

FCC

SAR

TEST REPORT

ISSUED BY  
Shenzhen BALUN Technology Co., Ltd.



FOR  
**Mobile Phone**

ISSUED TO  
GUANGDONG OPPO MOBILE TELECOMMUNICATIONS  
CORP., LTD.

NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan City,  
Guangdong, China



Tested by: *Zong Liyao*  
Zong Liyao

Date: *Feb. 28, 2020*

Approved by: *Wei Yanquan*  
Wei Yanquan  
(Chief Engineer)

Date: *Feb. 28, 2020*

Report No.: BL-SZ2010083-701

EUT Name: Mobile Phone

Model Name: CPH2005

Brand Name: OPPO

FCC ID: R9C-CPH2005

Test Standard: FCC 47 CFR Part 2.1093

ANSI C95.1: 1999, IEEE 1528: 2013

Maximum SAR: Head (1 g): 1.051 W/kg

Body-worn (1 g): 0.437 W/kg

Hotspot (1 g): 1.033 W/kg

Test Conclusion: Pass

Test Date: Jan. 20, 2020 ~ Feb. 23, 2020

Date of Issue: Feb. 28, 2020

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### Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Feb. 28, 2020</u>	<u>Initial Issue</u>

## TABLE OF CONTENTS

1	GENERAL INFORMATION .....	5
1.1	Identification of the Testing Laboratory .....	5
1.2	Identification of the Responsible Testing Location .....	5
1.3	Test Environment Condition .....	5
1.4	Announce .....	6
2	PRODUCT INFORMATION .....	7
2.1	Applicant Information .....	7
2.2	Manufacturer Information .....	7
2.3	Factory Information .....	7
2.4	General Description for Equipment under Test (EUT) .....	7
2.5	Ancillary Equipment .....	8
2.6	Technical Information .....	9
2.7	Power Reduction Description .....	11
3	SUMMARY OF TEST RESULT .....	13
3.1	Test Standards .....	13
3.2	Device Category and SAR Limit .....	14
3.3	Test Result Summary .....	15
3.4	Test Uncertainty .....	16
4	MEASUREMENT SYSTEM .....	17
4.1	Specific Absorption Rate (SAR) Definition .....	17
4.2	DASY SAR System .....	18
5	SYSTEM VERIFICATION .....	25
5.1	Purpose of System Check .....	25
5.2	System Check Setup .....	25
6	TEST POSITION CONFIGURATIONS .....	26
6.1	Head Exposure Conditions .....	26

6.2	Body-worn Position Conditions .....	28
6.3	Hotspot Mode Exposure Position Conditions .....	29
7	MEASUREMENT PROCEDURE .....	30
7.1	Measurement Process Diagram .....	30
7.2	SAR Scan General Requirement .....	31
7.3	Measurement Procedure .....	32
7.4	Area & Zoom Scan Procedure .....	32
8	CONDUCTED RF OUPUT POWER .....	33
8.1	GSM .....	33
8.2	WCDMA .....	34
8.3	LTE .....	35
8.4	Intra-Band Uplink CA Normal Power .....	47
8.5	WIFI .....	48
8.6	Bluetooth(Chain1) .....	50
8.7	Power Reduction List .....	51
9	TEST EXCLUSION CONSIDERATION .....	103
9.1	SAR Test Exclusion Consideration Table .....	104
10	TEST RESULT .....	108
10.1	GSM 850 .....	108
10.2	GSM 1900 .....	109
10.3	WCDMA Band 2 .....	110
10.4	WCDMA Band 4 .....	111
10.5	WCDMA Band 5 .....	112
10.6	LTE Band 2 (20MHz Bandwidth) .....	113
10.7	LTE Band 7 (20MHz Bandwidth) .....	115
10.8	LTE Band 12 (10MHz Bandwidth) .....	118
10.9	LTE Band 26 (15MHz Bandwidth) .....	119
10.10	LTE Band 66 (20MHz Bandwidth) .....	121
10.11	LTE Band 41 (20MHz Bandwidth) .....	123
10.12	WIFI 2.4GHz .....	125
10.13	WIFI 5GHz .....	125
10.14	Bluetooth .....	128

11 SAR Measurement Variability..... 129

12 SIMULTANEOUS TRANSMISSION..... 130

    12.1 Simultaneous Transmission Mode Consider..... 130

    12.2 Sum SAR of Simultaneous Transmission ..... 131

13 TEST EQUIPMENTS LIST ..... 132

ANNEX A SIMULATING LIQUID VERIFICATION RESULT ..... 133

ANNEX B SYSTEM CHECK RESULT..... 134

ANNEX C TEST DATA..... 159

ANNEX D EUT EXTERNAL PHOTOS..... 206

ANNEX E SAR TEST SETUP PHOTOS..... 206

ANNEX F CALIBRATION REPORT ..... 206



# 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	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.</p> <p>The laboratory is a testing organization accredited by American Association for Laboratory Accreditation (A2LA) according to ISO/IEC 17025. The accreditation certificate is 4344.01.</p> <p>The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.</p>
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	20°C to 23°C
Ambient Relative Humidity	36% 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.

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
Address	NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan City, Guangdong, China

### 2.2 Manufacturer Information

Manufacturer	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
Address	NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan City, Guangdong, China

### 2.3 Factory Information

Factory	GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
Address	NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan City, Guangdong, China

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

EUT Name	Mobile Phone
Model Name Under Test	CPH2005
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	ColorOS V7
Dimensions (Approx.)	160.3 x 74.3 x 7.96 mm
Weight (Approx.)	180g (with battery)

## 2.5 Ancillary Equipment

Ancillary Equipment 1	Li-Polymer Battery 1	
	Brand Name	OPPO
	Model No.	BLP755
	Serial No.	N/A
	Capacitance	Rated: 3935mAh/15.22Wh Typical: 4025mAh/15.57Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	TWS TECHNOLOGY (GUANGZHOU) LIMITED
Ancillary Equipment 2	Li-Polymer Battery (alternative)2	
	Brand Name	OPPO
	Model No.	BLP755
	Serial No.	N/A
	Capacitance	Rated: 3935mAh/15.22Wh Typical: 4025mAh/15.57Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	Dongguan NVT Technology Co., Ltd.
Ancillary Equipment 3	Earphone	
	Model No.	N/A
	Length (Approx.)	1.2 m

Note: The EUT has two Batteries, they are same with electrical parameters, but only differ in Manufacturer and battery cell. By comparing the test data of six Batteries, battery 1 can produce a more conservative SAR values. The battery of the Manufacturer is TWS TECHNOLOGY (GUANGZHOU) LIMITED as the main for test in this report.



## 2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA/HSDPA/HSUPA/DC-HSDPA/HSPA+ Band 1/2/4/5/6/8/19 4G Network LTE FDD Band 1/2/3/4/5/7/8/12/17/18/19/20/26/28/66 LTE TDD Band 38/39/40/41 LTE CA Uplink (UL): 7C, 38C, 41C Bluetooth 5.1 (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) Band 1/2/3/4 SRD, GPS, GLONASS, BDS, Galileo, NFC
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G 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 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 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 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	Bluetooth	802.11b/g/n(HT20)	2400 ~ 2483.5 MHz
802.11a/n(HT20/HT40)/ac(VHT20/VHT40/VHT80)		5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
Bluetooth	2400 ~ 2483.5 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	Not Support		
Hotspot Function	Support		
Power Reduction	Support		

Exposure Category	General Population/Uncontrolled exposure	
EUT Stage	Portable Device	
Product	Type	
	<input checked="" type="checkbox"/> Production unit	<input type="checkbox"/> Identical prototype

Note:

1. This device supports LTE B2, B4, B5, B7, B12, B17, B26, B38, B41 and B66. Since the supported frequency span for LTE B4 falls completely within the support frequency span for LTE B66; LTE B5 fall in Band B26, LTE B17 fall in Band B12; LTE B38 fall in Band B41. These LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, LTE SAR was only assessed for B2, B7, B12, B26, B66 and B41.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
3. 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)
4. This device has two WWAN transmit antennas. WWAN down antenna is located at the bottom edge of the device, and WWAN up antenna is located at the top edge of the device. Up and Down antenna support the same WWAN frequency bands, and they can't transmit simultaneously.

## 2.7 Power Reduction Description

This mobile phone device supports the receiver detection mechanism. This device uses the receiver to indicate whether the user is making a call in head or body or hand.

When there is a voice call (including VOIP) and the audio is actively routed through the earpiece receiver, which indicating the head exposure condition it will trigger the head exposure reduced the power.

When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body exposure conditions and will trigger the body reduced the power.

When this device used data mode only, and the receiver will not work too, the reduced the power are same as body.

### For WWAN Antenna (4 sets of power reduction levels)

Head, Body exposure condition conduction different reduction category, the detail as below:

#### a) Head exposure conditions (3 sets of power reduction levels):

**Reduced power level 1**-PCS1900; WCDMA Band 2/4; LTE Band2/4/7/38/41/66(WWAN Use Only)

When the device is transmitting at the WWAN Up Antenna, power reduction will be enabled for those bands.

**Reduced power level 2** -PCS1900; WCDMA Band 2/4; LTE Band2/4/7/38/41/66(WWAN+WLAN2.4G)

When the device WLAN 2.4GHz is transmitting simultaneously with the WWAN Up Antenna, power reduction will be enabled for those bands.

**Reduced power level 3** -PCS1900; WCDMA Band 2/4; LTE Band2/4/7/38/41/66(WWAN+WLAN5G)

When the device WLAN 5GHz is transmitting simultaneously with the WWAN Up Antenna, power reduction will be enabled for those bands.

**Reduced power level 4** -PCS1900; WCDMA Band 2/4; LTE Band2/4/7/38/41/66(WWAN+WLAN2.4G+5G)

When the device WLAN 2.4G and 5GHz is transmitting simultaneously with the WWAN Up Antenna, power reduction will be enabled for those bands.

#### b) Body (Hotspot) and Extremity exposure conditions (2 sets of power reduction levels):

**Reduced power level 5**-WCDMA Band 2/4; LTE Band2/4/7/66

Once the device is transmitting at the WWAN Up Antenna, the receiver to indicate user in body or hand. Power reduction will be enabled for those bands.

The power reduction support in WWAN Use Only, WWAN transmitting simultaneously with the WLAN 2.4G and WWAN transmitting simultaneously with the WLAN 5G mode.

**Reduced power level 6**-LTE Band7

Once the device is transmitting at the WWAN Down Antenna, the receiver to indicate user in body or hand. Power reduction will be enabled for those bands.

The power reduction support in WWAN Use Only, WWAN transmitting simultaneously with the WLAN 2.4G and WWAN transmitting simultaneously with the WLAN 5G mode.

Note: When the device transmitting at the WWAN LAT at Head exposure, Body or Extremity conditions this product not support power reduction function.

### For WLAN Antenna (4 sets of power reduction levels)

#### Head exposure conditions (3 sets of power reduction levels):

**Reduced power level 1**-WLAN2.4G, WLAN 5G (WLAN Use Only)

When the device is transmitting at the WLAN Antenna, power reduction will be enabled for those bands.

**Reduced power level 2**-WLAN2.4G, WLAN 5G(WLAN +WLAN)

When the device WLAN Antenna is transmitting simultaneously with the WWAN Antenna, power reduction

will be enabled for those bands.

**Reduced power level 3-WLAN2.4G, WLAN 5G (WLAN + WWAN)**

When the device WLAN Antenna is transmitting simultaneously with the WWAN Antenna, power reduction will be enabled for those bands.

**Body exposure conditions (1 sets of power reduction levels):**

**Reduced power level 1-WLAN2.4G, WLAN 5G (WWAN+WLAN2.4G+5G)**

When the device is transmitting at the WLAN Antenna, power reduction will be enabled for those bands.

Note: When the device transmitting at the WLAN at head exposure conditions this product not support power reduction function.

### 3 SUMMARY OF TEST RESULT

#### 3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1999	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.

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 Head and Body SAR (1 g Value)

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
	Head	Body		Head	Body-worn	Hotspot
		Body-worn (15mm)	Hotspot (10mm)			
GSM 850	0.663	0.387	0.586	1.051	0.437	1.033
GSM 1900	0.568	0.254	0.790			
WCDMA Band 2	0.981	0.402	0.971			
WCDMA Band 4	0.820	0.345	0.784			
WCDMA Band 5	0.568	0.360	0.566			
LTE Band 2	0.795	<b>0.437</b>	<b>1.033</b>			
LTE Band 7	0.679	0.409	0.932			
LTE Band 12	0.607	0.263	0.457			
LTE Band 26	0.557	0.261	0.584			
LTE Band 66	0.726	0.305	0.745			
LTE Band 41	0.660	0.246	0.585			
2.4G WLAN	0.627	0.263	0.364			
5.2G WLAN	/	/	0.977			
5.3G WLAN	0.801	0.235	/			
5.6G WLAN	0.558	0.328	/			
5.8G WLAN	<b>1.051</b>	0.287	0.777			
Bluetooth	0.315	0.038	0.058			
Limit (W/kg)	1.60					
Verdict	Pass					

Note: This device supports both LTE Band 4/17/38 and LTE Band 66/12/41. Since the supported frequency span for LTE Band 4/17/38 falls completely within the supports frequency span for LTE Band 66/12/41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE Band 66/12/41.

#### 3.3.2 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head (1g)	GSM + 2.4G WLAN + 5G WLAN + Bluetooth	1.392	1.6	Pass
Body-worn (1g)	LTE + 2.4G WLAN + 5G WLAN + Bluetooth	1.067	1.6	Pass
Hotspot Mode (1g)	GSM + 2.4G WLAN + 5G WLAN + Bluetooth	1.497	1.6	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 1.051 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

## 4 MEASUREMENT SYSTEM

### 4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

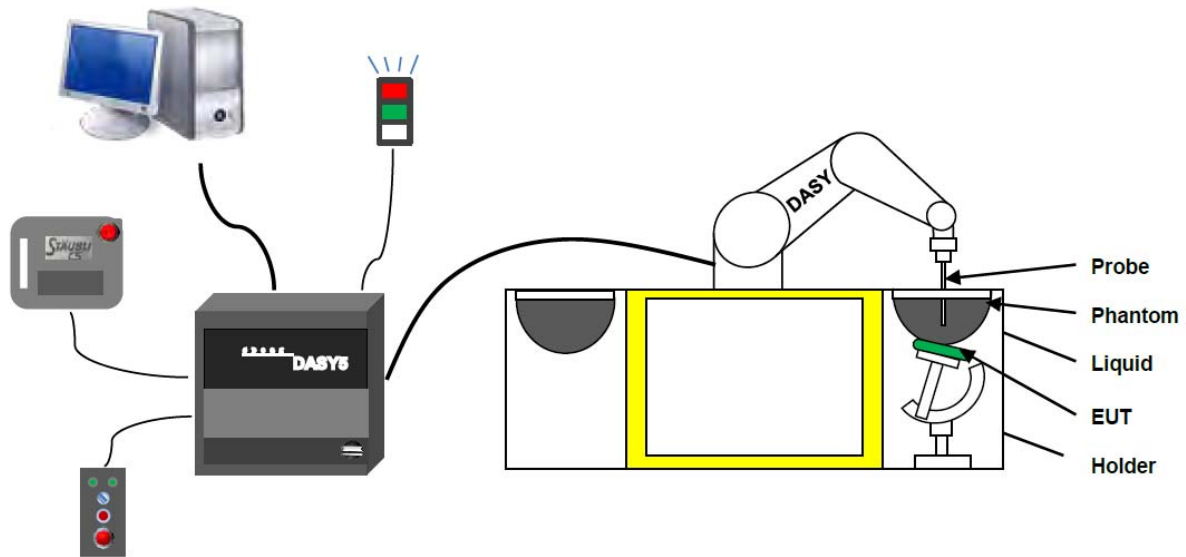
$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

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

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

## 4.2 DASY SAR System

### 4.2.1 DASY SAR System Diagram



The DASY5 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 DASYS5 measurement server.
6. The DASYS5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASYS5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

#### 4.2.2 Robot

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



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

### 4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4-SN:7510 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., glycoether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)
Directivity	$\pm 0.2$ dB in HSL (rotation around probe axis) ; $\pm 0.4$ dB in HSL (rotation normal to probe axis)
Dynamic range	5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



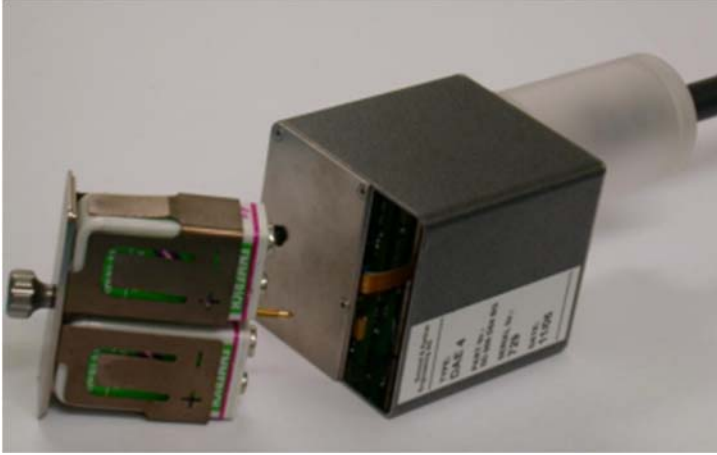
#### E-Field Probe Calibration Process

Probe calibration is realized, in compliance with 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

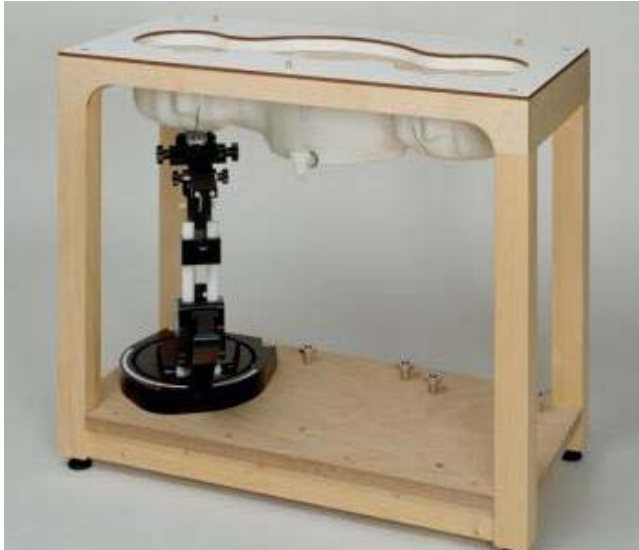
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an 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 SN1857



Photo of Phantom SN1859



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

#### 4.2.6 Device Holder

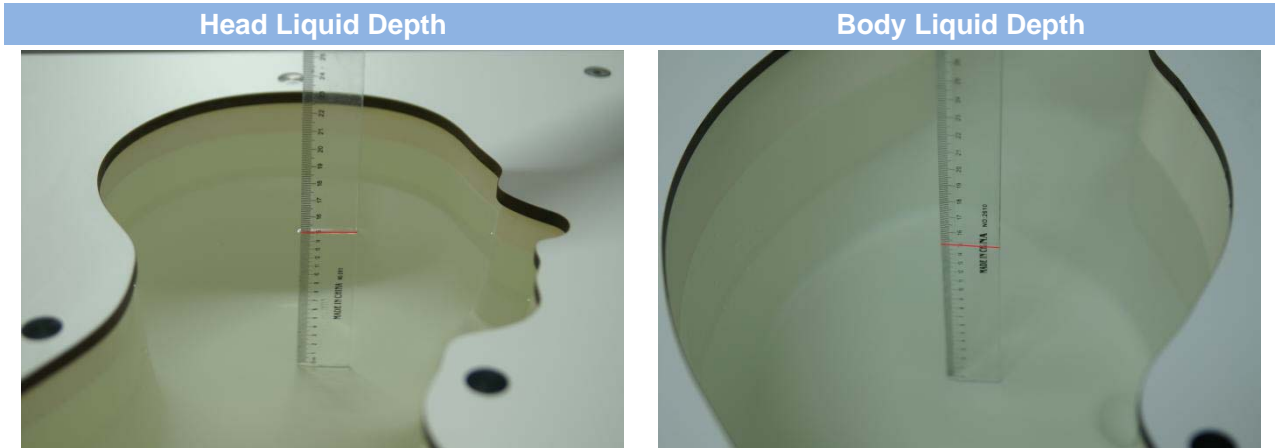
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of  $65^\circ$ . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA"s only. If necessary an additional support of polystyrene material is used. Larger DUT"s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.



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

#### 4.2.7 Simulating Liquid

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



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

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity $\sigma$ (S/m)	Permittivity $\epsilon$
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 $\sigma$ (S/m)	Permittivity $\epsilon$
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity $\sigma$ (S/m)	Permittivity $\epsilon$
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 $\sigma$ (S/m)	Permittivity $\epsilon$
5200	78.60	21.40			/		5.54	47.86
5800	78.50	21.40			0.1		6.0	48.20

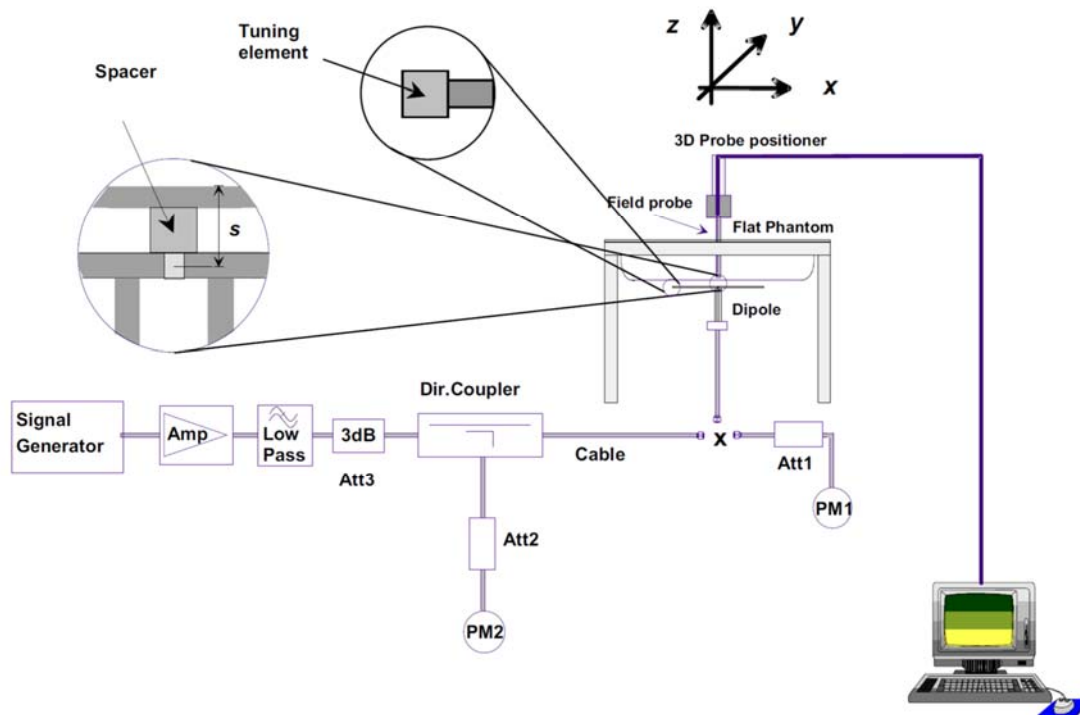
## 5 SYSTEM VERIFICATION

### 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

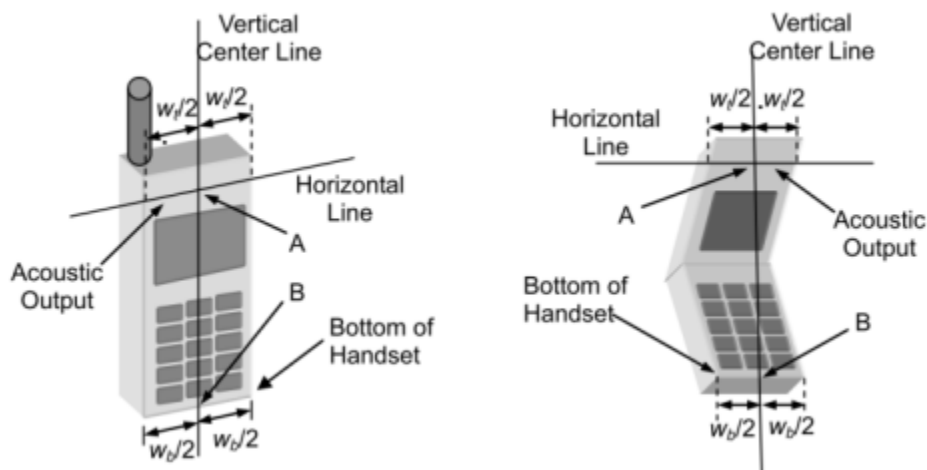
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

### 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

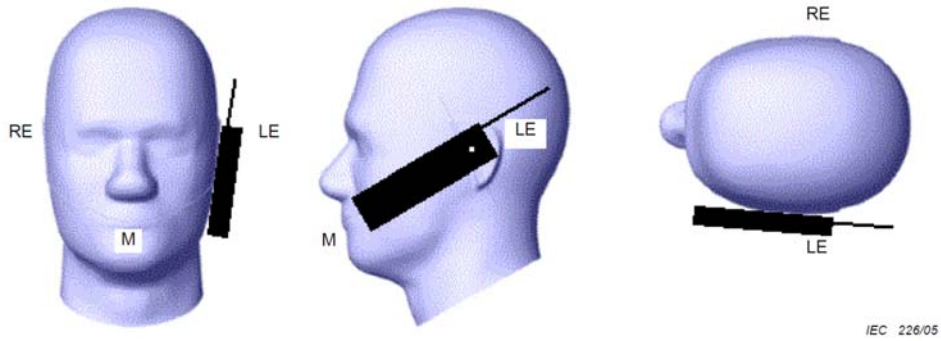
- The vertical center line passes through two points on the front side of the handset - the midpoint of the width  $w_t$  of the handset at the level of the acoustic output, and the midpoint of the width  $w_b$  of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline 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

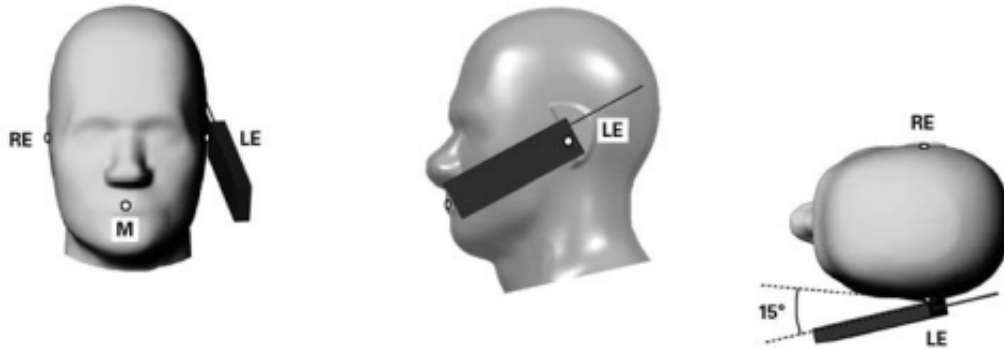
- To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the 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

- (a) To position the device in the “cheek” position described above.
- (b) 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.

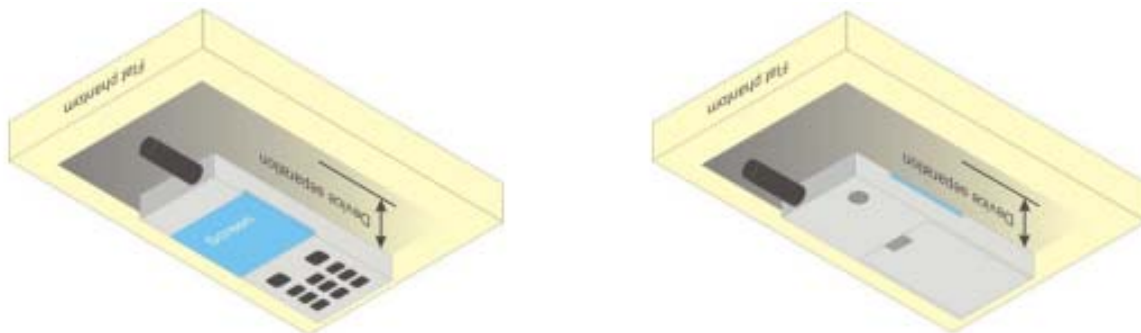


## 6.2 Body-worn Position Conditions

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.

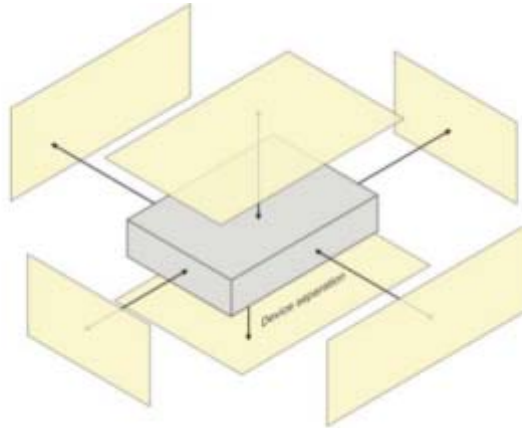
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. 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  $\leq 5$  mm to support compliance.



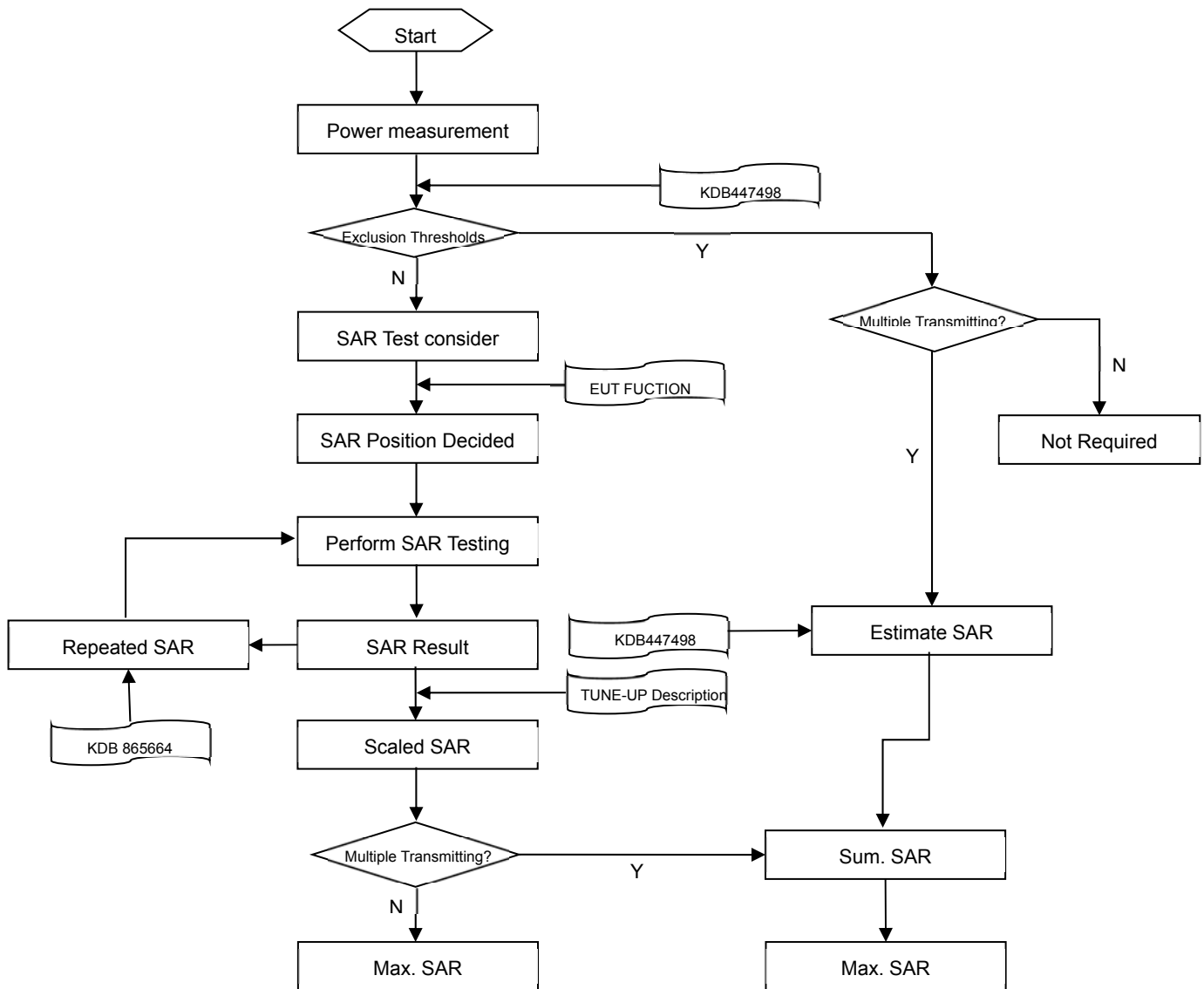
### 6.3 Hotspot Mode Exposure Position Conditions

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).



## 7 MEASUREMENT PROCEDURE

### 7.1 Measurement Process Diagram



## 7.2 SAR Scan General Requirement

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

		≤3GHz	>3GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm	
Maximum probe angle from probe axis to phantom surface normal at the measurement location		30°±1°	20°±1°	
Maximum area scan spatial resolution: $\Delta x$ Area , $\Delta y$ Area		≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm	
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.		
Maximum zoom scan spatial resolution: $\Delta x$ Zoom , $\Delta y$ 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: $\Delta z$ Zoom (n)	≤ 5 mm	3–4 GHz: ≤ 4 mm	
			4–5 GHz: ≤ 3 mm	
	graded grid	$\Delta z$ Zoom (1): between 1st two points closest to phantom surface  $\Delta z$ Zoom (n>1): between subsequent points	≤ 4 mm	3–4 GHz: ≤ 3 mm 4–5 GHz: ≤ 2.5 mm 5–6 GHz: ≤ 2 mm
			≤ 1.5· $\Delta z$ Zoom (n-1)	
Minimum zoom scan volume	x, y, z	≥30 mm	3–4 GHz: ≥ 28 mm	
			4–5 GHz: ≥ 25 mm	
			5–6 GHz: ≥ 22 mm	
<b>Note:</b> 1. $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. 2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 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

GSM 850								
GSM850 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power (dBm)			Tune-up Limit (dBm)
Channel	128	190	251		128	190	251	
GSM (GMSK, 1-Slot)	32.47	32.83	32.70	33.50	23.28	23.64	23.51	24.31
GPRS (GMSK, 1-Slot)	32.40	32.66	32.63	33.50	23.21	23.47	23.44	24.31
GPRS (GMSK, 2-Slots)	30.49	30.67	30.89	31.50	24.36	24.54	<b>24.76</b>	25.37
GPRS (GMSK, 3-Slots)	28.72	28.76	28.70	29.50	24.30	24.34	24.28	25.08
GPRS (GMSK, 4-Slots)	27.08	26.99	27.00	28.00	23.90	23.81	23.82	24.82
EGPRS (8PSK, 1-Slot)	28.56	28.75	28.90	29.50	19.37	19.56	19.71	20.31
EGPRS (8PSK, 2-Slots)	26.32	26.41	26.59	27.50	20.19	20.28	20.46	21.37
EGPRS (8PSK, 3-Slots)	24.66	24.73	24.87	25.50	20.24	20.31	20.45	21.08
EGPRS (8PSK, 4-Slots)	23.85	23.90	24.28	24.50	20.67	20.72	21.10	21.32
GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	29.49	29.42	29.48	30.50	20.30	20.23	20.29	21.31
GPRS (GMSK, 1-Slot)	29.14	29.43	29.47	30.50	19.95	20.24	20.28	21.31
GPRS (GMSK, 2-Slots)	27.55	27.80	27.77	28.50	21.42	21.67	21.64	22.37
GPRS (GMSK, 3-Slots)	25.94	25.81	26.21	27.00	21.52	21.39	<b>21.79</b>	22.58
GPRS (GMSK, 4-Slots)	24.29	24.20	24.62	25.50	21.11	21.02	21.44	22.32
EGPRS (8PSK, 1-Slot)	28.19	28.20	28.48	29.00	19.00	19.01	19.29	19.81
EGPRS (8PSK, 2-Slots)	25.83	25.81	26.12	27.00	19.70	19.68	19.99	20.87
EGPRS (8PSK, 3-Slots)	24.18	24.13	24.35	25.00	19.76	19.71	19.93	20.58
EGPRS (8PSK, 4-Slots)	23.32	23.28	23.31	24.00	20.14	20.10	20.13	20.82

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

WCDMA	Band 2				Band 4			
Channel	9262	9400	9538	Tune-up Limit (dBm)	1312	1412	1513	Tune-up Limit (dBm)
AMR 12.2Kbps	22.62	22.54	22.50	24.00	22.41	22.54	22.35	24.00
RMC 12.2Kbps	<b>22.69</b>	22.58	22.52	24.00	22.44	<b>22.63</b>	22.39	24.00
HSDPA Subtest-1	21.65	21.57	21.50	23.00	21.41	21.57	21.39	23.00
HSDPA Subtest-2	21.73	21.60	21.51	23.00	21.41	21.58	21.39	23.00
HSDPA Subtest-3	21.17	21.08	21.01	22.50	20.95	21.09	20.87	22.50
HSDPA Subtest-4	21.16	21.07	21.00	22.50	20.93	21.09	20.90	22.50
DC-HSDPA Subtest-1	21.58	21.70	21.37	23.00	21.50	21.69	21.39	23.00
DC-HSDPA Subtest-2	21.74	21.73	21.47	23.00	21.32	21.56	21.46	23.00
DC-HSDPA Subtest-3	21.24	21.13	20.97	22.50	20.81	21.12	20.86	22.50
DC-HSDPA Subtest-4	21.03	20.95	20.89	22.50	21.04	20.98	20.79	22.50
HSUPA Subtest-1	21.65	21.55	21.49	22.00	21.45	21.57	21.40	22.00
HSUPA Subtest-2	19.65	19.60	19.46	20.00	19.46	19.55	19.39	20.00
HSUPA Subtest-3	20.68	20.54	20.59	21.00	20.36	20.62	20.38	21.00
HSUPA Subtest-4	19.69	19.58	19.56	20.00	19.40	19.65	19.35	20.00
HSUPA Subtest-5	21.67	21.61	21.44	22.00	21.40	21.59	21.37	22.00
WCDMA	Band 5				-			
Channel	4132	4182	4233	Tune-up Limit (dBm)	-	-	-	-
AMR 12.2Kbps	23.58	23.54	23.55	24.80	-	-	-	-
RMC 12.2Kbps	<b>23.62</b>	23.60	23.60	24.80	-	-	-	-
HSDPA Subtest-1	22.62	22.59	22.64	24.00	-	-	-	-
HSDPA Subtest-2	22.63	22.58	22.63	24.00	-	-	-	-
HSDPA Subtest-3	22.09	22.08	22.11	23.50	-	-	-	-
HSDPA Subtest-4	22.14	22.07	22.09	23.50	-	-	-	-
DC-HSDPA Subtest-1	22.67	22.54	22.51	24.00	-	-	-	-
DC-HSDPA Subtest-2	22.49	22.62	22.51	24.00	-	-	-	-
DC-HSDPA Subtest-3	22.24	22.19	22.18	23.50	-	-	-	-
DC-HSDPA Subtest-4	22.24	22.07	22.00	23.50	-	-	-	-
HSUPA Subtest-1	22.28	22.24	22.42	23.00	-	-	-	-
HSUPA Subtest-2	20.59	20.56	20.57	21.00	-	-	-	-
HSUPA Subtest-3	21.57	21.54	21.63	22.00	-	-	-	-
HSUPA Subtest-4	20.60	20.59	20.64	21.00	-	-	-	-
HSUPA Subtest-5	22.63	22.56	22.60	23.00	-	-	-	-

### 8.3 LTE

FDD LTE Band 2									
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)	<b>22.63</b>	22.53	22.37	24.00	22.18	22.03	21.89	23.00
	1 (RB_Pos:50)	22.54	22.50	22.29	24.00	22.14	21.96	21.87	23.00
	1 (RB_Pos:99)	22.56	22.43	22.36	24.00	22.05	21.89	21.80	23.00
	50 (RB_Pos:0)	21.59	21.40	21.32	23.00	20.64	20.46	20.32	22.00
	50 (RB_Pos:25)	21.66	21.49	21.54	23.00	20.73	20.58	20.51	22.00
	50 (RB_Pos:50)	21.60	21.53	21.50	23.00	20.68	20.55	20.49	22.00
	100 (RB_Pos:0)	21.60	21.41	21.48	23.00	20.69	20.46	20.46	22.00
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)	22.44	22.54	22.37	24.00	21.42	21.97	21.85	23.00
	1 (RB_Pos:38)	22.58	22.41	22.38	24.00	21.61	21.87	21.86	23.00
	1 (RB_Pos:74)	22.52	22.37	22.39	24.00	21.57	21.86	21.91	23.00
	36 (RB_Pos:0)	21.64	21.47	21.38	23.00	20.61	20.48	20.34	22.00
	36 (RB_Pos:20)	21.73	21.48	21.53	23.00	20.70	20.58	20.50	22.00
	36 (RB_Pos:39)	21.64	21.56	21.50	23.00	20.69	20.58	20.47	22.00
	75 (RB_Pos:0)	21.63	21.45	21.48	23.00	20.64	20.49	20.50	22.00
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)	22.17	22.01	22.36	24.00	21.18	21.46	21.42	23.00
	1 (RB_Pos:25)	22.42	22.34	22.34	24.00	21.45	21.80	21.39	23.00
	1 (RB_Pos:49)	22.21	22.05	22.29	24.00	21.21	21.49	21.36	23.00
	25 (RB_Pos:0)	21.48	21.31	21.16	23.00	20.51	20.34	20.34	22.00
	25 (RB_Pos:12)	21.60	21.47	21.31	23.00	20.58	20.54	20.39	22.00
	25 (RB_Pos:25)	21.48	21.31	21.31	23.00	20.49	20.37	20.36	22.00
	50 (RB_Pos:0)	21.47	21.26	21.20	23.00	20.44	20.31	20.26	22.00
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)	22.48	22.33	22.20	24.00	21.69	21.90	21.41	23.00
	1 (RB_Pos:13)	22.51	22.40	22.36	24.00	21.80	22.03	21.58	23.00
	1 (RB_Pos:24)	22.38	22.24	22.26	24.00	21.64	21.88	21.48	23.00
	12 (RB_Pos:0)	21.57	21.39	21.32	23.00	20.67	20.57	20.43	22.00
	12 (RB_Pos:6)	21.63	21.49	21.41	23.00	20.70	20.60	20.50	22.00
	12 (RB_Pos:13)	21.50	21.41	21.34	23.00	20.62	20.52	20.36	22.00

	25 (RB_Pos:0)	21.58	21.39	21.34	23.00	20.56	20.46	20.30	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	22.53	22.33	22.32	24.00	21.54	21.77	21.44	23.00
	1 (RB_Pos:8)	22.50	22.41	22.36	24.00	21.54	21.84	21.48	23.00
	1 (RB_Pos:14)	22.41	22.28	22.26	24.00	21.42	21.71	21.34	23.00
	8 (RB_Pos:0)	21.61	21.44	21.40	23.00	20.73	20.52	20.48	22.00
	8 (RB_Pos:3)	21.60	21.43	21.41	23.00	20.70	20.54	20.47	22.00
	8 (RB_Pos:7)	21.57	21.42	21.30	23.00	20.68	20.47	20.40	22.00
	15 (RB_Pos:0)	21.61	21.39	21.40	23.00	20.63	20.44	20.34	22.00
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)	22.47	22.30	22.28	24.00	21.64	21.76	21.37	23.00
	1 (RB_Pos:3)	22.44	22.32	22.29	24.00	21.67	21.77	21.37	23.00
	1 (RB_Pos:5)	22.36	22.26	22.18	24.00	21.57	21.68	21.32	23.00
	3 (RB_Pos:0)	22.44	22.30	22.30	24.00	21.61	21.60	21.45	23.00
	3 (RB_Pos:1)	22.46	22.33	22.29	24.00	21.58	21.60	21.53	23.00
	3 (RB_Pos:3)	22.43	22.26	22.25	24.00	21.58	21.52	21.44	23.00
	6 (RB_Pos:0)	21.50	21.34	21.28	23.00	20.63	20.30	20.48	22.00

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	22.66	22.80	22.63	24.00	22.20	22.26	22.16	23.00
	1 (RB_Pos:50)	22.89	<b>22.98</b>	22.72	24.00	22.47	22.48	22.21	23.00
	1 (RB_Pos:99)	22.61	22.64	22.48	24.00	22.18	22.04	21.96	23.00
	50 (RB_Pos:0)	21.88	21.94	21.86	23.00	20.90	20.95	20.82	22.00
	50 (RB_Pos:25)	22.01	22.01	21.95	23.00	21.08	21.05	20.91	22.00
	50 (RB_Pos:50)	21.91	21.94	21.85	23.00	20.92	20.98	20.84	22.00
	100 (RB_Pos:0)	21.96	21.84	21.88	23.00	20.97	20.89	20.91	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	22.74	22.84	22.72	24.00	21.80	22.29	22.27	23.00
	1 (RB_Pos:38)	22.86	22.95	22.78	24.00	21.94	22.40	22.37	23.00
	1 (RB_Pos:74)	22.76	22.71	22.62	24.00	21.79	22.17	22.18	23.00
	36 (RB_Pos:0)	21.85	21.96	21.82	23.00	20.82	21.02	20.82	22.00

	36 (RB_Pos:20)	21.98	22.03	21.92	23.00	21.04	21.09	20.90	22.00
	36 (RB_Pos:39)	21.94	21.99	21.89	23.00	20.92	21.01	20.87	22.00
	75 (RB_Pos:0)	21.96	21.93	21.87	23.00	20.96	20.99	20.87	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	22.39	22.52	22.40	24.00	21.43	21.95	21.46	23.00
	1 (RB_Pos:25)	22.71	22.78	22.65	24.00	21.80	22.24	21.72	23.00
	1 (RB_Pos:49)	22.44	22.36	22.41	24.00	21.48	21.85	21.48	23.00
	25 (RB_Pos:0)	21.73	21.79	21.55	23.00	20.75	20.82	20.69	22.00
	25 (RB_Pos:12)	21.84	21.85	21.66	23.00	20.89	20.90	20.70	22.00
	25 (RB_Pos:25)	21.71	21.75	21.59	23.00	20.74	20.78	20.71	22.00
	50 (RB_Pos:0)	21.77	21.76	21.57	23.00	20.75	20.76	20.61	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	22.75	22.78	22.66	24.00	22.29	22.00	21.94	23.00
	1 (RB_Pos:13)	22.81	22.86	22.78	24.00	22.42	22.09	22.04	23.00
	1 (RB_Pos:24)	22.64	22.66	22.63	24.00	22.20	21.93	21.91	23.00
	12 (RB_Pos:0)	21.83	21.87	21.74	23.00	20.97	20.99	20.84	22.00
	12 (RB_Pos:6)	21.87	21.90	21.75	23.00	21.02	20.98	20.88	22.00
	12 (RB_Pos:13)	21.85	21.85	21.75	23.00	21.00	20.89	20.89	22.00
	25 (RB_Pos:0)	21.84	21.85	21.72	23.00	20.95	20.81	20.80	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	22.76	22.86	22.80	24.00	21.79	22.31	21.91	23.00
	1 (RB_Pos:8)	22.85	22.96	22.83	24.00	21.82	22.38	21.92	23.00
	1 (RB_Pos:14)	22.72	22.80	22.71	24.00	21.65	22.22	21.82	23.00
	8 (RB_Pos:0)	21.89	21.91	21.81	23.00	21.01	20.93	20.86	22.00
	8 (RB_Pos:3)	21.94	21.87	21.82	23.00	20.99	20.98	20.86	22.00
	8 (RB_Pos:7)	21.88	21.92	21.78	23.00	20.95	20.98	20.86	22.00
	15 (RB_Pos:0)	21.89	21.86	21.80	23.00	20.96	20.91	20.79	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19957	20175	20393		19957	20175	20393	
1.4 MHz	1 (RB_Pos:0)	22.80	22.83	22.67	24.00	21.92	22.30	21.82	23.00
	1 (RB_Pos:3)	22.81	22.82	22.79	24.00	22.00	22.33	21.91	23.00
	1 (RB_Pos:5)	22.68	22.76	22.71	24.00	21.94	22.25	21.85	23.00
	3 (RB_Pos:0)	22.70	22.83	22.72	24.00	21.88	22.12	21.94	23.00
	3 (RB_Pos:1)	22.78	22.87	22.82	24.00	21.95	22.13	22.04	23.00

	3 (RB_Pos:3)	22.73	22.82	22.78	24.00	21.88	22.11	22.01	23.00
	6 (RB_Pos:0)	21.79	21.85	21.75	23.00	21.02	20.84	20.92	22.00

FDD LTE Band 5									
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)	<b>23.31</b>	23.24	23.28	24.80	22.38	22.31	22.69	23.80
	1 (RB_Pos:25)	23.25	23.26	23.26	24.80	22.34	22.22	22.71	23.80
	1 (RB_Pos:49)	23.28	23.26	23.20	24.80	22.40	22.35	22.72	23.80
	25 (RB_Pos:0)	22.31	22.32	22.42	23.80	21.39	21.39	21.43	22.80
	25 (RB_Pos:12)	22.46	22.43	22.49	23.80	21.55	21.51	21.55	22.80
	25 (RB_Pos:25)	22.38	22.42	22.42	23.80	21.49	21.46	21.48	22.80
	50 (RB_Pos:0)	22.34	22.39	22.40	23.80	21.41	21.34	21.43	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5MHz	1 (RB_Pos:0)	23.22	23.15	23.26	24.80	22.72	22.38	22.50	23.80
	1 (RB_Pos:13)	23.36	23.32	23.37	24.80	22.84	22.59	22.65	23.80
	1 (RB_Pos:24)	23.26	23.28	23.26	24.80	22.79	22.55	22.53	23.80
	12 (RB_Pos:0)	22.29	22.32	22.39	23.80	21.48	21.44	21.48	22.80
	12 (RB_Pos:6)	22.41	22.43	22.49	23.80	21.59	21.54	21.56	22.80
	12 (RB_Pos:13)	22.40	22.43	22.47	23.80	21.54	21.52	21.53	22.80
	25 (RB_Pos:0)	22.43	22.44	22.47	23.80	21.44	21.41	21.49	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	23.24	23.28	23.27	24.80	22.69	22.36	22.26	23.80
	1 (RB_Pos:8)	23.37	23.40	23.35	24.80	22.83	22.49	22.32	23.80
	1 (RB_Pos:14)	23.28	23.34	23.29	24.80	22.80	22.41	22.22	23.80
	8 (RB_Pos:0)	22.36	22.34	22.37	23.80	21.43	21.43	21.49	22.80
	8 (RB_Pos:3)	22.43	22.44	22.44	23.80	21.53	21.50	21.56	22.80
	8 (RB_Pos:7)	22.40	22.37	22.40	23.80	21.50	21.49	21.53	22.80
	15 (RB_Pos:0)	22.44	22.46	22.38	23.80	21.48	21.42	21.44	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4MHz	1 (RB_Pos:0)	23.13	23.21	23.26	24.80	22.32	22.58	22.31	23.80
	1 (RB_Pos:3)	23.24	23.33	23.31	24.80	22.48	22.75	22.40	23.80
	1 (RB_Pos:5)	23.24	23.28	23.23	24.80	22.40	22.70	22.29	23.80

	3 (RB_Pos:0)	23.24	23.17	23.28	24.80	22.32	22.51	22.50	23.80
	3 (RB_Pos:1)	23.28	23.30	23.32	24.80	22.36	22.59	22.50	23.80
	3 (RB_Pos:3)	23.18	23.26	23.25	24.80	22.35	22.56	22.44	23.80
	6 (RB_Pos:0)	22.33	22.34	22.31	23.80	21.47	21.27	21.52	22.80

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	23.33	23.30	<b>23.45</b>	24.50	23.01	22.77	22.91	23.50
	1 (RB_Pos:50)	23.27	23.27	23.16	24.50	22.90	22.76	22.67	23.50
	1 (RB_Pos:99)	23.26	23.27	23.19	24.50	22.99	22.85	22.64	23.50
	50 (RB_Pos:0)	22.28	22.28	22.37	23.50	21.33	21.26	21.39	22.50
	50 (RB_Pos:25)	22.42	22.34	22.32	23.50	21.45	21.37	21.30	22.50
	50 (RB_Pos:50)	22.37	22.31	22.27	23.50	21.41	21.34	21.30	22.50
	100 (RB_Pos:0)	22.33	22.31	22.22	23.50	21.37	21.29	21.26	22.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	23.35	23.25	23.33	24.50	22.38	22.66	22.78	23.50
	1 (RB_Pos:38)	23.29	23.21	23.14	24.50	22.34	22.67	22.63	23.50
	1 (RB_Pos:74)	23.38	23.29	23.23	24.50	22.44	22.66	22.78	23.50
	36 (RB_Pos:0)	22.32	22.36	22.28	23.50	21.29	21.36	21.28	22.50
	36 (RB_Pos:20)	22.40	22.34	22.29	23.50	21.40	21.39	21.30	22.50
	36 (RB_Pos:39)	22.37	22.33	22.26	23.50	21.35	21.34	21.25	22.50
	75 (RB_Pos:0)	22.36	22.28	22.14	23.50	21.39	21.32	21.21	22.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	23.23	23.04	23.02	24.50	22.14	22.51	22.06	23.50
	1 (RB_Pos:25)	23.15	23.05	22.95	24.50	22.08	22.51	22.03	23.50
	1 (RB_Pos:49)	23.18	23.07	23.00	24.50	22.10	22.48	22.02	23.50
	25 (RB_Pos:0)	22.07	22.16	22.00	23.50	21.12	21.18	21.05	22.50
	25 (RB_Pos:12)	22.16	22.15	22.03	23.50	21.20	21.21	21.12	22.50
	25 (RB_Pos:25)	22.23	22.14	21.98	23.50	21.20	21.14	21.11	22.50
	50 (RB_Pos:0)	22.11	22.09	22.00	23.50	21.11	21.12	20.99	22.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	23.14	23.21	22.97	24.50	22.45	22.78	22.19	23.50

	1 (RB_Pos:13)	23.21	23.21	23.02	24.50	22.50	22.82	22.29	23.50
	1 (RB_Pos:24)	23.15	23.17	23.05	24.50	22.45	22.79	22.32	23.50
	12 (RB_Pos:0)	22.21	22.22	22.02	23.50	21.29	21.33	21.11	22.50
	12 (RB_Pos:6)	22.27	22.23	22.04	23.50	21.35	21.37	21.13	22.50
	12 (RB_Pos:13)	22.24	22.18	21.98	23.50	21.32	21.33	21.13	22.50
	25 (RB_Pos:0)	22.23	22.19	22.02	23.50	21.26	21.24	21.00	22.50

FDD LTE Band 12									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23060	23095	23130		23060	23095	23130	
10MHz	1 (RB_Pos:0)	23.52	23.53	<b>23.65</b>	24.80	22.52	22.98	22.64	23.80
	1 (RB_Pos:50)	23.48	23.53	23.54	24.80	22.51	22.98	22.57	23.80
	1 (RB_Pos:99)	23.52	23.48	23.51	24.80	22.55	22.96	22.53	23.80
	50 (RB_Pos:0)	22.51	22.54	22.46	23.80	21.55	21.61	21.60	22.80
	50 (RB_Pos:25)	22.66	22.70	22.63	23.80	21.69	21.73	21.74	22.80
	50 (RB_Pos:50)	22.55	22.64	22.55	23.80	21.63	21.63	21.67	22.80
	100 (RB_Pos:0)	22.59	22.60	22.49	23.80	21.58	21.66	21.55	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23035	23095	23155		23035	23095	23155	
5MHz	1 (RB_Pos:0)	23.52	23.53	23.45	24.80	23.03	22.73	22.68	23.80
	1 (RB_Pos:38)	23.62	23.61	23.50	24.80	23.20	22.84	22.76	23.80
	1 (RB_Pos:74)	23.55	23.53	23.45	24.80	23.13	22.76	22.78	23.80
	36 (RB_Pos:0)	22.54	22.58	22.53	23.80	21.72	21.70	21.64	22.80
	36 (RB_Pos:20)	22.65	22.67	22.61	23.80	21.80	21.75	21.68	22.80
	36 (RB_Pos:39)	22.59	22.63	22.53	23.80	21.79	21.69	21.64	22.80
	75 (RB_Pos:0)	22.61	22.65	22.59	23.80	21.69	21.62	21.62	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23025	23095	23165		23025	23095	23165	
3MHz	1 (RB_Pos:0)	23.51	23.54	23.49	24.80	22.50	22.99	22.59	23.80
	1 (RB_Pos:25)	23.56	23.60	23.59	24.80	22.62	23.05	22.64	23.80
	1 (RB_Pos:49)	23.51	23.55	23.51	24.80	22.53	22.99	22.58	23.80
	25 (RB_Pos:0)	22.58	22.57	22.50	23.80	21.65	21.66	21.56	22.80
	25 (RB_Pos:12)	22.59	22.66	22.50	23.80	21.73	21.76	21.57	22.80
	25 (RB_Pos:25)	22.57	22.63	22.53	23.80	21.72	21.69	21.57	22.80
	50 (RB_Pos:0)	22.60	22.68	22.51	23.80	21.63	21.68	21.48	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23017	23095	23173		23017	23095	23173	



					(dBm)				(dBm)
1.4MHz	1 (RB_Pos:0)	23.43	23.47	23.36	24.80	22.57	22.86	22.42	23.80
	1 (RB_Pos:13)	23.50	23.52	23.46	24.80	22.72	22.94	22.57	23.80
	1 (RB_Pos:24)	23.47	23.50	23.37	24.80	22.62	22.92	22.54	23.80
	12 (RB_Pos:0)	23.38	23.48	23.36	24.80	22.56	22.80	22.60	23.80
	12 (RB_Pos:6)	23.51	23.53	23.47	24.80	22.64	22.78	22.70	23.80
	12 (RB_Pos:13)	23.46	23.48	23.41	24.80	22.58	22.77	22.64	23.80
	25 (RB_Pos:0)	22.54	22.55	22.46	23.80	21.69	21.50	21.65	22.80

FDD LTE Band 17									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23780	23790	23800		23780	23790	23800	
10MHz	1 (RB_Pos:0)	<b>23.56</b>	23.49	23.62	24.80	22.60	23.03	22.63	24.80
	1 (RB_Pos:50)	23.46	23.43	23.53	24.80	22.52	22.99	22.55	24.80
	1 (RB_Pos:99)	23.46	23.46	23.51	24.80	22.49	22.89	22.51	24.80
	50 (RB_Pos:0)	22.57	22.52	22.54	24.30	21.61	21.59	21.64	23.80
	50 (RB_Pos:25)	22.62	22.62	22.64	24.30	21.65	21.67	21.75	23.80
	50 (RB_Pos:50)	22.57	22.54	22.56	24.30	21.62	21.63	21.65	23.80
	100 (RB_Pos:0)	22.62	22.61	22.60	24.30	21.60	21.64	21.65	23.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23755	23790	23825		23755	23790	23825	
5MHz	1 (RB_Pos:0)	23.45	23.51	23.39	24.80	22.75	23.08	22.62	24.80
	1 (RB_Pos:38)	23.58	23.60	23.52	24.80	22.82	23.14	22.70	24.80
	1 (RB_Pos:74)	23.51	23.50	23.50	24.80	22.74	23.04	22.72	24.80
	36 (RB_Pos:0)	22.55	22.54	22.49	24.30	21.63	21.68	21.61	23.80
	36 (RB_Pos:20)	22.62	22.61	22.60	24.30	21.73	21.73	21.69	23.80
	36 (RB_Pos:39)	22.58	22.59	22.55	24.30	21.66	21.75	21.61	23.80
	75 (RB_Pos:0)	22.57	22.59	22.52	24.30	21.65	21.64	21.46	23.80

TDD LTE Band 26									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26765	26865	26965		26765	26865	26965	
15MHz	1 (RB_Pos:0)	23.34	23.38	23.40	24.80	22.34	22.88	22.79	23.80
	1 (RB_Pos:50)	23.43	23.40	<b>23.49</b>	24.80	22.48	22.86	22.94	23.80
	1 (RB_Pos:99)	23.46	23.43	23.30	24.80	22.53	22.93	22.86	23.80
	50 (RB_Pos:0)	22.34	22.41	22.44	23.80	21.35	21.47	21.55	22.80
	50 (RB_Pos:25)	22.52	22.47	22.59	23.80	21.61	21.53	21.68	22.80

	50 (RB_Pos:50)	22.44	22.50	22.52	23.80	21.42	21.49	21.51	22.80
	100 (RB_Pos:0)	22.42	22.46	22.39	23.80	21.40	21.47	21.46	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26740	26865	26990		26740	26865	26990	
10MHz	1 (RB_Pos:0)	23.22	23.25	23.36	24.80	22.31	22.65	22.79	23.80
	1 (RB_Pos:38)	23.29	23.28	23.24	24.80	22.32	22.74	22.71	23.80
	1 (RB_Pos:74)	23.37	23.31	23.21	24.80	22.42	22.77	22.70	23.80
	36 (RB_Pos:0)	22.25	22.27	22.31	23.80	21.32	21.30	21.36	22.80
	36 (RB_Pos:20)	22.42	22.37	22.52	23.80	21.44	21.42	21.49	22.80
	36 (RB_Pos:39)	22.35	22.39	22.42	23.80	21.37	21.45	21.41	22.80
	75 (RB_Pos:0)	22.32	22.28	22.33	23.80	21.35	21.25	21.37	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26715	26865	27015		26715	26865	27015	
5MHz	1 (RB_Pos:0)	23.19	23.34	23.36	24.80	22.48	22.86	22.72	23.80
	1 (RB_Pos:25)	23.38	23.40	23.41	24.80	22.64	22.98	22.73	23.80
	1 (RB_Pos:49)	23.22	23.42	23.32	24.80	22.56	22.97	22.62	23.80
	25 (RB_Pos:0)	22.35	22.38	22.43	23.80	21.44	21.52	21.50	22.80
	25 (RB_Pos:12)	22.49	22.48	22.52	23.80	21.53	21.66	21.61	22.80
	25 (RB_Pos:25)	22.46	22.45	22.47	23.80	21.53	21.61	21.52	22.80
	50 (RB_Pos:0)	22.43	22.42	22.46	23.80	21.47	21.43	21.38	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26705	26865	27025		26705	26865	27025	
3MHz	1 (RB_Pos:0)	23.24	23.31	23.44	24.80	22.25	22.79	22.52	23.80
	1 (RB_Pos:13)	23.38	23.40	23.48	24.80	22.40	22.89	22.51	23.80
	1 (RB_Pos:24)	23.30	23.35	23.36	24.80	22.34	22.84	22.46	23.80
	12 (RB_Pos:0)	22.37	22.41	22.42	23.80	21.49	21.46	21.53	22.80
	12 (RB_Pos:6)	22.46	22.48	22.46	23.80	21.60	21.59	21.53	22.80
	12 (RB_Pos:13)	22.42	22.47	22.41	23.80	21.55	21.54	21.48	22.80
	25 (RB_Pos:0)	22.43	22.42	22.45	23.80	21.51	21.48	21.43	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26697	26865	27033		26697	26865	27033	
1.4MHz	1 (RB_Pos:0)	23.15	23.22	23.28	24.80	22.23	22.40	22.71	23.80
	1 (RB_Pos:13)	23.29	23.34	23.34	24.80	22.36	22.55	22.77	23.80
	1 (RB_Pos:24)	23.21	23.27	23.26	24.80	22.30	22.50	22.68	23.80
	12 (RB_Pos:0)	23.21	23.24	23.26	24.80	22.42	22.34	22.57	23.80
	12 (RB_Pos:6)	23.27	23.32	23.29	24.80	22.54	22.50	22.61	23.80
	12 (RB_Pos:13)	23.31	23.26	23.28	24.80	22.46	22.40	22.53	23.80

