

FCC

SAR

TEST REPORT

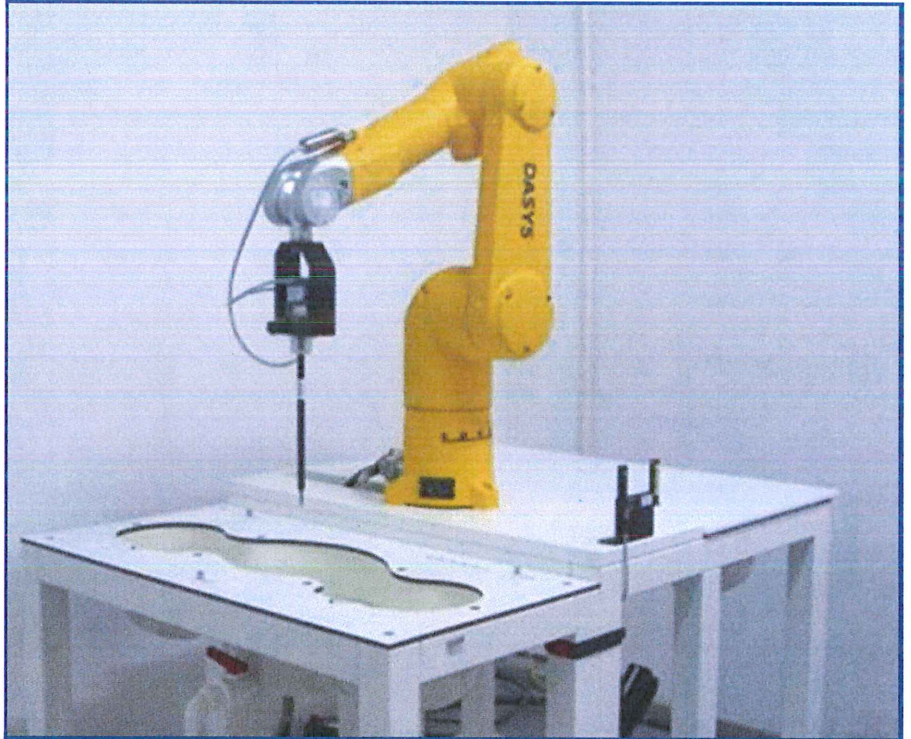
ISSUED BY  
Shenzhen BALUN Technology Co., Ltd.



FOR  
**Mobile Phone**

ISSUED TO  
Guangdong OPPO Mobile Telecommunications Corp., Ltd.

NO.18 HaiBin Road, Wusha village, Chang An Town, DongGuan City,  
GuangDong, China



Tested by: Zong Liyao  
Zong Liyao  
Date Jul. 21, 2020

Approved by: Wei Yanquan  
Wei Yanquan  
(Chief Engineer)

Date Jul. 21, 2020

Report No.: BL-SZ2060102-701

EUT Name: Mobile Phone

Model Name: CPH2123

Brand Name: OPPO

FCC ID: R9C-CPH2123

Test Standard: FCC 47 CFR Part 2.1093

ANSI C95.1: 1999, IEEE 1528: 2013

Maximum SAR: Head (1 g): 1.196 W/kg

Body (1 g): 0.921 W/kg

Hotspot (1 g): 1.165 W/kg

Specific (10 g): 2.255 W/kg

Test Conclusion: Pass

Test Date: Jun. 06, 2020 ~ Jul. 04, 2020

Date of Issue: Jul. 21, 2020

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**Revision History**

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Jul. 21, 2020</u>	<u>Initial Issue</u>

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# 1 GENERAL INFORMATION

## 1.1 Identification of the Testing Laboratory

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

## 1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.</p> <p>The laboratory is a testing organization accredited by American Association for Laboratory Accreditation (A2LA) according to ISO/IEC 17025. The accreditation certificate is 4344.01.</p> <p>The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.</p>
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

## 1.3 Test Environment Condition

Ambient Temperature	20°C to 23°C
Ambient Relative Humidity	35% 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	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 HaiBin Road, Wusha village, Chang An Town, DongGuan City, GuangDong, China

### 2.2 Manufacturer Information

Manufacturer	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 HaiBin Road, Wusha village, Chang An Town, DongGuan City, GuangDong, China

### 2.3 Factory Information

Factory	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 HaiBin Road, Wusha village, Chang An Town, DongGuan City, GuangDong, China

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

EUT Name	Mobile Phone
Model Name Under Test	CPH2123
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	ColorOS 7.2
Dimensions (Approx.)	160.1x73.8x7.5mm
Weight (Approx.)	164g(with battery)

## 2.5 Ancillary Equipment

Ancillary Equipment 1	Li-Polymer Battery	
	Brand Name	OPPO
	Model No.	BLP779(ATL cell)
	Serial No.	N/A
	Capacitance	Rated: 3890mAh/14.97Wh Typical: 4000mAh/15.40Wh
	Rated Voltage	3.85 V
	Limited Voltage	4.40 V
	Manufacturer	TWS Technology (Guangzhou) Limited
Ancillary Equipment 2	Li-Polymer Battery	
	Brand Name	OPPO
	Model No.	BLP779(SDI cell)
	Serial No.	N/A
	Capacitance	Rated: 3890mAh/14.97Wh Typical: 4000mAh/15.40Wh
	Rated Voltage	3.85 V
	Limited Voltage	4.40 V
	Manufacturer	TWS Technology (Guangzhou) Limited
Ancillary Equipment 3	Headset	
	Model No.	MH156
	Length (Approx.)	1.2 m
Note: The EUT has two Batterys, they are same with electrical parameters, but only differ in Manufacturer and battery cell. By comparing the test data of two Batteries, battery 1 can produce a more conservative SAR values. The battery of the Manufacturer is TWS Technology (Guangzhou) Limited as the main for test in this report.		



## 2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA/HSPA+ Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/17/26/66 TDD LTE Band 38/41 LTE CA Uplink (UL): CA_7C, CA_38C, CA_41C Bluetooth 5.1 (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) Band 1/2A/2C/3, GPS, GLONASS, BDS, SBAS, Galileo FM receiver, NFC
Note : The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20)	2400 ~ 2483.5 MHz	
802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz		
	5250 ~ 5350 MHz		
	5470 ~ 5725 MHz		
Bluetooth	2400 ~ 2483.5 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	Not Support		
Hotspot Function	Support		

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

Note:

1. 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.
5. This device supports both LTE Band 17 and Band 12. Since the supported frequency span for LTE Band 17 falls completely within the supports frequency span for LTE Band 12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE Band 12.

## 2.7 Power Reduction Description

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

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

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

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

**WWAN Reduced power level table**

Reduced level	Receiver state	Antenna	Transmitting conditions	Power reduced bands
Level 1	On (head scenario)	Up	WWAN Use Only	GSM1900; WCDMA B2/4; LTE B2/4/7/66/38/41
Level 2	On (head scenario)	Up	WWAN + WLAN 2.4G	GSM 850/GSM1900; WCDMA B2/4; LTE B2/4/5/7/66/38/41
Level 3	On (head scenario)	Up	WWAN + WLAN 5G	GSM 850/GSM1900; WCDMA B2/4; LTE B2/4/5/7/66/38/41
Level 4	Off (Body scenario)	Up	WWAN Use Only	GSM1900; WCDMA B2/4; LTE B2/4/7/66
Level 5	Off (Body scenario)	Up	WWAN + WLAN 2.4G	GSM1900; WCDMA B2/4; LTE B2/4/7/66
Level 6	Off (Body scenario)	Up	WWAN + WLAN 5G	GSM1900; WCDMA B2/4; LTE B2/4/7/66
Level 7	Off (Body scenario)	Down	WWAN Use Only	WCDMA B4; LTE B4/66
Level 8	Off (Body scenario)	Down	WWAN + WLAN 2.4G	WCDMA B2/4; LTE B4/66
Level 9	Off (Body scenario)	Down	WWAN + WLAN 5G	WCDMA B2/4; LTE B4/66

**WLAN Reduced power level table**

Reduced level	Receiver state	Transmitting conditions	Power reduced bands
Level 1	On (head scenario)	WLAN Use Only	WWLAN 2.4G; WLAN 5G
Level 2	On (head scenario)	WWAN + WLAN	WWLAN 2.4G; WLAN 5G
Level 3	Off (Body scenario)	WLAN Use Only	WLAN 5G
Level 4	Off (Body scenario)	WWAN + WLAN	WWLAN 2.4G; WLAN 5G

**WWAN Antenna Up Power table**

Mode	WWAN Antenna						
	Full Power	Head			Body		
		Standalone	Receiver on		Receiver off		
			Simultaneous transmission		Standalone	Simultaneous transmission	
			Body-worn&Hotspot			Body-worn&Hotspot	
		+2.4G WLAN	+5G WLAN		+2.4G WLAN	+5G WLAN	
GMSK 850	33.30	33.30	30.30	30.30	30.30	30.30	30.30
GMSK 850 1 Tx Slot	33.30	33.30	30.30	30.30	30.30	30.30	30.30
GMSK 850 2 Tx Slots	31.30	31.30	27.80	27.80	27.80	27.80	27.80
GMSK 850 3 Tx Slots	30.30	30.30	25.80	25.80	25.80	25.80	25.80
GMSK 850 4 Tx Slots	29.30	29.30	24.80	24.80	24.80	24.80	24.80
8PSK 850 1 Tx Slot	30.80	30.80	24.30	24.30	24.30	24.30	24.30
8PSK 850 2 Tx Slots	28.30	28.30	22.30	22.30	22.30	22.30	22.30
8PSK 850 3 Tx Slots	26.80	26.80	19.30	19.30	19.30	19.30	19.30
8PSK 850 4 Tx Slots	25.80	25.80	17.80	17.80	17.80	17.80	17.80
GMSK 1900	30.30	25.80	23.80	23.80	29.30	28.30	28.30
GPRS1900 1 Tx Slot	30.30	25.80	23.80	23.80	29.30	28.30	28.30
GPRS1900 2 Tx Slots	28.30	23.30	20.80	20.80	26.30	25.30	25.30
GPRS1900 3 Tx Slots	27.30	21.30	18.80	18.80	24.30	23.30	23.30
GPRS1900 4 Tx Slots	26.30	20.30	17.80	17.80	23.30	22.30	22.30
8PSK 1900 1 Tx Slot	25.30	20.80	18.80	18.80	24.30	23.30	23.30
8PSK 1900 2 Tx Slots	23.30	17.80	15.80	15.80	21.30	20.30	20.30
8PSK 1900 3 Tx Slots	22.30	16.30	13.80	13.80	19.30	18.30	18.30
8PSK 1900 4 Tx Slots	21.30	14.30	12.80	12.80	17.30	16.80	16.80
WCDMA Band2 RMC	24.10	17.10	14.10	19.10	18.60	24.10	23.10
HSDPA Subtest-1	23.10	15.10	13.10	13.10	18.10	17.60	17.60
HSDPA Subtest-2	23.10	15.10	13.10	13.10	18.10	17.60	17.60
HSDPA Subtest-3	22.60	15.60	12.60	12.60	17.60	17.10	17.10
HSDPA Subtest-4	22.60	14.60	12.60	12.60	17.60	17.10	17.10
HSUPA Subtest-1	22.60	15.60	12.60	12.60	17.60	17.10	17.10
HSUPA Subtest-2	22.10	16.80	12.10	12.10	17.10	16.60	16.60
HSUPA Subtest-3	23.10	16.80	13.10	13.10	18.10	17.60	17.60
HSUPA Subtest-4	21.60	15.80	11.60	11.60	16.60	16.10	16.10

HSUPA Subtest-5	23.10	15.80	13.10	13.10	18.10	17.60	17.60
WCDMA Band4 RMC	24.10	17.60	14.60	14.60	20.10	19.60	19.60
HSDPA Subtest-1	23.10	16.60	13.60	13.60	19.10	18.60	18.60
HSDPA Subtest-2	23.10	16.60	13.60	13.60	19.10	18.60	18.60
HSDPA Subtest-3	22.60	16.10	13.10	13.10	18.60	18.10	18.10
HSDPA Subtest-4	22.60	16.10	13.10	13.10	18.60	18.10	18.10
HSUPA Subtest-1	22.60	16.10	13.10	13.10	18.60	18.10	18.10
HSUPA Subtest-2	22.10	15.60	12.60	12.60	18.10	17.60	17.60
HSUPA Subtest-3	23.10	16.60	13.60	19.10	18.60	22.10	21.10
HSUPA Subtest-4	21.60	15.10	12.10	17.60	17.10	20.60	19.60
HSUPA Subtest-5	23.10	16.60	13.60	19.10	18.60	22.10	21.10
WCDMA Band5 RMC	24.30	24.30	24.30	24.30	24.30	24.30	24.30
HSDPA Subtest-1	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-2	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-3	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-4	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSUPA Subtest-1	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSUPA Subtest-2	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-3	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSUPA Subtest-4	21.80	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	23.30	23.30	23.30	23.30	23.30	23.30	23.30
LTE Band2	23.80	17.30	16.30	16.30	18.30	17.80	17.80
LTE Band4	23.80	18.30	15.30	15.30	19.80	19.30	19.30
LTE Band5	24.30	24.30	23.30	23.30	24.30	24.30	24.30
LTE Band7	23.80	15.80	14.80	14.80	22.80	21.80	21.80
LTE Band12	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band17	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band26	24.30	24.30	24.30	24.30	24.30	24.30	24.30
LTE Band66	24.10	17.60	14.60	14.60	20.10	20.10	20.10
LTE Band38	23.80	20.80	20.30	20.30	23.80	23.80	23.80
LTE Band41	23.80	20.80	20.30	20.30	23.80	23.80	23.80

**WWAN Antenna Down Power table**

Mode	WWAN Antenna							
	Full Power	Head			Body			
		Receiver on				Receiver off		
		Standalone	Simultaneous transmission		Standalone	Simultaneous transmission		
+2.4G WLAN	+5G WLAN		+2.4G WLAN	+5G WLAN				
GMSK 850	33.30	33.30	33.30	33.30	33.30	33.30	33.30	
GMSK 850 1 Tx Slot	33.30	33.30	33.30	33.30	33.30	33.30	33.30	
GMSK 850 2 Tx Slots	31.30	31.30	31.30	31.30	31.30	31.30	31.30	
GMSK 850 3 Tx Slots	30.30	30.30	30.30	30.30	30.30	30.30	30.30	
GMSK 850 4 Tx Slots	29.30	29.30	29.30	29.30	29.30	29.30	29.30	
8PSK 850 1 Tx Slot	30.80	30.80	30.80	30.80	30.80	30.80	30.80	
8PSK 850 2 Tx Slots	28.30	28.30	28.30	28.30	28.30	28.30	28.30	
8PSK 850 3 Tx Slots	26.80	26.80	26.80	26.80	26.80	26.80	26.80	
8PSK 850 4 Tx Slots	25.80	25.80	25.80	25.80	25.80	25.80	25.80	
GMSK 1900	30.30	30.30	30.30	30.30	30.30	30.30	30.30	
GPRS1900 1 Tx Slot	30.30	30.30	30.30	30.30	30.30	30.30	30.30	
GPRS1900 2 Tx Slots	28.30	28.30	28.30	28.30	28.30	28.30	28.30	
GPRS1900 3 Tx Slots	27.30	27.30	27.30	27.30	27.30	27.30	27.30	
GPRS1900 4 Tx Slots	26.30	26.30	26.30	26.30	26.30	26.30	26.30	
8PSK 1900 1 Tx Slot	25.30	25.30	25.30	25.30	25.30	25.30	25.30	
8PSK 1900 2 Tx Slots	23.30	23.30	23.30	23.30	23.30	23.30	23.30	
8PSK 1900 3 Tx Slots	22.30	22.30	22.30	22.30	22.30	22.30	22.30	
8PSK 1900 4 Tx Slots	21.30	21.30	21.30	21.30	21.30	21.30	21.30	
WCDMA Band2 RMC	24.10	24.10	24.10	24.10	24.10	23.10	23.10	
HSDPA Subtest-1	23.10	23.10	23.10	23.10	23.10	23.10	23.10	
HSDPA Subtest-2	23.10	23.10	23.10	23.10	23.10	23.10	23.10	
HSDPA Subtest-3	22.60	22.60	22.60	22.60	22.60	22.60	22.60	
HSDPA Subtest-4	22.60	22.60	22.60	22.60	22.60	22.60	22.60	
HSUPA Subtest-1	22.60	22.60	22.60	22.60	22.60	21.60	21.60	
HSUPA Subtest-2	22.10	22.10	22.10	22.10	22.10	21.10	21.10	
HSUPA Subtest-3	23.10	23.10	23.10	23.10	23.10	22.10	22.10	
HSUPA Subtest-4	21.60	21.60	21.60	21.60	21.60	20.60	20.60	
HSUPA Subtest-5	23.10	23.10	23.10	23.10	23.10	22.10	22.10	
WCDMA Band4 RMC	24.10	24.10	24.10	24.10	23.10	22.10	22.10	
HSDPA Subtest-1	23.10	23.10	23.10	23.10	22.10	22.10	22.10	
HSDPA Subtest-2	23.10	23.10	23.10	23.10	22.10	22.10	22.10	
HSDPA Subtest-3	22.60	22.60	22.60	22.60	21.60	21.60	21.60	
HSDPA Subtest-4	22.60	22.60	22.60	22.60	21.60	21.60	21.60	
HSUPA Subtest-1	22.60	22.60	22.60	22.60	21.60	20.60	20.60	
HSUPA Subtest-2	22.10	22.10	22.10	22.10	21.10	20.10	20.10	
HSUPA Subtest-3	23.10	23.10	23.10	23.10	22.10	21.10	21.10	
HSUPA Subtest-4	21.60	21.60	21.60	21.60	20.60	19.60	19.60	
HSUPA Subtest-5	23.10	23.10	23.10	23.10	22.10	21.10	21.10	
WCDMA Band5 RMC	24.30	24.30	24.30	24.30	24.30	24.30	24.30	
HSDPA Subtest-1	23.30	23.30	23.30	23.30	23.30	23.30	23.30	

HSDPA Subtest-2	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-3	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-4	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSUPA Subtest-1	22.80	22.80	22.80	22.80	22.80	22.80	22.80
HSUPA Subtest-2	22.30	22.30	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-3	23.30	23.30	23.30	23.30	23.30	23.30	23.30
HSUPA Subtest-4	21.80	21.80	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	23.30	23.30	23.30	23.30	23.30	23.30	23.30
LTE Band2	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band4	23.80	23.80	23.80	23.80	22.30	21.80	21.80
LTE Band5	24.30	24.30	24.30	24.30	24.30	24.30	24.30
LTE Band7	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band12	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band17	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band26	24.30	24.30	24.30	24.30	24.30	24.30	24.30
LTE Band66	24.10	24.10	24.10	24.10	22.10	22.10	22.10
LTE Band38	23.80	23.80	23.80	23.80	23.80	23.80	23.80
LTE Band41	23.80	23.80	23.80	23.80	23.80	23.80	23.80

**WLAN and Bluetooth Antenna Power table**

Mode	WLAN Antenna				
	Full Power	Head		Body	
		Receiver on		Receiver off	
		Standalone	Simultaneous transmission	Standalone	Simultaneous transmission
+WWAN	+WWAN				
2.4G WLAN 802.11b	20.00	16.00	14.50	20.00	14.50
2.4G WLAN 802.11g	19.00	15.50	14.50	19.00	14.50
2.4G WLAN 802.11n20	19.00	15.50	14.50	19.00	14.50
5.2G&5.3G WLAN 802.11a	20.00	17.00	12.50	17.50	14.50
5.2G&5.3G WLAN 802.11nHT20	20.00	17.00	12.50	17.50	14.50
5.2G&5.3G WLAN 802.11nHT40	19.00	17.00	12.50	17.50	14.50
5.2G&5.3G WLAN 802.11acHT20	20.00	17.00	12.50	17.50	14.50
5.2G&5.3G WLAN 802.11acHT40	19.00	17.00	12.50	17.50	14.50
5.2G&5.3G WLAN 802.11acHT80	19.00	17.00	12.50	17.50	14.50
5.6G WLAN 802.11a	20.00	15.50	11.50	18.50	14.50
5.6G WLAN 802.11nHT20	20.00	15.50	11.50	18.50	14.50
5.6G WLAN 802.11nHT40	19.00	15.50	11.50	18.50	14.50
5.6G WLAN 802.11acHT20	20.00	15.50	11.50	18.50	14.50
5.6G WLAN 802.11acHT40	19.00	15.50	11.50	18.50	14.50
5.6G WLAN 802.11acHT80	19.00	15.50	11.50	18.50	14.50
5.8G WLAN 802.11a	20.00	14.50	11.50	18.50	14.50
5.8G WLAN 802.11nHT20	20.00	14.50	11.50	18.50	14.50
5.8G WLAN 802.11nHT40	19.00	14.50	11.50	18.50	14.50
5.8G WLAN 802.11acHT20	20.00	14.50	11.50	18.50	14.50
5.8G WLAN 802.11acHT40	19.00	14.50	11.50	18.50	14.50
5.8G WLAN 802.11acHT80	19.00	14.50	11.50	18.50	14.50
Bluetooth	13.00	13.00	13.00	13.00	13.00



### 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	0.947	0.279	0.331	<b>1.196</b>	<b>0.921</b>	<b>1.165</b>
GSM 1900	0.927	0.318	0.856			
WCDMA Band 2	1.174	0.358	1.011			
WCDMA Band 4	1.039	0.394	0.884			
WCDMA Band 5	0.452	0.150	0.272			
LTE Band 2	0.795	0.216	<b>1.165</b>			
LTE Band 4	1.057	0.319	0.833			
LTE Band 5	0.508	0.154	0.260			
LTE Band 7	0.459	0.478	0.721			
LTE Band 12	0.102	0.156	0.261			
LTE Band 26	0.452	0.179	0.183			
LTE Band 66	0.938	0.493	0.976			
LTE Band 38	0.641	0.149	0.333			
LTE Band 41	0.611	0.185	0.349			
2.4G WLAN	0.954	0.238	0.550			
5.2G WLAN	/	/	0.979			
5.3G WLAN	1.190	<b>0.921</b>	/			
5.6G WLAN	<b>1.196</b>	0.822	/			
5.8G WLAN	1.190	0.318	0.976			
Bluetooth	0.393	0.031	0.058			
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	Specific 10g
WCDMA Band 2	1.885	<b>2.255</b>
WCDMA Band 4	1.978	
LTE Band 2	1.505	
LTE Band 4	1.823	
LTE Band 66	<b>2.255</b>	
5.2G WLAN	1.484	
5.3G WLAN	1.527	
5.6G WLAN	2.198	
Limit (W/kg)	4.0	
Verdict	Pass	

### 3.3.3 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head (1g)	WWAN + 5G WLAN + Bluetooth	1.464	1.6	Pass
Body-worn Accessory (1g)	WWAN + 5G WLAN + Bluetooth	0.939	1.6	Pass
Hotspot (1g)	WWAN + 5G WLAN + Bluetooth	1.434	1.6	Pass
Specific (10g)	WWAN + 5G WLAN + Bluetooth	2.773	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 1.196 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 2.255 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

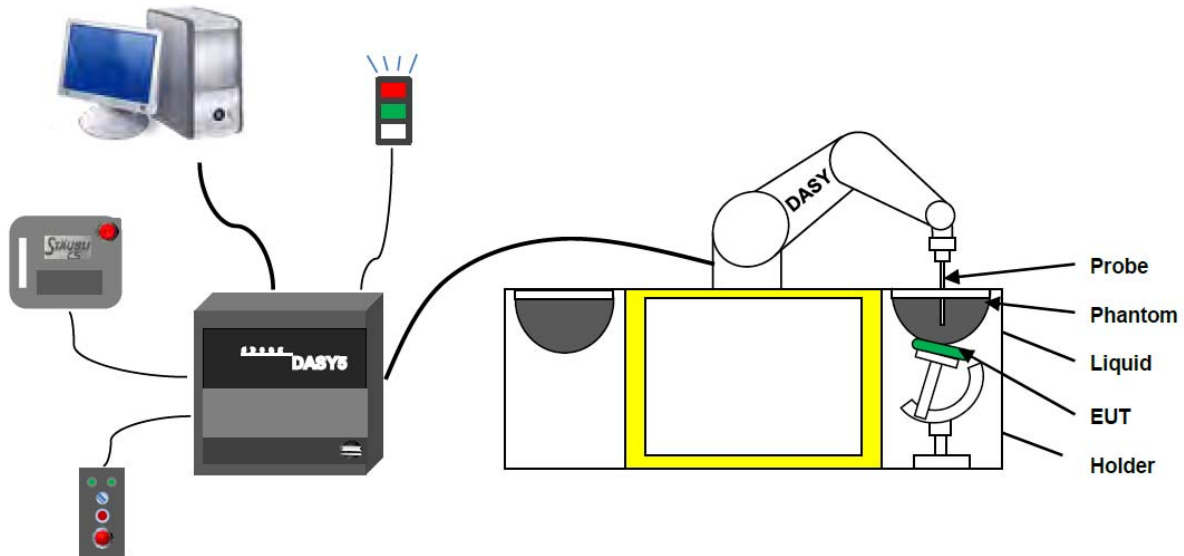
$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

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:7510 with following specifications is used.

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

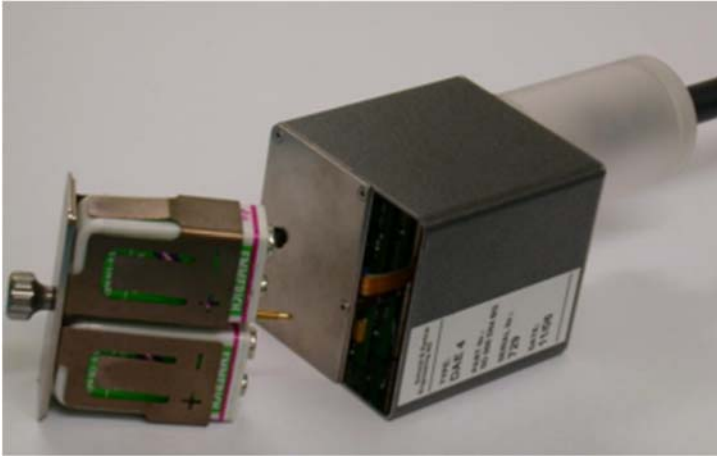


#### E-Field Probe Calibration Process

Probe calibration is realized, in compliance with CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antenna 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 $\Omega$ m
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

#### 4.2.5 Phantoms

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



- Left hand
- Right hand
- Flat phantom

Photo of Phantom SN1857



Photo of Phantom SN1859



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

#### 4.2.6 Device Holder

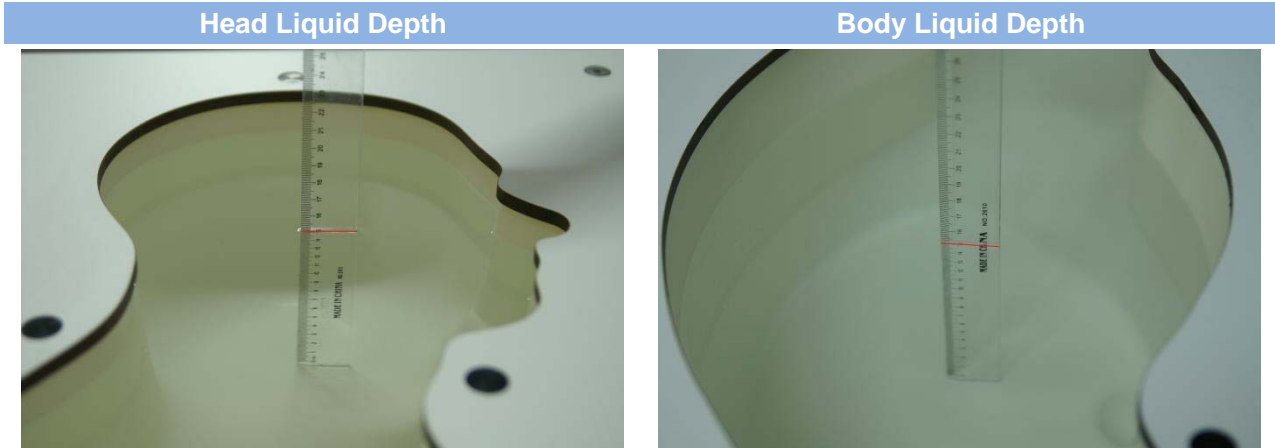
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of  $65^\circ$ . The bottom plate contains three pair of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



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

#### 4.2.7 Simulating Liquid

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



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

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity $\sigma$ (S/m)	Permittivity $\epsilon$
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency (MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity $\sigma$ (S/m)	Permittivity $\epsilon$
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity $\sigma$ (S/m)	Permittivity $\epsilon$
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
Frequency (MHz)	Water (%)	DGBE (%)			Salt (%)		Conductivity $\sigma$ (S/m)	Permittivity $\epsilon$
5200	78.60	21.40			/		5.54	47.86
5800	78.50	21.40			0.1		6.0	48.20

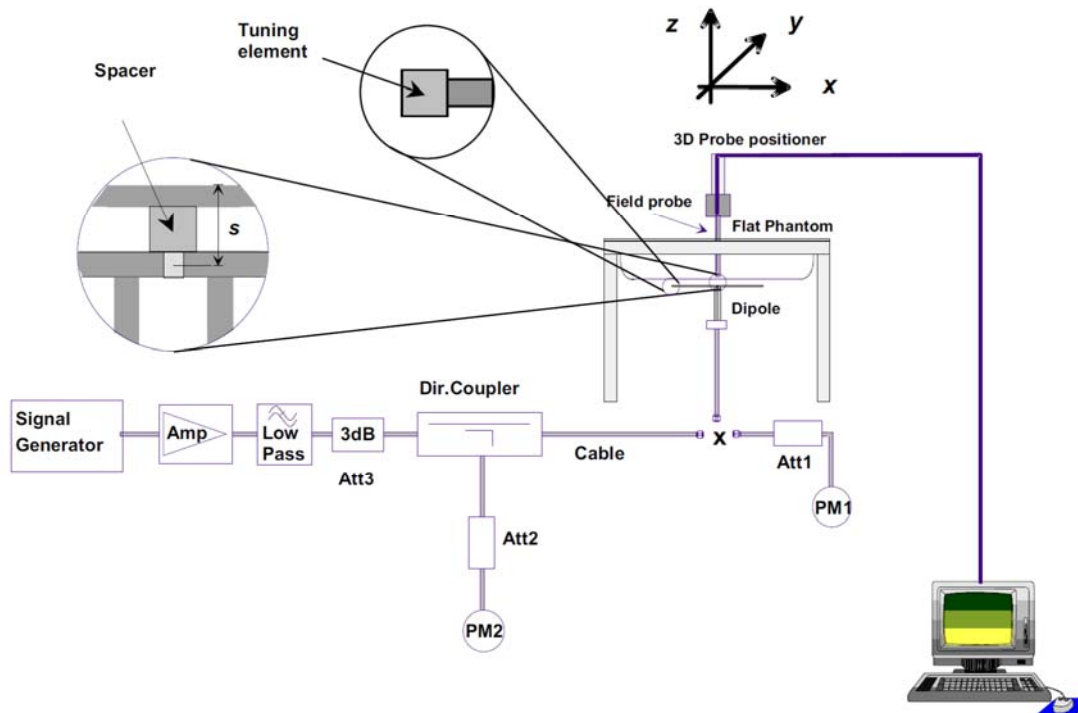
## 5 SYSTEM VERIFICATION

### 5.1 Purpose of System Check

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

### 5.2 System Check Setup

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



## 6 TEST POSITION CONFIGURATIONS

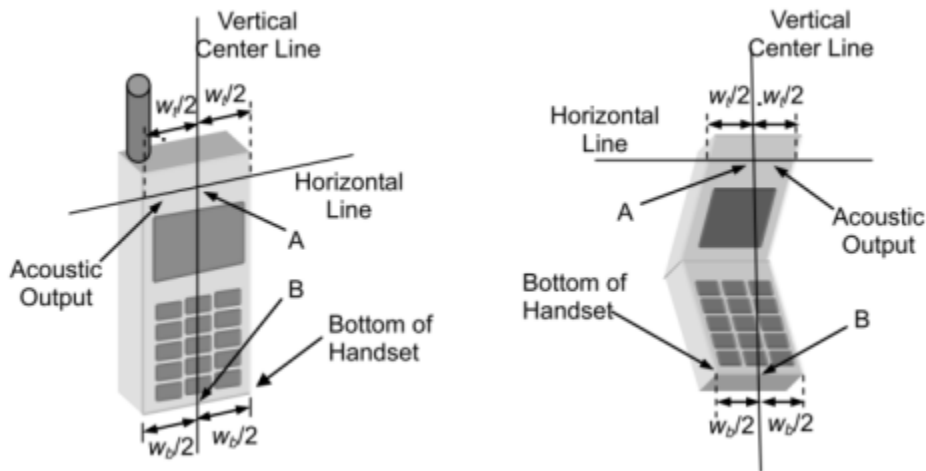
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

### 6.1 Head Exposure Conditions

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

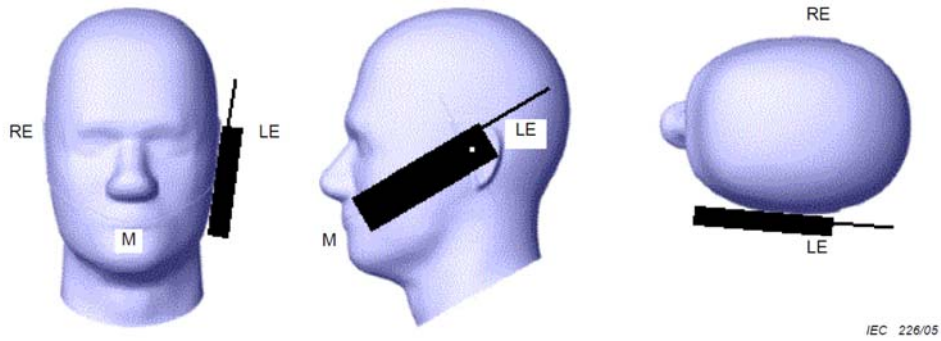
#### 6.1.1 Two Imaginary Lines on the Handset

