

FCC

SAR

TEST REPORT

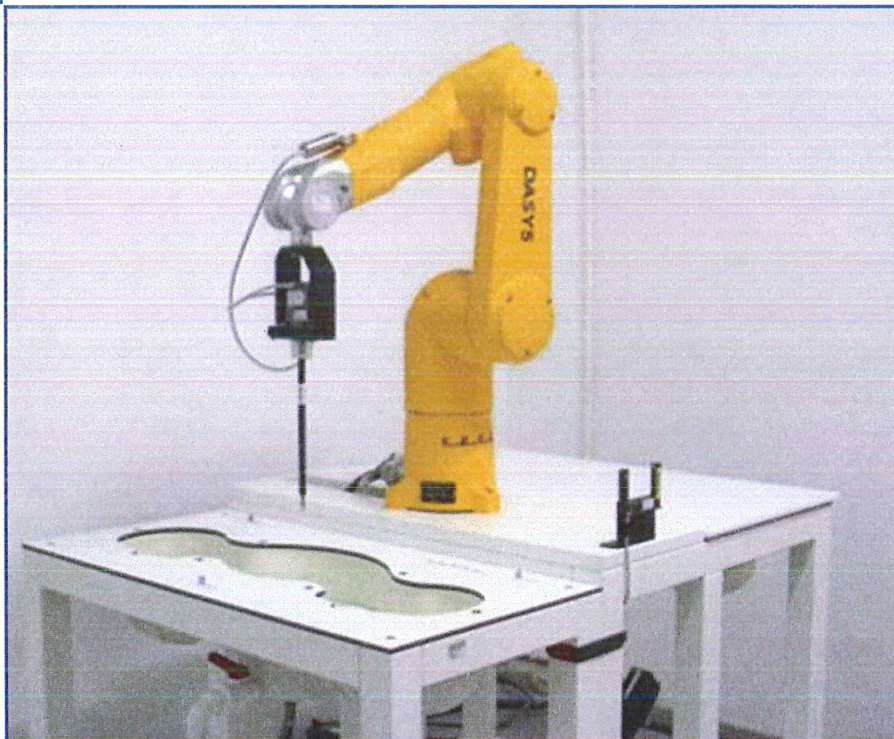
ISSUED BY  
Shenzhen BALUN Technology Co., Ltd.



FOR  
**Mobile Phone**

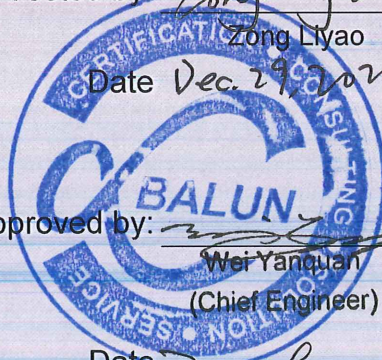
ISSUED TO  
vivo Mobile Communication Co., Ltd.

#283, BBK Road, Wusha, Chang'An, DongGuan City, China



Tested by: *Zong Liyao*  
Zong Liyao  
Date *Dec. 29, 2020*

Approved by: *Wei Yanquan*  
Wei Yanquan  
(Chief Engineer)  
Date *Dec. 29, 2020*



Report No.: BL-SZ20B0750-701

EUT Name: Mobile Phone

Model Name: V2035

Brand Name: vivo

FCC ID: 2AUCY-V2035

Test Standard: FCC 47 CFR Part 2.1093  
ANSI C95.1: 1999, IEEE 1528: 2013

Maximum SAR: Head (1 g): 1.00 W/kg  
Body (1 g): 0.78 W/kg  
Hotspot (1 g): 1.19 W/kg

Test Conclusion: Pass

Test Date: Nov. 25, 2020 ~ Dec. 17, 2020

Date of Issue: Dec. 29, 2020

*NOTE: This test report of test results only related to testing samples, which can be duplicated completely for the legal use with the approval of the applicant; it shall not be reproduced except in full, without the written approval of Shenzhen BALUN Technology Co., Ltd. Any objections should be raised within thirty days from the date of issue. To validate the report, please contact us.*

**Revision History**

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Dec. 25, 2020</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Dec. 29, 2020</u>	<u>Updated the description of CDMA BC0 in section 3.3.1</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 ..... 7
  - 2.6 Technical Information ..... 8
  - 2.7 Power Reduction Description ..... 10
- 3 SUMMARY OF TEST RESULT ..... 15
  - 3.1 Test Standards ..... 15
  - 3.2 Device Category and SAR Limit ..... 16
  - 3.3 Test Result Summary ..... 17
  - 3.4 Test Uncertainty ..... 19
- 4 MEASUREMENT SYSTEM ..... 20
  - 4.1 Specific Absorption Rate (SAR) Definition ..... 20
  - 4.2 DASy SAR System ..... 21
- 5 SYSTEM VERIFICATION ..... 28
  - 5.1 Purpose of System Check ..... 28
  - 5.2 System Check Setup ..... 28
- 6 TEST POSITION CONFIGURATIONS ..... 29



6.1	Head Exposure Conditions.....	29
6.2	Body-worn Position Conditions .....	31
6.3	Hotspot Mode Exposure Position Conditions .....	32
6.4	Product Specific 10g Exposure Consideration .....	32
7	MEASUREMENT PROCEDURE.....	33
7.1	Measurement Process Diagram.....	33
7.2	SAR Scan General Requirement .....	34
7.3	Measurement Procedure.....	35
7.4	Area & Zoom Scan Procedure .....	35
8	CONDUCTED RF OUPUT POWER.....	36
8.1	GSM.....	36
8.2	WCDMA .....	37
8.3	CDMA.....	38
8.4	LTE.....	39
8.5	WIFI.....	47
8.6	Bluetooth .....	50
8.7	Power Reduction List .....	51
9	TEST EXCLUSION CONSIDERATION.....	77
9.1	SAR Test Exclusion Consideration Table .....	78
10	TEST RESULT .....	82
10.1	GSM 850 .....	82
10.2	GSM 1900 .....	83
10.3	WCDMA Band 2 .....	84
10.4	WCDMA Band 4 .....	85
10.5	WCDMA Band 5 .....	86
10.6	CDMA BC0.....	87
10.7	LTE Band 2 (20MHz Bandwidth).....	88
10.8	LTE Band 4 (20MHz Bandwidth).....	90
10.9	LTE Band 5 (10MHz Bandwidth).....	92
10.10	LTE Band 7 (20MHz Bandwidth).....	94
10.11	LTE Band 38 (20MHz Bandwidth).....	96
10.12	LTE Band 41 (20MHz Bandwidth).....	98

10.13	WIFI 2.4GHz.....	100
10.14	WIFI 5GHz.....	101
10.15	Bluetooth .....	103
11	SAR Measurement Variability.....	104
12	SIMULTANEOUS TRANSMISSION.....	105
12.1	Simultaneous Transmission Mode Consider.....	105
12.2	Sum SAR of Simultaneous Transmission .....	106
13	TEST EQUIPMENTS LIST .....	113
ANNEX A	SIMULATING LIQUID VERIFICATION RESULT .....	114
ANNEX B	SYSTEM CHECK RESULT .....	115
ANNEX C	TEST DATA.....	140
ANNEX D	EUT EXTERNAL PHOTOS.....	197
ANNEX E	SAR TEST SETUP PHOTOS.....	197
ANNEX F	CALIBRATION REPORT .....	197

# 1 GENERAL INFORMATION

## 1.1 Identification of the Testing Laboratory

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

## 1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

## 1.3 Test Environment Condition

Ambient Temperature	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.
- (7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	vivo Mobile Communication Co., Ltd.
Address	#283, BBK Road, Wusha, Chang'An, DongGuan City, China

### 2.2 Manufacturer Information

Manufacturer	vivo Mobile Communication Co., Ltd.
Address	#283, BBK Road, Wusha, Chang'An, DongGuan City, China

### 2.3 Factory Information

Factory	vivo Mobile Communication Co., Ltd.
Address	#283, BBK Road, Wusha, Chang'An, DongGuan City, China

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

EUT Name	Mobile Phone
Model Name Under Test	V2035
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	MP_0.1
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

### 2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	vivo
	Model No.	B-O8
	Serial No.	N/A
	Capacity	Rated Capacity: 4910mAh/19.00Wh Typical Capacity: 5000mAh/19.35Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V
Ancillary Equipment 2	Headset	
	Model No.	N/A
	Length (Approx.)	1.2 m

## 2.6 Technical Information

Network and Wireless connectivity	2G Network GSM 850/1900 MHz 3G Network CDMA 1x Band Class 0 EVDO Rel. 0/Rev. A Band Class 0 WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7 TDD LTE Band 38/41 Bluetooth (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) U-NII-1/2A/2C/3, GPS, GLONASS, BDS, Galileo, SBAS, FM Receiver
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, CDMA, LTE, 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
	CDMA	TX: 824.025 ~ 848.985 MHz	RX: 869.025 ~ 893.985 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 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2535 ~ 2655 MHz	RX: 2535 ~ 2655 MHz
	802.11b/g/n(HT20)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
	5470 ~ 5725 MHz		
	5725 ~ 5850 MHz		
Bluetooth	2402 ~ 2480 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
EUT Stage	Portable Device		
Product	Type		



Production unit Identical prototype

## Note:

1. The Power Reduction please refer to section 8.7.
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

1. 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.
2. When device is making call in head, the power reduction will applied for SAR compliance.
3. When device operating under hotspot mode, the power reduction will applied for SAR compliance.
4. This device uses the P-sensor to detect handheld state.
5. For WWAN Down antenna this product not support power reduced function.

**WWAN Reduced Power Level Table**

Reduced level	State	Antenna	Transmitting conditions	Power reduced bands
Level 1	Head (Receiver on)	Up	WWAN Use Only	GSM 850/1900
				WCDMA Band2/4
				LTE Band2/4/7/38/41
Level 2	Head (Receiver on)	Up	WWAN + WLAN 2.4G Or WLAN5G	GSM 850/1900
				WCDMA Band2/4/5
				LTE Band2/4/5/7/38/41
Level 3	Limbs (P-sensor On)	Up	WWAN Use Only	GSM 850/1900
				WCDMA Band2/4
				LTE Band2/4/7/38/41
Level 4	Limbs&Body (Hotspot on)	Up	WWAN + WLAN 2.4G Or WLAN5G	GSM 850/1900
				WCDMA Band2/4
				LTE Band2/4/7/38/41

**WLAN Reduced Power Level Table**

Reduced level	Receiver state	Transmitting conditions	Power reduced bands
Level 1	On (head scenario)	WLAN Use Only	WLAN 2.4G; WLAN 5G
Level 2	On (head scenario)	WWAN + WLAN 2.4G Or WLAN5G	WLAN 2.4G; WLAN 5G
Level 3	Limbs&Body (Hotspot on)	WWAN + WLAN 2.4G Or WLAN5G	WLAN 2.4G; WLAN 5G

**WWAN Antenna Up Power Table**

Mode	WWAN Up Antenna							
	Full Power	Head (Receiver on)		Body-worn		Hotspot on	Limbs	
		Standalone	Simultaneous transmission	Standalone	Simultaneous transmission		Standalone	Simultaneous transmission
			+ WLAN/BT		+ WLAN/BT			+ WLAN/BT
Level1	Level2	Off	Level4	Level4	Level3	Level4		
GSM 850	33.5	27.5	27.5	33.5	27.5	27.5	27.5	27.5
GPRS850 1 Tx Slot	33.5	27.5	27.5	33.5	27.5	27.5	27.5	27.5
GPRS850 2 Tx Slots	31.5	25.5	25.5	31.5	25.5	25.5	25.5	25.5
GPRS850 3 Tx Slots	29.5	23.5	23.5	29.5	23.5	23.5	23.5	23.5
GPRS850 4 Tx Slots	28.5	23.5	23.5	28.5	23.5	23.5	23.5	23.5
EGPRS850 1 Tx Slot	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
EGPRS850 2 Tx Slots	26.0	25.5	25.5	26.0	25.5	25.5	25.5	25.5
EGPRS850 3 Tx Slots	24.5	23.5	23.5	24.5	23.5	23.5	23.5	23.5
EGPRS850 4 Tx Slots	22.5	21.5	21.5	22.5	21.5	21.5	21.5	21.5
GSM 1900	31.0	25.5	25.5	31.0	28.5	28.5	28.5	28.5
GPRS1900 1 Tx Slot	31.0	25.5	25.5	31.0	28.5	28.5	28.5	28.5
GPRS1900 2 Tx Slots	29.5	23.0	23.0	29.5	23.0	23.0	23.0	23.0
GPRS1900 3 Tx Slots	27.2	18.5	18.5	27.2	22.2	22.2	22.2	22.2
GPRS1900 4 Tx Slots	25.5	17.0	17.0	25.5	20.5	20.5	20.0	20.5
EGPRS1900 1 Tx Slot	27.6	25.5	25.5	27.6	26.1	26.1	27.1	26.1
EGPRS1900 2 Tx Slots	26.0	22.5	22.5	26.0	23.0	23.0	24.0	23.0
EGPRS1900 3 Tx Slots	24.0	20.0	20.0	24.0	21.5	21.5	22.0	21.5
EGPRS1900 4 Tx Slots	23.0	17.0	17.0	23.0	21.0	21.0	20.0	21.0
WCDMA Band2 RMC	24.0	15.0	15.0	24.0	18.0	18.0	18.0	18.0
HSDPA Subtest-1	23.0	14.0	14.0	23.0	17.0	17.0	17.0	17.0
HSDPA Subtest-2	23.0	14.0	14.0	23.0	17.0	17.0	17.0	17.0
HSDPA Subtest-3	22.6	13.6	13.6	22.6	16.6	16.6	16.6	16.6
HSDPA Subtest-4	22.6	13.6	13.6	22.6	16.6	16.6	16.6	16.6
HSUPA Subtest-1	23.2	14.2	14.2	23.2	17.2	17.2	17.2	17.2
HSUPA Subtest-2	21.0	12.0	12.0	21.0	15.0	15.0	15.0	15.0
HSUPA Subtest-3	22.0	13.0	13.0	22.0	16.0	16.0	16.0	16.0
HSUPA Subtest-4	21.0	12.0	12.0	21.0	15.0	15.0	15.0	15.0
HSUPA Subtest-5	23.0	14.0	14.0	23.0	17.0	17.0	17.0	17.0
WCDMA Band4 RMC	24.3	14.8	14.8	24.3	17.2	17.2	17.2	17.2
HSDPA Subtest-1	23.3	13.8	13.8	23.3	15.8	15.8	15.8	15.8
HSDPA Subtest-2	23.3	13.8	13.8	23.3	15.8	15.8	15.8	15.8
HSDPA Subtest-3	23.0	13.5	13.5	23.0	15.5	15.5	15.5	15.5
HSDPA Subtest-4	23.0	13.5	13.5	23.0	15.5	15.5	15.5	15.5
HSUPA Subtest-1	23.3	13.8	13.8	23.3	15.8	15.8	15.8	15.8
HSUPA Subtest-2	21.3	11.8	11.8	21.3	13.8	13.8	13.8	13.8
HSUPA Subtest-3	22.3	12.8	12.8	22.3	14.8	14.8	14.8	14.8

HSUPA Subtest-4	21.4	11.9	11.9	21.4	13.9	13.9	13.9	13.9
HSUPA Subtest-5	23.0	13.5	13.5	23.0	15.5	15.5	15.5	15.5
WCDMA Band5 RMC	23.5	23.5	20.5	23.5	23.5	23.5	23.5	23.5
HSDPA Subtest-1	22.5	22.5	19.5	22.5	22.5	22.5	22.5	22.5
HSDPA Subtest-2	22.5	22.5	19.5	22.5	22.5	22.5	22.5	22.5
HSDPA Subtest-3	22.0	22.0	19.0	22.0	22.0	22.0	22.0	22.0
HSDPA Subtest-4	22.0	22.0	19.0	22.0	22.0	22.0	22.0	22.0
HSUPA Subtest-1	22.5	22.5	19.5	22.5	22.5	22.5	22.5	22.5
HSUPA Subtest-2	20.5	20.5	17.5	20.5	20.5	20.5	20.5	20.5
HSUPA Subtest-3	21.5	21.5	18.5	21.5	21.5	21.5	21.5	21.5
HSUPA Subtest-4	20.5	20.5	17.5	20.5	20.5	20.5	20.5	20.5
HSUPA Subtest-5	22.5	22.5	19.5	22.5	22.5	22.5	22.5	22.5
CDMA BC0	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
LTE Band2	24.2	16.2	13.5	24.2	19.5	19.5	19.5	19.5
LTE Band4	24.5	14.5	14.5	24.5	18.6	18.6	18.6	18.6
LTE Band5	23.5	23.5	20.0	23.5	23.5	23.5	23.5	23.5
LTE Band7	25.2	16.7	14.7	25.2	19.7	19.7	19.7	19.7
LTE Band38	25.0	18.5	18.5	25.0	21.0	21.0	21.0	21.0
LTE Band41	24.8	18.7	18.7	24.8	20.7	20.7	20.7	20.7

**WWAN Antenna Down Power Table**

Mode	WWAN Down Antenna							
	Full Power	Head (Receiver on)		Body-worn		Hotspot on	Limbs	
		Standalone	Simultaneous transmission	Standalone	Simultaneous transmission		Standalone	Simultaneous transmission
			+ WLAN/BT		+ WLAN/BT			+ WLAN/BT
Off	Off	Off	Off	Off	Off	Off		
GSM 850	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
GPRS850 1 Tx Slot	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
GPRS850 2 Tx Slots	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
GPRS850 3 Tx Slots	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GPRS850 4 Tx Slots	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
EGPRS850 1 Tx Slot	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
EGPRS850 2 Tx Slots	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
EGPRS850 3 Tx Slots	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
EGPRS850 4 Tx Slots	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
GSM 1900	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
GPRS1900 1 Tx Slot	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
GPRS1900 2 Tx Slots	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
GPRS1900 3 Tx Slots	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
GPRS1900 4 Tx Slots	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
EGPRS1900 1 Tx Slot	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
EGPRS1900 2 Tx Slots	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0

EGPRS1900 3 Tx Slots	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
EGPRS1900 4 Tx Slots	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
WCDMA Band2 RMC	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
HSDPA Subtest-1	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
HSDPA Subtest-2	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
HSDPA Subtest-3	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
HSDPA Subtest-4	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
HSUPA Subtest-1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
HSUPA Subtest-2	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
HSUPA Subtest-3	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
HSUPA Subtest-4	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
HSUPA Subtest-5	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
WCDMA Band4 RMC	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
HSDPA Subtest-1	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
HSDPA Subtest-2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
HSDPA Subtest-3	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
HSDPA Subtest-4	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
HSUPA Subtest-1	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
HSUPA Subtest-2	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
HSUPA Subtest-3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
HSUPA Subtest-4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4
HSUPA Subtest-5	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
WCDMA Band5 RMC	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
HSDPA Subtest-1	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
HSDPA Subtest-2	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
HSDPA Subtest-3	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
HSDPA Subtest-4	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
HSUPA Subtest-1	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
HSUPA Subtest-2	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
HSUPA Subtest-3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
HSUPA Subtest-4	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
HSUPA Subtest-5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
CDMA BC0	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
LTE Band2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
LTE Band4	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
LTE Band7	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
LTE Band38	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
LTE Band41	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8



**WLAN and Bluetooth Antenna Power Table**

Mode	WLAN Up Antenna							
	Full Power	Head (Receiver on)		Body-worn		Hotspot on	Limbs	
		Standalone	Simultaneous transmission	Standalone	Simultaneous transmission		Standalone	Simultaneous transmission
			+ WLAN/BT		+ WLAN/BT			+ WLAN/BT
Level1	Level2	Off	Level3	Level3	Off	Level3		
2.4G WLAN 802.11b	19.5	17.0	15.0	19.5	15.0	15.0	19.5	15.0
2.4G WLAN 802.11g	18.0	15.5	13.5	18.0	13.5	13.5	18.0	13.5
2.4G WLAN 802.11n20	17.0	14.5	12.5	17.0	12.5	12.5	17.0	12.5
5.2G WLAN 802.11a	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.2G WLAN 802.11n20	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.2G WLAN 802.11n40	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.2G WLAN 802.11ac20	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.2G WLAN 802.11ac40	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.2G WLAN 802.11nac80	14.0	10.5	7.5	14.0	7.5	7.5	14.0	7.5
5.3G WLAN 802.11a	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.3G WLAN 802.11n20	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.3G WLAN 802.11n40	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.3G WLAN 802.11ac20	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.3G WLAN 802.11ac40	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.3G WLAN 802.11nac80	15.0	10.5	7.5	15.0	7.5	7.5	15.0	7.5
5.6G WLAN 802.11a	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.6G WLAN 802.11n20	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.6G WLAN 802.11n40	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.6G WLAN 802.11ac20	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.6G WLAN 802.11ac40	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.6G WLAN 802.11nac80	15.0	10.5	7.5	15.0	7.5	7.5	15.0	7.5
5.8G WLAN 802.11a	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.8G WLAN 802.11n20	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.8G WLAN 802.11n40	17.0	12.5	9.5	17.0	9.5	9.5	17.0	9.5
5.8G WLAN 802.11ac20	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.8G WLAN 802.11ac40	16.0	11.5	8.5	16.0	8.5	8.5	16.0	8.5
5.8G WLAN 802.11nac80	15.0	10.5	7.5	15.0	7.5	7.5	15.0	7.5
Bluetooth	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

### 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 SAR (1 g Value)

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
	Head	Body-worn Accessory	Hotspot	Head	Body-worn Accessory	Hotspot
GSM 850	0.27	0.22	0.36	<b>1.00</b>	<b>0.78</b>	<b>1.19</b>
GSM 1900	0.93	0.69	0.66			
WCDMA Band 2	0.83	0.66	<b>1.19</b>			
WCDMA Band 4	0.66	0.55	0.81			
WCDMA Band 5	0.93	0.14	0.36			
CDMA BC0	<b>1.00</b>	0.15	0.26			
LTE Band 2	0.99	0.73	1.14			
LTE Band 4	0.79	0.60	0.65			
LTE Band 5	0.85	0.14	0.27			
LTE Band 7	0.69	<b>0.78</b>	0.52			
LTE Band 38	0.51	0.35	0.54			
LTE Band 41	0.62	0.40	0.36			
2.4G WLAN	0.75	0.12	0.09			
5.2G WLAN	/	/	0.11			
5.3G WLAN	0.32	0.29	/			
5.6G WLAN	0.37	0.11	/			
5.8G WLAN	0.77	0.16	0.17			
Bluetooth	0.11	0.01	0.03			
Limit (W/kg)	1.6			1.6		
Verdict	Pass					

#### 3.3.2 Highest Specific SAR (10 g Value)

Band	Maximum Scaled SAR (W/kg)	Maximum Report SAR (W/kg)
	Specific 10g	
WCDMA Band 2	1.63	<b>1.86</b>
WCDMA Band 4	0.98	
LTE Band 2	<b>1.86</b>	
LTE Band 4	1.41	
LTE Band 7	0.88	
5.3G WLAN	1.31	
5.6G WLAN	0.56	
Limit (W/kg)	4.0	4.0
Verdict	Pass	

### 3.3.3 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head (1g)	WWAN + 2.4G WIFI	1.16	1.6	Pass
Body-worn Accessory (1g)	WWAN + 5G WIFI + Bluetooth	/	1.6	Pass
Hotspot (1g)	WWAN + 5G WIFI + Bluetooth	1.20	1.6	Pass
Specific (10g)	WWAN + 5G WIFI + Bluetooth	2.06	4.0	Pass



### 3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.19 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10 g SAR for the EUT in this report is 1.86 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

## 4 MEASUREMENT SYSTEM

### 4.1 Specific Absorption Rate (SAR) Definition

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

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

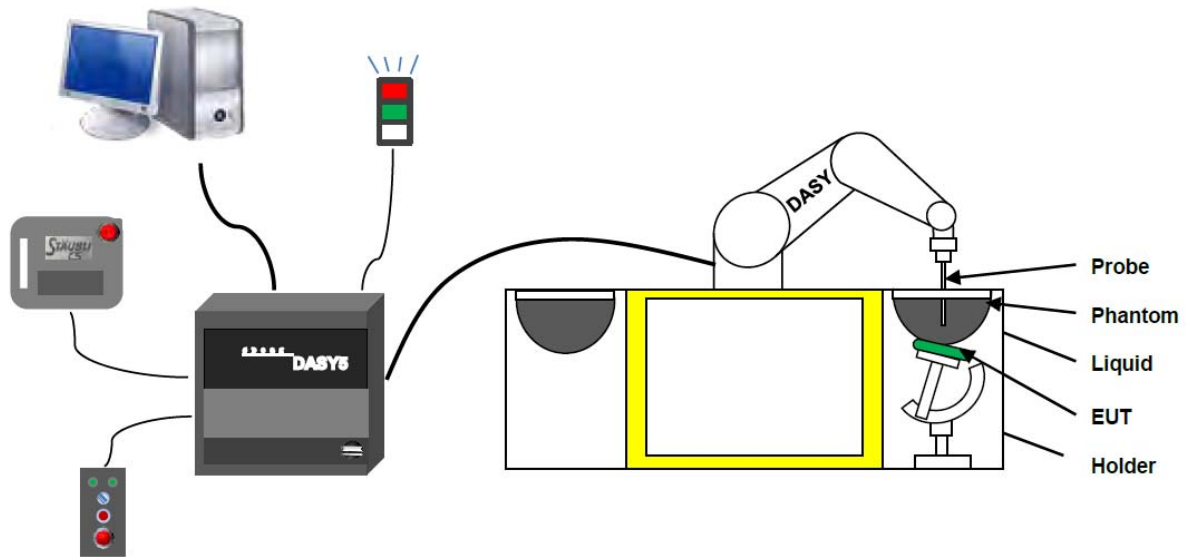
$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

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 DASYS measurement server.
6. The DASYS measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASYS 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: 7607 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)



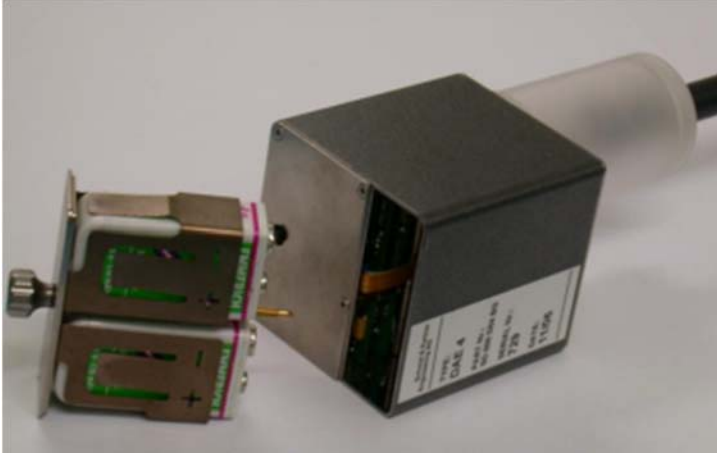
#### E-Field Probe Calibration Process

Probe calibration is realized, in compliance with CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antennassa 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

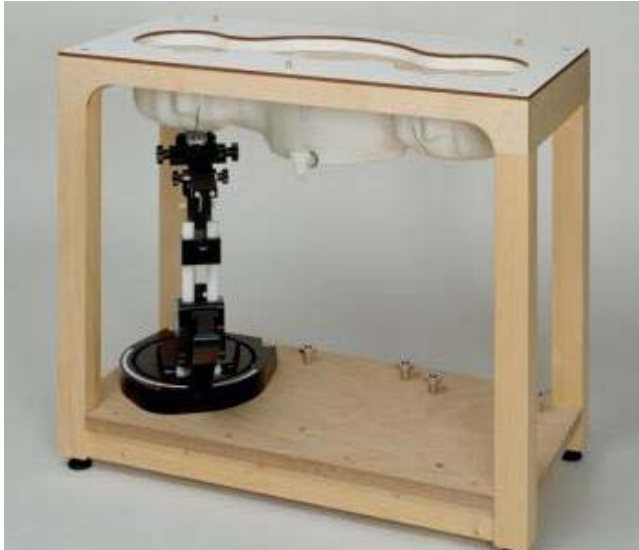
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



- Input Impedance: 200M $\Omega$
- The Inputs: Symmetrical and Floating
- Common 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

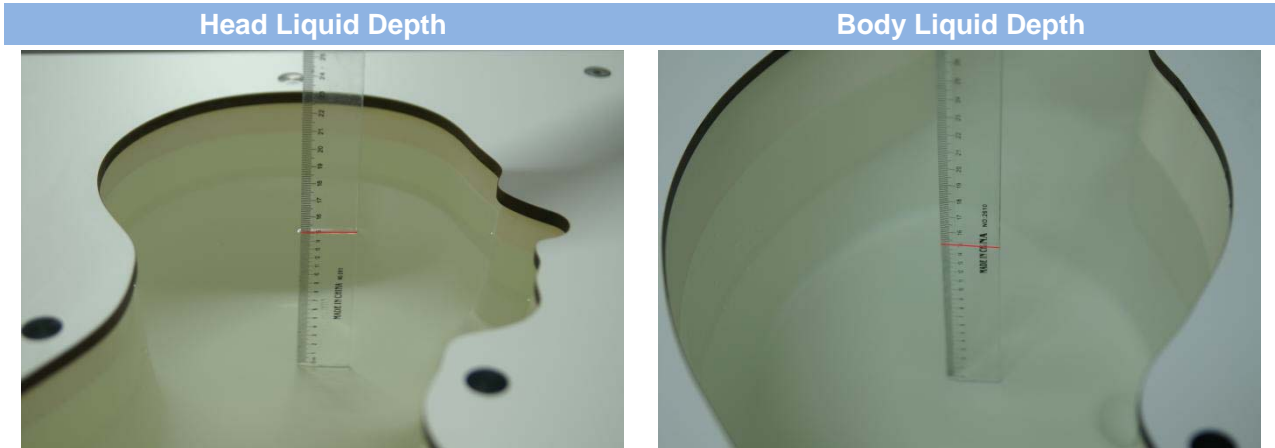
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of  $65^\circ$ . The bottom plate contains three pair of 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

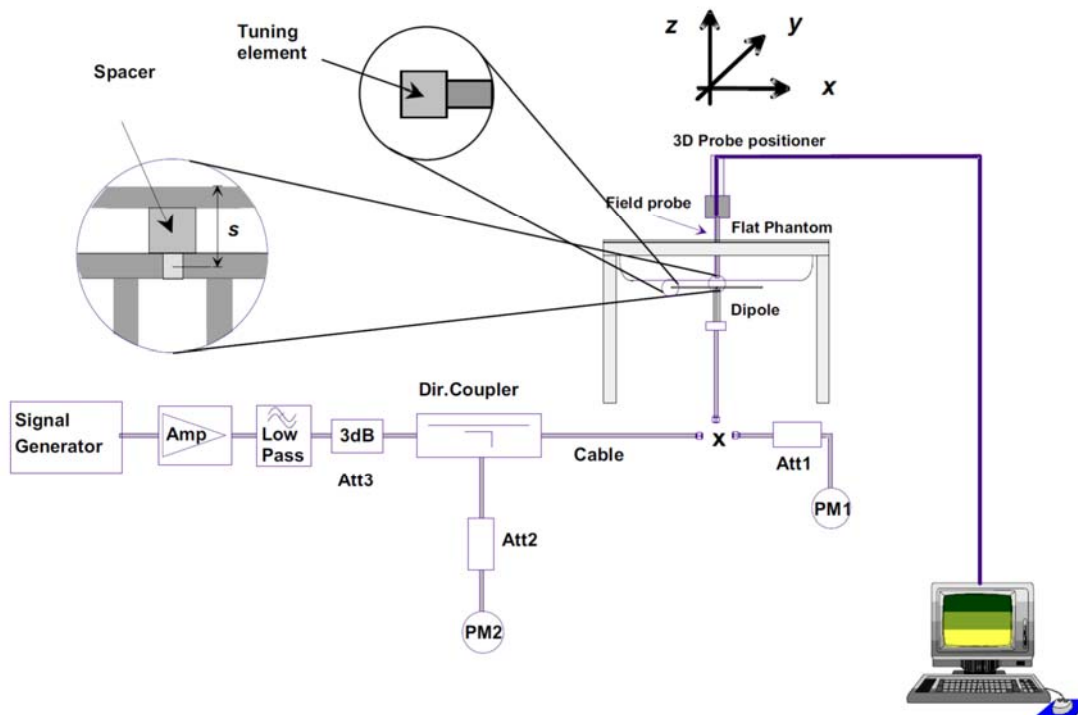
## 5 SYSTEM VERIFICATION

### 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

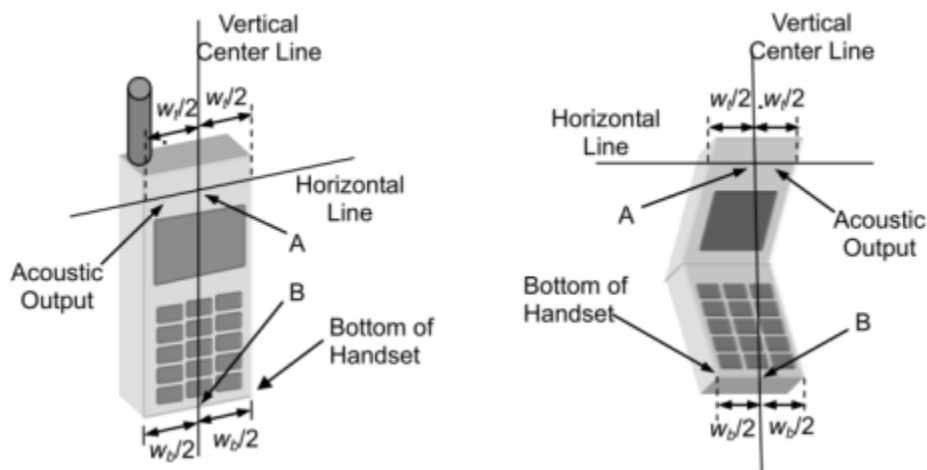
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

### 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.

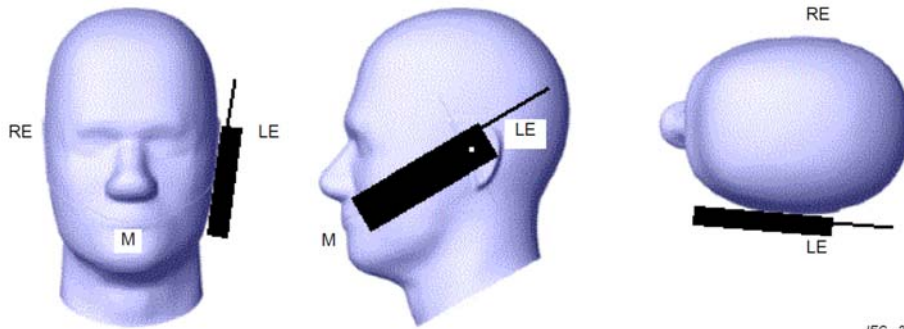
#### 6.1.1 Two Imaginary Lines on the Handset

- 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

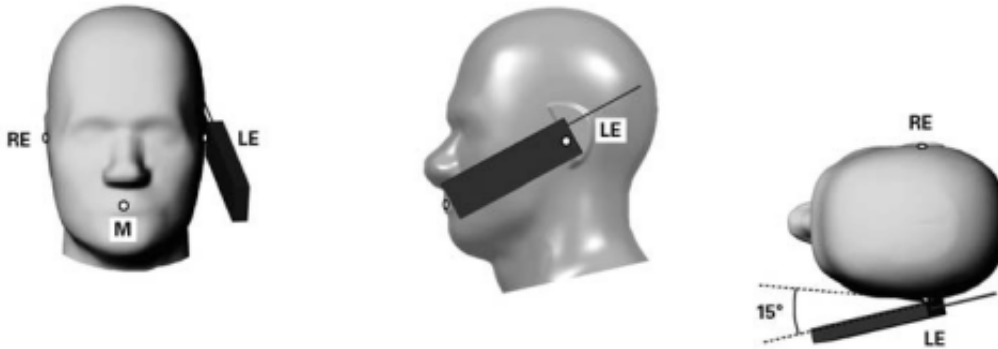
- To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the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



IEC 226/05

### 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.

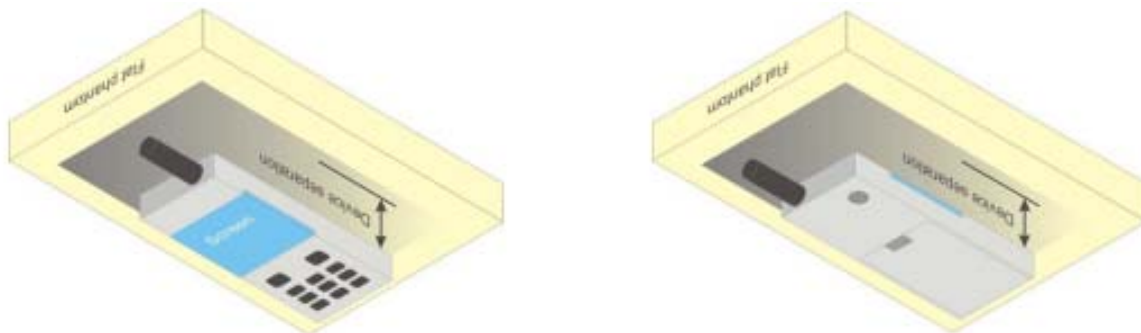


## 6.2 Body-worn Position Conditions

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.

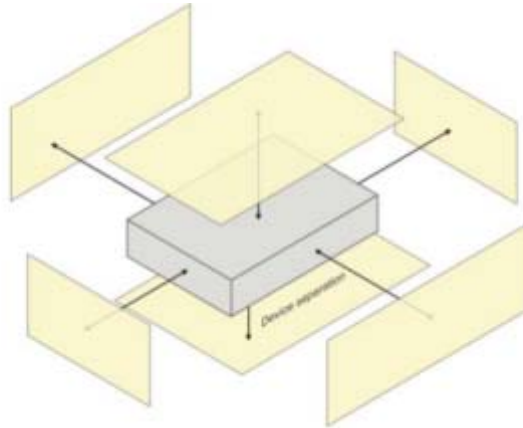
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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



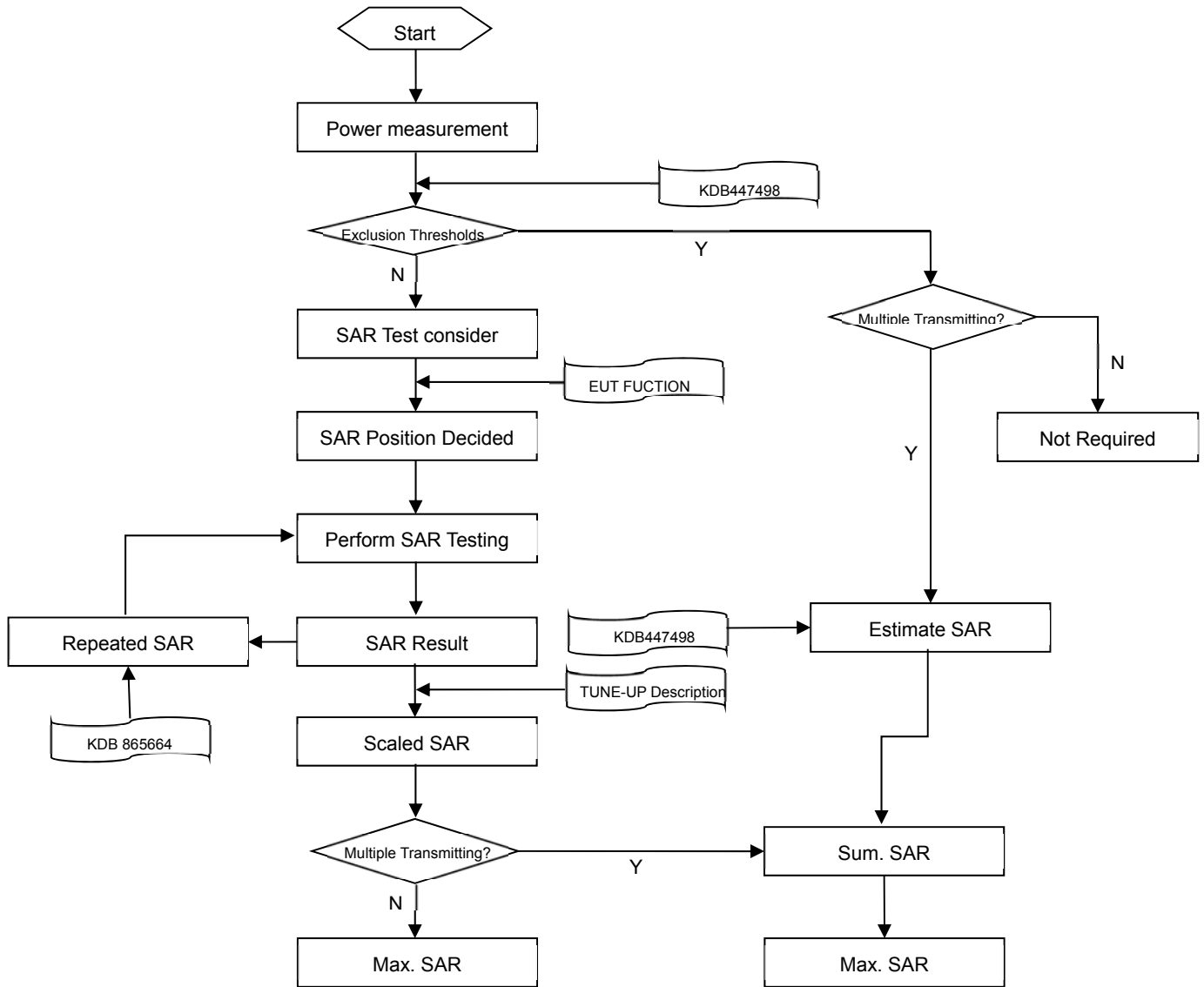
### 6.4 Product Specific 10g Exposure Consideration

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

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

## 7 MEASUREMENT PROCEDURE

### 7.1 Measurement Process Diagram



## 7.2 SAR Scan General Requirement

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

		≤3GHz	>3GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm	
Maximum probe angle from probe axis to phantom surface normal at the measurement location		30°±1°	20°±1°	
Maximum area scan spatial resolution: $\Delta x$ 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)	32.34	32.34	32.39	33.50	23.15	23.15	23.20	24.31
GPRS (GMSK, 1-Slot)	32.28	32.31	32.33	33.50	23.09	23.12	23.14	24.31
GPRS (GMSK, 2-Slots)	30.51	30.53	30.25	31.50	24.38	<b>24.40</b>	24.12	25.37
GPRS (GMSK, 3-Slots)	28.42	28.36	28.25	29.50	24.00	23.94	23.83	25.08
GPRS (GMSK, 4-Slots)	27.28	27.23	27.22	28.50	24.10	24.05	24.04	25.32
EGPRS (8PSK, 1-Slot)	26.95	26.73	26.67	27.50	17.76	17.54	17.48	18.31
EGPRS (8PSK, 2-Slots)	24.99	24.94	24.96	26.00	18.86	18.81	18.83	19.87
EGPRS (8PSK, 3-Slots)	23.39	23.27	23.23	24.50	18.97	18.85	18.81	20.08
EGPRS (8PSK, 4-Slots)	21.77	21.65	21.57	22.50	18.59	18.47	18.39	19.32
DTM (GMSK, 2-Slots)	30.20	30.19	29.85	31.00	24.07	24.06	23.72	24.87
DTM (GMSK, 3-Slots)	28.04	28.06	27.95	29.00	23.62	23.64	23.53	24.58
DTM (8PSK, 2-Slots)	28.27	28.18	28.03	29.50	22.14	22.05	21.90	23.37
DTM (8PSK, 3-Slots)	25.47	25.31	25.26	26.50	21.05	20.89	20.84	22.08

GSM 1900								
GSM900 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)	30.19	30.08	29.94	31.00	21.00	20.89	20.75	21.81
GPRS (GMSK, 1-Slot)	30.13	30.02	29.87	31.00	20.94	20.83	20.68	21.81
GPRS (GMSK, 2-Slots)	28.45	28.31	28.06	29.50	<b>22.32</b>	22.18	21.93	23.37
GPRS (GMSK, 3-Slots)	26.30	26.23	25.83	27.20	21.88	21.81	21.41	22.78
GPRS (GMSK, 4-Slots)	24.96	24.76	24.54	25.50	21.78	21.58	21.36	22.32
EGPRS (8PSK, 1-Slot)	26.67	26.66	26.22	27.60	17.48	17.47	17.03	18.41
EGPRS (8PSK, 2-Slots)	25.09	25.14	24.43	26.00	18.96	19.01	18.30	19.87
EGPRS (8PSK, 3-Slots)	22.99	22.96	22.52	24.00	18.57	18.54	18.10	19.58
EGPRS (8PSK, 4-Slots)	22.34	21.91	21.80	23.00	19.16	18.73	18.62	19.82
DTM (GMSK, 2-Slots)	27.97	27.97	27.98	29.00	21.84	21.84	21.85	22.87
DTM (GMSK, 3-Slots)	25.97	26.16	26.00	27.20	21.55	21.74	21.58	22.78
DTM (8PSK, 2-Slots)	26.71	26.87	26.81	28.00	20.58	20.74	20.68	21.87
DTM (8PSK, 3-Slots)	24.14	24.22	24.06	25.20	19.72	19.80	19.64	20.78

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

Note<sup>2</sup>: 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)
RMC 12.2Kbps	<b>23.01</b>	22.89	22.74	24.00	23.05	<b>23.37</b>	23.20	24.30
HSDPA Subtest-1	22.14	21.87	21.69	23.00	21.94	22.38	22.17	23.30
HSDPA Subtest-2	22.16	21.86	21.67	23.00	21.97	22.38	22.19	23.30
HSDPA Subtest-3	21.67	21.38	21.17	22.60	21.47	21.87	21.75	23.00
HSDPA Subtest-4	21.64	21.36	21.18	22.60	21.57	21.85	21.78	23.00
HSUPA Subtest-1	22.17	21.91	21.74	23.20	22.08	22.40	22.19	23.30
HSUPA Subtest-2	20.17	19.94	19.68	21.00	20.05	20.32	20.23	21.30
HSUPA Subtest-3	21.17	20.93	20.67	22.00	20.97	21.39	21.22	22.30
HSUPA Subtest-4	20.12	19.93	19.74	21.00	20.04	20.39	20.22	21.40
HSUPA Subtest-5	22.13	21.85	21.67	23.00	21.97	22.29	22.19	23.00
WCDMA	Band 5				-			
Channel	4132	4182	4233	Tune-up Limit (dBm)	-	-	-	-
RMC 12.2Kbps	22.40	22.39	<b>22.44</b>	23.50	-	-	-	-
HSDPA Subtest-1	21.39	21.37	21.41	22.50	-	-	-	-
HSDPA Subtest-2	21.40	21.40	21.41	22.50	-	-	-	-
HSDPA Subtest-3	20.89	20.90	20.91	22.00	-	-	-	-
HSDPA Subtest-4	20.90	20.89	20.94	22.00	-	-	-	-
HSUPA Subtest-1	21.41	21.40	21.41	22.50	-	-	-	-
HSUPA Subtest-2	19.40	19.41	19.40	20.50	-	-	-	-
HSUPA Subtest-3	20.36	20.36	20.41	21.50	-	-	-	-
HSUPA Subtest-4	19.42	19.41	19.40	20.50	-	-	-	-
HSUPA Subtest-5	21.35	21.29	21.32	22.50	-	-	-	-

### 8.3 CDMA

CDMA	BC0			
	1013	384	777	Tune-up Limit (dBm)
Channel				
1xRTT RC1 SO55	23.62	23.74	23.56	24.68
1xRTT RC3 SO55	23.57	23.68	23.54	24.68
1xRTT RC3 SO32 (FCH)	23.55	23.64	23.53	24.68
1xRTT RC3 SO32 (SCH)	23.58	23.64	23.53	24.68
1xEVDO Rel.0 RTAP 153.6kbps	23.56	23.64	23.49	24.68
1xEVDO Rel.A RETAP 4096	23.60	23.61	23.55	24.68

### 8.4 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)	23.14	<b>23.32</b>	23.05	24.20	22.61	22.71	22.39	23.20
	1 (RB_Pos:50)	23.04	23.07	22.89	24.20	22.57	22.47	22.30	23.20
	1 (RB_Pos:99)	22.92	22.91	22.62	24.20	22.51	22.27	22.02	23.20
	50 (RB_Pos:0)	22.17	22.13	22.05	23.20	21.23	21.11	21.02	22.20
	50 (RB_Pos:25)	22.10	22.09	22.00	23.20	21.19	21.07	20.95	22.20
	50 (RB_Pos:50)	21.92	21.99	21.83	23.20	21.02	20.95	20.82	22.20
	100 (RB_Pos:0)	22.04	22.00	22.00	23.20	21.17	21.01	20.91	22.20
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)	23.28	23.34	23.17	24.20	22.61	22.32	22.58	23.20
	1 (RB_Pos:38)	23.02	22.95	22.88	24.20	22.41	21.91	22.28	23.20
	1 (RB_Pos:74)	23.23	23.16	22.94	24.20	22.57	22.11	22.39	23.20
	36 (RB_Pos:0)	22.09	22.10	22.03	23.20	21.19	21.11	21.04	22.20
	36 (RB_Pos:20)	22.08	22.06	21.98	23.20	21.07	21.09	21.01	22.20
	36 (RB_Pos:39)	22.01	22.00	21.88	23.20	21.06	21.01	20.91	22.20
	75 (RB_Pos:0)	22.10	22.08	21.97	23.20	21.09	21.00	20.94	22.20
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)	23.40	23.21	23.16	24.20	22.42	22.61	22.17	23.20
	1 (RB_Pos:25)	23.25	23.06	22.96	24.20	22.11	22.39	21.98	23.20
	1 (RB_Pos:49)	23.35	23.16	23.01	24.20	22.21	22.58	22.01	23.20
	25 (RB_Pos:0)	22.23	22.03	21.95	23.20	21.25	21.11	21.04	22.20
	25 (RB_Pos:12)	22.19	22.02	21.93	23.20	21.26	21.04	21.02	22.20
	25 (RB_Pos:25)	22.20	22.06	21.93	23.20	21.24	21.07	21.01	22.20
	50 (RB_Pos:0)	22.25	22.06	21.95	23.20	21.25	21.04	20.95	22.20
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)	23.29	23.24	23.04	24.20	22.52	22.68	22.16	23.20
	1 (RB_Pos:13)	23.23	23.10	22.91	24.20	22.37	22.58	22.05	23.20
	1 (RB_Pos:24)	23.17	23.05	22.85	24.20	22.37	22.57	21.99	23.20
	12 (RB_Pos:0)	22.26	22.08	21.99	23.20	21.40	21.26	21.09	22.20
	12 (RB_Pos:6)	22.22	22.04	21.92	23.20	21.34	21.18	20.98	22.20
	12 (RB_Pos:13)	22.22	21.97	21.92	23.20	21.32	21.14	20.94	22.20

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18615	18900		19185	18615	18900	
25 (RB_Pos:0)		22.27	22.10	21.94	23.20	21.29	21.13	20.89	22.20
3.0 MHz	1 (RB_Pos:0)	23.16	23.11	22.98	24.20	22.15	22.50	21.99	23.20
	1 (RB_Pos:8)	23.14	23.08	22.89	24.20	22.01	22.50	21.87	23.20
	1 (RB_Pos:14)	23.10	23.09	22.88	24.20	22.03	22.69	21.88	23.20
	8 (RB_Pos:0)	22.23	22.03	21.91	23.20	21.33	21.14	20.96	22.20
	8 (RB_Pos:3)	22.27	22.03	21.97	23.20	21.37	21.15	20.97	22.20
	8 (RB_Pos:7)	22.22	22.00	21.90	23.20	21.31	21.07	20.93	22.20
	15 (RB_Pos:0)	22.29	22.06	21.92	23.20	21.30	21.06	20.88	22.20
1.4 MHz	1 (RB_Pos:0)	23.19	23.07	22.92	24.20	22.20	22.50	21.82	23.20
	1 (RB_Pos:3)	23.20	23.01	22.96	24.20	22.21	22.42	21.88	23.20
	1 (RB_Pos:5)	23.13	23.02	22.91	24.20	22.24	22.39	21.86	23.20
	3 (RB_Pos:0)	23.15	22.98	22.90	24.20	22.20	22.23	22.00	23.20
	3 (RB_Pos:1)	23.21	23.03	23.04	24.20	22.22	22.22	22.10	23.20
	3 (RB_Pos:3)	23.12	22.95	22.87	24.20	22.19	22.15	22.07	23.20
	6 (RB_Pos:0)	22.19	22.01	21.85	23.20	21.34	20.93	20.98	22.20

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	
20 MHz	1 (RB_Pos:0)	23.32	23.47	23.37	24.50	22.88	22.90	22.79	23.50
	1 (RB_Pos:50)	23.19	23.39	23.25	24.50	22.72	22.78	22.66	23.50
	1 (RB_Pos:99)	23.47	<b>23.77</b>	23.70	24.50	22.99	23.19	23.07	23.50
	50 (RB_Pos:0)	22.23	22.41	22.32	23.50	21.28	21.43	21.30	22.50
	50 (RB_Pos:25)	22.17	22.39	22.40	23.50	21.23	21.36	21.45	22.50
	50 (RB_Pos:50)	22.36	22.52	22.44	23.50	21.41	21.56	21.46	22.50
	100 (RB_Pos:0)	22.34	22.46	22.39	23.50	21.40	21.39	21.38	22.50
15 MHz	1 (RB_Pos:0)	23.48	23.51	23.50	24.50	22.56	22.98	22.94	23.50
	1 (RB_Pos:38)	23.15	23.26	23.35	24.50	22.11	22.71	22.78	23.50
	1 (RB_Pos:74)	23.58	23.64	23.70	24.50	22.50	23.12	23.06	23.50
	36 (RB_Pos:0)	22.19	22.30	22.27	23.50	21.26	21.35	21.30	22.50

	36 (RB_Pos:20)	22.15	22.32	22.33	23.50	21.18	21.35	21.36	22.50
	36 (RB_Pos:39)	22.23	22.44	22.37	23.50	21.26	21.50	21.39	22.50
	75 (RB_Pos:0)	22.17	22.35	22.38	23.50	21.21	21.32	21.40	22.50
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)	23.17	23.29	23.34	24.50	22.28	22.84	22.46	23.50
	1 (RB_Pos:25)	22.89	23.07	23.20	24.50	21.96	22.58	22.31	23.50
	1 (RB_Pos:49)	23.28	23.49	23.52	24.50	22.33	22.91	22.53	23.50
	25 (RB_Pos:0)	22.07	22.19	22.29	23.50	21.09	21.21	21.45	22.50
	25 (RB_Pos:12)	22.09	22.16	22.28	23.50	21.12	21.22	21.40	22.50
	25 (RB_Pos:25)	22.11	22.23	22.40	23.50	21.14	21.22	21.51	22.50
	50 (RB_Pos:0)	22.09	22.20	22.33	23.50	21.09	21.18	21.34	22.50
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)	23.04	23.18	23.27	24.50	22.35	22.80	22.50	23.50
	1 (RB_Pos:13)	22.98	23.15	23.36	24.50	22.27	22.65	22.44	23.50
	1 (RB_Pos:24)	22.93	23.16	23.28	24.50	22.23	22.62	22.46	23.50
	12 (RB_Pos:0)	21.99	22.15	22.31	23.50	21.25	21.27	21.42	22.50
	12 (RB_Pos:6)	22.02	22.18	22.34	23.50	21.14	21.28	21.45	22.50
	12 (RB_Pos:13)	22.08	22.12	22.32	23.50	21.13	21.23	21.35	22.50
	25 (RB_Pos:0)	22.05	22.18	22.35	23.50	21.08	21.23	21.35	22.50
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)	22.97	23.06	23.33	24.50	22.06	22.61	22.48	23.50
	1 (RB_Pos:8)	22.88	23.11	23.27	24.50	21.98	22.49	22.35	23.50
	1 (RB_Pos:14)	22.97	23.09	23.33	24.50	22.02	22.54	22.23	23.50
	8 (RB_Pos:0)	22.06	22.10	22.35	23.50	21.19	21.20	21.40	22.50
	8 (RB_Pos:3)	21.97	22.10	22.33	23.50	21.09	21.22	21.40	22.50
	8 (RB_Pos:7)	21.96	22.09	22.30	23.50	21.10	21.19	21.32	22.50
	15 (RB_Pos:0)	21.98	22.15	22.33	23.50	21.01	21.15	21.32	22.50
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)	22.90	23.03	23.20	24.50	22.10	22.54	22.36	23.50
	1 (RB_Pos:3)	22.94	23.08	23.28	24.50	22.24	22.56	22.34	23.50
	1 (RB_Pos:5)	22.94	23.09	23.26	24.50	22.23	22.47	22.25	23.50
	3 (RB_Pos:0)	22.98	23.07	23.26	24.50	22.09	22.24	22.42	23.50
	3 (RB_Pos:1)	23.04	23.10	23.28	24.50	22.13	22.27	22.49	23.50

	3 (RB_Pos:3)	23.00	23.11	23.31	24.50	22.11	22.30	22.43	23.50
	6 (RB_Pos:0)	22.01	22.06	22.25	23.50	21.23	21.01	21.45	22.50

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)	22.52	22.55	22.41	23.50	21.53	22.00	21.44	22.50
	1 (RB_Pos:25)	22.31	22.20	22.39	23.50	21.36	21.66	21.42	22.50
	1 (RB_Pos:49)	22.55	22.71	<b>22.79</b>	23.50	21.63	21.97	21.79	22.50
	25 (RB_Pos:0)	21.42	21.25	21.34	22.50	20.40	20.20	20.42	21.50
	25 (RB_Pos:12)	21.37	21.27	21.45	22.50	20.41	20.24	20.52	21.50
	25 (RB_Pos:25)	21.39	21.31	21.53	22.50	20.43	20.23	20.59	21.50
	50 (RB_Pos:0)	21.42	21.18	21.49	22.50	20.41	20.33	20.53	21.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5 MHz	1 (RB_Pos:0)	22.45	22.40	22.45	23.50	21.62	21.95	21.57	22.50
	1 (RB_Pos:13)	22.47	22.30	22.46	23.50	21.65	21.66	21.58	22.50
	1 (RB_Pos:24)	22.38	22.31	22.44	23.50	21.56	21.82	21.65	22.50
	12 (RB_Pos:0)	21.38	21.32	21.41	22.50	20.51	20.38	20.49	21.50
	12 (RB_Pos:6)	21.41	21.29	21.40	22.50	20.48	20.29	20.48	21.50
	12 (RB_Pos:13)	21.41	21.27	21.43	22.50	20.48	20.29	20.48	21.50
	25 (RB_Pos:0)	21.40	21.26	21.48	22.50	20.44	20.24	20.39	21.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	22.39	22.31	22.47	23.50	21.34	21.60	21.48	22.50
	1 (RB_Pos:8)	22.36	22.23	22.43	23.50	21.37	21.59	21.45	22.50
	1 (RB_Pos:14)	22.38	22.26	22.44	23.50	21.37	21.55	21.42	22.50
	8 (RB_Pos:0)	21.40	21.23	21.42	22.50	20.52	20.31	20.43	21.50
	8 (RB_Pos:3)	21.40	21.15	21.44	22.50	20.50	20.26	20.47	21.50
	8 (RB_Pos:7)	21.38	21.20	21.45	22.50	20.48	20.30	20.46	21.50
	15 (RB_Pos:0)	21.39	21.15	21.43	22.50	20.37	20.17	20.39	21.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4 MHz	1 (RB_Pos:0)	22.35	22.21	22.38	23.50	21.49	21.55	21.45	22.50
	1 (RB_Pos:3)	22.43	22.19	22.51	23.50	21.59	21.49	21.48	22.50
	1 (RB_Pos:5)	22.38	22.10	22.41	23.50	21.46	21.53	21.46	22.50