	25 (RB_Pos:0)	22.33	22.31	22.33	23.80	21.48	21.44	21.31	22.80
TDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20MHz	1 (RB_Pos:0)	22.62	22.77	22.87	24.00	22.28	22.25	22.41	23.00
	1 (RB_Pos:50)	22.84	22.86	<b>22.91</b>	24.00	22.49	22.43	22.40	23.00
	1 (RB_Pos:99)	22.59	22.63	22.87	24.00	22.19	22.37	22.33	23.00
	50 (RB_Pos:0)	21.90	21.93	21.97	23.00	20.93	20.99	20.95	22.00
	50 (RB_Pos:25)	21.97	21.92	22.14	23.00	21.01	20.92	21.09	22.00
	50 (RB_Pos:50)	21.85	21.85	22.02	23.00	20.88	20.88	20.97	22.00
	100 (RB_Pos:0)	21.92	21.86	22.04	23.00	20.95	20.87	21.06	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15MHz	1 (RB_Pos:0)	22.73	22.81	22.97	24.00	21.82	22.28	22.34	23.00
	1 (RB_Pos:38)	22.81	22.80	22.98	24.00	21.85	22.29	22.56	23.00
	1 (RB_Pos:74)	22.68	22.66	22.97	24.00	21.64	22.13	22.36	23.00
	36 (RB_Pos:0)	21.89	21.94	22.06	23.00	20.92	20.98	21.07	22.00
	36 (RB_Pos:20)	21.94	21.89	22.15	23.00	21.00	20.95	21.11	22.00
	36 (RB_Pos:39)	21.87	21.89	22.06	23.00	20.87	20.92	21.06	22.00
	75 (RB_Pos:0)	21.92	21.84	22.10	23.00	20.93	20.90	21.08	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10MHz	1 (RB_Pos:0)	22.49	22.43	22.61	24.00	21.49	21.94	21.64	23.00
	1 (RB_Pos:25)	22.68	22.62	22.85	24.00	21.68	22.09	21.86	23.00
	1 (RB_Pos:49)	22.45	22.38	22.62	24.00	21.42	21.85	21.66	23.00
	25 (RB_Pos:0)	21.71	21.72	21.76	23.00	20.69	20.75	20.93	22.00
	25 (RB_Pos:12)	21.80	21.69	21.91	23.00	20.81	20.75	20.97	22.00
	25 (RB_Pos:25)	21.67	21.69	21.82	23.00	20.72	20.75	20.96	22.00
	50 (RB_Pos:0)	21.75	21.66	21.79	23.00	20.70	20.70	20.87	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5MHz	1 (RB_Pos:0)	22.66	22.66	22.80	24.00	21.90	22.25	21.96	23.00
	1 (RB_Pos:13)	22.71	22.74	22.89	24.00	21.98	22.28	22.06	23.00
	1 (RB_Pos:24)	22.62	22.64	22.77	24.00	21.85	22.17	21.95	23.00
	12 (RB_Pos:0)	21.82	21.73	21.91	23.00	20.88	20.92	21.00	22.00

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	131987	132322		132657	131987	132322	
	12 (RB_Pos:6)	21.82	21.80	21.94	23.00	20.91	20.92	21.00	22.00
	12 (RB_Pos:13)	21.71	21.67	21.88	23.00	20.81	20.88	20.95	22.00
	25 (RB_Pos:0)	21.77	21.72	21.93	23.00	20.82	20.78	20.89	22.00
3MHz	1 (RB_Pos:0)	22.67	22.69	22.83	24.00	21.69	22.13	21.91	23.00
	1 (RB_Pos:25)	22.76	22.74	22.86	24.00	21.73	22.17	21.95	23.00
	1 (RB_Pos:49)	22.65	22.63	22.77	24.00	21.61	22.06	21.86	23.00
	25 (RB_Pos:0)	21.84	21.72	21.89	23.00	20.96	20.83	20.96	22.00
	25 (RB_Pos:12)	21.83	21.80	21.96	23.00	20.93	20.88	21.02	22.00
	25 (RB_Pos:25)	21.77	21.75	21.88	23.00	20.87	20.79	20.94	22.00
	50 (RB_Pos:0)	21.80	21.68	21.93	23.00	20.82	20.77	20.89	22.00
1.4MHz	1 (RB_Pos:0)	22.54	22.63	22.73	24.00	21.74	22.08	21.83	23.00
	1 (RB_Pos:13)	22.65	22.62	22.80	24.00	21.88	22.10	21.94	23.00
	1 (RB_Pos:24)	22.56	22.56	22.78	24.00	21.78	22.02	21.85	23.00
	12 (RB_Pos:0)	22.57	22.65	22.75	24.00	21.75	21.89	21.96	23.00
	12 (RB_Pos:6)	22.67	22.63	22.79	24.00	21.81	21.91	22.05	23.00
	12 (RB_Pos:13)	22.61	22.57	22.78	24.00	21.74	21.81	22.03	23.00
	25 (RB_Pos:0)	21.68	21.70	21.81	23.00	20.85	20.64	20.97	22.00

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	37850	38000		38150	37850	38000	
20MHz	1 (RB_Pos:0)	23.28	23.43	23.43	24.50	22.61	22.72	22.81	23.50
	1 (RB_Pos:50)	23.31	<b>23.47</b>	23.24	24.50	22.68	22.67	22.59	23.50
	1 (RB_Pos:99)	23.34	23.29	23.24	24.50	22.61	22.53	22.66	23.50
	50 (RB_Pos:0)	22.16	22.34	22.13	23.50	21.17	21.38	21.20	22.50
	50 (RB_Pos:25)	22.39	22.44	22.26	23.50	21.41	21.46	21.31	22.50
	50 (RB_Pos:50)	22.28	22.37	22.12	23.50	21.29	21.39	21.18	22.50
	100 (RB_Pos:0)	22.24	22.31	22.16	23.50	21.27	21.37	21.15	22.50
15MHz	1 (RB_Pos:0)	23.21	23.49	23.34	24.50	22.60	22.99	22.63	23.50
	1 (RB_Pos:38)	23.27	23.45	23.25	24.50	22.61	22.98	22.50	23.50

	1 (RB_Pos:74)	23.28	23.38	23.23	24.50	22.64	22.82	22.59	23.50
	36 (RB_Pos:0)	22.17	22.38	22.09	23.50	21.19	21.39	21.18	22.50
	36 (RB_Pos:20)	22.35	22.46	22.16	23.50	21.37	21.44	21.23	22.50
	36 (RB_Pos:39)	22.29	22.43	22.17	23.50	21.30	21.40	21.22	22.50
	75 (RB_Pos:0)	22.30	22.32	22.06	23.50	21.32	21.37	21.10	22.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	22.69	23.24	23.01	24.50	22.01	22.79	22.39	23.50
	1 (RB_Pos:25)	23.07	23.21	23.00	24.50	22.37	22.75	22.31	23.50
	1 (RB_Pos:49)	22.86	23.19	23.10	24.50	22.17	22.68	22.46	23.50
	25 (RB_Pos:0)	21.99	22.19	21.86	23.50	21.01	21.23	20.95	22.50
	25 (RB_Pos:12)	22.17	22.31	22.06	23.50	21.16	21.25	21.09	22.50
	25 (RB_Pos:25)	22.10	22.27	22.01	23.50	21.15	21.30	21.08	22.50
	50 (RB_Pos:0)	22.05	22.19	21.98	23.50	21.10	21.21	21.02	22.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	22.89	23.20	22.78	24.50	22.18	22.61	22.02	23.50
	1 (RB_Pos:13)	23.06	23.34	23.00	24.50	22.41	22.71	22.18	23.50
	1 (RB_Pos:24)	23.01	23.24	22.94	24.50	22.32	22.63	22.16	23.50
	12 (RB_Pos:0)	22.03	22.23	21.92	23.50	21.05	21.29	20.95	22.50
	12 (RB_Pos:6)	22.07	22.24	21.98	23.50	21.14	21.36	21.03	22.50
	12 (RB_Pos:13)	22.08	22.24	22.01	23.50	21.09	21.35	21.08	22.50
	25 (RB_Pos:0)	22.03	22.22	21.91	23.50	21.09	21.22	20.90	22.50

TDD LTE Band 41													
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)	23.52	23.40	23.20	23.26	23.19	24.50	22.91	22.70	22.60	22.62	22.39	23.50
	1 (RB_Pos:50)	23.41	23.28	<b>23.58</b>	23.45	23.43	24.50	22.75	22.62	22.94	22.84	22.66	23.50
	1 (RB_Pos:99)	23.45	23.05	23.21	22.95	23.18	24.50	22.76	22.35	22.55	22.33	22.39	23.50
	50 (RB_Pos:0)	22.52	22.39	22.35	22.45	22.35	23.50	21.56	21.41	21.42	21.45	21.38	22.50
	50 (RB_Pos:25)	22.51	22.43	22.50	22.46	22.53	23.50	21.50	21.49	21.55	21.45	21.53	22.50
	50 (RB_Pos:50)	22.51	22.30	22.46	22.34	22.44	23.50	21.49	21.35	21.50	21.35	21.47	22.50
	100 (RB_Pos:0)	22.47	22.30	22.39	22.34	22.45	23.50	21.46	21.33	21.35	21.37	21.46	22.50
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up	16QAM				Tune up	
	Channel	39725	40160	40620	41080	41515		39725	40160	40620	41080		41515

							limit (dBm)						limit (dBm)
15MHz	1 (RB_Pos:0)	23.47	23.21	23.35	23.35	23.23	24.50	22.86	22.70	22.62	22.75	22.73	23.50
	1 (RB_Pos:50)	23.38	23.34	23.55	23.39	23.39	24.50	22.76	22.79	22.90	22.77	22.89	23.50
	1 (RB_Pos:99)	23.41	22.97	23.30	23.08	23.26	24.50	22.72	22.46	22.65	22.46	22.72	23.50
	50 (RB_Pos:0)	22.56	22.35	22.40	22.43	22.34	23.50	21.52	21.32	21.45	21.45	21.36	22.50
	50 (RB_Pos:25)	22.55	22.45	22.48	22.52	22.48	23.50	21.56	21.46	21.52	21.56	21.52	22.50
	50 (RB_Pos:50)	22.49	22.31	22.51	22.40	22.45	23.50	21.49	21.29	21.54	21.42	21.43	22.50
	100 (RB_Pos:0)	22.47	22.37	22.43	22.44	22.42	23.50	21.49	21.39	21.41	21.47	21.45	22.50
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)	23.30	22.93	23.10	23.03	23.01	24.50	22.65	22.43	22.53	22.41	22.48	23.50
	1 (RB_Pos:50)	23.25	23.13	23.39	23.21	23.13	24.50	22.58	22.64	22.72	22.61	22.65	23.50
	1 (RB_Pos:99)	23.23	22.83	23.09	22.94	22.80	24.50	22.60	22.37	22.53	22.34	22.33	23.50
	50 (RB_Pos:0)	22.41	22.16	22.24	22.23	22.21	23.50	21.46	21.18	21.33	21.29	21.20	22.50
	50 (RB_Pos:25)	22.39	22.30	22.34	22.35	22.30	23.50	21.39	21.33	21.40	21.38	21.30	22.50
	50 (RB_Pos:50)	22.36	22.18	22.30	22.26	22.18	23.50	21.39	21.24	21.37	21.30	21.22	22.50
	100 (RB_Pos:0)	22.31	22.20	22.24	22.27	22.16	23.50	21.30	21.25	21.29	21.32	21.18	22.50
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39675	40110	40620	41130	41565		39675	40110	40620	41130	41565	
5MHz	1 (RB_Pos:0)	23.45	23.18	23.25	23.23	23.20	24.50	22.74	22.62	22.57	22.49	22.61	23.50
	1 (RB_Pos:50)	23.40	23.27	23.33	23.31	23.20	24.50	22.72	22.73	22.68	22.63	22.63	23.50
	1 (RB_Pos:99)	23.32	23.19	23.26	23.21	23.11	24.50	22.66	22.62	22.55	22.50	22.53	23.50
	50 (RB_Pos:0)	22.45	22.22	22.35	22.29	22.27	23.50	21.44	21.32	21.38	21.30	21.39	22.50
	50 (RB_Pos:25)	22.47	22.32	22.36	22.33	22.24	23.50	21.47	21.40	21.40	21.37	21.40	22.50
	50 (RB_Pos:50)	22.44	22.28	22.38	22.30	22.23	23.50	21.40	21.34	21.44	21.35	21.32	22.50
	100 (RB_Pos:0)	22.41	22.25	22.31	22.31	22.24	23.50	21.45	21.31	21.33	21.36	21.26	22.50

## 8.4 Intra-Band Uplink CA Normal Power

Note:

1. This device supports intra-band uplink CA of 7C/38C/41C.
2. For intra-band uplink carrier aggregation power verification and measurement is selected highest PCC and SCC bandwidth combination to do and was according to 3GPP 36.52101 section 6.2.2A.1 and section 6.2.2A.2 test procedure.
3. For intra-band uplink CA output power was measured high / middle / low channel combination, and for SAR verification is selected highest output power combination with each exposure condition in each frequency band using the highest SAR configuration test in standalone LTE mode.

LTE Uplink 2CA_ Bnad7									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
20850	21048	20	QPSK	1	High	1	Low	1	23.18
21100	20902	20	QPSK	1	Low	1	High	1	23.15
21350	21152	20	QPSK	1	Low	1	High	1	<b>23.19</b>
LTE Uplink 2CA_ Bnad38									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
37850	38048	20	QPSK	1	High	1	Low	1	23.19
38000	38099	20	QPSK	1	Low	1	High	1	<b>23.20</b>
38150	37952	20	QPSK	1	Low	1	High	1	23.17
LTE Uplink 2CA_ Bnad41									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
39750	39948	20	QPSK	1	High	1	Low	1	23.21
40185	40383	20	QPSK	1	High	1	Low	1	23.26
40620	40422	20	QPSK	1	Low	1	High	1	<b>23.28</b>
41055	40857	20	QPSK	1	Low	1	High	1	23.27
41490	41292	20	QPSK	1	Low	1	High	1	23.22

## 8.5 WIFI

### 8.5.1 2.4G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	20.19	21.50	Yes
		6	2437	21.20	22.50	Yes
		11	2462	<b>21.29</b>	22.50	Yes
	802.11g	1	2412	20.35	22.00	No
		6	2437	20.39	22.00	No
		11	2462	20.31	22.00	No
	802.11n(HT20)	1	2412	20.07	22.00	No
		6	2437	20.30	22.00	No
		11	2462	20.29	22.00	No

### 8.5.2 5G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	20.96	22.50	No
		44	5220	21.33	22.50	No
		48	5240	21.54	22.50	No
	802.11n(HT20)	36	5180	20.56	22.50	No
		44	5220	21.11	22.50	No
		48	5240	21.22	22.50	No
	802.11n(HT40)	38	5190	19.47	21.00	Yes
		46	5230	<b>21.51</b>	22.50	Yes
	802.11ac(HT20)	36	5180	20.22	22.00	No
		44	5220	20.69	22.00	No
		48	5240	20.72	22.00	No
	802.11ac(HT40)	38	5190	18.91	19.50	No
		46	5230	21.15	22.00	No
	802.11ac(HT80)	42	5210	17.84	18.50	No
	5.3 (5.25~5.35)	802.11a	52	5260	21.11	22.50
60			5300	20.86	22.50	No
64			5320	21.08	22.50	No
802.11n(HT20)		52	5260	21.37	22.50	No
		60	5300	20.75	22.50	No
		64	5320	20.89	22.50	No
802.11n(HT40)		54	5270	<b>21.94</b>	22.50	Yes
		62	5310	19.06	21.00	Yes
802.11ac(HT20)		52	5260	20.57	22.00	No



		60	5300	20.29	22.00	No	
		64	5320	20.55	22.00	No	
	802.11ac(HT40)	54	5270	21.15	22.00	No	
		62	5310	19.05	21.00	No	
	802.11ac(HT80)	58	5290	16.79	18.50	No	
5.6 (5.47~5.725)	802.11a	100	5500	20.58	22.50	No	
		116	5580	20.73	22.50	No	
		140	5700	20.61	22.00	No	
	802.11n(HT20)	100	5500	20.53	22.50	No	
		116	5580	20.56	22.50	No	
		140	5700	20.59	22.50	No	
	802.11n(HT40)	102	5510	21.12	22.50	Yes	
		118	5590	20.90	22.50	Yes	
		134	5670	<b>21.21</b>	22.50	Yes	
	802.11ac(HT20)	100	5500	20.34	22.00	No	
		116	5580	20.02	22.00	No	
		140	5700	20.36	22.00	No	
	802.11ac(HT40)	102	5510	20.77	22.00	No	
		118	5590	20.39	22.00	No	
		134	5670	20.82	22.00	No	
	802.11ac(HT80)	106	5530	19.05	21.00	No	
		122	5610	20.36	22.00	No	
		138	5690	20.17	22.00	No	
	5.8 (5.725~5.850)	802.11a	149	5745	20.99	22.50	No
			157	5785	20.91	22.50	No
			165	5825	21.04	22.50	No
802.11n(HT20)		149	5745	20.63	22.50	No	
		157	5785	21.01	22.50	No	
		165	5825	20.82	22.50	No	
802.11n(HT40)		151	5755	20.98	22.50	Yes	
		159	5795	<b>21.08</b>	22.50	Yes	
802.11ac(HT20)		149	5745	20.43	22.00	No	
		157	5785	20.28	22.00	No	
		165	5825	20.26	22.00	No	
802.11ac(HT40)		151	5755	20.73	22.00	No	
		159	5795	20.95	22.00	No	
802.11ac(HT80)		155	5775	20.09	22.00	No	

## 8.6 Bluetooth(Chain1)

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power (dBm)	10.91	<b>11.10</b>	10.61	8.74	9.01	8.96
Tune-Up Limit (dBm)	12.00			10.00		
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Conducted Power (dBm)	8.77	9.04	8.97	/	/	/
Tune-Up Limit (dBm)	10.00			/		
Mode	BLE (1Mbps)			BLE (2Mbps)		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Conducted Power (dBm)	2.33	2.85	3.31	-0.48	0.03	0.48
Tune-Up Limit (dBm)	4.00			1.00		

## 8.7 Power Reduction List

### 8.7.1 Power Reduced Level 1 of GSM 1900

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	22.85	22.78	22.85	24.00	13.66	13.59	13.66	14.81
GPRS (GMSK, 1-Slot)	22.61	22.85	22.69	24.00	13.42	13.66	13.50	14.81
GPRS (GMSK, 2-Slots)	20.93	21.03	20.88	22.00	14.80	14.90	14.75	15.87
GPRS (GMSK, 3-Slots)	19.42	19.05	19.43	20.50	15.00	14.63	<b>15.01</b>	16.08
GPRS (GMSK, 4-Slots)	17.37	17.50	18.04	19.00	14.19	14.32	14.86	15.82
EGPRS (8PSK, 1-Slot)	21.60	21.41	21.71	22.50	12.41	12.22	12.52	13.31
EGPRS (8PSK, 2-Slots)	19.25	18.85	19.50	20.50	13.12	12.72	13.37	14.37
EGPRS (8PSK, 3-Slots)	17.37	17.40	17.54	18.50	12.95	12.98	13.12	14.08
EGPRS (8PSK, 4-Slots)	16.81	16.54	16.59	17.50	13.63	13.36	13.41	14.32

### 8.7.2 Power Reduced Level 2&3 of GSM 1900

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	21.94	21.64	21.69	23.00	12.75	12.45	12.50	13.81
GPRS (GMSK, 1-Slot)	21.63	21.79	21.93	23.00	12.44	12.60	12.74	13.81
GPRS (GMSK, 2-Slots)	19.62	20.25	19.79	21.00	13.49	14.12	13.66	14.87
GPRS (GMSK, 3-Slots)	18.06	17.91	18.61	19.50	13.64	13.49	<b>14.19</b>	15.08
GPRS (GMSK, 4-Slots)	16.36	16.28	16.75	18.00	13.18	13.10	13.57	14.82
EGPRS (8PSK, 1-Slot)	20.26	20.30	20.52	21.50	11.07	11.11	11.33	12.31
EGPRS (8PSK, 2-Slots)	17.93	18.02	18.37	19.50	11.80	11.89	12.24	13.37
EGPRS (8PSK, 3-Slots)	16.50	16.30	16.59	17.50	12.08	11.88	12.17	13.08
EGPRS (8PSK, 4-Slots)	15.69	15.45	15.71	16.50	12.51	12.27	12.53	13.32

### 8.7.3 Power Reduced Level 4 of GSM 1900

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	20.83	20.45	20.85	22.00	11.64	11.26	11.66	12.81
GPRS (GMSK, 1-Slot)	20.44	20.63	20.83	22.00	11.25	11.44	11.64	12.81
GPRS (GMSK, 2-Slots)	18.77	18.92	18.93	20.00	12.64	12.79	12.80	13.87
GPRS (GMSK, 3-Slots)	17.10	16.98	17.29	18.50	12.68	12.56	<b>12.87</b>	14.08
GPRS (GMSK, 4-Slots)	15.67	15.47	15.78	17.00	12.49	12.29	12.60	13.82
EGPRS (8PSK, 1-Slot)	19.68	19.62	19.66	20.50	10.49	10.43	10.47	11.31
EGPRS (8PSK, 2-Slots)	16.88	17.21	17.45	18.50	10.75	11.08	11.32	12.37
EGPRS (8PSK, 3-Slots)	15.55	15.36	15.68	16.50	11.13	10.94	11.26	12.08
EGPRS (8PSK, 4-Slots)	14.41	14.45	14.79	15.50	11.23	11.27	11.61	12.32

## 8.7.4 Power Reduced Level 1 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
AMR 12.2Kbps	16.09	16.01	16.05	17.00
RMC 12.2Kbps	<b>16.13</b>	16.01	16.08	17.00
HSDPA Subtest-1	14.74	14.53	14.64	16.00
HSDPA Subtest-2	14.62	14.63	14.55	16.00
HSDPA Subtest-3	14.12	14.21	14.12	15.50
HSDPA Subtest-4	14.22	13.97	14.02	15.50
DC-HSDPA Subtest-1	14.44	14.84	14.43	16.00
DC-HSDPA Subtest-2	14.74	14.71	14.35	16.00
DC-HSDPA Subtest-3	14.10	14.03	13.99	15.50
DC-HSDPA Subtest-4	14.14	13.98	13.76	15.50
HSUPA Subtest-1	14.64	14.68	14.46	15.00
HSUPA Subtest-2	12.78	12.49	12.60	13.00
HSUPA Subtest-3	13.80	13.40	13.69	14.00
HSUPA Subtest-4	12.70	12.51	12.56	13.00
HSUPA Subtest-5	14.66	14.73	14.54	15.00

## 8.7.5 Power Reduced Level 2&amp;3 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
AMR 12.2Kbps	15.02	15.00	15.00	16.00
RMC 12.2Kbps	<b>15.08</b>	15.01	15.04	16.00
HSDPA Subtest-1	13.74	14.58	14.38	15.00
HSDPA Subtest-2	13.62	14.71	14.61	15.00
HSDPA Subtest-3	13.02	14.07	13.89	14.50
HSDPA Subtest-4	13.29	13.99	14.01	14.50
DC-HSDPA Subtest-1	13.48	14.82	14.27	15.00
DC-HSDPA Subtest-2	13.83	14.70	14.56	15.00
DC-HSDPA Subtest-3	13.20	14.14	14.12	14.50
DC-HSDPA Subtest-4	12.96	14.05	13.87	14.50
HSUPA Subtest-1	13.71	14.67	14.51	14.00
HSUPA Subtest-2	11.77	12.53	12.39	12.00
HSUPA Subtest-3	12.74	13.53	13.47	13.00
HSUPA Subtest-4	11.73	12.73	12.49	12.00
HSUPA Subtest-5	13.80	14.62	14.52	14.00

## 8.7.6 Power Reduced Level 4 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
AMR 12.2Kbps	14.08	13.95	13.99	15.00
RMC 12.2Kbps	<b>14.10</b>	13.98	14.02	15.00
HSDPA Subtest-1	12.80	12.67	12.58	14.00
HSDPA Subtest-2	12.78	12.74	12.49	14.00
HSDPA Subtest-3	12.11	12.20	12.09	13.50
HSDPA Subtest-4	12.11	12.16	11.89	13.50
DC-HSDPA Subtest-1	12.72	12.69	12.36	14.00
DC-HSDPA Subtest-2	12.64	12.79	12.48	14.00
DC-HSDPA Subtest-3	12.11	12.11	12.06	13.50
DC-HSDPA Subtest-4	12.10	11.95	11.82	13.50
HSUPA Subtest-1	12.78	12.53	12.37	13.00
HSUPA Subtest-2	10.54	10.61	10.34	11.00
HSUPA Subtest-3	11.64	11.64	11.51	12.00
HSUPA Subtest-4	10.81	10.59	10.62	11.00
HSUPA Subtest-5	12.69	12.73	12.32	13.00

## 8.7.7 Power Reduced Level 5 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
AMR 12.2Kbps	20.76	20.64	20.55	22.00
RMC 12.2Kbps	<b>20.85</b>	20.72	20.69	22.00
HSDPA Subtest-1	19.83	19.72	19.60	21.00
HSDPA Subtest-2	19.90	19.65	19.61	21.00
HSDPA Subtest-3	19.35	19.17	19.18	20.50
HSDPA Subtest-4	19.18	19.11	19.09	20.50
DC-HSDPA Subtest-1	19.78	19.74	19.42	21.00
DC-HSDPA Subtest-2	19.87	19.84	19.49	21.00
DC-HSDPA Subtest-3	19.32	19.20	19.07	20.50
DC-HSDPA Subtest-4	19.18	19.02	19.07	20.50
HSUPA Subtest-1	19.65	19.70	19.60	20.00
HSUPA Subtest-2	17.80	17.71	17.60	18.00
HSUPA Subtest-3	18.83	18.55	18.61	19.00
HSUPA Subtest-4	17.72	17.59	17.68	18.00
HSUPA Subtest-5	19.78	19.80	19.55	20.00

## 8.7.8 Power Reduced Level 1 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
AMR 12.2Kbps	16.33	16.40	16.10	17.50
RMC 12.2Kbps	16.35	<b>16.43</b>	16.19	17.50
HSDPA Subtest-1	14.88	15.04	14.81	16.50
HSDPA Subtest-2	14.91	14.96	14.87	16.50
HSDPA Subtest-3	14.33	14.68	14.51	16.00
HSDPA Subtest-4	14.36	14.71	14.45	16.00
DC-HSDPA Subtest-1	14.87	15.23	14.79	16.50
DC-HSDPA Subtest-2	14.67	15.10	14.85	16.50
DC-HSDPA Subtest-3	14.39	14.60	14.43	16.00
DC-HSDPA Subtest-4	14.47	14.41	14.15	16.00
HSUPA Subtest-1	14.99	15.21	14.91	15.50
HSUPA Subtest-2	13.03	13.03	13.00	13.50
HSUPA Subtest-3	13.83	14.06	13.94	14.50
HSUPA Subtest-4	12.90	13.20	12.92	13.50
HSUPA Subtest-5	14.97	15.05	14.89	15.50

## 8.7.9 Power Reduced Level 2&amp;3 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
AMR 12.2Kbps	15.25	15.32	15.20	16.50
RMC 12.2Kbps	15.29	<b>15.40</b>	15.22	16.50
HSDPA Subtest-1	13.95	13.96	14.01	15.50
HSDPA Subtest-2	13.87	14.09	13.98	15.50
HSDPA Subtest-3	13.58	13.61	13.36	15.00
HSDPA Subtest-4	13.43	13.66	13.32	15.00
DC-HSDPA Subtest-1	14.07	14.11	13.75	15.50
DC-HSDPA Subtest-2	13.84	14.09	13.81	15.50
DC-HSDPA Subtest-3	13.26	13.74	13.39	15.00
DC-HSDPA Subtest-4	13.41	13.58	13.43	15.00
HSUPA Subtest-1	13.97	14.03	13.89	14.50
HSUPA Subtest-2	11.97	12.01	11.97	12.50
HSUPA Subtest-3	12.82	13.22	12.80	13.50
HSUPA Subtest-4	11.90	12.00	11.74	12.50
HSUPA Subtest-5	13.81	14.13	13.87	14.50

## 8.7.10 Power Reduced Level 4 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
AMR 12.2Kbps	14.27	14.41	14.28	15.50
RMC 12.2Kbps	14.31	<b>14.45</b>	14.30	15.50
HSDPA Subtest-1	12.79	13.20	12.86	14.50
HSDPA Subtest-2	12.78	13.15	12.81	14.50
HSDPA Subtest-3	12.53	12.44	12.47	14.00
HSDPA Subtest-4	12.42	12.61	12.53	14.00
DC-HSDPA Subtest-1	13.09	13.32	12.99	14.50
DC-HSDPA Subtest-2	12.73	13.06	12.92	14.50
DC-HSDPA Subtest-3	12.38	12.60	12.38	14.00
DC-HSDPA Subtest-4	12.52	12.44	12.34	14.00
HSUPA Subtest-1	12.90	13.19	12.94	13.50
HSUPA Subtest-2	10.99	10.90	10.80	11.50
HSUPA Subtest-3	11.96	12.22	11.89	12.50
HSUPA Subtest-4	10.97	11.25	10.77	11.50
HSUPA Subtest-5	12.89	12.95	12.79	13.50

## 8.7.11 Power Reduced Level 5 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
AMR 12.2Kbps	20.49	20.64	20.48	22.50
RMC 12.2Kbps	20.58	<b>20.72</b>	20.58	22.50
HSDPA Subtest-1	19.59	19.61	19.43	21.50
HSDPA Subtest-2	19.46	19.62	19.51	21.50
HSDPA Subtest-3	19.15	19.12	18.90	21.00
HSDPA Subtest-4	19.10	19.22	18.96	21.00
DC-HSDPA Subtest-1	19.64	19.82	19.49	21.50
DC-HSDPA Subtest-2	19.50	19.61	19.52	21.50
DC-HSDPA Subtest-3	18.91	19.13	18.88	21.00
DC-HSDPA Subtest-4	19.14	19.17	18.88	21.00
HSUPA Subtest-1	19.64	19.65	19.54	20.50
HSUPA Subtest-2	17.49	17.68	17.42	18.50
HSUPA Subtest-3	18.53	18.66	18.41	19.50
HSUPA Subtest-4	17.48	17.73	17.50	18.50
HSUPA Subtest-5	19.56	19.72	19.52	20.50

## 8.7.12 Power Reduced Level 1 of LTE Band 2

FDD LTE Band 2									
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)	16.31	16.26	16.01	17.00	16.22	16.25	16.29	17.00
	1 (RB_Pos:50)	16.16	15.97	16.22	17.00	16.25	16.37	16.09	17.00
	1 (RB_Pos:99)	16.13	16.06	16.30	17.00	16.16	16.13	16.43	17.00
	50 (RB_Pos:0)	16.37	16.36	15.97	17.00	16.07	15.91	16.23	17.00
	50 (RB_Pos:25)	16.38	16.27	16.04	17.00	16.33	16.13	16.08	17.00
	50 (RB_Pos:50)	16.36	16.21	16.18	17.00	15.99	16.15	15.97	17.00
	100 (RB_Pos:0)	16.14	16.25	<b>16.39</b>	17.00	16.17	15.93	15.90	17.00
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)	16.09	16.35	16.07	17.00	16.23	16.15	16.08	17.00
	1 (RB_Pos:38)	16.34	15.96	16.20	17.00	16.14	16.26	16.32	17.00
	1 (RB_Pos:74)	16.11	16.18	16.38	17.00	16.15	15.98	15.96	17.00
	36 (RB_Pos:0)	16.26	16.28	16.39	17.00	16.35	16.00	16.17	17.00
	36 (RB_Pos:20)	16.07	16.34	16.11	17.00	16.08	15.99	16.12	17.00
	36 (RB_Pos:39)	16.17	16.19	16.34	17.00	16.09	15.98	16.37	17.00
	75 (RB_Pos:0)	16.23	16.04	16.01	17.00	16.00	16.38	16.34	17.00
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)	16.15	16.22	15.97	17.00	16.20	16.36	16.23	17.00
	1 (RB_Pos:25)	16.01	15.98	16.07	17.00	15.99	15.91	16.01	17.00
	1 (RB_Pos:49)	16.30	16.39	16.35	17.00	16.08	16.15	16.37	17.00
	25 (RB_Pos:0)	16.10	16.09	16.33	17.00	16.27	16.09	16.07	17.00
	25 (RB_Pos:12)	16.06	16.32	16.02	17.00	16.03	15.95	15.97	17.00
	25 (RB_Pos:25)	16.22	15.99	16.35	17.00	16.30	16.38	16.12	17.00
	50 (RB_Pos:0)	16.21	16.31	16.03	17.00	15.98	16.26	16.17	17.00
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)	15.95	16.07	16.04	17.00	15.90	16.31	16.26	17.00
	1 (RB_Pos:13)	16.15	16.22	16.02	17.00	16.31	16.02	16.16	17.00
	1 (RB_Pos:24)	16.32	16.10	16.14	17.00	16.08	16.09	16.15	17.00
	12 (RB_Pos:0)	16.38	16.17	15.93	17.00	15.97	16.11	16.13	17.00
	12 (RB_Pos:6)	16.07	16.17	16.33	17.00	16.12	16.02	16.00	17.00
	12 (RB_Pos:13)	16.29	16.12	16.05	17.00	15.97	16.18	16.39	17.00



	25 (RB_Pos:0)	16.00	16.29	16.07	17.00	15.99	16.12	16.05	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	16.36	16.04	16.02	17.00	16.06	16.29	16.08	17.00
	1 (RB_Pos:8)	16.02	16.06	15.94	17.00	16.34	16.22	16.00	17.00
	1 (RB_Pos:14)	16.35	16.03	16.23	17.00	16.20	16.05	16.15	17.00
	8 (RB_Pos:0)	16.37	16.02	16.10	17.00	16.07	16.38	16.17	17.00
	8 (RB_Pos:3)	16.20	15.93	16.20	17.00	16.22	16.04	16.31	17.00
	8 (RB_Pos:7)	16.03	15.91	16.05	17.00	16.12	15.99	16.24	17.00
	15 (RB_Pos:0)	16.03	16.28	16.16	17.00	16.24	16.00	15.98	17.00
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)	16.10	15.99	16.25	17.00	15.91	15.94	16.25	17.00
	1 (RB_Pos:3)	16.02	16.01	16.06	17.00	16.13	16.10	16.32	17.00
	1 (RB_Pos:5)	15.96	15.95	16.04	17.00	16.39	16.36	15.95	17.00
	3 (RB_Pos:0)	16.16	16.06	16.06	17.00	15.99	16.02	16.39	17.00
	3 (RB_Pos:1)	16.19	16.01	16.37	17.00	16.19	16.20	16.15	17.00
	3 (RB_Pos:3)	16.13	16.26	16.01	17.00	16.28	16.40	16.10	17.00
	6 (RB_Pos:0)	15.94	15.92	16.32	17.00	16.32	16.08	16.27	17.00

### 8.7.13 Power Reduced Level 2&3 of LTE Band 2

FDD LTE Band 2									
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)	<b>15.18</b>	15.04	14.75	16.00	15.18	15.14	14.98	16.00
	1 (RB_Pos:50)	14.71	14.98	14.76	16.00	15.16	14.80	14.93	16.00
	1 (RB_Pos:99)	15.01	15.12	15.12	16.00	15.01	14.86	14.97	16.00
	50 (RB_Pos:0)	14.88	15.08	15.07	16.00	14.85	15.04	14.94	16.00
	50 (RB_Pos:25)	15.18	14.98	15.07	16.00	15.16	14.75	14.77	16.00
	50 (RB_Pos:50)	14.76	15.14	14.98	16.00	15.14	14.89	15.11	16.00
	100 (RB_Pos:0)	15.03	15.04	14.98	16.00	15.16	14.77	14.83	16.00
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)	14.90	14.77	14.72	16.00	14.73	14.90	14.87	16.00
	1 (RB_Pos:38)	14.79	14.70	14.97	16.00	15.19	14.99	15.14	16.00
	1 (RB_Pos:74)	14.89	15.09	15.03	16.00	14.75	15.18	14.78	16.00

	36 (RB_Pos:0)	15.09	15.06	15.12	16.00	14.80	14.85	14.80	16.00
	36 (RB_Pos:20)	14.90	15.10	14.71	16.00	14.83	15.18	14.95	16.00
	36 (RB_Pos:39)	14.88	15.00	15.04	16.00	15.08	15.16	14.86	16.00
	75 (RB_Pos:0)	14.96	14.78	15.13	16.00	14.75	15.05	15.13	16.00
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)	14.88	15.20	15.13	16.00	14.99	15.03	14.98	16.00
	1 (RB_Pos:25)	15.17	15.17	15.08	16.00	15.06	15.06	15.03	16.00
	1 (RB_Pos:49)	15.20	14.99	14.73	16.00	14.76	14.95	14.98	16.00
	25 (RB_Pos:0)	15.04	14.81	15.05	16.00	15.19	15.20	15.08	16.00
	25 (RB_Pos:12)	14.89	15.17	15.03	16.00	14.87	14.80	14.92	16.00
	25 (RB_Pos:25)	14.84	15.19	14.88	16.00	14.83	14.75	14.71	16.00
	50 (RB_Pos:0)	14.81	15.10	15.17	16.00	14.98	14.97	14.88	16.00
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)	14.93	15.03	14.93	16.00	14.88	14.77	14.86	16.00
	1 (RB_Pos:13)	14.88	14.86	15.07	16.00	14.99	14.92	15.08	16.00
	1 (RB_Pos:24)	15.17	14.80	15.17	16.00	14.83	14.71	14.86	16.00
	12 (RB_Pos:0)	14.92	15.03	14.72	16.00	14.72	15.03	14.74	16.00
	12 (RB_Pos:6)	14.88	15.05	14.84	16.00	14.71	14.84	14.81	16.00
	12 (RB_Pos:13)	15.12	14.91	15.15	16.00	15.11	14.99	14.76	16.00
	25 (RB_Pos:0)	14.70	15.06	14.76	16.00	14.95	14.95	15.00	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	15.13	14.94	14.76	16.00	15.07	15.02	14.87	16.00
	1 (RB_Pos:8)	15.02	14.94	14.71	16.00	14.76	15.06	14.95	16.00
	1 (RB_Pos:14)	14.72	14.82	15.15	16.00	15.16	14.82	14.87	16.00
	8 (RB_Pos:0)	14.91	15.01	15.03	16.00	15.01	14.92	14.81	16.00
	8 (RB_Pos:3)	14.93	14.82	14.92	16.00	15.03	15.18	14.89	16.00
	8 (RB_Pos:7)	14.95	15.04	14.98	16.00	14.86	15.11	15.03	16.00
	15 (RB_Pos:0)	15.07	15.17	14.70	16.00	15.06	15.18	14.80	16.00
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)	15.15	14.81	15.01	16.00	15.20	15.17	15.04	16.00
	1 (RB_Pos:3)	15.07	14.92	14.94	16.00	14.86	14.80	14.87	16.00
	1 (RB_Pos:5)	14.88	14.70	15.02	16.00	14.72	14.76	14.75	16.00
	3 (RB_Pos:0)	14.73	14.74	14.98	16.00	14.95	14.80	15.06	16.00

	3 (RB_Pos:1)	15.07	15.05	15.16	16.00	14.77	14.84	15.15	16.00
	3 (RB_Pos:3)	14.80	14.79	15.19	16.00	15.18	15.09	15.08	16.00
	6 (RB_Pos:0)	15.08	15.20	14.90	16.00	15.16	14.79	15.09	16.00

## 8.7.14 Power Reduced Level 4 of LTE Band 2

FDD LTE Band 2									
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)	14.18	13.85	13.99	15.00	14.05	14.07	14.14	15.00
	1 (RB_Pos:50)	14.12	14.11	14.03	15.00	13.90	13.88	14.04	15.00
	1 (RB_Pos:99)	14.15	14.06	13.86	15.00	13.97	14.04	13.98	15.00
	50 (RB_Pos:0)	13.99	14.07	13.80	15.00	13.77	13.76	14.15	15.00
	50 (RB_Pos:25)	<b>14.23</b>	14.20	13.77	15.00	14.10	14.01	14.08	15.00
	50 (RB_Pos:50)	13.93	14.13	13.93	15.00	13.82	13.83	13.94	15.00
	100 (RB_Pos:0)	13.80	13.99	14.09	15.00	13.96	13.95	14.11	15.00
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)	14.07	14.14	14.23	15.00	14.02	13.93	13.80	15.00
	1 (RB_Pos:38)	13.80	14.04	13.91	15.00	13.86	14.14	14.03	15.00
	1 (RB_Pos:74)	13.92	13.90	14.11	15.00	14.21	13.84	14.12	15.00
	36 (RB_Pos:0)	14.07	14.25	13.87	15.00	13.80	13.90	13.82	15.00
	36 (RB_Pos:20)	14.12	13.83	14.12	15.00	13.85	13.85	14.04	15.00
	36 (RB_Pos:39)	14.04	13.83	14.02	15.00	14.24	14.22	13.94	15.00
	75 (RB_Pos:0)	14.25	13.86	13.77	15.00	14.04	14.07	14.14	15.00
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)	13.82	13.76	13.75	15.00	13.94	14.25	14.10	15.00
	1 (RB_Pos:25)	13.88	13.79	13.85	15.00	13.79	13.78	14.01	15.00
	1 (RB_Pos:49)	13.87	13.77	13.84	15.00	14.14	13.96	13.81	15.00
	25 (RB_Pos:0)	14.11	13.76	14.14	15.00	14.20	14.02	14.20	15.00
	25 (RB_Pos:12)	13.85	13.88	14.03	15.00	13.96	13.87	13.82	15.00
	25 (RB_Pos:25)	13.89	14.13	14.02	15.00	13.95	13.86	14.06	15.00
	50 (RB_Pos:0)	14.13	13.88	13.88	15.00	14.12	13.91	14.09	15.00
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)	14.13	14.04	13.96	15.00	13.91	14.05	13.90	15.00

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18615	18900		19185	18615	18900	
3.0 MHz	1 (RB_Pos:13)	14.12	14.22	13.89	15.00	14.12	14.02	13.87	15.00
	1 (RB_Pos:24)	14.16	13.93	13.81	15.00	13.76	13.90	13.79	15.00
	12 (RB_Pos:0)	13.87	14.22	14.13	15.00	14.04	14.04	14.21	15.00
	12 (RB_Pos:6)	13.89	14.10	13.91	15.00	13.80	13.92	13.98	15.00
	12 (RB_Pos:13)	13.99	14.00	13.79	15.00	13.76	13.78	14.03	15.00
	25 (RB_Pos:0)	14.08	14.14	13.87	15.00	14.13	14.09	13.81	15.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18607	18900		19193	18607	18900	
1.4 MHz	1 (RB_Pos:0)	13.98	14.23	13.92	15.00	14.13	14.01	13.80	15.00
	1 (RB_Pos:3)	14.14	14.00	14.25	15.00	14.08	14.09	13.91	15.00
	1 (RB_Pos:5)	14.00	14.09	13.89	15.00	14.11	14.21	13.92	15.00
	3 (RB_Pos:0)	14.12	13.96	13.77	15.00	13.83	14.08	13.77	15.00
	3 (RB_Pos:1)	14.02	13.83	14.16	15.00	14.11	13.75	13.87	15.00
	3 (RB_Pos:3)	14.13	13.91	14.15	15.00	14.20	14.12	14.23	15.00
	6 (RB_Pos:0)	13.80	13.91	14.04	15.00	14.22	14.18	14.05	15.00

### 8.7.15 Power Reduced Level 5 of LTE Band 2

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18700	18900		19100	18700	18900	
20 MHz	1 (RB_Pos:0)	20.01	19.64	19.78	21.00	19.88	19.74	19.94	21.00
	1 (RB_Pos:50)	19.80	19.82	19.86	21.00	19.55	19.77	19.72	21.00
	1 (RB_Pos:99)	19.90	19.84	19.70	21.00	19.77	19.90	19.79	21.00
	50 (RB_Pos:0)	19.71	19.92	19.57	21.00	19.51	19.37	19.79	21.00
	50 (RB_Pos:25)	<b>20.02</b>	20.00	19.42	21.00	19.99	19.62	19.69	21.00
	50 (RB_Pos:50)	19.58	19.97	19.64	21.00	19.54	19.62	19.75	21.00
	100 (RB_Pos:0)	19.60	19.63	19.87	21.00	19.61	19.61	19.71	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
		Channel	18700	18900		19100	18700	18900	

	Channel	18675	18900	19125	limit (dBm)	18675	18900	19125	limit (dBm)
15 MHz	1 (RB_Pos:0)	19.73	19.87	19.86	21.00	19.89	19.57	19.43	21.00
	1 (RB_Pos:38)	19.58	19.73	19.69	21.00	19.48	19.92	19.80	21.00
	1 (RB_Pos:74)	19.73	19.62	20.00	21.00	19.90	19.59	20.01	21.00
	36 (RB_Pos:0)	19.81	19.90	19.72	21.00	19.47	19.76	19.50	21.00
	36 (RB_Pos:20)	19.74	19.59	20.01	21.00	19.68	19.46	19.83	21.00
	36 (RB_Pos:39)	19.84	19.71	19.71	21.00	20.04	20.09	19.67	21.00
	75 (RB_Pos:0)	20.12	19.68	19.54	21.00	19.67	19.77	19.92	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	19.47	19.61	19.40	21.00	19.84	20.10	19.83	21.00
	1 (RB_Pos:25)	19.72	19.65	19.55	21.00	19.56	19.49	19.68	21.00
	1 (RB_Pos:49)	19.47	19.60	19.64	21.00	19.90	19.73	19.63	21.00
	25 (RB_Pos:0)	19.94	19.57	19.91	21.00	20.02	19.75	19.97	21.00
	25 (RB_Pos:12)	19.47	19.58	19.74	21.00	19.79	19.62	19.45	21.00
	25 (RB_Pos:25)	19.74	19.79	19.70	21.00	19.75	19.56	19.76	21.00
	50 (RB_Pos:0)	19.82	19.56	19.55	21.00	19.74	19.62	19.81	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	19.91	19.75	19.77	21.00	19.63	19.85	19.77	21.00
	1 (RB_Pos:13)	19.80	19.90	19.55	21.00	20.00	19.87	19.59	21.00
	1 (RB_Pos:24)	19.96	19.72	19.48	21.00	19.55	19.59	19.49	21.00
	12 (RB_Pos:0)	19.57	19.98	19.81	21.00	19.67	19.71	19.83	21.00
	12 (RB_Pos:6)	19.73	19.80	19.77	21.00	19.51	19.57	19.80	21.00
	12 (RB_Pos:13)	19.64	19.90	19.69	21.00	19.62	19.47	19.64	21.00
	25 (RB_Pos:0)	19.83	19.99	19.71	21.00	19.95	19.96	19.47	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	19.65	19.94	19.81	21.00	19.94	20.10	19.84	21.00
	1 (RB_Pos:8)	19.80	19.92	19.61	21.00	19.73	19.74	20.02	21.00
	1 (RB_Pos:14)	19.72	19.65	20.04	21.00	19.82	19.51	19.90	21.00
	8 (RB_Pos:0)	19.79	19.82	19.75	21.00	19.76	19.64	19.89	21.00
	8 (RB_Pos:3)	19.49	19.65	19.91	21.00	19.66	19.84	19.65	21.00
	8 (RB_Pos:7)	19.99	20.06	19.50	21.00	19.61	19.79	19.80	21.00
	15 (RB_Pos:0)	19.58	20.09	19.80	21.00	19.75	19.93	19.65	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		18607	18900	19193		18607	18900	19193	

					(dBm)				(dBm)
1.4 MHz	1 (RB_Pos:0)	19.72	19.99	19.66	21.00	19.87	19.78	19.42	21.00
	1 (RB_Pos:3)	19.79	19.81	20.03	21.00	19.69	19.72	19.60	21.00
	1 (RB_Pos:5)	19.66	19.92	19.56	21.00	19.74	20.10	19.68	21.00
	3 (RB_Pos:0)	19.72	19.86	19.64	21.00	19.46	19.69	19.66	21.00
	3 (RB_Pos:1)	19.80	19.55	19.95	21.00	19.89	19.64	19.50	21.00
	3 (RB_Pos:3)	19.99	19.64	20.04	21.00	20.04	19.85	20.05	21.00
	6 (RB_Pos:0)	19.53	19.52	19.75	21.00	19.95	20.03	19.68	21.00

## 8.7.16 Power Reduced Level 1 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	16.56	16.57	16.54	17.50	16.54	16.46	16.31	17.50
	1 (RB_Pos:50)	16.35	<b>16.69</b>	16.24	17.50	16.43	16.23	16.25	17.50
	1 (RB_Pos:99)	16.46	16.46	16.59	17.50	16.54	16.27	16.42	17.50
	50 (RB_Pos:0)	16.59	16.55	16.54	17.50	16.43	16.66	16.45	17.50
	50 (RB_Pos:25)	16.57	16.36	16.49	17.50	16.33	16.59	16.25	17.50
	50 (RB_Pos:50)	16.25	16.25	16.27	17.50	16.39	16.39	16.65	17.50
	100 (RB_Pos:0)	16.57	16.68	16.53	17.50	16.44	16.23	16.51	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	16.64	16.33	16.46	17.50	16.51	16.69	16.55	17.50
	1 (RB_Pos:38)	16.44	16.31	16.31	17.50	16.24	16.31	16.62	17.50
	1 (RB_Pos:74)	16.68	16.44	16.70	17.50	16.36	16.47	16.27	17.50
	36 (RB_Pos:0)	16.56	16.61	16.51	17.50	16.53	16.42	16.22	17.50
	36 (RB_Pos:20)	16.23	16.68	16.56	17.50	16.62	16.47	16.49	17.50
	36 (RB_Pos:39)	16.38	16.35	16.31	17.50	16.61	16.42	16.44	17.50
	75 (RB_Pos:0)	16.24	16.47	16.42	17.50	16.45	16.58	16.51	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	16.67	16.47	16.28	17.50	16.21	16.41	16.68	17.50
	1 (RB_Pos:25)	16.59	16.25	16.58	17.50	16.57	16.59	16.34	17.50
	1 (RB_Pos:49)	16.55	16.35	16.62	17.50	16.62	16.64	16.67	17.50
	25 (RB_Pos:0)	16.33	16.66	16.31	17.50	16.67	16.38	16.57	17.50
	25 (RB_Pos:12)	16.34	16.57	16.56	17.50	16.50	16.64	16.41	17.50
	25 (RB_Pos:25)	16.39	16.26	16.67	17.50	16.50	16.63	16.35	17.50
	50 (RB_Pos:0)	16.50	16.60	16.42	17.50	16.31	16.66	16.29	17.50

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	16.39	16.34	16.53	17.50	16.35	16.25	16.57	17.50
	1 (RB_Pos:13)	16.41	16.48	16.43	17.50	16.60	16.58	16.39	17.50
	1 (RB_Pos:24)	16.22	16.40	16.39	17.50	16.25	16.21	16.37	17.50
	12 (RB_Pos:0)	16.62	16.43	16.67	17.50	16.69	16.51	16.24	17.50
	12 (RB_Pos:6)	16.58	16.46	16.63	17.50	16.33	16.55	16.30	17.50
	12 (RB_Pos:13)	16.37	16.54	16.63	17.50	16.40	16.48	16.43	17.50
	25 (RB_Pos:0)	16.57	16.35	16.55	17.50	16.47	16.39	16.22	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	16.45	16.23	16.30	17.50	16.61	16.53	16.62	17.50
	1 (RB_Pos:8)	16.21	16.66	16.62	17.50	16.48	16.37	16.68	17.50
	1 (RB_Pos:14)	16.62	16.27	16.55	17.50	16.69	16.40	16.24	17.50
	8 (RB_Pos:0)	16.39	16.58	16.36	17.50	16.30	16.64	16.27	17.50
	8 (RB_Pos:3)	16.51	16.39	16.52	17.50	16.40	16.56	16.41	17.50
	8 (RB_Pos:7)	16.35	16.59	16.48	17.50	16.44	16.49	16.30	17.50
	15 (RB_Pos:0)	16.59	16.53	16.46	17.50	16.57	16.58	16.49	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19957	20175	20393		19957	20175	20393	
1.4 MHz	1 (RB_Pos:0)	16.43	16.44	16.30	17.50	16.44	16.67	16.62	17.50
	1 (RB_Pos:3)	16.49	16.30	16.24	17.50	16.40	16.51	16.50	17.50
	1 (RB_Pos:5)	16.52	16.59	16.33	17.50	16.68	16.54	16.39	17.50
	3 (RB_Pos:0)	16.28	16.33	16.24	17.50	16.38	16.38	16.23	17.50
	3 (RB_Pos:1)	16.30	16.59	16.60	17.50	16.29	16.57	16.44	17.50
	3 (RB_Pos:3)	16.58	16.57	16.59	17.50	16.69	16.29	16.64	17.50
	6 (RB_Pos:0)	16.54	16.30	16.28	17.50	16.26	16.33	16.21	17.50

### 8.7.17 Power Reduced Level 2&3 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	15.65	15.53	15.62	16.50	15.67	15.49	15.33	16.50
	1 (RB_Pos:50)	15.24	15.67	15.53	16.50	15.38	15.34	15.29	16.50
	1 (RB_Pos:99)	15.48	15.50	15.48	16.50	15.60	15.56	15.64	16.50
	50 (RB_Pos:0)	15.67	15.63	15.33	16.50	15.24	15.47	15.43	16.50

	50 (RB_Pos:25)	15.69	15.23	15.60	16.50	15.36	15.38	15.57	16.50
	50 (RB_Pos:50)	15.62	15.62	15.26	16.50	15.51	15.49	15.33	16.50
	100 (RB_Pos:0)	15.37	15.47	15.61	16.50	15.48	15.56	15.53	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	15.35	15.39	15.63	16.50	15.48	15.36	15.52	16.50
	1 (RB_Pos:38)	15.65	15.24	15.69	16.50	15.21	15.66	15.37	16.50
	1 (RB_Pos:74)	15.54	15.60	15.43	16.50	15.58	15.54	15.53	16.50
	36 (RB_Pos:0)	15.36	15.56	15.31	16.50	15.34	15.69	15.56	16.50
	36 (RB_Pos:20)	15.62	15.60	15.54	16.50	15.40	15.39	15.48	16.50
	36 (RB_Pos:39)	15.66	15.40	15.42	16.50	15.69	15.58	15.29	16.50
	75 (RB_Pos:0)	15.68	15.36	15.61	16.50	15.60	15.41	15.26	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	15.49	15.49	15.42	16.50	15.21	15.32	15.36	16.50
	1 (RB_Pos:25)	15.53	15.28	15.37	16.50	15.57	15.22	15.36	16.50
	1 (RB_Pos:49)	15.66	15.53	15.55	16.50	15.44	15.51	15.66	16.50
	25 (RB_Pos:0)	15.31	15.62	15.56	16.50	15.40	15.40	15.54	16.50
	25 (RB_Pos:12)	15.51	15.45	15.43	16.50	15.59	15.50	15.29	16.50
	25 (RB_Pos:25)	15.63	15.59	15.25	16.50	15.52	15.32	15.68	16.50
	50 (RB_Pos:0)	15.67	15.50	15.56	16.50	15.24	15.52	15.48	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	15.37	15.31	15.45	16.50	15.56	15.34	15.54	16.50
	1 (RB_Pos:13)	15.64	15.26	15.27	16.50	15.59	15.64	15.31	16.50
	1 (RB_Pos:24)	15.48	15.51	15.41	16.50	15.42	15.58	15.50	16.50
	12 (RB_Pos:0)	15.50	15.57	15.27	16.50	15.62	15.61	15.49	16.50
	12 (RB_Pos:6)	15.54	15.45	15.28	16.50	15.28	15.41	15.55	16.50
	12 (RB_Pos:13)	15.20	15.56	15.40	16.50	15.65	15.59	15.55	16.50
	25 (RB_Pos:0)	15.50	15.61	15.60	16.50	15.43	15.58	15.37	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	15.65	15.44	15.68	16.50	15.64	15.48	15.21	16.50
	1 (RB_Pos:8)	15.35	15.56	15.46	16.50	15.36	15.22	15.22	16.50
	1 (RB_Pos:14)	15.38	15.67	15.32	16.50	15.60	15.55	15.47	16.50
	8 (RB_Pos:0)	15.59	15.38	15.38	16.50	15.69	15.65	15.32	16.50
	8 (RB_Pos:3)	15.54	15.36	15.39	16.50	15.35	15.27	15.51	16.50



Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	19957	20175	20393	19957		20175	20393		
	8 (RB_Pos:7)	15.35	15.57	15.23	16.50	15.68	15.54	15.23	16.50
	15 (RB_Pos:0)	15.40	15.26	15.22	16.50	15.50	15.56	15.63	16.50
1.4 MHz	1 (RB_Pos:0)	15.47	15.49	15.36	16.50	15.41	15.64	15.29	16.50
	1 (RB_Pos:3)	15.53	15.60	15.50	16.50	15.29	15.22	15.37	16.50
	1 (RB_Pos:5)	15.34	15.47	15.34	16.50	15.68	15.33	15.64	16.50
	3 (RB_Pos:0)	15.34	15.68	15.63	16.50	15.60	15.28	15.53	16.50
	3 (RB_Pos:1)	15.25	15.59	15.39	16.50	15.45	15.62	15.30	16.50
	3 (RB_Pos:3)	15.65	15.52	15.43	16.50	15.30	15.68	15.27	16.50
	6 (RB_Pos:0)	15.33	15.61	15.34	16.50	15.54	15.60	15.57	16.50

### 8.7.18 Power Reduced Level 4 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	20050	20175	20300	20050		20175	20300		
20 MHz	1 (RB_Pos:0)	14.21	14.34	14.46	15.50	14.64	14.66	14.66	15.50
	1 (RB_Pos:50)	14.45	14.51	14.38	15.50	14.28	14.51	14.33	15.50
	1 (RB_Pos:99)	14.43	14.24	14.48	15.50	14.34	14.37	14.37	15.50
	50 (RB_Pos:0)	14.38	14.35	14.35	15.50	14.43	14.58	14.62	15.50
	50 (RB_Pos:25)	14.61	14.34	14.50	15.50	14.28	14.63	14.63	15.50
	50 (RB_Pos:50)	14.41	14.58	14.49	15.50	14.31	14.32	14.54	15.50
	100 (RB_Pos:0)	14.49	<b>14.70</b>	14.21	15.50	14.52	14.31	14.28	15.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	20025	20175	20325	20025		20175	20325		
15 MHz	1 (RB_Pos:0)	14.57	14.48	14.30	15.50	14.35	14.40	14.45	15.50
	1 (RB_Pos:38)	14.46	14.34	14.67	15.50	14.25	14.75	14.36	15.50
	1 (RB_Pos:74)	14.22	14.57	14.54	15.50	14.20	14.40	14.34	15.50
	36 (RB_Pos:0)	14.54	14.26	14.34	15.50	14.37	14.35	14.41	15.50
	36 (RB_Pos:20)	14.38	14.62	14.35	15.50	14.32	14.53	14.42	15.50
	36 (RB_Pos:39)	14.24	14.49	14.64	15.50	14.60	14.42	14.49	15.50
	75 (RB_Pos:0)	14.51	14.49	14.55	15.50	14.45	14.70	14.53	15.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	20000	20175	20350	20000		20175	20350		
10 MHz	1 (RB_Pos:0)	14.39	14.63	14.39	15.50	14.65	14.48	14.59	15.50
	1 (RB_Pos:25)	14.62	14.42	14.39	15.50	14.59	14.54	14.38	15.50

	1 (RB_Pos:49)	14.27	14.32	14.51	15.50	14.40	14.29	14.44	15.50
	25 (RB_Pos:0)	14.31	14.59	14.63	15.50	14.56	14.65	14.35	15.50
	25 (RB_Pos:12)	14.53	14.35	14.54	15.50	14.21	14.29	14.32	15.50
	25 (RB_Pos:25)	14.58	14.24	14.32	15.50	14.40	14.28	14.66	15.50
	50 (RB_Pos:0)	14.40	14.40	14.51	15.50	14.27	14.21	14.35	15.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	14.33	14.69	14.63	15.50	14.22	14.50	14.62	15.50
	1 (RB_Pos:13)	14.52	14.69	14.31	15.50	14.59	14.26	14.55	15.50
	1 (RB_Pos:24)	14.37	14.38	14.44	15.50	14.57	14.55	14.37	15.50
	12 (RB_Pos:0)	14.52	14.37	14.55	15.50	14.20	14.42	14.22	15.50
	12 (RB_Pos:6)	14.29	14.65	14.42	15.50	14.60	14.29	14.29	15.50
	12 (RB_Pos:13)	14.64	14.45	14.56	15.50	14.41	14.44	14.57	15.50
	25 (RB_Pos:0)	14.66	14.39	14.35	15.50	14.59	14.65	14.21	15.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	14.37	14.21	14.21	15.50	14.39	14.45	14.24	15.50
	1 (RB_Pos:8)	14.42	14.26	14.54	15.50	14.64	14.66	14.28	15.50
	1 (RB_Pos:14)	14.56	14.43	14.55	15.50	14.32	14.31	14.29	15.50
	8 (RB_Pos:0)	14.22	14.27	14.33	15.50	14.52	14.36	14.50	15.50
	8 (RB_Pos:3)	14.45	14.42	14.21	15.50	14.30	14.31	14.50	15.50
	8 (RB_Pos:7)	14.40	14.33	14.66	15.50	14.43	14.64	14.58	15.50
	15 (RB_Pos:0)	14.44	14.35	14.67	15.50	14.21	14.61	14.40	15.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19957	20175	20393		19957	20175	20393	
1.4 MHz	1 (RB_Pos:0)	14.61	14.51	14.67	15.50	14.28	14.21	14.43	15.50
	1 (RB_Pos:3)	14.51	14.30	14.31	15.50	14.34	14.64	14.52	15.50
	1 (RB_Pos:5)	14.47	14.57	14.43	15.50	14.56	14.22	14.66	15.50
	3 (RB_Pos:0)	14.30	14.43	14.38	15.50	14.41	14.49	14.36	15.50
	3 (RB_Pos:1)	14.29	14.26	14.52	15.50	14.29	14.28	14.64	15.50
	3 (RB_Pos:3)	14.67	14.35	14.23	15.50	14.35	14.66	14.27	15.50
	6 (RB_Pos:0)	14.33	14.66	14.43	15.50	14.42	14.20	14.23	15.50

## 8.7.19 Power Reduced Level 5 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	<b>20.08</b>	20.06	20.07	21.00	19.91	20.15	19.91	21.00
	1 (RB_Pos:50)	19.49	19.92	19.63	21.00	19.74	19.74	19.72	21.00
	1 (RB_Pos:99)	19.67	19.57	19.77	21.00	19.58	19.65	19.78	21.00
	50 (RB_Pos:0)	19.89	20.07	20.12	21.00	19.64	20.04	19.83	21.00
	50 (RB_Pos:25)	19.48	20.00	20.08	21.00	19.66	20.04	20.06	21.00
	50 (RB_Pos:50)	19.73	19.65	20.00	21.00	19.64	19.67	19.86	21.00
	100 (RB_Pos:0)	19.91	19.79	19.65	21.00	19.82	19.66	19.73	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	19.80	19.84	19.72	21.00	19.66	19.68	19.67	21.00
	1 (RB_Pos:38)	19.49	20.02	19.75	21.00	19.46	20.12	19.75	21.00
	1 (RB_Pos:74)	19.62	19.85	19.72	21.00	19.66	19.88	19.68	21.00
	36 (RB_Pos:0)	19.59	19.68	19.89	21.00	19.63	19.74	19.75	21.00
	36 (RB_Pos:20)	19.80	19.95	19.88	21.00	19.64	19.76	19.74	21.00
	36 (RB_Pos:39)	19.86	19.78	19.94	21.00	19.83	19.88	19.81	21.00
	75 (RB_Pos:0)	19.82	20.06	19.84	21.00	19.95	19.95	19.91	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	20.13	19.95	19.93	21.00	20.01	19.78	19.82	21.00
	1 (RB_Pos:25)	19.93	20.03	19.72	21.00	20.02	19.98	19.87	21.00
	1 (RB_Pos:49)	19.82	19.60	19.80	21.00	19.71	19.68	19.77	21.00
	25 (RB_Pos:0)	20.02	19.87	19.62	21.00	19.80	20.05	19.63	21.00
	25 (RB_Pos:12)	19.45	19.67	19.69	21.00	19.54	19.77	19.64	21.00
	25 (RB_Pos:25)	19.89	19.70	20.00	21.00	19.88	19.67	19.91	21.00
	50 (RB_Pos:0)	19.70	19.64	19.85	21.00	19.54	19.66	19.55	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	19.44	19.79	20.04	21.00	19.47	19.77	19.90	21.00
	1 (RB_Pos:13)	19.83	19.64	20.01	21.00	19.93	19.58	19.83	21.00
	1 (RB_Pos:24)	19.86	19.86	19.64	21.00	19.91	19.81	19.86	21.00
	12 (RB_Pos:0)	19.52	19.84	19.45	21.00	19.58	19.82	19.48	21.00
	12 (RB_Pos:6)	19.83	19.75	19.78	21.00	19.89	19.59	19.76	21.00
	12 (RB_Pos:13)	19.91	19.81	20.00	21.00	19.68	19.90	19.99	21.00