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



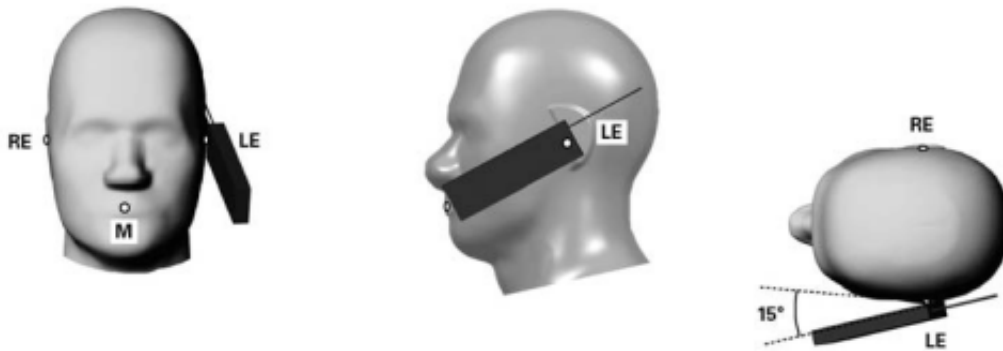
#### 6.1.2 Cheek Position

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



### 6.1.3 Tilted Position

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



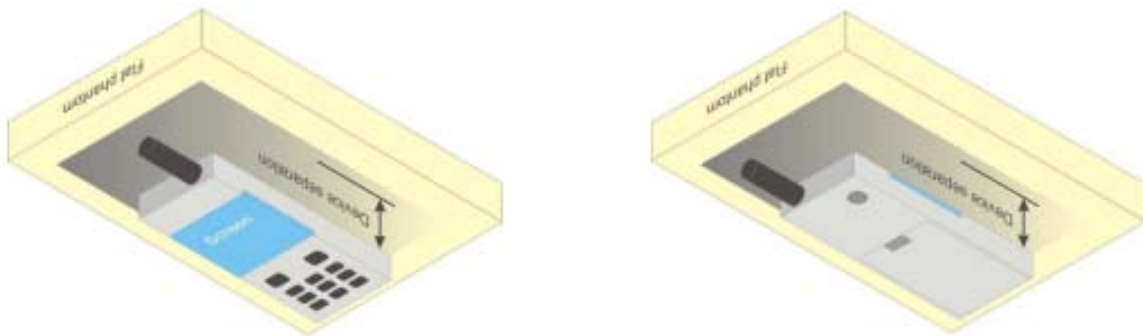


## 6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

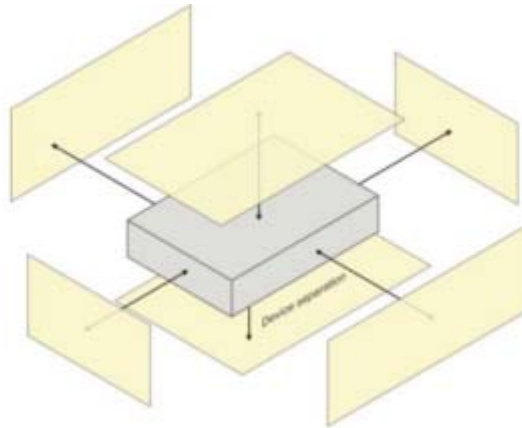
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



### 6.3 Hotspot Mode Exposure Position Conditions

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



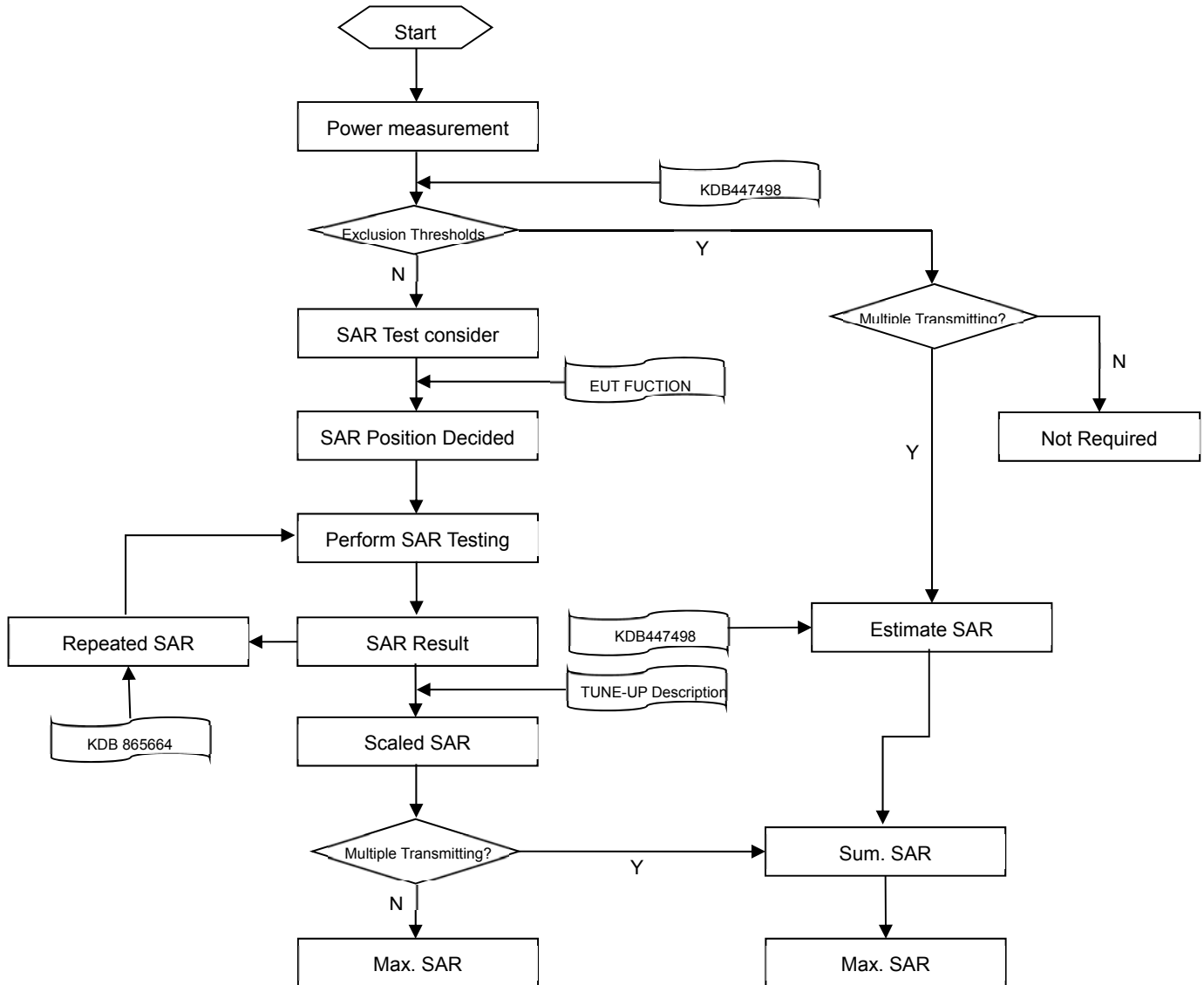
### 6.4 Product Specific 10g Exposure Consideration

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
				5–6 GHz: ≤ 2 mm
	graded grid	$\Delta z$ Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
$\Delta z$ Zoom (n>1): between subsequent points		4–5 GHz: ≤ 2.5 mm		
			5–6 GHz: ≤ 2 mm	
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm
<b>Note:</b> <ol style="list-style-type: none"> <li><math>\delta</math> is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.</li> <li>* 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.</li> </ol>				

### 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)	32.50	32.57	32.65	33.30	23.31	23.38	23.46	24.11
GPRS (GMSK, 1-Slot)	32.41	32.47	32.50	33.30	23.22	23.28	23.31	24.11
GPRS (GMSK, 2-Slots)	30.49	30.50	30.54	31.30	24.36	24.37	24.41	25.17
GPRS (GMSK, 3-Slots)	29.50	29.49	29.51	30.30	25.08	25.07	25.09	25.88
GPRS (GMSK, 4-Slots)	28.53	28.52	28.53	29.30	<b>25.35</b>	25.34	<b>25.35</b>	26.12
EGPRS (8PSK, 1-Slot)	29.86	30.02	30.16	30.80	20.67	20.83	20.97	21.61
EGPRS (8PSK, 2-Slots)	27.36	27.17	27.45	28.30	21.23	21.04	21.32	22.17
EGPRS (8PSK, 3-Slots)	26.05	26.07	26.14	26.80	21.63	21.65	21.72	22.38
EGPRS (8PSK, 4-Slots)	24.97	25.02	25.09	25.80	21.79	21.84	21.91	22.62

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)	28.97	28.97	28.96	30.30	19.78	19.78	19.77	21.11
GPRS (GMSK, 1-Slot)	29.13	29.03	29.00	30.30	19.94	19.84	19.81	21.11
GPRS (GMSK, 2-Slots)	27.07	26.90	26.90	28.30	20.94	20.77	20.77	22.17
GPRS (GMSK, 3-Slots)	26.06	25.89	25.85	27.30	21.64	21.47	21.43	22.88
GPRS (GMSK, 4-Slots)	25.01	24.83	24.79	26.30	<b>21.83</b>	21.65	21.61	23.12
EGPRS (8PSK, 1-Slot)	24.60	24.37	24.45	25.30	15.41	15.18	15.26	16.11
EGPRS (8PSK, 2-Slots)	22.98	22.68	22.73	23.30	16.85	16.55	16.60	17.17
EGPRS (8PSK, 3-Slots)	22.06	21.37	21.39	22.30	17.64	16.95	16.97	17.88
EGPRS (8PSK, 4-Slots)	20.54	20.23	20.06	21.30	17.36	17.05	16.88	18.12

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

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

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

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

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

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

## 8.2 WCDMA

WCDMA	Band 2				Band 4			
Channel	9262	9400	9538	Tune-up Limit (dBm)	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>23.05</b>	22.93	22.98	24.10	23.13	23.11	<b>23.14</b>	24.10
HSDPA Subtest-1	22.11	22.00	22.07	23.10	22.14	22.17	22.22	23.10
HSDPA Subtest-2	22.12	22.01	22.06	23.10	22.12	22.15	22.20	23.10
HSDPA Subtest-3	21.62	21.53	21.63	22.60	21.68	21.68	21.74	22.60
HSDPA Subtest-4	21.67	21.53	21.58	22.60	21.63	21.66	21.69	22.60
HSUPA Subtest-1	21.47	21.31	21.36	22.60	21.48	21.52	21.55	22.60
HSUPA Subtest-2	21.09	20.92	20.99	22.10	21.13	21.12	21.12	22.10
HSUPA Subtest-3	22.10	21.91	21.98	23.10	22.12	22.16	22.16	23.10
HSUPA Subtest-4	20.61	20.44	20.48	21.60	20.63	20.63	20.66	21.60
HSUPA Subtest-5	22.07	21.91	21.98	23.10	22.11	22.12	22.14	23.10
WCDMA	Band 5				-			
Channel	4132	4182	4233	Tune-up Limit (dBm)	-	-	-	-
RMC 12.2Kbps	<b>23.40</b>	23.31	23.25	24.30				
HSDPA Subtest-1	22.42	22.34	22.22	23.30	-	-	-	-
HSDPA Subtest-2	22.39	22.36	22.23	23.30	-	-	-	-
HSDPA Subtest-3	21.89	21.85	21.75	22.80	-	-	-	-
HSDPA Subtest-4	21.91	21.79	21.72	22.80	-	-	-	-
HSUPA Subtest-1	21.80	21.72	21.60	22.80	-	-	-	-
HSUPA Subtest-2	21.47	21.33	21.21	22.30	-	-	-	-
HSUPA Subtest-3	22.44	22.35	22.22	23.30	-	-	-	-
HSUPA Subtest-4	20.96	20.85	20.73	21.80	-	-	-	-
HSUPA Subtest-5	22.48	22.33	22.23	23.30	-	-	-	-

### 8.3 LTE

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	23.08	23.17	23.16	23.80	22.13	22.11	22.14	22.80
	1 (RB_Pos:50)	23.20	<b>23.26</b>	23.18	23.80	22.23	22.19	22.19	22.80
	1 (RB_Pos:99)	23.03	23.14	23.08	23.80	22.06	22.06	21.84	22.80
	50 (RB_Pos:0)	21.60	21.68	21.84	22.80	20.63	20.74	20.85	21.80
	50 (RB_Pos:25)	21.69	21.75	21.77	22.80	20.75	20.81	20.76	21.80
	50 (RB_Pos:50)	21.68	21.69	21.75	22.80	20.72	20.71	20.72	21.80
	100 (RB_Pos:0)	21.61	21.65	21.79	22.80	20.69	20.69	20.79	21.80
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)	23.11	23.17	23.24	23.80	21.57	22.04	22.21	22.80
	1 (RB_Pos:38)	23.17	23.21	23.22	23.80	21.62	22.13	22.14	22.80
	1 (RB_Pos:74)	23.07	23.13	23.20	23.80	21.52	22.02	21.88	22.80
	36 (RB_Pos:0)	21.67	21.63	21.73	22.80	20.61	20.72	20.71	21.80
	36 (RB_Pos:20)	21.62	21.70	21.68	22.80	20.62	20.75	20.68	21.80
	36 (RB_Pos:39)	21.61	21.66	21.67	22.80	20.63	20.74	20.61	21.80
	75 (RB_Pos:0)	21.65	21.69	21.74	22.80	20.64	20.69	20.69	21.80
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)	23.10	23.15	23.20	23.80	21.61	22.11	21.74	22.80
	1 (RB_Pos:25)	23.12	23.22	23.24	23.80	21.58	22.10	21.70	22.80
	1 (RB_Pos:49)	23.12	23.20	23.25	23.80	21.58	22.06	21.57	22.80
	25 (RB_Pos:0)	21.60	21.61	21.60	22.80	20.66	20.68	20.75	21.80
	25 (RB_Pos:12)	21.63	21.70	21.68	22.80	20.72	20.79	20.79	21.80
	25 (RB_Pos:25)	21.64	21.68	21.63	22.80	20.68	20.78	20.78	21.80
	50 (RB_Pos:0)	21.60	21.67	21.68	22.80	20.64	20.72	20.71	21.80
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)	23.05	23.09	23.07	23.80	21.70	22.12	21.69	22.80
	1 (RB_Pos:13)	23.12	23.19	23.21	23.80	21.78	22.26	21.75	22.80
	1 (RB_Pos:24)	23.00	23.08	23.12	23.80	21.69	22.11	21.59	22.80
	12 (RB_Pos:0)	21.54	21.61	21.54	22.80	20.66	20.80	20.64	21.80
	12 (RB_Pos:6)	21.60	21.68	21.65	22.80	20.71	20.82	20.71	21.80
	12 (RB_Pos:13)	21.56	21.65	21.61	22.80	20.62	20.83	20.66	21.80



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)	21.61	21.66	21.60	22.80	20.66	20.75	20.59	21.80
3.0 MHz	1 (RB_Pos:0)	22.73	22.87	22.87	23.80	21.15	21.69	21.33	22.80
	1 (RB_Pos:8)	22.80	22.94	23.01	23.80	21.28	21.81	21.35	22.80
	1 (RB_Pos:14)	22.72	22.83	22.97	23.80	21.13	21.66	21.26	22.80
	8 (RB_Pos:0)	21.49	21.55	21.52	22.80	20.62	20.66	20.57	21.80
	8 (RB_Pos:3)	21.54	21.61	21.57	22.80	20.68	20.70	20.63	21.80
	8 (RB_Pos:7)	21.43	21.53	21.51	22.80	20.59	20.63	20.52	21.80
	15 (RB_Pos:0)	21.44	21.50	21.51	22.80	20.52	20.55	20.46	21.80
1.4 MHz	1 (RB_Pos:0)	22.74	22.90	22.97	23.80	21.42	21.80	21.39	22.80
	1 (RB_Pos:3)	22.83	22.97	23.09	23.80	21.46	21.84	21.43	22.80
	1 (RB_Pos:5)	22.75	22.92	23.04	23.80	21.40	21.78	21.37	22.80
	3 (RB_Pos:0)	22.93	23.04	23.03	23.80	21.50	21.74	21.63	22.80
	3 (RB_Pos:1)	22.96	23.10	23.09	23.80	21.50	21.74	21.66	22.80
	3 (RB_Pos:3)	22.94	23.05	23.06	23.80	21.54	21.77	21.62	22.80
	6 (RB_Pos:0)	21.46	21.58	21.57	22.80	20.69	20.53	20.75	21.80

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)	23.35	23.34	23.27	23.80	22.33	22.27	22.20	22.80
	1 (RB_Pos:50)	<b>23.38</b>	<b>23.38</b>	23.33	23.80	22.39	22.23	22.31	22.80
	1 (RB_Pos:99)	23.24	23.28	23.21	23.80	22.22	22.16	22.15	22.80
	50 (RB_Pos:0)	21.97	21.69	21.97	22.80	21.02	20.76	20.95	21.80
	50 (RB_Pos:25)	21.92	21.84	21.89	22.80	20.96	20.89	20.89	21.80
	50 (RB_Pos:50)	21.93	21.80	21.82	22.80	20.97	20.78	20.77	21.80
	100 (RB_Pos:0)	21.96	21.70	21.89	22.80	21.00	20.76	20.89	21.80
15 MHz	1 (RB_Pos:0)	23.34	23.36	23.35	23.80	21.82	22.24	22.29	22.80
	1 (RB_Pos:38)	23.33	23.34	23.34	23.80	21.82	22.23	22.42	22.80
	1 (RB_Pos:74)	23.24	23.26	23.32	23.80	21.69	22.07	22.25	22.80
	36 (RB_Pos:0)	21.90	21.72	21.90	22.80	20.94	20.78	20.90	21.80
	36 (RB_Pos:20)	21.88	21.85	21.89	22.80	20.92	20.88	20.90	21.80

	36 (RB_Pos:39)	21.82	21.78	21.82	22.80	20.87	20.78	20.80	21.80
	75 (RB_Pos:0)	21.94	21.78	21.94	22.80	20.90	20.82	20.88	21.80
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)	23.36	23.34	23.32	23.80	21.82	22.21	21.96	22.80
	1 (RB_Pos:25)	23.35	23.35	23.37	23.80	21.86	22.16	21.98	22.80
	1 (RB_Pos:49)	23.33	23.29	23.30	23.80	21.75	22.19	21.91	22.80
	25 (RB_Pos:0)	21.87	21.66	21.93	22.80	20.94	20.74	21.06	21.80
	25 (RB_Pos:12)	21.93	21.80	21.92	22.80	20.97	20.86	21.02	21.80
	25 (RB_Pos:25)	21.84	21.75	21.81	22.80	20.90	20.82	20.93	21.80
	50 (RB_Pos:0)	21.88	21.75	21.93	22.80	20.91	20.81	20.96	21.80
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)	23.28	23.24	23.28	23.80	21.96	22.22	21.96	22.80
	1 (RB_Pos:13)	23.34	23.33	23.37	23.80	22.08	22.33	22.03	22.80
	1 (RB_Pos:24)	23.29	23.20	23.32	23.80	21.96	22.20	21.94	22.80
	12 (RB_Pos:0)	21.82	21.68	21.87	22.80	20.92	20.83	20.96	21.80
	12 (RB_Pos:6)	21.86	21.79	21.92	22.80	20.96	20.94	20.99	21.80
	12 (RB_Pos:13)	21.79	21.70	21.86	22.80	20.90	20.86	20.93	21.80
	25 (RB_Pos:0)	21.84	21.76	21.92	22.80	20.89	20.86	20.91	21.80
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)	23.02	23.00	23.09	23.80	21.47	21.86	21.66	22.80
	1 (RB_Pos:8)	23.04	23.03	23.22	23.80	21.49	21.94	21.66	22.80
	1 (RB_Pos:14)	22.95	22.96	23.05	23.80	21.35	21.88	21.58	22.80
	8 (RB_Pos:0)	21.80	21.69	21.79	22.80	20.89	20.76	20.83	21.80
	8 (RB_Pos:3)	21.81	21.73	21.86	22.80	20.94	20.84	20.90	21.80
	8 (RB_Pos:7)	21.71	21.66	21.75	22.80	20.83	20.70	20.82	21.80
	15 (RB_Pos:0)	21.72	21.62	21.79	22.80	20.76	20.63	20.75	21.80
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)	23.10	23.10	23.16	23.80	21.73	21.91	21.74	22.80
	1 (RB_Pos:3)	23.16	23.14	23.23	23.80	21.82	21.98	21.79	22.80
	1 (RB_Pos:5)	23.10	23.09	23.22	23.80	21.74	21.90	21.73	22.80
	3 (RB_Pos:0)	23.23	23.17	23.34	23.80	21.76	21.85	21.99	22.80
	3 (RB_Pos:1)	23.27	23.21	23.37	23.80	21.80	21.86	22.01	22.80
	3 (RB_Pos:3)	23.26	23.18	23.36	23.80	21.81	21.87	21.99	22.80
	6 (RB_Pos:0)	21.80	21.74	21.89	22.80	20.96	20.67	21.09	21.80

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)	23.64	23.65	23.65	24.30	22.14	22.57	22.20	23.30
	1 (RB_Pos:25)	<b>23.66</b>	23.63	23.59	24.30	22.11	22.52	22.09	23.30
	1 (RB_Pos:49)	23.55	23.56	23.50	24.30	22.06	22.52	22.07	23.30
	25 (RB_Pos:0)	22.06	22.06	22.06	23.30	21.09	21.15	21.19	22.30
	25 (RB_Pos:12)	22.15	22.13	22.10	23.30	21.23	21.24	21.17	22.30
	25 (RB_Pos:25)	22.13	22.09	21.98	23.30	21.21	21.15	21.10	22.30
	50 (RB_Pos:0)	22.11	22.07	22.00	23.30	21.12	21.07	21.08	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5MHz	1 (RB_Pos:0)	23.59	23.55	23.47	24.30	22.29	22.58	22.14	23.30
	1 (RB_Pos:13)	23.62	23.65	23.63	24.30	22.32	22.72	22.23	23.30
	1 (RB_Pos:24)	23.57	23.57	23.44	24.30	22.28	22.57	22.06	23.30
	12 (RB_Pos:0)	22.09	22.04	22.05	23.30	21.14	21.23	21.07	22.30
	12 (RB_Pos:6)	22.12	22.11	22.06	23.30	21.23	21.29	21.10	22.30
	12 (RB_Pos:13)	22.10	22.06	21.95	23.30	21.20	21.23	21.03	22.30
	25 (RB_Pos:0)	22.09	22.10	22.06	23.30	21.17	21.23	21.03	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	23.01	22.94	22.79	24.30	21.77	22.22	21.91	23.30
	1 (RB_Pos:8)	23.30	23.44	23.33	24.30	21.83	22.30	21.87	23.30
	1 (RB_Pos:14)	22.98	22.95	22.82	24.30	21.70	22.19	21.72	23.30
	8 (RB_Pos:0)	22.01	21.97	21.94	23.30	21.16	21.10	21.06	22.30
	8 (RB_Pos:3)	22.04	22.06	21.97	23.30	21.16	21.18	21.06	22.30
	8 (RB_Pos:7)	21.93	21.97	21.91	23.30	21.10	21.06	21.00	22.30
	15 (RB_Pos:0)	21.94	21.94	21.95	23.30	21.02	21.01	20.92	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4MHz	1 (RB_Pos:0)	23.33	23.41	23.32	24.30	22.05	22.29	21.85	23.30
	1 (RB_Pos:3)	23.41	23.44	23.42	24.30	22.12	22.33	21.93	23.30
	1 (RB_Pos:5)	23.35	23.43	23.37	24.30	22.03	22.23	21.87	23.30
	3 (RB_Pos:0)	23.54	23.53	23.46	24.30	22.11	22.25	22.16	23.30
	3 (RB_Pos:1)	23.54	23.56	23.50	24.30	22.10	22.24	22.16	23.30
	3 (RB_Pos:3)	23.53	23.51	23.48	24.30	22.11	22.27	22.16	23.30

	6 (RB_Pos:0)	22.08	22.02	21.98	23.30	21.26	20.97	21.21	22.30
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FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	<b>23.68</b>	23.32	23.47	23.80	22.58	22.20	22.34	22.80
	1 (RB_Pos:50)	23.60	23.41	23.63	23.80	22.58	22.26	22.45	22.80
	1 (RB_Pos:99)	23.28	23.39	23.40	23.80	22.27	22.22	22.24	22.80
	50 (RB_Pos:0)	22.10	21.83	22.02	22.80	21.15	20.85	21.03	21.80
	50 (RB_Pos:25)	22.04	21.87	22.06	22.80	21.07	20.87	21.02	21.80
	50 (RB_Pos:50)	22.00	21.76	21.82	22.80	21.01	20.78	20.86	21.80
	100 (RB_Pos:0)	22.05	21.82	21.93	22.80	21.07	20.80	20.93	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	23.42	23.66	23.60	23.80	22.04	22.15	22.41	22.80
	1 (RB_Pos:38)	23.53	23.42	23.65	23.80	21.93	22.16	22.38	22.80
	1 (RB_Pos:74)	23.32	23.38	23.48	23.80	21.79	22.15	22.29	22.80
	36 (RB_Pos:0)	22.12	21.86	22.12	22.80	21.13	20.88	21.09	21.80
	36 (RB_Pos:20)	22.07	21.92	22.16	22.80	21.05	20.85	21.04	21.80
	36 (RB_Pos:39)	21.96	21.81	21.98	22.80	20.89	20.83	20.93	21.80
	75 (RB_Pos:0)	22.05	21.88	22.09	22.80	21.04	20.82	21.04	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	23.57	23.38	23.55	23.80	22.03	22.18	22.08	22.80
	1 (RB_Pos:25)	23.55	23.41	23.67	23.80	21.98	22.22	22.04	22.80
	1 (RB_Pos:49)	23.51	23.39	23.58	23.80	21.93	22.20	21.95	22.80
	25 (RB_Pos:0)	22.14	21.83	22.13	22.80	21.11	20.85	21.21	21.80
	25 (RB_Pos:12)	22.06	21.85	22.07	22.80	21.12	20.88	21.16	21.80
	25 (RB_Pos:25)	21.97	21.79	21.92	22.80	21.06	20.84	21.03	21.80
	50 (RB_Pos:0)	22.08	21.83	22.03	22.80	21.09	20.81	21.06	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	23.57	23.29	23.50	23.80	22.14	22.26	22.07	22.80
	1 (RB_Pos:13)	23.67	23.41	23.64	23.80	22.24	22.34	22.17	22.80
	1 (RB_Pos:24)	23.41	23.28	23.46	23.80	22.05	22.16	22.00	22.80
	12 (RB_Pos:0)	22.06	21.77	22.06	22.80	21.16	20.88	21.08	21.80
	12 (RB_Pos:6)	22.08	21.79	22.07	22.80	21.16	20.89	21.09	21.80

	12 (RB_Pos:13)	21.99	21.72	21.96	22.80	21.06	20.84	20.98	21.80
	25 (RB_Pos:0)	22.00	21.77	22.01	22.80	21.06	20.87	21.00	21.80

TDD LTE Band 12									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23060	23095	23130		23060	23095	23130	
10MHz	1 (RB_Pos:0)	22.83	22.87	<b>22.92</b>	23.80	21.26	21.73	21.42	22.80
	1 (RB_Pos:38)	22.84	22.79	21.28	23.80	21.38	21.76	20.44	22.80
	1 (RB_Pos:74)	22.82	21.26	21.36	23.80	21.32	20.37	20.51	22.80
	36 (RB_Pos:0)	21.27	21.35	21.35	22.80	20.35	20.42	20.43	21.80
	36 (RB_Pos:20)	21.33	21.38	21.30	22.80	20.41	20.46	0.00	21.80
	36 (RB_Pos:39)	21.33	21.34	21.47	22.80	20.41	22.88	0.00	21.80
	75 (RB_Pos:0)	21.32	21.78	21.44	22.80	22.87	22.91	0.00	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23035	23095	23155		23035	23095	23155	
5MHz	1 (RB_Pos:0)	22.71	22.79	22.76	23.80	21.40	21.79	21.39	22.80
	1 (RB_Pos:25)	22.80	22.87	22.90	23.80	21.50	21.89	21.55	22.80
	1 (RB_Pos:49)	22.76	22.78	22.79	23.80	21.46	21.80	21.43	22.80
	25 (RB_Pos:0)	21.16	21.27	21.32	22.80	20.34	20.46	20.47	21.80
	25 (RB_Pos:12)	21.28	21.35	21.36	22.80	20.42	20.52	20.52	21.80
	25 (RB_Pos:25)	21.22	21.29	21.24	22.80	20.41	20.45	20.36	21.80
	50 (RB_Pos:0)	21.25	21.30	21.31	22.80	20.32	20.42	20.34	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23025	23095	23165		23025	23095	23165	
3MHz	1 (RB_Pos:0)	22.45	22.55	22.56	23.80	20.91	21.47	21.15	22.80
	1 (RB_Pos:13)	22.50	22.63	22.65	23.80	21.03	21.45	21.21	22.80
	1 (RB_Pos:24)	22.41	22.53	22.57	23.80	20.79	21.42	21.07	22.80
	12 (RB_Pos:0)	21.22	21.21	21.29	22.80	20.30	20.36	20.31	21.80
	12 (RB_Pos:6)	21.23	21.31	21.34	22.80	20.36	20.43	20.39	21.80
	12 (RB_Pos:13)	21.15	21.21	21.25	22.80	20.26	20.32	20.30	21.80
	25 (RB_Pos:0)	21.18	21.19	21.26	22.80	20.22	20.24	20.28	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23017	23095	23173		23017	23095	23173	
1.4MHz	1 (RB_Pos:0)	22.65	22.65	22.66	23.80	21.25	21.55	21.15	22.80
	1 (RB_Pos:13)	22.66	22.64	22.78	23.80	21.30	21.59	21.30	22.80
	1 (RB_Pos:24)	22.60	22.64	22.69	23.80	21.21	21.54	21.23	22.80
	12 (RB_Pos:0)	22.76	22.76	22.85	23.80	21.27	21.48	21.47	22.80

	12 (RB_Pos:6)	22.79	22.78	22.89	23.80	21.32	21.51	21.51	22.80
	12 (RB_Pos:13)	22.77	22.80	22.86	23.80	21.31	21.51	21.51	22.80
	25 (RB_Pos:0)	21.29	21.30	21.33	22.80	20.45	20.27	20.56	21.80

TDD LTE Band 17									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23780	23790	23800		23780	23790	23800	
10MHz	1 (RB_Pos:0)	22.92	23.00	<b>23.03</b>	23.80	21.41	21.88	21.51	22.80
	1 (RB_Pos:38)	22.93	22.95	21.36	23.80	21.38	21.88	20.55	22.80
	1 (RB_Pos:74)	22.90	21.35	21.51	23.80	21.28	20.47	20.66	22.80
	36 (RB_Pos:0)	21.33	21.46	21.38	22.80	20.41	20.58	20.52	21.80
	36 (RB_Pos:20)	21.40	21.45	21.41	22.80	20.49	20.51	0.00	21.80
	36 (RB_Pos:39)	21.45	21.44	21.55	22.80	20.54	22.92	0.00	21.80
	75 (RB_Pos:0)	21.40	21.84	21.55	22.80	22.98	23.03	0.00	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	23755	23790	23825		23755	23790	23825	
5MHz	1 (RB_Pos:0)	22.81	22.92	22.88	23.80	21.56	21.97	21.47	22.80
	1 (RB_Pos:25)	23.00	22.98	23.01	23.80	21.67	22.10	21.64	22.80
	1 (RB_Pos:49)	22.85	22.89	22.88	23.80	21.52	21.88	21.55	22.80
	25 (RB_Pos:0)	21.33	21.41	21.40	22.80	20.48	20.53	20.47	21.80
	25 (RB_Pos:12)	21.45	21.43	21.45	22.80	20.50	20.65	20.57	21.80
	25 (RB_Pos:25)	21.40	21.41	21.29	22.80	20.47	20.61	20.43	21.80
	50 (RB_Pos:0)	21.42	21.40	21.42	22.80	20.49	20.59	20.44	21.80

TDD LTE Band 26									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26765	26865	26965		26765	26865	26965	
15MHz	1 (RB_Pos:0)	23.76	23.84	23.74	24.30	22.25	22.73	22.80	23.30
	1 (RB_Pos:50)	23.80	23.83	<b>23.86</b>	24.30	22.31	22.77	22.70	23.30
	1 (RB_Pos:99)	23.81	23.79	23.65	24.30	22.28	22.65	22.59	23.30
	50 (RB_Pos:0)	22.26	22.34	22.26	23.30	21.29	21.35	21.25	22.30
	50 (RB_Pos:25)	22.36	22.32	22.26	23.30	21.39	21.40	21.27	22.30
	50 (RB_Pos:50)	22.30	22.30	22.13	23.30	21.36	21.36	21.17	22.30
	100 (RB_Pos:0)	22.35	22.33	22.27	23.30	21.35	21.36	21.23	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	26740	26865	26990		26740	26865	26990	

10MHz	1 (RB_Pos:0)	23.76	23.80	23.77	24.30	22.19	22.67	22.34	23.30
	1 (RB_Pos:38)	23.76	23.72	23.75	24.30	22.20	22.64	22.25	23.30
	1 (RB_Pos:74)	23.66	23.74	23.66	24.30	22.18	22.58	22.14	23.30
	36 (RB_Pos:0)	22.18	22.22	22.22	23.30	21.20	21.31	21.35	22.30
	36 (RB_Pos:20)	22.24	22.27	22.23	23.30	21.35	21.36	21.35	22.30
	36 (RB_Pos:39)	22.28	22.19	22.03	23.30	21.29	21.30	21.12	22.30
	75 (RB_Pos:0)	22.21	22.23	22.14	23.30	21.22	21.29	21.18	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		26715	26865	27015		26715	26865	27015	
5MHz	1 (RB_Pos:0)	23.66	23.70	23.65	24.30	22.33	22.75	22.24	23.30
	1 (RB_Pos:25)	23.77	23.78	23.71	24.30	22.42	22.76	22.26	23.30
	1 (RB_Pos:49)	23.66	23.67	23.52	24.30	22.36	22.68	22.19	23.30
	25 (RB_Pos:0)	22.08	22.17	22.20	23.30	21.21	21.32	21.23	22.30
	25 (RB_Pos:12)	22.20	22.22	22.12	23.30	21.32	21.43	21.26	22.30
	25 (RB_Pos:25)	22.23	22.18	22.10	23.30	21.28	21.28	21.11	22.30
	50 (RB_Pos:0)	22.13	22.21	22.12	23.30	21.22	21.30	21.18	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		26705	26865	27025		26705	26865	27025	
3MHz	1 (RB_Pos:0)	23.34	23.28	22.99	24.30	21.78	22.32	21.96	23.30
	1 (RB_Pos:13)	23.45	23.51	23.43	24.30	21.85	22.43	21.94	23.30
	1 (RB_Pos:24)	23.31	23.27	23.04	24.30	21.72	22.27	21.82	23.30
	12 (RB_Pos:0)	22.12	22.15	22.05	23.30	21.22	21.24	21.10	22.30
	12 (RB_Pos:6)	22.14	22.16	22.11	23.30	21.21	21.25	21.14	22.30
	12 (RB_Pos:13)	22.04	22.08	22.04	23.30	21.13	21.18	21.05	22.30
	25 (RB_Pos:0)	22.07	22.06	22.01	23.30	21.14	21.14	21.00	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		26697	26865	27033		26697	26865	27033	
1.4MHz	1 (RB_Pos:0)	23.45	23.50	23.40	24.30	22.09	22.41	22.01	23.30
	1 (RB_Pos:13)	23.48	23.52	23.50	24.30	22.13	22.48	22.00	23.30
	1 (RB_Pos:24)	23.41	23.53	23.40	24.30	22.08	22.41	21.98	23.30
	12 (RB_Pos:0)	23.57	23.62	23.57	24.30	22.13	22.37	22.19	23.30
	12 (RB_Pos:6)	23.59	23.70	23.59	24.30	22.12	22.33	22.24	23.30
	12 (RB_Pos:13)	23.55	23.63	23.57	24.30	22.16	22.33	22.20	23.30
	25 (RB_Pos:0)	22.09	22.19	22.08	23.30	21.29	21.10	21.27	22.30

FDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	23.25	23.25	23.24	24.10	22.30	22.14	22.21	23.10
	1 (RB_Pos:50)	23.35	23.37	<b>23.40</b>	24.10	22.38	22.27	22.29	23.10
	1 (RB_Pos:99)	23.15	23.21	23.28	24.10	22.10	22.18	22.22	23.10
	50 (RB_Pos:0)	21.90	21.90	21.81	23.10	20.95	20.91	20.79	22.10
	50 (RB_Pos:25)	21.90	21.86	21.93	23.10	20.95	20.84	20.91	22.10
	50 (RB_Pos:50)	21.89	21.75	21.77	23.10	20.97	20.77	20.75	22.10
	100 (RB_Pos:0)	21.89	21.80	21.76	23.10	20.93	20.79	20.76	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	23.26	23.26	23.38	24.10	21.71	22.10	22.27	23.10
	1 (RB_Pos:38)	23.29	23.34	23.38	24.10	21.81	22.29	22.38	23.10
	1 (RB_Pos:74)	23.15	23.22	23.38	24.10	21.62	22.13	22.26	23.10
	36 (RB_Pos:0)	21.80	21.82	21.91	23.10	20.86	20.88	20.90	22.10
	36 (RB_Pos:20)	21.81	21.78	21.96	23.10	20.82	20.85	20.94	22.10
	36 (RB_Pos:39)	21.80	21.71	21.86	23.10	20.81	20.80	20.81	22.10
	75 (RB_Pos:0)	21.87	21.81	21.95	23.10	20.84	20.78	20.91	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	23.31	23.29	23.37	24.10	21.75	22.14	21.91	23.10
	1 (RB_Pos:25)	23.28	23.30	23.36	24.10	21.78	22.21	22.01	23.10
	1 (RB_Pos:49)	23.28	23.24	23.34	24.10	21.75	22.19	21.96	23.10
	25 (RB_Pos:0)	21.81	21.81	22.01	23.10	20.88	20.87	21.06	22.10
	25 (RB_Pos:12)	21.84	21.81	21.98	23.10	20.87	20.88	21.06	22.10
	25 (RB_Pos:25)	21.77	21.73	21.84	23.10	20.81	20.80	20.94	22.10
	50 (RB_Pos:0)	21.83	21.78	21.94	23.10	20.87	20.78	20.98	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	23.21	23.21	23.32	24.10	21.89	22.24	21.99	23.10
	1 (RB_Pos:13)	23.32	23.31	23.38	24.10	22.00	22.35	22.10	23.10
	1 (RB_Pos:24)	23.19	23.25	23.35	24.10	21.94	22.26	21.97	23.10
	12 (RB_Pos:0)	21.77	21.73	21.93	23.10	20.86	20.92	21.01	22.10
	12 (RB_Pos:6)	21.80	21.81	21.94	23.10	20.87	20.91	21.00	22.10
	12 (RB_Pos:13)	21.74	21.66	21.91	23.10	20.81	20.83	20.94	22.10
	25 (RB_Pos:0)	21.77	21.76	21.94	23.10	20.80	20.86	20.94	22.10
Bandwidth	RB Set	Power (dBm)							



(MHz)	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131987	132322	132657		131987	132322	132657	
3.0 MHz	1 (RB_Pos:0)	22.91	22.98	23.14	24.10	21.33	21.85	21.73	23.10
	1 (RB_Pos:8)	23.04	23.06	23.25	24.10	21.45	21.94	21.75	23.10
	1 (RB_Pos:14)	22.96	22.92	23.13	24.10	21.42	21.83	21.60	23.10
	8 (RB_Pos:0)	21.73	21.71	21.82	23.10	20.84	20.82	20.92	22.10
	8 (RB_Pos:3)	21.74	21.68	21.92	23.10	20.84	20.84	20.97	22.10
	8 (RB_Pos:7)	21.64	21.64	21.81	23.10	20.78	20.73	20.87	22.10
	15 (RB_Pos:0)	21.66	21.61	21.85	23.10	20.70	20.67	20.80	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
1.4 MHz	1 (RB_Pos:0)	23.01	23.02	23.26	24.10	21.66	21.94	21.79	23.10
	1 (RB_Pos:3)	23.07	23.11	23.34	24.10	21.74	21.99	21.81	23.10
	1 (RB_Pos:5)	23.07	23.07	23.25	24.10	21.65	21.88	21.82	23.10
	3 (RB_Pos:0)	23.16	23.15	23.38	24.10	21.69	21.87	22.02	23.10
	3 (RB_Pos:1)	23.19	23.22	23.35	24.10	21.72	21.88	22.06	23.10
	3 (RB_Pos:3)	23.17	23.16	23.34	24.10	21.72	21.87	22.04	23.10
	6 (RB_Pos:0)	21.72	21.76	21.90	23.10	20.87	20.66	21.10	22.10

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	37850	38000	38175
20MHz	1 (RB_Pos:0)	23.53	23.48	23.60	23.80	22.30	22.13	22.35	22.80
	1 (RB_Pos:50)	23.59	23.60	<b>23.67</b>	23.80	22.32	22.23	22.43	22.80
	1 (RB_Pos:99)	23.42	23.41	23.49	23.80	22.13	22.03	22.31	22.80
	50 (RB_Pos:0)	22.05	22.00	21.98	22.80	21.00	21.00	20.99	21.80
	50 (RB_Pos:25)	22.01	21.99	22.04	22.80	20.98	21.00	21.08	21.80
	50 (RB_Pos:50)	21.97	21.97	21.97	22.80	20.93	20.98	21.00	21.80
	100 (RB_Pos:0)	21.99	21.97	21.96	22.80	20.96	20.98	20.97	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
15MHz	1 (RB_Pos:0)	23.58	23.55	23.61	23.80	22.29	22.44	22.35	22.80
	1 (RB_Pos:38)	23.60	23.63	23.63	23.80	22.31	22.46	22.34	22.80
	1 (RB_Pos:74)	23.43	23.48	23.54	23.80	22.15	22.33	22.30	22.80
	36 (RB_Pos:0)	22.00	21.97	22.01	22.80	21.00	20.94	21.04	21.80
	36 (RB_Pos:20)	21.97	21.98	22.02	22.80	20.96	20.95	21.03	21.80
	36 (RB_Pos:39)	21.93	21.95	21.95	22.80	20.90	20.94	20.94	21.80
	75 (RB_Pos:0)	21.96	21.98	21.98	22.80	20.95	20.97	20.98	21.80

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	23.59	23.59	23.67	23.80	22.33	22.43	22.46	22.80
	1 (RB_Pos:25)	23.59	23.62	23.65	23.80	22.32	22.44	22.45	22.80
	1 (RB_Pos:49)	23.51	23.54	23.63	23.80	22.21	22.36	22.45	22.80
	25 (RB_Pos:0)	22.03	21.96	22.02	22.80	21.02	20.96	21.07	21.80
	25 (RB_Pos:12)	22.03	21.99	22.04	22.80	21.05	21.03	21.11	21.80
	25 (RB_Pos:25)	21.95	21.96	22.04	22.80	20.99	20.99	21.05	21.80
	50 (RB_Pos:0)	22.03	21.98	22.02	22.80	21.01	20.98	21.08	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	23.51	23.48	23.55	23.80	22.15	22.20	22.35	22.80
	1 (RB_Pos:13)	23.58	23.59	23.62	23.80	22.26	22.33	22.49	22.80
	1 (RB_Pos:24)	23.46	23.47	23.58	23.80	22.11	22.16	22.41	22.80
	12 (RB_Pos:0)	21.94	21.94	22.04	22.80	20.98	20.90	21.12	21.80
	12 (RB_Pos:6)	21.99	21.99	22.09	22.80	21.05	20.98	21.18	21.80
	12 (RB_Pos:13)	21.94	21.96	22.06	22.80	20.95	20.94	21.15	21.80
	25 (RB_Pos:0)	21.93	21.97	22.03	22.80	20.96	20.99	21.06	21.80

TDD LTE Band 41													
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39750	40185	40620	41055	41490		39750	40185	40620	41055	41490	
20MHz	1 (RB_Pos:0)	23.14	23.01	23.13	23.14	23.36	23.80	21.90	21.76	21.76	21.83	22.21	22.80
	1 (RB_Pos:50)	23.23	23.14	23.21	23.12	<b>23.49</b>	23.80	21.99	21.84	21.87	21.87	22.30	22.80
	1 (RB_Pos:99)	23.01	22.91	23.05	23.00	23.33	23.80	21.79	21.78	21.70	21.71	22.15	22.80
	50 (RB_Pos:0)	21.58	21.58	21.61	21.49	21.89	22.80	20.57	20.50	20.61	20.43	20.99	21.80
	50 (RB_Pos:25)	21.70	21.59	21.69	21.59	21.89	22.80	20.68	20.65	20.70	20.65	20.93	21.80
	50 (RB_Pos:50)	21.64	21.60	21.63	21.51	21.77	22.80	20.68	20.64	20.64	20.67	20.83	21.80
	100 (RB_Pos:0)	21.64	21.49	21.61	21.53	21.83	22.80	20.62	20.55	20.60	20.62	20.85	21.80
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39725	40160	40620	41080	41515		39725	40160	40620	41080	41515	
15MHz	1 (RB_Pos:0)	23.20	23.05	23.23	23.20	23.37	23.80	21.93	21.79	22.11	21.89	22.14	22.80
	1 (RB_Pos:50)	23.23	23.10	23.24	23.21	23.43	23.80	21.94	21.89	22.10	21.94	22.20	22.80
	1 (RB_Pos:99)	23.11	22.97	23.13	22.97	23.33	23.80	21.81	21.72	21.99	21.77	22.09	22.80
	50 (RB_Pos:0)	21.61	21.51	21.64	21.50	21.84	22.80	20.59	20.50	20.58	20.55	20.87	21.80

	50 (RB_Pos:25)	21.67	21.57	21.65	21.67	21.83	22.80	20.66	20.62	20.61	20.51	20.86	21.80
	50 (RB_Pos:50)	21.65	21.61	21.61	21.54	21.74	22.80	20.61	20.47	20.60	20.46	20.78	21.80
	100 (RB_Pos:0)	21.67	21.67	21.66	21.53	21.86	22.80	20.65	20.50	20.64	20.59	20.87	21.80
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39700	40135	40620	41105	41540		39700	40135	40620	41105	41540	
10MHz	1 (RB_Pos:0)	23.19	23.17	23.26	23.12	23.46	23.80	21.90	21.75	22.09	21.81	22.27	22.80
	1 (RB_Pos:50)	23.19	23.07	23.25	23.18	23.47	23.80	21.96	21.87	22.13	21.82	22.29	22.80
	1 (RB_Pos:99)	23.15	23.05	23.21	23.08	23.41	23.80	21.89	21.85	22.07	21.79	22.25	22.80
	50 (RB_Pos:0)	21.60	21.58	21.64	21.52	21.94	22.80	20.60	20.55	20.67	20.49	21.02	21.80
	50 (RB_Pos:25)	21.66	21.62	21.69	21.65	21.87	22.80	20.71	20.61	20.70	20.68	20.94	21.80
	50 (RB_Pos:50)	21.70	21.56	21.64	21.70	21.82	22.80	20.71	20.59	20.66	20.57	20.90	21.80
	100 (RB_Pos:0)	21.63	21.57	21.69	21.63	21.87	22.80	20.67	20.63	20.70	20.56	20.95	21.80
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39675	40110	40620	41130	41565		39675	40110	40620	41130	41565	
5MHz	1 (RB_Pos:0)	23.10	23.05	23.11	22.99	23.31	23.80	21.77	21.75	21.86	21.65	22.16	22.80
	1 (RB_Pos:50)	23.21	23.15	23.25	23.19	23.46	23.80	21.89	21.82	21.98	21.74	22.28	22.80
	1 (RB_Pos:99)	23.07	23.07	23.10	22.94	23.32	23.80	21.76	21.71	21.84	21.72	22.16	22.80
	50 (RB_Pos:0)	21.55	21.54	21.59	21.42	21.80	22.80	20.61	20.46	20.57	20.60	20.94	21.80
	50 (RB_Pos:25)	21.66	21.62	21.64	21.53	21.86	22.80	20.67	20.61	20.64	20.60	21.00	21.80
	50 (RB_Pos:50)	21.60	21.49	21.61	21.46	21.78	22.80	20.65	20.62	20.62	20.65	20.90	21.80
	100 (RB_Pos:0)	21.59	21.55	21.64	21.56	21.81	22.80	20.61	20.60	20.68	20.55	20.89	21.80

## 8.4 Intra-Band Uplink CA Power

Note:

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

### 8.4.1 LTE Uplink 2CA\_ Band 7 Normal Power

LTE Uplink 2CA_ Band 7										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
20850	21048	20+20	QPSK	1	High	1	Low	2	23.53	23.80
21100	21298	20+20	QPSK	1	High	1	Low	2	23.45	23.80
21350	21152	20+20	QPSK	1	Low	1	High	2	23.40	23.80

### 8.4.2 LTE Uplink 2CA\_ Band 7 Reduced power Level 1

LTE Uplink 2CA_ Band 7										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
20850	21048	20+20	QPSK	1	High	1	Low	2	15.31	15.80
21100	21298	20+20	QPSK	1	High	1	Low	2	15.28	15.80
21350	21152	20+20	QPSK	1	Low	1	High	2	15.25	15.80

### 8.4.3 LTE Uplink 2CA\_ Band 7 Reduced power Level 2&3

LTE Uplink 2CA_ Band 7										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
20850	21048	20+20	QPSK	1	High	1	Low	2	14.29	14.80
21100	21298	20+20	QPSK	1	High	1	Low	2	14.23	14.80
21350	21152	20+20	QPSK	1	Low	1	High	2	14.21	14.80

#### 8.4.4 LTE Uplink 2CA\_ Band 7 Reduced power Level 4

LTE Uplink 2CA_ Band 7										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
20850	21048	20+20	QPSK	1	High	1	Low	2	22.38	22.80
21100	21298	20+20	QPSK	1	High	1	Low	2	22.23	22.80
21350	21152	20+20	QPSK	1	Low	1	High	2	22.31	22.80

#### 8.4.5 LTE Uplink 2CA\_ Band 7 Reduced power Level 5&6

LTE Uplink 2CA_ Band 7										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
20850	21048	20+20	QPSK	1	High	1	Low	2	21.34	21.80
21100	21298	20+20	QPSK	1	High	1	Low	2	21.33	21.80
21350	21152	20+20	QPSK	1	Low	1	High	2	21.21	21.80

#### 8.4.6 LTE Uplink 2CA\_ Band 38 Normal Power

LTE Uplink 2CA_ Band 38										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
37850	38048	20+20	QPSK	1	High	1	Low	2	23.51	23.80
38000	38198	20+20	QPSK	1	High	1	Low	2	23.47	23.80
38150	37952	20+20	QPSK	1	Low	1	High	2	23.53	23.80

#### 8.4.7 LTE Uplink 2CA\_ Band 38 Reduced power Level 1

LTE Uplink 2CA_ Band 38										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
37850	38048	20+20	QPSK	1	High	1	Low	2	20.41	20.80
38000	38198	20+20	QPSK	1	High	1	Low	2	20.35	20.80
38150	37952	20+20	QPSK	1	Low	1	High	2	20.43	20.80

## 8.4.8 LTE Uplink 2CA\_ Band 38 Reduced power Level 2&amp;3

LTE Uplink 2CA_ Band 38										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
37850	38048	20+20	QPSK	1	High	1	Low	2	19.81	20.30
38000	38198	20+20	QPSK	1	High	1	Low	2	19.75	20.30
38150	37952	20+20	QPSK	1	Low	1	High	2	19.83	20.30

## 8.4.9 LTE Uplink 2CA\_ Band 41 Normal Power

LTE Uplink 2CA_ Band 41										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
40140	40338	20+20	QPSK	1	High	1	Low	2	23.19	23.80
40640	40838	20+20	QPSK	1	High	1	Low	2	23.18	23.80
41490	41292	20+20	QPSK	1	Low	1	High	2	23.24	23.80

## 8.4.10 LTE Uplink 2CA\_ Band 41 Reduced power Level 1

LTE Uplink 2CA_ Band 41										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
40140	40338	20+20	QPSK	1	High	1	Low	2	20.09	20.80
40640	40838	20+20	QPSK	1	High	1	Low	2	20.17	20.80
41490	41292	20+20	QPSK	1	Low	1	High	2	20.21	20.80

## 8.4.11 LTE Uplink 2CA\_ Band 41 Reduced power Level 2&amp;3

LTE Uplink 2CA_ Band 41										
Combination 20MHz+20MHz(100RB+100RB)										
PCC	SCC	Bandwidth	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Tune-up Limit Power (dBm)
				RB Size	RB Pos.	RB Size	RB Pos.			
40140	40338	20+20	QPSK	1	High	1	Low	2	19.65	20.30
40640	40838	20+20	QPSK	1	High	1	Low	2	19.57	20.30
41490	41292	20+20	QPSK	1	Low	1	High	2	19.71	20.30

## 8.5 WIFI

### 8.5.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
2.4 (2.4~2.4835)	802.11b	1	2412	9.72	10.00	No
		2	2417	17.98	20.00	No
		6	2437	<b>18.05</b>	20.00	Yes
		10	2457	18.03	20.00	No
		11	2462	11.60	12.00	Yes
	802.11g	1	2412	16.04	18.00	No
		6	2437	16.83	18.00	No
		11	2462	15.49	17.00	No
	802.11n(HT20)	1	2412	16.05	18.00	No
		6	2437	16.73	18.00	No
		11	2462	15.39	17.00	No

### 8.5.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
5.2 (5.15~5.25)	802.11a	36	5180	15.84	16.00	No
		40	5200	18.52	20.00	No
		48	5240	17.71	18.00	No
	802.11n(HT20)	36	5180	17.41	18.00	No
		44	5220	18.63	20.00	No
		48	5240	17.87	18.00	No
	802.11n(HT40)	38	5190	13.63	14.50	No
		46	5230	17.23	19.00	No
	802.11ac(VHT20)	36	5180	17.85	18.00	No
		40	5200	18.51	20.00	No
		48	5240	17.90	18.00	No
	802.11ac(VHT40)	38	5190	15.09	16.00	No
		46	5230	17.18	19.00	No
	802.11ac(VHT80)	42	5210	15.11	16.00	No
	5.3 (5.25~5.35)	802.11a	52	5260	18.65	20.00
60			5300	17.71	18.00	No
64			5320	16.88	17.00	No
802.11n(HT20)		52	5260	17.83	18.00	No
		60	5300	18.27	20.00	No
		64	5320	15.27	16.00	No
802.11n(HT40)		54	5270	17.10	19.00	No
		62	5310	13.46	14.50	No

	802.11ac(VHT20)	52	5260	18.36	20.00	No
		60	5300	17.81	18.00	No
		64	5320	16.39	17.00	No
	802.11ac(VHT40)	54	5270	17.10	19.00	No
		62	5310	14.25	15.00	No
	802.11ac(VHT80)	58	5290	14.66	16.50	No
5.6 (5.47~5.725)	802.11a	100	5500	16.77	17.00	No
		116	5580	18.24	20.00	No
		140	5700	17.92	18.00	No
	802.11n(HT20)	100	5500	15.95	16.00	No
		116	5580	18.39	20.00	No
		140	5700	17.27	18.00	No
	802.11n(HT40)	102	5510	13.99	14.50	No
		110	5550	17.19	19.00	No
		134	5670	16.48	17.00	No
	802.11ac(VHT20)	100	5500	17.17	18.00	No
		116	5580	18.24	20.00	No
		140	5700	17.09	18.00	No
	802.11ac(VHT40)	102	5510	14.51	15.00	No
		110	5550	17.18	19.00	No
		134	5670	16.63	17.00	No
	802.11ac(VHT80)	106	5530	14.41	14.50	No
		122	5610	17.09	19.00	No
	5.8 (5.725~5.850)	802.11a	149	5745	17.94	18.50
157			5785	18.29	20.00	No
165			5825	17.79	18.50	No
802.11n(HT20)		149	5745	17.89	18.50	No
		157	5785	18.44	20.00	No
		165	5825	17.75	18.50	No
802.11n(HT40)		151	5755	17.06	19.00	No
		159	5795	16.50	17.50	No
802.11ac(VHT20)		149	5745	17.61	18.50	No
		157	5785	18.35	20.00	No
		165	5825	17.88	18.50	No
802.11ac(VHT40)		151	5755	16.72	18.50	No
		159	5795	17.12	19.00	No
802.11ac(VHT80)		155	5775	16.40	17.50	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)	11.07	<b>11.22</b>	11.17	9.90	9.98	10.04
Tune-Up Limit (dBm)	13.00			11.00		
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Conducted Power (dBm)	9.91	10.04	10.06	/	/	/
Tune-Up Limit (dBm)	11.00			/		
Mode	BLE (1Mbps)			BLE (2Mbps)		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Conducted Power (dBm)	5.34	6.25	5.25	5.04	6.02	5.27
Tune-Up Limit (dBm)	7.00			7.00		

## 8.7 Power Reduction List

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

GSM 850								
GSM1900 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)	30.17	30.21	30.15	30.30	20.98	21.02	20.96	21.11
GPRS (GMSK, 1-Slot)	30.13	30.18	30.10	30.30	20.94	20.99	20.91	21.11
GPRS (GMSK, 2-Slots)	27.10	27.18	27.04	27.80	20.97	<b>21.05</b>	20.91	21.67
GPRS (GMSK, 3-Slots)	25.36	25.43	25.29	25.80	20.94	21.01	20.87	21.38
GPRS (GMSK, 4-Slots)	24.14	24.19	24.12	24.80	20.96	21.01	20.94	21.62
EGPRS (8PSK, 1-Slot)	23.77	23.86	23.89	24.30	14.58	14.67	14.70	15.11
EGPRS (8PSK, 2-Slots)	20.48	20.74	21.92	22.30	14.35	14.61	15.79	16.17
EGPRS (8PSK, 3-Slots)	18.51	18.72	18.74	19.30	14.09	14.30	14.32	14.88
EGPRS (8PSK, 4-Slots)	16.96	17.31	17.37	17.80	13.78	14.13	14.19	14.62

### 8.7.2 Power Reduced Level 1 of GSM 1900

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	25.17	25.02	25.01	25.80	15.98	15.83	15.82	16.61
GPRS (GMSK, 1-Slot)	25.24	25.11	25.11	25.80	16.05	15.92	15.92	16.61
GPRS (GMSK, 2-Slots)	22.24	22.10	22.08	23.30	<b>16.11</b>	15.97	15.95	17.17
GPRS (GMSK, 3-Slots)	20.49	20.33	20.28	21.30	16.07	15.91	15.86	16.88
GPRS (GMSK, 4-Slots)	19.19	19.03	19.03	20.30	16.01	15.85	15.85	17.12
EGPRS (8PSK, 1-Slot)	20.25	19.92	19.94	20.80	11.06	10.73	10.75	11.61
EGPRS (8PSK, 2-Slots)	16.79	16.75	16.72	17.80	10.66	10.62	10.59	11.67
EGPRS (8PSK, 3-Slots)	15.53	15.34	14.77	16.30	11.11	10.92	10.35	11.88
EGPRS (8PSK, 4-Slots)	13.20	13.19	13.19	14.30	10.02	10.01	10.01	11.12

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

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	23.48	23.39	23.46	23.80	14.29	14.20	14.27	14.61
GPRS (GMSK, 1-Slot)	23.46	23.38	23.45	23.80	14.27	14.19	14.26	14.61
GPRS (GMSK, 2-Slots)	20.44	20.34	20.39	20.80	<b>14.31</b>	14.21	14.26	14.67
GPRS (GMSK, 3-Slots)	18.68	18.57	18.64	18.80	14.26	14.15	14.22	14.38
GPRS (GMSK, 4-Slots)	17.46	17.34	17.35	17.80	14.28	14.16	14.17	14.62
EGPRS (8PSK, 1-Slot)	18.48	18.47	18.56	18.80	9.29	9.28	9.37	9.61
EGPRS (8PSK, 2-Slots)	15.17	15.04	15.16	15.80	9.04	8.91	9.03	9.67
EGPRS (8PSK, 3-Slots)	13.17	13.77	13.27	13.80	8.75	9.35	8.85	9.38
EGPRS (8PSK, 4-Slots)	11.79	11.73	11.84	12.80	8.61	8.55	8.66	9.62

## 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)	28.52	28.42	28.42	29.30	19.33	19.23	19.23	20.11
GPRS (GMSK, 1-Slot)	28.52	28.43	28.44	29.30	19.33	19.24	19.25	20.11
GPRS (GMSK, 2-Slots)	25.62	25.48	25.48	26.30	<b>19.49</b>	19.35	19.35	20.17
GPRS (GMSK, 3-Slots)	23.88	23.73	23.72	24.30	19.46	19.31	19.30	19.88
GPRS (GMSK, 4-Slots)	22.65	22.50	22.51	23.30	19.47	19.32	19.33	20.12
EGPRS (8PSK, 1-Slot)	23.85	23.49	23.37	24.30	14.66	14.30	14.18	15.11
EGPRS (8PSK, 2-Slots)	20.54	20.19	20.21	21.30	14.41	14.06	14.08	15.17
EGPRS (8PSK, 3-Slots)	18.53	18.21	18.16	19.30	14.11	13.79	13.74	14.88
EGPRS (8PSK, 4-Slots)	16.89	16.72	16.76	17.30	13.71	13.54	13.58	14.12

## 8.7.5 Power Reduced Level 5&amp;6 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)	27.64	27.51	27.53	28.30	18.45	18.32	18.34	19.11
GPRS (GMSK, 1-Slot)	27.70	27.57	27.58	28.30	18.51	18.38	18.39	19.11
GPRS (GMSK, 2-Slots)	24.67	24.52	24.52	25.30	<b>18.54</b>	18.39	18.39	19.17
GPRS (GMSK, 3-Slots)	22.91	22.75	22.76	23.30	18.49	18.33	18.34	18.88
GPRS (GMSK, 4-Slots)	21.61	21.44	21.42	22.30	18.43	18.26	18.24	19.12
EGPRS (8PSK, 1-Slot)	22.67	22.41	22.65	23.30	13.48	13.22	13.46	14.11
EGPRS (8PSK, 2-Slots)	19.56	19.23	19.12	20.30	13.43	13.10	12.99	14.17
EGPRS (8PSK, 3-Slots)	17.44	17.16	17.27	18.30	13.02	12.74	12.85	13.88
EGPRS (8PSK, 4-Slots)	15.97	15.77	15.78	16.80	12.79	12.59	12.60	13.62

## 8.7.6 Power Reduced Level 1 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>15.93</b>	15.80	15.83	17.10
HSDPA Subtest-1	14.38	14.22	14.24	15.10
HSDPA Subtest-2	13.99	13.81	13.89	15.10
HSDPA Subtest-3	15.01	14.86	14.89	15.60
HSDPA Subtest-4	13.57	13.35	13.38	14.60
HSUPA Subtest-1	15.00	14.82	14.86	15.60
HSUPA Subtest-2	15.94	15.84	15.86	16.80
HSUPA Subtest-3	15.94	15.88	15.88	16.80
HSUPA Subtest-4	15.42	15.28	15.37	15.80
HSUPA Subtest-5	15.50	15.35	15.38	15.80

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

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>13.25</b>	13.07	13.13	14.10
HSDPA Subtest-1	12.07	11.85	11.94	13.10
HSDPA Subtest-2	12.27	12.12	12.12	13.10
HSDPA Subtest-3	11.53	11.52	11.48	12.60
HSDPA Subtest-4	11.63	11.67	11.55	12.60
HSUPA Subtest-1	11.53	11.40	11.39	12.60
HSUPA Subtest-2	11.01	10.87	10.92	12.10
HSUPA Subtest-3	12.05	12.04	12.13	13.10
HSUPA Subtest-4	10.55	10.46	10.36	11.60
HSUPA Subtest-5	12.02	12.01	12.12	13.10

## 8.7.8 Power Reduced Level 4 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>18.25</b>	18.05	18.13	19.10
HSDPA Subtest-1	17.19	17.00	17.01	18.10
HSDPA Subtest-2	17.07	17.08	17.08	18.10
HSDPA Subtest-3	16.47	16.64	16.69	17.60
HSDPA Subtest-4	16.76	16.39	16.71	17.60
HSUPA Subtest-1	16.32	16.16	16.38	17.60
HSUPA Subtest-2	16.20	16.00	15.88	17.10
HSUPA Subtest-3	17.13	16.97	17.03	18.10
HSUPA Subtest-4	15.68	15.34	15.33	16.60
HSUPA Subtest-5	16.95	16.93	17.13	18.10

## 8.7.9 Power Reduced Level 5&amp;6 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>17.73</b>	17.61	17.65	18.60
HSDPA Subtest-1	16.62	16.47	16.54	17.60
HSDPA Subtest-2	16.52	16.58	16.65	17.60
HSDPA Subtest-3	16.12	16.11	16.03	17.10
HSDPA Subtest-4	16.05	16.07	16.15	17.10
HSUPA Subtest-1	16.11	15.90	15.74	17.10
HSUPA Subtest-2	15.71	15.57	15.43	16.60
HSUPA Subtest-3	16.71	16.53	16.55	17.60
HSUPA Subtest-4	15.15	15.01	14.91	16.10
HSUPA Subtest-5	16.49	16.42	16.60	17.60

## 8.7.10 Power Reduced Level 8&amp;9 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>21.45</b>	21.30	21.36	23.10
HSDPA Subtest-1	21.50	21.32	21.41	23.10
HSDPA Subtest-2	21.48	21.31	21.36	23.10
HSDPA Subtest-3	20.97	20.79	20.98	22.60
HSDPA Subtest-4	20.95	20.86	20.95	22.60
HSUPA Subtest-1	19.86	19.67	19.72	21.60
HSUPA Subtest-2	19.48	19.31	19.36	21.10
HSUPA Subtest-3	20.50	20.33	20.34	22.10
HSUPA Subtest-4	19.01	18.85	18.88	20.60
HSUPA Subtest-5	20.45	20.28	20.30	22.10

## 8.7.11 Power Reduced Level 1 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>16.68</b>	<b>16.68</b>	16.62	17.60
HSDPA Subtest-1	15.73	15.74	15.68	16.60
HSDPA Subtest-2	15.57	15.59	15.69	16.60
HSDPA Subtest-3	15.27	15.21	15.09	16.10
HSDPA Subtest-4	15.12	15.19	15.34	16.10
HSUPA Subtest-1	15.02	14.89	15.02	16.10
HSUPA Subtest-2	14.56	14.71	14.70	15.60
HSUPA Subtest-3	15.64	15.80	15.57	16.60
HSUPA Subtest-4	14.15	14.12	14.09	15.10
HSUPA Subtest-5	15.48	15.49	15.68	16.60

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

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>13.61</b>	<b>13.61</b>	13.55	14.60
HSDPA Subtest-1	12.55	12.55	12.76	13.60
HSDPA Subtest-2	12.56	12.50	12.79	13.60
HSDPA Subtest-3	12.24	12.21	12.10	13.10
HSDPA Subtest-4	12.05	12.02	12.05	13.10
HSUPA Subtest-1	11.84	12.10	12.15	13.10
HSUPA Subtest-2	11.67	11.52	11.64	12.60
HSUPA Subtest-3	12.48	12.75	12.79	13.60
HSUPA Subtest-4	11.05	10.99	11.27	12.10
HSUPA Subtest-5	12.53	12.67	12.64	13.60

## 8.7.13 Power Reduced Level 4 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>19.18</b>	19.17	19.10	20.10
HSDPA Subtest-1	18.15	18.09	18.16	19.10
HSDPA Subtest-2	17.99	18.09	18.22	19.10
HSDPA Subtest-3	17.78	17.82	17.81	18.60
HSDPA Subtest-4	17.63	17.73	17.66	18.60
HSUPA Subtest-1	17.63	17.40	17.56	18.60
HSUPA Subtest-2	17.24	17.24	17.09	18.10
HSUPA Subtest-3	18.06	18.10	18.23	19.10
HSUPA Subtest-4	16.77	16.49	16.56	17.60
HSUPA Subtest-5	17.98	18.12	18.02	19.10

## 8.7.14 Power Reduced Level 5&amp;6 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	18.64	<b>18.67</b>	18.64	19.60
HSDPA Subtest-1	17.67	17.74	17.87	18.60
HSDPA Subtest-2	17.68	17.56	17.80	18.60
HSDPA Subtest-3	17.33	17.15	17.33	18.10
HSDPA Subtest-4	17.13	17.03	17.15	18.10
HSUPA Subtest-1	16.85	17.05	17.07	18.10
HSUPA Subtest-2	16.72	16.48	16.64	17.60
HSUPA Subtest-3	17.50	17.61	17.53	18.60
HSUPA Subtest-4	16.23	16.02	16.01	17.10
HSUPA Subtest-5	17.57	17.76	17.61	18.60

## 8.7.15 Power Reduced Level 7 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	22.79	<b>22.81</b>	22.76	23.10
HSDPA Subtest-1	21.81	21.84	21.83	22.10
HSDPA Subtest-2	21.82	21.81	21.85	22.10
HSDPA Subtest-3	21.32	21.40	21.33	21.60
HSDPA Subtest-4	21.35	21.40	21.28	21.60
HSUPA Subtest-1	21.22	21.23	21.17	21.60
HSUPA Subtest-2	20.83	20.82	20.77	21.10
HSUPA Subtest-3	21.84	21.83	21.77	22.10
HSUPA Subtest-4	20.33	20.30	20.28	20.60
HSUPA Subtest-5	21.83	21.82	21.72	22.10

