051	/
		Top Edge	10	DH5	76.9%	78/2480	13.00	12.48	0.011	-0.024	1.47	0.016	/
		Bottom Edge	10	DH5	76.9%	78/2480	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	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	1.310	0.000	1.13	1.483	26
		Front Side	0	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.449	0.090	1.13	0.508	/
		Left Edge	0	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.119	0.015	1.13	0.135	/
		Right Edge	0	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.153	0.085	1.13	0.173	/
		Top Edge	0	4TX Slots	N/A	N/A	190/836.6	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	4TX Slots	N/A	N/A	190/836.6	29.00	28.46	0.317	-0.140	1.13	0.359	/
GSM1900	Main	Back Side	0	4TX Slots	N/A	N/A	661/1880	26.00	25.26	1.690	-0.011	1.19	2.004	/
		Back Side	0	4TX Slots	N/A	N/A	512/1850.2	26.00	25.25	1.540	0.019	1.19	1.830	/
		Back Side	0	4TX Slots	N/A	N/A	810/1909.8	26.00	25.31	1.730	-0.036	1.17	2.028	27
		Front Side	0	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.299	0.027	1.19	0.355	/
		Left Edge	0	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.172	0.014	1.19	0.204	/
		Right Edge	0	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.073	0.021	1.19	0.087	/
		Top Edge	0	4TX Slots	N/A	N/A	661/1880	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	4TX Slots	N/A	N/A	661/1880	26.00	25.26	0.803	0.036	1.19	0.952	/
WCDMA II	Main	Back Side	0	RMC	N/A	N/A	9400/1880	23.00	22.11	1.830	0.040	1.23	2.246	/
		Back Side	0	RMC	N/A	N/A	9262/1852.4	23.00	22.30	1.700	-0.027	1.17	1.997	/
		Back Side	0	RMC	N/A	N/A	9538/1907.6	23.00	21.87	1.910	-0.029	1.30	2.478	28
		Front Side	0	RMC	N/A	N/A	9400/1880	23.00	22.11	0.365	0.060	1.23	0.448	/
		Left Edge	0	RMC	N/A	N/A	9400/1880	23.00	22.11	0.199	0.022	1.23	0.244	/
		Right Edge	0	RMC	N/A	N/A	9400/1880	23.00	22.11	0.210	0.054	1.23	0.258	/
		Top Edge	0	RMC	N/A	N/A	9400/1880	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	RMC	N/A	N/A	9400/1880	23.00	22.11	0.885	0.015	1.23	1.086	/
WCDMA IV	Main	Back Side	0	RMC	N/A	N/A	1413/1732.6	23.00	22.30	2.230	0.026	1.17	2.620	/
		Back Side	0	RMC	N/A	N/A	1312/1712.4	23.00	22.17	2.270	-0.160	1.21	2.748	29
		Back Side	0	RMC	N/A	N/A	1513/1752.6	23.00	22.50	2.240	0.090	1.12	2.513	/
		Back Side Repeat	0	RMC	N/A	N/A	1312/1712.4	23.00	22.17	2.060	0.010	1.21	2.494	/
		Front Side	0	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.607	0.016	1.17	0.713	/
		Left Edge	0	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.294	0.022	1.17	0.345	/
		Right Edge	0	RMC	N/A	N/A	1413/1732.6	23.00	22.30	0.071	0.052	1.17	0.083	/
		Top Edge	0	RMC	N/A	N/A	1413/1732.6	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	RMC	N/A	N/A	1413/1732.6	23.00	22.30	1.230	0.048	1.17	1.445	/
WCDMA V	Main	Back Side	0	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.912	-0.030	1.16	1.057	30
		Front Side	0	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.286	0.013	1.16	0.331	/
		Left Edge	0	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.088	0.010	1.16	0.102	/
		Right Edge	0	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.066	0.090	1.16	0.076	/
		Top Edge	0	RMC	N/A	N/A	4183/836.6	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	RMC	N/A	N/A	4183/836.6	23.00	22.36	0.268	0.025	1.16	0.311	/
LTE 4	Main	Back Side	0	QPSK	1	50	20300/1745	23.00	22.63	2.310	-0.079	1.09	2.515	/

			0	QPSK	1	50	20050/1720	23.00	22.59	2.460	-0.025	1.10	2.704	/
			0	QPSK	1	50	20175/1732.5	23.00	22.48	2.490	0.090	1.13	2.807	31
			0	QPSK	50%	50	20050/1720	22.50	21.57	2.050	-0.090	1.24	2.540	/
			0	QPSK	50%	25	20175/1732.5	22.00	21.54	2.040	0.005	1.11	2.268	/
			0	QPSK	50%	50	20300/1745	22.50	21.68	1.980	0.091	1.21	2.391	/
			0	QPSK	100%	0	20050/1720	22.50	21.49	2.020	0.170	1.26	2.549	/
			0	QPSK	100%	0	20175/1732.5	22.50	21.46	2.020	0.046	1.27	2.567	/
			0	QPSK	100%	0	20300/1745	22.50	21.64	2.040	0.060	1.22	2.487	/
		Back Side Repeat	0	QPSK	1	50	20175/1732.5	23.00	22.48	2.380	0.027	1.13	2.683	/
		Front Side	0	QPSK	1	50	20300/1745	23.00	22.63	0.636	0.068	1.09	0.693	/
			0	QPSK	50%	0	20300/1745	22.50	21.68	0.574	0.027	1.21	0.693	/
		Left Edge	0	QPSK	1	50	20300/1745	23.00	22.63	0.338	0.040	1.09	0.368	/
			0	QPSK	50%	0	20300/1745	22.50	21.68	0.260	0.081	1.21	0.314	/
		Right Edge	0	QPSK	1	50	20300/1745	23.00	22.63	0.098	0.015	1.09	0.107	/
			0	QPSK	50%	0	20300/1745	22.50	21.68	0.081	0.090	1.21	0.098	/
		Top Edge	0	QPSK	1	50	20300/1745	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	50%	0	20300/1745	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	20300/1745	23.00	22.63	1.220	-0.140	1.09	1.328	/
			0	QPSK	50%	0	20300/1745	22.50	21.68	0.718	0.067	1.21	0.867	/
LTE 7	Main	Back Side	0	QPSK	1	50	20850/2510	23.00	22.38	1.910	0.070	1.15	2.203	/
			0	QPSK	1	50	21100/2535	23.00	22.05	1.930	0.040	1.24	2.402	/
			0	QPSK	1	50	21350/2560	23.00	22.09	1.950	0.038	1.23	2.405	32
			0	QPSK	50%	25	20850/2510	22.00	21.37	1.470	0.027	1.16	1.699	/
			0	QPSK	100%	0	20850/2510	22.00	21.34	1.610	0.011	1.16	1.874	/
		Front Side	0	QPSK	1	50	20850/2510	23.00	22.38	0.480	-0.058	1.15	0.554	/
			0	QPSK	50%	25	20850/2510	22.00	21.37	0.358	0.016	1.16	0.414	/
		Left Edge	0	QPSK	1	50	20850/2510	23.00	22.38	0.534	0.045	1.15	0.616	/
			0	QPSK	50%	25	20850/2510	22.00	21.37	0.383	0.029	1.16	0.443	/
		Right Edge	0	QPSK	1	50	20850/2510	23.00	22.38	0.019	0.010	1.15	0.022	/
			0	QPSK	50%	25	20850/2510	22.00	21.37	0.040	0.038	1.16	0.046	/
		Top Edge	0	QPSK	1	50	20850/2510	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	50%	25	20850/2510	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	20850/2510	23.00	22.38	0.892	0.011	1.15	1.029	/
			0	QPSK	50%	25	20850/2510	22.00	21.37	0.730	0.015	1.16	0.844	/
LTE 12	Main	Back Side	0	QPSK	1	25	23130/711	23.00	22.47	0.522	-0.130	1.13	0.590	33
			0	QPSK	50%	0	23130/711	22.00	21.51	0.503	-0.041	1.12	0.563	/
		Front Side	0	QPSK	1	25	23130/711	23.00	22.47	0.148	0.012	1.13	0.167	/
			0	QPSK	50%	0	23130/711	22.00	21.51	0.131	0.025	1.12	0.147	/
		Left Edge	0	QPSK	1	25	23130/711	23.00	22.47	0.111	0.034	1.13	0.125	/
			0	QPSK	50%	0	23130/711	22.00	21.51	0.087	-0.050	1.12	0.097	/
		Right Edge	0	QPSK	1	25	23130/711	23.00	22.47	0.091	0.040	1.13	0.103	/
			0	QPSK	50%	0	23130/711	22.00	21.51	0.070	0.180	1.12	0.078	/
		Top Edge	0	QPSK	1	25	23130/711	N/A	N/A	N/A	N/A	N/A	N/A	/

			0	QPSK	50%	0	23130/711	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	25	23130/711	23.00	22.47	0.107	-0.010	1.13	0.121	/
			0	QPSK	50%	0	23130/711	22.00	21.51	0.100	0.045	1.12	0.112	/
LTE 25	Main	Back Side	0	QPSK	1	50	26140/1860	23.00	22.56	1.810	-0.019	1.11	2.003	/
			0	QPSK	1	50	26365/1882.5	23.00	22.38	1.920	0.028	1.15	2.215	/
			0	QPSK	1	50	26590/1905	23.00	22.08	1.990	-0.180	1.24	2.460	34
			0	QPSK	50%	0	26140/1860	22.00	21.61	1.420	0.048	1.09	1.553	/
			0	QPSK	100%	0	26140/1860	22.00	21.57	1.480	0.120	1.10	1.634	/
		Front Side	0	QPSK	1	50	26140/1860	23.00	22.56	0.404	0.050	1.11	0.447	/
			0	QPSK	50%	0	26140/1860	22.00	21.61	0.301	0.090	1.09	0.329	/
		Left Edge	0	QPSK	1	50	26140/1860	23.00	22.56	0.213	0.057	1.11	0.236	/
			0	QPSK	50%	0	26140/1860	22.00	21.61	0.174	0.064	1.09	0.190	/
		Right Edge	0	QPSK	1	50	26140/1860	23.00	22.56	0.081	0.098	1.11	0.090	/
			0	QPSK	50%	0	26140/1860	22.00	21.61	0.058	0.030	1.09	0.063	/
		Top Edge	0	QPSK	1	50	26140/1860	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	50%	0	26140/1860	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	26140/1860	23.00	22.56	1.040	0.030	1.11	1.151	/
			0	QPSK	50%	0	26140/1860	22.00	21.61	0.838	0.045	1.09	0.917	/
LTE 26	Main	Back Side	0	QPSK	1	38	26915/836.5	24.00	23.87	0.864	0.030	1.03	0.890	35
			0	QPSK	50%	39	26965/841.5	23.50	23.24	0.645	0.080	1.06	0.685	/
		Back Side	0	QPSK	1	25	26740/819	23.00	22.56	0.763	0.090	1.11	0.844	/
			0	QPSK	50%	13	26740/819	22.00	21.55	0.584	-0.048	1.11	0.648	/
		Front Side	0	QPSK	1	38	26915/836.5	24.00	23.87	0.238	0.081	1.03	0.245	/
			0	QPSK	50%	39	26965/841.5	23.50	23.24	0.186	0.027	1.06	0.197	/
		Left Edge	0	QPSK	1	38	26915/836.5	24.00	23.87	0.064	0.090	1.03	0.066	/
			0	QPSK	50%	39	26965/841.5	23.50	23.24	0.047	0.016	1.06	0.050	/
		Right Edge	0	QPSK	1	38	26915/836.5	24.00	23.87	0.065	0.030	1.03	0.067	/
			0	QPSK	50%	39	26965/841.5	23.50	23.24	0.037	0.050	1.06	0.039	/
		Top Edge	0	QPSK	1	38	26915/836.5	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	50%	39	26965/841.5	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	38	26915/836.5	24.00	23.87	0.236	0.012	1.03	0.243	/
			0	QPSK	50%	39	26965/841.5	23.50	23.24	0.172	0.090	1.06	0.183	/
LTE 41	Main	Back Side	0	QPSK	1	50	41140/2645	23.50	22.93	1.020	0.070	1.14	1.163	36
			0	QPSK	50%	25	40670/2598	22.50	21.84	0.849	0.025	1.16	0.988	/
		Front Side	0	QPSK	1	50	41140/2645	23.50	22.93	0.137	0.032	1.14	0.156	/
			0	QPSK	50%	25	40670/2598	22.50	21.84	0.098	0.070	1.16	0.114	/
		Left Edge	0	QPSK	1	50	41140/2645	23.50	22.93	0.151	0.016	1.14	0.172	/
			0	QPSK	50%	25	40670/2598	22.50	21.84	0.091	0.030	1.16	0.106	/
		Right Edge	0	QPSK	1	50	41140/2645	23.50	22.93	0.016	0.015	1.14	0.018	/
			0	QPSK	50%	25	40670/2598	22.50	21.84	0.015	0.049	1.16	0.017	/
		Top Edge	0	QPSK	1	50	41140/2645	N/A	N/A	N/A	N/A	N/A	N/A	/
			0	QPSK	50%	25	40670/2598	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	QPSK	1	50	41140/2645	23.50	22.93	0.180	0.017	1.14	0.205	/
			0	QPSK	50%	25	40670/2598	22.50	21.84	0.130	0.049	1.16	0.151	/

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	11b	100.0%	1/2412	19.50	19.14	0.963	0.025	1.09	1.046	37
		Front Side	0	11b	100.0%	1/2412	19.50	19.14	0.471	0.050	1.09	0.512	/
		Left Edge	0	11b	100.0%	1/2412	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	11b	100.0%	1/2412	19.50	19.14	0.581	-0.120	1.09	0.631	/
		Top Edge	0	11b	100.0%	1/2412	19.50	19.14	0.341	-0.170	1.09	0.370	/
		Bottom Edge	0	11b	100.0%	1/2412	N/A	N/A	N/A	N/A	N/A	N/A	/
U-NII-2A	Wi-Fi	Back Side	0	11a	100.0%	64/5320	17.50	16.92	0.427	0.090	1.14	0.488	/
		Front Side	0	11a	100.0%	64/5320	17.50	16.92	0.055	0.045	1.14	0.063	/
		Left Edge	0	11a	100.0%	64/5320	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	11a	100.0%	64/5320	17.50	16.92	0.149	0.019	1.14	0.170	/
		Top Edge	0	11a	100.0%	64/5320	17.50	16.92	0.086	-0.075	1.14	0.098	/
		Bottom Edge	0	11a	100.0%	64/5320	N/A	N/A	N/A	N/A	N/A	N/A	/
U-NII-3	Wi-Fi	Back Side	0	11a	100.0%	157/5785	17.50	16.88	0.607	-0.080	1.15	0.700	38
		Front Side	0	11a	100.0%	157/5785	17.50	16.88	0.091	0.030	1.15	0.105	/
		Left Edge	0	11a	100.0%	157/5785	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	11a	100.0%	157/5785	17.50	16.88	0.424	0.027	1.15	0.489	/
		Top Edge	0	11a	100.0%	157/5785	17.50	16.88	0.128	-0.023	1.15	0.148	/
		Bottom Edge	0	11a	100.0%	157/5785	N/A	N/A	N/A	N/A	N/A	N/A	/
Bluetooth	Bluetooth	Back Side	0	DH5	76.9%	78/2480	13.00	12.48	0.084	0.039	1.47	0.122	39
		Front Side	0	DH5	76.9%	78/2480	13.00	12.48	0.046	-0.017	1.47	0.067	/
		Left Edge	0	DH5	76.9%	78/2480	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	DH5	76.9%	78/2480	13.00	12.48	0.051	0.014	1.47	0.075	/
		Top Edge	0	DH5	76.9%	78/2480	13.00	12.48	0.037	-0.100	1.47	0.054	/
		Bottom Edge	0	DH5	76.9%	78/2480	N/A	N/A	N/A	N/A	N/A	N/A	/

10.4 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Hotspot	Product Specific 10-g SAR
WWAN Main-Antenna+ Bluetooth-Antenna	Yes	Yes
WWAN Main-Antenna + Wi-Fi 2.4G-Antenna	Yes	Yes
WWAN Main-Antenna + Wi-Fi 5G-Antenna	Yes	Yes

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 $< 1.6\text{W/kg}$, simultaneously transmission SAR measurement is not necessary.
 - ii) $\text{SPLSR} = (\text{SAR1} + \text{SAR2})^{1.5} / (\text{min. separation distance, mm})$, 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 $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

The Maximum SAR_{1g} and SAR_{10g} Value for Main-Antenna

SAR _{1g/10g} (W/kg)		GSM 850	GSM 1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE FDD 4	LTE FDD 7	LTE FDD 12	LTE FDD 25	LTE FDD 26	LTE FDD 41	MAX. SAR _{1g}
Test Position													
Hotspot	Back Side	1.071	0.685	0.727	0.847	0.627	0.777	0.698	0.345	0.780	0.509	0.233	1.071
	Front Side	0.276	0.216	0.249	0.530	0.151	0.549	0.275	0.151	0.311	0.180	0.079	0.276
	Left Edge	0.128	0.076	0.115	0.196	0.054	0.200	0.269	0.058	0.098	0.060	0.078	0.128
	Right Edge	0.182	0.075	0.052	0.070	0.053	0.059	0.001	0.057	0.050	0.048	0.001	0.182
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Bottom Edge	0.232	0.602	0.643	0.839	0.088	0.760	0.544	0.071	0.718	0.098	0.120	0.232
Product Specific 10-g SAR	Back Side	1.483	2.028	2.478	2.748	1.057	2.807	2.405	0.590	2.460	0.890	1.163	2.807
	Front Side	0.508	0.355	0.448	0.713	0.331	0.693	0.554	0.167	0.447	0.245	0.156	0.713
	Left Edge	0.135	0.204	0.244	0.345	0.102	0.368	0.616	0.125	0.236	0.066	0.172	0.616
	Right Edge	0.173	0.087	0.258	0.083	0.076	0.107	0.046	0.103	0.090	0.067	0.018	0.258
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000
	Bottom Edge	0.359	0.952	1.086	1.445	0.311	1.328	1.029	0.121	1.151	0.243	0.205	1.445

About Bluetooth, Wi-Fi and Main-Antenna

SAR _{1g/10g} (W/kg)		Main-Antenna	Wi-Fi 2.4G	Wi-Fi 5GHz	Bluetooth	MAX. ΣSAR _{1g/10g}		
				max(U-NII-2A;U-NII-3)				
		Test Position		1	2	3	4	1+2
Hotspot	Back Side	1.071	0.325	0.438	0.057	1.396	1.509	1.128
	Front Side	0.276	0.177	0.140	0.022	0.453	0.416	0.298
	Left Edge	0.128	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	0.182	0.352	0.247	0.051	0.534	0.429	0.233
	Top Edge	N/A	0.171	0.118	0.016	N/A	N/A	N/A
	Bottom Edge	0.232	N/A	N/A	N/A	N/A	N/A	N/A
Product Specific 10-g SAR	Back Side	2.807	1.046	0.700	0.122	3.853	3.507	2.929
	Front Side	0.713	0.512	0.105	0.067	1.225	0.818	0.780
	Left Edge	0.616	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	0.258	0.631	0.489	0.075	0.889	0.747	0.333
	Top Edge	N/A	0.370	0.148	0.054	N/A	N/A	N/A
	Bottom Edge	1.445	N/A	N/A	N/A	N/A	N/A	N/A
Note:								
1. The value with blue color is the maximum ΣSAR _{1g/10g} Value.								
2. MAX. ΣSAR _{1g/10g} =Unlicensed SAR _{MAX} +Licensed SAR _{MAX}								
3. MAX. ΣSAR _{1g} =1.509W/kg<1.6W/kg and MAX. ΣSAR _{10g} =3.853W/kg<4 W/kg, so the Simultaneous transmission SAR with volume scan are not required for Wi-Fi -Antenna and Main-Antenna.								