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	19965	20175		20385	19965	20175	
25 (RB_Pos:0)		20.06	19.86	19.62	21.00	20.01	19.98	19.70	21.00
3.0 MHz	1 (RB_Pos:0)	19.74	19.85	19.53	21.00	19.79	19.79	19.73	21.00
	1 (RB_Pos:8)	19.94	19.92	19.53	21.00	19.98	20.10	19.71	21.00
	1 (RB_Pos:14)	19.52	19.68	19.77	21.00	19.81	19.61	19.73	21.00
	8 (RB_Pos:0)	19.74	19.56	19.73	21.00	19.78	19.70	19.79	21.00
	8 (RB_Pos:3)	19.74	19.76	19.97	21.00	19.77	19.64	19.71	21.00
	8 (RB_Pos:7)	19.65	20.10	19.78	21.00	19.91	19.86	19.91	21.00
	15 (RB_Pos:0)	19.69	19.88	19.63	21.00	19.41	19.95	19.68	21.00
1.4 MHz	1 (RB_Pos:0)	19.74	19.43	19.66	21.00	19.74	19.49	19.81	21.00
	1 (RB_Pos:3)	19.58	20.13	19.95	21.00	19.78	19.89	19.90	21.00
	1 (RB_Pos:5)	20.00	19.68	20.13	21.00	19.90	19.63	20.13	21.00
	3 (RB_Pos:0)	19.81	19.70	19.72	21.00	19.78	19.70	19.76	21.00
	3 (RB_Pos:1)	19.70	19.52	19.96	21.00	19.64	19.62	19.90	21.00
	3 (RB_Pos:3)	19.65	19.98	19.65	21.00	19.62	20.10	19.70	21.00
	6 (RB_Pos:0)	19.81	19.55	19.58	21.00	19.83	19.69	19.47	21.00

### 8.7.20 Power Reduced Level 2&3 of LTE Band 5

FDD LTE Band 5									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	20450	20525		20600	20450	20525	
10 MHz	1 (RB_Pos:0)	<b>22.45</b>	22.40	22.33	23.80	21.39	21.44	21.83	22.80
	1 (RB_Pos:25)	22.34	22.42	22.37	23.80	21.54	21.39	21.82	22.80
	1 (RB_Pos:49)	22.43	22.35	22.39	23.80	21.56	21.38	21.84	22.80
	25 (RB_Pos:0)	21.37	21.44	21.57	22.80	20.41	20.51	20.49	21.80
	25 (RB_Pos:12)	21.49	21.47	21.62	22.80	20.60	20.59	20.58	21.80
	25 (RB_Pos:25)	21.54	21.60	21.45	22.80	20.57	20.64	20.58	21.80
	50 (RB_Pos:0)	21.54	21.53	21.46	22.80	20.52	20.51	20.59	21.80
5MHz	1 (RB_Pos:0)	22.38	22.18	22.29	23.80	21.91	21.49	21.67	22.80
	1 (RB_Pos:13)	22.48	22.42	22.50	23.80	21.90	21.67	21.82	22.80
	1 (RB_Pos:24)	22.35	22.35	22.43	23.80	21.92	21.61	21.60	22.80

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
	12 (RB_Pos:0)	21.41	21.44	21.39	22.80	20.54	20.44	20.63	21.80
	12 (RB_Pos:6)	21.45	21.47	21.60	22.80	20.74	20.59	20.76	21.80
	12 (RB_Pos:13)	21.48	21.50	21.47	22.80	20.57	20.68	20.53	21.80
	25 (RB_Pos:0)	21.52	21.63	21.48	22.80	20.48	20.55	20.49	21.80
3.0 MHz	1 (RB_Pos:0)	22.24	22.29	22.38	23.80	21.86	21.45	21.38	22.80
	1 (RB_Pos:8)	22.51	22.47	22.54	23.80	21.88	21.54	21.50	22.80
	1 (RB_Pos:14)	22.38	22.52	22.31	23.80	21.82	21.56	21.27	22.80
	8 (RB_Pos:0)	21.54	21.43	21.46	22.80	20.56	20.52	20.60	21.80
	8 (RB_Pos:3)	21.48	21.51	21.47	22.80	20.61	20.66	20.60	21.80
	8 (RB_Pos:7)	21.42	21.55	21.60	22.80	20.59	20.57	20.55	21.80
	15 (RB_Pos:0)	21.54	21.51	21.41	22.80	20.58	20.46	20.61	21.80
1.4MHz	1 (RB_Pos:0)	22.27	22.41	22.28	23.80	21.51	21.73	21.37	22.80
	1 (RB_Pos:3)	22.32	22.50	22.46	23.80	21.52	21.77	21.42	22.80
	1 (RB_Pos:5)	22.40	22.31	22.41	23.80	21.59	21.89	21.46	22.80
	3 (RB_Pos:0)	22.26	22.30	22.36	23.80	21.47	21.62	21.67	22.80
	3 (RB_Pos:1)	22.36	22.31	22.43	23.80	21.50	21.72	21.61	22.80
	3 (RB_Pos:3)	22.31	22.37	22.38	23.80	21.54	21.76	21.45	22.80
	6 (RB_Pos:0)	21.43	21.42	21.48	22.80	20.59	20.35	20.54	21.80

### 8.7.21 Power Reduced Level 4 of LTE Band 5

FDD LTE Band 5									
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)	<b>21.41</b>	21.33	21.31	22.80	21.08	20.94	21.39	22.30
	1 (RB_Pos:25)	21.25	21.27	21.31	22.80	21.01	21.10	21.46	22.30
	1 (RB_Pos:49)	21.36	21.35	21.26	22.80	21.12	21.06	21.38	22.30
	25 (RB_Pos:0)	20.44	20.33	20.46	22.30	20.10	20.01	20.08	21.80
	25 (RB_Pos:12)	20.53	20.56	20.57	22.30	20.26	20.08	20.25	21.80
	25 (RB_Pos:25)	20.43	20.56	20.49	22.30	20.32	20.22	20.20	21.80
	50 (RB_Pos:0)	20.96	20.96	21.03	22.30	20.74	20.56	20.64	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	

5MHz	1 (RB_Pos:0)	21.23	21.32	21.28	22.80	21.48	21.06	21.12	22.30
	1 (RB_Pos:13)	21.55	21.50	21.42	22.80	21.70	21.39	21.51	22.30
	1 (RB_Pos:24)	21.34	21.29	21.39	22.80	21.48	21.37	21.16	22.30
	12 (RB_Pos:0)	20.42	20.44	20.48	22.30	20.08	20.20	20.17	21.80
	12 (RB_Pos:6)	20.42	20.52	20.58	22.30	20.35	20.16	20.12	21.80
	12 (RB_Pos:13)	20.41	20.53	20.58	22.30	20.19	20.26	20.39	21.80
	25 (RB_Pos:0)	21.02	21.01	21.16	22.30	20.61	20.63	20.73	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	21.25	21.39	21.30	22.80	21.20	21.13	21.02	22.30
	1 (RB_Pos:8)	21.50	21.59	21.41	22.80	21.65	21.11	20.99	22.30
	1 (RB_Pos:14)	21.41	21.38	21.41	22.80	21.45	20.93	21.03	22.30
	8 (RB_Pos:0)	20.37	20.34	20.40	22.30	20.15	20.19	20.20	21.80
	8 (RB_Pos:3)	20.48	20.61	20.50	22.30	20.14	20.07	20.33	21.80
	8 (RB_Pos:7)	20.57	20.53	20.41	22.30	20.20	20.20	20.19	21.80
	15 (RB_Pos:0)	20.95	21.15	21.00	22.30	20.56	20.71	20.63	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4MHz	1 (RB_Pos:0)	21.22	21.27	21.28	22.80	20.94	21.36	21.19	22.30
	1 (RB_Pos:3)	21.33	21.45	21.44	22.80	21.26	21.33	21.10	22.30
	1 (RB_Pos:5)	21.41	21.29	21.38	22.80	21.10	21.33	20.97	22.30
	3 (RB_Pos:0)	21.37	21.27	21.36	22.80	20.99	21.18	21.38	22.30
	3 (RB_Pos:1)	21.32	21.38	21.45	22.80	21.01	21.42	21.31	22.30
	3 (RB_Pos:3)	21.21	21.46	21.27	22.80	21.05	21.18	21.18	22.30
	6 (RB_Pos:0)	20.88	21.01	20.87	22.30	20.75	20.45	20.71	21.80

### 8.7.22 Power Reduced Level 1 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	16.49	16.46	16.65	17.50	16.29	16.56	16.23	17.50
	1 (RB_Pos:50)	16.57	16.56	16.34	17.50	16.47	16.64	16.37	17.50
	1 (RB_Pos:99)	16.52	16.60	16.39	17.50	16.41	16.31	16.24	17.50
	50 (RB_Pos:0)	16.56	16.39	16.40	17.50	16.37	16.28	16.25	17.50
	50 (RB_Pos:25)	16.52	16.29	<b>16.67</b>	17.50	16.48	16.41	16.29	17.50
	50 (RB_Pos:50)	16.43	16.35	16.60	17.50	16.51	16.42	16.52	17.50
	100 (RB_Pos:0)	16.60	16.29	16.26	17.50	16.42	16.26	16.33	17.50
Bandwidth	RB Set	Power (dBm)							

(MHz)	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	16.31	16.33	16.51	17.50	16.56	16.62	16.23	17.50
	1 (RB_Pos:38)	16.69	16.34	16.36	17.50	16.54	16.26	16.55	17.50
	1 (RB_Pos:74)	16.27	16.68	16.68	17.50	16.56	16.51	16.58	17.50
	36 (RB_Pos:0)	16.69	16.52	16.30	17.50	16.57	16.60	16.40	17.50
	36 (RB_Pos:20)	16.29	16.22	16.28	17.50	16.21	16.60	16.67	17.50
	36 (RB_Pos:39)	16.52	16.44	16.53	17.50	16.50	16.61	16.29	17.50
	75 (RB_Pos:0)	16.56	16.54	16.55	17.50	16.33	16.67	16.55	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
10MHz	1 (RB_Pos:0)	16.40	16.57	16.22	17.50	16.24	16.40	16.38	17.50
	1 (RB_Pos:25)	16.36	16.47	16.33	17.50	16.33	16.21	16.58	17.50
	1 (RB_Pos:49)	16.37	16.29	16.59	17.50	16.31	16.64	16.55	17.50
	25 (RB_Pos:0)	16.37	16.68	16.30	17.50	16.27	16.45	16.37	17.50
	25 (RB_Pos:12)	16.43	16.46	16.59	17.50	16.54	16.69	16.56	17.50
	25 (RB_Pos:25)	16.29	16.28	16.23	17.50	16.40	16.61	16.28	17.50
	50 (RB_Pos:0)	16.56	16.59	16.27	17.50	16.49	16.49	16.30	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
5MHz	1 (RB_Pos:0)	16.68	16.60	16.35	17.50	16.50	16.38	16.49	17.50
	1 (RB_Pos:13)	16.61	16.55	16.54	17.50	16.36	16.30	16.62	17.50
	1 (RB_Pos:24)	16.37	16.65	16.33	17.50	16.29	16.53	16.34	17.50
	12 (RB_Pos:0)	16.35	16.68	16.39	17.50	16.31	16.46	16.55	17.50
	12 (RB_Pos:6)	16.66	16.46	16.27	17.50	16.30	16.45	16.65	17.50
	12 (RB_Pos:13)	16.64	16.29	16.21	17.50	16.29	16.41	16.59	17.50
	25 (RB_Pos:0)	16.59	16.47	16.44	17.50	16.60	16.49	16.21	17.50

### 8.7.23 Power Reduced Level 2&3 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	20850	21100	21350	20850	21100	21350	20850	21100	21350
20MHz	1 (RB_Pos:0)	15.49	15.61	<b>15.68</b>	16.50	15.29	15.21	15.60	16.50
	1 (RB_Pos:50)	15.34	15.33	15.22	16.50	15.30	15.42	15.21	16.50
	1 (RB_Pos:99)	15.35	15.28	15.24	16.50	15.63	15.61	15.40	16.50
	50 (RB_Pos:0)	15.49	15.45	15.30	16.50	15.41	15.30	15.57	16.50
	50 (RB_Pos:25)	15.54	15.51	15.62	16.50	15.39	15.45	15.51	16.50

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	20825	21100	21375	20825		21100	21375		
	50 (RB_Pos:50)	15.35	15.37	15.39	16.50	15.39	15.42	15.37	16.50
	100 (RB_Pos:0)	15.66	15.23	15.49	16.50	15.43	15.32	15.50	16.50
15MHz	1 (RB_Pos:0)	15.60	15.67	15.36	16.50	15.69	15.68	15.47	16.50
	1 (RB_Pos:38)	15.35	15.35	15.46	16.50	15.32	15.66	15.68	16.50
	1 (RB_Pos:74)	15.37	15.31	15.43	16.50	15.41	15.44	15.49	16.50
	36 (RB_Pos:0)	15.23	15.38	15.23	16.50	15.47	15.28	15.64	16.50
	36 (RB_Pos:20)	15.40	15.59	15.36	16.50	15.59	15.60	15.30	16.50
	36 (RB_Pos:39)	15.49	15.52	15.38	16.50	15.60	15.49	15.40	16.50
	75 (RB_Pos:0)	15.49	15.49	15.39	16.50	15.64	15.70	15.36	16.50
10MHz	1 (RB_Pos:0)	15.30	15.22	15.30	16.50	15.62	15.42	15.22	16.50
	1 (RB_Pos:25)	15.62	15.66	15.60	16.50	15.34	15.52	15.59	16.50
	1 (RB_Pos:49)	15.27	15.37	15.53	16.50	15.68	15.37	15.33	16.50
	25 (RB_Pos:0)	15.22	15.56	15.23	16.50	15.42	15.36	15.54	16.50
	25 (RB_Pos:12)	15.48	15.38	15.62	16.50	15.53	15.69	15.37	16.50
	25 (RB_Pos:25)	15.26	15.51	15.35	16.50	15.31	15.66	15.24	16.50
	50 (RB_Pos:0)	15.69	15.32	15.27	16.50	15.53	15.56	15.22	16.50
5MHz	1 (RB_Pos:0)	15.34	15.44	15.34	16.50	15.59	15.31	15.54	16.50
	1 (RB_Pos:13)	15.57	15.43	15.44	16.50	15.34	15.64	15.60	16.50
	1 (RB_Pos:24)	15.50	15.47	15.37	16.50	15.30	15.21	15.26	16.50
	12 (RB_Pos:0)	15.44	15.57	15.29	16.50	15.56	15.24	15.63	16.50
	12 (RB_Pos:6)	15.40	15.70	15.54	16.50	15.29	15.26	15.54	16.50
	12 (RB_Pos:13)	15.34	15.40	15.40	16.50	15.27	15.47	15.63	16.50
	25 (RB_Pos:0)	15.25	15.35	15.49	16.50	15.70	15.50	15.31	16.50

### 8.7.24 Power Reduced Level 4 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
Channel	20850	21100	21350	20850		21100	21350		
20MHz	1 (RB_Pos:0)	14.32	14.29	<b>14.67</b>	15.50	14.69	14.62	14.45	15.50
	1 (RB_Pos:50)	14.62	14.59	14.23	15.50	14.30	14.73	14.40	15.50



	1 (RB_Pos:99)	14.54	14.52	14.28	15.50	14.37	14.34	14.60	15.50
	50 (RB_Pos:0)	14.29	14.46	14.45	15.50	14.44	14.69	14.46	15.50
	50 (RB_Pos:25)	14.42	14.39	14.62	15.50	14.32	14.47	14.24	15.50
	50 (RB_Pos:50)	14.54	14.25	14.50	15.50	14.27	14.51	14.47	15.50
	100 (RB_Pos:0)	14.45	14.36	14.36	15.50	14.54	14.46	14.24	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	
15MHz	1 (RB_Pos:0)	14.60	14.23	14.30	15.50	14.62	14.70	14.53	15.50
	1 (RB_Pos:38)	14.49	14.59	14.36	15.50	14.64	14.66	14.60	15.50
	1 (RB_Pos:74)	14.51	14.50	14.49	15.50	14.67	14.41	14.23	15.50
	36 (RB_Pos:0)	14.26	14.56	14.30	15.50	14.68	14.30	14.53	15.50
	36 (RB_Pos:20)	14.42	14.62	14.41	15.50	14.26	14.59	14.57	15.50
	36 (RB_Pos:39)	14.23	14.41	14.44	15.50	14.58	14.67	14.67	15.50
	75 (RB_Pos:0)	14.31	14.33	14.31	15.50	14.24	14.31	14.29	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	
10MHz	1 (RB_Pos:0)	14.33	14.53	14.25	15.50	14.23	14.47	14.47	15.50
	1 (RB_Pos:25)	14.41	14.25	14.61	15.50	14.21	14.65	14.49	15.50
	1 (RB_Pos:49)	14.41	14.35	14.23	15.50	14.63	14.28	14.39	15.50
	25 (RB_Pos:0)	14.52	14.57	14.67	15.50	14.37	14.59	14.66	15.50
	25 (RB_Pos:12)	14.51	14.35	14.37	15.50	14.34	14.41	14.23	15.50
	25 (RB_Pos:25)	14.32	14.23	14.36	15.50	14.54	14.40	14.31	15.50
	50 (RB_Pos:0)	14.52	14.22	14.27	15.50	14.41	14.41	14.59	15.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	14.53	14.66	14.46	15.50	14.32	14.34	14.42	15.50
	1 (RB_Pos:13)	14.29	14.62	14.29	15.50	14.68	14.30	14.61	15.50
	1 (RB_Pos:24)	14.65	14.69	14.36	15.50	14.35	14.47	14.70	15.50
	12 (RB_Pos:0)	14.28	14.31	14.53	15.50	14.46	14.35	14.37	15.50
	12 (RB_Pos:6)	14.69	14.36	14.60	15.50	14.54	14.28	14.46	15.50
	12 (RB_Pos:13)	14.69	14.28	14.38	15.50	14.25	14.33	14.44	15.50
	25 (RB_Pos:0)	14.34	14.28	14.27	15.50	14.45	14.21	14.66	15.50

### 8.7.25 Power Reduced Level 5&6 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	

					(dBm)				(dBm)
20MHz	1 (RB_Pos:0)	20.20	20.30	<b>20.43</b>	21.50	20.40	20.49	20.16	21.50
	1 (RB_Pos:50)	19.99	20.37	20.13	21.50	20.17	20.42	20.12	21.50
	1 (RB_Pos:99)	20.05	20.02	20.40	21.50	20.13	19.96	20.39	21.50
	50 (RB_Pos:0)	19.98	20.11	20.19	21.50	20.31	20.46	20.17	21.50
	50 (RB_Pos:25)	20.29	20.30	20.47	21.50	19.97	20.13	19.92	21.50
	50 (RB_Pos:50)	19.99	20.29	20.35	21.50	19.98	20.37	20.32	21.50
	100 (RB_Pos:0)	20.22	20.11	20.05	21.50	20.20	20.12	19.97	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	
15MHz	1 (RB_Pos:0)	20.40	20.56	20.17	21.50	20.40	20.39	20.41	21.50
	1 (RB_Pos:38)	20.54	20.33	20.26	21.50	20.47	20.30	20.31	21.50
	1 (RB_Pos:74)	20.38	20.06	19.89	21.50	20.34	20.04	20.09	21.50
	36 (RB_Pos:0)	20.48	20.10	20.33	21.50	20.55	20.14	20.22	21.50
	36 (RB_Pos:20)	20.15	20.47	20.40	21.50	19.88	20.27	20.45	21.50
	36 (RB_Pos:39)	20.20	20.29	20.31	21.50	20.20	20.36	20.30	21.50
	75 (RB_Pos:0)	20.02	19.97	19.96	21.50	20.08	20.15	20.16	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	
10MHz	1 (RB_Pos:0)	20.09	20.10	20.25	21.50	19.96	20.31	20.09	21.50
	1 (RB_Pos:25)	19.97	20.33	20.20	21.50	19.85	20.38	20.37	21.50
	1 (RB_Pos:49)	20.47	20.02	20.02	21.50	20.35	20.02	20.07	21.50
	25 (RB_Pos:0)	20.27	20.32	20.54	21.50	20.24	20.43	20.47	21.50
	25 (RB_Pos:12)	20.03	20.11	20.09	21.50	19.99	20.07	19.89	21.50
	25 (RB_Pos:25)	20.44	20.17	20.13	21.50	20.20	20.09	19.95	21.50
	50 (RB_Pos:0)	20.19	20.31	20.30	21.50	20.08	20.24	20.42	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	
5MHz	1 (RB_Pos:0)	20.21	20.05	20.31	21.50	20.03	20.05	20.24	21.50
	1 (RB_Pos:13)	20.30	20.19	20.32	21.50	20.48	20.10	20.48	21.50
	1 (RB_Pos:24)	19.98	20.22	20.44	21.50	20.12	20.19	20.54	21.50
	12 (RB_Pos:0)	20.23	20.06	20.11	21.50	20.11	20.19	20.22	21.50
	12 (RB_Pos:6)	20.25	19.92	20.26	21.50	20.25	20.07	20.07	21.50
	12 (RB_Pos:13)	19.98	19.95	20.06	21.50	20.09	20.01	20.24	21.50
	25 (RB_Pos:0)	20.21	19.82	20.43	21.50	20.25	20.06	20.35	21.50

## 8.7.26 Power Reduced Level 2&amp;3 of LTE Band 26

TDD LTE Band 26									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26765	26865	26965		26765	26865	26965	
15MHz	1 (RB_Pos:0)	22.37	22.55	22.54	23.80	21.43	22.00	21.96	22.80
	1 (RB_Pos:50)	22.45	22.48	<b>22.58</b>	23.80	21.53	22.00	21.95	22.80
	1 (RB_Pos:99)	22.47	22.55	22.31	23.80	21.72	21.96	22.05	22.80
	50 (RB_Pos:0)	21.52	21.50	21.60	22.80	20.46	20.55	20.59	21.80
	50 (RB_Pos:25)	21.53	21.50	21.71	22.80	20.66	20.59	20.79	21.80
	50 (RB_Pos:50)	21.45	21.63	21.61	22.80	20.62	20.67	20.57	21.80
	100 (RB_Pos:0)	21.43	21.63	21.41	22.80	20.42	20.61	20.50	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26740	26865	26990		26740	26865	26990	
10MHz	1 (RB_Pos:0)	22.27	22.41	22.52	23.80	21.33	21.78	21.83	22.80
	1 (RB_Pos:38)	22.43	22.32	22.32	23.80	21.33	21.81	21.89	22.80
	1 (RB_Pos:74)	22.54	22.36	22.22	23.80	21.47	21.83	21.77	22.80
	36 (RB_Pos:0)	21.26	21.42	21.38	22.80	20.45	20.42	20.45	21.80
	36 (RB_Pos:20)	21.57	21.57	21.61	22.80	20.63	20.47	20.49	21.80
	36 (RB_Pos:39)	21.49	21.48	21.44	22.80	20.46	20.63	20.48	21.80
	75 (RB_Pos:0)	21.38	21.35	21.45	22.80	20.43	20.38	20.52	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26715	26865	27015		26715	26865	27015	
5MHz	1 (RB_Pos:0)	22.22	22.53	22.44	23.80	21.53	22.00	21.91	22.80
	1 (RB_Pos:25)	22.44	22.58	22.42	23.80	21.82	22.18	21.76	22.80
	1 (RB_Pos:49)	22.42	22.62	22.47	23.80	21.74	22.08	21.80	22.80
	25 (RB_Pos:0)	21.43	21.42	21.57	22.80	20.53	20.56	20.55	21.80
	25 (RB_Pos:12)	21.61	21.61	21.67	22.80	20.68	20.69	20.79	21.80
	25 (RB_Pos:25)	21.54	21.49	21.65	22.80	20.65	20.65	20.63	21.80
	50 (RB_Pos:0)	21.51	21.56	21.52	22.80	20.63	20.56	20.46	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26705	26865	27025		26705	26865	27025	
3MHz	1 (RB_Pos:0)	22.29	22.34	22.60	23.80	21.42	21.97	21.66	22.80
	1 (RB_Pos:13)	22.57	22.42	22.67	23.80	21.41	22.03	21.54	22.80
	1 (RB_Pos:24)	22.33	22.36	22.41	23.80	21.52	21.96	21.47	22.80
	12 (RB_Pos:0)	21.39	21.51	21.50	22.80	20.64	20.58	20.54	21.80
	12 (RB_Pos:6)	21.58	21.53	21.62	22.80	20.62	20.76	20.59	21.80
	12 (RB_Pos:13)	21.58	21.53	21.56	22.80	20.56	20.67	20.61	21.80

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	26697	26865		27033	26697	26865	
1.4MHz	25 (RB_Pos:0)	21.44	21.55	21.58	22.80	20.66	20.57	20.50	21.80
	1 (RB_Pos:0)	22.16	22.29	22.47	23.80	21.41	21.47	21.83	22.80
	1 (RB_Pos:13)	22.41	22.36	22.52	23.80	21.44	21.68	21.96	22.80
	1 (RB_Pos:24)	22.24	22.47	22.34	23.80	21.40	21.56	21.87	22.80
	12 (RB_Pos:0)	22.25	22.43	22.40	23.80	21.50	21.42	21.74	22.80
	12 (RB_Pos:6)	22.42	22.45	22.33	23.80	21.68	21.70	21.63	22.80
	12 (RB_Pos:13)	22.47	22.36	22.32	23.80	21.59	21.54	21.61	22.80
25 (RB_Pos:0)	21.52	21.34	21.44	22.80	20.67	20.46	20.48	21.80	

### 8.7.27 Power Reduced Level 4 of LTE Band 26

TDD LTE Band 26									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	26765	26865		26965	26765	26865	
15MHz	1 (RB_Pos:0)	21.47	21.39	21.57	22.80	20.43	21.00	20.88	21.80
	1 (RB_Pos:50)	21.52	21.40	<b>21.64</b>	22.80	20.68	20.99	20.98	21.80
	1 (RB_Pos:99)	21.54	21.50	21.39	22.80	20.64	20.96	20.98	21.80
	50 (RB_Pos:0)	20.52	20.49	20.50	22.30	19.51	19.55	19.59	21.30
	50 (RB_Pos:25)	20.53	20.58	20.74	22.30	19.71	19.63	19.85	21.30
	50 (RB_Pos:50)	20.51	20.62	20.68	22.30	19.46	19.63	19.58	21.30
	100 (RB_Pos:0)	20.96	21.15	20.90	22.30	19.99	20.15	19.98	21.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	26740	26865		26990	26740	26865	
10MHz	1 (RB_Pos:0)	21.33	21.33	21.41	22.80	20.33	20.74	20.88	21.80
	1 (RB_Pos:38)	21.42	21.29	21.40	22.80	20.34	20.93	20.75	21.80
	1 (RB_Pos:74)	21.53	21.42	21.22	22.80	20.60	20.92	20.80	21.80
	36 (RB_Pos:0)	20.27	20.36	20.47	22.30	19.42	19.36	19.56	21.30
	36 (RB_Pos:20)	20.47	20.52	20.59	22.30	19.52	19.57	19.54	21.30
	36 (RB_Pos:39)	20.48	20.44	20.54	22.30	19.45	19.45	19.57	21.30
	75 (RB_Pos:0)	20.91	20.92	20.88	22.30	19.99	19.94	19.99	21.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	26715	26865		27015	26715	26865	
5MHz	1 (RB_Pos:0)	21.28	21.39	21.42	22.80	20.56	20.89	20.83	21.80
	1 (RB_Pos:25)	21.50	21.50	21.41	22.80	20.72	21.12	20.91	21.80
	1 (RB_Pos:49)	21.37	21.44	21.48	22.80	20.60	21.09	20.70	21.80

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26705	26865	27025		26705	26865	27025	
	25 (RB_Pos:0)	20.49	20.57	20.46	22.30	19.46	19.60	19.62	21.30
	25 (RB_Pos:12)	20.68	20.63	20.63	22.30	19.63	19.76	19.72	21.30
	25 (RB_Pos:25)	20.54	20.52	20.57	22.30	19.69	19.73	19.69	21.30
	50 (RB_Pos:0)	21.04	20.98	21.01	22.30	20.05	19.98	19.90	21.30
3MHz	1 (RB_Pos:0)	21.30	21.34	21.46	22.80	20.41	20.87	20.53	21.80
	1 (RB_Pos:13)	21.55	21.46	21.55	22.80	20.56	20.93	20.67	21.80
	1 (RB_Pos:24)	21.45	21.36	21.49	22.80	20.44	20.91	20.65	21.80
	12 (RB_Pos:0)	20.40	20.58	20.53	22.30	19.50	19.58	19.56	21.30
	12 (RB_Pos:6)	20.56	20.52	20.64	22.30	19.66	19.60	19.60	21.30
	12 (RB_Pos:13)	20.47	20.56	20.58	22.30	19.73	19.57	19.58	21.30
	25 (RB_Pos:0)	21.06	21.10	21.07	22.30	20.14	20.08	19.97	21.30
1.4MHz	1 (RB_Pos:0)	21.21	21.31	21.34	22.80	20.27	20.60	20.82	21.80
	1 (RB_Pos:13)	21.29	21.42	21.50	22.80	20.51	20.55	20.85	21.80
	1 (RB_Pos:24)	21.26	21.35	21.39	22.80	20.46	20.66	20.85	21.80
	12 (RB_Pos:0)	21.28	21.42	21.46	22.80	20.46	20.52	20.59	21.80
	12 (RB_Pos:6)	21.32	21.33	21.37	22.80	20.63	20.61	20.77	21.80
	12 (RB_Pos:13)	21.44	21.45	21.43	22.80	20.60	20.52	20.56	21.80
	25 (RB_Pos:0)	20.95	20.89	20.93	22.30	20.13	20.08	19.88	21.30

### 8.7.28 Power Reduced Level 1 of LTE Band 66

TDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20MHz	1 (RB_Pos:0)	15.89	16.18	16.22	17.00	15.94	16.15	16.13	17.00
	1 (RB_Pos:50)	16.10	15.94	<b>16.33</b>	17.00	16.27	15.88	16.32	17.00
	1 (RB_Pos:99)	15.90	16.19	16.12	17.00	16.02	15.98	15.93	17.00
	50 (RB_Pos:0)	16.24	16.03	16.15	17.00	16.25	16.19	15.88	17.00
	50 (RB_Pos:25)	16.24	15.90	16.31	17.00	16.21	16.01	15.95	17.00
	50 (RB_Pos:50)	16.27	16.17	16.04	17.00	16.13	16.11	15.98	17.00
	100 (RB_Pos:0)	16.01	15.91	16.09	17.00	16.12	16.14	15.89	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	

15MHz	1 (RB_Pos:0)	16.26	16.18	16.18	17.00	15.94	15.99	16.11	17.00
	1 (RB_Pos:38)	15.95	16.28	16.04	17.00	16.07	16.15	16.26	17.00
	1 (RB_Pos:74)	16.22	16.25	16.08	17.00	16.00	16.18	16.15	17.00
	36 (RB_Pos:0)	16.34	16.21	16.01	17.00	16.03	16.01	16.12	17.00
	36 (RB_Pos:20)	16.30	15.92	15.90	17.00	16.17	16.29	15.98	17.00
	36 (RB_Pos:39)	16.18	16.16	16.20	17.00	16.24	16.17	15.95	17.00
	75 (RB_Pos:0)	16.22	16.29	15.99	17.00	16.04	16.10	16.28	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		132022	132322	132622		132022	132322	132622	
10MHz	1 (RB_Pos:0)	16.31	16.03	15.87	17.00	16.16	15.91	16.31	17.00
	1 (RB_Pos:25)	15.95	16.10	16.26	17.00	16.20	16.08	16.34	17.00
	1 (RB_Pos:49)	16.02	16.04	16.19	17.00	16.31	16.26	16.27	17.00
	25 (RB_Pos:0)	16.21	15.91	15.95	17.00	16.12	15.96	16.30	17.00
	25 (RB_Pos:12)	15.86	16.09	15.95	17.00	16.02	16.20	16.33	17.00
	25 (RB_Pos:25)	15.94	16.04	16.12	17.00	16.28	15.99	16.08	17.00
	50 (RB_Pos:0)	16.04	16.05	16.26	17.00	16.33	16.25	16.28	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131997	132322	132647		131997	132322	132647	
5MHz	1 (RB_Pos:0)	16.07	16.33	16.13	17.00	15.91	16.14	16.00	17.00
	1 (RB_Pos:13)	16.25	16.12	16.12	17.00	16.10	16.28	15.90	17.00
	1 (RB_Pos:24)	16.00	16.07	16.05	17.00	16.18	16.11	16.28	17.00
	12 (RB_Pos:0)	15.98	16.11	16.11	17.00	16.05	16.28	16.21	17.00
	12 (RB_Pos:6)	15.90	16.22	16.22	17.00	15.95	16.14	16.15	17.00
	12 (RB_Pos:13)	15.97	16.10	15.99	17.00	15.99	16.27	16.27	17.00
	25 (RB_Pos:0)	16.09	16.20	15.88	17.00	16.17	16.16	15.90	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131987	132322	132657		131987	132322	132657	
3MHz	1 (RB_Pos:0)	16.18	16.23	15.89	17.00	16.13	16.30	16.00	17.00
	1 (RB_Pos:25)	15.91	16.33	16.14	17.00	16.01	16.10	16.02	17.00
	1 (RB_Pos:49)	15.87	16.19	16.16	17.00	16.22	15.93	16.33	17.00
	25 (RB_Pos:0)	16.13	16.34	16.07	17.00	16.01	16.31	16.27	17.00
	25 (RB_Pos:12)	16.23	16.07	16.06	17.00	16.26	16.01	15.90	17.00
	25 (RB_Pos:25)	15.98	16.31	16.19	17.00	16.22	16.33	15.93	17.00
	50 (RB_Pos:0)	16.23	15.95	16.29	17.00	15.85	15.89	15.97	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131979	132322	132665		131979	132322	132665	
1.4MHz	1 (RB_Pos:0)	16.21	15.93	16.10	17.00	16.14	15.96	15.88	17.00

	1 (RB_Pos:13)	16.20	15.89	16.23	17.00	15.89	15.99	15.98	17.00
	1 (RB_Pos:24)	15.98	16.14	16.08	17.00	16.11	16.32	15.96	17.00
	12 (RB_Pos:0)	16.14	16.00	16.12	17.00	16.07	15.89	16.20	17.00
	12 (RB_Pos:6)	16.26	16.20	15.93	17.00	16.06	15.97	16.33	17.00
	12 (RB_Pos:13)	16.28	15.98	16.05	17.00	15.86	16.26	15.96	17.00
	25 (RB_Pos:0)	16.18	16.26	16.30	17.00	15.86	15.97	15.89	17.00

### 8.7.29 Power Reduced Level 2&3 of LTE Band 66

TDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20MHz	1 (RB_Pos:0)	14.89	14.87	15.14	16.00	15.00	15.23	14.75	16.00
	1 (RB_Pos:50)	15.00	14.93	<b>15.19</b>	16.00	14.98	15.11	14.94	16.00
	1 (RB_Pos:99)	15.04	15.14	15.08	16.00	14.83	14.93	14.86	16.00
	50 (RB_Pos:0)	14.87	14.87	14.81	16.00	15.13	14.93	15.01	16.00
	50 (RB_Pos:25)	15.14	14.82	15.23	16.00	15.00	14.82	14.94	16.00
	50 (RB_Pos:50)	15.16	14.98	15.02	16.00	15.16	14.96	15.13	16.00
	100 (RB_Pos:0)	14.90	14.80	14.99	16.00	14.81	15.18	15.19	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15MHz	1 (RB_Pos:0)	15.22	14.77	15.23	16.00	14.80	14.87	15.20	16.00
	1 (RB_Pos:38)	15.04	14.97	15.14	16.00	15.12	15.07	15.24	16.00
	1 (RB_Pos:74)	15.05	15.19	14.98	16.00	15.06	15.02	14.75	16.00
	36 (RB_Pos:0)	14.84	15.07	14.98	16.00	15.24	14.89	15.15	16.00
	36 (RB_Pos:20)	14.91	15.05	15.25	16.00	14.90	14.80	14.82	16.00
	36 (RB_Pos:39)	14.81	15.08	14.78	16.00	15.14	14.92	15.10	16.00
	75 (RB_Pos:0)	14.85	14.87	15.12	16.00	14.76	14.88	14.86	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10MHz	1 (RB_Pos:0)	15.21	14.98	15.04	16.00	14.91	15.16	15.19	16.00
	1 (RB_Pos:25)	15.07	14.79	15.14	16.00	14.78	15.16	14.79	16.00
	1 (RB_Pos:49)	15.23	15.16	14.88	16.00	15.00	15.13	15.20	16.00
	25 (RB_Pos:0)	14.83	14.87	14.86	16.00	15.07	15.18	15.20	16.00
	25 (RB_Pos:12)	15.10	14.98	15.03	16.00	15.00	14.91	14.85	16.00
	25 (RB_Pos:25)	14.95	14.84	15.11	16.00	14.93	15.24	14.85	16.00
	50 (RB_Pos:0)	14.97	15.03	14.75	16.00	14.82	14.85	14.91	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)

	Channel	131997	132322	132647	limit (dBm)	131997	132322	132647	limit (dBm)
5MHz	1 (RB_Pos:0)	15.10	14.76	15.19	16.00	15.24	14.98	15.19	16.00
	1 (RB_Pos:13)	15.01	14.95	14.77	16.00	15.08	14.99	14.83	16.00
	1 (RB_Pos:24)	14.94	15.24	15.16	16.00	15.04	14.75	14.95	16.00
	12 (RB_Pos:0)	15.08	15.12	14.92	16.00	15.14	14.80	14.84	16.00
	12 (RB_Pos:6)	15.04	15.05	15.16	16.00	14.96	14.84	14.86	16.00
	12 (RB_Pos:13)	15.08	15.10	15.22	16.00	15.15	15.06	14.87	16.00
	25 (RB_Pos:0)	15.17	14.84	14.77	16.00	15.15	15.17	14.78	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131987	132322	132657		131987	132322	132657	
3MHz	1 (RB_Pos:0)	14.92	14.96	15.11	16.00	15.04	15.02	14.88	16.00
	1 (RB_Pos:25)	15.20	15.00	15.12	16.00	15.12	14.93	14.89	16.00
	1 (RB_Pos:49)	15.22	15.05	14.80	16.00	14.99	15.16	15.04	16.00
	25 (RB_Pos:0)	14.85	15.14	14.78	16.00	14.83	15.18	15.05	16.00
	25 (RB_Pos:12)	14.78	15.04	15.10	16.00	15.07	14.84	15.07	16.00
	25 (RB_Pos:25)	15.03	14.86	15.20	16.00	15.01	14.79	14.76	16.00
	50 (RB_Pos:0)	15.23	14.82	15.05	16.00	14.94	14.90	15.12	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131979	132322	132665		131979	132322	132665	
1.4MHz	1 (RB_Pos:0)	14.84	15.04	15.16	16.00	14.93	14.98	14.99	16.00
	1 (RB_Pos:13)	15.03	15.05	14.94	16.00	14.79	14.91	15.13	16.00
	1 (RB_Pos:24)	14.93	14.89	14.93	16.00	14.83	15.05	15.06	16.00
	12 (RB_Pos:0)	15.10	15.12	15.00	16.00	14.83	15.22	15.18	16.00
	12 (RB_Pos:6)	15.23	14.92	14.81	16.00	14.79	15.05	14.77	16.00
	12 (RB_Pos:13)	15.24	15.19	15.11	16.00	14.78	14.87	14.83	16.00
	25 (RB_Pos:0)	15.23	15.00	14.99	16.00	15.19	14.81	14.84	16.00

### 8.7.30 Power Reduced Level 4 of LTE Band 66

TDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		132072	132322	132572		132072	132322	132572	
20MHz	1 (RB_Pos:0)	14.00	13.99	14.17	15.00	14.18	13.89	13.80	15.00
	1 (RB_Pos:50)	13.96	14.23	<b>14.24</b>	15.00	13.88	13.78	13.79	15.00
	1 (RB_Pos:99)	13.95	13.91	13.98	15.00	13.97	13.84	14.02	15.00
	50 (RB_Pos:0)	14.18	13.98	13.84	15.00	13.90	14.10	13.81	15.00
	50 (RB_Pos:25)	13.84	14.07	14.23	15.00	13.90	14.13	14.03	15.00
	50 (RB_Pos:50)	13.77	14.13	13.91	15.00	13.79	13.91	14.09	15.00



	100 (RB_Pos:0)	14.20	14.06	14.19	15.00	14.06	13.92	13.88	15.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15MHz	1 (RB_Pos:0)	14.09	13.97	13.86	15.00	14.16	13.78	13.92	15.00
	1 (RB_Pos:38)	14.02	13.95	14.18	15.00	14.15	14.12	13.84	15.00
	1 (RB_Pos:74)	14.22	13.87	13.87	15.00	14.04	13.88	13.78	15.00
	36 (RB_Pos:0)	14.18	13.86	13.93	15.00	14.08	14.22	14.22	15.00
	36 (RB_Pos:20)	13.82	14.20	14.23	15.00	13.94	13.90	13.83	15.00
	36 (RB_Pos:39)	13.97	14.21	14.11	15.00	13.89	14.15	14.05	15.00
	75 (RB_Pos:0)	14.19	14.01	13.86	15.00	14.18	14.01	14.00	15.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10MHz	1 (RB_Pos:0)	13.77	14.24	14.18	15.00	14.14	14.21	13.81	15.00
	1 (RB_Pos:25)	14.15	14.10	14.18	15.00	13.91	13.75	13.83	15.00
	1 (RB_Pos:49)	14.07	14.06	14.12	15.00	13.94	14.16	13.96	15.00
	25 (RB_Pos:0)	13.92	14.05	14.08	15.00	13.83	14.19	14.14	15.00
	25 (RB_Pos:12)	14.20	13.97	14.10	15.00	14.18	13.80	13.75	15.00
	25 (RB_Pos:25)	13.97	13.84	14.00	15.00	13.79	13.84	14.15	15.00
	50 (RB_Pos:0)	14.16	14.14	14.17	15.00	14.04	14.20	14.17	15.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5MHz	1 (RB_Pos:0)	14.18	13.95	14.12	15.00	14.10	13.89	13.95	15.00
	1 (RB_Pos:13)	14.24	14.00	14.19	15.00	13.99	13.98	14.09	15.00
	1 (RB_Pos:24)	13.81	13.86	14.23	15.00	14.19	13.94	14.19	15.00
	12 (RB_Pos:0)	14.01	13.99	14.05	15.00	14.13	13.99	14.01	15.00
	12 (RB_Pos:6)	13.95	14.23	13.90	15.00	13.94	13.85	14.05	15.00
	12 (RB_Pos:13)	13.88	13.93	14.06	15.00	13.75	14.20	14.07	15.00
	25 (RB_Pos:0)	14.23	14.25	14.00	15.00	14.12	14.23	13.91	15.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3MHz	1 (RB_Pos:0)	13.99	13.80	14.01	15.00	14.04	14.05	14.11	15.00
	1 (RB_Pos:25)	14.08	14.16	13.89	15.00	13.76	14.11	14.03	15.00
	1 (RB_Pos:49)	13.78	13.81	14.16	15.00	14.06	14.07	13.90	15.00
	25 (RB_Pos:0)	14.13	14.18	13.90	15.00	14.23	14.15	13.78	15.00
	25 (RB_Pos:12)	14.04	13.88	13.81	15.00	14.21	14.05	13.79	15.00
	25 (RB_Pos:25)	14.21	13.77	13.99	15.00	14.22	13.91	14.24	15.00
	50 (RB_Pos:0)	13.82	14.23	13.93	15.00	14.03	14.14	14.02	15.00

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4MHz	1 (RB_Pos:0)	14.25	14.15	13.84	15.00	13.99	13.78	14.20	15.00
	1 (RB_Pos:13)	13.75	14.19	14.11	15.00	14.23	14.04	13.85	15.00
	1 (RB_Pos:24)	14.01	14.17	14.19	15.00	13.77	14.21	13.76	15.00
	12 (RB_Pos:0)	13.82	14.06	13.85	15.00	13.96	14.12	13.86	15.00
	12 (RB_Pos:6)	14.24	14.20	13.79	15.00	14.11	13.77	14.12	15.00
	12 (RB_Pos:13)	14.24	13.97	13.91	15.00	14.18	13.93	13.85	15.00
	25 (RB_Pos:0)	14.13	13.94	14.22	15.00	14.06	13.93	13.94	15.00

## 8.7.31 Power Reduced Level 5 of LTE Band 66

TDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20MHz	1 (RB_Pos:0)	20.02	19.93	20.02	21.00	19.80	20.09	20.03	21.00
	1 (RB_Pos:50)	19.99	19.89	20.14	21.00	19.97	20.02	19.98	21.00
	1 (RB_Pos:99)	20.05	19.86	20.13	21.00	19.78	19.96	20.02	21.00
	50 (RB_Pos:0)	19.81	19.78	20.07	21.00	20.07	20.21	20.04	21.00
	50 (RB_Pos:25)	20.15	19.79	<b>20.17</b>	21.00	19.82	19.76	20.22	21.00
	50 (RB_Pos:50)	20.15	20.00	19.77	21.00	20.02	19.98	19.79	21.00
	100 (RB_Pos:0)	19.77	19.78	20.10	21.00	20.20	20.14	19.79	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15MHz	1 (RB_Pos:0)	20.22	20.10	20.18	21.00	19.91	20.07	19.80	21.00
	1 (RB_Pos:38)	20.05	20.16	19.87	21.00	19.89	19.82	19.97	21.00
	1 (RB_Pos:74)	20.23	19.98	20.07	21.00	20.14	20.01	20.21	21.00
	36 (RB_Pos:0)	20.03	20.01	20.07	21.00	20.05	19.84	19.85	21.00
	36 (RB_Pos:20)	19.92	19.76	20.13	21.00	20.09	19.86	20.03	21.00
	36 (RB_Pos:39)	20.05	19.89	20.15	21.00	20.18	19.85	19.77	21.00
	75 (RB_Pos:0)	19.94	19.84	19.96	21.00	20.25	19.76	20.20	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10MHz	1 (RB_Pos:0)	20.22	20.13	20.24	21.00	20.19	20.00	20.15	21.00
	1 (RB_Pos:25)	19.79	19.93	19.87	21.00	20.13	19.87	19.76	21.00
	1 (RB_Pos:49)	20.18	20.15	19.96	21.00	20.16	20.07	20.09	21.00
	25 (RB_Pos:0)	20.05	19.99	19.78	21.00	19.87	20.14	20.13	21.00

	25 (RB_Pos:12)	19.85	19.82	19.93	21.00	20.09	19.92	19.80	21.00
	25 (RB_Pos:25)	19.95	20.05	20.04	21.00	19.95	20.19	19.97	21.00
	50 (RB_Pos:0)	20.12	19.86	20.06	21.00	19.93	20.24	20.04	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5MHz	1 (RB_Pos:0)	20.09	19.97	19.89	21.00	20.04	20.11	19.76	21.00
	1 (RB_Pos:13)	19.90	20.18	19.79	21.00	19.98	19.77	19.90	21.00
	1 (RB_Pos:24)	20.17	20.07	19.89	21.00	19.92	20.17	19.95	21.00
	12 (RB_Pos:0)	19.85	19.94	20.18	21.00	20.24	20.23	20.05	21.00
	12 (RB_Pos:6)	19.78	19.86	20.06	21.00	19.82	19.86	20.06	21.00
	12 (RB_Pos:13)	19.93	20.24	19.82	21.00	20.01	20.19	20.20	21.00
	25 (RB_Pos:0)	20.09	20.07	19.93	21.00	20.05	20.03	19.84	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3MHz	1 (RB_Pos:0)	20.18	19.91	19.92	21.00	19.88	19.94	20.04	21.00
	1 (RB_Pos:25)	20.19	19.92	19.94	21.00	19.89	20.03	20.00	21.00
	1 (RB_Pos:49)	20.18	19.82	19.82	21.00	19.83	20.18	20.12	21.00
	25 (RB_Pos:0)	20.22	19.94	19.87	21.00	19.93	20.07	20.21	21.00
	25 (RB_Pos:12)	19.80	19.77	20.08	21.00	19.76	20.00	19.83	21.00
	25 (RB_Pos:25)	20.11	20.09	19.94	21.00	20.12	19.78	20.14	21.00
	50 (RB_Pos:0)	20.05	19.87	20.07	21.00	20.02	20.17	19.96	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4MHz	1 (RB_Pos:0)	20.15	20.14	19.88	21.00	20.11	19.97	19.80	21.00
	1 (RB_Pos:13)	19.79	20.24	20.20	21.00	20.24	20.16	20.22	21.00
	1 (RB_Pos:24)	20.07	19.92	19.89	21.00	19.78	19.85	19.89	21.00
	12 (RB_Pos:0)	19.80	20.06	20.06	21.00	19.90	20.02	19.80	21.00
	12 (RB_Pos:6)	20.00	19.96	20.16	21.00	19.86	19.75	20.14	21.00
	12 (RB_Pos:13)	19.91	20.10	20.17	21.00	19.83	20.05	19.93	21.00
	25 (RB_Pos:0)	20.23	19.83	19.83	21.00	19.93	19.99	20.19	21.00

### 8.7.32 Power Reduced Level 1 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	18.53	<b>18.69</b>	18.56	19.50	18.52	18.48	18.54	19.50

	1 (RB_Pos:50)	18.42	18.53	18.51	19.50	18.58	18.54	18.41	19.50
	1 (RB_Pos:99)	18.62	18.48	18.49	19.50	18.59	18.42	18.42	19.50
	50 (RB_Pos:0)	18.42	18.60	18.62	19.50	18.61	18.68	18.56	19.50
	50 (RB_Pos:25)	18.42	18.57	18.58	19.50	18.67	18.69	18.62	19.50
	50 (RB_Pos:50)	18.45	18.54	18.44	19.50	18.56	18.64	18.65	19.50
	100 (RB_Pos:0)	18.41	18.41	18.61	19.50	18.54	18.46	18.42	19.50
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	18.44	18.68	18.58	19.50	18.58	18.49	18.56	19.50
	1 (RB_Pos:38)	18.60	18.58	18.70	19.50	18.68	18.40	18.59	19.50
	1 (RB_Pos:74)	18.42	18.65	18.51	19.50	18.70	18.42	18.58	19.50
	36 (RB_Pos:0)	18.64	18.51	18.46	19.50	18.48	18.46	18.53	19.50
	36 (RB_Pos:20)	18.61	18.51	18.67	19.50	18.52	18.50	18.70	19.50
	36 (RB_Pos:39)	18.58	18.45	18.40	19.50	18.59	18.69	18.41	19.50
	75 (RB_Pos:0)	18.47	18.45	18.68	19.50	18.53	18.46	18.55	19.50
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	18.70	18.40	18.67	19.50	18.67	18.43	18.56	19.50
	1 (RB_Pos:25)	18.41	18.49	18.69	19.50	18.57	18.43	18.68	19.50
	1 (RB_Pos:49)	18.65	18.60	18.56	19.50	18.62	18.62	18.43	19.50
	25 (RB_Pos:0)	18.44	18.62	18.65	19.50	18.65	18.58	18.41	19.50
	25 (RB_Pos:12)	18.62	18.57	18.58	19.50	18.61	18.41	18.62	19.50
	25 (RB_Pos:25)	18.56	18.43	18.44	19.50	18.70	18.68	18.43	19.50
	50 (RB_Pos:0)	18.60	18.65	18.63	19.50	18.54	18.45	18.49	19.50
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	18.45	18.65	18.59	19.50	18.58	18.68	18.65	19.50
	1 (RB_Pos:13)	18.47	18.57	18.57	19.50	18.67	18.40	18.67	19.50
	1 (RB_Pos:24)	18.54	18.45	18.56	19.50	18.46	18.64	18.66	19.50
	12 (RB_Pos:0)	18.63	18.59	18.55	19.50	18.44	18.50	18.42	19.50
	12 (RB_Pos:6)	18.66	18.43	18.45	19.50	18.41	18.53	18.43	19.50
	12 (RB_Pos:13)	18.40	18.60	18.50	19.50	18.63	18.58	18.48	19.50
	25 (RB_Pos:0)	18.52	18.65	18.51	19.50	18.43	18.59	18.59	19.50

## 8.7.33 Power Reduced Level 2&amp;3 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	17.63	<b>17.68</b>	17.56	18.50	17.63	17.52	17.50	18.50
	1 (RB_Pos:50)	17.67	17.54	17.33	18.50	17.37	17.58	17.30	18.50
	1 (RB_Pos:99)	17.49	17.50	17.50	18.50	17.64	17.49	17.32	18.50
	50 (RB_Pos:0)	17.32	17.33	17.47	18.50	17.63	17.46	17.59	18.50
	50 (RB_Pos:25)	17.67	17.35	17.56	18.50	17.62	17.62	17.46	18.50
	50 (RB_Pos:50)	17.53	17.65	17.35	18.50	17.67	17.33	17.59	18.50
	100 (RB_Pos:0)	17.43	17.57	17.62	18.50	17.63	17.43	17.52	18.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	17.57	17.32	17.55	18.50	17.48	17.67	17.42	18.50
	1 (RB_Pos:38)	17.38	17.41	17.44	18.50	17.30	17.64	17.33	18.50
	1 (RB_Pos:74)	17.36	17.44	17.61	18.50	17.33	17.55	17.40	18.50
	36 (RB_Pos:0)	17.34	17.47	17.36	18.50	17.68	17.59	17.39	18.50
	36 (RB_Pos:20)	17.30	17.56	17.40	18.50	17.39	17.35	17.34	18.50
	36 (RB_Pos:39)	17.38	17.50	17.57	18.50	17.65	17.51	17.51	18.50
	75 (RB_Pos:0)	17.65	17.36	17.35	18.50	17.66	17.70	17.35	18.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	17.56	17.41	17.64	18.50	17.59	17.69	17.53	18.50
	1 (RB_Pos:25)	17.67	17.62	17.63	18.50	17.60	17.37	17.43	18.50
	1 (RB_Pos:49)	17.36	17.39	17.66	18.50	17.58	17.59	17.34	18.50
	25 (RB_Pos:0)	17.69	17.50	17.41	18.50	17.45	17.38	17.51	18.50
	25 (RB_Pos:12)	17.52	17.68	17.30	18.50	17.57	17.40	17.51	18.50
	25 (RB_Pos:25)	17.34	17.37	17.45	18.50	17.39	17.62	17.55	18.50
	50 (RB_Pos:0)	17.57	17.37	17.39	18.50	17.59	17.40	17.35	18.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	17.35	17.66	17.63	18.50	17.64	17.45	17.44	18.50
	1 (RB_Pos:13)	17.45	17.50	17.40	18.50	17.48	17.57	17.34	18.50
	1 (RB_Pos:24)	17.61	17.44	17.40	18.50	17.58	17.36	17.48	18.50
	12 (RB_Pos:0)	17.55	17.42	17.56	18.50	17.42	17.56	17.53	18.50

	12 (RB_Pos:6)	17.48	17.69	17.33	18.50	17.45	17.34	17.54	18.50
	12 (RB_Pos:13)	17.67	17.34	17.56	18.50	17.61	17.35	17.67	18.50
	25 (RB_Pos:0)	17.34	17.47	17.42	18.50	17.57	17.53	17.39	18.50

## 8.7.34 Power Reduced Level 4 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	16.49	16.45	16.43	17.50	16.38	16.59	16.56	17.50
	1 (RB_Pos:50)	16.48	16.47	<b>16.79</b>	17.50	16.39	16.63	16.42	17.50
	1 (RB_Pos:99)	16.67	16.71	16.60	17.50	16.64	16.78	16.38	17.50
	50 (RB_Pos:0)	16.42	16.68	16.53	17.50	16.40	16.53	16.52	17.50
	50 (RB_Pos:25)	16.41	16.71	16.74	17.50	16.72	16.56	16.52	17.50
	50 (RB_Pos:50)	<b>16.79</b>	16.74	16.68	17.50	16.80	16.79	16.76	17.50
	100 (RB_Pos:0)	16.41	16.77	16.46	17.50	16.54	16.34	16.61	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	16.68	16.37	16.39	17.50	16.79	16.58	16.48	17.50
	1 (RB_Pos:38)	16.30	16.64	16.67	17.50	16.38	16.37	16.40	17.50
	1 (RB_Pos:74)	16.49	16.42	16.44	17.50	16.53	16.73	16.60	17.50
	36 (RB_Pos:0)	16.50	16.53	16.34	17.50	16.40	16.43	16.60	17.50
	36 (RB_Pos:20)	16.56	16.56	16.70	17.50	16.74	16.69	16.57	17.50
	36 (RB_Pos:39)	16.80	16.37	16.36	17.50	16.48	16.33	16.67	17.50
	75 (RB_Pos:0)	16.69	16.59	16.64	17.50	16.41	16.60	16.48	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	16.75	16.65	16.77	17.50	16.52	16.61	16.43	17.50
	1 (RB_Pos:25)	16.64	16.44	16.58	17.50	16.65	16.54	16.78	17.50
	1 (RB_Pos:49)	16.34	16.51	16.37	17.50	16.73	16.64	16.73	17.50
	25 (RB_Pos:0)	16.72	16.72	16.74	17.50	16.75	16.38	16.78	17.50
	25 (RB_Pos:12)	16.64	16.46	16.81	17.50	16.53	16.73	16.46	17.50
	25 (RB_Pos:25)	16.73	16.43	16.37	17.50	16.61	16.64	16.42	17.50
	50 (RB_Pos:0)	16.34	16.67	16.78	17.50	16.63	16.49	16.52	17.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	16.51	17.37	17.30	17.50	16.33	16.66	16.48	17.50

	1 (RB_Pos:13)	16.33	17.42	17.43	17.50	16.36	16.44	16.70	17.50
	1 (RB_Pos:24)	16.70	17.69	17.53	17.50	16.60	16.61	16.74	17.50
	12 (RB_Pos:0)	16.48	17.31	17.50	17.50	16.77	16.39	16.66	17.50
	12 (RB_Pos:6)	16.61	17.69	17.61	17.50	16.40	16.33	16.35	17.50
	12 (RB_Pos:13)	16.55	17.32	17.43	17.50	16.79	16.61	16.32	17.50
	25 (RB_Pos:0)	16.69	17.67	17.58	17.50	16.48	16.70	16.53	17.50

### 8.7.35 Power Reduced Level 1 of LTE Band 41

TDD LTE Band 41													
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)	18.35	17.92	18.20	17.95	18.37	19.50	18.34	17.92	18.38	18.08	17.95	19.50
	1 (RB_Pos:50)	18.31	18.21	18.33	18.32	<b>18.39</b>	19.50	17.91	18.19	18.04	18.30	18.21	19.50
	1 (RB_Pos:99)	18.20	18.07	18.23	18.12	18.26	19.50	18.04	18.00	18.11	18.08	18.06	19.50
	50 (RB_Pos:0)	18.05	17.92	18.11	18.31	18.02	19.50	17.98	18.15	17.94	18.23	17.98	19.50
	50 (RB_Pos:25)	18.21	18.17	18.12	18.25	18.35	19.50	18.36	18.02	18.00	18.35	18.30	19.50
	50 (RB_Pos:50)	18.12	18.17	18.35	18.32	18.18	19.50	17.90	17.97	18.17	18.27	18.13	19.50
	100 (RB_Pos:0)	18.29	18.32	18.28	18.07	18.17	19.50	18.35	18.32	17.99	18.24	17.92	19.50
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)	18.35	18.31	18.05	18.09	18.28	19.50	18.08	18.32	17.99	18.33	18.00	19.50
	1 (RB_Pos:50)	18.31	18.17	18.19	18.13	18.23	19.50	18.18	18.08	18.13	18.13	18.32	19.50
	1 (RB_Pos:99)	18.26	18.24	18.35	17.99	18.24	19.50	18.34	18.26	18.36	17.94	18.13	19.50
	50 (RB_Pos:0)	17.96	18.10	18.07	18.17	18.29	19.50	18.24	18.04	18.31	18.19	17.92	19.50
	50 (RB_Pos:25)	18.00	17.99	18.11	18.28	18.09	19.50	18.20	18.08	18.24	18.22	17.99	19.50
	50 (RB_Pos:50)	18.22	18.17	18.14	18.35	18.11	19.50	18.03	17.99	17.93	18.15	18.18	19.50
	100 (RB_Pos:0)	18.36	18.00	18.04	18.37	17.99	19.50	18.13	17.91	18.12	18.07	18.33	19.50
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)	17.94	18.28	18.32	18.21	18.29	19.50	17.91	18.24	18.22	17.98	17.95	19.50
	1 (RB_Pos:50)	18.08	18.05	17.90	18.15	18.18	19.50	18.11	18.34	18.14	18.33	18.08	19.50
	1 (RB_Pos:99)	17.91	18.15	18.26	18.30	18.18	19.50	18.09	18.03	18.28	18.24	18.35	19.50
	50 (RB_Pos:0)	18.06	17.96	18.35	18.27	18.02	19.50	18.37	18.01	18.09	18.28	18.02	19.50
	50 (RB_Pos:25)	18.31	18.32	18.28	18.11	17.92	19.50	17.95	18.12	18.05	18.00	18.12	19.50
	50 (RB_Pos:50)	17.92	18.10	18.00	18.25	18.14	19.50	18.14	18.08	17.90	18.12	18.11	19.50

	100 (RB_Pos:0)	18.31	18.18	17.96	18.29	18.06	19.50	18.21	18.35	17.98	18.21	18.11	19.50
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39675	40110	40620	41130	41565		39675	40110	40620	41130	41565	
5MHz	1 (RB_Pos:0)	18.36	18.10	18.13	17.94	18.13	19.50	18.02	17.98	18.06	18.38	18.08	19.50
	1 (RB_Pos:50)	18.34	18.12	18.36	18.19	18.22	19.50	18.18	18.38	17.90	18.26	18.37	19.50
	1 (RB_Pos:99)	17.98	18.16	18.00	17.97	18.19	19.50	18.20	18.05	18.11	18.38	17.98	19.50
	50 (RB_Pos:0)	18.13	17.93	18.29	18.27	18.16	19.50	18.23	18.39	18.22	18.09	18.10	19.50
	50 (RB_Pos:25)	18.08	18.19	18.15	18.11	18.13	19.50	18.19	18.04	18.19	18.01	18.35	19.50
	50 (RB_Pos:50)	18.23	18.20	18.08	18.27	17.94	19.50	17.91	18.06	17.90	18.08	17.95	19.50
	100 (RB_Pos:0)	18.04	18.22	18.18	17.93	18.15	19.50	18.34	18.15	18.22	17.97	18.05	19.50

### 8.7.36 Power Reduced Level 2&3 of LTE Band 41

TDD LTE Band 41													
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)	16.99	17.30	17.20	16.96	17.37	18.50	17.28	17.03	17.27	17.01	17.09	18.50
	1 (RB_Pos:50)	17.32	17.38	17.27	17.32	<b>17.42</b>	18.50	17.14	16.91	17.22	17.02	16.90	18.50
	1 (RB_Pos:99)	17.24	16.95	17.21	17.12	16.91	18.50	17.03	17.16	17.05	17.04	17.11	18.50
	50 (RB_Pos:0)	16.96	17.25	17.34	17.33	17.16	18.50	17.16	17.30	17.10	17.30	16.95	18.50
	50 (RB_Pos:25)	17.22	17.06	17.19	17.21	17.38	18.50	17.23	17.10	17.09	17.05	17.29	18.50
	50 (RB_Pos:50)	17.37	17.30	17.30	17.34	17.11	18.50	17.14	17.21	17.32	17.16	17.26	18.50
	100 (RB_Pos:0)	17.34	17.28	16.90	17.35	17.38	18.50	16.95	16.95	17.13	17.22	17.02	18.50
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)	17.38	17.36	17.04	16.93	17.21	18.50	16.99	17.32	16.96	17.12	17.25	18.50
	1 (RB_Pos:50)	17.04	17.27	17.02	16.95	17.34	18.50	17.03	17.05	17.17	17.32	16.91	18.50
	1 (RB_Pos:99)	17.01	17.37	17.17	16.94	17.05	18.50	17.02	16.93	16.99	16.97	17.12	18.50
	50 (RB_Pos:0)	17.00	16.97	17.13	17.11	17.14	18.50	17.09	16.91	16.97	16.92	17.30	18.50
	50 (RB_Pos:25)	17.34	17.18	17.24	16.94	16.97	18.50	17.23	16.94	17.18	16.99	16.95	18.50
	50 (RB_Pos:50)	17.07	16.92	17.04	17.10	17.11	18.50	17.00	17.25	17.22	17.00	17.23	18.50
	100 (RB_Pos:0)	17.02	17.01	17.30	16.93	16.90	18.50	17.12	17.32	17.10	17.11	17.32	18.50
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	



