

SAR

TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR

Multi-band GSM/WCDMA/LTE/5G NR

Phone with Bluetooth, WLAN

ISSUED TO
Samsung Electronics Co., Ltd.

19 Chapin Rd., Building D Pine Brook, NJ 07058



Tested by: Miao Yan

Miao Yan

Date Dec. 28, 2021

Approved by: Wei Yanquan

Wei Yanquan
(Chief Engineer)

Date Dec. 28, 2021

Report No.: BL-EC21B0329-701

EUT Name: Multi-band GSM/WCDMA/LTE/5G NR
Phone with Bluetooth, WLAN

Model Name: SM-A226BR/DSN, SM-A226BR/N

Brand Name: SAMSUNG

FCC ID: ZCasma226BRN1

Test Standard: 47 CFR Part 2.1093 (refer section 3.1)

Maximum SAR: Head (1 g): 0.750 W/kg

Body (1 g): 0.771 W/kg

Hotspot (1 g): 0.793 W/kg

Specific(10g): 1.581 W/kg

Test Conclusion: Pass

Test Date: Nov.13, 2021 ~ Dec. 27, 2021

Date of Issue: Dec. 28, 2021

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Dec. 13, 2021</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Dec. 15, 2021</u>	<u>Update 5.8G WLAN Head SAR test data.</u>
<u>Rev. 03</u>	<u>Dec. 24, 2021</u>	<u>Update UNII 2C frequency range in Section 2.5;</u> <u>Update GSM850 Tune-up power in Section 8.1;</u> <u>Update LTE Band 66-ANT4 Receiver off +</u> <u>Hotspot on Tune-up power in Section 8.3;</u> <u>Update Power Table in Section 8.8;</u> <u>Update TEST RESULT in Section 11 ;</u> <u>Update SIMULTANEOUS TRANSMISSION in</u> <u>Section 13.</u>
<u>Rev. 04</u>	<u>Dec. 28, 2021</u>	<u>Update GSM850 and GSM1900 Head SAR test</u> <u>data.</u>

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1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Test Environment Condition

Ambient Temperature	21°C to 23°C
Ambient Relative Humidity	32% to 49%
Ambient Pressure	100 KPa to 102 KPa

1.4 Announce

- (1) The test report reference to the report template version v2.2.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Samsung Electronics Co., Ltd.
Address	19 Chapin Rd., Building D Pine Brook, NJ 07058

2.2 Manufacturer Information

Manufacturer	Samsung Electronics Co., Ltd.
Address	Samsung R5, Maetan dong 129, Samsung ro Youngtong gu, Suwon city 443 742, Korea

2.3 General Description for Equipment under Test (EUT)

EUT Name	Multi-band GSM/WCDMA/LTE/5GNR Phone with Bluetooth, WLAN
Model Name Under Test	SM-A226BR/DSN, SM-A226BR/N
Hardware Version	REV1.1
Software Version	A226BR.001
Dimensions (Approx.)	167.2x76.4x9.0mm
Weight (Approx.)	202g(with battery)

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	SCUD(Fujian) Electronic Co.,Ltd.
	Model No.	SCUD-WT-W1
	Serial No.	N/A
	Capacitance	4900mAh
	Rated Voltage	3.85V
	Limited Voltage	4.4V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA/HSDPA/HSUPA/DC-HSDPA Band 1/2/4/5/8 4G Network LTE FDD Band 1/2/3/4/5/7/8/12/17/20/26/28/66 LTE TDD Band 38/40/41 NSA: DC_5A_n7A, DC_7A_n5A, DC_66A_n5A, DC_66A_n7A Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80), U-NII-1/2A/2C/3
Note : The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA, LTE and NR, and both SIM share the same transmitting electro circuit, NV parameters, only SIM1 tested all configurations, and SIM2 only tested the worst mode.	

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

Operating Mode	GSM, WCDMA, LTE, NR, WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	NR n5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	NR n7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	802.11b/g	2412 ~ 2462 MHz	
	802.11n(HT20)	2412 ~ 2462 MHz	
	802.11a	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5500 ~ 5700 MHz	
		5725 ~ 5850 MHz	
	802.11n(HT20/HT40)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5500 ~ 5700 MHz	
		5725 ~ 5850 MHz	
	802.11ac(VHT20/VHT40/VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5500 ~ 5700 MHz	
		5725 ~ 5850 MHz	

	Bluetooth	2402 ~ 2480 MHz
Antenna Type	WWAN: Integrated Antenna WLAN: Integrated Antenna Bluetooth: Integrated Antenna	
DTM	Not Support	
Hotspot Function	Support	
Power Reduction	Support	
Exposure Category	General Population/Uncontrolled exposure	
EUT Stage	Portable Device	
Product	Type	
	☒ Production unit	☐ Identical prototype

Note:

1. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4/5G transmitter for held-to-ear exposure conditions.
2. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4/5G transmitter for near to body and limb exposure conditions.
3. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
4. This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz WLAN/5.5GHz WLAN supports WiFi Direct (GC only).
5. The reduction power details please refer section 8.8.

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	FCC KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	FCC KDB 941225 D06 v02r01	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
8	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
11	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters

3.2 Device Category and SAR Limit

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

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue and 4.0 W/kg as averaged over any 10 gram of tissue.

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
	Head	Body-worn Accessory	Hotspot	Head	Body-worn Accessory	Hotspot
GSM 850	0.168	/	0.500	0.750	0.771	0.793
GSM 1900	0.160	/	0.793			
WCDMA Band 2	0.543	0.771	0.383			
WCDMA Band 4	0.208	0.490	0.35			
WCDMA Band 5	0.354	/	0.445			
LTE Band 2	0.302	0.532	0.535			
LTE Band 5	0.208	/	0.458			
LTE Band 7-Ant0	0.155	0.535	0.532			
LTE Band 7-Ant4	0.419	0.282	0.475			
LTE Band 12	0.224	/	0.342			
LTE Band 26	0.261	/	0.375			
LTE Band 41	0.090	/	0.702			
LTE Band 66-Ant1	0.176	0.569	0.429			
LTE Band 66-Ant4	0.440	0.566	0.365			
5G NR N5	0.228	/	0.353			
5G NR N7	0.582	0.365	0.579			
LTE(ENDC) Band 7	0.503	0.282	0.475			
LTE(ENDC) Band 66	0.440	0.566	0.365			
WLAN 2.4G	0.416	/	0.644			
WLAN 5G	0.750	/	0.649			
Bluetooth	0.070	/	0.022			
Limit (W/kg)	1.6			1.6		
Verdict	Pass					

3.3.2 Highest Specific SAR(10 g Value)

Band	Maximum Scaled SAR (W/kg)	Maximum Report SAR (W/kg)
	Specific 10g	
5G NR N7	1.144	1.581
5.3G WLAN	1.581	
5.6G WLAN	1.229	
Limit (W/kg)	4.0	4.0
Verdict	Pass	

3.3.3 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head (1g)	WWAN+5GWIFI	1.147	1.6	Pass
Hotspot (1g)	WWAN+2.4GWIFI	1.437	1.6	Pass
ENDC-Head(1g)	WWAN+NR+5GWIFI	1.227	1.6	Pass
ENDC-Body(1g)	WWAN+NR+2.4GWIFI	1.417	1.6	Pass
Specific SAR (10 g)	NR+5GWIFI	2.373	4.0	Pass

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 0.793 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10 g SAR for the EUT in this report is 1.581 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

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

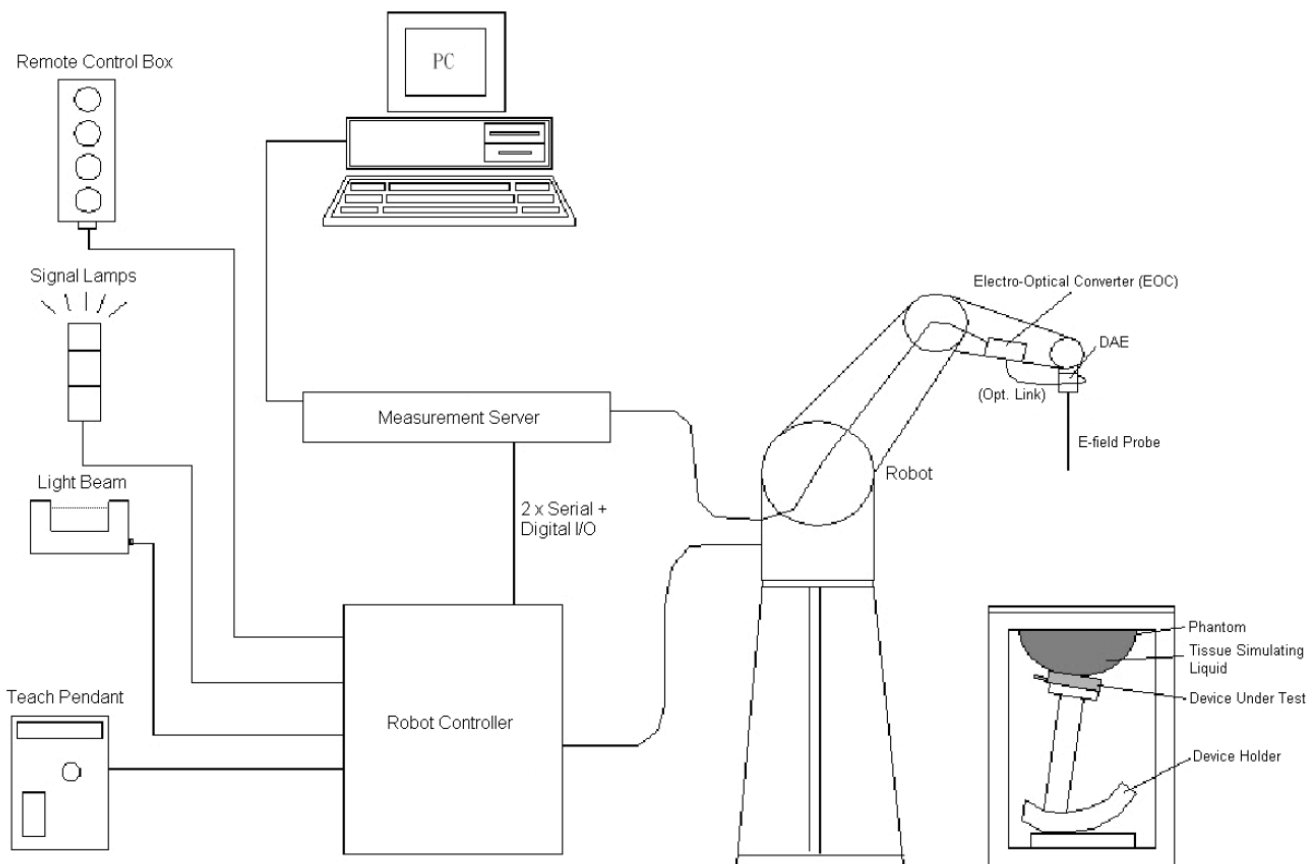
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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

Photo for DASY5



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

Photo for DASY4



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

4.2.3 E-Field Probe

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

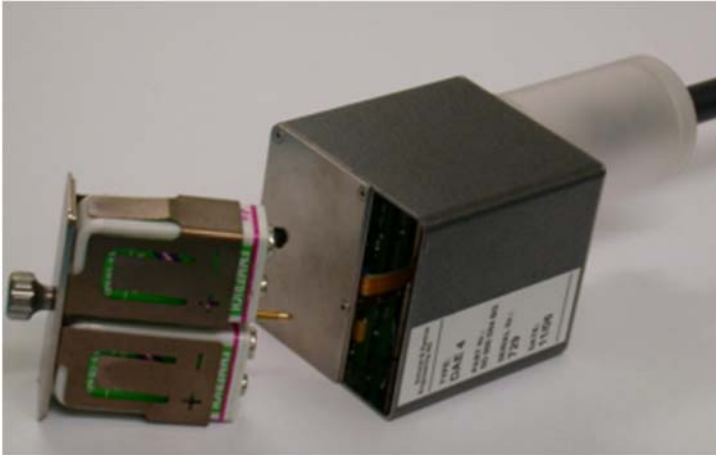
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)

E-Field Probe Calibration Process

Probe calibration is realized, in compliance with CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1/2 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

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



- Input Impedance: 200MOhm
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

4.2.5 Phantoms

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



- Left hand
- Right hand
- Flat phantom

Photo of Phantom



Serial Number	Material	Length	Height
SN 1857 SAM1	Vinylester, glass fiber reinforced	1000	500
SN 1859 SAM2	Vinylester, glass fiber reinforced	1000	500
SN 1392 SAM3	Vinylester, glass fiber reinforced	1000	500
SN 1402 SAM4	Vinylester, glass fiber reinforced	1000	500

4.2.6 Device Holder

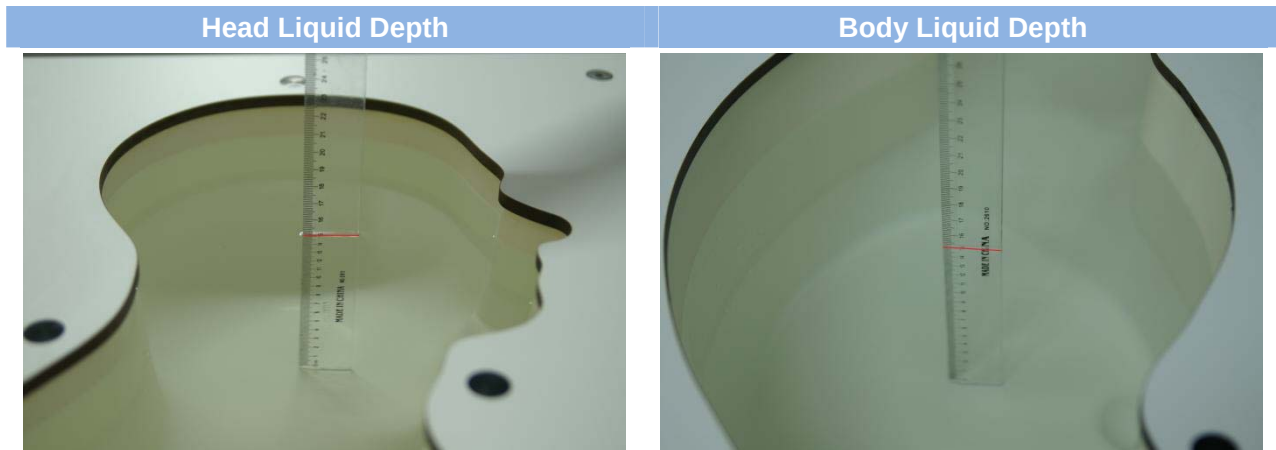
The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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



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

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency (MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity σ (S/m)	Permittivity ε
5200	62.52	17.24			17.24		4.66	36.0
5500	62.52	17.24			17.24		4.96	35.6
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
Frequency(MHz)	Water	DGBE (%)			Salt (%)		Conductivity σ (S/m)	Permittivity ε
5200	78.60	21.40			/		5.54	47.86

5500	78.60	21.40	/	5.44	
5800	78.50	21.40	0.1	6.0	48.20

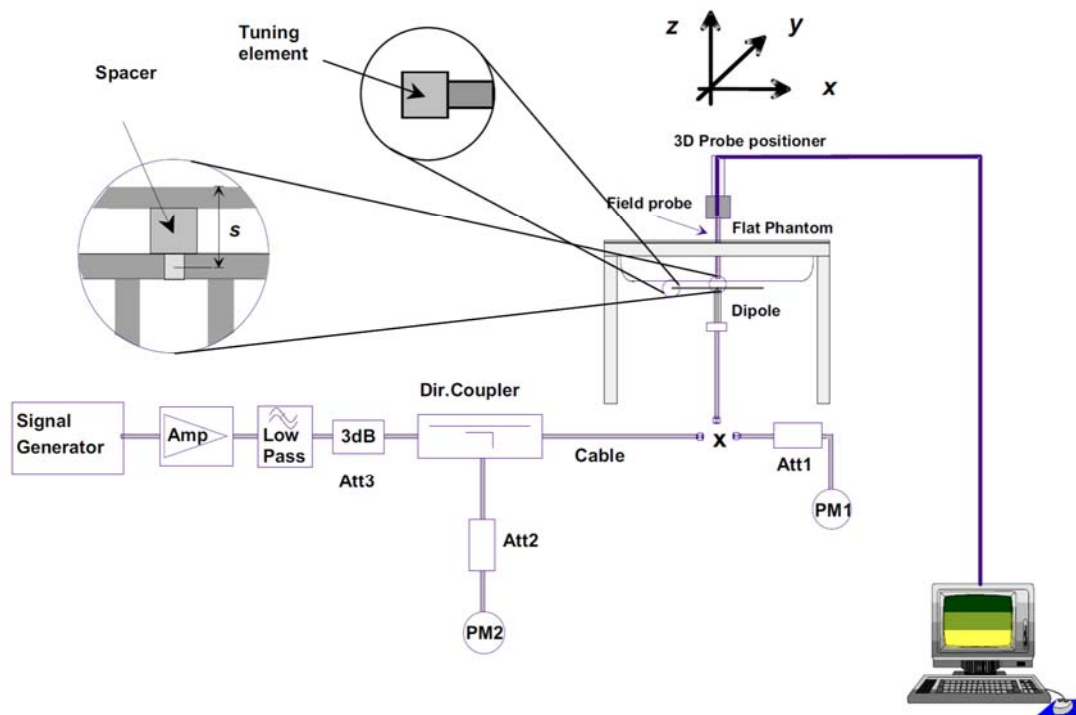
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

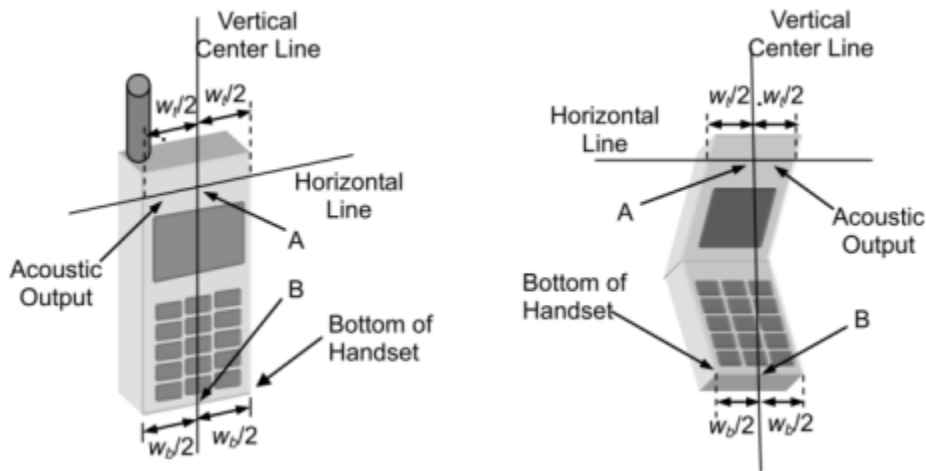
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

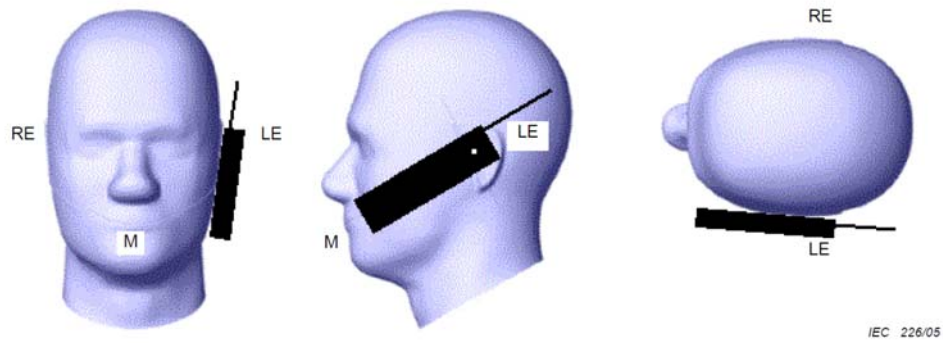
6.1.1 Two Imaginary Lines on the Handset

- The vertical center line passes through two points on the front side of the handset – the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
 - The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



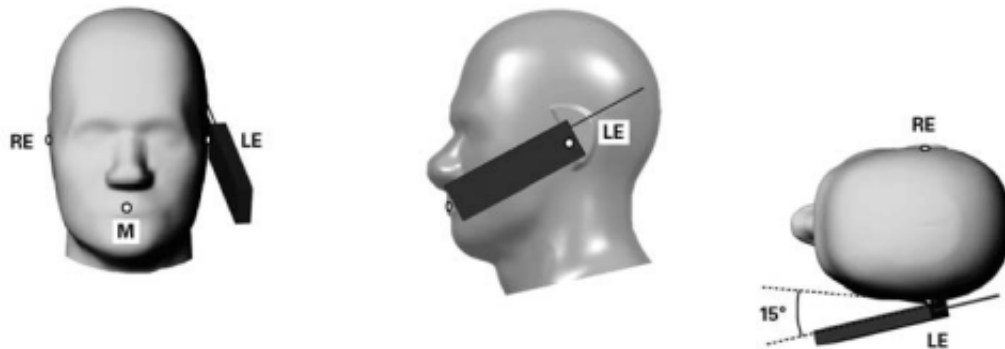
6.1.2 Cheek Position

- To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



6.1.3 Tilted Position

- To position the device in the "cheek" position described above.
- While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

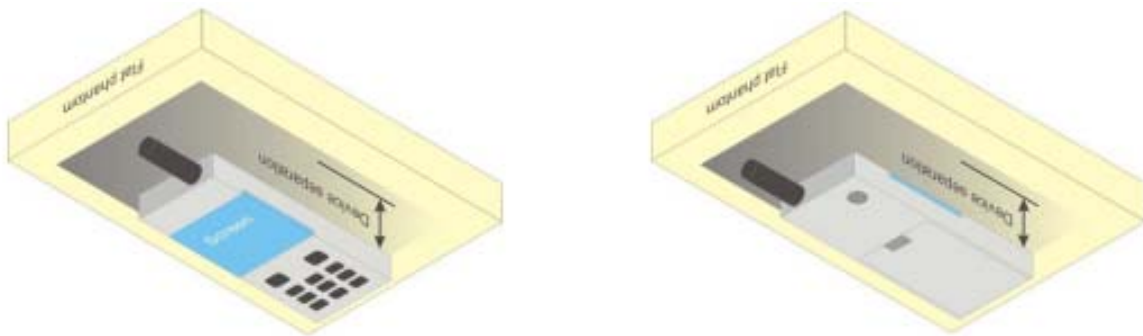


6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are 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 the reported SAR for a body-worn accessory.

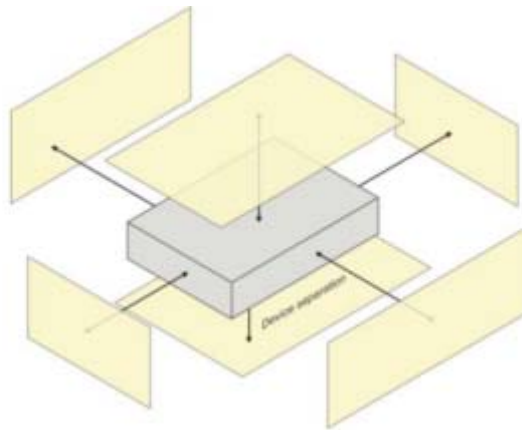
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance ≤ 5 mm to support compliance.



6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



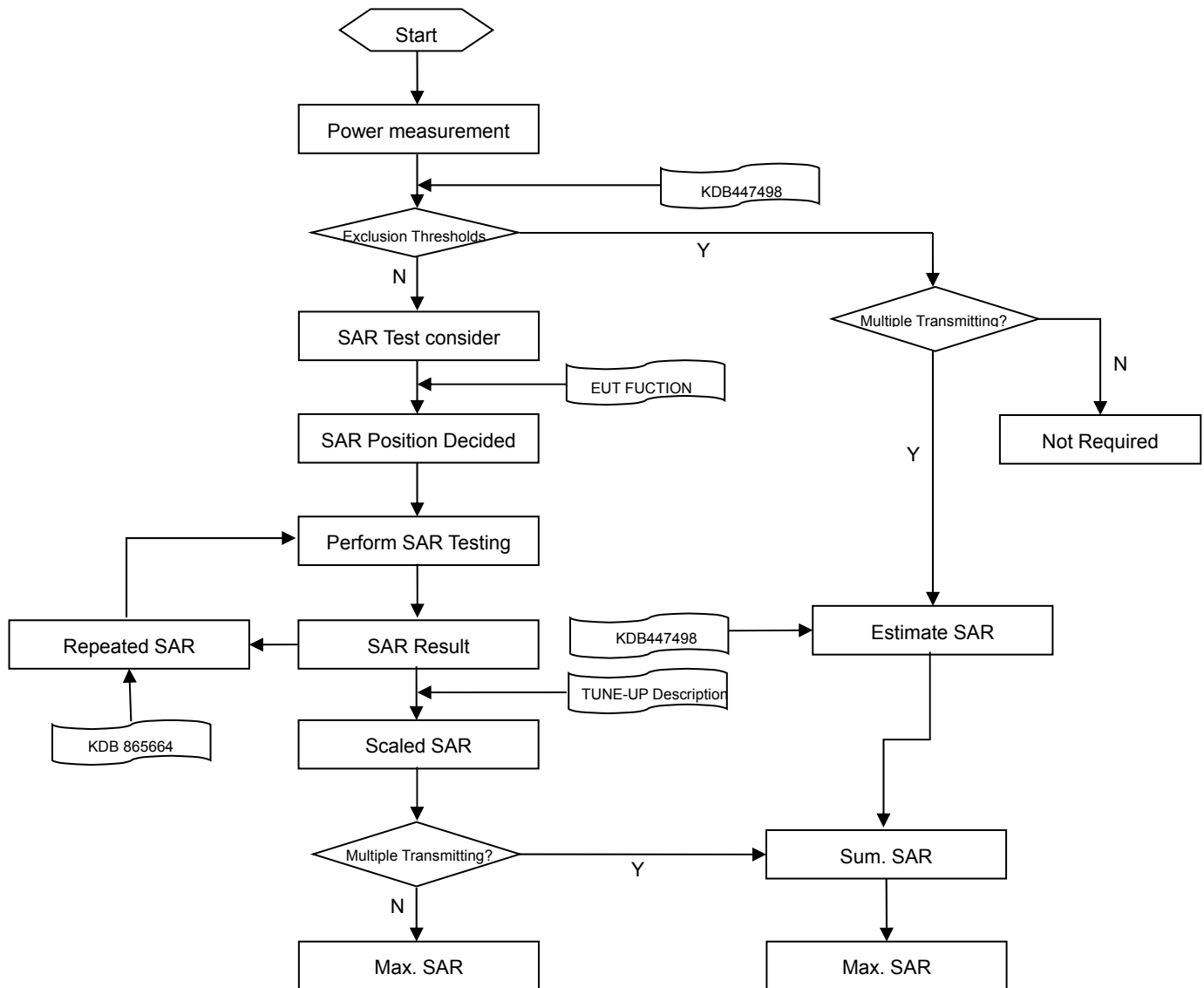
6.4 Product Specific 10g Exposure Consideration

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

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

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy 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.	
Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1 st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
		Δz Zoom (n>1): between subsequent points		5–6 GHz: ≤ 2 mm
Minimum zoom scan volume	x, y, z		≥ 30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

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

7.3 Measurement Procedure

The following steps are used for each test position

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

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUTPUT POWER

8.1 GSM

Table 8.1-1: The conducted power measurement results-Power Level A1&B1&C1

GSM 850								
GSM850 Band	Burst Average Power(dBm)			Tune-up	Frame-Averaged power (dBm)			Tune-up
Channel	128	190	251	Limit (dBm)	128	190	251	Limit (dBm)
GSM (GMSK, 1-Slot)	32.94	32.90	32.72	33.50	23.75	23.71	23.53	24.31
GPRS (GMSK, 1-Slot)	32.97	32.91	32.71	33.50	23.78	23.72	23.52	24.31
GPRS (GMSK, 2-Slots)	31.94	31.88	31.99	32.00	25.81	25.75	25.86	25.87
GPRS (GMSK, 3-Slots)	30.44	30.47	30.27	30.50	26.02	26.05	25.85	26.08
GPRS (GMSK, 4-Slots)	29.50	29.43	29.23	29.50	26.30	26.25	26.05	26.32
EGPRS (8PSK, 1-Slot)	26.76	26.87	26.77	27.00	17.57	17.68	17.58	17.81
EGPRS (8PSK, 2-Slots)	25.61	25.77	25.72	26.00	19.48	19.64	19.59	19.87
EGPRS (8PSK, 3-Slots)	23.70	23.58	23.54	25.00	19.28	19.16	19.12	20.58
EGPRS (8PSK, 4-Slots)	22.52	22.78	22.47	24.00	19.34	19.60	19.29	20.82
GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up	Frame-Averaged power(dBm)			Tune-up
Channel	512	661	810	Limit (dBm)	512	661	810	Limit (dBm)
GSM (GMSK, 1-Slot)	29.33	29.45	29.51	30.00	20.14	20.26	20.32	20.81
GPRS (GMSK, 1-Slot)	29.33	29.44	29.49	30.00	20.14	20.25	20.30	20.81
GPRS (GMSK, 2-Slots)	28.06	28.18	28.25	29.00	21.93	22.05	22.12	22.87
GPRS (GMSK, 3-Slots)	27.07	27.19	27.27	28.00	22.65	22.77	22.85	23.58
GPRS (GMSK, 4-Slots)	26.02	26.14	26.22	27.00	22.84	22.96	23.04	23.82
EGPRS (8PSK, 1-Slot)	25.68	25.90	25.78	26.00	16.49	16.71	16.59	16.81
EGPRS (8PSK, 2-Slots)	23.36	23.31	23.66	25.00	17.23	17.18	17.53	18.87
EGPRS (8PSK, 3-Slots)	22.02	22.14	22.23	24.00	17.60	17.72	17.81	19.58
EGPRS (8PSK, 4-Slots)	21.24	21.37	21.38	23.00	18.06	18.19	18.20	19.82

Note ¹: SAR testing was performed on the maximum frame-averaged power mode.

Note ²: The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:

Frame-averaged power = Burst averaged power (1 Tx Slot) – 9.19 dB

Frame-averaged power = Burst averaged power (2 Tx Slots) – 6.13 dB

Frame-averaged power = Burst averaged power (3 Tx Slots) - 4.42dB

Frame-averaged power = Burst averaged power (4 Tx Slots) – 3.18 dB

8.2 WCDMA

Table 8.2-1: The conducted Power for WCDMA B5-Power Level A1&B1&C1

The conducted Power for WCDMA B2&4-Power Level A1&B1

WCDMA	Band 2				Band 4			
Channel	9262	9400	9538	Tune-up Limit (dBm)	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	23.52	23.42	23.54	24.50	24.05	24.25	24.32	24.50
HSDPA Subtest-1	22.56	22.43	22.55	22.80	23.04	23.25	23.28	23.30
HSDPA Subtest-2	22.56	22.42	22.55	22.80	23.06	23.24	23.27	23.30
HSDPA Subtest-3	22.11	21.96	22.11	22.30	22.58	22.78	22.86	23.30
HSDPA Subtest-4	22.07	21.94	22.04	22.30	22.53	22.76	22.84	23.30
HSUPA Subtest-1	20.94	20.89	20.80	22.60	21.41	21.08	21.19	22.30
HSUPA Subtest-2	20.85	20.94	20.73	22.60	21.16	21.20	21.27	22.30
HSUPA Subtest-3	20.87	20.86	20.86	22.60	21.47	21.43	21.40	23.30
HSUPA Subtest-4	20.23	20.08	20.17	21.80	20.68	20.90	20.96	21.80
HSUPA Subtest-5	21.55	21.41	21.49	23.30	22.01	22.24	22.28	23.30
WCDMA	Band 5				-			
Channel	4132	4182	4233	Tune-up Limit (dBm)	-	-	-	-
RMC 12.2Kbps	23.79	23.76	23.74	25.00				
HSDPA Subtest-1	22.79	22.76	22.72	22.80	-	-	-	-
HSDPA Subtest-2	22.79	22.73	22.71	22.80	-	-	-	-
HSDPA Subtest-3	22.24	22.27	22.24	22.30	-	-	-	-
HSDPA Subtest-4	22.28	22.26	22.19	22.30	-	-	-	-
HSUPA Subtest-1	20.67	20.62	20.57	22.30	-	-	-	-
HSUPA Subtest-2	20.78	20.76	20.71	22.30	-	-	-	-
HSUPA Subtest-3	21.84	21.81	21.75	23.30	-	-	-	-
HSUPA Subtest-4	20.33	20.28	20.25	21.80	-	-	-	-
HSUPA Subtest-5	21.79	21.74	21.71	23.30	-	-	-	-

Table 8.2-2: The conducted Power for WCDMA B2/B4-Power Level C1

WCDMA	Band 2				Band 4			
Channel	9262	9400	9538	Tune-up Limit (dBm)	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	22.27	22.18	22.24	22.50	21.66	21.93	21.93	22.50
HSDPA Subtest-1	21.35	21.38	21.35	23.30	21.36	21.57	21.58	23.30
HSDPA Subtest-2	21.39	21.32	21.34	23.30	21.35	21.60	21.56	23.30
HSDPA Subtest-3	20.93	20.87	20.88	22.80	20.86	21.13	20.98	22.80
HSDPA Subtest-4	20.91	20.89	20.85	22.80	20.85	21.09	20.91	22.80
HSUPA Subtest-1	19.99	19.87	19.92	21.80	19.84	19.95	19.84	21.80
HSUPA Subtest-2	19.46	19.33	19.35	21.30	19.44	19.37	19.36	21.30
HSUPA Subtest-3	19.46	19.31	19.37	21.30	19.51	19.58	19.42	21.30
HSUPA Subtest-4	18.99	18.83	18.89	20.80	18.87	18.92	19.11	20.80
HSUPA Subtest-5	20.49	20.46	20.35	22.30	20.33	20.47	20.49	22.30

8.3 LTE

Maximum Target Power for Production Unit – Power Level A1/B1/C1

Band	Tune up (dBm)		
	Receiver on (Head scenario)	Receiver off + Hotspot off (Body scenario)	Receiver off + Hotspot on (Hotspot scenario)
	Level A1	Level B1	Level C1
Band2	24.5	24.5	22.5
Band5	24.5	24.5	24.5
Band 7-ANT0	24.5	24.5	21
Band 7-ANT4	16.5	24.5	20.5
Band 12	24.5	24.5	24.5
Band 26	24.5	24.5	24.5
Band 41	24.5	24.5	24.5
Band 66-ANT1	24.5	24.5	22.5(20 for C2)
Band 66-ANT4	16.5	24.5	21.0

FDD LTE Band 2 Power Level A1/B1_Ant1

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	23.87	23.97	23.80	24.50	23.46	23.29	23.25	23.50
	1 (RB_Pos:50)	24.16	24.11	24.07	24.50	23.48	23.30	23.42	23.50
	1 (RB_Pos:99)	23.95	23.83	23.98	24.50	23.46	23.10	23.44	23.50
	50 (RB_Pos:0)	23.12	23.15	22.95	23.50	22.15	22.13	21.88	22.50
	50 (RB_Pos:25)	23.18	23.06	23.05	23.50	22.16	22.07	22.01	22.50
	50 (RB_Pos:50)	23.20	22.97	23.02	23.50	22.20	21.94	21.94	22.50
	100 (RB_Pos:0)	23.19	23.05	22.96	23.50	22.18	22.04	21.92	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.35	22.15	22.23	22.50	-	-	-	-
	1 (RB_Pos:50)	22.45	22.19	22.38	22.50	-	-	-	-
	1 (RB_Pos:99)	22.39	22.01	22.41	22.50	-	-	-	-
	50 (RB_Pos:0)	21.03	21.00	20.73	21.50	-	-	-	-
	50 (RB_Pos:25)	21.11	20.92	20.89	21.50	-	-	-	-
	50 (RB_Pos:50)	21.08	20.78	20.86	21.50	-	-	-	-
	100 (RB_Pos:0)	21.10	21.03	20.87	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	24.02	23.93	23.83	24.50	22.95	23.38	23.22	23.50
	1 (RB_Pos:38)	24.13	24.01	23.94	24.50	23.07	23.42	23.28	23.50
	1 (RB_Pos:74)	24.07	23.90	24.02	24.50	22.95	23.33	23.31	23.50
	36 (RB_Pos:0)	23.06	23.05	22.94	23.50	22.08	22.09	21.88	22.50

	36 (RB_Pos:20)	23.12	23.00	22.99	23.50	22.11	22.06	21.97	22.50
	36 (RB_Pos:39)	23.11	22.99	23.00	23.50	22.13	22.01	21.94	22.50
	75 (RB_Pos:0)	23.13	23.02	22.97	23.50	22.12	22.02	21.94	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.84	22.24	22.20	22.50	-	-	-	-
	1 (RB_Pos:38)	22.04	22.31	22.24	22.50	-	-	-	-
	1 (RB_Pos:74)	21.88	22.24	22.28	22.50	-	-	-	-
	36 (RB_Pos:0)	20.96	20.96	20.73	21.50	-	-	-	-
	36 (RB_Pos:20)	21.06	20.91	20.85	21.50	-	-	-	-
	36 (RB_Pos:39)	21.01	20.85	20.86	21.50	-	-	-	-
	75 (RB_Pos:0)	21.04	21.01	20.89	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	24.13	23.99	23.88	24.50	23.00	23.47	22.94	23.50
	1 (RB_Pos:25)	24.15	23.96	24.08	24.50	23.06	23.40	23.07	23.50
	1 (RB_Pos:49)	24.02	23.93	24.09	24.50	23.07	23.36	23.09	23.50
	25 (RB_Pos:0)	23.12	23.11	23.06	23.50	22.15	22.17	22.15	22.50
	25 (RB_Pos:12)	23.13	23.02	23.05	23.50	22.16	22.07	22.16	22.50
	25 (RB_Pos:25)	23.12	22.96	23.03	23.50	22.15	22.04	22.11	22.50
	50 (RB_Pos:0)	23.12	23.08	23.10	23.50	22.11	22.05	22.09	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.89	22.33	21.92	22.50	-	-	-	-
	1 (RB_Pos:25)	22.03	22.29	22.03	22.50	-	-	-	-
	1 (RB_Pos:49)	22.00	22.27	22.06	22.50	-	-	-	-
	25 (RB_Pos:0)	21.03	21.04	21.00	21.50	-	-	-	-
	25 (RB_Pos:12)	21.11	20.92	21.04	21.50	-	-	-	-
	25 (RB_Pos:25)	21.03	20.88	21.03	21.50	-	-	-	-
	50 (RB_Pos:0)	21.03	21.04	21.04	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	24.03	23.97	24.10	24.50	23.42	23.43	23.00	23.50
	1 (RB_Pos:13)	24.15	23.94	24.12	24.50	23.41	23.48	22.96	23.50
	1 (RB_Pos:24)	24.11	23.92	24.07	24.50	23.49	23.47	22.99	23.50
	12 (RB_Pos:0)	23.14	23.07	23.09	23.50	22.13	22.17	22.15	22.50
	12 (RB_Pos:6)	23.09	23.00	23.09	23.50	22.12	22.10	22.12	22.50
	12 (RB_Pos:13)	23.07	22.94	23.03	23.50	22.09	22.04	22.04	22.50
	25 (RB_Pos:0)	23.08	23.03	23.03	23.50	22.13	22.06	21.98	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.31	22.29	21.98	22.50	-	-	-	-
	1 (RB_Pos:13)	22.38	22.37	21.92	22.50	-	-	-	-
	1 (RB_Pos:24)	22.42	22.38	21.96	22.50	-	-	-	-
	12 (RB_Pos:0)	21.01	21.04	21.00	21.50	-	-	-	-

	12 (RB_Pos:6)	21.07	20.95	21.00	21.50	-	-	-	-
	12 (RB_Pos:13)	20.97	20.88	20.96	21.50	-	-	-	-
	25 (RB_Pos:0)	21.05	21.05	20.93	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3 MHz	1 (RB_Pos:0)	24.10	23.89	23.92	24.50	23.03	23.41	23.01	23.50
	1 (RB_Pos:8)	24.06	23.88	23.98	24.50	22.99	23.41	23.03	23.50
	1 (RB_Pos:14)	24.09	23.84	24.00	24.50	23.01	23.38	23.03	23.50
	8 (RB_Pos:0)	23.07	22.99	23.06	23.50	22.19	22.08	22.05	22.50
	8 (RB_Pos:3)	23.04	22.94	23.08	23.50	22.16	22.04	22.11	22.50
	8 (RB_Pos:7)	23.04	22.98	23.07	23.50	22.16	22.04	22.12	22.50
	15 (RB_Pos:0)	23.09	23.00	23.04	23.50	22.14	22.04	22.01	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.92	22.27	21.99	22.50	-	-	-	-
	1 (RB_Pos:8)	21.96	22.30	21.99	22.50	-	-	-	-
	1 (RB_Pos:14)	21.94	22.29	22.00	22.50	-	-	-	-
	8 (RB_Pos:0)	21.07	20.95	20.90	22.50	-	-	-	-
	8 (RB_Pos:3)	21.11	20.89	20.99	22.50	-	-	-	-
	8 (RB_Pos:7)	21.04	20.88	21.04	22.50	-	-	-	-
	15 (RB_Pos:0)	21.06	21.03	20.96	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	23.88	23.80	23.91	24.50	23.22	23.40	23.02	23.50
	1 (RB_Pos:3)	23.87	23.83	23.96	24.50	23.22	23.35	23.02	23.50
	1 (RB_Pos:5)	23.92	23.86	23.96	24.50	23.21	23.36	23.08	23.50
	3 (RB_Pos:0)	24.06	23.93	23.88	24.50	23.13	23.17	23.19	23.50
	3 (RB_Pos:1)	24.09	23.93	23.92	24.50	23.13	23.14	23.15	23.50
	3 (RB_Pos:3)	24.05	23.92	24.08	24.50	23.13	23.13	23.16	23.50
	6 (RB_Pos:0)	23.09	23.02	23.08	23.50	22.17	21.87	22.22	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.11	22.26	22.00	22.50	-	-	-	-
	1 (RB_Pos:3)	22.19	22.24	21.98	22.50	-	-	-	-
	1 (RB_Pos:5)	22.14	22.27	22.05	22.50	-	-	-	-
	3 (RB_Pos:0)	22.01	22.04	22.04	22.50	-	-	-	-
	3 (RB_Pos:1)	22.08	21.99	22.03	22.50	-	-	-	-
	3 (RB_Pos:3)	22.01	21.97	22.08	22.50	-	-	-	-
	6 (RB_Pos:0)	21.09	20.86	21.17	21.50	-	-	-	-

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Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	21.89	21.95	21.71	22.50	21.93	21.88	21.68	22.50
	1 (RB_Pos:50)	22.05	21.99	21.89	22.50	22.02	21.91	21.84	22.50
	1 (RB_Pos:99)	21.89	21.80	21.86	22.50	21.96	21.71	21.81	22.50
	50 (RB_Pos:0)	21.52	21.50	21.30	22.50	21.57	21.51	21.30	22.50
	50 (RB_Pos:25)	21.54	21.46	21.42	22.50	21.55	21.48	21.39	22.50
	50 (RB_Pos:50)	21.55	21.35	21.39	22.50	21.58	21.38	21.37	22.50
	100 (RB_Pos:0)	21.53	21.42	21.37	22.50	21.55	21.45	21.36	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.82	21.74	21.66	22.50	-	-	-	-
	1 (RB_Pos:50)	21.99	21.80	21.80	22.50	-	-	-	-
	1 (RB_Pos:99)	21.89	21.62	21.78	22.50	-	-	-	-
	50 (RB_Pos:0)	21.45	21.38	21.15	21.50	-	-	-	-
	50 (RB_Pos:25)	21.50	21.33	21.27	21.50	-	-	-	-
	50 (RB_Pos:50)	21.46	21.22	21.29	21.50	-	-	-	-
	100 (RB_Pos:0)	21.07	20.94	20.91	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	21.85	21.86	21.73	22.50	21.32	21.77	21.74	22.50
	1 (RB_Pos:38)	21.95	21.91	21.87	22.50	21.42	21.80	21.85	22.50
	1 (RB_Pos:74)	21.88	21.80	21.85	22.50	21.34	21.67	21.83	22.50
	36 (RB_Pos:0)	21.47	21.43	21.29	21.50	21.52	21.48	21.32	22.50
	36 (RB_Pos:20)	21.48	21.40	21.39	21.50	21.46	21.49	21.38	22.50
	36 (RB_Pos:39)	21.45	21.31	21.40	21.50	21.46	21.40	21.37	22.50
	75 (RB_Pos:0)	21.49	21.43	21.39	22.50	21.50	21.44	21.39	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.21	21.63	21.72	22.50	-	-	-	-
	1 (RB_Pos:38)	21.39	21.69	21.81	22.50	-	-	-	-
	1 (RB_Pos:74)	21.27	21.58	21.80	22.50	-	-	-	-
	36 (RB_Pos:0)	21.40	21.35	21.17	21.50	-	-	-	-
	36 (RB_Pos:20)	21.41	21.34	21.26	21.50	-	-	-	-
	36 (RB_Pos:39)	21.34	21.24	21.29	21.50	-	-	-	-
	75 (RB_Pos:0)	21.02	20.93	20.94	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	21.91	21.97	21.86	22.50	21.38	21.84	21.41	22.50
	1 (RB_Pos:25)	21.99	21.93	21.94	22.50	21.42	21.82	21.47	22.50

	1 (RB_Pos:49)	21.98	21.82	21.94	22.50	21.43	21.73	21.47	22.50
	25 (RB_Pos:0)	21.48	21.46	21.38	21.50	21.53	21.54	21.52	22.50
	25 (RB_Pos:12)	21.46	21.39	21.44	21.50	21.53	21.47	21.57	22.50
	25 (RB_Pos:25)	21.48	21.36	21.39	21.50	21.56	21.41	21.51	22.50
	50 (RB_Pos:0)	21.51	21.44	21.46	22.50	21.49	21.48	21.48	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.27	21.70	21.39	22.50	-	-	-	-
	1 (RB_Pos:25)	21.39	21.71	21.43	22.50	-	-	-	-
	1 (RB_Pos:49)	21.36	21.64	21.44	22.50	-	-	-	-
	25 (RB_Pos:0)	21.41	21.41	21.37	21.50	-	-	-	-
	25 (RB_Pos:12)	21.48	21.32	21.45	21.50	-	-	-	-
	25 (RB_Pos:25)	21.44	21.25	21.43	21.50	-	-	-	-
	50 (RB_Pos:0)	21.01	20.97	21.03	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	22.02	21.93	21.89	22.50	21.65	21.99	21.51	22.50
	1 (RB_Pos:13)	22.02	21.92	21.92	22.50	21.64	21.94	21.50	22.50
	1 (RB_Pos:24)	22.03	21.91	21.98	22.50	21.68	21.92	21.54	22.50
	12 (RB_Pos:0)	21.48	21.46	21.45	21.50	21.54	21.60	21.55	22.50
	12 (RB_Pos:6)	21.48	21.35	21.45	21.50	21.54	21.48	21.50	22.50
	12 (RB_Pos:13)	21.44	21.33	21.41	21.50	21.50	21.48	21.45	22.50
	25 (RB_Pos:0)	21.49	21.42	21.44	21.50	21.56	21.48	21.42	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.54	21.85	21.49	22.50	-	-	-	-
	1 (RB_Pos:13)	21.61	21.83	21.46	22.50	-	-	-	-
	1 (RB_Pos:24)	21.61	21.83	21.51	22.50	-	-	-	-
	12 (RB_Pos:0)	21.42	21.47	21.40	21.50	-	-	-	-
	12 (RB_Pos:6)	21.49	21.33	21.38	21.50	-	-	-	-
	12 (RB_Pos:13)	21.38	21.32	21.37	21.50	-	-	-	-
	25 (RB_Pos:0)	21.08	20.97	20.97	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3 MHz	1 (RB_Pos:0)	21.93	21.90	21.87	22.50	21.38	21.48	21.47	21.50
	1 (RB_Pos:8)	21.91	21.90	21.90	22.50	21.37	21.50	21.45	21.50
	1 (RB_Pos:14)	21.91	21.83	21.95	22.50	21.37	21.46	21.46	21.50
	8 (RB_Pos:0)	21.45	21.43	21.47	21.50	21.59	21.53	21.49	22.50
	8 (RB_Pos:3)	21.46	21.37	21.44	21.50	21.61	21.49	21.47	22.50
	8 (RB_Pos:7)	21.44	21.36	21.42	21.50	21.59	21.47	21.47	22.50
	15 (RB_Pos:0)	21.45	21.36	21.43	21.50	21.52	21.43	21.46	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.27	21.34	21.45	22.50	-	-	-	-
	1 (RB_Pos:8)	21.34	21.39	21.41	22.50	-	-	-	-

	1 (RB_Pos:14)	21.30	21.37	21.43	22.50	-	-	-	-
	8 (RB_Pos:0)	21.47	21.40	21.34	22.50	-	-	-	-
	8 (RB_Pos:3)	21.56	21.34	21.35	22.50	-	-	-	-
	8 (RB_Pos:7)	21.47	21.31	21.39	22.50	-	-	-	-
	15 (RB_Pos:0)	21.04	20.92	21.01	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	21.92	21.87	21.85	22.50	21.43	21.50	21.27	21.50
	1 (RB_Pos:3)	21.89	21.84	21.87	22.50	21.44	21.47	21.30	21.50
	1 (RB_Pos:5)	21.92	21.86	21.89	22.50	21.42	21.49	21.31	21.50
	3 (RB_Pos:0)	21.97	21.90	21.92	22.50	21.31	21.41	21.39	21.50
	3 (RB_Pos:1)	22.00	21.86	21.96	22.50	21.33	21.36	21.37	21.50
	3 (RB_Pos:3)	21.97	21.85	21.95	22.50	21.33	21.37	21.36	21.50
	6 (RB_Pos:0)	21.46	21.39	21.43	21.50	21.41	21.08	21.42	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.30	21.83	21.48	22.50	-	-	-	-
	1 (RB_Pos:3)	21.46	21.86	21.51	22.50	-	-	-	-
	1 (RB_Pos:5)	21.44	21.79	21.46	22.50	-	-	-	-
	3 (RB_Pos:0)	21.68	21.80	21.68	22.50	-	-	-	-
	3 (RB_Pos:1)	21.75	21.73	21.68	22.50	-	-	-	-
	3 (RB_Pos:3)	21.70	21.65	21.71	22.50	-	-	-	-
	6 (RB_Pos:0)	21.32	21.33	21.34	21.50	-	-	-	-

FDD LTE Band 5 Power Level A1&B1&C1_Ant0									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20450	20525	20600		20450	20525	20600	
10 MHz	1 (RB_Pos:0)	23.92	23.87	23.74	24.50	22.41	22.44	22.47	22.50
	1 (RB_Pos:25)	24.05	23.91	23.78	24.50	22.45	22.35	22.40	22.50
	1 (RB_Pos:49)	23.92	23.77	23.73	24.50	22.47	22.26	22.49	22.50
	25 (RB_Pos:0)	22.93	22.94	22.77	23.50	21.96	22.00	21.87	22.50
	25 (RB_Pos:12)	22.95	22.88	22.78	23.50	21.93	21.95	21.88	22.50
	25 (RB_Pos:25)	22.93	22.83	22.71	23.50	21.97	21.89	21.78	22.50
	50 (RB_Pos:0)	22.93	22.93	22.81	23.50	21.92	21.91	21.80	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.30	21.30	21.45	22.50	-	-	-	-
	1 (RB_Pos:25)	21.42	21.24	21.36	22.50	-	-	-	-
	1 (RB_Pos:49)	21.40	21.17	21.46	22.50	-	-	-	-
	25 (RB_Pos:0)	20.84	20.87	20.72	21.50	-	-	-	-
	25 (RB_Pos:12)	20.88	20.80	20.76	21.50	-	-	-	-
	25 (RB_Pos:25)	20.85	20.73	20.70	21.50	-	-	-	-
	100 (RB_Pos:0)	20.84	20.90	20.75	21.50	-	-	-	-
Bandwidth	RB Set	Power (dBm)							

(MHz)		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5 MHz	1 (RB_Pos:0)	24.02	23.95	23.84	24.50	23.17	23.42	22.84	23.50
	1 (RB_Pos:13)	24.01	23.86	23.88	24.50	23.18	23.25	22.75	23.50
	1 (RB_Pos:24)	24.02	23.89	23.85	24.50	23.23	23.50	22.77	23.50
	12 (RB_Pos:0)	22.93	22.99	22.85	23.50	22.02	22.07	21.90	22.50
	12 (RB_Pos:6)	22.92	22.93	22.83	23.50	21.97	22.02	21.86	22.50
	12 (RB_Pos:13)	22.93	22.83	22.77	23.50	21.94	21.93	21.82	22.50
	25 (RB_Pos:0)	22.94	22.92	22.81	23.50	21.99	22.00	21.76	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.06	22.28	21.82	22.50	-	-	-	-
	1 (RB_Pos:13)	22.15	22.14	21.71	22.50	-	-	-	-
	1 (RB_Pos:24)	22.16	22.41	21.74	22.50	-	-	-	-
	12 (RB_Pos:0)	20.90	20.94	20.75	21.50	-	-	-	-
	12 (RB_Pos:6)	20.92	20.87	20.74	21.50	-	-	-	-
	12 (RB_Pos:13)	20.82	20.77	20.74	21.50	-	-	-	-
	25 (RB_Pos:0)	20.91	20.99	20.71	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3 MHz	1 (RB_Pos:0)	23.88	23.83	23.73	24.50	22.80	23.26	22.82	23.50
	1 (RB_Pos:8)	23.89	23.78	23.73	24.50	22.81	23.25	22.72	23.50
	1 (RB_Pos:14)	23.91	23.76	23.72	24.50	22.80	23.25	22.76	23.50
	8 (RB_Pos:0)	22.90	22.85	22.81	23.50	22.00	21.94	21.85	22.50
	8 (RB_Pos:3)	22.91	22.86	22.82	23.50	22.00	21.96	21.86	22.50
	8 (RB_Pos:7)	22.89	22.86	22.77	23.50	21.99	21.95	21.83	22.50
	15 (RB_Pos:0)	22.88	22.89	22.77	23.50	21.95	21.91	21.77	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.69	22.12	21.80	22.50	-	-	-	-
	1 (RB_Pos:8)	21.78	22.14	21.68	22.50	-	-	-	-
	1 (RB_Pos:14)	21.73	22.16	21.73	22.50	-	-	-	-
	8 (RB_Pos:0)	20.88	20.81	20.70	22.50	-	-	-	-
	8 (RB_Pos:3)	20.95	20.81	20.74	22.50	-	-	-	-
	8 (RB_Pos:7)	20.87	20.79	20.75	22.50	-	-	-	-
	15 (RB_Pos:0)	20.87	20.90	20.72	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4 MHz	1 (RB_Pos:0)	23.87	23.84	23.71	24.50	23.04	23.30	22.74	23.50
	1 (RB_Pos:3)	23.86	23.82	23.68	24.50	23.08	23.27	22.79	23.50
	1 (RB_Pos:5)	23.88	23.82	23.71	24.50	23.08	23.29	22.80	23.50
	3 (RB_Pos:0)	23.94	23.91	23.85	24.50	22.98	23.17	22.91	23.50
	3 (RB_Pos:1)	23.94	23.90	23.90	24.50	22.98	23.10	22.93	23.50

	3 (RB_Pos:3)	23.93	23.90	23.86	24.50	23.01	23.10	22.93	23.50
	6 (RB_Pos:0)	22.88	22.97	22.83	23.50	22.05	21.81	21.98	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.93	22.16	21.72	22.50	-	-	-	-
	1 (RB_Pos:3)	22.05	22.16	21.75	22.50	-	-	-	-
	1 (RB_Pos:5)	22.01	22.20	21.77	22.50	-	-	-	-
	3 (RB_Pos:0)	21.86	22.04	21.76	22.50	-	-	-	-
	3 (RB_Pos:1)	21.93	21.95	21.81	22.50	-	-	-	-
	3 (RB_Pos:3)	21.89	21.94	21.85	22.50	-	-	-	-
	6 (RB_Pos:0)	20.97	20.80	20.93	21.50	-	-	-	-