11. Measurement Uncertainty

Per KDB865664 D01:

SAR measurement uncertainty analysis is required in SAR reports only when the highest measured SAR in a frequency band is ≥ 1.5 W/kg for 1-g SAR. The equivalent ratio (1.5/1.6) should be applied to extremity and occupational exposure conditions. The procedures described in IEEE Std 1528-2013 should be applied.

No.	Source	Evaluation Method	Uncertainty Component a_i (%)	Probability Distribution	Coverage Factor k	Weight c_i	Standard Uncertainty u_i (%)	(Equivalent) Degree of Freedom V_{eff} or v_i
1	Measurement repeatability	A	0.5	Normal	1	1	0.5	9
Measuring device								
2	- Probe calibration	B	7	Normal	1	1	7	∞
3	- Axial isotropy of probe	B	4.7	Rectangular	$\sqrt{3}$	$\sqrt{0.5}$	1.9	∞
4	- Spherical isotropy of probe	B	9.4	Rectangular	$\sqrt{3}$	$\sqrt{0.5}$	3.9	∞
5	- Boundary effect	B	1.9	Rectangular	$\sqrt{3}$	1	1.1	∞
6	- Linearity of probe	B	4.7	Rectangular	$\sqrt{3}$	1	2.7	∞
7	- Detection limit	B	1.0	Rectangular	$\sqrt{3}$	1	0.6	∞
8	- Electronic reading	B	1.0	Normal	1	1	1.0	∞
9	- Response time	B	0	Rectangular	$\sqrt{3}$	1	0	∞
10	- Integration time	B	4.32	Rectangular	$\sqrt{3}$	1	2.5	∞
11	- Noise	B	0	Rectangular	$\sqrt{3}$	1	0	∞
12	- Reflection	B	3	Rectangular	$\sqrt{3}$	1	1.73	∞
13	- Mechanical positioning of probe	B	0.4	Rectangular	$\sqrt{3}$	1	0.2	∞
14	- Probe and human body model positioning	B	2.9	Rectangular	$\sqrt{3}$	1	1.7	∞
15	- SAR extrapolation and interpolation	B	3.9	Rectangular	$\sqrt{3}$	1	2.3	∞
Uncertainties related to DUT								

16	- DUT location	A	2.9	Normal	1	1	4.92	71
17	- DUT fixture	A	4.1	Normal	1	1	4.1	5
18	- Output power drift	B	5.0	Rectangular	$\sqrt{3}$	1	2.9	∞
Physical parameters								
18	- Shell of human body model	B	4.0	Rectangular	$\sqrt{3}$	1	2.3	∞
19	- Liquid conductivity (deviation from target value)	B	5.0	Rectangular	$\sqrt{3}$	0.64	1.8	∞
20	- Liquid conductivity (measurement error)	B	0.77	Normal	1	0.64	0.493	9
21	- Liquid dielectric constant (deviation from target value)	B	5.0	Rectangular	$\sqrt{3}$	0.6	1.7	∞
22	- Liquid dielectric constant (measurement error)	B	0.29	Normal	1	0.6	0.174	9
Combined standard uncertainty		$u'_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					11.36	
Expanded uncertainty (95% confidence interval)		$u_e = 2u_c$		Normal	k=2		22.72	

Therefore, the combined relative standard uncertainty is

$$u'_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$$

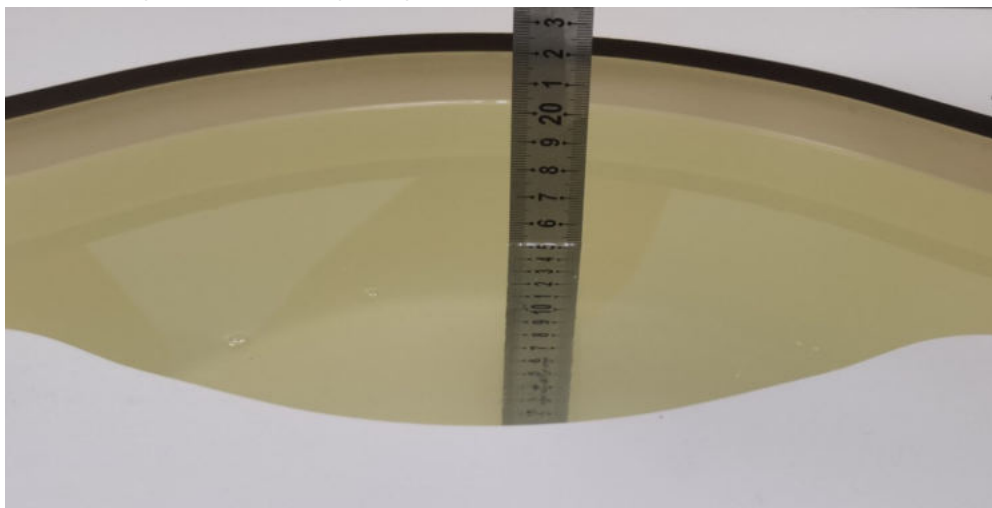
$$= 11.36\%$$

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.



liquid depth in the body Phantom

ANNEX B: System Check Results

Plot 1 System Performance Check at 750 MHz TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3

Date: 2025/4/2

Communication System: CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.58, 10.07, 10.24); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

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) = 2.15 W/kg

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

Reference Value = 50.165V/m; Power Drift = -0.08 dB

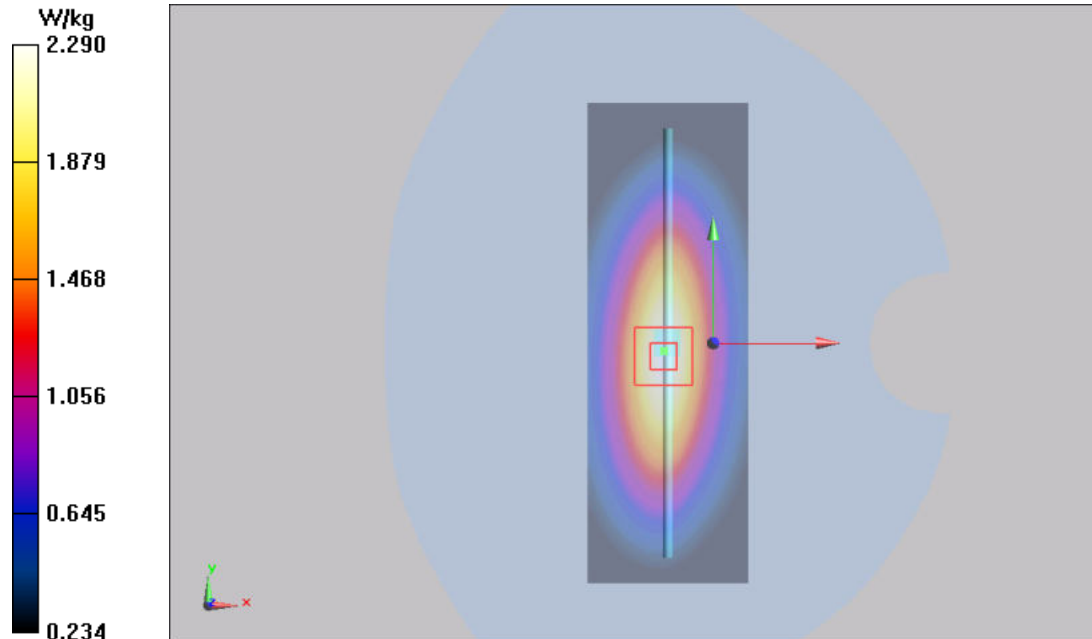
Peak SAR (extrapolated) = 3.16 W/kg

SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.41 W/kg

Smallest distance from peaks to all points 3 dB below = 8.7 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 2.29 W/kg



Plot 2 System Performance Check at 835 MHz TSL**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2**

Date: 3/28/2025

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.88 \text{ S/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

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

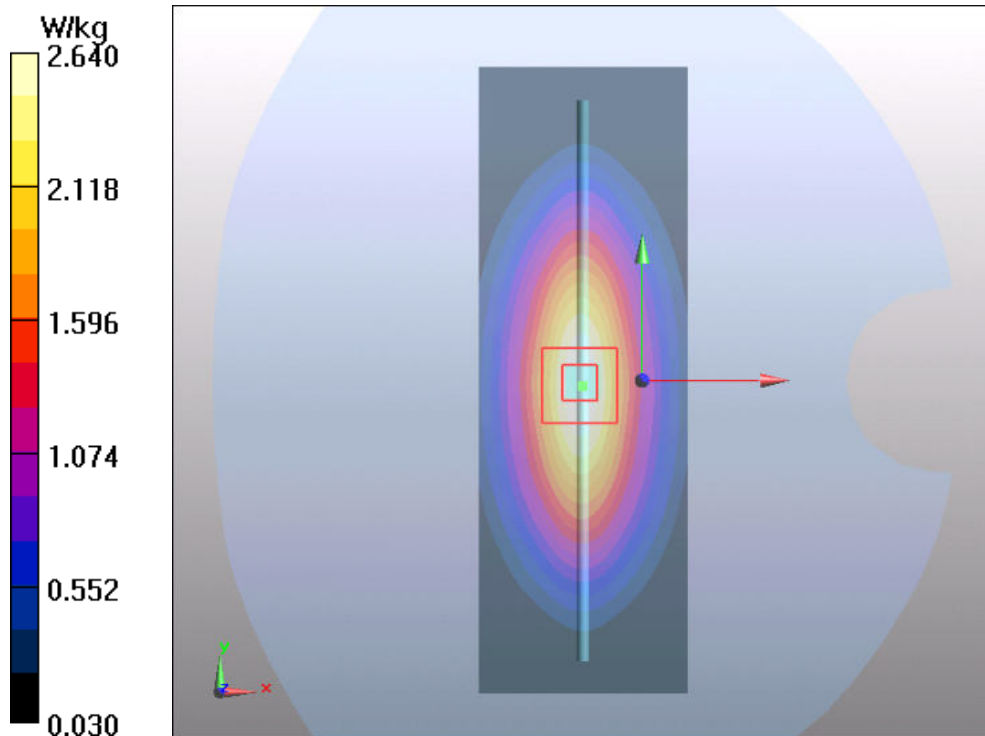
Electronics: DAE4 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

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

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 2.49 W/kg **d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 53.241 V/m ; Power Drift = -0.020 dB Peak SAR (extrapolated) = 3.95 W/kg **SAR(1 g) = 2.48 W/kg ; SAR(10 g) = 1.6 W/kg** Smallest distance from peaks to all points 3 dB below = 16.2 mm

Ratio of SAR at M2 to SAR at M1 = 63%

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

Plot 3 System Performance Check at 835 MHz TSL**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2**

Date: 4/2/2025

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 41.3$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

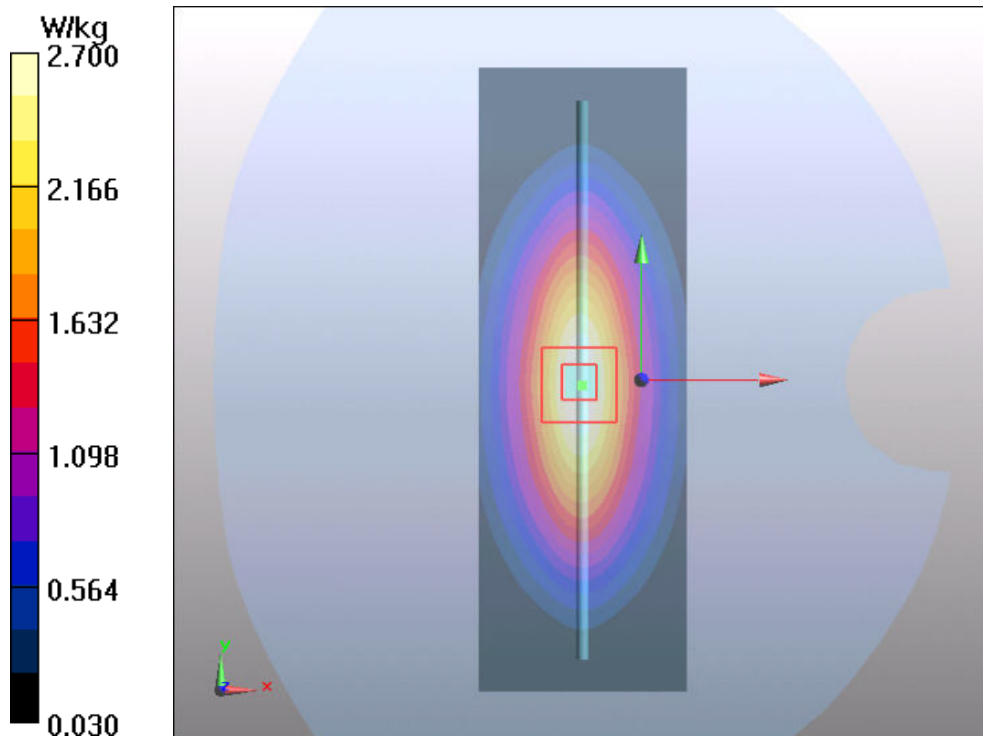
Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 2.59 W/kg **d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 52.023 V/m ; Power Drift = -0.06 dB Peak SAR (extrapolated) = 3.25 W/kg **SAR(1 g) = 2.46 W/kg ; SAR(10 g) = 1.65 W/kg** Smallest distance from peaks to all points 3 dB below = 15.7 mm Ratio of SAR at M2 to SAR at M1 = 65.4% Maximum value of SAR (measured) = 2.70 W/kg 

Plot 4 System Performance Check at 1750 MHz TSL**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2**

Date: 3/29/2025

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

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

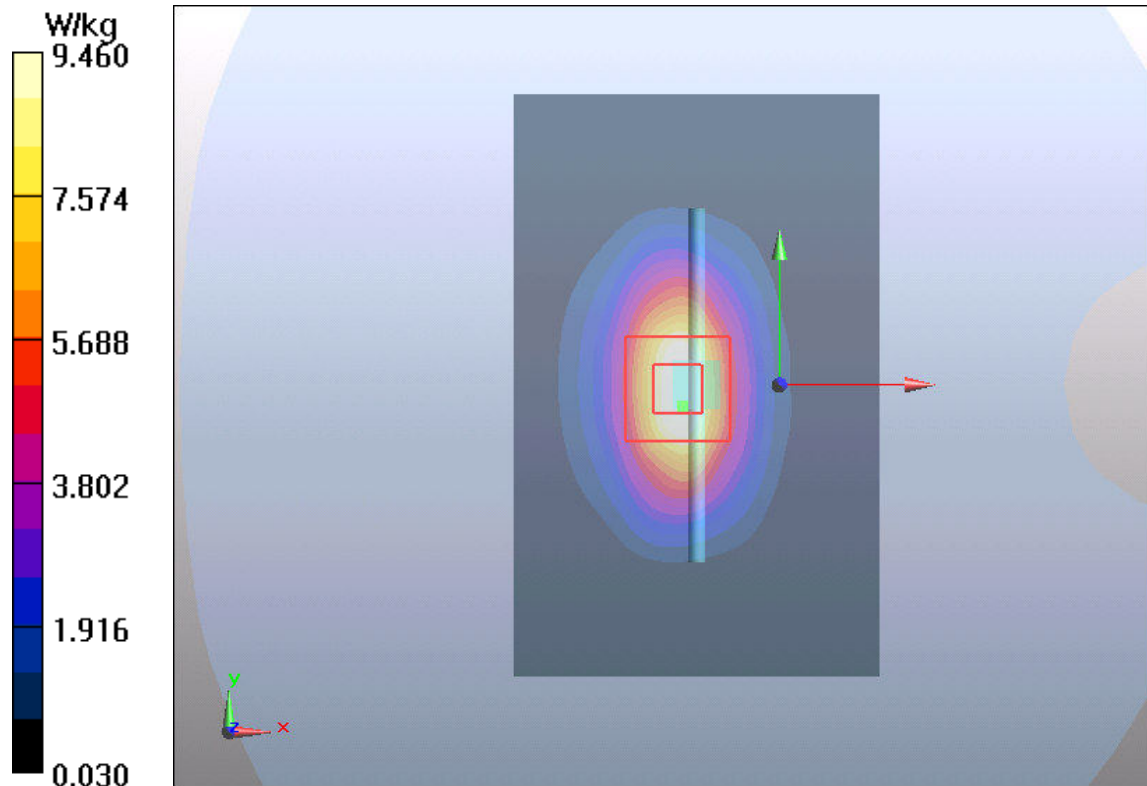
Peak SAR (extrapolated) = 15.5 W/kg

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 5 System Performance Check at 1750 MHz TSL**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2**

Date: 4/3/2025

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (measured) = 9.77 W/kg

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

Reference Value = 80.134 V/m; Power Drift = 0.055 dB

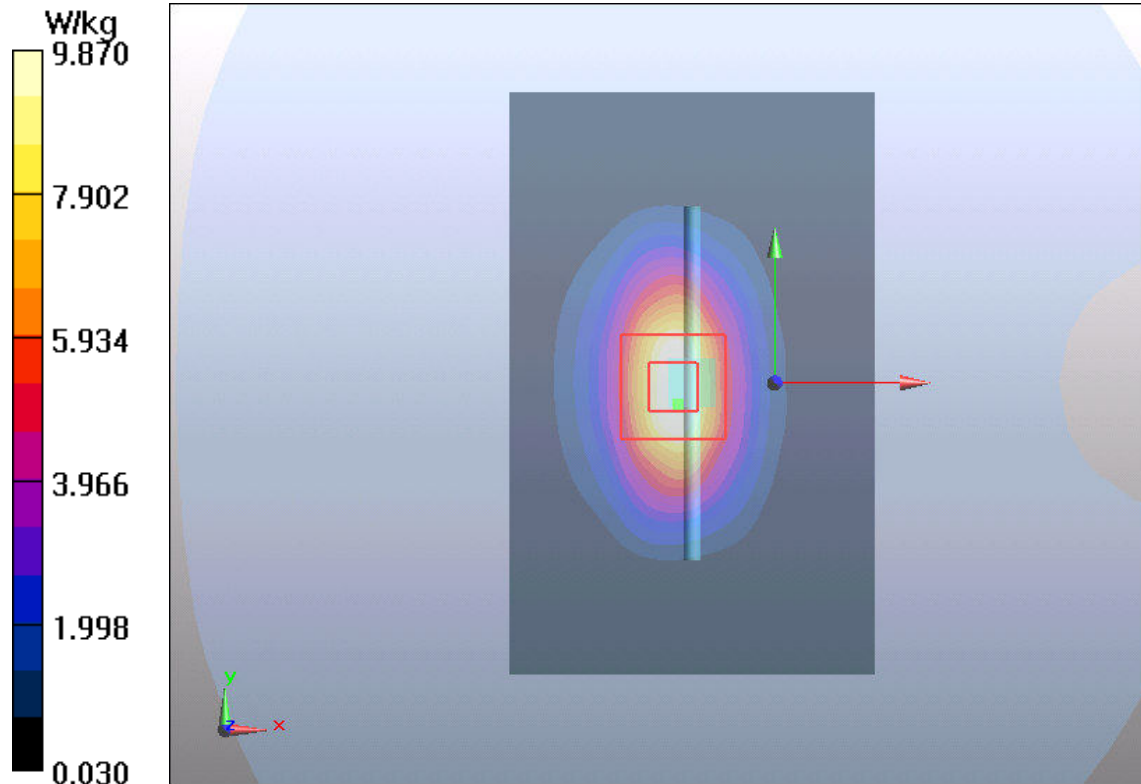
Peak SAR (extrapolated) = 15.81 W/kg

SAR(1 g) = 9.11 W/kg; SAR(10 g) = 4.77 W/kg

Smallest distance from peaks to all points 3 dB below = 8.6mm

Ratio of SAR at M2 to SAR at M1 = 54.6%

Maximum value of SAR (measured) = 9.87 W/kg



Plot 6 System Performance Check at 1900 MHz TSL**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2**