## 8.7.16 Power Reduced Level 8&amp;9 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	<b>20.69</b>	20.66	20.62	22.10
HSDPA Subtest-1	20.69	20.73	20.70	22.10
HSDPA Subtest-2	20.75	20.71	20.63	22.10
HSDPA Subtest-3	20.22	20.22	20.24	21.60
HSDPA Subtest-4	20.24	20.18	20.19	21.60
HSUPA Subtest-1	19.05	19.06	19.00	20.60
HSUPA Subtest-2	18.69	18.67	18.60	20.10
HSUPA Subtest-3	19.67	19.68	19.63	21.10
HSUPA Subtest-4	18.20	18.18	18.14	19.60
HSUPA Subtest-5	19.70	19.67	19.60	21.10

## 8.7.17 Power Reduced Level 1 of LTE Band 2

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	16.36	16.48	16.51	17.30	16.11	16.42	16.40	17.30
	1 (RB_Pos:50)	16.49	<b>16.59</b>	16.57	17.30	16.35	16.34	16.43	17.30
	1 (RB_Pos:99)	16.33	16.49	16.29	17.30	16.30	16.29	16.20	17.30
	50 (RB_Pos:0)	16.43	16.48	16.68	17.30	16.34	16.34	16.50	17.30
	50 (RB_Pos:25)	16.49	16.58	16.61	17.30	16.30	16.45	16.50	17.30
	50 (RB_Pos:50)	16.47	16.53	16.59	17.30	16.46	16.46	16.57	17.30
	100 (RB_Pos:0)	16.42	16.50	16.63	17.30	16.18	16.40	16.57	17.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	16.15	16.24	16.28	17.30	16.31	16.24	16.48	17.30
	1 (RB_Pos:38)	16.46	16.44	16.42	17.30	16.26	16.47	16.48	17.30
	1 (RB_Pos:74)	16.13	16.34	16.10	17.30	16.30	16.31	16.15	17.30
	36 (RB_Pos:0)	16.42	16.41	16.47	17.30	16.20	16.48	16.63	17.30
	36 (RB_Pos:20)	16.46	16.52	16.61	17.30	16.34	16.48	16.44	17.30
	36 (RB_Pos:39)	16.34	16.45	16.48	17.30	16.33	16.37	16.53	17.30
	75 (RB_Pos:0)	16.32	16.25	16.55	17.30	16.29	16.37	16.52	17.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	16.31	16.46	16.47	17.30	16.24	16.29	16.46	17.30
	1 (RB_Pos:25)	16.40	16.43	16.43	17.30	16.24	16.37	16.51	17.30
	1 (RB_Pos:49)	16.20	16.35	16.21	17.30	16.25	16.35	16.04	17.30
	25 (RB_Pos:0)	16.21	16.23	16.52	17.30	16.20	16.26	16.53	17.30
	25 (RB_Pos:12)	16.43	16.41	16.53	17.30	16.34	16.58	16.49	17.30
	25 (RB_Pos:25)	16.25	16.52	16.41	17.30	16.29	16.52	16.58	17.30
	50 (RB_Pos:0)	16.29	16.50	16.63	17.30	16.21	16.48	16.60	17.30
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)	16.35	16.48	16.30	17.30	16.31	16.38	16.26	17.30
	1 (RB_Pos:13)	16.48	16.39	16.44	17.30	16.36	16.55	16.55	17.30
	1 (RB_Pos:24)	16.26	16.43	16.10	17.30	16.23	16.48	16.21	17.30
	12 (RB_Pos:0)	16.42	16.36	16.59	17.30	16.35	16.48	16.53	17.30
	12 (RB_Pos:6)	16.25	16.34	16.46	17.30	16.46	16.33	16.37	17.30
	12 (RB_Pos:13)	16.45	16.47	16.42	17.30	16.44	16.48	16.34	17.30



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)		16.38	16.50	16.51	17.30	16.40	16.31	16.46	17.30
3.0 MHz	1 (RB_Pos:0)	16.27	16.42	16.34	17.30	16.27	16.42	16.37	17.30
	1 (RB_Pos:8)	16.34	16.49	16.55	17.30	16.46	16.56	16.47	17.30
	1 (RB_Pos:14)	16.26	16.27	16.29	17.30	16.32	16.24	16.23	17.30
	8 (RB_Pos:0)	16.24	16.26	16.61	17.30	16.34	16.28	16.59	17.30
	8 (RB_Pos:3)	16.24	16.51	16.54	17.30	16.47	16.45	16.59	17.30
	8 (RB_Pos:7)	16.22	16.49	16.54	17.30	16.36	16.33	16.41	17.30
	15 (RB_Pos:0)	16.18	16.46	16.49	17.30	16.33	16.35	16.59	17.30
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)	16.29	16.23	16.29	17.30	16.21	16.44	16.31	17.30
	1 (RB_Pos:3)	16.43	16.51	16.40	17.30	16.46	16.56	16.47	17.30
	1 (RB_Pos:5)	16.15	16.41	16.22	17.30	16.29	16.32	16.10	17.30
	3 (RB_Pos:0)	16.34	16.29	16.58	17.30	16.40	16.34	16.68	17.30
	3 (RB_Pos:1)	16.29	16.53	16.50	17.30	16.37	16.37	16.61	17.30
	3 (RB_Pos:3)	16.43	16.45	16.41	17.30	16.28	16.30	16.40	17.30
	6 (RB_Pos:0)	16.33	16.36	16.42	17.30	16.40	16.25	16.46	17.30

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

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18700	18900		19100	18700	18900	
20 MHz	1 (RB_Pos:0)	15.35	15.47	15.46	16.30	15.24	15.28	15.36	16.30
	1 (RB_Pos:50)	15.46	<b>15.55</b>	15.52	16.30	15.25	15.42	15.43	16.30
	1 (RB_Pos:99)	15.34	15.47	15.26	16.30	15.34	15.27	15.03	16.30
	50 (RB_Pos:0)	15.41	15.50	15.69	16.30	15.16	15.35	15.61	16.30
	50 (RB_Pos:25)	15.51	15.57	15.58	16.30	15.27	15.40	15.35	16.30
	50 (RB_Pos:50)	15.45	15.53	15.55	16.30	15.26	15.28	15.44	16.30
	100 (RB_Pos:0)	15.40	15.49	15.59	16.30	15.34	15.39	15.53	16.30
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)	15.32	15.44	15.21	16.30	15.11	15.40	15.37	16.30
	1 (RB_Pos:38)	15.41	15.44	15.41	16.30	15.43	15.43	15.42	16.30
	1 (RB_Pos:74)	15.22	15.39	15.14	16.30	15.17	15.45	15.04	16.30
	36 (RB_Pos:0)	15.24	15.33	15.48	16.30	15.34	15.34	15.52	16.30

	36 (RB_Pos:20)	15.30	15.40	15.56	16.30	15.44	15.34	15.34	16.30
	36 (RB_Pos:39)	15.36	15.32	15.51	16.30	15.29	15.38	15.32	16.30
	75 (RB_Pos:0)	15.34	15.44	15.45	16.30	15.40	15.36	15.57	16.30
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)	15.14	15.24	15.42	16.30	15.31	15.22	15.25	16.30
	1 (RB_Pos:25)	15.22	15.31	15.51	16.30	15.41	15.51	15.48	16.30
	1 (RB_Pos:49)	15.12	15.27	15.13	16.30	15.34	15.23	15.05	16.30
	25 (RB_Pos:0)	15.37	15.36	15.62	16.30	15.30	15.50	15.64	16.30
	25 (RB_Pos:12)	15.38	15.51	15.40	16.30	15.46	15.51	15.43	16.30
	25 (RB_Pos:25)	15.34	15.29	15.45	16.30	15.32	15.39	15.41	16.30
	50 (RB_Pos:0)	15.29	15.26	15.47	16.30	15.27	15.42	15.51	16.30
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)	15.26	15.43	15.31	16.30	15.20	15.34	15.25	16.30
	1 (RB_Pos:13)	15.40	15.32	15.40	16.30	15.32	15.43	15.40	16.30
	1 (RB_Pos:24)	15.33	15.26	15.26	16.30	15.29	15.43	15.26	16.30
	12 (RB_Pos:0)	15.29	15.47	15.52	16.30	15.17	15.30	15.63	16.30
	12 (RB_Pos:6)	15.44	15.50	15.34	16.30	15.51	15.57	15.58	16.30
	12 (RB_Pos:13)	15.45	15.44	15.53	16.30	15.31	15.52	15.36	16.30
	25 (RB_Pos:0)	15.39	15.24	15.44	16.30	15.39	15.34	15.34	16.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	15.29	15.25	15.30	16.30	15.35	15.41	15.29	16.30
	1 (RB_Pos:8)	15.43	15.46	15.28	16.30	15.31	15.38	15.32	16.30
	1 (RB_Pos:14)	15.26	15.27	15.13	16.30	15.30	15.42	15.19	16.30
	8 (RB_Pos:0)	15.41	15.30	15.48	16.30	15.24	15.29	15.59	16.30
	8 (RB_Pos:3)	15.39	15.48	15.54	16.30	15.26	15.57	15.43	16.30
	8 (RB_Pos:7)	15.25	15.29	15.30	16.30	15.31	15.46	15.48	16.30
	15 (RB_Pos:0)	15.33	15.48	15.50	16.30	15.36	15.46	15.58	16.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	15.15	15.27	15.38	16.30	15.29	15.42	15.25	16.30
	1 (RB_Pos:3)	15.45	15.52	15.50	16.30	15.32	15.47	15.34	16.30
	1 (RB_Pos:5)	15.34	15.26	15.18	16.30	15.31	15.40	15.15	16.30
	3 (RB_Pos:0)	15.35	15.29	15.60	16.30	15.22	15.35	15.45	16.30
	3 (RB_Pos:1)	15.40	15.34	15.57	16.30	15.32	15.37	15.45	16.30
	3 (RB_Pos:3)	15.30	15.38	15.32	16.30	15.23	15.41	15.40	16.30

	6 (RB_Pos:0)	15.25	15.42	15.59	16.30	15.30	15.42	15.39	16.30
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## 8.7.19 Power Reduced Level 4 of LTE Band 2

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	17.59	17.67	17.65	18.30	17.45	17.65	17.43	18.30
	1 (RB_Pos:50)	17.74	<b>17.86</b>	17.78	18.30	17.61	17.63	17.57	18.30
	1 (RB_Pos:99)	17.70	17.74	17.66	18.30	17.58	17.53	17.43	18.30
	50 (RB_Pos:0)	17.65	17.71	17.88	18.30	17.59	17.56	17.75	18.30
	50 (RB_Pos:25)	17.76	17.84	17.82	18.30	17.71	17.70	17.57	18.30
	50 (RB_Pos:50)	17.77	17.80	17.84	18.30	17.74	17.80	17.61	18.30
	100 (RB_Pos:0)	17.70	17.77	17.85	18.30	17.65	17.56	17.71	18.30
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)	17.54	17.66	17.40	18.30	17.45	17.47	17.55	18.30
	1 (RB_Pos:38)	17.54	17.73	17.64	18.30	17.55	17.67	17.67	18.30
	1 (RB_Pos:74)	17.61	17.58	17.59	18.30	17.46	17.65	17.57	18.30
	36 (RB_Pos:0)	17.50	17.65	17.83	18.30	17.50	17.70	17.70	18.30
	36 (RB_Pos:20)	17.63	17.68	17.77	18.30	17.65	17.79	17.60	18.30
	36 (RB_Pos:39)	17.75	17.68	17.69	18.30	17.55	17.78	17.64	18.30
	75 (RB_Pos:0)	17.59	17.55	17.70	18.30	17.61	17.76	17.81	18.30
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)	17.48	17.56	17.64	18.30	17.46	17.50	17.56	18.30
	1 (RB_Pos:25)	17.72	17.85	17.66	18.30	17.65	17.75	17.74	18.30
	1 (RB_Pos:49)	17.60	17.55	17.54	18.30	17.55	17.70	17.58	18.30
	25 (RB_Pos:0)	17.42	17.70	17.77	18.30	17.64	17.66	17.64	18.30
	25 (RB_Pos:12)	17.76	17.80	17.69	18.30	17.54	17.72	17.70	18.30
	25 (RB_Pos:25)	17.70	17.70	17.66	18.30	17.75	17.58	17.60	18.30
	50 (RB_Pos:0)	17.48	17.56	17.82	18.30	17.62	17.71	17.72	18.30
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)	17.51	17.58	17.42	18.30	17.34	17.54	17.53	18.30
	1 (RB_Pos:13)	17.56	17.75	17.53	18.30	17.73	17.77	17.65	18.30
	1 (RB_Pos:24)	17.62	17.62	17.47	18.30	17.61	17.57	17.48	18.30
	12 (RB_Pos:0)	17.64	17.64	17.67	18.30	17.65	17.68	17.69	18.30

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	18615	18900		19185	18615	18900	
	12 (RB_Pos:6)	17.67	17.82	17.66	18.30	17.60	17.71	17.74	18.30
	12 (RB_Pos:13)	17.75	17.71	17.59	18.30	17.66	17.71	17.77	18.30
	25 (RB_Pos:0)	17.52	17.75	17.80	18.30	17.67	17.59	17.68	18.30
3.0 MHz	1 (RB_Pos:0)	17.43	17.59	17.53	18.30	17.46	17.55	17.51	18.30
	1 (RB_Pos:8)	17.72	17.61	17.53	18.30	17.62	17.74	17.64	18.30
	1 (RB_Pos:14)	17.69	17.58	17.49	18.30	17.52	17.55	17.66	18.30
	8 (RB_Pos:0)	17.55	17.66	17.68	18.30	17.60	17.67	17.72	18.30
	8 (RB_Pos:3)	17.65	17.68	17.73	18.30	17.65	17.75	17.77	18.30
	8 (RB_Pos:7)	17.69	17.58	17.60	18.30	17.70	17.62	17.79	18.30
	15 (RB_Pos:0)	17.45	17.52	17.65	18.30	17.68	17.67	17.84	18.30
1.4 MHz	1 (RB_Pos:0)	17.41	17.62	17.57	18.30	17.59	17.58	17.44	18.30
	1 (RB_Pos:3)	17.73	17.73	17.74	18.30	17.51	17.75	17.76	18.30
	1 (RB_Pos:5)	17.64	17.62	17.52	18.30	17.68	17.72	17.58	18.30
	3 (RB_Pos:0)	17.54	17.47	17.75	18.30	17.59	17.66	17.78	18.30
	3 (RB_Pos:1)	17.76	17.75	17.79	18.30	17.64	17.66	17.69	18.30
	3 (RB_Pos:3)	17.59	17.74	17.77	18.30	17.62	17.65	17.80	18.30
	6 (RB_Pos:0)	17.48	17.59	17.65	18.30	17.52	17.52	17.70	18.30

### 8.7.20 Power Reduced Level 5&6 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)	17.15	17.11	17.22	17.80	17.12	16.93	16.99	17.80
	1 (RB_Pos:50)	17.29	17.28	<b>17.32</b>	17.80	17.04	17.27	17.22	17.80
	1 (RB_Pos:99)	17.24	17.17	17.18	17.80	17.03	17.09	17.06	17.80
	50 (RB_Pos:0)	17.15	17.27	17.37	17.80	17.06	17.16	17.24	17.80
	50 (RB_Pos:25)	17.25	17.34	17.33	17.80	17.08	17.26	17.24	17.80
	50 (RB_Pos:50)	17.24	17.30	17.33	17.80	17.08	17.28	17.32	17.80
	100 (RB_Pos:0)	17.20	17.27	17.35	17.80	17.11	17.18	17.17	17.80
15 MHz	1 (RB_Pos:0)	16.95	16.86	17.18	17.80	16.96	16.96	17.18	17.80
	1 (RB_Pos:38)	17.21	17.28	17.19	17.80	17.19	17.03	17.13	17.80

	1 (RB_Pos:74)	17.17	17.08	17.02	17.80	17.08	17.06	17.13	17.80
	36 (RB_Pos:0)	17.13	17.12	17.17	17.80	17.14	17.23	17.29	17.80
	36 (RB_Pos:20)	17.19	17.21	17.17	17.80	17.17	17.09	17.33	17.80
	36 (RB_Pos:39)	17.11	17.24	17.09	17.80	17.11	17.24	17.16	17.80
	75 (RB_Pos:0)	17.13	17.19	17.20	17.80	16.96	17.22	17.27	17.80
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)	17.06	17.11	16.97	17.80	16.94	16.97	17.05	17.80
	1 (RB_Pos:25)	17.23	17.28	17.28	17.80	17.29	17.28	17.09	17.80
	1 (RB_Pos:49)	17.22	17.08	16.94	17.80	17.04	17.01	17.17	17.80
	25 (RB_Pos:0)	17.08	17.15	17.21	17.80	16.94	17.11	17.33	17.80
	25 (RB_Pos:12)	17.24	17.25	17.08	17.80	17.15	17.14	17.27	17.80
	25 (RB_Pos:25)	17.17	17.09	17.23	17.80	17.11	17.27	17.15	17.80
	50 (RB_Pos:0)	16.99	17.22	17.33	17.80	17.05	17.21	17.13	17.80
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)	16.99	16.91	17.01	17.80	16.98	16.86	17.03	17.80
	1 (RB_Pos:13)	17.11	17.15	17.30	17.80	17.17	17.04	17.24	17.80
	1 (RB_Pos:24)	17.18	16.93	17.07	17.80	17.16	17.15	16.99	17.80
	12 (RB_Pos:0)	17.12	17.23	17.30	17.80	17.02	17.10	17.27	17.80
	12 (RB_Pos:6)	17.09	17.22	17.28	17.80	17.23	17.20	17.32	17.80
	12 (RB_Pos:13)	17.01	17.07	17.31	17.80	17.01	17.28	17.16	17.80
	25 (RB_Pos:0)	16.99	17.24	17.14	17.80	17.02	17.04	17.25	17.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	16.98	16.96	17.19	17.80	16.98	17.01	17.21	17.80
	1 (RB_Pos:8)	17.16	17.25	17.15	17.80	17.11	17.12	17.18	17.80
	1 (RB_Pos:14)	17.04	17.15	16.98	17.80	17.15	17.01	16.95	17.80
	8 (RB_Pos:0)	16.94	17.21	17.20	17.80	17.05	17.24	17.14	17.80
	8 (RB_Pos:3)	17.25	17.15	17.25	17.80	17.22	17.29	17.18	17.80
	8 (RB_Pos:7)	17.05	17.20	17.10	17.80	17.21	17.13	17.33	17.80
	15 (RB_Pos:0)	16.97	17.20	17.12	17.80	17.20	17.25	17.19	17.80
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)	17.13	17.06	17.04	17.80	16.99	17.10	17.07	17.80
	1 (RB_Pos:3)	17.07	17.28	17.15	17.80	17.25	17.03	17.18	17.80
	1 (RB_Pos:5)	17.02	16.95	17.16	17.80	17.08	16.95	16.94	17.80
	3 (RB_Pos:0)	16.95	17.20	17.29	17.80	17.15	17.21	17.34	17.80

	3 (RB_Pos:1)	17.22	17.25	17.28	17.80	17.03	17.10	17.20	17.80
	3 (RB_Pos:3)	17.17	17.14	17.12	17.80	17.16	17.12	17.10	17.80
	6 (RB_Pos:0)	17.03	17.27	17.26	17.80	17.17	17.17	17.20	17.80

## 8.7.21 Power Reduced Level 1 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	17.76	17.75	17.65	18.30	17.57	17.55	17.43	18.30
	1 (RB_Pos:50)	<b>17.80</b>	17.77	17.76	18.30	17.71	17.70	17.65	18.30
	1 (RB_Pos:99)	17.63	17.68	17.60	18.30	17.63	17.62	17.55	18.30
	50 (RB_Pos:0)	17.93	17.60	17.88	18.30	17.71	17.35	17.85	18.30
	50 (RB_Pos:25)	17.84	17.77	17.81	18.30	17.67	17.64	17.69	18.30
	50 (RB_Pos:50)	17.86	17.67	17.67	18.30	17.64	17.59	17.53	18.30
	100 (RB_Pos:0)	17.88	17.66	17.75	18.30	17.74	17.55	17.67	18.30
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)	17.63	17.58	17.50	18.30	17.71	17.68	17.63	18.30
	1 (RB_Pos:38)	17.78	17.62	17.57	18.30	17.57	17.62	17.54	18.30
	1 (RB_Pos:74)	17.46	17.56	17.57	18.30	17.42	17.49	17.43	18.30
	36 (RB_Pos:0)	17.93	17.50	17.82	18.30	17.77	17.37	17.76	18.30
	36 (RB_Pos:20)	17.67	17.66	17.79	18.30	17.76	17.65	17.66	18.30
	36 (RB_Pos:39)	17.76	17.67	17.62	18.30	17.84	17.56	17.52	18.30
	75 (RB_Pos:0)	17.83	17.49	17.61	18.30	17.81	17.44	17.70	18.30
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)	17.51	17.69	17.49	18.30	17.73	17.68	17.49	18.30
	1 (RB_Pos:25)	17.72	17.58	17.66	18.30	17.60	17.68	17.71	18.30
	1 (RB_Pos:49)	17.60	17.44	17.38	18.30	17.61	17.49	17.55	18.30
	25 (RB_Pos:0)	17.91	17.58	17.79	18.30	17.72	17.60	17.75	18.30
	25 (RB_Pos:12)	17.63	17.77	17.69	18.30	17.65	17.70	17.57	18.30
	25 (RB_Pos:25)	17.77	17.61	17.43	18.30	17.81	17.57	17.61	18.30
	50 (RB_Pos:0)	17.80	17.52	17.57	18.30	17.63	17.61	17.63	18.30
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)	17.60	17.74	17.64	18.30	17.59	17.74	17.46	18.30
	1 (RB_Pos:13)	17.63	17.75	17.70	18.30	17.58	17.73	17.60	18.30

	1 (RB_Pos:24)	17.44	17.67	17.49	18.30	17.44	17.66	17.52	18.30
	12 (RB_Pos:0)	17.69	17.36	17.81	18.30	17.74	17.36	17.77	18.30
	12 (RB_Pos:6)	17.66	17.76	17.61	18.30	17.77	17.65	17.76	18.30
	12 (RB_Pos:13)	17.79	17.54	17.51	18.30	17.65	17.49	17.43	18.30
	25 (RB_Pos:0)	17.75	17.57	17.52	18.30	17.66	17.55	17.59	18.30
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)	17.70	17.62	17.64	18.30	17.55	17.65	17.40	18.30
	1 (RB_Pos:8)	17.59	17.58	17.51	18.30	17.76	17.76	17.51	18.30
	1 (RB_Pos:14)	17.43	17.63	17.43	18.30	17.62	17.47	17.48	18.30
	8 (RB_Pos:0)	17.86	17.50	17.74	18.30	17.72	17.40	17.76	18.30
	8 (RB_Pos:3)	17.61	17.73	17.65	18.30	17.69	17.62	17.69	18.30
	8 (RB_Pos:7)	17.73	17.49	17.52	18.30	17.67	17.57	17.43	18.30
	15 (RB_Pos:0)	17.65	17.59	17.60	18.30	17.73	17.66	17.55	18.30
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)	17.67	17.69	17.64	18.30	17.67	17.62	17.51	18.30
	1 (RB_Pos:3)	17.65	17.52	17.60	18.30	17.58	17.73	17.59	18.30
	1 (RB_Pos:5)	17.39	17.67	17.49	18.30	17.59	17.66	17.52	18.30
	3 (RB_Pos:0)	17.74	17.47	17.69	18.30	17.84	17.48	17.76	18.30
	3 (RB_Pos:1)	17.63	17.76	17.81	18.30	17.75	17.71	17.63	18.30
	3 (RB_Pos:3)	17.72	17.52	17.67	18.30	17.74	17.60	17.61	18.30
	6 (RB_Pos:0)	17.81	17.60	17.57	18.30	17.69	17.62	17.50	18.30

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

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	14.77	14.78	14.83	15.30	14.60	14.76	14.79	15.30
	1 (RB_Pos:50)	14.84	<b>14.91</b>	14.87	15.30	14.71	14.86	14.72	15.30
	1 (RB_Pos:99)	14.73	14.80	14.85	15.30	14.53	14.66	14.77	15.30
	50 (RB_Pos:0)	14.98	14.71	14.93	15.30	14.98	14.48	14.86	15.30
	50 (RB_Pos:25)	14.94	14.92	14.91	15.30	14.76	14.73	14.70	15.30
	50 (RB_Pos:50)	14.97	14.87	14.77	15.30	14.81	14.72	14.66	15.30
	100 (RB_Pos:0)	14.98	14.82	14.87	15.30	14.79	14.70	14.77	15.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	

15 MHz	1 (RB_Pos:0)	14.77	14.58	14.82	15.30	14.67	14.66	14.64	15.30
	1 (RB_Pos:38)	14.73	14.77	14.80	15.30	14.82	14.80	14.77	15.30
	1 (RB_Pos:74)	14.72	14.59	14.73	15.30	14.66	14.60	14.71	15.30
	36 (RB_Pos:0)	14.79	14.57	14.73	15.30	14.76	14.67	14.88	15.30
	36 (RB_Pos:20)	14.87	14.80	14.81	15.30	14.81	14.71	14.73	15.30
	36 (RB_Pos:39)	14.89	14.64	14.56	15.30	14.93	14.84	14.65	15.30
	75 (RB_Pos:0)	14.89	14.79	14.66	15.30	14.96	14.76	14.79	15.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	14.64	14.61	14.75	15.30	14.69	14.77	14.78	15.30
	1 (RB_Pos:25)	14.84	14.91	14.72	15.30	14.64	14.75	14.87	15.30
	1 (RB_Pos:49)	14.54	14.74	14.64	15.30	14.67	14.57	14.66	15.30
	25 (RB_Pos:0)	14.98	14.65	14.77	15.30	14.86	14.63	14.92	15.30
	25 (RB_Pos:12)	14.80	14.76	14.88	15.30	14.87	14.83	14.91	15.30
	25 (RB_Pos:25)	14.73	14.77	14.67	15.30	14.80	14.78	14.57	15.30
	50 (RB_Pos:0)	14.74	14.75	14.85	15.30	14.79	14.80	14.84	15.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	14.74	14.75	14.83	15.30	14.58	14.53	14.78	15.30
	1 (RB_Pos:13)	14.79	14.74	14.77	15.30	14.81	14.66	14.86	15.30
	1 (RB_Pos:24)	14.67	14.70	14.70	15.30	14.48	14.80	14.73	15.30
	12 (RB_Pos:0)	14.84	14.71	14.82	15.30	14.73	14.65	14.72	15.30
	12 (RB_Pos:6)	14.88	14.73	14.89	15.30	14.91	14.83	14.73	15.30
	12 (RB_Pos:13)	14.87	14.63	14.58	15.30	14.96	14.83	14.62	15.30
	25 (RB_Pos:0)	14.97	14.63	14.64	15.30	14.95	14.60	14.71	15.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	14.72	14.72	14.64	15.30	14.74	14.74	14.79	15.30
	1 (RB_Pos:8)	14.80	14.81	14.80	15.30	14.62	14.89	14.73	15.30
	1 (RB_Pos:14)	14.54	14.61	14.79	15.30	14.63	14.71	14.78	15.30
	8 (RB_Pos:0)	14.98	14.69	14.82	15.30	14.84	14.51	14.88	15.30
	8 (RB_Pos:3)	14.82	14.86	14.68	15.30	14.81	14.86	14.90	15.30
	8 (RB_Pos:7)	14.77	14.62	14.59	15.30	14.79	14.65	14.77	15.30
	15 (RB_Pos:0)	14.84	14.57	14.62	15.30	14.94	14.65	14.70	15.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19957	20175	20393		19957	20175	20393	
1.4 MHz	1 (RB_Pos:0)	14.55	14.63	14.62	15.30	14.65	14.53	14.64	15.30
	1 (RB_Pos:3)	14.66	14.77	14.67	15.30	14.67	14.70	14.81	15.30



	1 (RB_Pos:5)	14.69	14.58	14.65	15.30	14.63	14.79	14.68	15.30
	3 (RB_Pos:0)	14.79	14.68	14.75	15.30	14.89	14.65	14.75	15.30
	3 (RB_Pos:1)	14.78	14.84	14.75	15.30	14.88	14.88	14.84	15.30
	3 (RB_Pos:3)	14.84	14.72	14.62	15.30	14.91	14.72	14.60	15.30
	6 (RB_Pos:0)	14.97	14.62	14.72	15.30	14.84	14.66	14.69	15.30

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

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	19.24	19.32	19.36	19.80	19.10	19.32	19.29	19.80
	1 (RB_Pos:50)	19.38	19.43	<b>19.47</b>	19.80	19.27	19.21	19.25	19.80
	1 (RB_Pos:99)	19.24	19.35	19.45	19.80	19.01	19.26	19.38	19.80
	50 (RB_Pos:0)	19.50	19.28	19.51	19.80	19.50	19.23	19.35	19.80
	50 (RB_Pos:25)	19.45	19.45	19.48	19.80	19.27	19.21	19.44	19.80
	50 (RB_Pos:50)	19.55	19.40	19.32	19.80	19.52	19.35	19.19	19.80
	100 (RB_Pos:0)	19.49	19.35	19.41	19.80	19.30	19.24	19.37	19.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	19.11	19.25	19.24	19.80	19.16	19.11	19.36	19.80
	1 (RB_Pos:38)	19.25	19.32	19.44	19.80	19.23	19.20	19.38	19.80
	1 (RB_Pos:74)	19.12	19.32	19.45	19.80	19.22	19.14	19.38	19.80
	36 (RB_Pos:0)	19.46	19.06	19.28	19.80	19.48	19.12	19.51	19.80
	36 (RB_Pos:20)	19.22	19.43	19.40	19.80	19.35	19.27	19.33	19.80
	36 (RB_Pos:39)	19.50	19.24	19.24	19.80	19.33	19.30	19.18	19.80
	75 (RB_Pos:0)	19.26	19.26	19.37	19.80	19.46	19.34	19.29	19.80
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)	19.07	19.11	19.30	19.80	19.01	19.29	19.30	19.80
	1 (RB_Pos:25)	19.23	19.34	19.39	19.80	19.29	19.36	19.40	19.80
	1 (RB_Pos:49)	19.08	19.31	19.21	19.80	19.01	19.30	19.38	19.80
	25 (RB_Pos:0)	19.30	19.11	19.36	19.80	19.45	19.17	19.33	19.80
	25 (RB_Pos:12)	19.25	19.23	19.25	19.80	19.25	19.31	19.42	19.80
	25 (RB_Pos:25)	19.35	19.27	19.17	19.80	19.30	19.24	19.22	19.80
	50 (RB_Pos:0)	19.41	19.33	19.20	19.80	19.40	19.33	19.35	19.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	

5 MHz	1 (RB_Pos:0)	19.03	19.26	19.28	19.80	19.20	19.14	19.17	19.80
	1 (RB_Pos:13)	19.33	19.21	19.32	19.80	19.13	19.24	19.36	19.80
	1 (RB_Pos:24)	19.14	19.26	19.21	19.80	19.04	19.20	19.25	19.80
	12 (RB_Pos:0)	19.43	19.17	19.40	19.80	19.37	19.19	19.41	19.80
	12 (RB_Pos:6)	19.25	19.25	19.24	19.80	19.45	19.35	19.40	19.80
	12 (RB_Pos:13)	19.41	19.36	19.31	19.80	19.32	19.30	19.23	19.80
	25 (RB_Pos:0)	19.46	19.33	19.40	19.80	19.38	19.32	19.32	19.80
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)	19.08	19.27	19.19	19.80	19.16	19.07	19.13	19.80
	1 (RB_Pos:8)	19.36	19.28	19.31	19.80	19.23	19.28	19.41	19.80
	1 (RB_Pos:14)	19.08	19.21	19.45	19.80	19.18	19.20	19.45	19.80
	8 (RB_Pos:0)	19.47	19.09	19.48	19.80	19.49	19.23	19.33	19.80
	8 (RB_Pos:3)	19.25	19.25	19.43	19.80	19.36	19.35	19.24	19.80
	8 (RB_Pos:7)	19.39	19.38	19.23	19.80	19.36	19.18	19.26	19.80
	15 (RB_Pos:0)	19.36	19.17	19.36	19.80	19.44	19.17	19.30	19.80
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)	19.13	19.29	19.32	19.80	19.12	19.20	19.13	19.80
	1 (RB_Pos:3)	19.32	19.37	19.35	19.80	19.36	19.30	19.38	19.80
	1 (RB_Pos:5)	19.03	19.21	19.32	19.80	19.03	19.18	19.25	19.80
	3 (RB_Pos:0)	19.35	19.20	19.48	19.80	19.40	19.23	19.30	19.80
	3 (RB_Pos:1)	19.43	19.35	19.34	19.80	19.45	19.26	19.30	19.80
	3 (RB_Pos:3)	19.53	19.26	19.08	19.80	19.34	19.35	19.24	19.80
	6 (RB_Pos:0)	19.47	19.28	19.22	19.80	19.32	19.23	19.31	19.80