							(dBm)						(dBm)
10MHz	1 (RB_Pos:0)	17.35	17.15	17.21	17.10	17.08	18.50	17.07	16.96	17.02	16.96	17.21	18.50
	1 (RB_Pos:50)	17.34	17.14	17.29	17.28	17.23	18.50	17.13	17.18	17.12	17.06	17.34	18.50
	1 (RB_Pos:99)	17.02	17.33	16.98	17.37	17.07	18.50	17.13	17.02	17.07	17.13	17.31	18.50
	50 (RB_Pos:0)	17.05	17.25	16.96	17.32	17.01	18.50	16.96	17.08	17.26	17.37	17.34	18.50
	50 (RB_Pos:25)	16.96	17.18	17.11	16.98	17.05	18.50	17.34	17.00	17.06	16.96	17.18	18.50
	50 (RB_Pos:50)	16.95	17.25	17.06	17.32	17.04	18.50	17.24	17.29	17.02	17.22	16.91	18.50
	100 (RB_Pos:0)	16.97	17.26	17.12	17.21	17.22	18.50	17.17	17.31	17.19	17.30	16.98	18.50
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39675	40110	40620	41130	41565		39675	40110	40620	41130	41565	
5MHz	1 (RB_Pos:0)	17.32	16.91	17.20	17.33	17.16	18.50	17.22	17.17	17.35	17.38	17.23	18.50
	1 (RB_Pos:50)	17.04	17.35	16.94	17.30	16.97	18.50	17.18	17.17	17.24	17.10	17.07	18.50
	1 (RB_Pos:99)	17.15	17.24	17.14	17.26	17.31	18.50	17.20	17.30	17.10	17.17	17.32	18.50
	50 (RB_Pos:0)	17.23	17.12	17.28	17.15	17.11	18.50	16.96	17.23	17.24	16.93	17.39	18.50
	50 (RB_Pos:25)	17.27	16.99	16.98	16.93	17.39	18.50	17.35	16.97	17.05	17.18	17.36	18.50
	50 (RB_Pos:50)	17.38	17.30	17.24	16.95	17.19	18.50	17.17	17.00	17.20	17.22	16.92	18.50
	100 (RB_Pos:0)	17.38	17.30	17.32	17.28	17.03	18.50	17.16	17.12	17.12	17.04	17.10	18.50

### 8.7.37 Power Reduced Level 4 of LTE Band 41

TDD LTE Band 41													
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)	16.36	16.31	16.21	16.16	15.92	17.50	15.95	16.05	16.04	16.05	16.16	17.50
	1 (RB_Pos:50)	15.98	16.20	16.34	16.26	16.37	17.50	16.25	16.07	16.21	15.92	16.35	17.50
	1 (RB_Pos:99)	15.99	16.09	16.21	16.17	16.08	17.50	16.01	16.35	16.17	16.24	16.29	17.50
	50 (RB_Pos:0)	16.03	15.96	15.93	16.05	16.15	17.50	16.37	16.22	16.18	15.98	16.29	17.50
	50 (RB_Pos:25)	16.06	16.00	16.22	16.19	16.29	17.50	16.21	15.95	16.26	16.06	15.97	17.50
	50 (RB_Pos:50)	16.28	16.18	15.96	16.26	16.22	17.50	16.27	16.33	16.29	16.05	16.10	17.50
	100 (RB_Pos:0)	15.95	16.11	16.23	<b>16.38</b>	16.37	17.50	15.91	15.97	15.91	16.12	16.05	17.50
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)	16.31	15.95	16.04	16.21	16.11	17.50	16.03	15.92	16.23	15.91	16.38	17.50
	1 (RB_Pos:50)	15.94	16.01	15.96	16.23	15.97	17.50	16.18	16.15	16.15	16.19	16.05	17.50
	1 (RB_Pos:99)	15.91	16.20	16.20	16.39	15.93	17.50	16.17	16.02	16.19	16.12	16.14	17.50
	50 (RB_Pos:0)	16.08	16.00	16.34	16.19	16.33	17.50	16.34	16.09	16.27	16.19	16.10	17.50

	50 (RB_Pos:25)	16.37	16.14	16.28	16.03	16.08	17.50	16.33	16.37	16.19	15.95	16.20	17.50
	50 (RB_Pos:50)	16.10	16.02	16.08	16.23	16.02	17.50	16.13	16.20	16.33	16.03	16.02	17.50
	100 (RB_Pos:0)	16.26	16.36	16.07	16.19	16.19	17.50	16.01	16.04	16.17	16.37	16.18	17.50
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)	16.00	16.08	16.29	16.38	16.27	17.50	16.27	16.06	16.07	15.94	15.96	17.50
	1 (RB_Pos:50)	15.96	16.10	16.34	16.20	15.99	17.50	16.28	16.09	16.05	16.38	16.36	17.50
	1 (RB_Pos:99)	16.30	15.98	16.09	16.01	16.30	17.50	16.21	16.15	16.07	16.05	16.21	17.50
	50 (RB_Pos:0)	16.23	16.37	16.23	15.92	16.20	17.50	16.24	16.06	16.22	16.02	16.06	17.50
	50 (RB_Pos:25)	15.93	15.93	16.06	16.08	16.13	17.50	16.28	16.13	16.34	15.95	16.11	17.50
	50 (RB_Pos:50)	16.35	16.36	16.05	16.12	16.12	17.50	16.31	16.17	16.08	15.91	16.30	17.50
	100 (RB_Pos:0)	15.94	15.97	16.07	16.29	16.26	17.50	15.94	16.29	16.33	16.33	16.29	17.50
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39675	40110	40620	41130	41565		39675	40110	40620	41130	41565	
5MHz	1 (RB_Pos:0)	16.18	15.91	16.25	15.98	16.36	17.50	16.02	16.05	15.92	16.19	15.93	17.50
	1 (RB_Pos:50)	16.01	16.35	16.05	15.97	16.32	17.50	16.34	16.26	16.15	16.34	16.36	17.50
	1 (RB_Pos:99)	16.34	16.33	15.93	15.95	16.01	17.50	16.29	15.93	15.93	16.23	16.01	17.50
	50 (RB_Pos:0)	16.15	15.94	16.02	16.18	16.32	17.50	16.02	16.05	16.34	16.34	16.07	17.50
	50 (RB_Pos:25)	16.05	16.38	16.05	16.23	15.97	17.50	15.96	16.35	15.92	16.09	16.06	17.50
	50 (RB_Pos:50)	16.22	15.91	15.92	16.05	16.37	17.50	16.20	16.36	16.14	16.17	16.19	17.50
	100 (RB_Pos:0)	15.93	16.20	16.18	16.26	16.04	17.50	16.03	16.15	16.15	16.06	16.17	17.50

## 8.7.38 Power Reduced Level 1 of LTE Uplink 2CA\_ Bnad7

LTE Uplink 2CA_ Bnad7-Level1									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
20850	21048	20	QPSK	1	High	1	Low	1	16.39
21100	20902	20	QPSK	1	Low	1	High	1	16.35
21350	21152	20	QPSK	1	Low	1	High	1	16.46

## 8.7.39 Power Reduced Level 2&amp;3 of LTE Uplink 2CA\_ Bnad7

LTE Uplink 2CA_ Bnad7-Level2&3									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
20850	21048	20	QPSK	1	High	1	Low	1	15.37
21100	20902	20	QPSK	1	Low	1	High	1	15.35
21350	21152	20	QPSK	1	Low	1	High	1	15.42

## 8.7.40 Power Reduced Level 4 of LTE Uplink 2CA\_ Bnad7

LTE Uplink 2CA_ Bnad7-Level4									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
20850	21048	20	QPSK	1	High	1	Low	1	14.32
21100	20902	20	QPSK	1	Low	1	High	1	14.30
21350	21152	20	QPSK	1	Low	1	High	1	14.36

## 8.7.41 Power Reduced Level 5&amp;6 of LTE Uplink 2CA\_ Bnad7

LTE Uplink 2CA_ Bnad7-Level5&6									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
20850	21048	20	QPSK	1	High	1	Low	1	20.28
21100	20902	20	QPSK	1	Low	1	High	1	20.25
21350	21152	20	QPSK	1	Low	1	High	1	20.30

## 8.7.42 Power Reduced Level 1 of LTE Uplink 2CA\_ Bnad38

LTE Uplink 2CA_ Bnad38-Level1									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
37850	38048	20	QPSK	1	High	1	Low	1	18.42
38000	38099	20	QPSK	1	Low	1	High	1	18.47
38150	37952	20	QPSK	1	Low	1	High	1	18.38

## 8.7.43 Power Reduced Level 2&amp;3 of LTE Uplink 2CA\_ Bnad38

LTE Uplink 2CA_ Bnad38-Level2&3									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
37850	38048	20	QPSK	1	High	1	Low	1	17.35
38000	38099	20	QPSK	1	Low	1	High	1	17.39
38150	37952	20	QPSK	1	Low	1	High	1	17.28

## 8.7.44 Power Reduced Level 4 of LTE Uplink 2CA\_ Bnad38

LTE Uplink 2CA_ Bnad38-Level4									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
37850	38048	20	QPSK	1	High	1	Low	1	16.25
38000	38099	20	QPSK	1	Low	1	High	1	16.34
38150	37952	20	QPSK	1	Low	1	High	1	16.31

## 8.7.45 Power Reduced Level 1 of LTE Uplink 2CA\_ Bnad41

LTE Uplink 2CA_ Bnad41-Level1									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
39750	39948	20	QPSK	1	High	1	Low	1	18.21
40185	40383	20	QPSK	1	High	1	Low	1	18.18
40620	40422	20	QPSK	1	Low	1	High	1	18.20
41055	40857	20	QPSK	1	Low	1	High	1	18.18
41490	41292	20	QPSK	1	Low	1	High	1	18.22

## 8.7.46 Power Reduced Level 2&amp;3 of LTE Uplink 2CA\_ Bnad41

LTE Uplink 2CA_ Bnad41-Level2&3									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
39750	39948	20	QPSK	1	High	1	Low	1	17.17
40185	40383	20	QPSK	1	High	1	Low	1	17.15
40620	40422	20	QPSK	1	Low	1	High	1	17.20
41055	40857	20	QPSK	1	Low	1	High	1	17.19
41490	41292	20	QPSK	1	Low	1	High	1	17.23

## 8.7.47 Power Reduced Level 4 of LTE Uplink 2CA\_ Bnad41

LTE Uplink 2CA_ Bnad41-Level4									
Combination 20MHz+20MHz(100RB+100RB)									
PCC	SCC	Bnadwidth	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
				RB Size	RB Pos.	RB Size	RB Pos.		
39750	39948	20	QPSK	1	High	1	Low	1	16.15
40185	40383	20	QPSK	1	High	1	Low	1	16.09
40620	40422	20	QPSK	1	Low	1	High	1	16.10
41055	40857	20	QPSK	1	Low	1	High	1	16.16
41490	41292	20	QPSK	1	Low	1	High	1	16.18

## 8.7.48 Power Reduced Level 1 of 2.4G WIFI (Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	14.74	16.00	Yes
		6	2437	<b>15.70</b>	17.00	Yes
		11	2462	15.67	17.00	Yes
	802.11g	1	2412	15.14	16.50	No
		6	2437	15.17	16.50	No
		11	2462	15.04	16.50	No
	802.11n(HT20)	1	2412	14.70	16.50	No
		6	2437	14.92	16.50	No
		11	2462	14.77	16.50	No

## 8.7.49 Power Reduced Level 2 of 2.4G WIFI (Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	13.11	14.00	Yes
		6	2437	<b>13.87</b>	15.00	Yes
		11	2462	13.81	15.00	Yes
	802.11g	1	2412	12.96	14.50	No
		6	2437	12.79	14.50	No
		11	2462	12.57	14.50	No
	802.11n(HT20)	1	2412	12.56	14.50	No
		6	2437	12.79	14.50	No
		11	2462	12.74	14.50	No

## 8.7.50 Power Reduced Level 3 of 2.4G WIFI (Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	12.11	13.00	Yes
		6	2437	<b>12.82</b>	14.00	Yes
		11	2462	12.81	14.00	Yes
	802.11g	1	2412	11.91	13.50	No
		6	2437	11.69	13.50	No
		11	2462	11.57	13.50	No
	802.11n(HT20)	1	2412	11.54	13.50	No
		6	2437	11.64	13.50	No
		11	2462	11.69	13.50	No

## 8.7.51 Power Reduced Level 4 of 2.4G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	11.16	12.00	Yes
		6	2437	<b>11.82</b>	13.00	Yes
		11	2462	11.81	13.00	Yes
	802.11g	1	2412	10.87	12.50	No
		6	2437	10.59	12.50	No
		11	2462	10.58	12.50	No
	802.11n(HT20)	1	2412	10.56	12.50	No
		6	2437	10.64	12.50	No
		11	2462	10.69	12.50	No

## 8.7.52 Power Reduced Level 1 of 5G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	15.35	17.00	No
		44	5220	15.57	17.00	No
		48	5240	15.79	17.00	No
	802.11n(HT20)	36	5180	15.32	17.00	No
		44	5220	15.55	17.00	No
		48	5240	15.56	17.00	No
	802.11n(HT40)	38	5190	13.89	15.50	Yes
		46	5230	<b>16.33</b>	17.00	Yes
	802.11ac(HT20)	36	5180	14.86	16.50	No
		44	5220	15.06	16.50	No
		48	5240	15.19	16.50	No
	802.11ac(HT40)	38	5190	13.27	14.00	No
		46	5230	15.70	16.50	No
	802.11ac(HT80)	42	5210	12.28	13.00	No
	5.3 (5.25~5.35)	802.11a	52	5260	15.72	17.00
60			5300	15.49	17.00	No
64			5320	15.39	17.00	No
802.11n(HT20)		52	5260	15.45	17.00	No
		60	5300	15.39	17.00	No
		64	5320	15.20	17.00	No
802.11n(HT40)		54	5270	<b>16.34</b>	17.00	Yes
		62	5310	13.96	15.50	Yes
802.11ac(HT20)		52	5260	15.11	16.50	No

		60	5300	14.75	16.50	No	
		64	5320	14.93	16.50	No	
	802.11ac(HT40)	54	5270	15.78	16.50	No	
		62	5310	13.59	15.50	No	
	802.11ac(HT80)	58	5290	11.35	13.00	No	
5.6 (5.47~5.725)	802.11a	100	5500	15.11	17.00	No	
		116	5580	15.22	17.00	No	
		140	5700	15.07	16.50	No	
	802.11n(HT20)	100	5500	15.32	17.00	No	
		116	5580	15.14	17.00	No	
		140	5700	15.41	17.00	No	
	802.11n(HT40)	102	5510	<b>16.44</b>	17.00	Yes	
		118	5590	15.39	17.00	Yes	
		134	5670	15.64	17.00	Yes	
	802.11ac(HT20)	100	5500	14.71	16.50	No	
		116	5580	14.61	16.50	No	
		140	5700	14.72	16.50	No	
	802.11ac(HT40)	102	5510	15.27	16.50	No	
		118	5590	15.19	16.50	No	
		134	5670	15.36	16.50	No	
	802.11ac(HT80)	106	5530	13.57	15.50	No	
		122	5610	14.73	16.50	No	
		138	5690	14.95	16.50	No	
	5.8 (5.725~5.850)	802.11a	149	5745	19.34	21.00	No
			157	5785	19.51	21.00	No
			165	5825	19.41	21.00	No
802.11n(HT20)		149	5745	19.18	21.00	No	
		157	5785	19.36	21.00	No	
		165	5825	19.25	21.00	No	
802.11n(HT40)		151	5755	19.68	21.00	Yes	
		159	5795	<b>19.73</b>	21.00	Yes	
802.11ac(HT20)		149	5745	18.78	20.50	No	
		157	5785	18.77	20.50	No	
		165	5825	18.80	20.50	No	
802.11ac(HT40)		151	5755	19.23	20.50	No	
		159	5795	19.25	20.50	No	
802.11ac(HT80)		155	5775	18.69	20.50	No	



## 8.7.53 Power Reduced Level 2 of 5G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	13.31	15.00	No
		44	5220	13.74	15.00	No
		48	5240	13.74	15.00	No
	802.11n(HT20)	36	5180	13.25	15.00	No
		44	5220	13.44	15.00	No
		48	5240	13.39	15.00	No
	802.11n(HT40)	38	5190	11.90	13.50	Yes
		46	5230	<b>14.21</b>	15.00	Yes
	802.11ac(HT20)	36	5180	13.01	14.50	No
		44	5220	13.19	14.50	No
		48	5240	13.36	14.50	No
	802.11ac(HT40)	38	5190	11.30	12.00	No
		46	5230	13.69	14.50	No
	802.11ac(HT80)	42	5210	10.46	11.00	No
	5.3 (5.25~5.35)	802.11a	52	5260	13.81	15.00
60			5300	13.47	15.00	No
64			5320	13.40	15.00	No
802.11n(HT20)		52	5260	13.67	15.00	No
		60	5300	13.16	15.00	No
		64	5320	13.21	15.00	No
802.11n(HT40)		54	5270	<b>14.14</b>	15.00	Yes
		62	5310	11.53	13.50	Yes
802.11ac(HT20)		52	5260	13.28	14.50	No
		60	5300	12.92	14.50	No
		64	5320	12.87	14.50	No
802.11ac(HT40)		54	5270	13.82	14.50	No
		62	5310	11.53	13.50	No
802.11ac(HT80)		58	5290	9.17	11.00	No
5.6 (5.47~5.725)		802.11a	100	5500	13.19	15.00
	116		5580	13.27	15.00	No
	140		5700	12.97	14.50	No
	802.11n(HT20)	100	5500	13.05	15.00	No
		116	5580	13.13	15.00	No
		140	5700	13.24	15.00	No
	802.11n(HT40)	102	5510	13.55	15.00	Yes
		118	5590	13.36	15.00	Yes
		134	5670	<b>13.75</b>	15.00	Yes
	802.11ac(HT20)	100	5500	12.79	14.50	No

		116	5580	12.78	14.50	No
		140	5700	12.64	14.50	No
		102	5510	13.03	14.50	No
	802.11ac(HT40)	118	5590	13.07	14.50	No
		134	5670	13.54	14.50	No
	802.11ac(HT80)	106	5530	11.56	13.50	No
		122	5610	12.58	14.50	No
138		5690	12.79	14.50	No	
5.8 (5.725~5.850)	802.11a	149	5745	16.10	18.00	No
		157	5785	16.42	18.00	No
		165	5825	16.33	18.00	No
	802.11n(HT20)	149	5745	16.17	18.00	No
		157	5785	16.33	18.00	No
		165	5825	16.16	18.00	No
	802.11n(HT40)	151	5755	16.70	18.00	Yes
		159	5795	<b>16.80</b>	18.00	Yes
	802.11ac(HT20)	149	5745	15.84	17.50	No
		157	5785	15.85	17.50	No
		165	5825	15.83	17.50	No
	802.11ac(HT40)	151	5755	16.08	17.50	No
		159	5795	16.34	17.50	No
	802.11ac(HT80)	155	5775	15.61	17.50	No

#### 8.7.54 Power Reduced Level 3 of 5G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	12.33	14.00	No
		44	5220	12.69	14.00	No
		48	5240	12.52	14.00	No
	802.11n(HT20)	36	5180	12.34	14.00	No
		44	5220	12.40	14.00	No
		48	5240	12.66	14.00	No
	802.11n(HT40)	38	5190	10.73	12.50	Yes
		46	5230	<b>13.03</b>	14.00	Yes
	802.11ac(HT20)	36	5180	11.98	13.50	No
		44	5220	12.30	13.50	No
		48	5240	12.14	13.50	No
	802.11ac(HT40)	38	5190	10.37	11.00	No
46		5230	12.72	13.50	No	
802.11ac(HT80)	42	5210	9.18	10.00	No	
5.3	802.11a	52	5260	12.65	14.00	No

(5.25~5.35)		60	5300	12.31	14.00	No	
		64	5320	12.63	14.00	No	
	802.11n(HT20)	52	5260	12.67	14.00	No	
		60	5300	12.37	14.00	No	
		64	5320	12.38	14.00	No	
	802.11n(HT40)	54	5270	<b>13.22</b>	14.00	Yes	
		62	5310	10.52	12.50	Yes	
	802.11ac(HT20)	52	5260	12.13	13.50	No	
		60	5300	11.96	13.50	No	
		64	5320	11.69	13.50	No	
	802.11ac(HT40)	54	5270	12.51	13.50	No	
		62	5310	10.53	12.50	No	
	802.11ac(HT80)	58	5290	8.33	10.00	No	
	5.6 (5.47~5.725)	802.11a	100	5500	12.20	14.00	No
116			5580	12.26	14.00	No	
140			5700	12.01	13.50	No	
802.11n(HT20)		100	5500	12.06	14.00	No	
		116	5580	12.04	14.00	No	
		140	5700	12.08	14.00	No	
802.11n(HT40)		102	5510	12.50	14.00	Yes	
		118	5590	12.66	14.00	Yes	
		134	5670	<b>12.82</b>	14.00	Yes	
802.11ac(HT20)		100	5500	11.57	13.50	No	
		116	5580	11.61	13.50	No	
		140	5700	11.99	13.50	No	
802.11ac(HT40)		102	5510	11.94	13.50	No	
		118	5590	11.90	13.50	No	
		134	5670	12.24	13.50	No	
802.11ac(HT80)		106	5530	10.58	12.50	No	
		122	5610	11.81	13.50	No	
		138	5690	11.78	13.50	No	
5.8 (5.725~5.850)		802.11a	149	5745	15.36	17.00	No
			157	5785	15.50	17.00	No
			165	5825	15.40	17.00	No
	802.11n(HT20)	149	5745	15.11	17.00	No	
		157	5785	15.21	17.00	No	
		165	5825	<b>15.29</b>	17.00	No	
	802.11n(HT40)	151	5755	15.66	17.00	Yes	
		159	5795	15.67	17.00	Yes	
	802.11ac(HT20)	149	5745	14.58	16.50	No	
		157	5785	14.80	16.50	No	

		165	5825	14.56	16.50	No
	802.11ac(HT40)	151	5755	15.33	16.50	No
		159	5795	15.05	16.50	No
	802.11ac(HT80)	155	5775	14.63	16.50	No

## 8.7.55 Power Reduced Level 4 of 5G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	11.17	13.00	No
		44	5220	11.51	13.00	No
		48	5240	11.54	13.00	No
	802.11n(HT20)	36	5180	11.24	13.00	No
		44	5220	11.59	13.00	No
		48	5240	11.42	13.00	No
	802.11n(HT40)	38	5190	10.01	11.50	Yes
		46	5230	<b>11.91</b>	13.00	Yes
	802.11ac(HT20)	36	5180	10.95	12.50	No
		44	5220	11.06	12.50	No
		48	5240	11.06	12.50	No
	802.11ac(HT40)	38	5190	9.38	10.00	No
46		5230	11.71	12.50	No	
802.11ac(HT80)	42	5210	8.40	9.00	No	
5.3 (5.25~5.35)	802.11a	52	5260	12.00	13.00	No
		60	5300	11.51	13.00	No
		64	5320	11.61	13.00	No
	802.11n(HT20)	52	5260	11.59	13.00	No
		60	5300	11.25	13.00	No
		64	5320	11.36	13.00	No
	802.11n(HT40)	54	5270	<b>12.17</b>	13.00	Yes
		62	5310	9.53	11.50	Yes
	802.11ac(HT20)	52	5260	11.07	12.50	No
		60	5300	11.03	12.50	No
		64	5320	10.82	12.50	No
	802.11ac(HT40)	54	5270	11.72	12.50	No
62		5310	9.54	11.50	No	
802.11ac(HT80)	58	5290	7.36	9.00	No	
5.6 (5.47~5.725)	802.11a	100	5500	11.07	13.00	No
		116	5580	11.22	13.00	No
		140	5700	11.09	12.50	No
	802.11n(HT20)	100	5500	11.13	13.00	No
		116	5580	11.23	13.00	No

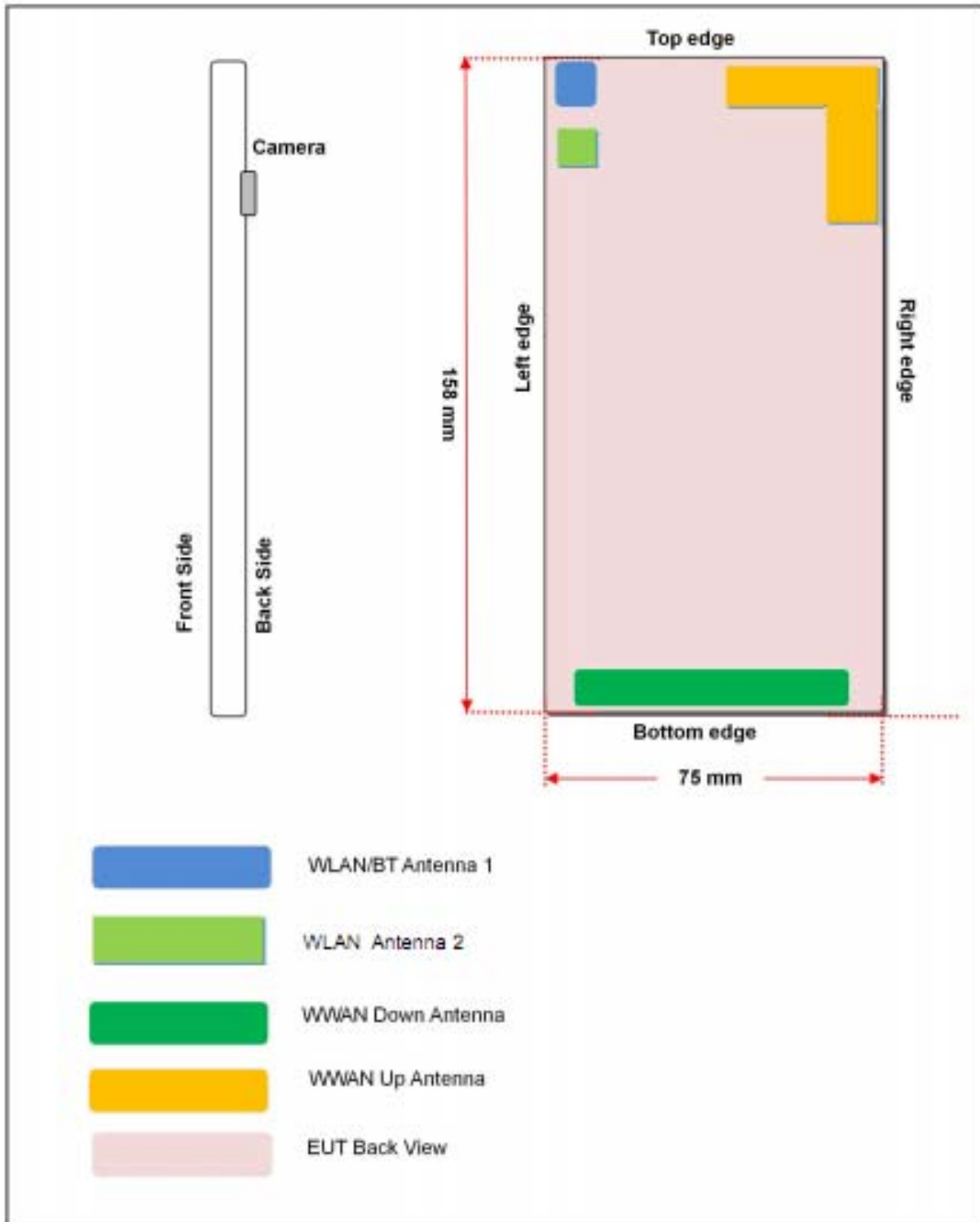
		140	5700	11.35	13.00	No	
	802.11n(HT40)	102	5510	11.34	13.00	Yes	
		118	5590	11.76	13.00	Yes	
		134	5670	<b>11.81</b>	13.00	Yes	
	802.11ac(HT20)	100	5500	10.74	12.50	No	
		116	5580	10.51	12.50	No	
		140	5700	10.85	12.50	No	
	802.11ac(HT40)	102	5510	11.19	12.50	No	
		118	5590	11.06	12.50	No	
		134	5670	11.40	12.50	No	
	802.11ac(HT80)	106	5530	9.51	11.50	No	
		122	5610	10.63	12.50	No	
		138	5690	10.55	12.50	No	
	5.8 (5.725~5.850)	802.11a	149	5745	14.47	16.00	No
			157	5785	14.45	16.00	No
165			5825	14.40	16.00	No	
802.11n(HT20)		149	5745	14.09	16.00	No	
		157	5785	14.23	16.00	No	
		165	5825	14.15	16.00	No	
802.11n(HT40)		151	5755	14.67	16.00	Yes	
		159	5795	<b>14.69</b>	16.00	Yes	
802.11ac(HT20)		149	5745	13.73	15.50	No	
		157	5785	13.53	15.50	No	
		165	5825	13.84	15.50	No	
802.11ac(HT40)		151	5755	14.27	15.50	No	
		159	5795	14.16	15.50	No	
802.11ac(HT80)		155	5775	13.55	15.50	No	

### 8.7.56 Power Reduced Level 5 of 5G WIFI(Chain 1+2 )

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	18.55	20.00	No
		44	5220	18.74	20.00	No
		48	5240	19.03	20.00	No
	802.11n(HT20)	36	5180	18.05	20.00	No
		44	5220	18.58	20.00	No
		48	5240	18.64	20.00	No
	802.11n(HT40)	38	5190	16.87	18.50	Yes
		46	5230	<b>18.89</b>	20.00	Yes
	802.11ac(HT20)	36	5180	17.67	19.50	No
		44	5220	18.31	19.50	No

		48	5240	18.27	19.50	No
	802.11ac(HT40)	38	5190	16.40	17.00	No
		46	5230	18.52	19.50	No
	802.11ac(HT80)	42	5210	15.25	16.00	No
5.3 (5.25~5.35)	802.11a	52	5260	18.64	20.00	No
		60	5300	18.32	20.00	No
		64	5320	18.66	20.00	No
	802.11n(HT20)	52	5260	18.97	20.00	No
		60	5300	18.20	20.00	No
		64	5320	18.30	20.00	No
	802.11n(HT40)	54	5270	<b>19.32</b>	20.00	Yes
		62	5310	16.54	18.50	Yes
	802.11ac(HT20)	52	5260	18.09	19.50	No
		60	5300	17.81	19.50	No
		64	5320	18.11	19.50	No
	802.11ac(HT40)	54	5270	18.68	19.50	No
		62	5310	16.55	18.50	No
	802.11ac(HT80)	58	5290	14.38	16.00	No
	5.6 (5.47~5.725)	802.11a	100	5500	18.21	20.00
116			5580	18.26	20.00	No
140			5700	18.04	19.50	No
802.11n(HT20)		100	5500	18.09	20.00	No
		116	5580	18.08	20.00	No
		140	5700	18.03	20.00	No
802.11n(HT40)		102	5510	18.62	20.00	Yes
		118	5590	18.47	20.00	Yes
		134	5670	<b>18.71</b>	20.00	Yes
802.11ac(HT20)		100	5500	17.97	19.50	No
		116	5580	17.57	19.50	No
		140	5700	17.87	19.50	No
802.11ac(HT40)		102	5510	18.16	19.50	No
		118	5590	17.84	19.50	No
		134	5670	18.28	19.50	No
802.11ac(HT80)		106	5530	16.55	18.50	No
		122	5610	17.75	19.50	No
		138	5690	17.73	19.50	No

## 9 TEST EXCLUSION CONSIDERATION



## 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 :

WWAN Up Antenna

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	52mm	<5mm	<5mm	105mm
	Voice	33.50	2238.72	Yes	Yes	No	Yes	Yes	No
	Data	33.50	2238.72	Yes	Yes	No	Yes	Yes	No
GSM 1900	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	Voice	30.50	1122.02	Yes	Yes	No	Yes	Yes	No
	Data	30.50	1122.02	Yes	Yes	No	Yes	Yes	No
WCDMA Band 2	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	RMC	24.00	251.19	Yes	Yes	No	Yes	Yes	No
WCDMA Band 4	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	RMC	24.00	251.19	Yes	Yes	No	Yes	Yes	No
WCDMA Band 5	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	RMC	24.80	302.00	Yes	Yes	No	Yes	Yes	No
LTE Band 2	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 4	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 5	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.80	302.00	Yes	Yes	No	Yes	Yes	No
LTE Band 7	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 12	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.80	302.00	Yes	Yes	No	Yes	Yes	No
LTE Band 17	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.80	302.00	Yes	Yes	No	Yes	Yes	No
LTE Band 26	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.80	302.00	Yes	Yes	No	Yes	Yes	No
LTE Band 66	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 38	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.50	281.83	Yes	Yes	No	Yes	Yes	No
LTE Band 41	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	105mm
	VOIP	24.50	281.83	Yes	Yes	No	Yes	Yes	No



## WWAN Down Antenna

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	<5mm	<5mm	<5mm	157mm	<5mm
	Voice	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
	Data	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
GSM 1900	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	Voice	30.50	1122.02	Yes	Yes	Yes	Yes	No	Yes
	Data	30.50	1122.02	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 2	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	RMC	24.30	269.15	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.80	302.00	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.80	302.00	Yes	Yes	Yes	Yes	No	Yes
LTE Band 17	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.80	302.00	Yes	Yes	Yes	Yes	No	Yes
LTE Band 26	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 66	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 38	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.50	281.83	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User		<5mm	<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.50	281.83	Yes	Yes	Yes	Yes	No	Yes

## WLAN and Bluetooth

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	14mm	40mm	<5mm	155mm
	802.11b	22.50	89.13	Yes	Yes	Yes	No	Yes	No
	802.11g	22.00	70.79	No	No	No	No	No	No
	802.11n(HT20)	22.00	70.79	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	14mm	40mm	<5mm	155mm
	802.11a	22.50	177.83	No	No	No	No	No	No
	802.11n(HT20)	22.50	177.83	No	No	No	No	No	No
	802.11n(HT40)	22.50	177.83	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT40)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT80)	18.50	70.79	No	No	No	No	No	No
WLAN 5.3 G	Distance to User			<5mm	<5mm	14mm	40mm	<5mm	155mm
	802.11a	22.50	177.83	No	No	No	No	No	No
	802.11n(HT20)	22.50	177.83	No	No	No	No	No	No
	802.11n(HT40)	22.50	177.83	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT40)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT80)	18.50	70.79	No	No	No	No	No	No

WLAN 5.6 G	Distance to User			<5mm	<5mm	14mm	40mm	<5mm	155mm
	802.11a	22.50	177.83	No	No	No	No	No	No
	802.11n(HT20)	22.50	177.83	No	No	No	No	No	No
	802.11n(HT40)	22.50	177.83	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT40)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT80)	22.00	158.48	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	14mm	40mm	<5mm	155mm
	802.11a	22.50	177.83	Yes	Yes	Yes	Yes	Yes	No
	802.11n(HT20)	22.50	177.83	No	No	No	No	No	No
	802.11n(HT40)	22.50	177.83	No	No	No	No	No	No
	802.11ac(VHT20)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT40)	22.00	158.48	No	No	No	No	No	No
	802.11ac(VHT80)	22.00	158.48	No	No	No	No	No	No
Bluetooth	Distance to User			<5mm	<5mm	<5mm	45mm	<5mm	130mm
	BR/EDR	12.00	15.85	Yes	Yes	Yes	No	Yes	No
	BLE	4.00	2.51	No	No	No	No	No	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
2. 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.
  3. 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
  4. Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:
 
$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
    - a.  $f(\text{GHz})$  is the RF channel transmit frequency in GHz
    - b. Power and distance are rounded to the nearest mW and mm before calculation
    - c. The result is rounded to one decimal place for comparison
    - d. For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.
 This formula is  $[3.0] / [\sqrt{f(\text{GHz})}] \cdot [\text{min. test separation distance, mm}] = \text{exclusion threshold of mW}$ .
  5. 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
    - a.  $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)$  mW, at 100 MHz to 1500 MHz
    - b.  $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot 10$  mW at > 1500 MHz and  $\leq 6$  GHz
  6. 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.
  7. 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
  8. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
    - a. When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
    - b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2 \text{ W/kg}$ .
  9. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
    - a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is  $\leq 1.2 \text{ W/kg}$ , 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.
    - b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is  $\leq 1.2 \text{ W/kg}$ , 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. For WLAN SAR testing was performed on dual antenna, due to the single antenna RF power in MIMO mode is larger than the single antenna RF power in SISO mode.

# 10 TEST RESULT

## 10.1 GSM 850

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Off	GPRS (2slots)	Left Cheek	0	251	848.80	-0.11	0.576	30.89	31.50	1.151	<b>0.663</b>	1#
	Off		Left Tilt	0	251	848.80	0.11	0.045	30.89	31.50	1.151	0.052	/
	Off		Right Cheek	0	251	848.80	0.18	0.297	30.89	31.50	1.151	0.342	/
	Off		Right Tilt	0	251	848.80	0.18	0.032	30.89	31.50	1.151	0.037	/
Down	Off	GPRS (2slots)	Left Cheek	0	251	848.80	-0.11	0.105	30.89	31.50	1.151	0.121	/
	Off		Left Tilt	0	251	848.80	0.02	0.098	30.89	31.50	1.151	0.113	/
	Off		Right Cheek	0	251	848.80	0.18	0.054	30.89	31.50	1.151	0.062	/
	Off		Right Tilt	0	251	848.80	-0.15	0.048	30.89	31.50	1.151	0.055	/
<b>Body-worn Accessory</b>													
Up	Off	Voice	Front Side	15	190	836.60	-0.05	0.082	32.83	33.50	1.167	0.096	/
	Off		Back Side	15	190	836.60	-0.04	0.093	32.83	33.50	1.167	0.109	/
	Off	GPRS (2slots)	Front Side	15	251	848.80	-0.02	0.104	30.89	31.50	1.151	0.120	/
	Off		Back Side	15	251	848.80	0.16	0.109	30.89	31.50	1.151	0.125	/
Down	Off	Voice	Front Side	15	190	836.60	-0.08	0.192	32.83	33.50	1.167	0.224	/
	Off		Back Side	15	190	836.60	-0.08	0.251	32.83	33.50	1.167	0.293	/
	Off	GPRS (2slots)	Front Side	15	251	848.80	-0.12	0.260	30.89	31.50	1.151	0.299	/
	Off		Back Side	15	251	848.80	0.05	0.336	30.89	31.50	1.151	<b>0.387</b>	2#
<b>Hotspot</b>													
Up	Off	Voice	Front Side	10	190	836.60	-0.02	0.153	32.83	33.50	1.167	0.179	/
	Off		Back Side	10	190	836.60	0.18	0.177	32.83	33.50	1.167	0.207	/
	Off	GPRS (2slots)	Front Side	10	251	848.80	-0.10	0.195	30.89	31.50	1.151	0.224	/
	Off		Back Side	10	251	848.80	0.07	0.246	30.89	31.50	1.151	0.283	/
	Off		Left Edge	10	251	848.80	0.08	0.034	30.89	31.50	1.151	0.039	/
	Off		Right Edge	10	251	848.80	-0.18	0.509	30.89	31.50	1.151	<b>0.586</b>	3#
	Off		Top Edge	10	251	848.80	0.05	0.058	30.89	31.50	1.151	0.067	/
Down	Off	Voice	Front Side	10	190	836.60	0.15	0.297	32.83	33.50	1.167	0.347	/
	Off		Back Side	10	190	836.60	0.15	0.370	32.83	33.50	1.167	0.432	/
	Off	GPRS (2slots)	Front Side	10	251	848.80	0.06	0.419	30.89	31.50	1.151	0.482	/
	Off		Back Side	10	251	848.80	-0.03	0.500	30.89	31.50	1.151	0.575	/
	Off		Left Edge	10	251	848.80	0.00	0.100	30.89	31.50	1.151	0.115	/
	Off		Right Edge	10	251	848.80	0.18	0.120	30.89	31.50	1.151	0.138	/
	Off		Bottom Edge	10	251	848.80	0.05	0.487	30.89	31.50	1.151	0.560	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

## 10.2 GSM 1900

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Level1	GPRS (3slots)	Left Cheek	0	810	1909.80	-0.05	0.211	19.43	20.50	1.279	0.270	/
	Level1		Left Tilt	0	810	1909.80	0.18	0.128	19.43	20.50	1.279	0.164	/
	Level1		Right Cheek	0	810	1909.80	-0.08	0.444	19.43	20.50	1.279	<b>0.568</b>	<b>4#</b>
	Level1		Right Tilt	0	810	1909.80	-0.08	0.271	19.43	20.50	1.279	0.347	/
Up	Level2&3	GPRS (3slots)	Left Cheek	0	810	1909.80	0.00	0.190	18.61	19.50	1.227	0.233	/
	Level2&3		Left Tilt	0	810	1909.80	0.02	0.115	18.61	19.50	1.227	0.141	/
	Level2&3		Right Cheek	0	810	1909.80	-0.13	0.386	18.61	19.50	1.227	0.474	/
	Level2&3		Right Tilt	0	810	1909.80	-0.17	0.244	18.61	19.50	1.227	0.299	/
Up	Level4	GPRS (3slots)	Left Cheek	0	810	1909.80	0.17	0.169	17.29	18.50	1.321	0.223	/
	Level4		Left Tilt	0	810	1909.80	0.12	0.102	17.29	18.50	1.321	0.135	/
	Level4		Right Cheek	0	810	1909.80	-0.07	0.295	17.29	18.50	1.321	0.390	/
	Level4		Right Tilt	0	810	1909.80	0.15	0.217	17.29	18.50	1.321	0.287	/
Down	Off	GPRS (3slots)	Left Cheek	0	810	1909.80	0.18	0.087	26.21	27.00	1.199	0.104	/
	Off		Left Tilt	0	810	1909.80	0.09	0.062	26.21	27.00	1.199	0.074	/
	Off		Right Cheek	0	810	1909.80	0.04	0.127	26.21	27.00	1.199	0.152	/
	Off		Right Tilt	0	810	1909.80	0.05	0.056	26.21	27.00	1.199	0.067	/
<b>Body-worn Accessory</b>													
Up	Off	Voice	Front Side	15	512	1850.20	-0.18	0.160	29.49	30.50	1.262	0.202	/
	Off		Back Side	15	512	1850.20	0.19	0.198	29.49	30.50	1.262	0.250	/
	Off	GPRS (3slots)	Front Side	15	810	1909.80	0.03	0.168	26.21	27.00	1.199	0.202	/
	Off		Back Side	15	810	1909.80	0.18	0.212	26.21	27.00	1.199	<b>0.254</b>	<b>5#</b>
Down	Off	Voice	Front Side	15	512	1850.20	-0.09	0.149	29.49	30.50	1.262	0.188	/
	Off		Back Side	15	512	1850.20	0.12	0.182	29.49	30.50	1.262	0.230	/
	Off	GPRS (3slots)	Front Side	15	810	1909.80	-0.11	0.158	26.21	27.00	1.199	0.190	/
	Off		Back Side	15	810	1909.80	0.15	0.196	26.21	27.00	1.199	0.235	/
<b>Hotspot</b>													
Up	Off	Voice	Front Side	10	512	1850.20	-0.13	0.335	29.49	30.50	1.262	0.423	/
	Off		Back Side	10	512	1850.20	-0.02	0.461	29.49	30.50	1.262	0.582	/
	Off	GPRS (3slots)	Front Side	10	810	1909.80	-0.08	0.485	26.21	27.00	1.199	0.582	/
	Off		Back Side	10	810	1909.80	0.04	0.604	26.21	27.00	1.199	0.724	/
	Off		Left Edge	10	810	1909.80	0.16	0.051	26.21	27.00	1.199	0.061	/
	Off		Right Edge	10	810	1909.80	0.14	0.485	26.21	27.00	1.199	0.582	/
	Off		Top Edge	10	810	1909.80	-0.05	0.215	26.21	27.00	1.199	0.258	/
Down	Off	Voice	Front Side	10	512	1850.20	0.03	0.231	29.49	30.50	1.262	0.291	/
	Off		Back Side	10	512	1850.20	-0.02	0.275	29.49	30.50	1.262	0.347	/
	Off	GPRS (3slots)	Front Side	10	810	1909.80	-0.04	0.332	26.21	27.00	1.199	0.398	/
	Off		Back Side	10	810	1909.80	-0.15	0.424	26.21	27.00	1.199	0.509	/
	Off		Left Edge	10	810	1909.80	0.03	0.234	26.21	27.00	1.199	0.281	/

	Off		Right Edge	10	810	1909.80	-0.14	0.087	26.21	27.00	1.199	0.104	/
	Off		Bottom Edge	10	810	1909.80	-0.12	0.659	26.21	27.00	1.199	<b>0.790</b>	6#

Note: Refer to ANNEX C for the detailed test data for each test configuration.

## 10.3 WCDMA Band 2

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.	
<b>Head</b>														
Up	Level1	RMC	Left Cheek	0	9262	1852.40	0.13	0.382	16.13	17.00	1.222	0.467	/	
	Level1		Left Tilt	0	9262	1852.40	-0.07	0.231	16.13	17.00	1.222	0.282	/	
	Level1		Right Cheek		0	9262	1852.40	0.09	0.803	16.13	17.00	1.222	<b>0.981</b>	7#
	Level1				0	9400	1880.00	0.17	0.761	16.01	17.00	1.256	0.956	/
	Level1				0	9538	1907.60	-0.19	0.776	16.08	17.00	1.236	0.959	/
	Level1		Right Tilt	0	9262	1852.40	0.12	0.491	16.13	17.00	1.222	0.600	/	
Up	Level2&3	RMC	Left Cheek	0	9262	1852.40	0.18	0.303	15.08	16.00	1.236	0.374	/	
	Level2&3		Left Tilt	0	9262	1852.40	0.18	0.183	15.08	16.00	1.236	0.226	/	
	Level2&3		Right Cheek	0	9262	1852.40	-0.05	0.638	15.08	16.00	1.236	0.789	/	
	Level2&3		Right Tilt	0	9262	1852.40	-0.18	0.390	15.08	16.00	1.236	0.482	/	
Up	Level4	RMC	Left Cheek	0	9262	1852.40	-0.06	0.241	14.10	15.00	1.230	0.296	/	
	Level4		Left Tilt	0	9262	1852.40	0.15	0.145	14.10	15.00	1.230	0.178	/	
	Level4		Right Cheek	0	9262	1852.40	-0.16	0.507	14.10	15.00	1.230	0.624	/	
	Level4		Right Tilt	0	9262	1852.40	0.10	0.310	14.10	15.00	1.230	0.381	/	
Down	Off	RMC	Left Cheek	0	9262	1852.40	0.04	0.071	22.69	24.00	1.352	0.096	/	
	Off		Left Tilt	0	9262	1852.40	-0.07	0.068	22.69	24.00	1.352	0.092	/	
	Off		Right Cheek	0	9262	1852.40	-0.14	0.120	22.69	24.00	1.352	0.162	/	
	Off		Right Tilt	0	9262	1852.40	-0.16	0.063	22.69	24.00	1.352	0.085	/	
<b>Body-worn Accessory</b>														
Up	Off	RMC	Front Side	15	9262	1852.40	-0.12	0.277	22.69	24.00	1.352	0.375	/	
	Off		Back Side	15	9262	1852.40	-0.11	0.297	22.69	24.00	1.352	<b>0.402</b>	8#	
Down	Off	RMC	Front Side	15	9262	1852.40	0.17	0.184	22.69	24.00	1.352	0.249	/	
	Off		Back Side	15	9262	1852.40	0.18	0.227	22.69	24.00	1.352	0.307	/	
<b>Hotspot</b>														
Up	Off	RMC	Front Side	10	9262	1852.40	0.11	0.559	22.69	24.00	1.352	0.756	/	
	Off		Back Side		10	9262	1852.40	-0.13	0.645	22.69	24.00	1.352	0.872	/
	Off				10	9400	1880.00	0.14	0.700	22.58	24.00	1.387	<b>0.971</b>	9#
	Off				10	9538	1907.60	-0.15	0.626	22.52	24.00	1.406	0.880	/
	Off		Left Edge	10	9262	1852.40	-0.10	0.056	22.69	24.00	1.352	0.076	/	
	Off		Right Edge	10	9262	1852.40	0.07	0.459	22.69	24.00	1.352	0.621	/	
	Off		Top Edge	10	9262	1852.40	0.04	0.244	22.69	24.00	1.352	0.330	/	
Up	Level5	RMC	Front Side	10	9262	1852.40	-0.11	0.353	20.85	22.00	1.303	0.460	/	
	Level5		Back Side	10	9262	1852.40	-0.06	0.450	20.85	22.00	1.303	0.586	/	
	Level5		Left Edge	10	9262	1852.40	0.15	0.035	20.85	22.00	1.303	0.046	/	
	Level5		Right Edge	10	9262	1852.40	-0.01	0.290	20.85	22.00	1.303	0.378	/	

	Level5		Top Edge	10	9262	1852.40	0.02	0.154	20.85	22.00	1.303	0.201	/
Down	Off	RMC	Front Side	10	9262	1852.40	-0.05	0.301	20.85	22.00	1.303	0.392	/
	Off		Back Side	10	9262	1852.40	0.19	0.414	20.85	22.00	1.303	0.540	/
	Off		Left Edge	10	9262	1852.40	0.00	0.211	20.85	22.00	1.303	0.275	/
	Off		Right Edge	10	9262	1852.40	-0.07	0.060	20.85	22.00	1.303	0.078	/
	Off		Bottom Edge	10	9262	1852.40	0.09	0.503	20.85	22.00	1.303	0.655	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

## 10.4WCDMA Band 4

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.	
<b>Head</b>														
Up	Level1	RMC	Left Cheek	0	1412	1732.40	-0.06	0.319	16.43	17.50	1.279	0.408	/	
	Level1		Left Tilt	0	1412	1732.40	-0.11	0.211	16.43	17.50	1.279	0.270	/	
	Level1		Right Cheek		0	1412	1732.40	0.06	0.641	16.43	17.50	1.279	<b>0.820</b>	10#
	Level1				0	1312	1712.40	-0.10	0.627	16.35	17.50	1.303	0.817	/
	Level1		0	1513	1752.60	-0.05	0.599	16.19	17.50	1.352	0.810	/		
Up	Level2&3	RMC	Right Tilt	0	1412	1732.40	-0.06	0.454	16.43	17.50	1.279	0.581	/	
	Level2&3		Left Cheek	0	1412	1732.40	-0.18	0.238	15.40	16.50	1.288	0.307	/	
	Level2&3		Left Tilt	0	1412	1732.40	-0.04	0.171	15.40	16.50	1.288	0.220	/	
	Level2&3		Right Cheek	0	1412	1732.40	0.15	0.485	15.40	16.50	1.288	0.625	/	
Up	Level4	RMC	Right Tilt	0	1412	1732.40	0.04	0.324	15.40	16.50	1.288	0.417	/	
	Level4		Left Cheek	0	1412	1732.40	-0.11	0.205	14.45	15.50	1.274	0.261	/	
	Level4		Left Tilt	0	1412	1732.40	0.16	0.136	14.45	15.50	1.274	0.173	/	
	Level4		Right Cheek	0	1412	1732.40	0.10	0.412	14.45	15.50	1.274	0.525	/	
Down	Off	RMC	Right Tilt	0	1412	1732.40	0.11	0.292	14.45	15.50	1.274	0.372	/	
	Off		Left Cheek	0	1412	1732.40	0.05	0.028	22.63	24.00	1.371	0.038	/	
	Off		Left Tilt	0	1412	1732.40	-0.09	0.017	22.63	24.00	1.371	0.023	/	
	Off		Right Cheek	0	1412	1732.40	0.11	0.032	22.63	24.00	1.371	0.044	/	
Down	Off	RMC	Right Tilt	0	1412	1732.40	0.19	0.022	22.63	24.00	1.371	0.030	/	
	Off		Right Tilt	0	1412	1732.40	0.19	0.022	22.63	24.00	1.371	0.030	/	
<b>Body-worn Accessory</b>														
Up	Off	RMC	Front Side	15	1412	1732.40	-0.09	0.203	22.63	24.00	1.371	0.278	/	
	Off		Back Side	15	1412	1732.40	0.18	0.252	22.63	24.00	1.371	<b>0.345</b>	11#	
Down	Off	RMC	Front Side	15	1412	1732.40	0.18	0.078	22.63	24.00	1.371	0.107	/	
	Off		Back Side	15	1412	1732.40	0.08	0.089	22.63	24.00	1.371	0.122	/	
<b>Hotspot</b>														
Up	Off	RMC	Front Side	10	1412	1732.40	0.18	0.467	22.63	24.00	1.371	0.640	/	
	Off		Back Side	10	1412	1732.40	0.04	0.572	22.63	24.00	1.371	<b>0.784</b>	12#	
	Off		Left Edge	10	1412	1732.40	0.13	0.066	22.63	24.00	1.371	0.090	/	
	Off		Right Edge	10	1412	1732.40	0.14	0.549	22.63	24.00	1.371	0.753	/	
	Off		Top Edge	10	1412	1732.40	0.05	0.272	22.63	24.00	1.371	0.373	/	
Up	Level5	RMC	Front Side	10	1412	1732.40	0.11	0.234	22.63	24.00	1.371	0.321	/	
	Level5		Back Side	10	1412	1732.40	-0.16	0.287	22.63	24.00	1.371	0.393	/	

	Level5		Left Edge	10	1412	1732.40	-0.11	0.033	22.63	24.00	1.371	0.045	/
	Level5		Right Edge	10	1412	1732.40	-0.07	0.275	22.63	24.00	1.371	0.377	/
	Level5		Top Edge	10	1412	1732.40	0.01	0.136	22.63	24.00	1.371	0.186	/
Down	Off	RMC	Front Side	10	1412	1732.40	-0.14	0.134	22.63	24.00	1.371	0.184	/
	Off		Back Side	10	1412	1732.40	-0.06	0.160	22.63	24.00	1.371	0.219	/
	Off		Left Edge	10	1412	1732.40	0.12	0.082	22.63	24.00	1.371	0.112	/
	Off		Right Edge	10	1412	1732.40	-0.06	0.014	22.63	24.00	1.371	0.019	/
	Off		Bottom Edge	10	1412	1732.40	0.14	0.171	22.63	24.00	1.371	0.234	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

## 10.5WCDMA Band 5

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Off	RMC	Left Cheek	0	4132	826.40	-0.03	0.433	23.62	24.80	1.312	<b>0.568</b>	13#
	Off		Left Tilt	0	4132	826.40	-0.09	0.060	23.62	24.80	1.312	0.079	/
	Off		Right Cheek	0	4132	826.40	-0.14	0.281	23.62	24.80	1.312	0.369	/
	Off		Right Tilt	0	4132	826.40	0.00	0.043	23.62	24.80	1.312	0.056	/
Down	Off	RMC	Left Cheek	0	4132	826.40	-0.14	0.097	23.62	24.80	1.312	0.127	/
	Off		Left Tilt	0	4132	826.40	0.06	0.090	23.62	24.80	1.312	0.118	/
	Off		Right Cheek	0	4132	826.40	-0.12	0.049	23.62	24.80	1.312	0.064	/
	Off		Right Tilt	0	4132	826.40	-0.06	0.043	23.62	24.80	1.312	0.056	/
<b>Body-worn Accessory</b>													
Up	Off	RMC	Front Side	15	4132	826.40	0.12	0.132	23.62	24.80	1.312	0.173	/
	Off		Back Side	15	4132	826.40	-0.02	0.152	23.62	24.80	1.312	0.199	/
Down	Off	RMC	Front Side	15	4132	826.40	-0.05	0.214	23.62	24.80	1.312	0.281	/
	Off		Back Side	15	4132	826.40	0.15	0.274	23.62	24.80	1.312	<b>0.360</b>	14#
<b>Hotspot</b>													
Up	Off	RMC	Front Side	10	4132	826.40	-0.05	0.232	23.62	24.80	1.312	0.304	/
	Off		Back Side	10	4132	826.40	0.04	0.260	23.62	24.80	1.312	0.341	/
	Off		Left Edge	10	4132	826.40	-0.04	0.032	23.62	24.80	1.312	0.042	/
	Off		Right Edge	10	4132	826.40	0.12	0.431	23.62	24.80	1.312	<b>0.566</b>	15#
	Off		Top Edge	10	4132	826.40	-0.15	0.059	23.62	24.80	1.312	0.077	/
Down	Off	RMC	Front Side	10	4132	826.40	0.02	0.325	23.62	24.80	1.312	0.426	/
	Off		Back Side	10	4132	826.40	0.18	0.415	23.62	24.80	1.312	0.545	/
	Off		Left Edge	10	4132	826.40	0.12	0.098	23.62	24.80	1.312	0.129	/
	Off		Right Edge	10	4132	826.40	-0.03	0.115	23.62	24.80	1.312	0.151	/
	Off		Bottom Edge	10	4132	826.40	0.04	0.370	23.62	24.80	1.312	0.486	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.