Date: 3/29/2025

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.41 \text{ S/m}$; $\epsilon_r = 40.1$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

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 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.23 W/kg

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

Reference Value = 85.857V/m; Power Drift = 0.026 dB

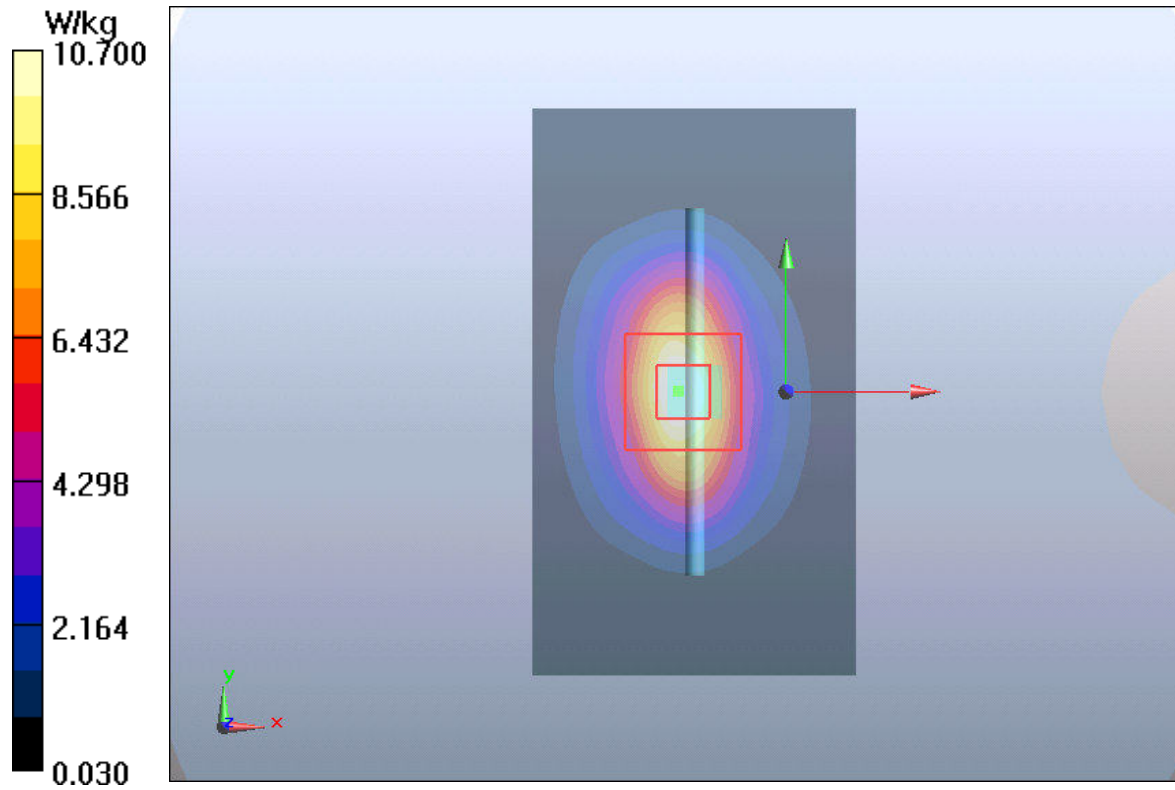
Peak SAR (extrapolated) = 17.84 W/kg

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 7 System Performance Check at 1900 MHz TSL**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2**

Date: 4/3/2025

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.43 W/kg

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

Reference Value = 87.324 V/m; Power Drift = 0.013 dB

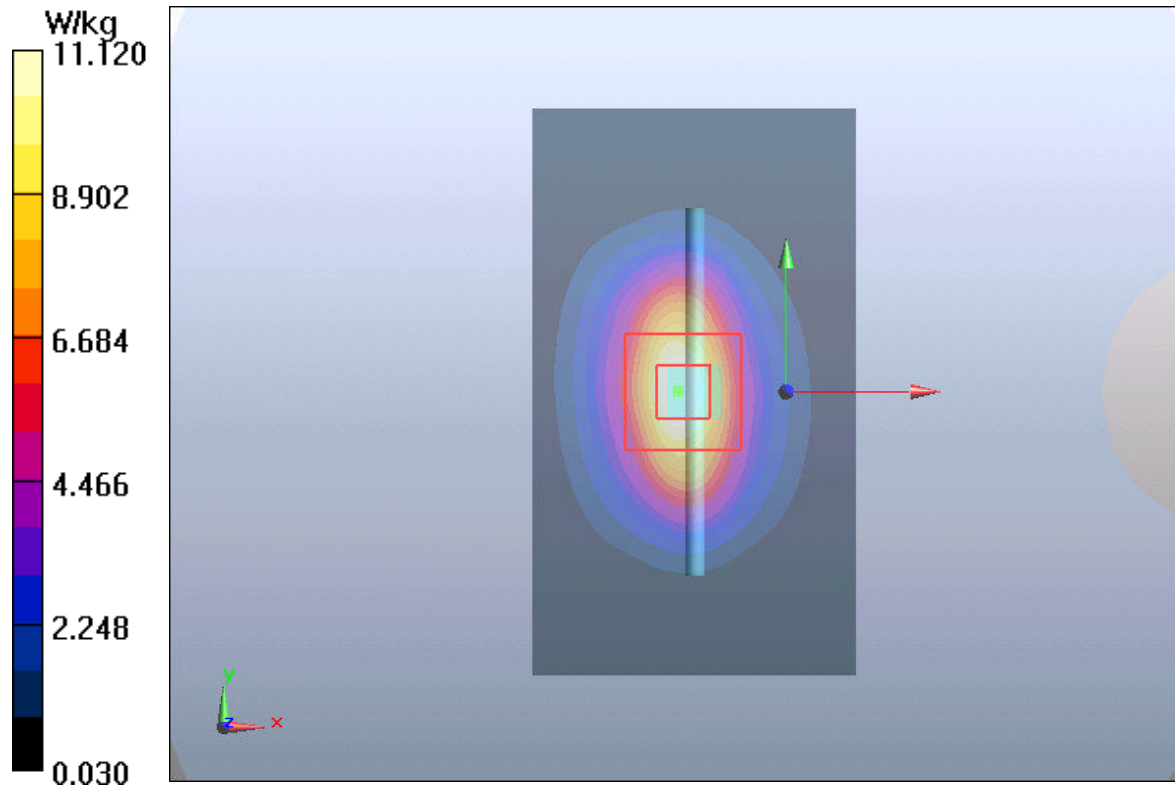
Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 9.85 W/kg; SAR(10 g) = 4.93 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2mm

Ratio of SAR at M2 to SAR at M1 = 56.3%

Maximum value of SAR (measured) = 11.12 W/kg



Plot 8 System Performance Check at 2450 MHz TSL**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2**

Date: 3/30/2025

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.81$ S/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

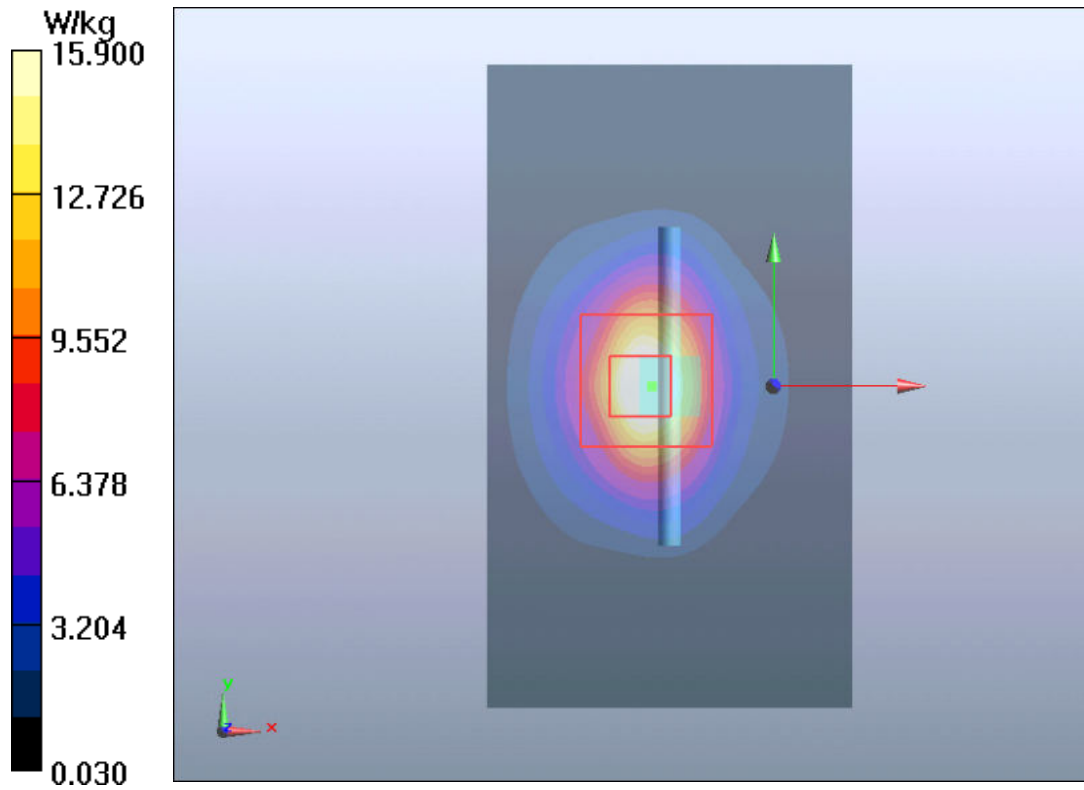
Peak SAR (extrapolated) = 30.10 W/kg

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 9 System Performance Check at 2600 MHz TSL**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2**

Date: 3/31/2025

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

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.01$ S/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

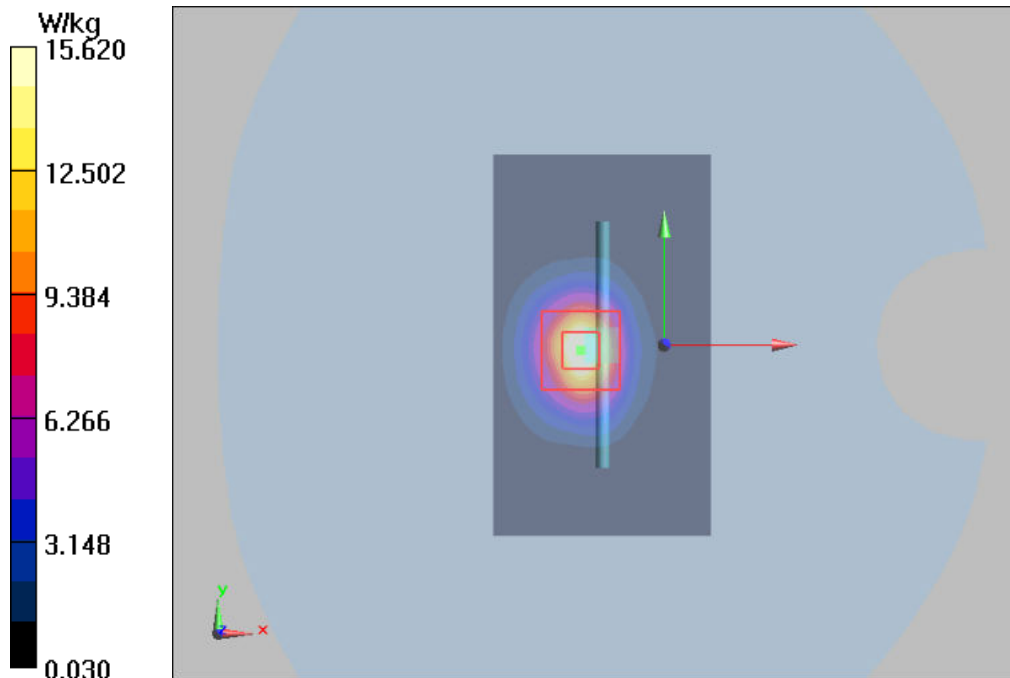
Peak SAR (extrapolated) = 31.85 W/kg

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



Plot 10 System Performance Check at 5250 MHz TSL**DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2**

Date: 4/1/2025

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.80$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.87, 6.17, 6.27); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 9.14 W/kg

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

Reference Value = 33.654 V/m; Power Drift = -0.095 dB

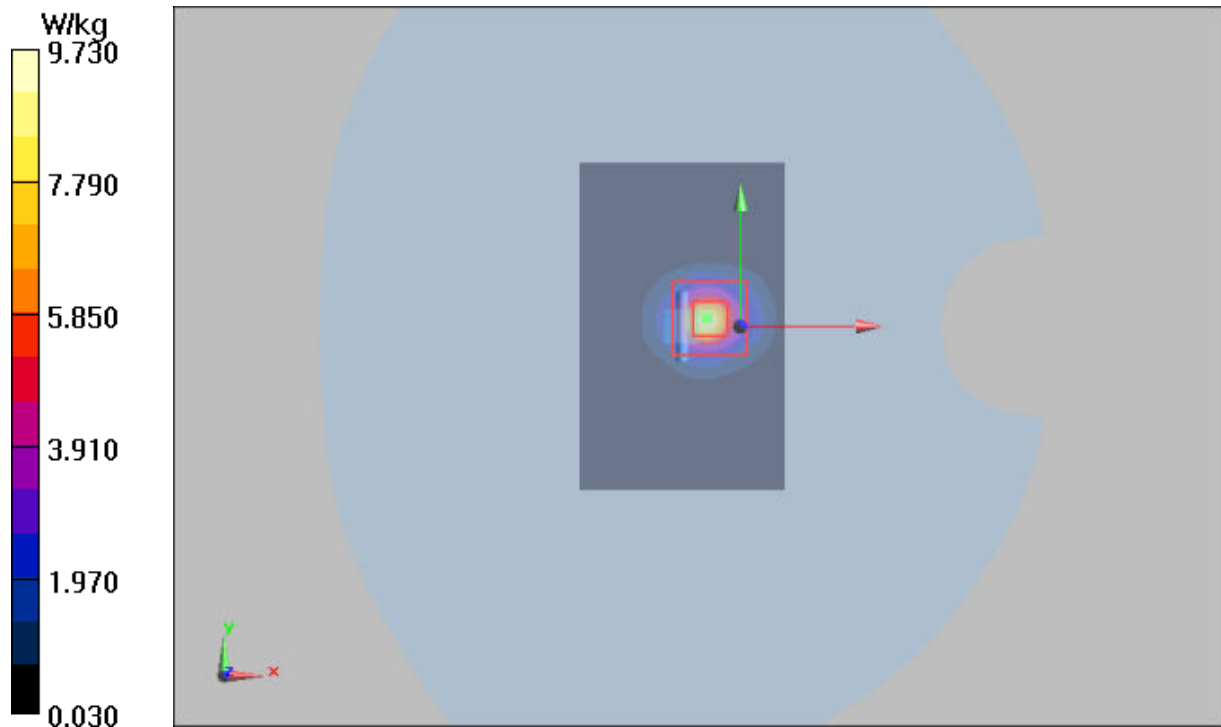
Peak SAR (extrapolated) = 52.20 W/kg

SAR(1 g) = 7.87 W/kg; SAR(10 g) = 2.25 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63%

Maximum value of SAR (measured) = 9.73 W/kg



Plot 11 System Performance Check at 5600 MHz TSL**DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2**

Date: 4/1/2025

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.33, 5.60, 5.70); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.25 W/kg

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

Reference Value = 23.142 V/m; Power Drift = -0.028 dB

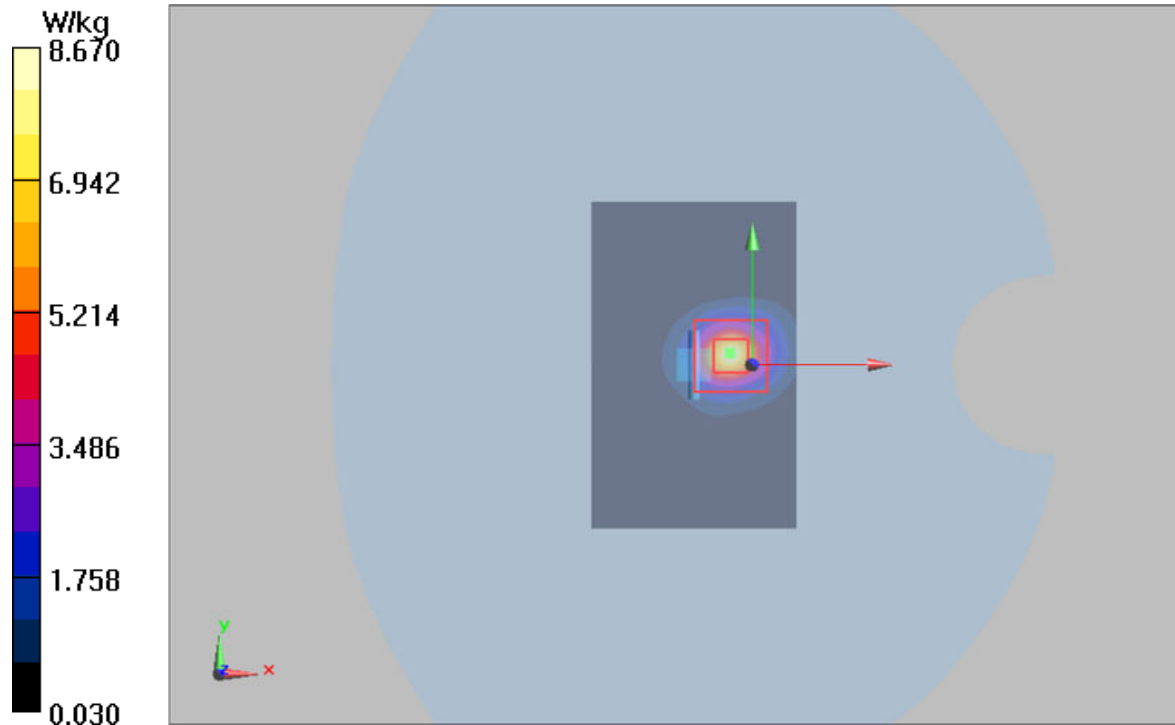
Peak SAR (extrapolated) = 22.9 W/kg

SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 61.9%

Maximum value of SAR (measured) = 8.67 W/kg



Plot 12 System Performance Check at 5750 MHz TSL**DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2**

Date: 4/1/2025

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 34.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.31, 5.59, 5.68); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2024/9/10