FDD LTE Band 7 Power Level A1&B1_Ant0									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20 MHz	1 (RB_Pos:0)	23.90	23.93	23.77	24.50	23.44	23.31	23.29	23.50
	1 (RB_Pos:50)	24.07	24.02	23.82	24.50	23.38	23.38	23.28	23.50
	1 (RB_Pos:99)	23.81	23.86	23.53	24.50	23.48	23.21	23.01	23.50
	50 (RB_Pos:0)	23.00	23.03	22.95	23.50	22.01	22.03	22.05	22.50
	50 (RB_Pos:25)	22.97	23.07	22.86	23.50	21.97	22.05	21.99	22.50
	50 (RB_Pos:50)	22.96	23.01	22.72	23.50	21.92	21.99	21.84	22.50
	100 (RB_Pos:0)	22.97	23.03	22.85	23.50	21.97	22.02	21.98	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.33	22.17	22.27	22.50	-	-	-	-
	1 (RB_Pos:50)	22.35	22.27	22.24	22.50	-	-	-	-
	1 (RB_Pos:99)	22.41	22.12	21.98	22.50	-	-	-	-
	50 (RB_Pos:0)	20.89	20.90	20.90	21.50	-	-	-	-
	50 (RB_Pos:25)	20.92	20.90	20.87	21.50	-	-	-	-
	50 (RB_Pos:50)	20.80	20.83	20.76	21.50	-	-	-	-
	100 (RB_Pos:0)	20.89	21.01	20.93	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	24.01	23.94	23.76	24.50	22.90	23.33	23.27	23.50
	1 (RB_Pos:38)	24.05	24.01	23.74	24.50	22.91	23.39	23.19	23.50
	1 (RB_Pos:74)	23.97	23.93	23.59	24.50	22.81	23.31	23.03	23.50
	36 (RB_Pos:0)	22.99	23.01	22.84	23.50	21.98	22.04	22.01	22.50
	36 (RB_Pos:20)	22.97	23.02	22.80	23.50	21.96	22.06	21.96	22.50
	36 (RB_Pos:39)	22.98	22.97	22.70	23.50	21.99	22.05	21.88	22.50
	75 (RB_Pos:0)	22.97	23.00	22.82	23.50	21.98	22.03	21.99	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.79	22.19	22.25	22.50	-	-	-	-
	1 (RB_Pos:38)	21.88	22.28	22.15	22.50	-	-	-	-
	1 (RB_Pos:74)	21.74	22.22	22.00	22.50	-	-	-	-

	36 (RB_Pos:0)	20.86	20.91	20.86	21.50	-	-	-	-
	36 (RB_Pos:20)	20.91	20.91	20.84	21.50	-	-	-	-
	36 (RB_Pos:39)	20.87	20.89	20.80	21.50	-	-	-	-
	75 (RB_Pos:0)	20.90	21.02	20.94	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	24.04	23.96	23.88	24.50	22.93	23.31	22.90	23.50
	1 (RB_Pos:25)	24.03	24.02	23.79	24.50	22.89	23.39	22.87	23.50
	1 (RB_Pos:49)	24.03	23.99	23.73	24.50	22.87	23.38	22.74	23.50
	25 (RB_Pos:0)	23.01	22.99	22.88	23.50	22.03	22.07	22.18	22.50
	25 (RB_Pos:12)	22.97	22.98	22.83	23.50	22.00	22.03	22.08	22.50
	25 (RB_Pos:25)	23.00	23.01	22.78	23.50	22.03	22.05	22.04	22.50
	50 (RB_Pos:0)	23.02	23.03	22.87	23.50	21.99	22.05	22.03	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.82	22.17	21.88	22.50	-	-	-	-
	1 (RB_Pos:25)	21.86	22.28	21.83	22.50	-	-	-	-
	1 (RB_Pos:49)	21.80	22.29	21.71	22.50	-	-	-	-
	25 (RB_Pos:0)	20.91	20.94	21.03	21.50	-	-	-	-
	25 (RB_Pos:12)	20.95	20.88	20.96	21.50	-	-	-	-
	25 (RB_Pos:25)	20.91	20.89	20.96	21.50	-	-	-	-
	50 (RB_Pos:0)	20.91	21.04	20.98	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	23.93	23.99	23.89	24.50	23.33	23.32	22.88	23.50
	1 (RB_Pos:13)	23.96	23.98	23.80	24.50	23.28	23.33	22.81	23.50
	1 (RB_Pos:24)	23.85	24.03	23.83	24.50	23.28	23.45	22.81	23.50
	12 (RB_Pos:0)	23.06	23.00	22.84	23.50	22.09	22.12	22.05	22.50
	12 (RB_Pos:6)	23.03	22.97	22.81	23.50	22.06	22.09	22.02	22.50
	12 (RB_Pos:13)	22.99	22.97	22.79	23.50	22.02	22.06	21.98	22.50
	25 (RB_Pos:0)	23.06	22.99	22.81	23.50	22.07	22.07	21.92	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.22	22.18	21.86	22.50	-	-	-	-
	1 (RB_Pos:13)	22.25	22.22	21.77	22.50	-	-	-	-
	1 (RB_Pos:24)	22.21	22.36	21.78	22.50	-	-	-	-
	12 (RB_Pos:0)	20.97	20.99	20.90	21.50	-	-	-	-
	12 (RB_Pos:6)	21.01	20.94	20.90	21.50	-	-	-	-
	12 (RB_Pos:13)	20.90	20.90	20.90	21.50	-	-	-	-
	25 (RB_Pos:0)	20.99	21.06	20.87	21.50	-	-	-	-

FDD LTE Band 7 Power Level C1_Ant0

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20 MHz	1 (RB_Pos:0)	20.35	20.37	20.26	21.00	20.33	20.34	20.22	21.00
	1 (RB_Pos:50)	20.38	20.52	20.33	21.00	20.34	20.50	20.29	21.00
	1 (RB_Pos:99)	20.31	20.33	20.11	21.00	20.28	20.24	20.05	21.00
	50 (RB_Pos:0)	19.86	19.95	19.91	20.00	19.88	19.96	19.91	21.00
	50 (RB_Pos:25)	19.85	19.89	19.86	20.00	19.89	19.91	19.85	21.00
	50 (RB_Pos:50)	19.86	19.87	19.71	20.00	19.87	19.88	19.67	21.00
	100 (RB_Pos:0)	19.83	19.86	19.80	20.00	19.87	19.87	19.85	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	20.22	20.20	20.20	21.00	-	-	-	-
	1 (RB_Pos:50)	20.31	20.39	20.25	21.00	-	-	-	-
	1 (RB_Pos:99)	20.21	20.15	20.02	21.00	-	-	-	-
	50 (RB_Pos:0)	19.76	19.83	19.76	20.00	-	-	-	-
	50 (RB_Pos:25)	19.84	19.76	19.73	20.00	-	-	-	-
	50 (RB_Pos:50)	19.75	19.72	19.59	20.00	-	-	-	-
	100 (RB_Pos:0)	19.39	19.36	19.40	20.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	20.35	20.40	20.33	21.00	19.88	20.28	20.33	21.00
	1 (RB_Pos:38)	20.32	20.48	20.36	21.00	19.84	20.38	20.34	21.00
	1 (RB_Pos:74)	20.22	20.36	20.24	21.00	19.76	20.25	20.20	21.00
	36 (RB_Pos:0)	19.90	19.95	19.87	20.00	19.91	20.01	19.86	21.00
	36 (RB_Pos:20)	19.88	19.88	19.87	20.00	19.93	19.97	19.84	21.00
	36 (RB_Pos:39)	19.89	19.89	19.76	20.00	19.87	20.01	19.70	21.00
	75 (RB_Pos:0)	19.93	19.92	19.89	20.00	19.94	19.92	19.81	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.77	20.14	20.31	21.00	-	-	-	-
	1 (RB_Pos:38)	19.81	20.27	20.30	21.00	-	-	-	-
	1 (RB_Pos:74)	19.69	20.16	20.17	21.00	-	-	-	-
	36 (RB_Pos:0)	19.79	19.88	19.71	20.00	-	-	-	-
	36 (RB_Pos:20)	19.88	19.82	19.72	20.00	-	-	-	-
	36 (RB_Pos:39)	19.75	19.85	19.62	20.00	-	-	-	-
	75 (RB_Pos:0)	19.46	19.41	19.36	20.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	20.43	20.44	20.45	21.00	19.90	20.34	19.98	21.00
	1 (RB_Pos:25)	20.41	20.48	20.36	21.00	19.91	20.34	19.97	21.00
	1 (RB_Pos:49)	20.31	20.41	20.36	21.00	19.81	20.30	19.89	21.00

	25 (RB_Pos:0)	19.98	19.97	19.94	20.00	20.00	20.01	20.05	21.00
	25 (RB_Pos:12)	19.97	19.93	19.88	20.00	19.98	19.97	20.00	21.00
	25 (RB_Pos:25)	19.90	19.92	19.81	20.00	19.95	19.93	19.92	21.00
	50 (RB_Pos:0)	19.95	19.93	19.93	20.00	19.96	19.93	19.95	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.79	20.20	19.96	21.00	-	-	-	-
	1 (RB_Pos:25)	19.88	20.23	19.93	21.00	-	-	-	-
	1 (RB_Pos:49)	19.74	20.21	19.86	21.00	-	-	-	-
	25 (RB_Pos:0)	19.88	19.88	19.90	20.00	-	-	-	-
	25 (RB_Pos:12)	19.93	19.82	19.88	20.00	-	-	-	-
	25 (RB_Pos:25)	19.83	19.77	19.84	20.00	-	-	-	-
	50 (RB_Pos:0)	19.48	19.42	19.50	20.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	20.48	20.45	20.40	21.00	20.43	20.14	20.06	21.00
	1 (RB_Pos:13)	20.50	20.42	20.40	21.00	20.42	20.10	20.02	21.00
	1 (RB_Pos:24)	20.50	20.49	20.39	21.00	20.43	20.11	20.06	21.00
	12 (RB_Pos:0)	19.94	19.97	19.88	20.00	20.06	20.03	19.96	21.00
	12 (RB_Pos:6)	19.93	19.90	19.84	20.00	20.05	19.96	19.92	21.00
	12 (RB_Pos:13)	19.91	19.89	19.84	20.00	20.09	19.96	19.90	21.00
	25 (RB_Pos:0)	19.98	19.92	19.83	20.00	20.03	19.87	19.91	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	20.32	20.00	20.04	21.00	-	-	-	-
	1 (RB_Pos:13)	20.39	19.99	19.98	21.00	-	-	-	-
	1 (RB_Pos:24)	20.36	20.02	20.03	21.00	-	-	-	-
	12 (RB_Pos:0)	19.94	19.90	19.81	20.00	-	-	-	-
	12 (RB_Pos:6)	20.00	19.81	19.80	20.00	-	-	-	-
	12 (RB_Pos:13)	19.97	19.80	19.82	20.00	-	-	-	-
	25 (RB_Pos:0)	19.55	19.36	19.46	20.00	-	-	-	-

FDD LTE Band 7 Power Level A1_Ant4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20 MHz	1 (RB_Pos:0)	15.38	15.41	15.25	16.50	15.02	15.49	15.47	16.50
	1 (RB_Pos:50)	15.40	15.71	15.30	16.50	15.06	15.36	15.46	16.50
	1 (RB_Pos:99)	15.29	15.34	15.01	16.50	15.46	15.69	15.49	16.50
	50 (RB_Pos:0)	15.48	15.51	15.43	16.50	15.49	15.51	15.53	16.50
	50 (RB_Pos:25)	15.45	15.55	15.34	16.50	15.45	15.53	15.47	16.50
	50 (RB_Pos:50)	15.44	15.49	15.20	16.50	15.40	15.47	15.32	16.50
	100 (RB_Pos:0)	15.45	15.51	15.33	16.50	15.45	15.50	15.46	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	14.91	15.35	15.45	16.50	-	-	-	-

	1 (RB_Pos:50)	15.03	15.25	15.42	16.50	-	-	-	-
	1 (RB_Pos:99)	15.39	15.60	15.46	16.50	-	-	-	-
	50 (RB_Pos:0)	15.37	15.38	15.38	15.50	-	-	-	-
	50 (RB_Pos:25)	15.40	15.38	15.35	15.50	-	-	-	-
	50 (RB_Pos:50)	15.28	15.31	15.24	15.50	-	-	-	-
	100 (RB_Pos:0)	14.97	14.99	15.01	15.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	15.49	15.42	15.24	16.50	15.38	15.51	15.35	16.50
	1 (RB_Pos:38)	15.55	15.49	15.22	16.50	15.39	15.57	15.57	16.50
	1 (RB_Pos:74)	15.45	15.41	15.07	16.50	15.29	15.49	15.51	16.50
	36 (RB_Pos:0)	15.47	15.49	15.32	16.50	15.46	15.52	15.49	16.50
	36 (RB_Pos:20)	15.45	15.50	15.28	16.50	15.44	15.54	15.44	16.50
	36 (RB_Pos:39)	15.46	15.45	15.18	16.50	15.47	15.53	15.36	16.50
	75 (RB_Pos:0)	15.45	15.48	15.30	16.50	15.46	15.51	15.47	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.27	15.37	15.33	16.50	-	-	-	-
	1 (RB_Pos:38)	15.36	15.46	15.53	16.50	-	-	-	-
	1 (RB_Pos:74)	15.22	15.40	15.48	16.50	-	-	-	-
	36 (RB_Pos:0)	15.34	15.39	15.34	15.50	-	-	-	-
	36 (RB_Pos:20)	15.39	15.39	15.32	15.50	-	-	-	-
	36 (RB_Pos:39)	15.35	15.37	15.28	15.50	-	-	-	-
	75 (RB_Pos:0)	14.98	15.00	15.02	15.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	15.55	15.44	15.36	16.50	15.41	15.39	15.38	16.50
	1 (RB_Pos:25)	15.51	15.50	15.27	16.50	15.37	15.37	15.35	16.50
	1 (RB_Pos:49)	15.51	15.47	15.21	16.50	15.35	15.46	15.22	16.50
	25 (RB_Pos:0)	15.49	15.47	15.36	16.50	15.51	15.55	15.66	16.50
	25 (RB_Pos:12)	15.45	15.46	15.31	16.50	15.48	15.51	15.56	16.50
	25 (RB_Pos:25)	15.48	15.49	15.26	16.50	15.51	15.53	15.52	16.50
	50 (RB_Pos:0)	15.50	15.51	15.35	16.50	15.47	15.53	15.51	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.30	15.25	15.36	16.50	-	-	-	-
	1 (RB_Pos:25)	15.34	15.26	15.31	16.50	-	-	-	-
	1 (RB_Pos:49)	15.28	15.37	15.19	16.50	-	-	-	-
	25 (RB_Pos:0)	15.39	15.42	15.50	15.50	-	-	-	-
	25 (RB_Pos:12)	15.43	15.36	15.44	15.50	-	-	-	-
	25 (RB_Pos:25)	15.39	15.37	15.44	15.50	-	-	-	-
	50 (RB_Pos:0)	14.99	15.02	15.06	15.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up

	Channel	20775	21100	21425	limit (dBm)	20775	21100	21425	limit (dBm)
5 MHz	1 (RB_Pos:0)	15.69	15.47	15.37	16.50	15.51	15.10	15.36	16.50
	1 (RB_Pos:13)	15.64	15.46	15.28	16.50	15.46	15.11	15.29	16.50
	1 (RB_Pos:24)	15.63	15.51	15.31	16.50	15.46	15.13	15.29	16.50
	12 (RB_Pos:0)	15.54	15.48	15.32	16.50	15.57	15.60	15.53	16.50
	12 (RB_Pos:6)	15.51	15.45	15.29	16.50	15.54	15.57	15.50	16.50
	12 (RB_Pos:13)	15.47	15.45	15.27	16.50	15.50	15.54	15.46	16.50
	25 (RB_Pos:0)	15.54	15.47	15.29	16.50	15.55	15.55	15.40	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.40	14.96	15.34	16.50	-	-	-	-
	1 (RB_Pos:13)	15.43	15.00	15.25	16.50	-	-	-	-
	1 (RB_Pos:24)	15.39	15.04	15.26	16.50	-	-	-	-
	12 (RB_Pos:0)	15.45	15.47	15.38	15.50	-	-	-	-
	12 (RB_Pos:6)	15.49	15.42	15.38	15.50	-	-	-	-
	12 (RB_Pos:13)	15.38	15.38	15.38	15.50	-	-	-	-
	25 (RB_Pos:0)	15.07	15.04	14.95	15.50	-	-	-	-

FDD LTE Band 7 Power Level B1_Ant4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20 MHz	1 (RB_Pos:0)	23.69	23.71	23.70	24.50	23.46	23.41	23.44	23.50
	1 (RB_Pos:50)	23.37	23.63	23.70	24.50	23.40	23.32	23.47	23.50
	1 (RB_Pos:99)	23.81	23.94	24.15	24.50	23.48	23.42	23.41	23.50
	50 (RB_Pos:0)	23.47	23.60	23.32	24.50	23.42	23.19	23.35	23.50
	50 (RB_Pos:25)	23.30	23.58	23.72	24.50	23.33	23.32	23.39	23.50
	50 (RB_Pos:50)	23.02	23.21	23.43	24.50	23.21	23.31	22.36	23.50
	100 (RB_Pos:0)	23.49	23.32	23.36	23.50	22.45	22.31	22.25	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.35	22.27	22.42	22.50	-	-	-	-
	1 (RB_Pos:50)	22.37	22.21	22.43	22.50	-	-	-	-
	1 (RB_Pos:99)	22.41	22.33	22.38	22.50	-	-	-	-
	50 (RB_Pos:0)	22.30	22.06	22.20	22.50	-	-	-	-
	50 (RB_Pos:25)	22.28	22.17	22.27	22.50	-	-	-	-
	50 (RB_Pos:50)	22.09	22.15	21.28	22.50	-	-	-	-
	100 (RB_Pos:0)	21.37	21.30	21.20	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	23.42	24.07	23.75	24.50	23.45	23.36	23.41	23.50
	1 (RB_Pos:38)	23.26	24.04	23.65	24.50	23.10	23.48	23.24	23.50
	1 (RB_Pos:74)	23.33	23.64	24.13	24.50	22.88	23.46	23.31	23.50
	36 (RB_Pos:0)	23.27	23.59	23.25	24.50	23.49	23.46	23.23	23.50

	36 (RB_Pos:20)	23.43	23.12	23.35	24.50	23.41	23.41	23.31	23.50
	36 (RB_Pos:39)	23.40	23.22	23.49	24.50	23.02	23.45	23.45	23.50
	75 (RB_Pos:0)	23.10	23.22	23.48	23.50	22.46	22.35	22.31	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.34	22.22	22.39	22.50	-	-	-	-
	1 (RB_Pos:38)	22.07	22.37	22.20	22.50	-	-	-	-
	1 (RB_Pos:74)	21.81	22.37	22.28	22.50	-	-	-	-
	36 (RB_Pos:0)	22.37	22.33	22.08	22.50	-	-	-	-
	36 (RB_Pos:20)	22.36	22.26	22.19	22.50	-	-	-	-
	36 (RB_Pos:39)	21.90	22.29	22.37	22.50	-	-	-	-
	75 (RB_Pos:0)	21.38	21.34	21.26	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	23.42	23.72	23.79	24.50	23.06	23.36	23.16	23.50
	1 (RB_Pos:25)	23.34	23.79	24.10	24.50	23.06	23.33	23.37	23.50
	1 (RB_Pos:49)	23.76	23.93	24.12	24.50	23.35	23.43	23.30	23.50
	25 (RB_Pos:0)	23.18	23.46	23.77	24.50	23.43	23.29	23.35	23.50
	25 (RB_Pos:12)	23.44	23.53	23.23	24.50	23.35	23.27	23.31	23.50
	25 (RB_Pos:25)	23.55	23.36	23.77	24.50	23.08	23.35	23.48	23.50
	50 (RB_Pos:0)	23.08	23.27	23.45	23.50	22.12	22.26	22.39	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.95	22.22	22.14	22.50	-	-	-	-
	1 (RB_Pos:25)	22.03	22.22	22.33	22.50	-	-	-	-
	1 (RB_Pos:49)	22.28	22.34	22.27	22.50	-	-	-	-
	25 (RB_Pos:0)	22.31	22.16	22.20	22.50	-	-	-	-
	25 (RB_Pos:12)	22.30	22.12	22.19	22.50	-	-	-	-
	25 (RB_Pos:25)	21.96	22.19	22.40	22.50	-	-	-	-
	50 (RB_Pos:0)	21.04	21.25	21.34	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	22.98	23.18	23.72	24.50	23.17	23.47	23.32	23.50
	1 (RB_Pos:13)	23.02	23.19	23.79	24.50	23.20	23.42	23.32	23.50
	1 (RB_Pos:24)	23.07	23.16	24.12	24.50	23.16	23.45	23.38	23.50
	12 (RB_Pos:0)	23.04	23.26	23.80	24.50	22.80	22.76	22.87	23.50
	12 (RB_Pos:6)	23.10	23.16	22.80	24.50	22.82	22.87	23.29	23.50
	12 (RB_Pos:13)	23.08	23.10	22.78	24.50	22.78	22.85	23.32	23.50
	25 (RB_Pos:0)	23.12	23.14	23.43	23.50	21.85	22.27	22.36	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.06	22.33	22.30	22.50	-	-	-	-
	1 (RB_Pos:13)	22.17	22.31	22.28	22.50	-	-	-	-
	1 (RB_Pos:24)	22.09	22.36	22.35	22.50	-	-	-	-
	12 (RB_Pos:0)	21.68	21.63	21.72	22.50	-	-	-	-

	12 (RB_Pos:6)	21.77	21.72	22.17	22.50	-	-	-	-
	12 (RB_Pos:13)	21.66	21.69	22.24	22.50	-	-	-	-
	25 (RB_Pos:0)	20.77	21.26	21.31	21.50	-	-	-	-

FDD LTE Band 7 Power Level C1_Ant4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20 MHz	1 (RB_Pos:0)	19.70	19.87	19.70	20.50	19.76	19.54	19.71	20.50
	1 (RB_Pos:50)	19.73	19.79	19.62	20.50	19.71	19.44	19.70	20.50
	1 (RB_Pos:99)	19.72	19.77	19.73	20.50	19.74	19.56	19.71	20.50
	50 (RB_Pos:0)	19.68	19.50	19.64	20.50	19.67	19.79	19.28	20.50
	50 (RB_Pos:25)	19.75	19.48	19.66	20.50	19.76	19.77	19.32	20.50
	50 (RB_Pos:50)	19.67	19.33	19.55	20.50	19.71	19.77	19.62	20.50
	100 (RB_Pos:0)	19.75	19.58	19.74	20.50	19.78	19.75	19.75	20.50
	Channel	64QAM							
	1 (RB_Pos:0)	19.65	19.40	19.69	20.50	-	-	-	-
	1 (RB_Pos:50)	19.68	19.33	19.66	20.50	-	-	-	-
	1 (RB_Pos:99)	19.67	19.47	19.68	20.50	-	-	-	-
	50 (RB_Pos:0)	19.55	19.66	19.13	20.50	-	-	-	-
	50 (RB_Pos:25)	19.71	19.62	19.20	20.50	-	-	-	-
	50 (RB_Pos:50)	19.59	19.61	19.54	20.50	-	-	-	-
	100 (RB_Pos:0)	19.30	19.24	19.30	19.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	19.74	19.77	19.73	20.50	19.72	19.57	19.71	20.50
	1 (RB_Pos:38)	19.77	19.79	19.78	20.50	19.75	19.52	19.72	20.50
	1 (RB_Pos:74)	19.73	19.79	19.77	20.50	19.77	19.61	19.71	20.50
	36 (RB_Pos:0)	19.70	19.62	19.75	20.50	19.65	19.64	19.64	20.50
	36 (RB_Pos:20)	19.76	19.53	19.81	20.50	19.73	19.61	19.65	20.50
	36 (RB_Pos:39)	19.73	19.47	19.71	20.50	19.72	19.48	19.55	20.50
	75 (RB_Pos:0)	19.73	19.62	19.73	20.50	19.77	19.74	19.72	20.50
	Channel	64QAM							
	1 (RB_Pos:0)	19.61	19.43	19.69	20.50	-	-	-	-
	1 (RB_Pos:38)	19.72	19.41	19.68	20.50	-	-	-	-
	1 (RB_Pos:74)	19.70	19.52	19.68	20.50	-	-	-	-
	36 (RB_Pos:0)	19.53	19.51	19.49	20.50	-	-	-	-
	36 (RB_Pos:20)	19.68	19.46	19.53	20.50	-	-	-	-
	36 (RB_Pos:39)	19.60	19.32	19.47	20.50	-	-	-	-
	75 (RB_Pos:0)	19.29	19.23	19.27	19.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit	16QAM			Tune up limit
	Channel	20800	21100	21400		20800	21100	21400	

					(dBm)				(dBm)
10 MHz	1 (RB_Pos:0)	19.72	19.83	19.76	20.50	19.71	19.55	19.71	20.50
	1 (RB_Pos:25)	19.76	19.80	19.72	20.50	19.71	19.53	19.74	20.50
	1 (RB_Pos:49)	19.81	19.81	19.66	20.50	19.73	19.55	19.76	20.50
	25 (RB_Pos:0)	19.73	19.63	19.81	20.50	19.76	19.62	19.67	20.50
	25 (RB_Pos:12)	19.72	19.54	19.77	20.50	19.77	19.55	19.63	20.50
	25 (RB_Pos:25)	19.77	19.57	19.77	20.50	19.69	19.55	19.61	20.50
	50 (RB_Pos:0)	19.74	19.58	19.75	20.50	19.66	19.79	19.77	20.50
	Channel	64QAM							
	1 (RB_Pos:0)	19.60	19.41	19.69	20.50	-	-	-	-
	1 (RB_Pos:25)	19.68	19.42	19.70	20.50	-	-	-	-
	1 (RB_Pos:49)	19.66	19.46	19.73	20.50	-	-	-	-
	25 (RB_Pos:0)	19.64	19.49	19.52	20.50	-	-	-	-
	25 (RB_Pos:12)	19.72	19.40	19.51	20.50	-	-	-	-
	25 (RB_Pos:25)	19.57	19.39	19.53	20.50	-	-	-	-
	50 (RB_Pos:0)	19.18	19.28	19.32	19.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	19.69	19.47	19.37	20.50	19.61	19.77	19.77	20.50
	1 (RB_Pos:13)	19.64	19.46	19.28	20.50	19.76	19.71	19.73	20.50
	1 (RB_Pos:24)	19.63	19.51	19.31	20.50	19.76	19.63	19.80	20.50
	12 (RB_Pos:0)	19.54	19.48	19.81	20.50	19.57	19.60	19.67	20.50
	12 (RB_Pos:6)	19.51	19.45	19.75	20.50	19.54	19.57	19.62	20.50
	12 (RB_Pos:13)	19.47	19.45	19.81	20.50	19.50	19.54	19.71	20.50
	25 (RB_Pos:0)	19.54	19.47	19.80	20.50	19.55	19.55	19.73	20.50
	Channel	64QAM							
	1 (RB_Pos:0)	19.50	19.63	19.75	20.50	-	-	-	-
	1 (RB_Pos:13)	19.73	19.60	19.69	20.50	-	-	-	-
	1 (RB_Pos:24)	19.69	19.54	19.77	20.50	-	-	-	-
	12 (RB_Pos:0)	19.45	19.47	19.50	19.50	-	-	-	-
	12 (RB_Pos:6)	19.49	19.42	19.50	19.50	-	-	-	-
	12 (RB_Pos:13)	19.38	19.38	19.43	19.50	-	-	-	-
	25 (RB_Pos:0)	19.07	19.04	19.28	19.50	-	-	-	-

FDD LTE Band 12 Power Level A1&B1&C1_Ant0									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23060	23095	23130		23060	23095	23130	
10 MHz	1 (RB_Pos:0)	23.92	23.75	23.73	24.50	22.79	23.21	22.74	23.50
	1 (RB_Pos:25)	23.98	23.79	23.76	24.50	22.81	23.16	22.75	23.50
	1 (RB_Pos:49)	23.87	23.71	23.71	24.50	22.63	23.10	22.71	23.50
	25 (RB_Pos:0)	22.78	22.74	22.78	23.50	21.79	21.76	21.87	22.50

	25 (RB_Pos:12)	22.82	22.75	22.77	23.50	21.83	21.81	21.87	22.50
	25 (RB_Pos:25)	22.82	22.71	22.74	23.50	21.85	21.76	21.82	22.50
	50 (RB_Pos:0)	22.82	22.77	22.78	23.50	21.81	21.77	21.78	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.68	22.07	21.72	22.50	-	-	-	-
	1 (RB_Pos:25)	21.78	22.05	21.71	22.50	-	-	-	-
	1 (RB_Pos:49)	21.56	22.01	21.68	22.50	-	-	-	-
	25 (RB_Pos:0)	20.67	20.63	20.72	21.50	-	-	-	-
	25 (RB_Pos:12)	20.78	20.66	20.75	21.50	-	-	-	-
	25 (RB_Pos:25)	20.73	20.60	20.74	21.50	-	-	-	-
	100 (RB_Pos:0)	20.73	20.76	20.73	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23035	23095	23155		23035	23095	23155	
5 MHz	1 (RB_Pos:0)	23.93	23.85	23.81	24.50	23.22	23.46	22.77	23.50
	1 (RB_Pos:13)	23.95	23.80	23.73	24.50	23.13	23.39	22.67	23.50
	1 (RB_Pos:24)	23.87	23.76	23.82	24.50	23.18	23.41	22.77	23.50
	12 (RB_Pos:0)	22.87	22.80	22.76	23.50	21.91	21.90	21.81	22.50
	12 (RB_Pos:6)	22.86	22.76	22.73	23.50	21.86	21.85	21.77	22.50
	12 (RB_Pos:13)	22.87	22.70	22.67	23.50	21.92	21.83	21.69	22.50
	25 (RB_Pos:0)	22.85	22.74	22.70	23.50	21.89	21.82	21.68	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.11	22.32	21.75	22.50	-	-	-	-
	1 (RB_Pos:13)	22.10	22.28	21.63	22.50	-	-	-	-
	1 (RB_Pos:24)	22.11	22.32	21.74	22.50	-	-	-	-
	12 (RB_Pos:0)	20.79	20.77	20.66	21.50	-	-	-	-
	12 (RB_Pos:6)	20.81	20.70	20.65	21.50	-	-	-	-
	12 (RB_Pos:13)	20.80	20.67	20.61	21.50	-	-	-	-
	25 (RB_Pos:0)	20.81	20.81	20.63	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23025	23095	23165		23025	23095	23165	
3 MHz	1 (RB_Pos:0)	23.91	23.67	23.60	24.50	22.78	23.15	22.68	23.50
	1 (RB_Pos:8)	23.88	23.68	23.64	24.50	22.75	23.15	22.66	23.50
	1 (RB_Pos:14)	23.84	23.60	23.68	24.50	22.71	23.12	22.69	23.50
	8 (RB_Pos:0)	22.82	22.72	22.72	23.50	21.94	21.81	21.75	22.50
	8 (RB_Pos:3)	22.82	22.73	22.69	23.50	21.96	21.81	21.72	22.50
	8 (RB_Pos:7)	22.82	22.68	22.72	23.50	21.92	21.75	21.77	22.50
	15 (RB_Pos:0)	22.83	22.73	22.70	23.50	21.88	21.77	21.64	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.67	22.01	21.66	22.50	-	-	-	-
	1 (RB_Pos:8)	21.72	22.04	21.62	22.50	-	-	-	-
	1 (RB_Pos:14)	21.64	22.03	21.66	22.50	-	-	-	-
	8 (RB_Pos:0)	20.82	20.68	20.60	22.50	-	-	-	-

	8 (RB_Pos:3)	20.91	20.66	20.60	22.50	-	-	-	-
	8 (RB_Pos:7)	20.80	20.59	20.69	22.50	-	-	-	-
	15 (RB_Pos:0)	20.80	20.76	20.59	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23017	23095	23173		23017	23095	23173	
1.4 MHz	1 (RB_Pos:0)	23.74	23.72	23.62	24.50	22.96	23.29	22.70	23.50
	1 (RB_Pos:3)	23.78	23.65	23.65	24.50	23.02	23.13	22.74	23.50
	1 (RB_Pos:5)	23.79	23.66	23.66	24.50	23.00	23.20	22.75	23.50
	3 (RB_Pos:0)	23.86	23.67	23.79	24.50	22.91	22.92	22.86	23.50
	3 (RB_Pos:1)	23.89	23.67	23.87	24.50	22.93	22.95	22.89	23.50
	3 (RB_Pos:3)	23.90	23.64	23.82	24.50	22.94	22.88	22.90	23.50
	6 (RB_Pos:0)	22.88	22.78	22.78	23.50	21.99	21.65	21.93	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.85	22.15	21.68	22.50	-	-	-	-
	1 (RB_Pos:3)	21.99	22.02	21.70	22.50	-	-	-	-
	1 (RB_Pos:5)	21.93	22.11	21.72	22.50	-	-	-	-
	3 (RB_Pos:0)	21.79	21.79	21.71	22.50	-	-	-	-
	3 (RB_Pos:1)	21.88	21.80	21.77	22.50	-	-	-	-
	3 (RB_Pos:3)	21.82	21.72	21.82	22.50	-	-	-	-
	6 (RB_Pos:0)	20.91	20.64	20.88	21.50	-	-	-	-

FDD LTE Band 26 Power Level A1&B1&C1_Ant0									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26765	26865	26965		26765	26865	26965	
15 MHz	1 (RB_Pos:0)	23.60	23.58	23.50	24.50	22.48	22.98	22.90	23.50
	1 (RB_Pos:38)	23.76	23.83	23.69	24.50	22.57	23.07	22.95	23.50
	1 (RB_Pos:74)	23.64	23.59	23.39	24.50	22.52	22.96	22.80	23.50
	36 (RB_Pos:0)	22.57	22.72	22.62	23.50	21.54	21.70	21.62	22.50
	36 (RB_Pos:20)	22.58	22.70	22.61	23.50	21.59	21.72	21.62	22.50
	36 (RB_Pos:39)	22.64	22.63	22.56	23.50	21.65	21.67	21.51	22.50
	75 (RB_Pos:0)	22.58	22.68	22.61	23.50	21.58	21.68	21.61	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.37	21.84	21.88	22.50	-	-	-	-
	1 (RB_Pos:38)	21.54	21.96	21.91	22.50	-	-	-	-
	1 (RB_Pos:74)	21.45	21.87	21.77	22.50	-	-	-	-
	36 (RB_Pos:0)	20.42	20.57	20.47	21.50	-	-	-	-
	36 (RB_Pos:20)	20.54	20.57	20.50	21.50	-	-	-	-
	36 (RB_Pos:39)	20.53	20.51	20.43	21.50	-	-	-	-
	75 (RB_Pos:0)	20.50	20.67	20.56	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit	16QAM			Tune up limit
	Channel	26740	26865	26990		26740	26865	26990	

					(dBm)				(dBm)
10 MHz	1 (RB_Pos:0)	23.64	23.65	23.57	24.50	22.53	23.03	22.60	23.50
	1 (RB_Pos:25)	23.71	23.71	23.60	24.50	22.56	23.09	22.65	23.50
	1 (RB_Pos:49)	23.68	23.60	23.51	24.50	22.55	22.98	22.48	23.50
	25 (RB_Pos:0)	22.63	22.70	22.66	23.50	21.66	21.75	21.75	22.50
	25 (RB_Pos:12)	22.67	22.71	22.66	23.50	21.71	21.79	21.77	22.50
	25 (RB_Pos:25)	22.74	22.68	22.55	23.50	21.67	21.75	21.66	22.50
	50 (RB_Pos:0)	22.69	22.72	22.66	23.50	21.64	21.73	21.66	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.42	21.89	21.58	22.50	-	-	-	-
	1 (RB_Pos:25)	21.53	21.98	21.61	22.50	-	-	-	-
	1 (RB_Pos:49)	21.48	21.89	21.45	22.50	-	-	-	-
	25 (RB_Pos:0)	20.54	20.62	20.60	21.50	-	-	-	-
	25 (RB_Pos:12)	20.66	20.64	20.65	21.50	-	-	-	-
	25 (RB_Pos:25)	20.55	20.59	20.58	21.50	-	-	-	-
	50 (RB_Pos:0)	20.56	20.72	20.61	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26715	26865	27015		26715	26865	27015	
5 MHz	1 (RB_Pos:0)	23.71	23.68	23.64	24.50	22.93	23.30	22.70	23.50
	1 (RB_Pos:13)	23.74	23.69	23.63	24.50	22.95	23.38	22.60	23.50
	1 (RB_Pos:24)	23.75	23.66	23.63	24.50	22.94	23.34	22.55	23.50
	12 (RB_Pos:0)	22.63	22.71	22.68	23.50	21.69	21.83	21.75	22.50
	12 (RB_Pos:6)	22.65	22.74	22.63	23.50	21.69	21.87	21.71	22.50
	12 (RB_Pos:13)	22.65	22.71	22.58	23.50	21.70	21.83	21.62	22.50
	25 (RB_Pos:0)	22.63	22.71	22.63	23.50	21.70	21.81	21.60	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.82	22.16	21.68	22.50	-	-	-	-
	1 (RB_Pos:13)	21.92	22.27	21.56	22.50	-	-	-	-
	1 (RB_Pos:24)	21.87	22.25	21.52	22.50	-	-	-	-
	12 (RB_Pos:0)	20.57	20.70	20.60	21.50	-	-	-	-
	12 (RB_Pos:6)	20.64	20.72	20.59	21.50	-	-	-	-
	12 (RB_Pos:13)	20.58	20.67	20.54	21.50	-	-	-	-
	25 (RB_Pos:0)	20.62	20.80	20.55	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26705	26865	27025		26705	26865	27025	
3 MHz	1 (RB_Pos:0)	23.64	23.69	23.55	24.50	22.51	23.10	22.65	23.50
	1 (RB_Pos:8)	23.62	23.63	23.54	24.50	22.52	23.08	22.58	23.50
	1 (RB_Pos:14)	23.62	23.60	23.51	24.50	22.50	23.05	22.51	23.50
	8 (RB_Pos:0)	22.56	22.69	22.65	23.50	21.72	21.79	21.70	22.50
	8 (RB_Pos:3)	22.61	22.68	22.65	23.50	21.74	21.77	21.66	22.50
	8 (RB_Pos:7)	22.58	22.69	22.59	23.50	21.73	21.77	21.61	22.50
	15 (RB_Pos:0)	22.61	22.73	22.65	23.50	21.66	21.76	21.56	22.50

	Channel	64QAM							
	1 (RB_Pos:0)	21.40	21.96	21.63	22.50	-	-	-	-
	1 (RB_Pos:8)	21.49	21.97	21.54	22.50	-	-	-	-
	1 (RB_Pos:14)	21.43	21.96	21.48	22.50	-	-	-	-
	8 (RB_Pos:0)	20.60	20.66	20.55	22.50	-	-	-	-
	8 (RB_Pos:3)	20.69	20.62	20.54	22.50	-	-	-	-
	8 (RB_Pos:7)	20.61	20.61	20.53	22.50	-	-	-	-
	15 (RB_Pos:0)	20.58	20.75	20.51	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26697	26865	27033		26697	26865	27033	
1.4 MHz	1 (RB_Pos:0)	23.50	23.63	23.50	24.50	22.72	23.10	22.59	23.50
	1 (RB_Pos:3)	23.53	23.62	23.48	24.50	22.76	23.08	22.56	23.50
	1 (RB_Pos:5)	23.52	23.63	23.45	24.50	22.74	23.07	22.55	23.50
	3 (RB_Pos:0)	23.60	23.66	23.61	24.50	22.64	22.95	22.74	23.50
	3 (RB_Pos:1)	23.60	23.67	23.67	24.50	22.66	22.92	22.73	23.50
	3 (RB_Pos:3)	23.62	23.68	23.62	24.50	22.70	22.94	22.72	23.50
	6 (RB_Pos:0)	22.65	22.75	22.63	23.50	21.76	21.59	21.80	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.61	21.96	21.57	22.50	-	-	-	-
	1 (RB_Pos:3)	21.73	21.97	21.52	22.50	-	-	-	-
	1 (RB_Pos:5)	21.67	21.98	21.52	22.50	-	-	-	-
	3 (RB_Pos:0)	21.52	21.82	21.59	22.50	-	-	-	-
	3 (RB_Pos:1)	21.61	21.77	21.61	22.50	-	-	-	-
	3 (RB_Pos:3)	21.58	21.78	21.64	22.50	-	-	-	-
	6 (RB_Pos:0)	20.68	20.58	20.75	21.50	-	-	-	-

TDD LTE Band 41 Power Level A1&B1&C1_Ant0													
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39750	40185	40620	41055	41490		39750	40185	40620	41055	41490	
20MHz	1 (RB_Pos:0)	23.86	23.84	23.62	23.72	23.74	24.50	21.97	21.74	21.50	21.41	21.97	22.00
	1 (RB_Pos:50)	23.85	23.64	23.69	23.65	23.76	24.50	21.93	21.74	21.55	21.49	21.97	22.00
	1 (RB_Pos:99)	23.80	23.54	23.57	23.60	23.69	24.50	21.85	21.64	21.49	21.51	21.88	22.00
	50 (RB_Pos:0)	22.86	22.69	22.71	22.66	22.75	23.50	21.79	21.79	21.83	21.80	21.93	22.00
	50 (RB_Pos:25)	22.90	22.65	22.67	22.65	22.70	23.50	21.85	21.78	21.80	21.80	21.88	22.00
	50 (RB_Pos:50)	22.86	22.61	22.63	22.69	22.64	23.50	21.79	21.71	21.79	21.82	21.81	22.00
	100 (RB_Pos:0)	22.86	22.64	22.68	22.65	22.66	23.50	21.81	21.77	21.79	21.80	21.84	22.00
	Channel	64QAM											
	1 (RB_Pos:0)	20.86	20.60	20.48	20.30	20.83	22.00	-	-	-	-	-	-
	1 (RB_Pos:50)	20.90	20.63	20.51	20.46	20.86	22.00	-	-	-	-	-	-
	1 (RB_Pos:99)	20.78	20.55	20.46	20.44	20.79	22.00	-	-	-	-	-	-
	50 (RB_Pos:0)	20.67	20.66	20.68	20.68	20.80	21.00	-	-	-	-	-	-

	50 (RB_Pos:25)	20.80	20.63	20.68	20.75	20.73	21.00	-	-	-	-	-	-
	50 (RB_Pos:50)	20.67	20.55	20.71	20.70	20.65	21.00	-	-	-	-	-	-
	100 (RB_Pos:0)	20.73	20.76	20.74	20.72	20.83	21.00	-	-	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39725	40160	40620	41080	41515		39725	40160	40620	41080	41515	
15MHz	1 (RB_Pos:0)	23.74	23.67	23.59	23.51	23.76	24.50	21.93	21.69	21.76	21.67	21.72	22.00
	1 (RB_Pos:38)	23.82	23.73	23.69	23.64	23.82	24.50	21.89	21.72	21.84	21.80	21.80	22.00
	1 (RB_Pos:74)	23.84	23.62	23.61	23.61	23.72	24.50	21.82	21.63	21.78	21.79	21.69	22.00
	36 (RB_Pos:0)	22.87	22.66	22.61	22.56	22.67	23.50	21.88	21.83	21.77	21.75	21.90	22.00
	36 (RB_Pos:20)	22.88	22.63	22.62	22.59	22.68	23.50	21.88	21.80	21.79	21.80	21.92	22.00
	36 (RB_Pos:39)	22.84	22.63	22.60	22.60	22.65	23.50	21.84	21.79	21.76	21.79	21.89	22.00
	75 (RB_Pos:0)	22.92	22.69	22.63	22.62	22.71	23.50	21.88	21.83	21.79	21.79	21.85	22.00
	Channel	64QAM											
	1 (RB_Pos:0)	20.79	20.67	20.65	20.53	20.70	22.00	-	-	-	-	-	-
	1 (RB_Pos:38)	20.78	20.68	20.81	20.69	20.76	22.00	-	-	-	-	-	-
	1 (RB_Pos:74)	20.73	20.60	20.71	20.70	20.66	22.00	-	-	-	-	-	-
	36 (RB_Pos:0)	20.75	20.68	20.65	20.62	20.75	21.00	-	-	-	-	-	-
	36 (RB_Pos:20)	20.73	20.68	20.74	20.65	20.80	21.00	-	-	-	-	-	-
	36 (RB_Pos:39)	20.68	20.71	20.64	20.63	20.81	21.00	-	-	-	-	-	-
	75 (RB_Pos:0)	20.87	20.78	20.71	20.78	20.80	21.00	-	-	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39700	40135	40620	41105	41540		39700	40135	40620	41105	41540	
10MHz	1 (RB_Pos:0)	23.85	23.75	23.65	23.57	23.74	24.50	21.95	21.99	21.77	21.97	21.88	22.00
	1 (RB_Pos:25)	23.77	23.78	23.71	23.66	23.78	24.50	21.93	21.99	21.83	21.88	21.92	22.00
	1 (RB_Pos:49)	23.79	23.73	23.64	23.66	23.74	24.50	21.87	21.96	21.78	21.88	21.87	22.00
	25 (RB_Pos:0)	22.88	22.75	22.67	22.62	22.73	23.50	21.88	21.91	21.82	21.80	21.95	22.00
	25 (RB_Pos:12)	22.91	22.71	22.63	22.62	22.73	23.50	21.89	21.86	21.81	21.82	21.92	22.00
	25 (RB_Pos:25)	22.91	22.71	22.59	22.65	22.70	23.50	21.90	21.87	21.78	21.83	21.92	22.00
	50 (RB_Pos:0)	22.93	22.72	22.67	22.64	22.74	23.50	21.88	21.88	21.81	21.82	21.91	22.00
	Channel	64QAM											
	1 (RB_Pos:0)	20.81	20.88	20.63	20.95	20.86	22.00	-	-	-	-	-	-
	1 (RB_Pos:25)	20.82	20.96	20.72	20.84	20.88	22.00	-	-	-	-	-	-
	1 (RB_Pos:49)	20.78	20.89	20.69	20.85	20.84	22.00	-	-	-	-	-	-
	25 (RB_Pos:0)	20.75	20.79	20.69	20.65	20.80	21.00	-	-	-	-	-	-
	25 (RB_Pos:12)	20.74	20.81	20.66	20.70	20.80	21.00	-	-	-	-	-	-
	25 (RB_Pos:25)	20.74	20.75	20.62	20.75	20.84	21.00	-	-	-	-	-	-
	50 (RB_Pos:0)	20.87	20.80	20.80	20.77	20.86	21.00	-	-	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up	16QAM					Tune up
	Channel	39675	40110	40620	41130	41565		39675	40110	40620	41130	41565	

							limit (dBm)						limit (dBm)
5MHz	1 (RB_Pos:0)	23.73	23.83	23.74	23.67	23.85	24.50	22.91	22.98	23.00	22.92	22.03	23.00
	1 (RB_Pos:13)	23.78	23.81	23.73	23.68	23.83	24.50	22.97	22.99	22.96	22.94	22.97	23.00
	1 (RB_Pos:24)	23.72	23.80	23.77	23.67	23.84	24.50	22.98	22.98	22.92	22.94	22.92	23.00
	12 (RB_Pos:0)	23.00	22.79	22.70	22.68	22.78	23.50	21.90	21.96	21.88	21.81	21.95	22.00
	12 (RB_Pos:6)	23.00	22.78	22.66	22.67	22.77	23.50	21.87	21.95	21.89	21.81	21.92	22.00
	12 (RB_Pos:13)	22.98	22.77	22.66	22.63	22.76	23.50	21.90	21.93	21.90	21.76	21.92	22.00
	25 (RB_Pos:0)	22.97	22.77	22.66	22.64	22.76	23.50	21.96	21.93	21.88	21.82	21.91	22.00
	Channel	64QAM											
	1 (RB_Pos:0)	21.80	21.84	21.98	21.81	20.89	22.00	-	-	-	-	-	-
	1 (RB_Pos:13)	21.94	21.88	21.92	21.91	21.86	22.00	-	-	-	-	-	-
	1 (RB_Pos:24)	21.91	21.89	21.89	21.87	21.83	22.00	-	-	-	-	-	-
	12 (RB_Pos:0)	20.78	20.83	20.73	20.69	20.82	21.00	-	-	-	-	-	-
	12 (RB_Pos:6)	20.82	20.80	20.77	20.76	20.77	21.00	-	-	-	-	-	-
	12 (RB_Pos:13)	20.78	20.77	20.82	20.64	20.76	21.00	-	-	-	-	-	-
	25 (RB_Pos:0)	20.88	20.92	20.83	20.74	20.90	21.00	-	-	-	-	-	-

FDD LTE Band 66 Power Level A1/B1_Ant1									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	23.36	23.65	23.72	24.50	23.08	22.97	23.20	23.50
	1 (RB_Pos:50)	23.48	23.75	23.88	24.50	23.23	23.10	23.33	23.50
	1 (RB_Pos:99)	23.49	23.67	23.76	24.50	23.21	22.98	23.24	23.50
	50 (RB_Pos:0)	22.51	22.74	23.00	23.50	21.46	21.72	21.94	22.50
	50 (RB_Pos:25)	22.57	22.83	22.97	23.50	21.55	21.80	21.92	22.50
	50 (RB_Pos:50)	22.61	22.80	22.97	23.50	21.58	21.73	21.90	22.50
	100 (RB_Pos:0)	22.54	22.76	23.01	23.50	21.53	21.75	21.94	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.97	21.83	22.18	22.50	-	-	-	-
	1 (RB_Pos:50)	22.20	21.99	22.29	22.50	-	-	-	-
	1 (RB_Pos:99)	22.14	21.89	22.21	22.50	-	-	-	-
	50 (RB_Pos:0)	20.34	20.59	20.79	21.50	-	-	-	-
	50 (RB_Pos:25)	20.50	20.65	20.80	21.50	-	-	-	-
	50 (RB_Pos:50)	20.46	20.57	20.82	21.50	-	-	-	-
	100 (RB_Pos:0)	20.45	20.74	20.89	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	23.45	23.71	23.78	24.50	22.31	23.14	23.18	23.50
	1 (RB_Pos:38)	23.58	23.73	23.84	24.50	22.38	23.14	23.22	23.50
	1 (RB_Pos:74)	23.56	23.69	23.81	24.50	22.40	23.09	23.17	23.50
	36 (RB_Pos:0)	22.41	22.75	22.95	23.50	21.43	21.80	21.91	22.50

	36 (RB_Pos:20)	22.49	22.80	22.90	23.50	21.49	21.84	21.92	22.50
	36 (RB_Pos:39)	22.51	22.72	22.95	23.50	21.51	21.79	21.96	22.50
	75 (RB_Pos:0)	22.49	22.78	22.97	23.50	21.47	21.76	21.93	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.20	22.00	22.16	22.50	-	-	-	-
	1 (RB_Pos:38)	21.35	22.03	22.18	22.50	-	-	-	-
	1 (RB_Pos:74)	21.33	22.00	22.14	22.50	-	-	-	-
	36 (RB_Pos:0)	20.31	20.67	20.76	21.50	-	-	-	-
	36 (RB_Pos:20)	20.44	20.69	20.80	21.50	-	-	-	-
	36 (RB_Pos:39)	20.39	20.63	20.88	21.50	-	-	-	-
	75 (RB_Pos:0)	20.39	20.75	20.88	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	23.51	23.76	23.87	24.50	22.34	23.14	22.91	23.50
	1 (RB_Pos:25)	23.56	23.74	23.84	24.50	22.34	23.14	22.93	23.50
	1 (RB_Pos:49)	23.57	23.72	23.82	24.50	22.37	23.08	22.92	23.50
	25 (RB_Pos:0)	22.41	22.76	22.93	23.50	21.43	21.81	22.04	22.50
	25 (RB_Pos:12)	22.49	22.74	22.97	23.50	21.51	21.77	22.05	22.50
	25 (RB_Pos:25)	22.50	22.80	22.98	23.50	21.55	21.83	22.07	22.50
	50 (RB_Pos:0)	22.53	22.79	22.99	23.50	21.47	21.81	22.01	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.23	22.00	21.89	22.50	-	-	-	-
	1 (RB_Pos:25)	21.31	22.03	21.89	22.50	-	-	-	-
	1 (RB_Pos:49)	21.30	21.99	21.89	22.50	-	-	-	-
	25 (RB_Pos:0)	20.31	20.68	20.89	21.50	-	-	-	-
	25 (RB_Pos:12)	20.46	20.62	20.93	21.50	-	-	-	-
	25 (RB_Pos:25)	20.43	20.67	20.99	21.50	-	-	-	-
	50 (RB_Pos:0)	20.39	20.80	20.96	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	23.70	23.74	23.82	24.50	22.82	23.41	22.91	23.50
	1 (RB_Pos:13)	23.73	23.73	23.85	24.50	22.83	23.41	22.91	23.50
	1 (RB_Pos:24)	23.75	23.73	23.76	24.50	22.83	23.44	22.90	23.50
	12 (RB_Pos:0)	22.47	22.79	22.94	23.50	21.47	21.91	22.02	22.50
	12 (RB_Pos:6)	22.48	22.74	22.92	23.50	21.53	21.83	21.98	22.50
	12 (RB_Pos:13)	22.49	22.68	22.90	23.50	21.51	21.78	21.95	22.50
	25 (RB_Pos:0)	22.45	22.72	22.92	23.50	21.52	21.81	21.90	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.71	22.27	21.89	22.50	-	-	-	-
	1 (RB_Pos:13)	21.80	22.30	21.87	22.50	-	-	-	-
	1 (RB_Pos:24)	21.76	22.35	21.87	22.50	-	-	-	-
	12 (RB_Pos:0)	20.35	20.78	20.87	21.50	-	-	-	-

	12 (RB_Pos:6)	20.48	20.68	20.86	21.50	-	-	-	-
	12 (RB_Pos:13)	20.39	20.62	20.87	21.50	-	-	-	-
	25 (RB_Pos:0)	20.44	20.80	20.85	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3 MHz	1 (RB_Pos:0)	23.48	23.66	23.82	24.50	22.34	23.12	22.94	23.50
	1 (RB_Pos:8)	23.45	23.67	23.80	24.50	22.32	23.13	22.89	23.50
	1 (RB_Pos:14)	23.47	23.65	23.81	24.50	22.31	23.12	22.90	23.50
	8 (RB_Pos:0)	22.40	22.75	22.90	23.50	21.54	21.84	21.95	22.50
	8 (RB_Pos:3)	22.42	22.72	22.91	23.50	21.57	21.78	21.96	22.50
	8 (RB_Pos:7)	22.41	22.70	22.87	23.50	21.52	21.78	21.96	22.50
	15 (RB_Pos:0)	22.44	22.71	22.91	23.50	21.48	21.75	21.88	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.23	21.98	21.92	22.50	-	-	-	-
	1 (RB_Pos:8)	21.29	22.02	21.85	22.50	-	-	-	-
	1 (RB_Pos:14)	21.24	22.03	21.87	22.50	-	-	-	-
	8 (RB_Pos:0)	20.42	20.71	20.80	21.50	-	-	-	-
	8 (RB_Pos:3)	20.52	20.63	20.84	21.50	-	-	-	-
	8 (RB_Pos:7)	20.40	20.62	20.88	21.50	-	-	-	-
	15 (RB_Pos:0)	20.40	20.74	20.83	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	23.27	23.64	23.79	24.50	22.53	23.11	22.94	23.50
	1 (RB_Pos:3)	23.26	23.62	23.83	24.50	22.54	23.08	22.98	23.50
	1 (RB_Pos:5)	23.30	23.63	23.81	24.50	22.57	23.08	22.95	23.50
	3 (RB_Pos:0)	23.39	23.75	23.86	24.50	22.50	22.93	23.05	23.50
	3 (RB_Pos:1)	23.41	23.73	23.84	24.50	22.48	22.88	23.03	23.50
	3 (RB_Pos:3)	23.40	23.70	23.87	24.50	22.49	22.88	23.04	23.50
	6 (RB_Pos:0)	22.45	22.76	22.97	23.50	21.55	21.59	22.11	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.42	21.97	21.92	22.50	-	-	-	-
	1 (RB_Pos:3)	21.51	21.97	21.94	22.50	-	-	-	-
	1 (RB_Pos:5)	21.50	21.99	21.92	22.50	-	-	-	-
	3 (RB_Pos:0)	21.38	21.80	21.90	22.50	-	-	-	-
	3 (RB_Pos:1)	21.43	21.73	21.91	22.50	-	-	-	-
	3 (RB_Pos:3)	21.37	21.72	21.96	22.50	-	-	-	-
	6 (RB_Pos:0)	20.47	20.58	21.06	21.50	-	-	-	-