### 10.6LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1	QPSK	Left Cheek	0	18700	1860	1	Low	-0.01	0.347	16.31	17.00	1.172	0.407	/
	Level1			0	18700	1860	50	Mid	0.15	0.343	16.38	17.00	1.153	0.396	/
	Level1		Left Tilt	0	18700	1860	1	Low	-0.02	0.209	16.31	17.00	1.172	0.245	/
	Level1			0	18700	1860	50	Mid	0.00	0.198	16.38	17.00	1.153	0.228	/
	Level1		Right Cheek	0	18700	1860	1	Low	0.10	0.678	16.31	17.00	1.172	<b>0.795</b>	16#
	Level1			0	18700	1860	50	Mid	-0.16	0.657	16.38	17.00	1.153	0.758	/
	Level1		Right Tilt	0	18700	1860	1	Low	0.07	0.446	16.31	17.00	1.172	0.523	/
	Level1			0	18700	1860	50	Mid	0.12	0.428	16.38	17.00	1.153	0.494	/
Up	Level2&3	QPSK	Left Cheek	0	18700	1860	1	Low	0.10	0.243	15.18	16.00	1.208	0.293	/
	Level2&3			0	18700	1860	50	Mid	-0.16	0.240	15.18	16.00	1.208	0.290	/
	Level2&3		Left Tilt	0	18700	1860	1	Low	0.16	0.147	15.18	16.00	1.208	0.178	/
	Level2&3			0	18700	1860	50	Mid	0.14	0.138	15.18	16.00	1.208	0.167	/
	Level2&3		Right Cheek	0	18700	1860	1	Low	-0.11	0.510	15.18	16.00	1.208	0.616	/
	Level2&3			0	18700	1860	50	Mid	0.19	0.495	15.18	16.00	1.208	0.598	/
	Level2&3		Right Tilt	0	18700	1860	1	Low	-0.04	0.312	15.18	16.00	1.208	0.377	/
	Level2&3			0	18700	1860	50	Mid	-0.04	0.300	15.18	16.00	1.208	0.362	/
Up	Level4	QPSK	Left Cheek	0	18700	1860	1	Low	-0.06	0.196	14.18	15.00	1.208	0.237	/
	Level4			0	18700	1860	50	Mid	-0.06	0.194	14.23	15.00	1.194	0.232	/
	Level4		Left Tilt	0	18700	1860	1	Low	-0.07	0.119	14.18	15.00	1.208	0.144	/
	Level4			0	18700	1860	50	Mid	-0.01	0.112	14.23	15.00	1.194	0.134	/
	Level4		Right Cheek	0	18700	1860	1	Low	-0.15	0.413	14.18	15.00	1.208	0.499	/
	Level4			0	18700	1860	50	Mid	0.03	0.401	14.23	15.00	1.194	0.479	/
	Level4		Right Tilt	0	18700	1860	1	Low	0.03	0.253	14.18	15.00	1.208	0.306	/
	Level4			0	18700	1860	50	Mid	-0.15	0.243	14.23	15.00	1.194	0.290	/
Down	Off	QPSK	Left Cheek	0	18700	1860	1	Low	0.15	0.072	22.63	24.00	1.371	0.099	/
	Off			0	18700	1860	50	Mid	0.09	0.059	21.66	23.00	1.361	0.080	/
	Off		Left Tilt	0	18700	1860	1	Low	0.07	0.066	22.63	24.00	1.371	0.090	/
	Off			0	18700	1860	50	Mid	-0.09	0.062	21.66	23.00	1.361	0.084	/
	Off		Right Cheek	0	18700	1860	1	Low	0.07	0.103	22.63	24.00	1.371	0.141	/
	Off			0	18700	1860	50	Mid	0.07	0.095	21.66	23.00	1.361	0.129	/
	Off		Right Tilt	0	18700	1860	1	Low	-0.02	0.057	22.63	24.00	1.371	0.078	/
	Off			0	18700	1860	50	Mid	0.04	0.054	21.66	23.00	1.361	0.074	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	18700	1860	1	Low	0.08	0.285	22.63	24.00	1.371	0.391	/
	Off			15	18700	1860	50	Mid	-0.03	0.228	21.66	23.00	1.361	0.310	/
	Off		Back Side	15	18700	1860	1	Low	0.03	0.319	22.63	24.00	1.371	<b>0.437</b>	17#
	Off			15	18700	1860	50	Mid	-0.17	0.278	21.66	23.00	1.361	0.378	/
Down	Off	QPSK	Front Side	15	18700	1860	1	Low	0.06	0.168	22.63	24.00	1.371	0.230	/
	Off			15	18700	1860	50	Mid	-0.04	0.138	21.66	23.00	1.361	0.188	/

	Off		Back Side	15	18700	1860	1	Low	-0.19	0.211	22.63	24.00	1.371	0.289	/
	Off			15	18700	1860	50	Mid	-0.14	0.173	21.66	23.00	1.361	0.236	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	18700	1860	1	Low	0.18	0.561	22.63	24.00	1.371	0.769	/
	Off			10	18700	1860	50	Mid	-0.06	0.439	21.66	23.00	1.361	0.598	/
	Off		Back Side	10	18700	1860	1	Low	0.04	0.732	22.63	24.00	1.371	1.003	/
	Off			10	18900	1880	1	Low	0.08	0.670	22.53	24.00	1.403	0.940	/
	Off			10	19100	1900	1	Low	-0.12	0.710	22.37	24.00	1.455	<b>1.033</b>	<b>18#</b>
	Off			10	18700	1860	50	Mid	-0.05	0.569	21.66	23.00	1.361	0.775	/
	Off		Left Edge	10	18700	1860	100	Low	0.15	0.554	21.60	23.00	1.380	0.765	/
	Off			10	18700	1860	1	Low	0.01	0.064	22.63	24.00	1.371	0.088	/
	Off		Right Edge	10	18700	1860	50	Mid	0.00	0.057	21.66	23.00	1.361	0.078	/
	Off			10	18700	1860	1	Low	-0.03	0.439	22.63	24.00	1.371	0.602	/
	Off		Top Edge	10	18700	1860	50	Mid	-0.11	0.369	21.66	23.00	1.361	0.502	/
	Off			10	18700	1860	1	Low	-0.02	0.264	22.63	24.00	1.371	0.362	/
	Off		10	18700	1860	50	Mid	-0.16	0.208	21.66	23.00	1.361	0.283	/	
	Up		Level5	QPSK	Front Side	10	18700	1860	1	Low	0.02	0.281	20.01	21.00	1.256
Level5		10	18700			1860	50	Mid	0.13	0.270	20.02	21.00	1.253	0.338	/
Level5		Back Side	10		18900	1880	1	Low	-0.10	0.370	20.01	21.00	1.256	0.465	/
Level5			10		18900	1880	50	Low	0.10	0.368	20.02	21.00	1.253	0.461	/
Level5		Left Edge	10		18700	1860	1	Low	-0.16	0.032	20.01	21.00	1.256	0.040	/
Level5			10		18700	1860	50	Mid	-0.10	0.029	20.02	21.00	1.253	0.036	/
Level5		Right Edge	10		18700	1860	1	Low	-0.12	0.220	20.01	21.00	1.256	0.276	/
Level5			10		18700	1860	50	Mid	-0.08	0.215	20.02	21.00	1.253	0.269	/
Level5		Top Edge	10		18700	1860	1	Low	0.18	0.132	20.01	21.00	1.256	0.166	/
Level5			10		18700	1860	50	Mid	0.02	0.124	20.02	21.00	1.253	0.155	/
Down	Off	QPSK	Front Side	10	18700	1860	1	Low	-0.12	0.274	22.63	24.00	1.371	0.376	/
	Off			10	18700	1860	50	Mid	-0.17	0.225	21.66	23.00	1.361	0.306	/
	Off		Back Side	10	18700	1860	1	Low	-0.05	0.347	22.63	24.00	1.371	0.476	/
	Off			10	18700	1860	50	Mid	0.14	0.280	21.66	23.00	1.361	0.381	/
	Off		Left Edge	10	18700	1860	1	Low	-0.08	0.276	22.63	24.00	1.371	0.378	/
	Off			10	18700	1860	50	Mid	-0.04	0.225	21.66	23.00	1.361	0.306	/
	Off		Right Edge	10	18700	1860	1	Low	-0.10	0.067	22.63	24.00	1.371	0.092	/
	Off			10	18700	1860	50	Mid	0.00	0.054	21.66	23.00	1.361	0.074	/
	Off		Bottom Edge	10	18700	1860	1	Low	0.14	0.486	22.53	24.00	1.403	0.682	/
	Off			10	18700	1860	50	Mid	-0.01	0.403	21.66	23.00	1.361	0.549	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

### 10.7LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1	QPSK	Left Cheek	0	21350	2560	1	Low	0.05	0.151	16.65	17.50	1.216	0.184	/
	Level1			0	21350	2560	50	Mid	0.08	0.125	16.67	17.50	1.211	0.151	/
	Level1		Left Tilt	0	21350	2560	1	Low	-0.12	0.110	16.65	17.50	1.216	0.134	/
	Level1			0	21350	2560	50	Mid	-0.16	0.091	16.67	17.50	1.211	0.110	/
	Level1		Right Cheek	0	21350	2560	1	Low	0.03	0.558	16.65	17.50	1.216	<b>0.679</b>	22#
	Level1			0	21350	2560	50	Mid	-0.01	0.461	16.67	17.50	1.211	0.558	/
	Level1		Right Tilt	0	21350	2560	1	Low	0.12	0.360	16.65	17.50	1.216	0.438	/
	Level1			0	21350	2560	50	Mid	-0.13	0.297	16.67	17.50	1.211	0.360	/
Up	Level1	QPSK	Right Cheek	0	PCC213 50+SCC 21152	2560 +2540. 2	PCC 1+ SCC 1	Low + High	-0.08	0.489	16.46	17.50	1.271	0.621	/
Up	Level2&3	QPSK	Left Cheek	0	21350	2560	1	Low	0.13	0.131	15.68	16.50	1.208	0.158	/
	Level2&3			0	21350	2560	50	Mid	0.10	0.128	15.62	16.50	1.225	0.157	/
	Level2&3		Left Tilt	0	21350	2560	1	Low	-0.19	0.095	15.68	16.50	1.208	0.115	/
	Level2&3			0	21350	2560	50	Mid	-0.12	0.089	15.62	16.50	1.225	0.109	/
	Level2&3		Right Cheek	0	21350	2560	1	Low	-0.09	0.483	15.68	16.50	1.208	0.583	/
	Level2&3			0	21350	2560	50	Mid	0.09	0.469	15.62	16.50	1.225	0.574	/
	Level2&3		Right Tilt	0	21350	2560	1	Low	-0.17	0.312	15.68	16.50	1.208	0.377	/
	Level2&3			0	21350	2560	50	Mid	-0.04	0.297	15.62	16.50	1.225	0.364	/
Up	Level4	QPSK	Left Cheek	0	21350	2560	1	Low	0.04	0.107	14.67	15.50	1.211	0.130	/
	Level4			0	21350	2560	50	Mid	-0.18	0.098	14.62	15.50	1.225	0.120	/
	Level4		Left Tilt	0	21350	2560	1	Low	0.08	0.093	14.67	15.50	1.211	0.113	/
	Level4			0	21350	2560	50	Mid	0.17	0.089	14.62	15.50	1.225	0.109	/
	Level4		Right Cheek	0	21350	2560	1	Low	0.16	0.394	14.67	15.50	1.211	0.477	/
	Level4			0	21350	2560	50	Mid	-0.18	0.386	14.62	15.50	1.225	0.473	/
	Level4		Right Tilt	0	21350	2560	1	Low	0.08	0.255	14.67	15.50	1.211	0.309	/
	Level4			0	21350	2560	50	Mid	0.04	0.245	14.62	15.50	1.225	0.300	/
Down	Off	QPSK	Left Cheek	0	21350	2560	1	Low	0.17	0.090	23.45	24.50	1.274	0.115	/
	Off			0	20850	2510	50	Mid	-0.02	0.084	22.42	23.50	1.282	0.108	/
	Off		Left Tilt	0	21350	2560	1	Low	0.04	0.065	23.45	24.50	1.274	0.083	/
	Off			0	20850	2510	50	Mid	-0.18	0.063	22.42	23.50	1.282	0.081	/
	Off		Right Cheek	0	21350	2560	1	Low	-0.07	0.078	23.45	24.50	1.274	0.099	/
	Off			0	20850	2510	50	Mid	-0.02	0.075	22.42	23.50	1.282	0.096	/
	Off		Right Tilt	0	21350	2560	1	Low	0.17	0.029	23.45	24.50	1.274	0.037	/
	Off			0	20850	2510	50	Mid	0.17	0.025	22.42	23.50	1.282	0.032	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	21350	2560	1	Low	0.07	0.212	23.45	24.50	1.274	0.270	/
	Off			15	20850	2510	50	Mid	0.07	0.174	22.42	23.50	1.282	0.223	/

	Off		Back Side	15	21350	2560	1	Low	0.03	0.292	23.45	24.50	1.274	0.372	/
	Off			15	20850	2510	50	Mid	0.14	0.237	22.42	23.50	1.282	0.304	/
Down	Off	QPSK	Front Side	15	21350	2560	1	Low	-0.17	0.263	23.45	24.50	1.274	0.335	/
	Off			15	20850	2510	50	Mid	-0.05	0.209	22.42	23.50	1.282	0.268	/
	Off		Back Side	15	21350	2560	1	Low	-0.01	0.321	23.45	24.50	1.274	<b>0.409</b>	23#
	Off			15	20850	2510	50	Mid	0.13	0.250	22.42	23.50	1.282	0.321	/
Down	Off	QPSK	Back Side	15	PCC213 50+SCC 21152	2560 +2540. 2	PCC 1+ SCC 1	Low + High	-0.11	0.285	23.19	24.50	1.352	0.385	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	0	21350	2560	1	Low	0.14	0.447	23.45	24.50	1.274	0.569	/
	Off			10	20850	2510	50	Mid	0.07	0.361	22.42	23.50	1.282	0.463	/
	Off		Back Side	10	21350	2560	1	Low	0.13	0.687	23.45	24.50	1.274	0.875	/
	Off			10	20850	2510	1	Low	-0.05	0.552	23.33	24.50	1.309	0.723	/
	Off			10	21100	2535	1	Low	0.05	0.707	23.30	24.50	1.318	<b>0.932</b>	24#
	Off			10	20850	2510	50	Mid	0.04	0.562	22.42	23.50	1.282	0.721	/
	Off		10	20850	2510	100	Low	0.10	0.548	22.33	23.50	1.309	0.717	/	
	Off		Left Edge	10	21350	2560	1	Low	0.00	0.045	23.45	24.50	1.274	0.057	/
	Off			10	20850	2510	50	Mid	0.12	0.038	22.42	23.50	1.282	0.049	/
	Off		Right Edge	10	21350	2560	1	Low	0.13	0.452	23.45	24.50	1.274	0.576	/
	Off			10	20850	2510	50	Mid	-0.16	0.372	22.42	23.50	1.282	0.477	/
	Off		Top Edge	10	21350	2560	1	Low	-0.16	0.224	23.45	24.50	1.274	0.285	/
	Off			10	20850	2510	50	Mid	0.07	0.183	22.42	23.50	1.282	0.235	/
	Up		Off	QPSK	Back Side	10	PCC213 50+SCC 21152	2560 +2540. 2	PCC 1+ SCC 1	Low + High	-0.13	0.588	23.19	24.50	1.352
Up	Level5	QPSK	Front Side	10	21350	2560	1	Low	-0.05	0.224	20.43	21.50	1.279	0.287	/
	Level5			10	21350	2560	50	Mid	0.14	0.220	20.47	21.50	1.268	0.279	/
	Level5		Back Side	10	21350	2560	1	Low	-0.14	0.404	20.43	21.50	1.279	0.517	/
	Level5			10	21350	2560	50	Mid	-0.02	0.398	20.47	21.50	1.268	0.505	/
	Level5		Left Edge	10	21350	2560	1	Low	-0.10	0.023	20.43	21.50	1.279	0.029	/
	Level5			10	21350	2560	50	Mid	0.17	0.019	20.47	21.50	1.268	0.024	/
	Level5		Right Edge	10	21350	2560	1	Low	-0.05	0.227	20.43	21.50	1.279	0.290	/
	Level5			10	21350	2560	50	Mid	0.07	0.218	20.47	21.50	1.268	0.276	/
	Level5		Top Edge	10	21350	2560	1	Low	0.03	0.112	20.43	21.50	1.279	0.143	/
	Level5			10	21350	2560	50	Mid	0.10	0.108	20.47	21.50	1.268	0.137	/
Down	Off	QPSK	Front Side	10	21350	2560	1	Low	-0.13	0.501	23.45	24.50	1.274	0.638	/
	Off			10	20850	2510	50	Mid	-0.04	0.406	22.42	23.50	1.282	0.521	/
	Off		Back Side	10	21350	2560	1	Low	0.19	0.535	23.45	24.50	1.274	0.681	/
	Off			10	20850	2510	50	Mid	-0.04	0.426	22.42	23.50	1.282	0.546	/
	Off		Left Edge	10	21350	2560	1	Low	0.16	0.197	23.45	24.50	1.274	0.251	/
	Off			10	20850	2510	50	Mid	0.07	0.164	22.42	23.50	1.282	0.210	/
	Off		Right Edge	10	21350	2560	1	Low	-0.15	0.108	23.45	24.50	1.274	0.138	/

	Off		Bottom Edge	10	20850	2510	50	Mid	-0.05	0.086	22.42	23.50	1.282	0.110	/
	Off			10	21350	2560	1	Low	0.00	0.574	23.45	24.50	1.274	0.731	/
	Off			10	20850	2510	1	Low	-0.03	0.552	23.33	24.50	1.309	0.723	/
	Off			10	21100	2535	1	Low	0.15	0.586	23.30	24.50	1.318	0.772	/
	Off			10	20850	2510	50	Mid	-0.13	0.479	22.42	23.50	1.282	0.614	/
	Off			10	20850	2510	100	Low	-0.13	0.479	22.33	23.50	1.309	0.627	/
Down	Level6	QPSK	Front Side	10	21350	2560	1	Low	-0.14	0.203	20.43	21.50	1.279	0.260	/
	Level6			10	21350	2560	50	Mid	-0.11	0.198	20.47	21.50	1.268	0.251	/
	Level6		Back Side	10	21350	2560	1	Low	0.17	0.214	20.43	21.50	1.279	0.274	/
	Level6			10	21350	2560	50	Mid	-0.15	0.208	20.47	21.50	1.268	0.264	/
	Level6		Left Edge	10	21350	2560	1	Low	-0.04	0.062	20.43	21.50	1.279	0.079	/
	Level6			10	21350	2560	50	Mid	-0.03	0.059	20.47	21.50	1.268	0.075	/
	Level6		Right Edge	10	21350	2560	1	Low	0.07	0.051	20.43	21.50	1.279	0.065	/
	Level6			10	21350	2560	50	Mid	-0.08	0.048	20.47	21.50	1.268	0.061	/
	Level6		Bottom Edge	10	21350	2560	1	Low	-0.01	0.298	20.43	21.50	1.279	0.381	/
	Level6			10	21350	2560	50	Mid	-0.19	0.287	20.47	21.50	1.268	0.364	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

### 10.8LTE Band 12 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Off	QPSK	Left Cheek	0	23130	711	1	Low	0.19	0.466	23.65	24.80	1.303	<b>0.607</b>	25#
	Off			0	23095	707.5	25	Mid	-0.06	0.424	22.70	23.80	1.288	0.546	/
	Off		Left Tilt	0	23130	711	1	Low	0.11	0.057	23.65	24.80	1.303	0.074	/
	Off			0	23095	707.5	25	Mid	0.19	0.051	22.70	23.80	1.288	0.066	/
	Off		Right Cheek	0	23130	711	1	Low	0.13	0.239	23.65	24.80	1.303	0.311	/
	Off			0	23095	707.5	25	Mid	-0.10	0.213	22.70	23.80	1.288	0.274	/
	Off		Right Tilt	0	23130	711	1	Low	-0.02	0.037	23.65	24.80	1.303	0.048	/
	Off			0	23095	707.5	25	Mid	-0.05	0.034	22.70	23.80	1.288	0.044	/
Down	Off	QPSK	Left Cheek	0	23130	711	1	Low	-0.02	0.100	23.65	24.80	1.303	0.130	/
	Off			0	23095	707.5	25	Mid	0.15	0.095	22.70	23.80	1.288	0.122	/
	Off		Left Tilt	0	23130	711	1	Low	0.04	0.092	23.65	24.80	1.303	0.120	/
	Off			0	23095	707.5	25	Mid	0.15	0.087	22.70	23.80	1.288	0.112	/
	Off		Right Cheek	0	23130	711	1	Low	0.02	0.045	23.65	24.80	1.303	0.059	/
	Off			0	23095	707.5	25	Mid	-0.04	0.042	22.70	23.80	1.288	0.054	/
	Off		Right Tilt	0	23130	711	1	Low	0.16	0.039	23.65	24.80	1.303	0.051	/
	Off			0	23095	707.5	25	Mid	-0.08	0.037	22.70	23.80	1.288	0.048	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	23130	711	1	Low	0.03	0.090	23.65	24.80	1.303	0.117	/
	Off			15	23095	707.5	25	Mid	-0.17	0.078	22.70	23.80	1.288	0.100	/
	Off		Back Side	15	23130	711	1	Low	0.06	0.097	23.65	24.80	1.303	0.126	/
	Off			15	23095	707.5	25	Mid	-0.10	0.084	22.70	23.80	1.288	0.108	/
Down	Off	QPSK	Front Side	15	23130	711	1	Low	0.15	0.154	23.65	24.80	1.303	0.201	/
	Off			15	23095	707.5	25	Mid	0.10	0.129	22.70	23.80	1.288	0.166	/
	Off		Back Side	15	23130	711	1	Low	0.12	0.202	23.65	24.80	1.303	<b>0.263</b>	26#
	Off			15	23095	707.5	25	Mid	0.02	0.171	22.70	23.80	1.288	0.220	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	23130	711	1	Low	-0.07	0.190	23.65	24.80	1.303	0.248	/
	Off			10	23095	707.5	25	Mid	0.09	0.161	22.70	23.80	1.288	0.207	/
	Off		Back Side	10	23130	711	1	Low	-0.02	0.243	23.65	24.80	1.303	0.317	/
	Off			10	23095	707.5	25	Mid	0.16	0.183	22.70	23.80	1.288	0.236	/
	Off		Left Edge	10	23130	711	1	Low	-0.02	0.025	23.65	24.80	1.303	0.033	/
	Off			10	23095	707.5	25	Mid	-0.05	0.023	22.70	23.80	1.288	0.030	/
	Off		Right Edge	10	23130	711	1	Low	0.07	0.351	23.65	24.80	1.303	<b>0.457</b>	27#
	Off			10	23095	707.5	25	Mid	0.06	0.307	22.70	23.80	1.288	0.395	/
	Off		Top Edge	10	23130	711	1	Low	-0.08	0.051	23.65	24.80	1.303	0.066	/
	Off			10	23095	707.5	25	Mid	0.16	0.048	22.70	23.80	1.288	0.062	/
Down	Off	QPSK	Front Side	10	23130	711	1	Low	0.09	0.154	23.65	24.80	1.303	0.201	/
	Off			10	23095	707.5	25	Mid	-0.10	0.132	22.70	23.80	1.288	0.170	/
	Off		Back Side	10	23130	711	1	Low	0.13	0.226	23.65	24.80	1.303	0.295	/

	Off			10	23095	707.5	25	Mid	-0.04	0.178	22.70	23.80	1.288	0.229	/
	Off		Left Edge	10	23130	711	1	Low	-0.09	0.042	23.65	24.80	1.303	0.055	/
	Off			10	23095	707.5	25	Mid	-0.01	0.039	22.70	23.80	1.288	0.050	/
	Off		Right Edge	10	23130	711	1	Low	0.19	0.068	23.65	24.80	1.303	0.089	/
	Off			10	23095	707.5	25	Mid	-0.13	0.048	22.70	23.80	1.288	0.062	/
	Off		Bottom Edge	10	23130	711	1	Low	-0.01	0.170	23.65	24.80	1.303	0.222	/
	Off			10	23095	707.5	25	Mid	0.15	0.141	22.70	23.80	1.288	0.182	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

## 10.9LTE Band 26 (15MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Off	QPSK	Left Cheek	0	26965	841.5	1	High	-0.11	0.412	23.49	24.80	1.352	<b>0.557</b>	28#
	Off			0	26965	841.5	25	Low	-0.02	0.368	22.59	23.80	1.321	0.486	/
	Off		Left Tilt	0	26965	841.5	1	Mid	-0.06	0.092	23.49	24.80	1.352	0.124	/
	Off			0	26965	841.5	25	Mid	0.12	0.072	22.59	23.80	1.321	0.095	/
	Off		Right Cheek	0	26965	841.5	1	Mid	-0.03	0.280	23.49	24.80	1.352	0.379	/
	Off			0	26965	841.5	25	Mid	0.12	0.256	22.59	23.80	1.321	0.338	/
	Off		Right Tilt	0	26965	841.5	1	Mid	0.16	0.045	23.49	24.80	1.352	0.061	/
	Off			0	26965	841.5	25	Mid	0.16	0.042	22.59	23.80	1.321	0.055	/
Down	Off	QPSK	Left Cheek	0	26965	841.5	1	Mid	0.11	0.087	23.49	24.80	1.352	0.118	/
	Off			0	26965	841.5	25	Mid	0.17	0.085	22.59	23.80	1.321	0.112	/
	Off		Left Tilt	0	26965	841.5	1	Mid	-0.05	0.078	23.49	24.80	1.352	0.105	/
	Off			0	26965	841.5	25	Mid	-0.18	0.074	22.59	23.80	1.321	0.098	/
	Off		Right Cheek	0	26965	841.5	1	Mid	-0.05	0.039	23.49	24.80	1.352	0.053	/
	Off			0	26965	841.5	25	Mid	-0.17	0.035	22.59	23.80	1.321	0.046	/
	Off		Right Tilt	0	26965	841.5	1	Mid	-0.14	0.036	23.49	24.80	1.352	0.049	/
	Off			0	26965	841.5	25	Mid	-0.18	0.033	22.59	23.80	1.321	0.044	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	26965	841.5	1	Mid	-0.09	0.079	23.49	24.80	1.352	0.107	/
	Off			15	26965	841.5	25	Mid	-0.03	0.068	22.59	23.80	1.321	0.090	/
	Off		Back Side	15	26965	841.5	1	Mid	-0.17	0.089	23.49	24.80	1.352	0.120	/
	Off			15	26965	841.5	25	Mid	-0.05	0.074	22.59	23.80	1.321	0.098	/
Down	Off	QPSK	Front Side	15	26965	841.5	1	Mid	0.02	0.142	23.49	24.80	1.352	0.192	/
	Off			15	26965	841.5	25	Mid	-0.17	0.134	22.59	23.80	1.321	0.177	/
	Off		Back Side	15	26965	841.5	1	Mid	0.04	0.193	23.49	24.80	1.352	<b>0.261</b>	29#
	Off			15	26965	841.5	25	Mid	0.05	0.189	22.59	23.80	1.321	0.250	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	26965	841.5	1	Mid	0.06	0.142	23.49	24.80	1.352	0.192	/
	Off			10	26965	841.5	25	Mid	-0.08	0.118	22.59	23.80	1.321	0.156	/
	Off		Back Side	10	26965	841.5	1	Mid	-0.02	0.311	23.49	24.80	1.352	0.420	/

	Off			10	26965	841.5	25	Mid	0.07	0.251	22.59	23.80	1.321	0.332	/
	Off			Left Edge	10	26965	841.5	1	Mid	-0.04	0.027	23.49	24.80	1.352	0.037
	Off		Right Edge		10	26965	841.5	25	Mid	0.14	0.023	22.59	23.80	1.321	0.030
	Off			Top Edge	10	26965	841.5	1	Mid	0.07	0.426	23.43	24.80	1.371	<b>0.584</b>
	Off				10	26965	841.5	25	Mid	-0.05	0.395	22.59	23.80	1.321	0.522
	Off				10	26965	841.5	1	Mid	-0.18	0.056	23.49	24.80	1.352	0.076
	Off				10	26965	841.5	25	Mid	-0.13	0.049	22.59	23.80	1.321	0.065
Down	Off	QPSK	Front Side	10	26965	841.5	1	Mid	-0.06	0.194	23.49	24.80	1.352	0.262	/
	Off			10	26965	841.5	25	Mid	-0.18	0.186	22.59	23.80	1.321	0.246	/
	Off		Back Side	10	26965	841.5	1	Mid	0.12	0.318	23.43	24.80	1.371	0.436	/
	Off			10	26965	841.5	25	Mid	-0.12	0.258	22.59	23.80	1.321	0.341	/
	Off		Left Edge	10	26965	841.5	1	Mid	-0.08	0.052	23.49	24.80	1.352	0.070	/
	Off			10	26965	841.5	25	Mid	-0.05	0.048	22.59	23.80	1.321	0.063	/
	Off		Right Edge	10	26965	841.5	1	Mid	0.10	0.088	23.49	24.80	1.352	0.119	/
	Off			10	26965	841.5	25	Mid	0.01	0.075	22.59	23.80	1.321	0.099	/
	Off		Bottom Edge	10	26965	841.5	1	Mid	0.19	0.284	23.49	24.80	1.352	0.384	/
	Off			10	26965	841.5	25	Mid	-0.14	0.226	22.59	23.80	1.321	0.299	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.



### 10.10 LTE Band 66 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1	QPSK	Left Cheek	0	132572	1770	1	Mid	-0.13	0.300	16.33	17.00	1.167	0.350	/
	Level1			0	132572	1770	50	Mid	-0.01	0.293	16.31	17.00	1.172	0.343	/
	Level1		Left Tilt	0	132572	1770	1	Mid	-0.16	0.198	16.33	17.00	1.167	0.231	/
	Level1			0	132572	1770	50	Mid	0.11	0.189	16.31	17.00	1.172	0.222	/
	Level1		Right Cheek	0	132572	1770	1	Mid	0.00	0.622	16.33	17.00	1.167	<b>0.726</b>	19#
	Level1			0	132572	1770	50	Low	0.18	0.608	16.31	17.00	1.172	0.713	/
	Level1		Right Tilt	0	132572	1770	1	Mid	-0.08	0.426	16.33	17.00	1.167	0.497	/
	Level1			0	132572	1770	50	Mid	-0.15	0.418	16.31	17.00	1.172	0.490	/
Up	Level2&3	QPSK	Left Cheek	0	132572	1770	1	Mid	0.13	0.250	15.19	16.00	1.205	0.301	/
	Level2&3			0	132572	1770	50	Mid	0.09	0.245	15.23	16.00	1.194	0.293	/
	Level2&3		Left Tilt	0	132572	1770	1	Mid	0.03	0.165	15.19	16.00	1.205	0.199	/
	Level2&3			0	132572	1770	50	Mid	-0.13	0.155	15.23	16.00	1.194	0.185	/
	Level2&3		Right Cheek	0	132572	1770	1	Mid	0.04	0.503	15.19	16.00	1.205	0.606	/
	Level2&3			0	132572	1770	50	Low	-0.13	0.489	15.23	16.00	1.194	0.584	/
	Level2&3		Right Tilt	0	132572	1770	1	Mid	-0.14	0.356	15.19	16.00	1.205	0.429	/
	Level2&3			0	132572	1770	50	Mid	0.09	0.352	15.23	16.00	1.194	0.420	/
Up	Level4	QPSK	Left Cheek	0	132572	1770	1	Mid	-0.17	0.203	14.24	15.00	1.191	0.242	/
	Level4			0	132572	1770	50	Mid	0.14	0.198	14.23	15.00	1.194	0.236	/
	Level4		Left Tilt	0	132572	1770	1	Mid	0.15	0.134	14.24	15.00	1.191	0.160	/
	Level4			0	132572	1770	50	Mid	0.15	0.129	14.23	15.00	1.194	0.154	/
	Level4		Right Cheek	0	132572	1770	1	Mid	0.10	0.408	14.24	15.00	1.191	0.486	/
	Level4			0	132572	1770	50	Low	-0.03	0.399	14.23	15.00	1.194	0.476	/
	Level4		Right Tilt	0	132572	1770	1	Mid	-0.04	0.288	14.24	15.00	1.191	0.343	/
	Level4			0	132572	1770	50	Mid	-0.02	0.279	14.23	15.00	1.194	0.333	/
Down	Off	QPSK	Left Cheek	0	132572	1770	1	Mid	0.18	0.025	22.91	24.00	1.285	0.032	/
	Off			0	132572	1770	50	Mid	0.13	0.022	22.14	23.00	1.219	0.027	/
	Off		Left Tilt	0	132572	1770	1	Mid	0.19	0.014	22.91	24.00	1.285	0.018	/
	Off			0	132572	1770	50	Mid	0.09	0.013	22.14	23.00	1.219	0.016	/
	Off		Right Cheek	0	132572	1770	1	Mid	0.09	0.027	22.91	24.00	1.285	0.035	/
	Off			0	132572	1770	50	Mid	0.03	0.025	22.14	23.00	1.219	0.030	/
	Off		Right Tilt	0	132572	1770	1	Mid	0.15	0.030	22.91	24.00	1.285	0.039	/
	Off			0	132572	1770	50	Mid	0.18	0.027	22.14	23.00	1.219	0.033	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	132572	1770	1	Mid	-0.07	0.189	22.91	24.00	1.285	0.243	/
	Off			15	132572	1770	50	Mid	0.12	0.165	22.14	23.00	1.219	0.201	/
	Off		Back Side	15	132572	1770	1	Mid	-0.08	0.237	22.91	24.00	1.285	<b>0.305</b>	20#
	Off			15	132572	1770	50	Mid	0.10	0.202	22.14	23.00	1.219	0.246	/
Down	Off	QPSK	Front Side	15	132572	1770	1	Mid	-0.12	0.065	22.91	24.00	1.285	0.084	/
	Off			15	132572	1770	50	Mid	0.14	0.056	22.14	23.00	1.219	0.068	/

	Off		Back Side	15	132572	1770	1	Mid	-0.12	0.071	22.91	24.00	1.285	0.091	/
	Off			15	132572	1770	50	Mid	-0.17	0.064	22.14	23.00	1.219	0.078	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	132572	1770	1	Mid	0.06	0.465	22.91	24.00	1.285	0.598	/
	Off			10	132572	1770	50	Mid	0.05	0.401	22.14	23.00	1.219	0.489	/
	Off		Back Side	10	132572	1770	1	Mid	0.04	0.580	22.91	24.00	1.285	<b>0.745</b>	21#
	Off			10	132572	1770	50	Mid	0.14	0.497	22.14	23.00	1.219	0.606	/
	Off		Left Edge	10	132572	1770	1	Mid	0.09	0.068	22.91	24.00	1.285	0.087	/
	Off			10	132572	1770	50	Mid	0.13	0.063	22.14	23.00	1.219	0.077	/
	Off		Right Edge	10	132572	1770	1	Mid	0.15	0.424	22.91	24.00	1.285	0.545	/
	Off			10	132572	1770	50	Mid	-0.16	0.356	22.14	23.00	1.219	0.434	/
	Off		Top Edge	10	132572	1770	1	Mid	-0.12	0.276	22.91	24.00	1.285	0.355	/
	Off			10	132572	1770	50	Mid	0.00	0.231	22.14	23.00	1.219	0.282	/
Up	Level5	QPSK	Front Side	10	132572	1770	1	Mid	0.14	0.233	20.14	21.00	1.219	0.284	/
	Level5			10	132572	1770	50	Mid	-0.12	0.231	20.17	21.00	1.211	0.280	/
	Level5		Back Side	10	132572	1770	1	Mid	-0.03	0.306	20.14	21.00	1.219	0.373	/
	Level5			10	132572	1770	50	Mid	0.01	0.297	20.17	21.00	1.211	0.360	/
	Level5		Left Edge	10	132572	1770	1	Mid	0.10	0.034	20.14	21.00	1.219	0.041	/
	Level5			10	132572	1770	50	Mid	0.03	0.032	20.17	21.00	1.211	0.039	/
	Level5		Right Edge	10	132572	1770	1	Mid	0.03	0.213	20.14	21.00	1.219	0.260	/
	Level5			10	132572	1770	50	Mid	-0.13	0.208	20.17	21.00	1.211	0.252	/
	Level5		Top Edge	10	132572	1770	1	Mid	0.18	0.138	20.14	21.00	1.219	0.168	/
	Level5			10	132572	1770	50	Mid	-0.02	0.136	20.17	21.00	1.211	0.165	/
Down	Off	QPSK	Front Side	10	132572	1770	1	Mid	0.06	0.107	22.91	24.00	1.285	0.138	/
	Off			10	132572	1770	50	Mid	-0.02	0.093	22.14	23.00	1.219	0.113	/
	Off		Back Side	10	132572	1770	1	Mid	0.05	0.126	22.91	24.00	1.285	0.162	/
	Off			10	132572	1770	50	Mid	-0.04	0.107	22.14	23.00	1.219	0.130	/
	Off		Left Edge	10	132572	1770	1	Mid	0.01	0.087	22.91	24.00	1.285	0.112	/
	Off			10	132572	1770	50	Mid	0.00	0.073	22.14	23.00	1.219	0.089	/
	Off		Right Edge	10	132572	1770	1	Mid	-0.07	0.015	22.91	24.00	1.285	0.019	/
	Off			10	132572	1770	50	Mid	0.12	0.012	22.14	23.00	1.219	0.015	/
	Off		Bottom Edge	10	132572	1770	1	Mid	-0.14	0.159	22.91	24.00	1.285	0.204	/
	Off			10	132572	1770	50	Mid	0.02	0.138	22.14	23.00	1.219	0.168	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

**10.11 LTE Band 41 (20MHz Bandwidth)**

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1	QPSK	Left Cheek	0	41490	2680	1	Mid	-0.11	0.121	18.39	19.50	1.291	0.156	/
	Level1			0	41490	2680	50	Mid	-0.06	0.115	18.35	19.50	1.303	0.150	/
	Level1		Left Tilt	0	41490	2680	1	Mid	-0.12	0.109	18.39	19.50	1.291	0.141	/
	Level1			0	41490	2680	50	Mid	0.07	0.103	18.35	19.50	1.303	0.134	/
	Level1		Right Cheek	0	41490	2680	1	Mid	-0.14	0.511	18.39	19.50	1.291	<b>0.660</b>	31#
	Level1			0	41490	2680	50	Mid	0.10	0.501	18.35	19.50	1.303	0.653	/
	Level1		Right Tilt	0	41490	2680	1	Mid	0.18	0.338	18.39	19.50	1.291	0.436	/
	Level1			0	41490	2680	50	Mid	-0.11	0.326	18.35	19.50	1.303	0.425	/
Up	Level1	QPSK	Right Cheek	0	PCC414 90+SCC 41292	2680 +266 0.2	PCC 1+ SCC 1	High + Low	0.17	0.427	18.22	19.50	1.343	0.573	/
Up	Level2&3	QPSK	Left Cheek	0	41490	2680	1	Mid	-0.06	0.104	17.42	18.50	1.282	0.133	/
	Level2&3			0	41490	2680	50	Mid	-0.05	0.098	17.38	18.50	1.294	0.127	/
	Level2&3		Left Tilt	0	41490	2680	1	Mid	0.04	0.080	17.42	18.50	1.282	0.103	/
	Level2&3			0	41490	2680	50	Mid	0.10	0.075	17.38	18.50	1.294	0.097	/
	Level2&3		Right Cheek	0	41490	2680	1	Mid	-0.12	0.409	17.42	18.50	1.282	0.524	/
	Level2&3			0	41490	2680	50	Mid	-0.06	0.389	17.38	18.50	1.294	0.503	/
	Level2&3		Right Tilt	0	41490	2680	1	Mid	0.18	0.248	17.42	18.50	1.282	0.318	/
	Level2&3			0	41490	2680	50	Mid	0.08	0.238	17.38	18.50	1.294	0.308	/
Up	Level4	QPSK	Left Cheek	0	41490	2680	1	Mid	0.12	0.091	16.37	17.50	1.297	0.118	/
	Level4			0	41490	2680	50	Mid	-0.06	0.087	16.29	17.50	1.321	0.115	/
	Level4		Left Tilt	0	41490	2680	1	Mid	0.11	0.085	16.37	17.50	1.297	0.110	/
	Level4			0	41490	2680	50	Mid	-0.16	0.079	16.29	17.50	1.321	0.104	/
	Level4		Right Cheek	0	41490	2680	1	Mid	0.02	0.321	16.37	17.50	1.297	0.416	/
	Level4			0	41490	2680	50	Mid	0.03	0.315	16.29	17.50	1.321	0.416	/
	Level4		Right Tilt	0	41490	2680	1	Mid	0.15	0.219	16.37	17.50	1.297	0.284	/
	Level4			0	41490	2680	50	Mid	0.00	0.211	16.29	17.50	1.321	0.279	/
Down	Off	QPSK	Left Cheek	0	40620	2593	1	Mid	-0.17	0.050	23.58	24.50	1.236	0.062	/
	Off			0	41490	2680	50	Mid	-0.13	0.041	22.53	23.50	1.250	0.051	/
	Off		Left Tilt	0	40620	2593	1	Mid	0.04	0.036	23.58	24.50	1.236	0.044	/
	Off			0	41490	2680	50	Mid	0.16	0.031	22.53	23.50	1.250	0.039	/
	Off		Right Cheek	0	40620	2593	1	Mid	0.03	0.043	23.58	24.50	1.236	0.053	/
	Off			0	41490	2680	50	Mid	0.07	0.035	22.53	23.50	1.250	0.044	/
	Off		Right Tilt	0	40620	2593	1	Mid	0.13	0.016	23.58	24.50	1.236	0.020	/
	Off			0	41490	2680	50	Mid	0.08	0.011	22.53	23.50	1.250	0.014	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	40620	2593	1	Mid	0.05	0.135	23.58	24.50	1.236	0.167	/
	Off			15	41490	2680	50	Mid	0.12	0.113	22.53	23.50	1.250	0.141	/

	Off		Back Side	15	40620	2593	1	Mid	-0.05	0.155	23.58	24.50	1.236	0.192	/
	Off			15	41490	2680	50	Mid	-0.02	0.133	22.53	23.50	1.250	0.166	/
Down	Off	QPSK	Front Side	15	40620	2593	1	Mid	0.05	0.142	23.58	24.50	1.236	0.176	/
	Off			15	41490	2680	50	Mid	0.00	0.118	22.53	23.50	1.250	0.148	/
	Off		Back Side	15	40620	2593	1	Mid	0.13	0.199	23.58	24.50	1.236	<b>0.246</b>	32#
	Off			15	41490	2680	50	Mid	-0.13	0.165	22.53	23.50	1.250	0.206	/
Down	Off	QPSK	Back Side	15	PCC 40620 +SCC 40422	2593 +257 3.2	PCC 1+ SCC 1	High +Low	-0.09	0.157	23.28	24.50	1.324	0.208	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	40620	2593	1	Mid	0.15	0.229	23.58	24.50	1.236	0.283	/
	Off			10	41490	2680	50	Mid	0.03	0.186	22.53	23.50	1.250	0.233	/
	Off		Back Side	10	40620	2593	1	Mid	0.08	0.473	23.58	24.50	1.236	0.585	33#
	Off			10	41490	2680	50	Mid	0.07	0.390	22.53	23.50	1.250	0.488	/
	Off		Left Edge	10	40620	2593	1	Mid	-0.18	0.047	23.58	24.50	1.236	0.058	/
	Off			10	41490	2680	50	Mid	-0.17	0.040	22.53	23.50	1.250	0.050	/
	Off		Right Edge	10	40620	2593	1	Mid	-0.18	0.324	23.58	24.50	1.236	0.400	/
	Off			10	41490	2680	50	Mid	0.06	0.256	22.53	23.50	1.250	0.320	/
	Off		Top Edge	10	40620	2593	1	Mid	-0.17	0.177	23.58	24.50	1.236	0.219	/
	Off			10	41490	2680	50	Mid	-0.12	0.140	22.53	23.50	1.250	0.175	/
Down	Off	QPSK	Front Side	10	40620	2593	1	Mid	0.12	0.288	23.58	24.50	1.236	0.356	/
	Off			10	41490	2680	50	Mid	0.10	0.238	22.53	23.50	1.250	0.298	/
	Off		Back Side	10	40620	2593	1	Mid	0.16	0.311	23.58	24.50	1.236	0.384	/
	Off			10	41490	2680	50	Mid	0.09	0.256	22.53	23.50	1.250	0.320	/
	Off		Left Edge	10	40620	2593	1	Mid	-0.01	0.130	23.58	24.50	1.236	0.161	/
	Off			10	41490	2680	50	Mid	-0.18	0.107	22.53	23.50	1.250	0.134	/
	Off		Right Edge	10	40620	2593	1	Mid	0.08	0.087	23.58	24.50	1.236	0.108	/
	Off			10	41490	2680	50	Mid	-0.06	0.072	22.53	23.50	1.250	0.090	/
	Off		Bottom Edge	10	40620	2593	1	Mid	0.03	0.369	23.58	24.50	1.236	0.456	/
	Off			10	41490	2680	50	Mid	-0.14	0.326	22.53	23.50	1.250	0.408	/
Up	Off	QPSK	Back Side	10	PCC 40620 +SCC 40422	2593 +257 3.2	PCC 1+ SCC 1	High + Low	-0.04	0.395	23.28	24.50	1.324	0.523	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

## 10.12 WIFI 2.4GHz

Mode	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle(%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>														
802.11 b	Level1	Left Cheek	0	6	2437	0.10	0.405	15.70	17.00	1.349	99.36	1.006	0.550	/
	Level1	Left Tilt	0	6	2437	0.09	0.462	15.70	17.00	1.349	99.36	1.006	<b>0.627</b>	34#
	Level1	Right Cheek	0	6	2437	0.17	0.192	15.70	17.00	1.349	99.36	1.006	0.261	/
	Level1	Right Tilt	0	6	2437	0.16	0.204	15.70	17.00	1.349	99.36	1.006	0.277	/
802.11 b	Level2	Left Cheek	0	6	2437	-0.04	0.248	13.87	15.00	1.297	99.36	1.006	0.324	/
	Level2	Left Tilt	0	6	2437	0.15	0.295	13.87	15.00	1.297	99.36	1.006	0.385	/
	Level2	Right Cheek	0	6	2437	-0.05	0.115	13.87	15.00	1.297	99.36	1.006	0.150	/
	Level2	Right Tilt	0	6	2437	0.02	0.119	13.87	15.00	1.297	99.36	1.006	0.155	/
802.11 b	Level3	Left Cheek	0	6	2437	-0.03	0.158	12.82	14.00	1.312	99.36	1.006	0.209	/
	Level3	Left Tilt	0	6	2437	-0.17	0.185	12.82	14.00	1.312	99.36	1.006	0.244	/
	Level3	Right Cheek	0	6	2437	0.15	0.075	12.82	14.00	1.312	99.36	1.006	0.099	/
	Level3	Right Tilt	0	6	2437	0.04	0.077	12.82	14.00	1.312	99.36	1.006	0.102	/
802.11 b	Level4	Left Cheek	0	6	2437	0.09	0.102	11.82	13.00	1.312	99.36	1.006	0.135	/
	Level4	Left Tilt	0	6	2437	0.01	0.121	11.82	13.00	1.312	99.36	1.006	0.160	/
	Level4	Right Cheek	0	6	2437	0.12	0.048	11.82	13.00	1.312	99.36	1.006	0.063	/
	Level4	Right Tilt	0	6	2437	0.14	0.050	11.82	13.00	1.312	99.36	1.006	0.066	/
<b>Body-worn Accessory</b>														
802.11 b	Off	Front Side	15	11	2462	0.00	0.131	21.29	22.50	1.321	99.36	1.006	0.208	/
	Off	Back Side	15	11	2462	0.18	0.166	21.29	22.50	1.321	99.36	1.006	<b>0.263</b>	35#
<b>Hotspot</b>														
802.11 b	Off	Front Side	10	11	2462	0.02	0.182	21.29	22.50	1.321	99.36	1.006	0.242	/
	Off	Back Side	10	11	2462	0.12	0.274	21.29	22.50	1.321	99.36	1.006	<b>0.364</b>	36#
	Off	Left Edge	10	11	2462	0.00	0.270	21.29	22.50	1.321	99.36	1.006	0.359	/
	Off	Right Edge	10	11	2462	0.12	0.022	21.29	22.50	1.321	99.36	1.006	0.029	/
	Off	Top Edge	10	11	2462	0.15	0.267	21.29	22.50	1.321	99.36	1.006	0.355	/
	Off	Bottom Edge	10	11	2462	-0.12	0.017	21.29	22.50	1.321	99.36	1.006	0.023	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

## 10.13 WIFI 5GHz

Mode	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle(%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>5.2&amp;5.3G Head</b>														
802.11 n(HT40)	Level1	Left Cheek	0	54	5270	0.11	0.517	16.34	17.00	1.165	95.74	1.044	0.629	/
	Level1	Left Tilt	0	54	5270	0.04	0.658	16.34	17.00	1.165	95.74	1.044	<b>0.801</b>	37#
	Level1		0	62	5310	-0.08	0.495	13.96	15.50	1.426	95.74	1.044	0.737	/
	Level1	Right Cheek	0	54	5270	0.08	0.338	16.34	17.00	1.165	95.74	1.044	0.411	/
	Level1	Right Tilt	0	54	5270	0.11	0.446	16.34	17.00	1.165	95.74	1.044	0.543	/
802.11	Level2	Left Cheek	0	54	5270	0.18	0.321	14.14	15.00	1.219	95.74	1.044	0.409	/

n(HT40)	Level2	Left Tilt	0	54	5270	-0.14	0.385	14.14	15.00	1.219	95.74	1.044	0.490	/
	Level2	Right Cheek	0	54	5270	-0.04	0.227	14.14	15.00	1.219	95.74	1.044	0.289	/
	Level2	Right Tilt	0	54	5270	-0.14	0.286	14.14	15.00	1.219	95.74	1.044	0.364	/
802.11 n(HT40)	Level3	Left Cheek	0	54	5270	-0.14	0.252	13.22	14.00	1.198	95.74	1.044	0.315	/
	Level3	Left Tilt	0	54	5270	0.04	0.322	13.22	14.00	1.198	95.74	1.044	0.403	/
	Level3	Right Cheek	0	54	5270	-0.01	0.176	13.22	14.00	1.198	95.74	1.044	0.220	/
	Level3	Right Tilt	0	54	5270	0.07	0.215	13.22	14.00	1.198	95.74	1.044	0.269	/
802.11 n(HT40)	Level4	Left Cheek	0	54	5270	0.19	0.201	12.17	13.00	1.212	95.74	1.044	0.254	/
	Level4	Left Tilt	0	54	5270	0.17	0.233	12.17	13.00	1.212	95.74	1.044	0.295	/
	Level4	Right Cheek	0	54	5270	0.12	0.136	12.17	13.00	1.212	95.74	1.044	0.172	/
	Level4	Right Tilt	0	54	5270	-0.10	0.181	12.17	13.00	1.212	95.74	1.044	0.229	/
<b>5.6G Head</b>														
802.11 n(HT40)	Level1	Left Cheek	0	134	5670	0.18	0.196	15.64	17.00	1.366	95.74	1.044	0.280	/
	Level1	Left Tilt	0	134	5670	-0.17	0.391	15.64	17.00	1.366	95.74	1.044	<b>0.558</b>	38#
	Level1	Right Cheek	0	134	5670	-0.08	0.177	15.64	17.00	1.366	95.74	1.044	0.253	/
	Level1	Right Tilt	0	102	5510	0.07	0.212	15.64	17.00	1.366	95.74	1.044	0.303	/
802.11 n(HT40)	Level2	Left Cheek	0	134	5670	0.16	0.115	13.75	15.00	1.332	95.74	1.044	0.160	/
	Level2	Left Tilt	0	134	5670	0.00	0.217	13.75	15.00	1.332	95.74	1.044	0.302	/
	Level2	Right Cheek	0	134	5670	0.18	0.121	13.75	15.00	1.332	95.74	1.044	0.168	/
	Level2	Right Tilt	0	134	5670	0.16	0.144	13.75	15.00	1.332	95.74	1.044	0.200	/
802.11 n(HT40)	Level3	Left Cheek	0	134	5670	0.03	0.093	12.82	14.00	1.314	95.74	1.044	0.128	/
	Level3	Left Tilt	0	134	5670	-0.17	0.166	12.82	14.00	1.314	95.74	1.044	0.228	/
	Level3	Right Cheek	0	134	5670	0.15	0.086	12.82	14.00	1.314	95.74	1.044	0.118	/
	Level3	Right Tilt	0	134	5670	0.15	0.104	12.82	14.00	1.314	95.74	1.044	0.143	/
802.11 n(HT40)	Level4	Left Cheek	0	134	5670	0.00	0.077	11.81	13.00	1.316	95.74	1.044	0.106	/
	Level4	Left Tilt	0	134	5670	-0.14	0.123	11.81	13.00	1.316	95.74	1.044	0.169	/
	Level4	Right Cheek	0	134	5670	0.07	0.070	11.81	13.00	1.316	95.74	1.044	0.096	/
	Level4	Right Tilt	0	134	5670	0.11	0.080	11.81	13.00	1.316	95.74	1.044	0.110	/
<b>5.8G Head</b>														
802.11 n(HT40)	Level1	Left Cheek	0	159	5795	0.08	0.624	19.73	21.00	1.340	95.74	1.044	0.873	/
	Level1	Left Tilt	0	159	5795	0.03	0.714	19.73	21.00	1.340	95.74	1.044	0.999	/
	Level1		0	151	5755	-0.17	0.742	19.68	21.00	1.357	95.74	1.044	<b>1.051</b>	39#
	Level1	Right Cheek	0	159	5795	-0.08	0.505	19.73	21.00	1.340	95.74	1.044	0.707	/
	Level1	Right Tilt	0	159	5795	-0.05	0.646	19.73	21.00	1.340	95.74	1.044	0.904	/
802.11 n(HT40)	Level2	Left Cheek	0	159	5795	0.18	0.310	16.80	18.00	1.319	95.74	1.044	0.427	/
	Level2	Left Tilt	0	159	5795	-0.12	0.344	16.80	18.00	1.319	95.74	1.044	0.474	/
	Level2	Right Cheek	0	159	5795	0.14	0.256	16.80	18.00	1.319	95.74	1.044	0.353	/
	Level2	Right Tilt	0	159	5795	0.03	0.334	16.80	18.00	1.319	95.74	1.044	0.460	/
802.11 n(HT40)	Level3	Left Cheek	0	159	5795	-0.07	0.240	15.67	17.00	1.358	95.74	1.044	0.340	/
	Level3	Left Tilt	0	159	5795	-0.03	0.280	15.67	17.00	1.358	95.74	1.044	0.397	/
	Level3	Right Cheek	0	159	5795	0.13	0.207	15.67	17.00	1.358	95.74	1.044	0.294	/
	Level3	Right Tilt	0	159	5795	0.17	0.258	15.67	17.00	1.358	95.74	1.044	0.366	/
802.11 n(HT40)	Level4	Left Cheek	0	159	5795	0.00	0.198	14.69	16.00	1.351	95.74	1.044	0.279	/
	Level4	Left Tilt	0	159	5795	-0.04	0.218	14.69	16.00	1.351	95.74	1.044	0.308	/
	Level4	Right Cheek	0	159	5795	0.09	0.155	14.69	16.00	1.351	95.74	1.044	0.219	/

	Level4	Right Tilt	0	159	5795	-0.01	0.194	14.69	16.00	1.351	95.74	1.044	0.274	/
<b>5.2&amp;5.3G Body-worn Accessory</b>														
802.11	Off	Front Side	15	54	5270	0.08	0.158	21.94	22.50	1.138	95.74	1.044	0.188	/
n(HT40)	Off	Back Side	15	54	5270	-0.08	0.198	21.94	22.50	1.138	95.74	1.044	<b>0.235</b>	40#
<b>5.6G Body-worn Accessory</b>														
802.11	Off	Front Side	15	134	5670	-0.11	0.142	21.21	22.50	1.346	95.74	1.044	0.200	/
n(HT40)	Off	Back Side	15	134	5670	0.11	0.233	21.21	22.50	1.346	95.74	1.044	<b>0.328</b>	41#
<b>5.8G Body-worn Accessory</b>														
802.11	Off	Front Side	15	159	5795	-0.07	0.152	21.08	22.50	1.387	95.74	1.044	0.220	/
n(HT40)	Off	Back Side	15	159	5795	-0.03	0.198	21.08	22.50	1.387	95.74	1.044	<b>0.287</b>	42#
<b>5.2&amp;5.3G Hotspot</b>														
802.11 n(HT40)	Off	Front Side	10	46	5230	0.05	0.237	21.51	22.50	1.257	95.74	1.044	0.311	/
	Off	Back Side	10	46	5230	0.05	0.301	21.51	22.50	1.257	95.74	1.044	0.395	/
	Off	Left Edge	10	46	5230	-0.17	0.259	21.51	22.50	1.257	95.74	1.044	0.340	/
	Off	Right Edge	10	46	5230	-0.02	0.059	21.51	22.50	1.257	95.74	1.044	0.077	/
	Off	Top Edge	10	46	5230	0.04	0.744	21.51	22.50	1.257	95.74	1.044	<b>0.977</b>	43#
	Off		10	38	5190	0.16	0.625	19.47	21.00	1.421	95.74	1.044	0.928	/
802.11 n(HT40)	Leve5	Front Side	10	46	5230	-0.05	0.121	18.89	20.00	1.291	95.74	1.044	0.163	/
	Leve5	Back Side	10	46	5230	0.04	0.162	18.89	20.00	1.291	95.74	1.044	0.218	/
	Leve5	Left Edge	10	46	5230	-0.16	0.148	18.89	20.00	1.291	95.74	1.044	0.200	/
	Leve5	Right Edge	10	46	5230	-0.15	0.039	18.89	20.00	1.291	95.74	1.044	0.053	/
	Leve5	Top Edge	10	46	5230	0.02	0.428	18.89	20.00	1.291	95.74	1.044	<b>0.577</b>	/
<b>5.8G Hotspot</b>														
802.11 n(HT40)	Off	Front Side	10	159	5795	-0.05	0.175	21.08	22.50	1.385	95.74	1.044	0.253	/
	Off	Back Side	10	159	5795	0.14	0.242	21.08	22.50	1.385	95.74	1.044	0.350	/
	Off	Left Edge	10	159	5795	-0.13	0.490	21.08	22.50	1.385	95.74	1.044	0.709	/
	Off	Right Edge	10	159	5795	-0.11	0.040	21.08	22.50	1.385	95.74	1.044	0.058	/
	Off	Top Edge	10	159	5795	0.14	0.537	21.08	22.50	1.385	95.74	1.044	<b>0.777</b>	44#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

## 10.14 Bluetooth

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle(%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
DH5	Left Cheek	0	39	2441	0.11	0.197	11.10	12.00	1.230	77.01	1.299	<b>0.315</b>	45#
	Left Tilt	0	39	2441	-0.15	0.184	11.10	12.00	1.230	77.01	1.299	0.294	/
	Right Cheek	0	39	2441	0.02	0.077	11.10	12.00	1.230	77.01	1.299	0.123	/
	Right Tilt	0	39	2441	-0.11	0.088	11.10	12.00	1.230	77.01	1.299	0.140	/
<b>Body-worn Accessory</b>													
DH5	Front Side	15	39	2441	-0.15	0.015	11.10	12.00	1.230	77.01	1.299	0.024	/
	Back Side	15	39	2441	0.05	0.024	11.10	12.00	1.230	77.01	1.299	<b>0.038</b>	46#
<b>Hotspot</b>													
DH5	Front Side	10	39	2441	0.18	0.021	11.10	12.00	1.230	77.01	1.299	0.033	/
	Back Side	10	39	2441	-0.02	0.037	11.10	12.00	1.230	77.01	1.299	<b>0.058</b>	47#
	Left Edge	10	39	2441	-0.04	0.021	11.10	12.00	1.230	77.01	1.299	0.033	/
	Right Edge	10	39	2441	0.07	0.005	11.10	12.00	1.230	77.01	1.299	0.008	/
	Top Edge	10	39	2441	0.08	0.036	11.10	12.00	1.230	77.01	1.299	0.057	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.



## 11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1900	WCDMA Band 2	Head	Right Cheek	0.803	Yes	0.795	1.01

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

## 12 SIMULTANEOUS TRANSMISSION

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

### 12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	GSM + WiFi 2.4G	Yes	Yes	Yes
2	GSM + WiFi 5G	Yes	Yes	Yes
3	GSM + Bluetooth	Yes	Yes	Yes
4	UMTS + WiFi 2.4G	Yes	Yes	Yes
5	UMTS + WiFi 5G	Yes	Yes	Yes
6	UMTS + Bluetooth	Yes	Yes	Yes
7	LTE + WiFi 2.4G	Yes	Yes	Yes
8	LTE + WiFi 5G	Yes	Yes	Yes
9	LTE + Bluetooth	Yes	Yes	Yes
10	WiFi 2.4G + Bluetooth	Yes	Yes	Yes
11	WiFi 5G + Bluetooth	Yes	Yes	Yes
12	GSM + 2.4G WIFI + Bluetooth	Yes	Yes	Yes
13	UMTS + 2.4G WIFI + Bluetooth	Yes	Yes	Yes
14	LTE + 2.4G WIFI + Bluetooth	Yes	Yes	Yes
15	GSM + 5G WIFI + Bluetooth	Yes	Yes	Yes
16	UMTS + 5G WIFI + Bluetooth	Yes	Yes	Yes
17	LTE + 5G WIFI + Bluetooth	Yes	Yes	Yes
18	GSM + 2.4G WIFI + 5G WIFI	Yes	Yes	Yes
19	UMTS + 2.4G WIFI + 5G WIFI	Yes	Yes	Yes
20	LTE + 2.4G WIFI + 5G WIFI	Yes	Yes	Yes
21	GSM + 2.4G WIFI + 5G WIFI + Bluetooth	Yes	Yes	Yes
22	UMTS + 2.4G WIFI + 5G WIFI + Bluetooth	Yes	Yes	Yes
23	LTE + 2.4G WIFI + 5G WIFI + Bluetooth	Yes	Yes	Yes

Note:

1. 2G&3G&4G share the same antenna and can't transmit simultaneously.
2. Two WWAN antennas can switch automatically, but up and down antenna can't transmit simultaneously.
3. The maximum SAR summation is calculated based on the same configuration and test position.

## 12.2 Sum SAR of Simultaneous Transmission

Sum SAR of Simultaneous Transmission Please refer the document “SAR Simultaneous Transmission Evaluation.pdf”.

## 13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1055	2017/06/26	2020/06/25
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2017/06/26	2020/06/25
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2017/07/01	2020/06/30
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2017/06/30	2020/06/29
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2017/03/21	2020/03/20
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2017/07/10	2020/07/09
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2017/06/29	2020/06/28
E-Field Probe	Speag	EX3DV4	SN: 7510	2019/08/02	2020/08/01
Data Acquisition Electronics	Speag	DAE4	SN: 1454	2019/08/02	2020/08/01
Signal Generator	R&S	SMBV100A	260592	2019/06/14	2020/06/13
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2019/10/30	2020/10/29
Power Sensor	R&S	NRV-Z4	100381	2019/10/30	2020/10/29
Power Sensor	R&S	NRV-Z2	100211	2019/10/30	2020/10/29
Wireless Communication Test Set	Agilent	8960-E5515C	MY50260493	2019/06/13	2020/06/13
Wireless Communication Test Set	R&S	CMW 500	104946	2019/10/30	2020/10/29
Network Analyzer	R&S	ZVL-6	101380	2019/06/20	2020/06/19
Thermometer	Elitech	RC-4HC	N/A	2019/11/02	2020/11/01
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	N/A	N/A
Phantom1	Speag	SAM	SN: 1859	N/A	N/A
Phantom2	Speag	SAM	SN: 1857	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.

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity ( $\sigma$ ) (S/m)	Meas. Permittivity ( $\epsilon$ )	Target Conductivity ( $\sigma$ ) (S/m)	Target Permittivity ( $\epsilon$ )	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2020.01.30	Head	750	21.3	0.88	42.36	0.89	41.90	-1.12	1.10
2020.01.31	Head	835	21.4	0.90	42.16	0.90	41.50	0.00	1.59
2020.01.20	Head	835	20.9	0.92	42.47	0.90	41.50	2.22	2.34
2020.01.21	Head	835	21.2	0.88	40.81	0.90	41.50	-2.22	-1.66
2020.01.22	Head	835	21.2	0.87	40.51	0.90	41.50	-3.33	-2.39
2020.02.23	Head	1750	21.4	1.35	39.28	1.37	40.08	-1.46	-2.00
2020.02.22	Head	1750	21.1	1.38	39.24	1.37	40.08	0.73	-2.10
2020.02.21	Head	1750	21.3	1.41	40.86	1.37	40.08	2.92	1.95
2020.02.20	Head	1900	21.2	1.42	40.25	1.40	40.00	1.43	0.63
2020.02.19	Head	1900	20.7	1.39	40.90	1.40	40.00	-0.71	2.25
2020.02.18	Head	1900	21.0	1.37	38.90	1.40	40.00	-2.14	-2.75
2020.02.17	Head	1900	21.1	1.41	39.35	1.40	40.00	0.71	-1.63
2020.02.16	Head	2450	21.2	1.76	37.85	1.80	39.20	-2.22	-3.44
2020.02.15	Head	2450	21.3	1.82	39.43	1.80	39.20	1.11	0.59
2020.02.14	Head	2600	21.2	1.96	39.15	1.96	39.01	0.00	0.36
2020.02.13	Head	2600	21.4	2.00	39.90	1.96	39.01	2.04	2.28
2020.02.12	Head	2600	21.0	1.98	39.74	1.96	39.01	1.02	1.87
2020.02.11	Head	2600	21.0	1.98	38.21	1.96	39.01	1.02	-2.05
2020.02.10	Head	5250	21.5	4.74	36.28	4.71	35.93	0.64	0.97
2020.02.07	Head	5250	21.3	4.67	36.74	4.71	35.93	-0.85	2.25
2020.02.09	Head	5600	21.2	5.11	34.73	5.07	35.53	0.79	-2.25
2020.02.06	Head	5600	21.2	4.92	35.47	5.07	35.53	-2.96	-0.17
2020.02.08	Head	5750	21.0	5.32	34.24	5.22	35.36	1.92	-3.17
2020.02.05	Head	5750	21.1	5.29	34.88	5.22	35.36	1.34	-1.36

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).