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.31 W/kg

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

Reference Value = 25.26 V/m; Power Drift = 0.044 dB

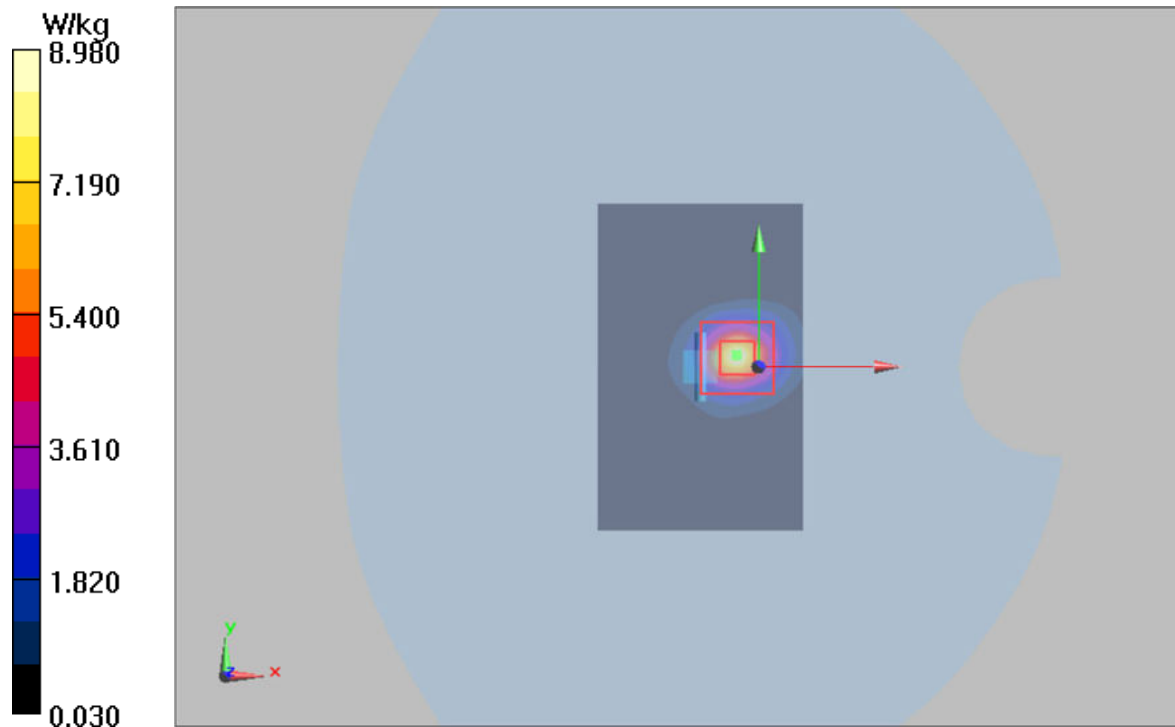
Peak SAR (extrapolated) = 23.4 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 59.4%

Maximum value of SAR (measured) = 8.98 W/kg



ANNEX C: Highest Graph Results

Plot 13 GSM 850 GPRS(4TX) Back Side Low

Date: 2025/3/28

Communication System: UID 0, GPRS 4TX (0); Frequency: 824.2 MHz; Duty Cycle: 1:2.07

Medium parameters used: $f = 825$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.365$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

GSM 850 GPRS(4TX) Back Side 10mm/Low/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.962 W/kg

GSM 850 GPRS(4TX) Back Side 10mm/Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.10 V/m; Power Drift = -0.030 dB

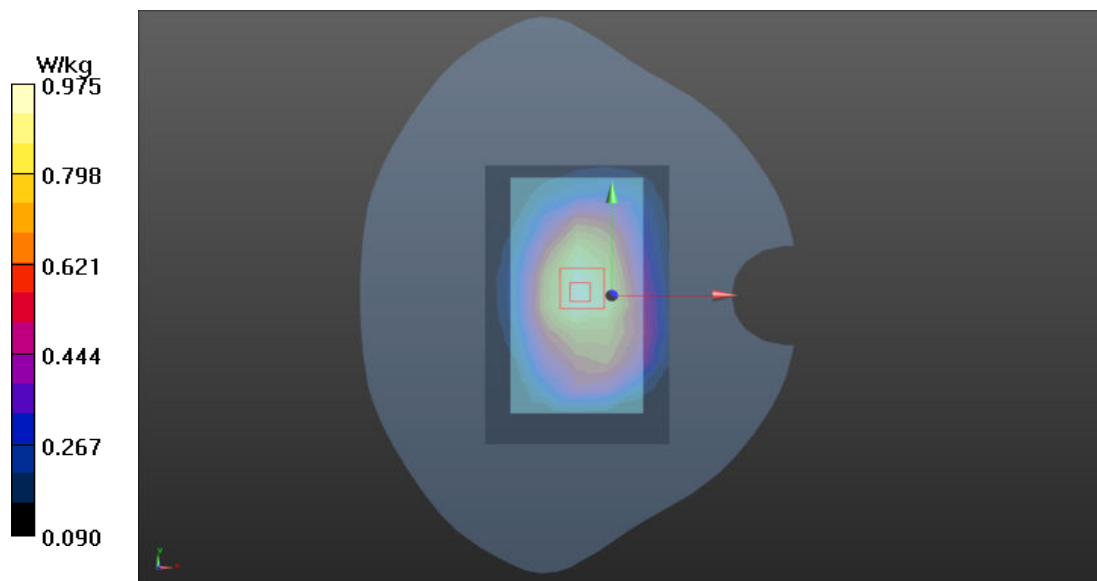
Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.920 W/kg; SAR(10 g) = 0.690 W/kg

Smallest distance from peaks to all points 3 dB below = 12.5 mm

Ratio of SAR at M2 to SAR at M1 = 78.2%

Maximum value of SAR (measured) = 0.975 W/kg



Plot 14 GSM 1900 GPRS(4TX) Back Side Mid

Date: 2025/4/3

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 38.43$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

GSM 1900 GPRS(4TX) Back Side 10mm/Mid/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.550 W/kg

GSM 1900 GPRS(4TX) Back Side 10mm/Mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.66 V/m; Power Drift = -0.04 dB

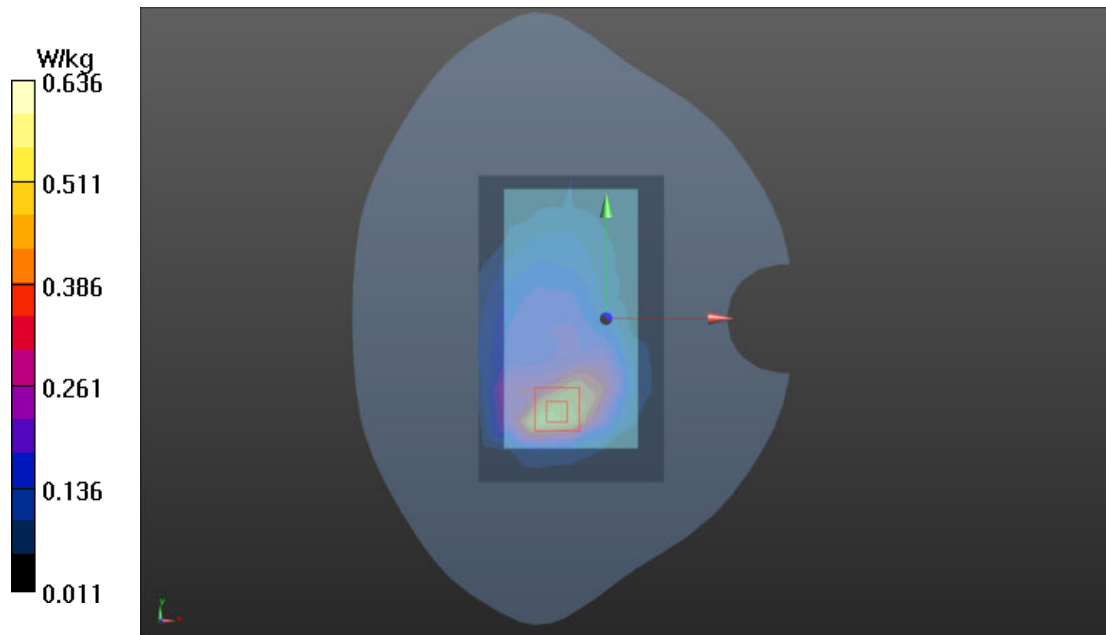
Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.578 W/kg; SAR(10 g) = 0.312 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 58.2%

Maximum value of SAR (measured) = 0.636 W/kg



Plot 48 WCDMA B2 Back Side Mid

Date: 2025/4/3

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 38.43$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

WCDMA B2 Back Side 10mm/Mid/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.630 W/kg

WCDMA B2 Back Side 10mm/Mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.60 V/m; Power Drift = -0.033 dB

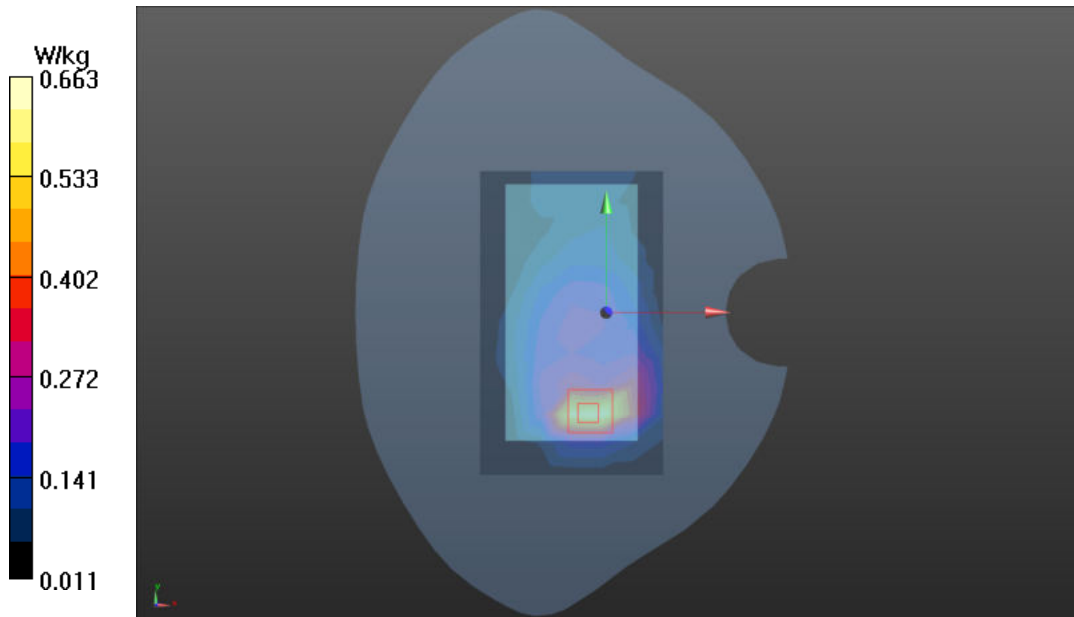
Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.592 W/kg; SAR(10 g) = 0.320 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 57.2%

Maximum value of SAR (measured) = 0.663 W/kg



Plot 48 WCDMA B4 Back Side High

Date: 2025/3/29

Communication System: UID 0, WCDMA (0); Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.283$ S/m; $\epsilon_r = 38.91$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

WCDMA B4 Back Side 10mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.820 W/kg

WCDMA B4 Back Side 10mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 19.33 V/m; Power Drift = -0.039 dB

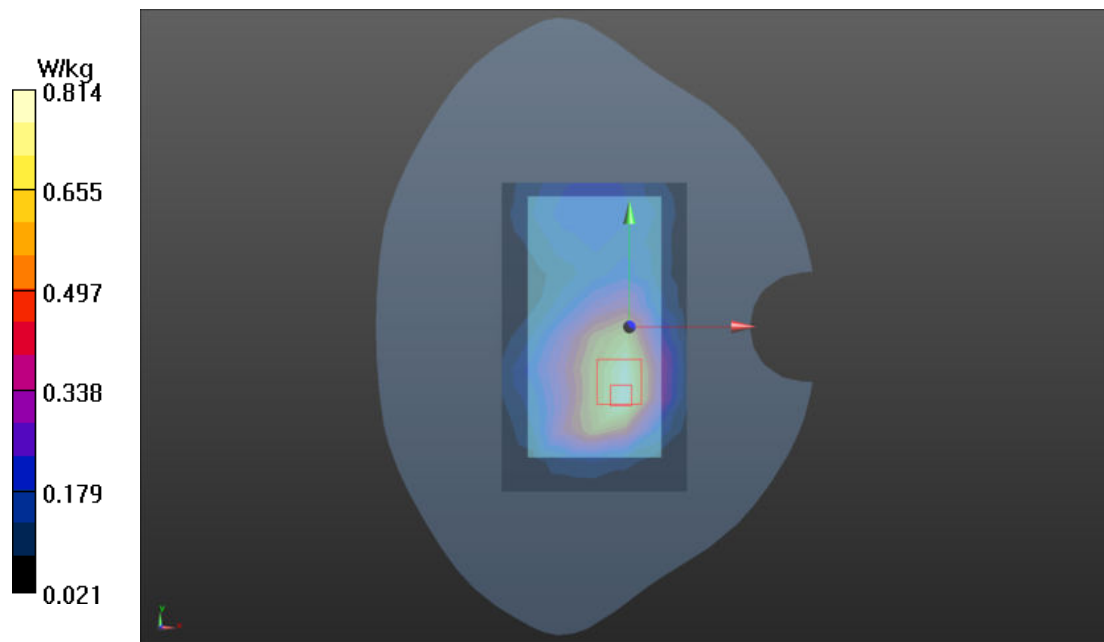
Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.755 W/kg; SAR(10 g) = 0.457 W/kg

Smallest distance from peaks to all points 3 dB below = 16.5 mm

Ratio of SAR at M2 to SAR at M1 = 60%

Maximum value of SAR (measured) = 0.814 W/kg



Plot 48 WCDMA B5 Back Side Mid

Date: 2025/3/28

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

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 42.274$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

WCDMA B5 Back Side 10mm/Mid/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.552 W/kg

WCDMA B5 Back Side 10mm/Mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.18 V/m; Power Drift = -0.06 dB

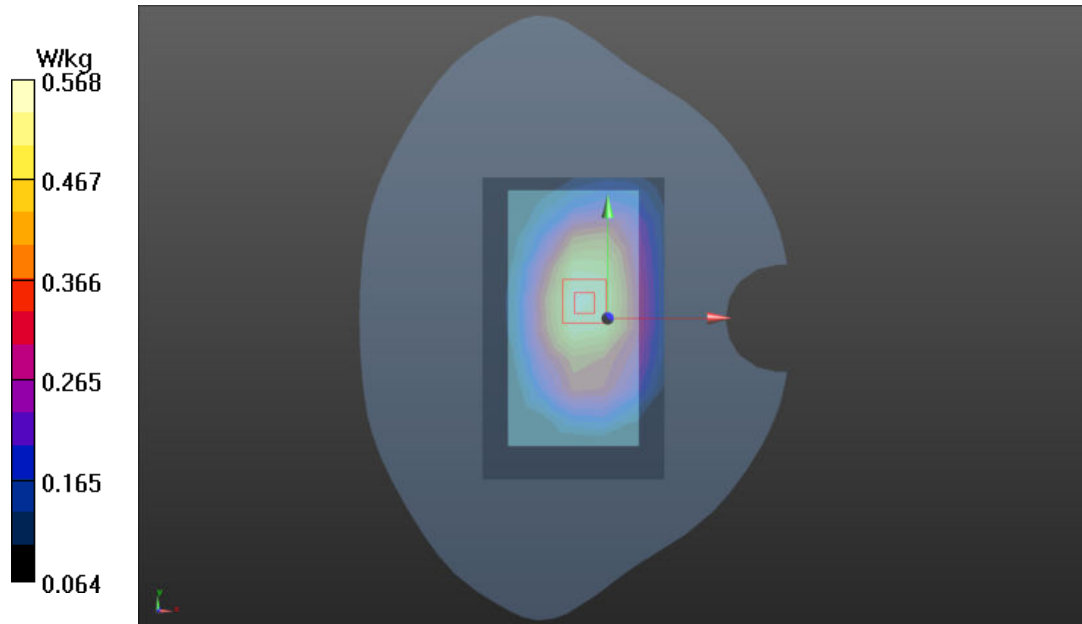
Peak SAR (extrapolated) = 0.669 W/kg

SAR(1 g) = 0.541 W/kg; SAR(10 g) = 0.405 W/kg

Smallest distance from peaks to all points 3 dB below = 11.6 mm

Ratio of SAR at M2 to SAR at M1 = 79.5%

Maximum value of SAR (measured) = 0.568 W/kg



Plot 48 LTE B4 1RB Back Side High

Date: 2025/3/29

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

Medium parameters used (interpolated): $f = 1745$ MHz; $\sigma = 1.277$ S/m; $\epsilon_r = 38.919$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B4 1RB Back Side 10mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.612 W/kg

LTE B4 1RB Back Side 10mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 18.60 V/m; Power Drift = -0.034 dB

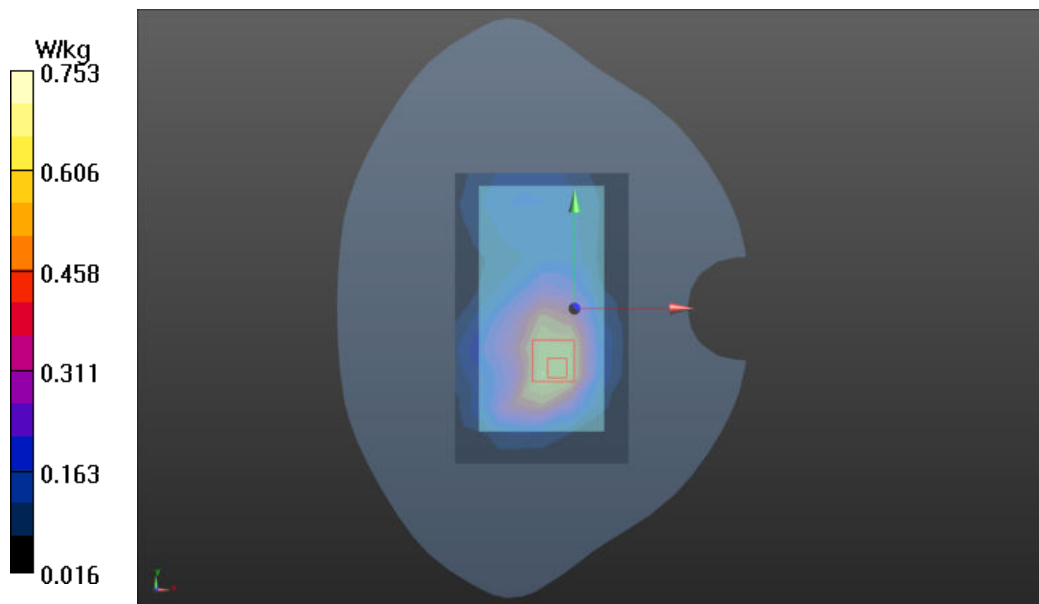
Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.714 W/kg; SAR(10 g) = 0.428 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 60.7%

Maximum value of SAR (measured) = 0.753 W/kg



Plot 48 LTE B7 1RB Back Side Low

Date: 2025/3/31

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

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.906$ S/m; $\epsilon_r = 38.249$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B7 1RB Back Side 10mm/Low/Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.696 W/kg

LTE B7 1RB Back Side 10mm/Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.899 V/m; Power Drift = -0.033 dB