	3 (RB_Pos:0)	22.36	22.09	22.37	23.50	21.43	21.32	21.62	22.50
	3 (RB_Pos:1)	22.40	22.13	22.48	23.50	21.43	21.33	21.62	22.50
	3 (RB_Pos:3)	22.38	22.10	22.47	23.50	21.41	21.27	21.60	22.50
	6 (RB_Pos:0)	21.33	21.08	21.37	22.50	20.53	20.04	20.56	21.50

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	
20 MHz	1 (RB_Pos:0)	24.15	<b>24.28</b>	23.80	25.20	23.69	23.67	23.18	24.20
	1 (RB_Pos:50)	24.05	24.11	23.67	25.20	23.62	23.64	23.10	24.20
	1 (RB_Pos:99)	24.09	23.93	23.52	25.20	23.56	23.39	22.93	24.20
	50 (RB_Pos:0)	23.30	23.24	22.95	24.20	22.16	22.18	21.86	23.20
	50 (RB_Pos:25)	23.21	23.08	22.83	24.20	22.16	22.08	21.78	23.20
	50 (RB_Pos:50)	23.14	23.05	22.81	24.20	22.13	22.05	21.77	23.20
	100 (RB_Pos:0)	23.14	23.06	22.83	24.20	22.20	22.04	21.83	23.20
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	24.22	24.15	23.87	25.20	23.18	23.62	23.27	24.20
	1 (RB_Pos:38)	24.08	23.99	23.85	25.20	23.07	23.53	23.11	24.20
	1 (RB_Pos:74)	24.02	23.88	23.59	25.20	22.98	23.41	22.93	24.20
	36 (RB_Pos:0)	23.40	23.14	22.82	24.20	22.56	22.19	21.85	23.20
	36 (RB_Pos:20)	23.24	23.11	22.84	24.20	22.33	22.12	21.82	23.20
	36 (RB_Pos:39)	23.18	23.06	22.70	24.20	22.22	22.08	21.73	23.20
	75 (RB_Pos:0)	23.26	23.17	22.82	24.20	22.30	22.03	21.83	23.20
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	24.44	24.17	23.96	25.20	23.43	23.61	23.03	24.20
	1 (RB_Pos:25)	24.07	23.99	23.74	25.20	23.00	23.36	22.70	24.20
	1 (RB_Pos:49)	24.23	23.96	23.84	25.20	23.20	23.43	22.91	24.20
	25 (RB_Pos:0)	23.07	23.00	22.83	24.20	22.16	22.03	21.95	23.20
	25 (RB_Pos:12)	23.12	22.96	22.79	24.20	22.21	21.95	21.88	23.20
	25 (RB_Pos:25)	23.12	22.92	22.83	24.20	22.19	21.93	21.91	23.20
	50 (RB_Pos:0)	23.17	22.99	22.82	24.20	22.10	21.98	21.86	23.20
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	24.21	24.09	23.82	25.20	23.31	23.22	23.31	24.20

	1 (RB_Pos:13)	24.21	23.90	23.72	25.20	23.18	23.11	23.26	24.20
	1 (RB_Pos:24)	24.09	23.96	23.67	25.20	23.23	23.14	23.22	24.20
	12 (RB_Pos:0)	23.19	23.03	22.84	24.20	22.29	22.10	22.01	23.20
	12 (RB_Pos:6)	23.23	22.94	22.83	24.20	22.31	22.04	21.96	23.20
	12 (RB_Pos:13)	23.21	22.95	22.81	24.20	22.42	22.03	22.00	23.20
	25 (RB_Pos:0)	23.18	22.99	22.83	24.20	22.22	21.95	21.92	23.20

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	
20 MHz	1 (RB_Pos:0)	24.09	23.96	24.01	25.00	23.32	23.21	23.23	24.00
	1 (RB_Pos:50)	23.96	23.80	23.80	25.00	23.22	23.09	22.87	24.00
	1 (RB_Pos:99)	<b>24.16</b>	24.08	24.12	25.00	23.46	23.37	23.42	24.00
	50 (RB_Pos:0)	22.86	22.79	22.79	24.00	21.89	21.82	21.82	23.00
	50 (RB_Pos:25)	22.87	22.76	22.73	24.00	21.86	21.78	21.79	23.00
	50 (RB_Pos:50)	22.87	22.91	22.75	24.00	21.85	21.93	21.84	23.00
	100 (RB_Pos:0)	22.95	22.82	22.79	24.00	21.92	21.82	21.77	23.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15 MHz	1 (RB_Pos:0)	24.15	24.05	24.00	25.00	23.38	23.53	23.36	24.00
	1 (RB_Pos:38)	23.83	23.75	23.70	25.00	23.10	23.14	23.02	24.00
	1 (RB_Pos:74)	24.10	24.21	24.04	25.00	23.39	23.59	23.41	24.00
	36 (RB_Pos:0)	22.81	22.76	22.63	24.00	21.82	21.73	21.73	23.00
	36 (RB_Pos:20)	22.86	22.73	22.66	24.00	21.84	21.72	21.72	23.00
	36 (RB_Pos:39)	22.92	22.83	22.72	24.00	21.91	21.80	21.76	23.00
	75 (RB_Pos:0)	22.88	22.77	22.57	24.00	21.91	21.78	21.72	23.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10 MHz	1 (RB_Pos:0)	24.09	24.05	24.08	25.00	23.43	23.62	23.48	24.00
	1 (RB_Pos:25)	23.85	23.77	23.69	25.00	23.11	23.20	23.14	24.00
	1 (RB_Pos:49)	24.20	24.11	24.03	25.00	23.50	23.59	23.46	24.00
	25 (RB_Pos:0)	22.86	22.81	22.72	24.00	21.88	21.81	21.82	23.00
	25 (RB_Pos:12)	22.85	22.75	22.69	24.00	21.85	21.78	21.74	23.00
	25 (RB_Pos:25)	22.97	22.81	22.74	24.00	21.91	21.75	21.78	23.00
	50 (RB_Pos:0)	22.93	22.82	22.70	24.00	21.89	21.85	21.78	23.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	



					(dBm)				(dBm)
5 MHz	1 (RB_Pos:0)	23.96	23.93	23.70	25.00	23.29	23.32	22.94	24.00
	1 (RB_Pos:13)	23.92	23.81	23.65	25.00	23.18	23.15	22.84	24.00
	1 (RB_Pos:24)	23.91	23.85	23.61	25.00	23.12	23.18	22.83	24.00
	12 (RB_Pos:0)	22.92	22.87	22.65	24.00	21.94	22.01	21.72	23.00
	12 (RB_Pos:6)	22.82	22.78	22.62	24.00	21.83	21.89	21.73	23.00
	12 (RB_Pos:13)	22.78	22.76	22.66	24.00	21.81	21.87	21.67	23.00
	25 (RB_Pos:0)	22.85	22.72	22.63	24.00	21.90	21.78	21.68	23.00

TDD LTE Band 41									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40140	40640	41140		40140	40640	41140	
20 MHz	1 (RB_Pos:0)	<b>24.02</b>	23.90	23.84	24.80	23.24	23.22	23.08	23.80
	1 (RB_Pos:50)	23.84	23.68	23.60	24.80	23.16	23.00	22.76	23.80
	1 (RB_Pos:99)	23.91	23.73	23.63	24.80	23.20	23.06	22.92	23.80
	50 (RB_Pos:0)	22.94	22.72	22.62	23.80	21.93	21.71	21.68	22.80
	50 (RB_Pos:25)	22.86	22.62	22.55	23.80	21.86	21.64	21.61	22.80
	50 (RB_Pos:50)	22.87	22.66	22.52	23.80	21.85	21.65	21.57	22.80
	100 (RB_Pos:0)	22.87	22.65	22.62	23.80	21.87	21.64	21.59	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40115	40640	41165		40115	40640	41165	
15 MHz	1 (RB_Pos:0)	23.54	23.41	23.31	24.80	22.80	22.90	22.63	23.80
	1 (RB_Pos:38)	23.83	23.62	23.48	24.80	23.12	23.07	22.78	23.80
	1 (RB_Pos:74)	23.08	22.83	22.90	24.80	22.39	22.37	22.09	23.80
	36 (RB_Pos:0)	22.93	22.76	22.53	23.80	21.92	21.73	21.59	22.80
	36 (RB_Pos:20)	22.88	22.64	22.47	23.80	21.86	21.61	21.51	22.80
	36 (RB_Pos:39)	22.50	22.26	22.14	23.80	21.50	21.29	21.17	22.80
	75 (RB_Pos:0)	22.75	22.44	22.35	23.80	21.73	21.44	21.36	22.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40090	40640	41190		40090	40640	41190	
10 MHz	1 (RB_Pos:0)	23.84	23.70	23.51	24.80	23.11	23.15	22.96	23.80
	1 (RB_Pos:25)	23.61	23.36	23.23	24.80	22.89	22.82	22.56	23.80
	1 (RB_Pos:49)	23.76	23.66	23.39	24.80	23.05	23.05	22.88	23.80
	25 (RB_Pos:0)	22.67	22.40	22.23	23.80	21.68	21.42	21.25	22.80
	25 (RB_Pos:12)	22.66	22.38	22.19	23.80	21.68	21.38	21.26	22.80
	25 (RB_Pos:25)	22.66	22.47	22.17	23.80	21.65	21.46	21.25	22.80
	50 (RB_Pos:0)	22.66	22.53	22.21	23.80	21.68	21.55	21.26	22.80
Bandwidth	RB Set	Power (dBm)							

(MHz)	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		40065	40640	41215		40065	40640	41215	
5 MHz	1 (RB_Pos:0)	23.75	23.44	23.33	24.80	23.10	22.73	22.59	23.80
	1 (RB_Pos:13)	23.69	23.36	23.22	24.80	23.02	22.60	22.47	23.80
	1 (RB_Pos:24)	23.63	23.42	23.10	24.80	23.04	22.67	22.43	23.80
	12 (RB_Pos:0)	22.75	22.41	22.19	23.80	21.84	21.47	21.23	22.80
	12 (RB_Pos:6)	22.70	22.37	22.22	23.80	21.74	21.38	21.26	22.80
	12 (RB_Pos:13)	22.65	22.39	22.15	23.80	21.77	21.43	21.21	22.80
	25 (RB_Pos:0)	22.63	22.44	22.21	23.80	21.67	21.45	21.23	22.80

## 8.5 WIFI

### 8.5.1 2.4G WIFI

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	18.22	19.50	Yes
		6	2437	18.23	19.50	Yes
		11	2462	<b>18.35</b>	19.50	Yes
	802.11g	1	2412	17.22	18.00	No
		6	2437	17.38	18.00	No
		11	2462	17.42	18.00	No
	802.11n(HT20)	1	2412	16.01	17.00	No
		6	2437	16.12	17.00	No
		11	2462	16.22	17.00	No

## 8.5.2 5G WIFI

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	16.49	17.00	No
		44	5220	16.51	17.00	No
		48	5240	16.48	17.00	No
	802.11n(HT20)	36	5180	16.30	17.00	No
		44	5220	16.32	17.00	No
		48	5240	16.30	17.00	No
	802.11n(HT40)	38	5190	14.22	15.00	No
		46	5230	16.09	17.00	No
	802.11ac(VHT20)	36	5180	15.33	16.00	No
		44	5220	15.36	16.00	No
		48	5240	15.42	16.00	No
	802.11ac(VHT40)	38	5190	15.53	16.00	No
46		5230	15.63	16.00	No	
802.11ac(VHT80)	42	5210	12.92	14.00	No	
5.3 (5.25~5.35)	802.11a	52	5260	16.64	17.00	No
		60	5300	16.79	17.00	No
		64	5320	16.86	17.00	No
	802.11n(HT20)	52	5260	16.57	17.00	No
		60	5300	16.61	17.00	No
		64	5320	13.22	14.00	No
	802.11n(HT40)	54	5270	<b>16.32</b>	17.00	Yes
		62	5310	14.70	15.00	Yes
	802.11ac(VHT20)	52	5260	15.51	16.00	No
		60	5300	15.71	16.00	No
		64	5320	13.61	15.00	No
	802.11ac(VHT40)	54	5270	15.63	16.00	No
		62	5310	13.95	15.00	No
	802.11ac(VHT80)	58	5290	14.05	15.00	No
	5.6 (5.47~5.725)	802.11a	100	5500	16.53	17.00
116			5580	16.57	17.00	No
140			5700	16.27	17.00	No
144			5720	16.20	17.00	No
802.11n(HT20)		100	5500	16.37	17.00	No
		116	5580	16.34	17.00	No
		140	5700	16.13	17.00	No
		144	5720	16.08	17.00	No
802.11n(HT40)		102	5510	15.55	16.00	Yes
		118	5590	<b>16.62</b>	17.00	Yes

		134	5670	16.40	17.00	Yes	
		142	5710	16.20	17.00	Yes	
	802.11ac(VHT20)	100	5500	15.74	16.00	No	
		116	5580	15.70	16.00	No	
		140	5700	15.68	16.00	No	
		144	5720	15.60	16.00	No	
	802.11ac(VHT40)	102	5510	15.63	16.00	No	
		118	5590	15.64	16.00	No	
		134	5670	15.43	16.00	No	
		142	5710	15.25	16.00	No	
	802.11ac(VHT80)	106	5530	14.16	15.00	No	
		122	5610	14.63	15.00	No	
		138	5690	14.32	15.00	No	
	5.8 (5.725~5.850)	802.11a	149	5745	16.11	17.00	No
			157	5785	16.31	17.00	No
165			5825	16.72	17.00	No	
802.11n(HT20)		149	5745	15.93	17.00	No	
		157	5785	16.15	17.00	No	
		165	5825	16.52	17.00	No	
802.11n(HT40)		151	5755	16.00	17.00	Yes	
		159	5795	<b>16.22</b>	17.00	Yes	
802.11ac(VHT20)		149	5745	15.01	16.00	No	
		157	5785	15.26	16.00	No	
		165	5825	15.54	16.00	No	
802.11ac(VHT40)		151	5755	14.95	16.00	No	
		159	5795	15.27	16.00	No	
802.11ac(VHT80)		155	5775	14.17	15.00	No	

## 8.6 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power (dBm)	9.61	9.80	<b>11.44</b>	9.09	9.27	11.09
Tune-Up Limit (dBm)	11.00	11.00	12.00	11.00	11.00	12.00
Mode	8-DPSK			BLE		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Conducted Power (dBm)	9.27	9.46	11.22	2.09	2.09	5.12
Tune-Up Limit (dBm)	11.00	11.00	12.00	3.00	3.00	6.00

## 8.7 Power Reduction List

### 8.7.1 Power Reduced Level 1&2&3&4 of GSM 850

GSM 850								
GSM1900 Band	Burst Average Power(dBm)			Tune-up	Frame-Averaged power(dBm)			Tune-up
Channel	128	190	251	Limit (dBm)	128	190	251	Limit (dBm)
GSM (GMSK, 1-Slot)	26.26	26.26	26.28	27.50	17.07	17.07	17.09	18.31
GPRS (GMSK, 1-Slot)	26.55	26.52	26.55	27.50	17.36	17.33	17.36	18.31
GPRS (GMSK, 2-Slots)	24.28	24.25	24.17	25.50	18.15	18.12	18.04	19.37
GPRS (GMSK, 3-Slots)	22.09	22.07	22.10	23.50	17.67	17.65	17.68	19.08
GPRS (GMSK, 4-Slots)	22.49	22.28	22.36	23.50	<b>19.31</b>	19.10	19.18	20.32
EGPRS (8PSK, 1-Slot)	26.79	26.63	26.71	27.50	17.60	17.44	17.52	18.31
EGPRS (8PSK, 2-Slots)	24.56	24.51	24.36	25.50	18.43	18.38	18.23	19.37
EGPRS (8PSK, 3-Slots)	22.33	22.16	22.20	23.50	17.91	17.74	17.78	19.08
EGPRS (8PSK, 4-Slots)	20.69	20.47	20.45	21.50	17.51	17.29	17.27	18.32
DTM (GMSK, 2-Slots)	23.89	23.90	23.82	25.00	17.76	17.77	17.69	18.87
DTM (GMSK, 3-Slots)	21.73	21.65	21.81	23.00	17.31	17.23	17.39	18.58
DTM (8PSK, 2-Slots)	24.14	23.97	24.03	25.00	18.01	17.84	17.90	18.87
DTM (8PSK, 3-Slots)	21.86	21.75	21.84	23.00	17.44	17.33	17.42	18.58

### 8.7.2 Power Reduced Level 1&2 of GSM 1900

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up	Frame-Averaged power(dBm)			Tune-up
Channel	512	661	810	Limit (dBm)	512	661	810	Limit (dBm)
GSM (GMSK, 1-Slot)	24.48	24.53	24.79	25.50	15.29	15.34	15.60	16.31
GPRS (GMSK, 1-Slot)	24.39	24.45	24.67	25.50	15.20	15.26	15.48	16.31
GPRS (GMSK, 2-Slots)	21.68	21.78	21.97	23.00	15.55	15.65	<b>15.84</b>	16.87
GPRS (GMSK, 3-Slots)	17.57	17.55	17.80	18.50	13.15	13.13	13.38	14.08
GPRS (GMSK, 4-Slots)	16.02	16.13	16.22	17.00	12.84	12.95	13.04	13.82
EGPRS (8PSK, 1-Slot)	24.42	24.49	24.67	25.50	15.23	15.30	15.48	16.31
EGPRS (8PSK, 2-Slots)	21.52	21.76	21.87	22.50	15.39	15.63	15.74	16.37
EGPRS (8PSK, 3-Slots)	18.98	18.85	19.17	20.00	14.56	14.43	14.75	15.58
EGPRS (8PSK, 4-Slots)	15.71	15.57	15.90	17.00	12.53	12.39	12.72	13.82
DTM (GMSK, 2-Slots)	21.32	21.42	21.61	22.50	15.19	15.29	15.48	16.37
DTM (GMSK, 3-Slots)	17.24	17.23	17.41	18.50	12.82	12.81	12.99	14.08
DTM (8PSK, 2-Slots)	21.27	21.43	21.69	22.50	15.14	15.30	15.56	16.37
DTM (8PSK, 3-Slots)	18.28	18.04	18.35	19.50	13.86	13.62	13.93	15.08

### 8.7.3 Power Reduced Level 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)	27.34	27.30	27.47	28.50	18.15	18.11	18.28	19.31
GPRS (GMSK, 1-Slot)	27.37	27.33	27.50	28.50	18.18	18.14	<b>18.31</b>	19.31
GPRS (GMSK, 2-Slots)	21.68	21.78	21.97	23.00	15.55	15.65	15.84	16.87
GPRS (GMSK, 3-Slots)	20.95	21.04	21.23	22.20	16.53	16.62	16.81	17.78
GPRS (GMSK, 4-Slots)	18.88	18.93	18.97	20.00	15.70	15.75	15.79	16.82
EGPRS (8PSK, 1-Slot)	26.08	26.17	26.32	27.10	16.89	16.98	17.13	17.91
EGPRS (8PSK, 2-Slots)	23.19	23.10	23.27	24.00	17.06	16.97	17.14	17.87
EGPRS (8PSK, 3-Slots)	20.77	20.65	20.83	22.00	16.35	16.23	16.41	17.58
EGPRS (8PSK, 4-Slots)	18.93	18.92	19.12	20.00	15.75	15.74	15.94	16.82
DTM (GMSK, 2-Slots)	21.32	21.42	21.61	22.50	15.19	15.29	15.48	16.37
DTM (GMSK, 3-Slots)	17.24	17.23	17.41	18.50	12.82	12.81	12.99	14.08
DTM (8PSK, 2-Slots)	21.27	21.43	21.69	22.50	15.14	15.30	15.56	16.37
DTM (8PSK, 3-Slots)	20.45	20.48	20.65	21.50	16.03	16.06	16.23	17.08

### 8.7.4 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)	27.34	27.30	27.47	28.50	18.15	18.11	18.28	19.31
GPRS (GMSK, 1-Slot)	27.37	27.33	27.50	28.50	18.18	18.14	<b>18.31</b>	19.31
GPRS (GMSK, 2-Slots)	21.68	21.78	21.97	23.00	15.55	15.65	15.84	16.87
GPRS (GMSK, 3-Slots)	20.95	21.04	21.23	22.20	16.53	16.62	16.81	17.78
GPRS (GMSK, 4-Slots)	19.15	19.18	19.34	20.50	15.97	16.00	16.16	17.32
EGPRS (8PSK, 1-Slot)	25.28	25.28	25.46	26.10	16.09	16.09	16.27	16.91
EGPRS (8PSK, 2-Slots)	21.62	21.51	21.68	23.00	15.49	15.38	15.55	16.87
EGPRS (8PSK, 3-Slots)	20.30	20.30	20.43	21.50	15.88	15.88	16.01	17.08
EGPRS (8PSK, 4-Slots)	19.71	19.84	19.84	21.00	16.53	16.66	16.66	17.82
DTM (GMSK, 2-Slots)	21.32	21.42	21.61	22.50	15.19	15.29	15.48	16.37
DTM (GMSK, 3-Slots)	17.24	17.23	17.41	18.50	12.82	12.81	12.99	14.08
DTM (8PSK, 2-Slots)	20.91	20.88	21.02	22.00	14.78	14.75	14.89	15.87
DTM (8PSK, 3-Slots)	20.03	20.10	20.01	21.00	15.61	15.68	15.59	16.58



## 8.7.5 Power Reduced Level 1&amp;2 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>14.08</b>	14.01	13.78	15.00
HSDPA Subtest-1	13.10	12.99	12.77	14.00
HSDPA Subtest-2	13.12	13.05	12.77	14.00
HSDPA Subtest-3	12.60	12.53	12.26	13.60
HSDPA Subtest-4	12.61	12.51	12.27	13.60
HSUPA Subtest-1	13.00	13.00	12.69	14.20
HSUPA Subtest-2	11.11	11.12	10.85	12.00
HSUPA Subtest-3	12.09	12.09	11.87	13.00
HSUPA Subtest-4	11.23	11.00	10.82	12.00
HSUPA Subtest-5	13.08	13.02	12.79	14.00

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

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>17.09</b>	17.02	16.84	18.00
HSDPA Subtest-1	16.14	16.07	15.86	17.00
HSDPA Subtest-2	15.84	16.08	15.86	17.00
HSDPA Subtest-3	15.59	15.57	15.34	16.60
HSDPA Subtest-4	15.63	15.55	15.33	16.60
HSUPA Subtest-1	15.93	16.06	15.82	17.20
HSUPA Subtest-2	14.12	14.08	13.78	15.00
HSUPA Subtest-3	15.09	15.09	14.82	16.00
HSUPA Subtest-4	14.12	13.99	13.81	15.00
HSUPA Subtest-5	16.02	16.02	15.86	17.00

## 8.7.7 Power Reduced Level 1&amp;2 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	13.94	<b>14.28</b>	13.98	14.80
HSDPA Subtest-1	12.98	13.23	13.00	13.80
HSDPA Subtest-2	12.97	13.20	12.98	13.80
HSDPA Subtest-3	12.48	12.84	12.49	13.50
HSDPA Subtest-4	12.48	12.80	12.48	13.50
HSUPA Subtest-1	12.87	13.25	13.00	13.80
HSUPA Subtest-2	11.01	11.18	11.00	11.80
HSUPA Subtest-3	11.95	12.23	12.02	12.80
HSUPA Subtest-4	10.96	11.26	10.96	11.90
HSUPA Subtest-5	12.94	13.16	12.94	13.50

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

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	15.94	<b>16.29</b>	15.94	17.20
HSDPA Subtest-1	14.96	15.27	14.98	15.80
HSDPA Subtest-2	14.96	15.28	14.99	15.80
HSDPA Subtest-3	14.47	14.77	14.50	15.50
HSDPA Subtest-4	14.48	14.83	14.49	15.50
HSUPA Subtest-1	14.94	15.35	14.83	15.80
HSUPA Subtest-2	12.98	13.38	13.02	13.80
HSUPA Subtest-3	13.93	14.37	13.96	14.80
HSUPA Subtest-4	12.91	13.40	13.06	13.90
HSUPA Subtest-5	14.88	15.20	15.06	15.50

## 8.7.9 Power Reduced Level 2 of WCDMA Band 5

WCDMA	Band 5			
Channel	4132	4182	4233	Tune-up Limit (dBm)
RMC 12.2Kbps	19.31	19.35	<b>19.45</b>	20.50
HSDPA Subtest-1	18.54	18.46	18.48	19.50
HSDPA Subtest-2	18.42	18.56	18.50	19.50
HSDPA Subtest-3	17.99	18.02	17.98	19.00
HSDPA Subtest-4	18.00	18.05	17.99	19.00
HSUPA Subtest-1	18.40	18.49	18.46	19.50
HSUPA Subtest-2	16.51	16.43	16.50	17.50
HSUPA Subtest-3	17.44	17.41	17.45	18.50
HSUPA Subtest-4	16.43	16.55	16.49	17.50
HSUPA Subtest-5	18.33	18.32	18.40	19.50

## 8.7.10 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)	15.52	<b>15.56</b>	15.51	16.20	15.50	15.55	15.37	16.20
	1 (RB_Pos:50)	15.43	15.36	15.31	16.20	15.37	15.39	15.20	16.20
	1 (RB_Pos:99)	15.12	15.22	15.10	16.20	15.05	15.19	14.99	16.20
	50 (RB_Pos:0)	15.44	15.44	15.57	16.20	14.99	14.93	14.99	16.20
	50 (RB_Pos:25)	15.44	15.42	15.42	16.20	14.98	14.92	14.92	16.20
	50 (RB_Pos:50)	15.31	15.35	15.32	16.20	14.84	14.84	14.77	16.20
	100 (RB_Pos:0)	15.31	15.23	15.29	16.20	14.93	14.89	14.87	16.20
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)	15.39	15.42	15.44	16.20	15.10	15.47	15.62	16.20
	1 (RB_Pos:38)	15.16	15.10	15.12	16.20	14.82	15.14	15.31	16.20
	1 (RB_Pos:74)	15.36	15.31	15.27	16.20	15.08	15.37	15.47	16.20
	36 (RB_Pos:0)	15.22	15.20	15.26	16.20	14.96	14.98	14.93	16.20
	36 (RB_Pos:20)	15.24	15.21	15.24	16.20	14.94	14.98	14.90	16.20
	36 (RB_Pos:39)	15.24	15.19	15.15	16.20	14.89	14.94	14.86	16.20
	75 (RB_Pos:0)	15.16	15.18	15.22	16.20	14.93	14.91	14.89	16.20
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)	15.48	15.39	15.39	16.20	15.13	15.48	15.13	16.20
	1 (RB_Pos:25)	15.42	15.29	15.29	16.20	14.98	15.36	15.02	16.20
	1 (RB_Pos:49)	15.46	15.43	15.33	16.20	15.14	15.50	15.07	16.20
	25 (RB_Pos:0)	15.38	15.20	15.24	16.20	15.10	15.00	15.05	16.20
	25 (RB_Pos:12)	15.33	15.23	15.26	16.20	15.06	14.99	15.04	16.20
	25 (RB_Pos:25)	15.33	15.26	15.23	16.20	15.08	15.01	15.02	16.20
	50 (RB_Pos:0)	15.38	15.29	15.27	16.20	15.04	14.97	15.02	16.20
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)	15.57	15.43	15.42	16.20	15.42	15.58	15.25	16.20
	1 (RB_Pos:13)	15.45	15.28	15.25	16.20	15.31	15.48	15.09	16.20
	1 (RB_Pos:24)	15.39	15.29	15.23	16.20	15.27	15.49	15.05	16.20
	12 (RB_Pos:0)	15.43	15.29	15.31	16.20	15.22	15.14	15.13	16.20
	12 (RB_Pos:6)	15.36	15.28	15.29	16.20	15.18	15.12	15.04	16.20
	12 (RB_Pos:13)	15.36	15.22	15.24	16.20	15.13	15.05	15.01	16.20

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18615	18900		19185	18615	18900	
25 (RB_Pos:0)		15.39	15.30	15.29	16.20	15.11	15.03	14.98	16.20
3.0 MHz	1 (RB_Pos:0)	15.38	15.33	15.32	16.20	15.20	15.60	15.16	16.20
	1 (RB_Pos:8)	15.39	15.23	15.20	16.20	15.16	15.53	15.16	16.20
	1 (RB_Pos:14)	15.25	15.16	15.18	16.20	15.10	15.56	15.09	16.20
	8 (RB_Pos:0)	15.44	15.28	15.28	16.20	15.39	15.28	15.21	16.20
	8 (RB_Pos:3)	15.41	15.29	15.23	16.20	15.42	15.28	15.18	16.20
	8 (RB_Pos:7)	15.35	15.23	15.19	16.20	15.35	15.20	15.12	16.20
	15 (RB_Pos:0)	15.39	15.25	15.28	16.20	15.29	15.19	15.12	16.20
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)	15.34	15.24	15.20	16.20	15.38	15.25	15.55	16.20
	1 (RB_Pos:3)	15.39	15.24	15.26	16.20	15.47	15.37	15.59	16.20
	1 (RB_Pos:5)	15.31	15.21	15.17	16.20	15.30	15.28	15.54	16.20
	3 (RB_Pos:0)	15.35	15.25	15.16	16.20	15.48	15.37	15.45	16.20
	3 (RB_Pos:1)	15.37	15.25	15.26	16.20	15.50	15.31	15.45	16.20
	3 (RB_Pos:3)	15.34	15.19	15.23	16.20	15.46	15.27	15.40	16.20
	6 (RB_Pos:0)	15.30	15.24	15.21	16.20	15.51	15.34	15.09	16.20

### 8.7.11 Power Reduced Level 2 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)	12.30	<b>12.38</b>	12.29	13.50	12.52	12.53	12.61	13.50
	1 (RB_Pos:50)	12.22	12.18	12.19	13.50	12.46	12.58	12.53	13.50
	1 (RB_Pos:99)	11.94	12.03	11.94	13.50	12.38	12.48	12.31	13.50
	50 (RB_Pos:0)	12.28	12.30	12.34	13.50	12.30	12.29	12.35	13.50
	50 (RB_Pos:25)	12.10	12.26	12.26	13.50	12.30	12.26	12.26	13.50
	50 (RB_Pos:50)	12.14	12.19	12.13	13.50	12.19	12.21	12.14	13.50
	100 (RB_Pos:0)	12.21	12.19	12.20	13.50	12.27	12.23	12.20	13.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18675	18900		19125	18675	18900	
15 MHz	1 (RB_Pos:0)	12.38	12.48	12.48	13.50	12.33	12.51	12.53	13.50
	1 (RB_Pos:38)	12.14	12.16	12.17	13.50	12.11	12.50	12.60	13.50
	1 (RB_Pos:74)	12.37	12.33	12.31	13.50	12.28	12.50	12.58	13.50

	36 (RB_Pos:0)	12.26	12.25	12.28	13.50	12.27	12.31	12.27	13.50
	36 (RB_Pos:20)	12.28	12.27	12.23	13.50	12.26	12.29	12.21	13.50
	36 (RB_Pos:39)	12.28	12.19	12.21	13.50	12.21	12.24	12.20	13.50
	75 (RB_Pos:0)	12.23	12.27	12.25	13.50	12.25	12.27	12.24	13.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	12.53	12.42	12.47	13.50	12.44	12.59	12.47	13.50
	1 (RB_Pos:25)	12.39	12.26	12.36	13.50	12.27	12.53	12.37	13.50
	1 (RB_Pos:49)	12.50	12.40	12.36	13.50	12.47	12.52	12.35	13.50
	25 (RB_Pos:0)	12.40	12.27	12.25	13.50	12.41	12.33	12.34	13.50
	25 (RB_Pos:12)	12.37	12.26	12.24	13.50	12.42	12.31	12.33	13.50
	25 (RB_Pos:25)	12.41	12.31	12.25	13.50	12.43	12.35	12.36	13.50
	50 (RB_Pos:0)	12.39	12.28	12.26	13.50	12.40	12.33	12.29	13.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	12.55	12.45	12.39	13.50	12.52	12.61	12.54	13.50
	1 (RB_Pos:13)	12.45	12.35	12.29	13.50	12.62	12.56	12.38	13.50
	1 (RB_Pos:24)	12.39	12.34	12.25	13.50	12.61	12.61	12.40	13.50
	12 (RB_Pos:0)	12.41	12.37	12.33	13.50	12.52	12.51	12.43	13.50
	12 (RB_Pos:6)	12.40	12.30	12.31	13.50	12.50	12.44	12.37	13.50
	12 (RB_Pos:13)	12.40	12.24	12.28	13.50	12.51	12.41	12.32	13.50
	25 (RB_Pos:0)	12.42	12.36	12.34	13.50	12.46	12.40	12.25	13.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	12.42	12.35	12.32	13.50	12.35	12.58	12.36	13.50
	1 (RB_Pos:8)	12.34	12.30	12.27	13.50	12.29	12.58	12.29	13.50
	1 (RB_Pos:14)	12.30	12.24	12.27	13.50	12.24	12.53	12.25	13.50
	8 (RB_Pos:0)	12.41	12.31	12.30	13.50	12.52	12.39	12.34	13.50
	8 (RB_Pos:3)	12.42	12.30	12.28	13.50	12.48	12.41	12.30	13.50
	8 (RB_Pos:7)	12.35	12.28	12.26	13.50	12.50	12.34	12.28	13.50
	15 (RB_Pos:0)	12.42	12.31	12.30	13.50	12.44	12.29	12.21	13.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	12.31	12.35	12.20	13.50	12.44	12.57	12.14	13.50
	1 (RB_Pos:3)	12.50	12.29	12.25	13.50	12.49	12.63	12.32	13.50
	1 (RB_Pos:5)	12.34	12.24	12.23	13.50	12.45	12.57	12.28	13.50
	3 (RB_Pos:0)	12.38	12.27	12.23	13.50	12.41	12.46	12.41	13.50

	3 (RB_Pos:1)	12.38	12.30	12.30	13.50	12.42	12.43	12.39	13.50
	3 (RB_Pos:3)	12.40	12.27	12.27	13.50	12.42	12.42	12.38	13.50
	6 (RB_Pos:0)	12.36	12.23	12.19	13.50	12.51	12.13	12.39	13.50

### 8.7.12 Power Reduced Level 3&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)	18.42	<b>18.49</b>	18.41	19.50	18.57	18.61	18.52	19.50
	1 (RB_Pos:50)	18.30	18.30	18.15	19.50	18.41	18.45	18.34	19.50
	1 (RB_Pos:99)	18.02	18.13	18.03	19.50	18.24	18.29	18.14	19.50
	50 (RB_Pos:0)	18.34	18.32	18.39	19.50	18.08	18.02	18.08	19.50
	50 (RB_Pos:25)	18.33	18.30	18.30	19.50	18.09	17.99	17.97	19.50
	50 (RB_Pos:50)	18.21	18.25	18.15	19.50	17.94	17.93	17.85	19.50
	100 (RB_Pos:0)	18.26	18.22	18.26	19.50	18.01	17.96	17.95	19.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	18.46	18.53	18.56	19.50	18.17	18.59	18.64	19.50
	1 (RB_Pos:38)	18.22	18.21	18.19	19.50	17.86	18.31	18.41	19.50
	1 (RB_Pos:74)	18.46	18.42	18.42	19.50	18.10	18.48	18.59	19.50
	36 (RB_Pos:0)	18.30	18.30	18.30	19.50	18.02	18.06	18.02	19.50
	36 (RB_Pos:20)	18.32	18.30	18.28	19.50	18.01	18.05	17.96	19.50
	36 (RB_Pos:39)	18.30	18.26	18.23	19.50	17.98	18.01	17.94	19.50
	75 (RB_Pos:0)	18.32	18.30	18.30	19.50	18.02	17.99	17.95	19.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	18.54	18.51	18.51	19.50	18.24	18.56	18.20	19.50
	1 (RB_Pos:25)	18.39	18.37	18.34	19.50	18.04	18.44	18.12	19.50
	1 (RB_Pos:49)	18.52	18.52	18.38	19.50	18.21	18.60	18.12	19.50
	25 (RB_Pos:0)	18.47	18.31	18.34	19.50	18.17	18.08	18.14	19.50
	25 (RB_Pos:12)	18.45	18.31	18.35	19.50	18.17	18.07	18.11	19.50
	25 (RB_Pos:25)	18.45	18.36	18.31	19.50	18.18	18.07	18.11	19.50
	50 (RB_Pos:0)	18.45	18.38	18.36	19.50	18.16	18.06	18.08	19.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	18.64	18.55	18.48	19.50	18.50	18.63	18.37	19.50

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)	18.48	18.41	18.36	19.50	18.38	18.56	18.18	19.50
	1 (RB_Pos:24)	18.47	18.44	18.30	19.50	18.36	18.57	18.18	19.50
	12 (RB_Pos:0)	18.52	18.40	18.42	19.50	18.34	18.25	18.21	19.50
	12 (RB_Pos:6)	18.49	18.35	18.38	19.50	18.29	18.18	18.14	19.50
	12 (RB_Pos:13)	18.47	18.28	18.32	19.50	18.25	18.14	18.08	19.50
	25 (RB_Pos:0)	18.47	18.39	18.39	19.50	18.20	18.14	18.02	19.50
3.0 MHz	1 (RB_Pos:0)	18.43	18.40	18.40	19.50	18.17	18.45	18.15	19.50
	1 (RB_Pos:8)	18.42	18.36	18.32	19.50	18.14	18.43	18.09	19.50
	1 (RB_Pos:14)	18.34	18.40	18.30	19.50	18.15	18.46	18.06	19.50
	8 (RB_Pos:0)	18.48	18.39	18.35	19.50	18.31	18.18	18.04	19.50
	8 (RB_Pos:3)	18.47	18.39	18.34	19.50	18.26	18.15	18.08	19.50
	8 (RB_Pos:7)	18.45	18.29	18.31	19.50	18.28	18.14	18.01	19.50
	15 (RB_Pos:0)	18.46	18.37	18.37	19.50	18.21	18.10	17.95	19.50
1.4 MHz	1 (RB_Pos:0)	18.36	18.34	18.27	19.50	18.30	18.38	17.98	19.50
	1 (RB_Pos:3)	18.37	18.27	18.31	19.50	18.26	18.52	18.08	19.50
	1 (RB_Pos:5)	18.32	18.27	18.24	19.50	18.29	18.44	18.06	19.50
	3 (RB_Pos:0)	18.45	18.31	18.33	19.50	18.20	18.23	18.19	19.50
	3 (RB_Pos:1)	18.46	18.33	18.37	19.50	18.23	18.23	18.21	19.50
	3 (RB_Pos:3)	18.45	18.32	18.30	19.50	18.18	18.14	18.23	19.50
	6 (RB_Pos:0)	18.42	18.30	18.27	19.50	18.26	17.91	18.17	19.50

8.7.13 Power Reduced Level 1&2 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	
20 MHz	1 (RB_Pos:0)	13.31	13.47	13.52	14.50	13.64	13.70	13.72	14.50
	1 (RB_Pos:50)	13.32	13.43	13.42	14.50	13.59	13.68	13.58	14.50
	1 (RB_Pos:99)	13.66	<b>13.81</b>	13.76	14.50	13.70	13.78	13.71	14.50
	50 (RB_Pos:0)	13.40	13.52	13.49	14.50	13.21	13.33	13.27	14.50
	50 (RB_Pos:25)	13.36	13.47	13.56	14.50	13.16	13.25	13.35	14.50
	50 (RB_Pos:50)	13.48	13.59	13.62	14.50	13.31	13.42	13.39	14.50
	100 (RB_Pos:0)	13.41	13.56	13.54	14.50	13.25	13.34	13.33	14.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
		Channel	20050	20175		20300	20050	20175	

	Channel	20025	20175	20325	limit (dBm)	20025	20175	20325	limit (dBm)
15 MHz	1 (RB_Pos:0)	13.56	13.68	13.63	14.50	13.35	13.76	13.73	14.50
	1 (RB_Pos:38)	13.30	13.33	13.48	14.50	13.05	13.52	13.73	14.50
	1 (RB_Pos:74)	13.71	13.72	13.81	14.50	13.51	13.92	13.68	14.50
	36 (RB_Pos:0)	13.35	13.44	13.46	14.50	13.17	13.27	13.22	14.50
	36 (RB_Pos:20)	13.37	13.40	13.52	14.50	13.23	13.24	13.30	14.50
	36 (RB_Pos:39)	13.45	13.52	13.52	14.50	13.31	13.33	13.31	14.50
	75 (RB_Pos:0)	13.45	13.46	13.52	14.50	13.24	13.22	13.36	14.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	20000	20175	20350	limit (dBm)	20000	20175	20350	limit (dBm)
10 MHz	1 (RB_Pos:0)	13.46	13.61	13.60	14.50	13.27	13.82	13.42	14.50
	1 (RB_Pos:25)	13.27	13.38	13.41	14.50	13.06	13.56	13.27	14.50
	1 (RB_Pos:49)	13.56	13.68	13.70	14.50	13.35	13.86	13.51	14.50
	25 (RB_Pos:0)	13.28	13.37	13.49	14.50	13.12	13.19	13.40	14.50
	25 (RB_Pos:12)	13.37	13.40	13.44	14.50	13.17	13.27	13.31	14.50
	25 (RB_Pos:25)	13.34	13.45	13.54	14.50	13.19	13.26	13.45	14.50
	50 (RB_Pos:0)	13.40	13.45	13.47	14.50	13.19	13.26	13.29	14.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	19975	20175	20375	limit (dBm)	19975	20175	20375	limit (dBm)
5 MHz	1 (RB_Pos:0)	13.46	13.49	13.55	14.50	13.40	13.74	13.45	14.50
	1 (RB_Pos:13)	13.31	13.46	13.47	14.50	13.27	13.71	13.46	14.50
	1 (RB_Pos:24)	13.29	13.39	13.42	14.50	13.29	13.65	13.30	14.50
	12 (RB_Pos:0)	13.30	13.45	13.47	14.50	13.24	13.39	13.33	14.50
	12 (RB_Pos:6)	13.23	13.40	13.49	14.50	13.13	13.34	13.39	14.50
	12 (RB_Pos:13)	13.33	13.35	13.46	14.50	13.21	13.33	13.32	14.50
	25 (RB_Pos:0)	13.25	13.45	13.51	14.50	13.06	13.27	13.30	14.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	19965	20175	20385	limit (dBm)	19965	20175	20385	limit (dBm)
3.0 MHz	1 (RB_Pos:0)	13.26	13.43	13.57	14.50	13.03	13.60	13.31	14.50
	1 (RB_Pos:8)	13.27	13.45	13.43	14.50	13.01	13.51	13.23	14.50
	1 (RB_Pos:14)	13.13	13.34	13.46	14.50	13.06	13.48	13.22	14.50
	8 (RB_Pos:0)	13.23	13.39	13.49	14.50	13.13	13.26	13.32	14.50
	8 (RB_Pos:3)	13.28	13.43	13.44	14.50	13.18	13.31	13.31	14.50
	8 (RB_Pos:7)	13.26	13.40	13.44	14.50	13.22	13.27	13.26	14.50
	15 (RB_Pos:0)	13.30	13.39	13.49	14.50	13.09	13.21	13.24	14.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	19957	20175	20393	limit	19957	20175	20393	limit



					(dBm)				(dBm)
1.4 MHz	1 (RB_Pos:0)	13.23	13.28	13.41	14.50	13.30	13.70	13.37	14.50
	1 (RB_Pos:3)	13.32	13.39	13.42	14.50	13.44	13.72	13.55	14.50
	1 (RB_Pos:5)	13.24	13.33	13.38	14.50	13.29	13.72	13.45	14.50
	3 (RB_Pos:0)	13.26	13.32	13.43	14.50	13.36	13.54	13.60	14.50
	3 (RB_Pos:1)	13.36	13.38	13.49	14.50	13.39	13.55	13.63	14.50
	3 (RB_Pos:3)	13.25	13.36	13.42	14.50	13.23	13.54	13.57	14.50
	6 (RB_Pos:0)	13.26	13.38	13.43	14.50	13.43	13.29	13.60	14.50

#### 8.7.14 Power Reduced Level 3&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)	17.38	17.46	17.54	18.60	17.77	17.92	17.84	18.60
	1 (RB_Pos:50)	17.36	17.43	17.43	18.60	17.65	17.81	17.74	18.60
	1 (RB_Pos:99)	17.71	<b>17.87</b>	17.79	18.60	17.89	17.94	17.90	18.60
	50 (RB_Pos:0)	17.44	17.53	17.48	18.60	17.45	17.54	17.46	18.60
	50 (RB_Pos:25)	17.40	17.46	17.61	18.60	17.41	17.47	17.58	18.60
	50 (RB_Pos:50)	17.51	17.59	17.61	18.60	17.52	17.63	17.60	18.60
	100 (RB_Pos:0)	17.45	17.53	17.59	18.60	17.49	17.53	17.57	18.60
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)	17.57	17.69	17.67	18.60	17.56	17.94	17.91	18.60
	1 (RB_Pos:38)	17.35	17.36	17.47	18.60	17.17	17.66	17.89	18.60
	1 (RB_Pos:74)	17.75	17.78	17.83	18.60	17.57	17.92	17.95	18.60
	36 (RB_Pos:0)	17.36	17.45	17.46	18.60	17.38	17.47	17.43	18.60
	36 (RB_Pos:20)	17.40	17.42	17.54	18.60	17.39	17.51	17.51	18.60
	36 (RB_Pos:39)	17.50	17.54	17.55	18.60	17.48	17.59	17.52	18.60
	75 (RB_Pos:0)	17.45	17.46	17.58	18.60	17.41	17.47	17.57	18.60
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)	17.41	17.55	17.54	18.60	17.39	17.92	17.58	18.60
	1 (RB_Pos:25)	17.23	17.31	17.33	18.60	17.16	17.67	17.36	18.60
	1 (RB_Pos:49)	17.49	17.65	17.63	18.60	17.47	17.63	17.64	18.60
	25 (RB_Pos:0)	17.23	17.29	17.40	18.60	17.22	17.35	17.48	18.60
	25 (RB_Pos:12)	17.30	17.32	17.37	18.60	17.31	17.41	17.46	18.60
	25 (RB_Pos:25)	17.26	17.38	17.47	18.60	17.28	17.38	17.54	18.60
	50 (RB_Pos:0)	17.32	17.37	17.42	18.60	17.26	17.42	17.45	18.60

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)	17.38	17.46	17.50	18.60	17.52	17.89	17.62	18.60
	1 (RB_Pos:13)	17.22	17.34	17.43	18.60	17.40	17.82	17.54	18.60
	1 (RB_Pos:24)	17.24	17.31	17.35	18.60	17.44	17.79	17.51	18.60
	12 (RB_Pos:0)	17.24	17.38	17.38	18.60	17.34	17.52	17.46	18.60
	12 (RB_Pos:6)	17.19	17.35	17.40	18.60	17.28	17.47	17.46	18.60
	12 (RB_Pos:13)	17.21	17.28	17.38	18.60	17.34	17.45	17.45	18.60
	25 (RB_Pos:0)	17.21	17.38	17.43	18.60	17.21	17.41	17.39	18.60
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)	17.19	17.42	17.48	18.60	17.19	17.71	17.47	18.60
	1 (RB_Pos:8)	17.19	17.29	17.35	18.60	17.19	17.66	17.39	18.60
	1 (RB_Pos:14)	17.10	17.30	17.28	18.60	17.17	17.63	17.33	18.60
	8 (RB_Pos:0)	17.17	17.24	17.35	18.60	17.29	17.41	17.39	18.60
	8 (RB_Pos:3)	17.22	17.30	17.39	18.60	17.31	17.44	17.43	18.60
	8 (RB_Pos:7)	17.23	17.31	17.33	18.60	17.31	17.39	17.38	18.60
	15 (RB_Pos:0)	17.18	17.34	17.34	18.60	17.24	17.34	17.33	18.60
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)	17.30	17.27	17.32	18.60	17.30	17.60	17.36	18.60
	1 (RB_Pos:3)	17.37	17.28	17.37	18.60	17.45	17.69	17.46	18.60
	1 (RB_Pos:5)	17.21	17.27	17.26	18.60	17.25	17.61	17.35	18.60
	3 (RB_Pos:0)	17.30	17.26	17.34	18.60	17.26	17.46	17.52	18.60
	3 (RB_Pos:1)	17.40	17.32	17.38	18.60	17.33	17.47	17.56	18.60
	3 (RB_Pos:3)	17.20	17.27	17.34	18.60	17.23	17.46	17.49	18.60
	6 (RB_Pos:0)	17.16	17.26	17.30	18.60	17.32	17.20	17.52	18.60

### 8.7.15 Power Reduced Level 2 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>19.09</b>	19.05	19.08	20.00	19.05	18.90	18.95	20.00
	1 (RB_Pos:25)	19.08	19.05	19.05	20.00	19.06	18.93	19.03	20.00
	1 (RB_Pos:49)	19.01	19.04	19.03	20.00	19.04	19.08	18.95	20.00
	25 (RB_Pos:0)	18.98	19.02	19.01	20.00	19.04	19.02	19.05	20.00

	25 (RB_Pos:12)	18.98	19.02	19.02	20.00	18.97	18.89	18.92	20.00
	25 (RB_Pos:25)	18.99	19.02	19.03	20.00	19.02	18.89	18.91	20.00
	50 (RB_Pos:0)	18.99	19.03	18.98	20.00	18.97	18.95	18.87	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5 MHz	1 (RB_Pos:0)	18.95	18.90	18.96	20.00	19.09	18.92	19.00	20.00
	1 (RB_Pos:13)	18.94	19.09	19.03	20.00	19.09	19.04	19.02	20.00
	1 (RB_Pos:24)	19.00	18.98	18.89	20.00	18.98	18.88	18.96	20.00
	12 (RB_Pos:0)	18.99	19.06	18.92	20.00	19.07	19.01	19.03	20.00
	12 (RB_Pos:6)	18.89	18.91	19.05	20.00	18.82	18.89	18.94	20.00
	12 (RB_Pos:13)	18.91	18.88	19.04	20.00	18.97	18.94	19.07	20.00
	25 (RB_Pos:0)	18.94	18.88	18.86	20.00	18.90	18.89	18.83	20.00
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)	18.97	18.99	19.10	20.00	19.09	19.04	19.13	20.00
	1 (RB_Pos:8)	19.01	18.91	18.92	20.00	19.08	19.09	18.96	20.00
	1 (RB_Pos:14)	18.92	19.02	18.91	20.00	18.91	19.00	19.04	20.00
	8 (RB_Pos:0)	18.93	18.98	19.01	20.00	18.91	18.93	18.94	20.00
	8 (RB_Pos:3)	19.01	18.88	19.06	20.00	18.86	19.03	19.03	20.00
	8 (RB_Pos:7)	18.88	18.91	18.98	20.00	18.87	18.88	18.95	20.00
	15 (RB_Pos:0)	18.90	19.02	19.03	20.00	18.97	18.93	18.88	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4 MHz	1 (RB_Pos:0)	19.09	18.99	19.09	20.00	19.07	19.07	19.13	20.00
	1 (RB_Pos:3)	19.11	19.05	19.07	20.00	18.98	19.03	19.07	20.00
	1 (RB_Pos:5)	18.89	18.91	18.91	20.00	18.91	18.93	18.98	20.00
	3 (RB_Pos:0)	18.89	18.99	18.90	20.00	19.05	18.87	18.89	20.00
	3 (RB_Pos:1)	19.00	19.00	18.93	20.00	19.01	18.98	19.05	20.00
	3 (RB_Pos:3)	18.93	19.06	18.97	20.00	19.01	18.94	19.06	20.00
	6 (RB_Pos:0)	18.89	18.96	18.89	20.00	18.81	19.05	18.82	20.00

## 8.7.16 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	
20 MHz	1 (RB_Pos:0)	<b>15.43</b>	<b>15.43</b>	15.24	16.70	15.83	15.81	15.66	16.70
	1 (RB_Pos:50)	15.30	15.36	15.16	16.70	15.71	15.80	15.54	16.70
	1 (RB_Pos:99)	15.31	15.30	15.29	16.70	15.73	15.76	15.68	16.70
	50 (RB_Pos:0)	15.37	15.41	15.25	16.70	15.39	15.43	15.28	16.70
	50 (RB_Pos:25)	15.29	15.33	15.17	16.70	15.34	15.37	15.20	16.70
	50 (RB_Pos:50)	15.34	15.35	15.20	16.70	15.37	15.36	15.16	16.70
	100 (RB_Pos:0)	15.30	15.34	15.16	16.70	15.31	15.35	15.20	16.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	15.53	15.35	15.26	16.70	15.44	15.69	15.74	16.70
	1 (RB_Pos:38)	15.33	15.28	15.17	16.70	15.31	15.68	15.64	16.70
	1 (RB_Pos:74)	15.36	15.26	15.26	16.70	15.25	15.62	15.74	16.70
	36 (RB_Pos:0)	15.45	15.38	15.20	16.70	15.48	15.39	15.17	16.70
	36 (RB_Pos:20)	15.47	15.36	15.22	16.70	15.46	15.42	15.20	16.70
	36 (RB_Pos:39)	15.44	15.35	15.28	16.70	15.49	15.41	15.31	16.70
	75 (RB_Pos:0)	15.44	15.37	15.22	16.70	15.43	15.38	15.23	16.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	15.58	15.60	15.52	16.70	15.59	15.94	15.60	16.70
	1 (RB_Pos:25)	15.34	15.28	15.31	16.70	15.28	15.64	15.33	16.70
	1 (RB_Pos:49)	15.39	15.35	15.43	16.70	15.37	15.74	15.44	16.70
	25 (RB_Pos:0)	15.41	15.32	15.37	16.70	15.41	15.40	15.45	16.70
	25 (RB_Pos:12)	15.37	15.24	15.33	16.70	15.38	15.26	15.41	16.70
	25 (RB_Pos:25)	15.27	15.25	15.32	16.70	15.34	15.28	15.39	16.70
	50 (RB_Pos:0)	15.46	15.31	15.32	16.70	15.43	15.30	15.37	16.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	15.46	15.42	15.38	16.70	15.62	15.89	15.52	16.70
	1 (RB_Pos:13)	15.45	15.31	15.34	16.70	15.60	15.78	15.46	16.70
	1 (RB_Pos:24)	15.36	15.27	15.30	16.70	15.55	15.72	15.45	16.70
	12 (RB_Pos:0)	15.38	15.22	15.37	16.70	15.46	15.41	15.41	16.70
	12 (RB_Pos:6)	15.36	15.26	15.33	16.70	15.46	15.39	15.39	16.70
	12 (RB_Pos:13)	15.35	15.26	15.27	16.70	15.43	15.41	15.40	16.70

	25 (RB_Pos:0)	15.38	15.28	15.37	16.70	15.41	15.37	15.31	16.70
--	---------------	-------	-------	-------	-------	-------	-------	-------	-------

## 8.7.17 Power Reduced Level 2 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	
20 MHz	1 (RB_Pos:0)	13.40	<b>13.43</b>	13.23	14.70	13.87	13.84	13.59	14.70
	1 (RB_Pos:50)	13.40	13.39	13.15	14.70	13.87	13.81	13.52	14.70
	1 (RB_Pos:99)	13.39	13.26	13.29	14.70	13.84	13.73	13.67	14.70
	50 (RB_Pos:0)	13.40	13.41	13.28	14.70	13.43	13.46	13.28	14.70
	50 (RB_Pos:25)	13.40	13.40	13.22	14.70	13.42	13.42	13.19	14.70
	50 (RB_Pos:50)	13.45	13.32	13.18	14.70	13.47	13.37	13.14	14.70
	100 (RB_Pos:0)	13.36	13.34	13.22	14.70	13.39	13.38	13.21	14.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	13.51	13.36	13.24	14.70	13.49	13.70	13.72	14.70
	1 (RB_Pos:38)	13.42	13.31	13.20	14.70	13.33	13.65	13.65	14.70
	1 (RB_Pos:74)	13.43	13.24	13.27	14.70	13.39	13.62	13.73	14.70
	36 (RB_Pos:0)	13.53	13.40	13.18	14.70	13.54	13.41	13.22	14.70
	36 (RB_Pos:20)	13.52	13.42	13.27	14.70	13.49	13.47	13.24	14.70
	36 (RB_Pos:39)	13.52	13.36	13.35	14.70	13.51	13.40	13.30	14.70
	75 (RB_Pos:0)	13.47	13.39	13.24	14.70	13.47	13.37	13.20	14.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	13.61	13.58	13.56	14.70	13.61	13.95	13.58	14.70
	1 (RB_Pos:25)	13.37	13.25	13.34	14.70	13.26	13.61	13.35	14.70
	1 (RB_Pos:49)	13.50	13.40	13.42	14.70	13.45	13.76	13.48	14.70
	25 (RB_Pos:0)	13.48	13.35	13.36	14.70	13.47	13.39	13.45	14.70
	25 (RB_Pos:12)	13.38	13.25	13.31	14.70	13.40	13.27	13.38	14.70
	25 (RB_Pos:25)	13.42	13.28	13.33	14.70	13.38	13.28	13.40	14.70
	50 (RB_Pos:0)	13.51	13.32	13.36	14.70	13.44	13.31	13.40	14.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5 MHz	1 (RB_Pos:0)	13.51	13.41	13.39	14.70	13.70	13.70	13.51	14.70
	1 (RB_Pos:13)	13.43	13.27	13.32	14.70	13.64	13.71	13.41	14.70
	1 (RB_Pos:24)	13.35	13.28	13.31	14.70	13.55	13.72	13.41	14.70

	12 (RB_Pos:0)	13.39	13.28	13.33	14.70	13.49	13.42	13.47	14.70
	12 (RB_Pos:6)	13.41	13.26	13.31	14.70	13.46	13.42	13.37	14.70
	12 (RB_Pos:13)	13.38	13.26	13.33	14.70	13.49	13.41	13.39	14.70
	25 (RB_Pos:0)	13.38	13.29	13.33	14.70	13.41	13.34	13.29	14.70