## 8.7.24 Power Reduced Level 5&amp;6 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)	18.83	18.83	18.80	19.30	18.79	18.85	18.87	19.30
	1 (RB_Pos:50)	18.92	<b>18.98</b>	18.92	19.30	18.80	19.07	18.90	19.30
	1 (RB_Pos:99)	18.87	18.89	18.81	19.30	18.82	18.99	18.87	19.30
	50 (RB_Pos:0)	18.99	18.73	19.02	19.30	18.94	18.75	19.12	19.30
	50 (RB_Pos:25)	18.98	18.94	18.97	19.30	18.98	19.09	19.10	19.30
	50 (RB_Pos:50)	19.06	18.91	18.81	19.30	19.14	18.96	18.72	19.30
	100 (RB_Pos:0)	19.03	18.87	18.91	19.30	18.89	18.72	19.05	19.30
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)	18.97	18.89	18.94	19.30	18.98	18.80	18.72	19.30
	1 (RB_Pos:38)	19.00	18.94	18.79	19.30	18.87	19.13	19.04	19.30
	1 (RB_Pos:74)	19.02	19.00	18.95	19.30	18.76	18.96	18.96	19.30
	36 (RB_Pos:0)	18.94	18.58	18.95	19.30	19.06	18.86	19.10	19.30
	36 (RB_Pos:20)	18.90	18.99	19.03	19.30	18.95	18.92	18.87	19.30
	36 (RB_Pos:39)	18.93	18.79	18.74	19.30	19.18	18.95	18.75	19.30
	75 (RB_Pos:0)	19.18	18.72	18.78	19.30	19.14	19.02	18.97	19.30
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)	18.84	18.73	18.73	19.30	18.97	18.88	18.87	19.30
	1 (RB_Pos:25)	18.89	18.86	18.92	19.30	18.86	18.99	18.91	19.30
	1 (RB_Pos:49)	18.81	19.04	18.95	19.30	19.01	18.90	18.93	19.30
	25 (RB_Pos:0)	19.03	18.76	18.96	19.30	19.08	18.71	19.08	19.30
	25 (RB_Pos:12)	18.98	18.94	19.08	19.30	18.86	18.86	18.99	19.30
	25 (RB_Pos:25)	19.12	18.76	18.66	19.30	19.10	19.00	18.76	19.30
	50 (RB_Pos:0)	18.99	18.87	18.87	19.30	18.89	18.83	18.92	19.30
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)	18.79	18.85	18.87	19.30	18.90	18.76	18.72	19.30
	1 (RB_Pos:13)	19.00	19.08	19.06	19.30	18.85	18.92	18.84	19.30
	1 (RB_Pos:24)	18.97	18.82	18.96	19.30	18.96	18.85	18.81	19.30
	12 (RB_Pos:0)	19.06	18.75	18.97	19.30	19.04	18.77	18.99	19.30
	12 (RB_Pos:6)	18.84	19.06	18.83	19.30	18.85	19.08	19.11	19.30
	12 (RB_Pos:13)	19.04	18.87	18.77	19.30	18.94	18.86	18.90	19.30

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	19965	20175		20385	19965	20175	
25 (RB_Pos:0)		18.90	18.94	18.82	19.30	19.06	18.79	18.93	19.30
3.0 MHz	1 (RB_Pos:0)	18.85	18.96	18.87	19.30	18.91	18.90	18.79	19.30
	1 (RB_Pos:8)	19.02	18.89	18.93	19.30	18.86	18.90	18.91	19.30
	1 (RB_Pos:14)	19.02	19.01	18.87	19.30	18.93	18.95	18.71	19.30
	8 (RB_Pos:0)	19.03	18.83	19.14	19.30	19.05	18.68	18.98	19.30
	8 (RB_Pos:3)	18.99	19.07	18.97	19.30	18.90	18.84	18.82	19.30
	8 (RB_Pos:7)	19.11	18.83	18.84	19.30	19.09	18.94	18.74	19.30
	15 (RB_Pos:0)	19.13	18.92	18.96	19.30	19.07	18.77	18.83	19.30
1.4 MHz	1 (RB_Pos:0)	18.80	18.89	18.88	19.30	18.81	18.87	18.71	19.30
	1 (RB_Pos:3)	19.07	18.84	18.93	19.30	19.02	19.06	18.95	19.30
	1 (RB_Pos:5)	18.89	19.01	18.92	19.30	18.95	19.01	18.90	19.30
	3 (RB_Pos:0)	18.88	18.80	18.87	19.30	19.01	18.76	18.88	19.30
	3 (RB_Pos:1)	18.93	18.93	19.02	19.30	19.03	19.04	18.94	19.30
	3 (RB_Pos:3)	19.14	18.99	18.89	19.30	18.91	18.88	18.68	19.30
	6 (RB_Pos:0)	18.88	18.95	18.99	19.30	19.07	18.94	18.95	19.30

### 8.7.25 Power Reduced Level 7 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)	21.54	21.54	21.44	22.30	21.42	21.52	21.20	22.30
	1 (RB_Pos:50)	<b>21.58</b>	<b>21.58</b>	21.49	22.30	21.55	21.57	21.40	22.30
	1 (RB_Pos:99)	21.37	21.41	21.37	22.30	21.18	21.19	21.17	22.30
	50 (RB_Pos:0)	21.66	21.43	21.59	22.30	20.64	20.50	20.59	21.80
	50 (RB_Pos:25)	21.59	21.54	21.53	22.30	20.63	20.60	20.54	21.80
	50 (RB_Pos:50)	21.63	21.48	21.43	22.30	20.69	20.49	20.42	21.80
	100 (RB_Pos:0)	21.60	21.47	21.48	22.30	20.61	20.48	20.50	21.80
15 MHz	1 (RB_Pos:0)	21.33	21.35	21.27	22.30	21.47	21.39	21.19	22.30
	1 (RB_Pos:38)	21.51	21.41	21.31	22.30	21.54	21.48	21.32	22.30
	1 (RB_Pos:74)	21.35	21.28	21.18	22.30	21.33	21.34	21.35	22.30
	36 (RB_Pos:0)	21.66	21.32	21.34	22.30	20.59	20.51	20.53	21.80

	36 (RB_Pos:20)	21.41	21.51	21.39	22.30	20.57	20.60	20.50	21.80
	36 (RB_Pos:39)	21.46	21.34	21.21	22.30	20.50	20.49	20.46	21.80
	75 (RB_Pos:0)	21.37	21.38	21.38	22.30	20.62	20.48	20.53	21.80
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)	21.49	21.42	21.31	22.30	21.37	21.31	21.20	22.30
	1 (RB_Pos:25)	21.35	21.58	21.40	22.30	21.36	21.41	21.33	22.30
	1 (RB_Pos:49)	21.15	21.38	21.20	22.30	21.37	21.16	21.25	22.30
	25 (RB_Pos:0)	21.65	21.24	21.55	22.30	20.61	20.46	20.69	21.80
	25 (RB_Pos:12)	21.34	21.34	21.44	22.30	20.67	20.56	20.68	21.80
	25 (RB_Pos:25)	21.60	21.38	21.29	22.30	20.58	20.51	20.57	21.80
	50 (RB_Pos:0)	21.41	21.32	21.48	22.30	20.55	20.52	20.58	21.80
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)	21.29	21.31	21.24	22.30	21.48	21.50	21.36	22.30
	1 (RB_Pos:13)	21.55	21.34	21.45	22.30	21.53	21.45	21.27	22.30
	1 (RB_Pos:24)	21.36	21.17	21.34	22.30	21.30	21.40	21.20	22.30
	12 (RB_Pos:0)	21.46	21.22	21.58	22.30	20.64	20.57	20.55	21.80
	12 (RB_Pos:6)	21.38	21.33	21.39	22.30	20.65	20.65	20.60	21.80
	12 (RB_Pos:13)	21.60	21.41	21.35	22.30	20.56	20.57	20.50	21.80
	25 (RB_Pos:0)	21.49	21.36	21.26	22.30	20.56	20.55	20.52	21.80
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)	21.29	21.54	21.38	22.30	21.51	21.52	21.42	22.30
	1 (RB_Pos:8)	21.44	21.35	21.28	22.30	21.52	21.33	21.36	22.30
	1 (RB_Pos:14)	21.27	21.20	21.14	22.30	21.26	21.32	21.35	22.30
	8 (RB_Pos:0)	21.44	21.37	21.39	22.30	20.56	20.48	20.50	21.80
	8 (RB_Pos:3)	21.35	21.44	21.42	22.30	20.58	20.51	20.49	21.80
	8 (RB_Pos:7)	21.58	21.34	21.27	22.30	20.52	20.42	20.44	21.80
	15 (RB_Pos:0)	21.56	21.36	21.48	22.30	20.47	20.35	20.36	21.80
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)	21.36	21.30	21.40	22.30	21.31	21.52	21.25	22.30
	1 (RB_Pos:3)	21.42	21.36	21.26	22.30	21.41	21.40	21.28	22.30
	1 (RB_Pos:5)	21.13	21.21	21.35	22.30	21.24	21.21	21.31	22.30
	3 (RB_Pos:0)	21.61	21.32	21.51	22.30	21.44	21.55	21.58	22.30
	3 (RB_Pos:1)	21.54	21.45	21.33	22.30	21.44	21.53	21.61	22.30
	3 (RB_Pos:3)	21.51	21.33	21.25	22.30	21.47	21.55	21.59	22.30

	6 (RB_Pos:0)	21.37	21.41	21.36	22.30	20.66	20.37	20.64	21.80
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## 8.7.26 Power Reduced Level 8&amp;9 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)	21.34	<b>21.37</b>	21.26	21.80	21.09	21.24	21.20	21.80
	1 (RB_Pos:50)	21.36	<b>21.37</b>	21.34	21.80	21.16	21.29	21.20	21.80
	1 (RB_Pos:99)	21.19	21.24	21.20	21.80	21.16	21.09	21.00	21.80
	50 (RB_Pos:0)	21.48	21.21	21.44	21.80	21.26	21.14	21.43	21.80
	50 (RB_Pos:25)	21.41	21.35	21.37	21.80	21.22	21.22	21.32	21.80
	50 (RB_Pos:50)	21.45	21.28	21.24	21.80	21.32	21.18	21.07	21.80
	100 (RB_Pos:0)	21.43	21.25	21.34	21.80	21.35	21.03	21.17	21.80
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)	21.20	21.27	21.23	21.80	21.10	21.31	21.09	21.80
	1 (RB_Pos:38)	21.18	21.20	21.10	21.80	21.35	21.26	21.26	21.80
	1 (RB_Pos:74)	21.13	21.19	21.12	21.80	21.01	21.22	20.99	21.80
	36 (RB_Pos:0)	21.45	21.13	21.23	21.80	21.26	20.98	21.32	21.80
	36 (RB_Pos:20)	21.25	21.10	21.31	21.80	21.30	21.18	21.22	21.80
	36 (RB_Pos:39)	21.20	21.03	21.11	21.80	21.38	21.08	21.10	21.80
	75 (RB_Pos:0)	21.29	21.17	21.12	21.80	21.25	21.22	21.28	21.80
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)	21.15	21.15	21.06	21.80	21.34	21.25	21.22	21.80
	1 (RB_Pos:25)	21.12	21.16	21.12	21.80	21.26	21.29	21.25	21.80
	1 (RB_Pos:49)	21.09	21.04	20.97	21.80	21.11	21.10	21.08	21.80
	25 (RB_Pos:0)	21.32	21.13	21.34	21.80	21.37	20.97	21.21	21.80
	25 (RB_Pos:12)	21.28	21.34	21.12	21.80	21.27	21.31	21.28	21.80
	25 (RB_Pos:25)	21.44	21.06	21.15	21.80	21.43	21.09	21.18	21.80
	50 (RB_Pos:0)	21.32	21.12	21.26	21.80	21.26	21.08	21.34	21.80
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)	21.17	21.28	21.09	21.80	21.13	21.14	21.19	21.80
	1 (RB_Pos:13)	21.23	21.20	21.20	21.80	21.24	21.18	21.19	21.80
	1 (RB_Pos:24)	20.98	21.02	21.18	21.80	20.98	21.13	20.96	21.80
	12 (RB_Pos:0)	21.28	21.14	21.38	21.80	21.34	21.09	21.21	21.80

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	19965	20175		20385	19965	20175	
	12 (RB_Pos:6)	21.16	21.22	21.20	21.80	21.39	21.21	21.18	21.80
	12 (RB_Pos:13)	21.21	21.04	21.18	21.80	21.41	21.25	21.24	21.80
	25 (RB_Pos:0)	21.43	21.24	21.32	21.80	21.22	21.00	21.29	21.80
3.0 MHz	1 (RB_Pos:0)	20.95	20.96	20.99	21.80	21.31	21.31	21.25	21.80
	1 (RB_Pos:8)	21.03	21.01	21.08	21.80	21.16	21.20	21.24	21.80
	1 (RB_Pos:14)	20.91	20.90	21.01	21.80	21.11	21.03	21.05	21.80
	8 (RB_Pos:0)	21.29	21.18	21.28	21.80	21.38	21.02	21.34	21.80
	8 (RB_Pos:3)	21.29	21.20	21.32	21.80	21.34	21.19	21.13	21.80
	8 (RB_Pos:7)	21.20	21.17	21.23	21.80	21.24	21.05	21.10	21.80
	15 (RB_Pos:0)	21.25	21.15	21.26	21.80	21.41	21.20	21.25	21.80
1.4 MHz	1 (RB_Pos:0)	21.07	21.01	21.13	21.80	21.15	21.23	21.05	21.80
	1 (RB_Pos:3)	21.13	21.08	21.19	21.80	21.33	21.17	21.23	21.80
	1 (RB_Pos:5)	21.07	21.03	21.12	21.80	21.00	21.17	21.10	21.80
	3 (RB_Pos:0)	21.20	21.16	21.30	21.80	21.33	21.07	21.27	21.80
	3 (RB_Pos:1)	21.23	21.22	21.29	21.80	21.22	21.20	21.21	21.80
	3 (RB_Pos:3)	21.21	21.15	21.32	21.80	21.33	21.24	21.23	21.80
	6 (RB_Pos:0)	21.28	21.21	21.32	21.80	21.24	21.00	21.24	21.80

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

FDD LTE Band 5									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		Channel	20450	20525		20600	20450	20525	
10 MHz	1 (RB_Pos:0)	22.66	22.73	22.68	23.30	22.20	22.55	22.21	23.30
	1 (RB_Pos:25)	<b>22.74</b>	22.51	22.61	23.30	22.02	22.47	22.14	23.30
	1 (RB_Pos:49)	22.49	22.58	22.42	23.30	22.14	22.54	22.19	23.30
	25 (RB_Pos:0)	21.93	22.11	22.08	23.30	21.08	21.27	21.29	22.30
	25 (RB_Pos:12)	22.17	22.06	22.17	23.30	21.11	21.22	21.28	22.30
	25 (RB_Pos:25)	22.20	22.06	21.83	23.30	21.06	21.16	20.98	22.30
	50 (RB_Pos:0)	21.98	22.04	21.91	23.30	21.24	20.95	20.97	22.30
5MHz	1 (RB_Pos:0)	21.59	21.80	21.61	23.30	22.29	22.48	22.26	23.30
	1 (RB_Pos:13)	21.75	21.39	21.64	23.30	21.90	22.38	22.16	23.30

	1 (RB_Pos:24)	21.62	21.54	21.42	23.30	22.20	22.65	22.28	23.30
	12 (RB_Pos:0)	21.94	22.02	22.05	23.30	21.07	21.42	21.43	22.30
	12 (RB_Pos:6)	22.32	22.10	22.29	23.30	21.24	21.12	21.33	22.30
	12 (RB_Pos:13)	22.11	22.12	21.85	23.30	20.97	21.06	21.12	22.30
	25 (RB_Pos:0)	21.87	22.16	22.05	23.30	21.33	20.85	21.05	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	21.64	21.83	21.58	23.30	22.35	22.68	22.11	23.30
	1 (RB_Pos:8)	21.78	21.46	21.60	23.30	22.03	22.60	22.03	23.30
	1 (RB_Pos:14)	21.44	21.72	21.47	23.30	22.01	22.50	22.17	23.30
	8 (RB_Pos:0)	21.97	22.26	21.98	23.30	20.97	21.38	21.28	22.30
	8 (RB_Pos:3)	22.21	22.03	22.14	23.30	21.24	21.32	21.26	22.30
	8 (RB_Pos:7)	22.31	22.01	21.89	23.30	21.04	21.06	20.98	22.30
	15 (RB_Pos:0)	22.09	21.97	21.96	23.30	21.15	21.07	20.94	22.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4MHz	1 (RB_Pos:0)	21.80	21.83	21.76	23.30	22.23	22.68	22.15	23.30
	1 (RB_Pos:3)	21.63	21.52	21.58	23.30	22.02	22.39	22.19	23.30
	1 (RB_Pos:5)	21.42	21.55	21.52	23.30	22.17	22.43	22.24	23.30
	3 (RB_Pos:0)	21.92	22.11	22.21	23.30	20.98	21.19	21.17	23.30
	3 (RB_Pos:1)	22.20	22.02	22.03	23.30	21.20	21.29	21.22	23.30
	3 (RB_Pos:3)	22.07	22.10	21.86	23.30	20.98	21.11	21.10	23.30
	6 (RB_Pos:0)	22.02	22.10	21.98	23.30	21.16	21.00	21.03	22.30

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

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	<b>15.44</b>	15.22	15.27	15.80	15.43	15.18	15.10	15.80
	1 (RB_Pos:50)	15.41	15.33	15.36	15.80	15.23	15.24	15.36	15.80
	1 (RB_Pos:99)	15.17	15.21	15.16	15.80	15.06	15.07	15.07	15.80
	50 (RB_Pos:0)	15.42	15.22	15.32	15.80	15.27	15.02	15.17	15.80
	50 (RB_Pos:25)	15.42	15.28	15.37	15.80	15.33	15.14	15.35	15.80
	50 (RB_Pos:50)	15.39	15.14	15.18	15.80	15.36	14.96	15.18	15.80
	100 (RB_Pos:0)	15.40	15.17	15.21	15.80	15.18	15.00	15.00	15.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	



15MHz	1 (RB_Pos:0)	15.23	15.41	15.16	15.80	15.26	15.07	15.16	15.80
	1 (RB_Pos:38)	15.39	15.12	15.23	15.80	15.33	15.08	15.25	15.80
	1 (RB_Pos:74)	14.92	15.14	15.05	15.80	15.17	15.18	14.98	15.80
	36 (RB_Pos:0)	15.32	15.13	15.30	15.80	15.17	15.18	15.25	15.80
	36 (RB_Pos:20)	15.36	15.25	15.12	15.80	15.42	15.18	15.20	15.80
	36 (RB_Pos:39)	15.25	14.96	14.99	15.80	15.30	14.89	14.93	15.80
	75 (RB_Pos:0)	15.34	14.98	15.21	15.80	15.40	14.99	15.20	15.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	15.28	15.05	15.04	15.80	15.33	15.01	15.27	15.80
	1 (RB_Pos:25)	15.38	15.10	15.22	15.80	15.39	15.09	15.32	15.80
	1 (RB_Pos:49)	15.17	15.19	15.08	15.80	15.11	15.04	14.94	15.80
	25 (RB_Pos:0)	15.20	15.09	15.25	15.80	15.27	15.17	15.17	15.80
	25 (RB_Pos:12)	15.38	15.24	15.30	15.80	15.34	15.28	15.25	15.80
	25 (RB_Pos:25)	15.31	15.02	15.00	15.80	15.36	15.13	14.98	15.80
	50 (RB_Pos:0)	15.15	15.01	15.16	15.80	15.28	15.07	15.01	15.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	15.36	14.98	15.05	15.80	15.35	15.05	15.11	15.80
	1 (RB_Pos:13)	15.29	15.24	15.18	15.80	15.40	15.33	15.22	15.80
	1 (RB_Pos:24)	15.04	15.01	15.08	15.80	14.95	15.17	14.95	15.80
	12 (RB_Pos:0)	15.38	15.21	15.11	15.80	15.36	15.06	15.07	15.80
	12 (RB_Pos:6)	15.28	15.10	15.36	15.80	15.24	15.14	15.26	15.80
	12 (RB_Pos:13)	15.31	15.00	15.06	15.80	15.38	15.00	14.98	15.80
	25 (RB_Pos:0)	15.32	15.10	15.16	15.80	15.17	15.15	15.02	15.80

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

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	<b>14.38</b>	14.18	14.20	14.80	14.17	13.99	14.10	14.80
	1 (RB_Pos:50)	14.36	14.23	14.35	14.80	14.11	14.18	14.33	14.80
	1 (RB_Pos:99)	14.12	14.17	14.10	14.80	13.89	14.17	13.93	14.80
	50 (RB_Pos:0)	14.45	14.17	14.26	14.80	14.36	13.97	14.25	14.80
	50 (RB_Pos:25)	14.37	14.23	14.33	14.80	14.28	14.02	14.17	14.80
	50 (RB_Pos:50)	14.31	14.08	14.12	14.80	14.28	13.95	14.10	14.80
	100 (RB_Pos:0)	14.35	14.13	14.13	14.80	14.21	14.04	13.98	14.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up

	Channel	20825	21100	21375	limit (dBm)	20825	21100	21375	limit (dBm)
15MHz	1 (RB_Pos:0)	14.17	14.40	14.13	14.80	14.36	13.96	14.10	14.80
	1 (RB_Pos:38)	14.15	14.17	14.33	14.80	14.23	14.19	14.22	14.80
	1 (RB_Pos:74)	13.87	14.10	13.86	14.80	13.92	14.14	13.88	14.80
	36 (RB_Pos:0)	14.39	13.99	14.09	14.80	14.40	14.06	14.13	14.80
	36 (RB_Pos:20)	14.32	14.05	14.27	14.80	14.15	14.07	14.23	14.80
	36 (RB_Pos:39)	14.21	13.88	14.12	14.80	14.12	13.86	14.03	14.80
	75 (RB_Pos:0)	14.26	14.04	14.01	14.80	14.16	14.10	14.03	14.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	20800	21100	21400	limit (dBm)	20800	21100	21400	limit (dBm)
10MHz	1 (RB_Pos:0)	14.38	14.09	13.96	14.80	14.17	14.05	14.19	14.80
	1 (RB_Pos:25)	14.26	14.11	14.15	14.80	14.14	14.22	14.26	14.80
	1 (RB_Pos:49)	14.02	13.97	13.95	14.80	13.98	14.14	13.95	14.80
	25 (RB_Pos:0)	14.34	14.03	14.04	14.80	14.20	14.17	14.07	14.80
	25 (RB_Pos:12)	14.24	14.02	14.26	14.80	14.29	14.12	14.30	14.80
	25 (RB_Pos:25)	14.19	13.86	13.87	14.80	14.11	13.89	14.10	14.80
	50 (RB_Pos:0)	14.21	14.01	13.99	14.80	14.32	13.94	14.08	14.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	20775	21100	21425	limit (dBm)	20775	21100	21425	limit (dBm)
5MHz	1 (RB_Pos:0)	14.35	13.96	14.07	14.80	14.18	14.02	13.98	14.80
	1 (RB_Pos:13)	14.11	14.18	14.31	14.80	14.12	14.16	14.21	14.80
	1 (RB_Pos:24)	13.91	14.09	14.08	14.80	14.05	14.07	14.06	14.80
	12 (RB_Pos:0)	14.40	14.09	14.11	14.80	14.40	14.13	14.22	14.80
	12 (RB_Pos:6)	14.21	14.19	14.33	14.80	14.27	14.22	14.31	14.80
	12 (RB_Pos:13)	14.16	14.07	14.04	14.80	14.22	13.97	13.87	14.80
	25 (RB_Pos:0)	14.11	14.09	14.06	14.80	14.28	13.97	13.91	14.80

## 8.7.30 Power Reduced Level 4 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	<b>22.63</b>	22.38	22.39	22.80	22.57	22.17	22.34	22.80
	1 (RB_Pos:50)	22.54	22.41	22.58	22.80	22.57	22.27	22.42	22.80
	1 (RB_Pos:99)	22.26	22.34	22.34	22.80	22.22	22.23	22.23	22.80
	50 (RB_Pos:0)	22.09	21.79	21.98	22.80	21.07	20.80	20.98	21.80
	50 (RB_Pos:25)	22.00	21.86	22.01	22.80	21.08	20.90	20.95	21.80
	50 (RB_Pos:50)	22.02	21.72	21.87	22.80	21.01	20.80	20.83	21.80
	100 (RB_Pos:0)	22.00	21.81	21.89	22.80	21.08	20.76	20.89	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	22.45	22.57	22.36	22.80	22.01	22.23	22.44	22.80
	1 (RB_Pos:38)	22.46	22.22	22.52	22.80	21.99	22.19	22.31	22.80
	1 (RB_Pos:74)	22.03	22.32	22.27	22.80	21.79	22.09	22.22	22.80
	36 (RB_Pos:0)	21.86	21.69	21.96	22.80	21.06	20.92	21.04	21.80
	36 (RB_Pos:20)	21.94	21.77	21.78	22.80	20.99	20.89	21.03	21.80
	36 (RB_Pos:39)	21.83	21.57	21.75	22.80	20.94	20.82	20.91	21.80
	75 (RB_Pos:0)	21.89	21.77	21.67	22.80	21.03	20.78	20.97	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	22.62	22.33	22.62	22.80	22.01	22.21	22.02	22.80
	1 (RB_Pos:25)	22.50	22.36	22.56	22.80	21.97	22.20	22.01	22.80
	1 (RB_Pos:49)	22.43	22.37	22.48	22.80	21.90	22.16	21.93	22.80
	25 (RB_Pos:0)	22.04	21.79	22.06	22.80	21.17	20.91	21.17	21.80
	25 (RB_Pos:12)	22.04	21.80	21.99	22.80	21.04	20.87	21.14	21.80
	25 (RB_Pos:25)	21.99	21.77	21.90	22.80	21.02	20.86	20.99	21.80
	50 (RB_Pos:0)	22.06	21.84	22.03	22.80	21.05	20.83	21.01	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	22.55	22.28	22.45	22.80	22.16	22.21	22.01	22.80
	1 (RB_Pos:13)	22.60	22.33	22.54	22.80	22.23	22.34	22.13	22.80
	1 (RB_Pos:24)	22.33	22.23	22.41	22.80	22.05	22.19	21.95	22.80
	12 (RB_Pos:0)	22.04	21.73	22.02	22.80	21.10	20.84	21.06	21.80
	12 (RB_Pos:6)	22.05	21.79	22.02	22.80	21.07	20.93	21.08	21.80
	12 (RB_Pos:13)	21.95	21.70	21.95	22.80	21.02	20.83	20.92	21.80

	25 (RB_Pos:0)	22.00	21.75	21.97	22.80	21.05	20.86	20.93	21.80
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## 8.7.31 Power Reduced Level 5&amp;6 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	<b>21.56</b>	21.28	21.33	21.80	21.51	21.13	21.29	21.80
	1 (RB_Pos:50)	21.50	21.38	21.53	21.80	21.25	21.35	21.32	21.80
	1 (RB_Pos:99)	21.23	21.29	21.26	21.80	21.03	21.21	21.14	21.80
	50 (RB_Pos:0)	21.54	21.29	21.45	21.80	21.39	21.29	21.38	21.80
	50 (RB_Pos:25)	21.53	21.35	21.53	21.80	21.45	21.15	21.33	21.80
	50 (RB_Pos:50)	21.46	21.24	21.34	21.80	21.28	21.13	21.13	21.80
	100 (RB_Pos:0)	21.53	21.25	21.40	21.80	21.50	21.15	21.20	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	21.42	21.48	21.31	21.80	21.44	21.06	21.16	21.80
	1 (RB_Pos:38)	21.46	21.14	21.13	21.80	21.29	21.38	21.34	21.80
	1 (RB_Pos:74)	21.17	21.20	21.10	21.80	21.12	21.10	21.16	21.80
	36 (RB_Pos:0)	21.30	21.12	21.45	21.80	21.45	21.15	21.27	21.80
	36 (RB_Pos:20)	21.28	21.31	21.47	21.80	21.32	21.22	21.42	21.80
	36 (RB_Pos:39)	21.26	21.04	21.15	21.80	21.34	21.06	21.28	21.80
	75 (RB_Pos:0)	21.28	21.14	21.23	21.80	21.53	21.20	21.39	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	21.50	21.17	21.19	21.80	21.56	21.08	21.11	21.80
	1 (RB_Pos:25)	21.41	21.19	21.32	21.80	21.38	21.22	21.46	21.80
	1 (RB_Pos:49)	21.21	21.10	21.17	21.80	21.06	21.13	21.15	21.80
	25 (RB_Pos:0)	21.29	21.11	21.35	21.80	21.38	21.23	21.29	21.80
	25 (RB_Pos:12)	21.31	21.34	21.45	21.80	21.37	21.24	21.36	21.80
	25 (RB_Pos:25)	21.23	21.02	21.30	21.80	21.27	21.06	21.11	21.80
	50 (RB_Pos:0)	21.41	21.15	21.34	21.80	21.49	21.14	21.37	21.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	21.50	21.25	21.23	21.80	21.52	21.09	21.11	21.80
	1 (RB_Pos:13)	21.26	21.26	21.40	21.80	21.36	21.21	21.38	21.80
	1 (RB_Pos:24)	21.07	21.04	21.22	21.80	21.04	21.13	21.22	21.80
	12 (RB_Pos:0)	21.40	21.27	21.24	21.80	21.36	21.16	21.42	21.80

	12 (RB_Pos:6)	21.37	21.30	21.39	21.80	21.47	21.24	21.44	21.80
	12 (RB_Pos:13)	21.26	21.18	21.21	21.80	21.33	21.18	21.21	21.80
	25 (RB_Pos:0)	21.35	21.08	21.19	21.80	21.30	21.03	21.38	21.80

## 8.7.32 Power Reduced Level 1 of LTE Band 66

FDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	16.81	16.77	16.75	17.60	16.92	16.73	16.68	17.60
	1 (RB_Pos:50)	<b>16.92</b>	16.89	<b>16.92</b>	17.60	17.00	16.97	16.77	17.60
	1 (RB_Pos:99)	16.83	16.88	16.84	17.60	16.95	16.83	16.93	17.60
	50 (RB_Pos:0)	16.96	16.89	16.76	17.60	16.83	17.03	16.70	17.60
	50 (RB_Pos:25)	16.94	16.89	17.01	17.60	16.81	17.04	17.12	17.60
	50 (RB_Pos:50)	17.03	16.74	16.82	17.60	16.93	16.75	16.77	17.60
	100 (RB_Pos:0)	17.01	16.81	16.76	17.60	17.07	16.75	16.84	17.60
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	16.96	16.62	16.68	17.60	16.71	16.80	16.63	17.60
	1 (RB_Pos:38)	16.96	16.94	16.94	17.60	16.83	16.78	17.02	17.60
	1 (RB_Pos:74)	16.75	16.89	16.98	17.60	16.70	16.78	16.75	17.60
	36 (RB_Pos:0)	16.87	17.00	16.70	17.60	16.81	16.86	16.69	17.60
	36 (RB_Pos:20)	16.92	16.92	17.03	17.60	17.09	17.02	17.13	17.60
	36 (RB_Pos:39)	17.05	16.89	16.79	17.60	17.05	16.85	16.92	17.60
	75 (RB_Pos:0)	17.10	16.67	16.82	17.60	17.03	16.86	16.72	17.60
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	16.78	16.79	16.63	17.60	16.68	16.84	16.82	17.60
	1 (RB_Pos:25)	16.99	16.88	16.86	17.60	16.78	16.96	16.96	17.60
	1 (RB_Pos:49)	16.83	16.93	16.90	17.60	16.71	16.96	16.88	17.60
	25 (RB_Pos:0)	16.81	17.03	16.82	17.60	16.94	16.77	16.85	17.60
	25 (RB_Pos:12)	17.01	16.87	17.09	17.60	16.87	16.81	16.96	17.60
	25 (RB_Pos:25)	17.11	16.76	16.93	17.60	17.00	16.72	16.75	17.60
	50 (RB_Pos:0)	17.05	16.74	16.85	17.60	16.86	16.67	16.63	17.60
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	16.76	16.65	16.62	17.60	16.94	16.73	16.74	17.60
	1 (RB_Pos:13)	16.98	17.00	16.99	17.60	17.06	16.86	16.93	17.60

	1 (RB_Pos:24)	16.88	16.74	16.83	17.60	16.87	16.85	16.88	17.60
	12 (RB_Pos:0)	17.06	17.01	16.87	17.60	17.06	16.91	16.78	17.60
	12 (RB_Pos:6)	17.03	16.80	16.96	17.60	16.85	16.92	16.87	17.60
	12 (RB_Pos:13)	16.91	16.65	16.93	17.60	16.95	16.77	16.81	17.60
	25 (RB_Pos:0)	17.16	16.83	16.78	17.60	17.02	16.81	16.88	17.60
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131987	132322	132657		131987	132322	132657	
3.0 MHz	1 (RB_Pos:0)	16.92	16.85	16.82	17.60	16.80	16.76	16.62	17.60
	1 (RB_Pos:8)	16.91	17.00	16.77	17.60	17.07	16.94	16.87	17.60
	1 (RB_Pos:14)	16.74	16.84	16.77	17.60	16.89	16.93	16.80	17.60
	8 (RB_Pos:0)	16.89	17.01	16.63	17.60	16.88	17.01	16.86	17.60
	8 (RB_Pos:3)	17.08	17.04	16.87	17.60	16.79	16.97	16.98	17.60
	8 (RB_Pos:7)	16.89	16.84	16.78	17.60	17.02	16.71	16.83	17.60
	15 (RB_Pos:0)	17.14	16.71	16.65	17.60	17.08	16.81	16.86	17.60
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	16.79	16.83	16.86	17.60	16.81	16.86	16.61	17.60
	1 (RB_Pos:3)	16.95	16.77	16.93	17.60	17.04	16.97	17.01	17.60
	1 (RB_Pos:5)	16.96	16.86	16.84	17.60	16.91	17.01	16.99	17.60
	3 (RB_Pos:0)	16.89	16.82	16.84	17.60	17.04	17.03	16.88	17.60
	3 (RB_Pos:1)	16.86	16.96	16.95	17.60	17.02	16.91	16.97	17.60
	3 (RB_Pos:3)	17.13	16.76	16.73	17.60	16.96	16.70	16.78	17.60
	6 (RB_Pos:0)	17.03	16.83	16.77	17.60	17.15	16.78	16.61	17.60

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

FDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	13.73	13.75	13.67	14.60	13.67	13.86	13.73	14.60
	1 (RB_Pos:50)	13.87	13.85	<b>13.91</b>	14.60	13.72	13.86	13.83	14.60
	1 (RB_Pos:99)	13.75	13.75	13.81	14.60	13.79	13.76	13.75	14.60
	50 (RB_Pos:0)	13.96	13.83	13.71	14.60	13.89	13.72	13.75	14.60
	50 (RB_Pos:25)	13.91	13.85	13.96	14.60	14.02	13.97	14.07	14.60
	50 (RB_Pos:50)	13.97	13.69	13.73	14.60	13.89	13.76	13.76	14.60
	100 (RB_Pos:0)	13.96	13.76	13.69	14.60	14.09	13.91	13.66	14.60
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	