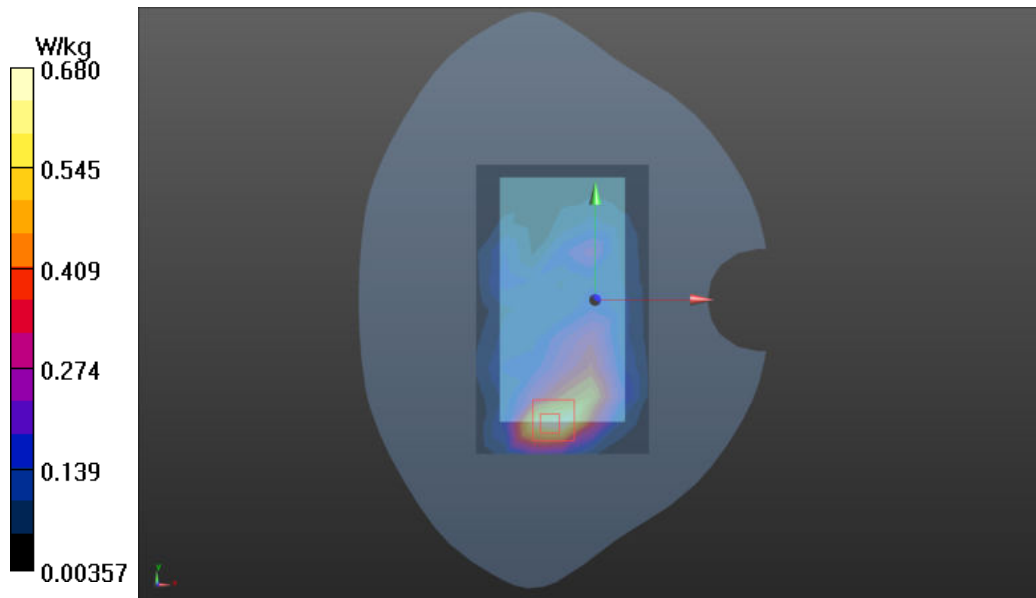
Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.295 W/kg

Smallest distance from peaks to all points 3 dB below = 12.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 0.680 W/kg



Plot 48 LTE B12 1RB Back Side High

Date: 2025/4/2

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 43.194$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.58, 10.07, 10.24); Calibrated: 2024/6/4

Electronics: DAE4 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B12 1RB Back Side 10mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.299 W/kg

LTE B12 1RB Back Side 10mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.78 V/m; Power Drift = -0.052 dB

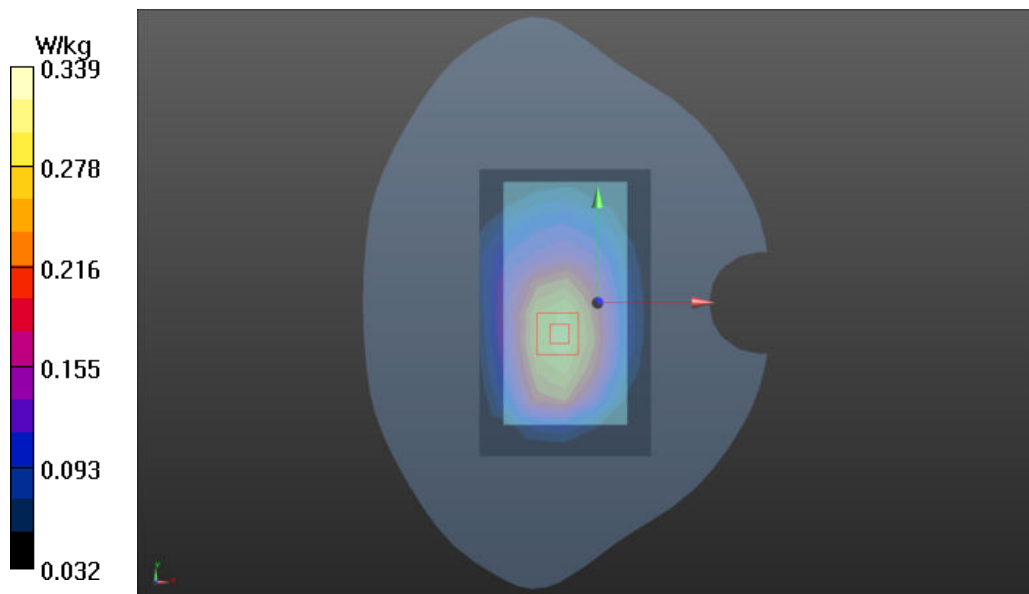
Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.210 W/kg

Smallest distance from peaks to all points 3 dB below = 15.5 mm

Ratio of SAR at M2 to SAR at M1 = 76.3%

Maximum value of SAR (measured) = 0.339 W/kg



Plot 48 LTE B25 1RB Back Side Low

Date: 2025/3/29

Communication System: UID 0, LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.363$ S/m; $\epsilon_r = 38.557$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B25 1RB Back Side 10mm/Low/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.480 W/kg

LTE B25 1RB Back Side 10mm/Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 11.88 V/m; Power Drift = -0.084 dB

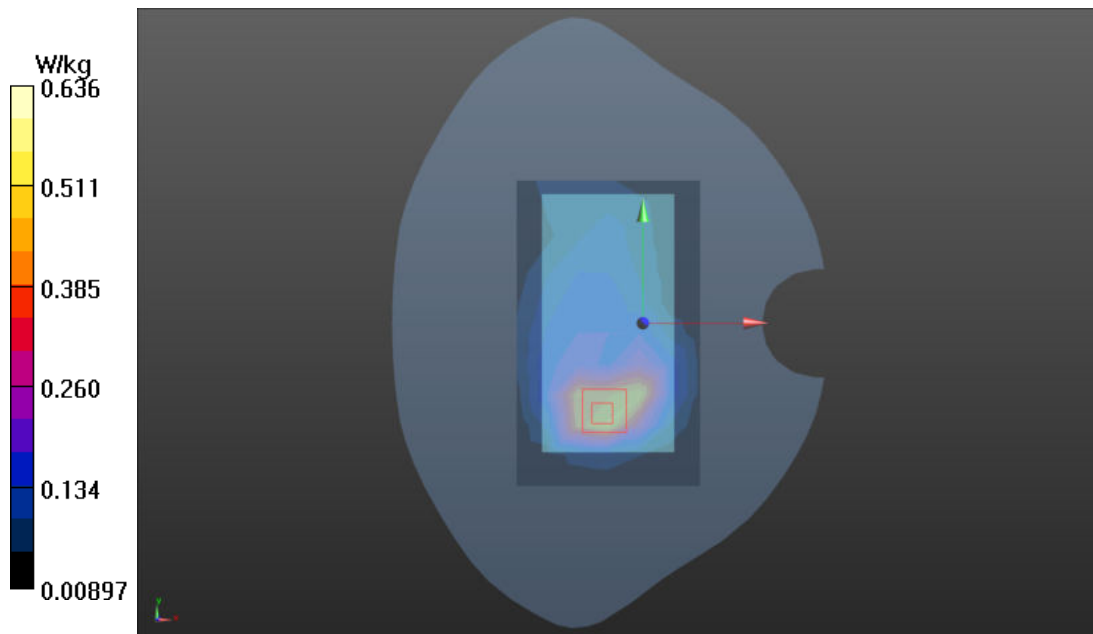
Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.574 W/kg; SAR(10 g) = 0.309 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 0.636 W/kg



Plot 48 LTE B26 1RB Back Side High

Date: 2025/4/2

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 42.275$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B26 1RB Back Side 10mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.494 W/kg

LTE B26 1RB Back Side 10mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.06 V/m; Power Drift = 0.04 dB

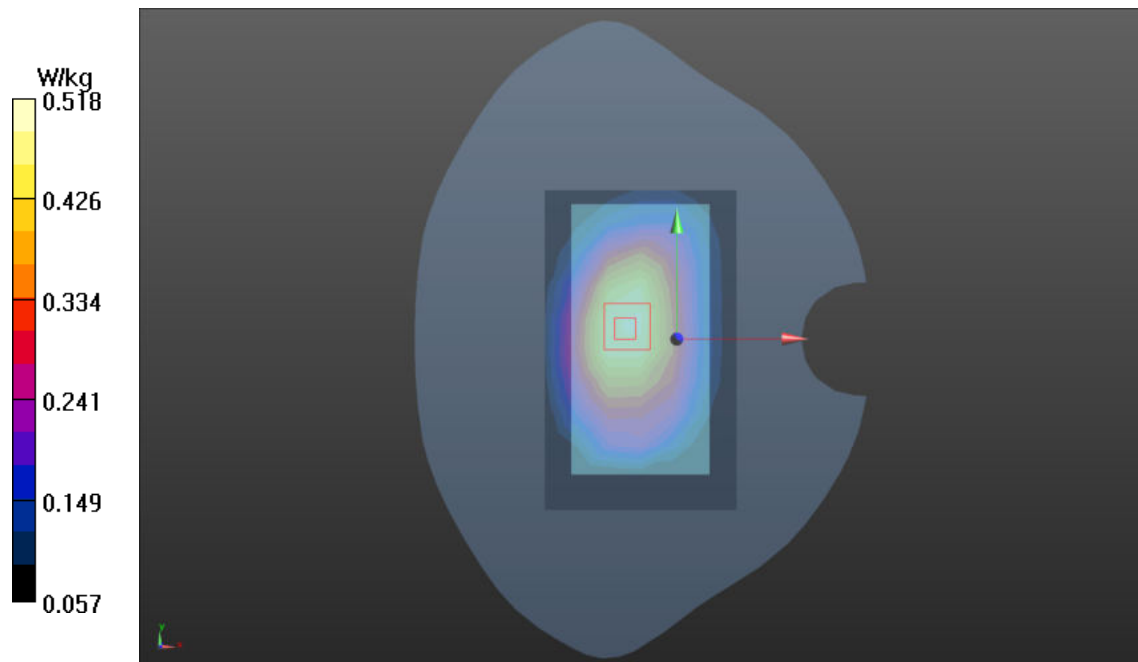
Peak SAR (extrapolated) = 0.616 W/kg

SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.371 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 78.8%

Maximum value of SAR (measured) = 0.518 W/kg



Plot 48 LTE B41 1RB Back Side High

Date: 2025/3/31

Communication System: UID 0, LTE (0); Frequency: 2645 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2645$ MHz; $\sigma = 2.065$ S/m; $\epsilon_r = 37.747$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B41 1RB Back Side 10mm/High/Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.213 W/kg

LTE B41 1RB Back Side 10mm/High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.312 V/m; Power Drift = 0.02 dB

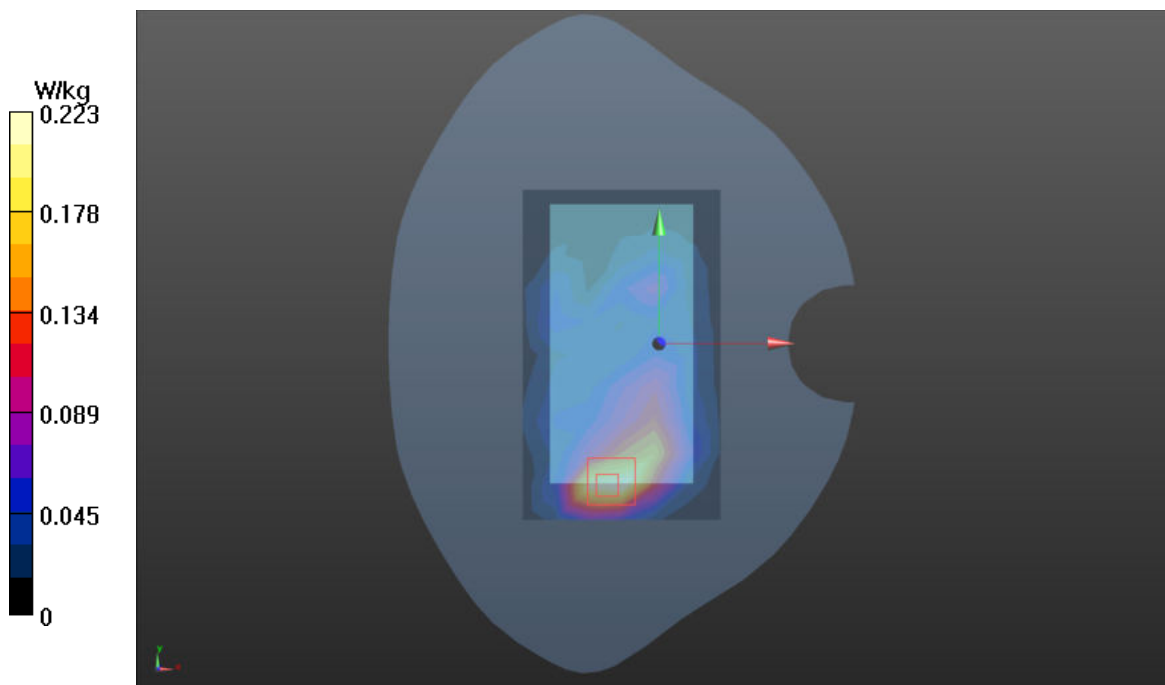
Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.097 W/kg

Smallest distance from peaks to all points 3 dB below = 9.7 mm

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

Maximum value of SAR (measured) = 0.223 W/kg



Plot 48 802.11b Right Edge Low

Date: 2025/3/30

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

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.796$ S/m; $\epsilon_r = 38.612$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

802.11b Right Edge 10mm/Low/Area Scan (7x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.320 W/kg

802.11b Right Edge 10mm/Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.30 V/m; Power Drift = -0.040 dB

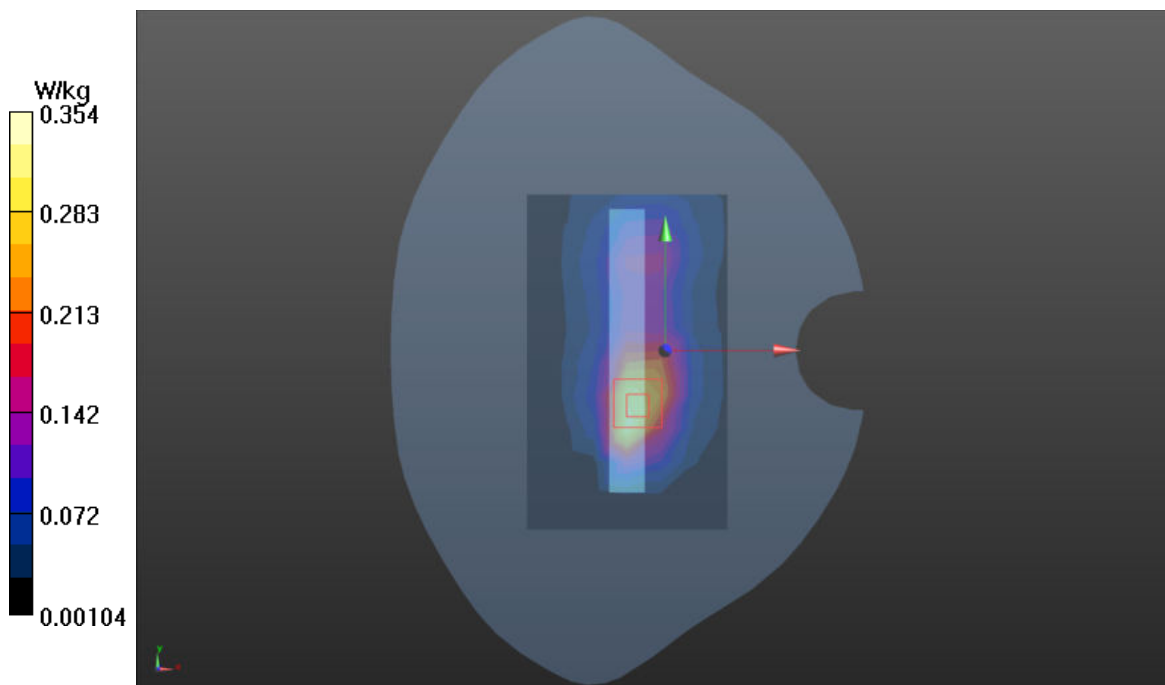
Peak SAR (extrapolated) = 0.612 W/kg

SAR(1 g) = 0.324 W/kg; SAR(10 g) = 0.172 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 53.3%

Maximum value of SAR (measured) = 0.354 W/kg



Plot 48 802.11a Back Side Mid

Date: 2025/4/1

Communication System: UID 0, 802.11a (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 5.382$ S/m; $\epsilon_r = 34.129$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.31, 5.59, 5.68); Calibrated: 2024/6/4

Electronics: DAE4 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

802.11a Back Side 10mm/Mid/Area Scan (11x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.330 W/kg

802.11a Back Side 10mm/Mid/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.4700 V/m; Power Drift = 0.1dB

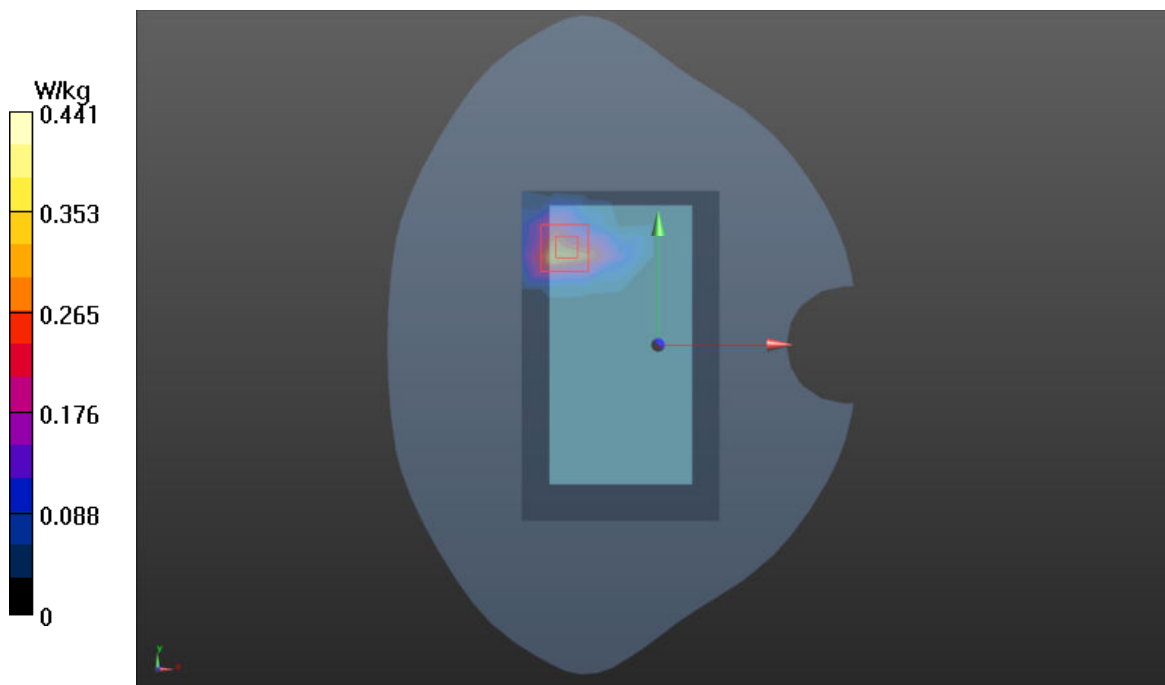
Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.380 W/kg; SAR(10 g) = 0.139 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 36.4%

Maximum value of SAR (measured) = 0.441 W/kg



Plot 48 BT DH5 Back Side High

Date: 2025/3/30

Communication System: UID 0, BT (0); Frequency: 2480 MHz; Duty Cycle: 1:1.30

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.872$ S/m; $\epsilon_r = 38.372$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