## 8.7.18 Power Reduced Level 3&amp;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	
20 MHz	1 (RB_Pos:0)	18.44	<b>18.50</b>	18.27	19.70	18.92	18.98	18.71	19.70
	1 (RB_Pos:50)	18.43	18.46	18.15	19.70	18.91	18.89	18.61	19.70
	1 (RB_Pos:99)	18.42	18.32	18.28	19.70	18.90	18.80	18.74	19.70
	50 (RB_Pos:0)	18.23	18.46	18.26	19.70	18.42	18.49	18.32	19.70
	50 (RB_Pos:25)	18.37	18.36	18.18	19.70	18.38	18.39	18.18	19.70
	50 (RB_Pos:50)	18.46	18.38	18.20	19.70	18.45	18.41	18.02	19.70
	100 (RB_Pos:0)	18.32	18.39	18.16	19.70	18.41	18.41	18.12	19.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15 MHz	1 (RB_Pos:0)	18.51	18.37	18.28	19.70	18.47	18.80	18.77	19.70
	1 (RB_Pos:38)	18.43	18.33	18.13	19.70	18.40	18.74	18.60	19.70
	1 (RB_Pos:74)	18.50	18.31	18.35	19.70	18.44	18.68	18.68	19.70
	36 (RB_Pos:0)	18.51	18.39	18.21	19.70	18.52	18.45	18.14	19.70
	36 (RB_Pos:20)	18.44	18.39	18.23	19.70	18.47	18.44	18.29	19.70
	36 (RB_Pos:39)	18.52	18.37	18.29	19.70	18.52	18.43	18.42	19.70
	75 (RB_Pos:0)	18.54	18.39	18.18	19.70	18.46	18.43	18.43	19.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10 MHz	1 (RB_Pos:0)	18.65	18.61	18.54	19.70	18.64	18.98	18.60	19.70
	1 (RB_Pos:25)	18.28	18.25	18.31	19.70	18.29	18.69	18.34	19.70
	1 (RB_Pos:49)	18.46	18.42	18.44	19.70	18.49	18.81	18.51	19.70
	25 (RB_Pos:0)	18.47	18.34	18.36	19.70	18.45	18.40	18.45	19.70
	25 (RB_Pos:12)	18.38	18.24	18.29	19.70	18.39	18.31	18.32	19.70
	25 (RB_Pos:25)	18.42	18.29	18.32	19.70	18.39	18.31	18.33	19.70
	50 (RB_Pos:0)	18.52	18.31	18.34	19.70	18.45	18.36	18.39	19.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	

5 MHz	1 (RB_Pos:0)	18.56	18.45	18.42	19.70	18.73	18.91	18.56	19.70
	1 (RB_Pos:13)	18.51	18.33	18.32	19.70	18.61	18.79	18.49	19.70
	1 (RB_Pos:24)	18.40	18.32	18.33	19.70	18.56	18.79	18.39	19.70
	12 (RB_Pos:0)	18.41	18.30	18.31	19.70	18.50	18.47	18.39	19.70
	12 (RB_Pos:6)	18.41	18.25	18.33	19.70	18.50	18.44	18.30	19.70
	12 (RB_Pos:13)	18.39	18.27	18.28	19.70	18.43	18.43	18.55	19.70
	25 (RB_Pos:0)	18.40	18.31	18.29	19.70	18.40	18.37	18.15	19.70

## 8.7.19 Power Reduced Level 1&amp;2 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	
20 MHz	1 (RB_Pos:0)	17.26	17.04	17.27	18.50	17.56	17.42	17.54	18.50
	1 (RB_Pos:50)	17.03	16.92	17.27	18.50	17.36	17.25	17.48	18.50
	1 (RB_Pos:99)	17.39	17.36	<b>17.66</b>	18.50	17.79	17.71	17.93	18.50
	50 (RB_Pos:0)	17.13	16.96	17.04	18.50	17.07	16.97	17.08	18.50
	50 (RB_Pos:25)	17.03	16.93	17.01	18.50	17.02	16.96	17.08	18.50
	50 (RB_Pos:50)	17.17	17.09	17.25	18.50	17.16	17.12	17.30	18.50
	100 (RB_Pos:0)	17.09	17.00	17.10	18.50	17.10	17.01	17.09	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	
15 MHz	1 (RB_Pos:0)	17.38	17.35	17.41	18.50	17.72	17.83	17.70	18.50
	1 (RB_Pos:38)	17.05	16.98	17.17	18.50	17.35	17.47	17.45	18.50
	1 (RB_Pos:74)	17.43	17.48	17.61	18.50	17.75	17.90	17.90	18.50
	36 (RB_Pos:0)	17.04	16.95	17.03	18.50	17.07	16.93	17.10	18.50
	36 (RB_Pos:20)	17.06	16.95	17.14	18.50	17.05	16.94	17.15	18.50
	36 (RB_Pos:39)	17.09	17.05	17.19	18.50	17.09	17.06	17.24	18.50
	75 (RB_Pos:0)	17.07	16.94	17.17	18.50	17.09	16.96	17.15	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	
10 MHz	1 (RB_Pos:0)	17.41	17.37	17.45	18.50	17.58	17.85	17.90	18.50
	1 (RB_Pos:25)	17.19	17.05	17.17	18.50	17.30	17.49	17.53	18.50
	1 (RB_Pos:49)	17.52	17.45	17.46	18.50	17.68	17.85	17.89	18.50
	25 (RB_Pos:0)	17.13	17.04	17.12	18.50	17.02	17.01	17.13	18.50
	25 (RB_Pos:12)	17.12	17.01	17.09	18.50	17.04	17.04	17.12	18.50
	25 (RB_Pos:25)	17.05	17.13	17.12	18.50	17.02	17.06	17.14	18.50
	50 (RB_Pos:0)	17.04	17.10	17.11	18.50	17.06	17.11	17.18	18.50
Bandwidth	RB Set	Power (dBm)							

(MHz)	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		37775	38000	38225		37775	38000	38225	
5 MHz	1 (RB_Pos:0)	17.18	17.09	17.21	18.50	17.35	17.46	17.52	18.50
	1 (RB_Pos:13)	17.08	17.05	17.14	18.50	17.24	17.35	17.51	18.50
	1 (RB_Pos:24)	17.06	17.12	17.15	18.50	17.18	17.34	17.50	18.50
	12 (RB_Pos:0)	16.89	16.95	17.04	18.50	17.06	17.00	17.18	18.50
	12 (RB_Pos:6)	16.90	16.97	17.02	18.50	17.00	16.99	17.17	18.50
	12 (RB_Pos:13)	16.94	16.96	17.05	18.50	16.93	16.95	17.12	18.50
	25 (RB_Pos:0)	16.92	17.00	17.07	18.50	16.94	17.03	17.08	18.50

### 8.7.20 Power Reduced Level 3&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	
20 MHz	1 (RB_Pos:0)	19.72	19.58	19.84	21.00	20.06	19.99	20.10	21.00
	1 (RB_Pos:50)	19.53	19.47	19.85	21.00	19.88	19.89	19.98	21.00
	1 (RB_Pos:99)	19.87	19.92	<b>20.23</b>	21.00	20.22	20.31	20.41	21.00
	50 (RB_Pos:0)	19.63	19.48	19.58	21.00	19.68	19.52	19.64	21.00
	50 (RB_Pos:25)	19.49	19.52	19.61	21.00	19.51	19.53	19.65	21.00
	50 (RB_Pos:50)	19.64	19.66	19.85	21.00	19.65	19.66	19.85	21.00
	100 (RB_Pos:0)	19.57	19.56	19.71	21.00	19.66	19.55	19.68	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15 MHz	1 (RB_Pos:0)	19.88	19.89	19.95	21.00	20.19	20.32	20.35	21.00
	1 (RB_Pos:38)	19.48	19.53	19.73	21.00	19.86	19.98	20.12	21.00
	1 (RB_Pos:74)	19.89	19.96	20.21	21.00	20.22	20.41	20.16	21.00
	36 (RB_Pos:0)	19.49	19.50	19.66	21.00	19.52	19.49	19.68	21.00
	36 (RB_Pos:20)	19.50	19.46	19.69	21.00	19.49	19.49	19.74	21.00
	36 (RB_Pos:39)	19.56	19.67	19.78	21.00	19.58	19.61	19.81	21.00
	75 (RB_Pos:0)	19.55	19.54	19.71	21.00	19.56	19.53	19.74	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10 MHz	1 (RB_Pos:0)	20.03	19.92	20.08	21.00	20.30	20.33	20.43	21.00
	1 (RB_Pos:25)	19.74	19.64	19.73	21.00	20.03	19.98	20.18	21.00
	1 (RB_Pos:49)	20.12	20.05	20.05	21.00	20.35	20.37	20.31	21.00
	25 (RB_Pos:0)	19.67	19.60	19.70	21.00	19.65	19.59	19.70	21.00
	25 (RB_Pos:12)	19.67	19.60	19.65	21.00	19.69	19.63	19.69	21.00



Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
	25 (RB_Pos:25)	19.73	19.68	19.73	21.00	19.73	19.67	19.71	21.00
	50 (RB_Pos:0)	19.72	19.66	19.64	21.00	19.69	19.65	19.73	21.00
5 MHz	1 (RB_Pos:0)	19.77	19.66	19.79	21.00	20.01	20.10	20.22	21.00
	1 (RB_Pos:13)	19.74	19.80	19.74	21.00	19.99	19.94	20.10	21.00
	1 (RB_Pos:24)	19.71	19.65	19.79	21.00	19.94	19.96	20.01	21.00
	12 (RB_Pos:0)	19.67	19.57	19.66	21.00	19.71	19.58	19.76	21.00
	12 (RB_Pos:6)	19.62	19.60	19.63	21.00	19.67	19.59	19.77	21.00
	12 (RB_Pos:13)	19.68	19.51	19.60	21.00	19.69	19.55	19.74	21.00
	25 (RB_Pos:0)	19.65	19.61	19.65	21.00	19.68	19.63	19.68	21.00

### 8.7.21 Power Reduced Level 1&2 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	40140	40640	41140		40140	40640	41140	
20 MHz	1 (RB_Pos:0)	17.35	17.49	<b>17.79</b>	18.70	17.66	17.79	18.07	18.70
	1 (RB_Pos:50)	17.30	17.39	17.72	18.70	17.60	17.71	17.98	18.70
	1 (RB_Pos:99)	17.38	17.37	17.75	18.70	17.74	17.70	18.06	18.70
	50 (RB_Pos:0)	17.27	17.33	17.64	18.70	17.26	17.37	17.68	18.70
	50 (RB_Pos:25)	17.26	17.37	17.58	18.70	17.23	17.42	17.62	18.70
	50 (RB_Pos:50)	17.26	17.35	17.57	18.70	17.24	17.32	17.59	18.70
	100 (RB_Pos:0)	17.29	17.39	17.61	18.70	17.28	17.39	17.61	18.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40115	40640	41165		40115	40640	41165	
15 MHz	1 (RB_Pos:0)	16.92	17.15	17.33	18.70	17.19	17.59	17.60	18.70
	1 (RB_Pos:38)	17.16	17.30	17.59	18.70	17.47	17.78	17.88	18.70
	1 (RB_Pos:74)	16.46	16.55	16.79	18.70	16.76	17.02	17.08	18.70
	36 (RB_Pos:0)	17.20	17.35	17.58	18.70	17.18	17.37	17.59	18.70
	36 (RB_Pos:20)	17.19	17.35	17.55	18.70	17.16	17.35	17.58	18.70
	36 (RB_Pos:39)	16.86	16.90	17.20	18.70	16.83	16.90	17.20	18.70
	75 (RB_Pos:0)	17.01	17.17	17.42	18.70	17.03	17.19	17.42	18.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40090	40640	41190		40090	40640	41190	
10 MHz	1 (RB_Pos:0)	17.31	17.52	17.71	18.70	17.62	17.79	18.06	18.70
	1 (RB_Pos:25)	17.09	17.32	17.44	18.70	17.42	17.70	17.74	18.70

	1 (RB_Pos:49)	17.33	17.50	17.61	18.70	17.61	17.73	18.04	18.70
	25 (RB_Pos:0)	17.10	17.27	17.45	18.70	17.10	17.25	17.46	18.70
	25 (RB_Pos:12)	17.04	17.28	17.37	18.70	17.04	17.25	17.41	18.70
	25 (RB_Pos:25)	17.10	17.22	17.40	18.70	17.14	17.17	17.40	18.70
	50 (RB_Pos:0)	17.10	17.29	17.39	18.70	17.07	17.32	17.45	18.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40065	40640	41215		40065	40640	41215	
5 MHz	1 (RB_Pos:0)	17.27	17.34	17.42	18.70	17.48	17.74	17.70	18.70
	1 (RB_Pos:13)	17.13	17.22	17.46	18.70	17.40	17.61	17.59	18.70
	1 (RB_Pos:24)	17.19	17.22	17.42	18.70	17.40	17.56	17.58	18.70
	12 (RB_Pos:0)	17.10	17.18	17.34	18.70	17.08	17.27	17.41	18.70
	12 (RB_Pos:6)	17.05	17.18	17.35	18.70	17.08	17.33	17.39	18.70
	12 (RB_Pos:13)	17.02	17.13	17.49	18.70	17.02	17.27	17.38	18.70
	25 (RB_Pos:0)	17.06	17.23	17.45	18.70	17.11	17.27	17.36	18.70

### 8.7.22 Power Reduced Level 3&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	40140	40640	41140		40140	40640	41140	
20 MHz	1 (RB_Pos:0)	19.40	19.52	<b>19.78</b>	20.70	19.78	19.89	20.03	20.70
	1 (RB_Pos:50)	19.36	19.43	19.71	20.70	19.68	19.75	19.94	20.70
	1 (RB_Pos:99)	19.44	19.44	19.74	20.70	19.82	19.76	20.04	20.70
	50 (RB_Pos:0)	19.34	19.38	19.64	20.70	19.32	19.42	19.70	20.70
	50 (RB_Pos:25)	19.32	19.44	19.60	20.70	19.33	19.45	19.63	20.70
	50 (RB_Pos:50)	19.31	19.35	19.58	20.70	19.31	19.37	19.65	20.70
	100 (RB_Pos:0)	19.33	19.42	19.62	20.70	19.35	19.42	19.62	20.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40115	40640	41165		40115	40640	41165	
15 MHz	1 (RB_Pos:0)	18.99	19.14	19.38	20.70	19.25	19.54	19.70	20.70
	1 (RB_Pos:38)	19.27	19.36	19.62	20.70	19.43	19.82	19.91	20.70
	1 (RB_Pos:74)	18.56	18.61	18.90	20.70	18.83	19.09	19.15	20.70
	36 (RB_Pos:0)	19.25	19.45	19.63	20.70	19.18	19.44	19.66	20.70
	36 (RB_Pos:20)	19.23	19.43	19.62	20.70	19.22	19.42	19.64	20.70
	36 (RB_Pos:39)	18.91	18.98	19.22	20.70	18.93	18.95	19.26	20.70
	75 (RB_Pos:0)	19.11	19.23	19.43	20.70	19.11	19.22	19.46	20.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit	16QAM			Tune up limit
	Channel	40090	40640	41190		40090	40640	41190	

					(dBm)				(dBm)
10 MHz	1 (RB_Pos:0)	19.37	19.49	19.75	20.70	19.58	19.95	20.20	20.70
	1 (RB_Pos:25)	19.05	19.33	19.46	20.70	19.44	19.66	19.84	20.70
	1 (RB_Pos:49)	19.45	19.56	19.62	20.70	19.61	19.79	20.10	20.70
	25 (RB_Pos:0)	19.06	19.28	19.43	20.70	19.01	19.31	19.49	20.70
	25 (RB_Pos:12)	19.04	19.27	19.42	20.70	19.02	19.32	19.45	20.70
	25 (RB_Pos:25)	19.08	19.15	19.40	20.70	19.03	19.24	19.42	20.70
	50 (RB_Pos:0)	19.07	19.22	19.42	20.70	18.99	19.32	19.46	20.70
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	40065	40640	41215		40065	40640	41215	
5 MHz	1 (RB_Pos:0)	19.25	19.26	19.51	20.70	19.35	19.62	19.89	20.70
	1 (RB_Pos:13)	19.20	19.26	19.43	20.70	19.33	19.59	19.83	20.70
	1 (RB_Pos:24)	19.16	19.26	19.40	20.70	19.15	19.43	19.78	20.70
	12 (RB_Pos:0)	19.15	19.11	19.45	20.70	19.13	19.19	19.55	20.70
	12 (RB_Pos:6)	19.06	19.17	19.33	20.70	19.07	19.15	19.54	20.70
	12 (RB_Pos:13)	19.05	19.07	19.32	20.70	19.03	19.14	19.47	20.70
	25 (RB_Pos:0)	18.98	19.21	19.41	20.70	19.03	19.20	19.42	20.70

## 8.7.23 Power Reduced Level 1 of 2.4G WIFI

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	<b>15.79</b>	17.00	Yes
		6	2437	15.72	17.00	Yes
		11	2462	<b>15.79</b>	17.00	Yes
	802.11g	1	2412	14.61	15.50	No
		6	2437	14.77	15.50	No
		11	2462	14.98	15.50	No
	802.11n(HT20)	1	2412	13.51	14.50	No
		6	2437	13.72	14.50	No
		11	2462	13.58	14.50	No

## 8.7.24 Power Reduced Level 2&amp;3 of 2.4G WIFI

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	13.50	15.00	Yes
		6	2437	13.39	15.00	Yes
		11	2462	<b>13.52</b>	15.00	Yes
	802.11g	1	2412	12.59	13.50	No
		6	2437	12.63	13.50	No
		11	2462	12.81	13.50	No
	802.11n(HT20)	1	2412	11.58	12.50	No
		6	2437	11.69	12.50	No
		11	2462	11.60	12.50	No

## 8.7.25 Power Reduced Level 1 of 5G WIFI

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	11.42	12.50	No
		44	5220	11.38	12.50	No
		48	5240	11.37	12.50	No
	802.11n(HT20)	36	5180	11.27	12.50	No
		44	5220	11.37	12.50	No
		48	5240	11.27	12.50	No
	802.11n(HT40)	38	5190	11.48	12.50	No
		46	5230	11.51	12.50	No
	802.11ac(VHT20)	36	5180	10.84	11.50	No
		44	5220	10.94	11.50	No
		48	5240	10.96	11.50	No
	802.11ac(VHT40)	38	5190	10.92	11.50	No
46		5230	11.15	11.50	No	
802.11ac(VHT80)	42	5210	9.25	10.50	No	
5.3 (5.25~5.35)	802.11a	52	5260	11.57	12.50	No
		60	5300	11.65	12.50	No
		64	5320	11.79	12.50	No
	802.11n(HT20)	52	5260	11.71	12.50	No
		60	5300	11.73	12.50	No
		64	5320	11.58	12.50	No
	802.11n(HT40)	54	5270	11.60	12.50	Yes
		62	5310	<b>11.79</b>	12.50	Yes
	802.11ac(VHT20)	52	5260	10.99	11.50	No
		60	5300	11.12	11.50	No
		64	5320	11.31	11.50	No
	802.11ac(VHT40)	54	5270	11.17	11.50	No
		62	5310	11.21	11.50	No
	802.11ac(VHT80)	58	5290	9.42	10.50	No
	5.6 (5.47~5.725)	802.11a	100	5500	12.03	12.50
116			5580	12.12	12.50	No
140			5700	11.85	12.50	No
144			5720	11.75	12.50	No
802.11n(HT20)		100	5500	11.95	12.50	No
		116	5580	11.92	12.50	No
		140	5700	11.60	12.50	No
		144	5720	11.45	12.50	No
802.11n(HT40)		102	5510	11.92	12.50	Yes
		118	5590	<b>12.16</b>	12.50	Yes

		134	5670	12.11	12.50	Yes
		142	5710	11.98	12.50	Yes
	802.11ac(VHT20)	100	5500	11.17	11.50	No
		116	5580	11.18	11.50	No
		140	5700	11.09	11.50	No
		144	5720	11.11	11.50	No
	802.11ac(VHT40)	102	5510	11.10	11.50	No
		118	5590	11.06	11.50	No
		134	5670	10.93	11.50	No
		142	5710	10.73	11.50	No
	802.11ac(VHT80)	106	5530	10.13	10.50	No
		122	5610	10.12	10.50	No
		138	5690	9.73	10.50	No
	5.8 (5.725~5.850)	802.11a	149	5745	11.65	12.50
157			5785	11.89	12.50	No
165			5825	11.71	12.50	No
802.11n(HT20)		149	5745	11.40	12.50	No
		157	5785	11.73	12.50	No
		165	5825	11.89	12.50	No
802.11n(HT40)		151	5755	11.30	12.50	Yes
		159	5795	<b>11.66</b>	12.50	Yes
802.11ac(VHT20)		149	5745	10.62	11.50	No
		157	5785	10.71	11.50	No
		165	5825	11.16	11.50	No
802.11ac(VHT40)		151	5755	10.40	11.50	No
		159	5795	10.87	11.50	No
802.11ac(VHT80)		155	5775	9.58	10.50	No

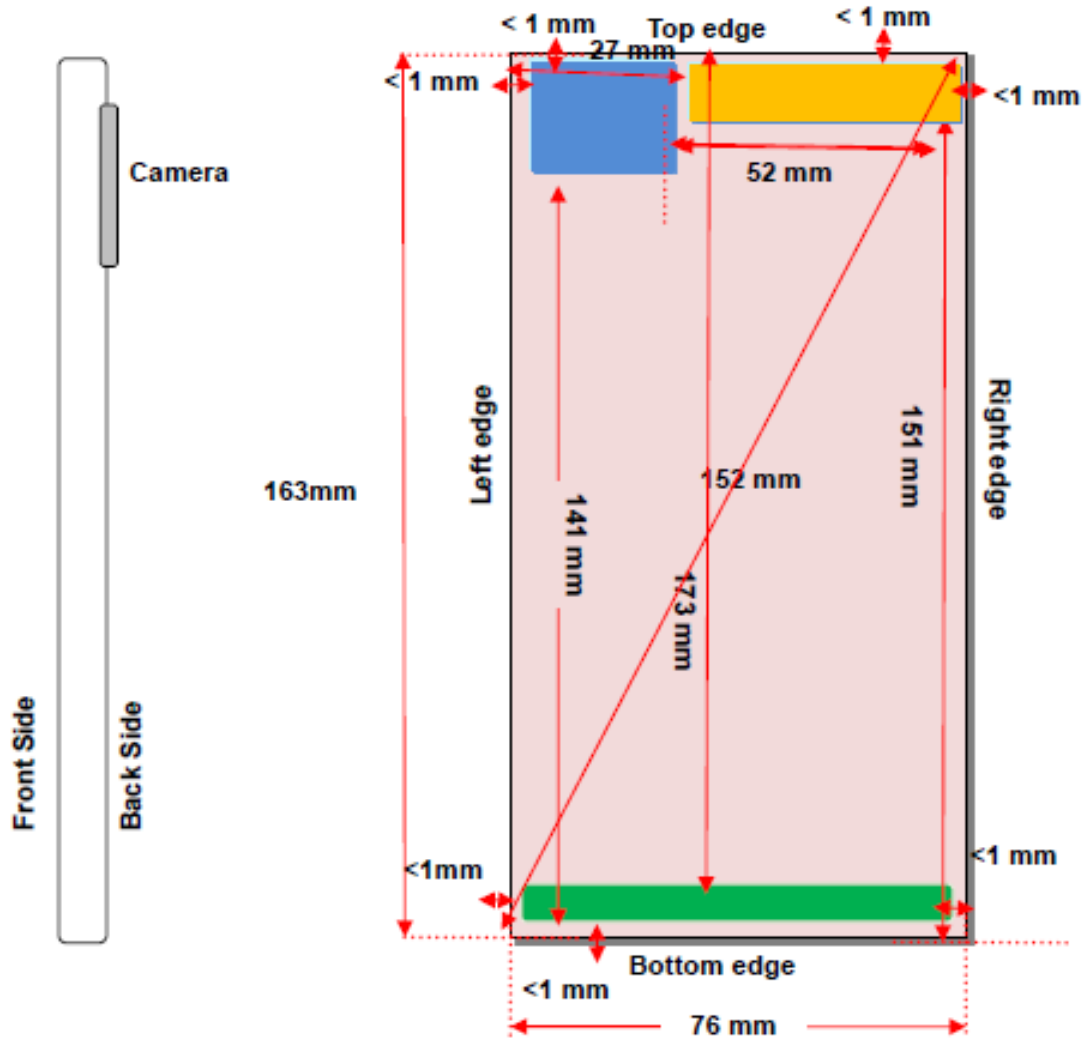
## 8.7.26 Power Reduced Level 2&amp;3 of 5G WIFI





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	8.46	9.50	No
		44	5220	8.43	9.50	No
		48	5240	8.33	9.50	No
	802.11n(HT20)	36	5180	8.23	9.50	No
		44	5220	8.43	9.50	No
		48	5240	8.24	9.50	No
	802.11n(HT40)	38	5190	8.49	9.50	Yes
		46	5230	<b>8.56</b>	9.50	Yes
	802.11ac(VHT20)	36	5180	7.88	8.50	No
		44	5220	7.93	8.50	No
		48	5240	8.00	8.50	No
	802.11ac(VHT40)	38	5190	7.89	8.50	No
		46	5230	8.10	8.50	No
	802.11ac(VHT80)	42	5210	6.24	7.50	No
5.3 (5.25~5.35)	802.11a	52	5260	8.54	9.50	No
		60	5300	8.62	9.50	No
		64	5320	8.77	9.50	No
	802.11n(HT20)	52	5260	8.67	9.50	No
		60	5300	8.66	9.50	No
		64	5320	8.61	9.50	No
	802.11n(HT40)	54	5270	8.60	9.50	Yes
		62	5310	<b>8.80</b>	9.50	Yes
	802.11ac(VHT20)	52	5260	8.01	8.50	No
		60	5300	8.15	8.50	No
		64	5320	8.28	8.50	No
	802.11ac(VHT40)	54	5270	8.19	8.50	No
		62	5310	8.15	8.50	No
	802.11ac(VHT80)	58	5290	6.36	7.50	No
5.6 (5.47~5.725)	802.11a	100	5500	9.07	9.50	No
		116	5580	9.15	9.50	No
		140	5700	8.88	9.50	No
		144	5720	8.79	9.50	No
	802.11n(HT20)	100	5500	8.91	9.50	No
		116	5580	8.94	9.50	No
		140	5700	8.53	9.50	No
		144	5720	8.42	9.50	No
	802.11n(HT40)	102	5510	8.92	9.50	Yes
		118	5590	<b>9.19</b>	9.50	Yes

		134	5670	9.14	9.50	Yes
		142	5710	8.93	9.50	Yes
	802.11ac(VHT20)	100	5500	8.22	8.50	No
		116	5580	8.21	8.50	No
		140	5700	8.06	8.50	No
		144	5720	8.16	8.50	No
	802.11ac(VHT40)	102	5510	8.10	8.50	No
		118	5590	8.09	8.50	No
		134	5670	7.87	8.50	No
		142	5710	7.68	8.50	No
	802.11ac(VHT80)	106	5530	7.14	7.50	No
		122	5610	7.13	7.50	No
		138	5690	6.78	7.50	No
	5.8 (5.725~5.850)	802.11a	149	5745	8.60	9.50
157			5785	8.91	9.50	No
165			5825	8.67	9.50	No
802.11n(HT20)		149	5745	8.43	9.50	No
		157	5785	8.72	9.50	No
		165	5825	8.95	9.50	No
802.11n(HT40)		151	5755	8.29	9.50	Yes
		159	5795	<b>8.62</b>	9.50	Yes
802.11ac(VHT20)		149	5745	7.62	8.50	No
		157	5785	7.74	8.50	No
		165	5825	8.20	8.50	No
802.11ac(VHT40)		151	5755	7.40	8.50	No
		159	5795	7.84	8.50	No
802.11ac(VHT80)		155	5775	6.59	7.50	No



## 9 TEST EXCLUSION CONSIDERATION



-  WLAN/BT Antenna
-  WWAN Down Antenna
-  WWAN Up Antenna
-  EUT Back View

## 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	27mm	<5mm	<5mm	151mm
	Voice	33.50	2238.72	Yes	Yes	Yes	Yes	Yes	No
	Data	33.50	2238.72	Yes	Yes	Yes	Yes	Yes	No
GSM 1900	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	Voice	31.00	1258.93	Yes	Yes	Yes	Yes	Yes	No
	Data	31.00	1258.93	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 2	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 4	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	RMC	24.30	269.15	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 5	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	RMC	23.50	223.87	Yes	Yes	Yes	Yes	Yes	No
CDMA BC0	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	1xRTT RC1/RC3	24.68	293.76	Yes	Yes	Yes	Yes	Yes	No
	1xEVDO	24.68	293.76	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2	Distance to User			24.68	293.76	27mm	<5mm	<5mm	151mm
	QPSK	24.20	263.03	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	Yes	No
LTE Band 5	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	QPSK	23.50	223.87	Yes	Yes	Yes	Yes	Yes	No
LTE Band 7	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	QPSK	25.20	331.13	Yes	Yes	Yes	Yes	Yes	No
LTE Band 38	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	QPSK	25.00	316.23	Yes	Yes	Yes	Yes	Yes	No
LTE Band 41	Distance to User			<5mm	<5mm	27mm	<5mm	<5mm	151mm
	QPSK	24.80	302.00	Yes	Yes	Yes	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	152mm	<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	152mm	<5mm	
	Voice	31.00	1258.93	Yes	Yes	Yes	Yes	No	Yes
	Data	31.00	1258.93	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 2	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	RMC	24.30	269.15	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	RMC	23.50	223.87	Yes	Yes	Yes	Yes	No	Yes
CDMA BC0	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	1xRTT RC1/RC3	24.68	293.76	Yes	Yes	Yes	Yes	No	Yes
	1xEVDO	24.68	293.76	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	QPSK	24.20	263.03	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	QPSK	23.50	223.87	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	QPSK	25.20	331.13	Yes	Yes	Yes	Yes	No	Yes
LTE Band 38	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	QPSK	25.00	316.23	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User		<5mm	<5mm	<5mm	<5mm	152mm	<5mm	
	QPSK	24.80	302.00	Yes	Yes	Yes	Yes	No	Yes

## WLAN/BT Antenna

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	<5mm	52mm	<5mm	141mm
	802.11b	19.50	89.13	Yes	Yes	Yes	Yes	Yes	Yes
	802.11g	18.00	63.10	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	<5mm	52mm	<5mm	141mm
	802.11a	17.00	50.12	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	Yes	Yes	Yes
	802.11ac(VHT20)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT80)	14.00	25.12	No	No	No	No	No	No
WLAN 5.3 G	Distance to User			<5mm	<5mm	<5mm	52mm	<5mm	141mm
	802.11a	17.00	50.12	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	Yes	Yes	Yes
	802.11ac(VHT20)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT80)	15.00	31.62	No	No	No	No	No	No
WLAN 5.6 G	Distance to User			<5mm	<5mm	<5mm	52mm	<5mm	141mm
	802.11a	17.00	50.12	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	Yes	Yes	Yes
	802.11ac(VHT20)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT80)	15.00	31.62	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	<5mm	52mm	<5mm	141mm
	802.11a	17.00	50.12	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	Yes	Yes	Yes
	802.11ac(VHT20)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT80)	15.00	31.62	No	No	No	No	No	No
Bluetooth	Distance to User			<5mm	<5mm	<5mm	52mm	<5mm	141mm
	BR/EDR	12.00	15.85	Yes	Yes	Yes	Yes	Yes	Yes
	BLE	6.00	3.98	No	No	No	No	No	No

## Note:

1. 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:  

$$\left[ \frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  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  $\left[ \frac{3.0}{\sqrt{f(\text{GHz})}} \right] \cdot \text{(min. test separation distance, mm)} = \text{exclusion threshold of mW}$ .
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.  $\left[ \text{Threshold at 50 mm in step 1} + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150) \right]$  mW, at 100 MHz to 1500 MHz
  - b.  $\left[ \text{Threshold at 50 mm in step 1} + (\text{test separation distance} - 50 \text{ mm}) \cdot 10 \right]$  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  $\leq 1.2$ 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  $\leq 1.2$  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  $\leq 1.2$  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  $\leq 1.2$  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 TEST RESULT

## 10.1 GSM 850

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Level1&2	GPRS (4slots)	Left Cheek	0	128	824.20	0.17	0.156	22.49	23.50	1.262	0.197	/
	Level1&2		Left Tilt	0	128	824.20	-0.13	0.143	22.49	23.50	1.262	0.180	/
	Level1&2		Right Cheek	0	128	824.20	-0.18	0.212	22.49	23.50	1.262	<b>0.268</b>	<b>1#</b>
	Level1&2		Right Tilt	0	128	824.20	0.01	0.156	22.49	23.50	1.262	0.197	/
Down	Off	GPRS (2slots)	Left Cheek	0	190	836.60	-0.15	0.196	30.53	31.50	1.250	0.245	/
	Off		Left Tilt	0	190	836.60	0.07	0.098	30.53	31.50	1.250	0.123	/
	Off		Right Cheek	0	190	836.60	0.10	0.172	30.53	31.50	1.250	0.215	/
	Off		Right Tilt	0	190	836.60	0.11	0.077	30.53	31.50	1.250	0.096	/
<b>Body-worn Accessory</b>													
Up	Off	Voice	Front Side	15	251	848.80	-0.13	0.125	32.39	33.50	1.291	0.161	/
	Off		Back Side	15	251	848.80	-0.05	0.143	32.39	33.50	1.291	0.185	/
	Off	GPRS (2slots)	Front Side	15	190	836.60	0.09	0.145	30.53	31.50	1.250	0.181	/
	Off		Back Side	15	190	836.60	0.02	0.177	30.53	31.50	1.250	<b>0.221</b>	<b>2#</b>
Down	Off	Voice	Front Side	15	251	848.80	0.12	0.107	32.39	33.50	1.291	0.138	/
	Off		Back Side	15	251	848.80	-0.07	0.135	32.39	33.50	1.291	0.174	/
	Off	GPRS (2slots)	Front Side	15	190	836.60	-0.13	0.111	30.53	31.50	1.250	0.139	/
	Off		Back Side	15	190	836.60	0.08	0.140	30.53	31.50	1.250	0.175	/
<b>Hotspot</b>													
Up	Level4	GPRS (4slots)	Front Side	10	128	824.20	0.18	0.174	22.49	23.50	1.262	0.220	/
	Level4		Back Side	10	128	824.20	0.08	0.285	22.49	23.50	1.262	<b>0.360</b>	<b>3#</b>
	Level4		Left Edge	10	128	824.20	0.11	0.099	22.49	23.50	1.262	0.125	/
	Level4		Right Edge	10	128	824.20	-0.02	0.085	22.49	23.50	1.262	0.107	/
	Level4		Top Edge	10	128	824.20	-0.01	0.174	22.49	23.50	1.262	0.220	/
Down	Off	GPRS (2slots)	Front Side	10	190	836.60	0.00	0.119	30.53	31.50	1.250	0.149	/
	Off		Back Side	10	190	836.60	-0.10	0.214	30.53	31.50	1.250	0.268	/
	Off		Left Edge	10	190	836.60	-0.04	0.085	30.53	31.50	1.250	0.106	/
	Off		Right Edge	10	190	836.60	-0.10	0.168	30.53	31.50	1.250	0.210	/
	Off		Bottom Edge	10	190	836.60	0.00	0.129	30.53	31.50	1.250	0.161	/

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

**10.2GSM 1900**

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Level1&2	GPRS (2slots)	Left Cheek	0	810	1909.80	0.10	0.420	21.97	23.00	1.268	0.532	/
	Level1&2		Left Tilt	0	810	1909.80	-0.12	0.485	21.97	23.00	1.268	0.615	/
	Level1&2		Right Cheek	0	810	1909.80	0.11	0.640	21.97	23.00	1.268	0.811	/
	Level1&2			0	512	1850.20	-0.09	0.583	21.68	23.00	1.355	0.790	/
	Level1&2		Right Tilt	0	661	1880.00	-0.18	0.530	21.78	23.00	1.324	0.702	/
	Level1&2			0	810	1909.80	-0.03	0.731	21.97	23.00	1.268	<b>0.927</b>	<b>4#</b>
	Level1&2			0	512	1850.20	-0.08	0.631	21.68	23.00	1.355	0.855	/
	Level1&2			0	661	1880.00	0.03	0.556	21.78	23.00	1.324	0.736	/
Down	Off	GPRS (2slots)	Left Cheek	0	512	1850.20	-0.14	0.068	28.45	29.50	1.274	0.087	/
	Off		Left Tilt	0	512	1850.20	-0.17	0.035	28.45	29.50	1.274	0.045	/
	Off		Right Cheek	0	512	1850.20	0.01	0.037	28.45	29.50	1.274	0.047	/
	Off		Right Tilt	0	512	1850.20	-0.07	0.041	28.45	29.50	1.274	0.052	/
<b>Body-worn Accessory</b>													
Up	Off	Voice	Front Side	15	512	1850.20	-0.17	0.275	30.19	31.00	1.205	0.331	/
	Off		Back Side	15	512	1850.20	-0.10	0.384	30.19	31.00	1.205	0.463	/
	Off	GPRS (2slots)	Front Side	15	512	1850.20	0.08	0.405	28.45	29.50	1.274	0.516	/
	Off		Back Side	15	512	1850.20	0.09	0.540	28.45	29.50	1.274	<b>0.688</b>	<b>5#</b>
Down	Off	Voice	Front Side	15	512	1850.20	-0.09	0.092	30.19	31.00	1.205	0.111	/
	Off		Back Side	15	512	1850.20	0.16	0.184	30.19	31.00	1.205	0.222	/
	Off	GPRS (2slots)	Front Side	15	512	1850.20	-0.15	0.097	28.45	29.50	1.274	0.124	/
	Off		Back Side	15	512	1850.20	0.15	0.196	28.45	29.50	1.274	0.250	/
<b>Hotspot</b>													
Up	Level4	GPRS (1slots)	Front Side	10	810	1909.80	-0.05	0.291	27.50	28.50	1.259	0.366	/
	Level4		Back Side	10	810	1909.80	-0.12	0.408	27.50	28.50	1.259	0.514	/
	Level4		Left Edge	10	810	1909.80	0.14	0.022	27.50	28.50	1.259	0.028	/
	Level4		Right Edge	10	810	1909.80	0.15	0.060	27.50	28.50	1.259	0.076	/
	Level4		Top Edge	10	810	1909.80	0.12	0.525	27.50	28.50	1.259	<b>0.661</b>	<b>6#</b>
Down	Off	GPRS (2slots)	Front Side	10	512	1850.20	-0.15	0.148	28.45	29.50	1.274	0.188	/
	Off		Back Side	10	512	1850.20	-0.18	0.331	28.45	29.50	1.274	0.422	/
	Off		Left Edge	10	512	1850.20	0.07	0.080	28.45	29.50	1.274	0.102	/
	Off		Right Edge	10	512	1850.20	-0.05	0.029	28.45	29.50	1.274	0.037	/
	Off		Bottom Edge	10	512	1850.20	0.02	0.425	28.45	29.50	1.274	0.541	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

## 10.3WCDMA Band 2

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Level1&2	RMC	Left Cheek	0	9262	1852.40	0.18	0.300	14.08	15.00	1.236	0.371	/
	Level1&2		Left Tilt	0	9262	1852.40	-0.07	0.347	14.08	15.00	1.236	0.429	/
	Level1&2		Right Cheek	0	9262	1852.40	0.16	0.449	14.08	15.00	1.236	0.555	/
	Level1&2		Right Tilt	0	9262	1852.40	0.06	0.573	14.08	15.00	1.236	0.708	/
	Level1&2			0	9400	1880.00	-0.18	0.617	14.01	15.00	1.256	0.775	/
	Level1&2			0	9538	1907.60	0.09	0.623	13.78	15.00	1.324	<b>0.825</b>	7#
Down	Off	RMC	Left Cheek	0	9262	1852.40	-0.09	0.074	23.01	24.00	1.256	0.093	/
	Off		Left Tilt	0	9262	1852.40	-0.01	0.038	23.01	24.00	1.256	0.048	/
	Off		Right Cheek	0	9262	1852.40	0.09	0.039	23.01	24.00	1.256	0.049	/
	Off		Right Tilt	0	9262	1852.40	-0.09	0.043	23.01	24.00	1.256	0.054	/
<b>Body-worn Accessory</b>													
Up	Off	RMC	Front Side	15	9262	1852.40	0.03	0.371	23.01	24.00	1.256	0.466	/
	Off		Back Side	15	9262	1852.40	-0.09	0.528	23.01	24.00	1.256	<b>0.663</b>	8#
Down	Off	RMC	Front Side	15	9262	1852.40	-0.02	0.128	23.01	24.00	1.256	0.161	/
	Off		Back Side	15	9262	1852.40	0.05	0.315	23.01	24.00	1.256	0.396	/
<b>Hotspot</b>													
Up	Level4	RMC	Front Side	10	9262	1852.40	0.10	0.205	17.09	18.00	1.233	0.253	/
	Level4		Back Side	10	9262	1852.40	0.09	0.295	17.09	18.00	1.233	0.364	/
	Level4		Left Edge	10	9262	1852.40	-0.04	0.015	17.09	18.00	1.233	0.018	/
	Level4		Right Edge	10	9262	1852.40	0.09	0.035	17.09	18.00	1.233	0.043	/
	Level4		Top Edge	10	9262	1852.40	0.07	0.342	17.09	18.00	1.233	0.422	/
Down	Off	RMC	Front Side	10	9262	1852.40	-0.06	0.287	23.01	24.00	1.256	0.360	/
	Off		Back Side	10	9262	1852.40	-0.09	0.591	23.01	24.00	1.256	0.742	/
	Off		Left Edge	10	9262	1852.40	0.01	0.157	23.01	24.00	1.256	0.197	/
	Off		Right Edge	10	9262	1852.40	-0.14	0.056	23.01	24.00	1.256	0.070	/
	Off		Bottom Edge	10	9262	1852.40	-0.17	0.948	23.01	24.00	1.256	<b>1.191</b>	9#
	Off			10	9400	1880.00	-0.09	0.900	22.89	24.00	1.291	1.162	/
	Off			10	9538	1907.60	-0.09	0.824	22.74	24.00	1.337	1.101	/

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific SAR</b>													
Up	Level3&4	RMC	Back Side	0	9262	1852.40	-0.03	0.789	17.09	18.00	1.233	0.973	/
	Level3&4		Top Edge	0	9262	1852.40	0.00	1.320	17.09	18.00	1.233	<b>1.628</b>	10#

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)	1g 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&2	RMC	Left Cheek	0	1412	1732.40	0.07	0.293	14.28	14.80	1.127	0.330	/
	Level1&2		Left Tilt	0	1412	1732.40	0.12	0.336	14.28	14.80	1.127	0.379	/
	Level1&2		Right Cheek	0	1412	1732.40	0.07	0.463	14.28	14.80	1.127	0.522	/
	Level1&2		Right Tilt	0	1412	1732.40	0.06	0.582	14.28	14.80	1.127	<b>0.656</b>	11#
Down	Off	RMC	Left Cheek	0	1412	1732.40	0.09	0.097	23.37	24.30	1.239	0.120	/
	Off		Left Tilt	0	1412	1732.40	0.02	0.070	23.37	24.30	1.239	0.087	/
	Off		Right Cheek	0	1412	1732.40	-0.05	0.069	23.37	24.30	1.239	0.085	/
	Off		Right Tilt	0	1412	1732.40	0.12	0.071	23.37	24.30	1.239	0.088	/
<b>Body-worn Accessory</b>													
Up	Off	RMC	Front Side	15	1412	1732.40	0.10	0.379	23.37	24.30	1.239	0.470	/
	Off		Back Side	15	1412	1732.40	-0.08	0.447	23.37	24.30	1.239	<b>0.554</b>	12#
Down	Off	RMC	Front Side	15	1412	1732.40	-0.18	0.162	23.37	24.30	1.239	0.201	/
	Off		Back Side	15	1412	1732.40	-0.06	0.281	23.37	24.30	1.239	0.348	/
<b>Hotspot</b>													
Up	Level4	RMC	Front Side	10	1412	1732.40	-0.05	0.179	16.29	17.20	1.233	0.221	/
	Level4		Back Side	10	1412	1732.40	0.05	0.200	16.29	17.20	1.233	0.247	/
	Level4		Left Edge	10	1412	1732.40	0.01	0.015	16.29	17.20	1.233	0.018	/
	Level4		Right Edge	10	1412	1732.40	0.11	0.026	16.29	17.20	1.233	0.032	/
	Level4		Top Edge	10	1412	1732.40	0.10	0.246	16.29	17.20	1.233	0.303	/
Down	Off	RMC	Front Side	10	1412	1732.40	-0.04	0.287	23.37	24.30	1.239	0.356	/
	Off		Back Side	10	1412	1732.40	-0.06	0.489	23.37	24.30	1.239	0.606	/
	Off		Left Edge	10	1412	1732.40	0.10	0.113	23.37	24.30	1.239	0.140	/
	Off		Right Edge	10	1412	1732.40	0.08	0.060	23.37	24.30	1.239	0.074	/
	Off		Bottom Edge	10	1412	1732.40	0.10	0.650	23.37	24.30	1.239	<b>0.805</b>	13#
	Off			10	1312	1712.40	-0.18	0.564	23.05	24.30	1.334	0.752	/
	Off			10	1513	1752.60	-0.17	0.625	23.20	24.30	1.288	0.805	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific SAR</b>													
Up	Level3&4	RMC	Back Side	0	1412	1732.40	-0.16	0.598	16.29	17.20	1.233	0.737	/
	Level3&4		Top Edge	0	1412	1732.40	-0.08	0.794	16.29	17.20	1.233	<b>0.979</b>	14#
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)	1g 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	4233	846.60	0.03	0.539	22.44	23.50	1.276	0.688	/	
	Off		Left Tilt	0	4233	846.60	-0.01	0.376	22.44	23.50	1.276	0.480	/	
	Off		Right Cheek		0	4233	846.60	-0.01	0.694	22.44	23.50	1.276	0.886	/
	Off				0	4132	826.40	-0.01	0.681	22.40	23.50	1.288	0.877	/
	Off				0	4182	836.40	0.02	0.717	22.39	23.50	1.291	<b>0.926</b>	15#
	Off		Right Tilt	0	4233	846.60	0.03	0.576	22.44	23.50	1.276	0.735	/	
Up	Level2	RMC	Left Cheek	0	4233	846.60	0.14	0.219	19.45	20.50	1.274	0.279	/	
	Level2		Left Tilt	0	4233	846.60	-0.06	0.154	19.45	20.50	1.274	0.196	/	
	Level2		Right Cheek	0	4233	846.60	-0.06	0.282	19.45	20.50	1.274	0.359	/	
	Level2		Right Tilt	0	4233	846.60	0.09	0.230	19.45	20.50	1.274	0.293	/	
Down	Off	RMC	Left Cheek	0	4233	846.60	0.09	0.144	22.44	23.50	1.276	0.184	/	
	Off		Left Tilt	0	4233	846.60	0.14	0.080	22.44	23.50	1.276	0.102	/	
	Off		Right Cheek	0	4233	846.60	0.04	0.119	22.44	23.50	1.276	0.152	/	
	Off		Right Tilt	0	4233	846.60	0.12	0.065	22.44	23.50	1.276	0.083	/	
<b>Body-worn Accessory</b>														
Up	Off	RMC	Front Side	15	4233	846.60	-0.09	0.091	22.44	23.50	1.276	0.116	/	
	Off		Back Side	15	4233	846.60	-0.01	0.108	22.44	23.50	1.276	<b>0.138</b>	16#	
Down	Off	RMC	Front Side	15	4233	846.60	-0.12	0.087	22.44	23.50	1.276	0.111	/	
	Off		Back Side	15	4233	846.60	0.08	0.084	22.44	23.50	1.276	0.107	/	
<b>Hotspot</b>														
Up	Off	RMC	Front Side	10	4233	846.60	-0.18	0.125	22.44	23.50	1.276	0.160	/	
	Off		Back Side	10	4233	846.60	-0.13	0.196	22.44	23.50	1.276	0.250	/	
	Off		Left Edge	10	4233	846.60	-0.13	0.081	22.44	23.50	1.276	0.103	/	
	Off		Right Edge	10	4233	846.60	-0.15	0.059	22.44	23.50	1.276	0.075	/	
	Off		Top Edge	10	4233	846.60	0.02	0.128	22.44	23.50	1.276	0.163	/	
Down	Off	RMC	Front Side	10	4233	846.60	0.02	0.137	22.44	23.50	1.276	0.175	/	
	Off		Back Side	10	4233	846.60	-0.04	0.280	22.44	23.50	1.276	<b>0.357</b>	17#	
	Off		Left Edge	10	4233	846.60	-0.18	0.049	22.44	23.50	1.276	0.063	/	
	Off		Right Edge	10	4233	846.60	-0.15	0.112	22.44	23.50	1.276	0.143	/	
	Off		Bottom Edge	10	4233	846.60	0.03	0.139	22.44	23.50	1.276	0.177	/	
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

**10.6CDMA BC0**

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
Up	Off	1xRTT (RC3 SO55)	Left Cheek	0	384	836.52	0.03	0.602	23.68	24.68	1.259	0.758	/
	Off		Left Tilt	0	384	836.52	-0.04	0.462	23.68	24.68	1.259	0.582	/
	Off		Right Cheek	0	384	836.52	-0.04	0.736	23.68	24.68	1.259	0.927	/
	Off			0	1013	824.70	-0.12	0.657	23.57	24.68	1.291	0.848	/
	Off			0	777	848.31	-0.10	0.765	23.54	24.68	1.300	<b>0.995</b>	18#
	Off		Right Tilt	0	384	836.52	-0.04	0.547	23.68	24.68	1.259	0.689	/
Down	Off	1xRTT (RC3 SO55)	Left Cheek	0	384	836.52	0.14	0.109	23.68	24.68	1.259	0.137	/
	Off		Left Tilt	0	384	836.52	0.09	0.060	23.68	24.68	1.259	0.075	/
	Off		Right Cheek	0	384	836.52	0.10	0.094	23.68	24.68	1.259	0.118	/
	Off		Right Tilt	0	384	836.52	0.16	0.051	23.68	24.68	1.259	0.064	/
<b>Body-worn Accessory</b>													
Up	Off	1xRTT (RC3 SO32)	Front Side	15	384	836.52	-0.07	0.096	23.64	24.68	1.271	0.122	/
	Off		Back Side	15	384	836.52	0.00	0.118	23.64	24.68	1.271	<b>0.150</b>	19#
Down	Off	1xRTT (RC3 SO32)	Front Side	15	384	836.52	-0.02	0.097	23.64	24.68	1.271	0.123	/
	Off		Back Side	15	384	836.52	0.04	0.105	23.64	24.68	1.271	0.133	/
<b>Hotspot</b>													
Up	Off	EVDO Rel.0	Front Side	10	384	836.52	0.00	0.141	23.64	24.68	1.271	0.179	/
	Off		Back Side	10	384	836.52	-0.02	0.204	23.64	24.68	1.271	<b>0.259</b>	20#
	Off		Left Edge	10	384	836.52	0.12	0.080	23.64	24.68	1.271	0.102	/
	Off		Right Edge	10	384	836.52	-0.09	0.048	23.64	24.68	1.271	0.061	/
	Off		Top Edge	10	384	836.52	-0.04	0.162	23.64	24.68	1.271	0.206	/
Down	Off	EVDO Rel.0	Front Side	10	384	836.52	0.10	0.095	23.64	24.68	1.271	0.121	/
	Off		Back Side	10	384	836.52	-0.02	0.189	23.64	24.68	1.271	0.240	/
	Off		Left Edge	10	384	836.52	0.06	0.082	23.64	24.68	1.271	0.104	/
	Off		Right Edge	10	384	836.52	0.02	0.143	23.64	24.68	1.271	0.182	/
	Off		Bottom Edge	10	384	836.52	-0.18	0.102	23.64	24.68	1.271	0.130	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

### 10.7LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	level1	QPSK	Left Cheek	0	18900	1880	1	Low	0.00	0.460	15.56	16.20	1.159	0.533	/
	level1			0	19100	1900	50	Low	-0.11	0.479	15.47	16.20	1.183	0.567	/
	level1		Left Tilt	0	18900	1880	1	Low	-0.15	0.451	15.56	16.20	1.159	0.523	/
	level1			0	19100	1900	50	Low	-0.12	0.482	15.47	16.20	1.183	0.570	/
	level1		Right Cheek	0	18900	1880	1	Low	-0.06	0.605	15.56	16.20	1.159	0.701	/
	level1			0	19100	1900	50	Low	0.15	0.643	15.47	16.20	1.183	0.761	/
	level1		Right Tilt	0	18900	1880	1	Low	0.02	0.811	15.56	16.20	1.159	0.940	/
	level1			0	18700	1860	1	Low	0.07	0.777	15.52	16.20	1.169	0.909	/
	level1			0	19100	1900	1	Low	-0.04	0.843	15.51	16.20	1.172	<b>0.988</b>	<b>21#</b>
	level1			0	19100	1900	50	Low	0.02	0.854	15.57	16.20	1.156	0.987	/
	level1			0	18700	1860	50	Low	0.01	0.792	15.44	16.20	1.191	0.943	/
	level1			0	18900	1880	50	Low	0.00	0.816	15.44	16.20	1.191	0.972	/
level1	0	18700	1860	100	Low	-0.06	0.796	15.31	16.20	1.227	0.977	/			
Up	level2	QPSK	Left Cheek	0	18900	1880	1	Low	-0.12	0.163	12.38	13.50	1.294	0.211	/
	level2			0	19100	1900	50	Low	-0.04	0.172	12.34	13.50	1.306	0.225	/
	level2		Left Tilt	0	18900	1880	1	Low	-0.07	0.218	12.38	13.50	1.294	0.282	/
	level2			0	19100	1900	50	Low	0.02	0.226	12.34	13.50	1.306	0.295	/
	level2		Right Cheek	0	18900	1880	1	Low	-0.03	0.315	12.38	13.50	1.294	0.408	/
	level2			0	19100	1900	50	Low	0.00	0.324	12.34	13.50	1.306	0.423	/
	level2		Right Tilt	0	18900	1880	1	Low	-0.09	0.443	12.38	13.50	1.294	0.573	/
	level2			0	19100	1900	50	Low	0.05	0.457	12.34	13.50	1.306	0.597	/
Down	Off	QPSK	Left Cheek	0	18900	1880	1	Low	0.13	0.069	23.32	24.20	1.225	0.084	/
	Off			0	18700	1860	50	Low	0.01	0.057	22.17	23.20	1.268	0.072	/
	Off		Left Tilt	0	18900	1880	1	Low	-0.09	0.063	23.32	24.20	1.225	0.077	/
	Off			0	18700	1860	50	Low	-0.06	0.049	22.17	23.20	1.268	0.062	/
	Off		Right Cheek	0	18900	1880	1	Low	0.04	0.053	23.32	24.20	1.225	0.065	/
	Off			0	18700	1860	50	Low	0.13	0.037	22.17	23.20	1.268	0.047	/
	Off		Right Tilt	0	18900	1880	1	Low	0.16	0.083	23.32	24.20	1.225	0.102	/
	Off			0	18700	1860	50	Low	-0.03	0.051	22.17	23.20	1.268	0.065	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	18900	1880	1	Low	-0.12	0.423	23.32	24.20	1.225	0.518	/
	Off			15	18700	1860	50	High	-0.08	0.319	22.17	23.20	1.268	0.404	/
	Off		Back Side	15	18900	1880	1	Low	0.12	0.597	23.32	24.20	1.225	<b>0.731</b>	<b>22#</b>
	Off			15	18700	1860	50	High	-0.03	0.478	22.17	23.20	1.268	0.606	/
Down	Off	QPSK	Front Side	15	18900	1880	1	Low	0.15	0.223	23.32	24.20	1.225	0.273	/
	Off			15	18700	1860	50	Low	0.07	0.167	22.17	23.20	1.268	0.212	/
	Off		Back Side	15	18900	1880	1	Low	0.09	0.429	23.32	24.20	1.225	0.525	/
	Off			15	18700	1860	50	Low	0.06	0.315	22.17	23.20	1.268	0.399	/
<b>Hotspot</b>															

Up	Level4	QPSK	Front Side	10	18900	1880	1	Low	0.03	0.266	18.49	19.50	1.262	0.336	/
	Level4			10	19100	1900	50	Low	0.05	0.241	18.39	19.50	1.291	0.311	/
	Level4		Back Side	10	18900	1880	1	Low	0.10	0.399	18.49	19.50	1.262	0.503	/
	Level4			10	19100	1900	50	Low	0.01	0.375	18.39	19.50	1.291	0.484	/
	Level4		Left Edge	10	18900	1880	1	Low	0.05	0.021	18.49	19.50	1.262	0.026	/
	Level4			10	19100	1900	50	Low	-0.06	0.018	18.39	19.50	1.291	0.023	/
	Level4		Right Edge	10	18900	1880	1	Low	-0.08	0.045	18.49	19.50	1.262	0.057	/
	Level4			10	19100	1900	50	Low	0.15	0.042	18.39	19.50	1.291	0.054	/
	Level4		Top Edge	10	18900	1880	1	Low	0.01	0.519	18.49	19.50	1.262	0.655	/
	Level4			10	19100	1900	50	Low	-0.03	0.487	18.39	19.50	1.291	0.629	/
Down	Off	QPSK	Front Side	10	18900	1880	1	Low	0.06	0.375	23.32	24.20	1.225	0.459	/
	Off			10	18700	1860	50	Low	0.01	0.274	22.17	23.20	1.268	0.347	/
	Off		Back Side	10	18900	1880	1	Low	-0.03	0.702	23.32	24.20	1.225	0.860	/
	Off			10	18700	1860	1	Low	-0.13	0.697	23.14	24.20	1.276	0.890	/
	Off			10	19100	1900	1	Low	0.18	0.726	23.05	24.20	1.303	0.946	/
	Off			10	18700	1860	50	Low	-0.01	0.532	22.17	23.20	1.268	0.674	/
	Off		Left Edge	10	18700	1860	100	Low	0.12	0.508	22.04	23.20	1.306	0.664	/
	Off			10	18900	1880	1	Low	-0.05	0.151	23.32	24.20	1.225	0.185	/
	Off		Right Edge	10	18700	1860	50	Low	-0.11	0.114	22.17	23.20	1.268	0.145	/
	Off			10	18900	1880	1	Low	-0.09	0.097	23.32	24.20	1.225	0.119	/
	Off		Bottom Edge	10	18700	1860	50	Low	-0.03	0.076	22.17	23.20	1.268	0.096	/
	Off			10	18900	1880	1	Low	0.10	0.931	23.32	24.20	1.225	<b>1.140</b>	<b>23#</b>
	Off			10	18700	1860	1	Low	-0.01	0.890	23.14	24.20	1.276	1.136	/
	Off			10	19100	1900	1	Low	-0.12	0.866	23.05	24.20	1.303	1.129	/
	Off			10	18700	1860	50	Low	0.10	0.754	22.17	23.20	1.268	0.956	/
	Off			10	18900	1880	50	Low	0.12	0.735	22.13	23.20	1.279	0.940	/
	Off			10	19100	1900	50	Low	-0.08	0.720	22.05	23.20	1.303	0.938	/
	Off			10	18700	1860	100	Low	-0.01	0.692	22.04	23.20	1.306	0.904	/