15 MHz	1 (RB_Pos:0)	13.80	13.67	13.58	14.60	13.77	13.83	13.79	14.60
	1 (RB_Pos:38)	13.86	13.95	13.81	14.60	13.86	13.83	13.88	14.60
	1 (RB_Pos:74)	13.74	13.78	13.81	14.60	13.83	13.74	13.79	14.60
	36 (RB_Pos:0)	13.89	13.70	13.86	14.60	13.91	13.91	13.78	14.60
	36 (RB_Pos:20)	13.97	13.81	13.82	14.60	13.97	13.85	13.84	14.60
	36 (RB_Pos:39)	13.97	13.82	13.77	14.60	13.90	13.76	13.81	14.60
	75 (RB_Pos:0)	13.97	13.81	13.67	14.60	13.84	13.89	13.60	14.60
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	13.73	13.86	13.52	14.60	13.74	13.79	13.77	14.60
	1 (RB_Pos:25)	13.84	13.89	13.85	14.60	13.95	13.81	13.81	14.60
	1 (RB_Pos:49)	13.90	13.79	13.92	14.60	13.71	13.68	13.67	14.60
	25 (RB_Pos:0)	13.81	13.69	13.59	14.60	14.01	13.80	13.61	14.60
	25 (RB_Pos:12)	13.79	13.91	14.00	14.60	13.94	13.74	14.09	14.60
	25 (RB_Pos:25)	14.00	13.54	13.77	14.60	13.83	13.67	13.59	14.60
	50 (RB_Pos:0)	14.02	13.66	13.55	14.60	13.87	13.75	13.69	14.60
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	13.77	13.87	13.61	14.60	13.73	13.81	13.76	14.60
	1 (RB_Pos:13)	13.84	13.74	14.02	14.60	13.92	13.89	13.98	14.60
	1 (RB_Pos:24)	13.88	13.86	13.84	14.60	13.63	13.74	13.74	14.60
	12 (RB_Pos:0)	14.05	13.75	13.72	14.60	14.08	13.84	13.58	14.60
	12 (RB_Pos:6)	14.05	13.73	13.97	14.60	13.86	13.79	14.01	14.60
	12 (RB_Pos:13)	13.82	13.55	13.80	14.60	13.91	13.72	13.74	14.60
	25 (RB_Pos:0)	14.10	13.80	13.80	14.60	13.94	13.80	13.55	14.60
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131987	132322	132657		131987	132322	132657	
3.0 MHz	1 (RB_Pos:0)	13.64	13.66	13.60	14.60	13.70	13.68	13.52	14.60
	1 (RB_Pos:8)	13.86	13.94	14.05	14.60	13.84	13.89	13.87	14.60
	1 (RB_Pos:14)	13.69	13.74	13.80	14.60	13.64	13.62	13.69	14.60
	8 (RB_Pos:0)	14.04	13.68	13.83	14.60	14.09	13.72	13.76	14.60
	8 (RB_Pos:3)	13.83	13.96	14.05	14.60	13.77	13.73	13.99	14.60
	8 (RB_Pos:7)	13.95	13.84	13.84	14.60	13.98	13.65	13.78	14.60
	15 (RB_Pos:0)	14.10	13.73	13.77	14.60	13.89	13.81	13.81	14.60
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	13.84	13.88	13.69	14.60	13.88	13.86	13.63	14.60
	1 (RB_Pos:3)	14.01	13.88	13.91	14.60	13.76	13.76	14.05	14.60

	1 (RB_Pos:5)	13.68	13.61	13.93	14.60	13.76	13.90	13.96	14.60
	3 (RB_Pos:0)	13.87	13.94	13.58	14.60	14.07	13.70	13.76	14.60
	3 (RB_Pos:1)	13.93	13.90	14.10	14.60	13.90	13.89	14.09	14.60
	3 (RB_Pos:3)	14.04	13.65	13.82	14.60	14.06	13.73	13.75	14.60
	6 (RB_Pos:0)	13.83	13.87	13.63	14.60	14.02	13.63	13.58	14.60

## 8.7.34 Power Reduced Level 4&amp;5&amp;6 of LTE Band 66

FDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	19.27	19.21	19.24	20.10	19.24	19.31	19.22	20.10
	1 (RB_Pos:50)	19.38	19.32	<b>19.45</b>	20.10	19.46	19.47	19.41	20.10
	1 (RB_Pos:99)	19.30	19.24	19.39	20.10	19.42	19.30	19.43	20.10
	50 (RB_Pos:0)	19.42	19.36	19.25	20.10	19.44	19.45	19.17	20.10
	50 (RB_Pos:25)	19.40	19.39	19.47	20.10	19.32	19.26	19.40	20.10
	50 (RB_Pos:50)	19.51	19.24	19.30	20.10	19.47	19.10	19.23	20.10
	100 (RB_Pos:0)	19.46	19.32	19.27	20.10	19.49	19.47	19.29	20.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132047	132322	132597		132047	132322	132597	
15 MHz	1 (RB_Pos:0)	19.13	19.36	19.21	20.10	19.38	19.25	19.17	20.10
	1 (RB_Pos:38)	19.27	19.47	19.33	20.10	19.31	19.45	19.35	20.10
	1 (RB_Pos:74)	19.38	19.19	19.27	20.10	19.34	19.16	19.34	20.10
	36 (RB_Pos:0)	19.27	19.33	19.32	20.10	19.38	19.34	19.39	20.10
	36 (RB_Pos:20)	19.49	19.46	19.43	20.10	19.52	19.29	19.43	20.10
	36 (RB_Pos:39)	19.55	19.25	19.38	20.10	19.51	19.15	19.25	20.10
	75 (RB_Pos:0)	19.37	19.30	19.12	20.10	19.58	19.39	19.13	20.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	19.16	19.23	19.15	20.10	19.21	19.30	19.28	20.10
	1 (RB_Pos:25)	19.33	19.31	19.52	20.10	19.48	19.43	19.42	20.10
	1 (RB_Pos:49)	19.29	19.38	19.54	20.10	19.26	19.09	19.33	20.10
	25 (RB_Pos:0)	19.29	19.34	19.31	20.10	19.33	19.35	19.17	20.10
	25 (RB_Pos:12)	19.52	19.26	19.53	20.10	19.46	19.48	19.34	20.10
	25 (RB_Pos:25)	19.56	19.23	19.39	20.10	19.62	19.10	19.15	20.10
	50 (RB_Pos:0)	19.33	19.45	19.40	20.10	19.44	19.17	19.29	20.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	131997	132322	132647		131997	132322	132647	



5 MHz	1 (RB_Pos:0)	19.40	19.36	19.21	20.10	19.28	19.13	19.37	20.10
	1 (RB_Pos:13)	19.34	19.39	19.53	20.10	19.33	19.23	19.44	20.10
	1 (RB_Pos:24)	19.45	19.21	19.53	20.10	19.42	19.36	19.48	20.10
	12 (RB_Pos:0)	19.34	19.35	19.17	20.10	19.49	19.27	19.17	20.10
	12 (RB_Pos:6)	19.35	19.37	19.62	20.10	19.52	19.48	19.42	20.10
	12 (RB_Pos:13)	19.41	19.32	19.39	20.10	19.58	19.34	19.16	20.10
	25 (RB_Pos:0)	19.40	19.18	19.41	20.10	19.35	19.20	19.14	20.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131987	132322	132657		131987	132322	132657	
3.0 MHz	1 (RB_Pos:0)	19.42	19.08	19.19	20.10	19.41	19.15	19.16	20.10
	1 (RB_Pos:8)	19.53	19.21	19.34	20.10	19.25	19.19	19.55	20.10
	1 (RB_Pos:14)	19.32	19.29	19.25	20.10	19.23	19.29	19.49	20.10
	8 (RB_Pos:0)	19.31	19.34	19.18	20.10	19.36	19.30	19.11	20.10
	8 (RB_Pos:3)	19.45	19.38	19.40	20.10	19.51	19.54	19.43	20.10
	8 (RB_Pos:7)	19.65	19.36	19.42	20.10	19.37	19.09	19.37	20.10
	15 (RB_Pos:0)	19.58	19.20	19.22	20.10	19.35	19.36	19.18	20.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131979	132322	132665		131979	132322	132665	
1.4 MHz	1 (RB_Pos:0)	19.38	19.16	19.10	20.10	19.22	19.34	19.19	20.10
	1 (RB_Pos:3)	19.23	19.36	19.39	20.10	19.39	19.29	19.53	20.10
	1 (RB_Pos:5)	19.18	19.15	19.26	20.10	19.27	19.14	19.35	20.10
	3 (RB_Pos:0)	19.57	19.24	19.36	20.10	19.40	19.38	19.37	20.10
	3 (RB_Pos:1)	19.30	19.52	19.32	20.10	19.48	19.36	19.51	20.10
	3 (RB_Pos:3)	19.48	19.29	19.22	20.10	19.59	19.14	19.36	20.10
	6 (RB_Pos:0)	19.40	19.30	19.13	20.10	19.36	19.31	19.25	20.10

### 8.7.35 Power Reduced Level 7&8&9 of LTE Band 66

FDD LTE Band 66									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	132072	132322	132572		132072	132322	132572	
20 MHz	1 (RB_Pos:0)	21.17	21.20	21.09	22.10	21.19	21.11	21.13	22.10
	1 (RB_Pos:50)	21.29	<b>21.31</b>	21.30	22.10	21.36	21.36	21.26	22.10
	1 (RB_Pos:99)	21.20	21.29	21.24	22.10	21.17	21.22	21.17	22.10
	50 (RB_Pos:0)	21.36	21.30	21.21	22.10	20.87	20.87	20.76	22.10
	50 (RB_Pos:25)	21.34	21.29	21.37	22.10	20.89	20.96	20.85	22.10
	50 (RB_Pos:50)	21.43	21.19	21.25	22.10	21.09	20.75	20.66	22.10
	100 (RB_Pos:0)	21.38	21.24	21.15	22.10	20.99	20.83	20.57	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up
	Channel	132072	132322	132572		132072	132322	132572	

	Channel	132047	132322	132597	limit (dBm)	132047	132322	132597	limit (dBm)
15 MHz	1 (RB_Pos:0)	21.09	21.09	21.08	22.10	21.08	21.08	21.15	22.10
	1 (RB_Pos:38)	21.40	21.40	21.18	22.10	21.40	21.32	21.20	22.10
	1 (RB_Pos:74)	21.35	21.19	21.26	22.10	21.18	21.20	21.25	22.10
	36 (RB_Pos:0)	21.46	21.43	21.17	22.10	21.00	20.96	20.91	22.10
	36 (RB_Pos:20)	21.46	21.14	21.52	22.10	20.77	20.93	20.90	22.10
	36 (RB_Pos:39)	21.34	21.25	21.27	22.10	21.11	20.70	20.66	22.10
	75 (RB_Pos:0)	21.46	21.38	21.17	22.10	20.93	20.69	20.60	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		132022	132322	132622		132022	132322	132622	
10 MHz	1 (RB_Pos:0)	21.12	21.25	21.02	22.10	21.21	21.21	21.11	22.10
	1 (RB_Pos:25)	21.41	21.23	21.25	22.10	21.27	21.45	21.33	22.10
	1 (RB_Pos:49)	21.27	21.18	21.09	22.10	21.23	21.38	21.24	22.10
	25 (RB_Pos:0)	21.33	21.37	21.15	22.10	20.92	20.84	20.66	22.10
	25 (RB_Pos:12)	21.39	21.30	21.46	22.10	20.76	20.91	20.88	22.10
	25 (RB_Pos:25)	21.45	21.13	21.23	22.10	21.01	20.90	20.68	22.10
	50 (RB_Pos:0)	21.29	21.21	21.07	22.10	20.98	20.96	20.57	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131997	132322	132647		131997	132322	132647	
5 MHz	1 (RB_Pos:0)	21.29	21.05	20.94	22.10	21.11	21.10	21.17	22.10
	1 (RB_Pos:13)	21.31	21.41	21.23	22.10	21.31	21.46	21.23	22.10
	1 (RB_Pos:24)	21.09	21.32	21.36	22.10	21.15	21.37	21.29	22.10
	12 (RB_Pos:0)	21.40	21.15	21.25	22.10	20.87	21.00	20.90	22.10
	12 (RB_Pos:6)	21.26	21.33	21.31	22.10	20.75	21.10	20.97	22.10
	12 (RB_Pos:13)	21.45	21.33	21.21	22.10	21.10	20.74	20.78	22.10
	25 (RB_Pos:0)	21.23	21.25	21.29	22.10	20.96	20.69	20.43	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131987	132322	132657		131987	132322	132657	
3.0 MHz	1 (RB_Pos:0)	21.12	21.14	21.06	22.10	21.27	21.35	21.10	22.10
	1 (RB_Pos:8)	21.24	21.24	21.24	22.10	21.43	21.42	21.33	22.10
	1 (RB_Pos:14)	21.15	21.37	21.32	22.10	21.20	21.39	21.33	22.10
	8 (RB_Pos:0)	21.23	21.36	21.26	22.10	20.72	20.84	20.88	22.10
	8 (RB_Pos:3)	21.38	21.16	21.46	22.10	20.91	20.89	20.86	22.10
	8 (RB_Pos:7)	21.34	21.26	21.22	22.10	21.15	20.70	20.55	22.10
	15 (RB_Pos:0)	21.41	21.30	21.04	22.10	20.94	20.92	20.45	22.10
Bandwidth (MHz)	RB Set	Power (dBm)							
	Channel	QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
		131979	132322	132665		131979	132322	132665	

1.4 MHz	1 (RB_Pos:0)	21.15	21.27	21.03	22.10	21.09	21.26	20.96	22.10
	1 (RB_Pos:3)	21.42	21.19	21.39	22.10	21.14	21.27	21.24	22.10
	1 (RB_Pos:5)	21.17	21.36	21.19	22.10	21.29	21.43	21.20	22.10
	3 (RB_Pos:0)	21.28	21.22	21.34	22.10	20.78	20.87	20.81	22.10
	3 (RB_Pos:1)	21.19	21.30	21.28	22.10	20.78	21.07	20.87	22.10
	3 (RB_Pos:3)	21.57	21.17	21.25	22.10	21.12	20.80	20.63	22.10
	6 (RB_Pos:0)	21.29	21.34	21.21	22.10	21.04	20.86	20.63	22.10

## 8.7.36 Power Reduced Level 1 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	20.40	20.38	20.47	20.80	20.19	20.20	20.34	20.80
	1 (RB_Pos:50)	20.47	20.49	<b>20.58</b>	20.80	20.37	20.28	20.57	20.80
	1 (RB_Pos:99)	20.26	20.27	20.39	20.80	20.15	20.03	20.27	20.80
	50 (RB_Pos:0)	20.42	20.40	20.37	20.80	20.28	20.16	20.24	20.80
	50 (RB_Pos:25)	20.42	20.40	20.44	20.80	20.17	20.23	20.36	20.80
	50 (RB_Pos:50)	20.33	20.37	20.36	20.80	20.08	20.33	20.22	20.80
	100 (RB_Pos:0)	20.41	20.43	20.38	20.80	20.21	20.25	20.35	20.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	20.20	20.21	20.24	20.80	20.26	20.20	20.41	20.80
	1 (RB_Pos:38)	20.47	20.48	20.51	20.80	20.42	20.27	20.50	20.80
	1 (RB_Pos:74)	20.01	20.19	20.25	20.80	20.12	20.04	20.27	20.80
	36 (RB_Pos:0)	20.40	20.32	20.25	20.80	20.36	20.33	20.20	20.80
	36 (RB_Pos:20)	20.17	20.31	20.35	20.80	20.28	20.15	20.43	20.80
	36 (RB_Pos:39)	20.17	20.13	20.23	20.80	20.30	20.22	20.13	20.80
	75 (RB_Pos:0)	20.29	20.32	20.31	20.80	20.18	20.32	20.32	20.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	20.39	20.25	20.41	20.80	20.18	20.29	20.44	20.80
	1 (RB_Pos:25)	20.47	20.47	20.50	20.80	20.39	20.40	20.38	20.80
	1 (RB_Pos:49)	20.17	20.07	20.14	20.80	20.20	20.06	20.22	20.80
	25 (RB_Pos:0)	20.32	20.32	20.30	20.80	20.41	20.29	20.30	20.80
	25 (RB_Pos:12)	20.29	20.38	20.31	20.80	20.37	20.16	20.39	20.80
	25 (RB_Pos:25)	20.09	20.32	20.25	20.80	20.17	20.18	20.21	20.80
	50 (RB_Pos:0)	20.21	20.29	20.14	20.80	20.40	20.28	20.13	20.80
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)

	Channel	37775	38000	38225	limit (dBm)	37775	38000	38225	limit (dBm)
5MHz	1 (RB_Pos:0)	20.19	20.21	20.25	20.80	20.18	20.21	20.40	20.80
	1 (RB_Pos:13)	20.45	20.36	20.57	20.80	20.30	20.30	20.38	20.80
	1 (RB_Pos:24)	20.26	20.03	20.38	20.80	20.03	20.19	20.28	20.80
	12 (RB_Pos:0)	20.22	20.34	20.37	20.80	20.41	20.27	20.28	20.80
	12 (RB_Pos:6)	20.22	20.20	20.36	20.80	20.32	20.32	20.38	20.80
	12 (RB_Pos:13)	20.23	20.16	20.17	20.80	20.32	20.16	20.33	20.80
	25 (RB_Pos:0)	20.34	20.33	20.17	20.80	20.41	20.40	20.14	20.80

### 8.7.37 Power Reduced Level 2&3 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	19.88	19.92	19.95	20.30	19.64	19.89	19.88	20.30
	1 (RB_Pos:50)	19.94	19.93	<b>20.04</b>	20.30	19.84	19.82	19.93	20.30
	1 (RB_Pos:99)	19.75	19.76	19.89	20.30	19.52	19.65	19.73	20.30
	50 (RB_Pos:0)	19.92	19.85	19.85	20.30	19.75	19.83	19.80	20.30
	50 (RB_Pos:25)	19.89	19.86	19.92	20.30	19.76	19.66	19.86	20.30
	50 (RB_Pos:50)	19.83	19.85	19.86	20.30	19.83	19.65	19.85	20.30
	100 (RB_Pos:0)	19.86	19.88	19.87	20.30	19.75	19.88	19.80	20.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	19.87	19.90	19.83	20.30	19.76	19.70	19.71	20.30
	1 (RB_Pos:38)	19.89	19.74	19.80	20.30	19.93	19.80	20.02	20.30
	1 (RB_Pos:74)	19.71	19.69	19.64	20.30	19.55	19.52	19.79	20.30
	36 (RB_Pos:0)	19.88	19.68	19.80	20.30	19.79	19.69	19.75	20.30
	36 (RB_Pos:20)	19.74	19.85	19.79	20.30	19.71	19.70	19.88	20.30
	36 (RB_Pos:39)	19.80	19.71	19.72	20.30	19.67	19.62	19.71	20.30
	75 (RB_Pos:0)	19.63	19.75	19.67	20.30	19.71	19.63	19.83	20.30
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	19.78	19.91	19.95	20.30	19.83	19.72	19.85	20.30
	1 (RB_Pos:25)	19.87	19.77	19.89	20.30	19.94	19.87	19.83	20.30
	1 (RB_Pos:49)	19.66	19.73	19.79	20.30	19.68	19.52	19.77	20.30
	25 (RB_Pos:0)	19.70	19.66	19.63	20.30	19.89	19.76	19.71	20.30
	25 (RB_Pos:12)	19.72	19.84	19.87	20.30	19.74	19.84	19.72	20.30
	25 (RB_Pos:25)	19.61	19.64	19.75	20.30	19.69	19.60	19.86	20.30
	50 (RB_Pos:0)	19.70	19.63	19.80	20.30	19.67	19.75	19.76	20.30

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	19.68	19.83	19.81	20.30	19.71	19.67	19.91	20.30
	1 (RB_Pos:13)	19.89	19.85	19.84	20.30	19.75	19.69	19.92	20.30
	1 (RB_Pos:24)	19.57	19.76	19.67	20.30	19.73	19.57	19.87	20.30
	12 (RB_Pos:0)	19.90	19.63	19.76	20.30	19.90	19.71	19.68	20.30
	12 (RB_Pos:6)	19.86	19.70	19.75	20.30	19.88	19.62	19.76	20.30
	12 (RB_Pos:13)	19.68	19.83	19.68	20.30	19.80	19.73	19.63	20.30
	25 (RB_Pos:0)	19.81	19.68	19.81	20.30	19.68	19.67	19.63	20.30

## 8.7.38 Power Reduced Level 1 of LTE Band 41

TDD LTE Band 41													
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39750	40185	40620	41055	41490		39750	40185	40620	41055	41490	
20MHz	1 (RB_Pos:0)	20.08	19.95	20.02	19.96	20.35	20.80	19.91	19.80	19.82	19.78	20.27	20.80
	1 (RB_Pos:50)	20.19	20.08	20.13	20.08	<b>20.47</b>	20.80	20.09	20.02	19.95	19.99	20.38	20.80
	1 (RB_Pos:99)	19.95	19.89	19.91	19.80	20.31	20.80	19.92	19.77	19.86	19.84	20.14	20.80
	50 (RB_Pos:0)	20.00	19.96	20.03	19.86	20.35	20.80	19.80	19.72	19.93	19.80	20.33	20.80
	50 (RB_Pos:25)	20.12	20.08	20.13	20.12	20.37	20.80	19.95	19.83	19.93	19.89	20.20	20.80
	50 (RB_Pos:50)	20.05	19.91	20.01	19.99	20.22	20.80	19.93	19.82	19.88	19.92	20.11	20.80
	100 (RB_Pos:0)	20.03	20.02	20.04	19.99	20.32	20.80	19.88	19.84	19.94	19.77	20.29	20.80
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39725	40160	40620	41080	41515		39725	40160	40620	41080	41515	
15MHz	1 (RB_Pos:0)	19.91	19.81	20.01	19.79	20.17	20.80	19.91	19.90	20.00	19.89	20.28	20.80
	1 (RB_Pos:50)	20.05	19.92	20.06	19.97	20.45	20.80	20.04	19.99	19.92	19.92	20.43	20.80
	1 (RB_Pos:99)	19.87	19.86	19.87	19.75	20.28	20.80	19.93	19.79	19.82	19.79	20.16	20.80
	50 (RB_Pos:0)	19.76	19.61	20.02	19.65	20.16	20.80	19.78	19.75	19.85	19.78	20.33	20.80
	50 (RB_Pos:25)	20.03	19.96	20.08	20.00	20.21	20.80	20.05	20.02	20.12	20.04	20.35	20.80
	50 (RB_Pos:50)	19.95	19.94	19.82	19.81	20.08	20.80	20.04	20.01	19.99	20.04	20.07	20.80
	100 (RB_Pos:0)	19.92	19.92	19.87	19.84	20.21	20.80	19.82	19.73	19.81	19.77	20.11	20.80
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
	Channel	39700	40135	40620	41105	41540		39700	40135	40620	41105	41540	
10MHz	1 (RB_Pos:0)	19.84	19.80	19.92	19.76	20.18	20.80	19.87	19.78	19.90	19.75	20.33	20.80
	1 (RB_Pos:50)	20.13	19.98	20.05	20.09	20.33	20.80	20.16	20.14	20.11	20.11	20.37	20.80

Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
Channel	39675	40110	40620	41130	41565	39675		40110	40620	41130	41565		
5MHz	1 (RB_Pos:99)	19.78	19.68	19.84	19.69	20.07	20.80	19.83	19.75	19.76	19.74	20.19	20.80
	50 (RB_Pos:0)	19.78	19.70	20.01	19.71	20.13	20.80	19.91	19.90	19.83	19.81	20.16	20.80
	50 (RB_Pos:25)	19.99	19.96	19.89	19.97	20.20	20.80	19.94	19.94	20.04	19.84	20.12	20.80
	50 (RB_Pos:50)	19.86	19.75	19.80	19.81	20.10	20.80	19.84	19.83	19.91	19.71	20.19	20.80
	100 (RB_Pos:0)	20.01	19.94	19.87	20.01	20.25	20.80	19.85	19.74	19.88	19.78	20.30	20.80
5MHz	1 (RB_Pos:0)	19.94	19.93	20.00	19.90	20.32	20.80	20.04	20.01	19.89	19.89	20.17	20.80
	1 (RB_Pos:50)	20.14	20.13	20.05	20.10	20.36	20.80	19.96	19.91	20.12	19.83	20.44	20.80
	1 (RB_Pos:99)	19.72	19.68	19.69	19.64	20.24	20.80	19.94	19.89	19.68	19.81	20.29	20.80
	50 (RB_Pos:0)	19.83	19.83	19.82	19.81	20.34	20.80	19.96	19.91	19.89	19.96	20.35	20.80
	50 (RB_Pos:25)	20.02	19.97	20.12	19.97	20.21	20.80	19.93	19.88	19.92	19.80	20.24	20.80
	50 (RB_Pos:50)	19.96	19.83	19.94	19.92	20.01	20.80	19.85	19.74	19.78	19.72	19.97	20.80
	100 (RB_Pos:0)	19.93	19.88	19.92	19.86	20.22	20.80	19.91	19.76	19.82	19.85	20.17	20.80

## 8.7.39 Power Reduced Level 2&amp;3 of LTE Band 41

TDD LTE Band 41													
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
Channel	39750	40185	40620	41055	41490	39750		40185	40620	41055	41490		
20MHz	1 (RB_Pos:0)	19.53	19.52	19.44	19.41	19.85	20.30	19.40	19.37	19.19	19.34	19.74	20.30
	1 (RB_Pos:50)	19.65	19.56	19.58	19.55	<b>19.97</b>	20.30	19.51	19.51	19.49	19.38	19.72	20.30
	1 (RB_Pos:99)	19.43	19.43	19.39	19.38	19.79	20.30	19.31	19.16	19.25	19.20	19.69	20.30
	50 (RB_Pos:0)	19.48	19.38	19.54	19.47	19.85	20.30	19.37	19.30	19.42	19.23	19.63	20.30
	50 (RB_Pos:25)	19.61	19.52	19.57	19.61	19.88	20.30	19.57	19.52	19.43	19.49	19.67	20.30
	50 (RB_Pos:50)	19.58	19.45	19.52	19.54	19.74	20.30	19.49	19.35	19.34	19.41	19.66	20.30
	100 (RB_Pos:0)	19.52	19.50	19.52	19.44	19.78	20.30	19.36	19.26	19.32	19.28	19.70	20.30
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
Channel	39725	40160	40620	41080	41515	39725		40160	40620	41080	41515		
15MHz	1 (RB_Pos:0)	19.51	19.46	19.20	19.40	19.62	20.30	19.35	19.22	19.22	19.23	19.64	20.30
	1 (RB_Pos:50)	19.50	19.41	19.55	19.44	19.77	20.30	19.45	19.37	19.45	19.30	19.83	20.30
	1 (RB_Pos:99)	19.26	19.26	19.26	19.20	19.56	20.30	19.34	19.26	19.37	19.33	19.73	20.30
	50 (RB_Pos:0)	19.42	19.30	19.42	19.34	19.70	20.30	19.28	19.21	19.49	19.27	19.67	20.30
	50 (RB_Pos:25)	19.49	19.46	19.54	19.43	19.85	20.30	19.37	19.27	19.35	19.31	19.64	20.30
	50 (RB_Pos:50)	19.51	19.43	19.31	19.39	19.57	20.30	19.33	19.26	19.37	19.24	19.51	20.30
	100 (RB_Pos:0)	19.29	19.24	19.29	19.19	19.70	20.30	19.49	19.42	19.51	19.44	19.68	20.30
Bandwidth	RB Set	Power (dBm)											

(MHz)	Channel	QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
		39700	40135	40620	41105	41540		39700	40135	40620	41105	41540	
10MHz	1 (RB_Pos:0)	19.35	19.30	19.23	19.34	19.65	20.30	19.29	19.17	19.32	19.29	19.63	20.30
	1 (RB_Pos:50)	19.58	19.55	19.54	19.47	19.91	20.30	19.52	19.47	19.55	19.40	19.94	20.30
	1 (RB_Pos:99)	19.29	19.16	19.29	19.20	19.77	20.30	19.39	19.36	19.24	19.24	19.76	20.30
	50 (RB_Pos:0)	19.41	19.34	19.34	19.35	19.82	20.30	19.46	19.34	19.49	19.42	19.85	20.30
	50 (RB_Pos:25)	19.57	19.54	19.48	19.51	19.74	20.30	19.45	19.31	19.37	19.33	19.87	20.30
	50 (RB_Pos:50)	19.58	19.45	19.33	19.56	19.50	20.30	19.51	19.41	19.51	19.36	19.52	20.30
	100 (RB_Pos:0)	19.28	19.22	19.27	19.19	19.53	20.30	19.29	19.15	19.50	19.16	19.70	20.30
Bandwidth (MHz)	RB Set	Power (dBm)											
		QPSK					Tune up limit (dBm)	16QAM					Tune up limit (dBm)
Channel	39675	40110	40620	41130	41565	39675		40110	40620	41130	41565		
5MHz	1 (RB_Pos:0)	19.51	19.43	19.35	19.45	19.72	20.30	19.43	19.36	19.28	19.37	19.79	20.30
	1 (RB_Pos:50)	19.57	19.53	19.47	19.49	19.93	20.30	19.43	19.41	19.37	19.36	19.77	20.30
	1 (RB_Pos:99)	19.41	19.29	19.24	19.29	19.76	20.30	19.40	19.27	19.17	19.38	19.58	20.30
	50 (RB_Pos:0)	19.34	19.33	19.49	19.22	19.72	20.30	19.31	19.19	19.53	19.16	19.70	20.30
	50 (RB_Pos:25)	19.41	19.40	19.51	19.27	19.83	20.30	19.44	19.44	19.35	19.30	19.86	20.30
	50 (RB_Pos:50)	19.36	19.26	19.27	19.36	19.58	20.30	19.39	19.25	19.38	19.31	19.74	20.30
	100 (RB_Pos:0)	19.35	19.20	19.52	19.29	19.64	20.30	19.38	19.29	19.51	19.24	19.57	20.30

## 8.7.40 Power Reduced Level 1 of 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
2.4 (2.4~2.4835)	802.11b	1	2412	9.72	10.00	No
		2	2417	15.39	16.00	Yes
		6	2437	<b>15.60</b>	16.00	Yes
		10	2457	15.55	16.00	Yes
		11	2462	11.60	12.00	No
	802.11g	1	2412	15.01	15.50	No
		6	2437	15.03	15.50	No
		11	2462	15.11	15.50	No
	802.11n(HT20)	1	2412	15.02	15.50	No
		6	2437	14.89	15.50	No
		11	2462	15.98	15.50	No

## 8.7.41 Power Reduced Level 2&amp;4 of 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
2.4 (2.4~2.4835)	802.11b	1	2412	9.72	10.00	No
		2	2417	13.43	14.50	No
		6	2437	<b>13.66</b>	14.50	Yes
		10	2457	13.61	14.50	No
		11	2462	11.60	12.00	No
	802.11g	1	2412	13.41	14.50	No
		6	2437	13.25	14.50	No
		11	2462	13.33	14.50	No
	802.11n(HT20)	1	2412	13.28	14.50	No
		6	2437	13.18	14.50	No
		11	2462	13.30	14.50	No



## 8.7.42 Power Reduced Level 1 of 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
5.2 (5.15~5.25)	802.11a	36	5180	15.84	16.00	No
		44	5220	16.70	17.00	No
		48	5240	16.51	17.00	No
	802.11n(HT20)	36	5180	16.66	17.00	No
		44	5220	16.63	17.00	No
		48	5240	16.70	17.00	No
	802.11n(HT40)	38	5190	13.63	14.00	No
		46	5230	16.38	17.00	No
	802.11ac(VHT20)	36	5180	16.75	17.00	No
		44	5220	16.67	17.00	No
		48	5240	16.52	17.00	No
	802.11ac(VHT40)	38	5190	15.09	17.00	No
		46	5230	16.45	17.00	No
	802.11ac(VHT80)	42	5210	15.11	16.00	No
	5.3 (5.25~5.35)	802.11a	52	5260	16.57	17.00
60			5300	16.51	17.00	No
64			5320	16.88	17.00	No
802.11n(HT20)		52	5260	16.60	17.00	No
		60	5300	16.61	17.00	No
		64	5320	15.27	17.00	No
802.11n(HT40)		54	5270	<b>16.95</b>	17.00	Yes
		62	5310	13.46	14.00	Yes
802.11ac(VHT20)		52	5260	16.61	17.00	No
		60	5300	16.62	17.00	No
		64	5320	16.39	17.00	No
802.11ac(VHT40)		54	5270	16.48	17.00	No
		62	5310	14.25	15.00	No
802.11ac(VHT80)		58	5290	13.87	14.00	No
5.6 (5.47~5.725)		802.11a	100	5500	14.74	15.50
	116		5580	14.74	15.50	No
	140		5700	14.69	15.50	No
	802.11n(HT20)	100	5500	14.61	15.50	No
		116	5580	14.77	15.50	No
		140	5700	14.56	15.50	No
	802.11n(HT40)	102	5510	13.99	15.50	No
		118	5590	14.55	15.50	No
		134	5670	14.64	15.50	No
	802.11ac(VHT20)	100	5500	14.78	15.50	No
116		5580	14.51	15.50	No	

	802.11ac(VHT40)	140	5700	14.71	15.50	No
		102	5510	14.51	15.50	No
		118	5590	14.79	15.50	No
		134	5670	14.68	15.50	No
	802.11ac(VHT80)	106	5530	13.96	14.00	Yes
		122	5690	<b>15.14</b>	15.50	Yes
5.8 (5.725~5.850)	802.11a	149	5745	13.58	14.50	No
		157	5785	13.64	14.50	No
		165	5825	13.68	14.50	No
	802.11n(HT20)	149	5745	13.79	14.50	No
		157	5785	13.69	14.50	No
		165	5825	13.74	14.50	No
	802.11n(HT40)	151	5755	13.51	14.50	No
		159	5795	13.71	14.50	No
	802.11ac(VHT20)	149	5745	13.50	14.50	No
		157	5785	13.70	14.50	No
		165	5825	13.67	14.50	No
	802.11ac(VHT40)	151	5755	13.63	14.50	No
		159	5795	13.66	14.50	No
	802.11ac(VHT80)	155	5775	<b>13.98</b>	14.50	Yes

#### 8.7.43 Power Reduced Level 2 of 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
5.2 (5.15~5.25)	802.11a	36	5180	12.01	12.50	No
		44	5220	11.81	12.50	No
		48	5240	12.02	12.50	No
	802.11n(HT20)	36	5180	11.90	12.50	No
		44	5220	12.04	12.50	No
		48	5240	12.07	12.50	No
	802.11n(HT40)	38	5190	12.02	12.50	No
		46	5230	11.92	12.50	No
	802.11ac(VHT20)	36	5180	11.92	12.50	No
		44	5220	11.84	12.50	No
		48	5240	12.09	12.50	No
	802.11ac(VHT40)	38	5190	11.81	12.50	No
		46	5230	11.85	12.50	No
	802.11ac(VHT80)	42	5210	11.98	12.50	No
5.3 (5.25~5.35)	802.11a	52	5260	11.96	12.50	No
		60	5300	11.88	12.50	No
		64	5320	11.80	12.50	No