BT DH5 Back Side 10mm/High/Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0405 W/kg

BT DH5 Back Side 10mm/High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.507 V/m; Power Drift = 0.56 dB

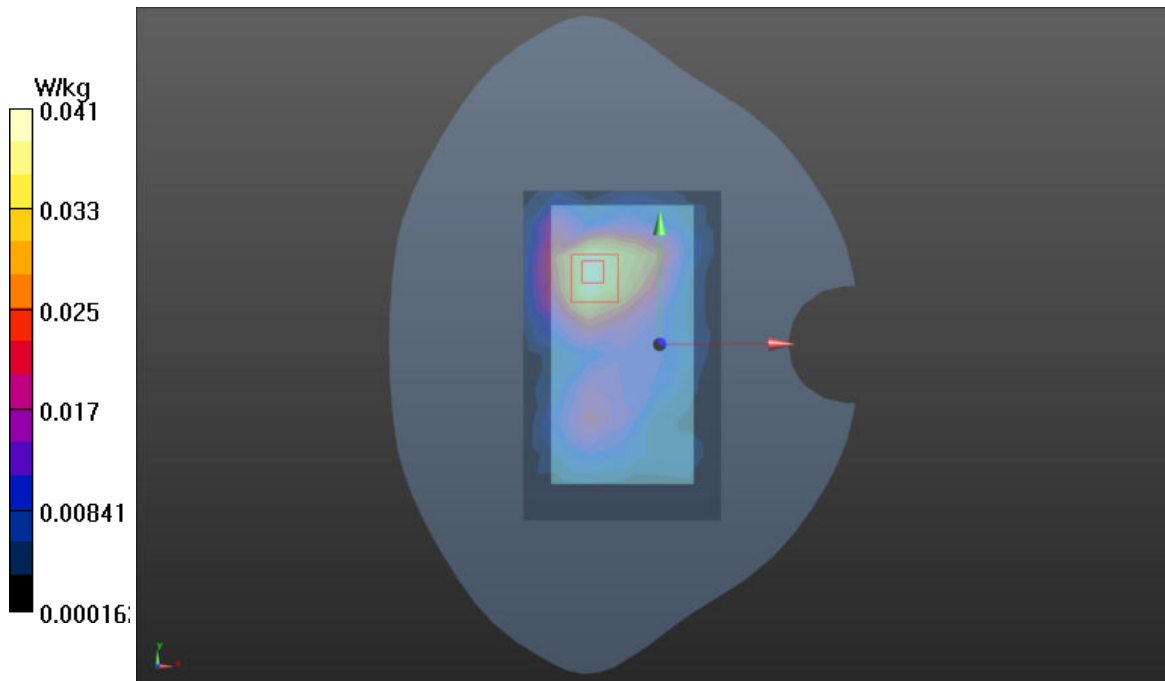
Peak SAR (extrapolated) = 0.0790 W/kg

SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.022 W/kg

Smallest distance from peaks to all points 3 dB below = 12.5 mm

Ratio of SAR at M2 to SAR at M1 = 48.9%

Maximum value of SAR (measured) = 0.041 W/kg



Plot 48 GSM 850 GPRS(4TX) Back Side Mid

Date: 2025/3/28

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

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 42.274$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

GSM 850 GPRS(4TX) Back Side 0mm/Mid/Area Scan (7x11x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (measured) = 3.19 W/kg

GSM 850 GPRS(4TX) Back Side 0mm/Mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 29.26 V/m; Power Drift = -0.00 dB

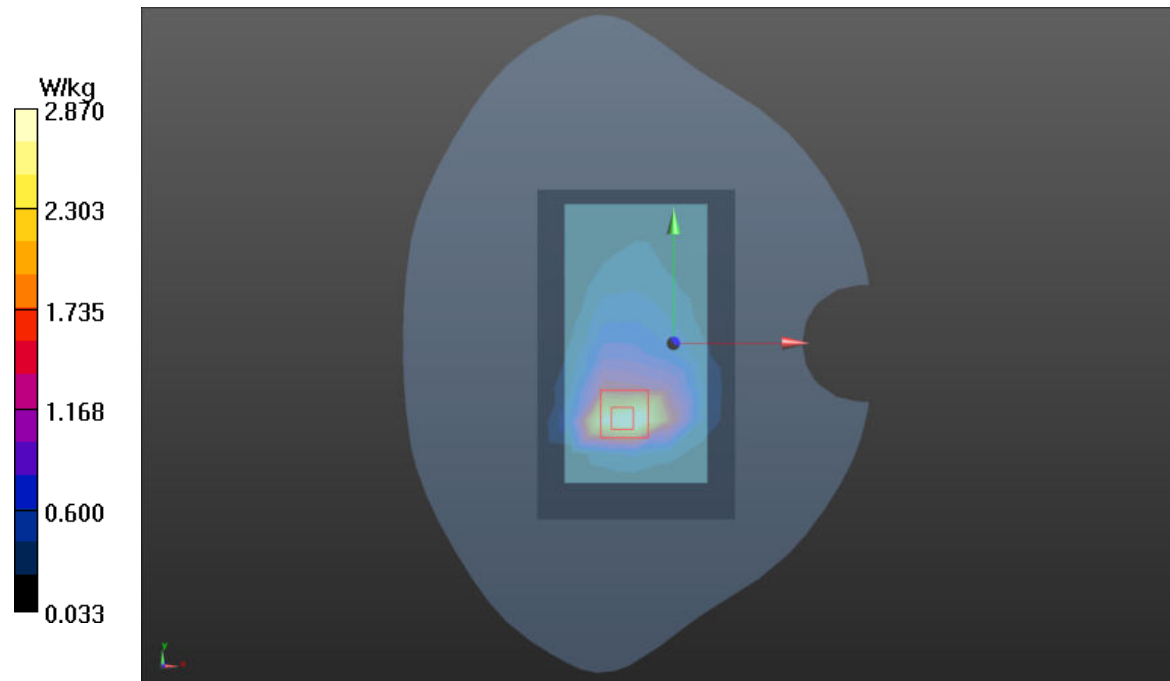
Peak SAR (extrapolated) = 6.91 W/kg

SAR(1 g) = 2.74 W/kg; SAR(10 g) = 1.31 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 46.1%

Maximum value of SAR (measured) = 2.87 W/kg



Plot 48 GSM 1900 GPRS(4TX) Back Side High

Date: 2025/4/3

Communication System: UID 0, GPRS 4TX (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2.07

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.397$ S/m; $\epsilon_r = 38.328$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

GSM 1900 GPRS(4TX) Back Side 0mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.62 W/kg

GSM 1900 GPRS(4TX) Back Side 0mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.14 V/m; Power Drift = -0.036 dB

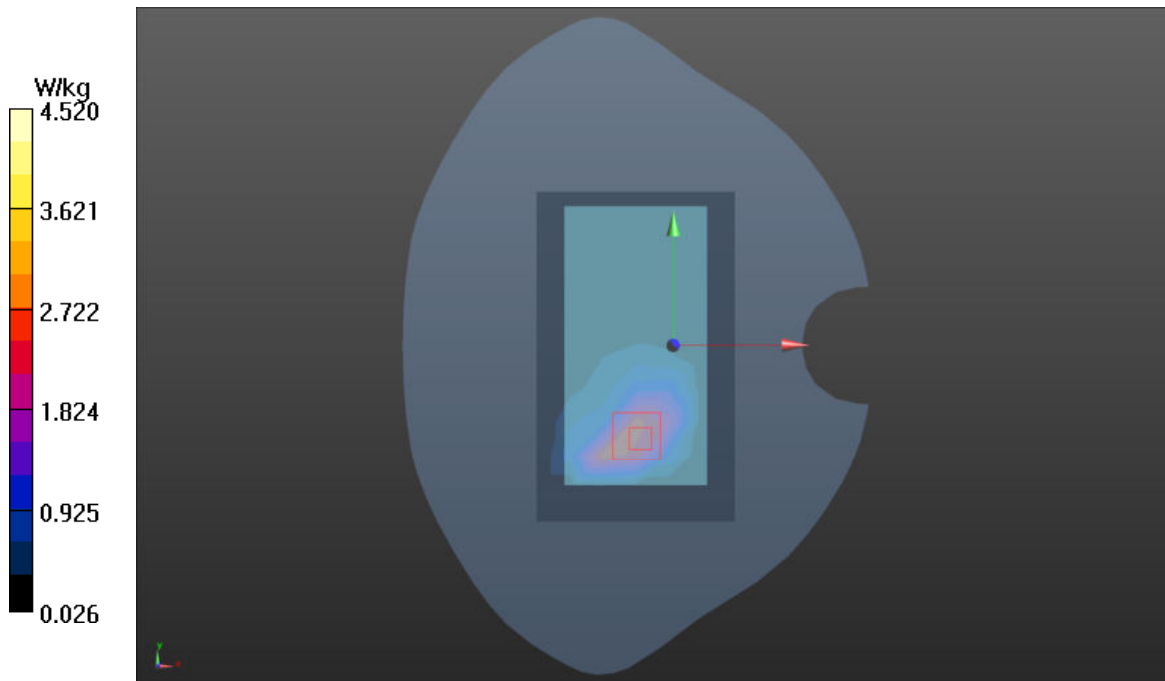
Peak SAR (extrapolated) = 8.28 W/kg

SAR(1 g) = 3.88 W/kg; SAR(10 g) = 1.73 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 50.1%

Maximum value of SAR (measured) = 4.52 W/kg



Plot 48 WCDMA B2 Back Side High

Date: 2025/4/3

Communication System: UID 0, WCDMA (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.395$ S/m; $\epsilon_r = 38.334$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

WCDMA B2 Back Side 0mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.29 W/kg

WCDMA B2 Back Side 0mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.24 V/m; Power Drift = -0.029 dB

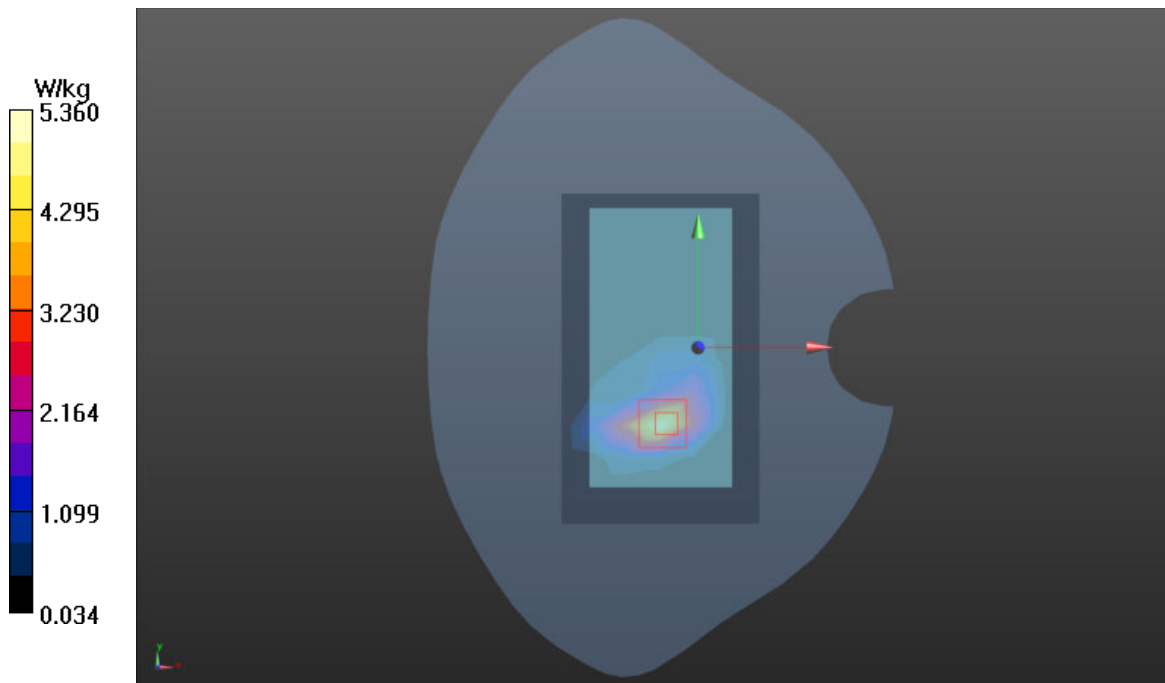
Peak SAR (extrapolated) = 9.96 W/kg

SAR(1 g) = 4.41 W/kg; SAR(10 g) = 1.91 W/kg

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

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

Maximum value of SAR (measured) = 5.36 W/kg



Plot 48 WCDMA B4 Back Side Low

Date: 2025/3/29

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

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.263$ S/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

WCDMA B4 Back Side 0mm/Low/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

WCDMA B4 Back Side 0mm/Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.55 V/m; Power Drift = -0.16 dB

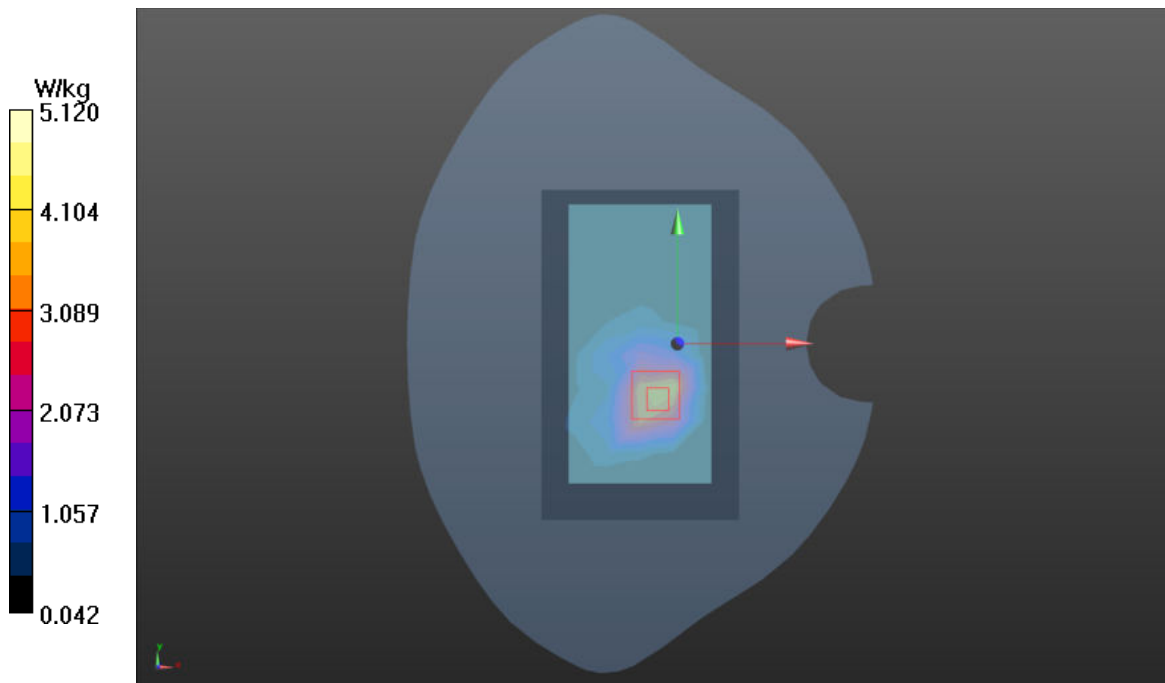
Peak SAR (extrapolated) = 9.72 W/kg

SAR(1 g) = 4.68 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 11.6 mm

Ratio of SAR at M2 to SAR at M1 = 51.5%

Maximum value of SAR (measured) = 5.12 W/kg



Plot 48 WCDMA B5 Back Side Mid

Date: 2025/3/28

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

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 42.274$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

WCDMA B5 Back Side 0mm/Mid/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.27 W/kg

WCDMA B5 Back Side 0mm/Mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.93 V/m; Power Drift = -0.03 dB

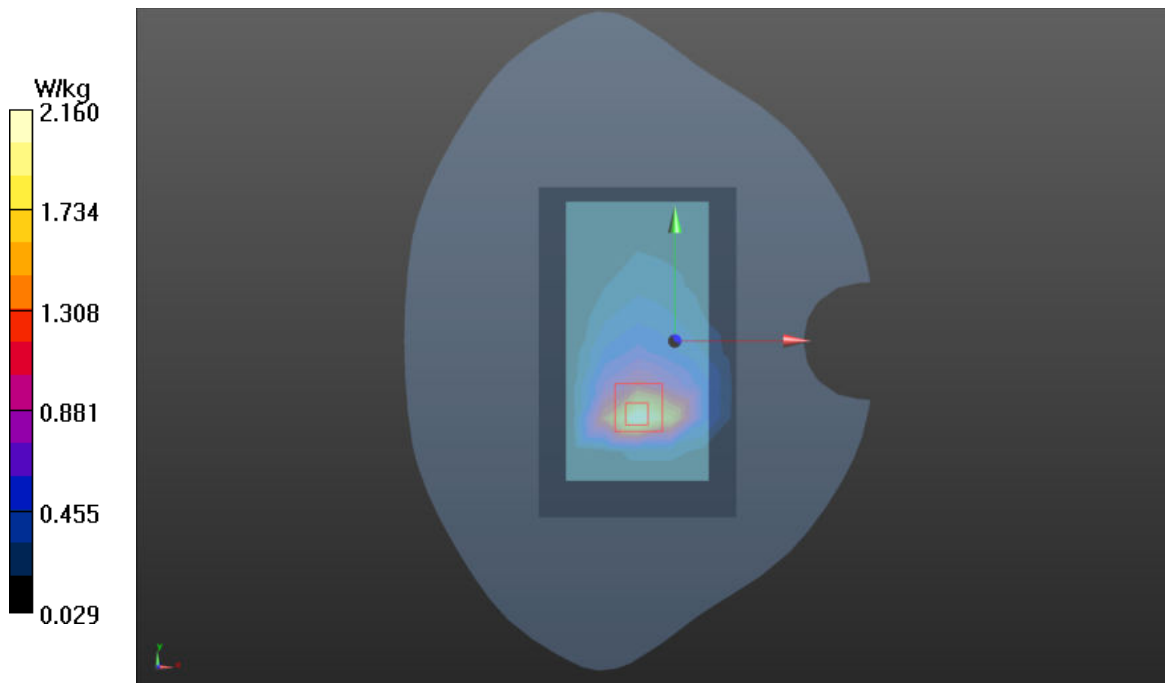
Peak SAR (extrapolated) = 5.06 W/kg

SAR(1 g) = 1.95 W/kg; SAR(10 g) = 0.912 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 44.9%

Maximum value of SAR (measured) = 2.16 W/kg



Plot 48 LTE B4 1RB Back Side Mid

Date: 2025/3/29

Communication System: UID 0, LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.27$ S/m; $\epsilon_r = 38.943$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B4 1RB Back Side 0mm/Mid/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 4.06 W/kg

LTE B4 1RB Back Side 0mm/Mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 36.51 V/m; Power Drift = 0.09 dB