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Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	21.37	21.66	21.69	22.50	21.62	21.56	21.63	22.50
	1 (RB_Pos:50)	21.50	21.80	21.87	22.50	21.72	21.73	21.84	22.50
	1 (RB_Pos:99)	21.49	21.68	21.70	22.50	21.75	21.57	21.66	22.50
	50 (RB_Pos:0)	21.13	21.18	21.45	22.50	21.18	21.18	21.41	22.50
	50 (RB_Pos:25)	21.25	21.27	21.41	22.50	21.20	21.26	21.41	22.50
	50 (RB_Pos:50)	21.19	21.22	21.44	22.50	21.19	21.25	21.43	22.50
	100 (RB_Pos:0)	21.15	21.19	21.44	22.50	21.22	21.20	21.41	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.51	21.42	21.61	22.50	-	-	-	-
	1 (RB_Pos:50)	21.69	21.62	21.80	22.50	-	-	-	-
	1 (RB_Pos:99)	21.68	21.48	21.63	22.50	-	-	-	-
	50 (RB_Pos:0)	21.06	21.05	21.26	22.50	-	-	-	-
	50 (RB_Pos:25)	21.15	21.11	21.29	22.50	-	-	-	-
	50 (RB_Pos:50)	21.07	21.09	21.35	22.50	-	-	-	-
	100 (RB_Pos:0)	20.74	20.69	20.96	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	21.37	21.65	21.70	22.50	21.02	21.55	21.68	22.50
	1 (RB_Pos:38)	21.43	21.73	21.82	22.50	21.05	21.65	21.80	22.50
	1 (RB_Pos:74)	21.39	21.65	21.75	22.50	21.05	21.52	21.71	22.50
	36 (RB_Pos:0)	21.09	21.17	21.35	22.50	21.15	21.28	21.40	22.50
	36 (RB_Pos:20)	21.10	21.22	21.36	22.50	21.17	21.28	21.37	22.50
	36 (RB_Pos:39)	21.16	21.23	21.44	22.50	21.15	21.31	21.41	22.50
	75 (RB_Pos:0)	21.11	21.17	21.43	22.50	21.14	21.23	21.44	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	20.91	21.41	21.66	22.50	-	-	-	-
	1 (RB_Pos:38)	21.02	21.54	21.76	22.50	-	-	-	-
	1 (RB_Pos:74)	20.98	21.43	21.68	22.50	-	-	-	-
	36 (RB_Pos:0)	21.03	21.15	21.25	22.50	-	-	-	-
	36 (RB_Pos:20)	21.12	21.13	21.25	22.50	-	-	-	-
	36 (RB_Pos:39)	21.03	21.15	21.33	22.50	-	-	-	-
	75 (RB_Pos:0)	20.66	20.72	20.99	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	21.46	21.67	21.80	22.50	21.07	21.55	21.32	22.50
	1 (RB_Pos:25)	21.47	21.78	21.78	22.50	21.06	21.64	21.47	22.50
	1 (RB_Pos:49)	21.44	21.67	21.81	22.50	21.03	21.54	21.31	22.50

	25 (RB_Pos:0)	21.17	21.19	21.35	22.50	21.14	21.25	21.50	22.50
	25 (RB_Pos:12)	21.19	21.20	21.40	22.50	21.21	21.28	21.54	22.50
	25 (RB_Pos:25)	21.12	21.26	21.43	22.50	21.18	21.33	21.55	22.50
	50 (RB_Pos:0)	21.18	21.25	21.45	22.50	21.13	21.29	21.47	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	20.96	21.41	21.30	22.50	-	-	-	-
	1 (RB_Pos:25)	21.03	21.53	21.43	22.50	-	-	-	-
	1 (RB_Pos:49)	20.96	21.45	21.28	22.50	-	-	-	-
	25 (RB_Pos:0)	21.02	21.12	21.35	22.50	-	-	-	-
	25 (RB_Pos:12)	21.16	21.13	21.42	22.50	-	-	-	-
	25 (RB_Pos:25)	21.06	21.17	21.47	22.50	-	-	-	-
	50 (RB_Pos:0)	20.65	20.78	21.02	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	21.61	21.75	21.85	22.50	21.41	21.78	21.43	22.50
	1 (RB_Pos:13)	21.63	21.75	21.77	22.50	21.37	21.77	21.42	22.50
	1 (RB_Pos:24)	21.57	21.73	21.84	22.50	21.39	21.78	21.41	22.50
	12 (RB_Pos:0)	21.18	21.22	21.38	22.50	21.23	21.35	21.46	22.50
	12 (RB_Pos:6)	21.15	21.20	21.36	22.50	21.23	21.35	21.46	22.50
	12 (RB_Pos:13)	21.10	21.17	21.35	22.50	21.22	21.32	21.42	22.50
	25 (RB_Pos:0)	21.16	21.22	21.39	22.50	21.22	21.31	21.36	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.30	21.64	21.41	22.50	-	-	-	-
	1 (RB_Pos:13)	21.34	21.66	21.38	22.50	-	-	-	-
	1 (RB_Pos:24)	21.32	21.69	21.38	22.50	-	-	-	-
	12 (RB_Pos:0)	21.11	21.22	21.31	22.50	-	-	-	-
	12 (RB_Pos:6)	21.18	21.20	21.34	22.50	-	-	-	-
	12 (RB_Pos:13)	21.10	21.16	21.34	22.50	-	-	-	-
	25 (RB_Pos:0)	20.74	20.80	20.91	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3 MHz	1 (RB_Pos:0)	21.50	21.70	21.80	22.50	21.04	21.60	21.40	22.50
	1 (RB_Pos:8)	21.42	21.71	21.81	22.50	21.04	21.63	21.36	22.50
	1 (RB_Pos:14)	21.38	21.63	21.82	22.50	20.99	21.62	21.35	22.50
	8 (RB_Pos:0)	21.11	21.20	21.36	21.50	21.26	21.31	21.44	22.50
	8 (RB_Pos:3)	21.13	21.20	21.37	21.50	21.23	21.31	21.41	22.50
	8 (RB_Pos:7)	21.14	21.19	21.35	21.50	21.25	21.30	21.43	22.50
	15 (RB_Pos:0)	21.14	21.20	21.37	21.50	21.19	21.27	21.35	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	20.93	21.46	21.38	22.50	-	-	-	-
	1 (RB_Pos:8)	21.01	21.52	21.32	22.50	-	-	-	-
	1 (RB_Pos:14)	20.92	21.53	21.32	22.50	-	-	-	-

	8 (RB_Pos:0)	21.14	21.18	21.29	22.50	-	-	-	-
	8 (RB_Pos:3)	21.18	21.16	21.29	22.50	-	-	-	-
	8 (RB_Pos:7)	21.13	21.14	21.35	22.50	-	-	-	-
	15 (RB_Pos:0)	20.71	20.76	20.90	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	21.45	21.69	21.83	22.50	21.27	21.62	21.40	22.50
	1 (RB_Pos:3)	21.42	21.71	21.82	22.50	21.29	21.61	21.41	22.50
	1 (RB_Pos:5)	21.40	21.70	21.83	22.50	21.29	21.63	21.42	22.50
	3 (RB_Pos:0)	21.50	21.69	21.80	22.50	21.17	21.43	21.52	22.50
	3 (RB_Pos:1)	21.49	21.68	21.85	22.50	21.20	21.40	21.52	22.50
	3 (RB_Pos:3)	21.46	21.66	21.81	22.50	21.21	21.38	21.54	22.50
	6 (RB_Pos:0)	21.15	21.21	21.38	21.50	21.28	21.11	21.58	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	21.16	21.48	21.38	22.50	-	-	-	-
	1 (RB_Pos:3)	21.26	21.50	21.37	22.50	-	-	-	-
	1 (RB_Pos:5)	21.22	21.54	21.39	22.50	-	-	-	-
	3 (RB_Pos:0)	21.05	21.30	21.37	22.50	-	-	-	-
	3 (RB_Pos:1)	21.15	21.25	21.40	22.50	-	-	-	-
	3 (RB_Pos:3)	21.09	21.22	21.46	22.50	-	-	-	-
	6 (RB_Pos:0)	20.80	20.60	21.13	21.50	-	-	-	-

FDD LTE Band 66 Power Level C2_Ant1									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	18.37	18.66	18.69	20.00	18.62	18.56	18.63	20.00
	1 (RB_Pos:50)	18.50	18.80	18.88	20.00	18.72	18.73	18.84	20.00
	1 (RB_Pos:99)	18.49	18.68	18.70	20.00	18.75	18.57	18.66	20.00
	50 (RB_Pos:0)	18.13	18.18	18.45	20.00	18.18	18.18	18.41	20.00
	50 (RB_Pos:25)	18.25	18.27	18.41	20.00	18.20	18.26	18.41	20.00
	50 (RB_Pos:50)	18.19	18.22	18.44	20.00	18.19	18.25	18.43	20.00
	100 (RB_Pos:0)	18.15	18.19	18.44	20.00	18.22	18.20	18.41	20.00
	Channel	64QAM							
	1 (RB_Pos:0)	18.51	18.42	18.61	20.00	-	-	-	-
	1 (RB_Pos:50)	18.69	18.62	18.80	20.00	-	-	-	-
	1 (RB_Pos:99)	18.68	18.48	18.63	20.00	-	-	-	-
	50 (RB_Pos:0)	18.06	18.05	18.26	20.00	-	-	-	-
	50 (RB_Pos:25)	18.15	18.11	18.29	20.00	-	-	-	-
	50 (RB_Pos:50)	18.07	18.09	18.35	20.00	-	-	-	-
	100 (RB_Pos:0)	17.74	17.69	17.96	19.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up

	Channel	132047	132322	132597	limit (dBm)	132047	132322	132597	limit (dBm)
15 MHz	1 (RB_Pos:0)	18.37	18.65	18.70	20.00	18.02	18.55	18.68	20.00
	1 (RB_Pos:38)	18.43	18.73	18.82	20.00	18.05	18.65	18.80	20.00
	1 (RB_Pos:74)	18.39	18.65	18.75	20.00	18.05	18.52	18.71	20.00
	36 (RB_Pos:0)	18.09	18.17	18.35	20.00	18.15	18.28	18.40	20.00
	36 (RB_Pos:20)	18.10	18.22	18.36	20.00	18.17	18.28	18.37	20.00
	36 (RB_Pos:39)	18.16	18.23	18.44	20.00	18.15	18.31	18.41	20.00
	75 (RB_Pos:0)	18.11	18.17	18.43	20.00	18.14	18.23	18.44	20.00
	Channel	64QAM							
	1 (RB_Pos:0)	18.61	18.41	18.66	20.00	-	-	-	-
	1 (RB_Pos:38)	18.02	18.54	18.76	20.00	-	-	-	-
	1 (RB_Pos:74)	18.78	18.43	18.68	20.00	-	-	-	-
	36 (RB_Pos:0)	18.03	18.15	18.25	20.00	-	-	-	-
	36 (RB_Pos:20)	18.12	18.13	18.25	20.00	-	-	-	-
	36 (RB_Pos:39)	18.03	18.15	18.33	20.00	-	-	-	-
	75 (RB_Pos:0)	17.66	17.72	17.99	19.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	18.46	18.67	18.80	18.46	18.35	18.53	18.78	20.00
	1 (RB_Pos:25)	18.47	18.78	18.87	18.47	18.44	18.67	18.83	20.00
	1 (RB_Pos:49)	18.44	18.67	18.81	18.44	18.37	18.58	18.78	20.00
	25 (RB_Pos:0)	18.17	18.19	18.35	18.17	18.05	18.06	18.20	20.00
	25 (RB_Pos:12)	18.19	18.20	18.40	18.19	18.14	18.05	18.28	20.00
	25 (RB_Pos:25)	18.12	18.26	18.43	18.12	18.00	18.10	18.35	20.00
	50 (RB_Pos:0)	18.18	18.25	18.45	18.18	18.27	18.24	18.00	20.00
	Channel	64QAM							
	1 (RB_Pos:0)	18.76	18.41	18.30	20.00	-	-	-	-
	1 (RB_Pos:25)	18.03	18.53	18.43	20.00	-	-	-	-
	1 (RB_Pos:49)	18.46	18.45	18.28	20.00	-	-	-	-
	25 (RB_Pos:0)	18.02	18.12	18.35	20.00	-	-	-	-
	25 (RB_Pos:12)	18.16	18.13	18.42	20.00	-	-	-	-
	25 (RB_Pos:25)	18.06	18.17	18.47	20.00	-	-	-	-
	50 (RB_Pos:0)	17.65	17.78	18.02	19.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	18.61	18.75	18.85	20.00	18.41	18.78	18.43	20.00
	1 (RB_Pos:13)	18.63	18.75	18.87	20.00	18.37	18.77	18.42	20.00
	1 (RB_Pos:24)	18.57	18.73	18.84	20.00	18.39	18.78	18.41	20.00
	12 (RB_Pos:0)	18.18	18.22	18.38	20.00	18.23	18.35	18.46	20.00
	12 (RB_Pos:6)	18.15	18.20	18.36	20.00	18.23	18.35	18.46	20.00
	12 (RB_Pos:13)	18.10	18.17	18.35	20.00	18.22	18.32	18.42	20.00

	25 (RB_Pos:0)	18.16	18.22	18.39	20.00	18.22	18.31	18.36	20.00
	Channel	64QAM							
	1 (RB_Pos:0)	18.30	18.64	18.41	20.00	-	-	-	-
	1 (RB_Pos:13)	18.34	18.66	18.38	20.00	-	-	-	-
	1 (RB_Pos:24)	18.32	18.69	18.38	20.00	-	-	-	-
	12 (RB_Pos:0)	18.11	18.22	18.31	20.00	-	-	-	-
	12 (RB_Pos:6)	18.18	18.20	18.34	20.00	-	-	-	-
	12 (RB_Pos:13)	18.10	18.16	18.34	20.00	-	-	-	-
	25 (RB_Pos:0)	17.74	17.80	17.91	19.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3 MHz	1 (RB_Pos:0)	18.50	18.70	18.80	20.00	18.04	18.60	18.40	20.00
	1 (RB_Pos:8)	18.42	18.71	18.81	20.00	18.04	18.63	18.36	20.00
	1 (RB_Pos:14)	18.38	18.63	18.82	20.00	18.49	18.62	18.35	20.00
	8 (RB_Pos:0)	18.11	18.20	18.36	20.00	18.26	18.31	18.44	20.00
	8 (RB_Pos:3)	18.13	18.20	18.37	20.00	18.23	18.31	18.41	20.00
	8 (RB_Pos:7)	18.14	18.19	18.35	20.00	18.25	18.30	18.43	20.00
	15 (RB_Pos:0)	18.14	18.20	18.37	20.00	18.19	18.27	18.35	20.00
	Channel	64QAM							
	1 (RB_Pos:0)	18.73	18.46	18.38	20.00	-	-	-	-
	1 (RB_Pos:8)	18.01	18.52	18.32	20.00	-	-	-	-
	1 (RB_Pos:14)	18.62	18.53	18.32	20.00	-	-	-	-
	8 (RB_Pos:0)	18.14	18.18	18.29	20.00	-	-	-	-
	8 (RB_Pos:3)	18.18	18.16	18.29	20.00	-	-	-	-
	8 (RB_Pos:7)	18.13	18.14	18.35	20.00	-	-	-	-
	15 (RB_Pos:0)	17.71	17.76	17.90	19.00	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	18.45	18.69	18.83	20.00	18.27	18.62	18.40	20.00
	1 (RB_Pos:3)	18.42	18.71	18.82	20.00	18.29	18.61	18.41	20.00
	1 (RB_Pos:5)	18.40	18.70	18.83	20.00	18.29	18.63	18.42	20.00
	3 (RB_Pos:0)	18.50	18.69	18.77	20.00	18.17	18.43	18.52	20.00
	3 (RB_Pos:1)	18.49	18.68	18.85	20.00	18.20	18.40	18.52	20.00
	3 (RB_Pos:3)	18.46	18.66	18.81	20.00	18.21	18.38	18.54	20.00
	6 (RB_Pos:0)	18.15	18.21	18.38	20.00	18.28	18.11	18.58	20.00
	Channel	64QAM							
	1 (RB_Pos:0)	18.16	18.48	18.38	20.00	-	-	-	-
	1 (RB_Pos:3)	18.26	18.50	18.37	20.00	-	-	-	-
	1 (RB_Pos:5)	18.22	18.54	18.39	20.00	-	-	-	-
	3 (RB_Pos:0)	18.05	18.30	18.37	20.00	-	-	-	-
	3 (RB_Pos:1)	18.15	18.25	18.40	20.00	-	-	-	-
	3 (RB_Pos:3)	18.09	18.22	18.46	20.00	-	-	-	-

	6 (RB_Pos:0)	17.80	17.60	17.83	19.00	-	-	-	-
FDD LTE Band 66 Power Level A1_Ant4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	15.98	16.27	16.30	16.50	16.23	16.17	16.24	16.50
	1 (RB_Pos:50)	16.11	16.41	16.48	16.50	16.33	16.34	16.45	16.50
	1 (RB_Pos:99)	16.10	16.29	16.31	16.50	16.36	16.18	16.27	16.50
	50 (RB_Pos:0)	15.74	15.79	16.06	16.50	15.79	15.79	16.02	16.50
	50 (RB_Pos:25)	15.86	15.88	16.02	16.50	15.81	15.87	16.02	16.50
	50 (RB_Pos:50)	15.80	15.83	16.05	16.50	15.80	15.86	16.04	16.50
	100 (RB_Pos:0)	15.76	15.80	16.05	16.50	15.83	15.81	16.02	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	16.12	16.03	16.22	16.50	-	-	-	-
	1 (RB_Pos:50)	16.30	16.23	16.41	16.50	-	-	-	-
	1 (RB_Pos:99)	16.29	16.09	16.24	16.50	-	-	-	-
	50 (RB_Pos:0)	15.67	15.66	15.87	16.50	-	-	-	-
	50 (RB_Pos:25)	15.76	15.72	15.90	16.50	-	-	-	-
	50 (RB_Pos:50)	15.68	15.70	15.96	16.50	-	-	-	-
	100 (RB_Pos:0)	15.35	15.30	15.57	16.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	15.98	16.26	16.31	16.50	15.63	16.16	16.29	16.50
	1 (RB_Pos:38)	16.04	16.34	16.43	16.50	15.66	16.26	16.41	16.50
	1 (RB_Pos:74)	16.00	16.26	16.36	16.50	15.66	16.13	16.32	16.50
	36 (RB_Pos:0)	15.70	15.78	15.96	16.50	15.76	15.89	16.01	16.50
	36 (RB_Pos:20)	15.71	15.83	15.97	16.50	15.78	15.89	15.98	16.50
	36 (RB_Pos:39)	15.77	15.84	16.05	16.50	15.76	15.92	16.02	16.50
	75 (RB_Pos:0)	15.72	15.78	16.04	16.50	15.75	15.84	16.05	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.52	16.02	16.27	16.50	-	-	-	-
	1 (RB_Pos:38)	15.63	16.15	16.37	16.50	-	-	-	-
	1 (RB_Pos:74)	15.59	16.04	16.29	16.50	-	-	-	-
	36 (RB_Pos:0)	15.64	15.76	15.86	16.50	-	-	-	-
	36 (RB_Pos:20)	15.73	15.74	15.86	16.50	-	-	-	-
	36 (RB_Pos:39)	15.64	15.76	15.94	16.50	-	-	-	-
	75 (RB_Pos:0)	15.27	15.33	15.60	16.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	16.07	16.28	16.41	16.50	15.68	16.16	15.93	16.50

	1 (RB_Pos:25)	16.08	16.39	16.41	16.50	15.67	16.25	16.08	16.50
	1 (RB_Pos:49)	16.05	16.28	16.42	16.50	15.64	16.15	15.92	16.50
	25 (RB_Pos:0)	15.78	15.80	15.96	16.50	15.75	15.86	16.11	16.50
	25 (RB_Pos:12)	15.80	15.81	16.01	16.50	15.82	15.89	16.15	16.50
	25 (RB_Pos:25)	15.73	15.87	16.04	16.50	15.79	15.94	16.16	16.50
	50 (RB_Pos:0)	15.79	15.86	16.06	16.50	15.74	15.90	16.08	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.57	16.02	15.91	16.50	-	-	-	-
	1 (RB_Pos:25)	15.64	16.14	16.04	16.50	-	-	-	-
	1 (RB_Pos:49)	15.57	16.06	15.89	16.50	-	-	-	-
	25 (RB_Pos:0)	15.63	15.73	15.96	16.50	-	-	-	-
	25 (RB_Pos:12)	15.77	15.74	16.03	16.50	-	-	-	-
	25 (RB_Pos:25)	15.67	15.78	16.08	16.50	-	-	-	-
	50 (RB_Pos:0)	15.26	15.39	15.63	16.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	16.22	16.36	16.46	16.50	16.02	16.39	16.04	16.50
	1 (RB_Pos:13)	16.24	16.36	16.48	16.50	15.98	16.38	16.03	16.50
	1 (RB_Pos:24)	16.18	16.34	16.45	16.50	16.00	16.39	16.02	16.50
	12 (RB_Pos:0)	15.79	15.83	15.99	16.50	15.84	15.96	16.07	16.50
	12 (RB_Pos:6)	15.76	15.81	15.97	16.50	15.84	15.96	16.07	16.50
	12 (RB_Pos:13)	15.71	15.78	15.96	16.50	15.83	15.93	16.03	16.50
	25 (RB_Pos:0)	15.77	15.83	16.00	16.50	15.83	15.92	15.97	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.91	16.25	16.02	16.50	-	-	-	-
	1 (RB_Pos:13)	15.95	16.27	15.99	16.50	-	-	-	-
	1 (RB_Pos:24)	15.93	16.30	15.99	16.50	-	-	-	-
	12 (RB_Pos:0)	15.72	15.83	15.92	16.50	-	-	-	-
	12 (RB_Pos:6)	15.79	15.81	15.95	16.50	-	-	-	-
	12 (RB_Pos:13)	15.71	15.77	15.95	16.50	-	-	-	-
	25 (RB_Pos:0)	15.35	15.41	15.52	16.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3 MHz	1 (RB_Pos:0)	16.11	16.31	16.41	16.50	15.65	16.21	16.01	16.50
	1 (RB_Pos:8)	16.03	16.32	16.42	16.50	15.65	16.24	15.97	16.50
	1 (RB_Pos:14)	15.99	16.24	16.43	16.50	15.60	16.23	15.96	16.50
	8 (RB_Pos:0)	15.72	15.81	15.97	16.50	15.87	15.92	16.05	16.50
	8 (RB_Pos:3)	15.74	15.81	15.98	16.50	15.84	15.92	16.02	16.50
	8 (RB_Pos:7)	15.75	15.80	15.96	16.50	15.86	15.91	16.04	16.50
	15 (RB_Pos:0)	15.75	15.81	15.98	16.50	15.80	15.88	15.96	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.54	16.07	15.99	16.50	-	-	-	-

	1 (RB_Pos:8)	15.62	16.13	15.93	16.50	-	-	-	-
	1 (RB_Pos:14)	15.53	16.14	15.93	16.50	-	-	-	-
	8 (RB_Pos:0)	15.75	15.79	15.90	16.50	-	-	-	-
	8 (RB_Pos:3)	15.79	15.77	15.90	16.50	-	-	-	-
	8 (RB_Pos:7)	15.74	15.75	15.96	16.50	-	-	-	-
	15 (RB_Pos:0)	15.32	15.37	15.51	16.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	16.06	16.30	16.44	16.50	15.88	16.23	16.01	16.50
	1 (RB_Pos:3)	16.03	16.32	16.43	16.50	15.90	16.22	16.02	16.50
	1 (RB_Pos:5)	16.01	16.31	16.44	16.50	15.90	16.24	16.03	16.50
	3 (RB_Pos:0)	16.11	16.30	16.41	16.50	15.78	16.04	16.13	16.50
	3 (RB_Pos:1)	16.10	16.29	16.46	16.50	15.81	16.01	16.13	16.50
	3 (RB_Pos:3)	16.07	16.27	16.44	16.50	15.82	15.99	16.15	16.50
	6 (RB_Pos:0)	15.76	15.82	15.99	16.50	15.89	15.72	16.19	16.50
	Channel	64QAM							
	1 (RB_Pos:0)	15.77	16.09	15.99	16.50	-	-	-	-
	1 (RB_Pos:3)	15.87	16.11	15.98	16.50	-	-	-	-
	1 (RB_Pos:5)	15.83	16.15	16.00	16.50	-	-	-	-
	3 (RB_Pos:0)	15.66	15.91	15.98	16.50	-	-	-	-
	3 (RB_Pos:1)	15.76	15.86	16.01	16.50	-	-	-	-
	3 (RB_Pos:3)	15.70	15.83	16.07	16.50	-	-	-	-
	6 (RB_Pos:0)	15.41	15.21	15.74	16.50	-	-	-	-

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Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	23.69	23.71	23.70	24.50	23.12	23.11	23.13	23.50
	1 (RB_Pos:50)	23.37	23.63	23.70	24.50	23.24	23.22	23.27	23.50
	1 (RB_Pos:99)	23.83	23.91	24.16	24.50	23.15	23.32	23.44	23.50
	50 (RB_Pos:0)	23.47	23.36	23.32	23.50	23.32	23.19	23.41	23.50
	50 (RB_Pos:25)	23.30	23.28	23.22	23.50	23.50	23.32	23.33	23.50
	50 (RB_Pos:50)	23.02	23.21	23.43	23.50	23.21	23.23	23.47	23.50
	100 (RB_Pos:0)	23.49	23.22	23.36	23.50	22.45	22.33	22.40	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.01	21.97	22.11	22.50	-	-	-	-
	1 (RB_Pos:50)	22.21	22.11	22.23	22.50	-	-	-	-
	1 (RB_Pos:99)	22.08	22.23	22.41	22.50	-	-	-	-
	50 (RB_Pos:0)	22.20	22.06	22.26	22.50	-	-	-	-
	50 (RB_Pos:25)	22.45	22.17	22.21	22.50	-	-	-	-
	50 (RB_Pos:50)	22.09	22.07	22.39	22.50	-	-	-	-
	100 (RB_Pos:0)	21.37	21.32	21.35	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	23.42	24.07	23.75	24.50	23.45	23.26	23.11	23.50
	1 (RB_Pos:38)	23.26	24.04	23.65	24.50	23.10	23.48	23.14	23.50
	1 (RB_Pos:74)	23.63	23.64	24.12	24.50	22.88	23.36	23.21	23.50
	36 (RB_Pos:0)	23.11	23.19	23.25	23.50	23.49	23.15	23.23	23.50
	36 (RB_Pos:20)	23.03	23.12	23.35	23.50	23.41	23.36	23.21	23.50
	36 (RB_Pos:39)	23.06	23.22	23.49	23.50	23.02	23.23	23.15	23.50
	75 (RB_Pos:0)	23.10	23.22	23.48	23.50	22.46	22.35	22.31	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.34	22.12	22.09	22.50	-	-	-	-
	1 (RB_Pos:38)	22.07	22.37	22.10	22.50	-	-	-	-
	1 (RB_Pos:74)	21.81	22.27	22.18	22.50	-	-	-	-
	36 (RB_Pos:0)	22.37	22.02	22.08	22.50	-	-	-	-
	36 (RB_Pos:20)	22.36	22.21	22.09	22.50	-	-	-	-
	36 (RB_Pos:39)	21.90	22.07	22.07	22.50	-	-	-	-
	75 (RB_Pos:0)	21.38	21.34	21.26	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	23.36	23.72	23.63	24.50	23.41	23.26	23.46	23.50
	1 (RB_Pos:25)	23.46	23.79	24.11	24.50	23.06	23.13	23.37	23.50
	1 (RB_Pos:49)	23.49	23.93	24.13	24.50	23.35	23.33	23.30	23.50

	25 (RB_Pos:0)	23.18	23.46	23.40	23.50	23.43	23.09	23.05	23.50
	25 (RB_Pos:12)	23.44	23.13	23.23	23.50	23.05	23.20	23.05	23.50
	25 (RB_Pos:25)	23.25	23.36	23.37	23.50	23.08	23.25	23.48	23.50
	50 (RB_Pos:0)	23.41	23.37	23.45	23.50	22.12	22.34	22.39	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.30	22.12	22.44	22.50	-	-	-	-
	1 (RB_Pos:25)	22.03	22.02	22.33	22.50	-	-	-	-
	1 (RB_Pos:49)	22.28	22.24	22.27	22.50	-	-	-	-
	25 (RB_Pos:0)	22.31	21.96	21.90	22.50	-	-	-	-
	25 (RB_Pos:12)	22.00	22.05	21.93	22.50	-	-	-	-
	25 (RB_Pos:25)	21.96	22.09	22.40	22.50	-	-	-	-
	50 (RB_Pos:0)	21.04	21.33	21.34	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	23.92	23.75	23.72	24.50	23.40	23.28	23.24	23.50
	1 (RB_Pos:13)	23.62	24.07	24.11	24.50	23.42	23.29	23.41	23.50
	1 (RB_Pos:24)	23.83	24.02	24.13	24.50	23.40	23.22	23.34	23.50
	12 (RB_Pos:0)	23.01	23.06	23.30	23.50	23.48	23.43	23.22	23.50
	12 (RB_Pos:6)	23.17	23.12	23.28	23.50	23.28	23.19	23.29	23.50
	12 (RB_Pos:13)	23.03	23.00	23.48	23.50	23.05	23.16	23.26	23.50
	25 (RB_Pos:0)	23.06	23.06	23.31	23.50	22.16	22.06	22.36	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.29	22.14	22.22	22.50	-	-	-	-
	1 (RB_Pos:13)	22.39	22.18	22.37	22.50	-	-	-	-
	1 (RB_Pos:24)	22.33	22.13	22.31	22.50	-	-	-	-
	12 (RB_Pos:0)	22.36	22.30	22.07	22.50	-	-	-	-
	12 (RB_Pos:6)	22.23	22.04	22.17	22.50	-	-	-	-
	12 (RB_Pos:13)	21.93	22.00	22.18	22.50	-	-	-	-
	25 (RB_Pos:0)	21.08	21.05	21.31	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3 MHz	1 (RB_Pos:0)	23.92	24.12	24.05	24.50	23.47	23.04	23.45	23.50
	1 (RB_Pos:8)	23.73	23.76	23.68	24.50	22.94	23.21	23.19	23.50
	1 (RB_Pos:14)	23.37	23.46	24.14	24.50	22.98	23.45	23.09	23.50
	8 (RB_Pos:0)	23.03	23.14	23.20	24.50	23.31	23.05	23.31	23.50
	8 (RB_Pos:3)	23.39	23.20	23.29	24.50	23.24	23.14	23.23	23.50
	8 (RB_Pos:7)	23.47	23.11	23.28	24.50	23.50	23.14	23.06	23.50
	15 (RB_Pos:0)	23.16	23.49	23.29	23.50	22.32	22.11	22.27	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.36	21.90	22.43	22.50	-	-	-	-
	1 (RB_Pos:8)	21.91	22.10	22.15	22.50	-	-	-	-
	1 (RB_Pos:14)	21.91	22.36	22.06	22.50	-	-	-	-

	8 (RB_Pos:0)	22.19	21.92	22.16	22.50	-	-	-	-
	8 (RB_Pos:3)	22.19	21.99	22.11	22.50	-	-	-	-
	8 (RB_Pos:7)	22.38	21.98	21.98	22.50	-	-	-	-
	15 (RB_Pos:0)	21.24	21.10	21.22	21.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	23.78	23.61	24.09	24.50	23.21	23.45	23.33	23.50
	1 (RB_Pos:3)	23.81	23.84	24.09	24.50	23.47	23.45	23.46	23.50
	1 (RB_Pos:5)	23.80	24.12	24.14	24.50	23.12	23.13	23.25	23.50
	3 (RB_Pos:0)	23.82	24.00	24.00	24.50	23.41	23.25	23.36	23.50
	3 (RB_Pos:1)	23.85	23.67	24.09	24.50	23.07	23.19	23.26	23.50
	3 (RB_Pos:3)	23.84	24.09	24.04	24.50	23.13	23.22	23.41	23.50
	6 (RB_Pos:0)	23.42	23.26	23.40	23.50	22.30	22.23	22.37	22.50
	Channel	64QAM							
	1 (RB_Pos:0)	22.10	22.31	22.31	22.50	-	-	-	-
	1 (RB_Pos:3)	22.44	22.34	22.42	22.50	-	-	-	-
	1 (RB_Pos:5)	22.05	22.04	22.22	22.50	-	-	-	-
	3 (RB_Pos:0)	22.29	22.12	22.21	22.50	-	-	-	-
	3 (RB_Pos:1)	22.02	22.04	22.14	22.50	-	-	-	-
	3 (RB_Pos:3)	22.01	22.06	22.33	22.50	-	-	-	-
	6 (RB_Pos:0)	21.22	21.22	21.32	21.50	-	-	-	-

FDD LTE Band 66 Power Level C1_Ant4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	20.05	20.34	20.37	21.00	20.30	20.24	20.31	21.00
	1 (RB_Pos:50)	20.18	20.48	20.55	21.00	20.40	20.41	20.52	21.00
	1 (RB_Pos:99)	20.17	20.36	20.38	21.00	20.43	20.25	20.34	21.00
	50 (RB_Pos:0)	19.81	19.86	20.26	21.00	19.86	19.86	20.09	21.00
	50 (RB_Pos:25)	19.93	19.95	20.09	21.00	19.88	19.94	20.09	21.00
	50 (RB_Pos:50)	19.87	19.90	20.12	21.00	19.87	19.93	20.11	21.00
	100 (RB_Pos:0)	19.83	19.87	20.12	21.00	19.90	19.88	20.09	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	20.19	20.10	20.29	21.00	-	-	-	-
	1 (RB_Pos:50)	20.37	20.30	20.48	21.00	-	-	-	-
	1 (RB_Pos:99)	20.36	20.16	20.31	21.00	-	-	-	-
	50 (RB_Pos:0)	19.74	19.73	19.94	21.00	-	-	-	-
	50 (RB_Pos:25)	19.83	19.79	19.97	21.00	-	-	-	-
	50 (RB_Pos:50)	19.75	19.77	20.03	21.00	-	-	-	-
	100 (RB_Pos:0)	19.42	19.37	19.64	20.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up

	Channel	132047	132322	132597	limit (dBm)	132047	132322	132597	limit (dBm)
15 MHz	1 (RB_Pos:0)	20.05	20.33	20.38	21.00	19.70	20.23	20.36	21.00
	1 (RB_Pos:38)	20.11	20.41	20.50	21.00	19.73	20.33	20.48	21.00
	1 (RB_Pos:74)	20.07	20.33	20.43	21.00	19.73	20.20	20.39	21.00
	36 (RB_Pos:0)	19.77	19.85	20.03	21.00	19.83	19.96	20.08	21.00
	36 (RB_Pos:20)	19.78	19.90	20.04	21.00	19.85	19.96	20.05	21.00
	36 (RB_Pos:39)	19.84	19.91	20.12	21.00	19.83	19.99	20.09	21.00
	75 (RB_Pos:0)	19.79	19.85	20.11	21.00	19.82	19.91	20.12	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.59	20.09	20.34	21.00	-	-	-	-
	1 (RB_Pos:38)	19.70	20.22	20.44	21.00	-	-	-	-
	1 (RB_Pos:74)	19.66	20.11	20.36	21.00	-	-	-	-
	36 (RB_Pos:0)	19.71	19.83	19.93	21.00	-	-	-	-
	36 (RB_Pos:20)	19.80	19.81	19.93	21.00	-	-	-	-
	36 (RB_Pos:39)	19.71	19.83	20.01	21.00	-	-	-	-
	75 (RB_Pos:0)	19.34	19.40	19.67	20.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	20.14	20.35	20.48	21.00	19.75	20.23	20.00	21.00
	1 (RB_Pos:25)	20.15	20.46	20.53	21.00	19.74	20.32	20.15	21.00
	1 (RB_Pos:49)	20.12	20.35	20.49	21.00	19.71	20.22	19.99	21.00
	25 (RB_Pos:0)	19.85	19.87	20.03	21.00	19.82	19.93	20.18	21.00
	25 (RB_Pos:12)	19.87	19.88	20.08	21.00	19.89	19.96	20.22	21.00
	25 (RB_Pos:25)	19.80	19.94	20.11	21.00	19.86	20.01	20.23	21.00
	50 (RB_Pos:0)	19.86	19.93	20.13	21.00	19.81	19.97	20.15	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.64	20.09	19.98	21.00	-	-	-	-
	1 (RB_Pos:25)	19.71	20.21	20.11	21.00	-	-	-	-
	1 (RB_Pos:49)	19.64	20.13	19.96	21.00	-	-	-	-
	25 (RB_Pos:0)	19.70	19.80	20.03	21.00	-	-	-	-
	25 (RB_Pos:12)	19.84	19.81	20.10	21.00	-	-	-	-
	25 (RB_Pos:25)	19.74	19.85	20.15	21.00	-	-	-	-
	50 (RB_Pos:0)	19.33	19.46	19.70	20.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	20.29	20.43	20.53	21.00	20.09	20.46	20.11	21.00
	1 (RB_Pos:13)	20.31	20.43	20.47	21.00	20.05	20.45	20.10	21.00
	1 (RB_Pos:24)	20.25	20.41	20.52	21.00	20.07	20.46	20.09	21.00
	12 (RB_Pos:0)	19.86	19.90	20.06	21.00	19.91	20.03	20.14	21.00
	12 (RB_Pos:6)	19.83	19.88	20.04	21.00	19.91	20.03	20.14	21.00
	12 (RB_Pos:13)	19.78	19.85	20.03	21.00	19.90	20.00	20.10	21.00

	25 (RB_Pos:0)	19.84	19.90	20.07	21.00	19.90	19.99	20.04	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.98	20.32	20.09	21.00	-	-	-	-
	1 (RB_Pos:13)	20.02	20.34	20.06	21.00	-	-	-	-
	1 (RB_Pos:24)	20.00	20.37	20.06	21.00	-	-	-	-
	12 (RB_Pos:0)	19.79	19.90	19.99	21.00	-	-	-	-
	12 (RB_Pos:6)	19.86	19.88	20.02	21.00	-	-	-	-
	12 (RB_Pos:13)	19.78	19.84	20.02	21.00	-	-	-	-
	25 (RB_Pos:0)	19.52	19.58	19.59	20.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3 MHz	1 (RB_Pos:0)	20.18	20.38	20.48	21.00	19.72	20.28	20.08	21.00
	1 (RB_Pos:8)	20.10	20.39	20.49	21.00	19.72	20.31	20.04	21.00
	1 (RB_Pos:14)	20.06	20.31	20.50	21.00	19.67	20.30	20.03	21.00
	8 (RB_Pos:0)	19.79	19.88	20.04	21.00	19.94	19.99	20.12	21.00
	8 (RB_Pos:3)	19.81	19.88	20.05	21.00	19.91	19.99	20.09	21.00
	8 (RB_Pos:7)	19.82	19.87	20.03	21.00	19.93	19.98	20.11	21.00
	15 (RB_Pos:0)	19.82	19.88	20.05	21.00	19.87	19.95	20.03	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.61	20.14	20.06	21.00	-	-	-	-
	1 (RB_Pos:8)	19.69	20.20	20.00	21.00	-	-	-	-
	1 (RB_Pos:14)	19.60	20.21	20.00	21.00	-	-	-	-
	8 (RB_Pos:0)	19.82	19.86	19.97	21.00	-	-	-	-
	8 (RB_Pos:3)	19.86	19.84	19.97	21.00	-	-	-	-
	8 (RB_Pos:7)	19.81	19.82	20.03	21.00	-	-	-	-
	15 (RB_Pos:0)	19.39	19.44	19.58	20.50	-	-	-	-
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	20.13	20.37	20.51	21.00	19.95	20.30	20.08	21.00
	1 (RB_Pos:3)	20.10	20.39	20.50	21.00	19.97	20.29	20.09	21.00
	1 (RB_Pos:5)	20.08	20.38	20.51	21.00	19.97	20.31	20.10	21.00
	3 (RB_Pos:0)	20.18	20.37	20.51	21.00	19.85	20.11	20.20	21.00
	3 (RB_Pos:1)	20.17	20.36	20.53	21.00	19.88	20.08	20.20	21.00
	3 (RB_Pos:3)	20.14	20.34	20.49	21.00	19.89	20.06	20.22	21.00
	6 (RB_Pos:0)	19.83	19.89	20.06	21.00	19.96	19.79	19.56	21.00
	Channel	64QAM							
	1 (RB_Pos:0)	19.84	20.16	20.06	21.00	-	-	-	-
	1 (RB_Pos:3)	19.94	20.18	20.05	21.00	-	-	-	-
	1 (RB_Pos:5)	19.90	20.22	20.07	21.00	-	-	-	-
	3 (RB_Pos:0)	19.73	19.98	20.05	21.00	-	-	-	-
	3 (RB_Pos:1)	19.83	19.93	20.08	21.00	-	-	-	-
	3 (RB_Pos:3)	19.77	19.90	20.14	21.00	-	-	-	-

6 (RB_Pos:0)

19.48

19.28

19.81

20.50

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8.4 Intra-Band Downlink CA

The conducted power measurement results of downlink LTE CA Conduted Power are as below(Normal Power):

DL LTE CA Clas	PCC								SCC1			Power		
	PCC Band	PCC Bandwidth	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth	SCC	Rel 8 LTETx Power(dBm)	Rel 10 DL LTE CA TX Power(dBm)	Tune-up
2C	2	20	1	50	1	50	18700	700	2	5	817	24.16	23.58	24.5
2A-2A	2	20	1	50	1	50	18700	700	2	10	1150	24.16	23.59	24.5
2A-5A	2	20	1	50	1	50	18700	700	5	10	2525	24.16	23.63	24.5
2A-7A	2	20	1	50	1	50	18700	700	7	20	3100	24.16	23.61	24.5
2A-12A	2	20	1	50	1	50	18700	700	12	10	5095	24.16	23.55	24.5
2A-17A	2	20	1	50	1	50	18700	700	17	10	5790	24.16	23.36	24.5
4A-4A	4	20	1	50	1	50	20050	2050	4	20	2300	23.79	22.39	24.5
4A-5A	4	20	1	50	1	50	20050	2050	5	10	2525	23.79	22.63	24.5
4A-7A	4	20	1	50	1	50	20050	2050	7	20	3100	23.79	22.53	24.5
4A-12A	4	20	1	50	1	50	20050	2050	12	10	5095	23.79	22.66	24.5
4A-17A	4	20	1	50	1	50	20050	2050	17	10	5790	23.79	22.66	24.5
5A-7A	5	10	1	24	1	24	20450	2450	7	20	3100	24.05	23.21	24.5
5A-41A	5	10	1	24	1	24	20450	2450	41	20	40620	24.05	23.16	24.5
7C	7	20	1	0	1	0	20850	2850	7	10	2994	24.07	22.90	24.5
7A-7A	7	20	1	0	1	0	20850	2850	7	5	3425	24.07	23.35	24.5
12A-66A	12	10	1	24	1	24	23060	5060	66	20	66786	23.98	23.42	24.5
41C	41	20	1	0	1	0	39750	39750	41	5	41373	23.86	23.39	24.5
41A-41A	41	20	1	0	1	0	39750	39750	41	5	39675	23.86	23.39	24.5
66C	66	20	1	49	1	49	132572	66780	66	10	66680	23.88	23.51	24.5
66A-66A	66	20	1	49	1	49	132572	66780	66	10	67286	23.88	23.49	24.5
5A-2A	5	10	1	24	1	24	20450	2450	2	20	900	24.05	23.66	24.5
7A-2A	7	20	1	0	1	0	20850	2850	2	20	900	24.07	23.61	24.5
12A-2A	12	10	1	0	1	0	23060	5060	2	20	900	23.98	23.52	24.5
17A-2A	12	10	1	0	1	0	23780	5780	2	20	900	23.94	23.78	24.5
5A-4A	5	10	1	24	1	24	20450	2450	4	20	2175	24.05	23.56	24.5
7A-4A	7	20	1	50	1	50	20850	2850	4	20	2175	24.07	23.31	24.5
12A-4A	12	10	1	0	1	0	23060	5060	4	20	2175	23.98	23.33	24.5
17A-4A	12	10	1	0	1	0	23780	5780	4	20	2175	23.92	23.53	24.5
7A-5A	7	20	1	0	1	0	20850	2850	5	10	2525	24.07	23.36	24.5
41A-5A	41	20	1	0	1	0	41490	41490	5	10	2525	23.86	23.61	24.5
66A-12A	66	20	1	49	1	49	132072	66780	12	10	5095	23.88	23.38	24.5

The conducted power measurement results of downlink LTE CA Conduted Power are as below(Normal Power):

DL LTE CA Clas	PCC								SCC1			Power		
	PCC Band	PCC Bandwidth	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth	SCC	Rel 8 LTET × Power(dBm)	Rel 10 DL LTE CA TX Power(dBm)	Tune-up
2C	2	20	1	50	1	50	18700	700	2	5	817	22.05	21.45	22.5
2A-2A	2	20	1	50	1	50	18700	700	2	10	1150	22.05	21.39	22.5
2A-5A	2	20	1	50	1	50	18700	700	5	10	2525	22.05	21.38	22.5
2A-7A	2	20	1	50	1	50	18700	700	7	20	3100	22.05	20.94	22.5
2A-12A	2	20	1	50	1	50	18700	700	12	10	5095	22.05	21.29	22.5
2A-17A	2	20	1	50	1	50	18700	700	17	10	5790	22.05	21.17	22.5
7C	7	20	1	50	1	50	21100	2850	5	10	2525	20.52	19.50	21
7A-7A	7	20	1	50	1	50	21100	3100	7	10	3400	20.52	19.71	21
66C	66	20	1	49	1	49	132572	67036	66	10	67180	21.87	21.29	22.5
66A-66A	66	20	1	49	1	49	132572	66536	66	10	67286	21.87	21.27	22.5

8.5 5G NR

5GNR N5 Power Level A1&B1&C1_Ant0

5GNR N5 Power Level A1&B1&C1_Ant0							
Bandwidth (MHz)		Channel		165300	167300	169300	Tune-up
	Modulation	RB Size	RB offset	826.5	836.5	846.5	power(dBm)
5	DFT-s-OFDM QPSK	1	1	24.16	24.13	24.12	24.50
Bandwidth (MHz)		Channel		165800	167300	168800	Tune-up
	Modulation	RB Size	RB offset	829	836.5	844	power(dBm)
10	DFT-s-OFDM QPSK	1	1	23.92	24.02	23.89	24.50
Bandwidth (MHz)		Channel		166300	167300	168300	Tune-up
15	Modulation	RB Size	RB offset	831.5	836.5	841.5	power(dBm)
	DFT-s-OFDM QPSK	1	1	23.87	24.07	24.02	24.50
Bandwidth (MHz)		Channel		166800	167300	167800	Tune-up
	Modulation	RB Size	RB offset	834	836.5	839	power(dBm)
20	DFT-s-OFDM QPSK	1	1	23.88	23.96	24.05	24.50
		1	53	24.14	24.16	24.07	24.50
		1	104	23.79	23.86	23.82	24.50
	DFT-s-OFDM QPSK	50	0	23.23	23.28	23.26	24.50
		50	28	24.19	24.22	24.15	24.50
		50	56	23.15	23.10	23.13	24.00
	DFT-s-OFDM QPSK	100	0	23.22	23.25	23.22	24.00
	DFT-s-OFDM 16QAM	1	1	22.73	22.91	22.95	23.00
	DFT-s-OFDM 64QAM	1	1	21.28	21.37	21.43	22.00
	DFT-s-OFDM 256QAM	1	1	19.85	19.98	20.02	21.00
	CP-OFDM QPSK	1	1	22.56	22.63	22.69	23.00
	CP-OFDM 16QAM	1	1	22.32	22.43	22.46	23.00
	CP-OFDM 64QAM	1	1	20.76	20.86	20.96	22.00
	CP-OFDM 256QAM	1	1	17.65	17.73	17.83	18.00

5GNR N7 Power Level A1_Ant0							
Bandwidth (MHz)		Channel		500500	507000	513500	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	15.69	15.62	15.56	16.50
Bandwidth (MHz)		Channel		501000	507000	513000	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	15.50	15.43	15.37	16.50
Bandwidth (MHz)		Channel		501500	507000	512500	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	15.63	15.57	15.53	16.50
Bandwidth (MHz)		Channel		502000	507000	512000	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2510	2535	2560	
20	DFT-s-OFDM QPSK	1	1	15.64	15.52	15.49	16.50
		1	53	15.67	15.68	15.60	16.50
		1	104	15.56	15.53	15.39	16.50
	DFT-s-OFDM QPSK	50	0	15.77	15.73	15.74	16.50
		50	28	15.73	15.76	15.71	16.50
		50	56	15.69	15.68	15.55	16.50
	DFT-s-OFDM QPSK	100	0	15.73	15.67	15.63	16.50
	DFT-s-OFDM 16QAM	1	1	15.60	15.42	15.43	16.50
	DFT-s-OFDM 64QAM	1	1	15.56	15.46	15.42	16.50
	DFT-s-OFDM 256QAM	1	1	15.98	16.03	15.93	16.50
	CP-OFDM QPSK	1	1	15.98	15.92	15.82	16.50
	CP-OFDM 16QAM	1	1	16.32	16.22	16.14	16.50
	CP-OFDM 64QAM	1	1	16.14	16.13	15.99	16.50
	CP-OFDM 256QAM	1	1	15.79	15.76	15.64	16.50

5GNR N7 Power Level B1_Ant0							
Bandwidth (MHz)		Channel		500500	507000	513500	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	24.14	24.09	23.95	24.50
Bandwidth (MHz)		Channel		501000	507000	513000	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	23.92	23.97	23.78	24.50
Bandwidth (MHz)		Channel		501500	507000	512500	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	24.04	23.99	23.84	24.50
Bandwidth (MHz)		Channel		502000	507000	512000	Tune-up

	Modulation	RB Size	RB offset	2510	2535	2560	power(dBm)
20	DFT-s-OFDM QPSK	1	1	24.03	23.98	23.92	24.50
		1	53	24.02	24.12	23.96	24.50
		1	104	23.98	23.94	23.74	24.50
	DFT-s-OFDM QPSK	50	0	23.22	23.29	23.19	23.50
		50	28	24.16	24.26	24.16	24.50
		50	56	23.14	23.21	22.98	23.50
	DFT-s-OFDM QPSK	100	0	23.17	23.26	23.08	23.50
	DFT-s-OFDM 16QAM	1	1	22.92	22.89	22.79	23.50
	DFT-s-OFDM 64QAM	1	1	21.53	21.52	21.43	22.00
	DFT-s-OFDM 256QAM	1	1	20.14	20.09	20.03	21.00
	CP-OFDM QPSK	1	1	22.78	22.75	22.67	23.00
	CP-OFDM 16QAM	1	1	22.56	22.53	22.49	23.00
	CP-OFDM 64QAM	1	1	21.12	21.04	20.96	22.00
	CP-OFDM 256QAM	1	1	17.79	17.73	17.66	18.00

5GNR N7 Power Level C1_Ant0							
Bandwidth (MHz)		Channel		500500	507000	513500	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	19.79	19.73	19.53	20.00
Bandwidth (MHz)		Channel		501000	507000	513000	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	19.61	19.52	19.43	20.00
Bandwidth (MHz)		Channel		501500	507000	512500	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	19.73	19.66	19.57	20.00
Bandwidth (MHz)		Channel		502000	507000	512000	Tune-up power(dBm)
	Modulation	RB Size	RB offset	2510	2535	2560	
20	DFT-s-OFDM QPSK	1	1	19.67	19.63	19.59	20.00
		1	53	19.70	19.75	19.64	20.00
		1	104	19.60	19.53	19.44	20.00
	DFT-s-OFDM QPSK	50	0	19.82	19.89	19.78	20.00
		50	28	19.84	19.93	19.81	20.00
		50	56	19.77	19.83	19.72	20.00
	DFT-s-OFDM QPSK	100	0	19.80	19.84	19.72	20.00
	DFT-s-OFDM 16QAM	1	1	19.65	19.56	19.43	20.00
	DFT-s-OFDM 64QAM	1	1	19.60	19.52	19.40	20.00
	DFT-s-OFDM 256QAM	1	1	20.12	20.09	20.00	20.50
	CP-OFDM QPSK	1	1	19.96	19.91	19.84	20.00
	CP-OFDM 16QAM	1	1	20.23	20.18	20.02	20.50
	CP-OFDM 64QAM	1	1	20.12	20.09	20.01	20.50
	CP-OFDM 256QAM	1	1	17.82	17.76	17.66	18.00

8.6 WIFI

8.6.1 2.4G WIFI (Power Level B1&C1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	19.28	19.5	Yes
		2	2417	19.21	19.5	No
		6	2437	19.30	19.5	Yes
		10	2457	19.24	19.5	No
		11	2462	19.46	19.5	Yes
	802.11g	1	2412	18.23	18.5	No
		2	2417	18.20	18.5	No
		6	2437	18.23	18.5	No
		10	2457	18.21	18.5	No
		11	2462	18.39	18.5	No
	802.11n(HT20)	1	2412	18.13	18.5	No
		2	2417	18.11	18.5	No
		6	2437	18.17	18.5	No
		10	2457	18.10	18.5	No
		11	2462	18.33	18.5	No

8.6.2 2.4G WIFI (Power Level A1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	13.59	14.0	Yes
		2	2417	13.38	14.0	No
		6	2437	13.64	14.0	Yes
		10	2457	13.55	14.0	No
		11	2462	13.90	14.0	Yes
	802.11g	1	2412	13.97	14.0	No
		2	2417	13.42	14.0	No
		6	2437	13.55	14.0	No
		10	2457	13.52	14.0	No
		11	2462	13.77	14.0	No
	802.11n(HT20)	1	2412	13.98	14.0	No
		2	2417	13.73	14.0	No
		6	2437	13.89	14.0	No
		10	2457	13.81	14.0	No
		11	2462	13.67	14.0	No

8.6.3 5G WIFI (Power Level B1&C1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	17.57	18.0	No
		40	5200	17.85	18.0	No
		44	5220	17.76	18.0	No
		48	5240	17.67	18.0	No
	802.11n(HT20)	36	5180	17.63	18.0	No
		40	5200	17.68	18.0	No
		44	5220	17.72	18.0	No
		48	5240	17.54	18.0	No
	802.11n(HT40)	38	5190	15.62	16.0	No
		46	5230	15.71	16.0	No
	802.11ac(VHT20)	36	5180	17.59	18.0	No
		40	5200	17.62	18.0	No
		44	5220	17.74	18.0	No
		48	5240	17.76	18.0	No
	802.11ac(VHT40)	38	5190	16.23	16.5	No
		46	5230	16.27	16.5	No
	802.11ac(VHT80)	42	5210	15.66	16.0	No
5.3 (5.25~5.35)	802.11a	52	5260	17.52	18.0	Yes
		56	5280	17.67	18.0	Yes
		60	5300	17.54	18.0	Yes
		64	5320	17.78	18.0	Yes
	802.11n(HT20)	52	5260	17.59	18.0	No
		56	5280	17.62	18.0	No
		60	5300	17.66	18.0	No
		64	5320	17.71	18.0	No
	802.11n(HT40)	54	5270	15.76	16.0	No
		62	5310	15.52	16.0	No
	802.11ac(VHT20)	52	5260	17.62	18.0	No
		56	5280	17.71	18.0	No
		60	5300	17.68	18.0	No
		64	5320	17.63	18.0	No
	802.11ac(VHT40)	54	5270	16.13	16.5	No
		62	5310	16.34	16.5	No
	802.11ac(VHT80)	58	5290	15.55	16.0	No
5.6 (5.47~5.725)	802.11a	100	5500	15.72	16.0	No
		104	5520	15.69	16.0	No
		108	5540	15.62	16.0	No
		112	5560	15.73	16.0	No
		116	5580	15.75	16.0	No

		120	5600	15.63	16.0	No
		124	5620	15.66	16.0	No
		128	5640	15.61	16.0	No
		132	5660	15.71	16.0	No
		136	5680	15.73	16.0	No
		140	5700	15.58	16.0	No
	802.11n(HT20)	100	5500	15.66	16.0	No
		104	5520	15.70	16.0	No
		108	5540	15.72	16.0	No
		112	5560	15.62	16.0	No
		116	5580	15.59	16.0	No
		120	5600	15.56	16.0	No
		124	5620	15.60	16.0	No
		128	5640	15.62	16.0	No
		132	5660	15.73	16.0	No
		136	5680	15.71	16.0	No
		140	5700	15.54	16.0	No
	802.11n(HT40)	102	5510	15.57	16.0	Yes
		110	5550	17.62	18.0	Yes
		118	5590	17.76	18.0	Yes
		126	5630	17.82	18.0	Yes
		134	5670	17.63	18.0	Yes
	802.11ac(VHT20)	100	5500	14.70	15.0	No
		104	5520	14.71	15.0	No
		108	5540	14.62	15.0	No
		112	5560	14.73	15.0	No
		116	5580	14.59	15.0	No
		120	5600	14.66	15.0	No
		124	5620	14.63	15.0	No
		128	5640	14.70	15.0	No
		132	5660	14.52	15.0	No
		136	5680	14.59	15.0	No
		140	5700	14.63	15.0	No
	802.11ac(VHT40)	102	5510	15.66	16.0	No
		110	5550	15.60	16.0	No
		118	5590	15.74	16.0	No
		126	5630	15.72	16.0	No
		134	5670	15.68	16.0	No
	802.11ac(VHT80)	106	5530	17.30	17.5	No
		122	5610	17.22	17.5	No
		138	5690	17.34	17.5	No
5.8	802.11a	149	5745	17.58	18.0	No