	802.11n(HT20)	52	5260	11.88	12.50	No	
		60	5300	12.05	12.50	No	
		64	5320	11.81	12.50	No	
	802.11n(HT40)	54	5270	11.99	12.50	No	
		62	5310	12.08	12.50	No	
	802.11ac(VHT20)	52	5260	12.00	12.50	No	
		60	5300	12.00	12.50	No	
		64	5320	12.10	12.50	No	
	802.11ac(VHT40)	54	5270	11.87	12.50	No	
		62	5310	11.90	12.50	No	
802.11ac(VHT80)	58	5290	<b>12.24</b>	12.50	Yes		
5.6 (5.47~5.725)	802.11a	100	5500	10.56	11.50	No	
		116	5580	10.60	11.50	No	
		140	5700	10.56	11.50	No	
	802.11n(HT20)	100	5500	10.65	11.50	No	
		116	5580	10.79	11.50	No	
		140	5700	10.60	11.50	No	
	802.11n(HT40)	102	5510	10.66	11.50	No	
		118	5590	10.67	11.50	No	
		134	5670	10.56	11.50	No	
	802.11ac(VHT20)	100	5500	10.74	11.50	No	
		116	5580	10.56	11.50	No	
		140	5700	10.75	11.50	No	
	802.11ac(VHT40)	102	5510	10.59	11.50	No	
		118	5590	10.77	11.50	No	
		134	5670	10.79	11.50	No	
	802.11ac(VHT80)	106	5530	<b>10.70</b>	11.50	Yes	
		122	5690	10.65	11.50	Yes	
	5.8 (5.725~5.850)	802.11a	149	5745	10.75	11.50	No
			157	5785	10.64	11.50	No
			165	5825	10.54	11.50	No
802.11n(HT20)		149	5745	10.60	11.50	No	
		157	5785	10.73	11.50	No	
		165	5825	10.60	11.50	No	
802.11n(HT40)		151	5755	10.69	11.50	No	
		159	5795	10.65	11.50	No	
802.11ac(VHT20)		149	5745	10.52	11.50	No	
		157	5785	10.50	11.50	No	
		165	5825	10.70	11.50	No	
802.11ac(VHT40)		151	5755	10.59	11.50	No	
		159	5795	10.64	11.50	No	
802.11ac(VHT80)		155	5775	<b>10.81</b>	11.50	Yes	

## 8.7.44 Power Reduced Level 3 of 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
5.2 (5.15~5.25)	802.11a	36	5180	15.84	17.50	No
		44	5220	17.34	17.50	No
		48	5240	17.42	17.50	No
	802.11n(HT20)	36	5180	17.28	17.50	No
		44	5220	17.11	17.50	No
		48	5240	17.08	17.50	No
	802.11n(HT40)	38	5190	13.63	14.50	No
		46	5230	17.08	17.50	No
	802.11ac(VHT20)	36	5180	17.12	17.50	No
		44	5220	17.33	17.50	No
		48	5240	17.22	17.50	No
	802.11ac(VHT40)	38	5190	15.09	17.00	No
		46	5230	16.45	17.50	No
	802.11ac(VHT80)	42	5210	14.25	14.50	No
	5.3 (5.25~5.35)	802.11a	52	5260	17.11	17.50
60			5300	17.02	17.50	No
64			5320	16.88	17.50	No
802.11n(HT20)		52	5260	17.12	17.50	No
		60	5300	17.15	17.50	No
		64	5320	15.27	17.00	No
802.11n(HT40)		54	5270	<b>17.06</b>	17.50	Yes
		62	5310	13.46	14.50	Yes
802.11ac(VHT20)		52	5260	17.11	17.50	No
		60	5300	17.12	17.50	No
		64	5320	16.39	17.50	No
802.11ac(VHT40)		54	5270	16.48	17.50	No
		62	5310	14.25	17.50	No
802.11ac(VHT80)		58	5290	13.87	14.50	No
5.6 (5.47~5.725)		802.11a	100	5500	16.77	18.50
	116		5580	17.74	18.50	No
	140		5700	17.92	18.50	No
	802.11n(HT20)	100	5500	15.95	17.50	No
		116	5580	17.76	18.50	No
		140	5700	17.27	18.50	No
	802.11n(HT40)	102	5510	13.99	14.50	Yes
		118	5590	<b>17.33</b>	18.50	Yes
		134	5670	16.48	17.50	Yes
	802.11ac(VHT20)	100	5500	17.17	18.50	No

		116	5580	17.73	18.50	No
		140	5700	17.09	18.50	No
	802.11ac(VHT40)	102	5510	14.51	15.50	No
		118	5590	16.38	17.50	No
		134	5670	16.63	17.50	No
	802.11ac(VHT80)	106	5530	13.96	15.00	No
122		5690	16.49	17.50	No	
5.8 (5.725~5.850)	802.11a	149	5745	17.94	18.50	No
		157	5785	17.78	18.50	No
		165	5825	17.79	18.50	No
	802.11n(HT20)	149	5745	17.77	18.50	No
		157	5785	17.89	18.50	No
		165	5825	17.75	18.50	No
	802.11n(HT40)	151	5755	<b>17.04</b>	18.50	Yes
		159	5795	16.50	17.50	Yes
	802.11ac(VHT20)	149	5745	17.61	18.50	No
		157	5785	17.78	18.50	No
		165	5825	17.88	18.50	No
	802.11ac(VHT40)	151	5755	16.72	18.50	No
		159	5795	16.62	18.50	No
	802.11ac(VHT80)	155	5775	16.40	17.50	No

#### 8.7.45 Power Reduced Level 4 of 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test
5.2 (5.15~5.25)	802.11a	36	5180	13.86	14.50	No
		44	5220	13.55	14.50	No
		48	5240	13.94	14.50	No
	802.11n(HT20)	36	5180	14.18	14.50	No
		44	5220	13.60	14.50	No
		48	5240	13.59	14.50	No
	802.11n(HT40)	38	5190	13.63	14.50	No
		46	5230	14.39	14.50	No
	802.11ac(VHT20)	36	5180	14.34	14.50	No
		44	5220	14.05	14.50	No
		48	5240	14.12	14.50	No
	802.11ac(VHT40)	38	5190	13.50	14.50	No
		46	5230	13.74	14.50	No
	802.11ac(VHT80)	42	5210	<b>14.25</b>	14.50	Yes
	5.3 (5.25~5.35)	802.11a	52	5260	13.56	14.50
60			5300	14.10	14.50	No

		64	5320	13.98	14.50	No
	802.11n(HT20)	52	5260	14.26	14.50	No
		60	5300	14.13	14.50	No
		64	5320	14.36	14.50	No
	802.11n(HT40)	54	5270	14.00	14.50	No
		62	5310	13.46	14.50	No
	802.11ac(VHT20)	52	5260	14.15	14.50	No
		60	5300	14.19	14.50	No
		64	5320	14.01	14.50	No
	802.11ac(VHT40)	54	5270	13.77	14.50	No
62		5310	14.17	14.50	No	
802.11ac(VHT80)	58	5290	<b>13.87</b>	14.50	Yes	
5.6 (5.47~5.725)	802.11a	100	5500	13.82	14.50	No
		116	5580	13.64	14.50	No
		140	5700	13.65	14.50	No
	802.11n(HT20)	100	5500	13.57	14.50	No
		116	5580	13.75	14.50	No
		140	5700	13.97	14.50	No
	802.11n(HT40)	102	5510	13.99	14.50	No
		118	5590	14.12	14.50	No
		134	5670	13.75	14.50	No
	802.11ac(VHT20)	100	5500	14.30	14.50	No
		116	5580	14.02	14.50	No
		140	5700	13.59	14.50	No
	802.11ac(VHT40)	102	5510	14.37	14.50	No
		118	5590	14.26	14.50	No
		134	5670	14.31	14.50	No
	802.11ac(VHT80)	106	5530	<b>14.41</b>	14.50	Yes
		122	5690	14.17	14.50	No

## 8.8 LTE Downlink Carrier Aggregation Setup Configurations

LTE Carrier Aggregation (CA) was defined in 3GPP release 10 and higher. The LTE device in CA mode has one Primary Component Carrier (PCC) and one or more Secondary Component Carriers (SCC). PCC acts as the anchor carrier and can optionally cross-schedule data transmission on SCC. The RRC connection is only handled by one cell, the PCC for downlink and uplink communications. After making a data connection to the PCC, the LTE device adds the SCC on the downlink only. All uplink communications and acknowledgements remain identical to release 8 specifications on the PCC. The combinations of downlink carrier aggregation supported by this device are listed in below.

1. This device supports carrier aggregation on uplink and downlink for inter and intra band. For the device supports combination bands and configurations are according to 3GPP and the combinations list as below table.
2. All permutations exist. No restrictions on Pcell & Scell combinations. Only LTE Band 29 and band 46 is limited to Scell.
3. The gray color table is covered by other combinations and no need to verify power.

### 8.8.1 Downlink Bandwidth Combination sets for Intra-Band CA

E-UTRA CA Configuration	
DL Intra-Band Contiguous CA	DL Intra-Band Non-Contiguous CA
CA_7B	CA_41A-41A
CA_7C	CA_7A-7A
CA_38C	CA_66A-66A
CA_41C	CA_4A-4A
CA_41D	/

### 8.8.2 Downlink Bandwidth Combination Sets for Inter-Band CA

E-UTRA CA Configuration				
DL Inter-Band (2Bands, 2CC)	DL Inter-Band (2Bands, 3CC)	DL Inter-Band (3Bands, 3CC)	DL Inter-Band (3Bands, 4CC)	DL Inter-Band (4Bands, 4CC)
CA_5A-41A	CA_4A-7C	/	/	/
CA_2A-5A	CA_5A-7C	/	/	/
CA_4A-5A	CA_26A-41C	/	/	/
CA_4A-7A	CA_7A-66A-66A	/	/	/
CA_5A-7A	CA_5A-66A-66A	/	/	/
CA_26A-41A	/	/	/	/
CA_5A-38A	/	/	/	/
CA_5A-66A	/	/	/	/

## 8.9 Power Confirmation for SAR test Exclusion for LTE Downlink CA

According to KDB 941225 D05A, the uplink maximum output power below was measured with downlink CA active on the channel with highest measured maximum output power when downlink CA is inactive. The downlink SCC channel was paired with the uplink channel as normal operation. For intra-band contiguous CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing per section 5.4.1A of 3GPP TS36.521. For intra-band non-contiguous CA, the downlink channel spacing between the component carriers was set to maximum separation from PCC and remain fully within the downlink transmission band. For Inter-band CA, the SCC downlink channel was set to near the middle of its transmission band.

### 8.9.1 EUT without Power Reduction (Full power)

#### Power Measurements for Intra-Band Contiguous Downlink CA

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7C	7	20M	20850	2510	1	0	2850	2630	7	20M	3042	2529.2	23.68	23.58
7B	7	15M	21100	2535	1	0	3100	2655	7	5M	3007	2645.7	23.66	23.54
38C	38	20M	38150	2610	1	49	38150	2610	38	20M	37952	2590.2	23.67	23.57
41C	41	20M	41490	2680	1	49	41490	2680	41	20M	41292	2660.2	23.49	23.35

#### Power Measurements for Intra-Band Non-Contiguous Downlink CA

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
41A-41A	41	20M	41490	2680	1	49	41490	2680	41	5M	39675	2498.5	23.49	23.37
7A-7A	7	20M	20850	2510	1	0	2850	2630	7	5M	3425	2687.5	23.68	23.55
66A-66A	66	20M	132572	1770	1	49	67036	2170	66	5M	66443	2110.7	23.40	23.27
4A-4A	4	20M	20050	1720	1	49	2050	2120	4	5M	2393	2154.3	23.38	23.17



**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
5A-41A	5	10M	20450	829	1	49	2450	874	41	20M	40620	2593	23.66	23.52
2A-5A	2	20M	18900	1880	1	49	900	1960	5	10M	2525	881.5	23.26	23.17
4A-5A	4	20M	20050	1720	1	49	2050	2120	5	10M	2525	881.5	23.38	23.31
4A-7A	4	20M	20050	1720	1	49	2050	2120	7	20M	3100	2655	23.38	23.29
5A-7A	5	10M	20450	829	1	49	2450	874	7	20M	3100	2655	23.66	23.47
26A-41A	26	15M	26965	841.5	1	49	8965	886.5	41	20M	40620	2593	23.86	23.67
5A-38A	5	10M	20450	829	1	49	2450	874	38	20M	38000	2595	23.66	23.54
5A-66A	5	10M	20450	829	1	49	2450	874	66	20M	66786	2145	23.66	23.48

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20050	1720	1	49	2050	2120	7	20M	3100	2655	7	20M	2902	2635.2	23.38	23.18
5A-7C	5	10M	20450	829	1	49	2450	874	7	20M	3100	2655	7	20M	2850	2630	23.66	23.57
26A-41C	26	15M	26965	841.5	1	49	8965	886.5	41	20M	40620	2593	41	20M	40422	2573.2	23.86	23.67
7A-66A-6A	7	20M	20850	2510	1	0	2850	2630	66	20M	66786	2145	66	5M	66443	2110.7	23.68	23.55
5A-66A-6A	5	10M	20450	829	1	49	2450	874	66	20M	66786	2145	66	5M	66443	2110.7	23.66	23.47

**Power Measurements for Intra-Band Contiguous Downlink CA (Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
41D	41	20M	41490	2680	1	49	41490	2680	41	20M	41298	2660.8	41	20M	41100	2641	23.49	23.31

## 8.9.2 EUT without Power Reduction (Level1)

**Power Measurements for Intra-Band Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7C	7	20M	20850	2510	1	0	2850	2630	7	20M	3042	2529.2	15.44	15.38
7B	7	15M	21100	2535	1	0	3100	2655	7	5M	3007	2645.7	15.41	15.34
38C	38	20M	38150	2610	1	49	38150	2610	38	20M	37952	2590.2	20.58	20.44
41C	41	20M	41490	2680	1	49	41490	2680	41	20M	41292	2660.2	20.47	20.35

**Power Measurements for Intra-Band Non-Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
41A-41A	41	20M	41490	2680	1	49	41490	2680	41	5M	39675	2498.5	20.47	20.37
7A-7A	7	20M	20850	2510	1	0	2850	2630	7	5M	3425	2687.5	15.44	15.32
66A-66A	66	20M	132072	1720	1	49	66536	2120	66	5M	67129	2179.3	16.92	16.77
4A-4A	4	20M	20050	1720	1	49	2050	2120	4	5M	2393	2154.3	17.80	17.67

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
2A-5A	2	20M	18900	1880	50	0	900	1960	5	10M	2525	881.5	16.68	16.47
4A-5A	4	20M	20050	1720	1	49	2050	2120	5	10M	2525	881.5	17.80	17.53
4A-7A	4	20M	20050	1720	1	49	2050	2120	7	20M	3100	2655	17.80	17.47

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20050	1720	1	49	2050	2120	7	20M	3100	2655	7	20M	2902	2635.2	17.80	17.66
7A-66A-6A	7	20M	20850	2510	1	0	2850	2630	66	20M	66786	2145	66	5M	66443	2110.7	15.44	15.33

**Power Measurements for Intra-Band Contiguous Downlink CA (Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
41D	41	20M	41490	2680	1	49	41490	2680	41	20M	41298	2660.8	41	20M	41100	2641	20.47	20.28

### 8.9.3 EUT without Power Reduction (Level2&3)

#### Power Measurements for Intra-Band Contiguous Downlink CA

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7C	7	20M	20850	2510	50	0	2850	2630	7	20M	3042	2529.2	14.45	14.25
7B	7	15M	21100	2535	1	0	3100	2655	7	5M	3007	2645.7	14.40	14.21
38C	38	20M	38150	2610	1	49	38150	2610	38	20M	37952	2590.2	20.04	19.93
41C	41	20M	41490	2680	1	49	41490	2680	41	20M	41292	2660.2	19.97	19.76

#### Power Measurements for Intra-Band Non-Contiguous Downlink CA

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
41A-41A	41	20M	41490	2680	1	49	41490	2680	41	5M	39675	2498.5	19.97	19.77
7A-7A	7	20M	20850	2510	50	0	2850	2630	7	5M	3425	2687.5	14.45	14.33
66A-66A	66	20M	132572	1770	1	49	67036	2170	66	5M	66443	2110.7	13.91	13.78
4A-4A	4	20M	20175	1732.5	1	49	2175	2132.5	4	5M	2393	2154.3	14.91	14.73

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
5A-41A	5	10M	20450	829	1	49	2450	874	41	20M	40620	2593	22.74	22.66
2A-5A	2	20M	18900	1880	50	0	900	1960	5	10M	2525	881.5	15.69	15.47
4A-5A	4	20M	20175	1732.5	1	49	2175	2132.5	5	10M	2525	881.5	14.91	14.85
4A-7A	4	20M	20175	1732.5	1	49	2175	2132.5	7	20M	3100	2655	14.91	14.88
5A-7A	5	10M	20450	829	1	49	2450	874	7	20M	3100	2655	22.74	22.61
5A-38A	5	10M	20450	829	1	49	2450	874	38	20M	38000	2595	22.74	22.58
5A-66A	5	10M	20450	829	1	49	2450	874	66	20M	66786	2145	22.74	22.63
5A-41A	5	10M	20450	829	1	49	2450	874	41	20M	40620	2593	22.74	22.66

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20175	1732.5	1	49	2175	2132.5	7	20M	3100	2655	7	20M	2902	2635.2	14.91	14.71
5A-7C	5	10M	20450	829	1	49	2450	874	7	20M	3100	2655	7	20M	2850	2630	22.74	22.63
7A-66A-6A	7	20M	20850	2510	1	0	2850	2630	66	20M	66786	2145	66	5M	66443	2110.7	14.45	14.32
5A-66A-6A	5	10M	20450	829	1	49	2450	874	66	20M	66786	2145	66	5M	66443	2110.7	22.74	22.66

**Power Measurements for Intra-Band Contiguous Downlink CA (Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
41D	41	20M	41490	2680	1	49	41490	2680	41	20M	41298	2660.8	41	20M	41100	2641	19.97	19.78

## 8.9.4 EUT without Power Reduction (Level4)

**Power Measurements for Intra-Band Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7C	7	20M	20850	2510	1	0	2850	2630	7	20M	3042	2529.2	22.63	22.41
7B	7	15M	21100	2535	1	0	3100	2655	7	5M	3007	2645.7	22.57	22.45

**Power Measurements for Intra-Band Non-Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7A-7A	7	20M	20850	2510	1	0	2850	2630	7	5M	3425	2687.5	22.63	22.47
66A-66A	66	20M	132572	1770	1	49	67036	2170	66	5M	66443	2110.7	19.45	19.33
4A-4A	4	20M	20300	1745	1	49	2300	2145	4	5M	2393	2154.3	19.47	19.34

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
2A-5A	2	20M	19100	1900	50	1	1100	1980	5	10M	2525	881.5	17.88	17.67
4A-5A	4	20M	20300	1745	1	49	2300	2145	5	10M	2525	881.5	19.47	19.34
4A-7A	4	20M	20300	1745	1	49	2300	2145	7	20M	3100	2655	19.47	19.38

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20300	1745	1	49	2300	2145	7	20M	3100	2655	7	20M	2902	2635.2	19.47	19.34
7A-66A-66A	7	20M	20850	2510	1	0	2850	2630	66	20M	20M	66786	2145	66	5M	66443	22.63	22.51

## 8.9.5 EUT without Power Reduction (Level5&amp;6)

**Power Measurements for Intra-Band Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7C	7	20M	20850	2510	1	0	2850	2630	7	20M	3042	2529.2	21.56	21.44
7B	7	15M	21100	2535	1	0	3100	2655	7	5M	3007	2645.7	21.48	21.37

**Power Measurements for Intra-Band Non-Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
7A-7A	7	20M	20850	2510	1	0	2850	2630	7	5M	3425	2687.5	21.56	21.43
66A-66A	66	20M	132572	1770	1	49	67036	2170	66	5M	66443	2110.7	19.45	19.33
4A-4A	4	20M	20175	1732.5	1	49	2175	2132.5	4	5M	2393	2154.3	18.98	18.85

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
2A-5A	2	20M	19100	1900	50	1	1100	1980	5	10M	2525	881.5	19.37	19.25
4A-5A	4	20M	20175	1732.5	1	49	2175	2132.5	5	10M	2525	881.5	18.98	18.74
4A-7A	4	20M	20175	1732.5	1	49	2175	2132.5	7	20M	3100	2655	18.98	18.78

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20175	1732.5	1	49	2175	2132.5	7	20M	3100	2655	7	20M	2902	2635.2	18.98	18.77
7A-66A-66A	7	20M	20850	2510	1	0	2850	2630	66	20M	66786	2145	66	5M	66443	2110.7	21.56	21.42

## 8.9.6 EUT without Power Reduction (Level7)

**Power Measurements for Intra-Band Non-Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
66A-66A	66	20M	132322	1745	1	49	66786	2145	66	5M	66443	2110.7	21.31	21.18
4A-4A	4	20M	20050	1720	1	49	2050	2120	4	5M	2393	2154.3	21.58	21.45

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-5A	4	20M	20050	1720	1	49	2050	2120	5	10M	2525	881.5	21.58	21.44
4A-7A	4	20M	20050	1720	1	49	2050	2120	7	20M	3100	2655	21.58	21.47

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20050	1720	1	49	2050	2120	7	20M	3100	2655	7	20M	2902	2635.2	21.58	21.47

## 8.9.7 EUT without Power Reduction (Level8&amp;9)

**Power Measurements for Intra-Band Non-Contiguous Downlink CA**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
66A-66A	66	20M	132322	1745	1	49	66786	2145	66	5M	66443	2110.7	21.31	21.18
4A-4A	4	20M	20175	1732.5	1	0	2175	2132.5	4	5M	2393	2154.3	21.37	21.22

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band)**

CA Combination	PCC								SCC1				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-5A	4	20M	20175	1732.5	1	0	2175	2132.5	5	10M	2525	881.5	21.37	21.24
4A-7A	4	20M	20175	1732.5	1	0	2175	2132.5	7	20M	3100	2655	21.37	21.23

**Power Measurements for Inter-Band Non-Contiguous Downlink CA (Two Band and Three CC)**

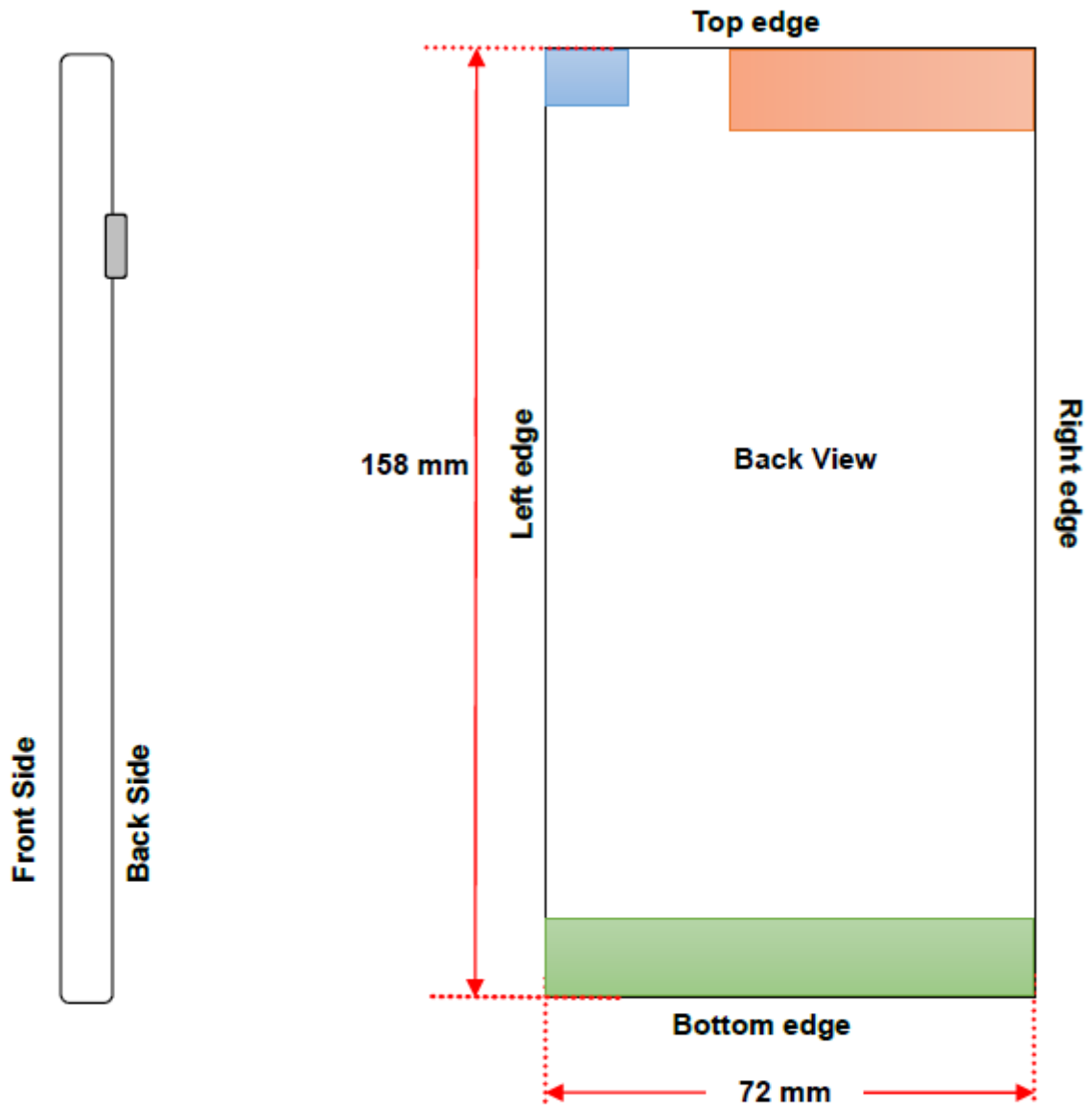
CA Combination	PCC								SCC1				SCC2				Power(dBm)	
	LTE Band	BW (MHz)	UL Ch.	UL Freq. (MHz)	RB Size	RB Offset	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch.	DL Freq. (MHz)	Single Carrier Tx Power	Tx Power with DL-CA Active
4A-7C	4	20M	20175	1732.5	1	0	2175	2132.5	7	20M	3100	2655	7	20M	2902	2635.2	21.37	21.22


**Summary for SAR Test Exclusion for LTE Downlink CA**

Per power confirmation results in above, the uplink maximum output power with downlink CA active remains within the specified tune-up tolerance and not more than 0.25 dB higher than the maximum output power with downlink CA inactive. According to KDB 941225 D05A, the SAR test exclusion applies to LTE downlink CA operation.




## 9 TEST EXCLUSION CONSIDERATION



 BT/ 2.4G / 5G Antenna

 WWAN Antenna Up

 WWAN Antenna Down

## 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  $\leq 50$  mm> Table, this Device SAR test configurations consider as following :

Antenna Up

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	>25mm	<5mm	<5mm	>25mm
	Voice	33.30	1995.26	No	No	No	No	No	No
	Data	33.30	1995.26	Yes	Yes	Yes	Yes	Yes	No
GSM 1900	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	Voice	30.30	1071.52	No	No	No	No	No	No
	Data	30.30	1071.52	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 2	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	24.10	257.04	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 4	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	24.10	257.04	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 5	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	24.30	269.15	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No
LTE Band 5	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	24.30	269.15	Yes	Yes	Yes	Yes	Yes	No
LTE Band 7	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No
LTE Band 12	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No
LTE Band 17	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No
LTE Band 26	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	24.30	269.15	Yes	Yes	Yes	Yes	Yes	No
LTE Band 66	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	24.10	257.04	Yes	Yes	Yes	Yes	Yes	No
LTE Band 38	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No
LTE Band 41	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	Yes	No

## Antenna Down

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	>25mm	<5mm
	Voice	33.30	1995.26	No	No	No	No	No	No
	Data	33.30	1995.26	Yes	Yes	Yes	Yes	No	Yes
GSM 1900	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	Voice	30.30	1071.52	No	No	No	No	No	No
	Data	30.30	1071.52	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 2	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	24.10	257.04	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	24.10	257.04	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	24.30	269.15	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	24.30	269.15	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 17	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 26	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	24.30	269.15	Yes	Yes	Yes	Yes	No	Yes
LTE Band 66	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	24.10	257.04	Yes	Yes	Yes	Yes	No	Yes
LTE Band 38	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	VOIP	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes

## BT/ 2.4G / 5G 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	>25mm	<5mm	>25mm
	802.11b	20.00	100.00	Yes	Yes	Yes	Yes	Yes	No
	802.11g	18.00	63.10	No	No	No	No	No	No
	802.11n(HT20)	18.00	63.10	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	17.50	56.23	No	No	No	No	No	No
	802.11n(HT20)	17.50	56.23	No	No	No	No	No	No
	802.11n(HT40)	17.50	56.23	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	17.50	56.23	No	No	No	No	No	No
	802.11ac(VHT40)	17.50	56.23	No	No	No	No	No	No
	802.11ac(VHT80)	14.50	28.18	No	No	No	No	No	No
WLAN 5.3 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	17.50	56.23	No	No	No	No	No	No
	802.11n(HT20)	17.50	56.23	No	No	No	No	No	No
	802.11n(HT40)	17.50	56.23	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	17.50	56.23	No	No	No	No	No	No
	802.11ac(VHT40)	17.50	56.23	No	No	No	No	No	No
	802.11ac(VHT80)	14.50	28.18	No	No	No	No	No	No
WLAN 5.6 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	18.50	70.79	No	No	No	No	No	No
	802.11n(HT20)	18.50	70.79	No	No	No	No	No	No
	802.11n(HT40)	18.50	70.79	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	18.50	70.79	No	No	No	No	No	No
	802.11ac(VHT40)	17.50	56.23	No	No	No	No	No	No
	802.11ac(VHT80)	17.50	56.23	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	18.50	70.79	No	No	No	No	No	No
	802.11n(HT20)	18.50	70.79	No	No	No	No	No	No
	802.11n(HT40)	18.50	70.79	Yes	Yes	Yes	Yes	Yes	No
	802.11ac(VHT20)	18.50	70.79	No	No	No	No	No	No
	802.11ac(VHT40)	18.50	70.79	No	No	No	No	No	No
	802.11ac(VHT80)	17.50	56.23	Yes	Yes	Yes	Yes	Yes	No
Bluetooth	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	BT	13.5	22.39	Yes	Yes	Yes	Yes	Yes	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.  $[\text{Threshold at 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]$  mW, at 100 MHz to 1500 MHz
  - b.  $[\text{Threshold at 50 mm in step 1}) + (\text{test separation distance} - 50 \text{ mm}) \cdot 10]$  mW at > 1500 MHz and  $\leq 6$  GHz
6. Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2Kbps, or reported SAR with RMC 12.2kbps setting is  $\leq 1.2$ 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	Off	GPRS (4slots)	Left Cheek	0	251	848.8	-0.09	0.556	28.53	29.30	1.194	0.664	/	
	Off		Left Tilt	0	251	848.8	-0.07	0.508	28.53	29.30	1.194	0.607	/	
	Off		Right Cheek		0	251	848.80	-0.03	0.758	28.53	29.30	1.194	0.905	/
	Off				0	128	824.2	0.06	0.791	28.52	29.30	1.197	<b>0.947</b>	<b>1#</b>
	Off				0	190	836.6	-0.01	0.786	28.51	29.30	1.199	0.943	/
	Off		Right Tilt	0	190	836.6	0.00	0.643	28.53	29.30	1.194	0.768	/	
Up	Level2&3	GPRS (4slots)	Left Cheek	0	190	836.6	0.19	0.283	27.18	27.80	1.153	0.326	/	
	Level2&3		Left Tilt	0	190	836.6	-0.13	0.259	27.18	27.80	1.153	0.299	/	
	Level2&3		Right Cheek	0	190	836.6	-0.10	0.378	27.18	27.80	1.153	0.436	/	
	Level2&3		Right Tilt	0	190	836.6	-0.07	0.326	27.18	27.80	1.153	0.376	/	
Down	Off	GPRS (4slots)	Left Cheek	0	251	848.80	0.13	0.184	28.53	29.30	1.194	0.220	/	
	Off		Left Tilt	0	251	848.80	0.06	0.090	28.53	29.30	1.194	0.107	/	
	Off		Right Cheek	0	251	848.80	-0.18	0.136	28.53	29.30	1.194	0.162	/	
	Off		Right Tilt	0	251	848.80	0.08	0.072	28.53	29.30	1.194	0.086	/	
<b>Body-worn Accessory</b>														
Up	Off	Voice	Front Side	15	251	848.80	-0.09	0.058	32.65	33.30	1.161	0.067	/	
	Off		Back Side	15	251	848.80	0.03	0.069	32.65	33.30	1.161	0.080	/	
	Off	GPRS (4slots)	Front Side	15	251	848.80	0.04	0.099	28.53	29.30	1.194	0.118	/	
	Off		Back Side	15	251	848.80	0.00	0.106	28.53	29.30	1.194	0.127	/	
Down	Off	Voice	Front Side	15	251	848.80	-0.10	0.126	32.65	33.30	1.161	0.146	/	
	Off		Back Side	15	251	848.80	0.02	0.157	32.65	33.30	1.161	0.182	/	
	Off	GPRS (4slots)	Front Side	15	251	848.80	0.12	0.206	28.53	29.30	1.194	0.246	/	
	Off		Back Side	15	251	848.80	0.00	0.234	28.53	29.30	1.194	<b>0.279</b>	<b>2#</b>	
<b>Hotspot</b>														
Up	Off	Voice	Front Side	10	251	848.80	0.07	0.101	32.65	33.30	1.161	0.117	/	
	Off		Back Side	10	251	848.80	0.07	0.130	32.65	33.30	1.161	0.151	/	
	Off	GPRS (4slots)	Front Side	10	251	848.80	0.04	0.120	28.53	29.30	1.194	0.143	/	
	Off		Back Side	10	251	848.80	-0.03	0.143	28.53	29.30	1.194	0.171	/	
	Off		Left Edge	10	251	848.80	0.07	0.021	28.53	29.30	1.194	0.025	/	
	Off		Right Edge	10	251	848.80	-0.11	0.015	28.53	29.30	1.194	0.018	/	
	Off		Top Edge	10	251	848.80	0.07	0.151	28.53	29.30	1.194	0.180	/	
Down	Off	Voice	Front Side	10	251	848.80	0.18	0.124	32.65	33.30	1.161	0.144	/	
	Off		Back Side	10	251	848.80	0.14	0.236	32.65	33.30	1.161	0.274	/	
	Off	GPRS (4slots)	Front Side	10	251	848.80	-0.08	0.168	28.53	29.30	1.194	0.201	/	
	Off		Back Side	10	251	848.80	0.05	0.277	28.53	29.30	1.194	<b>0.331</b>	<b>3#</b>	
	Off		Left Edge	10	251	848.80	-0.18	0.022	28.53	29.30	1.194	0.026	/	
	Off		Right Edge	10	251	848.80	0.12	0.084	28.53	29.30	1.194	0.100	/	