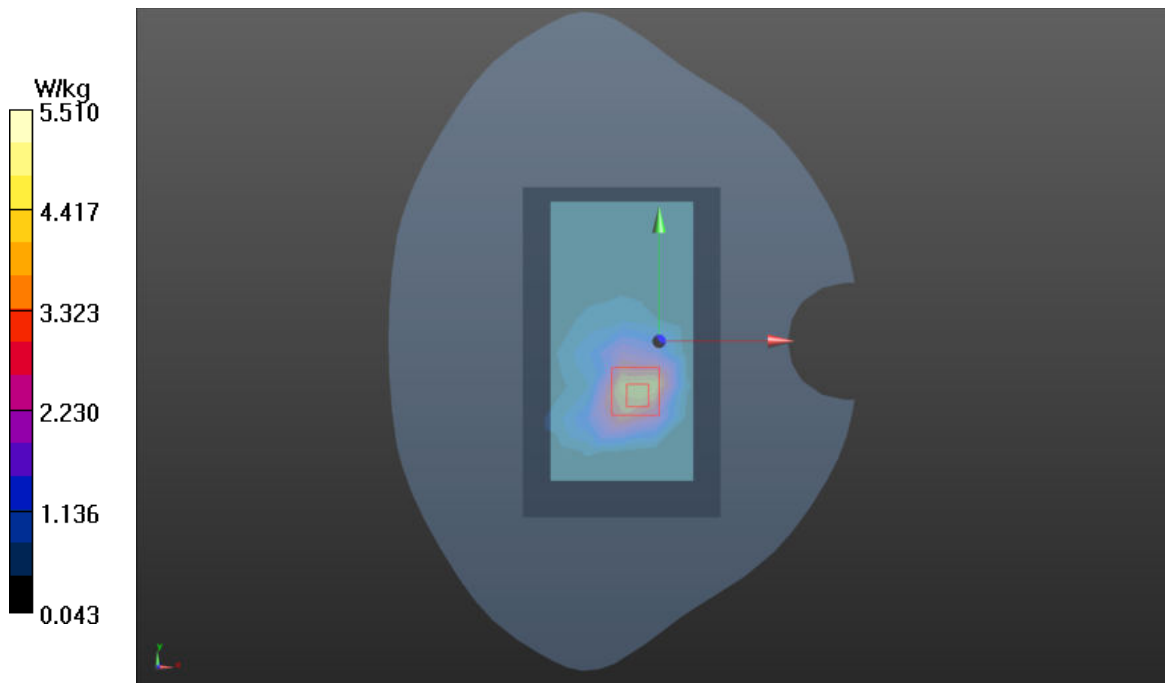
Peak SAR (extrapolated) = 10.4 W/kg

SAR(1 g) = 5.06 W/kg; SAR(10 g) = 2.49 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.1%

Maximum value of SAR (measured) = 5.51 W/kg



Plot 48 LTE B7 1RB Back Side High

Date: 2025/3/31

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 38.067$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B7 1RB Back Side 0mm/High/Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 4.95 W/kg

LTE B7 1RB Back Side 0mm/High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.144 V/m; Power Drift = 0.038 dB

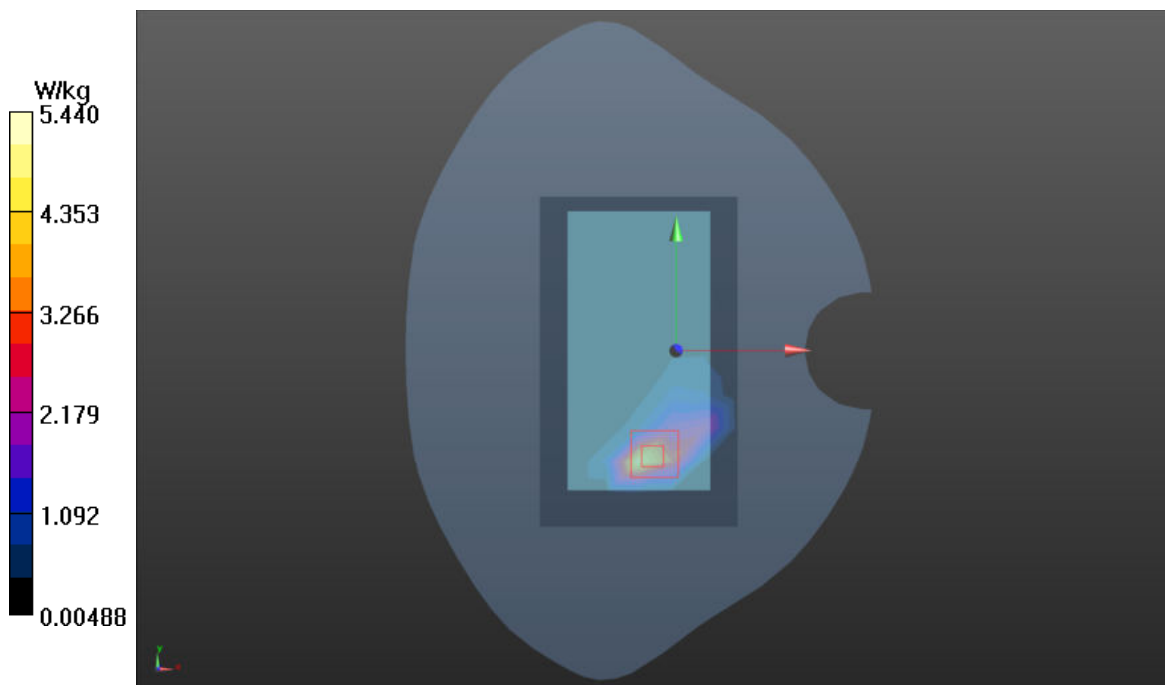
Peak SAR (extrapolated) = 11.6 W/kg

SAR(1 g) = 5.17 W/kg; SAR(10 g) = 1.95 W/kg

Smallest distance from peaks to all points 3 dB below = 15.1 mm

Ratio of SAR at M2 to SAR at M1 = 39.7%

Maximum value of SAR (measured) = 5.44 W/kg



Plot 48 LTE B12 1RB Back Side High

Date: 2025/4/2

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 43.194$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(9.58, 10.07, 10.24); Calibrated: 2024/6/4

Electronics: DAE4 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B12 1RB Back Side 0mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.807 W/kg

LTE B12 1RB Back Side 0mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 21.44 V/m; Power Drift = -0.13 dB

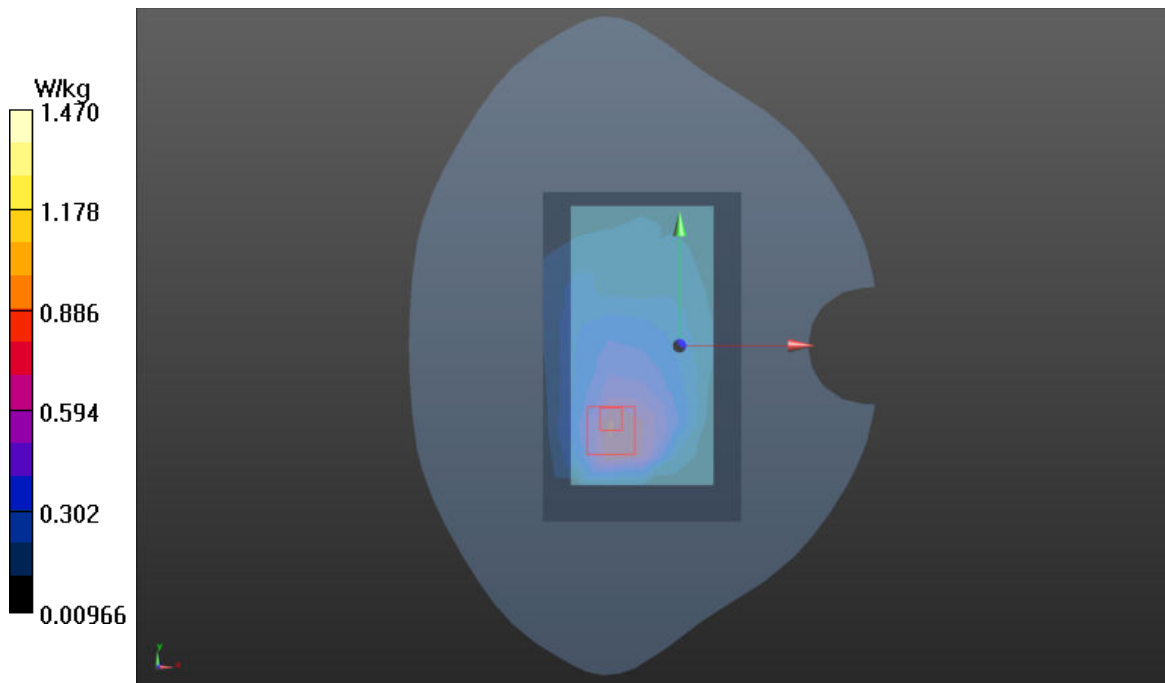
Peak SAR (extrapolated) = 4.04 W/kg

SAR(1 g) = 1.41 W/kg; SAR(10 g) = 0.522 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 39.3%

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



Plot 48 LTE B25 1RB Back Side High

Date: 2025/3/29

Communication System: UID 0, LTE (0); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1905$ MHz; $\sigma = 1.393$ S/m; $\epsilon_r = 38.342$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B25 1RB Back Side 0mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.11 W/kg

LTE B25 1RB Back Side 0mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 14.23 V/m; Power Drift = -0.18 dB

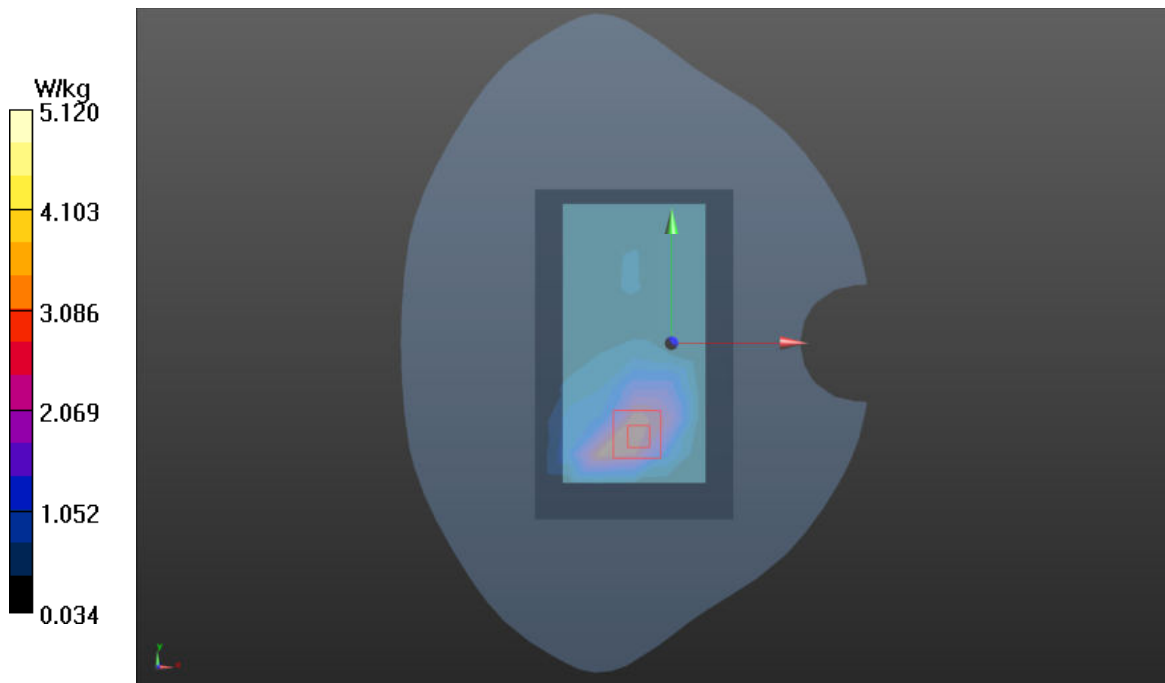
Peak SAR (extrapolated) = 9.54 W/kg

SAR(1 g) = 4.38 W/kg; SAR(10 g) = 1.99 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48%

Maximum value of SAR (measured) = 5.12 W/kg



Plot 48 LTE B26 1RB Back Side High

Date: 2025/4/2

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 42.275$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B26 1RB Back Side 0mm/High/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.10 W/kg

LTE B26 1RB Back Side 0mm/High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 21.93 V/m; Power Drift = 0.030 dB

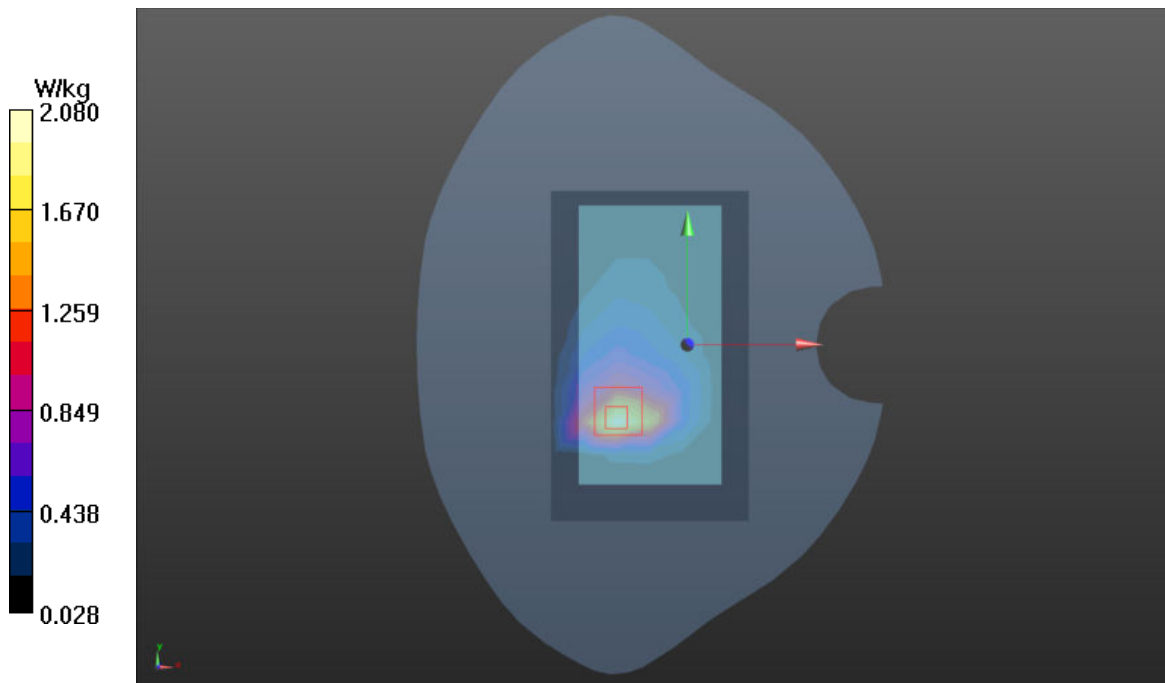
Peak SAR (extrapolated) = 4.65 W/kg

SAR(1 g) = 1.84 W/kg; SAR(10 g) = 0.864 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 44.8%

Maximum value of SAR (measured) = 2.08 W/kg



Plot 48 LTE B41 1RB Back Side High

Date: 2025/3/31

Communication System: UID 0, LTE (0); Frequency: 2645 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2645$ MHz; $\sigma = 2.065$ S/m; $\epsilon_r = 37.747$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

LTE B41 1RB Back Side 0mm/High/Area Scan (7x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 2.52 W/kg

LTE B41 1RB Back Side 0mm/High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.054 V/m; Power Drift = 0.07 dB

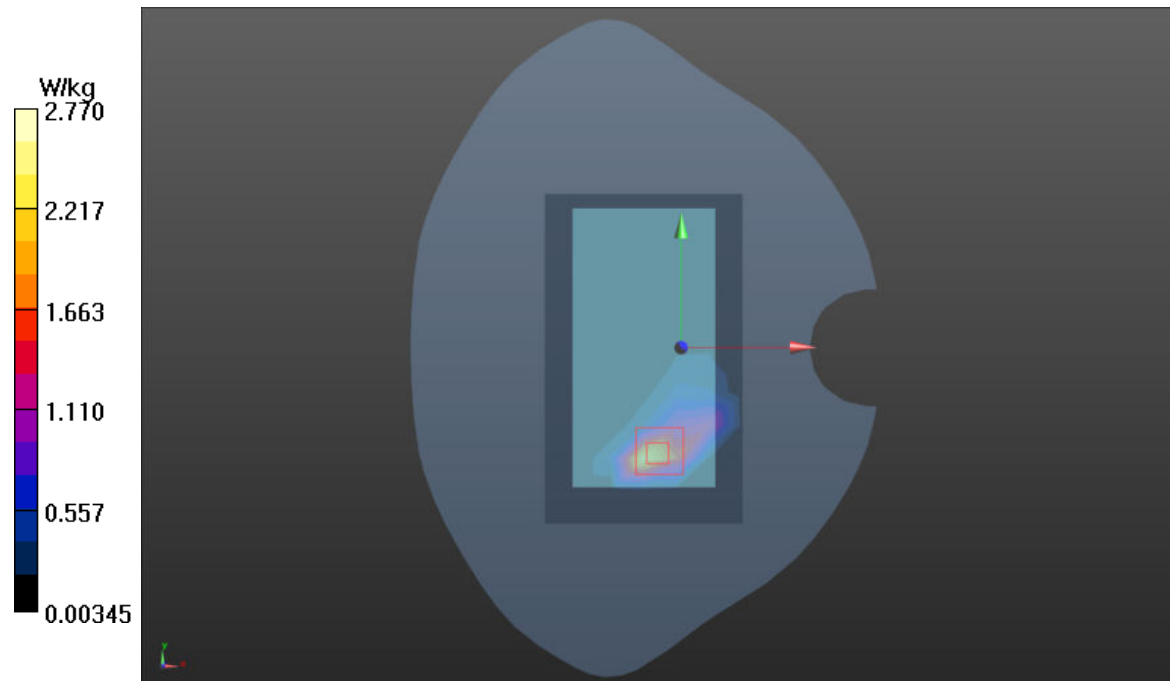
Peak SAR (extrapolated) = 5.49 W/kg

SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.02 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 40.1%

Maximum value of SAR (measured) = 2.77 W/kg



Plot 48 802.11b Back Side Low

Date: 2025/3/30

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

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.796$ S/m; $\epsilon_r = 38.612$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

802.11b Back Side 0mm/Low/Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 2.46 W/kg

802.11b Back Side 0mm/Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.02 V/m; Power Drift = 0.025 dB