(5.725~5.850)		153	5765	17.64	18.0	No
		157	5785	17.56	18.0	No
		161	5805	17.69	18.0	No
		165	5825	17.66	18.0	No
	802.11n(HT20)	149	5745	17.72	18.0	No
		153	5765	17.68	18.0	No
		157	5785	17.60	18.0	No
		161	5805	17.62	18.0	No
		165	5825	17.69	18.0	No
	802.11n(HT40)	151	5755	17.71	18.0	No
		159	5795	17.66	18.0	No
	802.11ac(VHT20)	149	5745	17.62	18.0	No
		153	5765	17.55	18.0	No
		157	5785	17.58	18.0	No
		161	5805	17.64	18.0	No
		165	5825	17.67	18.0	No
	802.11ac(VHT40)	151	5755	17.71	18.0	No
		159	5795	17.74	18.0	No
	802.11ac(VHT80)	155	5775	17.79	18.0	Yes

8.6.4 5G WIFI (Power Level A1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	11.68	12.0	No
		40	5200	11.73	12.0	No
		44	5220	11.65	12.0	No
		48	5240	11.72	12.0	No
	802.11n(HT20)	36	5180	11.72	12.0	No
		40	5200	11.81	12.0	No
		44	5220	11.82	12.0	No
		48	5240	11.63	12.0	No
	802.11n(HT40)	38	5190	11.67	12.0	No
		46	5230	12.42	12.5	No
	802.11ac(VHT20)	36	5180	12.29	12.5	No
		40	5200	12.37	12.5	No
		44	5220	12.30	12.5	No
		48	5240	12.08	12.5	No
	802.11ac(VHT40)	38	5190	11.66	12.0	No
		46	5230	11.73	12.0	No
	802.11ac(VHT80)	42	5210	11.70	12.0	No
5.3	802.11a	52	5260	11.88	12.0	No

(5.25~5.35)		56	5280	11.71	12.0	No
		60	5300	11.60	12.0	No
		64	5320	11.69	12.0	No
	802.11n(HT20)	52	5260	11.85	12.0	No
		56	5280	11.65	12.0	No
		60	5300	11.74	12.0	No
		64	5320	11.77	12.0	No
	802.11n(HT40)	54	5270	11.87	12.0	No
		62	5310	11.68	12.0	No
	802.11ac(VHT20)	52	5260	12.40	12.5	Yes
		56	5280	12.04	12.5	Yes
		60	5300	12.11	12.5	Yes
		64	5320	12.38	12.5	Yes
	802.11ac(VHT40)	54	5270	11.79	12.0	No
		62	5310	11.78	12.0	No
	802.11ac(VHT80)	58	5290	11.80	12.0	No
5.6 (5.47~5.725)	802.11a	100	5500	12.05	13.0	No
		104	5520	12.45	13.0	No
		108	5540	11.98	13.0	No
		112	5560	12.14	13.0	No
		116	5580	12.32	13.0	No
		120	5600	12.32	13.0	No
		124	5620	12.40	13.0	No
		128	5640	12.35	13.0	No
		132	5660	12.05	13.0	No
		136	5680	12.48	13.0	No
		140	5700	11.95	13.0	No
	802.11n(HT20)	100	5500	12.10	13.0	No
		104	5520	12.43	13.0	No
		108	5540	12.38	13.0	No
		112	5560	12.37	13.0	No
		116	5580	12.33	13.0	No
		120	5600	11.94	13.0	No
		124	5620	12.39	13.0	No
		128	5640	11.98	13.0	No
		132	5660	12.14	13.0	No
		136	5680	12.44	13.0	No
		140	5700	12.26	13.0	No
	802.11n(HT40)	102	5510	12.33	13.0	No
		110	5550	12.35	13.0	No
		118	5590	12.08	13.0	No
		126	5630	12.54	13.0	No

		134	5670	11.99	13.0	No
	802.11ac(VHT20)	100	5500	12.12	13.0	No
		104	5520	12.44	13.0	No
		108	5540	12.31	13.0	No
		112	5560	12.45	13.0	No
		116	5580	12.33	13.0	No
		120	5600	12.01	13.0	No
		124	5620	12.41	13.0	No
		128	5640	12.03	13.0	No
		132	5660	12.00	13.0	No
		136	5680	12.35	13.0	No
		140	5700	12.32	13.0	No
	802.11ac(VHT40)	102	5510	12.40	13.0	No
		110	5550	12.34	13.0	No
		118	5590	12.07	13.0	No
		126	5630	12.47	13.0	No
		134	5670	12.02	13.0	No
	802.11ac(VHT80)	106	5530	12.52	13.0	Yes
		122	5610	12.77	13.0	Yes
		138	5690	12.48	13.0	Yes
5.8 (5.725~5.850)	802.11a	149	5745	12.34	13.0	No
		153	5765	12.37	13.0	No
		157	5785	11.94	13.0	No
		161	5805	12.45	13.0	No
		165	5825	12.01	13.0	No
	802.11n(HT20)	149	5745	12.14	13.0	No
		153	5765	12.42	13.0	No
		157	5785	12.30	13.0	No
		161	5805	12.37	13.0	No
		165	5825	12.40	13.0	No
	802.11n(HT40)	151	5755	12.05	13.0	No
		159	5795	12.43	13.0	No
	802.11ac(VHT20)	149	5745	11.98	13.0	No
		153	5765	12.02	13.0	No
		157	5785	12.34	13.0	No
		161	5805	12.38	13.0	No
		165	5825	12.39	13.0	No
	802.11ac(VHT40)	151	5755	12.43	13.0	No
		159	5795	12.44	13.0	No
	802.11ac(VHT80)	155	5775	12.73	13.0	Yes

8.7 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	10.27	10.49	10.39	9.42	10.20	9.78
Tune-Up Limit (dBm)	11			11		
Mode	8-DPSK			BLE		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Average Power (dBm)	9.46	10.35	9.82	-3.96	-2.44	-3.61
Tune-Up Limit (dBm)	11			-2		

8.8 Power Reduction List

Test Level Table

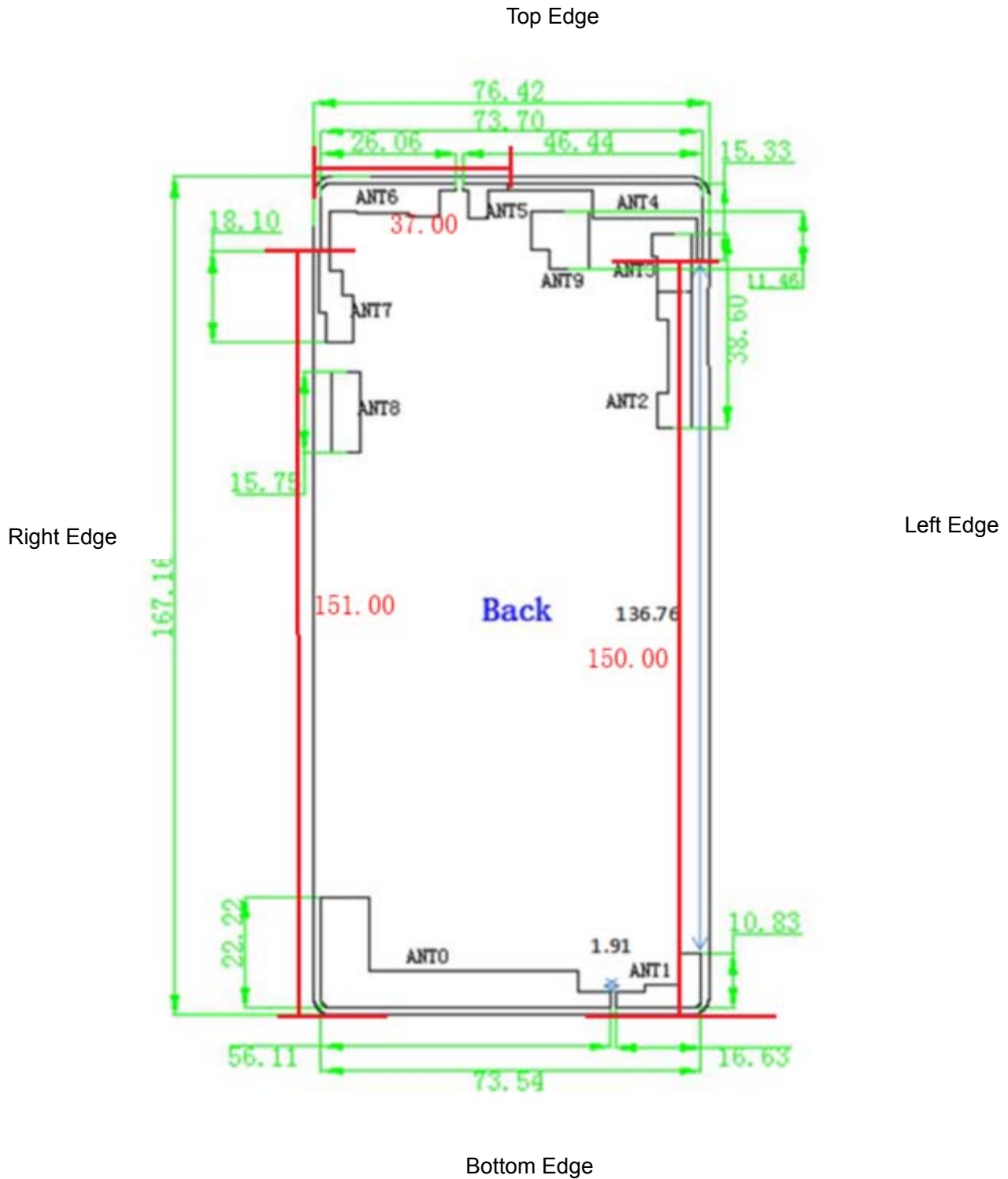
Reduced level	Receiver state	Transmitting
		conditions
Level A1	On (Head scenario)	WWAN + WLAN 2.4G or WLAN 5G + NR +BT
Level B1	Off + Hotspot Off (Body scenario)	WWAN + WLAN 2.4G or WLAN 5G +NR +BT
Level C1	Off + Hotspot on (Hotspot scenario)	WWAN + NR
Level C2	Off + Hotspot on (only for LTE B66 Ant0-ENDC)	only for LTE B66 Ant0

Power Table

Mode	WWAN Antenna 0&1&4&6											
	Test Mode	Head			Hotspot		Body-worn			Specific		
	Receiver state	Receiver on			Receiver off + Hotspot on		Receiver off + Hotspot off			Receiver off + Hotspot off		
	Full Power	Standalone	Simultaneous transmission		Simultaneous transmission		Standalone	Simultaneous transmission		Standalone	Simultaneous transmission	
			+2.4G WLAN	+5G WLAN	+2.4G WLAN	+5G WLAN		+2.4G WLAN	+5G WLAN		+2.4G WLAN	+5G WLAN
GSM 850	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50
GPRS850 1 Tx Slot	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50
GPRS850 2 Tx Slots	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
GPRS850 3 Tx Slots	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50
GPRS850 4 Tx Slots	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50	29.50
EGPRS850 1 Tx Slot	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
EGPRS850 2 Tx Slots	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00
EGPRS850 3 Tx Slots	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
EGPRS850 4 Tx Slots	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
GSM 1900	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
GPRS1900 1 Tx Slot	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
GPRS1900 2 Tx Slots	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
GPRS1900 3 Tx Slots	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00
GPRS1900 4 Tx Slots	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
EGPRS1900 1 Tx Slot	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00
EGPRS1900 2 Tx Slots	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
EGPRS1900 3 Tx Slots	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
EGPRS1900 4 Tx Slots	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
WCDMA Band2 RMC	24.50	24.50	24.50	24.50	22.50	22.50	24.50	24.50	24.50	24.50	24.50	24.50
HSDPA Subtest-1	22.80	22.80	22.80	22.80	23.30	23.30	22.80	22.80	22.80	22.80	22.80	22.80

HSDPA Subtest-2	22.80	22.80	22.80	22.80	23.30	23.30	22.80	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-3	22.30	22.30	22.30	22.30	22.80	22.80	22.30	22.30	22.30	22.30	22.30	22.30
HSDPA Subtest-4	22.30	22.30	22.30	22.30	22.80	22.80	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-1	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-2	21.80	21.80	21.80	21.80	21.30	21.30	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-3	21.80	21.80	21.80	21.80	21.30	21.30	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-4	21.80	21.80	21.80	21.80	20.80	20.80	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	21.80	21.80	21.80	21.80	22.30	22.30	21.80	21.80	21.80	21.80	21.80	21.80
WCDMA Band4 RMC	24.50	24.50	24.50	24.50	22.50	22.50	24.50	24.50	24.50	24.50	24.50	24.50
HSDPA Subtest-1	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-2	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-3	23.30	23.30	23.30	23.30	22.80	22.80	23.30	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-4	23.30	23.30	23.30	23.30	22.80	22.80	23.30	23.30	23.30	23.30	23.30	23.30
HSUPA Subtest-1	22.30	22.30	22.30	22.30	21.80	21.80	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-2	22.30	22.30	22.30	22.30	21.30	21.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-3	22.30	22.30	22.30	22.30	21.30	21.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-4	21.80	21.80	21.80	21.80	20.80	20.80	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	23.30	23.30	23.30	23.30	22.30	22.30	23.30	23.30	23.30	23.30	23.30	23.30
WCDMA Band5 RMC	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
HSDPA Subtest-1	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-2	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-3	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSDPA Subtest-4	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-1	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-2	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-3	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-4	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30	23.30
LTE Band2	24.50	24.50	24.50	24.50	22.50	22.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band5	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band7-Ant0	24.50	24.50	24.50	24.50	21.00	21.00	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band7-Ant4	24.5	16.5	16.5	16.5	20.5	20.5	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 12	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 26	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 41	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 66-Ant1	24.50	24.50	24.50	24.50	22.50	22.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 66-Ant1(for C2)	/	/	/	/	20.00	20.00	/	/	/	/	/	/
LTE Band 66-Ant4	24.50	16.50	16.50	16.50	21.00	21.00	24.50	24.50	24.50	24.50	24.50	24.50
5G NR N5	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
5G NR N7	24.50	16.50	16.50	16.50	20.00	20.00	24.50	24.50	24.50	24.50	24.50	24.50

9 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
ANT 0	GSM850
	WCDMA B5
	LTE B5/7/12/26/41
	N5
ANT 1	GSM1900
	WCDMA B2/4
	LTE B2/66
ANT 4	LTE B7/66
	N7
ANT 6	WLAN 2.4G/WLAN 5G/BT

Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
ANT0	<5	<5	16.63	<5	144.94	<5
ANT1	<5	<5	<5	56.11	156.33	<5
ANT4	<5	<5	<5	37	<5	150
ANT6	<5	<5	50.36	<5	<5	151

9.1 SAR Test Exclusion Consideration Table

According with FCC KDB 447498 D01, Appendix A, <SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm> Table, this Device SAR test configurations consider as following :

ANT0

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	Voice	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
	Data	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	RMC	25.00	316.23	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 26	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
NR n5	Distance to User			<5mm	<5mm	16.63mm	<5mm	144.94mm	<5mm
	DFT-s-OFDM QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes

ANT1

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 1900	Distance to User			<5mm	<5mm	<5mm	56.11mm	156.33mm	<5mm
	Voice	30.00	1000	Yes	Yes	Yes	No	No	Yes
	Data	30.00	1000	Yes	Yes	Yes	No	No	Yes
WCDMA Band 2	Distance to User			<5mm	<5mm	<5mm	56.11mm	142.8mm	<5mm
	RMC	24.50	281.84	Yes	Yes	Yes	No	No	Yes
WCDMA Band 4	Distance to User			<5mm	<5mm	<5mm	56.11mm	142.8mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	No	No	Yes
LTE Band 2	Distance to User			<5mm	<5mm	<5mm	56.11mm	142.8mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	No	No	Yes
LTE Band 66	Distance to User			<5mm	<5mm	<5mm	56.11mm	142.8mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	No	No	Yes

ANT4

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
LTE Band 7	Distance to User			<5mm	<5mm	<5mm	37mm	<5mm	150mm
	QPSK	24.50	281.84	Yes	Yes	Yes	No	Yes	No
LTE Band 66	Distance to User			<5mm	<5mm	<5mm	37mm	<5mm	150mm
	QPSK	24.50	281.84	Yes	Yes	Yes	No	Yes	No
NR n7	Distance to User			<5mm	<5mm	<5mm	37mm	<5mm	150mm
	DFT-s-OFDM BPSK	24.50	281.84	Yes	Yes	Yes	No	Yes	No

ANT6

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<5mm	<5mm	50.36mm	<5mm	<5mm	151mm
	802.11b	19.50	89.13	Yes	Yes	No	Yes	Yes	No
	802.11g	18.50	70.79	No	No	No	No	No	No
	802.11n(HT20)	18.50	70.79	No	No	No	No	No	No
	802.11n(HT40)	18.50	70.79	No	No	No	No	No	No
	802.11ac(VHT20)	18.50	70.79	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	50.36mm	<5mm	<5mm	151mm
	802.11a	18.00	63.10	No	No	No	No	No	No
	802.11n(HT20)	18.00	63.10	No	No	No	No	No	No
	802.11n(HT40)	18.00	63.10	No	No	No	No	No	No
	802.11ac(VHT20)	18.00	63.10	No	No	No	No	No	No
	802.11ac(VHT40)	18.00	63.10	No	No	No	No	No	No
WLAN 5.3 G	Distance to User			<5mm	<5mm	50.36mm	<5mm	<5mm	151mm
	802.11a	18.00	63.10	Yes	Yes	No	Yes	Yes	No
	802.11n(HT20)	18.00	63.10	No	No	No	No	No	No
	802.11n(HT40)	18.00	63.10	No	No	No	No	No	No
	802.11ac(VHT20)	18.00	63.10	Yes	Yes	No	Yes	Yes	No
	802.11ac(VHT40)	18.00	63.10	No	No	No	No	No	No
WLAN 5.6 G	Distance to User			<5mm	<5mm	50.36mm	<5mm	<5mm	151mm
	802.11a	18.00	63.10	No	No	No	No	No	No
	802.11n(HT20)	18.00	63.10	No	No	No	No	No	No
	802.11n(HT40)	18.00	63.10	Yes	Yes	No	Yes	Yes	No
	802.11ac(VHT20)	18.00	63.10	No	No	No	No	No	No
	802.11ac(VHT40)	18.00	63.10	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	50.36mm	<5mm	<5mm	151mm
	802.11a	18.00	63.10	No	No	No	No	No	No
	802.11n(HT20)	18.00	63.10	No	No	No	No	No	No

	802.11n(HT40)	18.00	63.10	Yes	Yes	No	Yes	Yes	No
	802.11ac(VHT20)	18.00	63.10	No	No	No	No	No	No
	802.11ac(VHT40)	18.00	63.10	No	No	No	No	No	No
	802.11ac(VHT80)	18.00	63.10	Yes	Yes	No	Yes	Yes	No

Note:

- Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
- Per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- Per KDB 447498 D01, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
- 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:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
 - $f(\text{GHz})$ 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
 - For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.

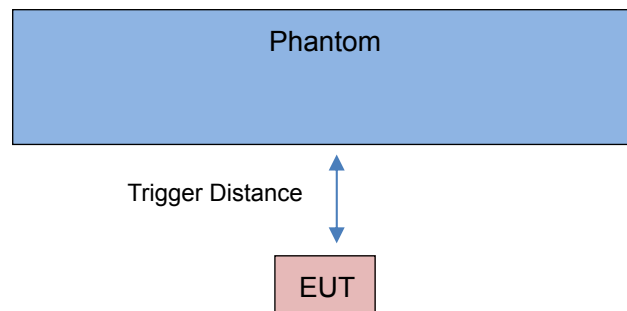
This formula is $[3.0] / [\sqrt{f(\text{GHz})}] \cdot [(\text{min. test separation distance, mm})] = \text{exclusion threshold of mW}$.
- Per KDB 447498 D01, at 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following
 - $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)$ mW, at 100 MHz to 1500 MHz
 - $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot 10$ mW at > 1500 MHz and ≤ 6 GHz
- Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2kbps, or reported SAR with RMC 12.2kbps setting is $\leq 1.2\text{W/kg}$, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
- Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
- Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
 - When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
 - When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is $\leq 1.2 \text{ W/kg}$.
- Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
 - When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is $\leq 1.2 \text{ W/kg}$, 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.
 - When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is $\leq 1.2 \text{ W/kg}$, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

10 PROXIMITY SENSOR TRIGGERING TEST

10.1 Procedures for determining proximity sensor distance

Proximity sensor triggering distance testing was performed, EUT moving further away from the phantom and EUT moving toward the phantom were both assessed, and the shortest triggering distances were reported and used for SAR assessment.

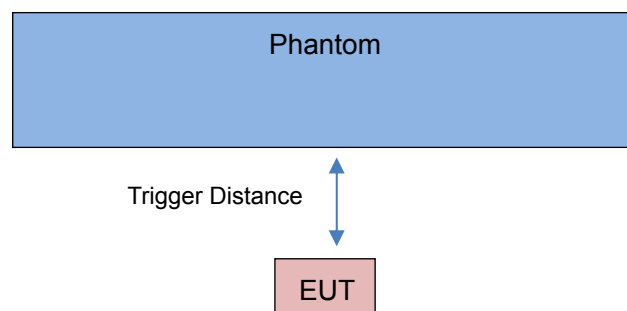
10.1.1 proximity sensor channel-1



Distance in mm	9	10	11	12	13	14	15	16	17
Front Side	On	On	Off	Off	Off	Off	Off	Off	Off
Left Side	On	On	Off	Off	Off	Off	Off	Off	Off
Bottom Side	On	On	On	Off	Off	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	On	Off	Off

Note: Power reduction is only applicable for WWAN Ant 0(LTE B7) and WWAN Ant 1 (WCDMA2/4,LTE B2/66)

10.1.2 proximity sensor channel-2



Distance in mm	9	10	11	12	13	14	15	16	17
Front Side	On	On	Off	Off	Off	Off	Off	Off	Off
Left Side	On	On	Off	Off	Off	Off	Off	Off	Off
Top Side	On	On	On	Off	Off	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	On	Off	Off

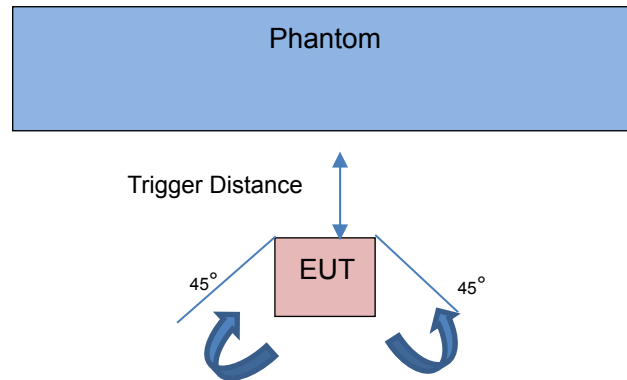
Note: Power reduction is only applicable for WWAN Ant 4(LTE B7/66,NR n7)

10.2 Procedures for determining EUT tilt angle influences to proximity sensor triggering

The influence of EUT tilt angles to proximity sensor channel-1 triggering was determined by positioning each EUT edge that contains a transmitting Ant0 and Ant1, perpendicular to the flat phantom, at 10 mm separation for the front side, 15 mm separation for the back side, 10 mm separation for the left edge and 11 mm separation for the bottom edge.

The influence of EUT tilt angles to proximity sensor channel-2 triggering was determined by positioning each EUT edge that contains a transmitting Ant4, perpendicular to the flat phantom, at 10 mm separation for the front side, 15 mm separation for the back side, 10 mm separation for the left edge and 11 mm separation for the bottom edge.

Rotating the tablet around the edge next to the phantom in $\leq 10^\circ$ increments until the tablet is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.



For verification of compliance of power reduction scheme, additional SAR test with EUT transmitting at full RF power at a separation of “the triggering distance – 1 mm”

proximity sensor channel-1

EUT Sides	Additional SAR test Distance in mm
Front Side	10
Left Side	10
Bottom Side	11
Back Side	15

proximity sensor channel-2

EUT Sides	Additional SAR test Distance in mm
Front Side	10
Left Side	10
Top Side	11
Back Side	15

11 TEST RESULT

11.1 GSM 850

Antenn a	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Mea s. No.
Head														
Ant0	Level A1&B1&C1	N/A	Voice	Right Cheek	0	128	824.2	-0.13	0.148	32.94	33.50	1.138	0.168	1#
		N/A		Right Tilted	0	128	824.2	0.02	0.095	32.94	33.50	1.138	0.108	/
		N/A		Left Cheek	0	128	824.2	0.11	0.119	32.94	33.50	1.138	0.135	/
		N/A		Left Tilted	0	128	824.2	0.06	0.083	32.94	33.50	1.138	0.094	/
Body														
Ant0	Level A1&B1&C1	N/A	GPRS (4slots)	Front	10	128	824.2	0.12	0.411	29.48	29.50	1.005	0.413	/
		N/A		Back	10	128	824.2	0.10	0.500	29.48	29.50	1.005	0.502	2#
		N/A		Left Side	10	128	824.2	0.09	0.216	29.48	29.50	1.005	0.217	/
		N/A		Right Side	10	128	824.2	-0.08	0.375	29.48	29.50	1.005	0.377	/
		N/A		Bottom Side	10	128	824.2	-0.01	0.497	29.48	29.50	1.005	0.499	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.2 GSM 1900

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
Ant1	Level A1&B1&C1	N/A	Voice	Right Cheek	0	810	1909.8	0.02	0.091	29.51	30.00	1.119	0.102	/
		N/A		Right Tilted	0	810	1909.8	0.05	0.077	29.51	30.00	1.119	0.086	/
		N/A		Left Cheek	0	810	1909.8	0.07	0.143	29.51	30.00	1.119	0.160	3#
		N/A		Left Tilted	0	810	1909.8	0.01	0.095	29.51	30.00	1.119	0.106	/
Hotspot														
Ant1	Level A1&B1&C1	N/A	GPRS (4slots)	Front	10	810	1909.8	0.04	0.448	26.22	27.00	1.197	0.536	/
		N/A		Back	10	810	1909.8	-0.01	0.663	26.22	27.00	1.197	0.793	4#
		N/A		Left Side	10	810	1909.8	0.08	0.400	26.22	27.00	1.197	0.479	/
		N/A		Bottom Side	10	810	1909.8	0.12	0.568	26.22	27.00	1.197	0.680	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.3WCDMA Band 2

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT1	Level A1&B1	N/A	RMC	Right Cheek	0	9538	1907.6	0.01	0.250	23.54	24.50	1.247	0.312	/
		N/A		Right Tilted	0	9538	1907.6	-0.01	0.166	23.54	24.50	1.247	0.207	/
		N/A		Left Cheek	0	9538	1907.6	0.05	0.388	23.54	24.50	1.247	0.484	5#
		N/A		Left Tilted	0	9538	1907.6	0.04	0.192	23.54	24.50	1.247	0.239	/
Body-worn Accessory														
ANT1	Level A1&B1	N/A	RMC	Front	15	9538	1907.6	0.02	0.419	23.54	24.50	1.247	0.523	/
		N/A		Back	15	9538	1907.6	0.03	0.618	23.54	24.50	1.247	0.771	6#
Hotspot														
ANT1	Level C1	N/A	RMC	Front	10	9262	1852.4	-0.11	0.195	22.27	22.50	1.054	0.206	/
		N/A		Back	10	9262	1852.4	0.11	0.363	22.27	22.50	1.054	0.383	7#
		N/A		Left Side	10	9262	1852.4	0.18	0.272	22.27	22.50	1.054	0.287	/
		N/A		Right Side	10	9262	1852.4	0.14	0.074	22.27	22.50	1.054	0.078	/
		N/A		Bottom Side	10	9262	1852.4	0.05	0.231	22.27	22.50	1.054	0.244	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.4WCDMA Band 4

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT1	Level A1&B1	N/A	RMC	Right Cheek	0	1513	1752.6	0.01	0.161	24.32	24.50	1.042	0.168	/
		N/A		Right Tilted	0	1513	1752.6	-0.04	0.130	24.32	24.50	1.042	0.136	/
		N/A		Left Cheek	0	1513	1752.6	0.07	0.200	24.32	24.50	1.042	0.208	8#
		N/A		Left Tilted	0	1513	1752.6	-0.09	0.146	24.32	24.50	1.042	0.152	/
Body-worn Accessory														
ANT1	Level A1&B1	N/A	RMC	Front	15	1513	1752.6	0.12	0.372	24.32	24.50	1.042	0.388	/
		N/A		Back	15	1513	1752.6	-0.03	0.470	24.32	24.50	1.042	0.490	9#
Hotspot														
ANT1	Level C1	N/A	RMC	Front	10	1513	1752.6	0.06	0.195	21.93	22.50	1.140	0.222	/
		N/A		Back	10	1513	1752.6	0.12	0.307	21.93	22.50	1.140	0.350	10#
		/		Left Side	10	1513	1752.6	0.19	0.236	21.93	22.50	1.140	0.269	/
		/		Right Side	10	1513	1752.6	0.08	0.064	21.93	22.50	1.140	0.073	/
		ON2		Bottom Side	10	1513	1752.6	-0.18	0.269	21.93	22.50	1.140	0.307	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.5WCDMA Band 5

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT0	Level A1&B1&C1	N/A	RMC	Right Cheek	0	4132	826.4	0.11	0.268	23.79	25.00	1.321	0.354	11#
		N/A		Right Tilted	0	4132	826.4	-0.01	0.104	23.79	25.00	1.321	0.137	/
		N/A		Left Cheek	0	4132	826.4	-0.08	0.217	23.79	25.00	1.321	0.287	/
		N/A		Left Tilted	0	4132	826.4	-0.17	0.091	23.79	25.00	1.321	0.120	/
Body														
ANT0	Level A1&B1&C1	N/A	RMC	Front	10	4132	826.4	0.10	0.276	23.79	25.00	1.321	0.365	/
		N/A		Back	10	4132	826.4	-0.06	0.337	23.79	25.00	1.321	0.445	12#
		N/A		Left Side	10	4132	826.4	0.09	0.144	23.79	25.00	1.321	0.190	/
		N/A		Rlght Side	10	4132	826.4	0.19	0.306	23.79	25.00	1.321	0.404	/
		N/A		Bottom Side	10	4132	826.4	0.09	0.318	23.79	25.00	1.321	0.420	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.6LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT0	Level A1&B1	N/A	QPSK	Right Cheek	0	18700	1860	1	Mid	0.08	0.182	24.16	24.50	1.081	0.197	/
		N/A			0	18700	1860	50	High	0.08	0.137	23.20	24.50	1.349	0.185	/
		N/A		Right Tilted	0	18700	1860	1	Mid	-0.15	0.082	24.16	24.50	1.081	0.089	/
		N/A			0	18700	1860	50	High	0.15	0.066	23.20	24.50	1.349	0.089	/
		N/A		Left Cheek	0	18700	1860	1	Mid	0.16	0.279	24.16	24.50	1.081	0.302	13#
		N/A			0	18700	1860	50	High	0.19	0.221	23.20	24.50	1.349	0.298	/
		N/A		Left Tilted	0	18700	1860	1	Mid	-0.02	0.090	24.16	24.50	1.081	0.097	/
		N/A			0	18700	1860	50	High	-0.04	0.074	23.20	24.50	1.349	0.100	/
Body-worn Accessory																
ANT0	Level A1&B1	N/A	QPSK	Front	15	18700	1860	1	Mid	-0.19	0.361	24.16	24.5	1.081	0.39	/
		N/A			15	18700	1860	50	High	0.12	0.284	23.2	24.5	1.349	0.383	/
		N/A		Back	15	18700	1860	1	Mid	-0.09	0.492	24.16	24.5	1.081	0.532	14#
		N/A			15	18700	1860	50	High	0.02	0.391	23.2	24.5	1.349	0.527	/
Hotspot																
ANT0	Level C1	N/A	QPSK	Front	10	18700	1860	1	Mid	0.01	0.393	22.05	22.50	1.109	0.436	/
		N/A			10	18700	1860	50	High	0.02	0.353	21.55	22.50	1.245	0.439	/
		N/A		Back	10	18700	1860	1	Mid	-0.08	0.476	22.05	22.50	1.109	0.528	/
		N/A			10	18700	1860	50	High	0.08	0.430	21.55	22.50	1.245	0.535	15#
		N/A		Left Side	10	18700	1860	1	Mid	0.02	0.368	22.05	22.50	1.109	0.408	/
		N/A			10	18700	1860	50	High	0.03	0.330	21.55	22.50	1.245	0.411	/
		N/A		Bottom Side	10	18700	1860	1	Mid	0.11	0.343	22.05	22.50	1.109	0.380	/
		N/A			10	18700	1860	50	High	0.01	0.314	21.55	22.50	1.245	0.391	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.7LTE Band 5 (10MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT0	Level A1&B1&C1	N/A	QPSK	Right Cheek	0	20525	836.5	1	Mid	0.08	0.182	23.91	24.50	1.146	0.208	16#
		N/A			0	20525	836.5	25	Low	-0.10	0.142	22.93	24.50	1.435	0.204	/
		N/A		Right Tilted	0	20525	836.5	1	Mid	-0.11	0.130	23.91	24.50	1.146	0.149	/
		N/A			0	20525	836.5	25	Low	0.03	0.104	22.93	24.50	1.435	0.149	/
		N/A		Left Cheek	0	20525	836.5	1	Mid	-0.16	0.176	23.91	24.50	1.146	0.202	/
		N/A			0	20525	836.5	25	Low	0.19	0.138	22.93	24.50	1.435	0.198	/
		N/A		Left Tilted	0	20525	836.5	1	Mid	0.02	0.040	23.91	24.50	1.146	0.046	/
		N/A			0	20525	836.5	25	Low	0.10	0.032	22.93	24.50	1.435	0.046	/
Body-worn Accessory																
ANT0	Level A1&B1&C1	N/A	QPSK	Front Side	10	20525	836.5	1	Mid	0.11	0.326	23.91	24.50	1.146	0.373	/
		N/A			10	20525	836.5	25	Low	-0.03	0.250	22.93	24.50	1.435	0.359	/
		N/A		Back Side	10	20525	836.5	1	Mid	-0.04	0.400	23.91	24.50	1.146	0.458	17#
		N/A			10	20525	836.5	25	Low	0.18	0.263	22.93	24.50	1.435	0.378	/
		N/A		Left Side	10	20525	836.5	1	Mid	0.15	0.127	23.91	24.50	1.146	0.145	/
		N/A			10	20525	836.5	25	Low	-0.19	0.102	22.93	24.50	1.435	0.146	/
		N/A		Right Side	10	20525	836.5	1	Mid	0.03	0.279	23.91	24.50	1.146	0.320	/
		N/A			10	20525	836.5	25	Low	-0.10	0.224	22.93	24.50	1.435	0.322	/
		N/A		Bottom Edge	10	20525	836.5	1	Mid	0.10	0.331	23.91	24.50	1.146	0.379	/
		N/A			10	20525	836.5	25	Low	0.04	0.257	22.93	24.50	1.435	0.369	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.8LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT0	Level A1&B1	N/A	QPSK	Right Cheek	0	20850	2510	1	Mid	0.09	0.140	24.07	24.50	1.104	0.155	18#
		N/A			0	21100	2535	50	Low	-0.04	0.102	23.07	24.50	1.390	0.142	/
		N/A		Right Tilted	0	20850	2510	1	Mid	-0.15	0.035	24.07	24.50	1.104	0.039	/
		N/A			0	21100	2535	50	Low	0.02	0.029	23.07	24.50	1.390	0.040	/
		N/A		Left Cheek	0	20850	2510	1	Mid	0.06	0.083	24.07	24.50	1.104	0.092	/
		N/A			0	21100	2535	50	Low	0.02	0.069	23.07	24.50	1.390	0.095	/
		N/A		Left Tilted	0	20850	2510	1	Mid	-0.12	0.036	24.07	24.50	1.104	0.040	/
		N/A			0	21100	2535	50	Low	-0.07	0.031	23.07	24.50	1.390	0.043	/
Body-worn Accessory																
ANT0	Level A1&B1	N/A	QPSK	Front Side	15	20850	2510	1	Mid	-0.18	0.233	24.07	24.50	1.104	0.257	/
		N/A			15	21100	2535	50	Low	0.02	0.209	23.07	24.50	1.390	0.291	/
		N/A		Back Side	15	20850	2510	1	Mid	0.12	0.397	24.07	24.50	1.104	0.438	/
		N/A			15	21100	2535	50	Low	0.09	0.385	23.07	24.50	1.390	0.535	19#
Hotspot																
ANT0	Level C1	N/A	QPSK	Front Side	10	20850	2510	1	Mid	0.02	0.154	20.52	21.00	1.117	0.172	/
		N/A			10	21100	2535	50	Low	-0.01	0.141	19.95	21.00	1.274	0.180	/
		N/A		Back Side	10	20850	2510	1	Mid	0.12	0.287	20.52	21.00	1.117	0.321	/
		N/A			10	21100	2535	50	Low	0.03	0.260	19.95	21.00	1.274	0.331	/
		N/A		Left Side	10	20850	2510	1	Mid	0.03	0.069	20.52	21.00	1.117	0.077	/
		N/A			10	21100	2535	50	Low	0.03	0.062	19.95	21.00	1.274	0.079	/
		N/A		Right Side	10	20850	2510	1	Mid	0.03	0.080	20.52	21.00	1.117	0.090	/
		N/A			10	21100	2535	50	Low	0.02	0.020	19.95	21.00	1.274	0.025	/
		N/A		Bottom Side	10	20850	2510	1	Mid	0.12	0.484	20.52	21.00	1.117	0.541	/
		N/A			10	21100	2535	50	Low	0.02	0.443	19.95	21.00	1.274	0.564	20#
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.9LTE Band 7 (20MHz Bandwidth)_ (ENDC)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT4	Level A1	ON	QPSK	Right Cheek	0	21100	2535	1	Mid	-0.07	0.353	15.71	16.50	1.199	0.423	/
		ON			0	21100	2535	50	Low	-0.08	0.321	15.55	16.50	1.245	0.399	/
		ON		Right Tilted	0	21100	2535	1	Mid	0.09	0.419	15.71	16.50	1.199	0.503	21#
		ON			0	21100	2535	50	Low	0.12	0.382	15.55	16.50	1.245	0.475	/
		ON		Left Cheek	0	21100	2535	1	Mid	0.19	0.160	15.71	16.50	1.199	0.192	/
		ON			0	21100	2535	50	Low	-0.07	0.152	15.55	16.50	1.245	0.189	/
		ON		Left Tilted	0	21100	2535	1	Mid	-0.17	0.235	15.71	16.50	1.199	0.282	/
		ON			0	21100	2535	50	Low	0.02	0.218	15.55	16.50	1.245	0.271	/
Body-worn Accessory																
ANT4	Level B1	N/A	QPSK	Front Side	15	21350	2560	1	High	0.10	0.221	24.15	24.50	1.084	0.240	/
		N/A			15	21350	2560	50	Mid	0.14	0.208	23.72	24.50	1.197	0.249	/
		N/A		Back Side	15	21350	2560	1	High	-0.07	0.260	24.15	24.50	1.084	0.282	22#
		N/A			15	21350	2560	50	Mid	0.08	0.234	23.72	24.50	1.197	0.280	/
Hotspot																
ANT4	Level C1	N/A	QPSK	Front Side	10	21100	2535	1	Low	0.07	0.201	19.87	20.50	1.156	0.232	/
		N/A			10	20850	2510	50	Mid	0.00	0.193	19.75	20.50	1.189	0.229	/
		N/A		Back Side	10	21100	2535	1	Mid	0.06	0.266	19.87	20.50	1.156	0.308	/
		N/A			10	20850	2510	50	Low	0.01	0.251	19.75	20.50	1.189	0.298	/
		N/A		Left Side	10	21100	2535	1	Mid	0.15	0.096	19.87	20.50	1.156	0.111	/
		N/A			10	20850	2510	50	Low	-0.09	0.084	19.75	20.50	1.189	0.100	/
		N/A		Top Side	10	21100	2535	1	Mid	0.10	0.429	19.87	20.50	1.156	0.496	23#
		N/A			10	20850	2510	50	Low	0.11	0.469	19.75	20.50	1.189	0.557	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.10 LTE Band 12 (10MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT0	Level A1&B1&C1	N/A	QPSK	Right Cheek	0	23095	707.5	1	Mid	0.03	0.190	23.79	24.50	1.178	0.224	24#
		N/A			0	23095	707.5	25	Low	0.15	0.149	22.77	24.50	1.489	0.222	/
		N/A		Right Tilted	0	23095	707.5	1	Mid	-0.04	0.063	23.79	24.50	1.178	0.074	/
		N/A			0	23095	707.5	25	Low	0.16	0.055	22.77	24.50	1.489	0.082	/
		N/A		Left Cheek	0	23095	707.5	1	Mid	-0.03	0.137	23.79	24.50	1.178	0.161	/
		N/A			0	23095	707.5	25	Low	-0.18	0.118	22.77	24.50	1.489	0.176	/
		N/A		Left Tilted	0	23095	707.5	1	Mid	0.08	0.037	23.79	24.50	1.178	0.044	/
		N/A			0	23095	707.5	25	Low	0.06	0.024	22.77	24.50	1.489	0.036	/

Hotspot																
ANT0	Level A1&B1&C1	N/A	QPSK	Front Side	10	23095	707.5	1	Mid	-0.16	0.184	23.79	24.50	1.178	0.217	/
		10			23095	707.5	25	Low	-0.17	0.138	22.77	24.50	1.489	0.206	/	
		N/A		Back Side	10	23095	707.5	1	Mid	0.18	0.221	23.79	24.50	1.178	0.260	/
		N/A			10	23095	707.5	25	Low	-0.06	0.170	22.77	24.50	1.489	0.253	/
		N/A		Left Side	10	23095	707.5	1	Mid	-0.12	0.142	23.79	24.50	1.178	0.167	/
		N/A			10	23095	707.5	25	Low	-0.16	0.111	22.77	24.50	1.489	0.165	/
		N/A		Right Side	10	23095	707.5	1	Mid	-0.02	0.290	23.79	24.50	1.178	0.342	25#
		N/A			10	23095	707.5	25	Low	0.16	0.212	22.77	24.50	1.489	0.316	/
		N/A		Bottom Side	10	23095	707.5	1	Mid	-0.03	0.203	23.79	24.50	1.178	0.239	/
		N/A			10	23095	707.5	25	Low	-0.18	0.151	22.77	24.50	1.489	0.225	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.11 LTE Band 26 (15MHz Bandwidth)

Anten na	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT0	Level A1&B1&C1	N/A	QPSK	Right Cheek	0	26865	831.5	1	Mid	0.03	0.224	23.83	24.50	1.167	0.261	26#
		N/A			0	26865	831.5	36	Low	-0.09	0.171	22.72	24.50	1.507	0.258	/
		N/A		Right Tilted	0	26865	831.5	1	Mid	0.08	0.170	23.83	24.50	1.167	0.198	/
		N/A			0	26865	831.5	36	Low	-0.04	0.109	22.72	24.50	1.507	0.164	/
		N/A		Left Cheek	0	26865	831.5	1	Mid	0.13	0.152	23.83	24.50	1.167	0.177	/
		N/A			0	26865	831.5	36	Low	0.17	0.136	22.72	24.50	1.507	0.205	/
		N/A		Left Tilted	0	26865	831.5	1	Mid	-0.01	0.066	23.83	24.50	1.167	0.077	/
		N/A			0	26865	831.5	36	Low	0.16	0.051	22.72	24.50	1.507	0.077	/
Body																
ANT0	Level A1&B1&C1	N/A	QPSK	Front Side	10	26865	831.5	1	Mid	0.04	0.281	23.83	24.50	1.167	0.328	/
		N/A			10	26865	831.5	36	Low	-0.02	0.235	22.72	24.50	1.507	0.354	/
		N/A		Back Side	10	26865	831.5	1	Mid	0.19	0.321	23.83	24.50	1.167	0.375	27#
		N/A			10	26865	831.5	36	Low	-0.14	0.242	22.72	24.50	1.507	0.365	/
		N/A		Left Side	10	26865	831.5	1	Mid	-0.11	0.128	23.83	24.50	1.167	0.149	/
		N/A			10	26865	831.5	36	Low	-0.15	0.099	22.72	24.50	1.507	0.149	/
		N/A		Right Side	10	26865	831.5	1	Mid	-0.16	0.269	23.83	24.50	1.167	0.314	/
		N/A			10	26865	831.5	36	Low	-0.13	0.204	22.72	24.50	1.507	0.307	/
		N/A		Bottom Side	10	26865	831.5	1	Mid	-0.14	0.294	23.83	24.50	1.167	0.343	/
		N/A			10	26865	831.5	36	Low	-0.06	0.228	22.72	24.50	1.507	0.344	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.12 LTE Band 66 (20MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT1	Level A1&B1	N/A	QPSK	Right Cheek	0	132572	1770	1	Mid	0.07	0.153	23.88	24.50	1.153	0.176	28#
		N/A			0	132572	1770	50	Low	-0.08	0.123	23.00	24.50	1.413	0.174	/
		N/A		Right Tilted	0	132572	1770	1	Mid	0.06	0.072	23.88	24.50	1.153	0.083	/
		N/A			0	132572	1770	50	Low	-0.16	0.055	23.00	24.50	1.413	0.078	/
		N/A		Left Cheek	0	132572	1770	1	Mid	0.04	0.138	23.88	24.50	1.153	0.159	/
		N/A			0	132572	1770	50	Low	-0.09	0.112	23.00	24.50	1.413	0.158	/
		N/A		Left Tilted	0	132572	1770	1	Mid	-0.18	0.049	23.88	24.50	1.153	0.057	/
		N/A			0	132572	1770	50	Low	-0.04	0.033	23.00	24.50	1.413	0.047	/
Body-worn Accessory																
ANT1	Level A1&B1	N/A	QPSK	Front Side	15	132572	1770	1	Mid	0.01	0.443	23.88	24.50	1.153	0.511	/
		N/A			15	132572	1770	50	Low	0.07	0.351	23.00	24.50	1.413	0.496	/
		N/A		Back Side	15	132572	1770	1	Mid	-0.05	0.482	23.88	24.50	1.153	0.556	29#
		N/A			15	132572	1770	50	Low	0.02	0.401	23.00	24.50	1.413	0.566	/
Hotspot																
ANT1	Level C1	N/A	QPSK	Front Side	10	132572	1770	1	Mid	0.02	0.333	21.87	22.50	1.156	0.385	/
		N/A			10	132572	1770	50	Low	0.02	0.299	21.45	22.50	1.274	0.381	/
		N/A		Back Side	10	132572	1770	1	Mid	0.02	0.371	21.87	22.50	1.156	0.429	30#
		N/A			10	132572	1770	50	Low	0.02	0.331	21.45	22.50	1.274	0.422	/
		N/A		Left Side	10	132572	1770	1	Mid	-0.01	0.294	21.87	22.50	1.156	0.340	/
		N/A			10	132572	1770	50	Low	0.02	0.263	21.45	22.50	1.274	0.335	/
		N/A		Bottom Side	10	132572	1770	1	Mid	0.05	0.354	21.87	22.50	1.156	0.409	/
		N/A			10	132572	1770	50	Low	-0.01	0.326	21.45	22.50	1.274	0.415	/
For ENDC																
ANT1	Level C2	N/A	QPSK	Front Side	10	132572	1770	1	Mid	0.03	0.218	18.88	20.00	1.294	0.282	/
		N/A			10	132572	1770	50	Low	-0.16	0.204	18.45	20.00	1.429	0.291	/
		N/A		Back Side	10	132572	1770	1	Mid	-0.09	0.247	18.88	20.00	1.294	0.320	31#
		N/A			10	132572	1770	50	Low	0.08	0.233	18.45	20.00	1.429	0.333	/
		N/A		Left Side	10	132572	1770	1	Mid	0.05	0.161	18.88	20.00	1.294	0.208	/
		N/A			10	132572	1770	50	Low	0.19	0.153	18.45	20.00	1.429	0.219	/
		N/A		Bottom Edge	10	132572	1770	1	Mid	-0.05	0.258	18.88	20.00	1.294	0.334	/
		N/A			10	132572	1770	50	Low	0.19	0.234	18.45	20.00	1.429	0.334	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.13 LTE Band 66 (20MHz Bandwidth)_(ENDC)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT4	Level A1	ON	QPSK	Right Cheek	0	132572	1770	1	Mid	0.08	0.307	16.48	16.50	1.005	0.308	/
		ON			0	132572	1770	50	Low	0.01	0.263	16.06	16.50	1.107	0.291	/
		ON		Right Tilted	0	132572	1770	1	Mid	0.01	0.438	16.48	16.50	1.005	0.440	32#
		ON			0	132572	1770	50	Low	-0.07	0.393	16.06	16.50	1.107	0.435	/
		ON		Left Cheek	0	132572	1770	1	Mid	-0.08	0.304	16.48	16.50	1.005	0.305	/
		ON			0	132572	1770	50	Low	-0.17	0.288	16.06	16.50	1.107	0.319	/
		ON		Left Tilted	0	132572	1770	1	Mid	-0.07	0.383	16.48	16.50	1.005	0.385	/
		ON			0	132572	1770	50	Low	-0.08	0.359	16.06	16.50	1.107	0.397	/
Body-worn Accessory																
ANT4	Level B1	N/A	QPSK	Front Side	15	132572	1770	1	High	-0.15	0.433	24.16	24.50	1.081	0.468	/
		N/A			15	132072	1720	50	Low	0.01	0.382	23.47	24.50	1.268	0.484	/
		N/A		Back Side	15	132572	1770	1	High	-0.09	0.523	24.16	24.50	1.081	0.566	33#
		N/A			15	132072	1720	50	Low	0.05	0.442	23.47	24.50	1.268	0.560	/
Hotspot																
ANT4	Level C1	N/A	QPSK	Front Side	10	132572	1770	1	Mid	0.17	0.306	20.55	21.00	1.109	0.339	/
		N/A			10	132572	1770	50	Low	-0.10	0.283	20.26	21.00	1.186	0.336	/
		N/A		Back Side	10	132572	1770	1	Mid	-0.16	0.326	20.55	21.00	1.109	0.362	/
		N/A			10	132572	1770	50	Low	-0.18	0.307	20.26	21.00	1.186	0.364	/
		N/A		Left Side	10	132572	1770	1	Mid	-0.15	0.077	20.55	21.00	1.109	0.086	/
		N/A			10	132572	1770	50	Low	0.08	0.057	20.26	21.00	1.186	0.068	/
		N/A		Top Side	10	132572	1770	1	Mid	0.01	0.329	20.55	21.00	1.109	0.365	34#
		N/A			10	132572	1770	50	Low	0.12	0.292	20.26	21.00	1.186	0.346	/

11.14 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT0	Level A1&B1&C1	N/A	QPSK	Right Cheek	0	39750	2506	1	Low	0.09	0.078	23.86	24.50	1.159	0.090	35#
		N/A			0	39750	2506	50	Mid	0.16	0.058	22.90	24.50	1.445	0.084	/
		N/A		Right Tilted	0	39750	2506	1	Low	0.07	0.033	23.86	24.50	1.159	0.038	/
		N/A			0	39750	2506	50	Mid	0.12	0.030	22.90	24.50	1.445	0.043	/
		N/A		Left Cheek	0	39750	2506	1	Low	0.08	0.057	23.86	24.50	1.159	0.066	/
		N/A			0	39750	2506	50	Mid	-0.16	0.043	22.90	24.50	1.445	0.062	/
		N/A		Left Tilted	0	39750	2506	1	Low	-0.18	0.027	23.86	24.50	1.159	0.032	/
		N/A			0	39750	2506	50	Mid	-0.18	0.027	23.86	24.50	1.159	0.032	/

		N/A			0	39750	2506	50	Mid	-0.15	0.021	22.90	24.50	1.445	0.030	/
Hotspot																
ANT0	Level A1&B1&C1	N/A	QPSK	Front Side	10	39750	2506	1	Low	0.04	0.258	23.86	24.50	1.159	0.299	/
		N/A			10	39750	2506	50	Mid	-0.07	0.196	22.90	24.50	1.445	0.283	/
		N/A		Back Side	10	39750	2506	1	Low	-0.04	0.472	23.86	24.50	1.159	0.547	/
		N/A			10	39750	2506	50	Mid	0.06	0.363	22.90	24.50	1.445	0.525	/
		N/A		Left Side	10	39750	2506	1	Low	-0.11	0.051	23.86	24.50	1.159	0.059	/
		N/A			10	39750	2506	50	Mid	-0.12	0.040	22.90	24.50	1.445	0.058	/
		N/A		Right Side	10	39750	2506	1	Low	-0.16	0.116	23.86	24.50	1.159	0.134	/
		N/A			10	39750	2506	50	Mid	-0.15	0.089	22.90	24.50	1.445	0.128	/
		N/A		Bottom Side	10	39750	2506	1	Low	0.05	0.606	23.86	24.50	1.159	0.702	36#
		N/A			10	40620	2593	1	Low	-0.03	0.490	23.62	24.50	1.225	0.600	/
		N/A			10	41490	2680	1	Low	0.01	0.539	23.74	24.50	1.191	0.642	/
		N/A			10	39750	2506	50	Mid	0.16	0.455	22.90	24.50	1.445	0.658	/
		N/A			10	40620	2593	50	Mid	0.07	0.393	22.67	24.50	1.524	0.599	/
		N/A			10	41490	2680	50	Mid	0.12	0.426	22.70	24.50	1.514	0.645	/
		N/A			10	39750	2506	100	0	0.03	0.239	22.86	24.50	1.459	0.349	/
		N/A														
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.15 5G n5 (20MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	VRB Length	VRB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
ANT0	Level A1&B1&C 1	N/A	DFT- s-OF DM QPS K	ENDC	Right	0	167300	836.5	1	53	0.01	0.211	24.16	24.50	1.081	0.228	37#
		Cheek				0	167300	836.5	50	28	-0.13	0.207	24.22	24.50	1.067	0.221	/
		Right			0	167300	836.5	1	53	-0.08	0.082	24.16	24.50	1.081	0.089	/	
					Tilted	0	167300	836.5	50	28	0.10	0.074	24.22	24.50	1.067	0.079	/
		Left			0	167300	836.5	1	53	0.00	0.152	24.16	24.50	1.081	0.164	/	
					Cheek	0	167300	836.5	50	28	-0.14	0.141	24.22	24.50	1.067	0.150	/
		Left			0	167300	836.5	1	53	0.11	0.074	24.16	24.50	1.081	0.080	/	
					Tilted	0	167300	836.5	50	28	0.19	0.069	24.22	24.50	1.067	0.074	/
Body																	
ANT0	Level A1&B1&C 1	N/A	DFT- s-OF DM BPSK	ENDC	Front	10	167300	836.5	1	53	-0.01	0.280	24.16	24.50	1.081	0.303	/
		Side				10	167300	836.5	50	28	0.02	0.277	24.22	24.50	1.067	0.295	/
		Back			10	167300	836.5	1	53	-0.04	0.326	24.16	24.50	1.081	0.353	38#	
					Side	10	167300	836.5	50	28	0.03	0.308	24.22	24.50	1.067	0.329	/
		Left			10	167300	836.5	1	53	-0.01	0.125	24.16	24.50	1.081	0.135	/	
					Side	10	167300	836.5	50	28	-0.14	0.110	24.22	24.50	1.067	0.117	/
		Right			10	167300	836.5	1	53	-0.04	0.125	24.16	24.50	1.081	0.135	/	
					Side	10	167300	836.5	50	28	-0.16	0.108	24.22	24.50	1.067	0.115	/
		Bottom			10	167300	836.5	1	53	-0.19	0.304	24.16	24.50	1.081	0.329	/	
					Side	10	167300	836.5	50	28	-0.18	0.283	24.22	24.50	1.067	0.302	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																	

11.16 5G n7 (20MHz Bandwidth)