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)	Targeted SAR(W/kg)	Tolerance (%)
2020.01.30	Head	750	100	0.859	8.59	8.27	3.87	8.49	1.18
2020.01.31	Head	835	100	0.948	9.48	9.75	-2.77	9.56	-0.84
2020.01.20	Head	835	100	0.931	9.31	9.75	-4.51	9.56	-2.62
2020.01.21	Head	835	100	0.924	9.24	9.75	-5.23	9.56	-3.35
2020.01.22	Head	835	100	1.010	10.10	9.75	3.59	9.56	5.65
2020.02.23	Head	1750	100	3.510	35.10	36.90	-4.88	36.40	-3.57
2020.02.22	Head	1750	100	3.450	34.50	36.90	-6.50	36.40	-5.22
2020.02.21	Head	1750	100	3.780	37.80	36.90	2.44	36.40	3.85
2020.02.20	Head	1900	100	4.180	41.80	39.90	4.76	39.70	5.29
2020.02.19	Head	1900	100	4.220	42.20	39.90	5.76	39.70	6.30
2020.02.18	Head	1900	100	3.910	39.10	39.90	-2.01	39.70	-1.51
2020.02.17	Head	1900	100	3.790	37.90	39.90	-5.01	39.70	-4.53
2020.02.16	Head	2450	100	5.470	54.70	52.40	4.39	52.40	4.39
2020.02.15	Head	2450	100	5.350	53.50	52.40	2.10	52.40	2.10
2020.02.14	Head	2600	100	5.380	53.80	56.40	-4.61	55.30	-2.71
2020.02.13	Head	2600	100	5.690	56.90	56.40	0.89	55.30	2.89
2020.02.12	Head	2600	100	5.280	52.80	56.40	-6.38	55.30	-4.52
2020.02.11	Head	2600	100	5.820	58.20	56.40	3.19	55.30	5.24
2020.02.10	Head	5250	100	8.120	81.20	76.20	6.56	76.50	6.14
2020.02.07	Head	5250	100	7.950	79.50	76.20	4.33	76.50	3.92
2020.02.09	Head	5600	100	8.240	82.40	82.60	-0.24	83.30	-1.08
2020.02.06	Head	5600	100	8.520	85.20	82.60	3.15	83.30	2.28
2020.02.08	Head	5750	100	8.020	80.20	80.80	-0.74	78.00	2.82
2020.02.05	Head	5750	100	8.210	82.10	80.80	1.61	78.00	5.26

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

# System Performance Check Data (750MHz Head)

Date: 2020.01.30

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

Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.876 \text{ S/m}$ ;  $\epsilon_r = 42.358$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 750 100mW/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.931 W/kg

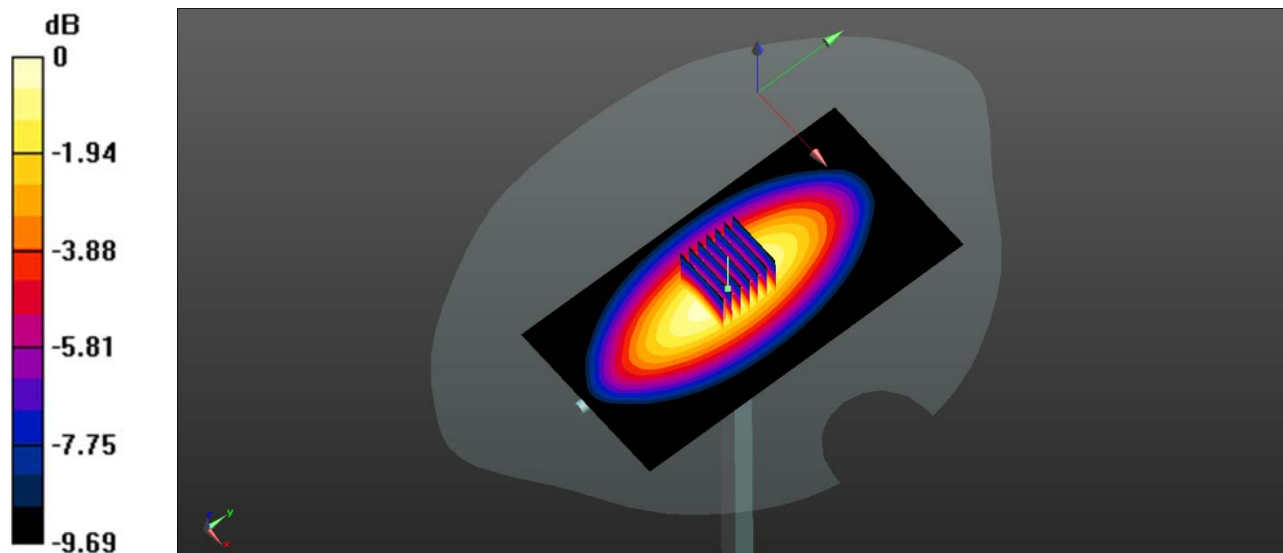
**CW 750 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.42 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.21 W/kg

**SAR(1 g) = 0.859 W/kg; SAR(10 g) = 0.557 W/kg**

Maximum value of SAR (measured) = 0.935 W/kg



0 dB = 0.935 W/kg

# System Performance Check Data (835MHz Head)

Date: 2020.01.31

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.902 \text{ S/m}$ ;  $\epsilon_r = 42.16$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 835 100mW/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.978 W/kg

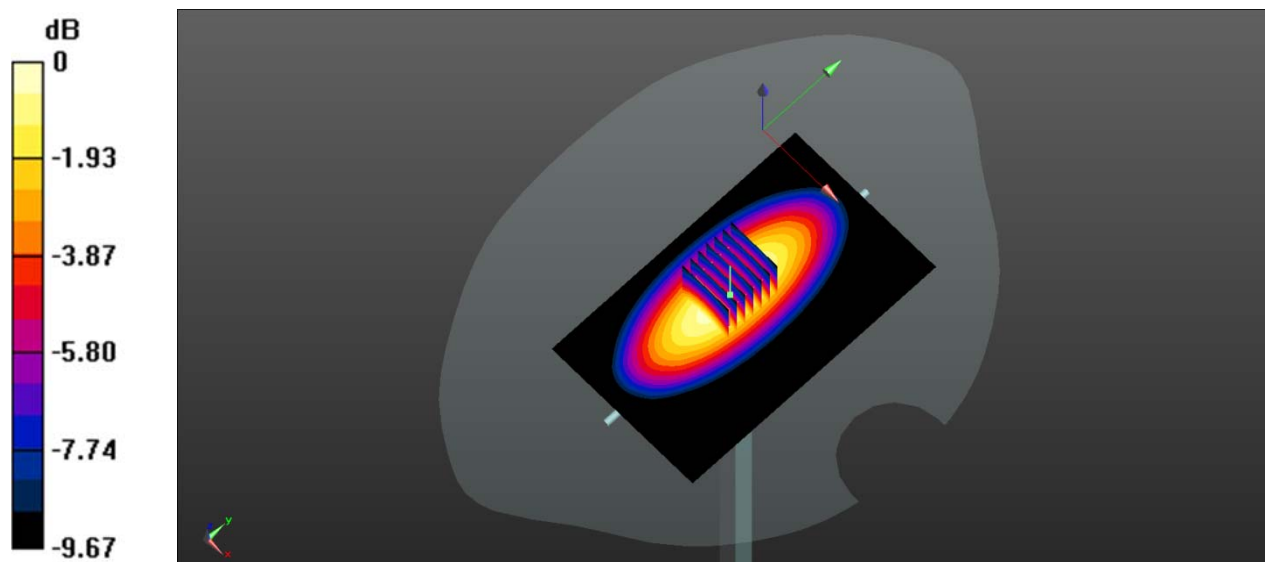
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.42 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.948 W/kg; SAR(10 g) = 0.614 W/kg**

Maximum value of SAR (measured) = 0.982 W/kg



0 dB = 0.982 W/kg



# System Performance Check Data (835MHz Head)

Date: 2020.01.20

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.918 \text{ S/m}$ ;  $\epsilon_r = 42.468$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 835 100mW/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.966 W/kg

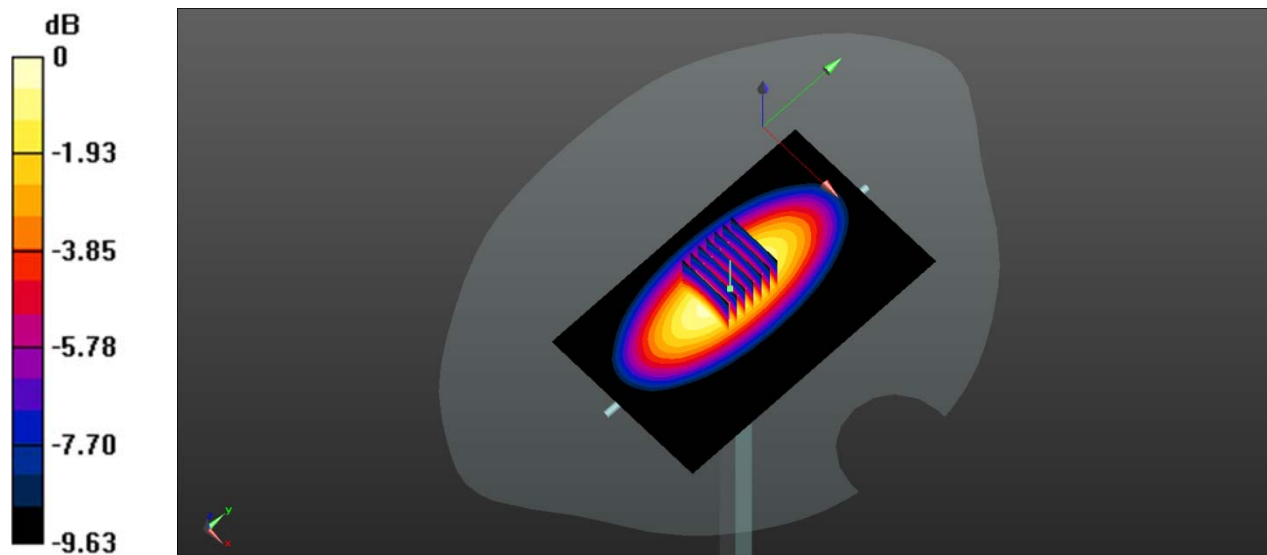
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.38 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.26 W/kg

**SAR(1 g) = 0.931 W/kg; SAR(10 g) = 0.596 W/kg**

Maximum value of SAR (measured) = 0.966 W/kg



0 dB = 0.966 W/kg

# System Performance Check Data (835MHz Head)

Date: 2020.01.21

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.88$  S/m;  $\epsilon_r = 40.805$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 0.962 W/kg

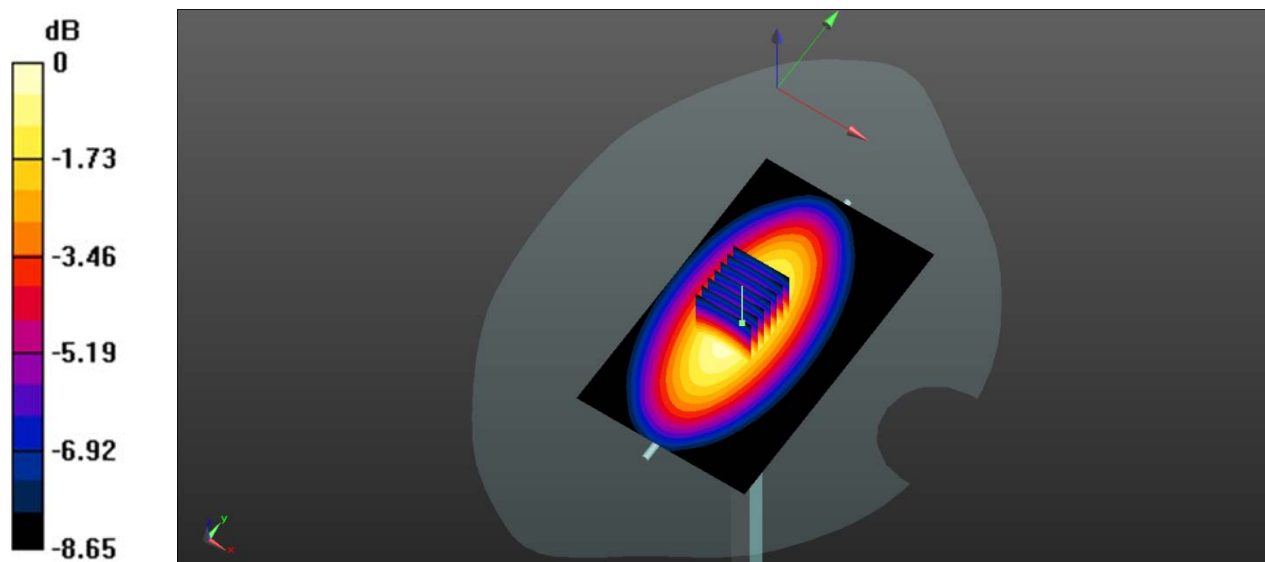
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.21 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.924 W/kg; SAR(10 g) = 0.581 W/kg**

Maximum value of SAR (measured) = 0.958 W/kg



0 dB = 0.958 W/kg

## System Performance Check Data (835MHz Head)

Date: 2020.01.22

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.871$  S/m;  $\epsilon_r = 40.51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 0.996 W/kg

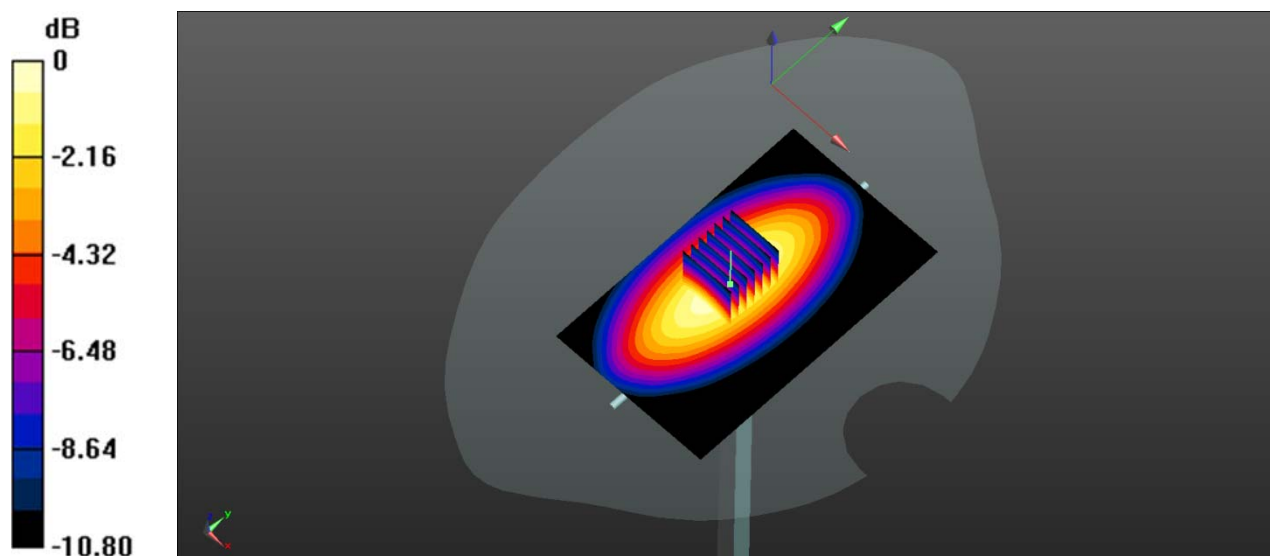
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.99 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.664 W/kg**

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



0 dB = 1.02 W/kg

# System Performance Check Data (1750MHz Head)

Date: 2020.02.23

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.35$  S/m;  $\epsilon_r = 39.278$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 4.05 W/kg

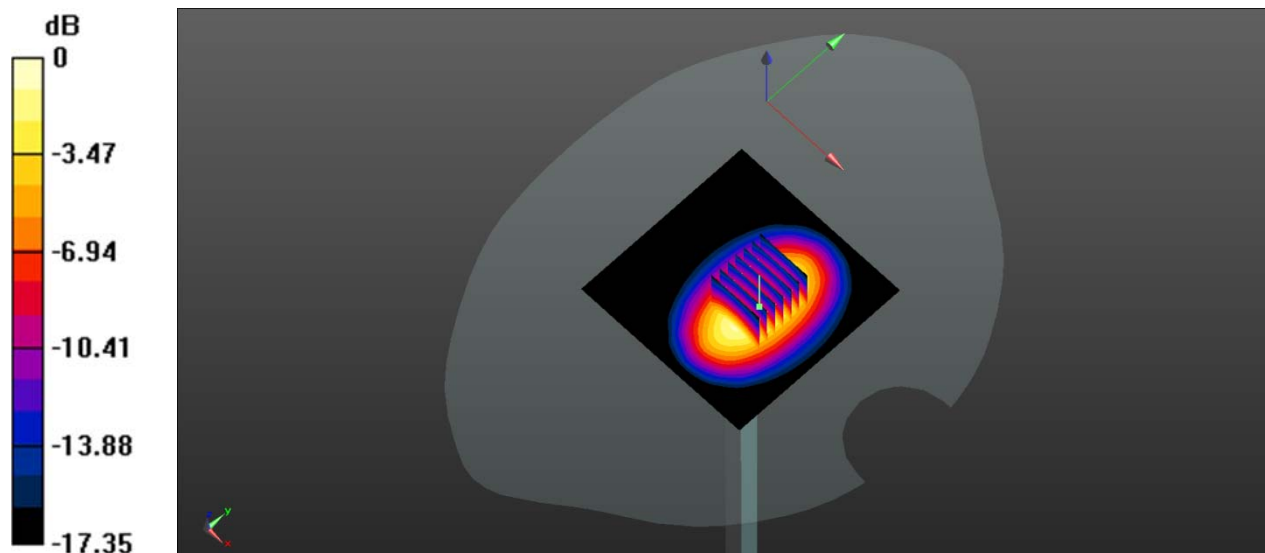
**CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.83 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 7.08 W/kg

**SAR(1 g) = 3.51 W/kg; SAR(10 g) = 1.86 W/kg**

Maximum value of SAR (measured) = 4.04 W/kg



0 dB = 4.04 W/kg

# System Performance Check Data (1750MHz Head)

Date: 2020.02.22

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.384$  S/m;  $\epsilon_r = 39.235$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 3.89 W/kg

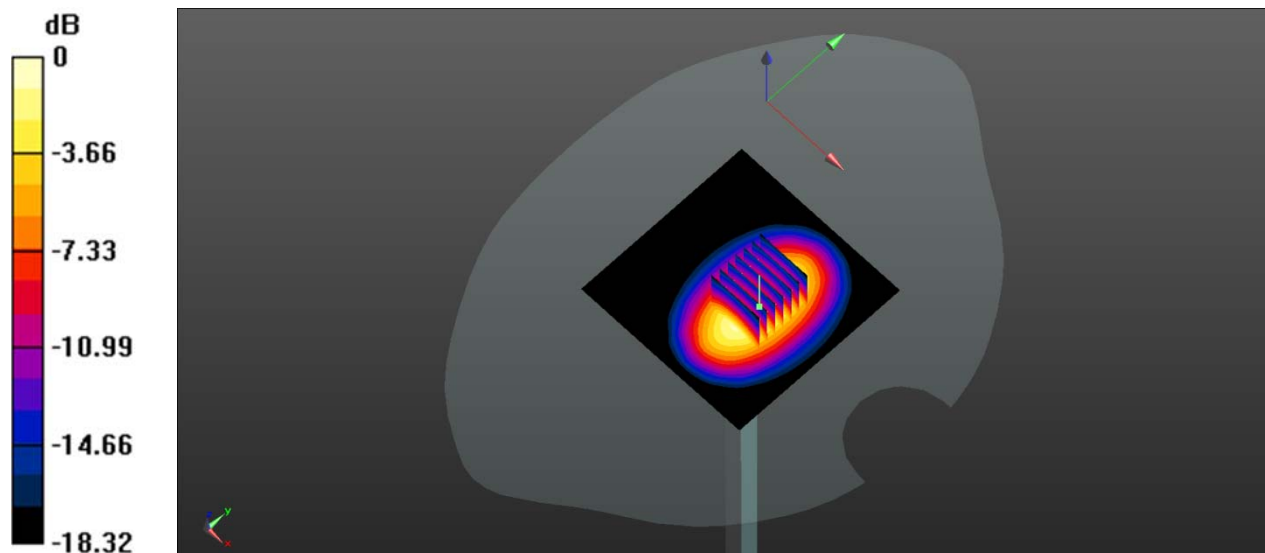
**CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.68 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 6.95 W/kg

**SAR(1 g) = 3.45 W/kg; SAR(10 g) = 1.85 W/kg**

Maximum value of SAR (measured) = 3.89 W/kg



0 dB = 3.89 W/kg

# System Performance Check Data (1750MHz Head)

Date: 2020.02.21

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.408$  S/m;  $\epsilon_r = 40.858$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 4.15 W/kg

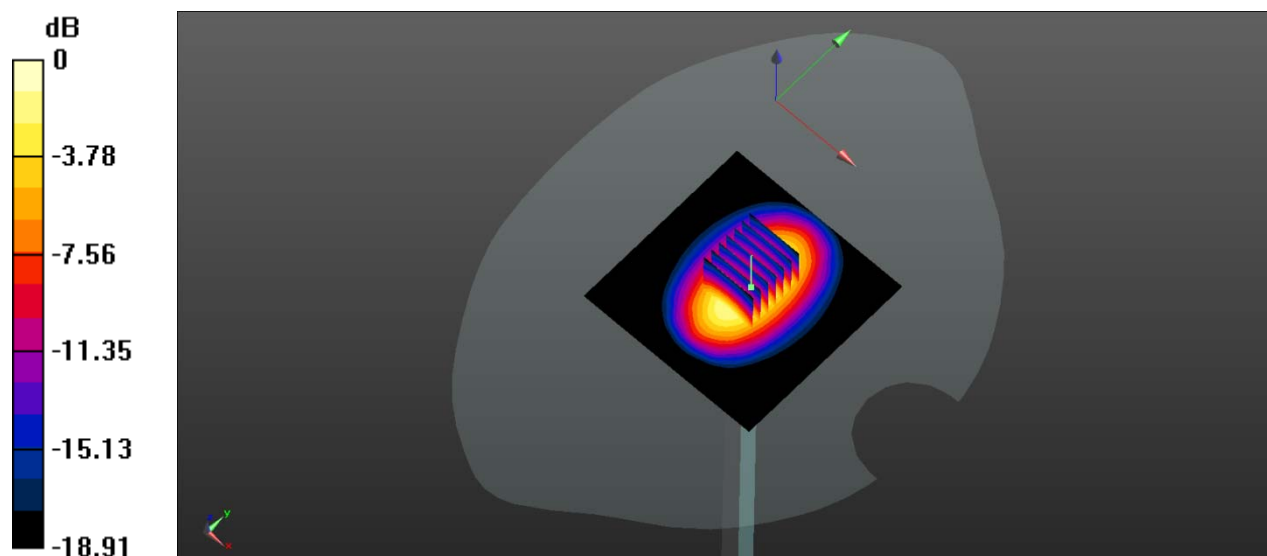
**CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.84 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 7.11 W/kg

**SAR(1 g) = 3.78 W/kg; SAR(10 g) = 2.03 W/kg**

Maximum value of SAR (measured) = 4.12 W/kg



0 dB = 4.12 W/kg

# System Performance Check Data (1900MHz Head)

Date: 2020.02.20

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.417$  S/m;  $\epsilon_r = 40.245$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 4.61 W/kg

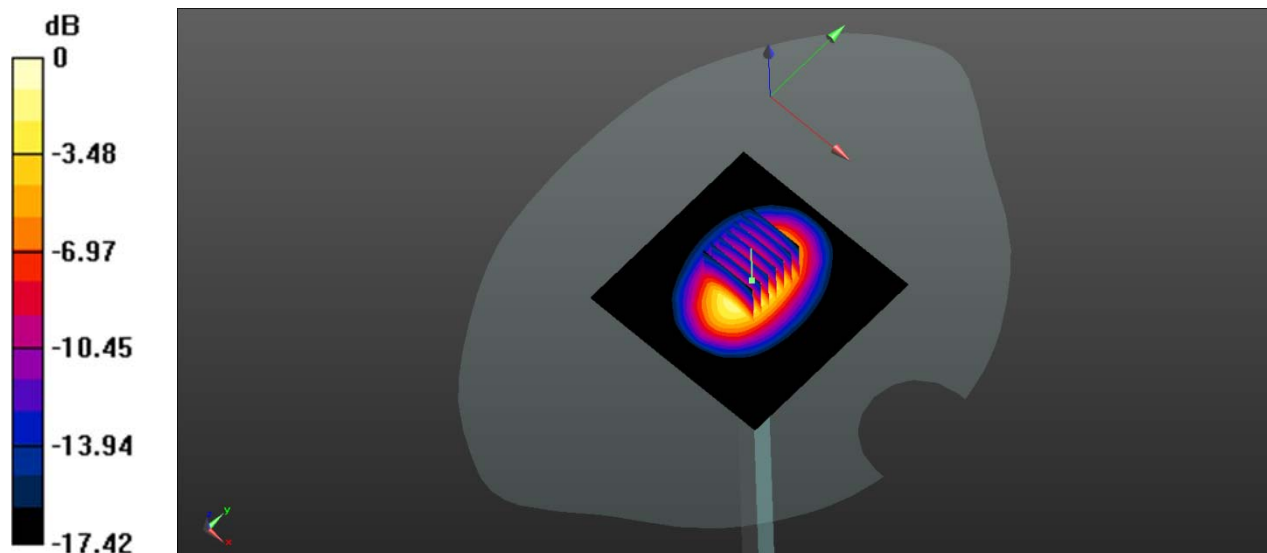
**CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.27 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 7.72 W/kg

**SAR(1 g) = 4.18 W/kg; SAR(10 g) = 2.14 W/kg**

Maximum value of SAR (measured) = 4.59 W/kg



0 dB = 4.59 W/kg

# System Performance Check Data (1900MHz Head)

Date: 2020.02.19

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.39$  S/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.0 Liquid Temperature: 20.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 4.68 W/kg

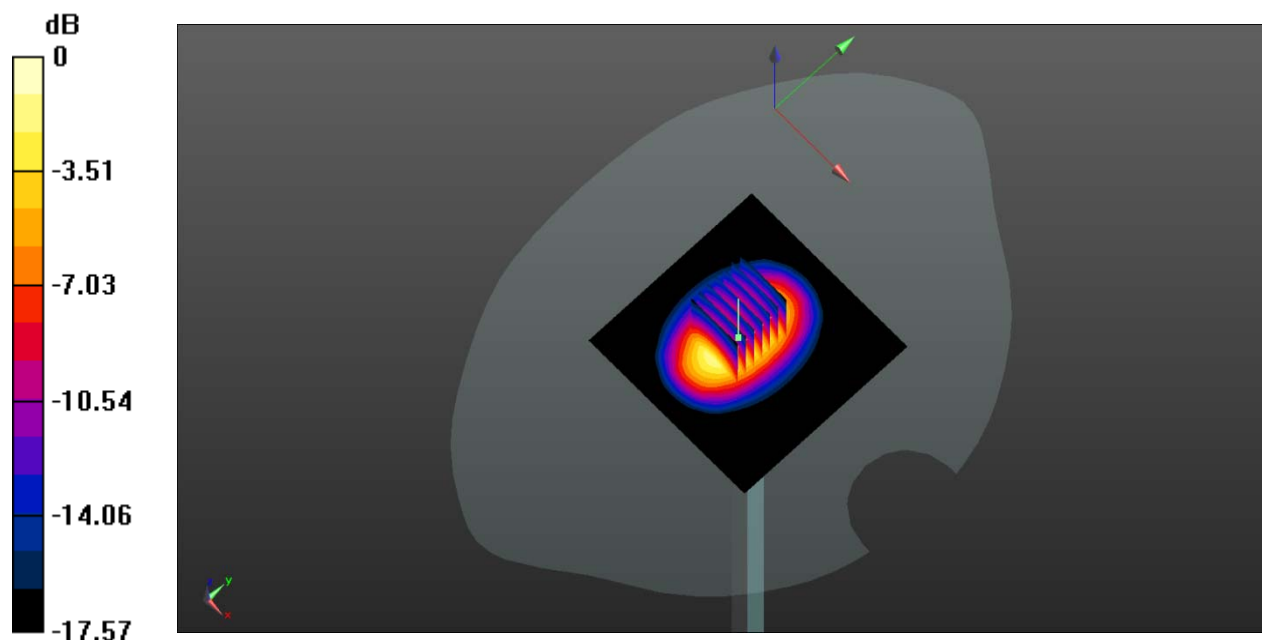
**CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.65 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 7.53 W/kg

**SAR(1 g) = 4.22 W/kg; SAR(10 g) = 2.19 W/kg**

Maximum value of SAR (measured) = 4.63 W/kg



0 dB = 4.63 W/kg



## System Performance Check Data (1900MHz Head)

Date: 2020.02.18

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.365$  S/m;  $\epsilon_r = 38.898$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 4.43 W/kg

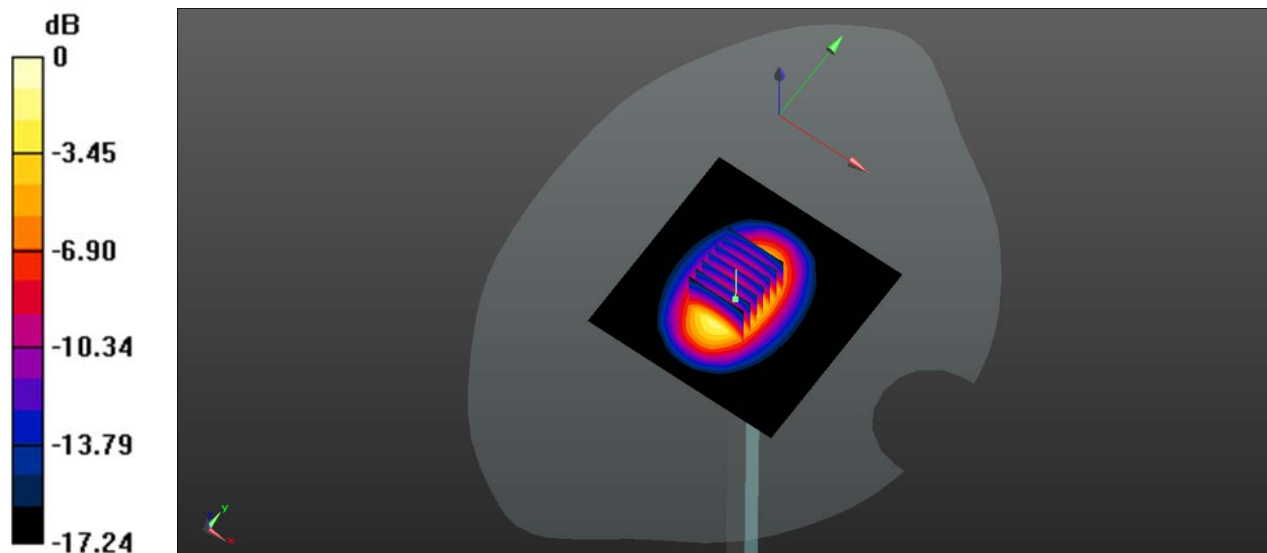
**CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.45 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 7.28 W/kg

**SAR(1 g) = 3.91 W/kg; SAR(10 g) = 1.98 W/kg**

Maximum value of SAR (measured) = 4.41 W/kg



0 dB = 4.41 W/kg

## System Performance Check Data (1900MHz Head)

Date: 2020.02.17

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.414$  S/m;  $\epsilon_r = 39.35$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 4.41 W/kg

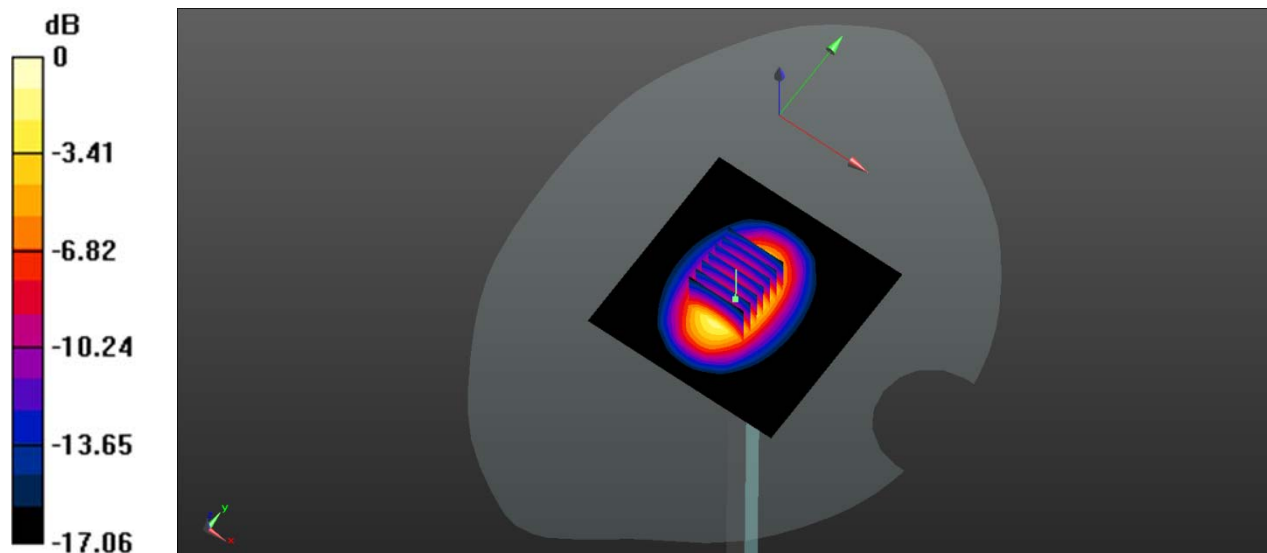
**CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.39 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 7.22 W/kg

**SAR(1 g) = 3.79 W/kg; SAR(10 g) = 1.96 W/kg**

Maximum value of SAR (measured) = 4.37 W/kg



0 dB = 4.37 W/kg

# System Performance Check Data (2450MHz Head)

Date: 2020.02.16

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.759$  S/m;  $\epsilon_r = 37.85$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 2450 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.23 W/kg

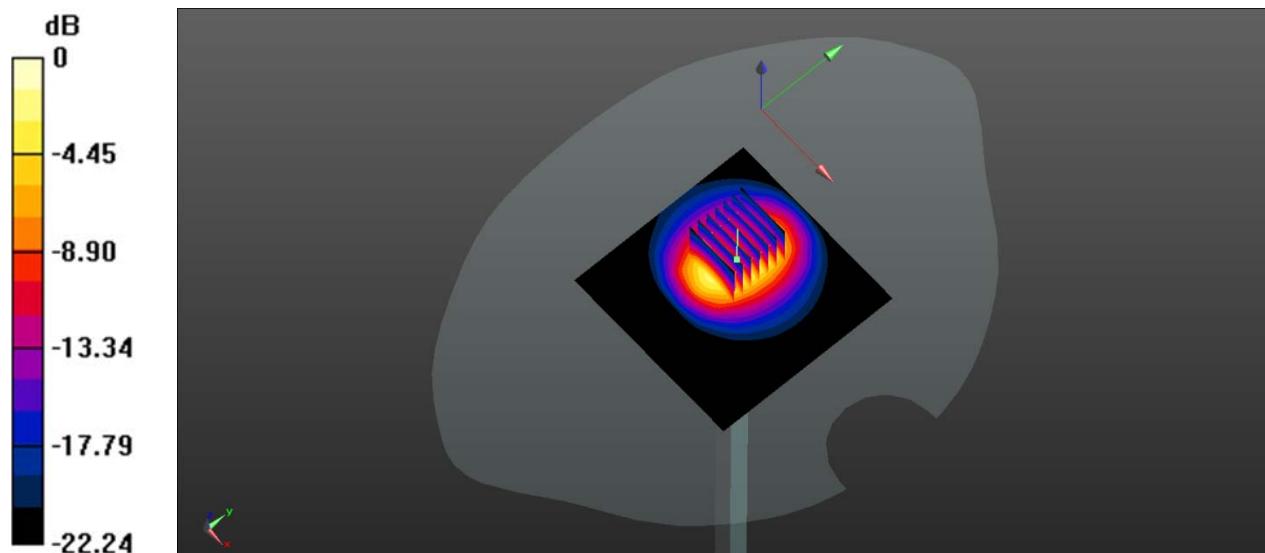
**CW 2450 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.14 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 12.1 W/kg

**SAR(1 g) = 5.47 W/kg; SAR(10 g) = 2.57 W/kg**

Maximum value of SAR (measured) = 6.19 W/kg



0 dB = 6.19 W/kg

# System Performance Check Data (2450MHz Head)

Date: 2020.02.15

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.823$  S/m;  $\epsilon_r = 39.429$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 2450 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.13 W/kg

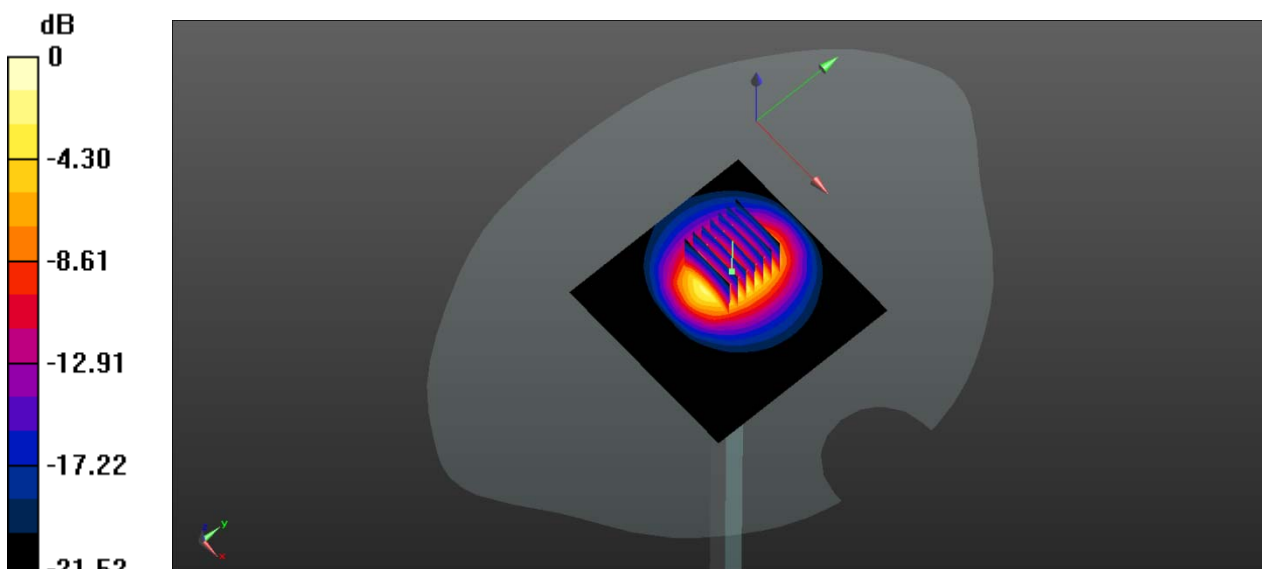
**CW 2450 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.86 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 11.5 W/kg

**SAR(1 g) = 5.35 W/kg; SAR(10 g) = 2.44 W/kg**

Maximum value of SAR (measured) = 6.12 W/kg



0 dB = 6.12 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.02.14

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 1.957$  S/m;  $\epsilon_r = 39.152$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 2600 100mW/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.42 W/kg

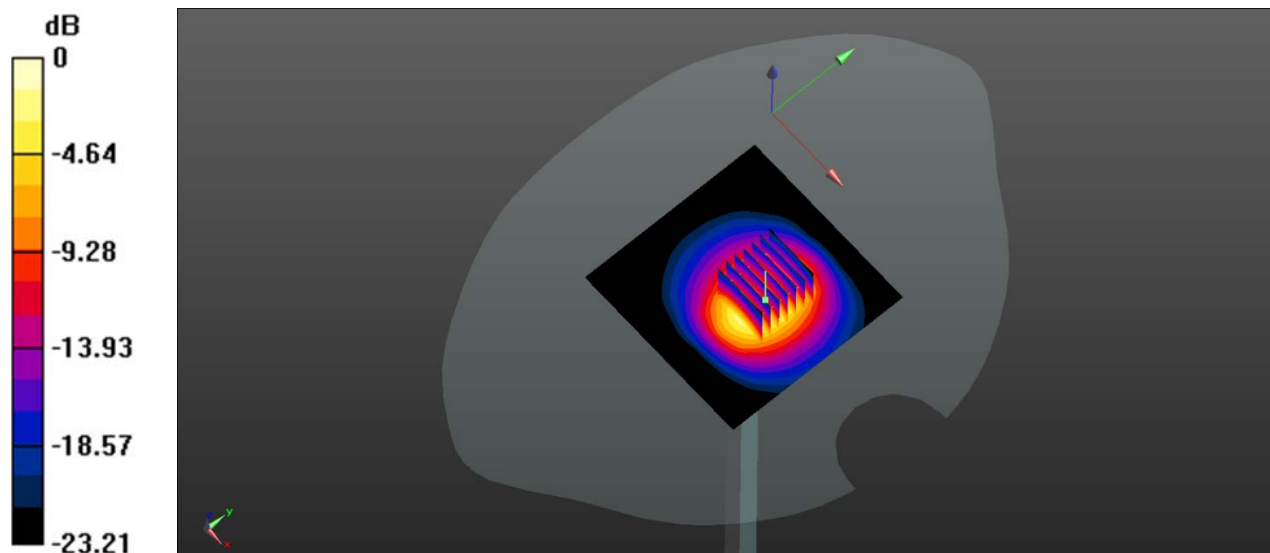
**CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.48 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 12.4 W/kg

**SAR(1 g) = 5.38 W/kg; SAR(10 g) = 2.39 W/kg**

Maximum value of SAR (measured) = 6.35 W/kg



0 dB = 6.35 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.02.13

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 2.004$  S/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 2600 100mW/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.47 W/kg

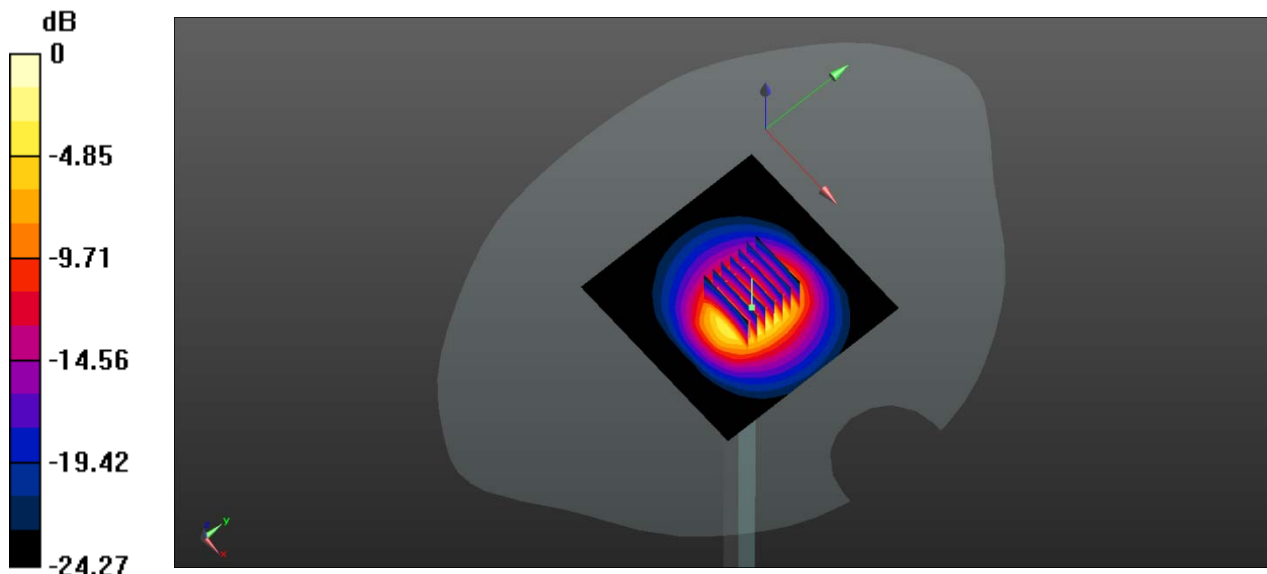
**CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 48.05 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 12.7 W/kg

**SAR(1 g) = 5.69 W/kg; SAR(10 g) = 2.53 W/kg**

Maximum value of SAR (measured) = 6.42 W/kg



0 dB = 6.42 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.02.12

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 1.982$  S/m;  $\epsilon_r = 39.741$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 2600 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.01 W/kg

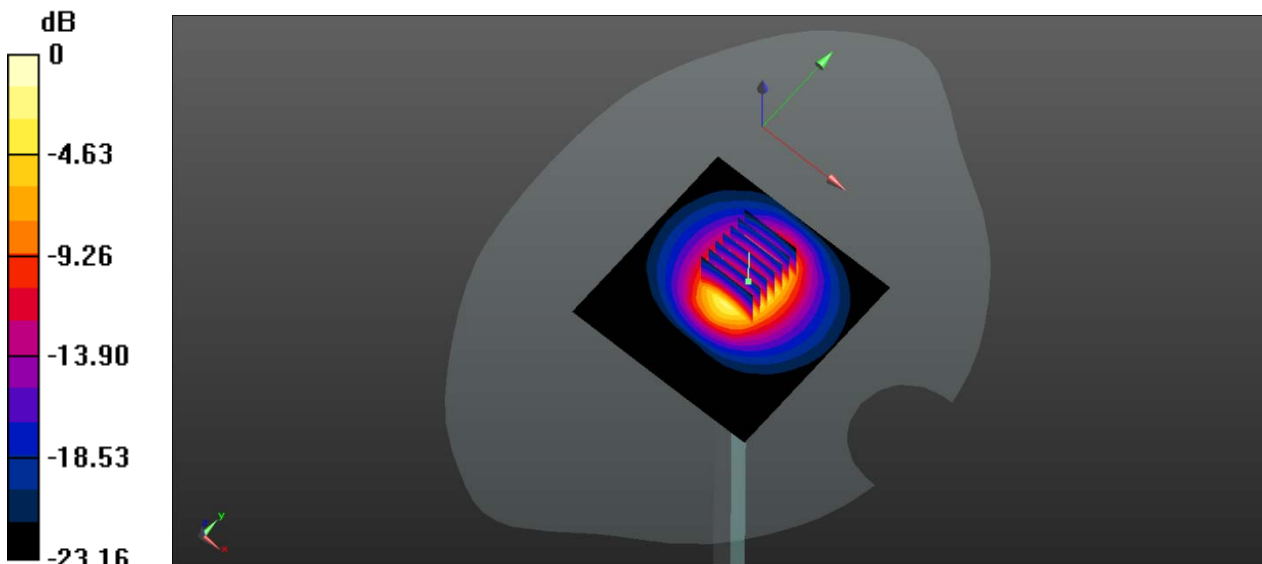
**CW 2600 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 47.55 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 12.1 W/kg

**SAR(1 g) = 5.28 W/kg; SAR(10 g) = 2.35 W/kg**

Maximum value of SAR (measured) = 5.99 W/kg



0 dB = 5.99 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.02.11

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 1.975$  S/m;  $\epsilon_r = 38.213$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 2600 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.60 W/kg

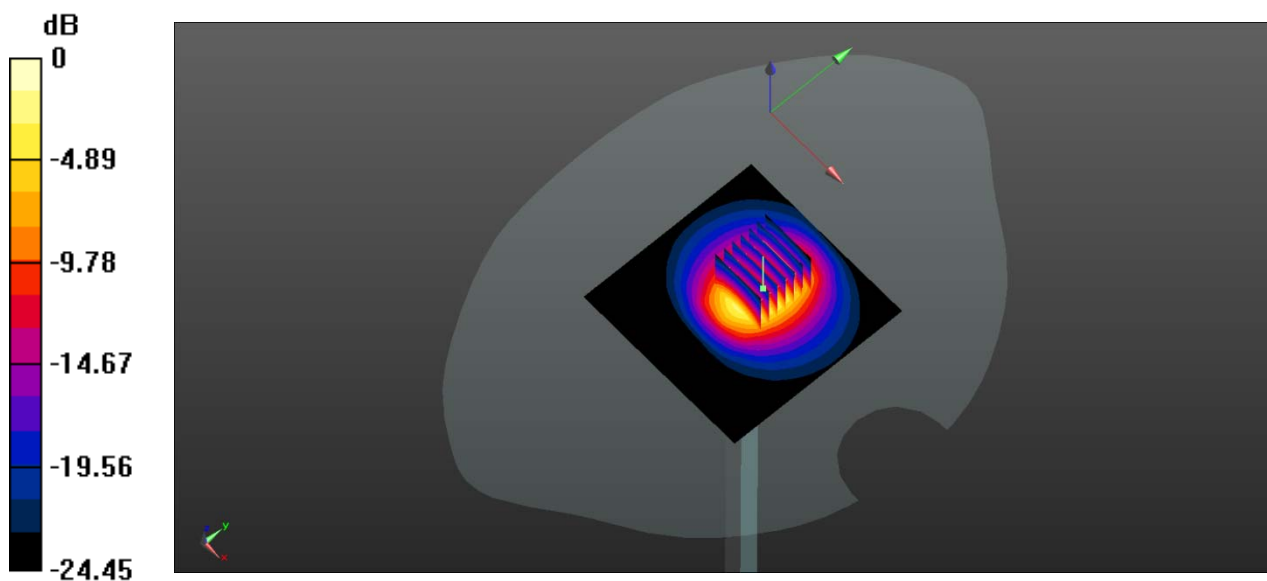
**CW 2600 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.94 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 13.1 W/kg

**SAR(1 g) = 5.82 W/kg; SAR(10 g) = 2.61 W/kg**

Maximum value of SAR (measured) = 6.51 W/kg



0 dB = 6.51 W/kg



# System Performance Check Data (5250MHz Head)

Date: 2020.02.10

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

Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.739$  S/m;  $\epsilon_r = 36.28$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 5250 100mW/Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 7.75 W/kg

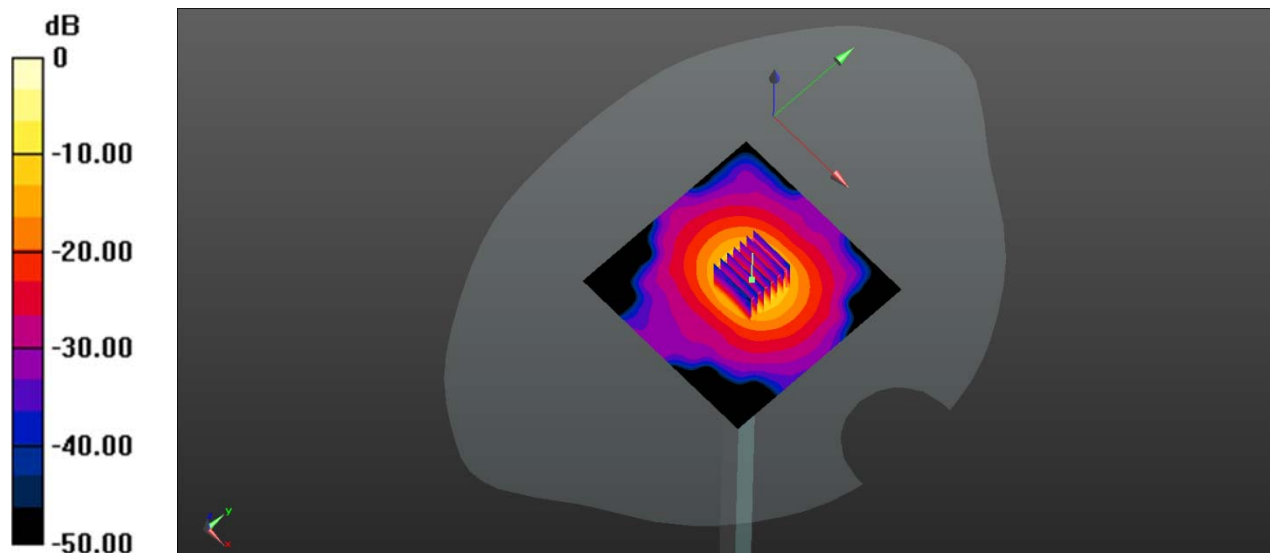
**CW 5250 100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 37.81 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 43.6 W/kg

**SAR(1 g) = 8.12 W/kg; SAR(10 g) = 2.29 W/kg**

Maximum value of SAR (measured) = 15.6 W/kg



0 dB = 15.6 W/kg

## System Performance Check Data (5250MHz Head)

Date: 2020.02.07

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

Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.674$  S/m;  $\epsilon_r = 36.738$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 5250 100mW/Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 7.82 W/kg

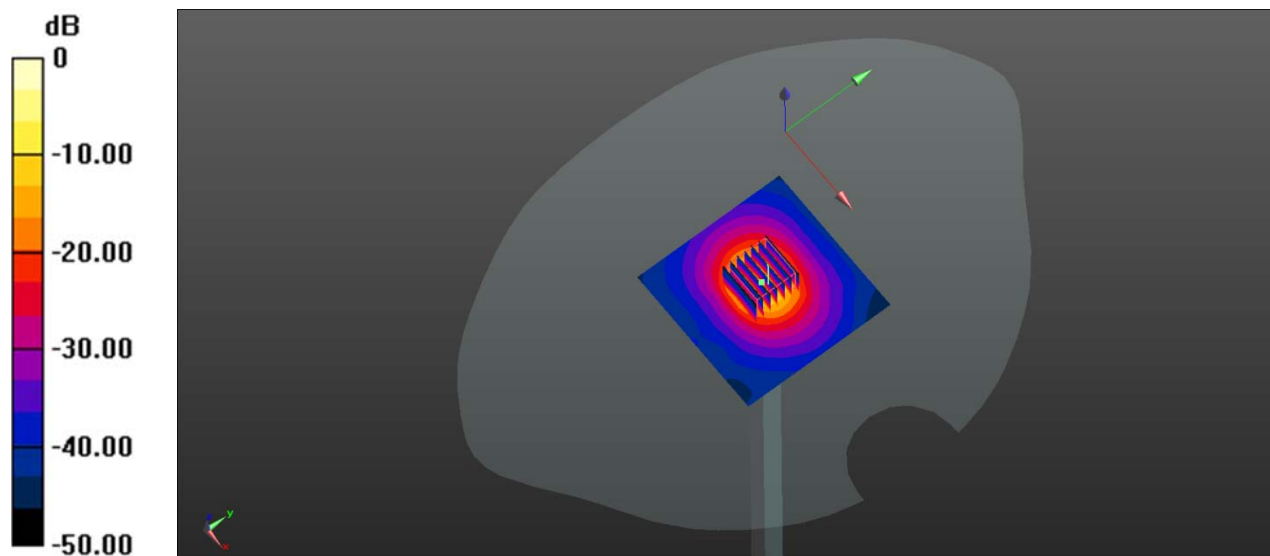
**CW 5250 100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 38.35 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 42.3 W/kg

**SAR(1 g) = 7.95 W/kg; SAR(10 g) = 2.26 W/kg**

Maximum value of SAR (measured) = 15.4 W/kg



0 dB = 15.4 W/kg

## System Performance Check Data (5600MHz Head)

Date: 2020.02.09

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

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.114$  S/m;  $\epsilon_r = 34.73$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 5600 100mW/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.37 W/kg

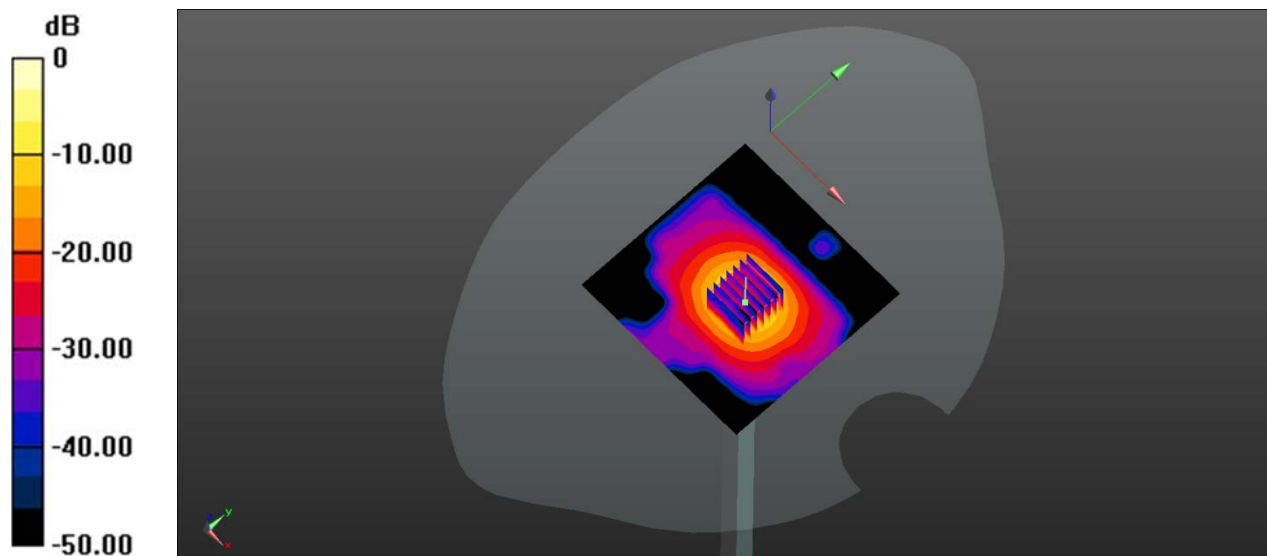
**CW 5600 100mW/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 34.68 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 38.5 W/kg

**SAR(1 g) = 8.24 W/kg; SAR(10 g) = 2.35 W/kg**

Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg

## System Performance Check Data (5600MHz Head)

Date: 2020.02.06

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

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.917$  S/m;  $\epsilon_r = 35.466$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 5600 100mW/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.71 W/kg

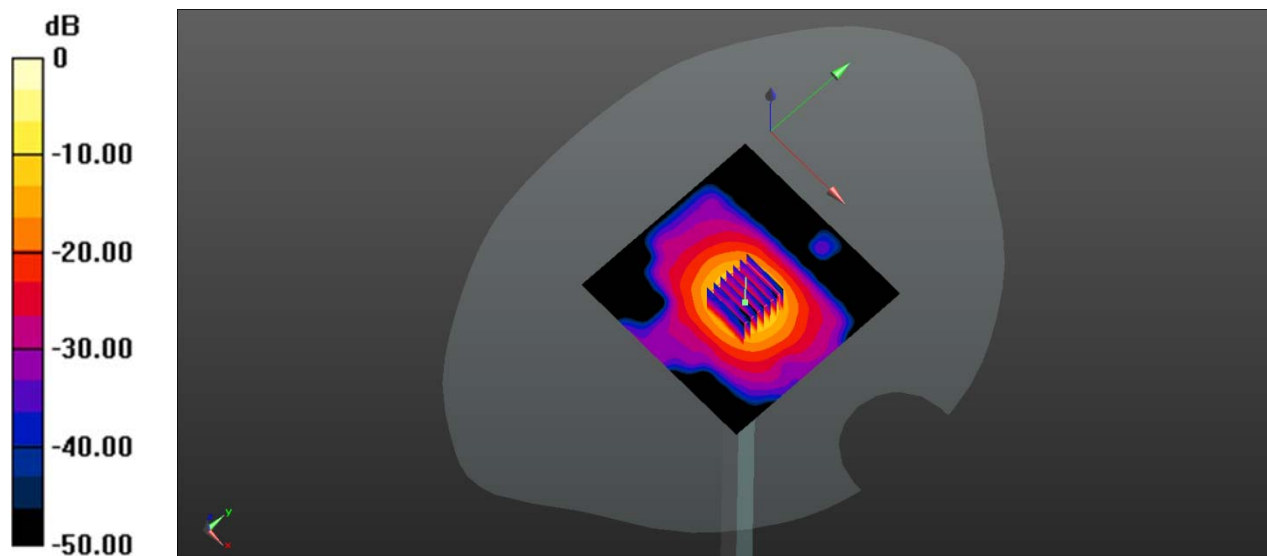
**CW 5600 100mW/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 35.57 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 39.4 W/kg

**SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.45 W/kg**

Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg

## System Performance Check Data (5750MHz Head)

Date: 2020.02.08

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

Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.32$  S/m;  $\epsilon_r = 34.235$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 5750 100mW/Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

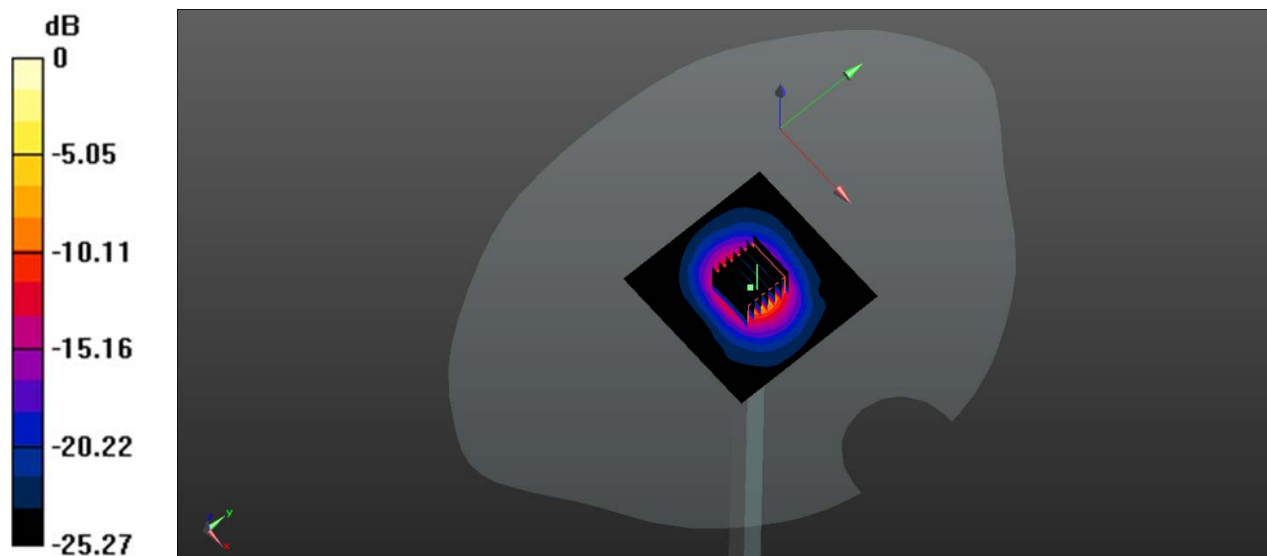
**CW 5750 100mW/Zoom Scan (7x7x15)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 40.38 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 38.9 W/kg

**SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.25 W/kg**

Maximum value of SAR (measured) = 15.4 W/kg



0 dB = 15.4 W/kg

## System Performance Check Data (5750MHz Head)

Date: 2020.02.05

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

Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.291$  S/m;  $\epsilon_r = 34.88$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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 5750 100mW/Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.59 W/kg

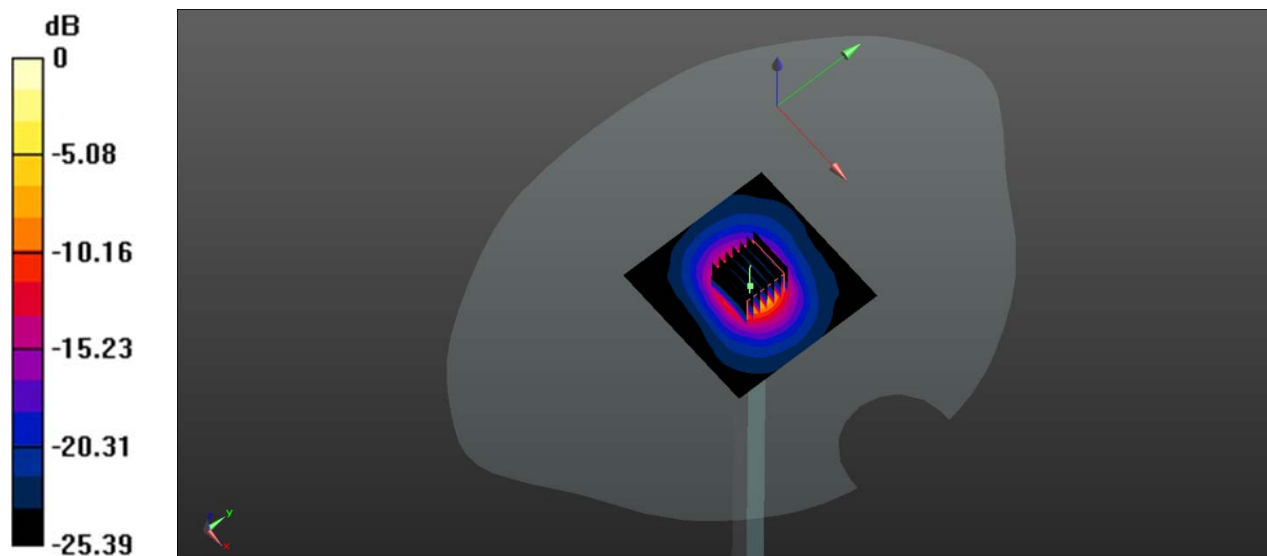
**CW 5750 100mW/Zoom Scan (7x7x15)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.3 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 39.8 W/kg

**SAR(1 g) = 8.21 W/kg; SAR(10 g) = 2.33 W/kg**

Maximum value of SAR (measured) = 16.3 W/kg



0 dB = 16.3 W/kg

## ANNEX C TEST DATA

### MEAS.1 Left Head with Cheek on High Channel in GPRS850 2Slots mode with Up Antenna

Date: 2020.01.31

Communication System Band: GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.923$  S/m;  $\epsilon_r = 41.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch251/Area Scan (81x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.632 W/kg

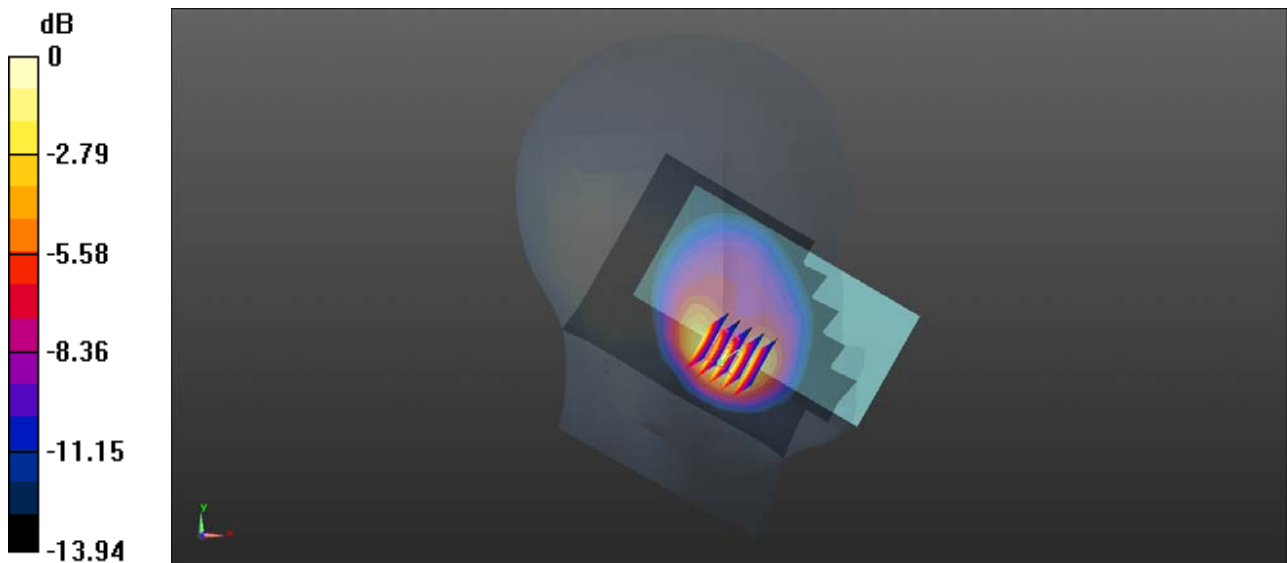
**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.009 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.576 W/kg; SAR(10 g) = 0.301 W/kg**

Maximum value of SAR (measured) = 0.567 W/kg



0 dB = 0.567 W/kg

**MEAS.2 Body Plane with Back Side 15mm on High Channel in GPRS850 2Slots mode with Down Antenna**

Date: 2020.01.31

Communication System Band: GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.923$  S/m;  $\epsilon_r = 41.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch251/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.281 W/kg