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific SAR</b>															
Up	Level3&4	QPSK	Back Side	0	18900	1880	1	Low	0.03	0.997	18.49	19.50	1.262	1.258	/
	Level3&4			0	19100	1900	50	Low	-0.15	0.968	18.39	19.50	1.291	1.250	/
	Level3&4		Top Edge	0	18900	1880	1	Low	-0.05	1.470	18.49	19.50	1.262	<b>1.855</b>	<b>24#</b>
	Level3&4			0	19100	1900	50	Low	0.03	1.430	18.39	19.50	1.291	1.846	/

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

**10.8LTE Band 4 (20MHz Bandwidth)**

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	level1&2	QPSK	Left Cheek	0	20175	1732.5	1	High	-0.05	0.241	13.81	14.50	1.172	0.282	/
	level1&2			0	20300	1745	50	High	0.00	0.264	13.62	14.50	1.225	0.323	/
	level1&2		Left Tilt	0	20175	1732.5	1	High	0.06	0.298	13.81	14.50	1.172	0.349	/
	level1&2			0	20300	1745	50	High	0.02	0.310	13.62	14.50	1.225	0.380	/
	level1&2		Right Cheek	0	20175	1732.5	1	High	-0.14	0.345	13.81	14.50	1.172	0.404	/
	level1&2			0	20300	1745	50	High	-0.12	0.465	13.62	14.50	1.225	0.569	/
	level1&2		Right Tilt	0	20175	1732.5	1	High	-0.03	0.616	13.81	14.50	1.172	0.722	/
	level1&2			0	20300	1745	50	High	-0.08	0.645	13.62	14.50	1.225	<b>0.790</b>	25#
Down	Off	QPSK	Left Cheek	0	20175	1732.5	1	High	0.01	0.120	23.77	24.50	1.183	0.142	/
	Off			0	20175	1732.5	50	High	0.07	0.087	22.52	23.50	1.253	0.109	/
	Off		Left Tilt	0	20175	1732.5	1	High	0.04	0.075	23.77	24.50	1.183	0.089	/
	Off			0	20175	1732.5	50	High	-0.04	0.057	22.52	23.50	1.253	0.071	/
	Off		Right Cheek	0	20175	1732.5	1	High	0.09	0.103	23.77	24.50	1.183	0.122	/
	Off			0	20175	1732.5	50	High	0.14	0.078	22.52	23.50	1.253	0.098	/
	Off		Right Tilt	0	20175	1732.5	1	High	-0.10	0.070	23.77	24.50	1.183	0.083	/
	Off			0	20175	1732.5	50	High	-0.06	0.054	22.52	23.50	1.253	0.068	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	20175	1732.5	1	High	0.15	0.445	23.77	24.50	1.183	0.526	/
	Off			15	20175	1732.5	50	High	0.00	0.330	22.52	23.50	1.253	0.414	/
	Off		Back Side	15	20175	1732.5	1	High	0.05	0.508	23.77	24.50	1.183	<b>0.601</b>	26#
	Off			15	20175	1732.5	50	High	-0.12	0.364	22.52	23.50	1.253	0.456	/
Down	Off	QPSK	Front Side	15	20175	1732.5	1	High	-0.06	0.223	23.77	24.50	1.183	0.264	/
	Off			15	20175	1732.5	50	High	0.08	0.159	22.52	23.50	1.253	0.199	/
	Off		Back Side	15	20175	1732.5	1	High	-0.11	0.344	23.77	24.50	1.183	0.407	/
	Off			15	20175	1732.5	50	High	0.14	0.252	22.52	23.50	1.253	0.316	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	20175	1732.5	1	High	0.14	0.293	17.87	18.60	1.183	0.347	/
	Level4			10	20300	1745	50	High	-0.02	0.308	17.61	18.60	1.256	0.387	/
	Level4		Back Side	10	20175	1732.5	1	High	0.06	0.348	17.87	18.60	1.183	0.412	/
	Level4			10	20300	1745	50	High	0.06	0.363	17.61	18.60	1.256	0.456	/
	Level4		Left Edge	10	20175	1732.5	1	High	0.10	0.039	17.87	18.60	1.183	0.046	/
	Level4			10	20300	1745	50	High	0.06	0.042	17.61	18.60	1.256	0.053	/
	Level4		Right Edge	10	20175	1732.5	1	High	-0.07	0.049	17.87	18.60	1.183	0.058	/
	Level4			10	20300	1745	50	High	0.14	0.068	17.61	18.60	1.256	0.085	/
	Level4		Top Edge	10	20175	1732.5	1	High	0.16	0.456	17.87	18.60	1.183	0.539	/
	Level4			10	20300	1745	50	High	0.16	0.476	17.61	18.60	1.256	0.598	/
Down	Off	QPSK	Front Side	10	20175	1732.5	1	High	0.12	0.330	23.77	24.50	1.183	0.390	/
	Off			10	20175	1732.5	50	High	-0.04	0.247	22.52	23.50	1.253	0.310	/
	Off		Back Side	10	20175	1732.5	1	High	-0.05	0.545	23.77	24.50	1.183	0.645	/

	Off		Left Edge	10	20175	1732.5	50	High	0.03	0.393	22.52	23.50	1.253	0.492	/
	Off			10	20175	1732.5	1	High	-0.09	0.148	23.77	24.50	1.183	0.175	/
	Off		10	20175	1732.5	50	High	0.17	0.116	22.52	23.50	1.253	0.145	/	
	Off		Right Edge	10	20175	1732.5	1	High	-0.10	0.079	23.77	24.50	1.183	0.093	/
	Off			10	20175	1732.5	50	High	0.00	0.057	22.52	23.50	1.253	0.071	/
	Off		Bottom Edge	10	20175	1732.5	1	High	-0.18	0.550	23.77	24.50	1.183	<b>0.651</b>	<b>27#</b>
	Off			10	20175	1732.5	50	High	0.04	0.418	22.52	23.50	1.253	0.524	/

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific SAR</b>															
Up	Level3&4	QPSK	Front Side	0	20175	1732.5	1	High	-0.10	1.100	17.87	18.60	1.183	1.301	/
	Level3&4			0	20300	1745	50	High	0.03	1.080	17.61	18.60	1.256	1.357	/
	Level3&4		Back Side	0	20175	1732.5	1	High	0.08	1.020	17.87	18.60	1.183	1.207	/
	Level3&4			0	20300	1745	50	High	0.16	0.980	17.61	18.60	1.256	1.231	/
	Level3&4		Top Edge	0	20175	1732.5	1	High	-0.14	1.120	17.87	18.60	1.183	1.325	/
	Level3&4			0	20300	1745	50	High	-0.05	1.120	17.61	18.60	1.256	<b>1.407</b>	<b>28#</b>

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

### 10.9LTE Band 5 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Off	QPSK	Left Cheek	0	20600	844	1	High	-0.09	0.457	22.79	23.50	1.178	0.538	/
	Off			0	20600	844	25	High	0.02	0.373	21.53	22.50	1.250	0.466	/
	Off		Left Tilt	0	20600	844	1	High	0.01	0.404	22.79	23.50	1.178	0.476	/
	Off			0	20600	844	25	High	0.02	0.322	21.53	22.50	1.250	0.403	/
	Off		Right Cheek	0	20600	844	1	High	0.01	0.534	22.79	23.50	1.178	0.629	/
	Off			0	20600	844	25	High	0.00	0.537	21.53	22.50	1.250	0.671	/
	Off		Right Tilt	0	20600	844	1	High	0.02	0.720	22.79	23.50	1.178	<b>0.848</b>	29#
	Off			0	20450	829	1	High	-0.12	0.652	22.55	23.50	1.245	0.811	/
	Off			0	20525	836.5	1	High	-0.05	0.578	22.71	23.50	1.199	0.693	/
	Off			0	20600	844	25	High	0.00	0.589	21.53	22.50	1.250	0.736	/
Off	0	20600	844	50	High	0.07	0.575	21.49	22.50	1.262	0.726	/			
Up	level2	QPSK	Left Cheek	0	20450	829	1	Low	0.09	0.205	19.09	20.00	1.233	0.253	/
	level2			0	20600	844	25	High	-0.08	0.198	19.03	20.00	1.250	0.248	/
	level2		Left Tilt	0	20450	829	1	Low	0.10	0.182	19.09	20.00	1.233	0.224	/
	level2			0	20600	844	25	High	0.13	0.170	19.03	20.00	1.250	0.213	/
	level2		Right Cheek	0	20450	829	1	Low	0.09	0.240	19.09	20.00	1.233	0.296	/
	level2			0	20600	844	25	High	-0.10	0.228	19.03	20.00	1.250	0.285	/
	level2		Right Tilt	0	20450	829	1	Low	-0.16	0.324	19.09	20.00	1.233	0.400	/
	level2			0	20600	844	25	High	-0.11	0.313	19.03	20.00	1.250	0.391	/
Down	Off	QPSK	Left Cheek	0	20600	844	1	High	-0.17	0.103	22.79	23.50	1.178	0.121	/
	Off			0	20600	844	25	High	-0.01	0.072	21.53	22.50	1.250	0.090	/
	Off		Left Tilt	0	20600	844	1	High	-0.09	0.050	22.79	23.50	1.178	0.059	/
	Off			0	20600	844	25	High	-0.10	0.035	21.53	22.50	1.250	0.044	/
	Off		Right Cheek	0	20600	844	1	High	-0.03	0.118	22.79	23.50	1.178	0.139	/
	Off			0	20600	844	25	High	-0.12	0.098	21.53	22.50	1.250	0.123	/
	Off		Right Tilt	0	20600	844	1	High	-0.14	0.073	22.79	23.50	1.178	0.086	/
	Off			0	20600	844	25	High	-0.13	0.052	21.53	22.50	1.250	0.065	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	20600	844	1	High	0.08	0.093	22.79	23.50	1.178	0.110	/
	Off			15	20600	844	25	High	-0.05	0.067	21.53	22.50	1.250	0.084	/
	Off		Back Side	15	20600	844	1	High	-0.05	0.117	22.79	23.50	1.178	<b>0.138</b>	30#
	Off			15	20600	844	25	High	0.18	0.089	21.53	22.50	1.250	0.111	/
Down	Off	QPSK	Front Side	15	20600	844	1	High	0.11	0.077	22.79	23.50	1.178	0.091	/
	Off			15	20600	844	25	High	-0.05	0.055	21.53	22.50	1.250	0.069	/
	Off		Back Side	15	20600	844	1	High	0.02	0.096	22.79	23.50	1.178	0.113	/
	Off			15	20600	844	25	High	-0.09	0.072	21.53	22.50	1.250	0.090	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	20600	844	1	High	-0.04	0.122	22.79	23.50	1.178	0.144	/
	Off			10	20600	844	25	High	0.13	0.084	21.53	22.50	1.250	0.105	/



	Off		Back Side	10	20600	844	1	High	-0.06	0.227	22.79	23.50	1.178	<b>0.267</b>	31#
	Off			10	20600	844	25	High	-0.04	0.151	21.53	22.50	1.250	0.189	/
	Off		Left Edge	10	20600	844	1	High	-0.11	0.117	22.79	23.50	1.178	0.138	/
	Off			10	20600	844	25	High	0.03	0.088	21.53	22.50	1.250	0.110	/
	Off		Right Edge	10	20600	844	1	High	-0.10	0.098	22.79	23.50	1.178	0.116	/
	Off			10	20600	844	25	High	0.12	0.075	21.53	22.50	1.250	0.094	/
	Off		Top Edge	10	20600	844	1	High	-0.03	0.137	22.79	23.50	1.178	0.161	/
	Off			10	20600	844	25	High	-0.12	0.099	21.53	22.50	1.250	0.124	/
Down	Off	QPSK	Front Side	10	20600	844	1	High	-0.15	0.106	22.79	23.50	1.178	0.125	/
	Off			10	20600	844	25	High	-0.01	0.077	21.53	22.50	1.250	0.096	/
	Off		Back Side	10	20600	844	1	High	0.02	0.204	22.79	23.50	1.178	0.240	/
	Off			10	20600	844	25	High	-0.11	0.139	21.53	22.50	1.250	0.174	/
	Off		Left Edge	10	20600	844	1	High	0.00	0.079	22.79	23.50	1.178	0.093	/
	Off			10	20600	844	25	High	0.14	0.058	21.53	22.50	1.250	0.073	/
	Off		Right Edge	10	20600	844	1	High	-0.03	0.171	22.79	23.50	1.178	0.201	/
	Off			10	20600	844	25	High	0.02	0.137	21.53	22.50	1.250	0.171	/
	Off		Bottom Edge	10	20600	844	1	High	-0.09	0.144	22.79	23.50	1.178	0.170	/
	Off			10	20600	844	25	High	0.16	0.102	21.53	22.50	1.250	0.128	/

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

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1	QPSK	Left Cheek	0	21100	2535	1	Low	0.11	0.197	15.43	16.70	1.340	0.264	/
	Level1			0	21100	2535	50	Low	0.15	0.196	15.41	16.70	1.346	0.264	/
	Level1		Left Tilt	0	21100	2535	1	Low	-0.03	0.297	15.43	16.70	1.340	0.398	/
	Level1			0	21100	2535	50	Low	-0.11	0.290	15.41	16.70	1.346	0.390	/
	Level1		Right Cheek	0	21100	2535	1	Low	-0.17	0.391	15.43	16.70	1.340	0.524	/
	Level1			0	21100	2535	50	Low	0.12	0.393	15.41	16.70	1.346	0.529	/
	Level1		Right Tilt	0	21100	2535	1	Low	-0.11	0.511	15.43	16.70	1.340	0.685	/
	Level1			0	21100	2535	50	Low	-0.11	0.512	15.41	16.70	1.346	<b>0.689</b>	32#
Up	Level2	QPSK	Left Cheek	0	21100	2535	1	Low	-0.16	0.125	13.43	14.70	1.340	0.167	/
	Level2			0	20850	2510	50	High	-0.01	0.126	13.45	14.70	1.334	0.168	/
	Level2		Left Tilt	0	21100	2535	1	Low	-0.05	0.187	13.43	14.70	1.340	0.251	/
	Level2			0	20850	2510	50	High	-0.10	0.191	13.45	14.70	1.334	0.255	/
	Level2		Right Cheek	0	21100	2535	1	Low	0.06	0.252	13.43	14.70	1.340	0.338	/
	Level2			0	20850	2510	50	High	0.17	0.253	13.45	14.70	1.334	0.337	/
	Level2		Right Tilt	0	21100	2535	1	Low	0.07	0.329	13.43	14.70	1.340	0.441	/
	Level2			0	20850	2510	50	High	0.17	0.332	13.45	14.70	1.334	0.443	/
Down	Off	QPSK	Left Cheek	0	21100	2535	1	Low	-0.09	0.055	24.28	25.20	1.236	0.068	/
	Off			0	20850	2510	50	Low	-0.06	0.045	23.30	24.20	1.230	0.055	/
	Off		Left Tilt	0	21100	2535	1	Low	-0.15	0.041	24.28	25.20	1.236	0.051	/
	Off			0	20850	2510	50	Low	0.18	0.032	23.30	24.20	1.230	0.039	/
	Off		Right Cheek	0	21100	2535	1	Low	-0.04	0.211	24.28	25.20	1.236	0.261	/
	Off			0	20850	2510	50	Low	0.00	0.148	23.30	24.20	1.230	0.182	/
	Off		Right Tilt	0	21100	2535	1	Low	-0.17	0.122	24.28	25.20	1.236	0.151	/
	Off			0	20850	2510	50	Low	0.18	0.096	23.30	24.20	1.230	0.118	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	21100	2535	1	Low	0.11	0.288	24.28	25.20	1.236	0.356	/
	Off			15	20850	2510	50	Low	0.09	0.227	23.30	24.20	1.230	0.279	/
	Off		Back Side	15	21100	2535	1	Low	0.05	0.634	24.28	25.20	1.236	<b>0.784</b>	33#
	Off			15	20850	2510	50	Low	0.09	0.493	23.30	24.20	1.230	0.607	/
Down	Off	QPSK	Front Side	15	21100	2535	1	Low	-0.02	0.136	24.28	25.20	1.236	0.168	/
	Off			15	20850	2510	50	Low	0.13	0.102	23.30	24.20	1.230	0.125	/
	Off		Back Side	15	21100	2535	1	Low	-0.13	0.225	24.28	25.20	1.236	0.278	/
	Off			15	20850	2510	50	Low	-0.06	0.172	23.30	24.20	1.230	0.212	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	21100	2535	1	Low	0.18	0.121	18.50	19.70	1.318	0.160	/
	Level4			10	21100	2535	50	Low	0.12	0.135	18.46	19.70	1.330	0.180	/
	Level4		Back Side	10	21100	2535	1	Low	-0.12	0.132	18.50	19.70	1.318	0.174	/
	Level4			10	21100	2535	50	Low	0.17	0.143	18.46	19.70	1.330	0.190	/
	Level4		Left Edge	10	21100	2535	1	Low	-0.07	0.014	18.50	19.70	1.318	0.018	/

	Level4		Right Edge	10	21100	2535	50	Low	0.03	0.016	18.46	19.70	1.330	0.021	/	
	Level4			10	21100	2535	1	Low	0.14	0.110	18.50	19.70	1.318	0.145	/	
	Level4			10	21100	2535	50	Low	0.05	0.121	18.46	19.70	1.330	0.161	/	
	Level4			Top Edge	10	21100	2535	1	Low	0.14	0.323	18.50	19.70	1.318	0.426	/
	Level4				10	21100	2535	50	Low	-0.16	0.364	18.46	19.70	1.330	0.484	/
Down	Off	QPSK	Front Side	10	21100	2535	1	Low	-0.03	0.279	24.28	25.20	1.236	0.345	/	
	Off			10	20850	2510	50	Low	-0.10	0.257	23.30	24.20	1.230	0.316	/	
	Off		Back Side	10	21100	2535	1	Low	0.04	0.424	24.28	25.20	1.236	<b>0.524</b>	34#	
	Off			10	20850	2510	50	Low	0.03	0.332	23.30	24.20	1.230	0.408	/	
	Off		Left Edge	10	21100	2535	1	Low	0.10	0.143	24.28	25.20	1.236	0.177	/	
	Off			10	20850	2510	50	Low	-0.08	0.110	23.30	24.20	1.230	0.135	/	
	Off		Right Edge	10	21100	2535	1	Low	0.12	0.063	24.28	25.20	1.236	0.078	/	
	Off			10	20850	2510	50	Low	-0.10	0.048	23.30	24.20	1.230	0.059	/	
	Off		Bottom Edge	10	21100	2535	1	Low	-0.09	0.337	24.28	25.20	1.236	0.417	/	
	Off			10	20850	2510	50	Low	-0.04	0.295	23.30	24.20	1.230	0.363	/	

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific SAR</b>															
Up	Level3&4	QPSK	Top Edge	0	21100	2535	1	Low	0.02	0.628	18.50	19.70	1.318	0.828	/
	Level3&4			0	21100	2535	50	Low	0.09	0.663	18.46	19.70	1.330	<b>0.882</b>	35#

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

### 10.11 LTE Band 38 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1&2	QPSK	Left Cheek	0	38150	2610	1	High	0.08	0.140	17.66	18.50	1.213	0.170	/
	Level1&2			0	38150	2610	50	High	-0.17	0.127	17.25	18.50	1.334	0.169	/
	Level1&2		Left Tilt	0	38150	2610	1	High	-0.10	0.191	17.66	18.50	1.213	0.232	/
	Level1&2			0	38150	2610	50	High	0.10	0.183	17.25	18.50	1.334	0.244	/
	Level1&2		Right Cheek	0	38150	2610	1	High	-0.15	0.305	17.66	18.50	1.213	0.370	/
	Level1&2			0	38150	2610	50	High	-0.12	0.296	17.25	18.50	1.334	0.395	/
	Level1&2		Right Tilt	0	38150	2610	1	High	-0.13	0.394	17.66	18.50	1.213	0.478	/
	Level1&2			0	38150	2610	50	High	0.17	0.382	17.25	18.50	1.334	<b>0.509</b>	36#
Down	Off	QPSK	Left Cheek	0	37850	2580	1	High	0.08	0.029	24.16	25.00	1.213	0.035	/
	Off			0	38000	2595	50	High	-0.10	0.022	22.91	24.00	1.285	0.028	/
	Off		Left Tilt	0	37850	2580	1	High	-0.11	0.032	24.16	25.00	1.213	0.039	/
	Off			0	38000	2595	50	High	0.15	0.026	22.91	24.00	1.285	0.033	/
	Off		Right Cheek	0	37850	2580	1	High	-0.05	0.158	24.16	25.00	1.213	0.192	/
	Off			0	38000	2595	50	High	0.13	0.119	22.91	24.00	1.285	0.153	/
	Off		Right Tilt	0	37850	2580	1	High	0.06	0.087	24.16	25.00	1.213	0.106	/
	Off			0	38000	2595	50	High	-0.13	0.070	22.91	24.00	1.285	0.090	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	37850	2580	1	High	0.12	0.167	24.16	25.00	1.213	0.203	/
	Off			15	38000	2595	50	High	-0.07	0.161	22.91	24.00	1.285	0.207	/
	Off		Back Side	15	37850	2580	1	High	0.15	0.289	24.16	25.00	1.213	<b>0.351</b>	37#
	Off			15	38000	2595	50	High	0.05	0.270	22.91	24.00	1.285	0.347	/
Down	Off	QPSK	Front Side	15	37850	2580	1	High	0.16	0.135	24.16	25.00	1.213	0.164	/
	Off			15	38000	2595	50	High	-0.13	0.107	22.91	24.00	1.285	0.138	/
	Off		Back Side	15	37850	2580	1	High	0.03	0.182	24.16	25.00	1.213	0.221	/
	Off			15	38000	2595	50	High	0.01	0.130	22.91	24.00	1.285	0.167	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	38150	2610	1	High	-0.14	0.101	20.23	21.00	1.194	0.121	/
	Level4			10	38150	2610	50	High	0.15	0.100	19.85	21.00	1.303	0.130	/
	Level4		Back Side	10	38150	2610	1	High	-0.09	0.220	20.23	21.00	1.194	0.263	/
	Level4			10	38150	2610	50	High	-0.04	0.216	19.85	21.00	1.303	0.281	/
	Level4		Left Edge	10	38150	2610	1	High	-0.05	0.015	20.23	21.00	1.194	0.018	/
	Level4			10	38150	2610	50	High	-0.17	0.014	19.85	21.00	1.303	0.018	/
	Level4		Right Edge	10	38150	2610	1	High	0.07	0.120	20.23	21.00	1.194	0.143	/
	Level4			10	38150	2610	50	High	-0.030	0.117	19.85	21.00	1.303	0.152	/
	Level4		Top Edge	10	38150	2610	1	High	0.080	0.278	20.23	21.00	1.194	0.332	/
	Level4			10	38150	2610	50	High	-0.14	0.275	19.85	21.00	1.303	0.358	/
Down	Off	QPSK	Front Side	10	37850	2580	1	High	-0.07	0.272	24.16	25.00	1.213	0.330	/
	Off			10	38000	2595	50	High	0.13	0.216	22.91	24.00	1.285	0.278	/
	Off		Back Side	10	37850	2580	1	High	-0.11	0.444	24.16	25.00	1.213	<b>0.539</b>	38#

Off			10	38000	2595	50	High	-0.08	0.334	22.91	24.00	1.285	0.429	/
Off	Left Edge		10	37850	2580	1	High	-0.15	0.147	24.16	25.00	1.213	0.178	/
Off			10	38000	2595	50	High	-0.13	0.124	22.91	24.00	1.285	0.159	/
Off	Right Edge		10	37850	2580	1	High	-0.16	0.035	24.16	25.00	1.213	0.042	/
Off			10	38000	2595	50	High	-0.05	0.029	22.91	24.00	1.285	0.037	/
Off	Bottom Edge		10	37850	2580	1	High	-0.04	0.274	24.16	25.00	1.213	0.332	/
Off			10	38000	2595	50	High	0.11	0.216	22.91	24.00	1.285	0.278	/

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

### 10.12 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>															
Up	Level1&2	QPSK	Left Cheek	0	41140	2645	1	Low	0.01	0.197	17.79	18.70	1.233	0.243	/
	Level1&2			0	41140	2645	50	Low	-0.11	0.191	17.64	18.70	1.276	0.244	/
	Level1&2		Left Tilt	0	41140	2645	1	Low	-0.14	0.265	17.79	18.70	1.233	0.327	/
	Level1&2			0	41140	2645	50	Low	-0.14	0.257	17.64	18.70	1.276	0.328	/
	Level1&2		Right Cheek	0	41140	2645	1	Low	0.04	0.363	17.79	18.70	1.233	0.448	/
	Level1&2			0	41140	2645	50	Low	-0.16	0.354	17.64	18.70	1.276	0.452	/
	Level1&2		Right Tilt	0	41140	2645	1	Low	0.05	0.494	17.79	18.70	1.233	0.609	/
	Level1&2			0	41140	2645	50	Low	-0.02	0.486	17.64	18.70	1.276	<b>0.620</b>	39#
Down	Off	QPSK	Left Cheek	0	40140	2545	1	Low	-0.14	0.026	24.02	24.80	1.197	0.031	/
	Off			0	40140	2545	50	Low	0.06	0.019	22.94	23.80	1.219	0.023	/
	Off		Left Tilt	0	40140	2545	1	Low	0.00	0.054	24.02	24.80	1.197	0.065	/
	Off			0	40140	2545	50	Low	-0.11	0.043	22.94	23.80	1.219	0.052	/
	Off		Right Cheek	0	40140	2545	1	Low	-0.12	0.120	24.02	24.80	1.197	0.144	/
	Off			0	40140	2545	50	Low	-0.17	0.093	22.94	23.80	1.219	0.113	/
	Off		Right Tilt	0	40140	2545	1	Low	0.17	0.063	24.02	24.80	1.197	0.075	/
	Off			0	40140	2545	50	Low	0.16	0.051	22.94	23.80	1.219	0.062	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	40140	2545	1	Low	0.17	0.172	24.02	24.80	1.197	0.206	/
	Off			15	40140	2545	50	Low	0.07	0.137	22.94	23.80	1.219	0.167	/
	Off		Back Side	15	40140	2545	1	Low	-0.02	0.334	24.02	24.80	1.197	<b>0.400</b>	40#
	Off			15	40140	2545	50	Low	-0.10	0.257	22.94	23.80	1.219	0.313	/
Down	Off	QPSK	Front Side	15	40140	2545	1	Low	-0.07	0.107	24.02	24.80	1.197	0.128	/
	Off			15	40140	2545	50	Low	-0.10	0.099	22.94	23.80	1.219	0.121	/
	Off		Back Side	15	40140	2545	1	Low	-0.03	0.157	24.02	24.80	1.197	0.188	/
	Off			15	40140	2545	50	Low	0.02	0.128	22.94	23.80	1.219	0.156	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	41140	2645	1	Low	-0.12	0.108	19.78	20.70	1.236	0.133	/
	Level4			10	41140	2645	50	Low	-0.04	0.106	19.64	20.70	1.276	0.135	/
	Level4		Back Side	10	41140	2645	1	Low	0.12	0.226	19.78	20.70	1.236	0.279	/
	Level4			10	41140	2645	50	Low	0.09	0.223	19.64	20.70	1.276	0.285	/
	Level4		Left Edge	10	41140	2645	1	Low	0.14	0.014	19.78	20.70	1.236	0.017	/
	Level4			10	41140	2645	50	Low	0.13	0.012	19.64	20.70	1.276	0.015	/
	Level4		Right Edge	10	41140	2645	1	Low	0.14	0.082	19.78	20.70	1.236	0.101	/
	Level4			10	41140	2645	50	Low	-0.17	0.079	19.64	20.70	1.276	0.101	/
	Level4		Top Edge	10	41140	2645	1	Low	0.12	0.255	19.78	20.70	1.236	0.315	/
	Level4			10	41140	2645	50	Low	-0.03	0.255	19.64	20.70	1.276	0.325	/
Down	Off	QPSK	Front Side	10	40140	2545	1	Low	0.16	0.182	24.02	24.80	1.197	0.218	/
	Off			10	40140	2545	50	Low	-0.06	0.152	22.94	23.80	1.219	0.185	/
	Off		Back Side	10	40140	2545	1	Low	-0.05	0.299	24.02	24.80	1.197	<b>0.358</b>	41#

Off			10	40140	2545	50	Low	-0.14	0.246	22.94	23.80	1.219	0.300	/
Off	Left Edge		10	40140	2545	1	Low	-0.10	0.097	24.02	24.80	1.197	0.116	/
Off			10	40140	2545	50	Low	-0.14	0.088	22.94	23.80	1.219	0.107	/
Off	Right Edge		10	40140	2545	1	Low	0.08	0.032	24.02	24.80	1.197	0.038	/
Off			10	40140	2545	50	Low	0.05	0.029	22.94	23.80	1.219	0.035	/
Off	Bottom Edge		10	40140	2545	1	Low	0.02	0.212	24.02	24.80	1.197	0.254	/
Off			10	40140	2545	50	Low	0.17	0.175	22.94	23.80	1.219	0.213	/

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

### 10.13 WIFI 2.4GHz

Antenna	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g 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>														
802.11b	Level1	Left Cheek	0	11	2462	0.01	0.561	15.79	17.00	1.321	98.67	1.013	<b>0.751</b>	42#
	Level1	Left Tilt	0	11	2462	0.04	0.445	15.79	17.00	1.321	98.67	1.013	0.596	/
	Level1	Right Cheek	0	11	2462	0.15	0.209	15.79	17.00	1.321	98.67	1.013	0.280	/
	Level1	Right Tilt	0	11	2462	0.11	0.240	15.79	17.00	1.321	98.67	1.013	0.321	/
802.11b	Level2	Left Cheek	0	11	2462	0.19	0.284	13.52	15.00	1.406	98.67	1.013	0.405	/
	Level2	Left Tilt	0	11	2462	-0.14	0.228	13.52	15.00	1.406	98.67	1.013	0.325	/
	Level2	Right Cheek	0	11	2462	0.09	0.105	13.52	15.00	1.406	98.67	1.013	0.150	/
	Level2	Right Tilt	0	11	2462	0.10	0.120	13.52	15.00	1.406	98.67	1.013	0.171	/
<b>Body-worn Accessory</b>														
802.11b	Off	Front Side	15	11	2462	0.06	0.071	18.35	19.50	1.303	98.67	1.013	0.094	/
	Off	Back Side	15	11	2462	0.16	0.092	18.35	19.50	1.303	98.67	1.013	<b>0.121</b>	43#
<b>Hotspot</b>														
802.11b	Level3	Front Side	10	11	2462	-0.09	0.046	13.52	15.00	1.406	98.67	1.013	0.066	/
	Level3	Back Side	10	11	2462	0.04	0.066	13.52	15.00	1.406	98.67	1.013	<b>0.093</b>	44#
	Level3	Left Edge	10	11	2462	-0.12	0.046	13.52	15.00	1.406	98.67	1.013	0.066	/
	Level3	Right Edge	10	11	2462	-0.10	0.018	13.52	15.00	1.406	98.67	1.013	0.026	/
	Level3	Top Edge	10	11	2462	0.05	0.054	13.52	15.00	1.406	98.67	1.013	0.077	/
	Level3	Bottom Edge	10	11	2462	-0.07	0.005	13.52	15.00	1.406	98.67	1.013	0.007	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														



### 10.14 WIFI 5GHz

Fre. Band	Antenna	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g 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>															
5.3G	802.11 n40	Level1	Left Cheek	0	62	5310	-0.09	0.262	11.79	12.50	1.178	96.35	1.038	<b>0.320</b>	45#
		Level1	Left Tilt	0	62	5310	0.06	0.163	11.79	12.50	1.178	96.35	1.038	0.199	/
		Level1	Right Cheek	0	62	5310	0.16	0.069	11.79	12.50	1.178	96.35	1.038	0.084	/
		Level1	Right Tilt	0	62	5310	0.05	0.065	11.79	12.50	1.178	96.35	1.038	0.079	/
5.3G	802.11 n40	Level2	Left Cheek	0	62	5310	-0.09	0.117	8.80	9.50	1.175	96.35	1.038	0.143	/
		Level2	Left Tilt	0	62	5310	0.14	0.077	8.80	9.50	1.175	96.35	1.038	0.094	/
		Level2	Right Cheek	0	62	5310	0.15	0.032	8.80	9.50	1.175	96.35	1.038	0.039	/
		Level2	Right Tilt	0	62	5310	0.14	0.030	8.80	9.50	1.175	96.35	1.038	0.037	/
5.6G	802.11 n40	Level1	Left Cheek	0	118	5590	0.07	0.246	12.16	12.50	1.081	96.35	1.038	0.276	/
		Level1	Left Tilt	0	118	5590	-0.10	0.330	12.16	12.50	1.081	96.35	1.038	<b>0.370</b>	46#
		Level1	Right Cheek	0	118	5590	-0.10	0.083	12.16	12.50	1.081	96.35	1.038	0.093	/
		Level1	Right Tilt	0	118	5590	0.04	0.104	12.16	12.50	1.081	96.35	1.038	0.117	/
5.6G	802.11 n40	Level2	Left Cheek	0	118	5590	-0.04	0.107	9.19	9.50	1.074	96.35	1.038	0.119	/
		Level2	Left Tilt	0	118	5590	0.07	0.143	9.19	9.50	1.074	96.35	1.038	0.159	/
		Level2	Right Cheek	0	118	5590	-0.15	0.036	9.19	9.50	1.074	96.35	1.038	0.040	/
		Level2	Right Tilt	0	118	5590	-0.18	0.045	9.19	9.50	1.074	96.35	1.038	0.050	/
5.8G	802.11 n40	Level1	Left Cheek	0	159	5795	0.17	0.471	11.66	12.50	1.213	96.35	1.038	0.593	/
		Level1	Left Tilt	0	159	5795	-0.12	0.609	11.66	12.50	1.213	96.35	1.038	<b>0.767</b>	47#
		Level1	Right Cheek	0	159	5795	0.12	0.194	11.66	12.50	1.213	96.35	1.038	0.244	/
		Level1	Right Tilt	0	159	5795	0.16	0.243	11.66	12.50	1.213	96.35	1.038	0.306	/
5.8G	802.11 n40	Level2	Left Cheek	0	159	5795	0.06	0.205	8.62	9.50	1.225	96.35	1.038	0.261	/
		Level2	Left Tilt	0	159	5795	-0.04	0.268	8.62	9.50	1.225	96.35	1.038	0.341	/
		Level2	Right Cheek	0	159	5795	-0.16	0.083	8.62	9.50	1.225	96.35	1.038	0.105	/
		Level2	Right Tilt	0	159	5795	-0.13	0.108	8.62	9.50	1.225	96.35	1.038	0.137	/
<b>Body-worn Accessory</b>															
5.3G	802.11 n40	Off	Front Side	15	54	5270	-0.08	0.104	16.32	17.00	1.169	96.35	1.038	0.126	/
		Off	Back Side	15	54	5270	-0.16	0.235	16.32	17.00	1.169	96.35	1.038	<b>0.285</b>	48#
5.6G	802.11 n40	Off	Front Side	15	118	5590	-0.16	0.059	16.62	17.00	1.091	96.35	1.038	0.067	/
		Off	Back Side	15	118	5590	0.07	0.100	16.62	17.00	1.091	96.35	1.038	<b>0.113</b>	49#
5.8G	802.11 n40	Off	Front Side	15	159	5795	0.02	0.123	16.22	17.00	1.197	96.35	1.038	0.153	/
		Off	Back Side	15	159	5795	-0.07	0.127	16.22	17.00	1.197	96.35	1.038	<b>0.158</b>	50#
<b>Hotspot</b>															
5.2G	802.11 n40	Level3	Front Side	10	46	5230	0.14	0.027	8.56	9.50	1.242	96.35	1.038	0.035	/
		Level3	Back Side	10	46	5230	0.09	0.081	8.56	9.50	1.242	96.35	1.038	0.104	/
		Level3	Left Edge	10	46	5230	0.08	0.088	8.56	9.50	1.242	96.35	1.038	<b>0.113</b>	51#
		Level3	Right Edge	10	46	5230	-0.02	0.006	8.56	9.50	1.242	96.35	1.038	0.008	/
		Level3	Top Edge	10	46	5230	-0.13	0.038	8.56	9.50	1.242	96.35	1.038	0.049	/
		Level3	Bottom Edge	10	46	5230	-0.08	0.003	8.56	9.50	1.242	96.35	1.038	0.004	/
5.8G	802.11	Level3	Front Side	10	159	5795	-0.06	0.069	8.62	9.50	1.225	96.35	1.038	0.088	/

	n40	Level3	Back Side	10	159	5795	0.13	0.051	8.62	9.50	1.225	96.35	1.038	0.065	/
		Level3	Left Edge	10	159	5795	0.04	0.134	8.62	9.50	1.225	96.35	1.038	<b>0.170</b>	52#
		Level3	Right Edge	10	159	5795	0.05	0.008	8.62	9.50	1.225	96.35	1.038	0.010	/
		Level3	Top Edge	10	159	5795	-0.07	0.060	8.62	9.50	1.225	96.35	1.038	0.076	/
		Level3	Bottom Edge	10	159	5795	0.06	0.004	8.62	9.50	1.225	96.35	1.038	0.005	/

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

Fre. Band	Antenna	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific SAR</b>															
5.3G	802.11 n40	Off	Front Side	0	54	5270	-0.12	0.450	16.32	17.00	1.169	96.35	1.038	0.546	/
		Off	Back Side	0	54	5270	-0.12	0.636	16.32	17.00	1.169	96.35	1.038	0.772	/
		Off	Left Edge	0	54	5270	-0.14	1.080	16.32	17.00	1.169	96.35	1.038	<b>1.311</b>	53#
		Off	Right Edge	0	54	5270	-0.15	0.041	16.32	17.00	1.169	96.35	1.038	0.050	/
		Off	Top Edge	0	54	5270	0.08	0.212	16.32	17.00	1.169	96.35	1.038	0.257	/
		Off	Bottom Edge	0	54	5270	0.10	0.028	16.32	17.00	1.169	96.35	1.038	0.034	/
5.3G	802.11 n40	Level3	Front Side	0	62	5310	-0.16	0.079	8.80	9.50	1.175	96.35	1.038	0.096	/
		Level3	Back Side	0	62	5310	-0.07	0.105	8.80	9.50	1.175	96.35	1.038	0.128	/
		Level3	Left Edge	0	62	5310	-0.12	0.166	8.80	9.50	1.175	96.35	1.038	0.202	/
		Level3	Right Edge	0	62	5310	0.16	0.008	8.80	9.50	1.175	96.35	1.038	0.010	/
		Level3	Top Edge	0	54	5270	0.00	0.046	8.80	9.50	1.175	96.35	1.038	0.056	/
		Level3	Bottom Edge	0	54	5270	0.07	0.007	8.80	9.50	1.175	96.35	1.038	0.009	/
5.6G	802.11 n40	Off	Front Side	0	118	5590	0.13	0.477	16.62	17.00	1.091	96.35	1.038	0.540	/
		Off	Back Side	0	118	5590	-0.01	0.268	16.62	17.00	1.091	96.35	1.038	0.304	/
		Off	Left Edge	0	118	5590	-0.04	0.491	16.62	17.00	1.091	96.35	1.038	<b>0.556</b>	54#
		Off	Right Edge	0	118	5590	-0.03	0.030	16.62	17.00	1.091	96.35	1.038	0.034	/
		Off	Top Edge	0	118	5590	0.08	0.468	16.62	17.00	1.091	96.35	1.038	0.530	/
		Off	Bottom Edge	0	118	5590	0.10	0.026	16.62	17.00	1.091	96.35	1.038	0.029	/
5.6G	802.11 n40	Level3	Front Side	0	118	5590	-0.03	0.092	9.19	9.50	1.074	96.35	1.038	0.103	/
		Level3	Back Side	0	118	5590	0.17	0.052	9.19	9.50	1.074	96.35	1.038	0.058	/
		Level3	Left Edge	0	118	5590	0.13	0.119	9.19	9.50	1.074	96.35	1.038	0.133	/
		Level3	Right Edge	0	118	5590	0.01	0.006	9.19	9.50	1.074	96.35	1.038	0.007	/
		Level3	Top Edge	0	118	5590	-0.08	0.093	9.19	9.50	1.074	96.35	1.038	0.104	/
		Level3	Bottom Edge	0	118	5590	-0.07	0.006	9.19	9.50	1.074	96.35	1.038	0.007	/

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

## 10.15 Bluetooth

Mode	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g 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	Off	Left Cheek	0	78	2480	0.05	0.077	11.44	12.00	1.138	77.01	1.299	<b>0.113</b>	55#
	Off	Left Tilt	0	78	2480	-0.18	0.060	11.44	12.00	1.138	77.01	1.299	0.089	/
	Off	Right Cheek	0	78	2480	-0.11	0.028	11.44	12.00	1.138	77.01	1.299	0.041	/
	Off	Right Tilt	0	78	2480	-0.04	0.033	11.44	12.00	1.138	77.01	1.299	0.049	/
<b>Body-worn Accessory</b>														
DH5	Off	Front Side	15	78	2480	0.09	0.006	11.44	12.00	1.138	77.01	1.299	0.009	/
	Off	Back Side	15	78	2480	0.04	0.008	11.44	12.00	1.138	77.01	1.299	<b>0.012</b>	56#
<b>Hotspot</b>														
DH5	Off	Front Side	10	78	2480	-0.14	0.016	11.44	12.00	1.138	77.01	1.299	0.024	/
	Off	Back Side	10	78	2480	0.02	0.022	11.44	12.00	1.138	77.01	1.299	<b>0.033</b>	57#
	Off	Left Edge	10	78	2480	0.05	0.015	11.44	12.00	1.138	77.01	1.299	0.022	/
	Off	Right Edge	10	78	2480	0.06	0.007	11.44	12.00	1.138	77.01	1.299	0.010	/
	Off	Top Edge	10	78	2480	-0.13	0.018	11.44	12.00	1.138	77.01	1.299	0.027	/
	Off	Bottom Edge	10	78	2480	-0.08	0.002	11.44	12.00	1.138	77.01	1.299	0.003	/
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)	Repeated <sup>1st</sup> Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1852.40	WCDMA Band 2	Hotspot	Bottom Edge	0.948	Yes	0.930	1.02
1900.00	LTE Band 2	Head	Right Tilt	0.843	Yes	0.825	1.02
1880.00	LTE Band 2	Hotspot	Bottom Edge	0.931	Yes	0.908	1.03

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	No	Yes
2	GSM + WiFi 5G + Bluetooth	Yes	No	Yes
3	UMTS + WiFi 2.4G	Yes	No	Yes
4	UMTS + WiFi 5G + Bluetooth	Yes	No	Yes
5	LTE + WiFi 2.4G	Yes	No	Yes
6	LTE + WiFi 5G + Bluetooth	Yes	No	Yes

Note:

1. 2G&3G&4G share the same antenna and can't transmit simultaneously.
2. 2.4G WLAN can't transmit simultaneously with Bluetooth or 5G WLAN.
3. Two WWAN antennas can switch automatically, but up and down antenna can't transmit simultaneously.
4. The maximum SAR summation is calculated based on the same configuration and test position.
5. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
6. 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)

## 12.2 Sum SAR of Simultaneous Transmission

### 12.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN

Band	Power Reduction	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	Sum SAR (1+2)	Sum SAR (1+3+4)
			WWAN	2.4GWIFI On	5GWIFI On	Bluetooth		
GSM850	Level2	Left Cheek	0.197	0.405	0.261	0.113	0.602	0.571
	Level2	Left Tilt	0.180	0.325	0.341	0.089	0.505	0.610
	Level2	Right Cheek	0.268	0.150	0.105	0.041	0.417	0.414
	Level2	Right Tilt	0.197	0.171	0.137	0.049	0.368	0.383
GSM 1900	Level2	Left Cheek	0.532	0.405	0.261	0.113	0.937	0.906
	Level2	Left Tilt	0.615	0.325	0.341	0.089	0.940	1.044
	Level2	Right Cheek	0.811	0.325	0.105	0.041	1.136	0.958
	Level2	Right Tilt	0.927	0.171	0.137	0.049	1.098	1.113
WCDMA B2	Level2	Left Cheek	0.371	0.405	0.261	0.113	0.775	0.745
	Level2	Left Tilt	0.429	0.325	0.341	0.089	0.754	0.858
	Level2	Right Cheek	0.555	0.150	0.105	0.041	0.705	0.702
	Level2	Right Tilt	0.825	0.171	0.137	0.049	0.996	1.011
WCDMA B4	Level2	Left Cheek	0.330	0.405	0.261	0.113	0.735	0.704
	Level2	Left Tilt	0.379	0.325	0.341	0.089	0.704	0.808
	Level2	Right Cheek	0.522	0.150	0.105	0.041	0.672	0.669
	Level2	Right Tilt	0.656	0.171	0.137	0.049	0.827	0.842
WCDMA B5	Level2	Left Cheek	0.279	0.405	0.261	0.113	0.684	0.653
	Level2	Left Tilt	0.196	0.325	0.341	0.089	0.521	0.625
	Level2	Right Cheek	0.359	0.150	0.105	0.041	0.509	0.506
	Level2	Right Tilt	0.293	0.171	0.137	0.049	0.464	0.479
CDMA BC0	Off	Left Cheek	0.758	0.405	0.261	0.113	<b>1.163</b>	1.132
	Off	Left Tilt	0.582	0.325	0.341	0.089	0.907	1.011
	Off	Right Cheek	0.995	0.150	0.105	0.041	1.144	1.141
	Off	Right Tilt	0.689	0.171	0.137	0.049	0.860	0.875
LTE B2	Level2	Left Cheek	0.225	0.405	0.261	0.113	0.629	0.599
	Level2	Left Tilt	0.295	0.325	0.341	0.089	0.620	0.724
	Level2	Right Cheek	0.423	0.150	0.105	0.041	0.573	0.570
	Level2	Right Tilt	0.597	0.171	0.137	0.049	0.768	0.783
LTE B4	Level2	Left Cheek	0.323	0.405	0.261	0.113	0.728	0.697
	Level2	Left Tilt	0.380	0.325	0.341	0.089	0.705	0.809
	Level2	Right Cheek	0.569	0.150	0.105	0.041	0.719	0.716
	Level2	Right Tilt	0.790	0.171	0.137	0.049	0.961	0.976
LTE B5	Level2	Left Cheek	0.253	0.405	0.261	0.113	0.657	0.627
	Level2	Left Tilt	0.224	0.325	0.341	0.089	0.549	0.654
	Level2	Right Cheek	0.296	0.150	0.105	0.041	0.446	0.443
	Level2	Right Tilt	0.400	0.171	0.137	0.049	0.571	0.586
LTE B7	Level2	Left Cheek	0.168	0.405	0.261	0.113	0.573	0.542
	Level2	Left Tilt	0.255	0.325	0.341	0.089	0.580	0.684

	Level2	Right Cheek	0.338	0.150	0.105	0.041	0.487	0.484
	Level2	Right Tilt	0.443	0.171	0.137	0.049	0.614	0.629
LTE B38	Level2	Left Cheek	0.170	0.405	0.261	0.113	0.575	0.544
	Level2	Left Tilt	0.244	0.325	0.341	0.089	0.569	0.673
	Level2	Right Cheek	0.395	0.150	0.105	0.041	0.544	0.542
	Level2	Right Tilt	0.509	0.171	0.137	0.049	0.680	0.695
LTE B41	Level2	Left Cheek	0.244	0.405	0.261	0.113	0.648	0.618
	Level2	Left Tilt	0.328	0.325	0.341	0.089	0.653	0.757
	Level2	Right Cheek	0.452	0.150	0.105	0.041	0.601	0.599
	Level2	Right Tilt	0.620	0.171	0.137	0.049	0.791	0.806

Note:

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

2: The highest Summed 1g SAR is 1.163 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.2 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN

Band	Power Reduction	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	Sum SAR (1+2)	Sum SAR (1+3+4)
			WWAN	2.4GWIFI On	5GWIFI On	Bluetooth		
GSM850	Level4	Front Side 10mm	0.220	0.066	0.088	0.024	0.285	0.331
	Level4	Back Side 10mm	0.360	0.093	0.104	0.033	0.453	0.497
	Level4	Left Edge 10mm	0.125	0.066	0.170	0.022	0.190	0.317
	Level4	Right Edge 10mm	0.107	0.026	0.010	0.010	0.133	0.128
	Level4	Top Edge 10mm	0.220	0.077	0.076	0.027	0.297	0.322
GSM 1900	Level4	Front Side 10mm	0.366	0.066	0.088	0.024	0.432	0.478
	Level4	Back Side 10mm	0.514	0.093	0.104	0.033	0.607	0.651
	Level4	Left Edge 10mm	0.028	0.066	0.170	0.022	0.093	0.220
	Level4	Right Edge 10mm	0.076	0.026	0.010	0.010	0.101	0.096
	Level4	Top Edge 10mm	0.661	0.077	0.076	0.027	0.738	<b>0.764</b>
WCDMA B2	Level4	Front Side 10mm	0.253	0.066	0.088	0.024	0.318	0.364
	Level4	Back Side 10mm	0.364	0.093	0.104	0.033	0.457	0.501
	Level4	Left Edge 10mm	0.018	0.066	0.170	0.022	0.084	0.211
	Level4	Right Edge 10mm	0.043	0.026	0.010	0.010	0.069	0.064
	Level4	Top Edge 10mm	0.422	0.077	0.076	0.027	0.499	0.525
WCDMA B4	Level4	Front Side 10mm	0.221	0.066	0.088	0.024	0.286	0.332
	Level4	Back Side 10mm	0.247	0.093	0.104	0.033	0.340	0.384
	Level4	Left Edge 10mm	0.018	0.066	0.170	0.022	0.084	0.211
	Level4	Right Edge 10mm	0.032	0.026	0.010	0.010	0.058	0.053
	Level4	Top Edge 10mm	0.303	0.077	0.076	0.027	0.381	0.406
WCDMA B5	Off	Front Side 10mm	0.160	0.066	0.088	0.024	0.225	0.271
	Off	Back Side 10mm	0.250	0.093	0.104	0.033	0.344	0.387
	Off	Left Edge 10mm	0.103	0.066	0.170	0.022	0.169	0.296
	Off	Right Edge 10mm	0.075	0.026	0.010	0.010	0.101	0.096

	Off	Top Edge 10mm	0.163	0.077	0.076	0.027	0.241	0.266
CDMA BC0	Off	Front Side 10mm	0.179	0.066	0.088	0.024	0.245	0.290
	Off	Back Side 10mm	0.259	0.093	0.104	0.033	0.353	0.396
	Off	Left Edge 10mm	0.102	0.066	0.170	0.022	0.167	0.294
	Off	Right Edge 10mm	0.061	0.026	0.010	0.010	0.087	0.081
	Off	Top Edge 10mm	0.206	0.077	0.076	0.027	0.283	0.309
	LTE B2	Level4	Front Side 10mm	0.336	0.066	0.088	0.024	0.401
Level4		Back Side 10mm	0.503	0.093	0.104	0.033	0.597	0.641
Level4		Left Edge 10mm	0.026	0.066	0.170	0.022	0.092	0.219
Level4		Right Edge 10mm	0.057	0.026	0.010	0.010	0.082	0.077
Level4		Top Edge 10mm	0.655	0.077	0.076	0.027	0.732	0.758
LTE B4	Level4	Front Side 10mm	0.387	0.066	0.088	0.024	0.452	0.498
	Level4	Back Side 10mm	0.456	0.093	0.104	0.033	0.549	0.593
	Level4	Left Edge 10mm	0.053	0.066	0.170	0.022	0.118	0.245
	Level4	Right Edge 10mm	0.085	0.026	0.010	0.010	0.111	0.106
	Level4	Top Edge 10mm	0.598	0.077	0.076	0.027	0.675	0.701
LTE B5	Off	Front Side 10mm	0.144	0.066	0.088	0.024	0.209	0.255
	Off	Back Side 10mm	0.267	0.093	0.104	0.033	0.361	0.404
	Off	Left Edge 10mm	0.138	0.066	0.170	0.022	0.203	0.330
	Off	Right Edge 10mm	0.116	0.026	0.010	0.010	0.141	0.136
	Off	Top Edge 10mm	0.161	0.077	0.076	0.027	0.239	0.264
LTE B7	Level4	Front Side 10mm	0.180	0.066	0.088	0.024	0.245	0.291
	Level4	Back Side 10mm	0.190	0.093	0.104	0.033	0.284	0.327
	Level4	Left Edge 10mm	0.021	0.066	0.170	0.022	0.087	0.214
	Level4	Right Edge 10mm	0.161	0.026	0.010	0.010	0.187	0.181
	Level4	Top Edge 10mm	0.484	0.077	0.076	0.027	0.562	0.587
LTE B38	Level4	Front Side 10mm	0.130	0.066	0.088	0.024	0.196	0.242
	Level4	Back Side 10mm	0.281	0.093	0.104	0.033	0.375	0.419
	Level4	Left Edge 10mm	0.018	0.066	0.170	0.022	0.084	0.211
	Level4	Right Edge 10mm	0.152	0.026	0.010	0.010	0.178	0.173
	Level4	Top Edge 10mm	0.358	0.077	0.076	0.027	0.436	0.461
LTE B41	Level4	Front Side 10mm	0.135	0.066	0.088	0.024	0.201	0.247
	Level4	Back Side 10mm	0.285	0.093	0.104	0.033	0.378	0.422
	Level4	Left Edge 10mm	0.017	0.066	0.170	0.022	0.083	0.210
	Level4	Right Edge 10mm	0.101	0.026	0.010	0.010	0.127	0.122
	Level4	Top Edge 10mm	0.325	0.077	0.076	0.027	0.403	0.428

**Note:**

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

2: The highest Summed 1g SAR is 0.764 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.



## 12.2.3 Specific Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR
			1	2	3	Sum SAR (1+3+4)
			WWAN	5G WIFI On	Bluetooth	
WCDMA B2	Level4	Back Side 0mm	0.973	0.128	0.128	1.229
	Level4	Top Edge 0mm	1.628	0.104	0.104	1.835
WCDMA B4	Level4	Back Side 0mm	0.737	0.128	0.128	0.993
	Level4	Top Edge 0mm	0.979	0.104	0.104	1.186
LTE B2	Level4	Back Side 0mm	1.258	0.128	0.128	1.514
	Level4	Top Edge 0mm	1.855	0.104	0.104	<b>2.062</b>
LTE B4	Level4	Front Side 0mm	1.357	0.103	0.103	1.562
	Level4	Back Side 0mm	1.231	0.128	0.128	1.487
	Level4	Top Edge 0mm	1.407	0.104	0.104	1.614
LTE B7	Level4	Top Edge 0mm	0.882	0.104	0.104	1.089

Note:

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

2: The highest Summed 10g SAR is 2.062 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.