Antenna	Power Reduction	Sensor State	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	VRB Length	VRB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
ANT4	Level A1	ON	DFT-s-OFDM QPSK	END C	Right	0	507000	2535	1	53	-0.02	0.482	15.68	16.50	1.208	0.582	39#
		Cheek			0	502000	2510	50	0	-0.09	0.463	15.77	16.50	1.183	0.548	/	
		Right			0	507000	2535	1	53	0.17	0.439	15.68	16.50	1.208	0.530	/	
		Tilted			0	502000	2510	50	0	0.14	0.412	15.77	16.50	1.183	0.487	/	
		Left Cheek			0	507000	2535	1	53	0.01	0.141	15.68	16.50	1.208	0.170	/	
					0	502000	2510	50	0	0.15	0.110	15.77	16.50	1.183	0.130	/	
		Left Tilted			0	507000	2535	1	53	-0.05	0.128	15.68	16.50	1.208	0.155	/	
					0	502000	2510	50	0	0.08	0.093	15.77	16.50	1.183	0.110	/	
Body-worn Accessory																	
ANT4	Level B1	N/A	DFT-s-OFDM QPSK	END C	Front	15	507000	2535	1	53	-0.09	0.083	24.12	24.50	1.091	0.091	/
		Front			15	507000	2535	50	28	0.11	0.062	24.26	24.50	1.057	0.066	/	
		Back			15	507000	2535	1	53	-0.04	0.334	24.12	24.50	1.091	0.365	40#	
		Back			15	507000	2535	50	28	0.15	0.312	24.26	24.50	1.057	0.330	/	
Hotspot																	
ANT4	Level C1	N/A	DFT-s-OFDM QPSK	END C	Front Side	10	507000	2535	1	53	0.14	0.221	19.75	20.00	1.059	0.234	/
		10				507000	2535	50	28	-0.06	0.210	19.93	20.00	1.016	0.213	/	
		Back Side			10	507000	2535	1	53	-0.08	0.297	19.75	20.00	1.059	0.315	/	
					10	507000	2535	50	28	-0.05	0.283	19.93	20.00	1.016	0.288	/	
		Left Side			10	507000	2535	1	53	0.08	0.087	19.75	20.00	1.059	0.093	/	
					10	507000	2535	50	28	0.02	0.074	19.93	20.00	1.016	0.075	/	
		Top Side			10	507000	2535	1	53	0.08	0.547	19.75	20.00	1.059	0.579	41#	
					10	507000	2535	50	28	-0.11	0.532	19.93	20.00	1.016	0.541	/	
Antenna	Power Reduction	Sensor State	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	VRB Length	VRB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Ant4	Level C1	N/A	D-s-O	END C	Top Side	0	507000	2535	1	53	0.05	1.080	19.75	20.00	1.059	1.144	42#
		N/A	QPSK		Top Side	0	507000	2535	50	28	0.01	1.020	19.93	20.00	1.016	1.037	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																	

11.17 WIFI 2.4GHz

Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
ANT6	Level A1	ON	802.11 b	Right Cheek	0	11	2462	0.02	0.109	99.59	1.004	13.90	14.00	1.023	0.112	/
	Level A1	ON		Left Tilted	0	11	2462	0.03	0.116	99.59	1.004	13.90	14.00	1.023	0.119	/
	Level A1	ON		Right Tilted	0	11	2462	0.01	0.357	99.59	1.004	13.90	14.00	1.023	0.367	/
	Level A1	ON		Right Tilted	0	11	2462	-0.06	0.405	99.59	1.004	13.90	14.00	1.023	0.416	43#
Body																
ANT6	LevelB1&C1	N/A	802.11 b	Front Side	10	11	2462	0.01	0.302	99.59	1.004	19.46	19.50	1.009	0.306	/
	LevelB1&C1	N/A		Back Side	10	11	2462	0.18	0.635	99.59	1.004	19.46	19.50	1.009	0.644	44#
	LevelB1&C1	N/A		Right Side	10	11	2462	0.11	0.163	99.59	1.004	19.46	19.50	1.009	0.165	/
	LevelB1&C1	N/A		Top Side	10	11	2462	-0.03	0.516	99.59	1.004	19.46	19.50	1.009	0.523	/
Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity																
ANT6	LevelB1&C1	N/A	802.11 b	Front Side	0	11	2462	-0.02	1.110	99.59	1.004	19.46	19.50	1.009	1.125	/
	LevelB1&C1	N/A		Back Side	0	11	2462	0.03	1.560	99.59	1.004	19.46	19.50	1.009	1.581	45#
	LevelB1&C1	N/A		Top Side	0	11	2462	0.13	0.835	99.59	1.004	19.46	19.50	1.009	0.846	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.18 WIFI 5GHz

Fre. Band	Antenna	Power Reduction	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																	
5.3G	ANT6	Level A1	ON	802.11ac(VHT20)	Right Cheek	0	52	5260	0.03	0.274	97.03	1.031	12.40	12.50	1.023	0.289	/
			ON		Right Tilted	0	52	5260	-0.02	0.295	97.03	1.031	12.40	12.50	1.023	0.311	/
			ON		Left Cheek	0	52	5260	-0.12	0.435	97.03	1.031	12.40	12.50	1.023	0.459	/
			ON		Left Tilted	0	52	5260	0.02	0.630	97.03	1.031	12.40	12.50	1.023	0.664	46#
5.5G	ANT6	Level A1	ON	802.11ac(VHT80)	Right Cheek	0	122	5610	-0.15	0.331	89.87	1.113	12.77	13.00	1.054	0.388	/
			ON		Right Tilted	0	122	5610	-0.05	0.346	89.87	1.113	12.77	13.00	1.054	0.406	/
			ON		Left Cheek	0	122	5610	-0.03	0.433	89.87	1.113	12.77	13.00	1.054	0.508	/
			ON		Left Tilted	0	122	5610	0.09	0.574	89.87	1.113	12.77	13.00	1.054	0.673	47#
5.8G	ANT6	Level A1	ON	802.11ac(VHT80)	Right Cheek	0	155	5775	0.12	0.344	89.87	1.113	12.73	13.00	1.064	0.407	/
			ON		Right Tilted	0	155	5775	0.10	0.382	89.87	1.113	12.73	13.00	1.064	0.452	/
			ON		Left Cheek	0	155	5775	-0.04	0.515	89.87	1.113	12.73	13.00	1.064	0.610	/
			ON		Left Tilted	0	155	5775	0.02	0.633	89.87	1.113	12.73	13.00	1.064	0.750	48#
Body																	
5.3G	ANT6	Level	N/A	802.11a	Front Side	10	64	5320	0.07	0.214	97.39	1.027	17.78	18.00	1.052	0.231	/

		B1&C1	N/A		Back Side	10	64	5320	0.12	0.503	97.39	1.027	17.78	18.00	1.052	0.543	/
			N/A		Rlght Side	10	64	5320	0.04	0.132	97.39	1.027	17.78	18.00	1.052	0.143	/
			N/A		Top Side	10	64	5320	0.04	0.601	97.39	1.027	17.78	18.00	1.052	0.649	49#
5.5G	ANT6	Level B1&C1	N/A	802.11n(H T40)	Front Side	10	126	5630	0.17	0.188	94.13	1.062	17.82	18.00	1.042	0.208	/
			N/A		Back Side	10	126	5630	-0.10	0.214	94.13	1.062	17.82	18.00	1.042	0.237	/
			N/A		Rlght Side	10	126	5630	-0.16	0.108	94.13	1.062	17.82	18.00	1.042	0.120	/
			N/A		Top Side	10	126	5630	0.01	0.496	94.13	1.062	17.82	18.00	1.042	0.549	50#
5.8G	ANT6	Level B1&C1	N/A	802.11ac(VHT80)	Front Side	10	155	5775	0.07	0.214	89.87	1.113	17.79	18.00	1.050	0.250	/
			N/A		Back Side	10	155	5775	0.12	0.409	89.87	1.113	17.79	18.00	1.050	0.478	/
			N/A		Rlght Side	10	155	5775	0.04	0.052	89.87	1.113	17.79	18.00	1.050	0.061	/
			N/A		Top Side	10	155	5775	0.04	0.529	89.87	1.113	17.79	18.00	1.050	0.618	51#
Fre. Band	Antenna	Power Reductio n	Sensor State	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity																	
5.3G	ANT6	Level B1&C1	N/A	802.11a	Front Side	0	64	5320	0.03	0.419	97.39	1.027	17.78	18.00	1.052	0.453	/
			N/A		Back Side	0	64	5320	-0.02	0.642	97.39	1.027	17.78	18.00	1.052	0.693	/
			N/A		Top Side	0	64	5320	0.08	1.080	97.39	1.027	17.78	18.00	1.052	1.167	52#
5.5G	ANT6	Level B1&C1	N/A	802.11n(H T40)	Front Side	0	126	5630	0.13	0.415	94.13	1.062	17.82	18.00	1.042	0.460	/
			N/A		Back Side	0	126	5630	0.03	0.660	94.13	1.062	17.82	18.00	1.042	0.731	/
			N/A		Top Side	0	126	5630	0.09	1.110	94.13	1.062	17.82	18.00	1.042	1.229	53#

11.19 Bluetooth

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT6	DH5	Right Cheek	0	39	2441	0.14	0.019	10.49	11.00	1.125	100	1.000	0.021	/
		Right Tilted	0	39	2441	0.12	0.037	10.49	11.00	1.125	100	1.000	0.042	/
		Left Cheek	0	39	2441	-0.17	0.044	10.49	11.00	1.125	100	1.000	0.050	/
		Left Tilted	0	39	2441	-0.03	0.062	10.49	11.00	1.125	100	1.000	0.070	54#
Hotspot														
ANT6	DH5	Front Side	10	39	2441	0.04	0.013	10.49	11.00	1.125	100	1.000	0.014	/
		Back Side	10	39	2441	-0.09	0.020	10.49	11.00	1.125	100	1.000	0.022	55#
		Right Side	10	39	2441	0.09	0.007	10.49	11.00	1.125	100	1.000	0.008	/
		Top Side	10	39	2441	0.14	0.011	10.49	11.00	1.125	100	1.000	0.012	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.20 The evaluation of multi-SIM cards

We'll perform the head measurement in all bands with the primary SIM depending on the evaluation of multi-SIM cards and retest on highest value point with other SIM. Then, repeat the measurement in the Body test.

Frequency		Position	SIM cards	1g Meas SAR (W/kg)	Dist (mm)
Freq (MHz)	Ch.				
5775	155	Left Tilted	SIM 1	0.633	0
5775	155	Left Tilted	SIM 2	0.622	0
Note: According to the values in the above table, the SIM1 is the primary SIM card. We'll perform the head measurement with the SIM1 and retest on highest value point with others					

Frequency		Position	SIM cards	1g Meas SAR (W/kg)	Dist (mm)
Freq (MHz)	Ch.				
1909.8	810	Back	SIM 1	0.663	10
1909.8	810	Back	SIM 2	0.657	10
Note: According to the values in the above table, the SIM1 is the primary SIM card. We'll perform the head measurement with the SIM1 and retest on highest value point with others					

12 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Ratio
--	--	--	--	--	--	--	--

13 SIMULTANEOUS TRANSMISSION

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

13.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Specific
1	WWAN + 2.4GWIFI	Yes	Yes	Yes	Yes
2	WWAN + Bluetooth	Yes	Yes	Yes	No
3	WWAN + 5GWIFI	Yes	Yes	Yes	Yes

Note:

1. 2G&3G&4G&5G share the same antenna and can't transmit simultaneously.
2. WWAN antennas can switch automatically, but can't transmit simultaneously.
3. The maximum SAR summation is calculated based on the same configuration and test position.
4. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
5. This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz WLAN/5.5GHz WLAN supports WiFi Direct (GC only).

13.2 Sum SAR of Simultaneous Transmission

13.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR				SUM SAR		
			1	2	3	4			
			WWAN	2.4GWIFI	MAX.5GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)	Sum SAR (1+4)
GSM850	Ant0	Right Cheek	0.168	0.112	0.407	0.021	0.280	0.575	0.189
		Right Tilt	0.108	0.119	0.452	0.042	0.227	0.560	0.150
		Left Cheek	0.135	0.367	0.610	0.050	0.502	0.745	0.185
		Left Tilt	0.094	0.416	0.750	0.070	0.510	0.844	0.164
GSM1900	Ant1	Right Cheek	0.102	0.112	0.407	0.021	0.214	0.509	0.123
		Right Tilt	0.086	0.119	0.452	0.042	0.205	0.538	0.128
		Left Cheek	0.160	0.367	0.610	0.050	0.527	0.770	0.210
		Left Tilt	0.106	0.416	0.750	0.070	0.522	0.856	0.176
WCDMA B2	Ant1	Right Cheek	0.312	0.112	0.407	0.021	0.424	0.719	0.333
		Right Tilt	0.207	0.119	0.452	0.042	0.326	0.659	0.249
		Left Cheek	0.484	0.367	0.610	0.050	0.851	1.094	0.534
		Left Tilt	0.239	0.416	0.750	0.070	0.655	0.989	0.309
WCDMA B4	Ant1	Right Cheek	0.168	0.112	0.407	0.021	0.280	0.575	0.189
		Right Tilt	0.136	0.119	0.452	0.042	0.255	0.588	0.178
		Left Cheek	0.208	0.367	0.610	0.050	0.575	0.818	0.258
		Left Tilt	0.152	0.416	0.750	0.070	0.568	0.902	0.222
WCDMA B5	Ant0	Right Cheek	0.354	0.112	0.407	0.021	0.466	0.761	0.375
		Right Tilt	0.137	0.119	0.452	0.042	0.256	0.589	0.179
		Left Cheek	0.287	0.367	0.610	0.050	0.654	0.897	0.337
		Left Tilt	0.120	0.416	0.750	0.070	0.536	0.870	0.190
LTE Band 2	Ant1	Right Cheek	0.197	0.112	0.407	0.021	0.309	0.604	0.218
		Right Tilt	0.089	0.119	0.452	0.042	0.208	0.541	0.131
		Left Cheek	0.302	0.367	0.610	0.050	0.669	0.912	0.352
		Left Tilt	0.100	0.416	0.750	0.070	0.516	0.850	0.170
LTE Band 5	Ant0	Right Cheek	0.208	0.112	0.407	0.021	0.320	0.615	0.229
		Right Tilt	0.149	0.119	0.452	0.042	0.268	0.601	0.191
		Left Cheek	0.202	0.367	0.610	0.050	0.569	0.812	0.252
		Left Tilt	0.046	0.416	0.750	0.070	0.462	0.796	0.116
LTE Band 7-Ant0	Ant0	Right Cheek	0.155	0.112	0.407	0.021	0.267	0.562	0.176
		Right Tilt	0.040	0.119	0.452	0.042	0.159	0.492	0.082
		Left Cheek	0.095	0.367	0.610	0.050	0.462	0.705	0.145
		Left Tilt	0.043	0.416	0.750	0.070	0.459	0.793	0.113
LTE Band 7-Ant4	Ant4	Right Cheek	0.423	0.112	0.407	0.021	0.535	0.830	0.444
		Right Tilt	0.503	0.119	0.452	0.042	0.622	0.955	0.545
		Left Cheek	0.192	0.367	0.610	0.050	0.559	0.802	0.242
		Left Tilt	0.282	0.416	0.750	0.070	0.698	1.032	0.352

LTE Band 12	Ant0	Right Cheek	0.224	0.112	0.407	0.021	0.336	0.631	0.245
		Right Tilt	0.082	0.119	0.452	0.042	0.201	0.534	0.124
		Left Cheek	0.176	0.367	0.610	0.050	0.543	0.786	0.226
		Left Tilt	0.044	0.416	0.750	0.070	0.460	0.794	0.114
LTE Band 26	Ant0	Right Cheek	0.261	0.112	0.407	0.021	0.373	0.668	0.282
		Right Tilt	0.198	0.119	0.452	0.042	0.317	0.650	0.240
		Left Cheek	0.205	0.367	0.610	0.050	0.572	0.815	0.255
		Left Tilt	0.077	0.416	0.750	0.070	0.493	0.827	0.147
LTE Band 41	Ant0	Right Cheek	0.090	0.112	0.407	0.021	0.202	0.497	0.111
		Right Tilt	0.043	0.119	0.452	0.042	0.162	0.495	0.085
		Left Cheek	0.066	0.367	0.610	0.050	0.433	0.676	0.116
		Left Tilt	0.032	0.416	0.750	0.070	0.448	0.782	0.102
LTE Band 66-Ant1	Ant1	Right Cheek	0.176	0.112	0.407	0.021	0.288	0.583	0.197
		Right Tilt	0.083	0.119	0.452	0.042	0.202	0.535	0.125
		Left Cheek	0.159	0.367	0.610	0.050	0.526	0.769	0.209
		Left Tilt	0.057	0.416	0.750	0.070	0.473	0.807	0.127
LTE Band 66-Ant1 Level C2	Ant1	Right Cheek	0.291	0.112	0.407	0.021	0.403	0.698	0.312
		Right Tilt	0.364	0.119	0.452	0.042	0.483	0.816	0.406
		Left Cheek	0.219	0.367	0.610	0.050	0.586	0.829	0.269
		Left Tilt	0.334	0.416	0.750	0.070	0.750	1.084	0.404
LTE Band 66-Ant4	Ant4	Right Cheek	0.308	0.112	0.407	0.021	0.420	0.715	0.329
		Right Tilt	0.440	0.119	0.452	0.042	0.559	0.892	0.482
		Left Cheek	0.319	0.367	0.610	0.050	0.686	0.929	0.369
		Left Tilt	0.397	0.416	0.750	0.070	0.813	1.147	0.467

Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.215 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.2 Body Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR				SUM SAR		
			1	2	3	4			
			WWAN	2.4GWIFI	MAX.5GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)	Sum SAR (1+4)
GSM850	Ant0	Front	0.413	0.306	0.250	0.014	0.719	0.663	0.427
		Back	0.502	0.644	0.543	0.022	1.146	1.045	0.524
		Right Side	0.377	0.165	0.143	0.008	0.542	0.520	0.385
GSM1900	Ant1	Front	0.536	0.306	0.250	0.014	0.842	0.786	0.550
		Back	0.793	0.644	0.543	0.022	1.437	1.336	0.815
WCDMA B2	Ant1	Front	0.206	0.306	0.250	0.014	0.512	0.456	0.220
		Back	0.383	0.644	0.543	0.022	1.027	0.926	0.405
		Right Side	0.078	0.165	0.143	0.008	0.243	0.221	0.086
WCDMA B4	Ant1	Front	0.222	0.306	0.250	0.014	0.528	0.472	0.236
		Back	0.350	0.644	0.543	0.022	0.994	0.893	0.372
		Right Side	0.073	0.165	0.143	0.008	0.238	0.216	0.081
WCDMA B5	Ant0	Front	0.365	0.306	0.250	0.014	0.671	0.615	0.379
		Back	0.445	0.644	0.543	0.022	1.089	0.988	0.467
		Right Side	0.404	0.165	0.143	0.008	0.569	0.547	0.412
LTE Band 2	Ant1	Front	0.439	0.306	0.250	0.014	0.745	0.689	0.453
		Back	0.535	0.644	0.543	0.022	1.179	1.078	0.557
LTE Band 5	Ant0	Front	0.373	0.306	0.250	0.014	0.679	0.623	0.387
		Back	0.458	0.644	0.543	0.022	1.102	1.001	0.480
		Right Side	0.322	0.165	0.143	0.008	0.487	0.465	0.330
LTE Band 7-Ant0	Ant0	Front	0.169	0.306	0.250	0.014	0.475	0.419	0.183
		Back	0.313	0.644	0.543	0.022	0.957	0.856	0.335
		Right Side	0.085	0.165	0.143	0.008	0.250	0.228	0.093
LTE Band 7-Ant4	Ant4	Front	0.223	0.306	0.250	0.014	0.529	0.473	0.237
		Back	0.295	0.644	0.543	0.022	0.939	0.838	0.317
		Top Side	0.475	0.523	0.649	0.012	0.998	1.124	0.487
LTE Band 12	Ant0	Front	0.217	0.306	0.250	0.014	0.523	0.467	0.231
		Back	0.260	0.644	0.543	0.022	0.904	0.803	0.282
		Right Side	0.342	0.165	0.143	0.008	0.507	0.485	0.350
LTE Band 26	Ant0	Front	0.354	0.306	0.250	0.014	0.660	0.604	0.368
		Back	0.375	0.644	0.543	0.022	1.019	0.918	0.397
		Right Side	0.314	0.165	0.143	0.008	0.479	0.457	0.322
LTE Band 41	Ant0	Front	0.299	0.306	0.250	0.014	0.605	0.549	0.313
		Back	0.547	0.644	0.543	0.022	1.191	1.090	0.569
		Right Side	0.134	0.165	0.143	0.008	0.299	0.277	0.142
LTE Band 66-Ant1	Ant1	Front	0.385	0.306	0.250	0.014	0.691	0.635	0.399
		Back	0.429	0.644	0.543	0.022	1.073	0.972	0.451
LTE Band 66-Ant1 Level C2	Ant1	Front	0.291	0.306	0.250	0.014	0.597	0.541	0.305
		Back	0.320	0.644	0.543	0.022	0.964	0.863	0.342

LTE Band 66-Ant4	Ant4	Front	0.346	0.306	0.250	0.014	0.652	0.596	0.360
		Back	0.375	0.644	0.543	0.022	1.019	0.918	0.397
		Top Side	0.365	0.523	0.649	0.012	0.888	1.014	0.377
Note: 1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table. 2: The highest Summed 1g SAR is 1.437 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.									

13.2.3 Specific Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN

Band	Antenna	Position	Stand alone SAR			SUM SAR	
			1	2	3		
			WWAN	2.4GWIFI	MAX.5GWIFI	Sum SAR (1+2)	Sum SAR (1+3)
N7	Ant4	Top Side	1.144	0.846	1.229	1.990	2.373
Note: Conclusion: According to the above tables, the sum of reported SAR values is < 4.0W/kg. So the simultaneous transmission SAR with volume scans is not required							

13.2.4 Simultaneous Transmission SAR Evaluation for EN-DC Mode with WLAN and Bluetooth

Band	Position	Stand alone SAR				SUM SAR		
		1	2	3	4			
		WWAN	2.4GWIFI	MAX.5GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)	Sum SAR (1+4)
Head								
7A-N5A	Right Cheek	0.651	0.112	0.407	0.021	0.763	1.058	0.133
	Right Tilt	0.592	0.119	0.452	0.042	0.711	1.044	0.161
	Left Cheek	0.356	0.367	0.610	0.050	0.723	0.966	0.417
	Left Tilt	0.362	0.416	0.750	0.070	0.778	1.112	0.486
5A-N7A	Right Cheek	0.790	0.112	0.407	0.021	0.902	1.197	0.133
	Right Tilt	0.679	0.119	0.452	0.042	0.798	1.131	0.161
	Left Cheek	0.372	0.367	0.610	0.050	0.739	0.982	0.417
	Left Tilt	0.201	0.416	0.750	0.070	0.617	0.951	0.486
66A-N7A	Right Cheek	0.758	0.112	0.407	0.021	0.870	1.165	0.133
	Right Tilt	0.613	0.119	0.452	0.042	0.732	1.065	0.161
	Left Cheek	0.329	0.367	0.610	0.050	0.696	0.939	0.417
	Left Tilt	0.212	0.416	0.750	0.070	0.628	0.962	0.486
66A-N5A	Right Cheek	0.536	0.112	0.407	0.021	0.648	0.943	0.133
	Right Tilt	0.529	0.119	0.452	0.042	0.648	0.981	0.161
	Left Cheek	0.483	0.367	0.610	0.050	0.850	1.093	0.417
	Left Tilt	0.477	0.416	0.750	0.070	0.893	1.227	0.486
Body								
7A-N5A	Front	0.526	0.306	0.250	0.014	0.832	0.776	0.540
	Back	0.648	0.644	0.543	0.022	1.292	1.191	0.670
5A-N7A	Front	0.607	0.306	0.250	0.014	0.913	0.857	0.621

	Back	0.773	0.644	0.543	0.022	1.417	1.316	0.795
66A-N7A	Front	0.525	0.306	0.250	0.014	0.831	0.775	0.539
	Back	0.635	0.644	0.543	0.022	1.279	1.178	0.657
66A-N5A	Front	0.642	0.306	0.250	0.014	0.948	0.892	0.656
	Back	0.718	0.644	0.543	0.022	1.362	1.260	0.739

Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.418 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.5 Head Simultaneous Transmission SAR Evaluation for EN-DC Mode

EN-DC Configuratoon	LTE Ant.	NR Ant.	Position	Stand alone SAR		SUM SAR
				1	2	
				LTE	NR	Sum SAR (1+2)
7A-N5A	Ant.4	Ant.0	Right Cheek	0.423	0.228	0.651
			Right Tilted	0.503	0.089	0.592
			Left Cheek	0.192	0.164	0.356
			Left Tilted	0.282	0.080	0.362
5A-N7A	Ant.0	Ant.4	Right Cheek	0.208	0.582	0.790
			Right Tilted	0.149	0.530	0.679
			Left Cheek	0.202	0.170	0.372
			Left Tilted	0.046	0.155	0.201
66A-N7A	Ant.1	Ant.4	Right Cheek	0.176	0.582	0.758
			Right Tilted	0.083	0.530	0.613
			Left Cheek	0.159	0.170	0.329
			Left Tilted	0.057	0.155	0.212
66A-N5A	Ant.4	Ant.0	Right Cheek	0.308	0.228	0.536
			Right Tilted	0.440	0.089	0.529
			Left Cheek	0.319	0.164	0.483
			Left Tilted	0.397	0.080	0.477

Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.790 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.6 Simultaneous Transmission SAR Evaluation for EN-DC Mode

EN-DC Configuratoin	LTE Ant.	NR Ant.	Position	Stand alone SAR		SUM SAR
				1	2	
				LTE	NR	Sum SAR (1+2)
7A-N5A	Ant.4	Ant.0	Front	0.223	0.303	0.526
			Back	0.295	0.353	0.648
			Left Side	0.106	0.135	0.241
5A-N7A	Ant.0	Ant.4	Front	0.373	0.234	0.607
			Back	0.458	0.315	0.773
			Left Side	0.146	0.093	0.239
66A-N7A	Ant.1	Ant.4	Front	0.291	0.234	0.525
			Back	0.320	0.315	0.635
			Left Side	0.219	0.093	0.312
66A-N5A	Ant.4	Ant.0	Front	0.339	0.303	0.642
			Back	0.364	0.353	0.717
			Left Side	0.086	0.135	0.221

Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.774 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

14 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1201	2020/11/11	2023/11/10
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2021/05/17	2024/05/16
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2021/05/17	2024/05/16
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2021/05/20	2024/05/19
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2021/05/19	2024/05/18
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2021/05/19	2024/05/18
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2021/05/18	2024/05/17
E-Field Probe	Speag	EX3DV4	SN: 7510	2020/11/30	2021/11/29
E-Field Probe	Speag	EX3DV4	SN: 7663	2021/07/23	2022/07/22
Data Acquisition Electronics	Speag	DAE4	SN: 878	2021/07/15	2022/07/14
Signal Generator	R&S	SMB100A	182396	2020/12/21	2022/12/19
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2021/09/08	2022/09/07
Power Sensor	R&S	NRV-Z4	100381	2021/09/08	2022/09/07
Power Sensor	R&S	NRV-Z2	100211	2021/09/08	2022/09/07
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2021/03/16	2022/03/15
Wireless Communication Test Set	Anritsu	MT8820C	6201502991	2021/03/16	2022/03/15
Network Analyzer	Agilent	E5071B	MY42404001	2021/04/01	2022/03/31
Thermometer	Elitech	RC-4HC	N/A	2021/09/22	2022/09/21
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	N/A	N/A
Phantom1(DASY5)	Speag	SAM	SN: 1859	N/A	N/A
Phantom2(DASY5)	Speag	SAM	SN: 1857	N/A	N/A
Phantom3(DASY4)	Speag	SAM	SN: 1392	N/A	N/A
Phantom4(DASY4)	Speag	SAM	SN: 1402	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an SCLMP Dielectric Probe Kit.

Head Liquid

Date	Test System	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2021.11.13	DASY5	Head	750	21.5	0.920	41.92	0.89	41.94	3.37	-0.05
2021.11.14	DASY5	Head	835	21.2	0.940	43.53	0.90	41.50	4.44	4.89
2021.11.15	DASY5	Head	835	21.1	0.900	41.23	0.90	41.50	0.00	-0.65
2021.11.16	DASY5	Head	835	21.3	0.950	43.53	0.90	41.50	3.33	2.48
2021.11.17	DASY5	Head	1750	21.6	1.350	40.38	1.37	40.08	-1.46	0.75
2021.11.18	DASY5	Head	1750	21.6	1.380	41.82	1.37	40.08	0.73	4.34
2021.11.19	DASY5	Head	1900	21.3	1.460	40.09	1.40	40.00	4.29	0.23
2021.11.20	DASY5	Head	1900	21.7	1.460	41.80	1.40	40.00	4.29	4.50
2021.11.21	DASY5	Head	2450	21.2	1.850	39.05	1.80	39.20	2.78	-0.38
2021.11.22	DASY5	Head	2600	21.7	1.980	39.06	1.96	39.01	1.02	0.13
2021.11.23	DASY5	Head	2600	21.4	2.010	40.64	1.96	39.01	2.55	4.18
2021.11.24	DASY5	Head	5250	21.3	4.740	35.90	4.66	35.99	1.72	-0.25
2021.11.25	DASY5	Head	5600	21.6	5.210	35.24	5.07	35.53	2.76	-0.82
2021.11.26	DASY5	Head	5750	21.5	5.380	34.95	5.27	35.30	2.09	-0.99
2021.12.14	DASY5	Head	5750	21.6	5.201	34.00	5.27	35.30	-1.31	-3.68
2021.12.27	DASY5	Head	835	21.4	0.929	42.05	0.90	41.50	3.22	1.32
2021.12.27	DASY5	Head	1900	21.4	1.458	39.73	1.40	40.00	4.14	-0.67
Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.										

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 % (for 1 g).

Head liquid 1g

Date	Test System	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2021.11.13	DASY5	Head	750	100	0.851	8.51	8.29	2.65
2021.11.14	DASY5	Head	835	100	0.924	9.24	9.49	-2.63
2021.11.15	DASY5	Head	835	100	0.945	9.45	9.49	-0.42
2021.11.16	DASY5	Head	835	100	1.000	10.00	9.49	5.37
2021.11.17	DASY5	Head	1750	100	3.570	35.70	36.7	-2.72
2021.11.18	DASY5	Head	1750	100	3.710	37.10	36.7	1.09
2021.11.19	DASY5	Head	1900	100	4.250	42.50	39.4	7.87
2021.11.20	DASY5	Head	1900	100	4.040	40.40	39.4	2.54
2021.11.21	DASY5	Head	2450	100	5.300	53.00	52.6	0.76
2021.11.22	DASY5	Head	2600	100	5.700	57.00	56.8	0.35
2021.11.23	DASY5	Head	2600	100	5.510	55.10	56.8	-2.99
2021.11.24	DASY5	Head	5250	100	7.550	75.50	77.8	-2.96
2021.11.25	DASY5	Head	5600	100	8.470	84.70	81.2	4.31
2021.11.26	DASY5	Head	5750	100	8.270	82.70	77.2	7.12
2021.12.14	DASY5	Head	5750	100	8.010	80.10	77.2	3.76
2021.12.27	DASY5	Head	835	100	0.907	9.07	9.49	-4.43
2021.12.27	DASY5	Head	1900	100	4.130	41.30	39.4	4.82

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

Head liquid 10g

Date	Test System	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2021.11.23	DASY5	Head	2600	100	2.41	24.10	24.8	-2.82
2021.11.24	DASY5	Head	5250	100	2.15	21.50	22.1	-2.71
2021.11.25	DASY5	Head	5600	100	2.40	24.00	23.1	3.90

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

System Performance Check Data (750MHz)

System Check: Head 750 MHz

Date: 2021.11.13

Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 41.921$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 – SN7510; ConvF(10.31, 10.31, 10.31); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 750 100mW/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.907 W/kg

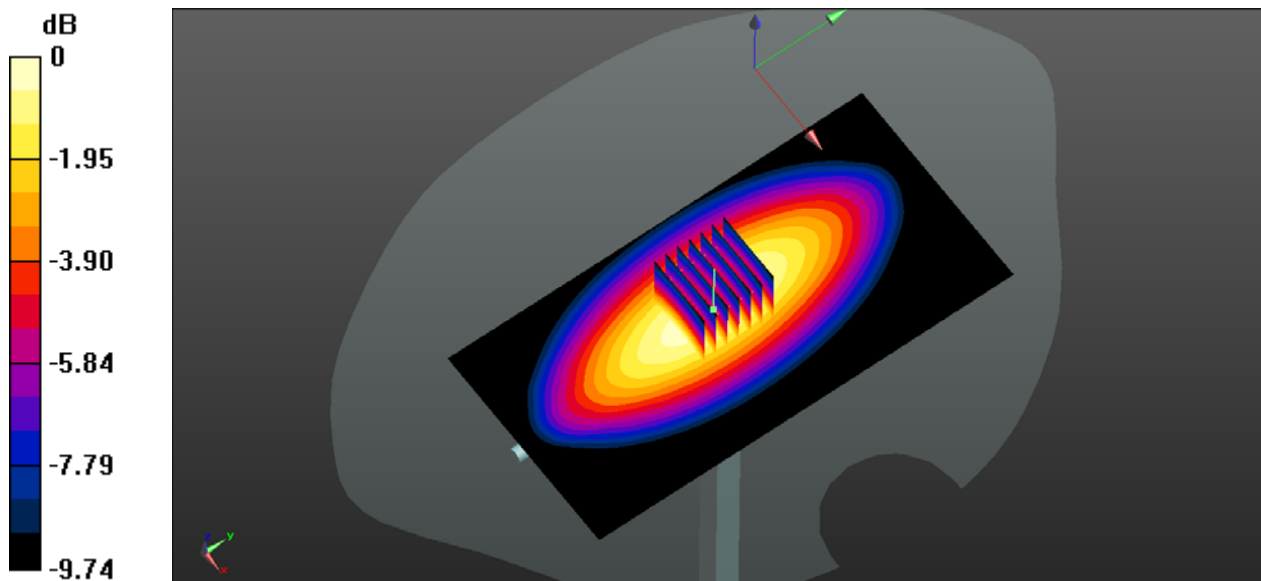
CW 750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.05 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.851 W/kg; SAR(10 g) = 0.570 W/kg

Maximum value of SAR (measured) = 0.915 W/kg



0 dB = 0.915 W/kg

System Performance Check Data (835MHz)

System Check: Head 835 MHz

Date: 2021.11.14

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.942$ S/m; $\epsilon_r = 43.531$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.977 W/kg

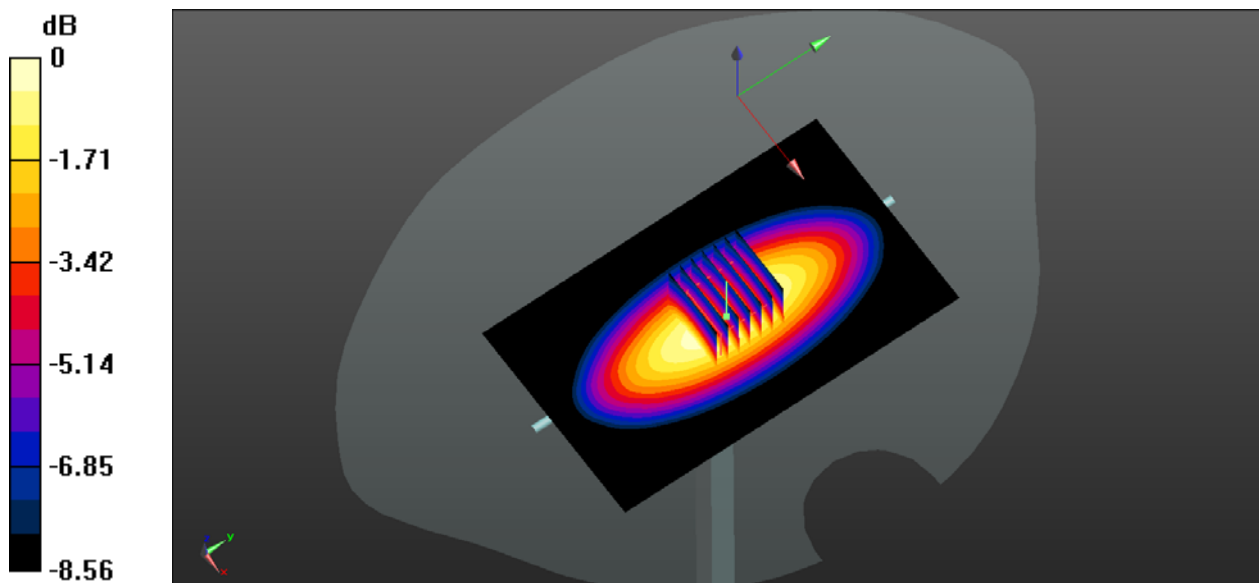
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.04 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.924 W/kg; SAR(10 g) = 0.627 W/kg

Maximum value of SAR (measured) = 0.977 W/kg



0 dB = 0.977 W/kg

System Performance Check Data (835MHz)

System Check: Head 835 MHz

Date: 2021.11.15

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.901 \text{ S/m}$; $\epsilon_r = 41.233$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW HEAD/Area Scan (61x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.02 W/kg

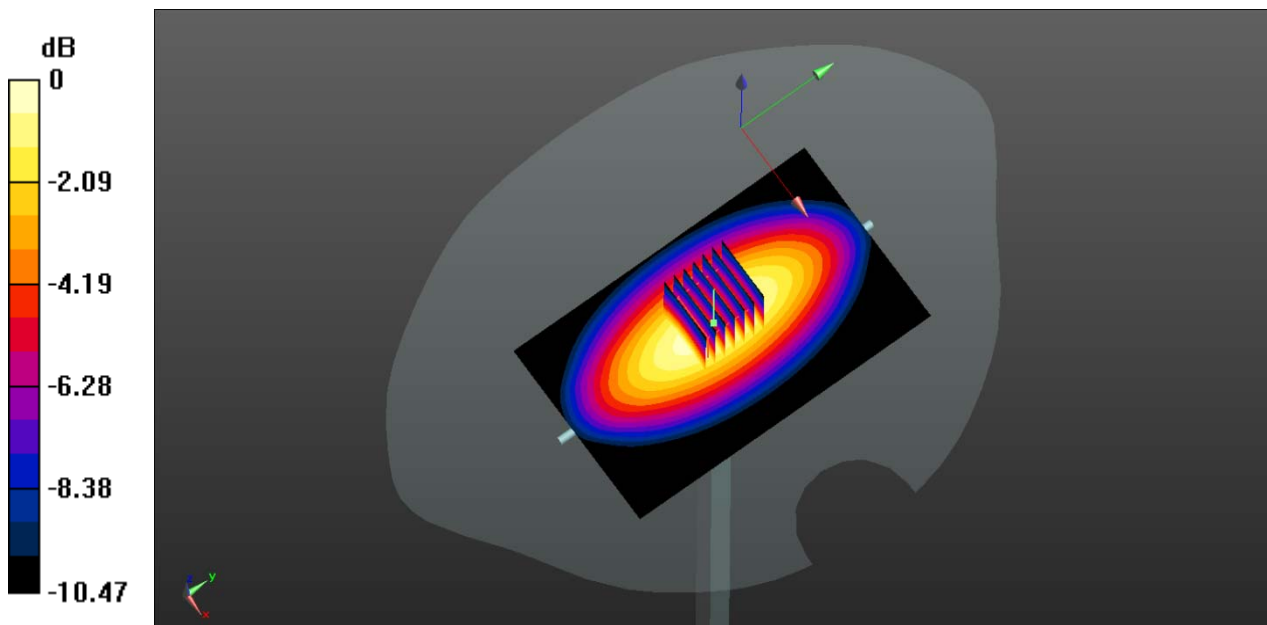
CW 835 100mW HEAD/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.18 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.617 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg

System Performance Check Data (835MHz)

System Check: Head 835 MHz

Date: 2021.11.16

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.931 \text{ S/m}$; $\epsilon_r = 42.529$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW /Area Scan (61x81x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 1.08 W/kg

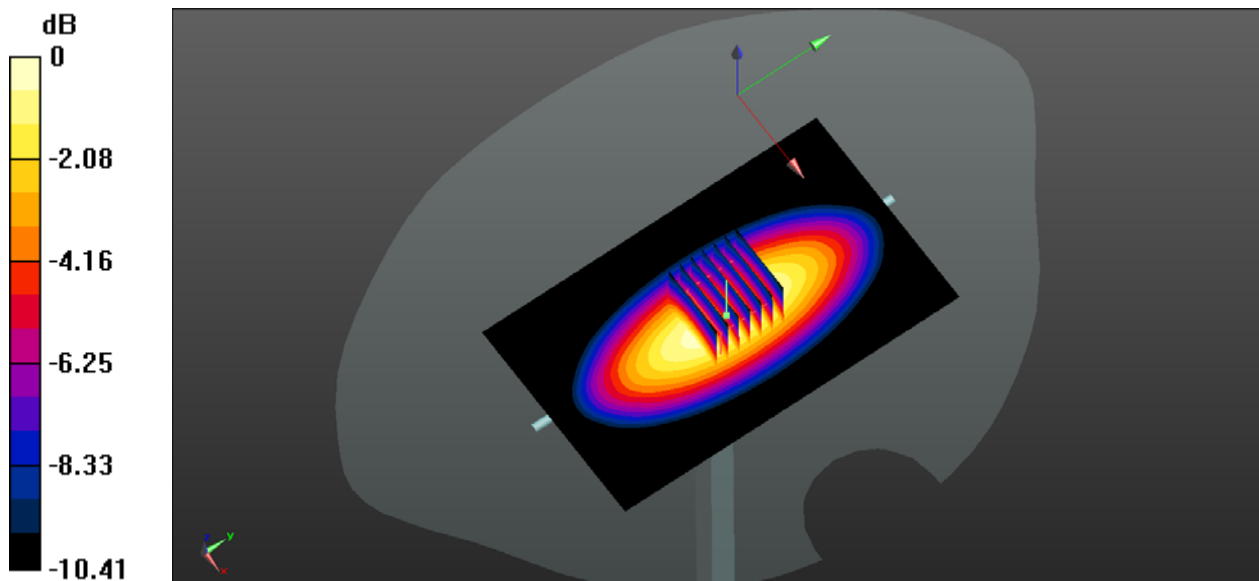
CW 835 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.62 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 1 W/kg; SAR(10 g) = 0.656 W/kg

Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg

System Performance Check Data (1750MHz)

System Check: Head 1750 MHz

Date: 2021.11.17

Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.351$ S/m; $\epsilon_r = 40.38$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1750 100mw/Area Scan (101x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 4.03 W/kg

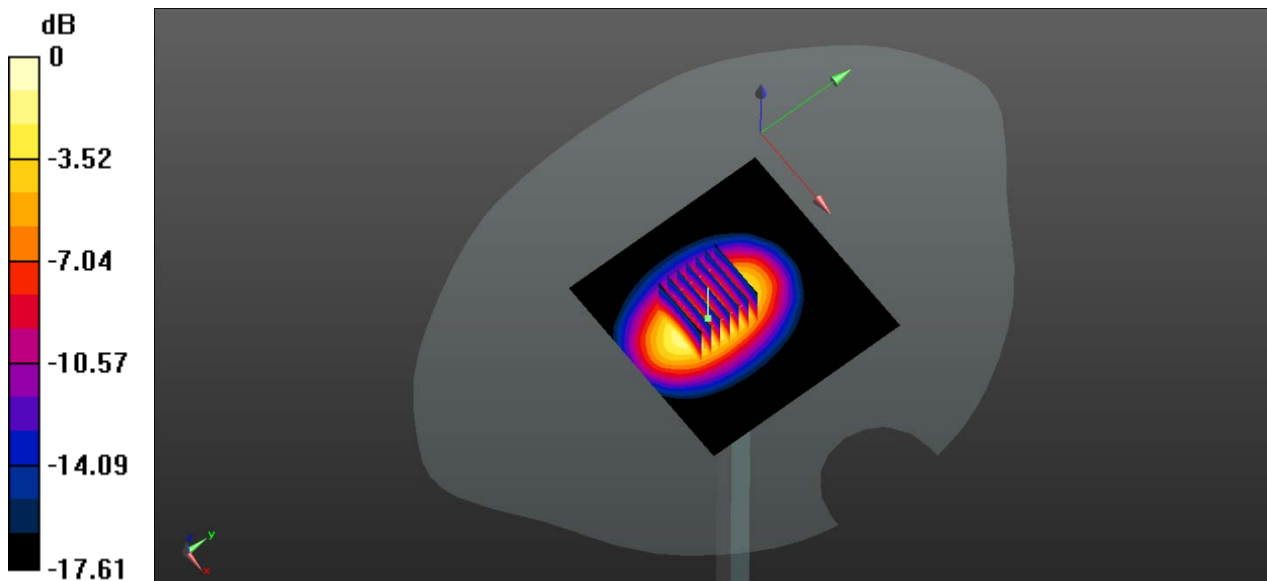
CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 48.41 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 6.75 W/kg

SAR(1 g) = 3.57 W/kg; SAR(10 g) = 1.85 W/kg

Maximum value of SAR (measured) = 4.01 W/kg



0 dB = 4.01 W/kg

System Performance Check Data (1750MHz)

System Check: Head 1750 MHz

Date: 2021.11.18

Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.381$ S/m; $\epsilon_r = 41.818$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1750 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.19 W/kg

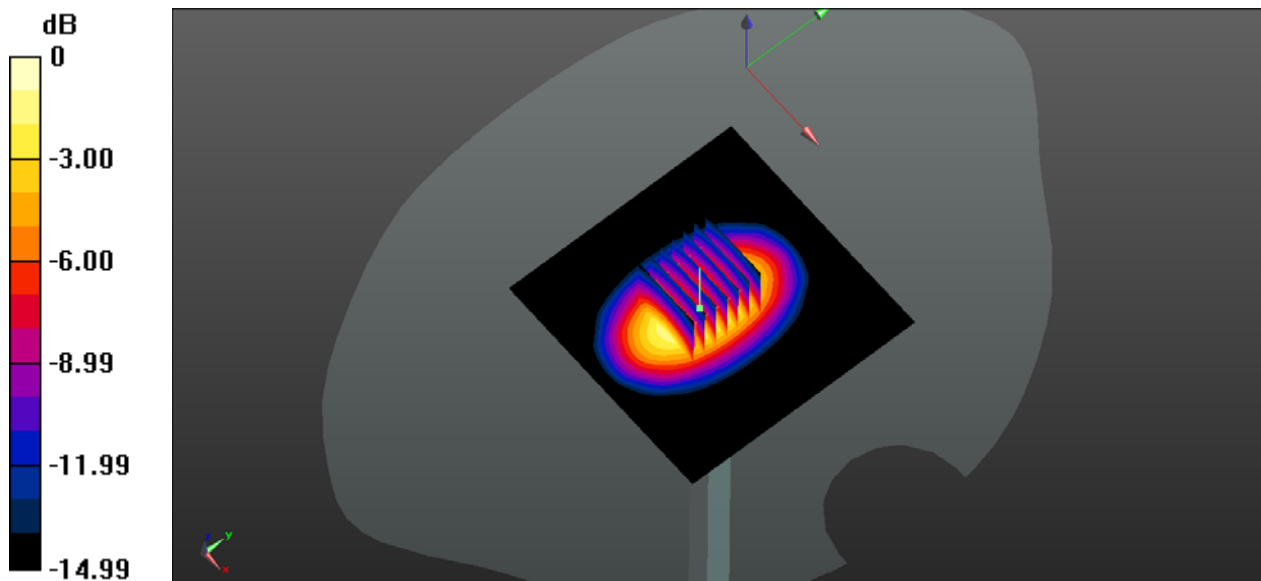
CW 1750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.22 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 6.48 W/kg

SAR(1 g) = 3.71 W/kg; SAR(10 g) = 2.04 W/kg

Maximum value of SAR (measured) = 4.18 W/kg



0 dB = 4.18 W/kg

System Performance Check Data (1900MHz)

System Check: Head 1900 MHz

Date: 2021.11.19

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.462$ S/m; $\epsilon_r = 40.088$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900 100mw/Area Scan (101x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 4.71 W/kg

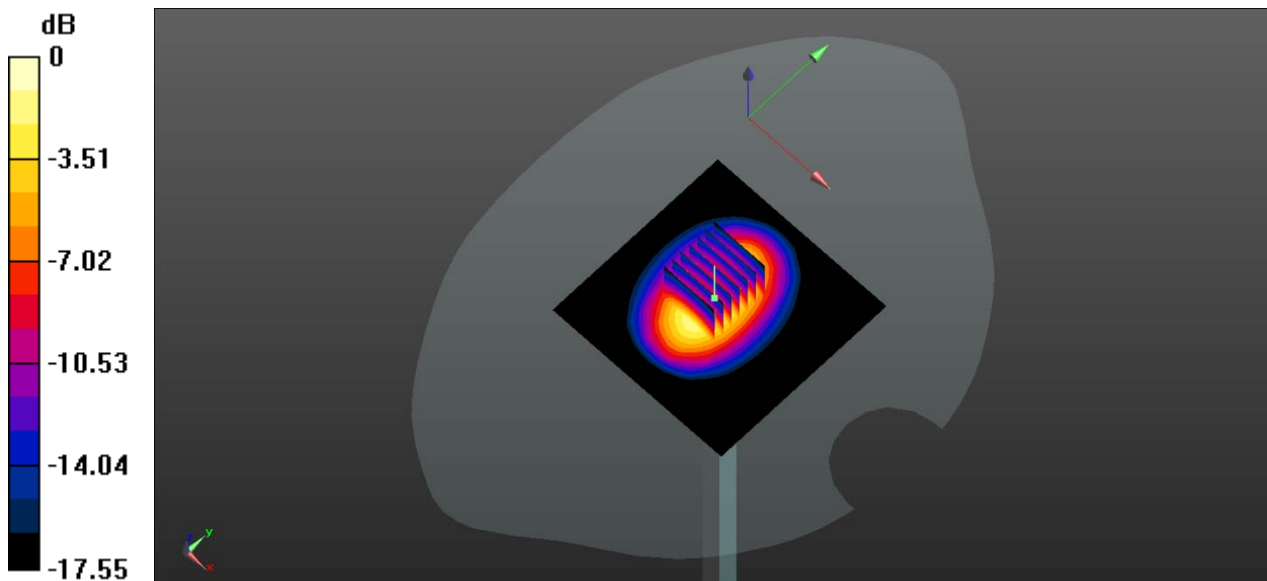
CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 55.12 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 8.12 W/kg

SAR(1 g) = 4.25 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 4.73 W/kg



0 dB = 4.73 W/kg

System Performance Check Data (1900MHz)

System Check: Head 1900 MHz

Date: 2021.11.20

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.464$ S/m; $\epsilon_r = 41.797$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.55 W/kg

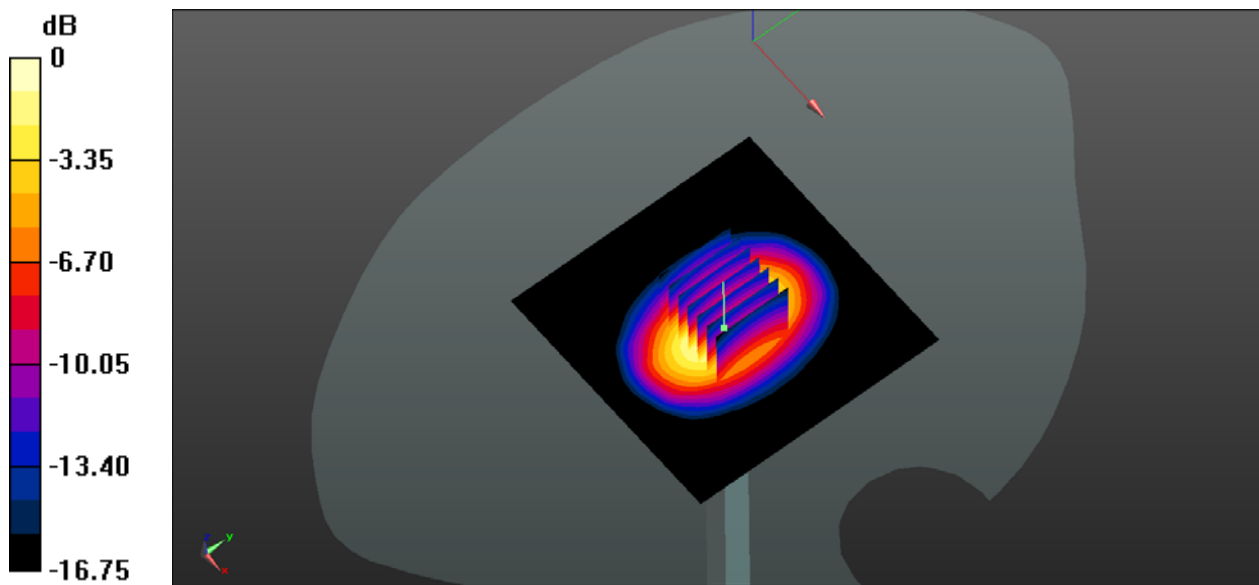
CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.76 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 7.32 W/kg

SAR(1 g) = 4.04 W/kg; SAR(10 g) = 2.14 W/kg

Maximum value of SAR (measured) = 4.55 W/kg



0 dB = 4.55 W/kg

System Performance Check Data (2450MHz)

System Check: Head 2450 MHz

Date: 2021.11.21

Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.85$ S/m; $\epsilon_r = 39.054$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.54, 7.54, 7.54); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2450 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.18 W/kg

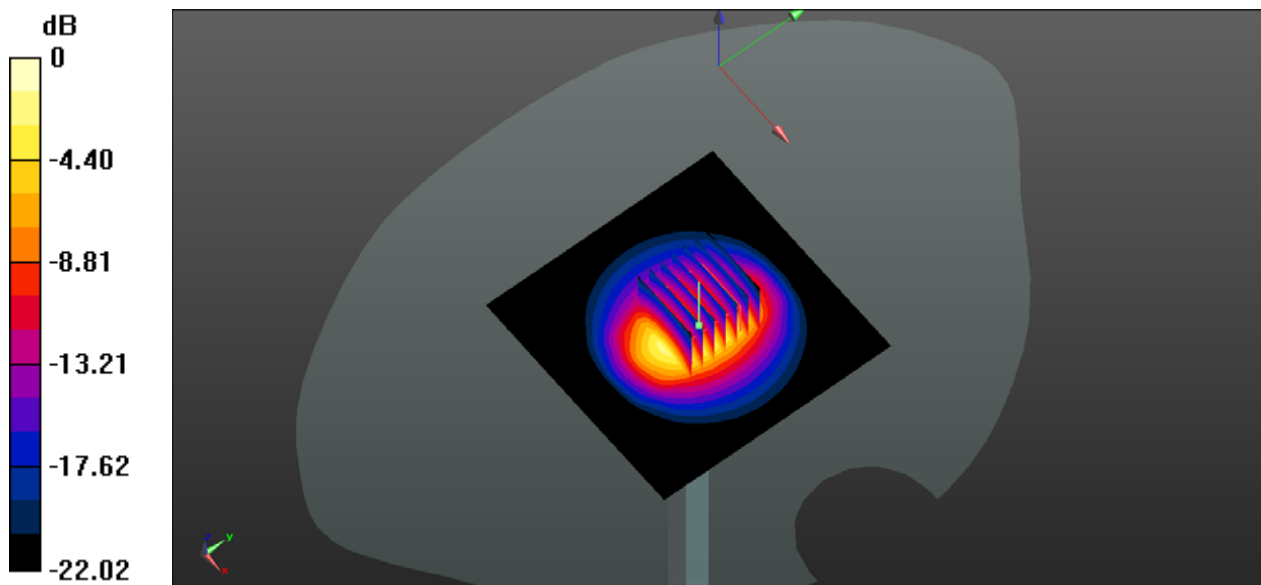
CW 2450 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.27 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 11.0 W/kg

SAR(1 g) = 5.3 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 6.09 W/kg



0 dB = 6.09 W/kg

System Performance Check Data (2600MHz)

System Check: Head 2600 MHz

Date: 2021.11.22

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.98$ S/m; $\epsilon_r = 39.055$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mW /Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.56 W/kg