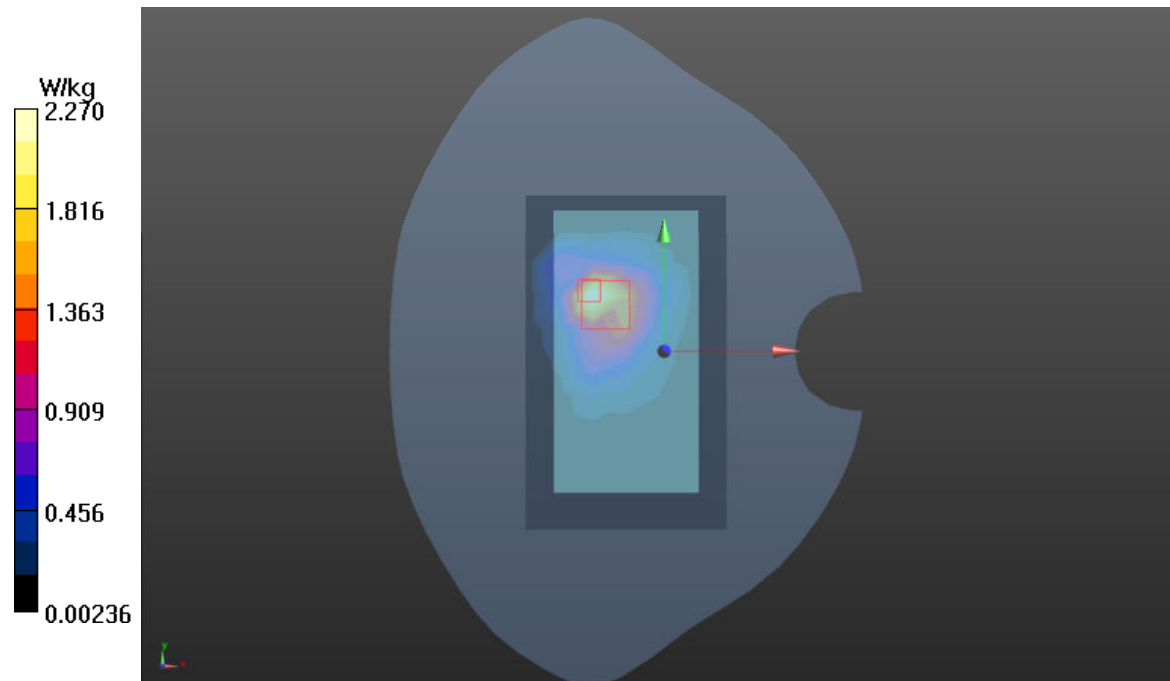
Peak SAR (extrapolated) = 5.69 W/kg

SAR(1 g) = 2.09 W/kg; SAR(10 g) = 0.963 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 37.1%

Maximum value of SAR (measured) = 2.27 W/kg



Plot 48 802.11a Back Side Mid

Date: 2025/4/1

Communication System: UID 0, 802.11a (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 5.382$ S/m; $\epsilon_r = 34.129$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.31, 5.59, 5.68); Calibrated: 2024/6/4

Electronics: DAE4 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

802.11a Back Side 0mm/Mid/Area Scan (11x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.23 W/kg

802.11a Back Side 0mm/Mid/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.798 V/m; Power Drift = -0.08 dB

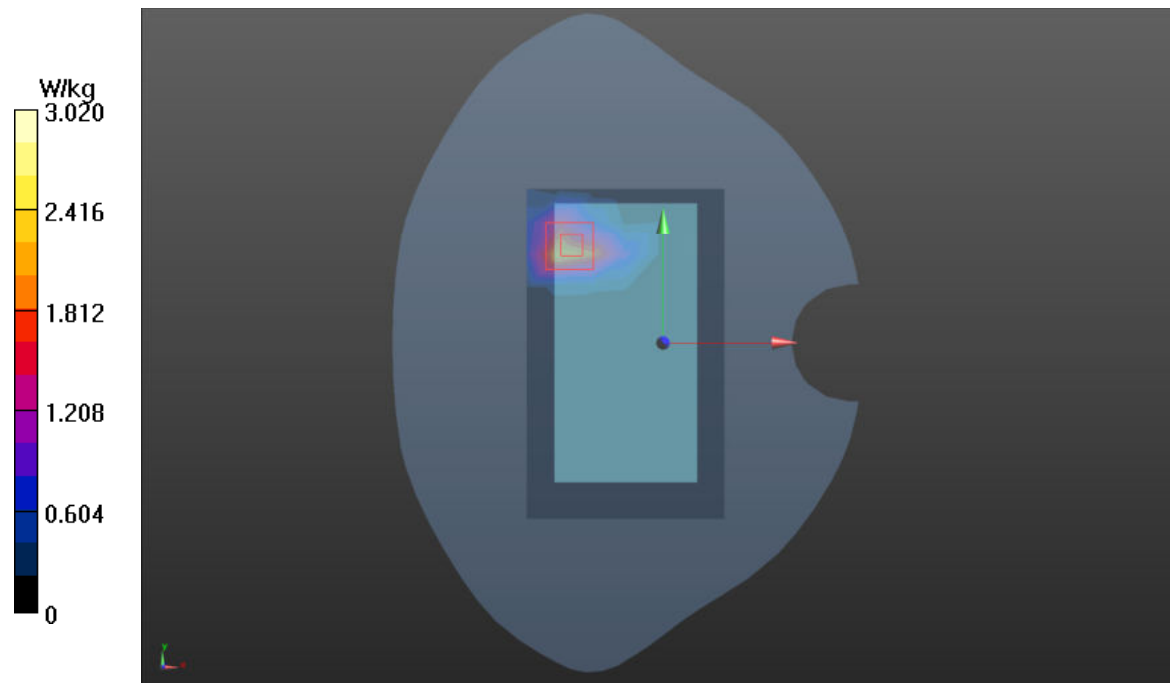
Peak SAR (extrapolated) = 6.57 W/kg

SAR(1 g) = 2.15 W/kg; SAR(10 g) = 0.607 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 38.3%

Maximum value of SAR (measured) = 3.02 W/kg



Plot 48 BT DH5 Back Side High

Date: 2025/3/30

Communication System: UID 0, BT (0); Frequency: 2480 MHz; Duty Cycle: 1:1.30

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.872$ S/m; $\epsilon_r = 38.372$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 Sn1317; Calibrated: 2024/9/10

Phantom: SAM 1; Type: SAM Serial: TP-1534

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

BT DH5 Back Side 0mm/High/Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.177 W/kg

BT DH5 Back Side 0mm/High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.352 V/m; Power Drift = 0.039 dB

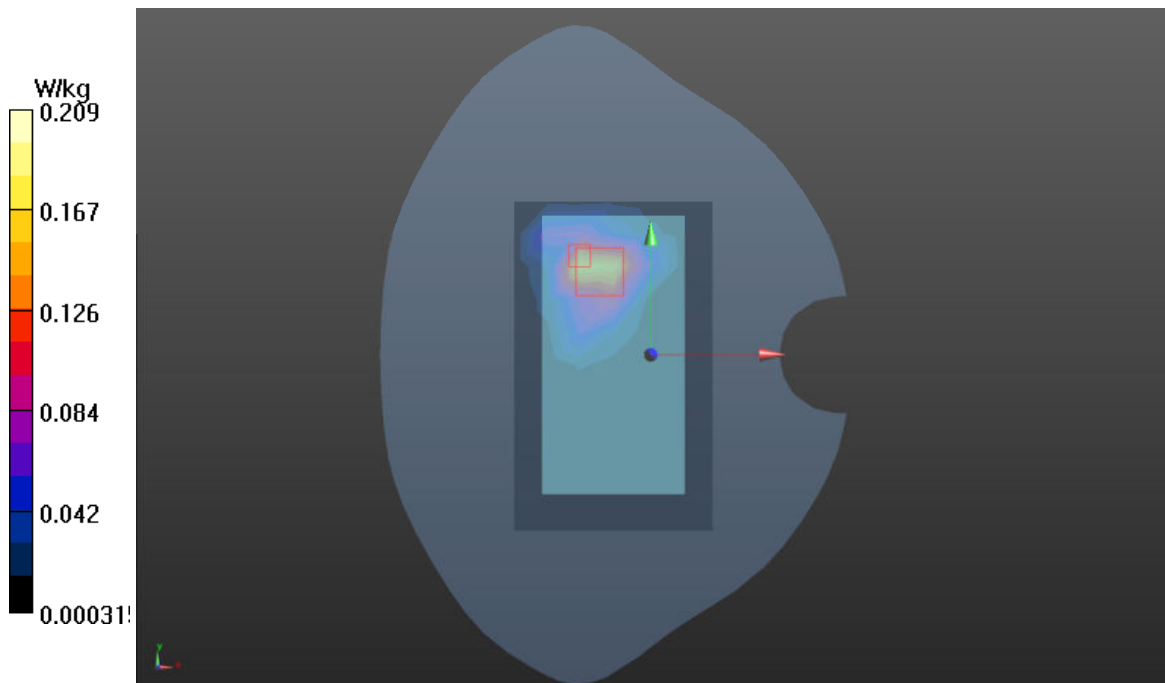
Peak SAR (extrapolated) = 0.484 W/kg

SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.084 W/kg

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 36%

Maximum value of SAR (measured) = 0.209 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 $(22 \pm 3)^\circ\text{C}$ 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.

**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
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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., $\theta = 0$ 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:

- 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.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\theta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z} = NORM_{x,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.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (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 ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.56	0.61	0.60	$\pm 10.1\%$
DCP (mV) ^B	102.7	103.5	104.8	$\pm 4.7\%$

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	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	$\pm 1.1\%$	$\pm 4.7\%$
		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	$\pm 2.5\%$	$\pm 9.6\%$
		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	$\pm 2.2\%$	$\pm 9.6\%$
		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	$\pm 2.8\%$	$\pm 9.6\%$
		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	$\pm 1.7\%$	$\pm 9.6\%$
		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	$\pm 3.8\%$	$\pm 9.6\%$
		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	$\pm 1.3\%$	$\pm 9.6\%$
		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	$\pm 0.9\%$	$\pm 9.6\%$
		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	$\pm 1.6\%$	$\pm 9.6\%$
		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	$\pm 3.0\%$	$\pm 9.6\%$
		Y	3.88	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 E²-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.

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Parameters of Probe: EX3DV4 - SN:7689

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 msV^{-2}	T2 msV^{-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.

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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.

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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.

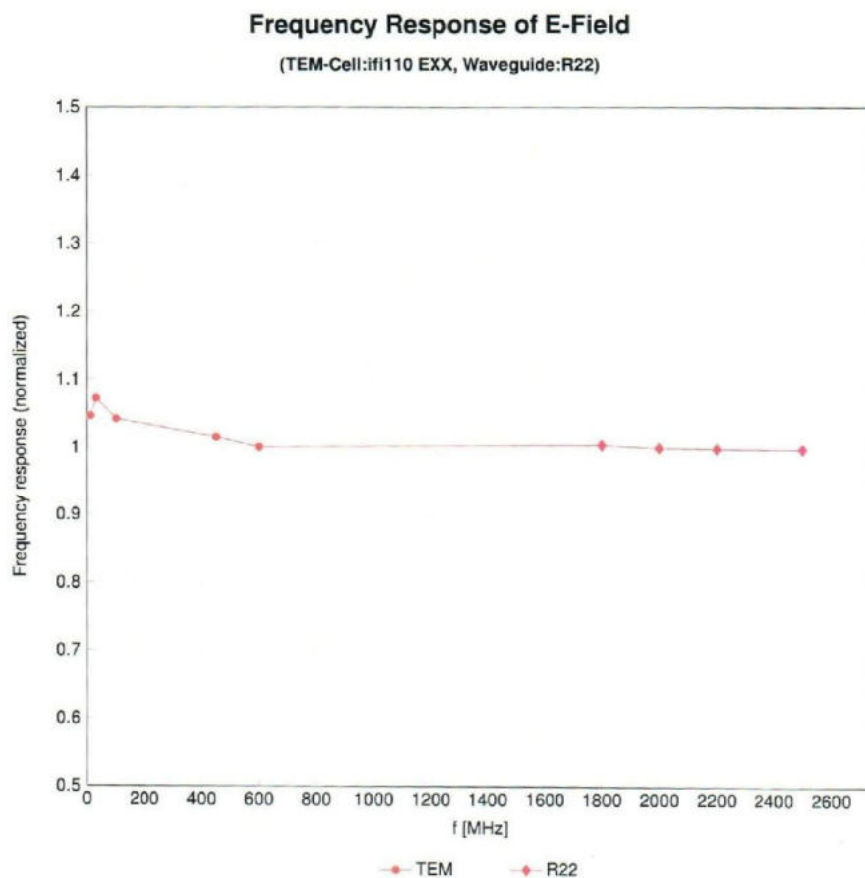
^F The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ and σ by less than ±10% from the target values (typically better than ±6%) and are valid for TSL with deviations of up to ±10%.

^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.

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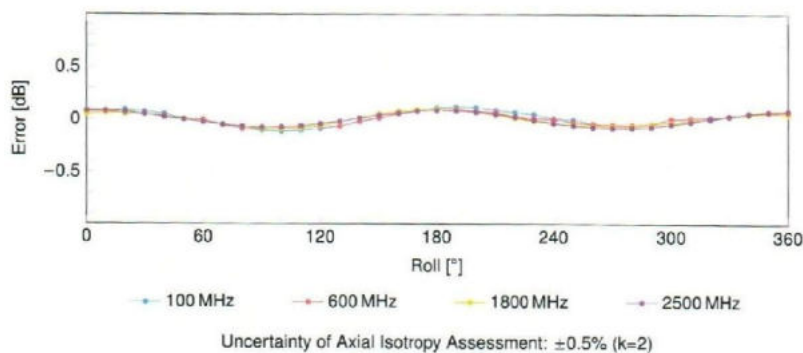
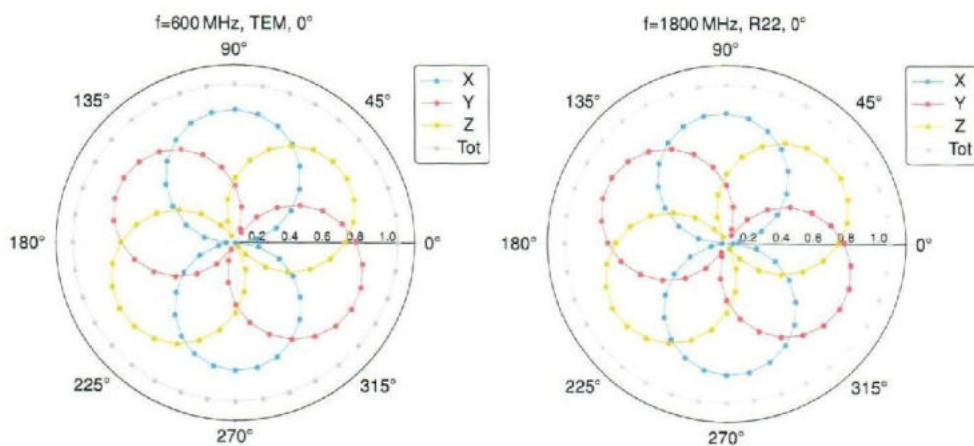


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

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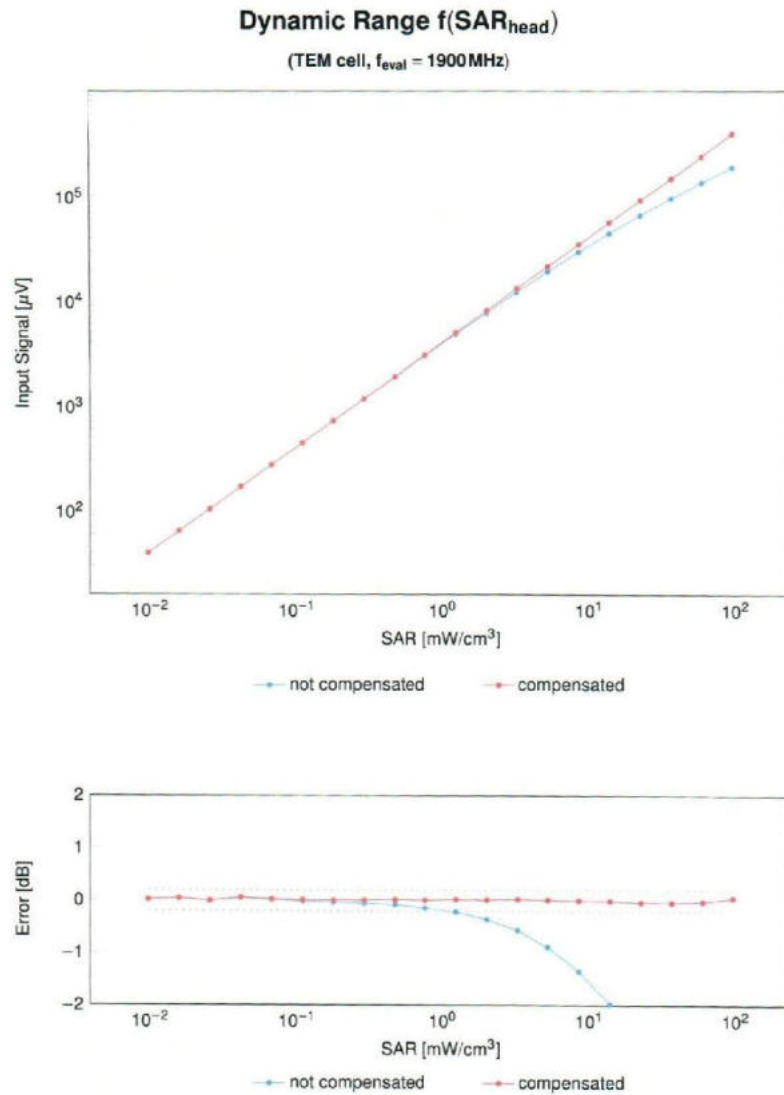
Receiving Pattern (ϕ), $\theta = 0^\circ$



Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

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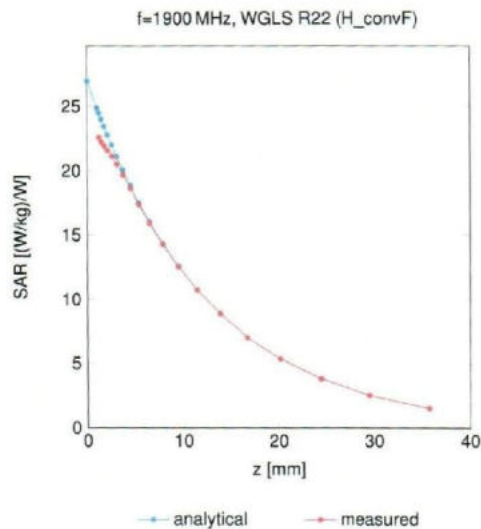


Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

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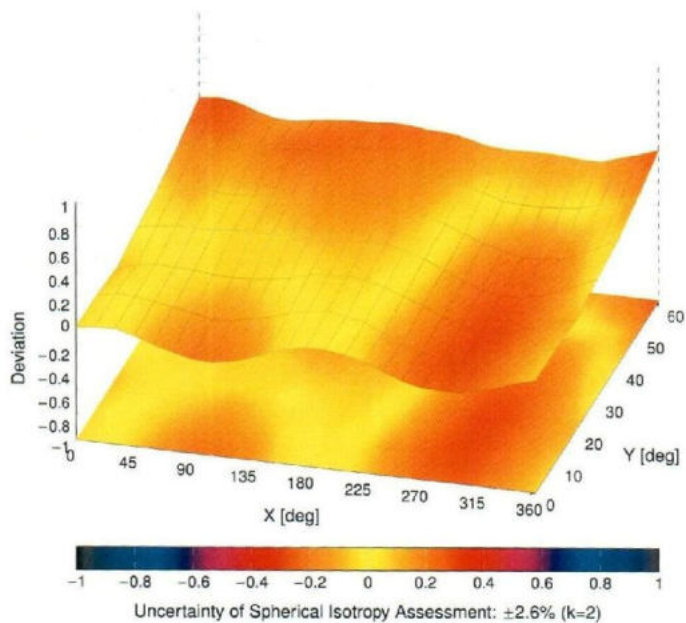
June 04, 2024

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



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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	9.82	±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

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^F $k=2$
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	5.48	±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	8.08	±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

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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	9.62	±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, Roll-off 0.5)	PHS	11.81	±9.6
10279	CAA	PHS (QPSK, BW 884 MHz, Roll-off 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

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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	8.06	±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, SQ32, 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/n 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 preamble)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	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, Clipping 44%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 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

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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

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