## 12.2.4 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN

Band	Power Reduction	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	Sum SAR (1+2)	Sum SAR (1+3+4)
			WWAN	2.4GWIFI On	5GWIFI On	Bluetooth		
GSM850	Off	Left Cheek	0.245	0.405	0.261	0.113	<b>0.650</b>	0.619
	Off	Left Tilt	0.123	0.325	0.341	0.089	0.447	0.552
	Off	Right Cheek	0.215	0.150	0.105	0.041	0.365	0.362
	Off	Right Tilt	0.096	0.171	0.137	0.049	0.267	0.282
GSM 1900	Off	Left Cheek	0.087	0.405	0.261	0.113	0.491	0.460
	Off	Left Tilt	0.045	0.325	0.341	0.089	0.369	0.474
	Off	Right Cheek	0.047	0.325	0.105	0.041	0.372	0.194
	Off	Right Tilt	0.052	0.171	0.137	0.049	0.223	0.238
WCDMA B2	Off	Left Cheek	0.093	0.405	0.261	0.113	0.498	0.467
	Off	Left Tilt	0.048	0.325	0.341	0.089	0.373	0.477
	Off	Right Cheek	0.049	0.150	0.105	0.041	0.199	0.196
	Off	Right Tilt	0.054	0.171	0.137	0.049	0.225	0.240
WCDMA B4	Off	Left Cheek	0.120	0.405	0.261	0.113	0.525	0.494
	Off	Left Tilt	0.087	0.325	0.341	0.089	0.412	0.516
	Off	Right Cheek	0.085	0.150	0.105	0.041	0.235	0.232
	Off	Right Tilt	0.088	0.171	0.137	0.049	0.259	0.274
WCDMA B5	Off	Left Cheek	0.184	0.405	0.261	0.113	0.589	0.558
	Off	Left Tilt	0.102	0.325	0.341	0.089	0.427	0.531
	Off	Right Cheek	0.152	0.150	0.105	0.041	0.302	0.299

	Off	Right Tilt	0.083	0.171	0.137	0.049	0.254	0.269
CDMA BC0	Off	Left Cheek	0.137	0.405	0.261	0.113	0.542	0.511
	Off	Left Tilt	0.075	0.325	0.341	0.089	0.400	0.504
	Off	Right Cheek	0.118	0.150	0.105	0.041	0.268	0.265
	Off	Right Tilt	0.064	0.171	0.137	0.049	0.235	0.250
LTE B2	Off	Left Cheek	0.084	0.405	0.261	0.113	0.489	0.458
	Off	Left Tilt	0.077	0.325	0.341	0.089	0.402	0.506
	Off	Right Cheek	0.065	0.150	0.105	0.041	0.215	0.212
	Off	Right Tilt	0.102	0.171	0.137	0.049	0.273	0.288
LTE B4	Off	Left Cheek	0.142	0.405	0.261	0.113	0.547	0.516
	Off	Left Tilt	0.089	0.325	0.341	0.089	0.414	0.518
	Off	Right Cheek	0.122	0.150	0.105	0.041	0.271	0.269
	Off	Right Tilt	0.083	0.171	0.137	0.049	0.254	0.269
LTE B5	Off	Left Cheek	0.121	0.405	0.261	0.113	0.526	0.495
	Off	Left Tilt	0.059	0.325	0.341	0.089	0.384	0.488
	Off	Right Cheek	0.139	0.150	0.105	0.041	0.289	0.286
	Off	Right Tilt	0.086	0.171	0.137	0.049	0.257	0.272
LTE B7	Off	Left Cheek	0.068	0.405	0.261	0.113	0.473	0.442
	Off	Left Tilt	0.051	0.325	0.341	0.089	0.376	0.480
	Off	Right Cheek	0.261	0.150	0.105	0.041	0.410	0.408
	Off	Right Tilt	0.151	0.171	0.137	0.049	0.322	0.337
LTE B38	Off	Left Cheek	0.035	0.405	0.261	0.113	0.440	0.409
	Off	Left Tilt	0.039	0.325	0.341	0.089	0.364	0.468
	Off	Right Cheek	0.192	0.150	0.105	0.041	0.341	0.339
	Off	Right Tilt	0.106	0.171	0.137	0.049	0.277	0.292
LTE B41	Off	Left Cheek	0.031	0.405	0.261	0.113	0.436	0.405
	Off	Left Tilt	0.065	0.325	0.341	0.089	0.390	0.494
	Off	Right Cheek	0.144	0.150	0.105	0.041	0.293	0.290
	Off	Right Tilt	0.075	0.171	0.137	0.049	0.246	0.261

Note:

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

2: The highest Summed 1g SAR is 0.650 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

## 12.2.5 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN

Band	Power Reduction	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	Sum SAR (1+2)	Sum SAR (1+3+4)
			WWAN	2.4GWIFI On	5GWIFI On	Bluetooth		
GSM850	Off	Front Side 10mm	0.149	0.066	0.088	0.024	0.214	0.260
	Off	Back Side 10mm	0.268	0.093	0.104	0.033	0.361	0.405
	Off	Left Edge 10mm	0.106	0.066	0.170	0.022	0.171	0.298
	Off	Right Edge 10mm	0.210	0.026	0.010	0.010	0.236	0.231
	Off	Bottom Edge 10mm	0.161	0.007	0.005	0.003	0.168	0.169
GSM 1900	Off	Front Side 10mm	0.188	0.066	0.088	0.024	0.254	0.300
	Off	Back Side 10mm	0.422	0.093	0.104	0.033	0.515	0.559
	Off	Left Edge 10mm	0.102	0.066	0.170	0.022	0.167	0.294
	Off	Right Edge 10mm	0.037	0.026	0.010	0.010	0.063	0.057
	Off	Bottom Edge 10mm	0.541	0.007	0.005	0.003	0.548	0.549
WCDMA B2	Off	Front Side 10mm	0.360	0.066	0.088	0.024	0.426	0.472
	Off	Back Side 10mm	0.742	0.093	0.104	0.033	0.836	0.879
	Off	Left Edge 10mm	0.197	0.066	0.170	0.022	0.263	0.390
	Off	Right Edge 10mm	0.070	0.026	0.010	0.010	0.096	0.091
	Off	Bottom Edge 10mm	1.191	0.007	0.005	0.003	1.198	<b>1.199</b>
WCDMA B4	Off	Front Side 10mm	0.356	0.066	0.088	0.024	0.421	0.467
	Off	Back Side 10mm	0.606	0.093	0.104	0.033	0.699	0.743
	Off	Left Edge 10mm	0.140	0.066	0.170	0.022	0.206	0.332
	Off	Right Edge 10mm	0.074	0.026	0.010	0.010	0.100	0.095
	Off	Bottom Edge 10mm	0.805	0.007	0.005	0.003	0.812	0.813
WCDMA B5	Off	Front Side 10mm	0.175	0.066	0.088	0.024	0.240	0.286
	Off	Back Side 10mm	0.357	0.093	0.104	0.033	0.451	0.494
	Off	Left Edge 10mm	0.063	0.066	0.170	0.022	0.128	0.255
	Off	Right Edge 10mm	0.143	0.026	0.010	0.010	0.169	0.163
	Off	Bottom Edge 10mm	0.177	0.007	0.005	0.003	0.185	0.185
CDMA BC0	Off	Front Side 10mm	0.121	0.066	0.088	0.024	0.186	0.232
	Off	Back Side 10mm	0.240	0.093	0.104	0.033	0.333	0.377
	Off	Left Edge 10mm	0.104	0.066	0.170	0.022	0.170	0.297
	Off	Right Edge 10mm	0.182	0.026	0.010	0.010	0.207	0.202
	Off	Bottom Edge 10mm	0.130	0.007	0.005	0.003	0.137	0.138
LTE B2	Off	Front Side 10mm	0.459	0.066	0.088	0.024	0.525	0.571
	Off	Back Side 10mm	0.946	0.093	0.104	0.033	1.039	1.083
	Off	Left Edge 10mm	0.185	0.066	0.170	0.022	0.250	0.377
	Off	Right Edge 10mm	0.119	0.026	0.010	0.010	0.144	0.139
	Off	Bottom Edge 10mm	1.140	0.007	0.005	0.003	1.147	1.148
LTE B4	Off	Front Side 10mm	0.390	0.066	0.088	0.024	0.456	0.502
	Off	Back Side 10mm	0.645	0.093	0.104	0.033	0.738	0.782
	Off	Left Edge 10mm	0.175	0.066	0.170	0.022	0.241	0.368
	Off	Right Edge 10mm	0.093	0.026	0.010	0.010	0.119	0.114
	Off	Bottom Edge 10mm	0.651	0.007	0.005	0.003	0.658	0.659

LTE B5	Off	Front Side 10mm	0.125	0.066	0.088	0.024	0.190	0.236
	Off	Back Side 10mm	0.240	0.093	0.104	0.033	0.334	0.377
	Off	Left Edge 10mm	0.093	0.066	0.170	0.022	0.159	0.286
	Off	Right Edge 10mm	0.201	0.026	0.010	0.010	0.227	0.222
	Off	Bottom Edge 10mm	0.170	0.007	0.005	0.003	0.177	0.178
LTE B7	Off	Front Side 10mm	0.345	0.066	0.088	0.024	0.410	0.456
	Off	Back Side 10mm	0.524	0.093	0.104	0.033	0.617	0.661
	Off	Left Edge 10mm	0.177	0.066	0.170	0.022	0.242	0.369
	Off	Right Edge 10mm	0.078	0.026	0.010	0.010	0.104	0.099
	Off	Bottom Edge 10mm	0.417	0.007	0.005	0.003	0.424	0.425
LTE B38	Off	Front Side 10mm	0.330	0.066	0.088	0.024	0.396	0.441
	Off	Back Side 10mm	0.539	0.093	0.104	0.033	0.632	0.676
	Off	Left Edge 10mm	0.178	0.066	0.170	0.022	0.244	0.371
	Off	Right Edge 10mm	0.042	0.026	0.010	0.010	0.068	0.063
	Off	Bottom Edge 10mm	0.332	0.007	0.005	0.003	0.340	0.341
LTE B41	Off	Front Side 10mm	0.218	0.066	0.088	0.024	0.283	0.329
	Off	Back Side 10mm	0.358	0.093	0.104	0.033	0.451	0.495
	Off	Left Edge 10mm	0.116	0.066	0.170	0.022	0.182	0.309
	Off	Right Edge 10mm	0.038	0.026	0.010	0.010	0.064	0.059
	Off	Bottom Edge 10mm	0.254	0.007	0.005	0.003	0.261	0.262

Note:

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

2: The highest Summed 1g SAR is 1.199 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

## 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
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2019/06/11	2021/06/10
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2018/09/13	2021/09/12
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2019/06/11	2021/06/10
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2019/06/10	2021/06/09
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2018/11/5	2021/11/04
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2020/02/17	2021/02/16
E-Field Probe	Speag	EX3DV4	SN: 7607	2020/08/07	2021/08/06
Data Acquisition Electronics	Speag	DAE3	SN: 878	2020/09/30	2021/09/29
Signal Generator	R&S	SMB100A	177746	2020/06/08	2021/06/07
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2020/09/25	2021/09/24
Power Sensor	R&S	NRV-Z4	100381	2020/09/25	2021/09/24
Power Sensor	R&S	NRV-Z2	100211	2020/09/25	2021/09/24
Wireless Communication Test Set	Agilent	8960-E5515C	MY47510286	2020/06/08	2021/06/07
Wireless Communication Test Set	R&S	CMW 500	104192	2020/06/08	2021/06/07
Network Analyzer	R&S	ZVL-6	101380	2020/06/22	2021/06/21
Thermometer	Elitech	RC-4HC	N/A	2020/09/29	2021/09/28
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 (%)
2020.11.29	Head	835	21.3	0.92	41.90	0.90	41.50	2.22	0.96
2020.11.28	Head	835	21.4	0.93	42.22	0.90	41.50	3.33	1.73
2020.12.17	Head	835	21.1	0.90	41.35	0.90	41.50	0.00	-0.36
2020.11.27	Head	835	21.0	0.93	42.22	0.90	41.50	3.33	1.73
2020.11.26	Head	835	21.3	0.89	40.98	0.90	41.50	-1.11	-1.25
2020.11.25	Head	1750	21.3	1.38	39.68	1.37	40.08	0.73	-1.00
2020.12.16	Head	1750	21.0	1.38	39.86	1.37	40.08	0.73	-0.55
2020.12.01	Head	1750	21.2	1.39	40.11	1.37	40.08	1.46	0.07
2020.12.02	Head	1900	21.1	1.43	39.48	1.40	40.00	2.14	-1.30
2020.12.03	Head	1900	21.3	1.42	41.09	1.40	40.00	1.43	2.73
2020.12.15	Head	1900	21.2	1.39	40.10	1.40	40.00	-0.71	0.25
2020.12.04	Head	1900	21.2	1.43	40.52	1.40	40.00	2.14	1.30
2020.12.11	Head	2450	21.4	1.78	38.63	1.80	39.20	-1.11	-1.45
2020.12.10	Head	2600	21.1	1.95	37.38	1.96	39.01	-0.51	-4.18
2020.12.09	Head	2600	21.4	2.02	39.61	1.96	39.01	3.06	1.54
2020.12.08	Head	2600	20.9	1.93	38.70	1.96	39.01	-1.53	-0.79
2020.12.07	Head	2600	21.2	1.95	38.03	1.96	39.01	-0.51	-2.51
2020.12.06	Head	2600	21.1	1.97	38.06	1.96	39.01	0.51	-2.44
2020.12.05	Head	2600	20.8	1.98	40.07	1.96	39.01	1.02	2.72
2020.12.14	Head	5200	21.1	4.56	36.85	4.66	35.99	-2.15	2.39
2020.12.14	Head	5300	21.1	4.68	36.48	4.76	35.87	-1.68	1.70
2020.12.13	Head	5600	21.2	5.05	35.37	5.07	35.53	-0.39	-0.45
2020.12.12	Head	5800	20.5	5.36	34.67	5.27	35.30	1.71	-1.78

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 (%)
2020.11.29	Head	835	100	0.981	9.81	9.49	3.37
2020.11.28	Head	835	100	0.954	9.54	9.49	0.53
2020.12.17	Head	835	100	0.948	9.48	9.49	-0.11
2020.11.27	Head	835	100	0.963	9.63	9.49	1.48
2020.11.26	Head	835	100	0.939	9.39	9.49	-1.05
2020.11.25	Head	1750	100	3.780	37.80	36.80	2.72
2020.12.16	Head	1750	100	3.630	36.30	36.80	-1.36
2020.12.01	Head	1750	100	3.810	38.10	36.80	3.53
2020.12.02	Head	1900	100	4.160	41.60	39.40	5.58
2020.12.03	Head	1900	100	4.110	41.10	39.40	4.31
2020.12.15	Head	1900	100	4.080	40.80	39.40	3.55
2020.12.04	Head	1900	100	4.010	40.10	39.40	1.78
2020.12.11	Head	2450	100	5.180	51.80	52.60	-1.52
2020.12.10	Head	2600	100	5.590	55.90	56.30	-0.71
2020.12.09	Head	2600	100	5.610	56.10	56.30	-0.36
2020.12.08	Head	2600	100	5.650	56.50	56.30	0.36
2020.12.07	Head	2600	100	5.610	56.10	56.30	-0.36
2020.12.06	Head	2600	100	5.550	55.50	56.30	-1.42
2020.12.05	Head	2600	100	5.590	55.90	56.30	-0.71
2020.12.14	Head	5200	100	7.830	78.30	73.90	5.95
2020.12.14	Head	5300	100	8.110	81.10	78.10	3.84
2020.12.13	Head	5600	100	8.250	82.50	80.30	2.74
2020.12.12	Head	5800	100	8.150	81.50	76.90	5.98

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

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

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2020.11.25	Head	1750	100	2.060	20.60	19.80	4.04
2020.12.16	Head	1750	100	1.940	19.40	19.80	-2.02
2020.12.01	Head	1750	100	2.020	20.20	19.80	2.02
2020.12.03	Head	1900	100	2.050	20.50	20.40	0.49
2020.12.15	Head	1900	100	2.060	20.60	20.40	0.98
2020.12.04	Head	1900	100	2.020	20.20	20.40	-0.98
2020.12.10	Head	2600	100	2.530	25.30	25.10	0.80
2020.12.09	Head	2600	100	2.520	25.20	25.10	0.40
2020.12.14	Head	5300	100	2.290	22.90	22.20	3.15
2020.12.13	Head	5600	100	2.330	23.30	22.60	3.10

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



# System Performance Check Data (835MHz)

Date: 2020.11.29

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.921 \text{ S/m}$ ;  $\epsilon_r = 41.903$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 1.03 W/kg

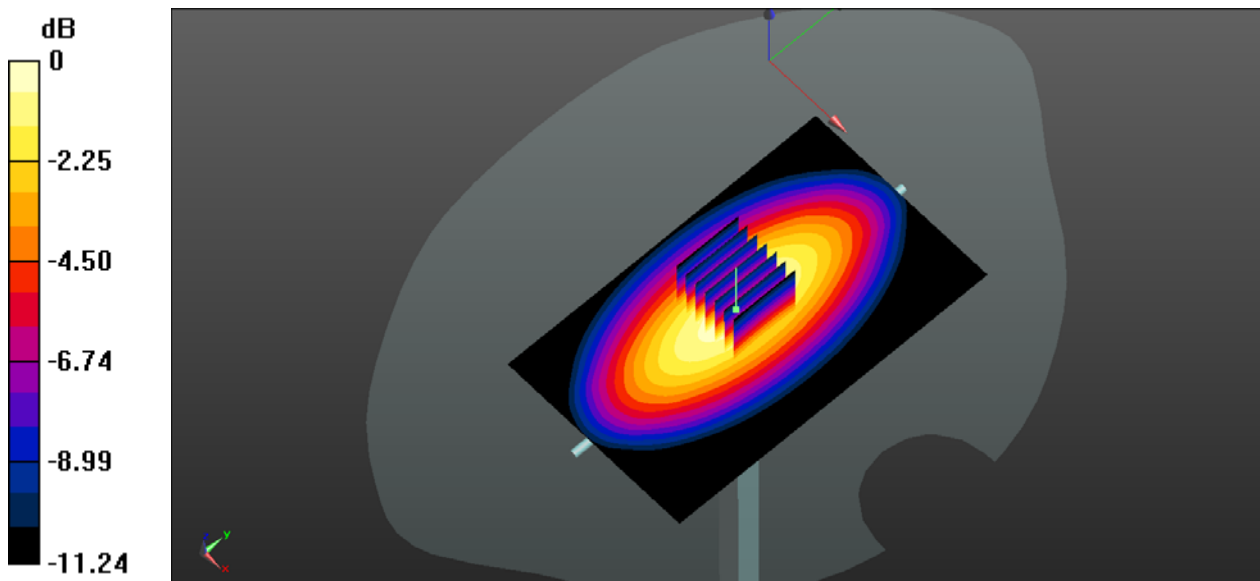
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 35.84 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.45 W/kg

**SAR(1 g) = 0.981 W/kg; SAR(10 g) = 0.620 W/kg**

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



0 dB = 1.08 W/kg

# System Performance Check Data (835MHz)

Date: 2020.11.28

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.932 \text{ S/m}$ ;  $\epsilon_r = 42.224$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

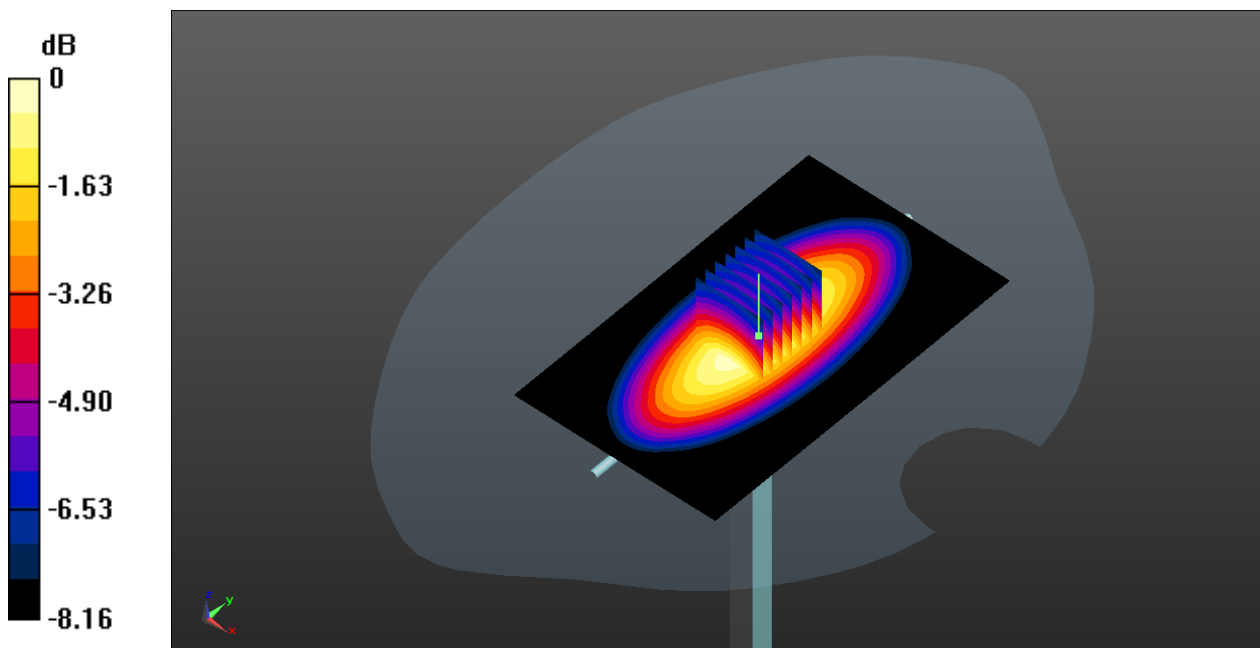
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 33.83 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.954 W/kg; SAR(10 g) = 0.618 W/kg**

Maximum value of SAR (measured) = 1.06 W/kg



0 dB = 1.06 W/kg

# System Performance Check Data (835MHz)

Date: 2020.12.17

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.897 \text{ S/m}$ ;  $\epsilon_r = 41.35$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 1.03 W/kg

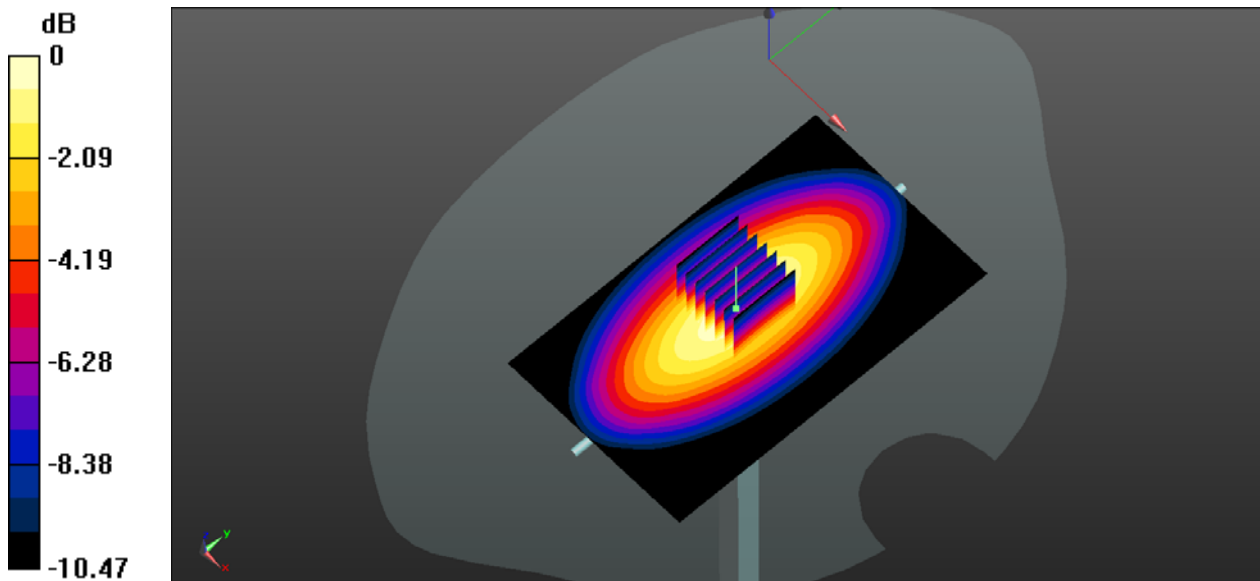
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 33.79 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.42 W/kg

**SAR(1 g) = 0.948 W/kg; SAR(10 g) = 0.621 W/kg**

Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg

# System Performance Check Data (835MHz)

Date: 2020.11.27

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.932 \text{ S/m}$ ;  $\epsilon_r = 42.224$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 1.01 W/kg

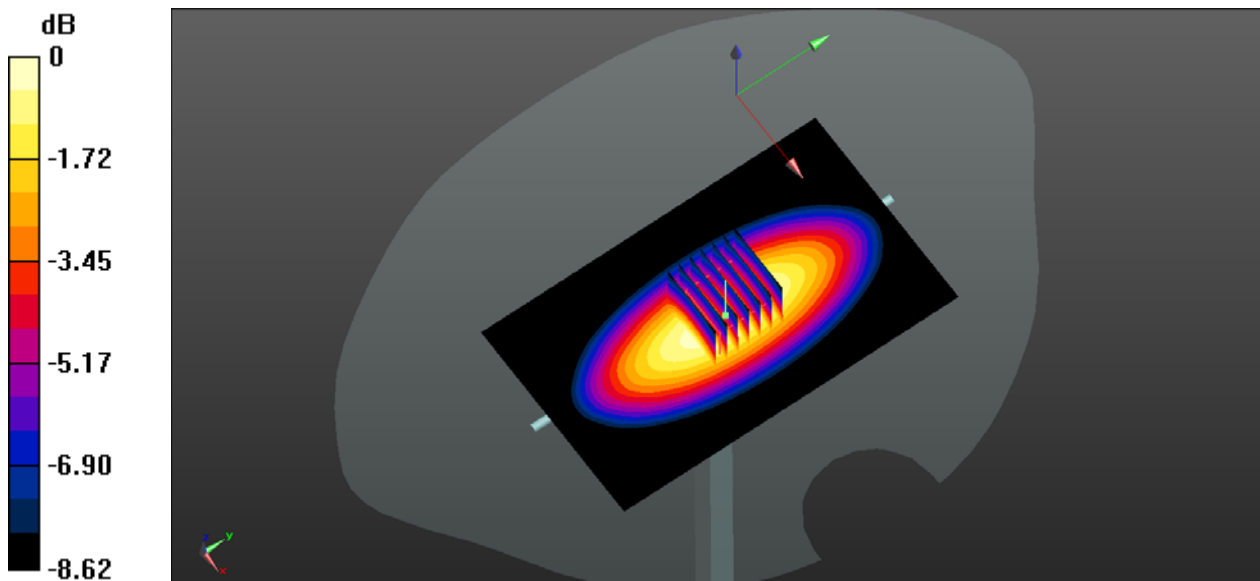
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.23 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.26 W/kg

**SAR(1 g) = 0.963 W/kg; SAR(10 g) = 0.620 W/kg**

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



0 dB = 1.04 W/kg

# System Performance Check Data (835MHz)

Date: 2020.11.26

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.893 \text{ S/m}$ ;  $\epsilon_r = 40.981$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

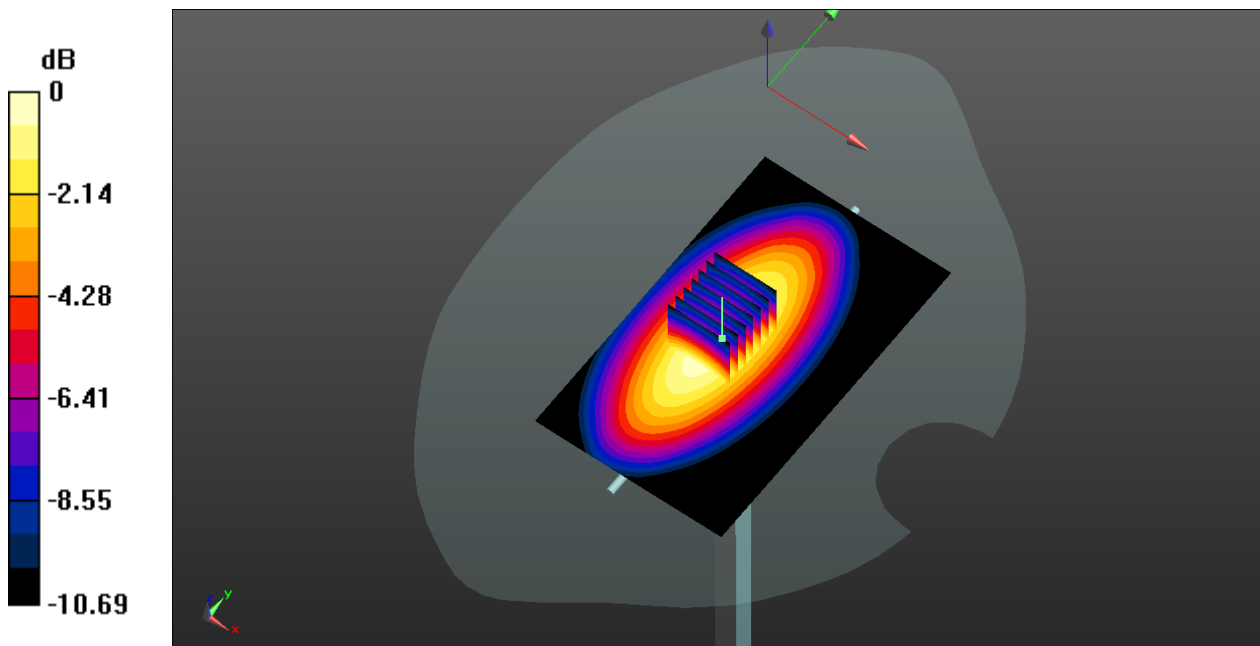
**CW 835 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.34 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.38 W/kg

**SAR(1 g) = 0.939 W/kg; SAR(10 g) = 0.609 W/kg**

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



0 dB = 1.02 W/kg

## System Performance Check Data (1750MHz)

Date: 2020.11.25

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.383$  S/m;  $\epsilon_r = 39.68$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.11 W/kg

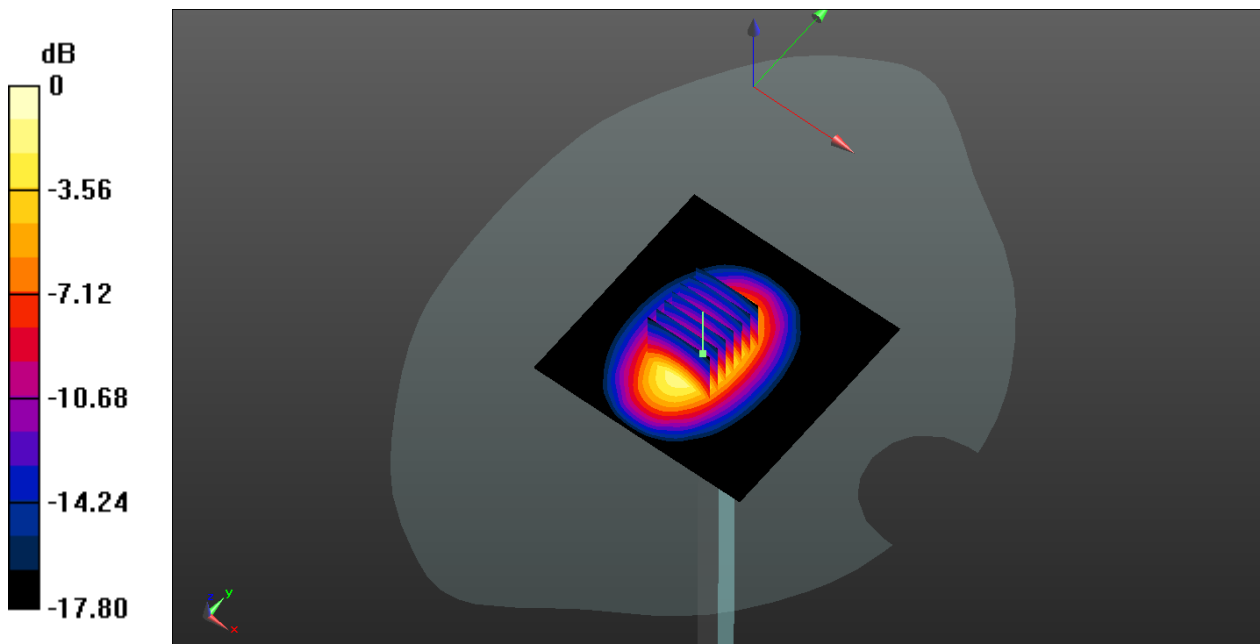
**CW 1750 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.48 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 6.97 W/kg

**SAR(1 g) = 3.78 W/kg; SAR(10 g) = 2.06 W/kg**

Maximum value of SAR (measured) = 4.21 W/kg



0 dB = 4.21 W/kg

# System Performance Check Data (1750MHz)

Date: 2020.12.16

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.376$  S/m;  $\epsilon_r = 39.863$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

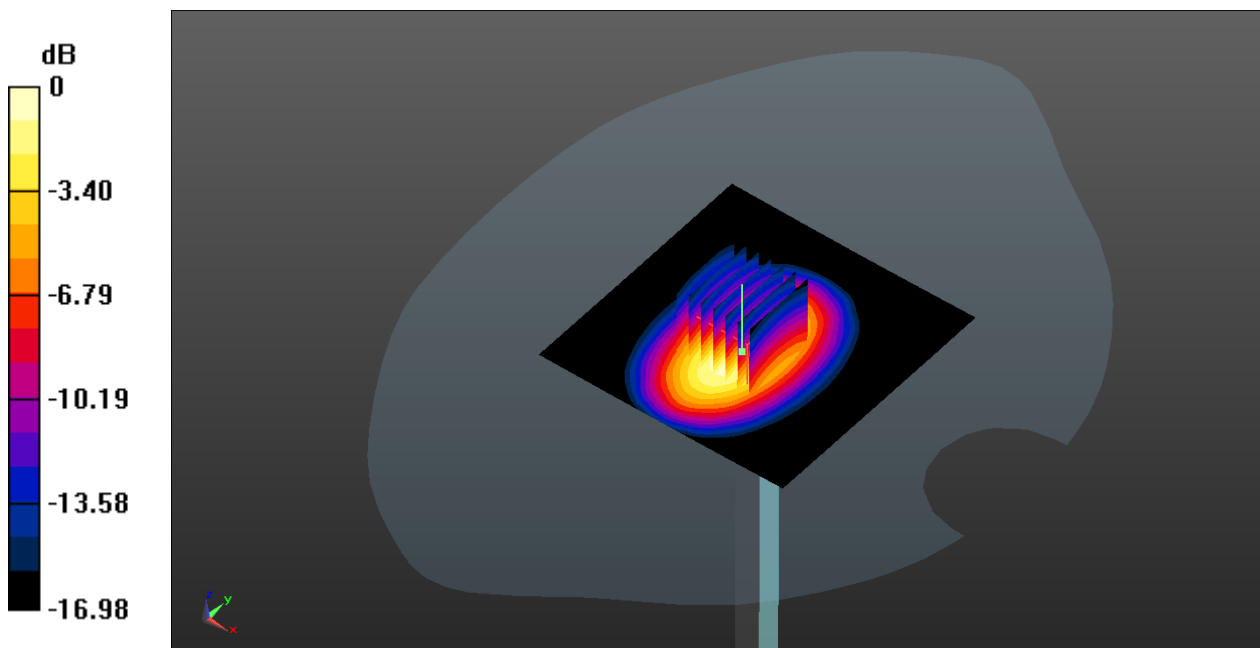
**CW 1750 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.45 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 6.71 W/kg

**SAR(1 g) = 3.63 W/kg; SAR(10 g) = 1.94 W/kg**

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



0 dB = 4.03 W/kg

# System Performance Check Data (1750MHz)

Date: 2020.12.01

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.39$  S/m;  $\epsilon_r = 40.107$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

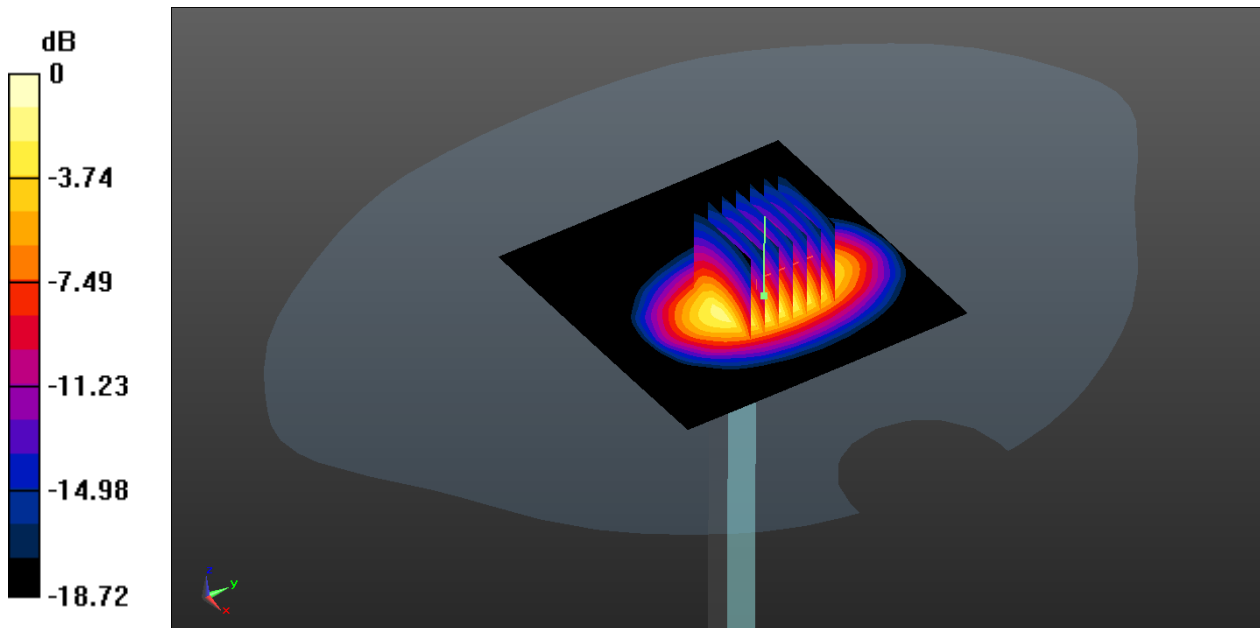
**CW 1750 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 44.72 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 6.51 W/kg

**SAR(1 g) = 3.81 W/kg; SAR(10 g) = 2.02 W/kg**

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



0 dB = 4.18 W/kg



# System Performance Check Data (1900MHz)

Date: 2020.12.02

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.429$  S/m;  $\epsilon_r = 39.484$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

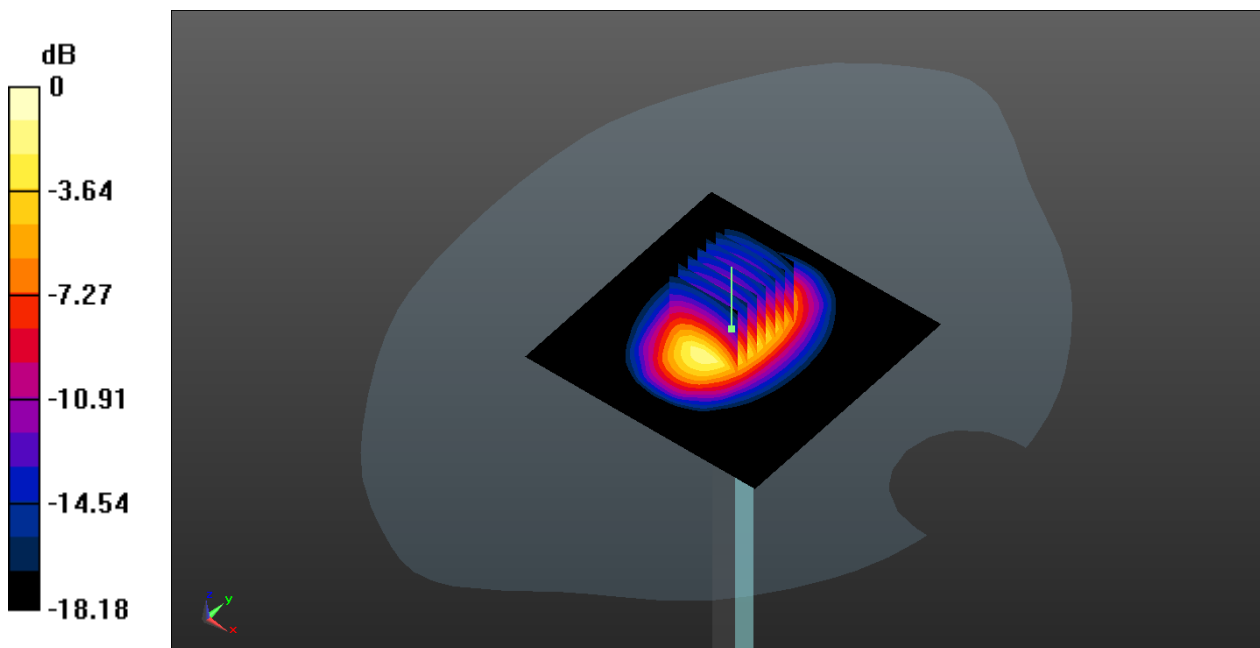
**CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.08 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 7.57 W/kg

**SAR(1 g) = 4.16 W/kg; SAR(10 g) = 2.13 W/kg**

Maximum value of SAR (measured) = 4.67 W/kg



0 dB = 4.67 W/kg

## System Performance Check Data (1900MHz)

Date: 2020.12.03

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;  $\epsilon_r = 41.092$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.29 W/kg

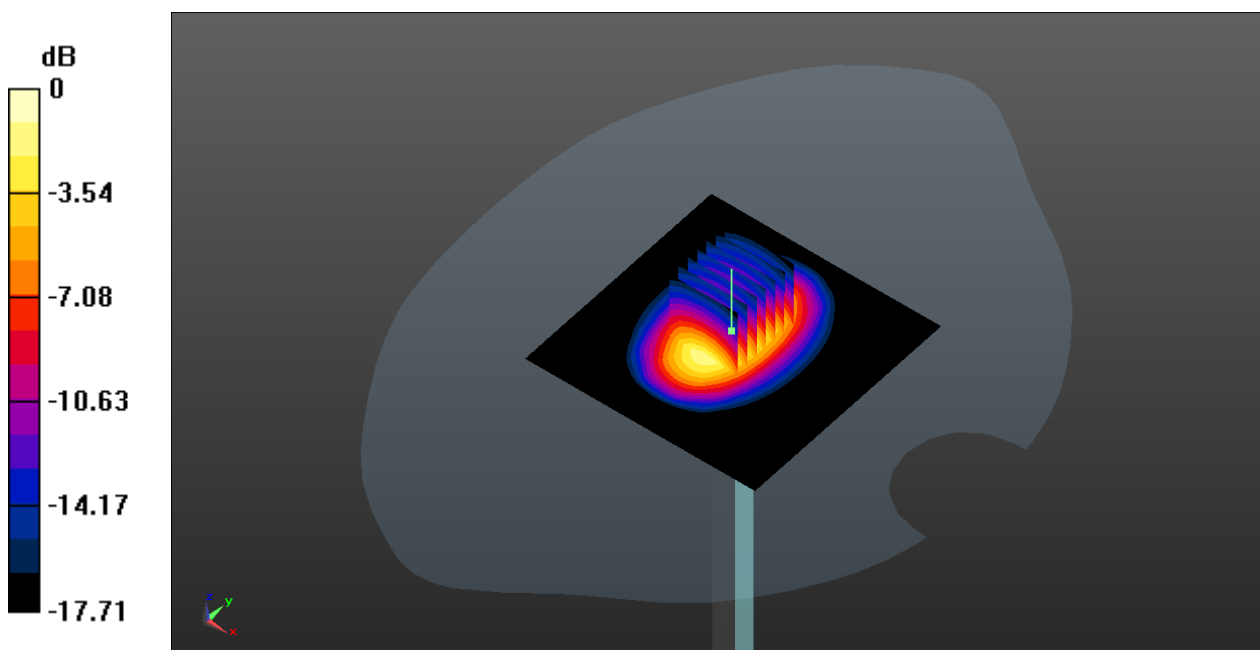
**CW 1900 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.43 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 7.36 W/kg

**SAR(1 g) = 4.11 W/kg; SAR(10 g) = 2.05 W/kg**

Maximum value of SAR (measured) = 4.35 W/kg



0 dB = 4.35 W/kg

# System Performance Check Data (1900MHz)

Date: 2020.12.15

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;  $\epsilon_r = 40.104$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.51 W/kg

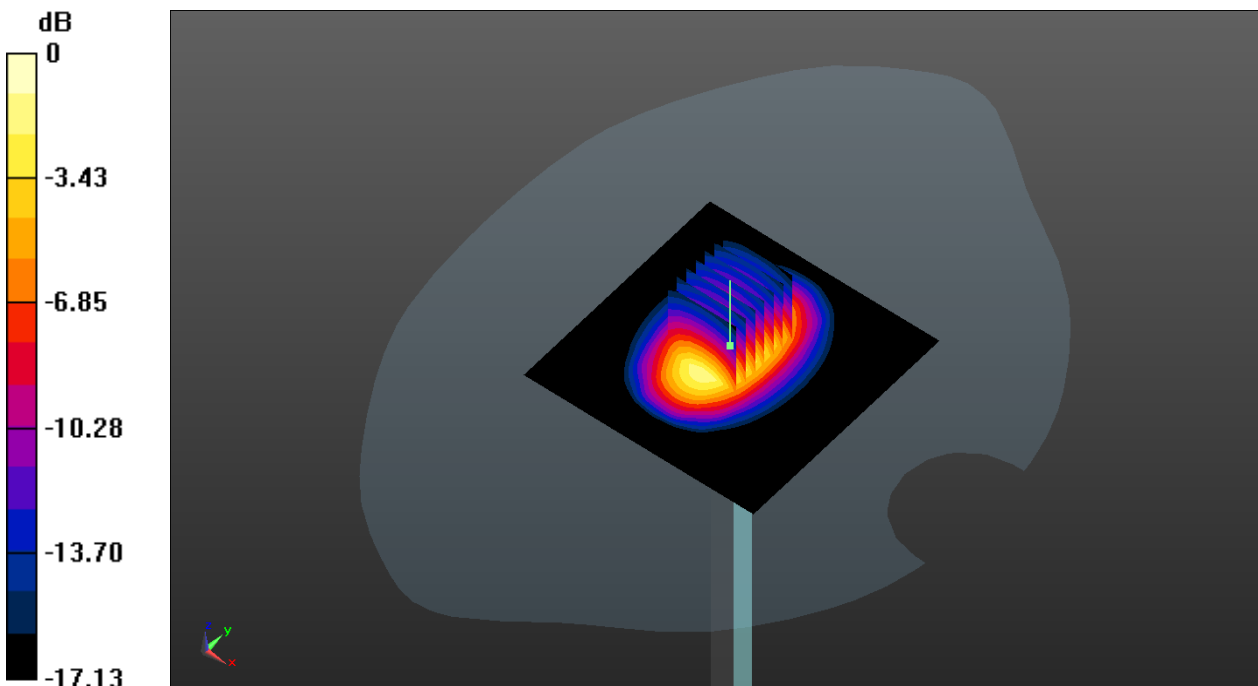
**CW 1900 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.35 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 7.42 W/kg

**SAR(1 g) = 4.08 W/kg; SAR(10 g) = 2.06 W/kg**

Maximum value of SAR (measured) = 4.54 W/kg



0 dB = 4.54 W/kg

# System Performance Check Data (1900MHz)

Date: 2020.12.04

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.43$  S/m;  $\epsilon_r = 40.52$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

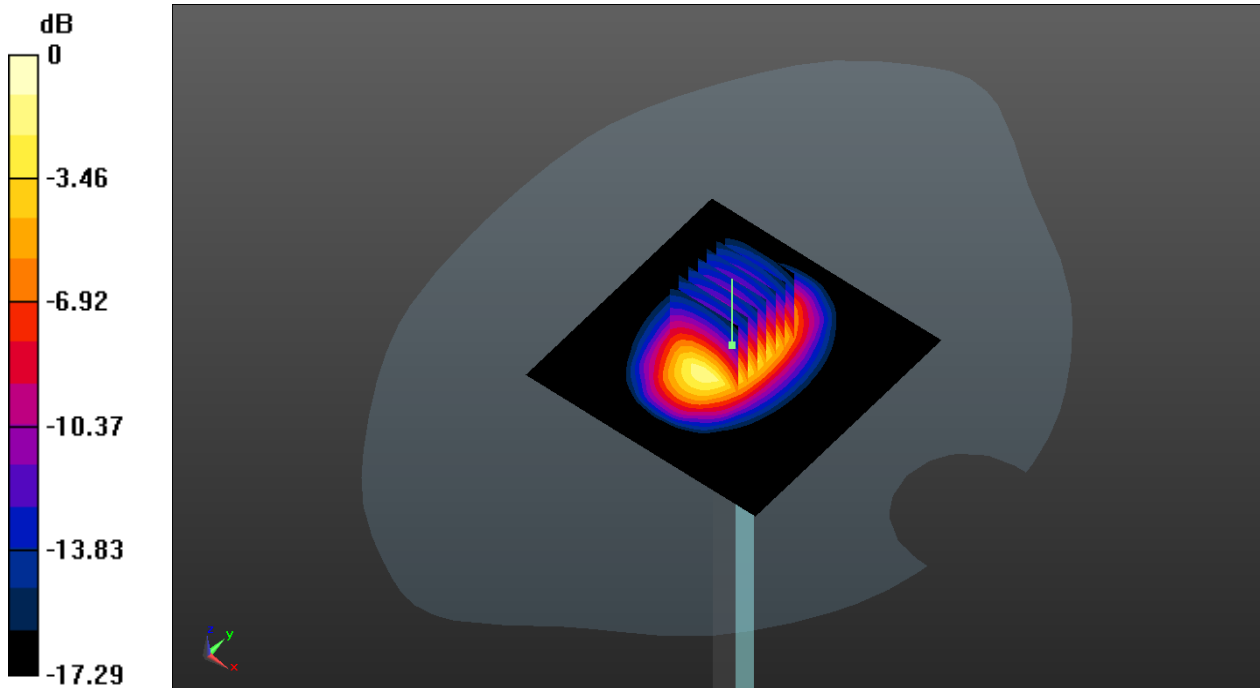
- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 1900 100mW /Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 4.59 W/kg

**CW 1900 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 52.88 V/m; Power Drift = 0.15 dB  
 Peak SAR (extrapolated) = 7.95 W/kg

**SAR(1 g) = 4.01 W/kg; SAR(10 g) = 2.02 W/kg**

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



0 dB = 4.59 W/kg

## System Performance Check Data (2450MHz)

Date: 2020.12.11

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.777$  S/m;  $\epsilon_r = 38.629$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
  
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
  
- 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) = 6.07 W/kg

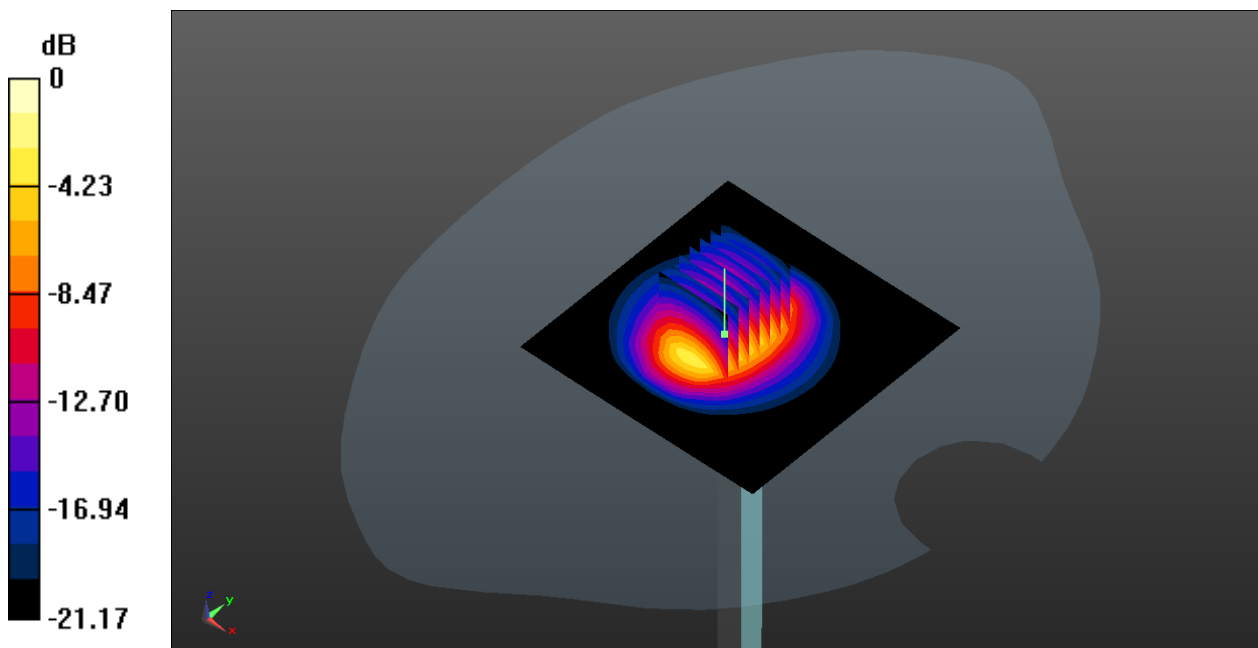
**CW 2450 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.11 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 10.5 W/kg

**SAR(1 g) = 5.18 W/kg; SAR(10 g) = 2.35 W/kg**

Maximum value of SAR (measured) = 5.93 W/kg



0 dB = 5.93 W/kg

## System Performance Check Data (2600MHz)

Date: 2020.12.10

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.954$  S/m;  $\epsilon_r = 37.376$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- 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) = 6.07 W/kg

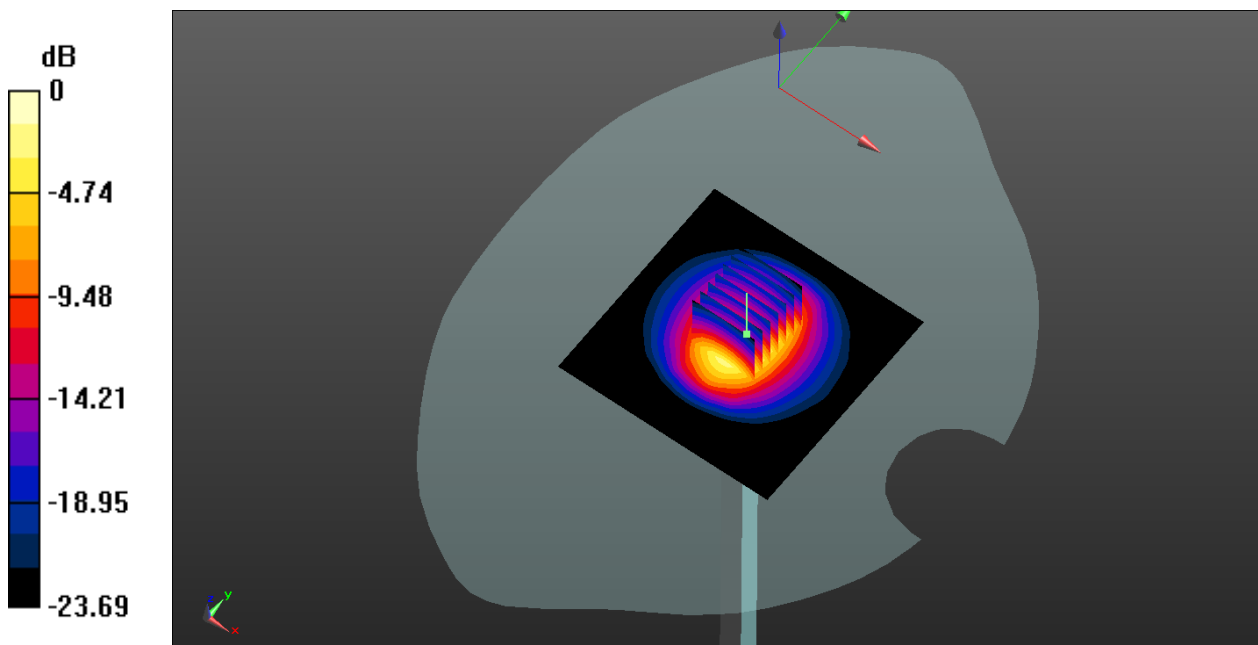
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.12 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 11.9 W/kg

**SAR(1 g) = 5.59 W/kg; SAR(10 g) = 2.53 W/kg**

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



0 dB = 6.09 W/kg

# System Performance Check Data (2600MHz)

Date: 2020.12.09

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.018$  S/m;  $\epsilon_r = 39.608$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
  
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
  
- 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) = 6.15 W/kg

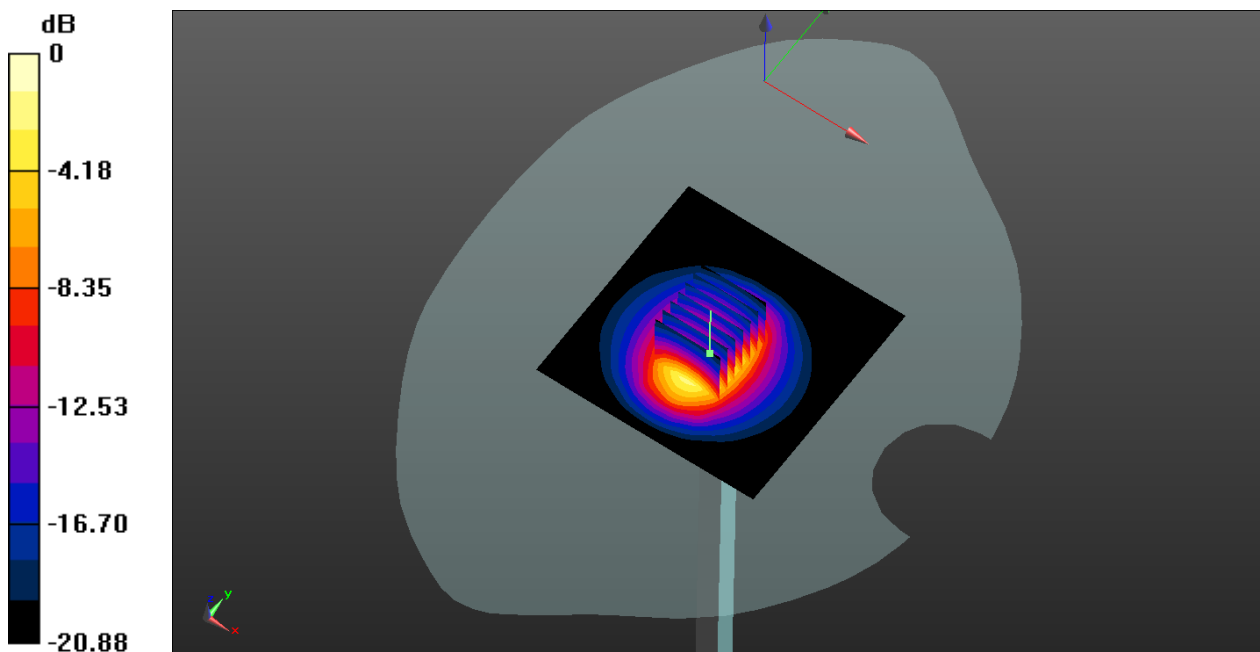
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.94 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 11.9 W/kg

**SAR(1 g) = 5.61 W/kg; SAR(10 g) = 2.52 W/kg**

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



0 dB = 6.13 W/kg

# System Performance Check Data (2600MHz)

Date: 2020.12.08

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.933$  S/m;  $\epsilon_r = 38.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.0 Liquid Temperature: 20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- 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) = 6.29 W/kg

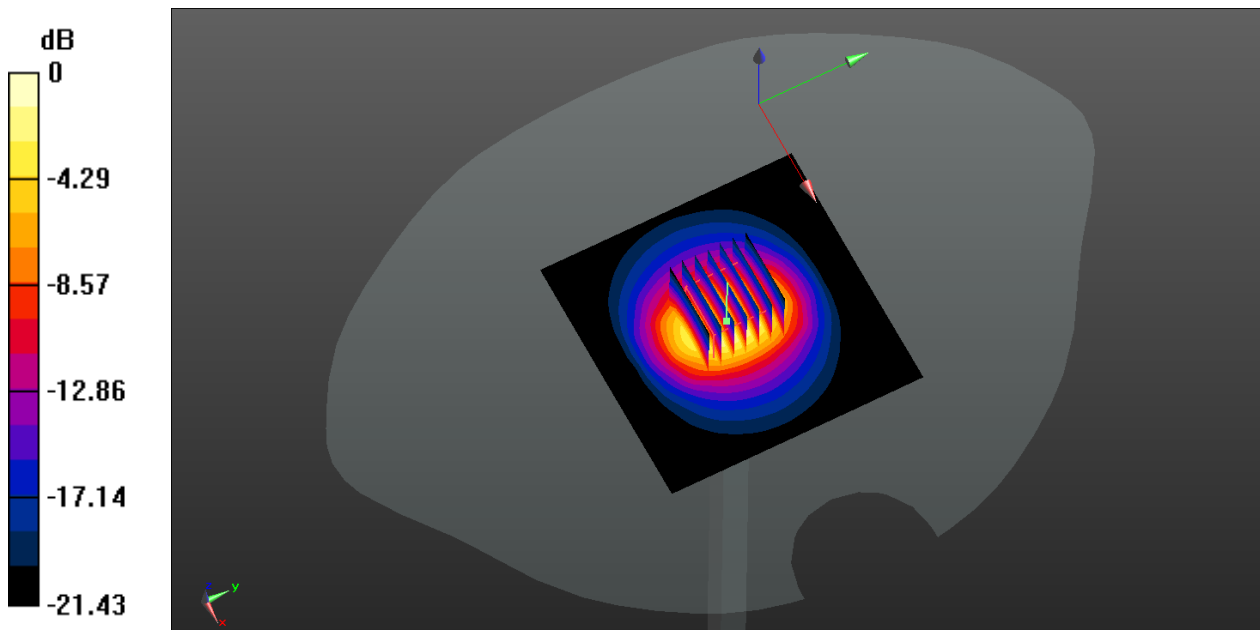
**CW 2600 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.02 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 13.11 W/kg

**SAR(1 g) = 5.65 W/kg; SAR(10 g) = 2.54 W/kg**

Maximum value of SAR (measured) = 6.31 W/kg



0 dB = 6.31 W/kg



# System Performance Check Data (2600MHz)

Date: 2020.12.07

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 1.949$  S/m;  $\epsilon_r = 38.031$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- 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) = 6.21 W/kg