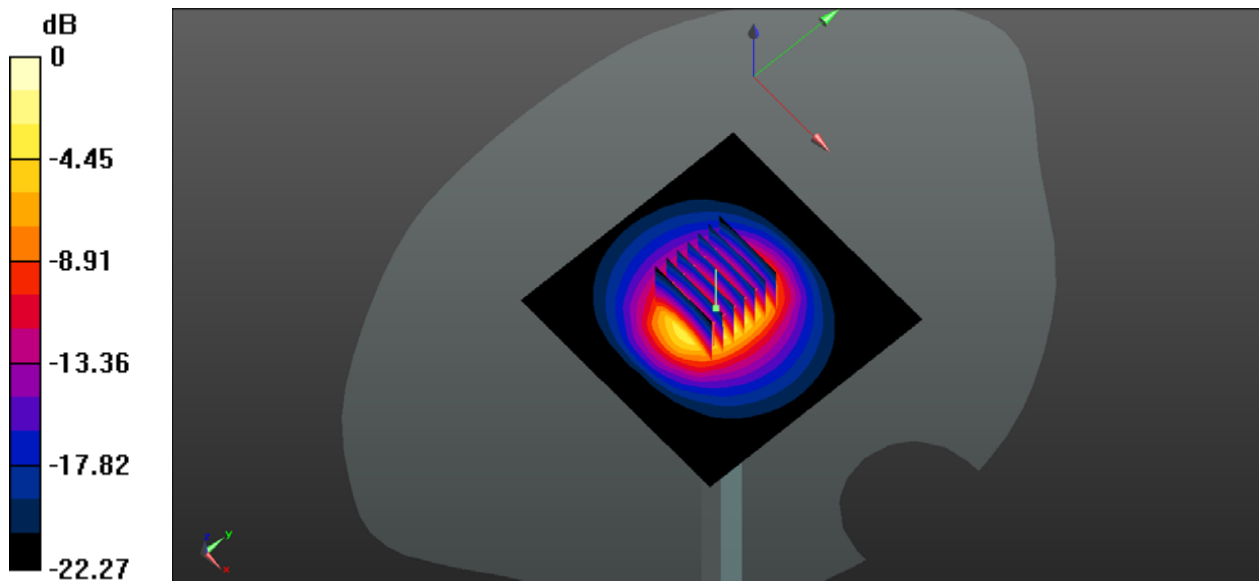
CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.58 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 5.7 W/kg; SAR(10 g) = 2.49 W/kg

Maximum value of SAR (measured) = 6.50 W/kg



0 dB = 6.50 W/kg

System Performance Check Data (2600MHz)

System Check: Head 2600MHz

Date: 2021.11.23

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.013$ S/m; $\epsilon_r = 40.642$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW2600 HEAD 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.29 W/kg

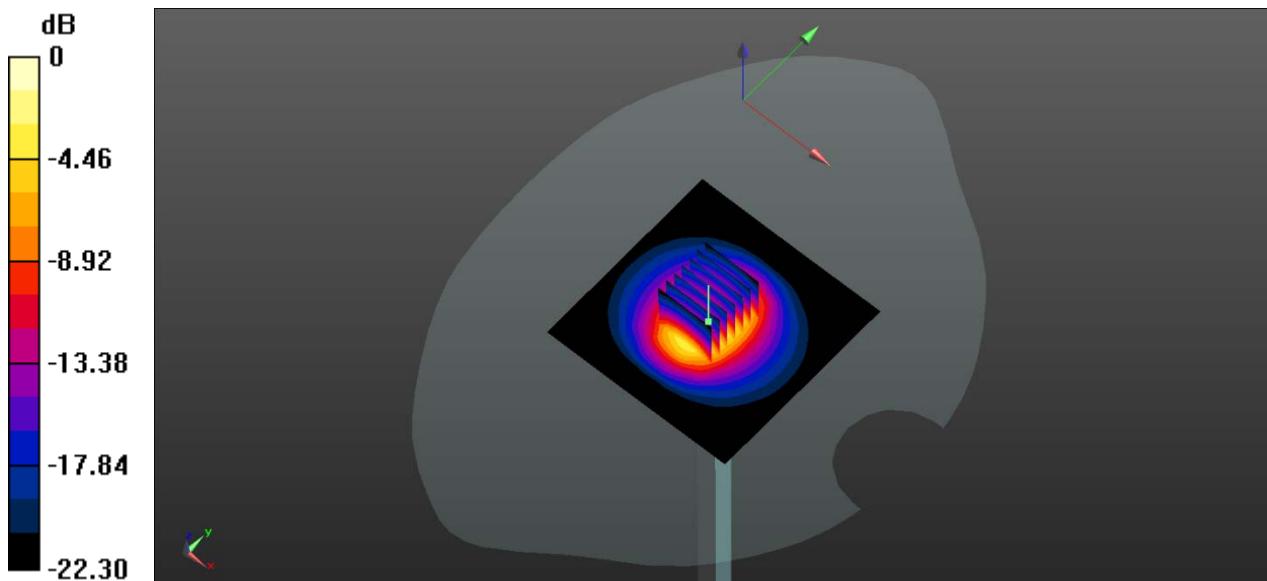
CW2600 HEAD 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.23 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.51 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 6.28 W/kg



0 dB = 6.28 W/kg

System Performance Check Data (5250MHz)

System Check: Head 5250 MHz

Date: 2021.11.24

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.744$ S/m; $\epsilon_r = 35.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.46, 5.46, 5.46); Calibrated: 2020.11.30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5250 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

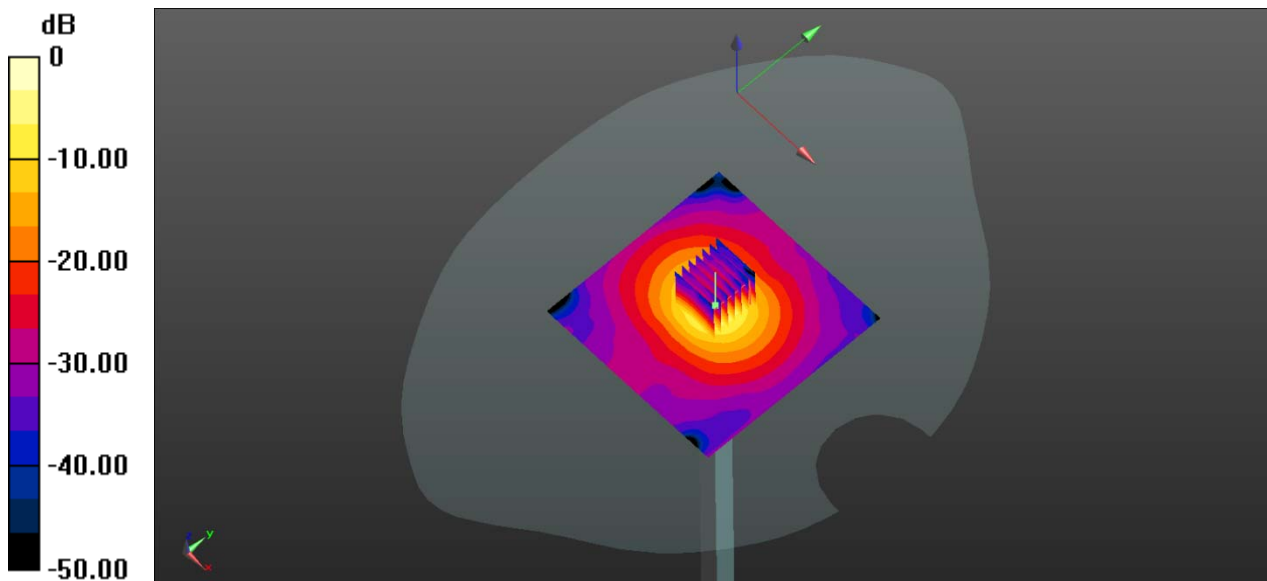
CW 5250 100mW/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 37.78 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.9 W/kg

SAR(1 g) = 7.55 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg

System Performance Check Data (5600MHz)

System Check: Head 5600 MHz

Date: 2021.11.25

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.205$ S/m; $\epsilon_r = 35.237$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.89, 4.89, 4.89); Calibrated: 2020.11.30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5600 100mW /Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.13 W/kg

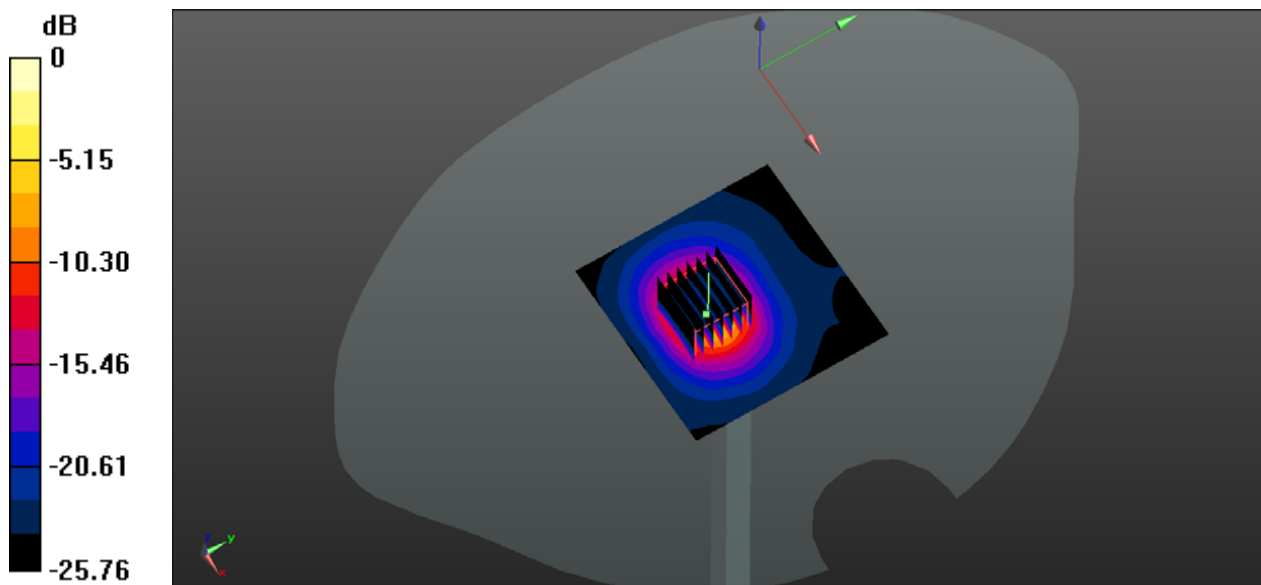
CW 5600 100mW /Zoom Scan (7x7x15)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 22.84 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 38.21 W/kg

SAR(1 g) = 8.47 W/kg; SAR(10 g) = 2.4 W/kg

Maximum value of SAR (measured) = 17.1 W/kg



0 dB = 17.2 W/kg

System Performance Check Data (5750MHz)

System Check: Head 5750 MHz

Date: 2021.11.26

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.377$ S/m; $\epsilon_r = 34.948$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.96, 4.96, 4.96); Calibrated: 2020.11.30;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5750 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.92 W/kg

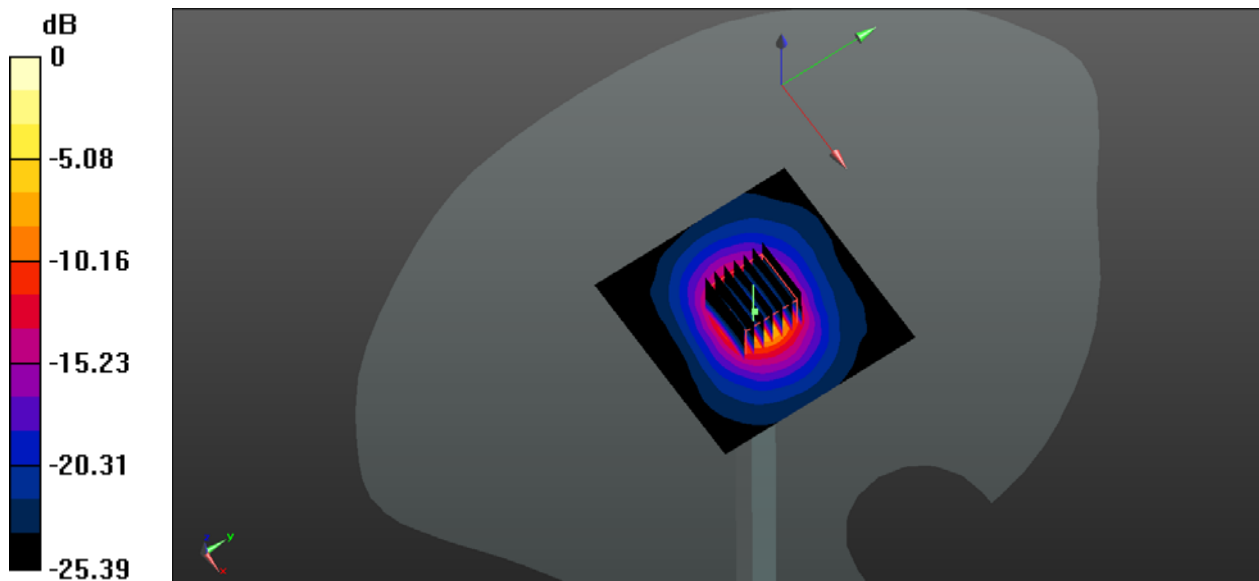
CW 5750 100mW/Zoom Scan (7x7x15)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 40.19 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 36.7 W/kg

SAR(1 g) = 8.27 W/kg; SAR(10 g) = 2.33 W/kg

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



0 dB = 16.1 W/kg

System Performance Check Data (5750MHz)

System Check: Head 5750 MHz

Date: 2021.12.14

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.201$ S/m; $\epsilon_r = 34$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.15, 5.15, 5.15); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5750 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.47 W/kg

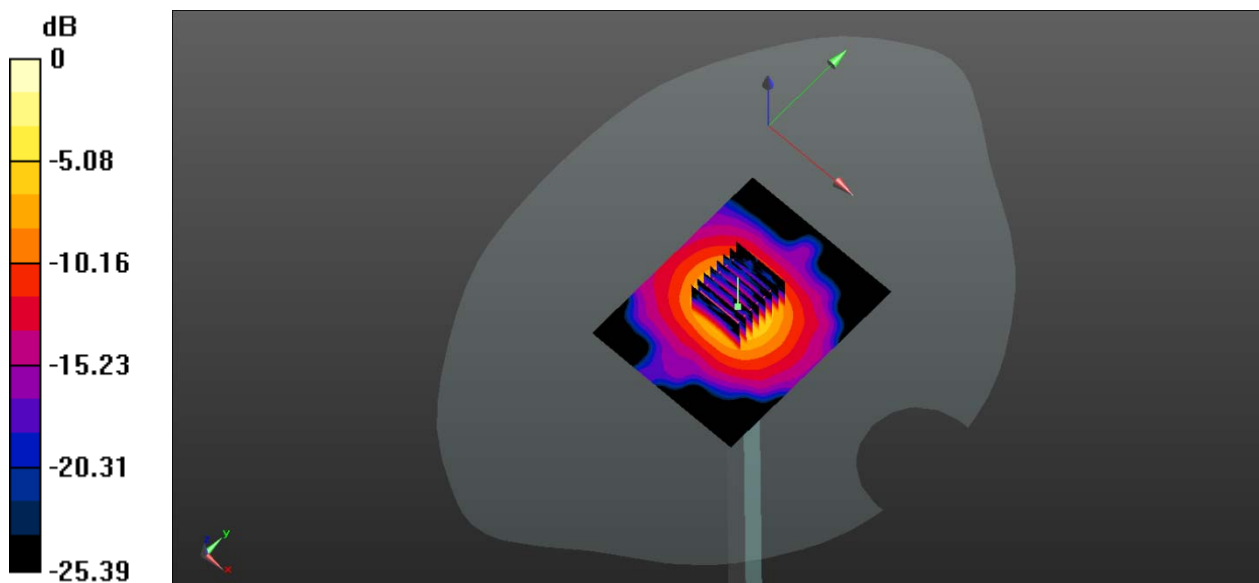
CW 5750 100mW/Zoom Scan (7x7x15)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 38.74 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 35.4 W/kg

SAR(1 g) = 8.01 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 15.5 W/kg



0 dB = 15.5 W/kg

System Performance Check Data (835MHz)

System Check: Head 835MHz

Date: 2021.12.27

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.929 \text{ S/m}$; $\epsilon_r = 42.047$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 – SN7663; ConvF(10.10, 10.10, 10.10) Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW835 HEAD 100mW/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

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

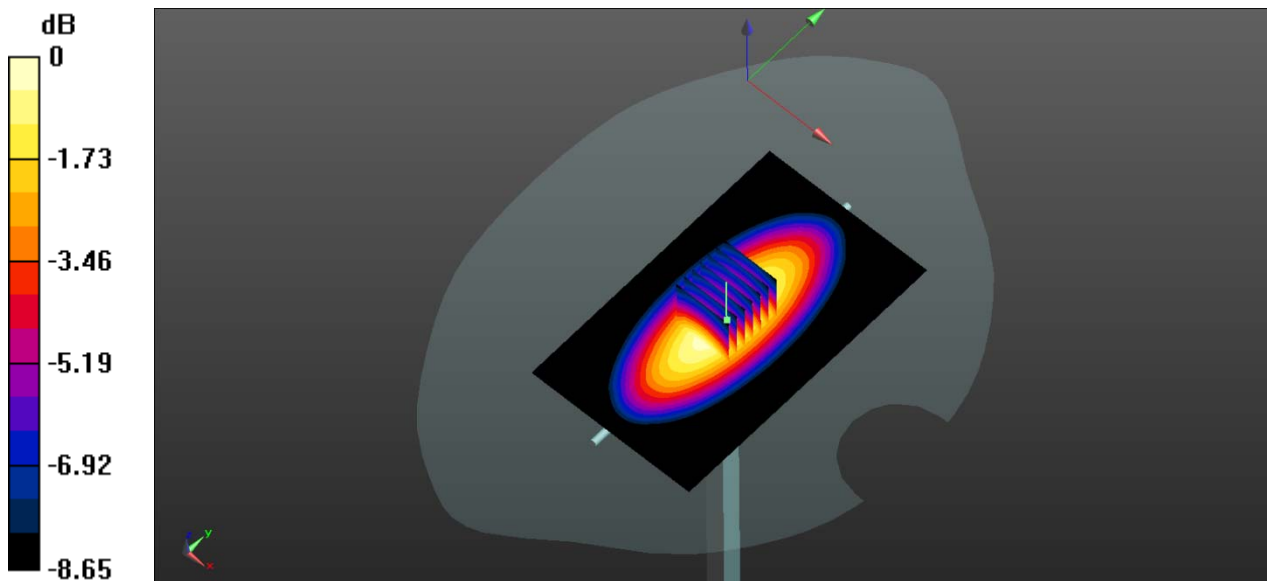
CW835 HEAD 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.6 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.907 W/kg; SAR(10 g) = 0.622 W/kg

Maximum value of SAR (measured) = 0.973 W/kg



0 dB = 0.973 W/kg

System Performance Check Data (1900MHz)

System Check: Head 1900 MHz

Date: 2021.12.27

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.458$ S/m; $\epsilon_r = 39.732$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 – SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.65 W/kg

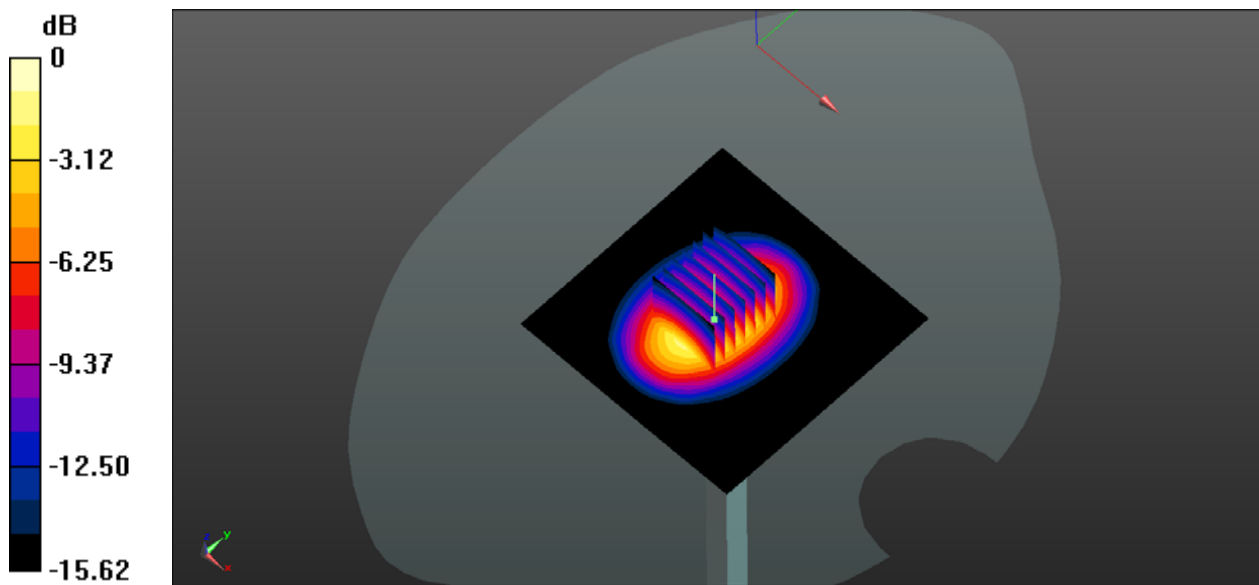
CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.52 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 7.36 W/kg

SAR(1 g) = 4.13 W/kg; SAR(10 g) = 2.12 W/kg

Maximum value of SAR (measured) = 4.66 W/kg



0 dB = 4.66 W/kg

ANNEX C TEST DATA

1.Right Head with Cheek on Low Channel in GSM850

Date: 2021.12.27

Communication System Band: Exported from older format; Frequency: 824.2 MHz; Duty Cycle: 1:2.08

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.891$ S/m; $\epsilon_r = 41.375$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.3 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 – SN7663; ConvF(10.10, 10.10, 10.10) Calibrated: 2021.07.23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch128/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.191 W/kg

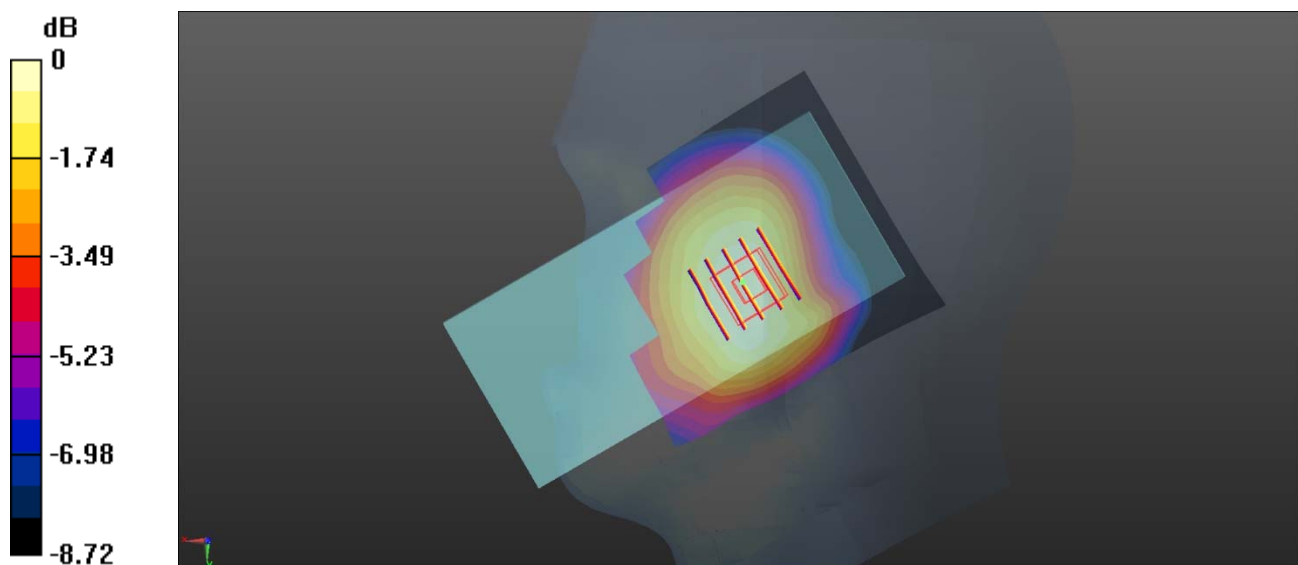
Ch128/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.663 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.114 W/kg

Maximum value of SAR (measured) = 0.184 W/kg



0 dB = 0.184 W/kg = -3.15 dBW/kg

2.Body Plane with Back side 10mm on Low Channel in GSM850

Date: 2021.11.14

Communication System Band: Exported from older format.; Frequency: 824.2 MHz;Duty Cycle: 1:2.08

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.945$ S/m; $\epsilon_r = 43.539$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch128/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.692 W/kg

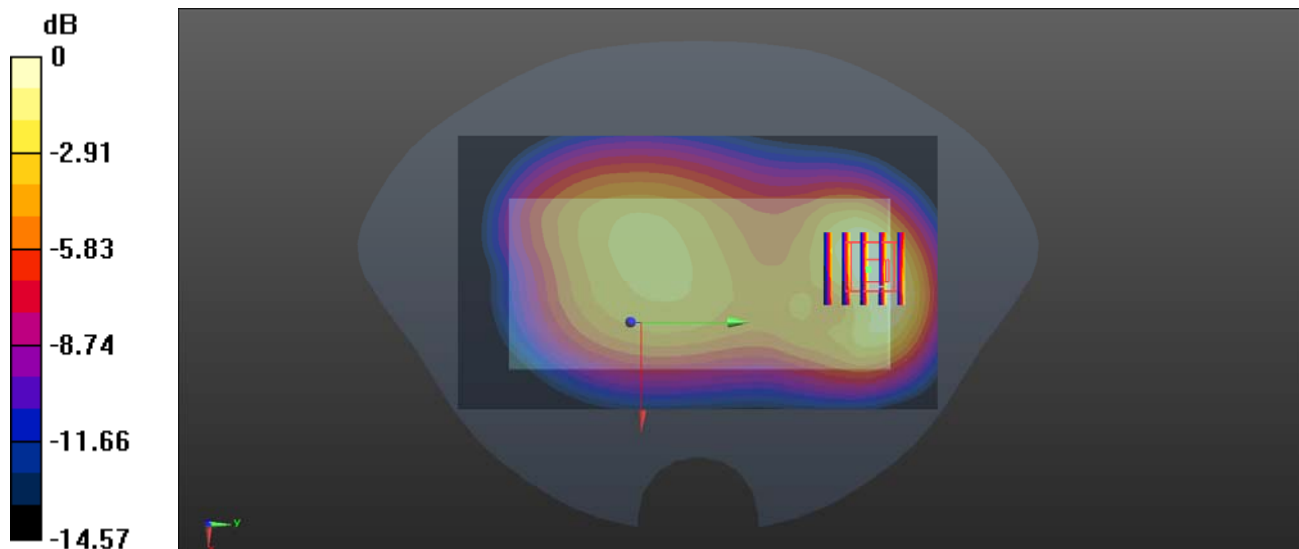
Ch128/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.183 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 0.708 W/kg



0 dB = 0.708 W/kg = -1.50 dBW/kg

3.Left Head with Cheek on High Channel in GSM1900

Date: 2021.12.27

Communication System Band: Exported from older format; Frequency: 1909.8 MHz; Duty Cycle: 1:2.08

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.468$ S/m; $\epsilon_r = 40.08$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.3 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 – SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.199 W/kg

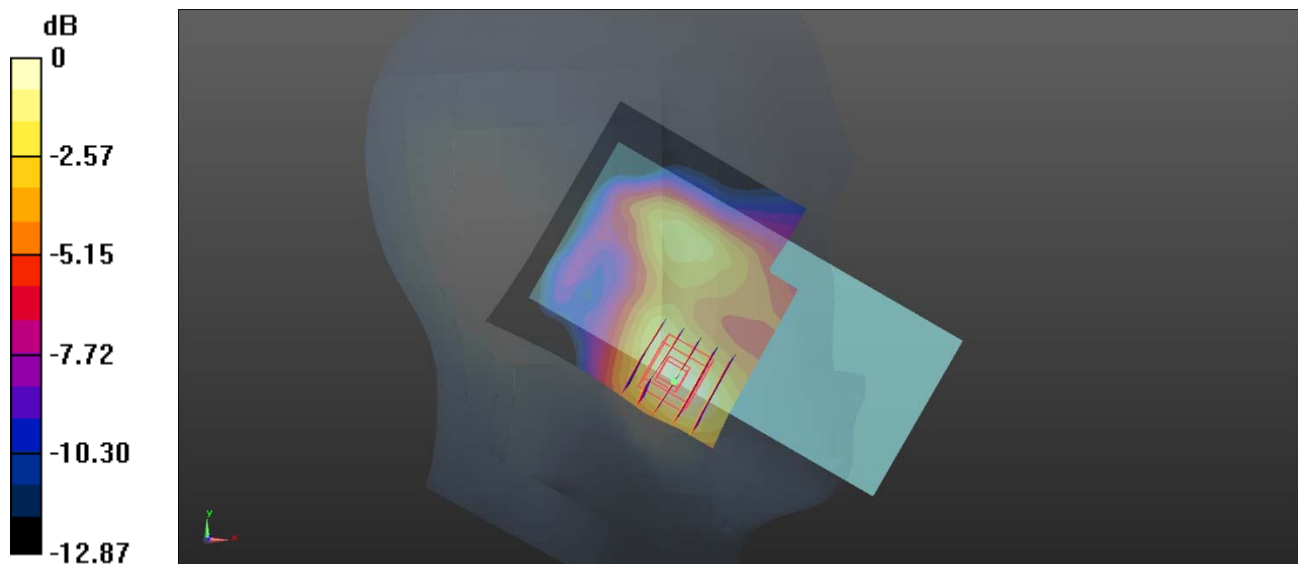
Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.836 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.236 W/kg

SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.090 W/kg

Maximum value of SAR (measured) = 0.202 W/kg



0 dB = 0.202 W/kg = -2.88 dBW/kg

4.Body Plane with Back side 10mm on High Channel in GSM1900

Date: 2021.11.20

Communication System Band: Exported from older format; Frequency: 1909.8 MHz; Duty Cycle: 1:2.08

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.472$ S/m; $\epsilon_r = 41.783$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.04 W/kg

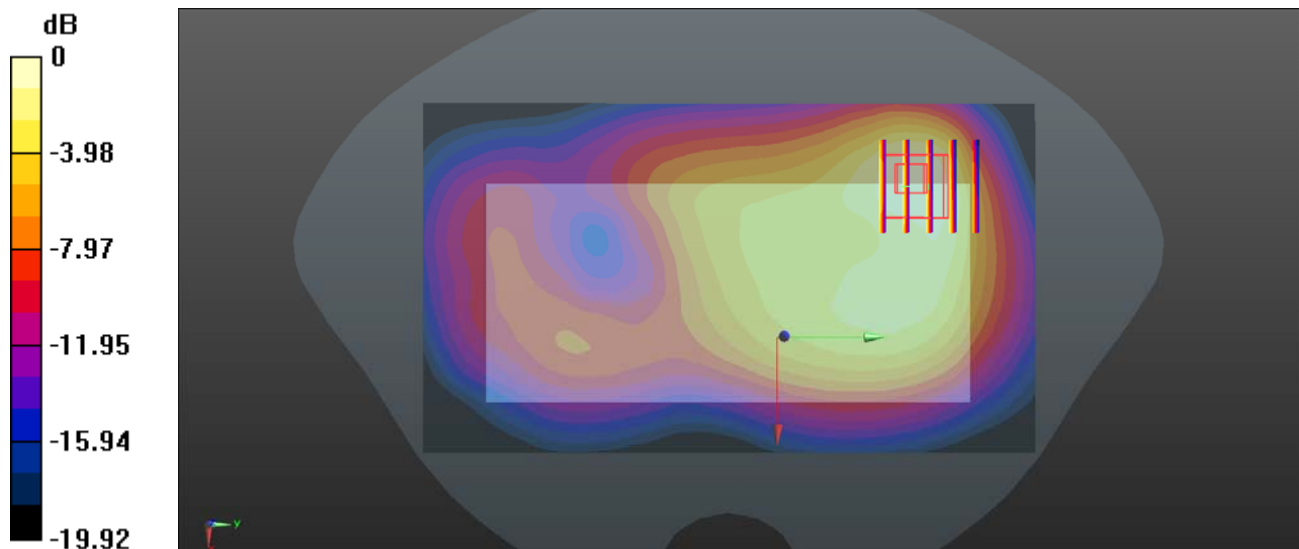
Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.135 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.371 W/kg

Maximum value of SAR (measured) = 0.993 W/kg



0 dB = 0.993 W/kg = -0.03 dBW/kg

5. Left Head with Cheek on High Channel in WCDMA II

Date: 2021.11.19

Communication System Band: WCDMA II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.467$ S/m; $\epsilon_r = 40.078$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9538/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.549 W/kg

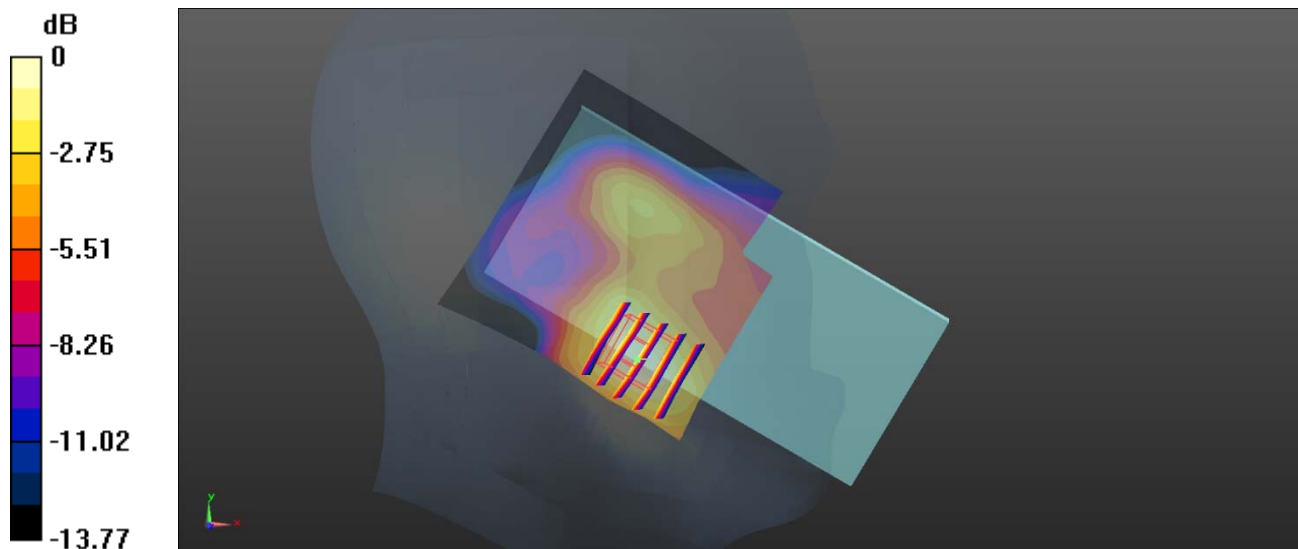
Ch9538/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.375 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.645 W/kg

SAR(1 g) = 0.388 W/kg; SAR(10 g) = 0.234 W/kg

Maximum value of SAR (measured) = 0.549 W/kg



0 dB = 0.549 W/kg = -2.60 dBW/kg

6.Body Plane with Back side 15mm on High Channel in WCDMA II

Date: 2021.11.19

Communication System Band: WCDMA II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.467$ S/m; $\epsilon_r = 40.078$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9538/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.921 W/kg

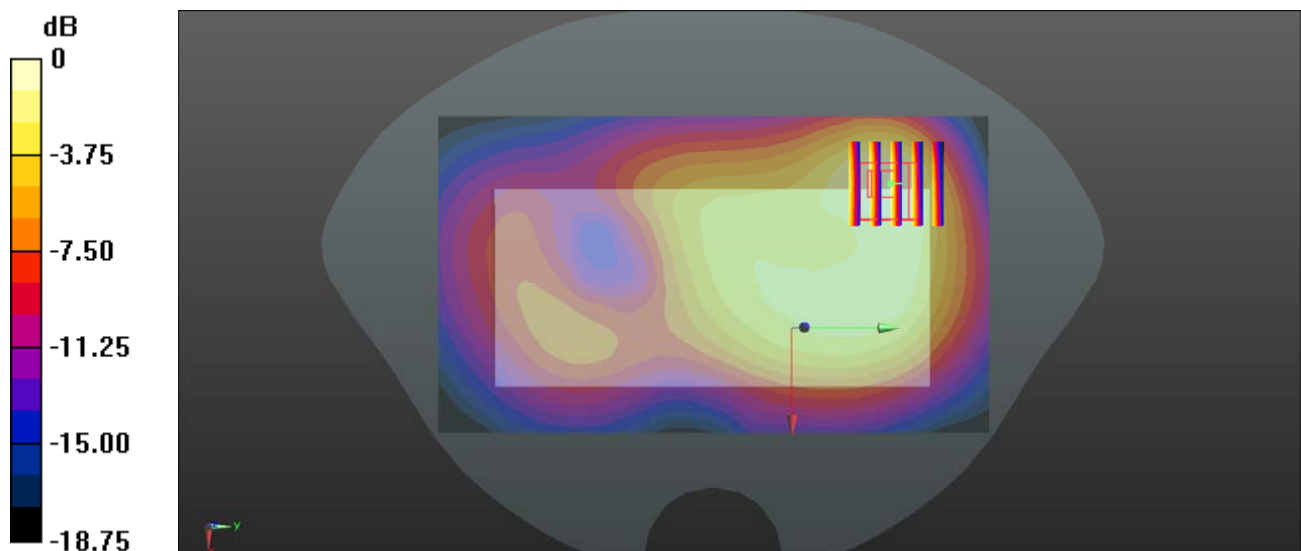
Ch9538/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.968 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.618 W/kg; SAR(10 g) = 0.352 W/kg

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



0 dB = 0.930 W/kg = -0.32 dBW/kg

7.Body Plane with Back side 10mm on Low Channel in WCDMA II

Date: 2021.11.19

Communication System Band: WCDMA II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1852.4$ MHz; $\sigma = 1.435$ S/m; $\epsilon_r = 40.129$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.584 W/kg

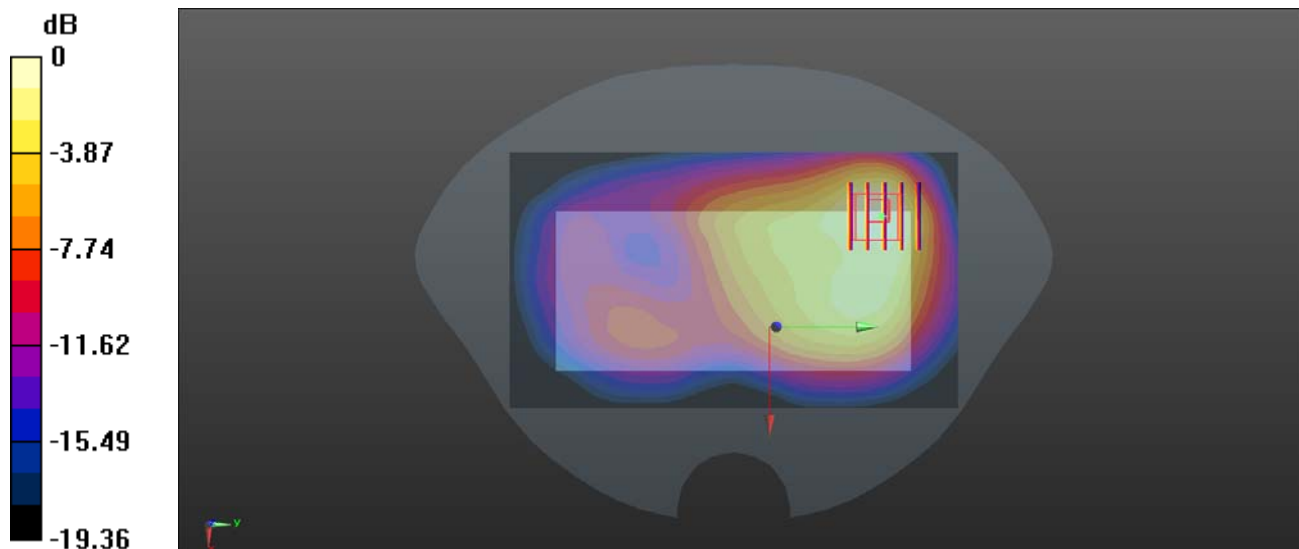
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.78 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.363 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.529 W/kg



0 dB = 0.529 W/kg = -2.77 dBW/kg

8. Left Head with Cheek on High Channel in WCDMA IV

Date: 2021.11.18

Communication System Band: WCDMA IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 41.807$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.275 W/kg

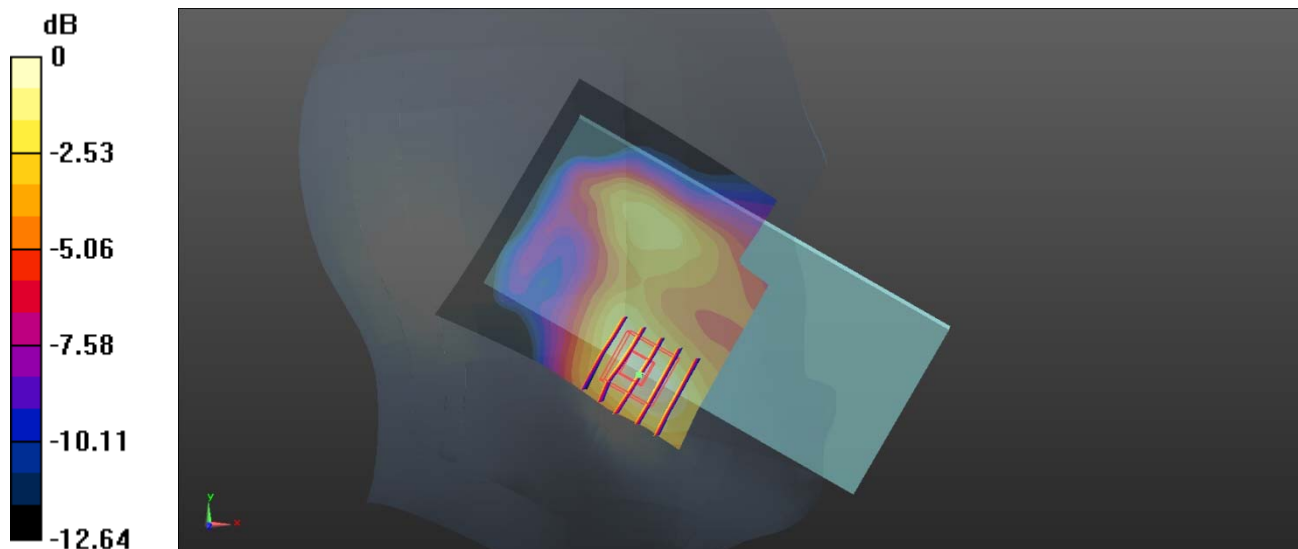
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.348 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.322 W/kg

SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.278 W/kg



0 dB = 0.278 W/kg = -5.56 dBW/kg

9.Body Plane with Back side 15mm on High Channel in WCDMA IV

Date: 2021.11.18

Communication System Band: WCDMA IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 41.807$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

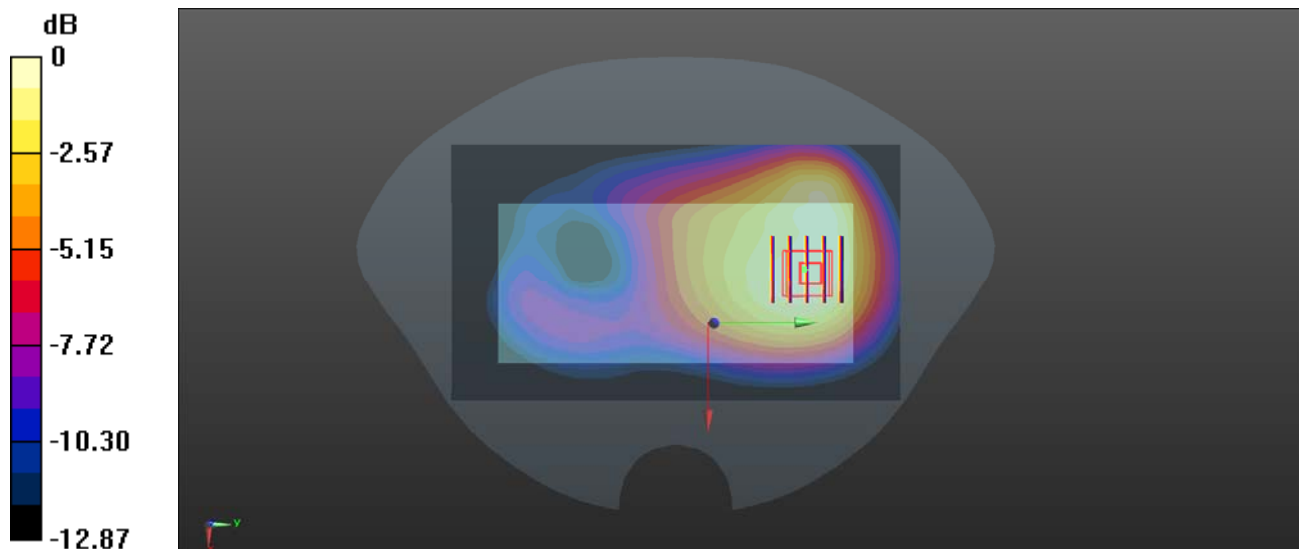
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.103 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.726 W/kg

SAR(1 g) = 0.470 W/kg; SAR(10 g) = 0.306 W/kg

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



0 dB = 0.630 W/kg = -2.01 dBW/kg

10.Body Plane with Back side 10mm on High Channel in WCDMA IV

Date: 2021.11.17

Communication System Band: WCDMA IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.381$ S/m; $\epsilon_r = 41.818$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.506 W/kg

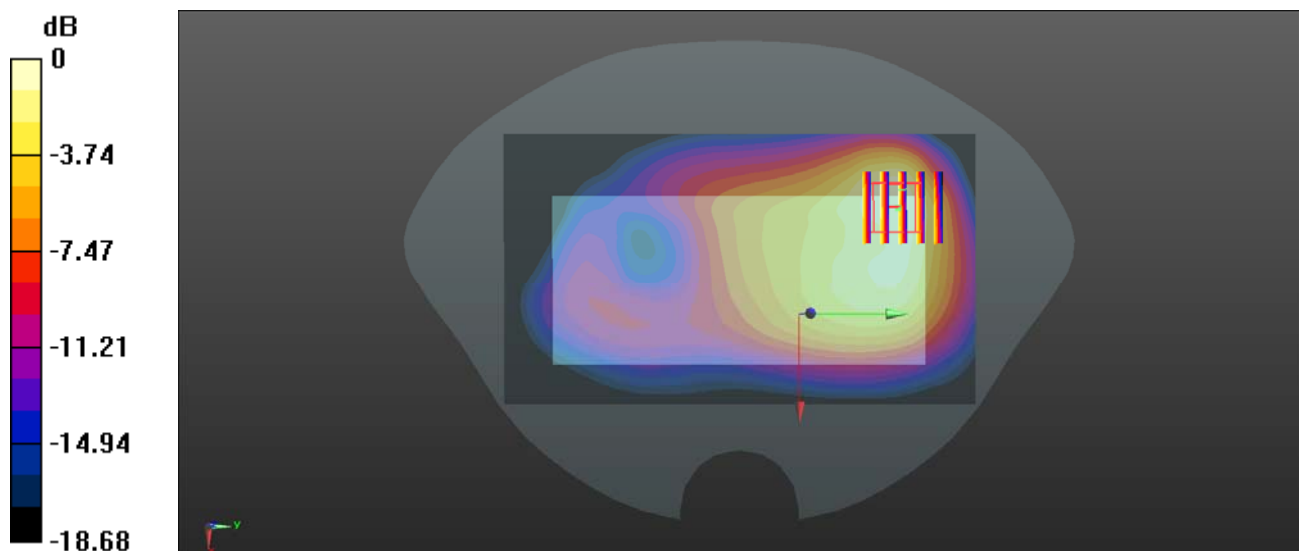
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.06 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.178 W/kg

Maximum value of SAR (measured) = 0.475 W/kg



0 dB = 0.475 W/kg = -3.23 dBW/kg

11.Right Head with Cheek on Low Channel in WCDMA V

Date: 2021.11.16

Communication System Band: WCDMA V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 826.4$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 43.546$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.334 W/kg

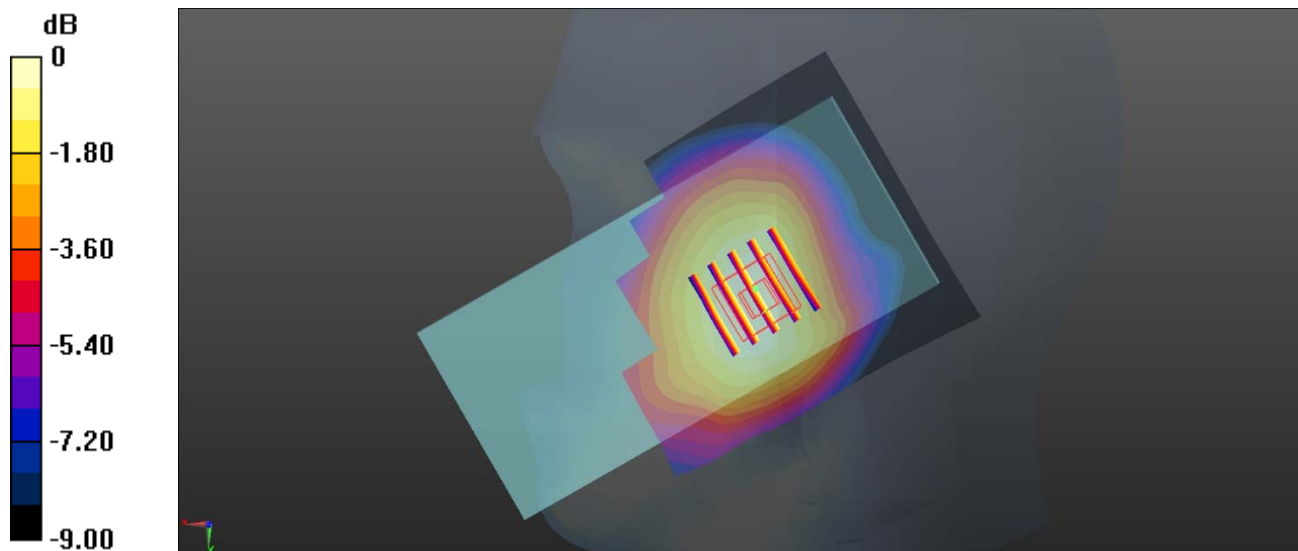
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.076 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.205 W/kg

Maximum value of SAR (measured) = 0.317 W/kg



0 dB = 0.317 W/kg = -4.99 dBW/kg

12.Body Plane with Back side 10mm on Low Channel in WCDMA V

Date: 2021.11.16

Communication System Band: WCDMA V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 826.4$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 43.546$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

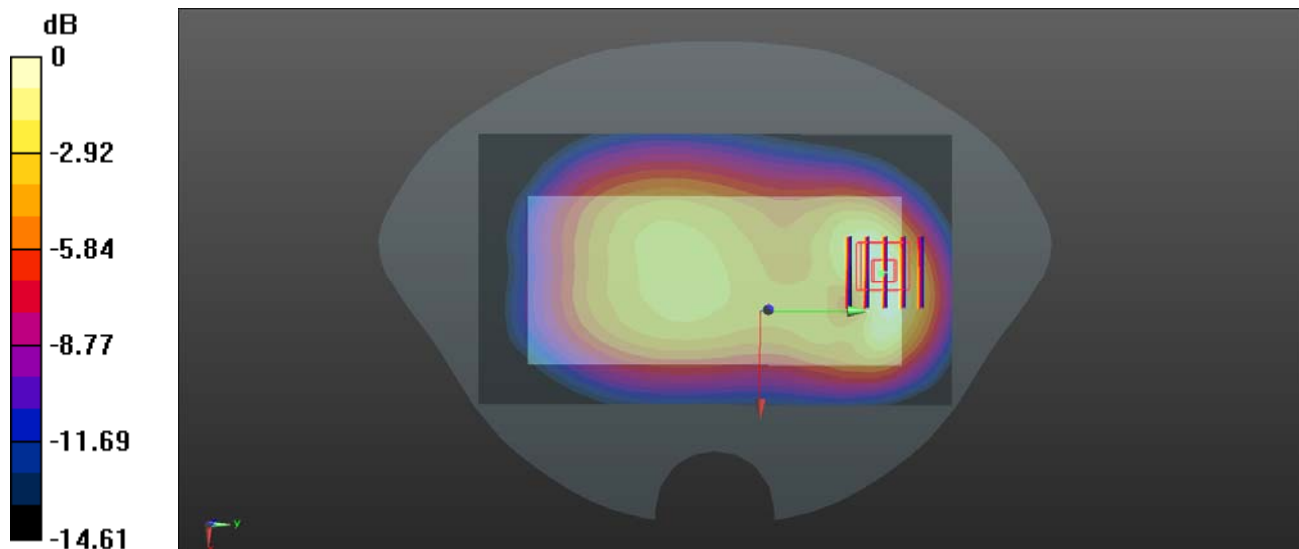
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.01 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.586 W/kg

SAR(1 g) = 0.337 W/kg; SAR(10 g) = 0.198 W/kg

Maximum value of SAR (measured) = 0.492 W/kg



0 dB = 0.492 W/kg = -3.08 dBW/kg

13.Left Head with Cheek on Low Channel in LTE Band 2

Date: 2021.11.19

Communication System Band: Band 2; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.44$ S/m; $\epsilon_r = 40.128$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18700/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.386 W/kg

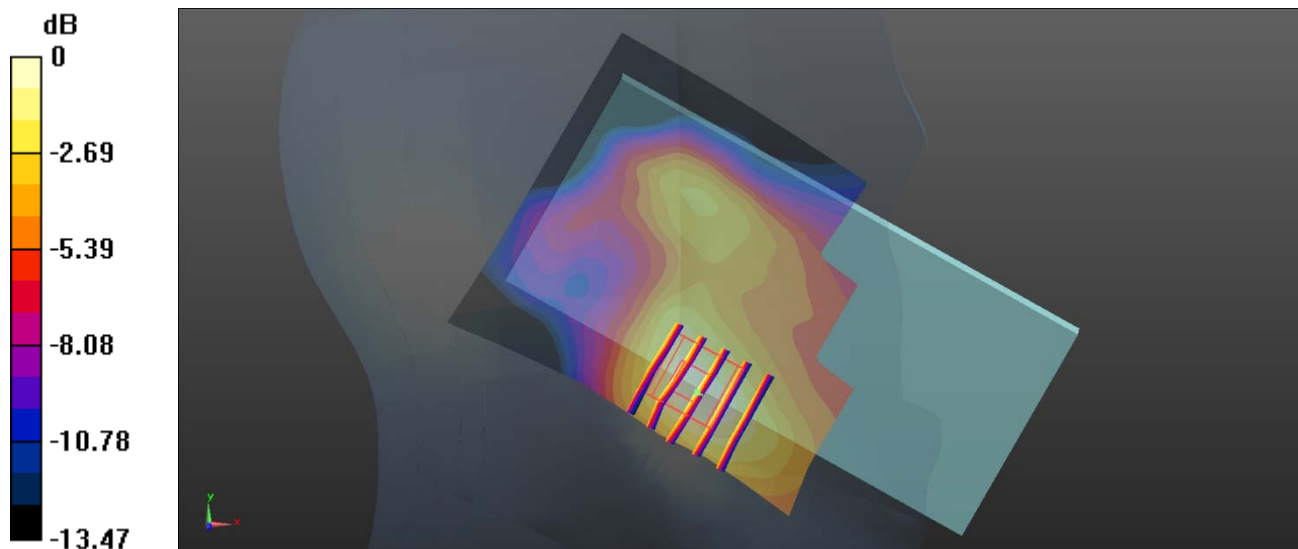
Ch18700/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.456 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.451 W/kg

SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.174 W/kg

Maximum value of SAR (measured) = 0.390 W/kg



0 dB = 0.390 W/kg = -4.09 dBW/kg

14.Body Plane with Back side 15mm on Low Channel in LTE Band 2

Date: 2021.11.19

Communication System Band: Band 2; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.44$ S/m; $\epsilon_r = 40.128$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18700/Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.787 W/kg