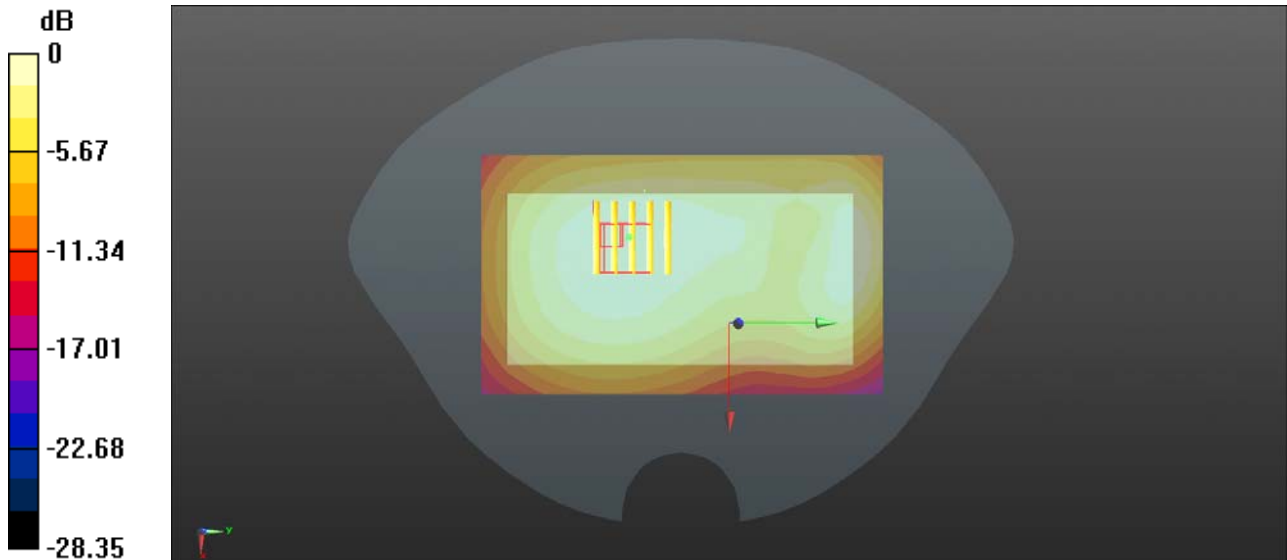
**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.60 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.365 W/kg

**SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.218 W/kg**

Maximum value of SAR (measured) = 0.273 W/kg



0 dB = 0.273 W/kg



**MEAS.3 Body Plane with Right Edge 15mm on High Channel in GPRS850 2Slots mode with Up Antenna**

Date: 2020.01.31

Communication System Band: GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.923$  S/m;  $\epsilon_r = 41.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch251/Area Scan (51x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.585 W/kg

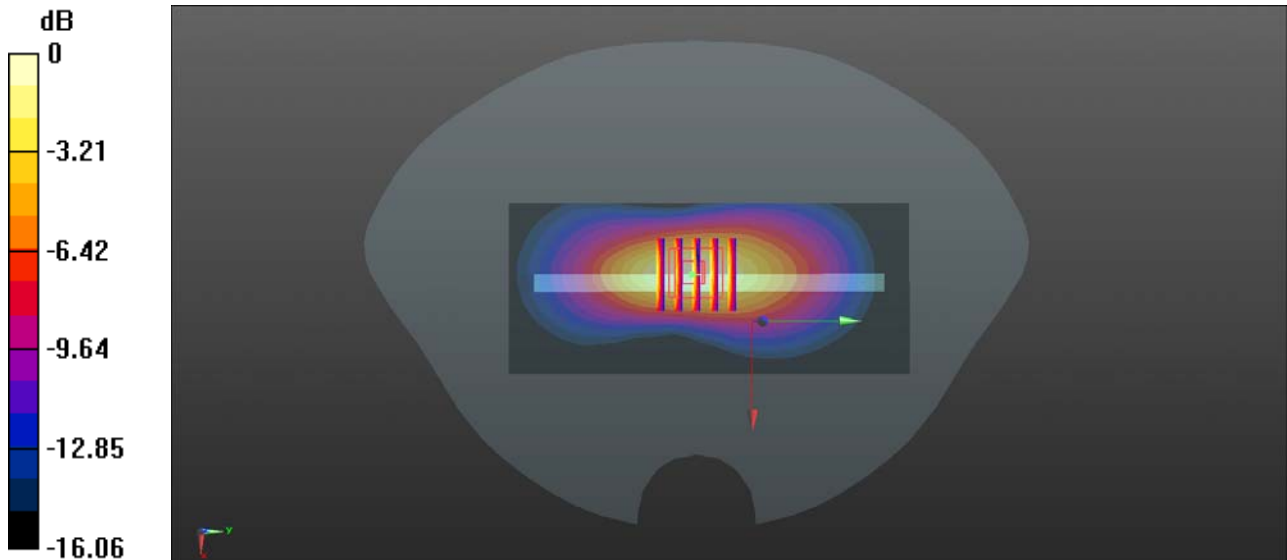
**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.51 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.865 W/kg

**SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.289 W/kg**

Maximum value of SAR (measured) = 0.569 W/kg



0 dB = 0.569 W/kg

**MEAS.4 Right Head with Cheek on High Channel in GPRS1900 3Slots mode with Up Antenna**

Date: 2020.02.20

Communication System Band: GPRS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2.77

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.421$  S/m;  $\epsilon_r = 40.167$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch810/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.551 W/kg

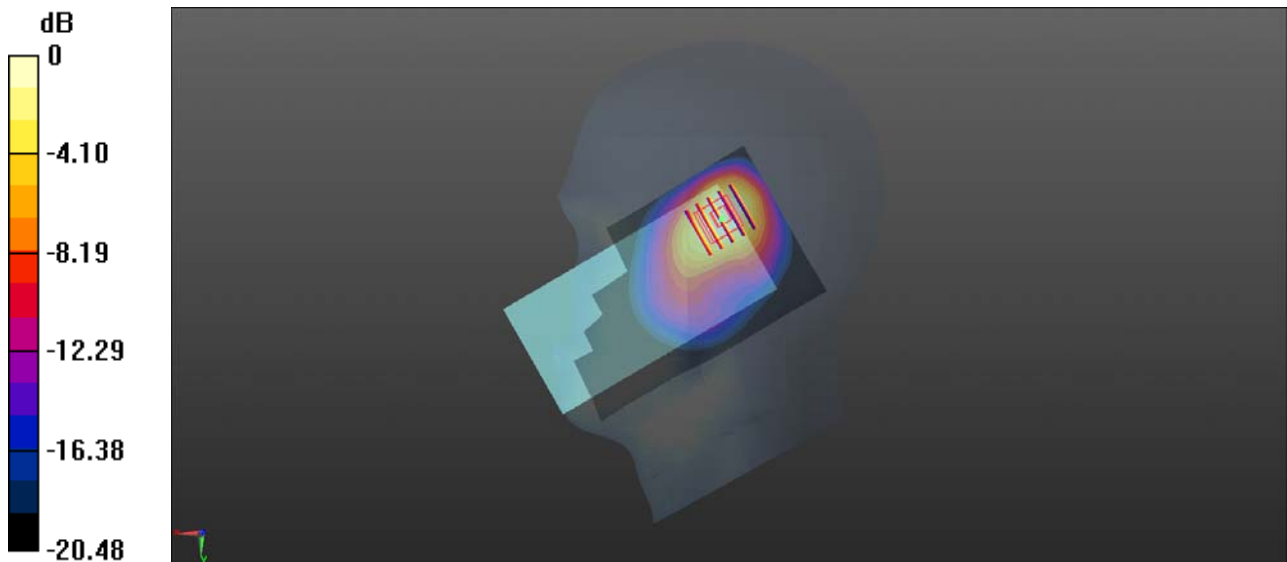
**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.63 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.949 W/kg

**SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.255 W/kg**

Maximum value of SAR (measured) = 0.537 W/kg



0 dB = 0.537 W/kg

**MEAS.5 Body Plane with Back Side 15mm on High Channel in GPRS1900 3Slots mode with Up Antenna**

Date: 2020.02.20

Communication System Band: GPRS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2.77

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.421$  S/m;  $\epsilon_r = 40.167$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch810/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.205 W/kg

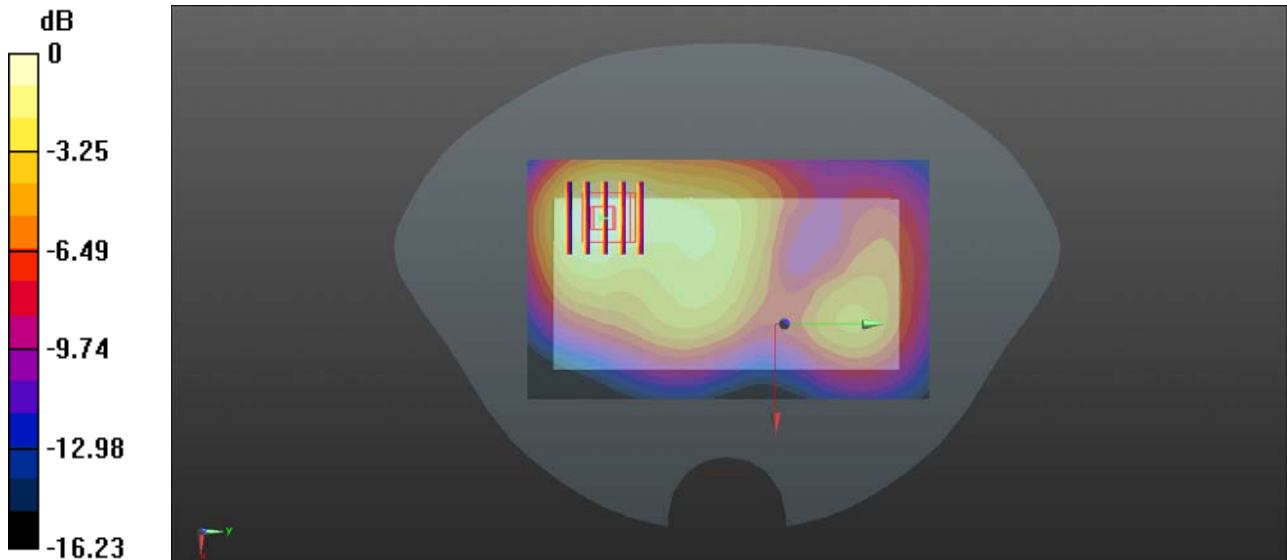
**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.001 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.315 W/kg

**SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.119 W/kg**

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



0 dB = 0.206 W/kg

**MEAS.6 Body Plane with Bottom Edge 15mm on High Channel in GPRS1900 3Slots mode with Up Antenna**

Date: 2020.02.20

Communication System Band: GPRS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2.77

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.421$  S/m;  $\epsilon_r = 40.167$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch810/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.746 W/kg

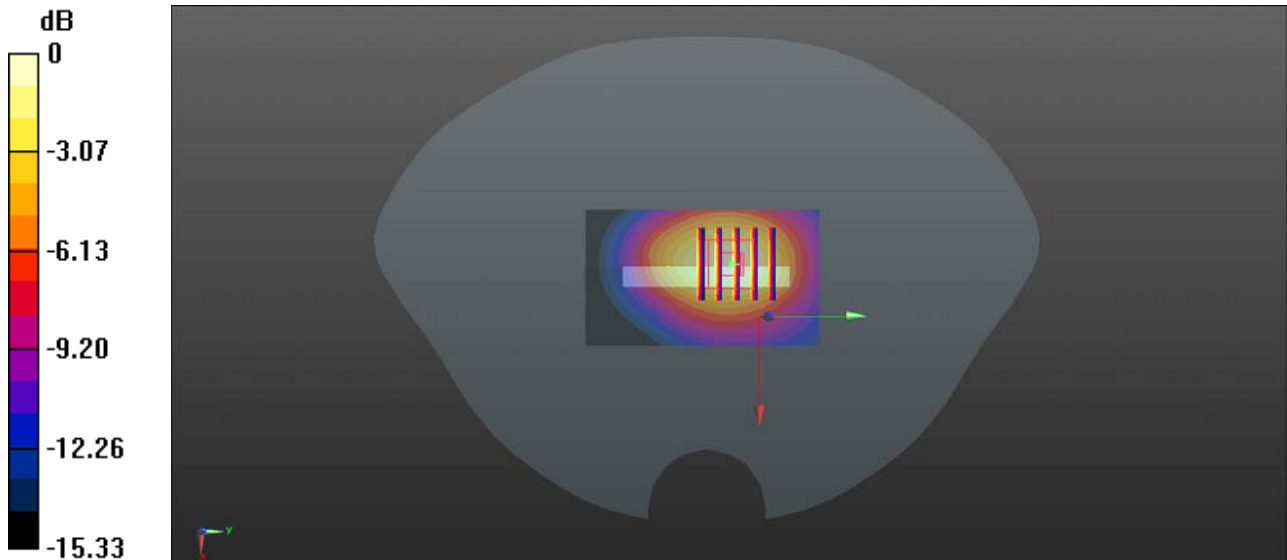
**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.04 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.11 W/kg

**SAR(1 g) = 0.659 W/kg; SAR(10 g) = 0.380 W/kg**

Maximum value of SAR (measured) = 0.724 W/kg



0 dB = 0.724 W/kg

**MEAS.7 Right Head with Cheek on Low Channel in WCDMA Band 2 mode with Up Antenna**

Date: 2020.02.19

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

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.367$  S/m;  $\epsilon_r = 41.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.0 Liquid Temperature:20.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9262/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.868 W/kg

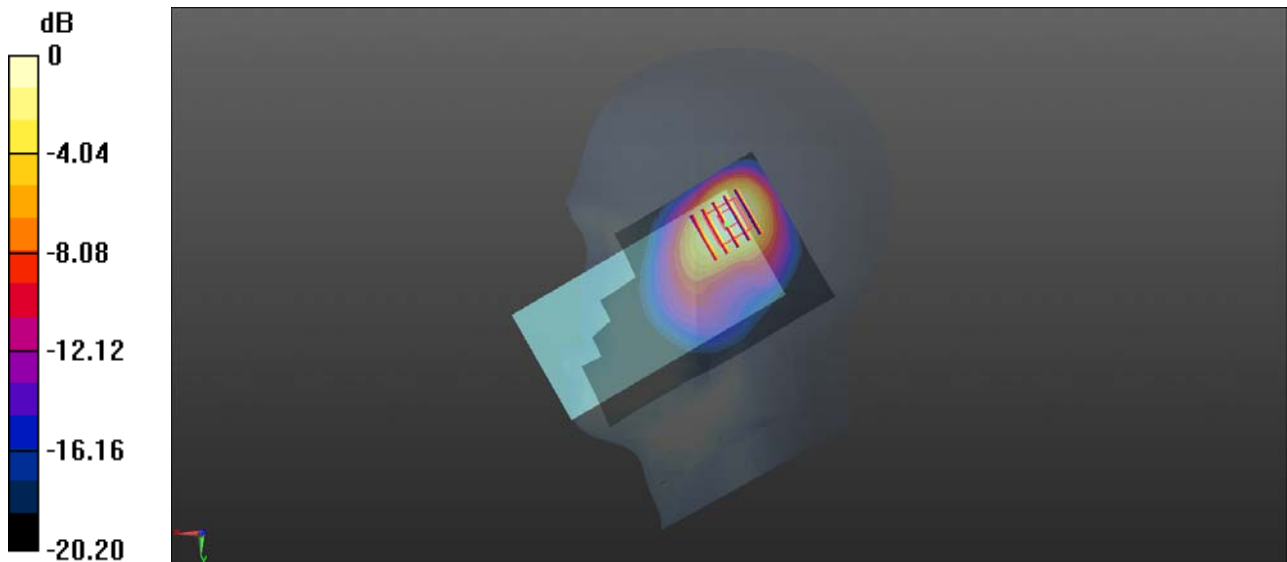
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.18 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.803 W/kg; SAR(10 g) = 0.384 W/kg**

Maximum value of SAR (measured) = 0.886 W/kg



0 dB = 0.886 W/kg

**MEAS.8 Body Plane with Back Side 15mm on Low Channel in WCDMA Band 2 mode with Up Antenna**

Date: 2020.02.19

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

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.367$  S/m;  $\epsilon_r = 41.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.0 Liquid Temperature:20.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9262/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.293 W/kg

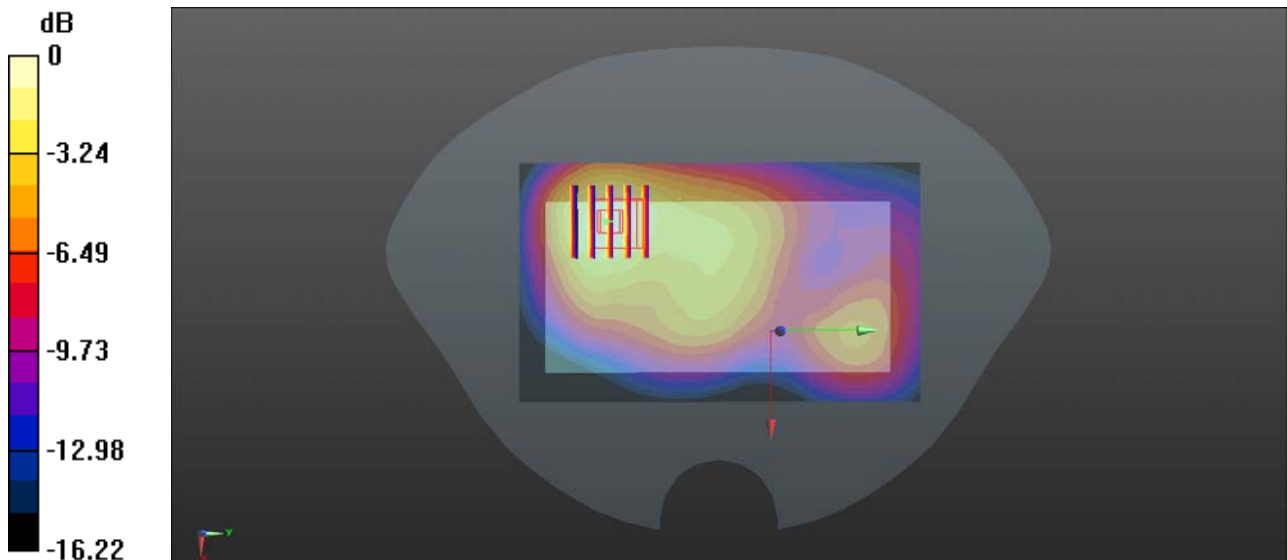
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.876 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.435 W/kg

**SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.183 W/kg**

Maximum value of SAR (measured) = 0.300 W/kg



0 dB = 0.300 W/kg

**MEAS.9 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band 2 mode with Up Antenna**

Date: 2020.02.19

Communication System Band: II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.383$  S/m;  $\epsilon_r = 41.049$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.0 Liquid Temperature:20.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9400/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.713 W/kg

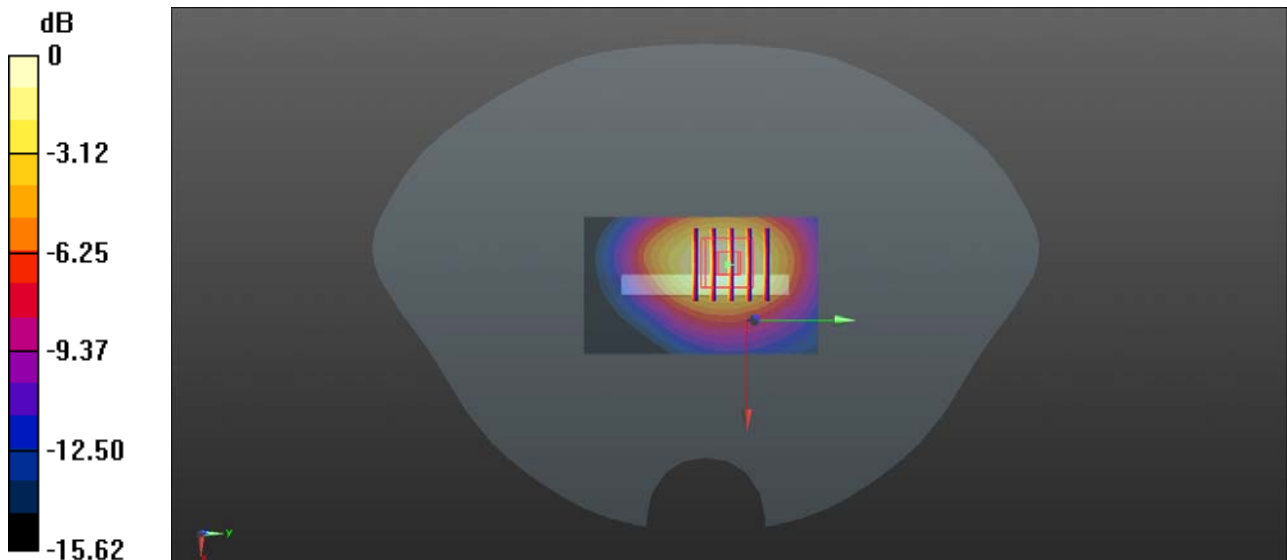
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.09 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.700 W/kg; SAR(10 g) = 0.372 W/kg**

Maximum value of SAR (measured) = 0.702 W/kg



0 dB = 0.702 W/kg

**MEAS.10 Right Head with Cheek on Middle Channel in WCDMA Band 4 mode with Up Antenna**

Date: 2020.02.23

Communication System Band: IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.334$  S/m;  $\epsilon_r = 39.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

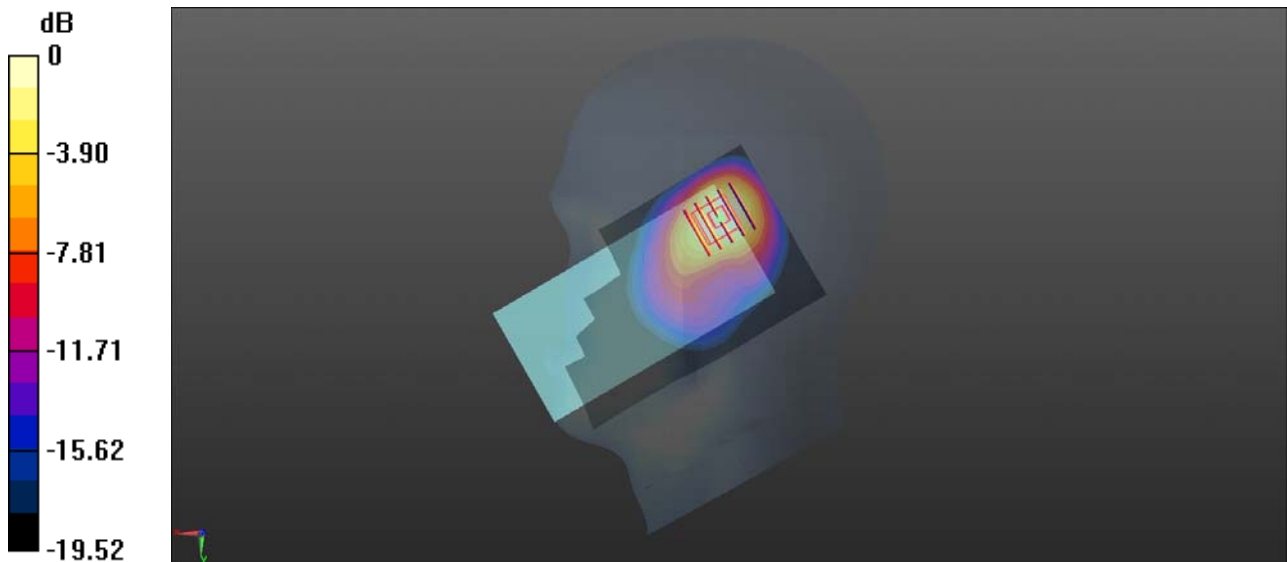
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.03 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.13 W/kg

**SAR(1 g) = 0.641 W/kg; SAR(10 g) = 0.392 W/kg**

Maximum value of SAR (measured) = 0.658 W/kg



0 dB = 0.658 W/kg



**MEAS.11 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band 4 mode with Up Antenna**

Date: 2020.02.23

Communication System Band: IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.334$  S/m;  $\epsilon_r = 39.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.273 W/kg

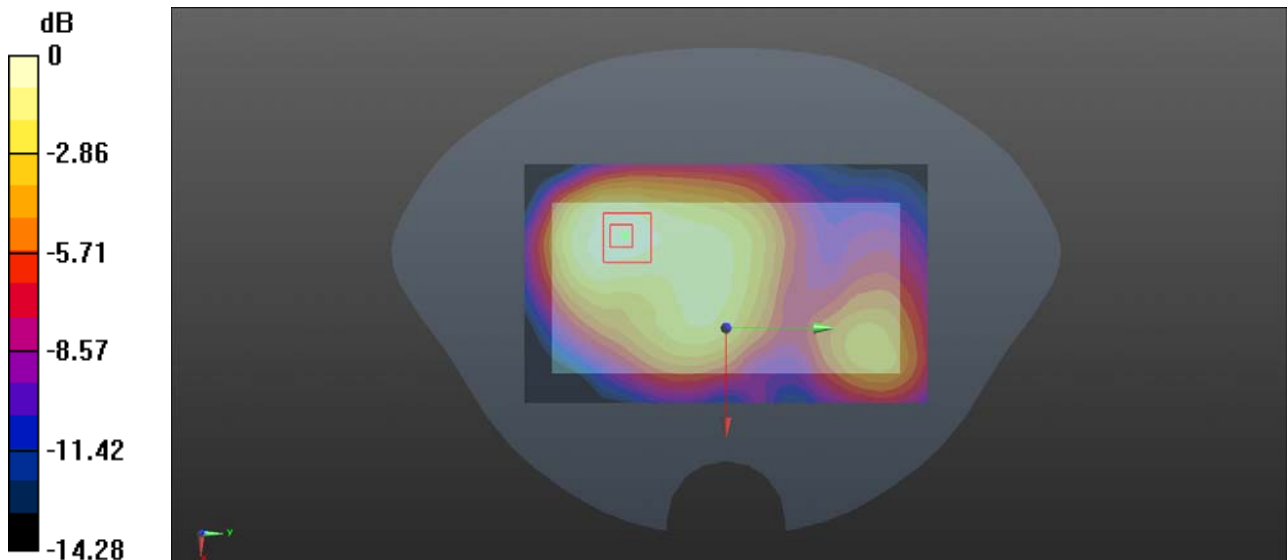
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.682 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.267 W/kg

**SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.126 W/kg**

Maximum value of SAR (measured) = 0.276 W/kg



0 dB = 0.276 W/kg

**MEAS.12 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band 4 mode with Up Antenna**

Date: 2020.02.23

Communication System Band: IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.334$  S/m;  $\epsilon_r = 39.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.614 W/kg

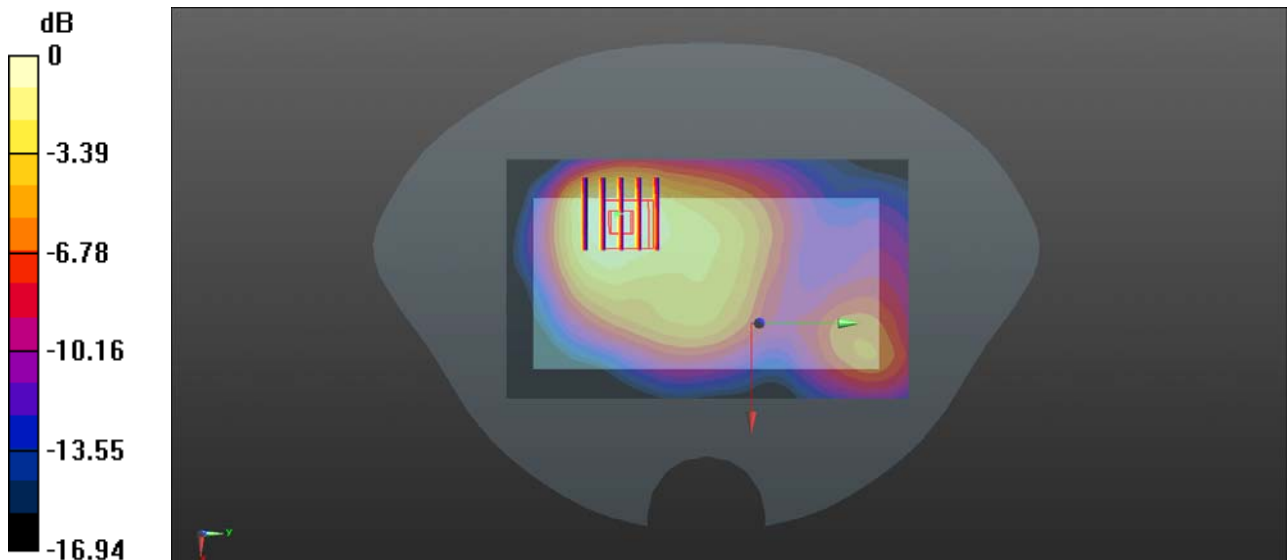
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.928 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.669 W/kg

**SAR(1 g) = 0.572 W/kg; SAR(10 g) = 0.262 W/kg**

Maximum value of SAR (measured) = 0.611 W/kg



0 dB = 0.611 W/kg

**MEAS.13 Left Head with Cheek on Low Channel in WCDMA Band 5 mode with Up Antenna**

Date: 2020.01.20

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

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.913$  S/m;  $\epsilon_r = 42.625$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.1 Liquid Temperature:20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch4132/Area Scan (81x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.460 W/kg

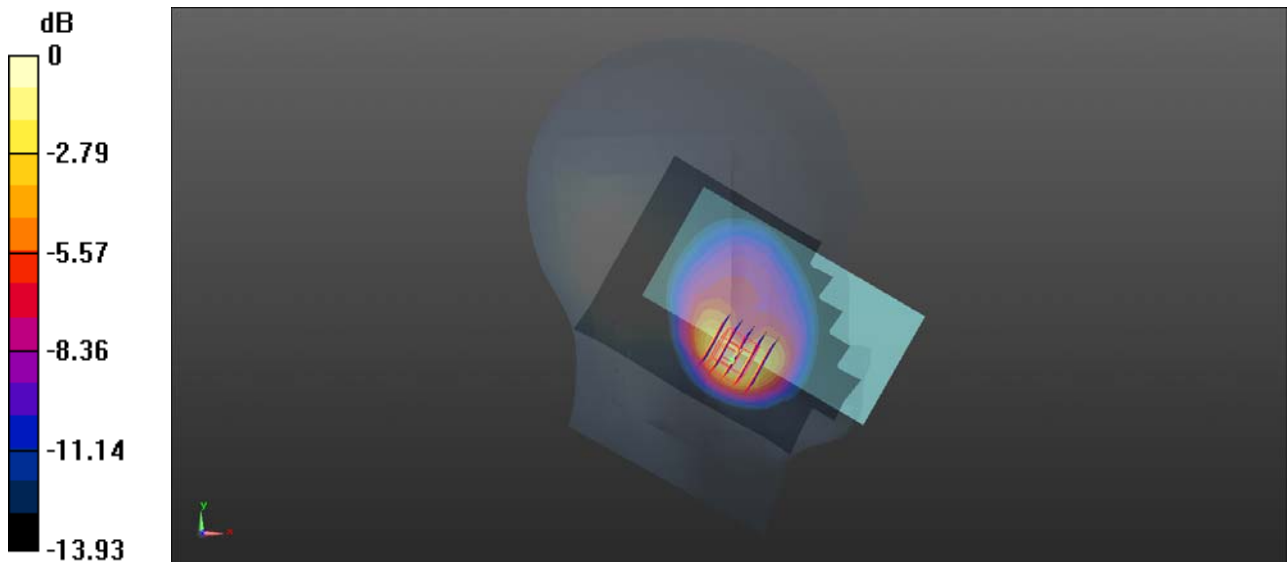
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.361 V/m; Power Drift = -003 dB

Peak SAR (extrapolated) = 0.890 W/kg

**SAR(1 g) = 0.433 W/kg; SAR(10 g) = 0.226 W/kg**

Maximum value of SAR (measured) = 0.429 W/kg



0 dB = 0.429 W/kg

**MEAS.14 Body Plane with Back Side 15mm on Low Channel in WCDMA Band 5 mode with Down Antenna**

Date: 2020.01.20

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

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.913$  S/m;  $\epsilon_r = 42.625$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch4132/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.307 W/kg

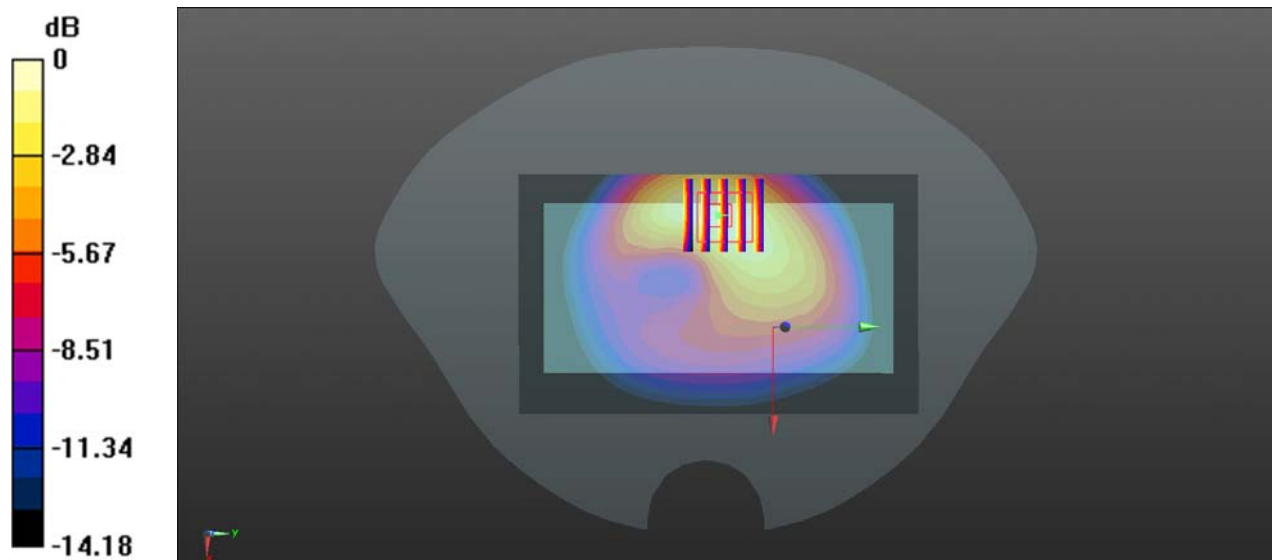
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.88 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.346 W/kg

**SAR(1 g) = 0.274 W/kg; SAR(10 g) = 0.148 W/kg**

Maximum value of SAR (measured) = 0.306 W/kg



0 dB = 0.306 W/kg

**MEAS.15 Body Plane with Right Edge 10mm on Low Channel in WCDMA Band 5 mode with Up Antenna**

Date: 2020.01.20

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

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.913$  S/m;  $\epsilon_r = 42.625$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch4132/Area Scan (51x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.522 W/kg

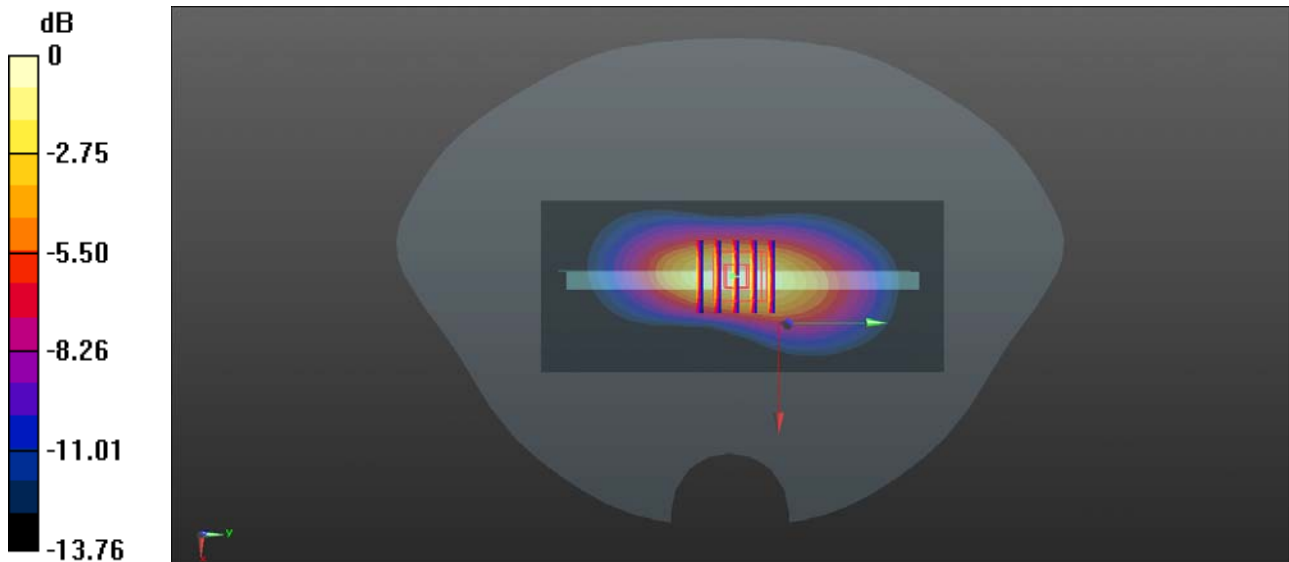
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.42 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.856 W/kg

**SAR(1 g) = 0.431 W/kg; SAR(10 g) = 0.281 W/kg**

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



0 dB = 0.518 W/kg

**MEAS.16 Right Head with Cheek on Low Channel in LTE Band 2 mode with Up Antenna**

Date: 2020.02.18

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1860$  MHz;  $\sigma = 1.338$  S/m;  $\epsilon_r = 39.577$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18700/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.851 W/kg

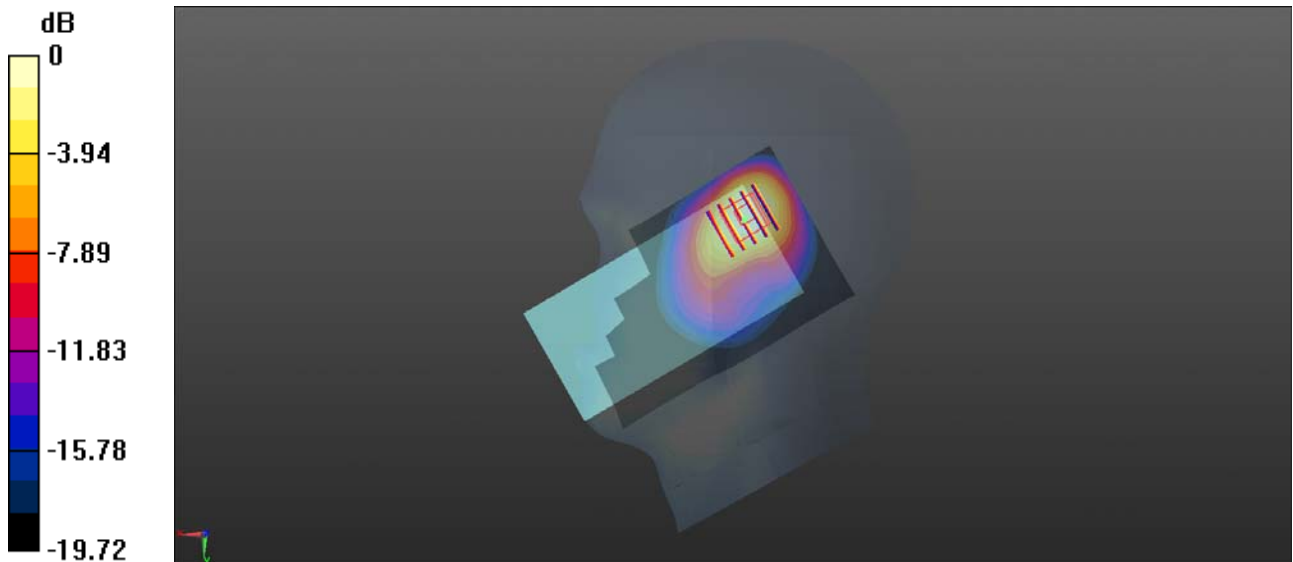
**Ch18700/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.80 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.795 W/kg; SAR(10 g) = 0.334 W/kg**

Maximum value of SAR (measured) = 0.866 W/kg



0 dB = 0.866 W/kg

**MEAS.17 Body Plane with Back Side 15mm on Low Channel in LTE Band 2 mode with Up Antenna**

Date: 2020.02.17

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.395$  S/m;  $\epsilon_r = 39.718$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18700/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.343 W/kg

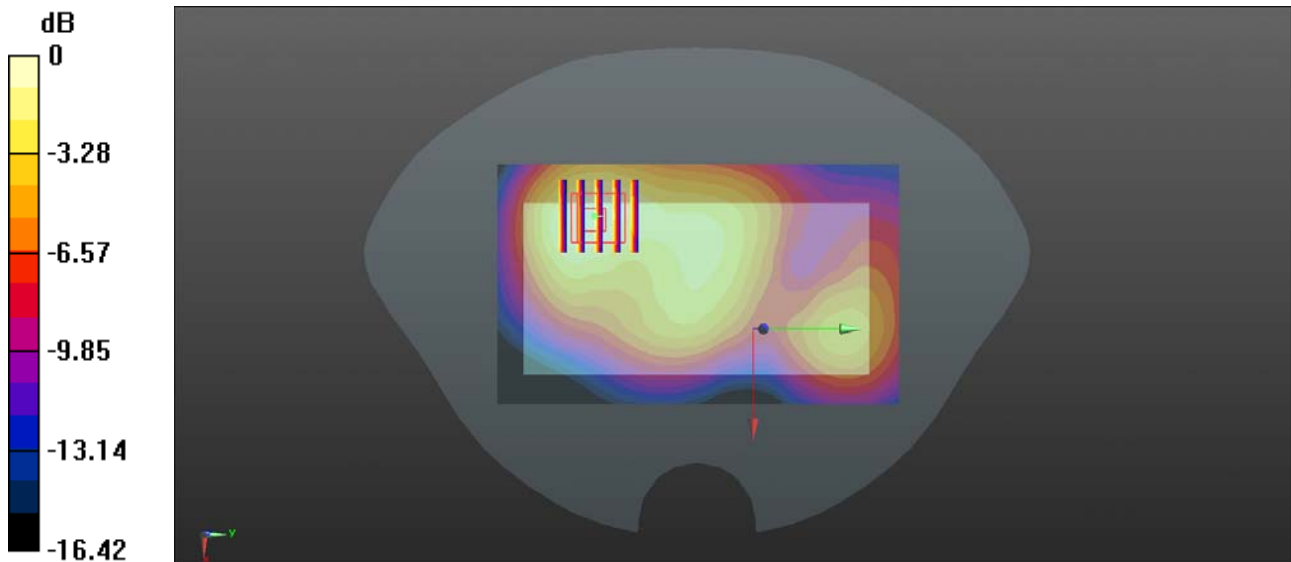
**Ch18700/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.06 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.547 W/kg

**SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.188 W/kg**

Maximum value of SAR (measured) = 0.346 W/kg



0 dB = 0.346 W/kg

**MEAS.18 Body Plane with Back Side 10mm on High Channel in LTE Band 2 mode with Up Antenna**

Date: 2020.01.17

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.414$  S/m;  $\epsilon_r = 39.35$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch19100/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.794 W/kg

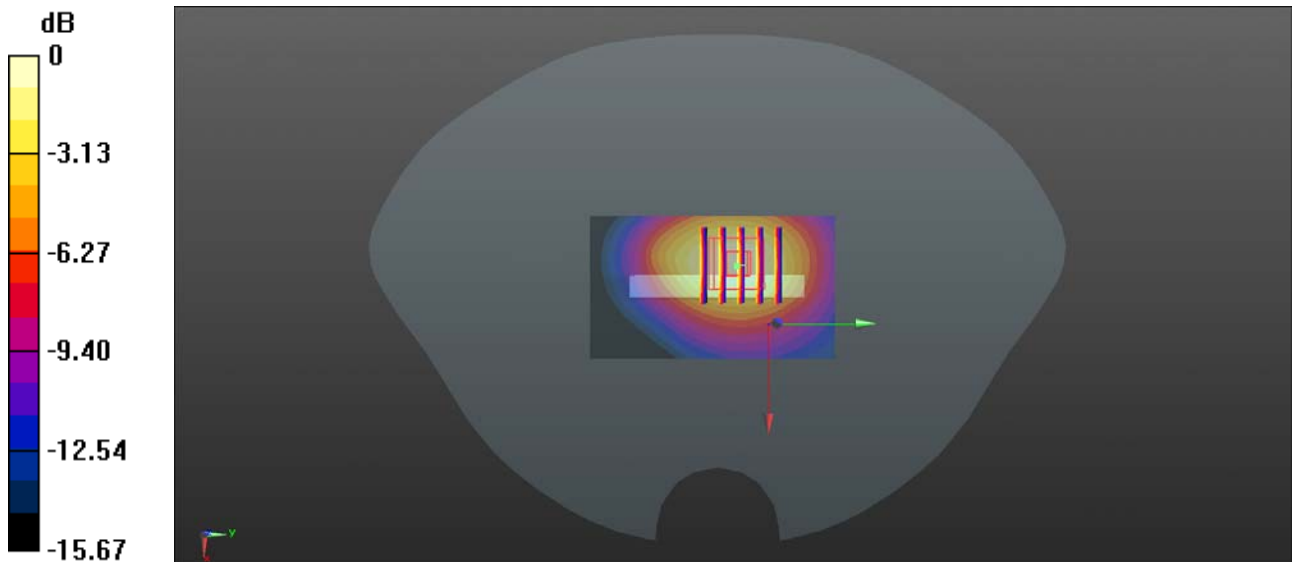
**Ch19100/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.75 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.16 W/kg

**SAR(1 g) = 0.710 W/kg; SAR(10 g) = 0.411 W/kg**

Maximum value of SAR (measured) = 0.782 W/kg



0 dB = 0.782 W/kg



**MEAS.19 Right Head with Cheek on High Channel in LTE Band 66 mode with Up Antenna**

Date: 2020.02.22

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1790.0 MHz); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1770$  MHz;  $\sigma = 1.402$  S/m;  $\epsilon_r = 38.95$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch132572/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.666 W/kg

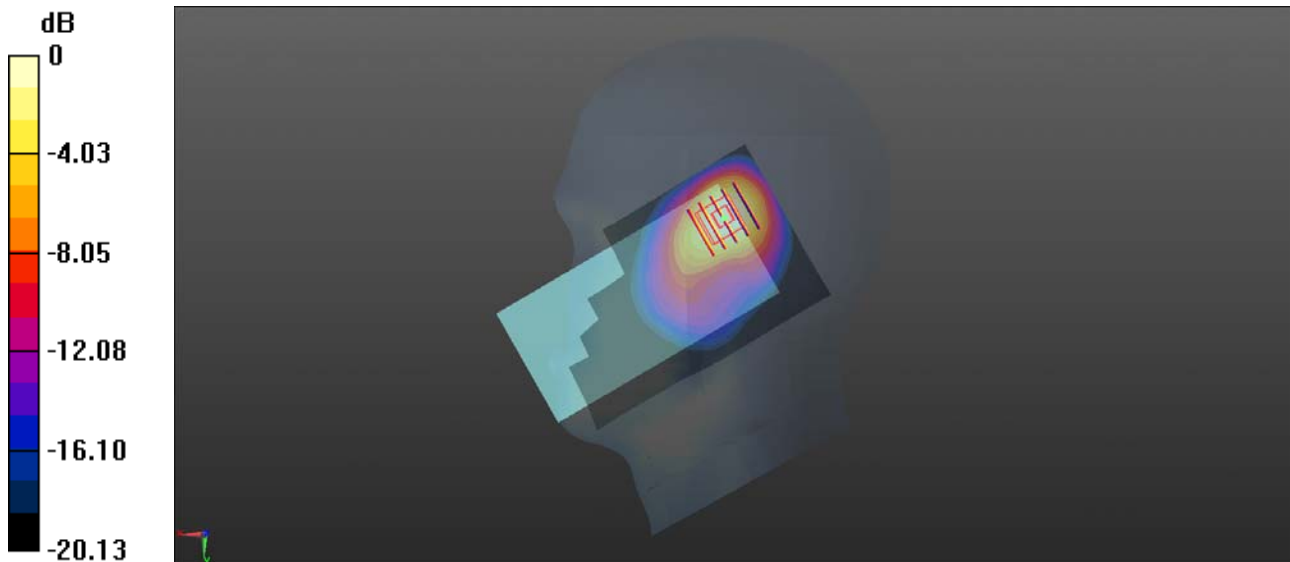
**Ch132572/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.025 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.18 W/kg

**SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.254 W/kg**

Maximum value of SAR (measured) = 0.697 W/kg



0 dB = 0.697 W/kg

**MEAS.20 Body Plane with Back Side 15mm on High Channel in LTE Band 66 mode with Up Antenna**

Date: 2020.02.21

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1790.0 MHz); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1770$  MHz;  $\sigma = 1.432$  S/m;  $\epsilon_r = 40.528$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch132572/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.257 W/kg

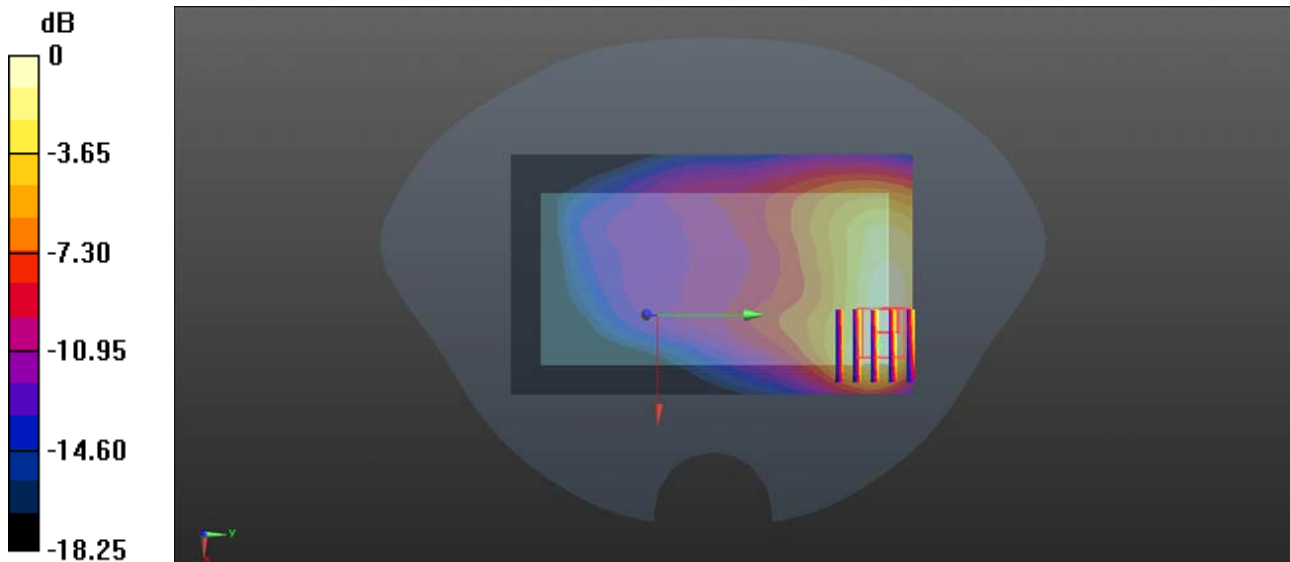
**Ch132572/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.500 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.431 W/kg

**SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.127 W/kg**

Maximum value of SAR (measured) = 0.246 W/kg



0 dB = 0.246 W/kg

**MEAS.21 Body Plane with Back Side 10mm on Middle Channel in LTE Band 66 mode with Up Antenna**

Date: 2020.02.21

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1790.0 MHz); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1770$  MHz;  $\sigma = 1.432$  S/m;  $\epsilon_r = 40.528$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch132572/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.647 W/kg

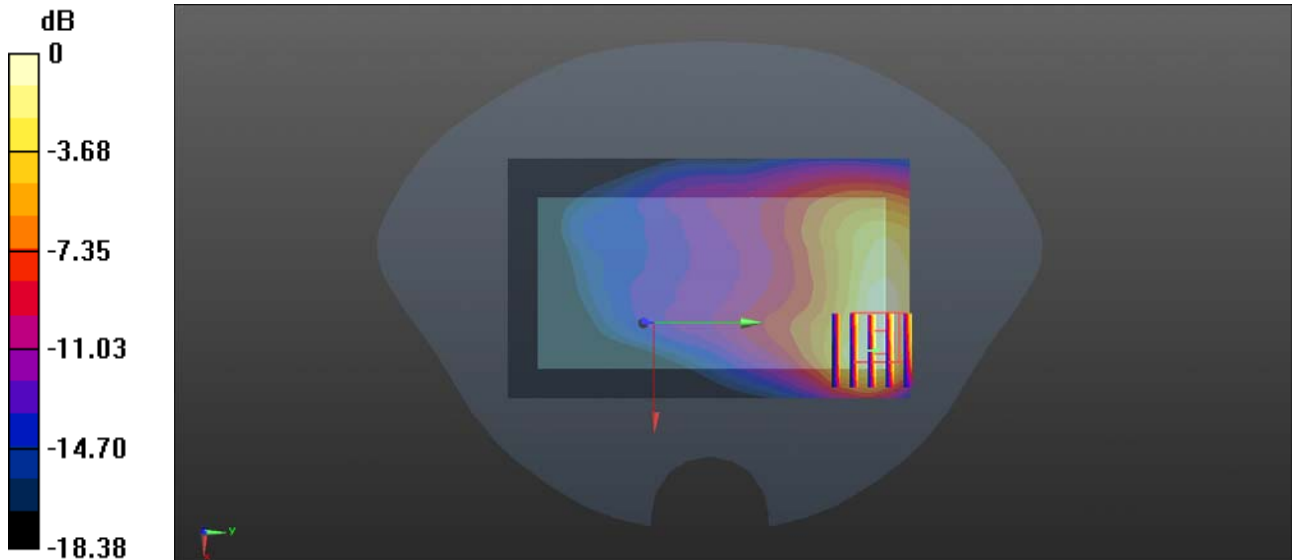
**Ch132572/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.590 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.903 W/kg

**SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.258 W/kg**

Maximum value of SAR (measured) = 0.629 W/kg



0 dB = 0.629 W/kg

**MEAS.22 Right Head with Cheek on High Channel in LTE Band 7 mode with Up Antenna**

Date: 2020.02.14

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2560$  MHz;  $\sigma = 1.904$  S/m;  $\epsilon_r = 39.43$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch21350/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

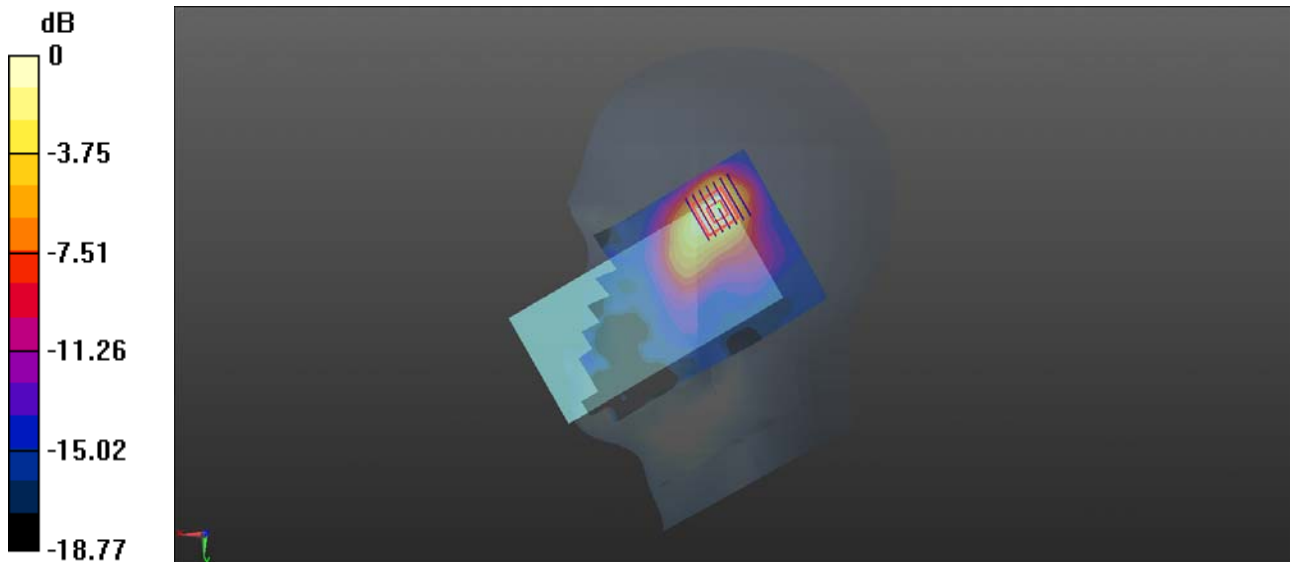
**Ch21350/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.194 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.21 W/kg

**SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.245 W/kg**

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



0 dB = 0.573 W/kg

**MEAS.23 Body Plane with Back Side 15mm on High Channel in LTE Band 7 mode with Down Antenna**

Date: 2020.02.13

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2560$  MHz;  $\sigma = 1.957$  S/m;  $\epsilon_r = 40.151$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch21350/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.349 W/kg

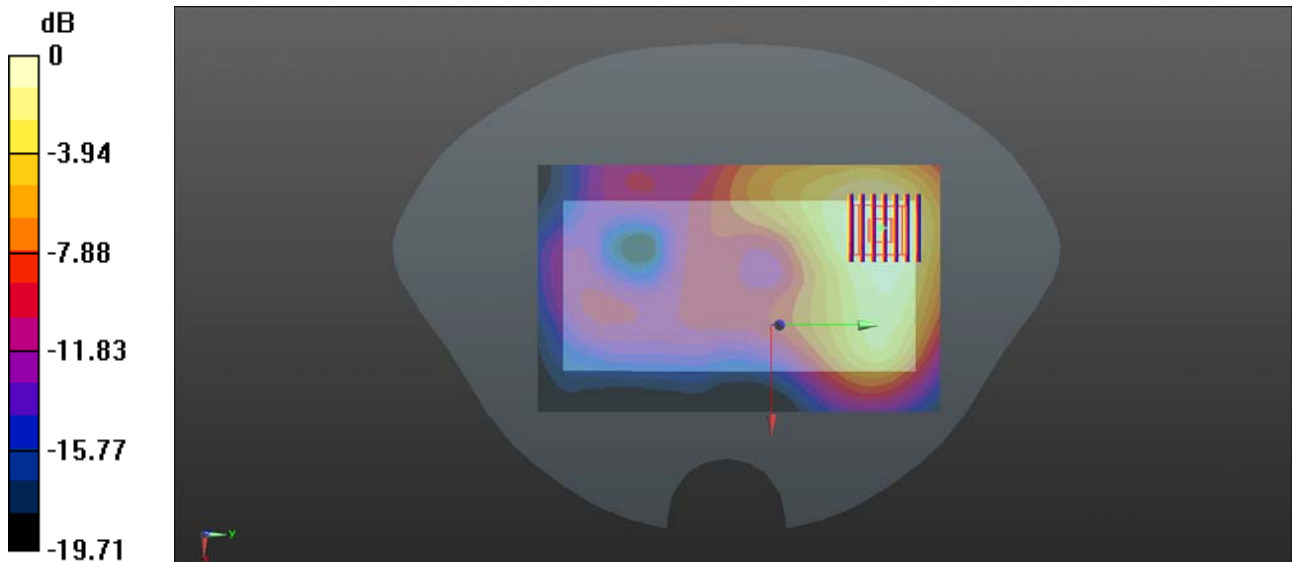
**Ch21350/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.692 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.618 W/kg

**SAR(1 g) = 0.321 W/kg; SAR(10 g) = 0.177 W/kg**

Maximum value of SAR (measured) = 0.344 W/kg



0 dB = 0.344 W/kg

**MEAS.24 Body Plane with Bottom Edge 10mm on High Channel in LTE Band 7 mode with Up Antenna**

Date: 2020.02.13

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 1.957$  S/m;  $\epsilon_r = 40.151$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch21350/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.782 W/kg

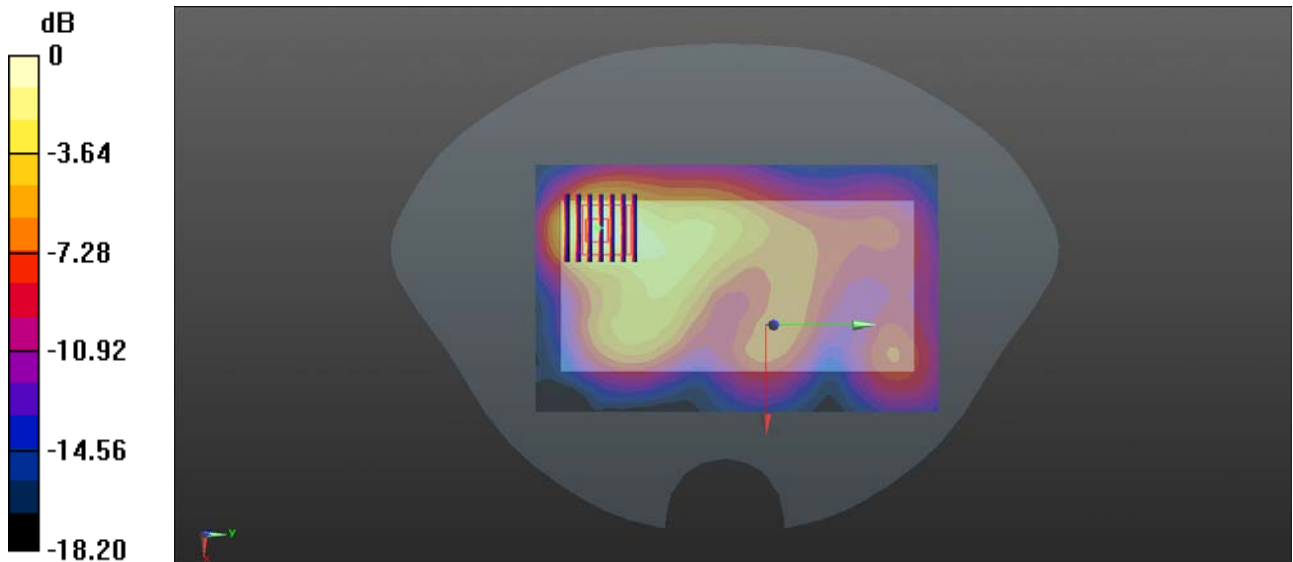
**Ch21350/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.460 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.27 W/kg

**SAR(1 g) = 0.707 W/kg; SAR(10 g) = 0.324 W/kg**

Maximum value of SAR (measured) = 0.764 W/kg



0 dB = 0.764 W/kg

**MEAS.25 Left Head with Cheek on High Channel in LTE Band 12 mode with Up Antenna**

Date: 2020.01.30

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.864$  S/m;  $\epsilon_r = 42.85$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch23130/Area Scan (81x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.499 W/kg