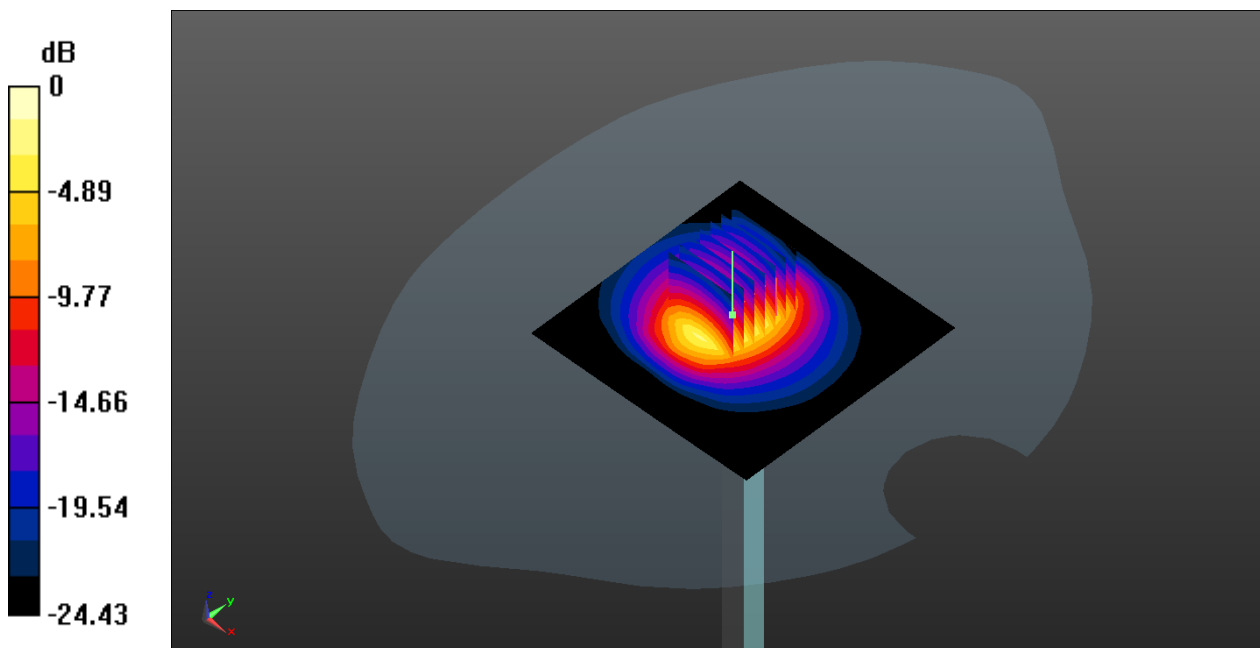
**CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 44.24 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 11.9 W/kg

**SAR(1 g) = 5.61 W/kg; SAR(10 g) = 2.52 W/kg**

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



0 dB = 6.23 W/kg

# System Performance Check Data (2600MHz)

Date: 2020.12.06

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.97$  S/m;  $\epsilon_r = 38.057$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 2600 100mW /Area Scan (101x101x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 6.22 W/kg

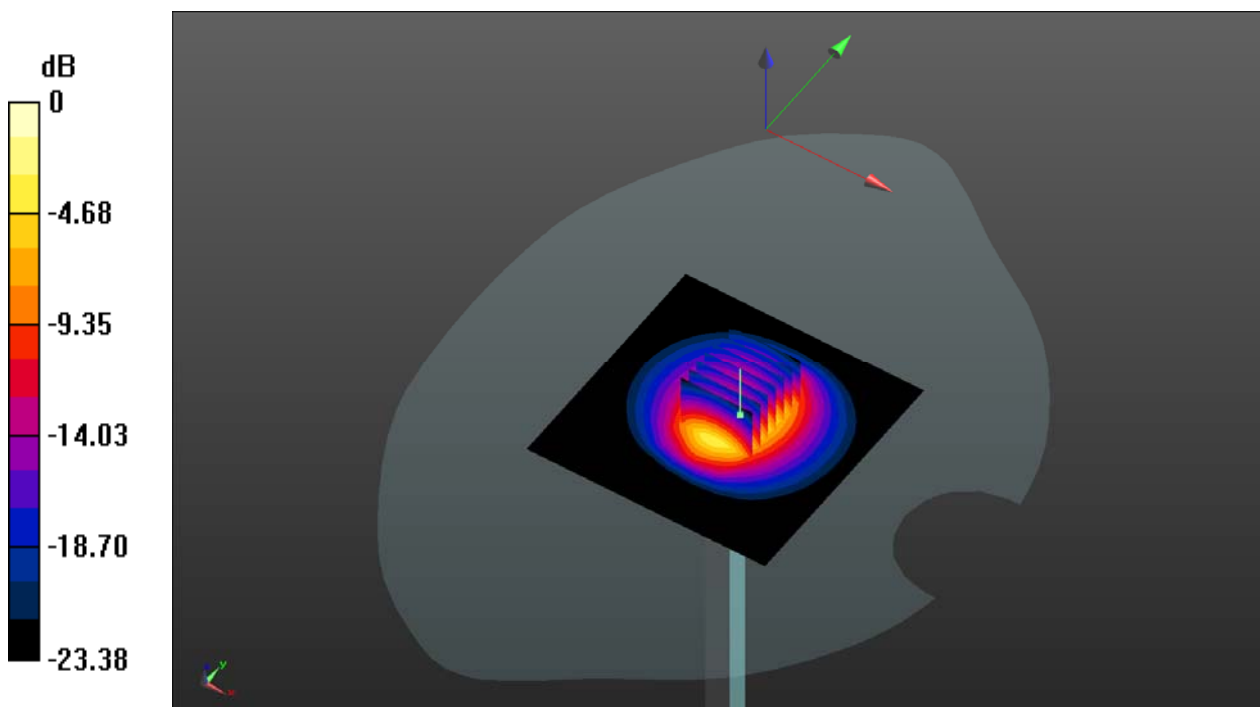
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.62 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 11.3 W/kg

**SAR(1 g) = 5.55 W/kg; SAR(10 g) = 2.46 W/kg**

Maximum value of SAR (measured) = 6.21 W/kg



0 dB = 6.21 W/kg

# System Performance Check Data (2600MHz)

Date: 2020.12.05

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.984$  S/m;  $\epsilon_r = 40.072$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 2600 100mW /Area Scan (101x101x1):** Interpolated grid: dx=10mm, dy=10mm

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

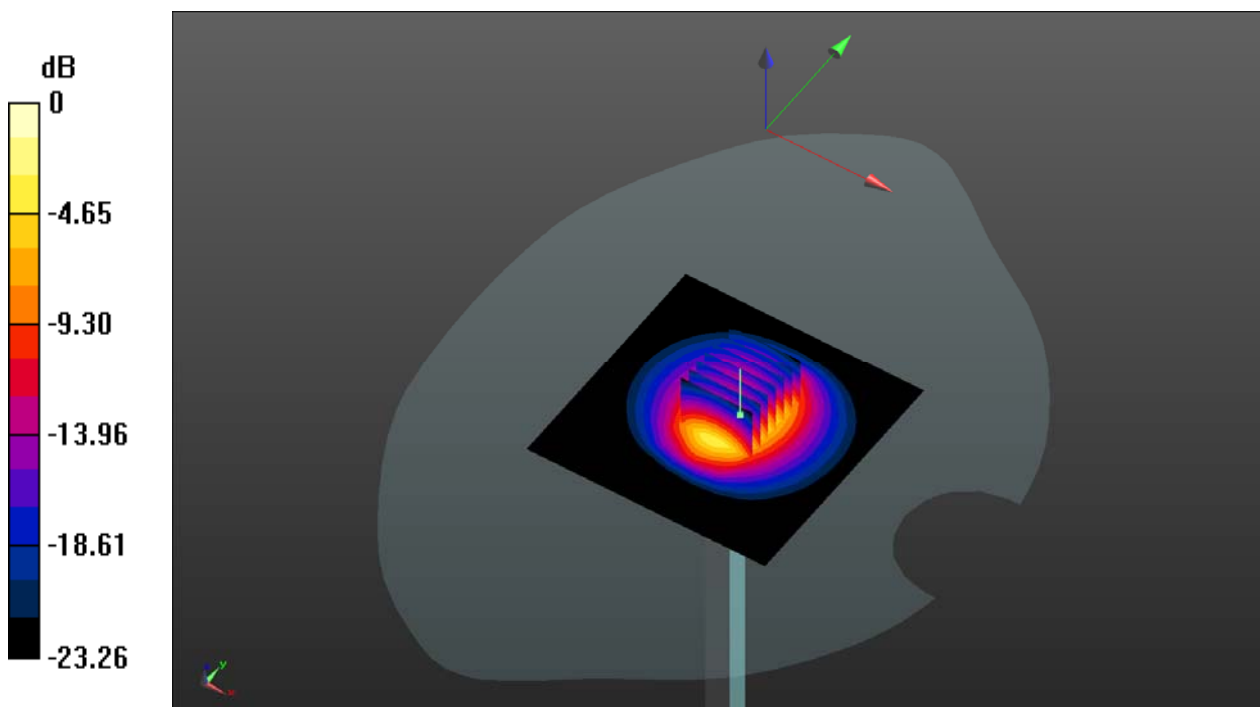
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.74 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 11.5 W/kg

**SAR(1 g) = 5.59 W/kg; SAR(10 g) = 2.52 W/kg**

Maximum value of SAR (measured) = 6.25 W/kg



0 dB = 6.25 W/kg

## System Performance Check Data (5200MHz)

Date: 2020.12.14

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.563$  S/m;  $\epsilon_r = 36.853$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.46, 5.46, 5.46); Calibrated: 2020.08.07;
- Sensor-Surface: Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 5200 100mW/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

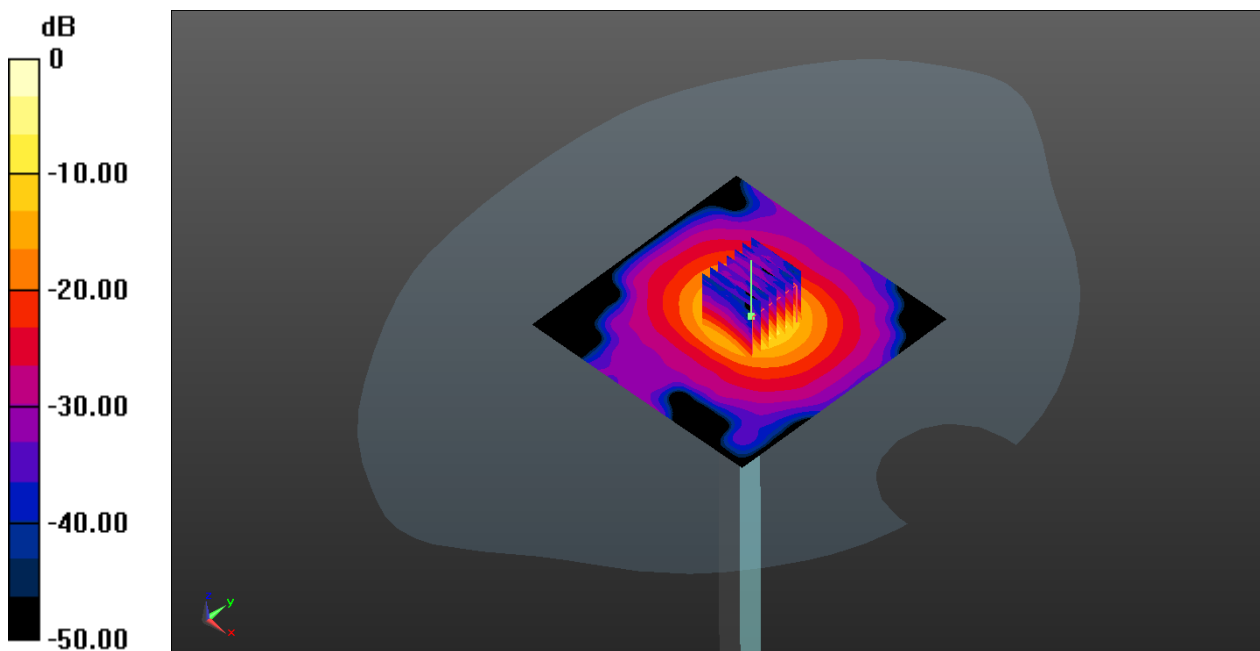
**CW 5200 100mW/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.58 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 34.1 W/kg

**SAR(1 g) = 7.83 W/kg; SAR(10 g) = 2.21 W/kg**

Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.1 W/kg

# System Performance Check Data (5300MHz)

Date: 2020.12.14

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5300$  MHz;  $\sigma = 4.68$  S/m;  $\epsilon_r = 36.482$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.3, 5.3, 5.3); Calibrated: 2020.08.07;
- Sensor-Surface: Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 5300 100mW /Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.81 W/kg

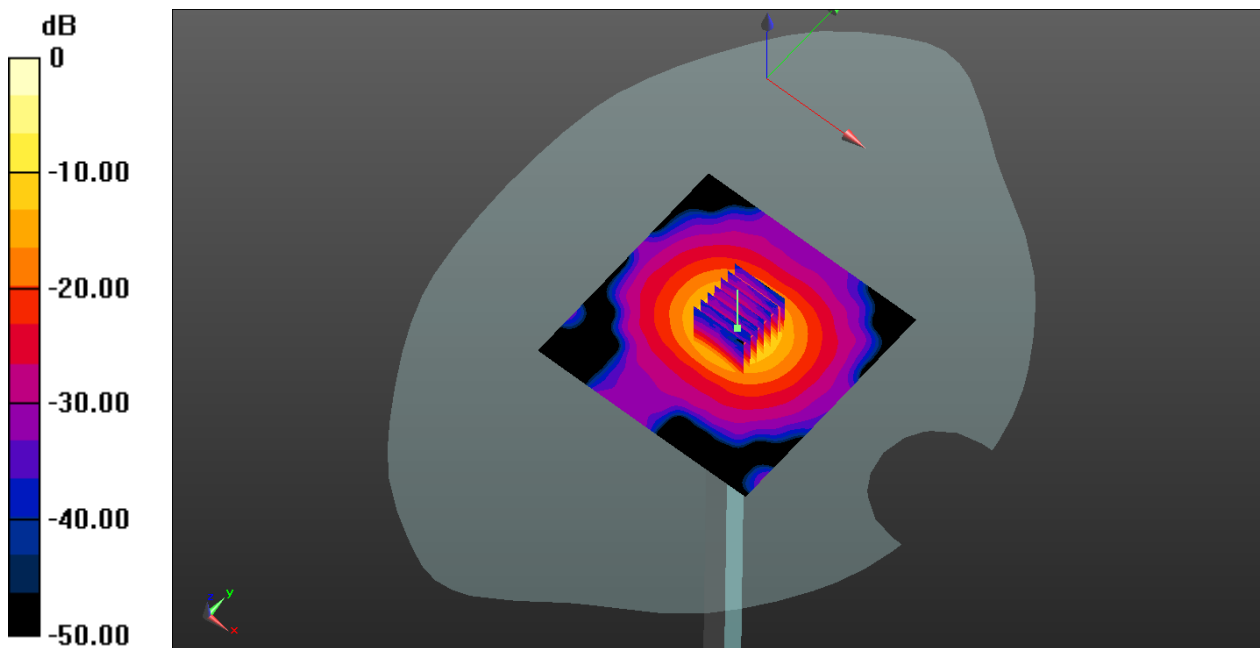
**CW 5300 100mW /Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 37.95 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 35.8 W/kg

**SAR(1 g) = 8.11 W/kg; SAR(10 g) = 2.29 W/kg**

Maximum value of SAR (measured) = 21.3 W/kg



0 dB = 21.3 W/kg

## System Performance Check Data (5600MHz)

Date: 2020.12.13

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

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.047$  S/m;  $\epsilon_r = 35.368$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.85, 4.85, 4.85); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- 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) = 9.25 W/kg

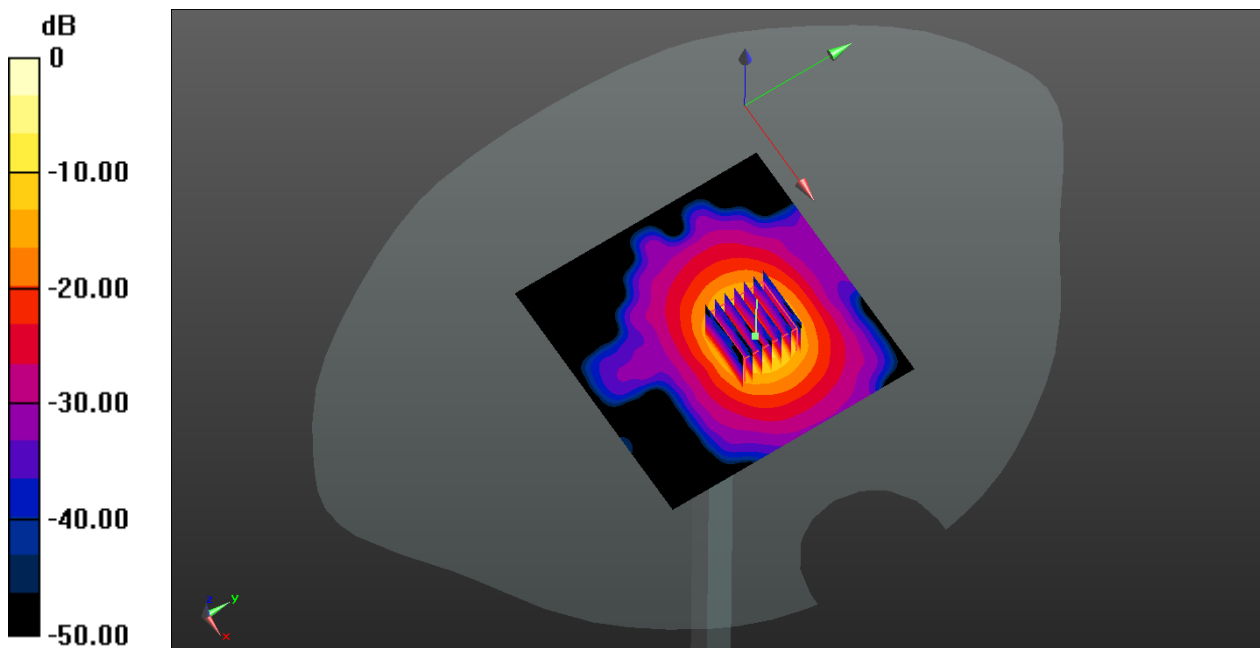
**CW 5600 100mw/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 33.57 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 38.9 W/kg

**SAR(1 g) = 8.25 W/kg; SAR(10 g) = 2.33 W/kg**

Maximum value of SAR (measured) = 17.2 W/kg



0 dB = 17.2 W/kg

# System Performance Check Data (5800MHz)

Date: 2020.12.12

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.36$  S/m;  $\epsilon_r = 34.669$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 20.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.86, 4.86, 4.86); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 5800 100mw/Area Scan (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.44 W/kg

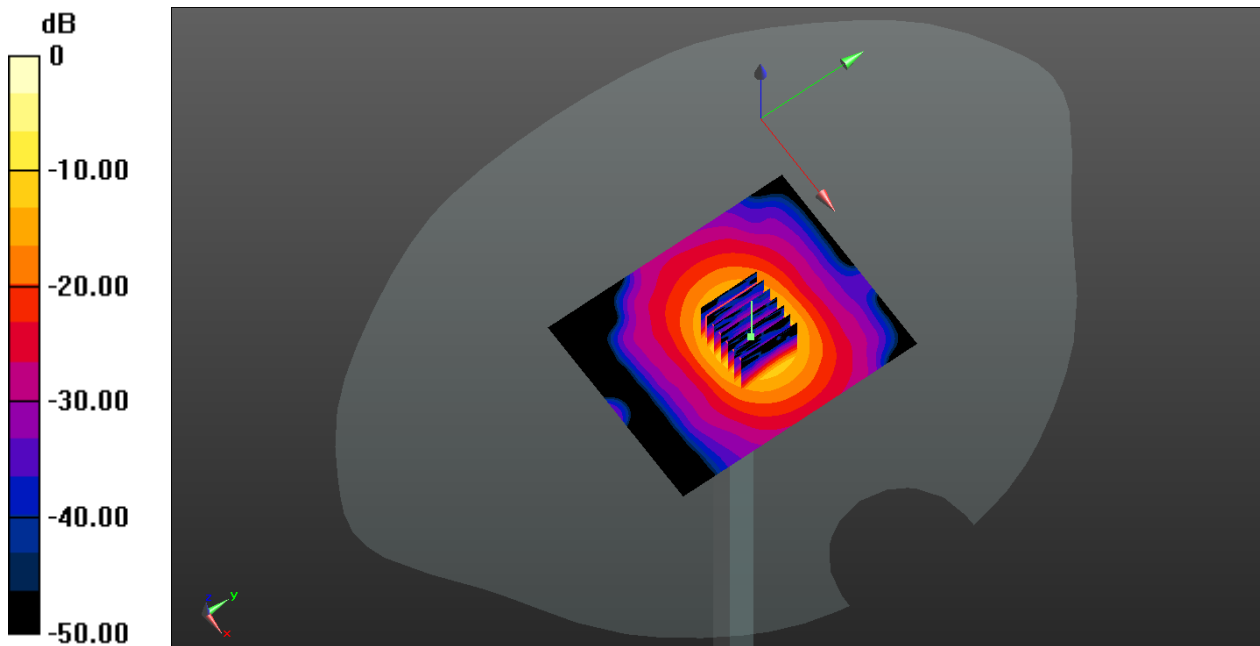
**CW 5800 100mw/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 28.62 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 38.7 W/kg

**SAR(1 g) = 8.15 W/kg; SAR(10 g) = 2.27 W/kg**

Maximum value of SAR (measured) = 16.9 W/kg



0 dB = 16.9 W/kg

## ANNEX C TEST DATA

### MEAS.1 Right Head with Cheek on Low Channel in GPRS850 4Slots mode with Antenna Up

Date: 2020.11.29

Communication System Band: GPRS 850; Frequency: 824.2 MHz; Duty Cycle: 1:2.08

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.915$  S/m;  $\epsilon_r = 42.011$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 128/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.264 W/kg

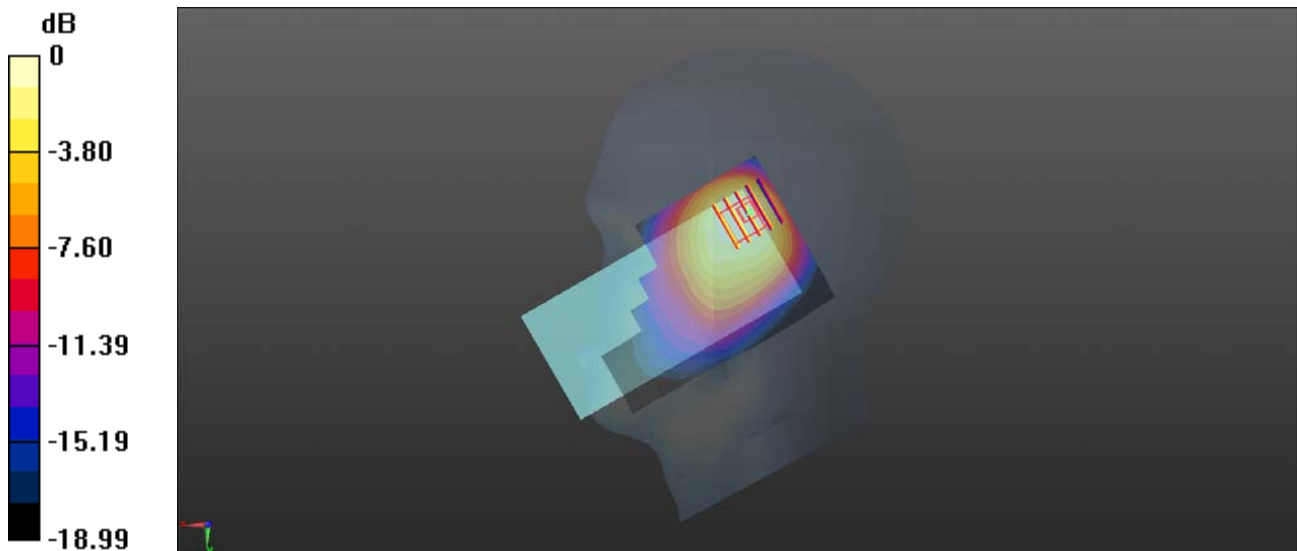
**Ch 128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.49 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.422 W/kg

**SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.130 W/kg**

Maximum value of SAR (measured) = 0.226 W/kg



0 dB = 0.226 W/kg



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

Date: 2020.11.29

Communication System Band: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.1

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.924$  S/m;  $\epsilon_r = 41.899$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 190/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.156 W/kg

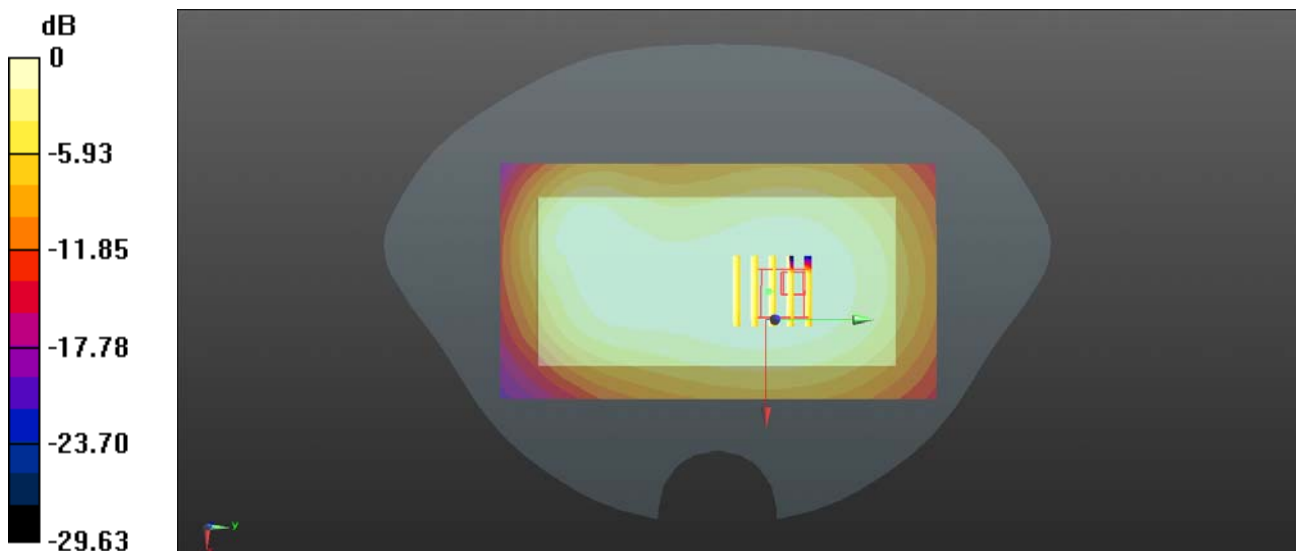
**Ch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.79 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.300 W/kg

**SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.116 W/kg**

Maximum value of SAR (measured) = 0.158 W/kg



0 dB = 0.158 W/kg

**MEAS.3 Body Plane with Back Side 10mm on Low Channel in GPRS850 4Slots mode with Antenna Up**

Date: 2020.11.29

Communication System Band: GPRS 850; Frequency: 824.2 MHz; Duty Cycle: 1:2.08

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.915$  S/m;  $\epsilon_r = 42.011$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 128/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.308 W/kg

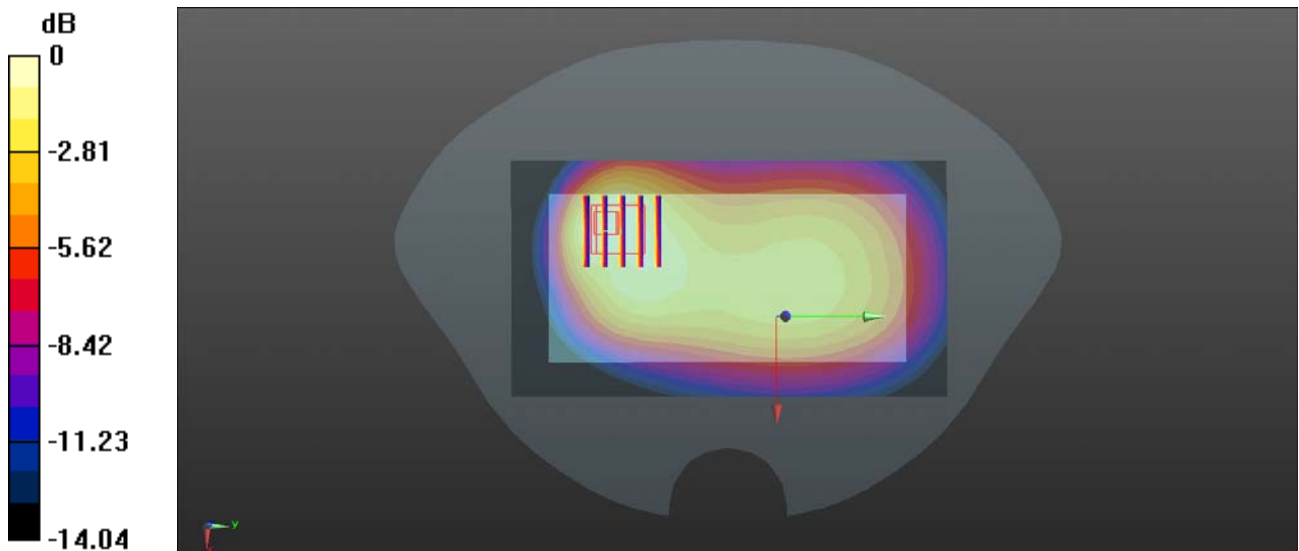
**Ch 128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.09 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.496 W/kg

**SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.171 W/kg**

Maximum value of SAR (measured) = 0.305 W/kg



0 dB = 0.305 W/kg

**MEAS.4 Right Head with Tilt on High Channel in GPRS1900 2Slots mode with Antenna Up**

Date: 2020.12.02

Communication System Band: GPRS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4.1

Medium parameters used (interpolated):  $f = 1909.8$  MHz;  $\sigma = 1.433$  S/m;  $\epsilon_r = 39.467$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

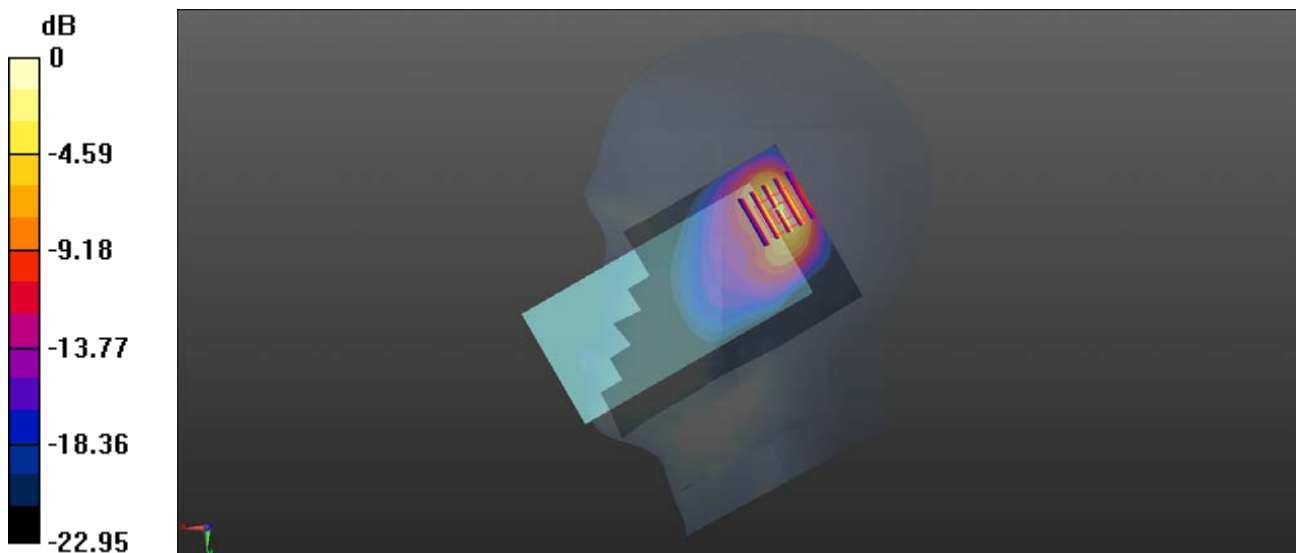
**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.69 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.66 W/kg

**SAR(1 g) = 0.731 W/kg; SAR(10 g) = 0.312 W/kg**

Maximum value of SAR (measured) = 0.826 W/kg



0 dB = 0.826 W/kg

**MEAS.5 Body Plane with Back Side 15mm on Middle Channel in GPRS1900 2Slots mode with Antenna Up**

Date: 2020.12.02

Communication System Band: GPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4.1

Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.415$  S/m;  $\epsilon_r = 39.827$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch512/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.593 W/kg

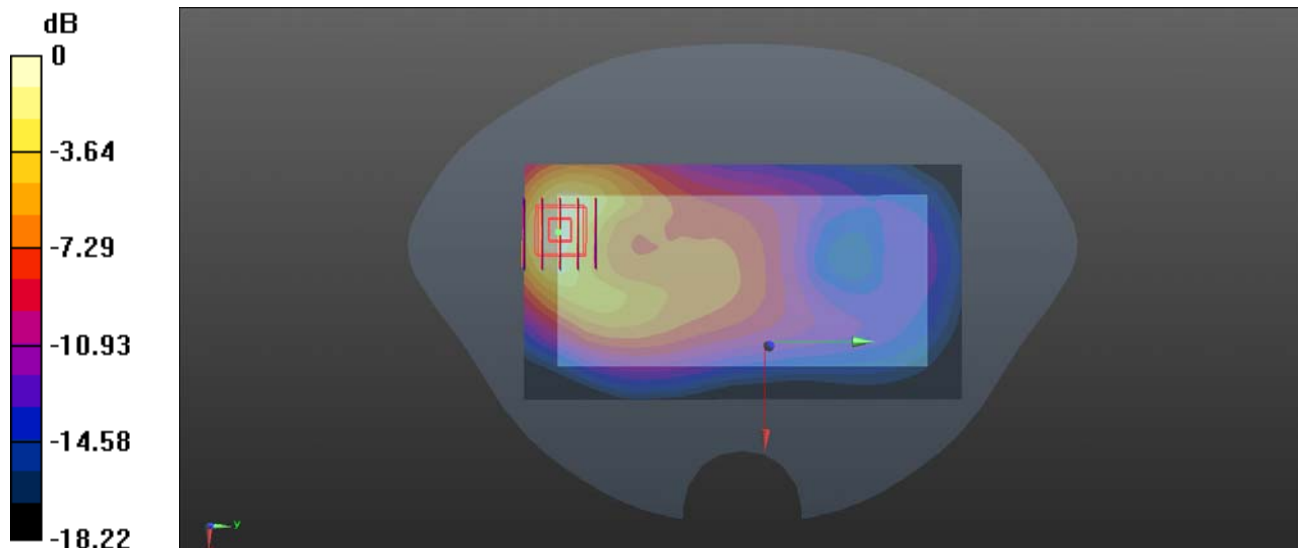
**Ch512/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.805 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.966 W/kg

**SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.288 W/kg**

Maximum value of SAR (measured) = 0.602 W/kg



0 dB = 0.602 W/kg

**MEAS.6 Body Plane with Top Edge 10mm on High Channel in GPRS1900 1Slots mode with Antenna Up**

Date: 2020.12.02

Communication System Band: GPRS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated):  $f = 1909.8$  MHz;  $\sigma = 1.433$  S/m;  $\epsilon_r = 39.467$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch 810/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.607 W/kg

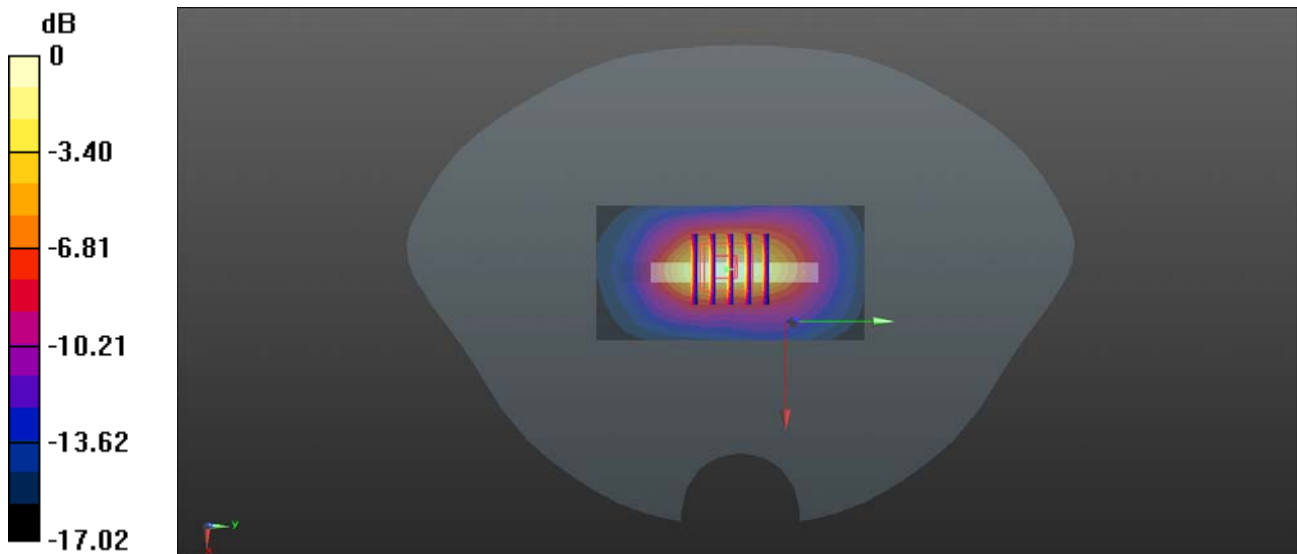
Ch 810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.78 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.972 W/kg

SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 0.596 W/kg



0 dB = 0.596 W/kg

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

Date: 2020.12.03

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

Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.424$  S/m;  $\epsilon_r = 41.013$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9538/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.618 W/kg

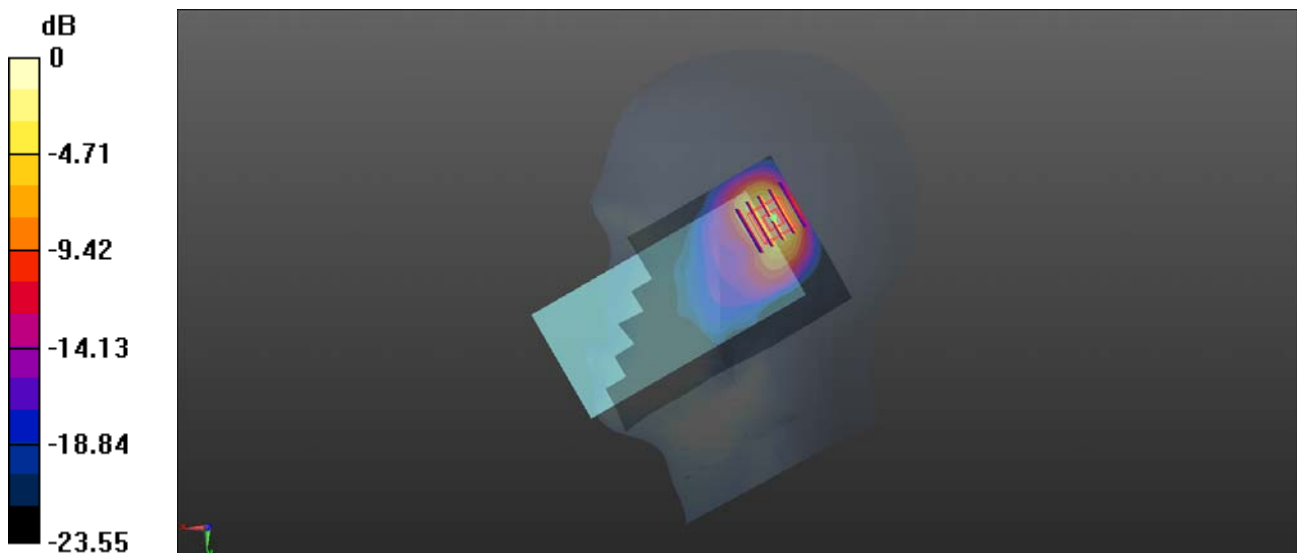
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.90 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.44 W/kg

**SAR(1 g) = 0.623 W/kg; SAR(10 g) = 0.262 W/kg**

Maximum value of SAR (measured) = 0.707 W/kg



0 dB = 0.707 W/kg

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

Date: 2020.12.03

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

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 41.271$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9262/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.580 W/kg

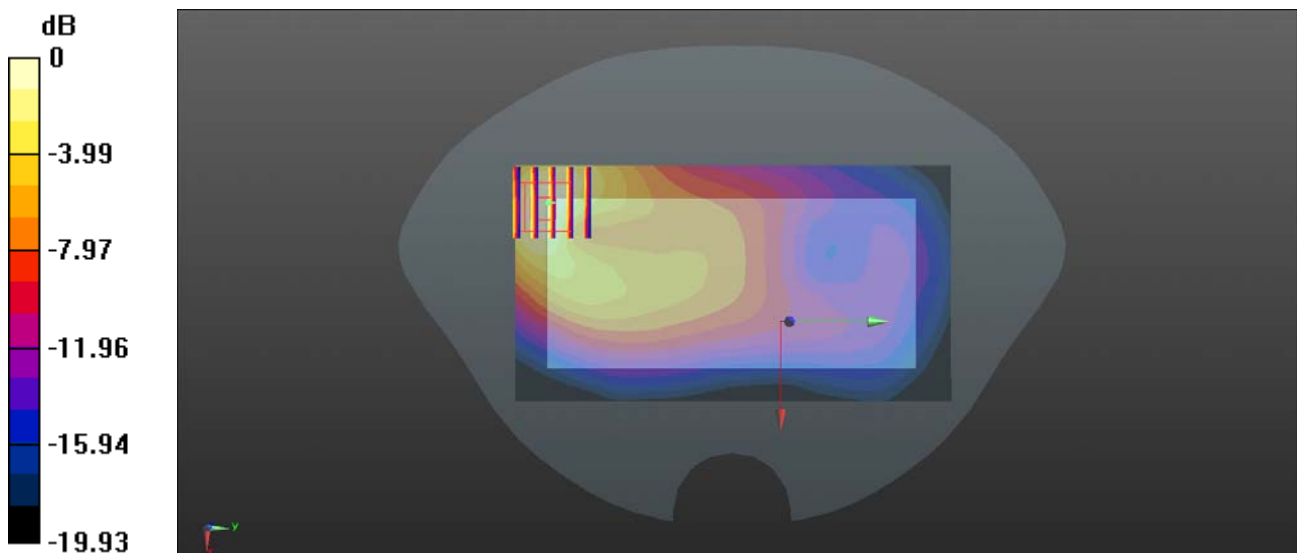
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.645 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.969 W/kg

**SAR(1 g) = 0.528 W/kg; SAR(10 g) = 0.277 W/kg**

Maximum value of SAR (measured) = 0.577 W/kg



0 dB = 0.577 W/kg

**MEAS.9 Body Plane with Bottom Edge 10mm on Low Channel in WCDMA Band 2 mode with Antenna Down**

Date: 2020.12.03

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

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 41.271$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9262/Area Scan (51x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.07 W/kg

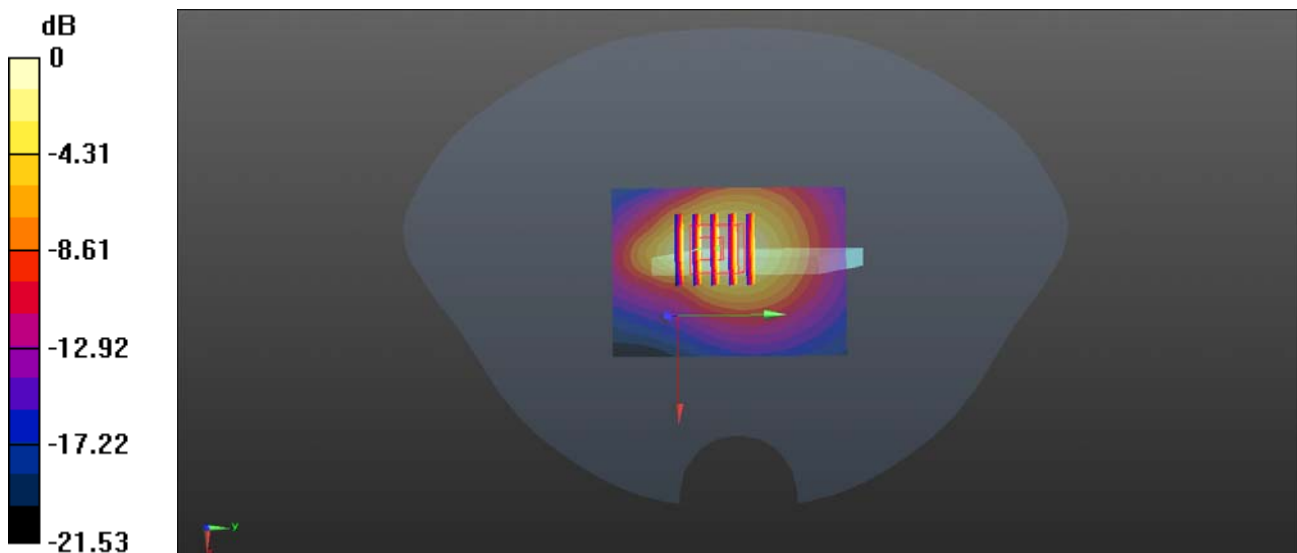
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.99 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.74 W/kg

**SAR(1 g) = 0.948 W/kg; SAR(10 g) = 0.501 W/kg**

Maximum value of SAR (measured) = 1.06 W/kg



0 dB = 1.06 W/kg



**MEAS.10 Body Plane with Top Edge 0mm on Low Channel in WCDMA Band 2 mode with Antenna Up**

Date: 2020.12.03

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

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 41.271$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 9262/Area Scan (41x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 4.38 W/kg

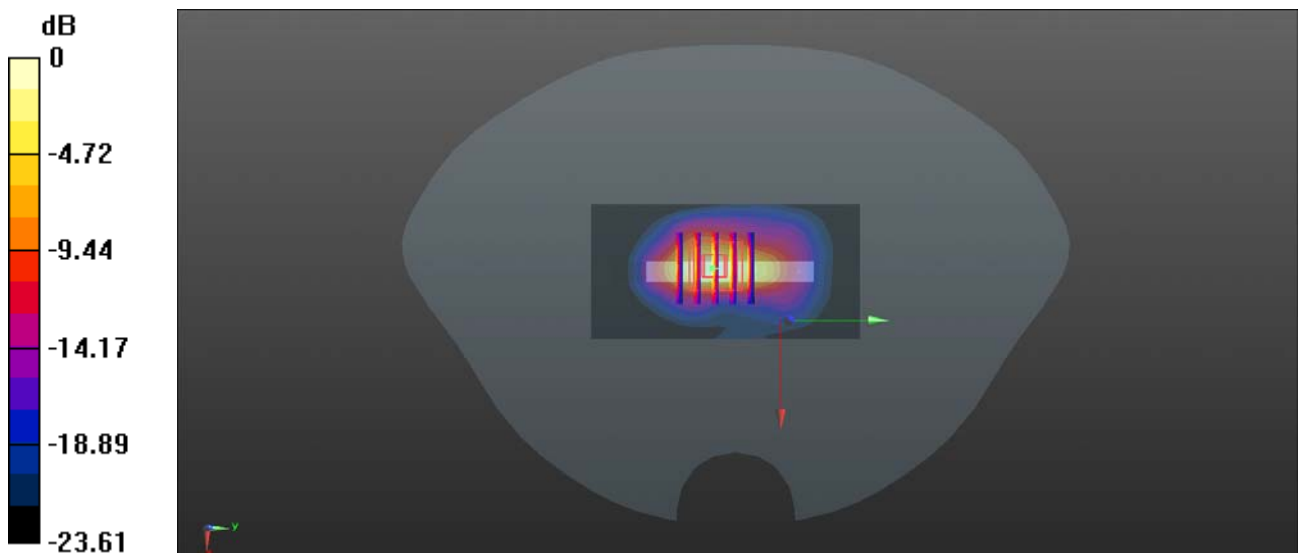
**Ch 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.58 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 7.90 W/kg

**SAR(1 g) = 3.35 W/kg; SAR(10 g) = 1.32 W/kg**

Maximum value of SAR (measured) = 4.14 W/kg



0 dB = 4.14 W/kg

**MEAS.11 Right Head with Tilt on Middle Channel in WCDMA Band 4 mode with Antenna Up**

Date: 2020.11.25

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

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.367$  S/m;  $\epsilon_r = 39.865$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

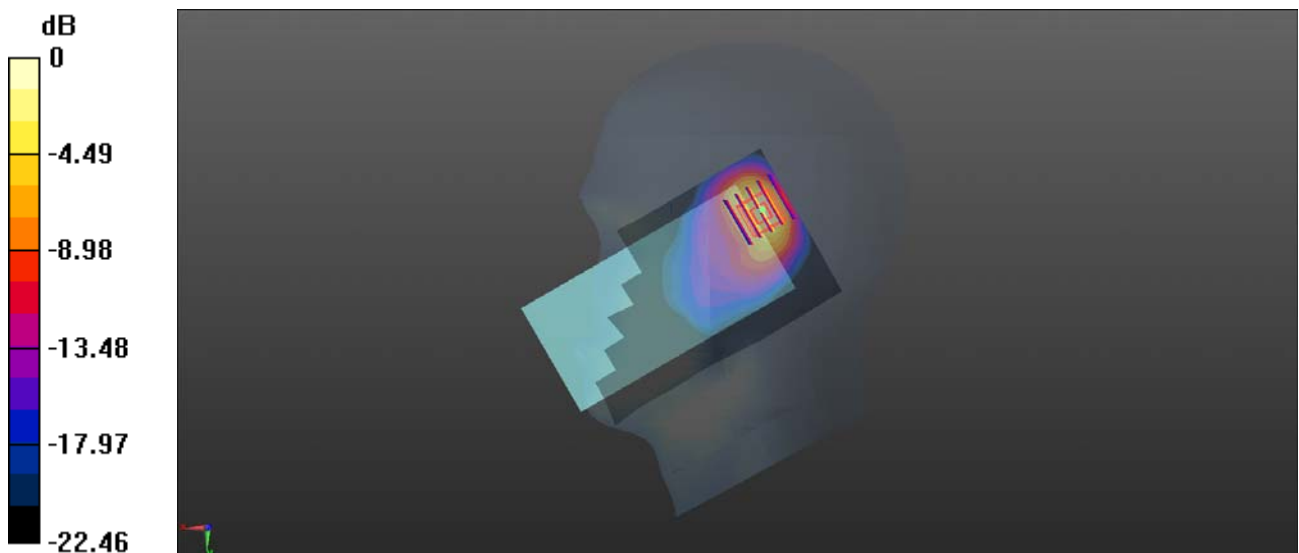
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.87 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.29 W/kg

**SAR(1 g) = 0.582 W/kg; SAR(10 g) = 0.250 W/kg**

Maximum value of SAR (measured) = 0.657 W/kg



0 dB = 0.657 W/kg

**MEAS.12 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band 4 mode with Antenna Up**

Date: 2020.11.25

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

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.367$  S/m;  $\epsilon_r = 39.865$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.485 W/kg

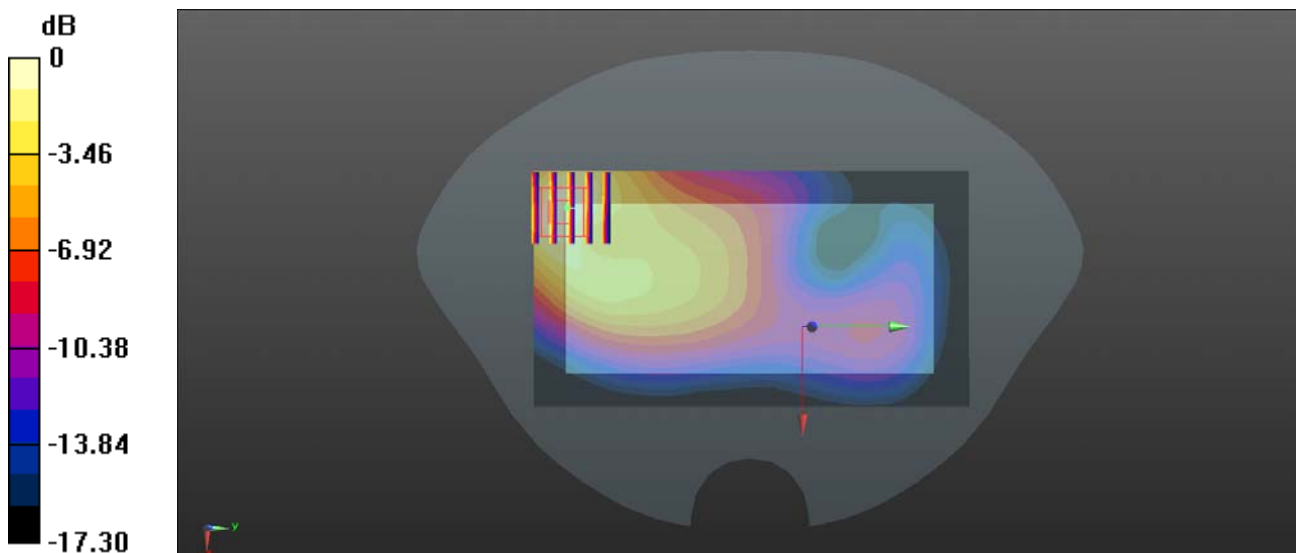
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.577 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.770 W/kg

**SAR(1 g) = 0.447 W/kg; SAR(10 g) = 0.248 W/kg**

Maximum value of SAR (measured) = 0.484 W/kg



0 dB = 0.484 W/kg

**MEAS.13 Body Plane with Bottom Edge 10mm on Middle Channel in WCDMA Band 4 mode with Antenna Down**

Date: 2020.11.25

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

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.367$  S/m;  $\epsilon_r = 39.865$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (51x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.755 W/kg

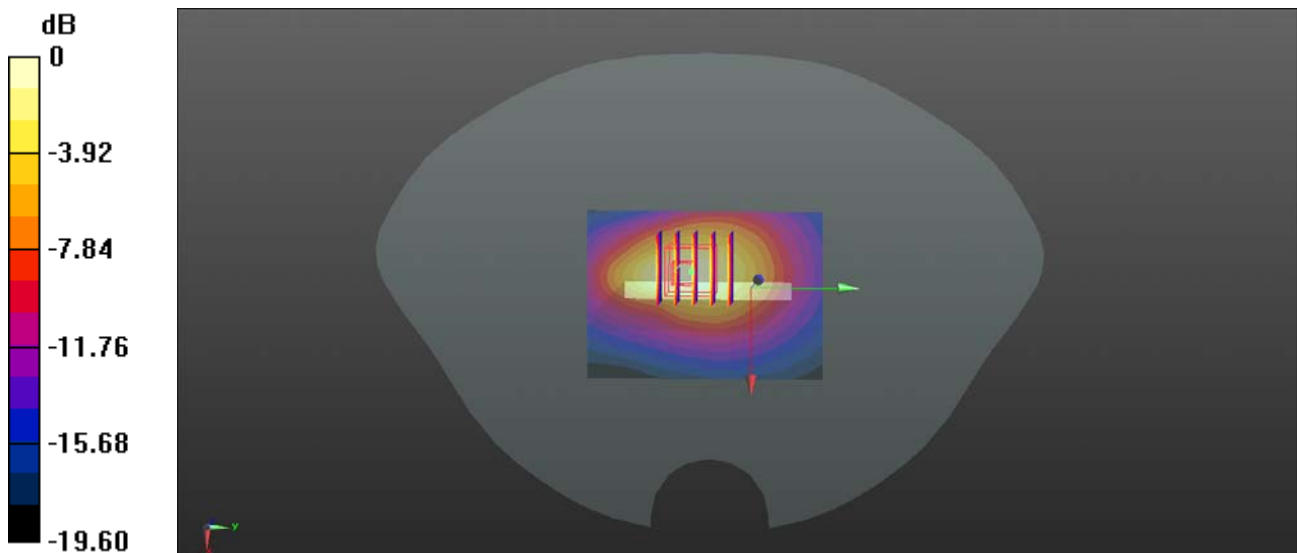
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.09 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.16 W/kg

**SAR(1 g) = 0.650 W/kg; SAR(10 g) = 0.346 W/kg**

Maximum value of SAR (measured) = 0.726 W/kg



0 dB = 0.726 W/kg

**MEAS.14 Body Plane with Top Edge 0mm on Middle Channel in WCDMA Band 4 mode with Antenna Up**

Date: 2020.11.25

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

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.367$  S/m;  $\epsilon_r = 39.865$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 1412/Area Scan (41x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

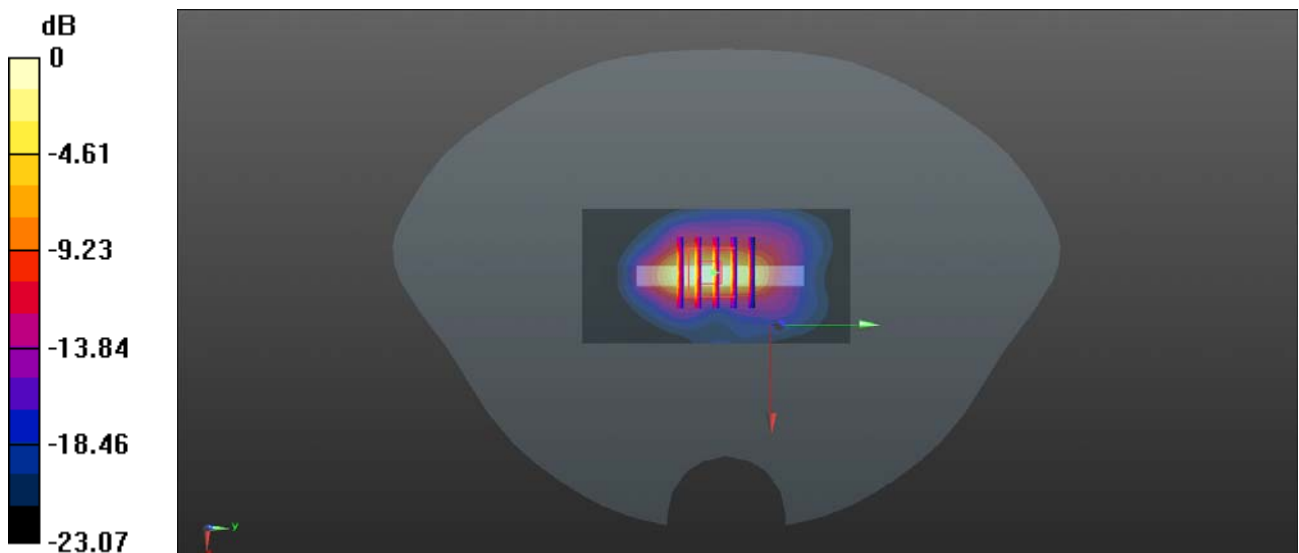
**Ch 1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.58 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 4.73 W/kg