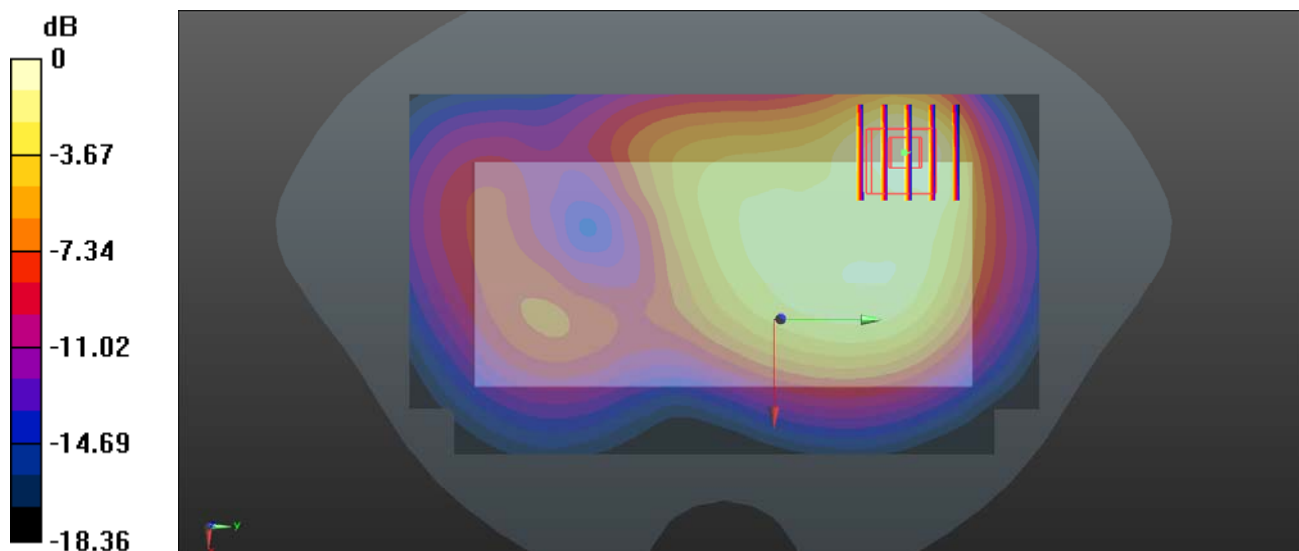
Ch18700/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 1.937 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.891 W/kg

SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.280 W/kg

Maximum value of SAR (measured) = 0.744 W/kg



0 dB = 0.744 W/kg = -1.28 dBW/kg

15.Body Plane with Back side 10mm on Low Channel in LTE Band 2

Date: 2021.11.19

Communication System Band: Band 2; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.44$ S/m; $\epsilon_r = 40.128$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.30, 8.30, 8.30); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18700/Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.672 W/kg

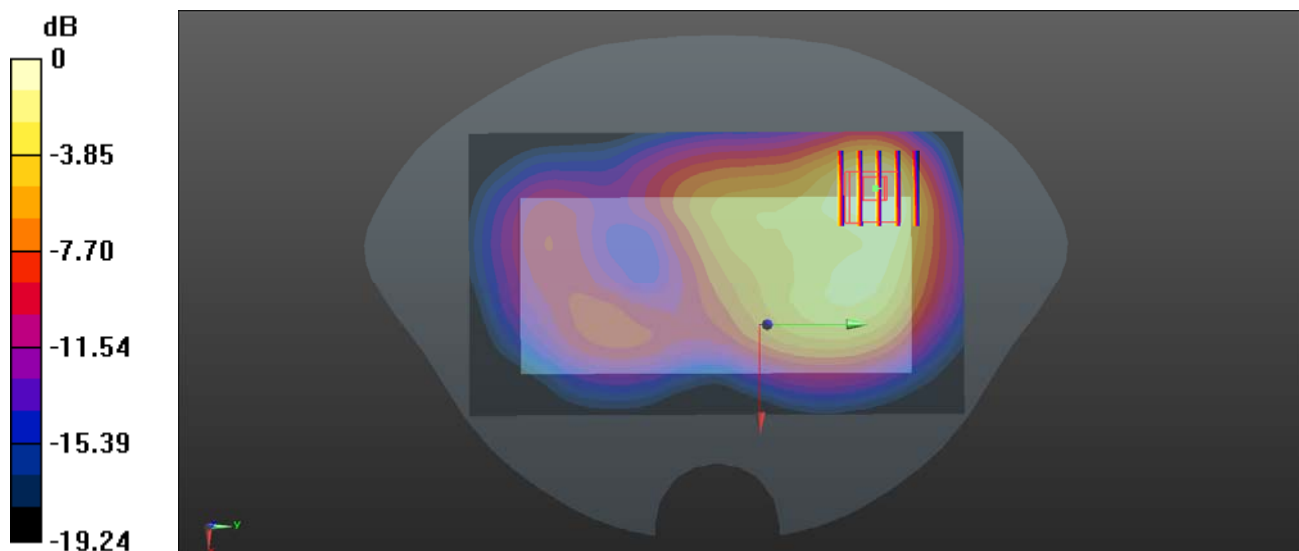
Ch18700/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 2.228 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.825 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.239 W/kg

Maximum value of SAR (measured) = 0.675 W/kg



0 dB = 0.675 W/kg = -1.71 dBW/kg

16.Right Head with Cheek on Mid Channel in LTE Band 5

Date: 2021.11.16

Communication System Band: Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.951$ S/m; $\epsilon_r = 43.534$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20525/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.284 W/kg

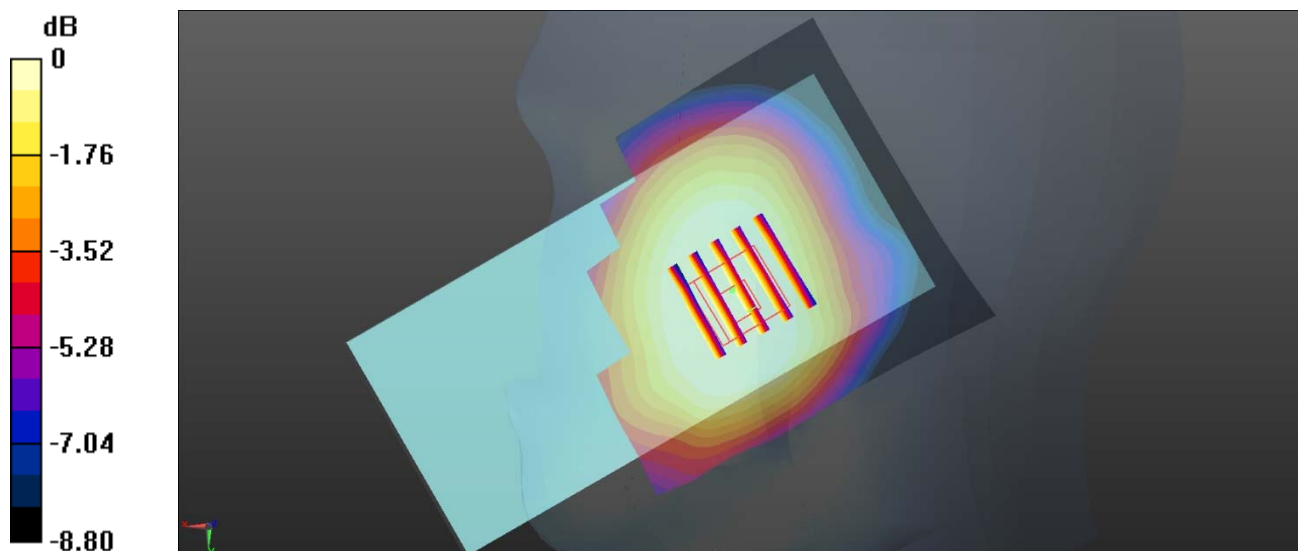
Ch20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.195 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.232 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.141 W/kg

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



0 dB = 0.215 W/kg = -6.68 dBW/kg

17.Body Plane with Back side 10mm on Mid Channel in LTE Band 5

Date: 2021.11.16

Communication System Band: Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.951$ S/m; $\epsilon_r = 43.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn Sn878; Calibrated: 2021.07.15
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1542
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20525/Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.594 W/kg

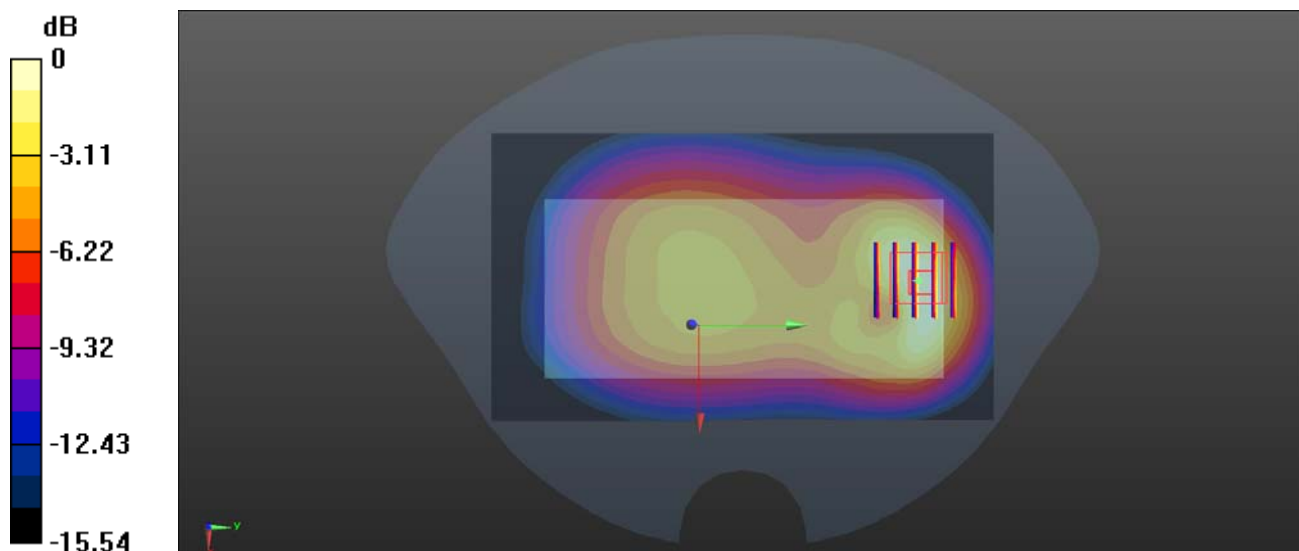
Ch20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 15.06 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.729 W/kg

SAR(1 g) = 0.400 W/kg; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (measured) = 0.595 W/kg



0 dB = 0.595 W/kg = -2.25 dBW/kg

18.Right Head with Cheek on Low Channel in LTE Band 7 with Antenna 0

Date: 2021.11.22

Communication System Band: Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.9$ S/m; $\epsilon_r = 39.14$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20850/Area Scan (91x101x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

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

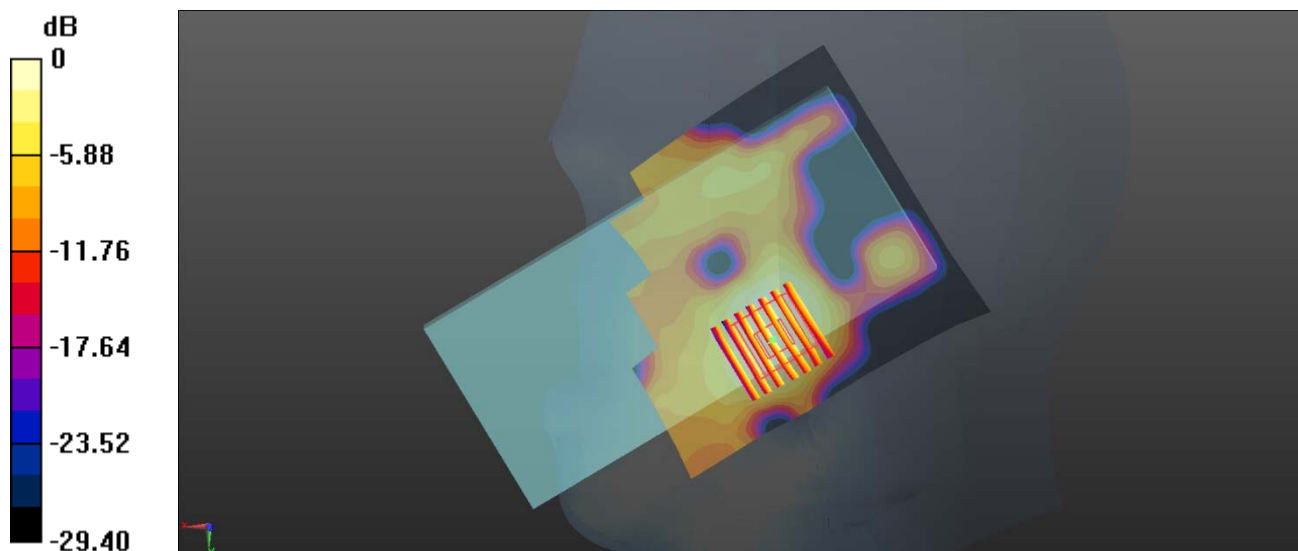
Ch20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0.5290 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.071 W/kg

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



0 dB = 0.213 W/kg = -6.72 dBW/kg

19.Body Plane with Back side 15mm on Mid Channel in LTE Band 7 with Antenna 0

Date: 2021.11.22

Communication System Band: Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.911$ S/m; $\epsilon_r = 39.047$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21100/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.587 W/kg

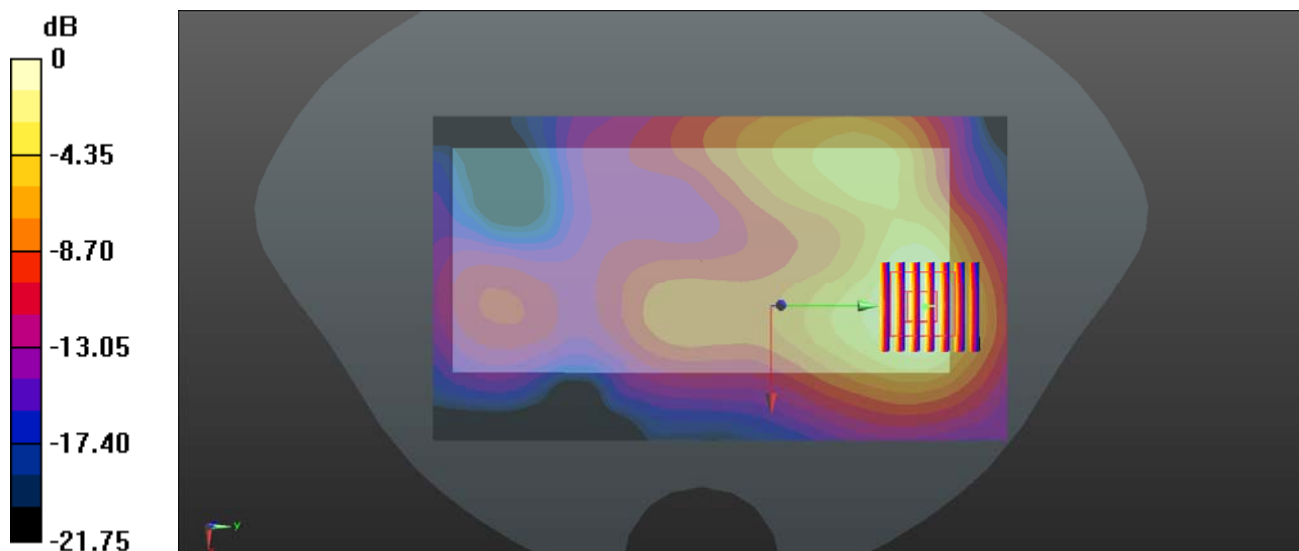
Ch21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.365 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.725 W/kg

SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.594 W/kg



0 dB = 0.594 W/kg = -2.26 dBW/kg

20.Body Plane with Top side 10mm on Mid Channel in LTE Band 7 with Antenna 0

Date: 2021.11.22

Communication System Band: Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.911$ S/m; $\epsilon_r = 39.047$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21100/Area Scan (51x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.705 W/kg

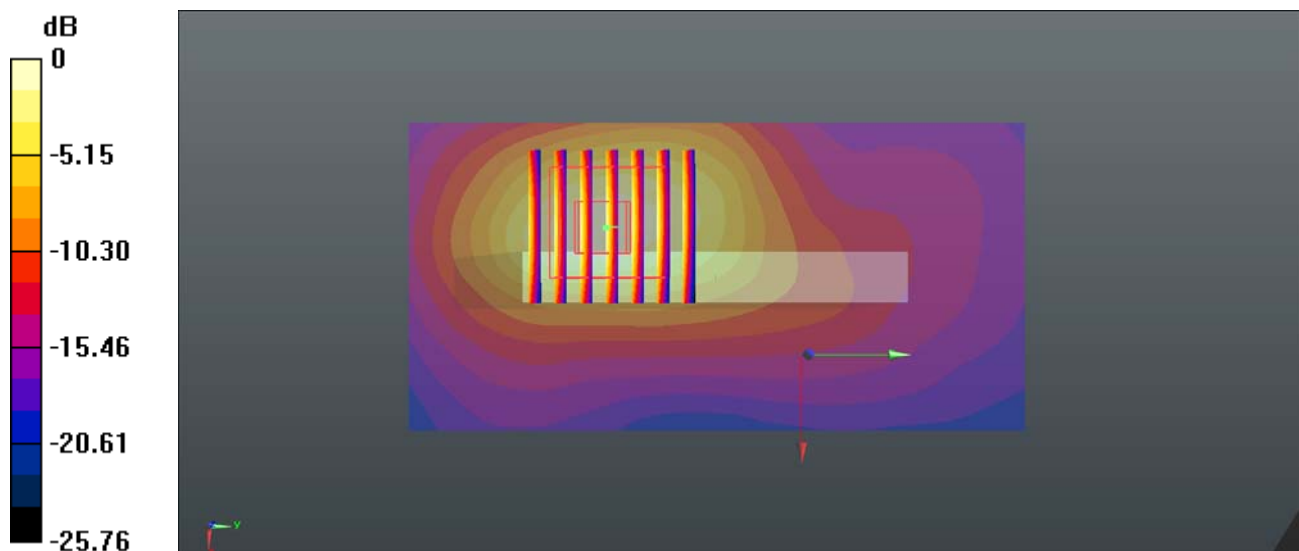
Ch21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.424 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.861 W/kg

SAR(1 g) = 0.418 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 0.692 W/kg



0 dB = 0.692 W/kg = -1.28 dBW/kg

21Right Head with Tilted on Mid Channel in LTE Band 7 with Antenna 4

Date: 2021.11.22

Communication System Band: Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.911$ S/m; $\epsilon_r = 39.047$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21100/Area Scan (91x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.715 W/kg

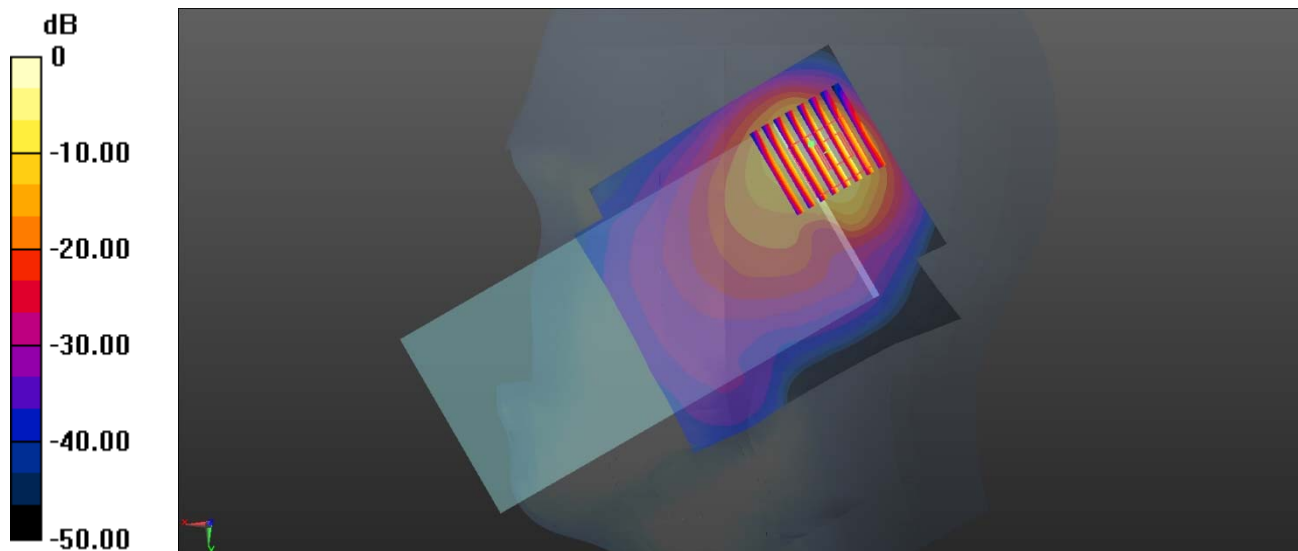
Ch21100/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.419 W/kg; SAR(10 g) = 0.173 W/kg

Maximum value of SAR (measured) = 0.731 W/kg



0 dB = 0.731 W/kg = -1.36 dBW/kg

22.Body Plane with Back side 15mm on High Channel in LTE Band 7 with Antenna 4

Date: 2021.11.22

Communication System Band: Band 7; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 39.047$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.417 W/kg

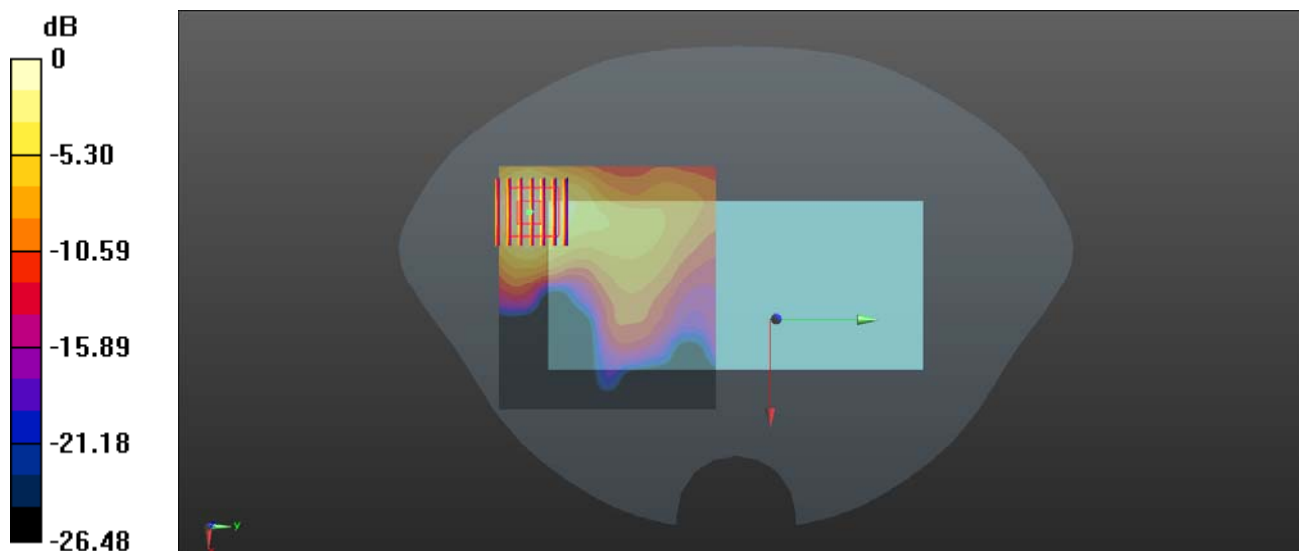
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.204 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.532 W/kg

SAR(1 g) = 0.260 W/kg; SAR(10 g) = 0.126 W/kg

Maximum value of SAR (measured) = 0.430 W/kg



0 dB = 0.430 W/kg = -3.67 dBW/kg

23.Body Plane with Top side 10mm on Mid Channel in LTE Band 7 with Antenna 4

Date: 2021.11.22

Communication System Band: Band 7; Frequency: 2535 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.911$ S/m; $\epsilon_r = 39.047$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF((7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21100/Area Scan (51x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.705 W/kg

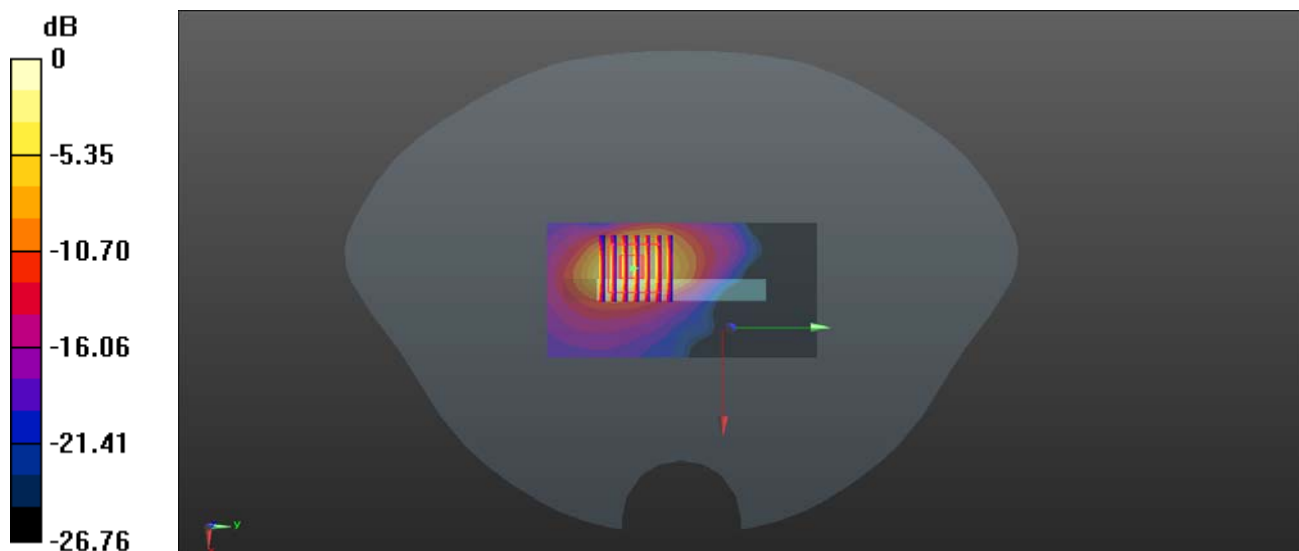
Ch21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.104 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.411 W/kg; SAR(10 g) = 0.171 W/kg

Maximum value of SAR (measured) = 0.73 W/kg



0 dB = 0.73 W/kg = -0.51 dBW/kg

24.Right Head with Cheek on Mid Channel in LTE Band 12

Date: 2021.11.13

Communication System Band: Band 12; Frequency: 707.5 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 707.5$ MHz; $\sigma = 0.909$ S/m; $\epsilon_r = 42.036$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 – SN7510; ConvF(10.31, 10.31, 10.31); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23905/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

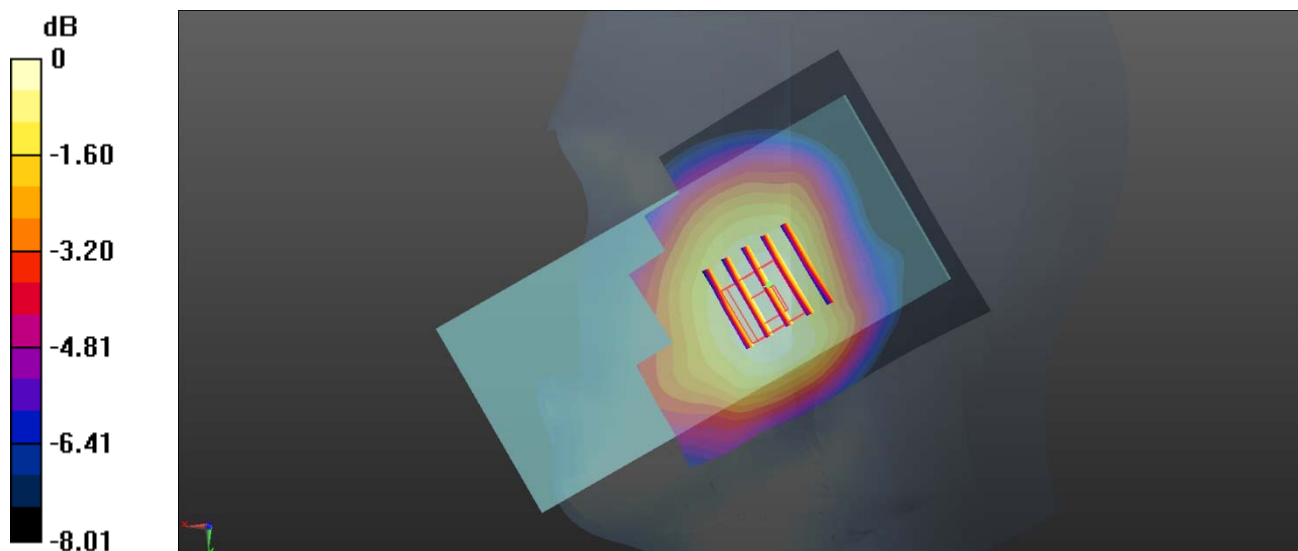
Ch23905/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.850 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.240 W/kg

SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.149 W/kg

Maximum value of SAR (measured) = 0.220 W/kg



0 dB = 0.220 W/kg = -6.58 dBW/kg

25.Body Plane with Right side 10mm on Mid Channel in LTE Band 12

Date: 2021.11.13

Communication System Band: Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 707.5$ MHz; $\sigma = 0.909$ S/m; $\epsilon_r = 42.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 – SN7510; ConvF(10.31, 10.31, 10.31); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23095/Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.371 W/kg

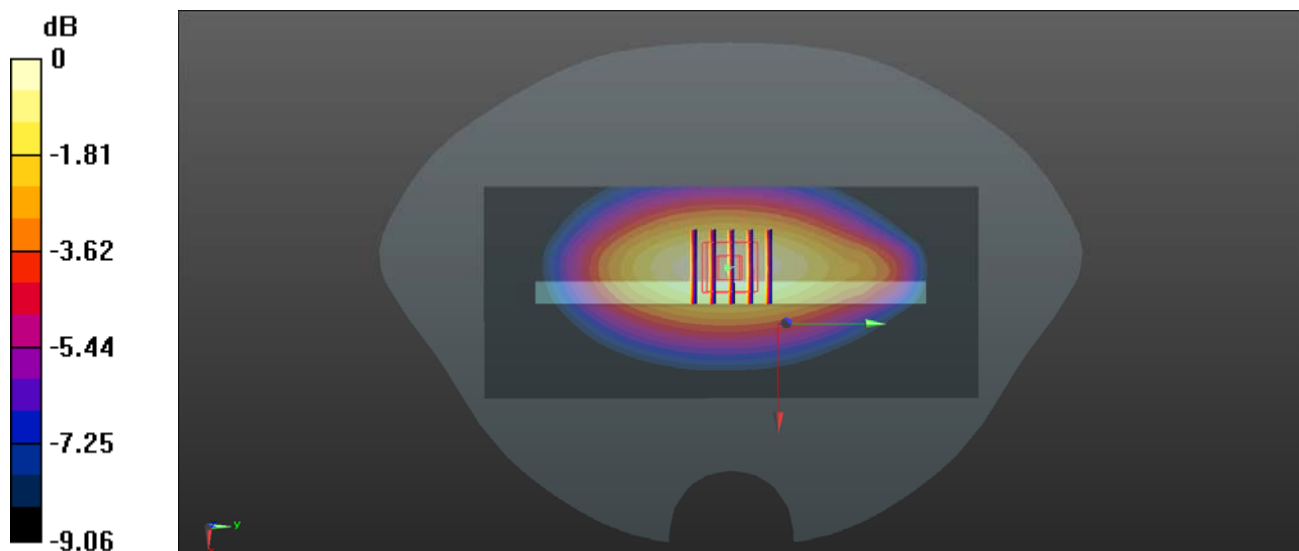
Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.764 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.290 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.373 W/kg



0 dB = 0.373 W/kg = -4.28 dBW/kg

26.Right Head with Cheek on Mid Channel in LTE Band 26

Date: 2021.11.15

Communication System Band: Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 831.5$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 41.282$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.278 W/kg

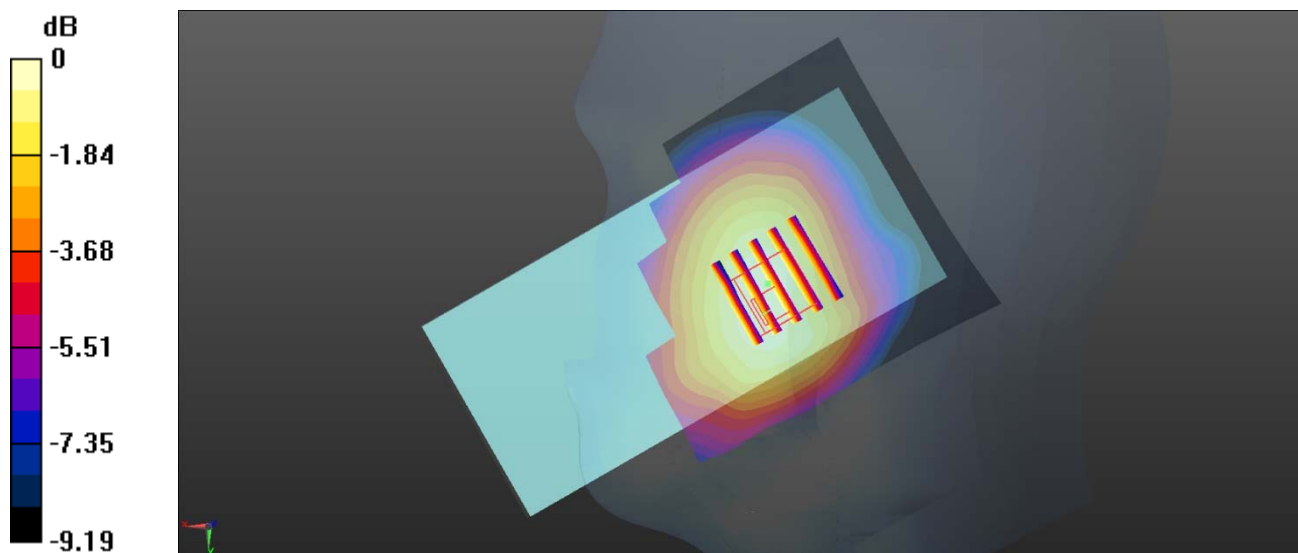
Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.352 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.299 W/kg

SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.171 W/kg

Maximum value of SAR (measured) = 0.271 W/kg



0 dB = 0.271 W/kg = -5.67 dBW/kg

27.Body Plane with Back side 10mm on Mid Channel in LTE Band 26

Date: 2021.11.15

Communication System Band: Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 831.5$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 41.282$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.449 W/kg

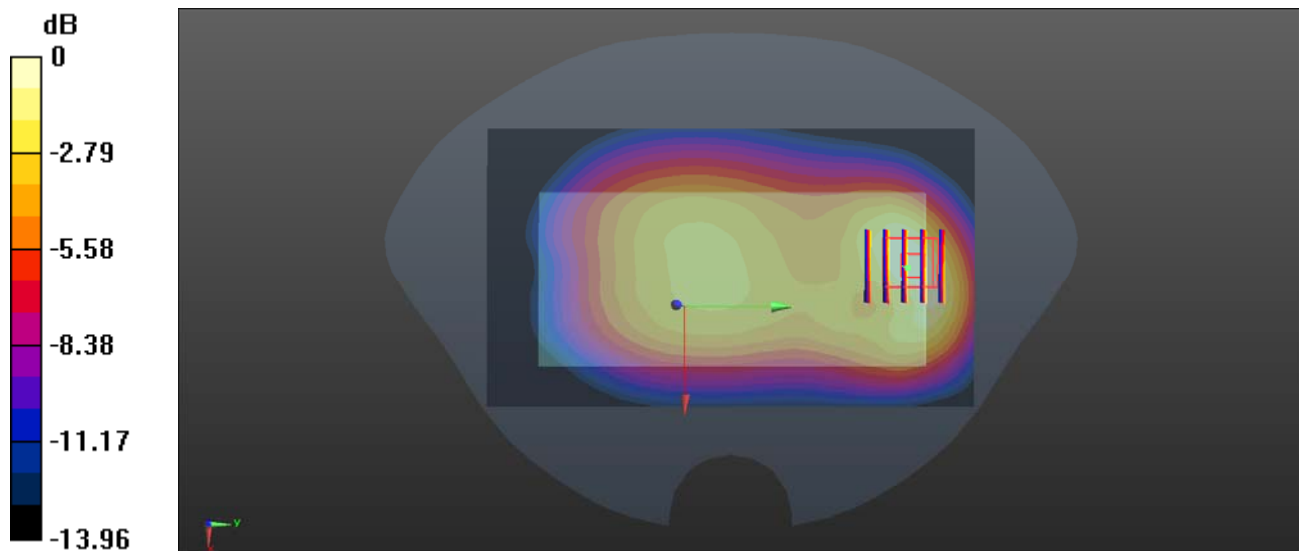
Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.029 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.550 W/kg

SAR(1 g) = 0.321 W/kg; SAR(10 g) = 0.191 W/kg

Maximum value of SAR (measured) = 0.454 W/kg



0 dB = 0.454 W/kg = -3.43 dBW/kg

28.Right Head with Cheek on High Channel in LTE Band 66 with Antenna 1

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

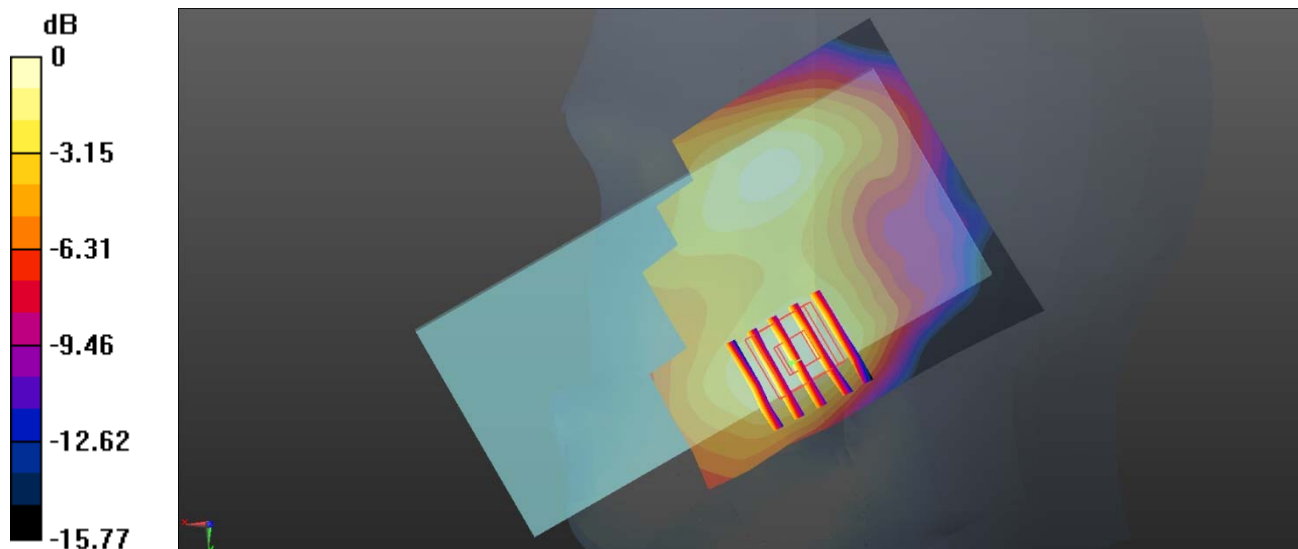
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.552 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.096 W/kg

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



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

29.Body Plane with Back side 15mm on High Channel in LTE Band 66 with Antenna 1

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.651 W/kg

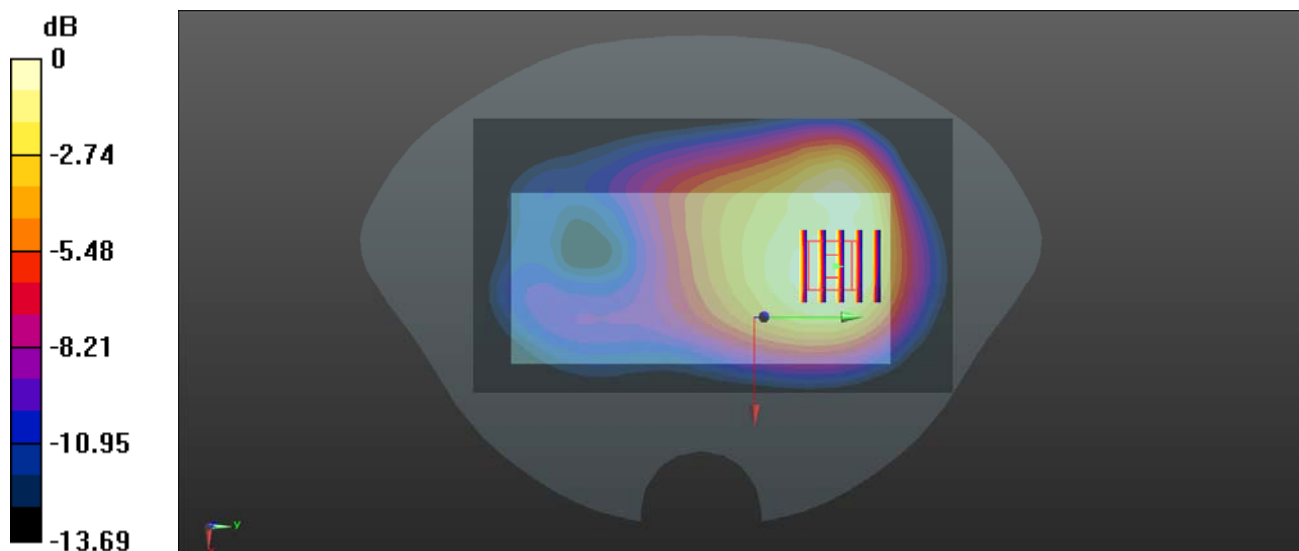
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.419 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.748 W/kg

SAR(1 g) = 0.482 W/kg; SAR(10 g) = 0.314 W/kg

Maximum value of SAR (measured) = 0.648 W/kg



0 dB = 0.648 W/kg = -1.88 dBW/kg

30.Body Plane with Back side 10mm on High Channel in LTE Band 66 with Antenna 1

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.578 W/kg

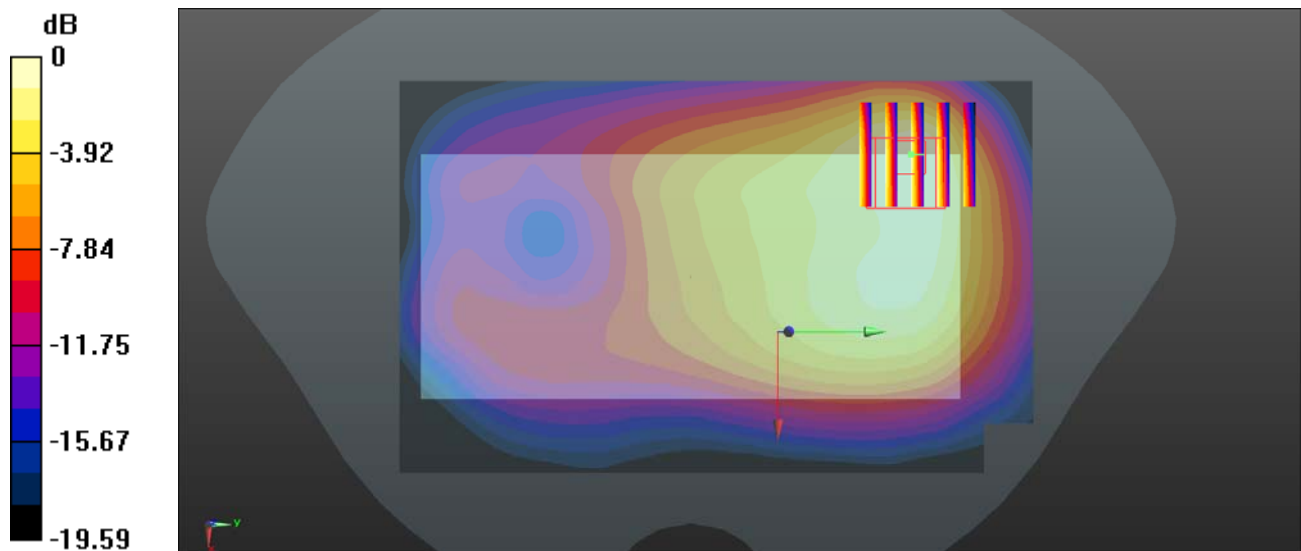
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.158 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.703 W/kg

SAR(1 g) = 0.371 W/kg; SAR(10 g) = 0.219 W/kg

Maximum value of SAR (measured) = 0.573 W/kg



0 dB = 0.573 W/kg = -2.42 dBW/kg

31.Body Plane with Back side 10mm on High Channel in LTE Band 66 with Antenna 1

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (81x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.405 W/kg

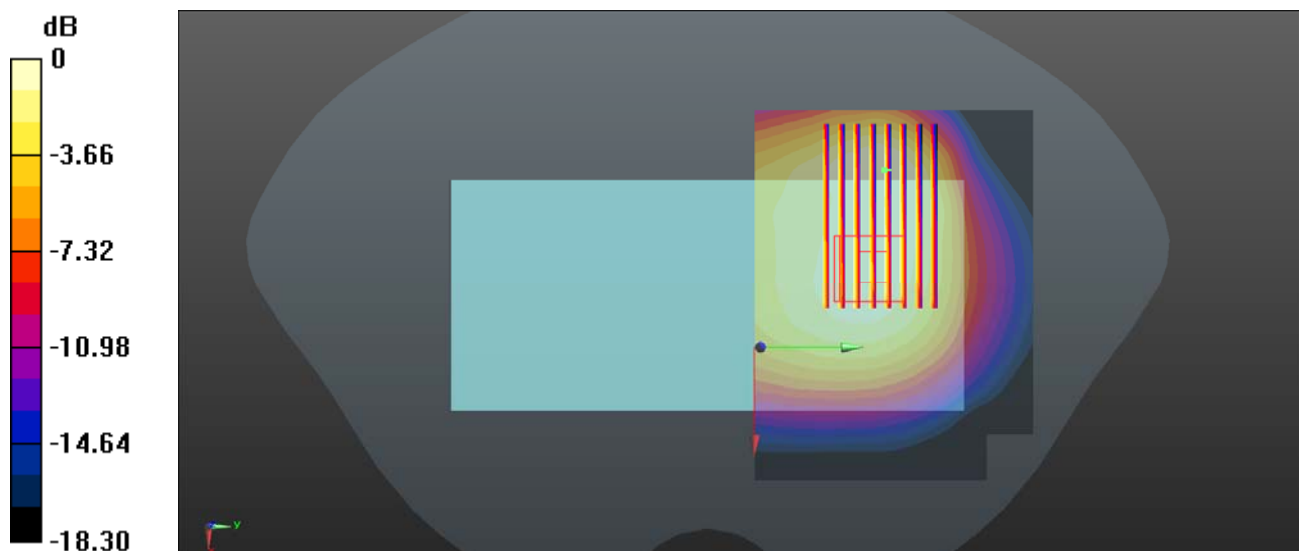
Ch132572/Zoom Scan (13x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.5480 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.359 W/kg



0 dB = 0.359 W/kg = -4.45 dBW/kg

32.Right Head with Tilted on High Channel in LTE Band 66 with Antenna 4

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (71x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.646 W/kg

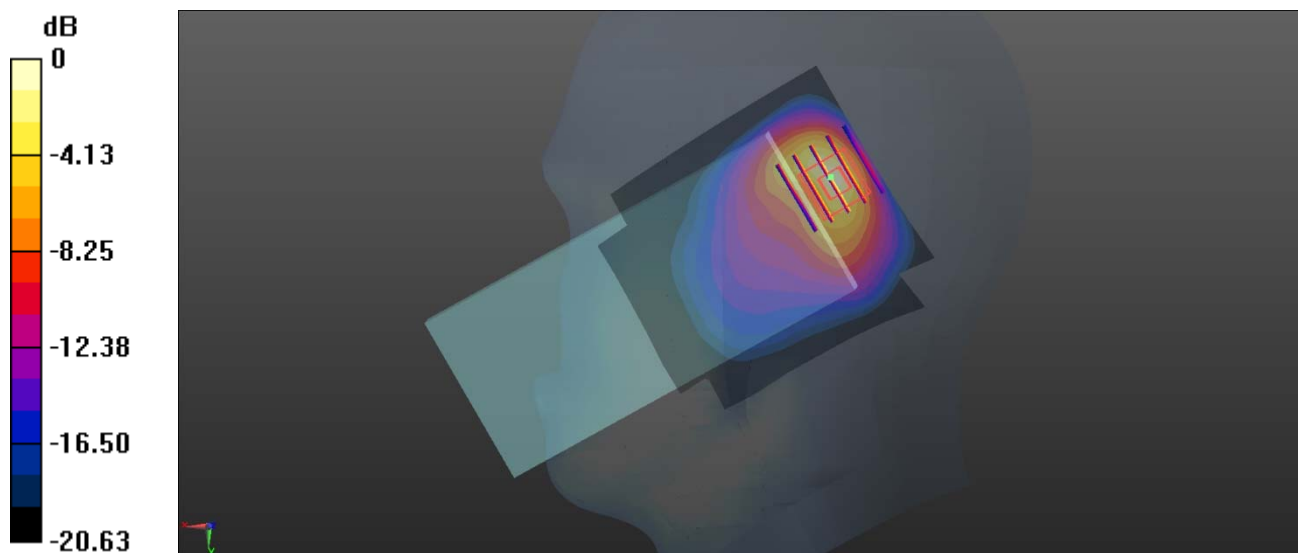
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 1.263 V/m; Power Drift = 0.01

Peak SAR (extrapolated) = 0.888 W/kg

SAR(1 g) = 0.438 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.748 W/kg



0 dB = 0.748 W/kg = -1.26 dBW/kg

33.Body Plane with Back side 15mm on High Channel in LTE Band 66 with Antenna 4

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (81x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.768 W/kg

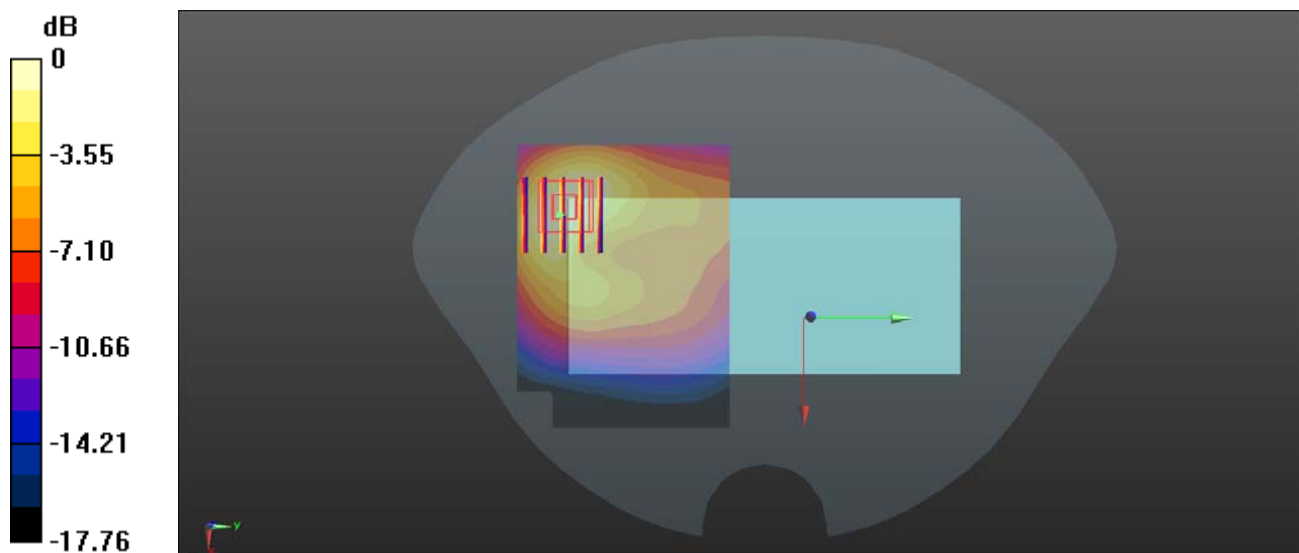
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.022 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.912 W/kg

SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.293 W/kg

Maximum value of SAR (measured) = 0.756 W/kg



0 dB = 0.756 W/kg = -1.21 dBW/kg

34.Body Plane with Top side 10mm on High Channel in LTE Band 66 with Antenna 4

Date: 2021.11.17

Communication System Band: Band 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.307$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (41x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.477 W/kg

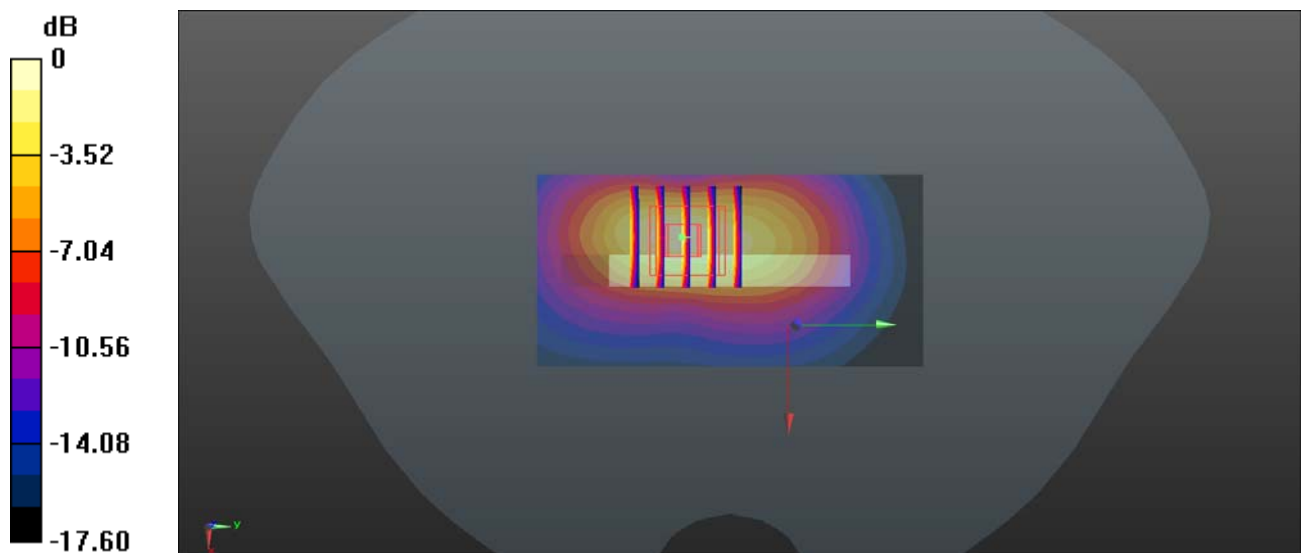
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 1.437 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.617 W/kg

SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.170 W/kg

Maximum value of SAR (measured) = 0.517 W/kg



0 dB = 0.517 W/kg = -2.87 dBW/kg

35.Right Head with Cheek on Low Channel in LTE Band 41

Date: 2021.11.23

Communication System Band: Band 41; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used: $f = 2506$ MHz; $\sigma = 1.938$ S/m; $\epsilon_r = 40.806$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.1 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39750/Area Scan (91x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.124 W/kg