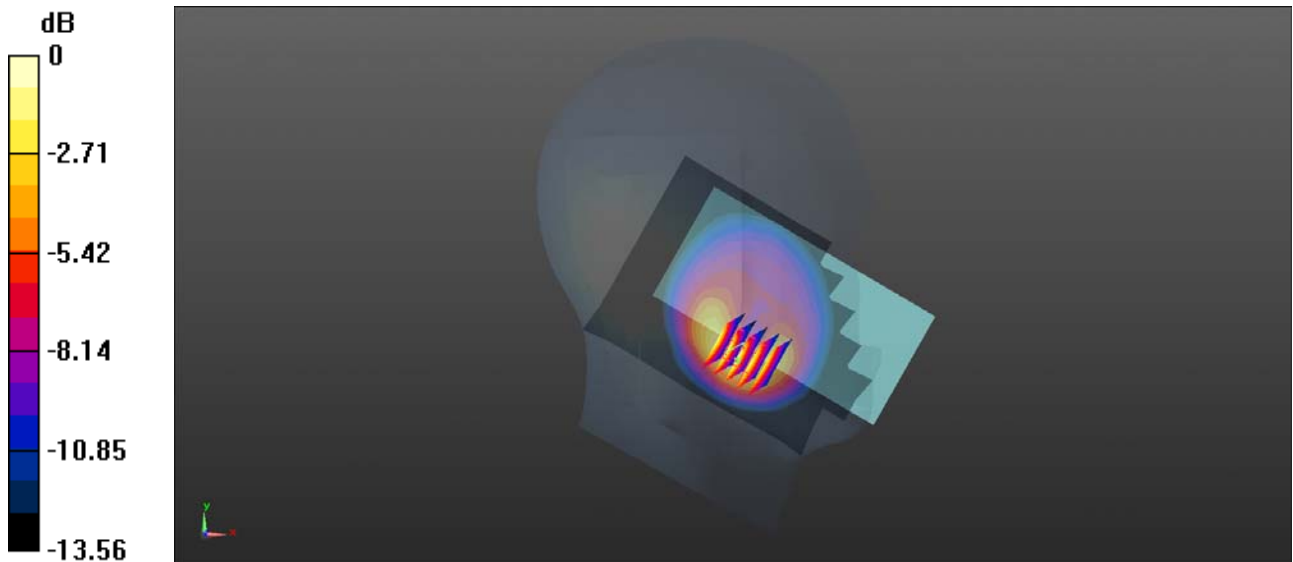
**Ch23130/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.589 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.962 W/kg

**SAR(1 g) = 0.466 W/kg; SAR(10 g) = 0.247 W/kg**

Maximum value of SAR (measured) = 0.474 W/kg



0 dB = 0.474 W/kg

**MEAS.26 Body Plane with Back Side 15mm on High Channel in LTE Band 12 mode with Down Antenna**

Date: 2020.01.30

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.864$  S/m;  $\epsilon_r = 42.85$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch23130/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.245 W/kg

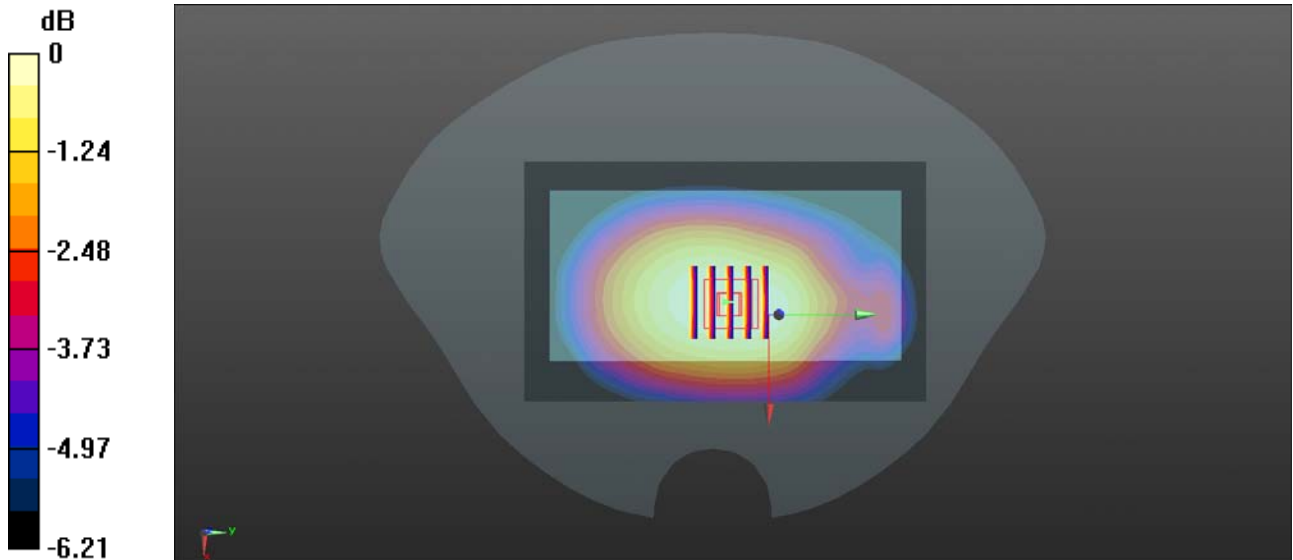
**Ch23130/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.211 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.280 W/kg

**SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.089 W/kg**

Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg



**MEAS.27 Body Plane with Right Edge 10mm on High Channel in LTE Band 12 mode with Up Antenna**

Date: 2020.01.30

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.864$  S/m;  $\epsilon_r = 42.85$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch23130/Area Scan (51x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.389 W/kg

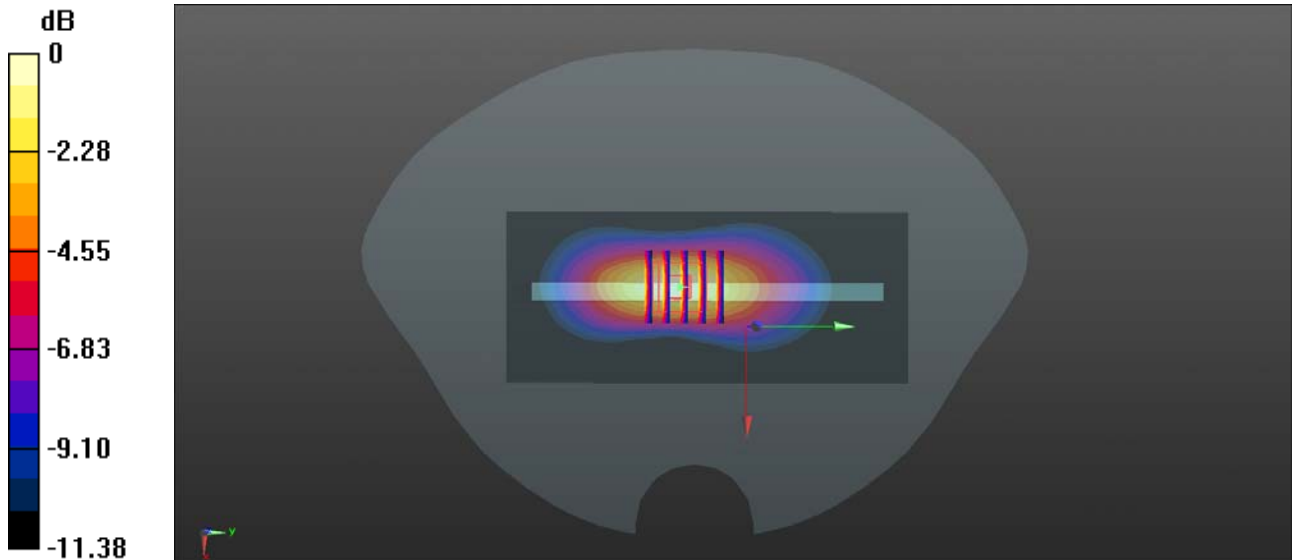
**Ch23130/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.52 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.563 W/kg

**SAR(1 g) = 0.351 W/kg; SAR(10 g) = 0.208 W/kg**

Maximum value of SAR (measured) = 0.392 W/kg



0 dB = 0.392 W/kg

**MEAS.28 Left Head with Cheek on High Channel in LTE Band 26 mode with Up Antenna**

Date: 2020.01.21

Communication System Band: Band26; Frequency: 841.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.9$  S/m;  $\epsilon_r = 40.674$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.2 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch26965/Area Scan (81x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.490 W/kg

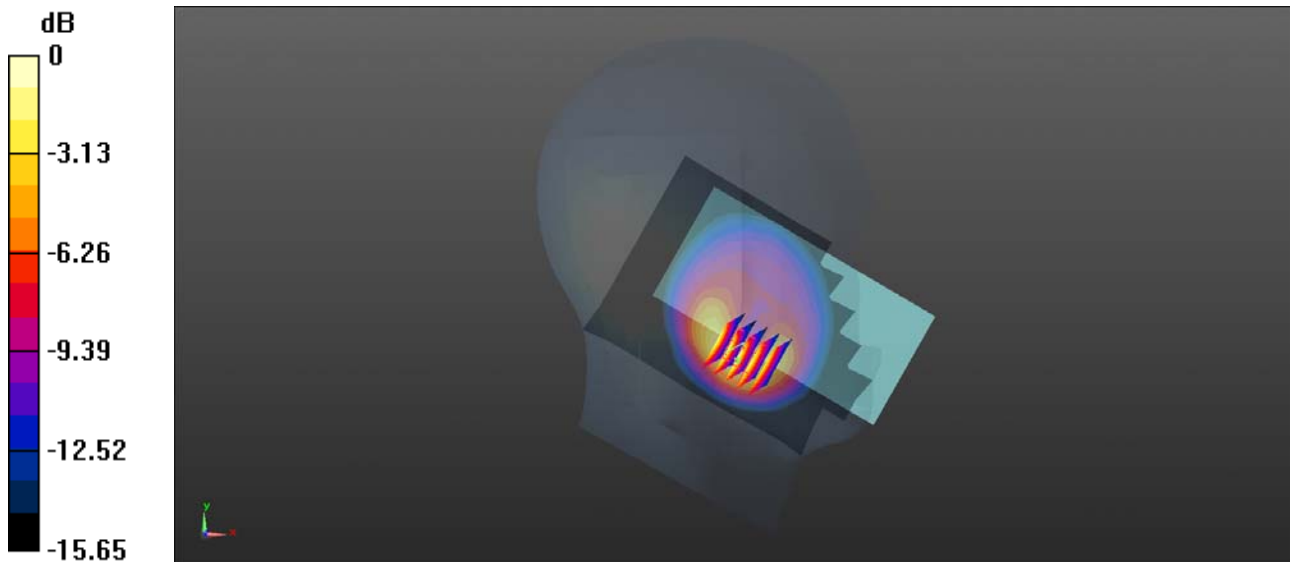
**Ch26965/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.166 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.932 W/kg

**SAR(1 g) = 0.412 W/kg; SAR(10 g) = 0.205 W/kg**

Maximum value of SAR (measured) = 0.466 W/kg



0 dB = 0.466 W/kg

**MEAS.29 Body Plane with Back Side 15mm on High Channel in LTE Band 26 mode with Down Antenna**

Date: 2020.01.22

Communication System Band: Band26; Frequency: 841.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.889$  S/m;  $\epsilon_r = 40.44$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch26965/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.210 W/kg

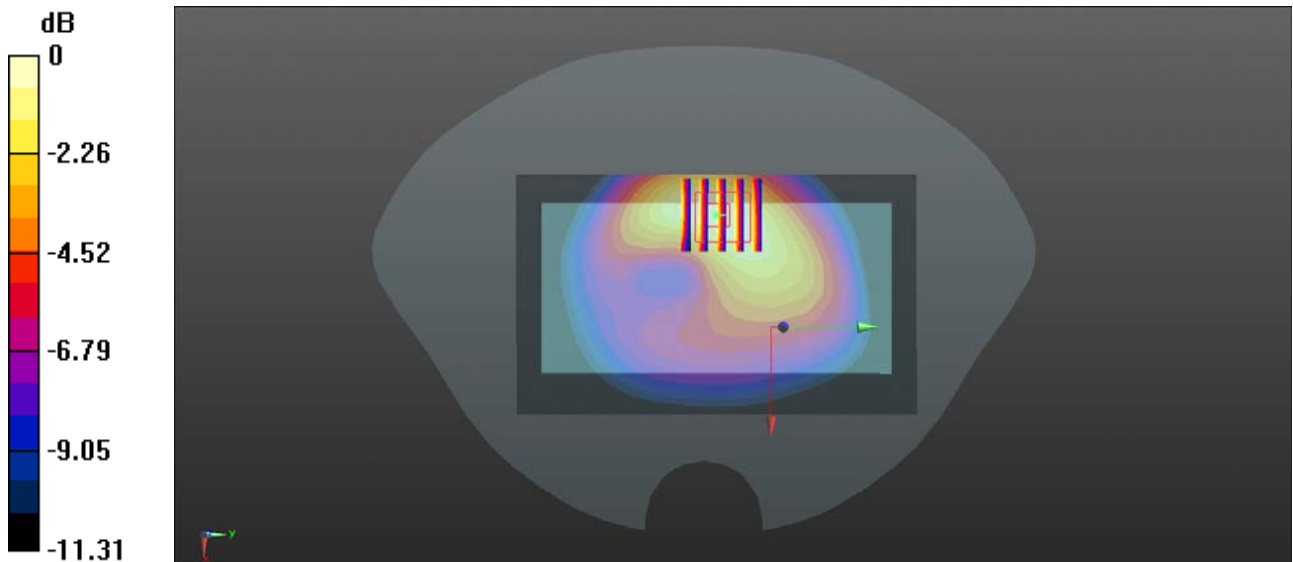
**Ch26965/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.413 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.279 W/kg

**SAR(1 g) = 0.193 W/kg; SAR(10 g) = 0.127 W/kg**

Maximum value of SAR (measured) = 0.209 W/kg



0 dB = 0.209 W/kg

**MEAS.30 Body Plane with Right Edge 10mm on High Channel in LTE Band 26 mode with Up Antenna**

Date: 2020.01.22

Communication System Band: Band26; Frequency: 841.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.889$  S/m;  $\epsilon_r = 40.44$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch26965/Area Scan (51x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.664 W/kg

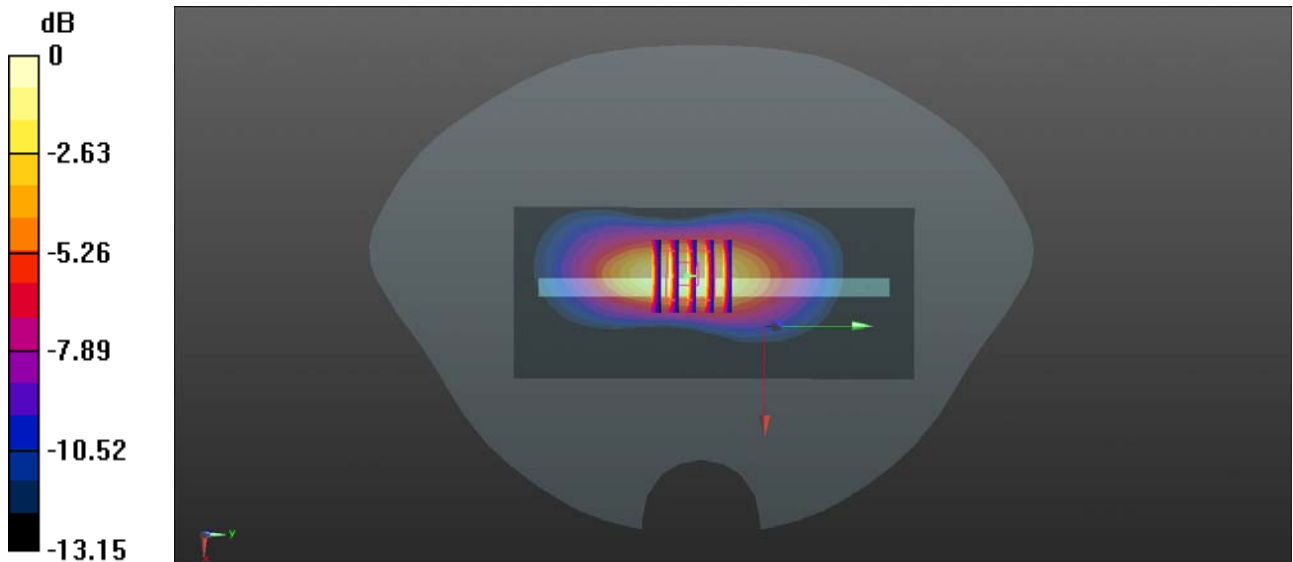
**Ch26965/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.29 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.798 W/kg

**SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.226 W/kg**

Maximum value of SAR (measured) = 0.556 W/kg



0 dB = 0.556 W/kg

**MEAS.31 Right Head with Cheek on High Channel in LTE Band 41 mode with Up Antenna**

Date: 2020.02.12

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2680 MHz; Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.05$  S/m;  $\epsilon_r = 39.328$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.3 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch41490/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.581 W/kg

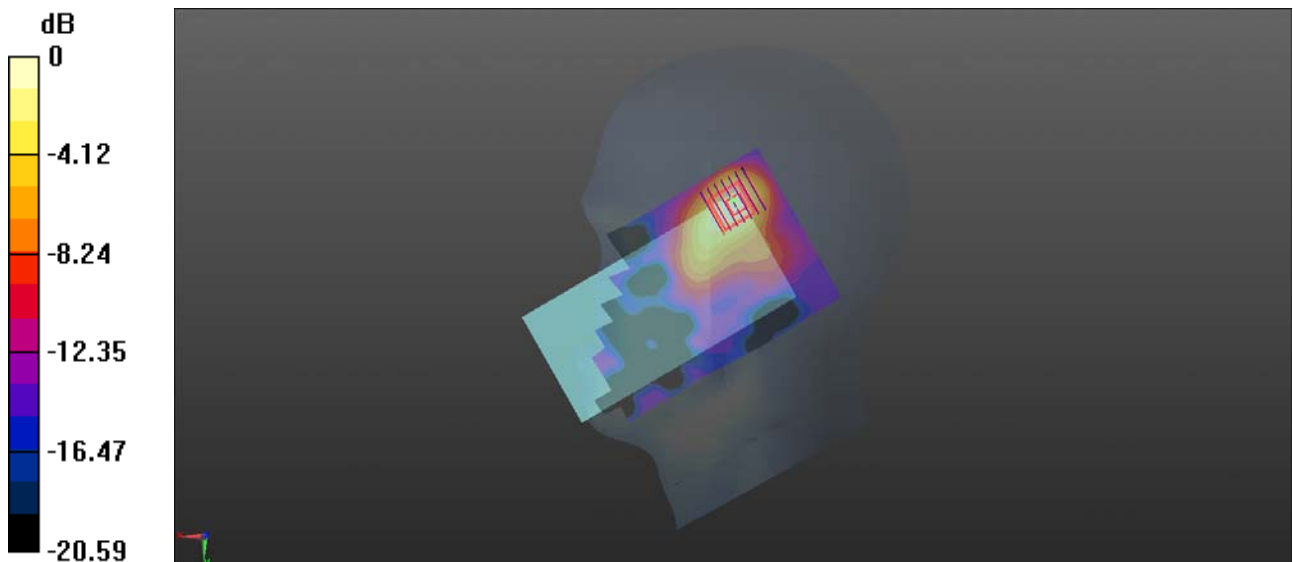
**Ch41490/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.124 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.14 W/kg

**SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.245 W/kg**

Maximum value of SAR (measured) = 0.563 W/kg



0 dB = 0.563 W/kg

**MEAS.32 Body Plane with Back Side 15mm on Middle Channel in LTE Band 41 mode with Down Antenna**

Date: 2020.02.11

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz; Duty Cycle: 1:1 .58

Medium parameters used (extrapolated):  $f = 2593$  MHz;  $\sigma = 1.972$  S/m;  $\epsilon_r = 38.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch40620/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.214 W/kg

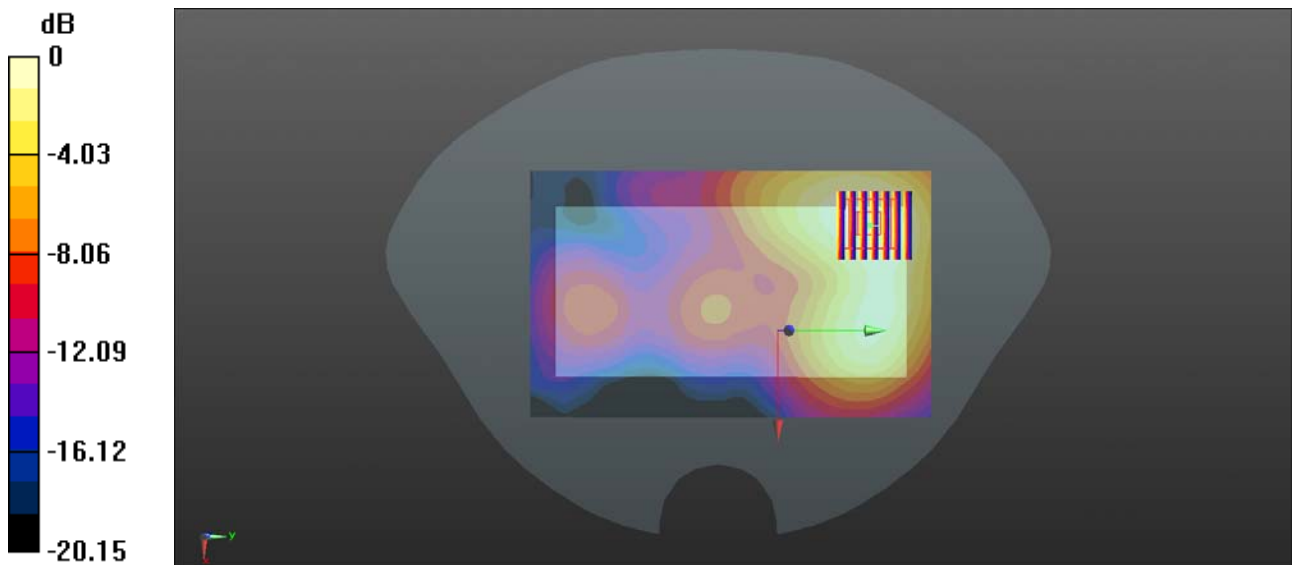
**Ch40620/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.719 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.399 W/kg

**SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.108 W/kg**

Maximum value of SAR (measured) = 0.212 W/kg



0 dB = 0.212 W/kg

**MEAS.33 Body Plane with Back Side 10mm on Middle Channel in LTE Band 41 mode with Up Antenna**

Date: 2020.02.11

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz; Duty Cycle: 1:1 .58

Medium parameters used (extrapolated):  $f = 2593$  MHz;  $\sigma = 1.972$  S/m;  $\epsilon_r = 38.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch40620/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.562 W/kg

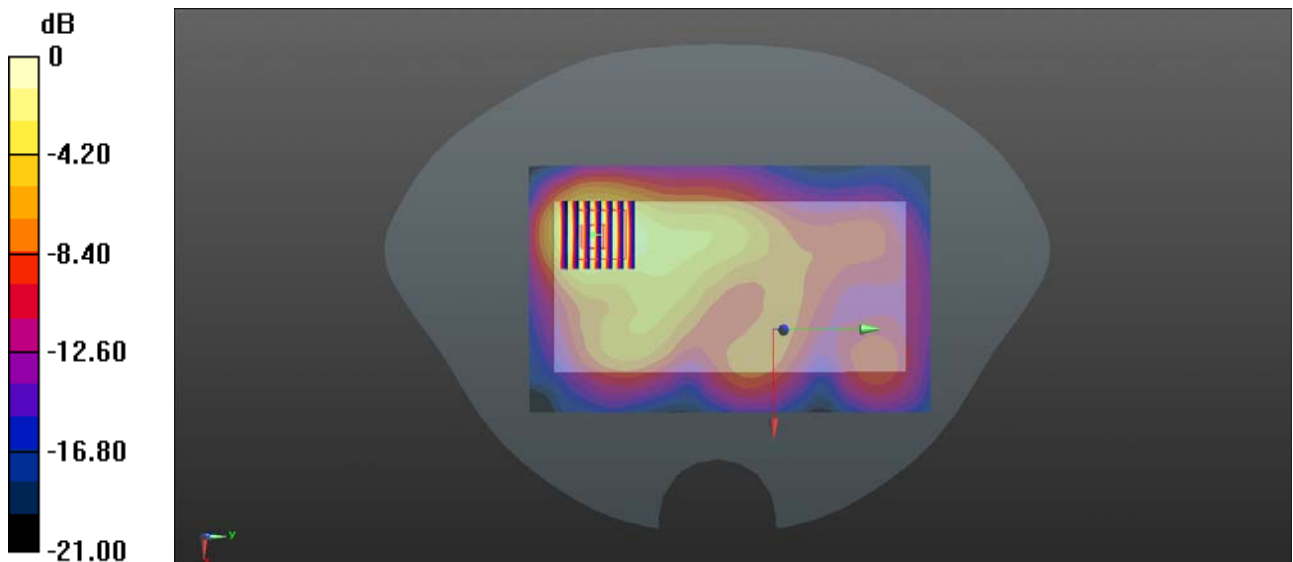
**Ch40620/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.849 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.473 W/kg; SAR(10 g) = 0.227 W/kg**

Maximum value of SAR (measured) = 0.516 W/kg



0 dB = 0.516 W/kg

**MEAS.34 Left Head with Tilt on Middle Channel in IEEE802.11b mode**

Date: 2020.02.16

Communication System Band: WLAN(b); Frequency: 2437 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.742$  S/m;  $\epsilon_r = 37.98$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch6/Area Scan (91x141x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

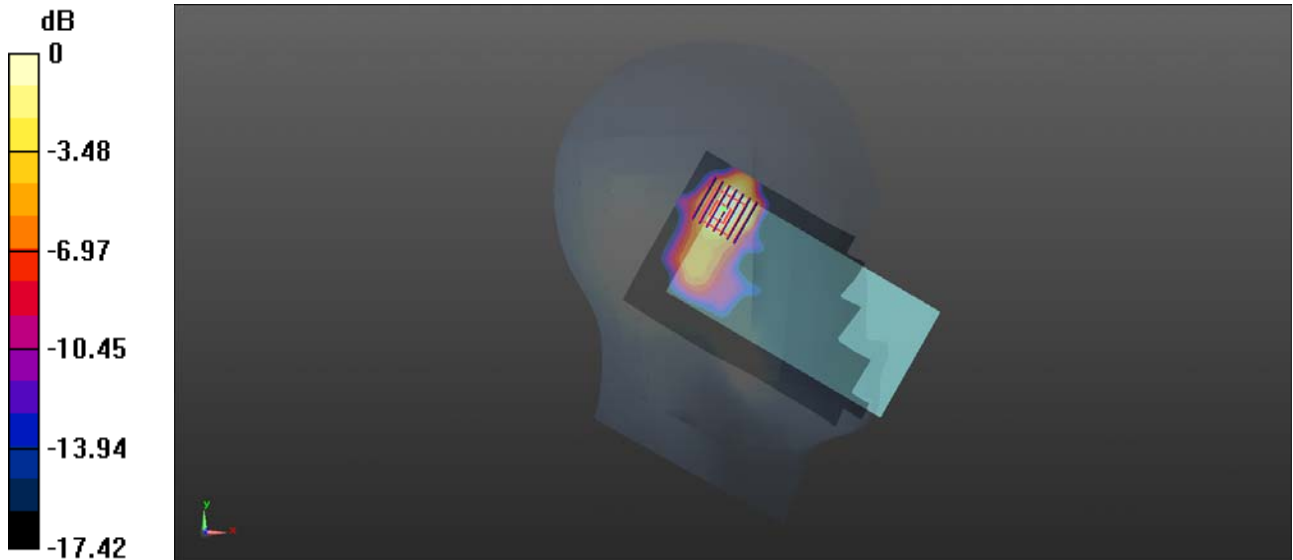
**Ch6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.286 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.859 W/kg

**SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.236 W/kg**

Maximum value of SAR (measured) = 0.532 W/kg



0 dB = 0.532 W/kg



**MEAS.35 Body Plane with Back Side 15mm on High Channel in IEEE802.11b mode**

Date: 2020.02.16

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.76$  S/m;  $\epsilon_r = 37.804$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch11/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.183 W/kg

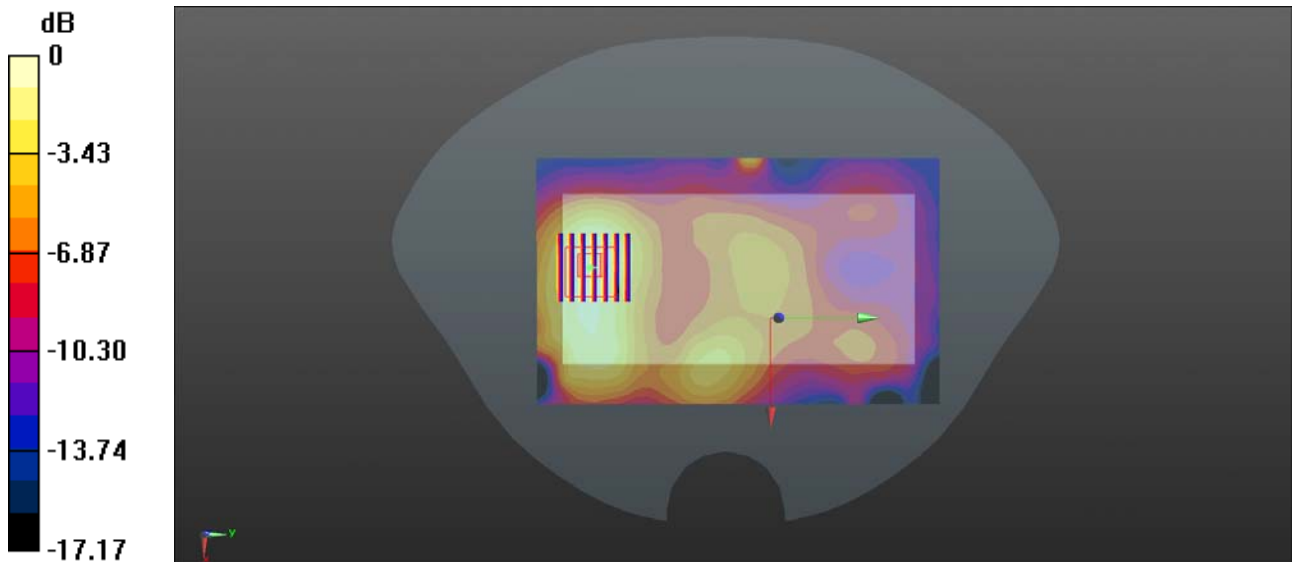
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.125 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.315 W/kg

**SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.090 W/kg**

Maximum value of SAR (measured) = 0.182 W/kg



0 dB = 0.182 W/kg

**MEAS.36 Body Plane with Back Side 10mm on High Channel in IEEE802.11b mode**

Date: 2020.02.16

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.76$  S/m;  $\epsilon_r = 37.804$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch11/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.304 W/kg

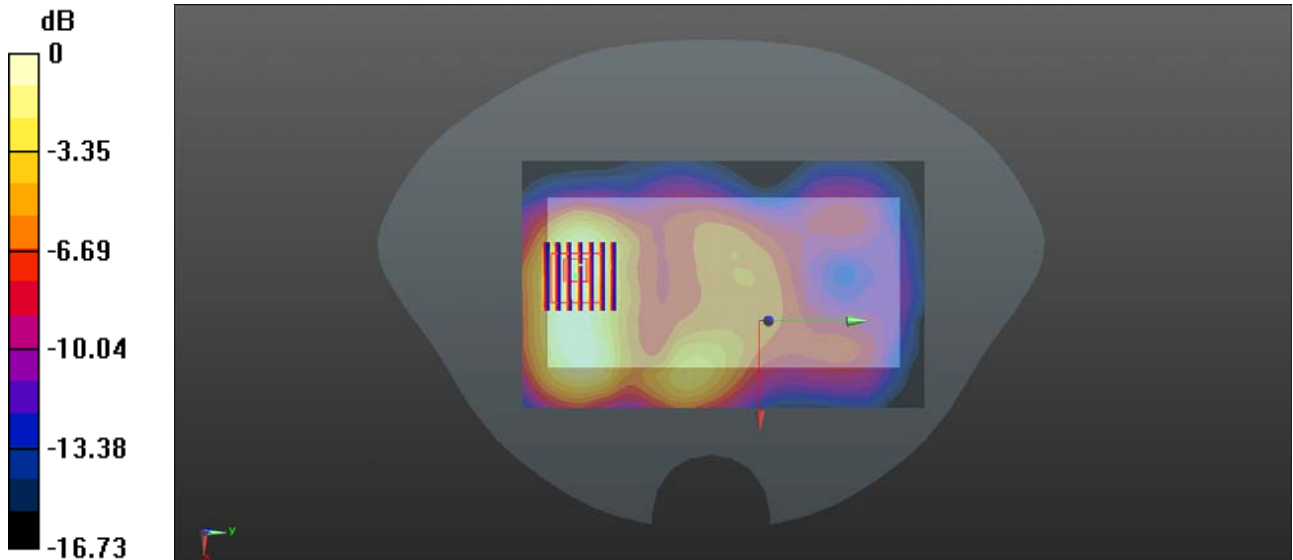
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.075 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.517 W/kg

**SAR(1 g) = 0.274 W/kg; SAR(10 g) = 0.148 W/kg**

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



0 dB = 0.299 W/kg

**MEAS.37 Left Head with Tilt on Channel 54 in IEEE802.11n HT40 mode**

Date: 2020.02.10

Communication System Band: WLAN(n)40Mhz; Frequency: 5270 MHz;Duty Cycle: 1:1.04

Medium parameters used:  $f = 5270$  MHz;  $\sigma = 4.77$  S/m;  $\epsilon_r = 36.052$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.6 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch54/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.761 W/kg

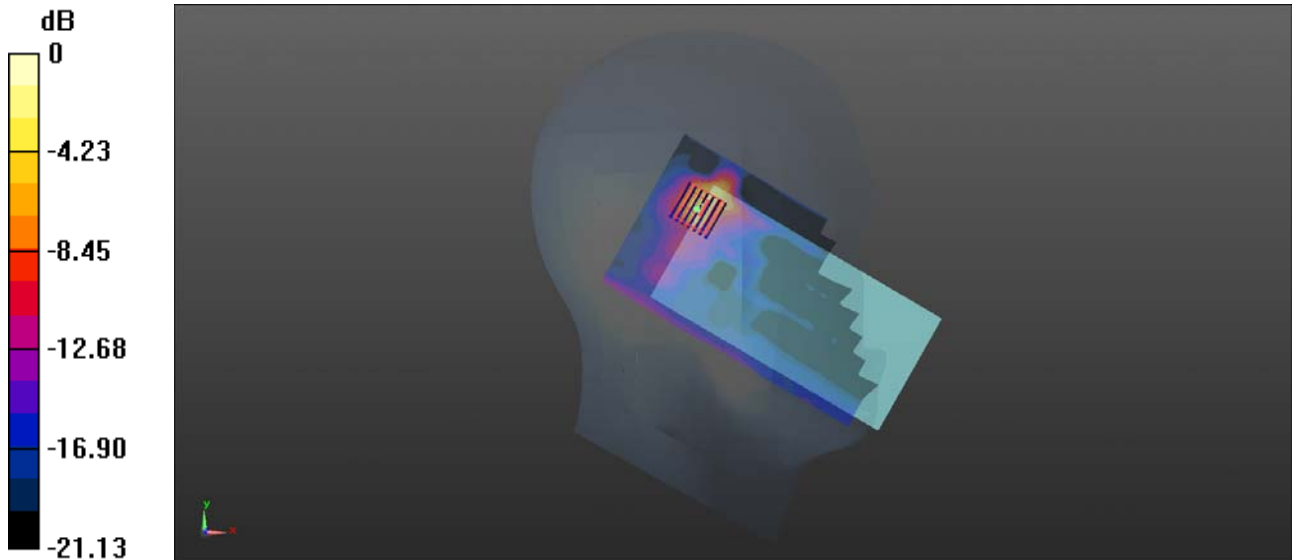
**Ch54/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.754 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.02 W/kg

**SAR(1 g) = 0.658 W/kg; SAR(10 g) = 0.254 W/kg**

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



0 dB = 1.61 W/kg

**MEAS.39 Left Head with Tilt on Channel 134 in IEEE802.11n HT40 mode**

Date: 2020.02.09

Communication System Band: WLAN(n)40Mhz; Frequency: 5670 MHz;Duty Cycle: 1:1.04

Medium parameters used (interpolated):  $f = 5670$  MHz;  $\sigma = 5.21$  S/m;  $\epsilon_r = 34.422$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.3 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch134/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.618 W/kg

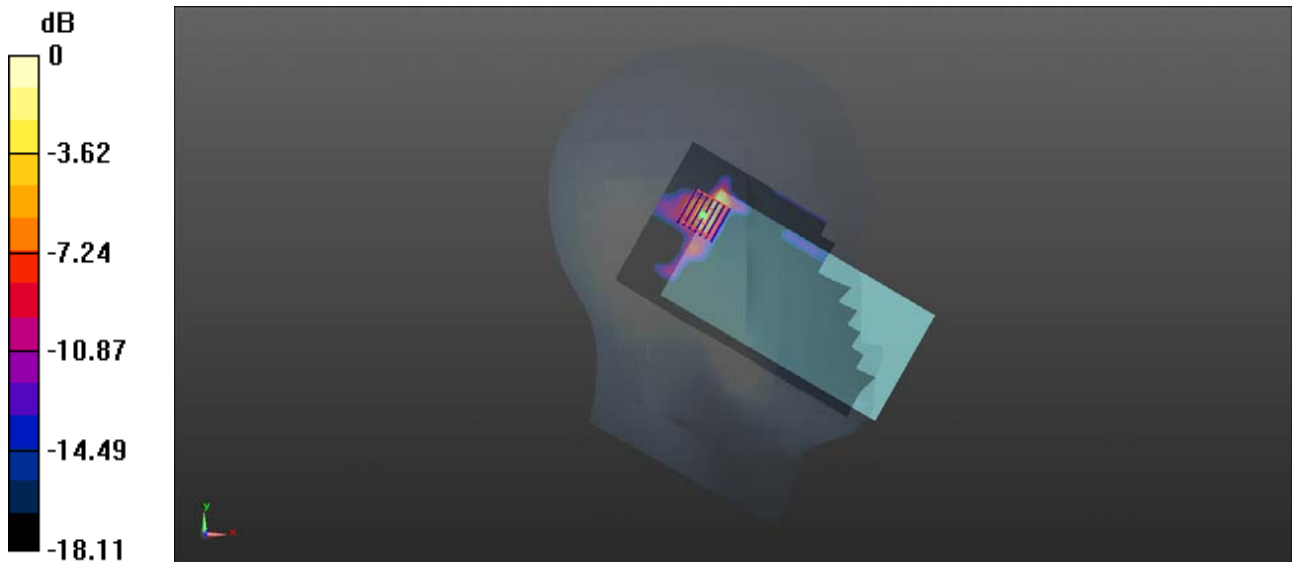
**Ch134/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.682 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.183 W/kg**

Maximum value of SAR (measured) = 0.618 W/kg



0 dB = 0.618 W/kg

**MEAS.39 Left Head with Tilt on Channel 151 in IEEE802.11n HT40 mode**

Date: 2020.02.08

Communication System Band: WLAN(n)40Mhz; Frequency: 5755 MHz;Duty Cycle: 1:1.04

Medium parameters used (interpolated):  $f = 5755 \text{ MHz}$ ;  $\sigma = 5.329 \text{ S/m}$ ;  $\epsilon_r = 34.189$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch151/Area Scan (101x181x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.723 W/kg

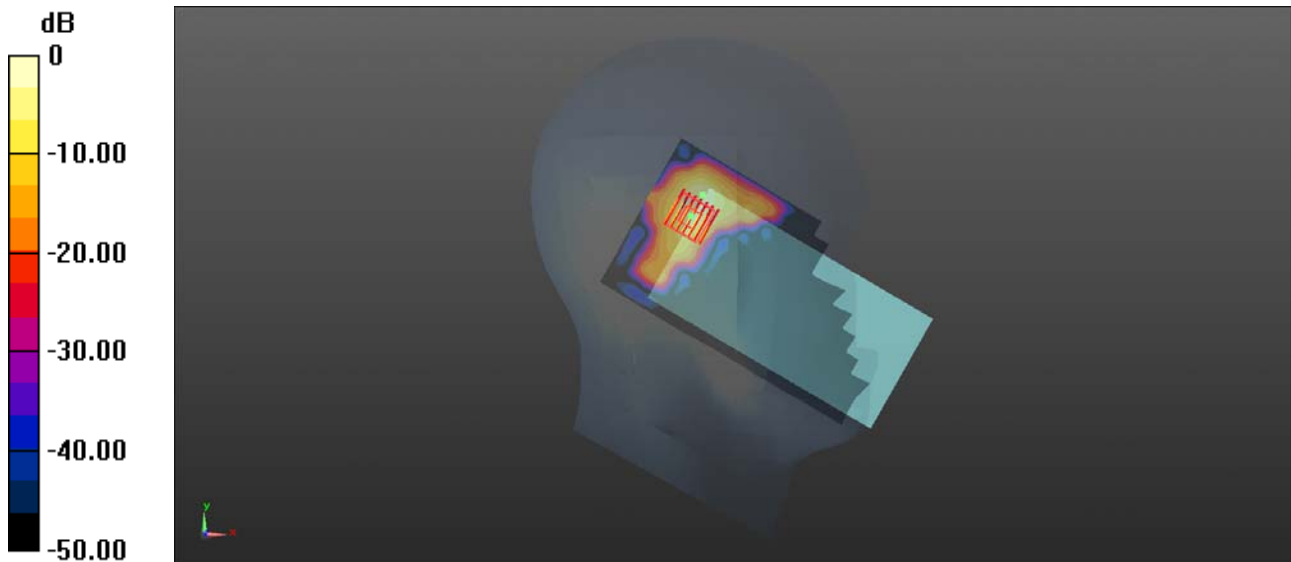
**Ch151/Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$

Reference Value = 3.004 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 6.61 W/kg

**SAR(1 g) = 0.742 W/kg; SAR(10 g) = 0.154 W/kg**

Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg

**MEAS.40 Body Plane with Back Side 15mm on Channel 54 in IEEE802.11n HT40 mode**

Date: 2020.02.07

Communication System Band: WLAN(n)40Mhz; Frequency: 5270 MHz;Duty Cycle: 1:1.04

Medium parameters used (interpolated):  $f = 5270$  MHz;  $\sigma = 4.705$  S/m;  $\epsilon_r = 36.616$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch54/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.295 W/kg

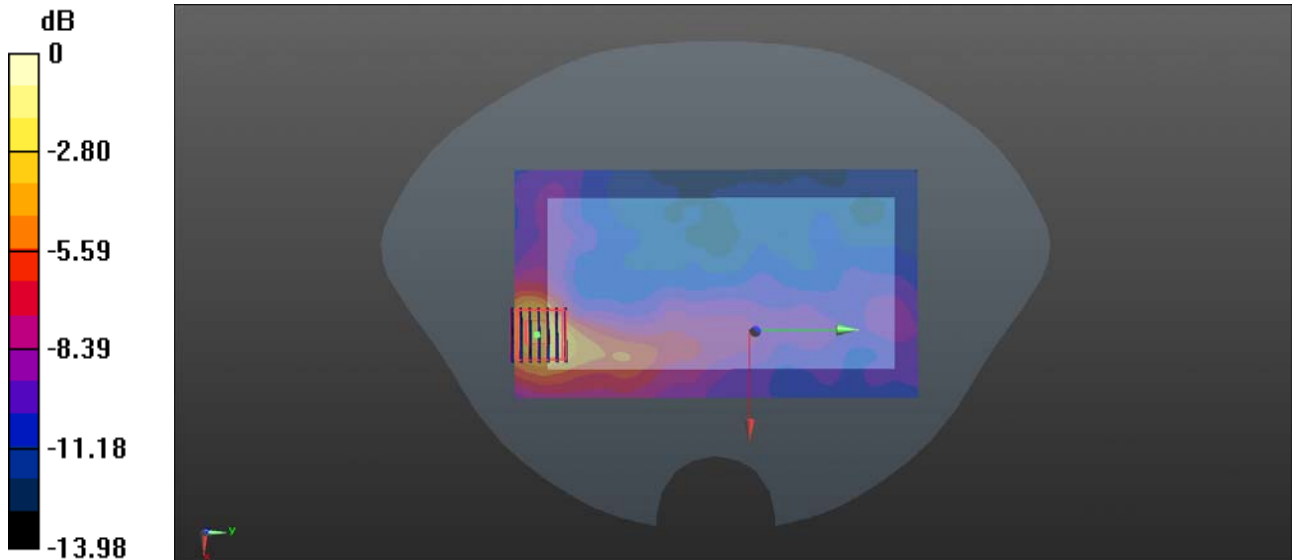
**Ch54/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.971 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.749 W/kg

**SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.084 W/kg**

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



0 dB = 0.299 W/kg

**MEAS.41 Body Plane with Back Side 15mm on Channel 134 in IEEE802.11n HT40 mode**

Date: 2020.02.06

Communication System Band: WLAN(n)40Mhz; Frequency: 5670 MHz;Duty Cycle: 1:1.04

Medium parameters used (interpolated):  $f = 5670$  MHz;  $\sigma = 5.014$  S/m;  $\epsilon_r = 35.258$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch134/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.183 W/kg

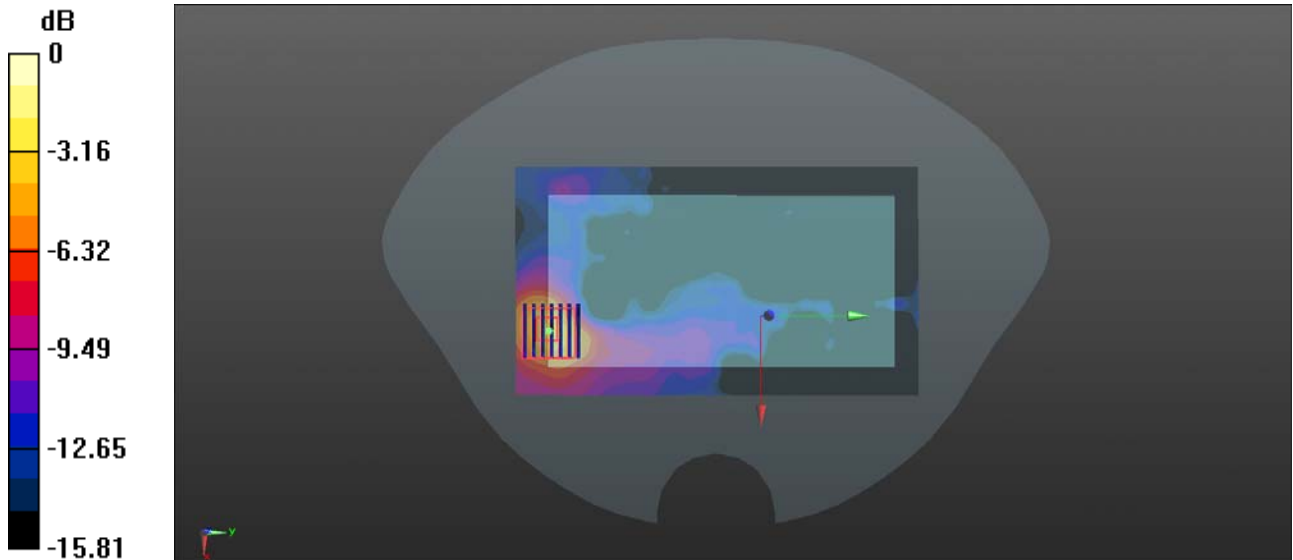
**Ch134/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.596 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.738 W/kg

**SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.088 W/kg**

Maximum value of SAR (measured) = 0.365 W/kg



0 dB = 0.365 W/kg

**MEAS.42 Body Plane with Back Side 15mm on Channel 159 in IEEE802.11n HT40 mode**

Date: 2020.02.05

Communication System Band: WLAN(n)40Mhz; Frequency: 5795 MHz;Duty Cycle: 1:1.04

Medium parameters used (interpolated):  $f = 5795$  MHz;  $\sigma = 5.368$  S/m;  $\epsilon_r = 34.438$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch159/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.196 W/kg

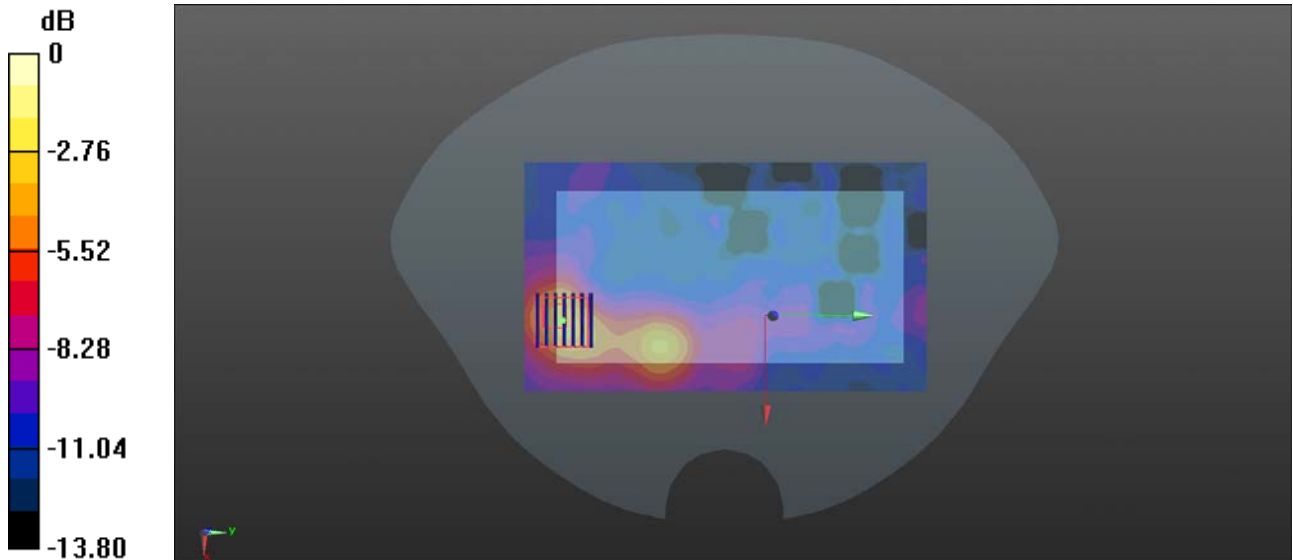
**Ch159/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.657 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.41 W/kg

**SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.082 W/kg**

Maximum value of SAR (measured) = 0.396 W/kg



0 dB = 0.396 W/kg



**MEAS.43 Body Plane with Top Edge 10mm on Channel 46 in IEEE802.11n HT40 mode**

Date: 2020.02.07

Communication System Band: WLAN(n)40Mhz; Frequency: 5230 MHz;Duty Cycle: 1:1.04

Medium parameters used:  $f = 5230$  MHz;  $\sigma = 4.633$  S/m;  $\epsilon_r = 36.816$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch46/Area Scan (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

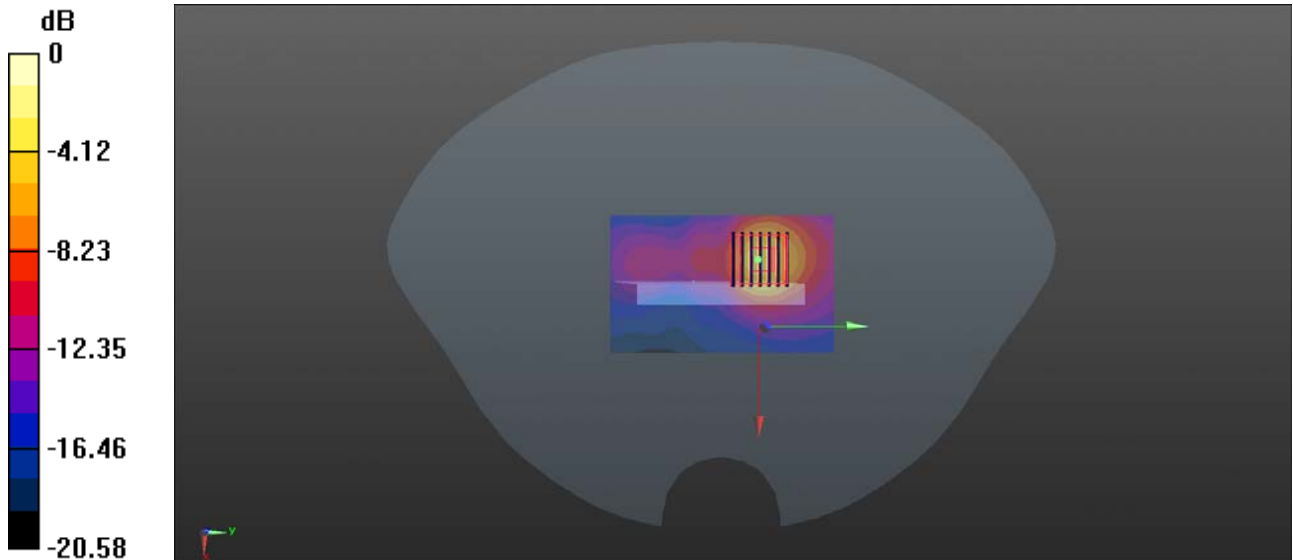
**Ch46/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.372 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.07 W/kg

**SAR(1 g) = 0.744 W/kg; SAR(10 g) = 0.277 W/kg**

Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg

**MEAS.44 Body Plane with Top Edge 10mm on Channel 159 in IEEE802.11n HT40 mode**

Date: 2020.02.05

Communication System Band: WLAN(n)40Mhz; Frequency: 5795 MHz;Duty Cycle: 1:1.04

Medium parameters used (interpolated):  $f = 5795$  MHz;  $\sigma = 5.368$  S/m;  $\epsilon_r = 34.438$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch159/Area Scan (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.606 W/kg

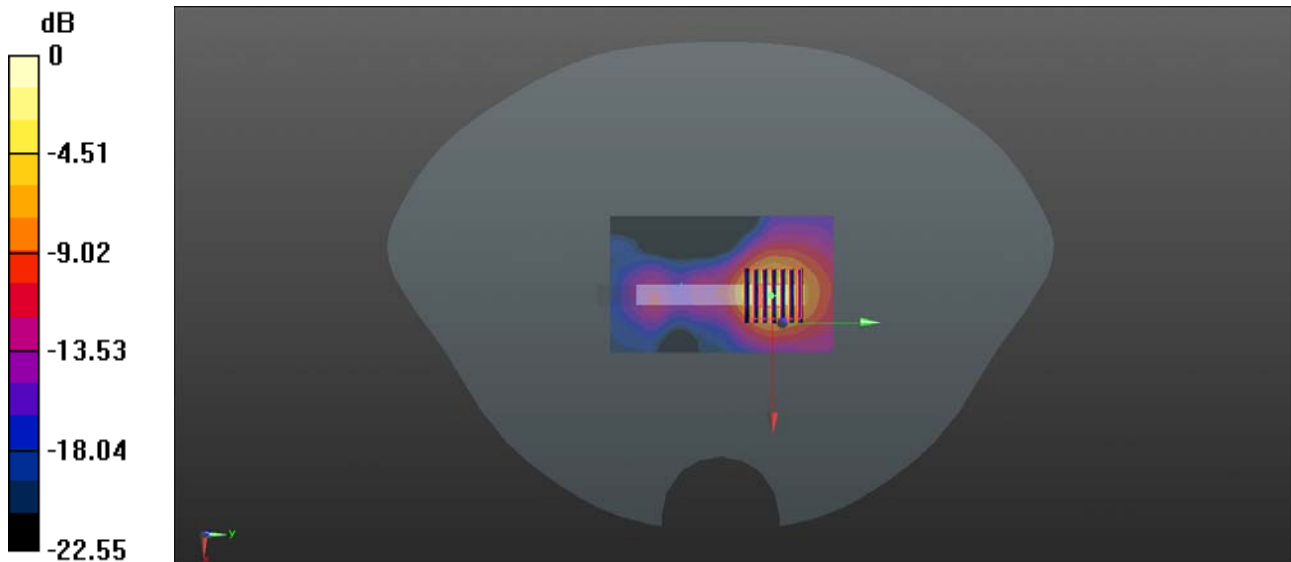
**Ch159/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.870 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 2.15 W/kg

**SAR(1 g) = 0.537 W/kg; SAR(10 g) = 0.195 W/kg**

Maximum value of SAR (measured) = 1.11 W/kg



0 dB = 1.11 W/kg

**MEAS.45 Left Head with Cheek on Middle Channel in Bluetooth DH5 mode**

Date: 2020.02.15

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used:  $f = 2441$  MHz;  $\sigma = 1.814$  S/m;  $\epsilon_r = 39.466$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch39/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.212 W/kg

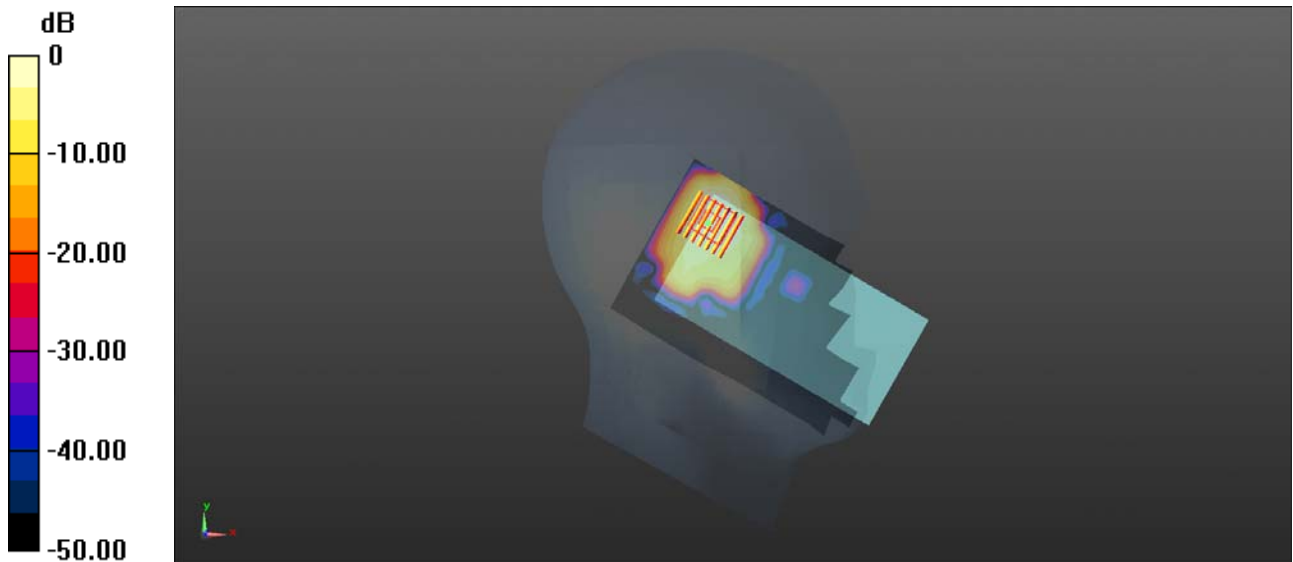
**Ch39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.346 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.446 W/kg

**SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.085 W/kg**

Maximum value of SAR (measured) = 0.225 W/kg



0 dB = 0.225 W/kg

**MEAS.46 Body Plane with Back Side 15mm on Middle Channel in Bluetooth DH5 mode**

Date: 2020.02.15

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used:  $f = 2441$  MHz;  $\sigma = 1.814$  S/m;  $\epsilon_r = 39.466$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch39/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0268 W/kg

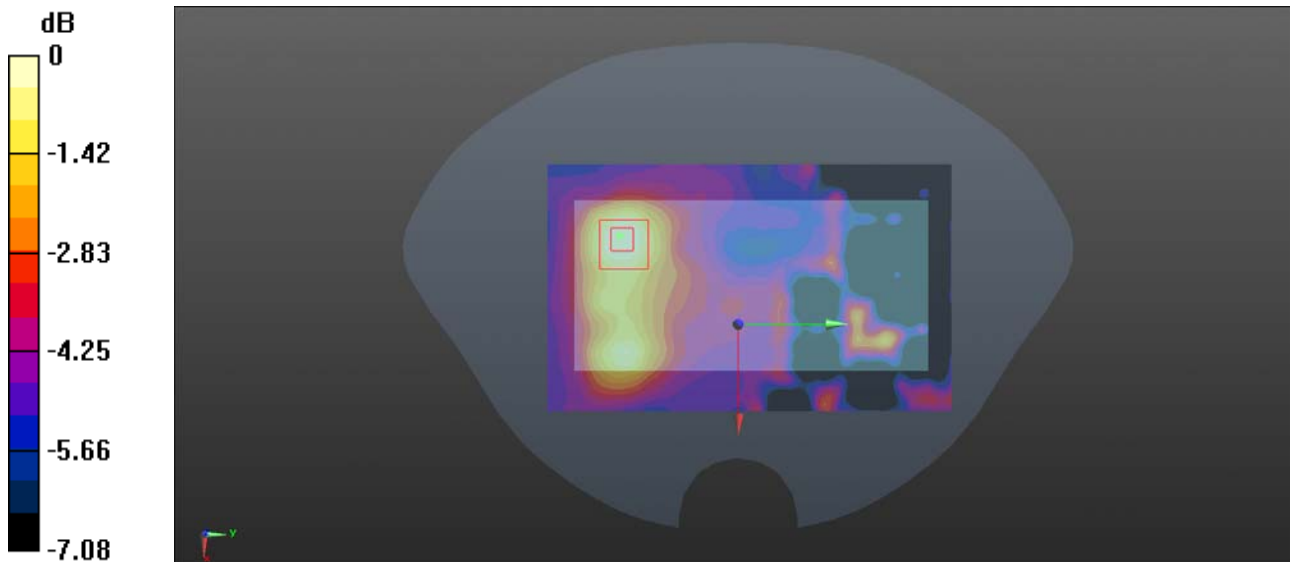
**Ch39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.470 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0640 W/kg

**SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.014 W/kg**

Maximum value of SAR (measured) = 0.0266 W/kg



0 dB = 0.0266 W/kg

**MEAS.47 Body Plane with Back Side 10mm on Middle Channel in Bluetooth DH5 mode**

Date: 2020.02.15

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used:  $f = 2441$  MHz;  $\sigma = 1.814$  S/m;  $\epsilon_r = 39.466$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- 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)

**Ch39/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0410 W/kg

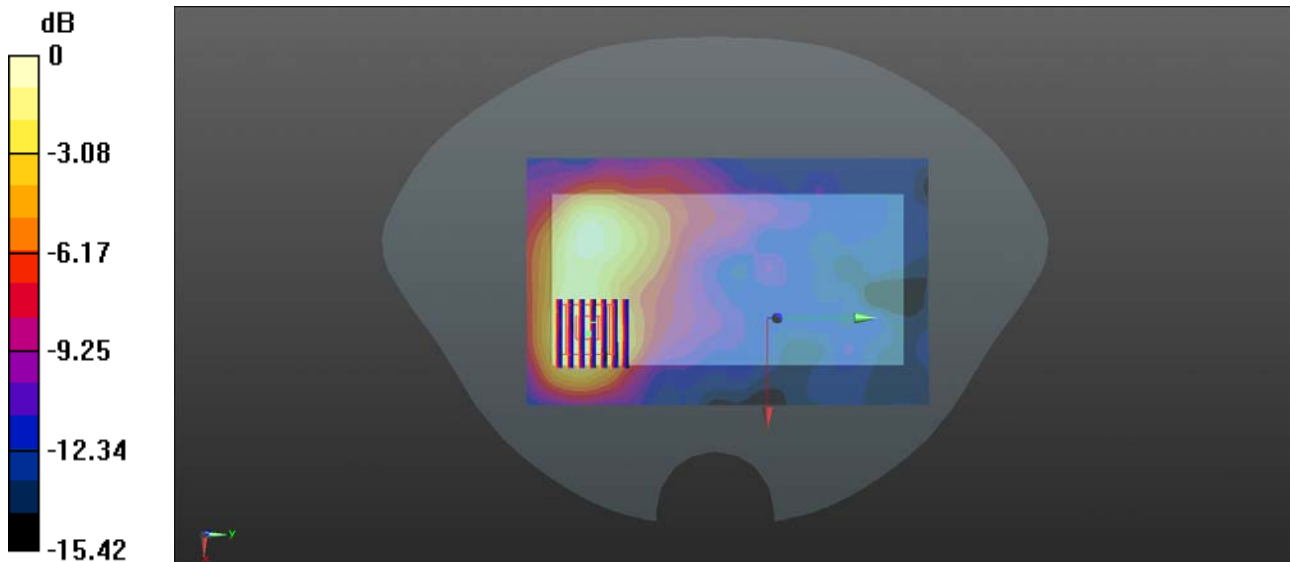
**Ch39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.215 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.0790 W/kg

**SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.020 W/kg**

Maximum value of SAR (measured) = 0.0397 W/kg



0 dB = 0.0397 W/kg

## **ANNEX D EUT EXTERNAL PHOTOS**

Please refer the document "BL-SZ2010083-AW.pdf".

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

Please refer the document "BL-SZ2010083-AS.pdf".

## **ANNEX F CALIBRATION REPORT**

Please refer the document "CALIBRATION REPORT.pdf".

--END OF REPORT--