**SAR(1 g) = 2 W/kg; SAR(10 g) = 0.794 W/kg**

Maximum value of SAR (measured) = 2.63 W/kg



0 dB = 2.63 W/kg

**MEAS.15 Right Head with Cheek on Middle Channel in WCDMA Band 5 mode with Antenna Up**

Date: 2020.11.28

Communication System Band: V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.934$  S/m;  $\epsilon_r = 42.219$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 4182/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.877 W/kg

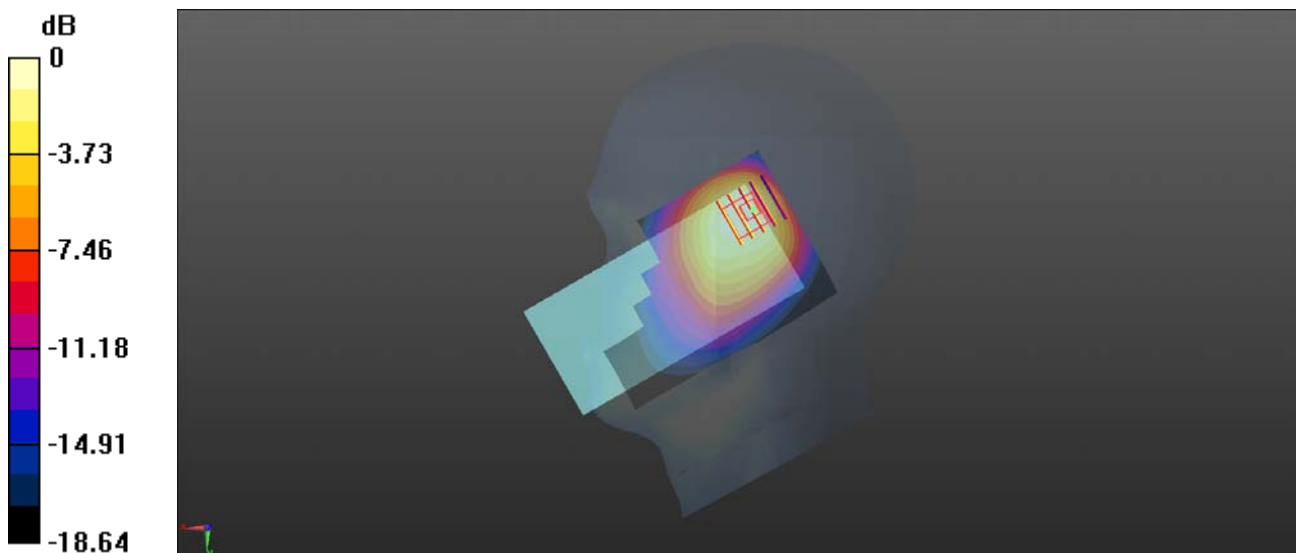
**Ch 4182/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.51 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.41 W/kg

**SAR(1 g) = 0.717 W/kg; SAR(10 g) = 0.441 W/kg**

Maximum value of SAR (measured) = 0.765 W/kg



0 dB = 0.765 W/kg

**MEAS.16 Body Plane with Back Side 15mm on High Channel in WCDMA Band 5 mode with Antenna Up**

Date: 2020.11.28

Communication System Band: V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 4233/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.114 W/kg

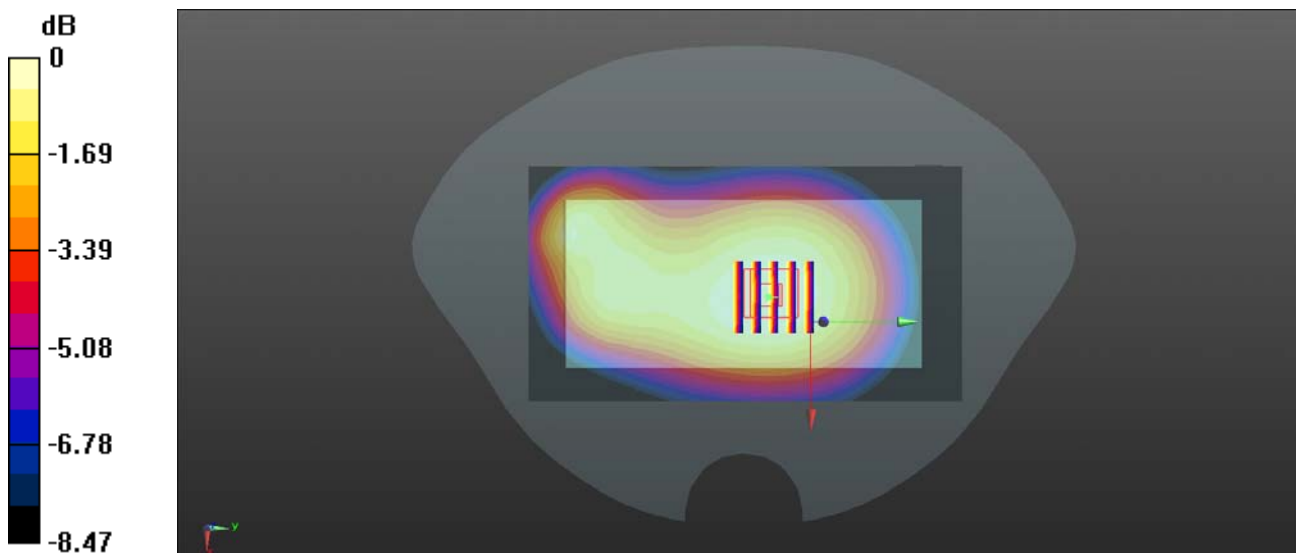
**Ch 4233/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.23 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.136 W/kg

**SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.081 W/kg**

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



0 dB = 0.113 W/kg

**MEAS.17 Body Plane with Back Side 10mm on High Channel in WCDMA Band 5 mode with Antenna Down**

Date: 2020.11.28

Communication System Band: V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 4233/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.283 W/kg

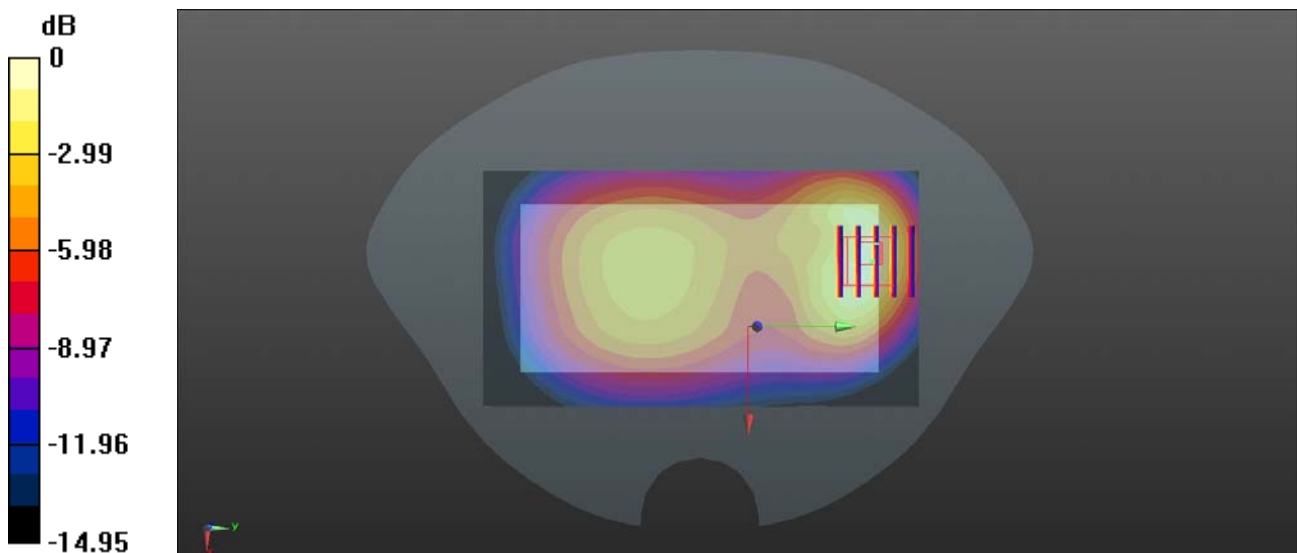
**Ch 4233/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.59 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.528 W/kg

**SAR(1 g) = 0.280 W/kg; SAR(10 g) = 0.156 W/kg**

Maximum value of SAR (measured) = 0.312 W/kg



0 dB = 0.312 W/kg



**MEAS.18 Right Head with Cheek on High Channel in CDMA BC0 mode with Antenna Up**

Date: 2020.12.17

Communication System Band:CDMA(BC0); Frequency: 848.31 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.084$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch777/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.853 W/kg

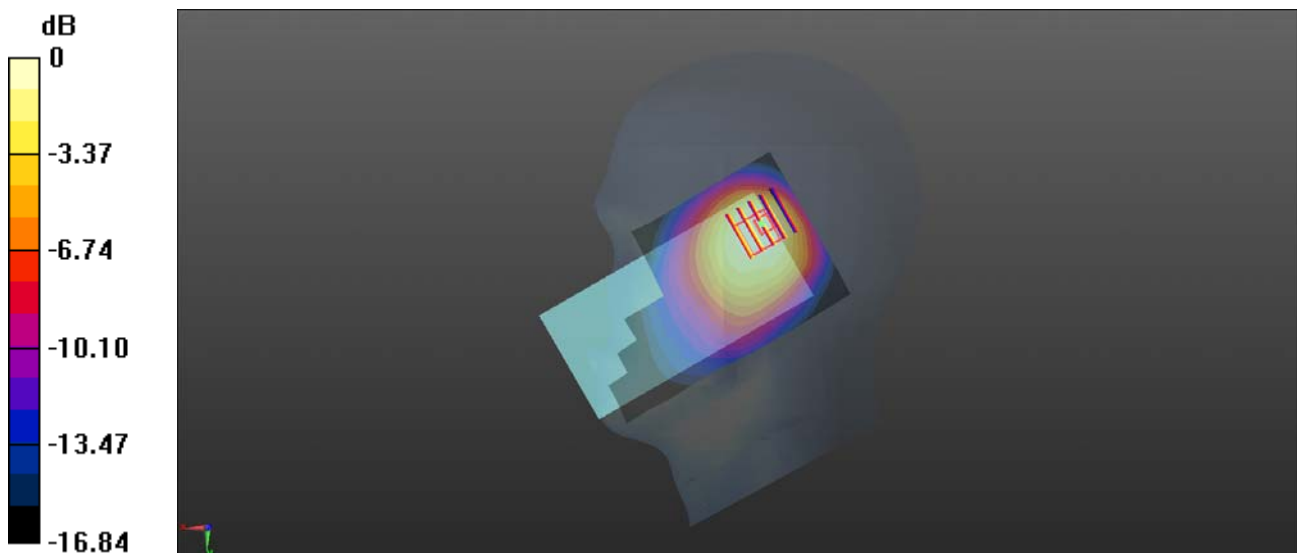
**Ch777/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.07 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.43 W/kg

**SAR(1 g) = 0.765 W/kg; SAR(10 g) = 0.483 W/kg**

Maximum value of SAR (measured) = 0.803 W/kg



0 dB = 0.803 W/kg

**MEAS.19 Body Plane with Back Side 15mm on Middle Channel in CDMA BC0 mode with Antenna Up**

Date: 2020.12.17

Communication System Band:CDMA(BC0); Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.52$  MHz;  $\sigma = 0.9$  S/m;  $\epsilon_r = 41.343$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch384/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.123 W/kg

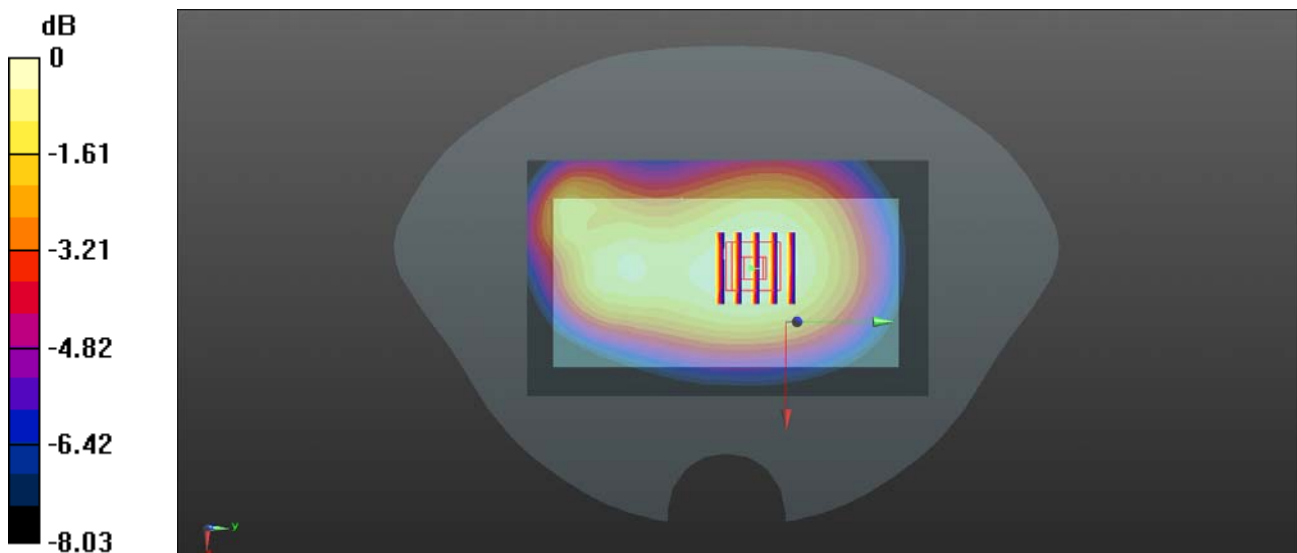
**Ch384/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.66 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.150 W/kg

**SAR(1 g) = 0.118 W/kg; SAR(10 g) = 0.089 W/kg**

Maximum value of SAR (measured) = 0.123 W/kg



0 dB = 0.123 W/kg

**MEAS.20 Body Plane with Back Side 10mm on Middle Channel in CDMA BC0 mode with Antenna Up**

Date: 2020.12.17

Communication System Band:CDMA(BC0); Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.52$  MHz;  $\sigma = 0.9$  S/m;  $\epsilon_r = 41.343$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch384/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.237 W/kg

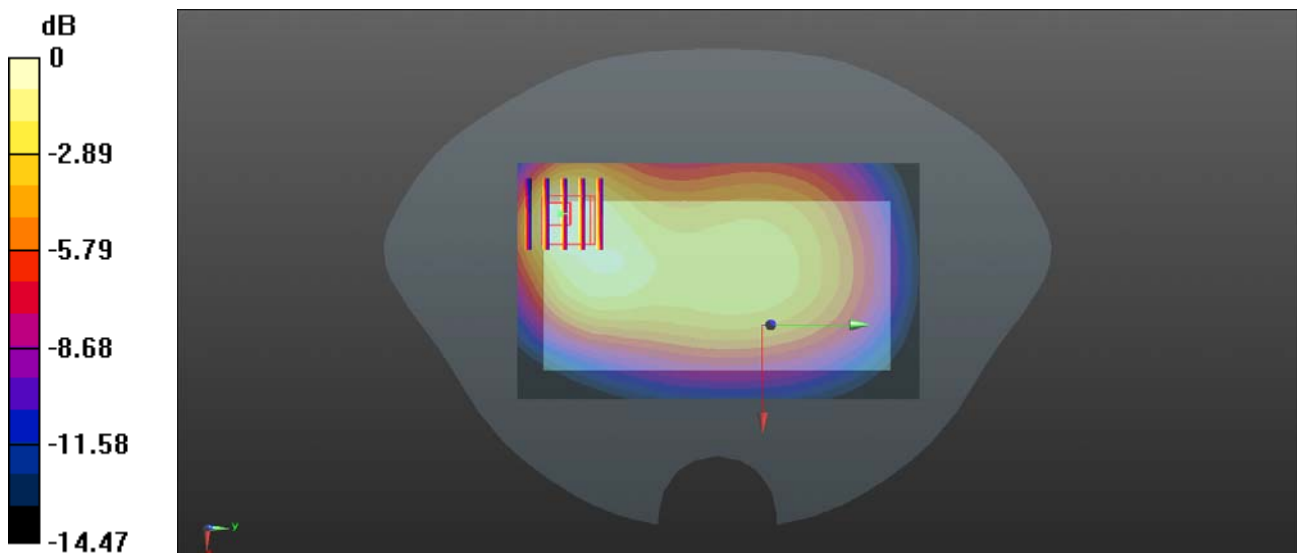
**Ch384/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.66 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.357 W/kg

**SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.122 W/kg**

Maximum value of SAR (measured) = 0.224 W/kg



0 dB = 0.224 W/kg

**MEAS.21 Right Head with Tilt on High Channel in LTE Band 2 mode with Antenna Up**

Date: 2020.12.15

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;  $\sigma = 1.39$  S/m;  $\epsilon_r = 40.104$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch19100/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.859 W/kg

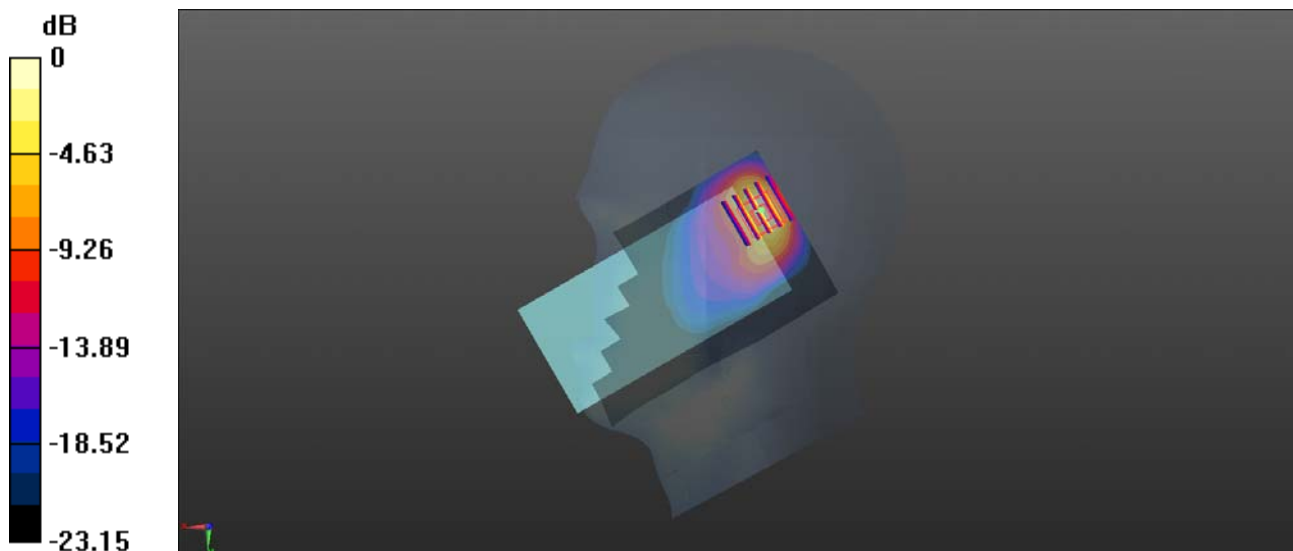
**Ch19100/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.67 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.94 W/kg

**SAR(1 g) = 0.843 W/kg; SAR(10 g) = 0.357 W/kg**

Maximum value of SAR (measured) = 0.950 W/kg



0 dB = 0.950 W/kg

**MEAS.22 Body Plane with Back Side 15mm on Middle Channel in LTE Band 2 mode with Antenna Up**

Date: 2020.12.04

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.424$  S/m;  $\epsilon_r = 40.684$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18900/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.674 W/kg

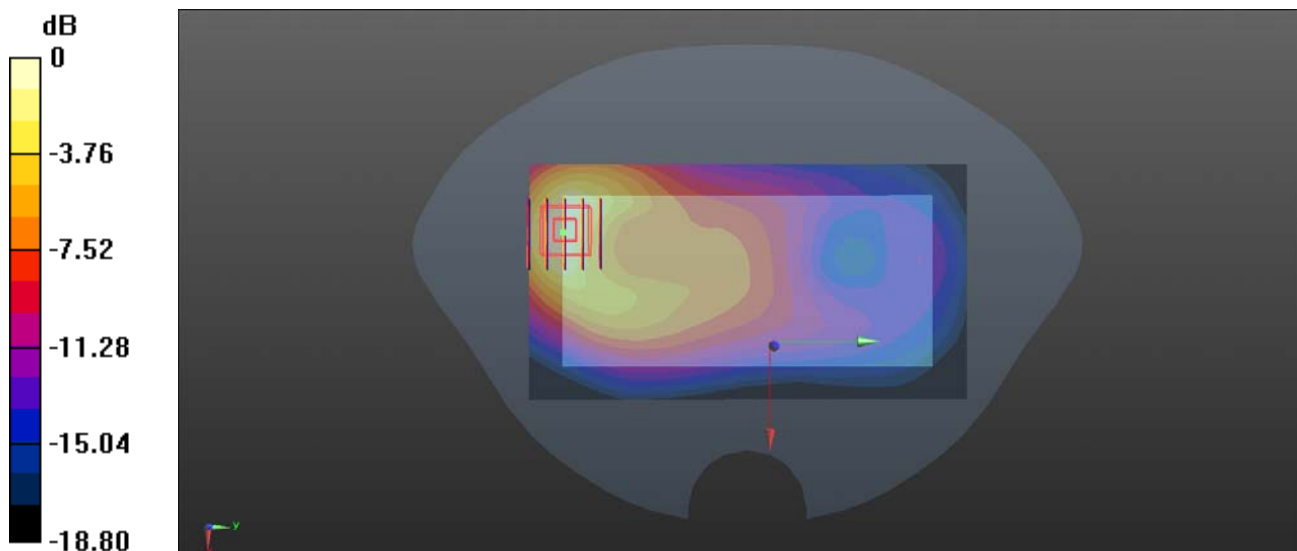
**Ch18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.126 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.09 W/kg

**SAR(1 g) = 0.597 W/kg; SAR(10 g) = 0.315 W/kg**

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



0 dB = 0.663 W/kg

**MEAS.23 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band 2 mode with Antenna Down**

Date: 2020.12.04

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.424$  S/m;  $\epsilon_r = 40.684$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18900/Area Scan (51x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

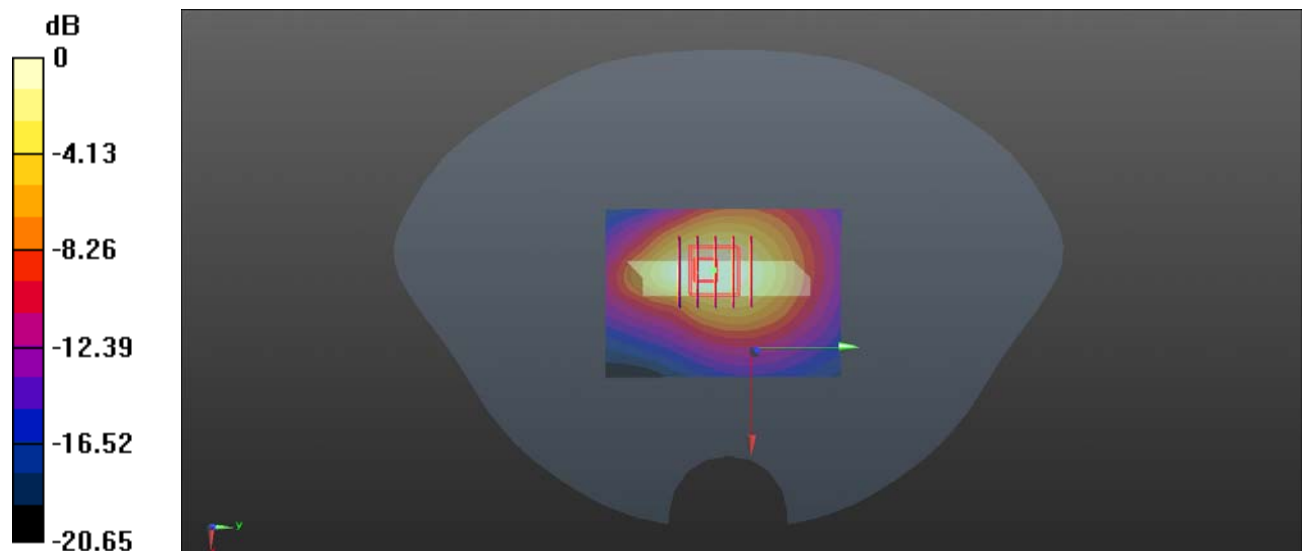
**Ch18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.15 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 0.931 W/kg; SAR(10 g) = 0.500 W/kg**

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



0 dB = 1.02 W/kg

**MEAS.24 Body Plane with Top Edge 0mm on Middle Channel in LTE Band 2 mode with Antenna Up**

Date: 2020.12.04

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.424$  S/m;  $\epsilon_r = 40.684$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.26, 8.26, 8.26); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18900/Area Scan (51x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 4.93 W/kg

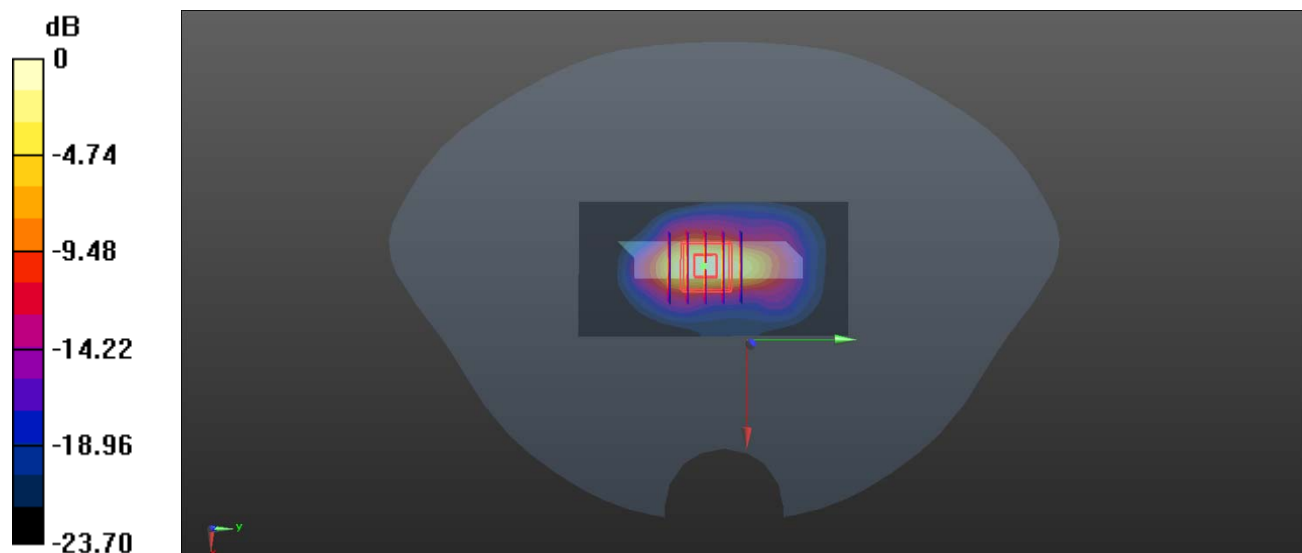
**Ch18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.64 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 3.75 W/kg; SAR(10 g) = 1.47 W/kg**

Maximum value of SAR (measured) = 4.70 W/kg



0 dB = 4.70 W/kg

### MEAS.25 Right Head with Tilt on High Channel in LTE Band 4 mode with Antenna Up

Date: 2020.12.16

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.348$  S/m;  $\epsilon_r = 39.668$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.2 Liquid Temperature: 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20300/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.796 W/kg

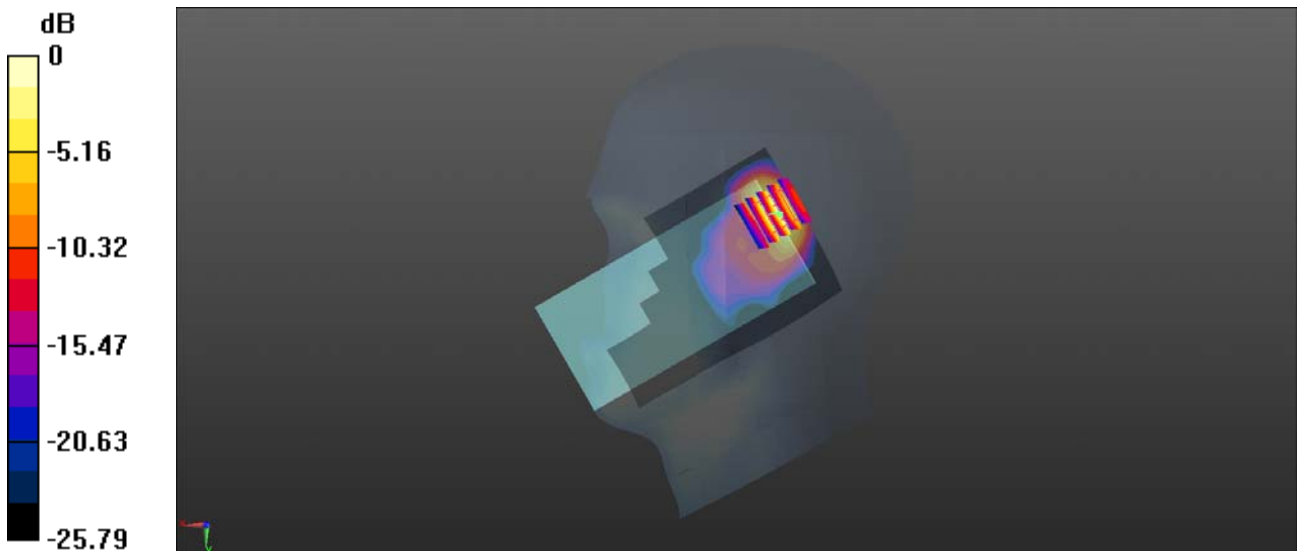
**Ch 20300/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.01 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.43 W/kg

**SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.271 W/kg**

Maximum value of SAR (measured) = 0.761 W/kg



0 dB = 0.761 W/kg



**MEAS.26 Body Plane with Back Side 15mm on Middle Channel in LTE Band 4 mode with Antenna Up**

Date: 2020.12.01

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1732.5$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 40.313$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20175/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.559 W/kg

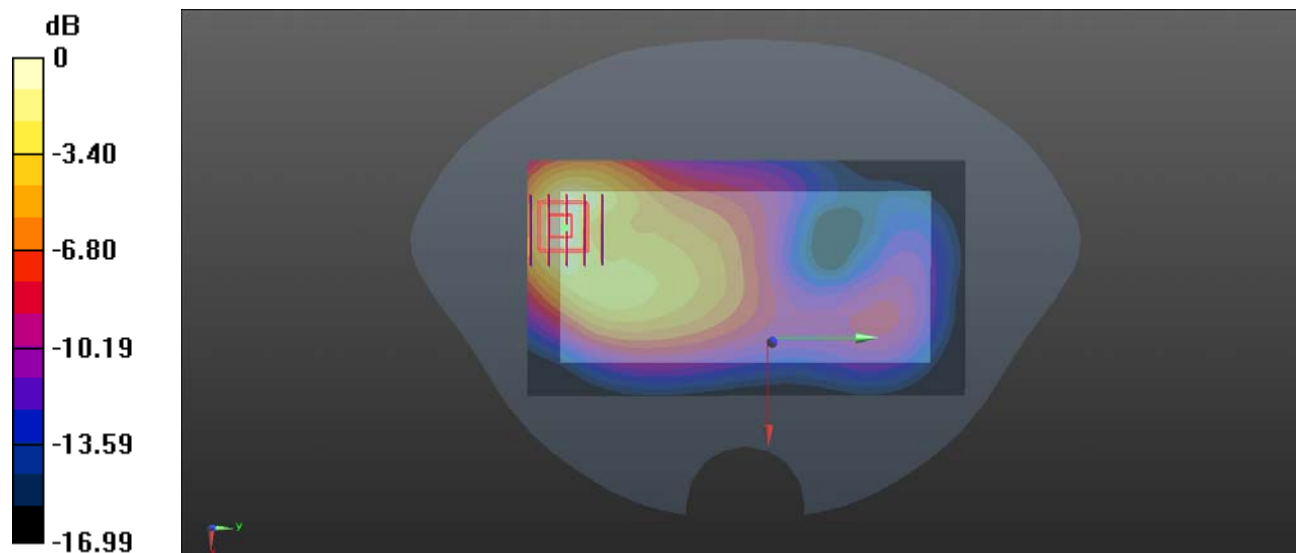
**Ch20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.076 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.857 W/kg

**SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.284 W/kg**

Maximum value of SAR (measured) = 0.563 W/kg



0 dB = 0.563 W/kg

**MEAS.27 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band 4 mode with Antenna Down**

Date: 2020.12.01

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1732.5$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 40.313$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20175/Area Scan (51x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.690 W/kg

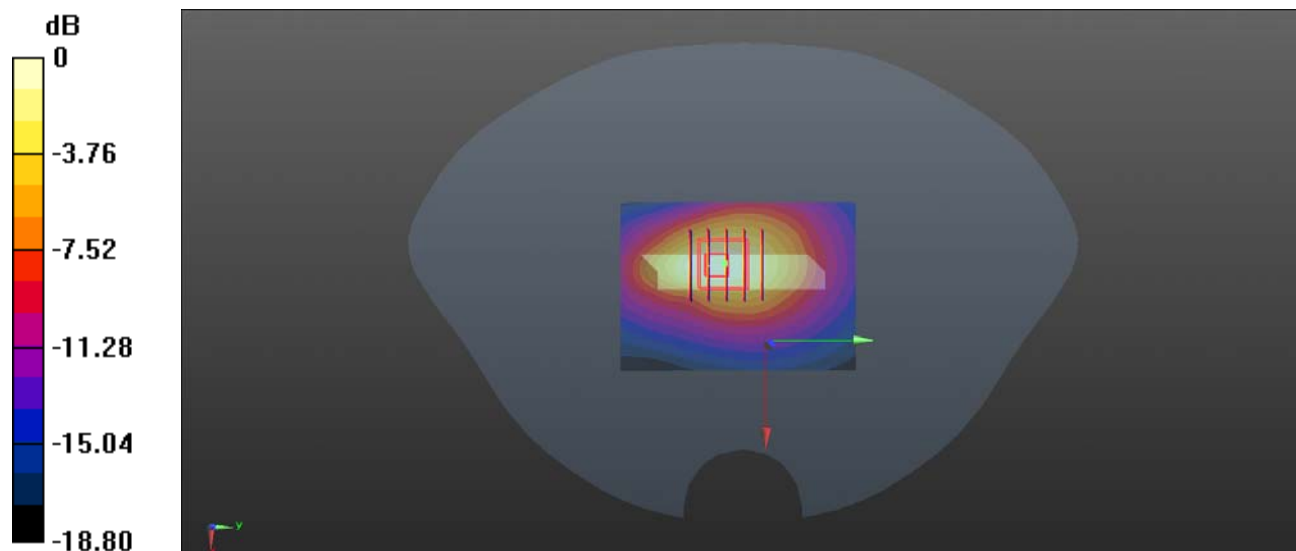
**Ch20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.41 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.550 W/kg; SAR(10 g) = 0.304 W/kg**

Maximum value of SAR (measured) = 0.690 W/kg



0 dB = 0.690 W/kg

**MEAS.28 Body Plane with Top Edge 0mm on Middle Channel in LTE Band 4 mode with Antenna Up**

Date: 2020.12.01

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.383$  S/m;  $\epsilon_r = 40.195$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.58, 8.58, 8.58); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20300/Area Scan (41x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.66 W/kg

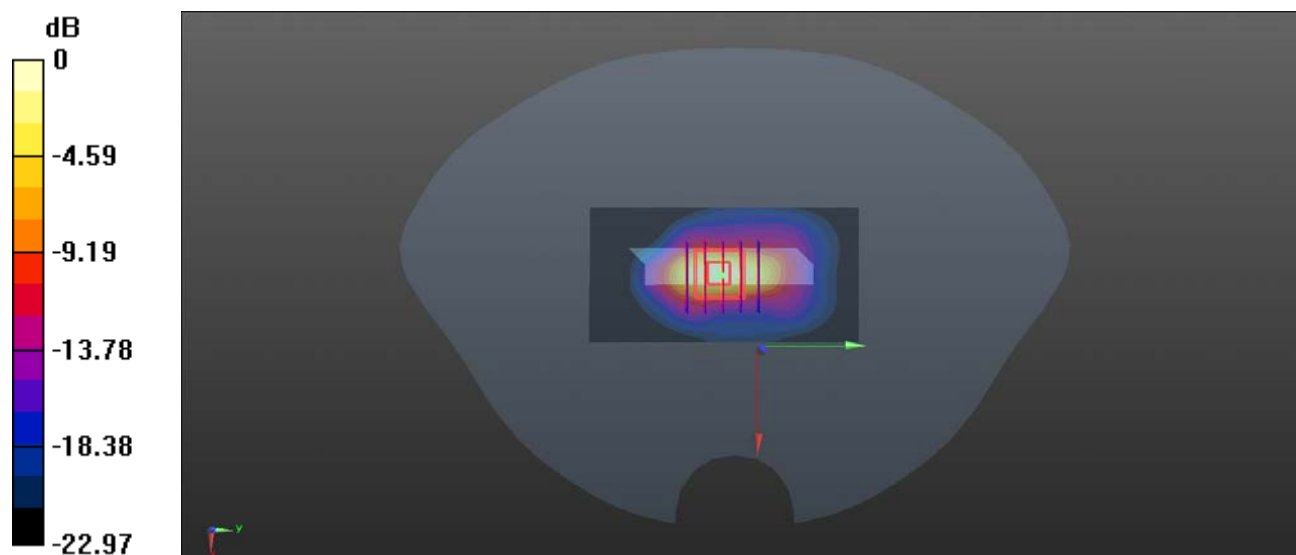
**Ch 20300/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 34.07 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 6.58 W/kg

**SAR(1 g) = 2.82 W/kg; SAR(10 g) = 1.12 W/kg**

Maximum value of SAR (measured) = 3.66 W/kg



0 dB = 3.66 W/kg

**MEAS.29 Right Head with Cheek on High Channel in LTE Band 5 mode with Antenna Up**

Date: 2020.11.27

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.945$  S/m;  $\epsilon_r = 41.958$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20600/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.899 W/kg

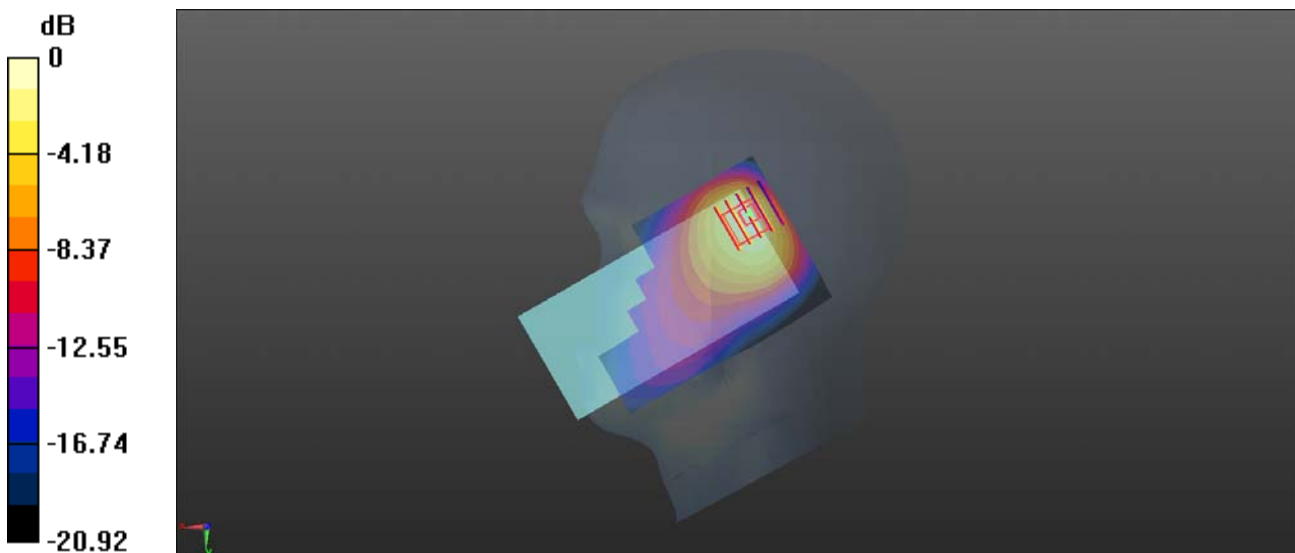
**Ch 20600/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.99 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.74 W/kg

**SAR(1 g) = 0.720 W/kg; SAR(10 g) = 0.370 W/kg**

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



0 dB = 0.820 W/kg

**MEAS.30 Body Plane with Back Side 15mm on High Channel in LTE Band 5 mode with Antenna Up**

Date: 2020.11.26

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.906$  S/m;  $\epsilon_r = 40.666$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20525/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.123 W/kg

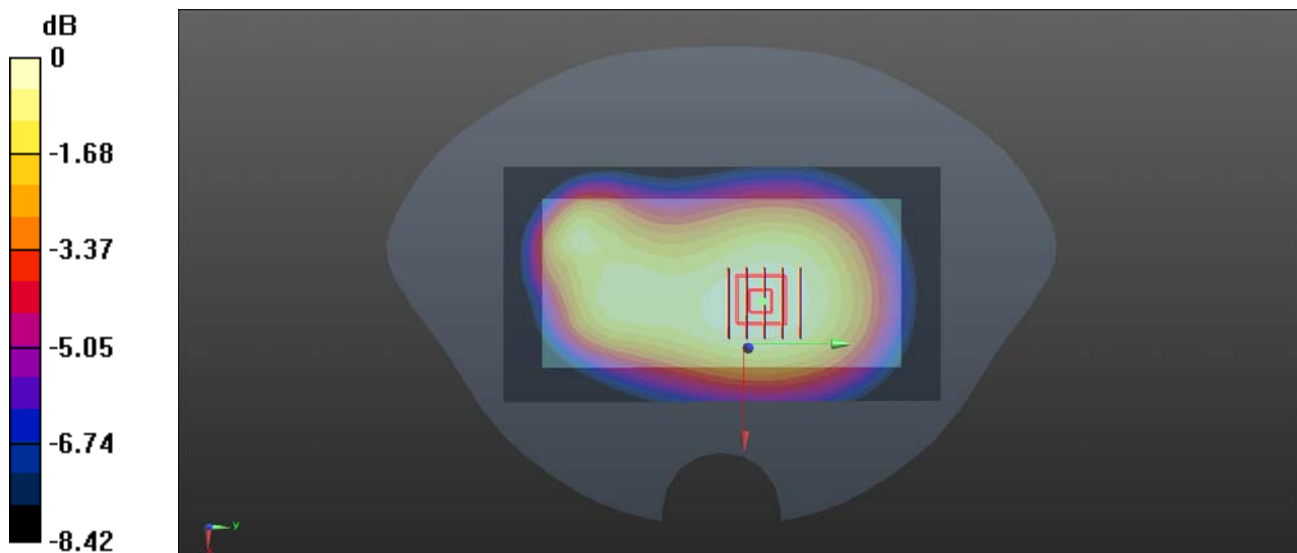
**Ch 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.40 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.148 W/kg

**SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.087 W/kg**

Maximum value of SAR (measured) = 0.123 W/kg



0 dB = 0.123 W/kg

**MEAS.31 Body Plane with Back Side 10mm on High Channel in LTE Band 5 mode with Antenna Up**

Date: 2020.11.26

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.906$  S/m;  $\epsilon_r = 40.666$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.49, 10.49, 10.49); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20525/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.260 W/kg

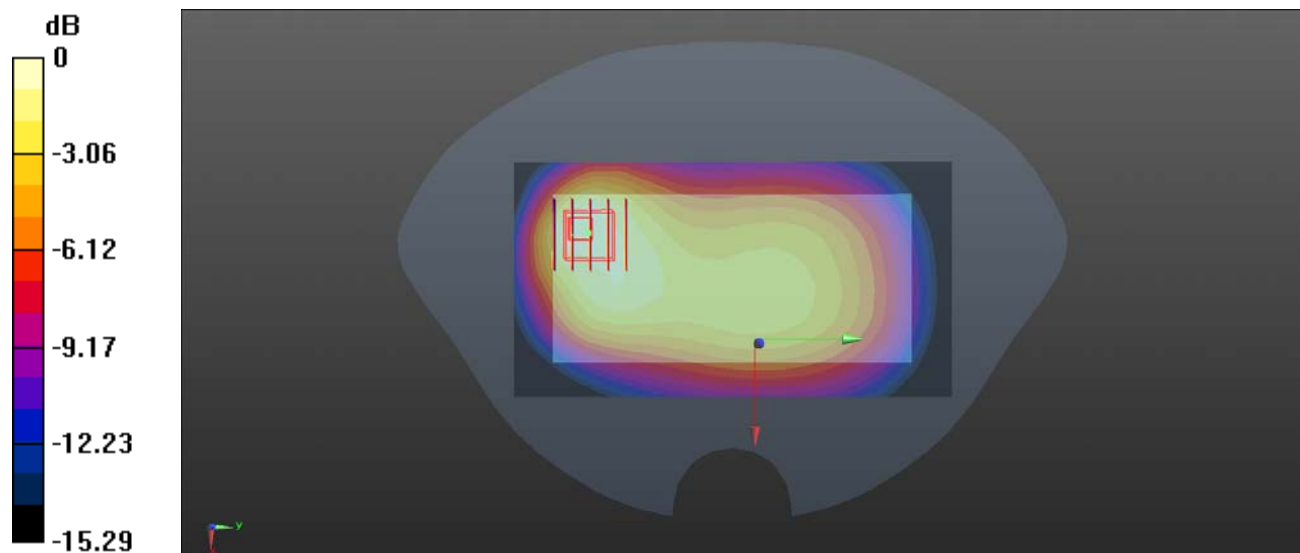
**Ch 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.63 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.404 W/kg

**SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.134 W/kg**

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



0 dB = 0.244 W/kg

**MEAS.32 Right Head with Tilt on Middle Channel in LTE Band 7 mode with Antenna Up**

Date: 2020.12.10

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.865$  S/m;  $\epsilon_r = 37.943$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch21100/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.583 W/kg

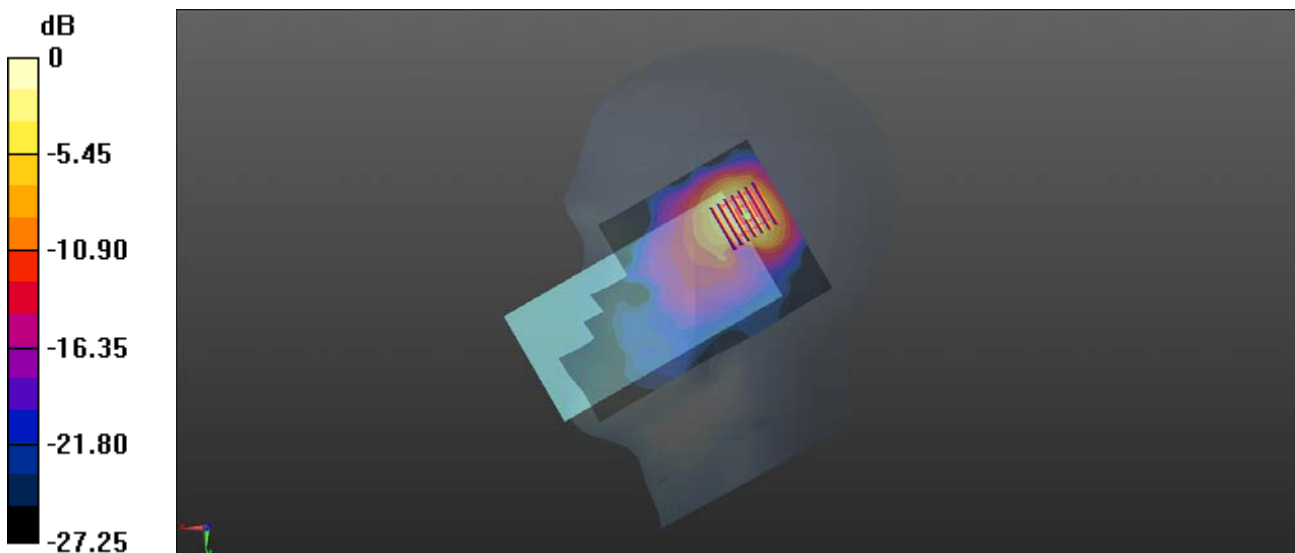
**Ch21100/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.891 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.212 W/kg**

Maximum value of SAR (measured) = 0.588 W/kg



0 dB = 0.588 W/kg

**MEAS.33 Body Plane with Back Side 15mm on Middle Channel in LTE Band 7 mode with Antenna Up**

Date: 2020.12.09

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.936$  S/m;  $\epsilon_r = 40.042$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch21100/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

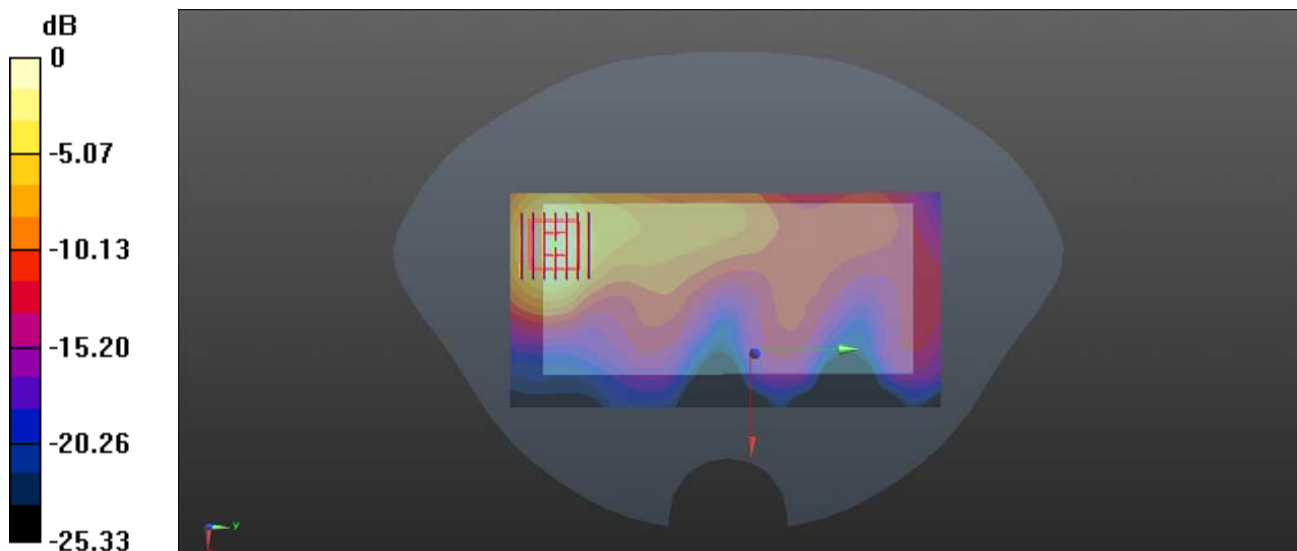
**Ch21100/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.376 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.35 W/kg

**SAR(1 g) = 0.634 W/kg; SAR(10 g) = 0.299 W/kg**

Maximum value of SAR (measured) = 0.704 W/kg



0 dB = 0.704 W/kg



**MEAS.34 Body Plane with Back Side 10mm on Middle Channel in LTE Band 7 mode with Antenna Down**

Date: 2020.12.09

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.936$  S/m;  $\epsilon_r = 40.042$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch21100/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.445 W/kg

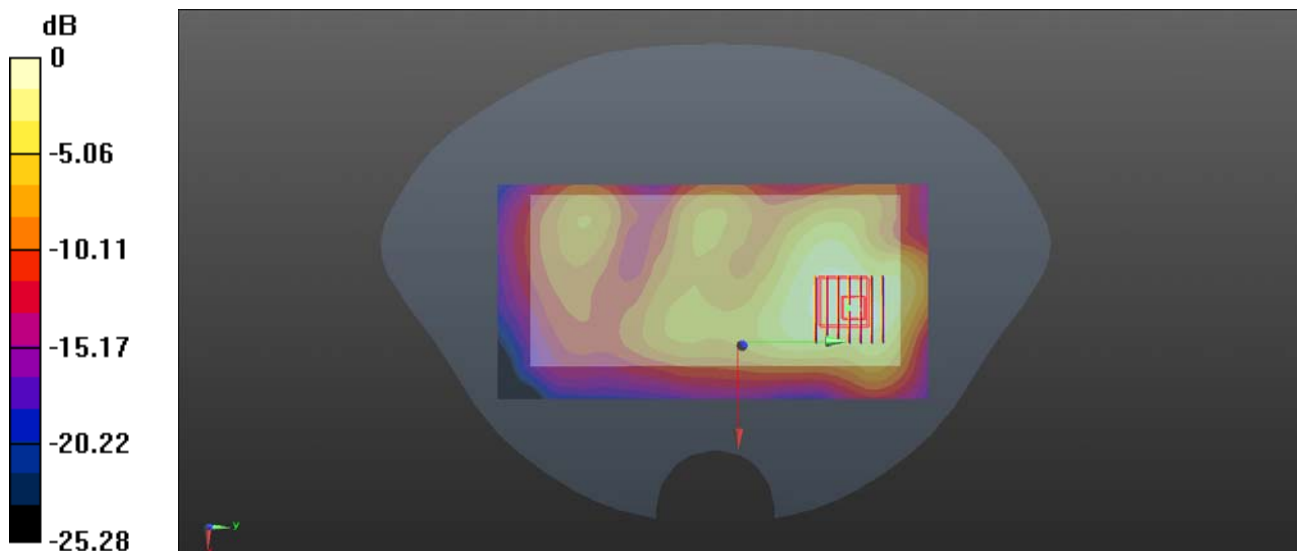
**Ch21100/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.606 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.815 W/kg

**SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.219 W/kg**

Maximum value of SAR (measured) = 0.476 W/kg



0 dB = 0.476 W/kg

**MEAS.35 Body Plane with Top Edge 0mm on Middle Channel in LTE Band 7 mode with Antenna Up**

Date: 2020.12.09

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.936$  S/m;  $\epsilon_r = 40.042$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch 21100/Area Scan (61x91x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.47 W/kg

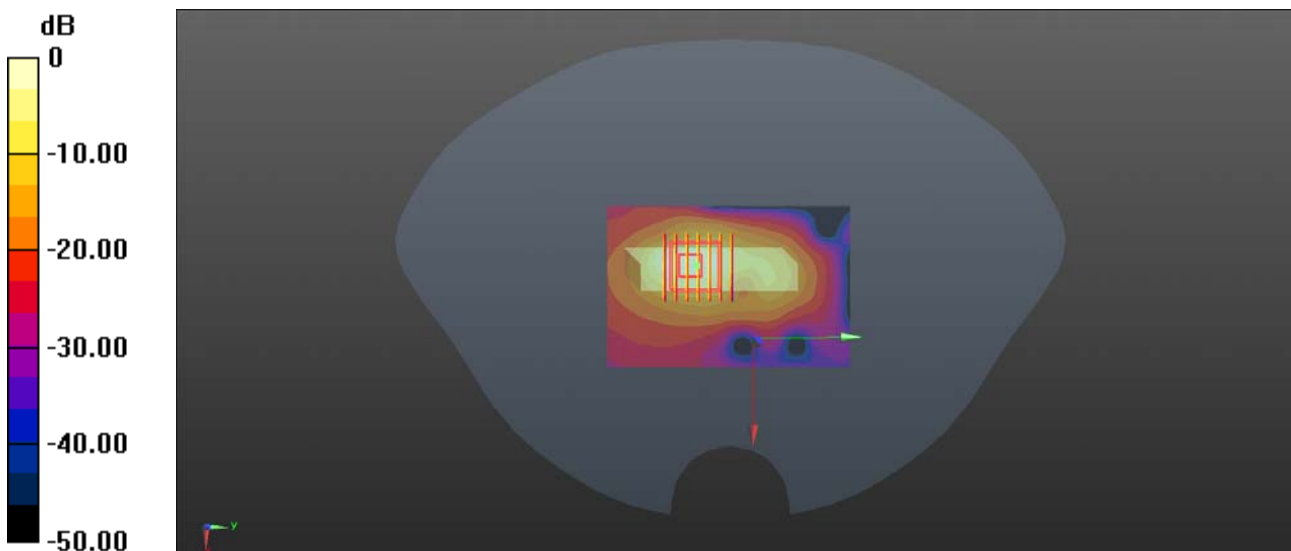
**Ch 21100/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.95 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 6.85 W/kg

**SAR(1 g) = 1.95 W/kg; SAR(10 g) = 0.663 W/kg**

Maximum value of SAR (measured) = 2.37 W/kg



0 dB = 2.37 W/kg

**MEAS.36 Right Head with Tilt on High Channel in LTE Band 38 mode with Antenna Up**

Date: 2020.12.08

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2610 MHz; Duty Cycle: 1:1.58

Medium parameters used (extrapolated):  $f = 2610$  MHz;  $\sigma = 1.955$  S/m;  $\epsilon_r = 38.529$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.0 Liquid Temperature:20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch38150/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.448 W/kg

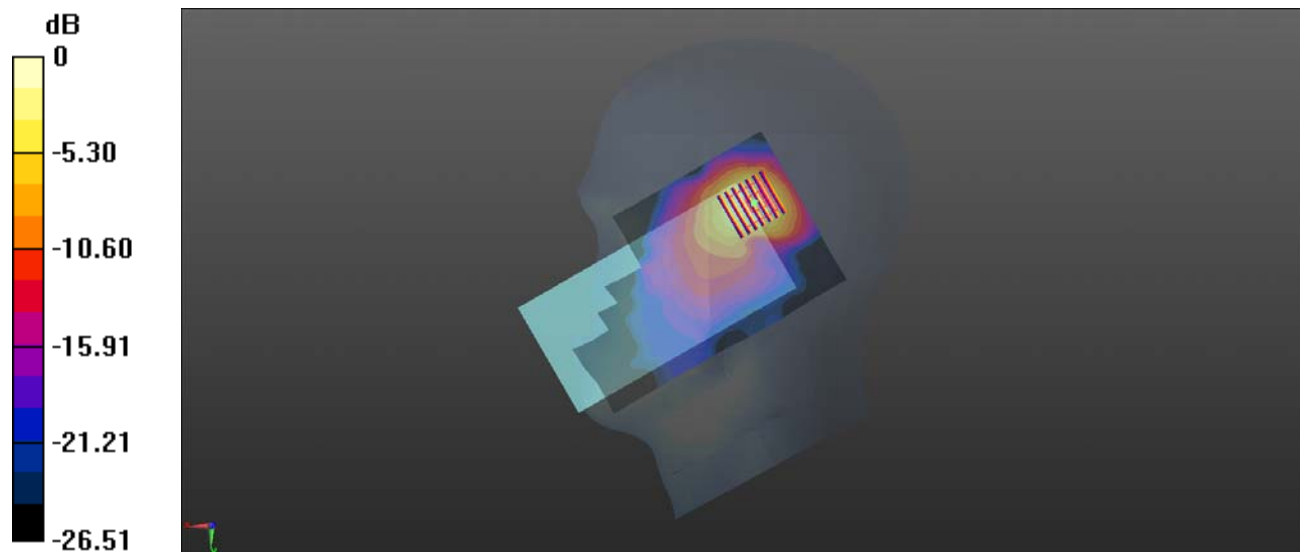
**Ch38150/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.879 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.382 W/kg; SAR(10 g) = 0.162 W/kg**