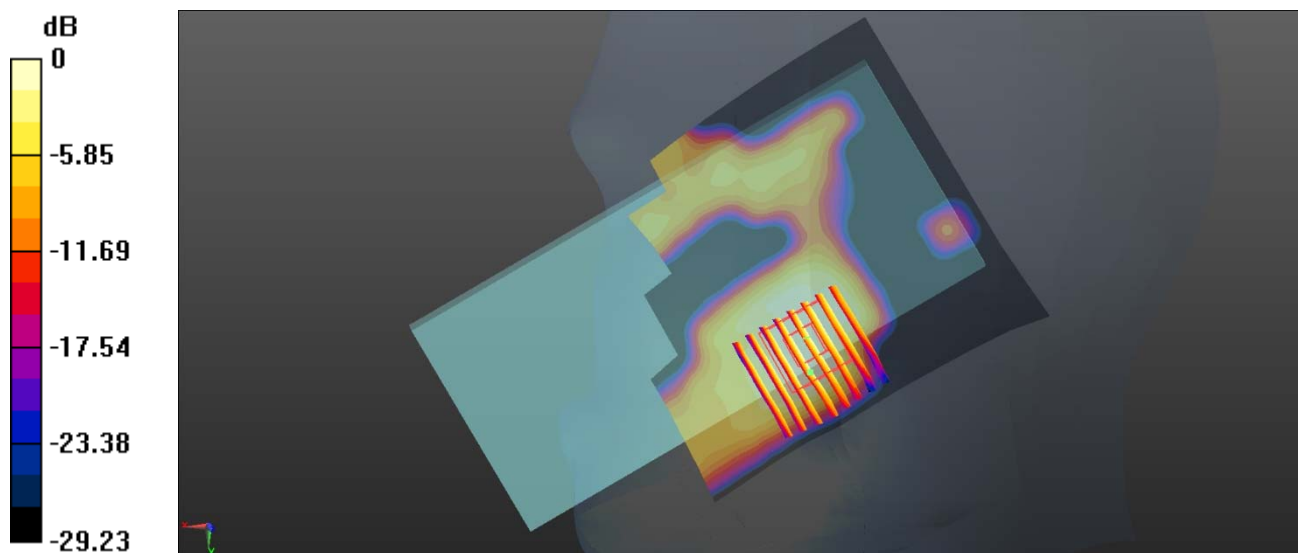
Ch39750/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.4820 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.139 W/kg

SAR(1 g) = 0.078 W/kg; SAR(10 g) = 0.040 W/kg

Maximum value of SAR (measured) = 0.113 W/kg



0 dB = 0.113 W/kg = -9.47 dBW/kg

36.Body Plane with Bottom side 10mm on Low Channel in LTE Band 41

Date: 2021.11.23

Communication System Band: Band 41; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used: $f = 2506$ MHz; $\sigma = 1.938$ S/m; $\epsilon_r = 40.806$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39750/Area Scan (51x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.997 W/kg

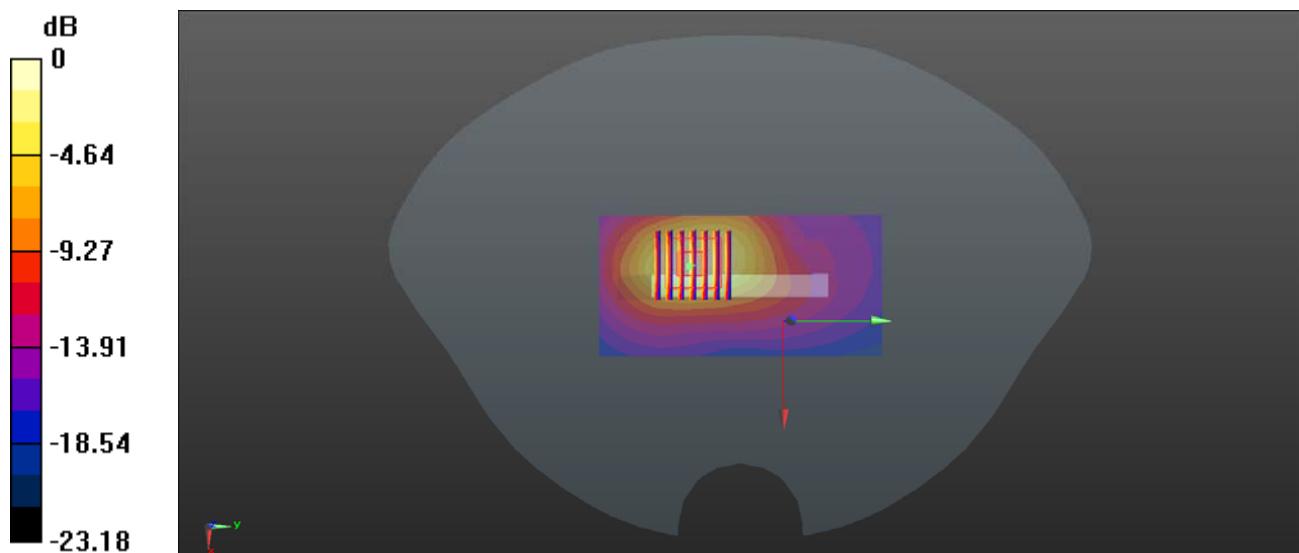
Ch39750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.745 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 0.983 W/kg



0 dB = 0.983 W/kg = -0.07 dBW/kg

37.Right Head with Cheek on Mid Channel in n5

Date: 2021.11.15

Communication System Band: 5G NR n5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 41.22$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch167300/Area Scan (71x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.256 W/kg

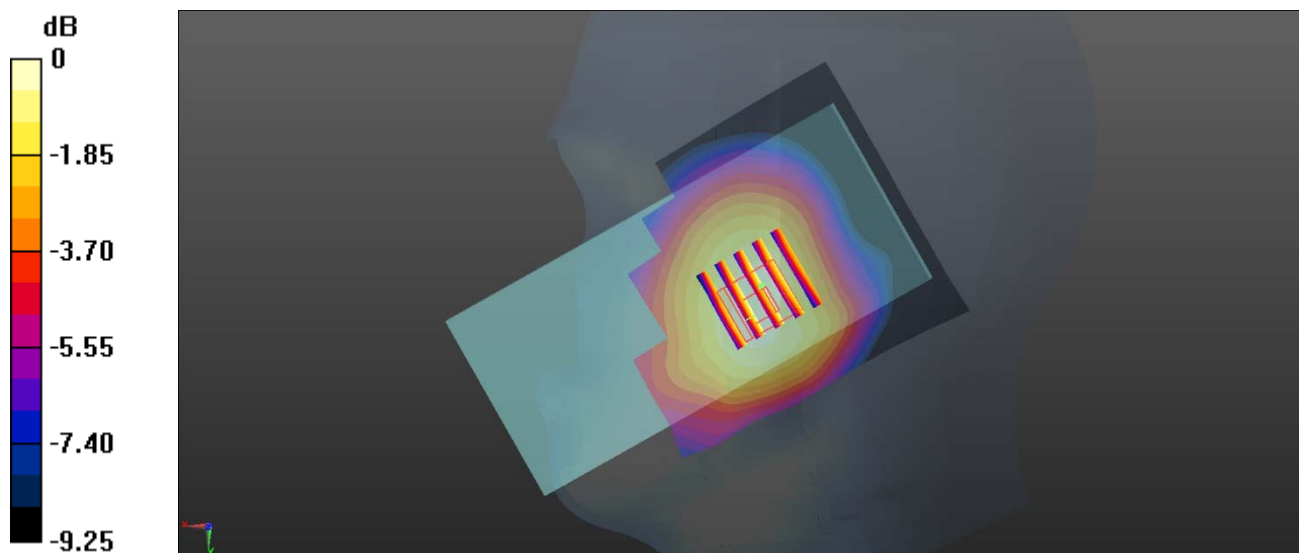
Ch167300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.601 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.259 W/kg



0 dB = 0.259 W/kg = -5.87 dBW/kg

38.Body Plane with Back side 10mm on Mid Channel in n5

Date: 2021.11.15

Communication System Band: 5G NR n5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 41.22$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.94, 9.94, 9.94); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch167300/Area Scan (81x71x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.455 W/kg

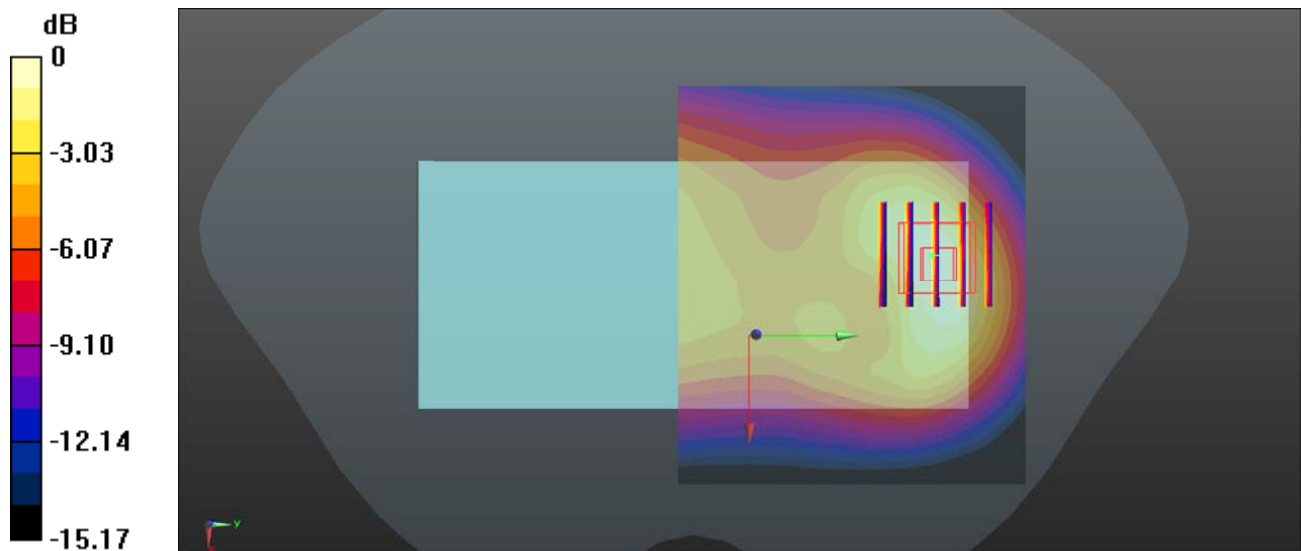
Ch167300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 1.328 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.574 W/kg

SAR(1 g) = 0.326 W/kg; SAR(10 g) = 0.190 W/kg

Maximum value of SAR (measured) = 0.470 W/kg



0 dB = 0.470 W/kg = -3.28 dBW/kg

39.Right Head with Cheek on Mid Channel in n7

Date: 2021.11.23

Communication System Band: 5G NR n7; Frequency: 2535 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.961$ S/m; $\epsilon_r = 40.757$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature:22.1 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch50700/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.927 W/kg

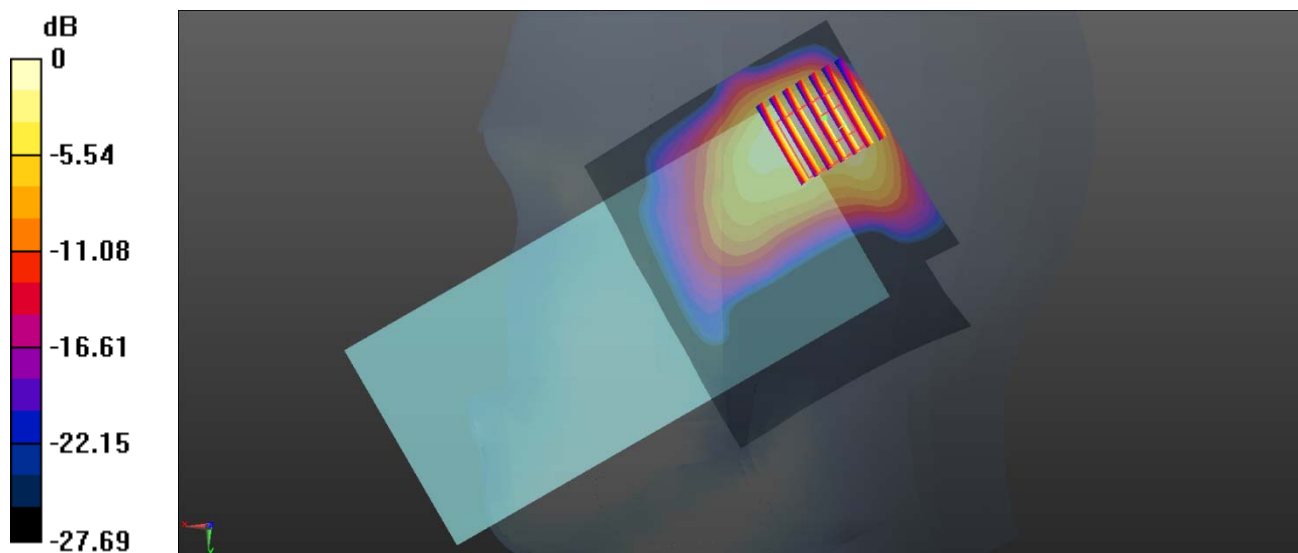
Ch50700/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.086 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.482 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 0.848 W/kg



0 dB = 0.848 W/kg = -0.72 dBW/kg

40.Body Plane with Back side 15mm on Mid Channel in n7

Date: 2021.11.23

Communication System Band: 5G NR n7; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.961$ S/m; $\epsilon_r = 40.757$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch507000/Area Scan (101x181x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.547 W/kg

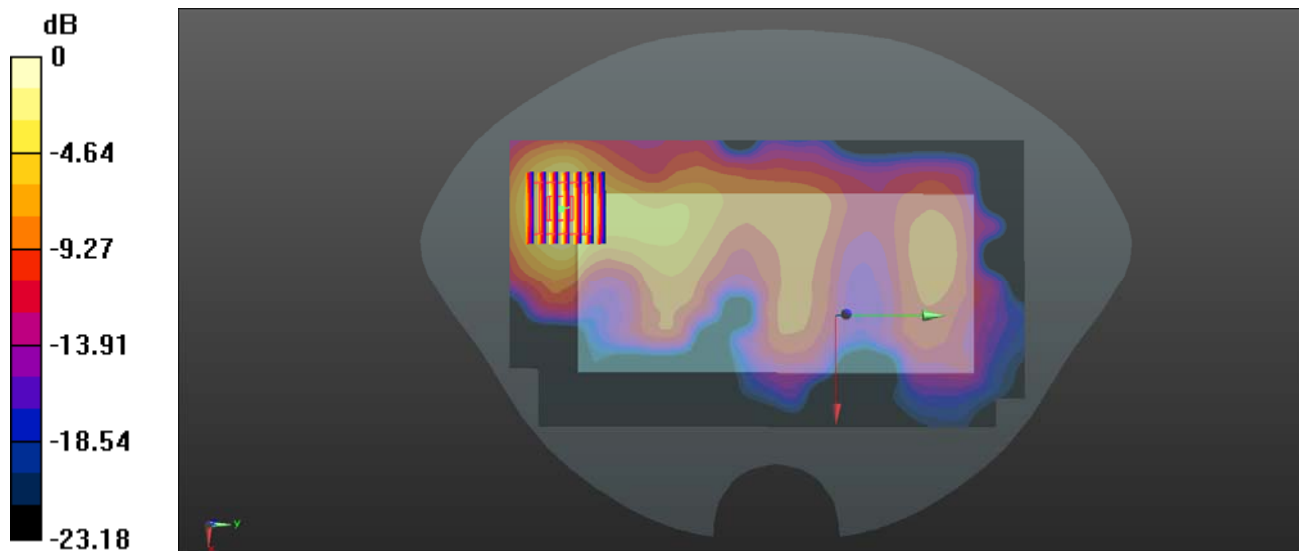
Ch507000/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.139 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.669 W/kg

SAR(1 g) = 0.334 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.543 W/kg



0 dB = 0.543 W/kg = -2.65 dBW/kg

41.Body Plane with Top side 10mm on Mid Channel in N7

Date: 2021.11.23

Communication System Band: 5G NR n7; Frequency: 2535 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.961$ S/m; $\epsilon_r = 40.757$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch507000/Area Scan (51x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.944 W/kg

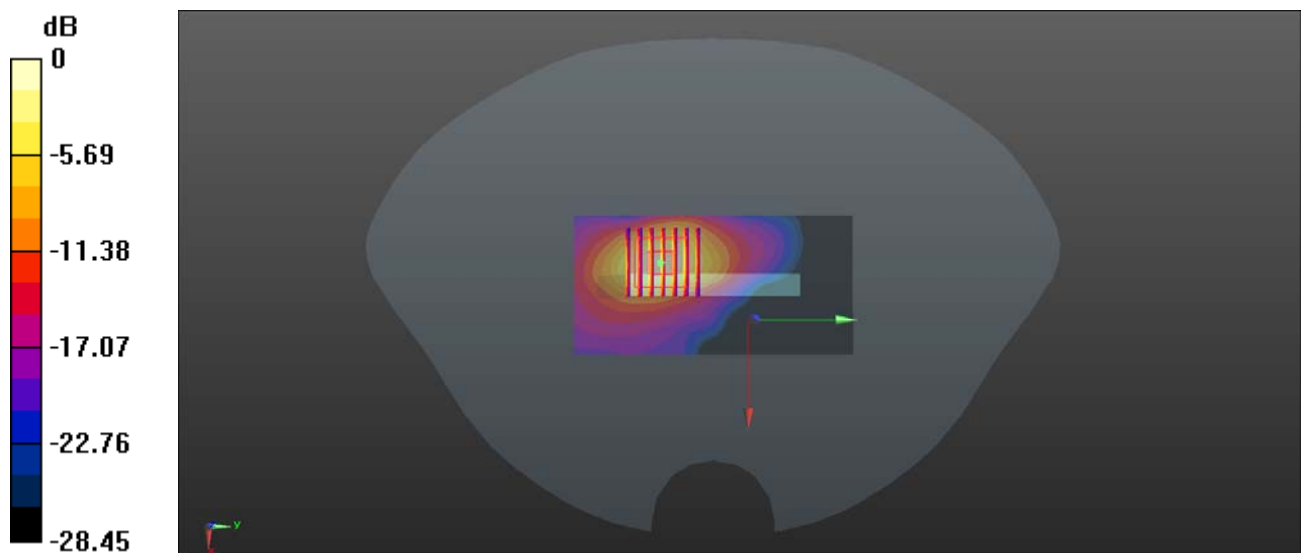
Ch507000/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.956 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.547 W/kg; SAR(10 g) = 0.230 W/kg

Maximum value of SAR (measured) = 0.959 W/kg



0 dB = 0.959 W/kg = -0.18 dBW/kg

42.Body Plane with Top side 0mm on Mid Channel 1RB Mid in N7

Date: 2021.11.23

Communication System Band: 5G NR n7; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.961$ S/m; $\epsilon_r = 40.757$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.50, 7.50, 7.50); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch507000/Area Scan (51x101x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 6.61 W/kg

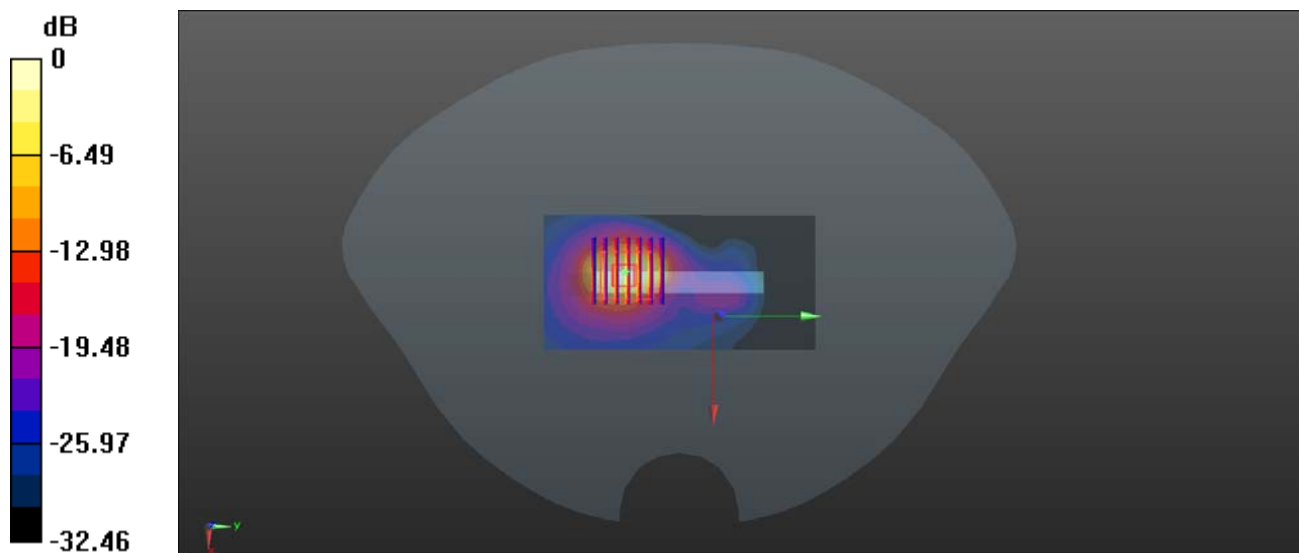
Ch507000/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.992 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 3.53 W/kg; SAR(10 g) = 1.08 W/kg

Maximum value of SAR (measured) = 8.36 W/kg



0 dB = 8.36 W/kg = 9.22 dBW/kg

43.Left Head with Tilted on High Channel in IEEE 802.11b

Date: 2021.11.21

Communication System Band: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.866$ S/m; $\epsilon_r = 39.091$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.8 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.54, 7.54, 7.54); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x91x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.767 W/kg

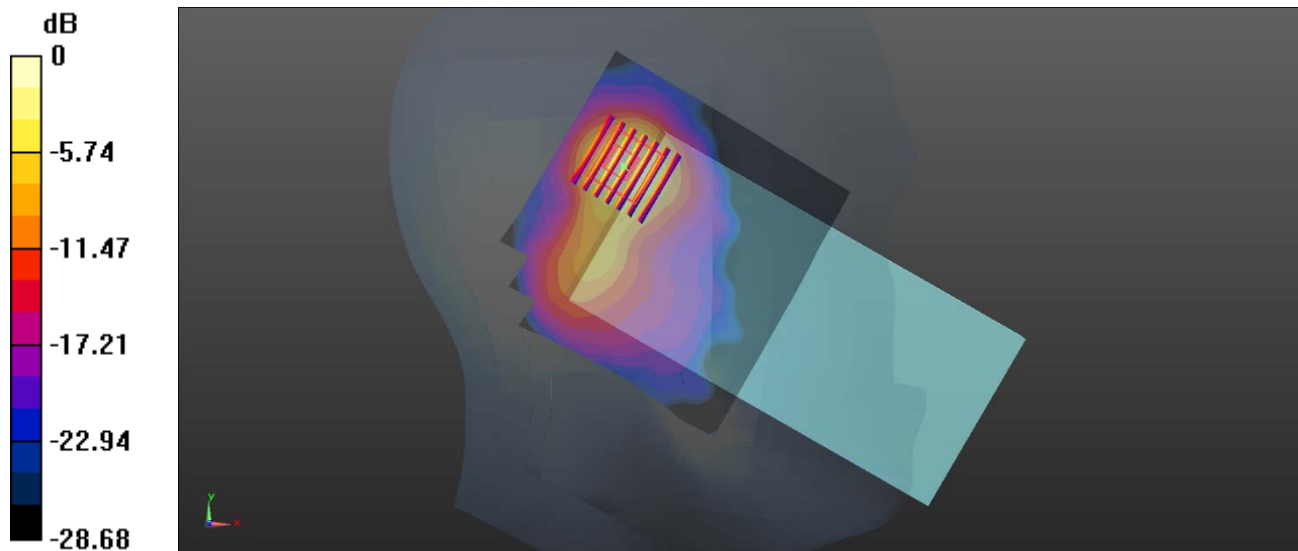
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.615 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.751 W/kg



0 dB = 0.751 W/kg = -1.24 dBW/kg

44.Body Plane with Back side 10mm on High Channel in IEEE 802.11b

Date: 2021.11.21

Communication System Band: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.866$ S/m; $\epsilon_r = 39.091$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.54, 7.54, 7.54); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.00 W/kg

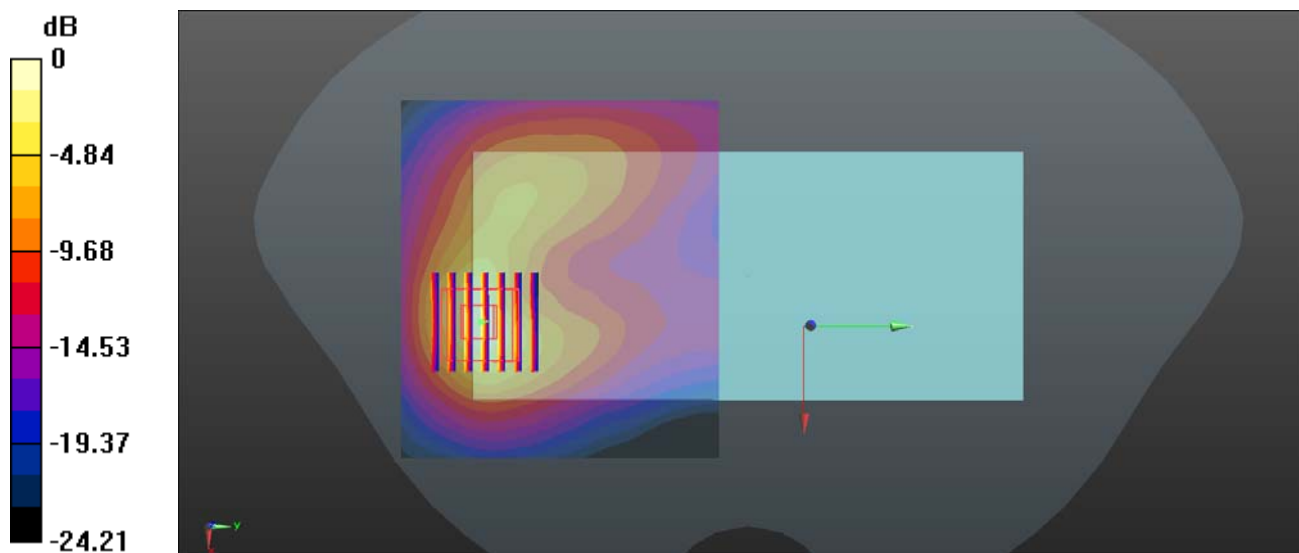
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.330 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.635 W/kg; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

45.Body Plane with Back side 0mm on High Channel in IEEE 802.11b

Date: 2021.11.21

Communication System Band: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.866$ S/m; $\epsilon_r = 39.091$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.54, 7.54, 7.54); Calibrated: 2020.11.30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 10.7 W/kg

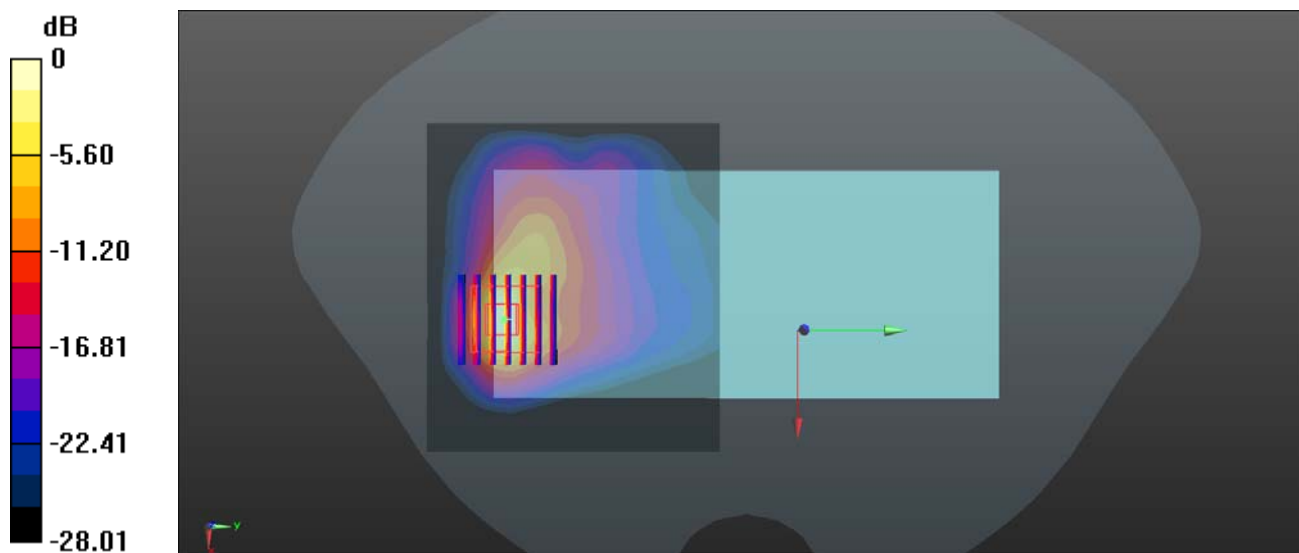
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.307 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 15.8 W/kg

SAR(1 g) = 4.78 W/kg; SAR(10 g) = 1.56 W/kg

Maximum value of SAR (measured) = 11.4 W/kg



0 dB = 11.4 W/kg = 10.57 dBW/kg

46. Left Head with Tilted on Low Channel in IEEE 802.11ac-20M

Date: 2021.11.24

Communication System Band: 802.11ac-20MHz; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.792$ S/m; $\epsilon_r = 35.874$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.46, 5.46, 5.46); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch52/Area Scan (111x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 1.56 W/kg

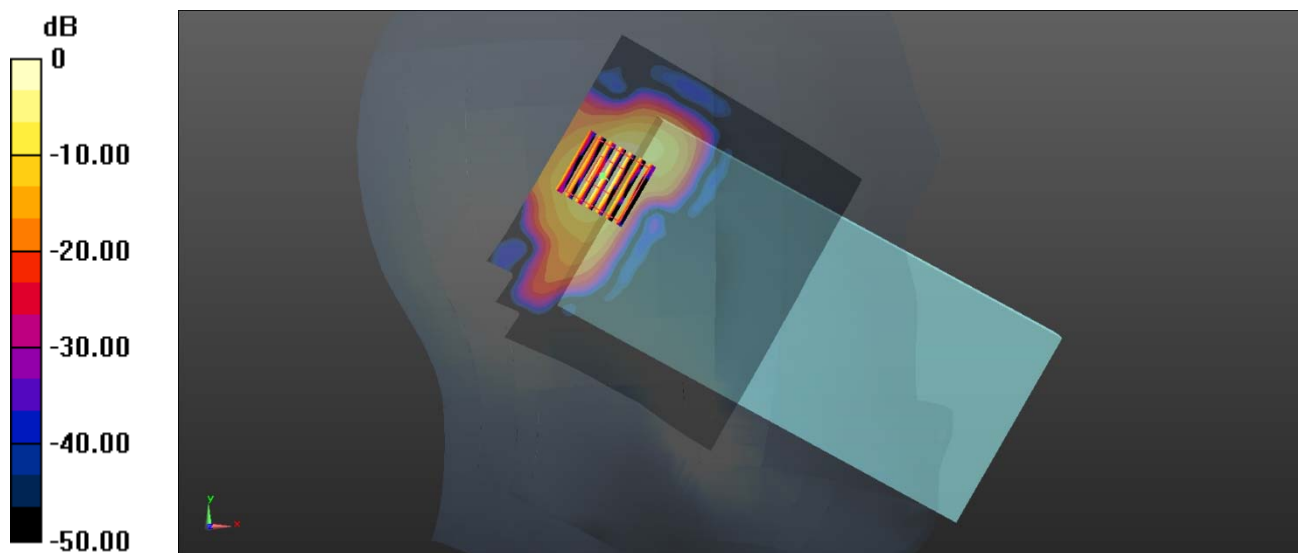
Ch52/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 3.420 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.31 W/kg

SAR(1 g) = 0.630 W/kg; SAR(10 g) = 0.147 W/kg

Maximum value of SAR (measured) = 1.74 W/kg



0 dB = 1.74 W/kg = 2.41 dBW/kg

47.Left Head with Tilted on Mid Channel in IEEE 802.11ac-80M

Date: 2021.11.25

Communication System Band: 802.11ac-80MHz; Frequency: 5610 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5610$ MHz; $\sigma = 5.221$ S/m; $\epsilon_r = 35.227$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature:22.3 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.89, 4.89, 4.89); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.5
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch122/Area Scan (111x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.84 W/kg

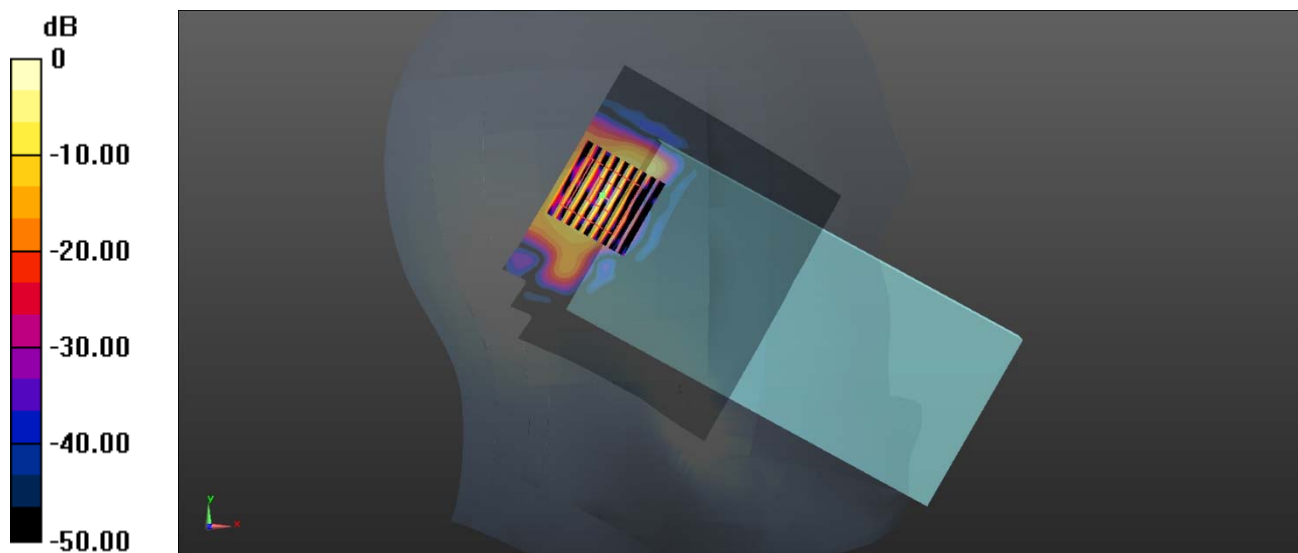
Ch122/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.301 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.19 W/kg

SAR(1 g) = 0.574 W/kg; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 1.56 W/kg



0 dB = 1.56 W/kg = 1.93 dBW/kg

48.Left Head with Tilted on Mid Channel in IEEE 802.11ac-80M

Date: 2021.12.14

Communication System Band: 802.11ac-80MHz; Frequency: 5775 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5775$ MHz; $\sigma = 5.213$ S/m; $\epsilon_r = 33.952$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.15, 5.15, 5.15); Calibrated: 2021.07.23
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch155/Area Scan (111x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.24 W/kg

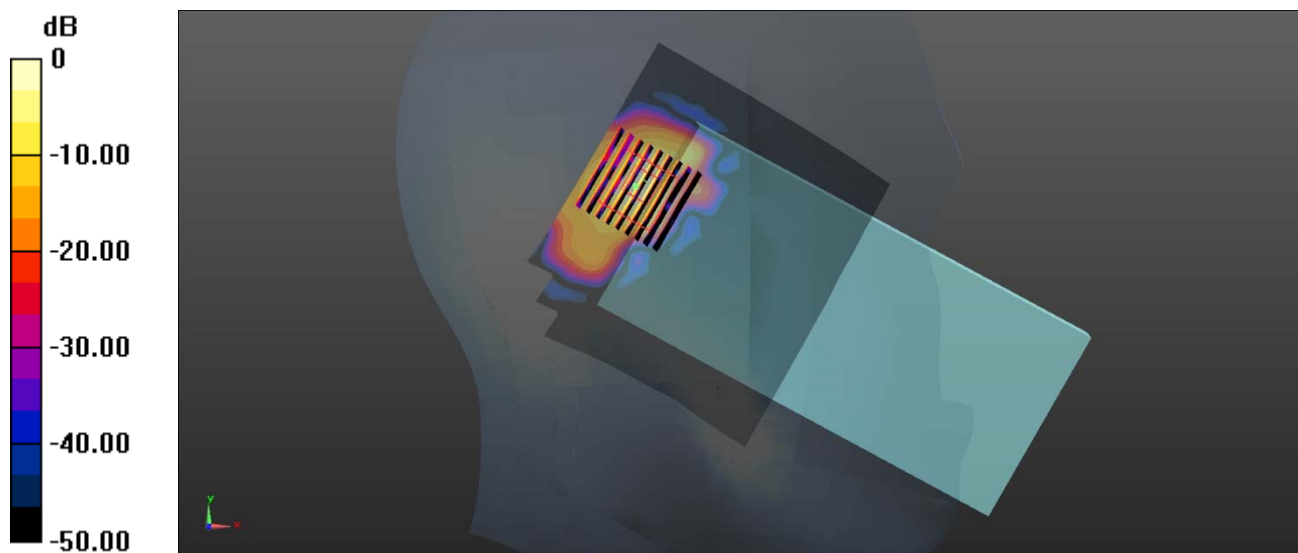
Ch155/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 0.4510 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.02 W/kg

SAR(1 g) = 0.633 W/kg; SAR(10 g) = 0.154 W/kg

Maximum value of SAR (measured) = 1.80 W/kg



0 dB = 1.80 W/kg = 2.38 dBW/kg

49.Body Plane with Top side 10mm on Mid Channel in IEEE 802.11a

Date: 2021.11.24

Communication System Band: 802.11a; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.861$ S/m; $\epsilon_r = 35.803$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.46, 5.46, 5.46); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (61x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 1.40 W/kg

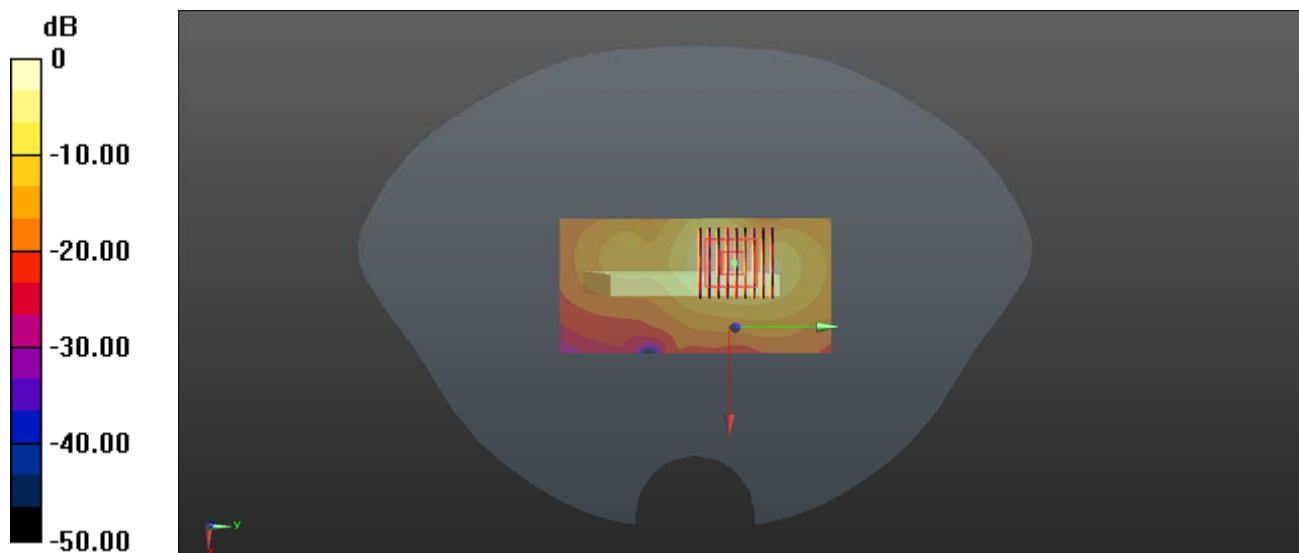
Ch64/Zoom Scan (9x9x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 5.018 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 0.601 W/kg; SAR(10 g) = 0.193 W/kg

Maximum value of SAR (measured) = 1.45 W/kg



0 dB = 1.45 W/kg = 1.61 dBW/kg

50.Body Plane with Top side 10mm on Mid Channel in IEEE 802.11n-40M

Date: 2021.11.25

Communication System Band: 802.11n-40MHz; Frequency: 5630 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5630$ MHz; $\sigma = 5.239$ S/m; $\epsilon_r = 35.209$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.89, 4.89, 4.89); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch126/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.13 W/kg

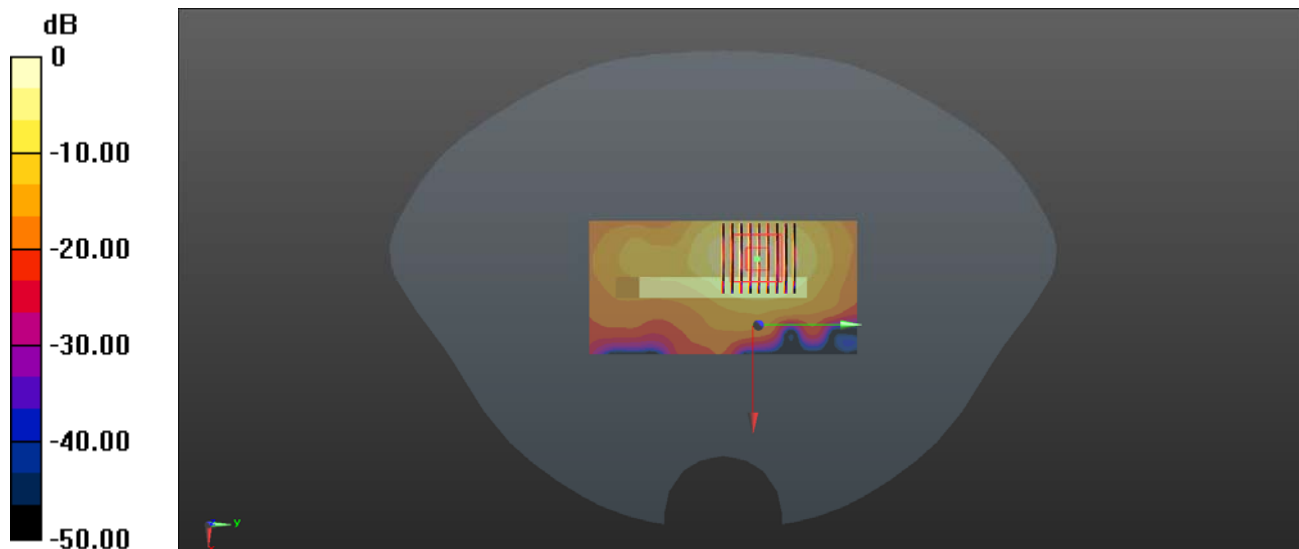
Ch126/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 4.413 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.10 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.163 W/kg

Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

51.Body Plane with Top side 10mm on Mid Channel in IEEE 802.11ac-80M

Date: 2021.11.26

Communication System Band: 802.11ac-80MHz; Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5775$ MHz; $\sigma = 5.405$ S/m; $\epsilon_r = 34.881$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.96, 4.96, 4.96); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch155/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.23 W/kg

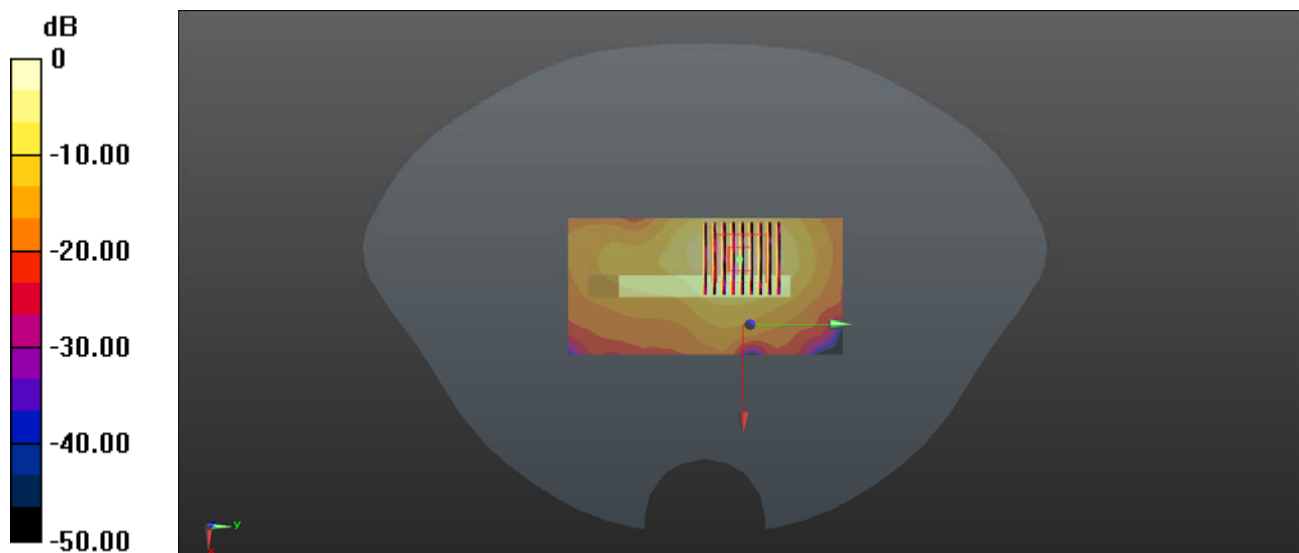
Ch155/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.599 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.23 W/kg

SAR(1 g) = 0.529 W/kg; SAR(10 g) = 0.175 W/kg

Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

52.Body Plane with Top side 0mm on Mid Channel in IEEE 802.11a

Date: 2021.11.24

Communication System Band: 802.11a; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.861$ S/m; $\epsilon_r = 35.803$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF5.46, 5.46, 5.46); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 19.4 W/kg

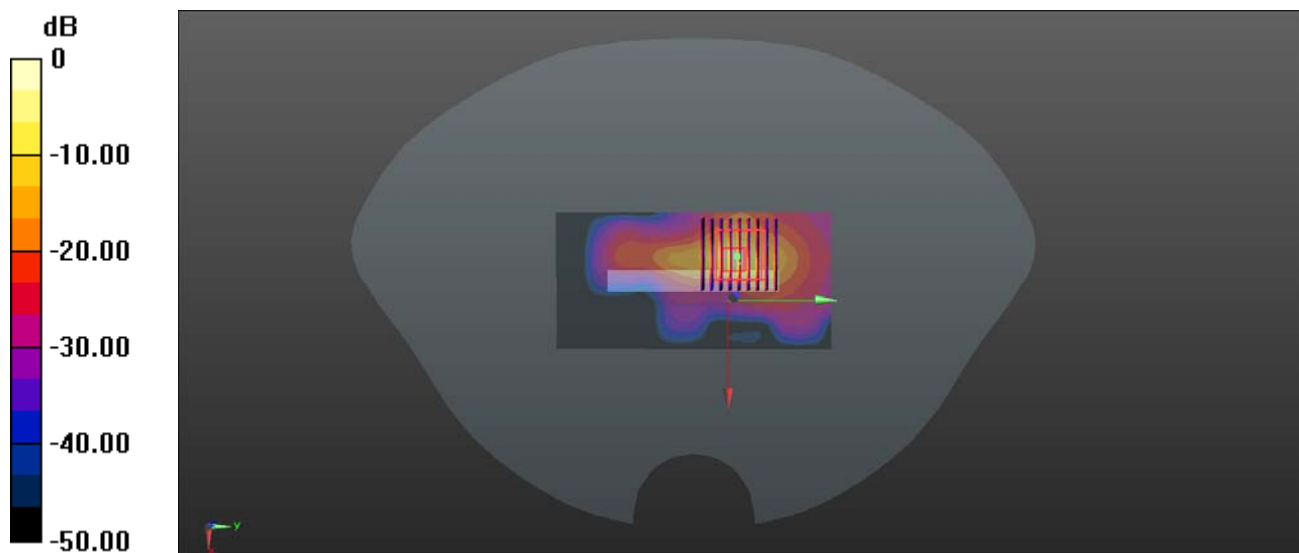
Ch64/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.042 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 55.5 W/kg

SAR(1 g) = 6.26 W/kg; SAR(10 g) = 1.08 W/kg

Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg = 13.32 dBW/kg

53.Body Plane with Top side 0mm on Mid Channel in IEEE 802.11n-40M

Date: 2021.11.25

Communication System Band: 802.11n-40MHz; Frequency: 5630 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5630$ MHz; $\sigma = 5.239$ S/m; $\epsilon_r = 35.209$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.89, 4.89, 4.89); Calibrated: 2020.11.30
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch126/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 26.2 W/kg

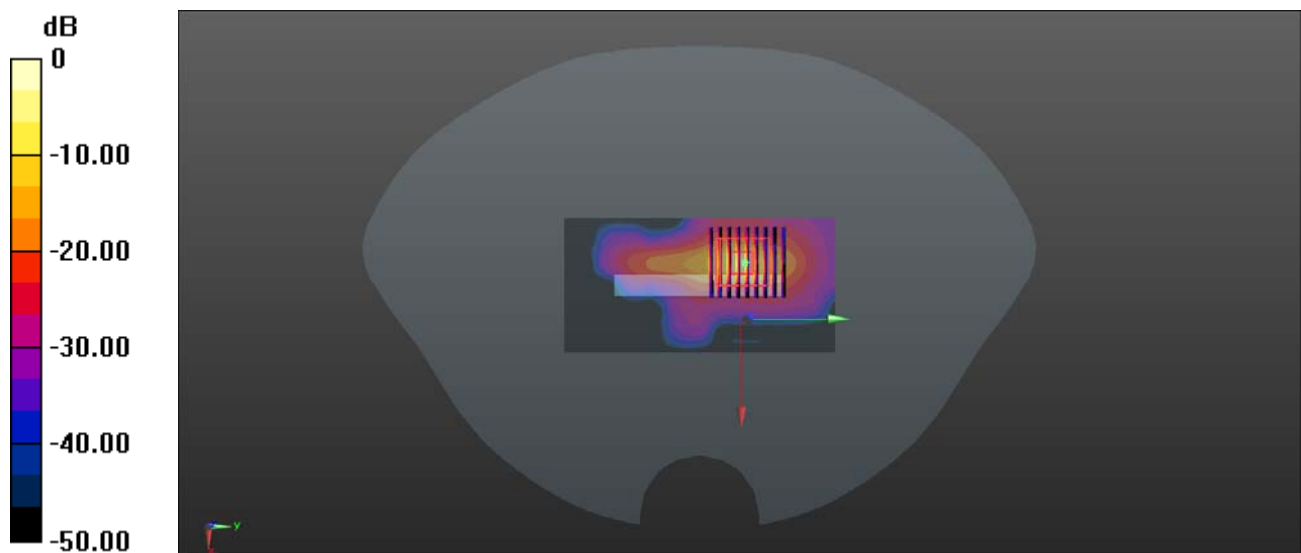
Ch126/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.238 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 64.7 W/kg

SAR(1 g) = 7.07 W/kg; SAR(10 g) = 1.11 W/kg

Maximum value of SAR (measured) = 26.9 W/kg



0 dB = 26.9 W/kg = 14.30 dBW/kg

54.Left Head with Tilted on Mid Channel in Bluetooth

Date: 2021.11.21

Communication System Band: Bluetooth 2.0; Frequency: 2441 MHz; Duty Cycle: 1:1.2

Medium parameters used: $f = 2441$ MHz; $\sigma = 1.839$ S/m; $\epsilon_r = 39.037$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature:22.8 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.54, 7.54, 7.54); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (91x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.116 W/kg

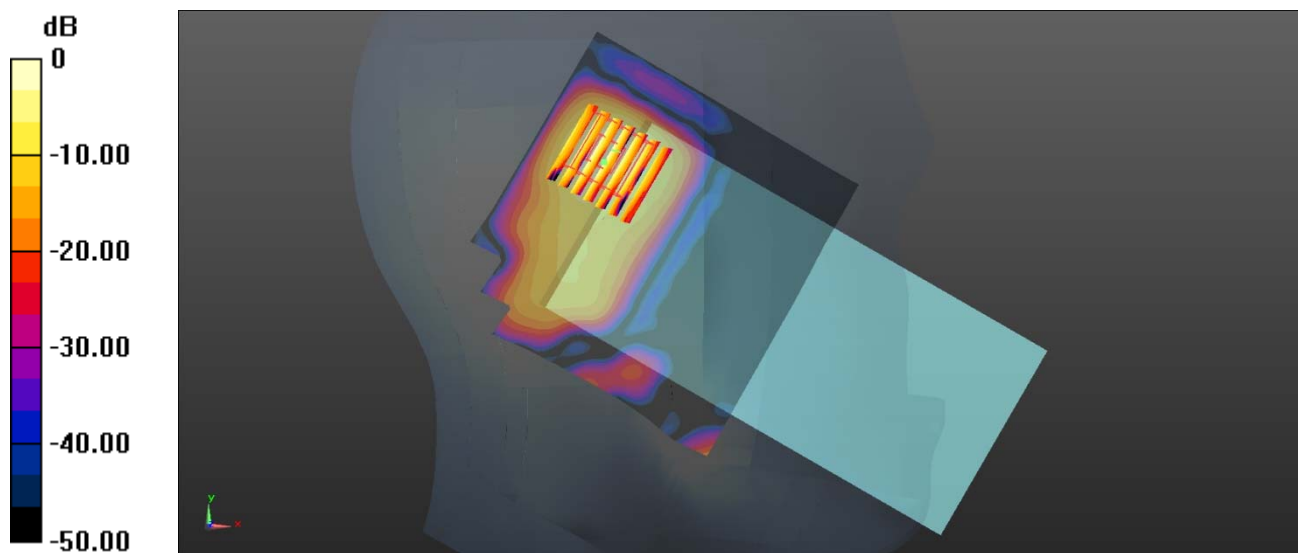
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.5700 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.150 W/kg

SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.024 W/kg

Maximum value of SAR (measured) = 0.113 W/kg



0 dB = 0.113 W/kg = -9.47 dBW/kg

55.Body Plane with Back side 10mm on Mid Channel in Bluetooth

Date: 2021.11.20

Communication System Band: Bluetooth 2.0; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used: $f = 2441$ MHz; $\sigma = 1.839$ S/m; $\epsilon_r = 39.037$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.60, 8.60, 8.60); Calibrated: 2020.11.30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (91x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.0416 W/kg

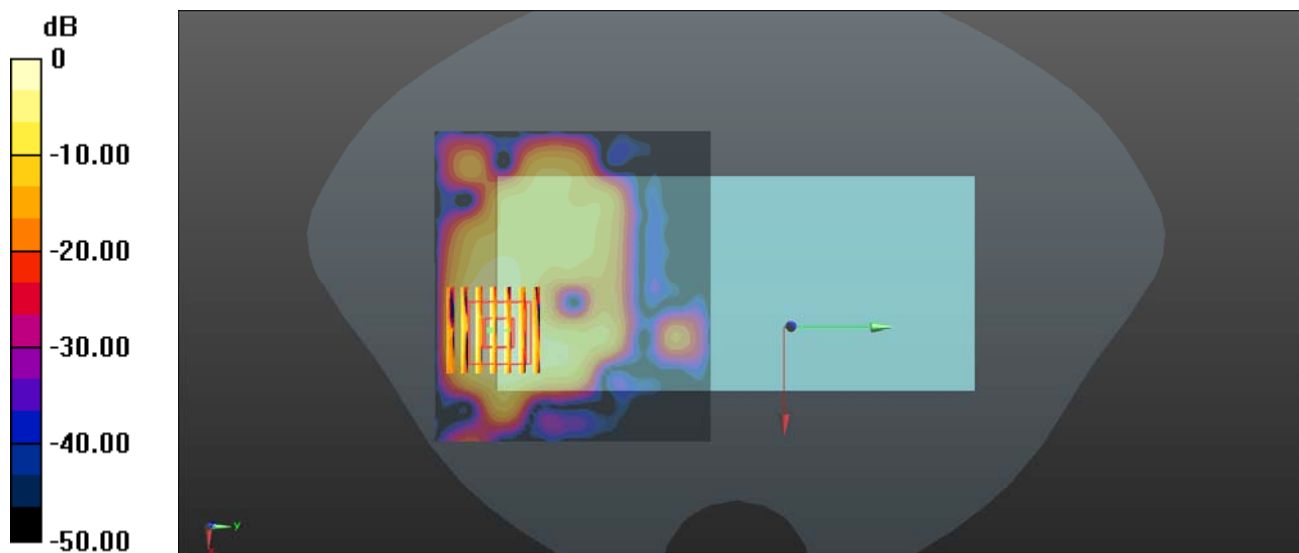
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0.5890 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.0420 W/kg

SAR(1 g) = 0.020 W/kg; SAR(10 g) = 0.0082 W/kg

Maximum value of SAR (measured) = 0.0343 W/kg



0 dB = 0.0343 W/kg = -14.65 dBW/kg

ANNEX D SAR TEST SETUP PHOTOS

Please refer the document "BL-EC21B0329-AS.pdf".

ANNEX E CALIBRATION REPORT

Please refer the document "CALIBRATION REPORT.pdf".

--END OF REPORT--