Maximum value of SAR (measured) = 0.411 W/kg



0 dB = 0.411 W/kg

**MEAS.37 Body Plane with Back Side 15mm on Low Channel in LTE Band 38 mode with Antenna Up**

Date: 2020.12.07

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used (extrapolated):  $f = 2580$  MHz;  $\sigma = 1.918$  S/m;  $\epsilon_r = 38.224$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch37850/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.309 W/kg

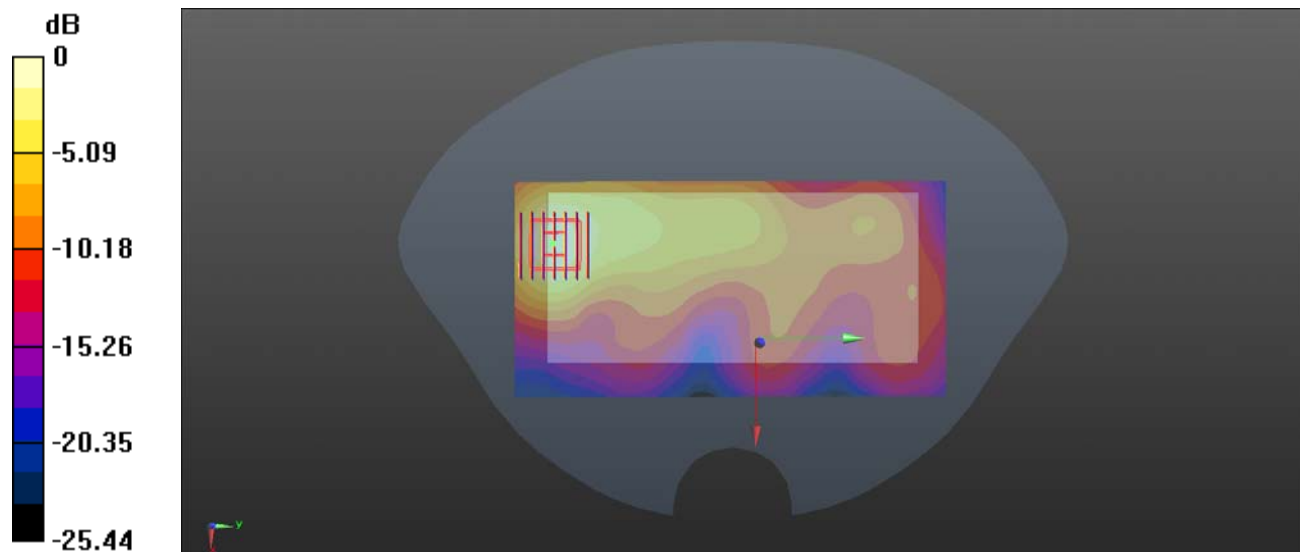
**Ch37850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.992 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.649 W/kg

**SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.135 W/kg**

Maximum value of SAR (measured) = 0.319 W/kg



0 dB = 0.319 W/kg

**MEAS.38 Body Plane with Back Side 10mm on Low Channel in LTE Band 38 mode with Antenna Down**

Date: 2020.12.07

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used (extrapolated):  $f = 2580$  MHz;  $\sigma = 1.918$  S/m;  $\epsilon_r = 38.224$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch37850/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.484 W/kg

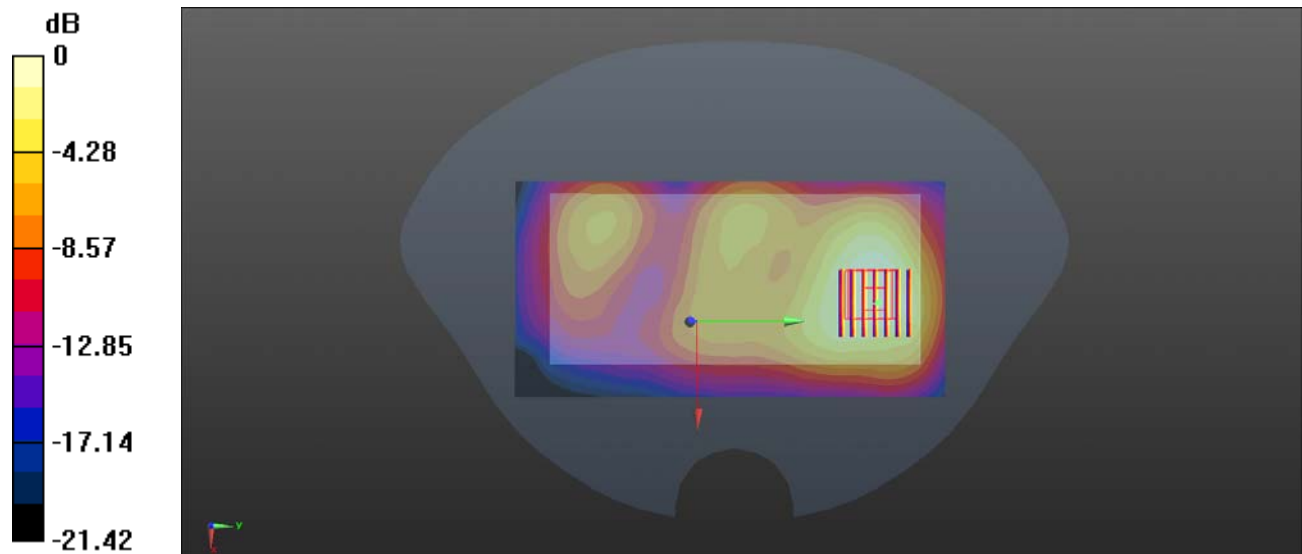
**Ch37850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.979 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.778 W/kg

**SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.254 W/kg**

Maximum value of SAR (measured) = 0.484 W/kg



0 dB = 0.484 W/kg

**MEAS.39 Right Head with Tilt on High Channel in LTE Band 41 mode with Antenna Up**

Date: 2020.12.06

Communication System Band: Band 41, E-UTRA/TDD (2535.0 - 2655.0 MHz); Frequency: 2645 MHz; Duty Cycle: 1:1.58

Medium parameters used (extrapolated):  $f = 2645$  MHz;  $\sigma = 2.06$  S/m;  $\epsilon_r = 37.448$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch41140/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.562 W/kg

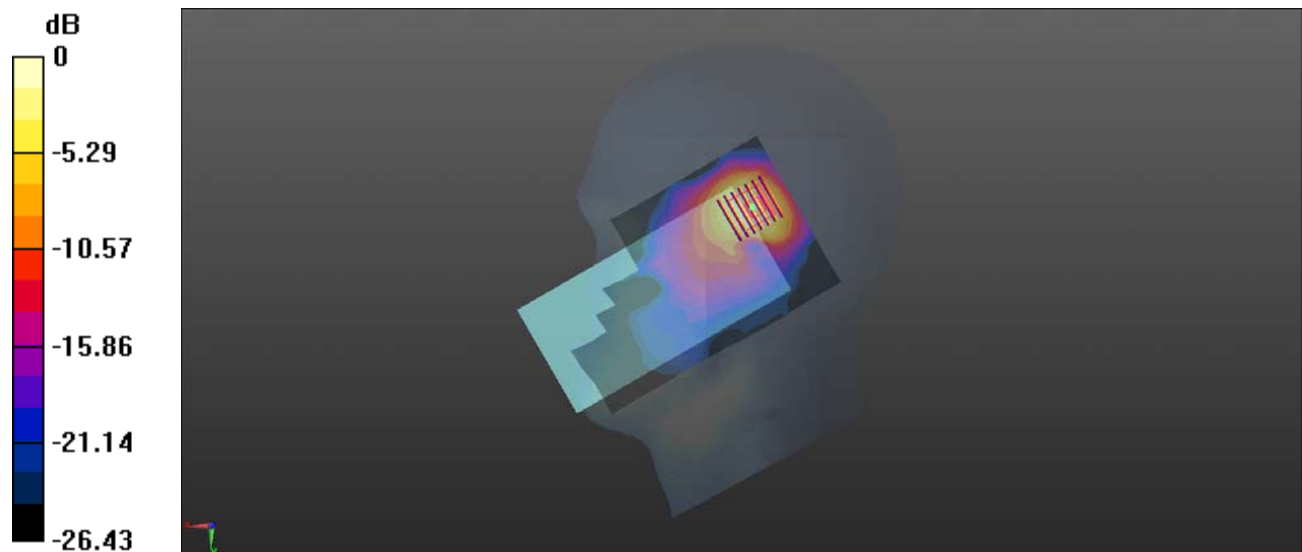
**Ch41140/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.025 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.25 W/kg

**SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.201 W/kg**

Maximum value of SAR (measured) = 0.545 W/kg



0 dB = 0.545 W/kg

**MEAS.40 Body Plane with Back Side 15mm on Low Channel in LTE Band 41 mode with Antenna Up**

Date: 2020.12.05

Communication System Band: Band 41, E-UTRA/TDD (2535.0 - 2655.0 MHz); Frequency: 2545 MHz; Duty Cycle: 1:1.58

Medium parameters used (extrapolated):  $f = 2545$  MHz;  $\sigma = 1.976$  S/m;  $\epsilon_r = 40.133$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch40140/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.368 W/kg

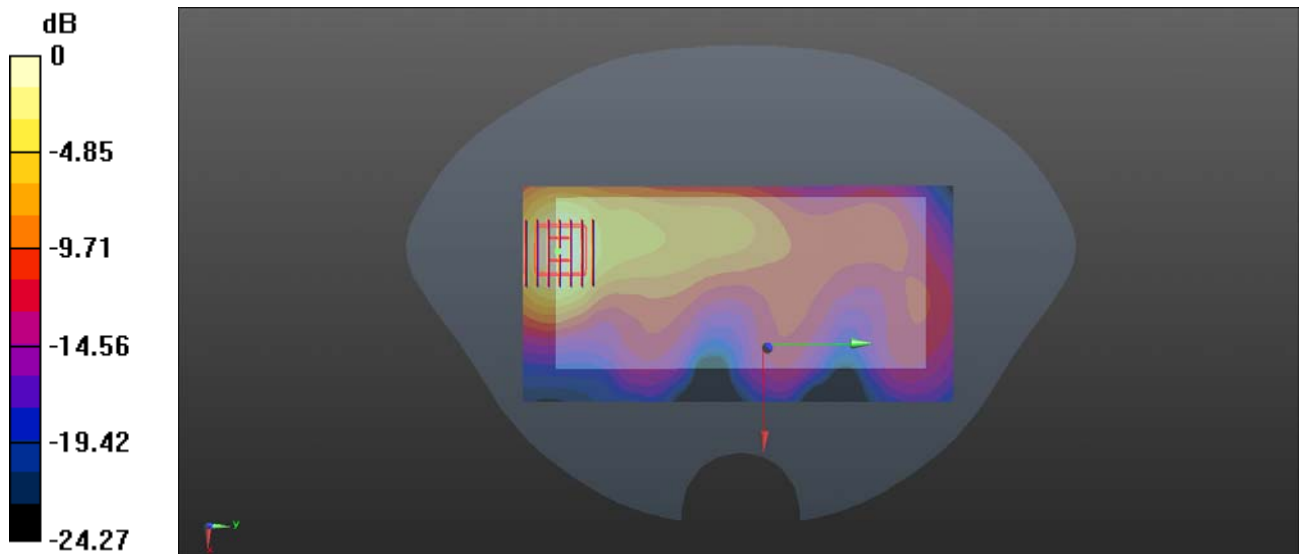
**Ch40140/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.867 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.720 W/kg

**SAR(1 g) = 0.334 W/kg; SAR(10 g) = 0.157 W/kg**

Maximum value of SAR (measured) = 0.368 W/kg



0 dB = 0.368 W/kg

**MEAS.41 Body Plane with Back Side 10mm on Low Channel in LTE Band 41 mode with Antenna Down**

Date: 2020.12.05

Communication System Band: Band 41, E-UTRA/TDD (2535.0 - 2655.0 MHz); Frequency: 2545 MHz; Duty Cycle: 1:1.58

Medium parameters used (extrapolated):  $f = 2545$  MHz;  $\sigma = 1.976$  S/m;  $\epsilon_r = 40.133$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:20.8

## DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.5, 7.5, 7.5); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch40140/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.328 W/kg

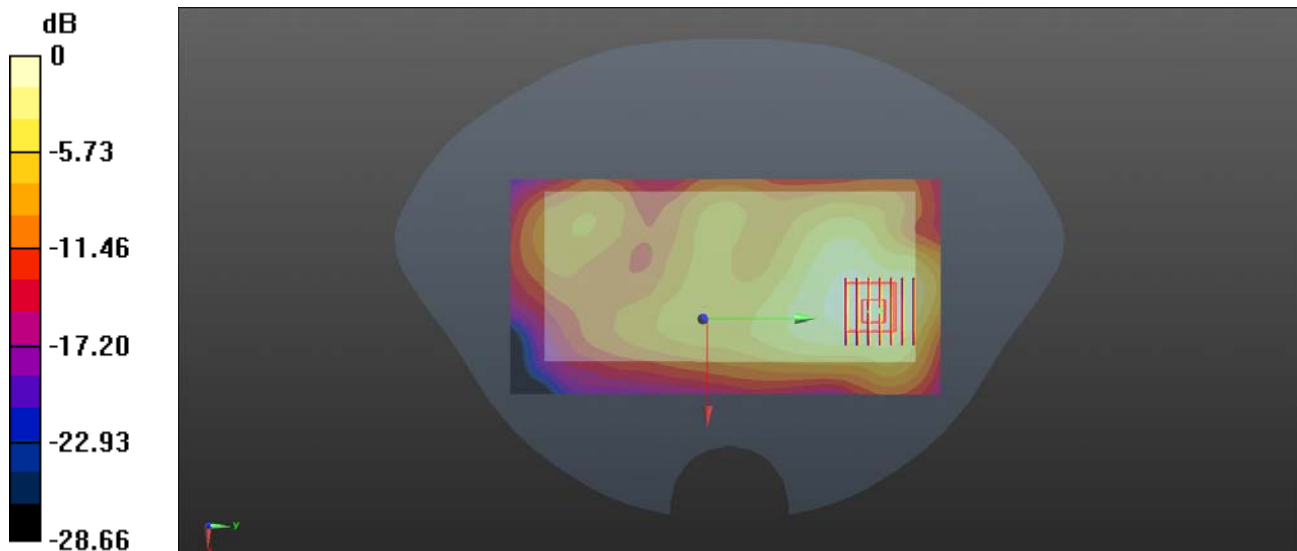
**Ch40140/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.339 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.599 W/kg

**SAR(1 g) = 0.299 W/kg; SAR(10 g) = 0.151 W/kg**

Maximum value of SAR (measured) = 0.331 W/kg



0 dB = 0.331 W/kg



**MEAS.42 Left Head with Cheek on High Channel in IEEE802.11b mode**

Date: 2020.12.11

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.013

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.795$  S/m;  $\epsilon_r = 38.583$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch11/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.668 W/kg

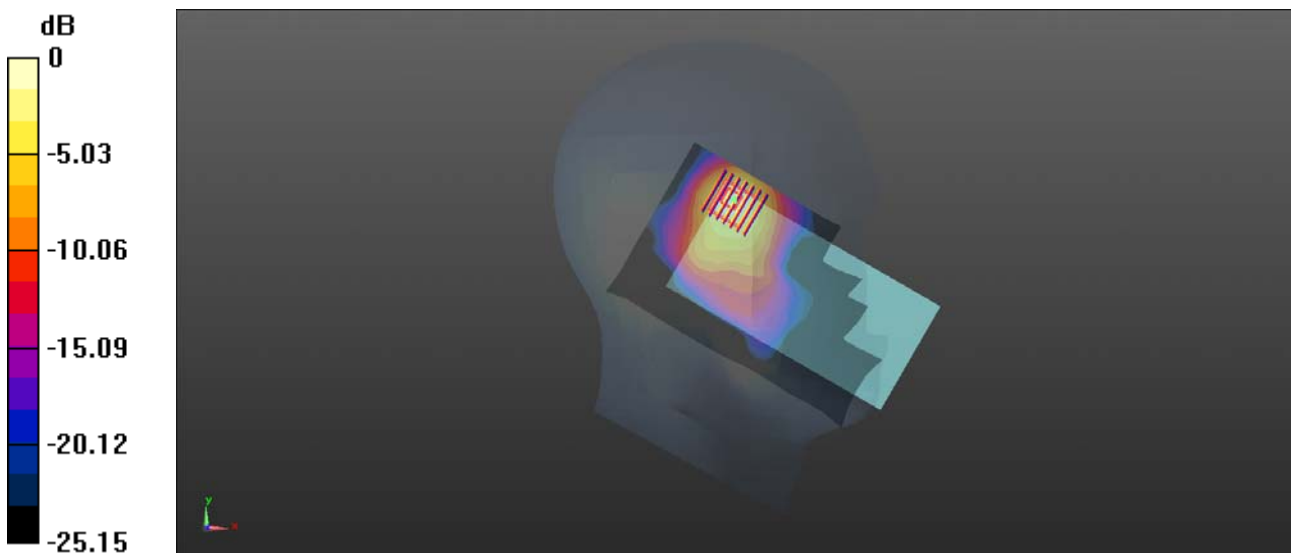
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.300 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.23 W/kg

**SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.253 W/kg**

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



0 dB = 0.629 W/kg

**MEAS.43 Body Plane with Back Side 15mm on High Channel in IEEE802.11b mode**

Date: 2020.12.11

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.013

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.795$  S/m;  $\epsilon_r = 38.583$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch11/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.100 W/kg

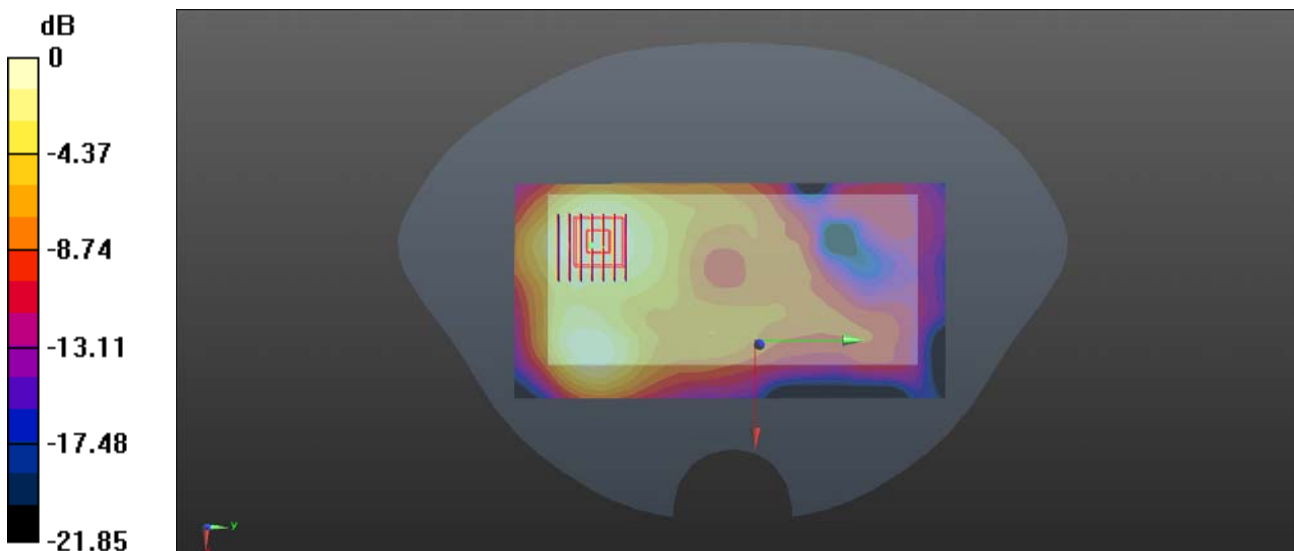
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.638 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.173 W/kg

**SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.050 W/kg**

Maximum value of SAR (measured) = 0.0995 W/kg



0 dB = 0.0995 W/kg

**MEAS.44 Body Plane with Back Side 10mm on High Channel in IEEE802.11b mode**

Date: 2020.12.11

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.013

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.795$  S/m;  $\epsilon_r = 38.583$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch11/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0726 W/kg

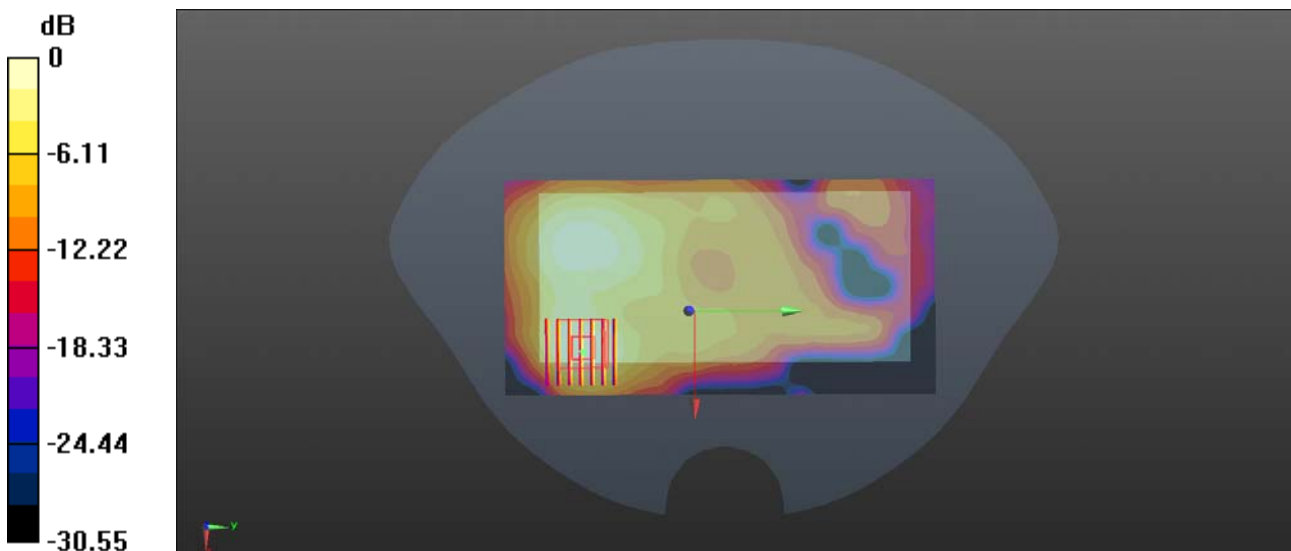
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.774 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.148 W/kg

**SAR(1 g) = 0.066 W/kg; SAR(10 g) = 0.030 W/kg**

Maximum value of SAR (measured) = 0.0720 W/kg



0 dB = 0.0720 W/kg

**MEAS.45 Left Head with Cheek on Channel 62 in IEEE802.11n(HT40) mode**

Date: 2020.12.14

Communication System Band: WLAN(n)40Mhz; Frequency: 5310 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5310$  MHz;  $\sigma = 4.692$  S/m;  $\epsilon_r = 35.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.3, 5.3, 5.3); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch62/Area Scan (111x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.548 W/kg

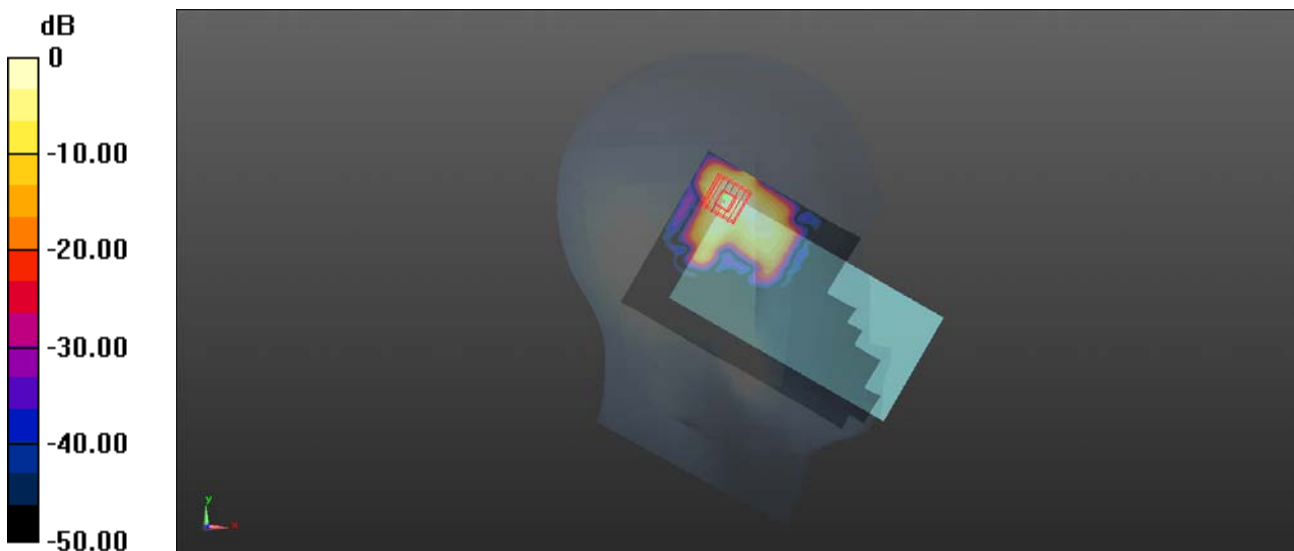
**Ch62/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.785 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.15 W/kg

**SAR(1 g) = 0.262 W/kg; SAR(10 g) = 0.082 W/kg**

Maximum value of SAR (measured) = 0.533 W/kg



0 dB = 0.533 W/kg

**MEAS.46 Left Head with Tilt on Channel 118 in IEEE802.11n(HT40) mode**

Date: 2020.12.13

Communication System Band: WLAN(n)40Mhz; Frequency: 5590 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5590$  MHz;  $\sigma = 5.03$  S/m;  $\epsilon_r = 35.39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.85, 4.85, 4.85); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch118/Area Scan (111x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.859 W/kg

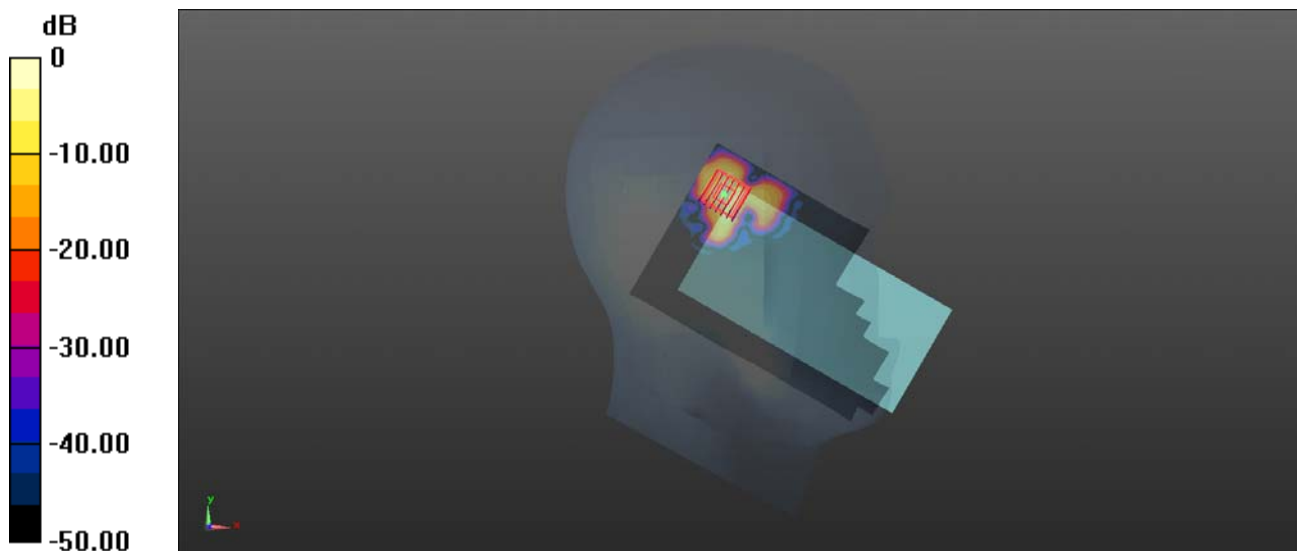
**Ch118/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.077 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 2.08 W/kg

**SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.071 W/kg**

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



0 dB = 0.820 W/kg

**MEAS.47 Left Head with Tilt on Channel 159 in IEEE802.11n(HT40) mode**

Date: 2020.12.12

Communication System Band: WLAN(n)40Mhz; Frequency: 5795 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5795$  MHz;  $\sigma = 5.349$  S/m;  $\epsilon_r = 34.68$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.1 Liquid Temperature:20.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.86, 4.86, 4.86); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch159/Area Scan (111x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.50 W/kg

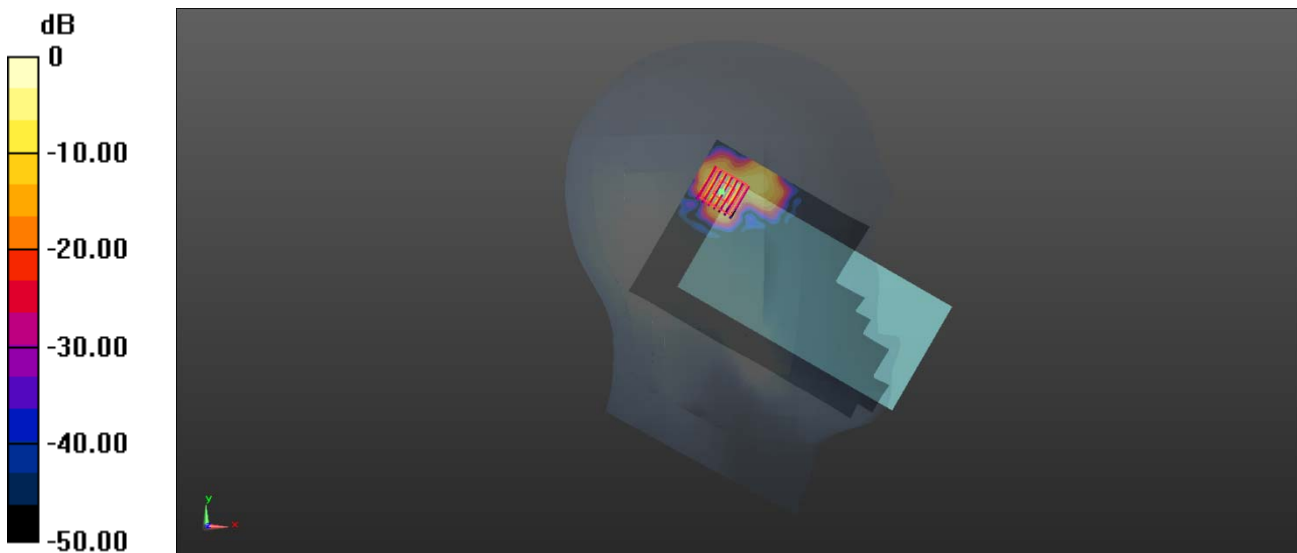
**Ch159/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.084 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 4.14 W/kg

**SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.114 W/kg**

Maximum value of SAR (measured) = 1.52 W/kg



0 dB = 1.52 W/kg

**MEAS.48 Body Plane with Back Side 15mm on Channel 54 in IEEE802.11n(HT40) mode**

Date: 2020.12.14

Communication System Band: WLAN(n)40Mhz; Frequency: 5270 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5270$  MHz;  $\sigma = 4.643$  S/m;  $\epsilon_r = 36.65$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.3, 5.3, 5.3); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

Ch62/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.239 W/kg

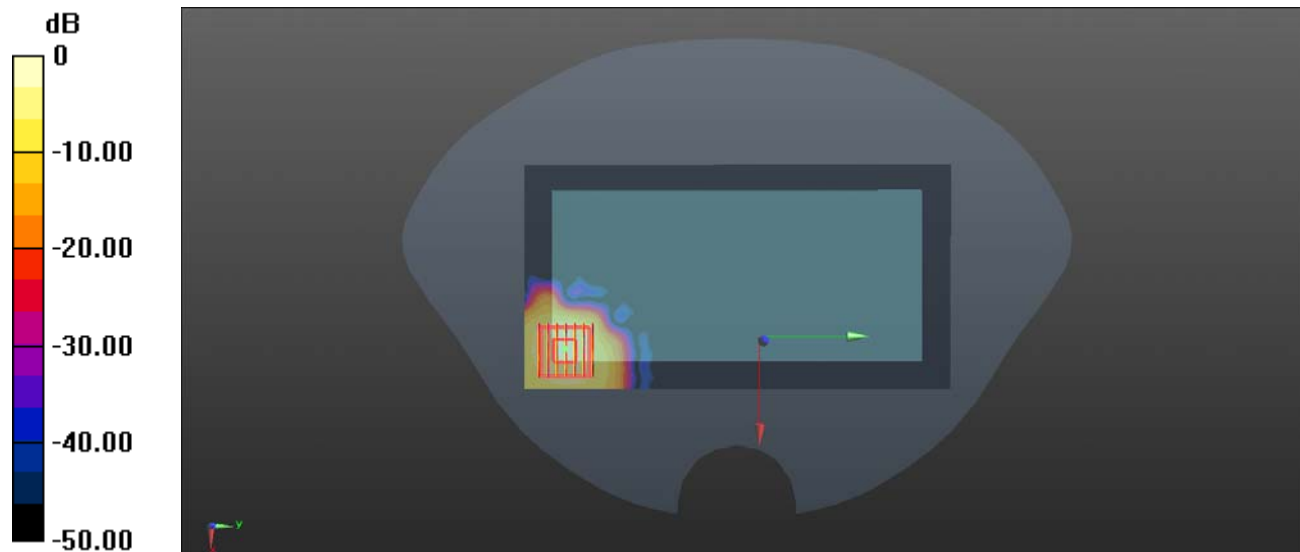
Ch62/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.827 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.907 W/kg

SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.444 W/kg



0 dB = 0.444 W/kg

**MEAS.49 Body Plane with Back Side 15mm on Channel 118 in IEEE802.11n(HT40) mode**

Date: 2020.12.13

Communication System Band: WLAN(n)40Mhz; Frequency: 5590 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5590$  MHz;  $\sigma = 5.03$  S/m;  $\epsilon_r = 35.39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.85, 4.85, 4.85); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

Ch118/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.118 W/kg

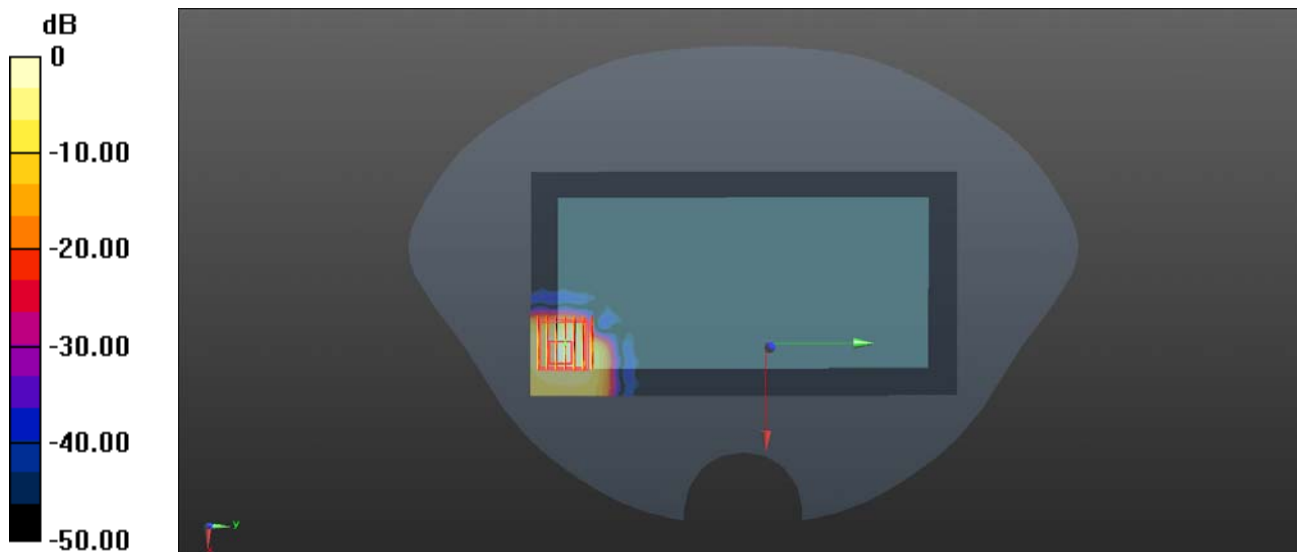
Ch118/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.465 W/kg

SAR(1 g) = 0.100 W/kg; SAR(10 g) = 0.033 W/kg

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



0 dB = 0.199 W/kg



**MEAS.50 Body Plane with Back Side 15mm on Channel 159 in IEEE802.11n(HT40) mode**

Date: 2020.12.12

Communication System Band: WLAN(n)40Mhz; Frequency: 5795 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5795$  MHz;  $\sigma = 5.349$  S/m;  $\epsilon_r = 34.68$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:20.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.86, 4.86, 4.86); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch159/Area Scan (101x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.157 W/kg

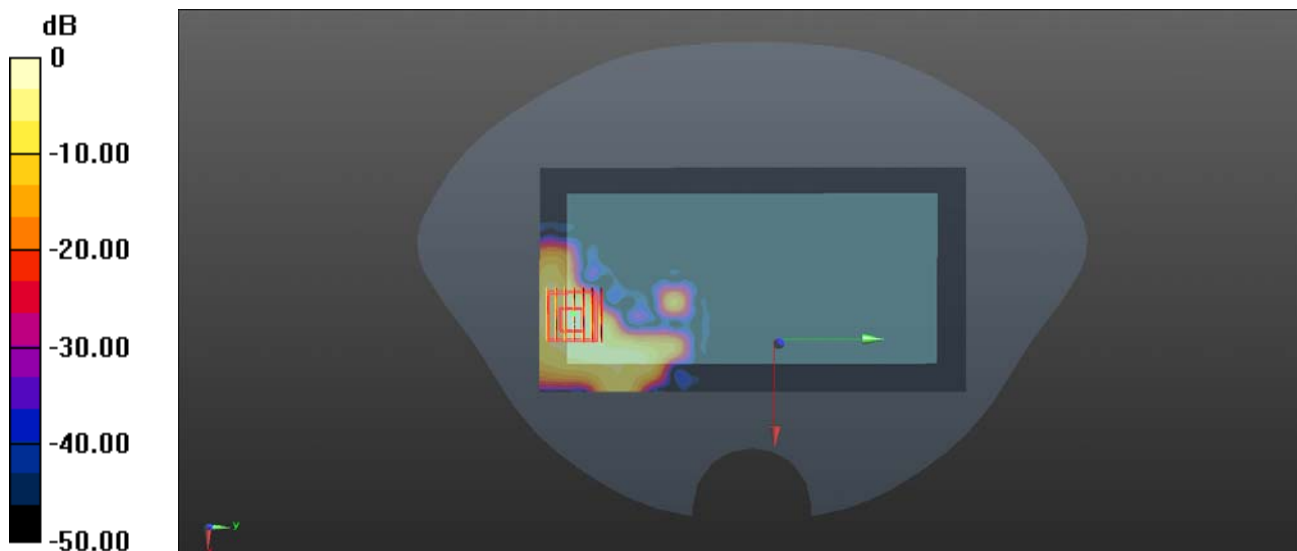
**Ch159/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.2470 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.604 W/kg

**SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.044 W/kg**

Maximum value of SAR (measured) = 0.247 W/kg



0 dB = 0.247 W/kg

**MEAS.51 Body Plane with Left Edge 10mm on Channel 46 in IEEE802.11n(HT40) mode**

Date: 2020.12.14

Communication System Band: WLAN(n)40Mhz; Frequency: 5230 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5230$  MHz;  $\sigma = 4.56$  S/m;  $\epsilon_r = 37.024$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.46, 5.46, 5.46); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch46/Area Scan (61x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.227 W/kg

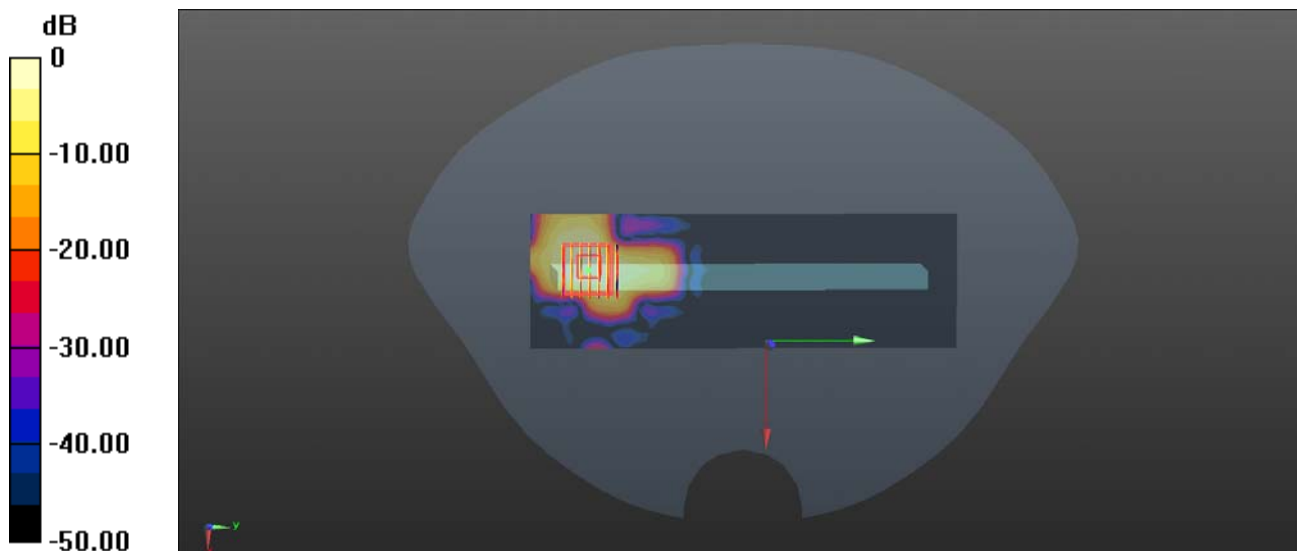
**Ch46/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.738 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.349 W/kg

**SAR(1 g) = 0.088 W/kg; SAR(10 g) = 0.026 W/kg**

Maximum value of SAR (measured) = 0.185 W/kg



**MEAS.52 Body Plane with Left Edge 10mm on Channel 159 in IEEE802.11n(HT40) mode**

Date: 2020.12.12

Communication System Band: WLAN(n)40Mhz; Frequency: 5795 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5795$  MHz;  $\sigma = 5.349$  S/m;  $\epsilon_r = 34.68$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:20.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.86, 4.86, 4.86); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch159/Area Scan (61x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.238 W/kg

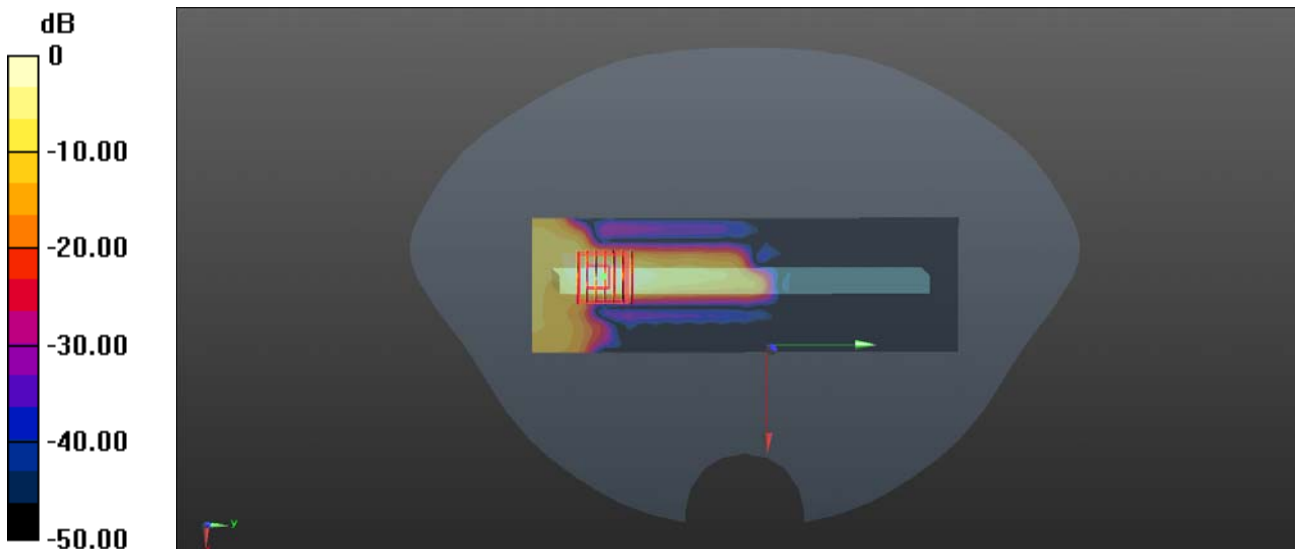
**Ch159/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.3120 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.607 W/kg

**SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.035 W/kg**

Maximum value of SAR (measured) = 0.295 W/kg



0 dB = 0.295 W/kg

**MEAS.53 Body Plane with Left Edge 0mm on Channel 54 in IEEE802.11n(HT40) mode**

Date: 2020.12.14

Communication System Band: WLAN(n)40Mhz; Frequency: 5270 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5270$  MHz;  $\sigma = 4.643$  S/m;  $\epsilon_r = 36.65$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.3, 5.3, 5.3); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch54/Area Scan (61x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

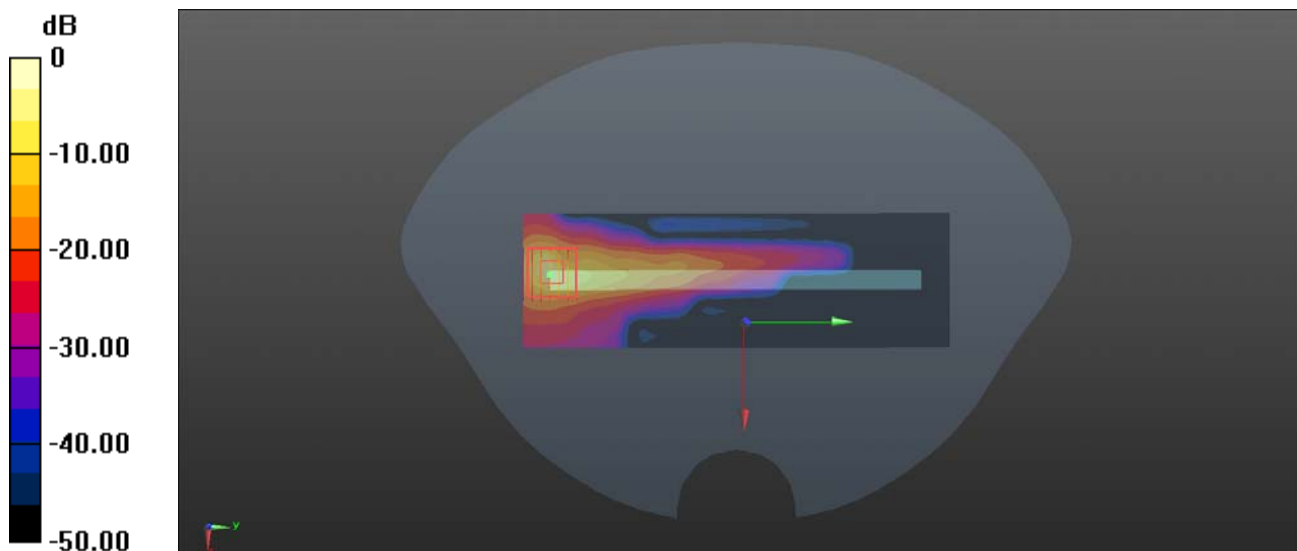
**Ch54/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.982 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 33.0 W/kg

**SAR(1 g) = 5.13 W/kg; SAR(10 g) = 1.08 W/kg**

Maximum value of SAR (measured) = 12.6 W/kg



0 dB = 12.6 W/kg

**MEAS.54 Body Plane with Left Edge 0mm on Channel 118 in IEEE802.11n(HT40) mode**

Date: 2020.12.13

Communication System Band: WLAN(n)40Mhz; Frequency: 5590 MHz;Duty Cycle: 1:1.038

Medium parameters used (interpolated):  $f = 5590$  MHz;  $\sigma = 5.03$  S/m;  $\epsilon_r = 35.39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.85, 4.85, 4.85); Calibrated: 2020.08.07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch118/Area Scan (61x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.37 W/kg

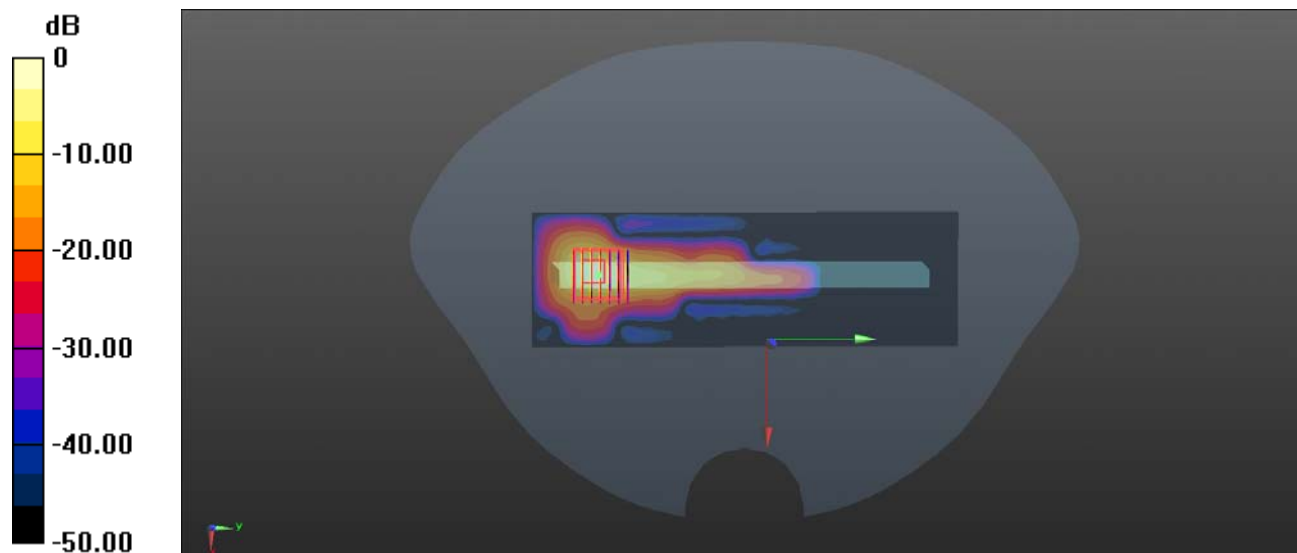
**Ch118/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 14.2 W/kg

**SAR(1 g) = 2.11 W/kg; SAR(10 g) = 0.491 W/kg**

Maximum value of SAR (measured) = 4.97 W/kg



0 dB = 4.97 W/kg

**MEAS.55 Left Head with Cheek on High Channel in Bluetooth DH5 mode**

Date: 2020.12.11

Communication System Band: BT; Frequency: 2480 MHz; Duty Cycle: 1:1.299

Medium parameters used:  $f = 2480$  MHz;  $\sigma = 1.818$  S/m;  $\epsilon_r = 38.55$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch 78/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.100 W/kg

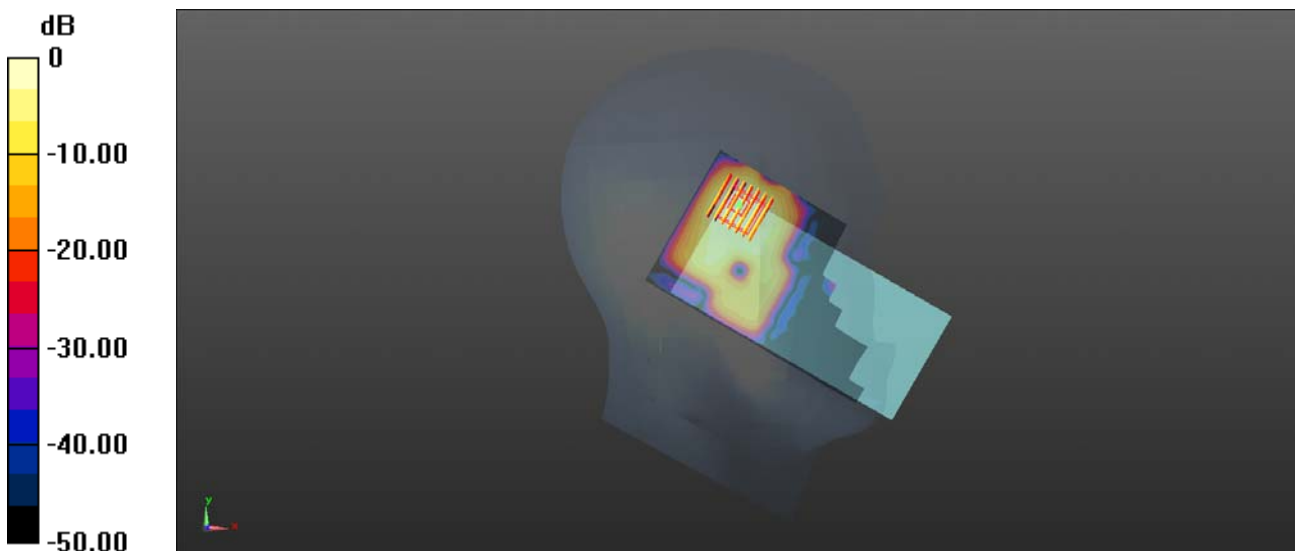
**Ch 78/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.854 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.154 W/kg

**SAR(1 g) = 0.077 W/kg; SAR(10 g) = 0.033 W/kg**

Maximum value of SAR (measured) = 0.0890 W/kg



0 dB = 0.0890 W/kg

**MEAS.56 Body Plane with Back Side 15mm on High Channel in Bluetooth DH5 mode**

Date: 2020.12.11

Communication System Band: BT; Frequency: 2480 MHz; Duty Cycle: 1:1.299

Medium parameters used:  $f = 2480$  MHz;  $\sigma = 1.818$  S/m;  $\epsilon_r = 38.55$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch 78/Area Scan (91x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0161 W/kg

**Ch 78/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.3040 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.0190 W/kg

**SAR(1 g) = 0.00833 W/kg; SAR(10 g) = 0.00328 W/kg**

Maximum value of SAR (measured) = 0.0104 W/kg



0 dB = 0.0104 W/kg

**MEAS.57 Body Plane with Back Side 10mm on Middle Channel in Bluetooth DH5 mode**

Date: 2020.12.11

Communication System Band: BT; Frequency: 2480 MHz; Duty Cycle: 1:1.299

Medium parameters used:  $f = 2480$  MHz;  $\sigma = 1.818$  S/m;  $\epsilon_r = 38.55$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.66, 7.66, 7.66); Calibrated: 2020.08.07;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2020.09.30
- Phantom: SAM (20deg 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)

**Ch 78/Area Scan (91x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0359 W/kg

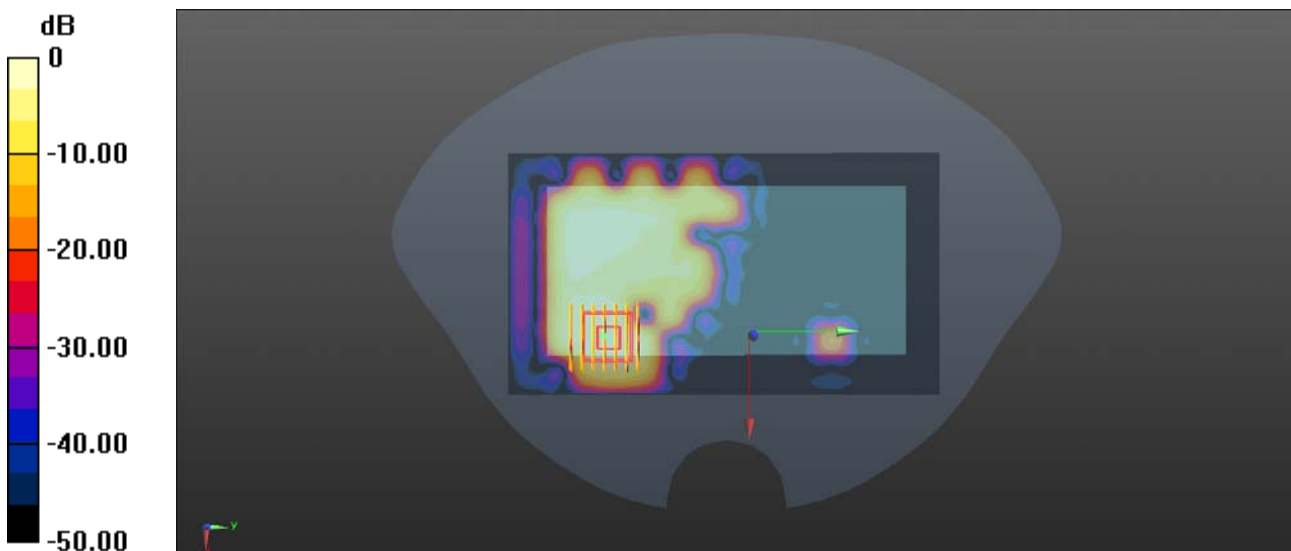
**Ch 78/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.5510 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.0530 W/kg

**SAR(1 g) = 0.022 W/kg; SAR(10 g) = 0.00863 W/kg**

Maximum value of SAR (measured) = 0.0254 W/kg



0 dB = 0.0254 W/kg



## **ANNEX D EUT EXTERNAL PHOTOS**

Please refer the document "BL-SZ20B0750-AW.pdf".

## **ANNEX E SAR TEST SETUP PHOTOS**

Please refer the document "BL-SZ20B0750-AS.pdf".

## **ANNEX F CALIBRATION REPORT**

Please refer the document "CALIBRATION REPORT\_SAR.pdf".

--END OF REPORT--