	Off		Bottom Edge	10	251	848.80	0.07	0.219	28.53	29.30	1.194	0.261	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

## 10.2 GSM 1900

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	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	GPRS (2slots)	Left Cheek	0	512	1850.20	-0.07	0.407	22.24	23.30	1.276	0.520	/	
	Level1		Left Tilt	0	512	1850.20	-0.07	0.509	22.24	23.30	1.276	0.650	/	
	Level1		Right Cheek	0	512	1850.20	0.14	0.529	22.24	23.30	1.276	0.675	/	
	Level1		Right Tilt		0	512	1850.20	-0.01	0.726	22.24	23.30	1.276	<b>0.927</b>	<b>4#</b>
	Level1				0	661	1880.00	0.05	0.636	22.10	23.30	1.318	0.838	/
	Level1				0	810	1909.80	-0.16	0.588	22.08	23.30	1.324	0.779	/
Up	Level2&3	GPRS (2slots)	Left Cheek	0	512	1850.20	0.15	0.275	20.44	20.80	1.086	0.299	/	
	Level2&3		Left Tilt	0	512	1850.20	0.01	0.335	20.44	20.80	1.086	0.364	/	
	Level2&3		Right Cheek	0	512	1850.20	-0.16	0.374	20.44	20.80	1.086	0.406	/	
	Level2&3		Right Tilt	0	512	1850.20	-0.13	0.504	20.44	20.80	1.086	0.548	/	
Down	Off	GPRS (4slots)	Left Cheek	0	512	1850.20	-0.07	0.054	25.01	26.30	1.346	0.073	/	
	Off		Left Tilt	0	512	1850.20	0.19	0.043	25.01	26.30	1.346	0.058	/	
	Off		Right Cheek	0	512	1850.20	-0.02	0.051	25.01	26.30	1.346	0.069	/	
	Off		Right Tilt	0	512	1850.20	-0.12	0.039	25.01	26.30	1.346	0.052	/	
<b>Body-worn Accessory</b>														
Up	Level4	Voice	Front Side	15	512	1850.20	0.09	0.117	28.52	29.30	1.197	0.140	/	
	Level4		Back Side	15	512	1850.20	0.07	0.145	28.52	29.30	1.197	0.174	/	
	Level4	GPRS (2slots)	Front Side	15	512	1850.20	0.00	0.119	25.62	26.30	1.169	0.139	/	
	Level4		Back Side	15	512	1850.20	0.02	0.152	25.62	26.30	1.169	0.178	/	
Up	Level5&6	Voice	Front Side	15	512	1850.20	-0.15	0.077	27.64	28.30	1.164	0.090	/	
	Level5&6		Back Side	15	512	1850.20	-0.18	0.096	27.64	28.30	1.164	0.112	/	
	Level5&6	GPRS (4slots)	Front Side	15	512	1850.20	-0.04	0.081	24.67	25.30	1.156	0.094	/	
	Level5&6		Back Side	15	512	1850.20	0.15	0.102	24.67	25.30	1.156	0.118	/	
Down	Off	Voice	Front Side	15	512	1850.20	0.10	0.085	28.97	30.30	1.358	0.115	/	
	Off		Back Side	15	512	1850.20	0.07	0.129	28.97	30.30	1.358	0.175	/	
	Off	GPRS (4slots)	Front Side	15	512	1850.20	-0.08	0.138	25.01	26.30	1.346	0.186	/	
	Off		Back Side	15	512	1850.20	0.19	0.236	25.01	26.30	1.346	<b>0.318</b>	<b>5#</b>	
<b>Hotspot</b>														
Up	Level4	Voice	Front Side	10	512	1850.20	0.18	0.240	28.52	29.30	1.197	0.287	/	
	Level4		Back Side	10	512	1850.20	0.15	0.313	28.52	29.30	1.197	0.375	/	
	Level4	GPRS (2slots)	Front Side	10	512	1850.20	-0.14	0.266	25.62	26.30	1.169	0.311	/	
	Level4		Back Side	10	512	1850.20	0.08	0.408	25.62	26.30	1.169	0.477	/	
	Level4		Left Edge	10	512	1850.20	-0.05	0.032	25.62	26.30	1.169	0.037	/	
	Level4		Right Edge	10	512	1850.20	-0.03	0.021	25.62	26.30	1.169	0.025	/	
	Level4		Top Edge	10	512	1850.20	0.00	0.521	25.62	26.30	1.169	0.609	/	
Up	Level5&6	Voice	Front Side	10	512	1850.20	0.09	0.191	27.64	28.30	1.164	0.222	/	
	Level5&6		Back Side	10	512	1850.20	-0.07	0.252	27.64	28.30	1.164	0.293	/	

	Level5&6	GPRS (4slots)	Front Side	10	512	1850.20	0.09	0.200	24.67	25.30	1.156	0.231	/	
	Level5&6		Back Side	10	512	1850.20	-0.06	0.273	24.67	25.30	1.156	0.316	/	
	Level5&6		Left Edge	10	512	1850.20	0.04	0.024	24.67	25.30	1.156	0.028	/	
	Level5&6		Right Edge	10	512	1850.20	0.14	0.016	24.67	25.30	1.156	0.018	/	
	Level5&6		Top Edge	10	512	1850.20	-0.17	0.400	24.67	25.30	1.156	0.462	/	
Down	Off	Voice	Front Side	10	512	1850.20	-0.13	0.148	28.97	30.30	1.358	0.201	/	
	Off		Back Side	10	512	1850.20	0.12	0.302	28.97	30.30	1.358	0.410	/	
	Off	GPRS (4slots)	Front Side	10	512	1850.20	-0.13	0.312	25.01	26.30	1.346	0.420	/	
	Off		Back Side	10	512	1850.20	-0.03	0.463	25.01	26.30	1.346	0.623	/	
	Off		Left Edge	10	512	1850.20	0.09	0.100	25.01	26.30	1.346	0.135	/	
	Off		Right Edge	10	512	1850.20	-0.14	0.059	25.01	26.30	1.346	0.079	/	
	Off		Bottom Edge		10	512	1850.20	0.07	0.636	25.01	26.30	1.346	<b>0.856</b>	<b>6#</b>
	Off				10	661	1880.00	-0.04	0.603	24.93	26.30	1.371	0.827	/
	Off				10	810	1909.80	0.10	0.575	24.79	26.30	1.416	0.814	/

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

## 10.3 WCDMA Band 2

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	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	RMC	Left Cheek	0	9262	1852.4	-0.06	0.458	15.93	17.10	1.309	0.600	/	
	Level1		Left Tilt	0	9262	1852.4	-0.09	0.585	15.93	17.10	1.309	0.766	/	
	Level1		Right Cheek	0	9262	1852.4	-0.05	0.531	15.93	17.10	1.309	0.695	/	
	Level1		Right Tilt		0	9262	1852.4	0.15	0.706	15.93	17.10	1.309	0.924	/
	Level1				0	9400	1880.0	-0.16	0.805	15.80	17.10	1.349	1.086	/
	Level1				0	9538	1907.6	-0.16	0.876	15.83	17.10	1.340	<b>1.174</b>	<b>7#</b>
Up	Level2&3	RMC	Left Cheek	0	9262	1852.4	-0.17	0.171	13.25	14.10	1.216	0.208	/	
	Level2&3		Left Tilt	0	9262	1852.4	0.12	0.223	13.25	14.10	1.216	0.271	/	
	Level2&3		Right Cheek	0	9262	1852.4	-0.13	0.204	13.25	14.10	1.216	0.248	/	
	Level2&3		Right Tilt	0	9262	1852.4	0.19	0.271	13.25	14.10	1.216	0.330	/	
Down	Off	RMC	Left Cheek	0	9262	1852.4	0.09	0.056	23.05	24.10	1.274	0.071	/	
	Off		Left Tilt	0	9262	1852.4	-0.14	0.043	23.05	24.10	1.274	0.055	/	
	Off		Right Cheek	0	9262	1852.4	-0.05	0.053	23.05	24.10	1.274	0.067	/	
	Off		Right Tilt	0	9262	1852.4	-0.04	0.040	23.05	24.10	1.274	0.051	/	
<b>Body-worn Accessory</b>														
Up	Level4	RMC	Front Side	15	9262	1852.4	0.14	0.158	18.25	19.10	1.216	0.192	/	
	Level4		Back Side	15	9262	1852.4	0.18	0.236	18.25	19.10	1.216	0.287	/	
Up	Level5&6	RMC	Front Side	15	9262	1852.4	-0.16	0.131	17.65	18.60	1.245	0.163	/	
	Level5&6		Back Side	15	9262	1852.4	0.05	0.202	17.65	18.60	1.245	0.251	/	
Down	Off	RMC	Front Side	15	9262	1852.4	0.19	0.202	23.05	24.10	1.274	0.257	/	
	Off		Back Side	15	9262	1852.4	-0.01	0.281	23.05	24.10	1.274	<b>0.358</b>	<b>8#</b>	
<b>Hotspot</b>														
Up	Level4	RMC	Front Side	10	9262	1852.4	0.13	0.178	18.25	19.10	1.216	0.216	/	
	Level4		Back Side	10	9262	1852.4	0.14	0.252	18.25	19.10	1.216	0.306	/	



	Level4		Left Edge	10	9262	1852.4	0.06	0.012	18.25	19.10	1.216	0.015	/
	Level4		Right Edge	10	9262	1852.4	0.17	0.033	18.25	19.10	1.216	0.040	/
	Level4		Top Edge	10	9262	1852.4	0.06	0.458	18.25	19.10	1.216	0.557	/
Up	Level5&6	RMC	Front Side	10	9262	1852.4	0.01	0.168	17.65	18.60	1.245	0.209	/
	Level5&6		Back Side	10	9262	1852.4	0.10	0.235	17.65	18.60	1.245	0.292	/
	Level5&6		Left Edge	10	9262	1852.4	-0.13	0.009	17.65	18.60	1.245	0.011	/
	Level5&6		Right Edge	10	9262	1852.4	0.02	0.030	17.65	18.60	1.245	0.037	/
	Level5&6		Top Edge	10	9262	1852.4	-0.04	0.410	17.65	18.60	1.245	0.510	/
Down	Off	RMC	Front Side	10	9262	1852.4	0.09	0.476	23.05	24.10	1.274	0.606	/
	Off		Back Side	10	9262	1852.4	0.18	0.681	23.05	24.10	1.274	0.867	/
	Off		Left Edge	10	9262	1852.4	-0.03	0.179	23.05	24.10	1.274	0.228	/
	Off		Right Edge	10	9262	1852.4	-0.01	0.092	23.05	24.10	1.274	0.117	/
	Off		Bottom Edge	10	9262	1852.4	-0.09	0.794	23.05	24.10	1.274	<b>1.011</b>	9#
	Off			10	9400	1880.0	0.19	0.738	22.93	24.10	1.309	0.966	/
	Off			10	9538	1907.6	-0.18	0.715	22.98	24.10	1.294	0.925	/

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</b>													
Up	Level4	RMC	Front Side	0	9262	1852.4	0.19	0.599	18.25	19.10	1.216	0.728	/
	Level4		Back Side	0	9262	1852.4	0.02	0.561	18.25	19.10	1.216	0.682	/
	Level4		Left Edge	0	9262	1852.4	0.04	0.031	18.25	19.10	1.216	0.038	/
	Level4		Right Edge	0	9262	1852.4	-0.07	0.047	18.25	19.10	1.216	0.057	/
	Level4		Top Edge	0	9262	1852.4	0.12	1.550	18.25	19.10	1.216	<b>1.885</b>	10#
Up	Level5&6	RMC	Front Side	0	9262	1852.4	-0.19	0.543	17.65	18.60	1.245	0.676	/
	Level5&6		Back Side	0	9262	1852.4	0.05	0.511	17.65	18.60	1.245	0.636	/
	Level5&6		Left Edge	0	9262	1852.4	0.13	0.027	17.65	18.60	1.245	0.034	/
	Level5&6		Right Edge	0	9262	1852.4	-0.02	0.044	17.65	18.60	1.245	0.055	/
	Level5&6		Top Edge	0	9262	1852.4	0.15	1.390	17.65	18.60	1.245	1.730	/

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	RMC	Left Cheek	0	1412	1732.4	0.17	0.472	16.68	17.60	1.236	0.583	/	
	Level1		Left Tilt		0	1412	1732.4	0.10	0.662	16.68	17.60	1.236	0.818	/
	Level1				0	1312	1712.4	0.03	0.617	16.68	17.60	1.236	0.763	/
	Level1				0	1513	1752.6	0.07	0.698	16.62	17.60	1.253	0.875	/
	Level1			Right Cheek	0	1412	1732.4	-0.01	0.614	16.68	17.60	1.236	0.759	/
	Level1		Right Tilt		0	1412	1732.4	-0.02	0.795	16.68	17.60	1.236	0.983	/
	Level1				0	1312	1712.4	-0.13	0.841	16.68	17.60	1.236	<b>1.039</b>	11#
	Level1				0	1513	1752.6	-0.14	0.793	16.62	17.60	1.253	0.994	/
Up	Level2&3	RMC	Left Cheek	0	1412	1732.4	-0.17	0.228	13.61	14.60	1.256	0.286	/	
	Level2&3		Left Tilt	0	1412	1732.4	-0.13	0.319	13.61	14.60	1.256	0.401	/	
	Level2&3		Right Cheek	0	1412	1732.4	-0.07	0.301	13.61	14.60	1.256	0.378	/	
	Level2&3		Right Tilt	0	1412	1732.4	-0.17	0.378	13.61	14.60	1.256	0.475	/	
Down	Off	RMC	Left Cheek	0	1513	1752.6	-0.13	0.071	23.14	24.10	1.247	0.089	/	
	Off		Left Tilt	0	1513	1752.6	-0.16	0.056	23.14	24.10	1.247	0.070	/	
	Off		Right Cheek	0	1513	1752.6	-0.14	0.063	23.14	24.10	1.247	0.079	/	
	Off		Right Tilt	0	1513	1752.6	0.01	0.052	23.14	24.10	1.247	0.065	/	
<b>Body-worn Accessory</b>														
Up	Level4	RMC	Front Side	15	1312	1712.4	0.14	0.255	19.18	20.10	1.236	0.315	/	
	Level4		Back Side	15	1312	1712.4	0.05	0.319	19.18	20.10	1.236	<b>0.394</b>	12#	
Up	Level5&6	RMC	Front Side	15	1412	1732.4	-0.02	0.225	18.67	19.60	1.239	0.279	/	
	Level5&6		Back Side	15	1412	1732.4	0.18	0.289	18.67	19.60	1.239	0.358	/	
Down	Level7	RMC	Front Side	15	1513	1752.6	-0.02	0.188	22.81	23.10	1.069	0.201	/	
	Level7		Back Side	15	1513	1752.6	-0.13	0.285	22.81	23.10	1.069	0.305	/	
Down	Level8&9	RMC	Front Side	15	1513	1752.6	0.06	0.121	20.69	22.10	1.384	0.167	/	
	Level8&9		Back Side	15	1513	1752.6	-0.10	0.188	20.69	22.10	1.384	0.260	/	
<b>Hotspot</b>														
Up	Level4	RMC	Front Side	10	1312	1712.4	-0.08	0.189	19.18	20.10	1.236	0.234	/	
	Level4		Back Side	10	1312	1712.4	0.03	0.241	19.18	20.10	1.236	0.298	/	
	Level4		Left Edge	10	1312	1712.4	0.07	0.023	19.18	20.10	1.236	0.028	/	
	Level4		Right Edge	10	1312	1712.4	0.11	0.027	19.18	20.10	1.236	0.033	/	
	Level4		Top Edge	10	1312	1712.4	-0.03	0.471	19.18	20.10	1.236	0.582	/	
Up	Level5&6	RMC	Front Side	10	1412	1732.4	-0.17	0.168	18.67	19.60	1.239	0.209	/	
	Level5&6		Back Side	10	1412	1732.4	0.18	0.215	18.67	19.60	1.239	0.266	/	
	Level5&6		Left Edge	10	1412	1732.4	0.16	0.021	18.67	19.60	1.239	0.026	/	
	Level5&6		Right Edge	10	1412	1732.4	0.07	0.024	18.67	19.60	1.239	0.030	/	
	Level5&6		Top Edge	10	1412	1732.4	-0.07	0.424	18.67	19.60	1.239	0.525	/	
Down	Level7	RMC	Front Side	10	1412	1732.4	0.13	0.410	22.81	23.10	1.069	0.438	/	
	Level7		Back Side	10	1412	1732.4	0.03	0.608	22.81	23.10	1.069	0.650	/	
	Level7		Left Edge	10	1412	1732.4	-0.19	0.167	22.81	23.10	1.069	0.179	/	
	Level7		Right Edge	10	1412	1732.4	0.02	0.090	22.81	23.10	1.069	0.096	/	

	Level7		Bottom Edge	10	1412	1732.4	0.02	0.820	22.81	23.10	1.069	0.877	/
	Level7			10	1312	1712.4	-0.05	0.777	22.79	23.10	1.074	0.834	/
	Level7			10	1513	1752.6	0.00	0.817	22.76	23.10	1.081	<b>0.884</b>	13#
Down	Level8&9	RMC	Front Side	10	1312	1712.4	0.03	0.263	20.69	22.10	1.384	0.364	/
	Level8&9		Back Side	10	1312	1712.4	-0.09	0.396	20.69	22.10	1.384	0.548	/
	Level8&9		Left Edge	10	1312	1712.4	0.00	0.112	20.69	22.10	1.384	0.155	/
	Level8&9		Right Edge	10	1312	1712.4	-0.03	0.063	20.69	22.10	1.384	0.087	/
	Level8&9		Bottom Edge	10	1312	1712.4	0.09	0.521	20.69	22.10	1.384	0.721	/

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</b>													
Up	Level4	RMC	Front Side	0	1312	1312.4	-0.05	0.787	19.18	20.10	1.236	0.973	/
	Level4		Back Side	0	1312	1312.4	0.03	0.692	19.18	20.10	1.236	0.855	/
	Level4		Left Edge	0	1312	1312.4	-0.11	0.046	19.18	20.10	1.236	0.057	/
	Level4		Right Edge	0	1312	1312.4	-0.07	0.062	19.18	20.10	1.236	0.076	/
	Level4		Top Edge	0	1312	1312.4	0.16	1.600	19.18	20.10	1.236	<b>1.978</b>	14#
Up	Level5&6	RMC	Front Side	0	1312	1312.4	0.01	0.712	18.67	19.60	1.239	0.882	/
	Level5&6		Back Side	0	1312	1312.4	0.11	0.630	18.67	19.60	1.239	0.780	/
	Level5&6		Left Edge	0	1312	1312.4	-0.19	0.043	18.67	19.60	1.239	0.053	/
	Level5&6		Right Edge	0	1312	1312.4	-0.04	0.058	18.67	19.60	1.239	0.072	/
	Level5&6		Top Edge	0	1312	1312.4	-0.02	1.430	18.67	19.60	1.239	1.771	/

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	4132	826.4	0.07	0.283	23.40	24.30	1.230	0.348	/
	Off		Left Tilt	0	4132	826.4	-0.03	0.220	23.40	24.30	1.230	0.271	/
	Off		Right Cheek	0	4132	826.4	-0.04	0.367	23.40	24.30	1.230	<b>0.452</b>	15#
	Off		Right Tilt	0	4132	826.4	0.04	0.311	23.40	24.30	1.230	0.383	/
Down	Off	RMC	Left Cheek	0	4132	826.4	-0.03	0.131	23.40	24.30	1.230	0.161	/
	Off		Left Tilt	0	4132	826.4	0.10	0.065	23.40	24.30	1.230	0.080	/
	Off		Right Cheek	0	4132	826.4	0.17	0.105	23.40	24.30	1.230	0.129	/
	Off		Right Tilt	0	4132	826.4	-0.18	0.065	23.40	24.30	1.230	0.080	/
<b>Body-worn Accessory</b>													
Up	Off	RMC	Front Side	15	4132	826.4	-0.09	0.023	23.40	24.30	1.230	0.028	/
	Off		Back Side	15	4132	826.4	-0.02	0.060	23.40	24.30	1.230	0.074	/
Down	Off	RMC	Front Side	15	4132	826.4	-0.07	0.092	23.40	24.30	1.230	0.113	/
	Off		Back Side	15	4132	826.4	0.05	0.122	23.40	24.30	1.230	<b>0.150</b>	16#

Hotspot													
Up	Off	RMC	Front Side	10	4132	826.4	-0.14	0.063	23.40	24.30	1.230	0.078	/
	Off		Back Side	10	4132	826.4	0.16	0.082	23.40	24.30	1.230	0.101	/
	Off		Left Edge	10	4132	826.4	0.09	0.059	23.40	24.30	1.230	0.073	/
	Off		Right Edge	10	4132	826.4	-0.13	0.015	23.40	24.30	1.230	0.018	/
	Off		Top Edge	10	4132	826.4	-0.16	0.072	23.40	24.30	1.230	0.089	/
Down	Off	RMC	Front Side	10	4132	826.4	0.12	0.175	23.40	24.30	1.230	0.215	/
	Off		Back Side	10	4132	826.4	0.04	0.221	23.40	24.30	1.230	<b>0.272</b>	17#
	Off		Left Edge	10	4132	826.4	-0.05	0.048	23.40	24.30	1.230	0.059	/
	Off		Right Edge	10	4132	826.4	0.04	0.138	23.40	24.30	1.230	0.170	/
	Off		Bottom Edge	10	4132	826.4	0.02	0.172	23.40	24.30	1.230	0.212	/

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

## 10.6LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	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	MID	-0.01	0.312	16.59	17.30	1.178	0.367	/
	Level1			0	19100	1900	50	LOW	0.17	0.303	16.68	17.30	1.153	0.349	/
	Level1		Left Tilt	0	18900	1880	1	MID	-0.09	0.395	16.59	17.30	1.178	0.465	/
	Level1			0	19100	1900	50	LOW	0.19	0.387	16.68	17.30	1.153	0.446	/
	Level1		Right Cheek	0	18900	1880	1	MID	-0.05	0.363	16.59	17.30	1.178	0.427	/
	Level1			0	19100	1900	50	LOW	-0.13	0.356	16.68	17.30	1.153	0.411	/
	Level1		Right Tilt	0	18900	1880	1	MID	-0.11	0.675	16.59	17.30	1.178	<b>0.795</b>	18#
	Level1			0	19100	1900	50	LOW	0.10	0.658	16.68	17.30	1.153	0.759	/
Up	Level2&3	QPSK	Left Cheek	0	18900	1880	1	MID	0.13	0.251	15.55	16.30	1.189	0.298	/
	Level2&3			0	19100	1900	50	LOW	-0.02	0.240	15.69	16.30	1.151	0.276	/
	Level2&3		Left Tilt	0	18900	1880	1	MID	-0.05	0.323	15.55	16.30	1.189	0.384	/
	Level2&3			0	19100	1900	50	LOW	-0.19	0.314	15.69	16.30	1.151	0.361	/
	Level2&3		Right Cheek	0	18900	1880	1	MID	0.11	0.293	15.55	16.30	1.189	0.348	/
	Level2&3			0	19100	1900	50	LOW	0.18	0.277	15.69	16.30	1.151	0.319	/
	Level2&3		Right Tilt	0	18900	1880	1	MID	-0.17	0.558	15.55	16.30	1.189	0.663	/
	Level2&3			0	19100	1900	50	LOW	-0.10	0.525	15.69	16.30	1.151	0.604	/
Down	Off	QPSK	Left Cheek	0	18900	1880	1	MID	0.19	0.052	23.26	23.80	1.132	0.059	/
	Off			0	19100	1900	50	LOW	-0.12	0.040	21.84	22.80	1.247	0.050	/
	Off		Left Tilt	0	18900	1880	1	MID	-0.19	0.041	23.26	23.80	1.132	0.046	/
	Off			0	19100	1900	50	LOW	-0.11	0.031	21.84	22.80	1.247	0.039	/
	Off		Right Cheek	0	18900	1880	1	MID	-0.08	0.048	23.26	23.80	1.132	0.054	/
	Off			0	19100	1900	50	LOW	0.18	0.033	21.84	22.80	1.247	0.041	/
	Off		Right Tilt	0	18900	1880	1	MID	-0.12	0.033	23.26	23.80	1.132	0.037	/
	Off			0	19100	1900	50	LOW	0.04	0.025	21.84	22.80	1.247	0.031	/
<b>Body-worn Accessory</b>															
Up	Level4	QPSK	Front Side	15	18900	1880	1	MID	0.17	0.144	17.86	18.30	1.107	0.159	/

	Level4		Back Side	15	18900	1880	50	LOW	-0.15	0.135	17.88	18.30	1.102	0.149	/
	Level4			15	18900	1880	1	MID	-0.04	0.195	17.86	18.30	1.107	<b>0.216</b>	19#
	Level4			15	18900	1880	50	LOW	-0.02	0.188	17.88	18.30	1.102	0.207	/
Up	Level5&6	QPSK	Front Side	10	19100	1900	1	MID	0.15	0.132	17.32	17.80	1.117	0.147	/
	Level5&6			10	19100	1900	50	MID	-0.06	0.118	17.37	17.80	1.104	0.130	/
	Level5&6		Back Side	10	19100	1900	1	MID	-0.03	0.185	17.32	17.80	1.117	0.207	/
	Level5&6			10	19100	1900	50	MID	-0.06	0.169	17.37	17.80	1.104	0.187	/
Down	Off	QPSK	Front Side	15	18900	1880	1	MID	-0.17	0.101	23.26	23.80	1.132	0.114	/
	Off			15	19100	1900	50	LOW	-0.12	0.076	21.84	22.80	1.247	0.095	/
	Off		Back Side	15	18900	1880	1	MID	-0.16	0.151	23.26	23.80	1.132	0.171	/
	Off			15	19100	1900	50	LOW	-0.06	0.115	21.84	22.80	1.247	0.143	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	18900	1880	1	MID	0.12	0.158	17.86	18.30	1.107	0.175	/
	Level4			10	19100	1900	50	LOW	0.11	0.151	17.88	18.30	1.102	0.166	/
	Level4		Back Side	10	18900	1880	1	MID	-0.01	0.229	17.86	18.30	1.107	0.253	/
	Level4			10	19100	1900	50	LOW	0.07	0.218	17.88	18.30	1.102	0.240	/
	Level4		Left Edge	10	18900	1880	1	MID	-0.10	0.018	17.86	18.30	1.107	0.020	/
	Level4			10	19100	1900	50	LOW	0.05	0.016	17.88	18.30	1.102	0.017	/
	Level4		Right Edge	10	18900	1880	1	MID	-0.19	0.024	17.86	18.30	1.107	0.027	/
	Level4			10	19100	1900	50	LOW	-0.01	0.020	17.88	18.30	1.102	0.022	/
	Level4		Top Edge	10	18900	1880	1	MID	-0.03	0.404	17.86	18.30	1.107	0.447	/
	Level4			10	19100	1900	50	LOW	-0.03	0.385	17.88	18.30	1.102	0.424	/
Up	Level5&6	QPSK	Front Side	10	19100	1900	1	MID	-0.02	0.141	17.32	17.80	1.117	0.157	/
	Level5&6			10	19100	1900	50	MID	0.19	0.132	17.37	17.80	1.104	0.146	/
	Level5&6		Back Side	10	19100	1900	1	MID	0.04	0.204	17.32	17.80	1.117	0.228	/
	Level5&6			10	19100	1900	50	MID	0.04	0.189	17.37	17.80	1.104	0.209	/
	Level5&6		Left Edge	10	19100	1900	1	MID	0.03	0.018	17.32	17.80	1.117	0.020	/
	Level5&6			10	19100	1900	50	MID	0.07	0.014	17.37	17.80	1.104	0.015	/
	Level5&6		Right Edge	10	19100	1900	1	MID	0.03	0.022	17.32	17.80	1.117	0.024	/
	Level5&6			10	19100	1900	50	MID	-0.12	0.019	17.37	17.80	1.104	0.021	/
	Level5&6		Top Edge	10	19100	1900	1	MID	0.08	0.361	17.32	17.80	1.117	0.403	/
	Level5&6			10	19100	1900	50	MID	0.00	0.352	17.37	17.80	1.104	0.389	/
Down	Off	QPSK	Front Side	10	18900	1880	1	MID	-0.12	0.349	23.26	23.80	1.132	0.395	/
	Off			10	19100	1900	50	LOW	0.15	0.282	21.84	22.80	1.247	0.352	/
	Off		Back Side	10	18900	1880	1	MID	0.05	0.531	23.26	23.80	1.132	0.601	/
	Off			10	19100	1900	50	LOW	0.12	0.415	21.84	22.80	1.247	0.518	/
	Off		Left Edge	10	18900	1880	1	MID	-0.07	0.116	23.26	23.80	1.132	0.131	/
	Off			10	19100	1900	50	LOW	-0.04	0.085	21.84	22.80	1.247	0.106	/
	Off		Right Edge	10	18900	1880	1	MID	-0.12	0.065	23.26	23.80	1.132	0.074	/
	Off			10	19100	1900	50	LOW	0.09	0.043	21.84	22.80	1.247	0.054	/
	Off		Bottom Edge	10	18900	1880	1	MID	0.03	0.754	23.26	23.80	1.132	0.854	/
	Off			10	18700	1860	1	MID	0.06	0.819	23.20	23.80	1.148	0.940	/
	Off			10	19100	1900	1	MID	0.04	1.010	23.18	23.80	1.153	<b>1.165</b>	20#
	Off			10	19100	1900	50	LOW	-0.01	0.759	21.84	22.80	1.247	0.947	/
	Off			10	18700	1860	50	MID	0.12	0.713	21.69	22.80	1.291	0.921	/
	Off			10	18900	1880	50	MID	-0.04	0.605	21.75	22.80	1.274	0.770	/

	Off			10	19100	1900	100	LOW	-0.11	0.712	21.79	22.80	1.262	0.898	/
	Off			10	18700	1860	100	LOW	0.05	0.735	21.61	22.80	1.315	0.967	/
	Off			10	18900	1880	100	LOW	0.13	0.718	21.65	22.80	1.303	0.936	/

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</b>															
Up	Level4	QPSK	Front Side	0	18900	1880	1	MID	0.09	0.630	17.86	18.30	1.107	0.697	/
	Level4			0	19100	1900	50	LOW	0.19	0.590	17.88	18.30	1.102	0.650	/
	Level4		Back Side	0	18900	1880	1	MID	-0.02	0.549	17.86	18.30	1.107	0.608	/
	Level4			0	19100	1900	50	LOW	-0.17	0.499	17.88	18.30	1.102	0.549	/
	Level4		Left Edge	0	18900	1880	1	MID	-0.12	0.052	17.86	18.30	1.107	0.058	/
	Level4			0	19100	1900	50	LOW	-0.04	0.052	17.88	18.30	1.102	0.058	/
	Level4		Right Edge	0	18900	1880	1	MID	-0.18	0.035	17.86	18.30	1.107	0.039	/
	Level4			0	19100	1900	50	LOW	0.01	0.034	17.88	18.30	1.102	0.038	/
	Level4		Top Edge	0	18900	1880	1	MID	0.07	1.360	17.86	18.30	1.107	<b>1.505</b>	21#
	Level4			0	19100	1900	50	LOW	0.06	1.260	17.88	18.30	1.102	1.388	/
Up	Level5&6	QPSK	Front Side	10	19100	1900	1	MID	-0.19	0.561	17.32	17.80	1.117	0.627	/
	Level5&6			10	19100	1900	50	MID	0.12	0.526	17.37	17.80	1.104	0.581	/
	Level5&6		Back Side	10	19100	1900	1	MID	0.09	0.490	17.32	17.80	1.117	0.547	/
	Level5&6			10	19100	1900	50	MID	0.01	0.445	17.37	17.80	1.104	0.491	/
	Level5&6		Left Edge	10	19100	1900	1	MID	0.12	0.058	17.32	17.80	1.117	0.065	/
	Level5&6			10	19100	1900	50	MID	-0.03	0.050	17.37	17.80	1.104	0.055	/
	Level5&6		Right Edge	10	19100	1900	1	MID	0.14	0.035	17.32	17.80	1.117	0.039	/
	Level5&6			10	19100	1900	50	MID	-0.16	0.031	17.37	17.80	1.104	0.034	/
	Level5&6		Top Edge	10	19100	1900	1	MID	-0.11	1.040	17.32	17.80	1.117	1.162	/
	Level5&6			10	19100	1900	50	MID	0.06	1.020	17.37	17.80	1.104	1.126	/

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

### 10.7LTE 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	QPSK	Left Cheek	0	20050	1720	1	MID	0.10	0.552	17.80	18.30	1.122	0.619	/
	Level1			0	20050	1720	50	LOW	-0.08	0.541	17.93	18.30	1.089	0.589	/
	Level1		Left Tilt	0	20050	1720	1	MID	-0.03	0.705	17.80	18.30	1.122	0.791	/
	Level1			0	20050	1720	50	LOW	0.16	0.703	17.93	18.30	1.089	0.766	/
	Level1		Right Cheek	0	20050	1720	1	MID	0.11	0.711	17.80	18.30	1.122	0.798	/
	Level1			0	20050	1720	50	LOW	0.08	0.718	17.93	18.30	1.089	0.782	/
	Level1		Right Tilt	0	20050	1720	1	MID	0.09	0.865	17.80	18.30	1.122	0.971	/

	Level1			0	20175	1732.5	1	MID	0.03	0.907	17.77	18.30	1.130	1.025	/
	Level1			0	20300	1745	1	MID	0.05	0.933	17.76	18.30	1.132	<b>1.057</b>	22#
	Level1			0	20050	1720	50	LOW	0.11	0.734	17.93	18.30	1.089	0.799	/
	Level1			0	20050	1720	100	LOW	0.03	0.715	17.88	18.30	1.102	0.788	/
Up	Level2&3	QPSK	Left Cheek	0	20175	1732.5	1	MID	-0.02	0.289	14.91	15.30	1.094	0.316	/
	Level2&3			0	20050	1720	50	LOW	-0.15	0.281	14.98	15.30	1.076	0.302	/
	Level2&3		Left Tilt	0	20175	1732.5	1	MID	0.06	0.389	14.91	15.30	1.094	0.426	/
	Level2&3			0	20050	1720	50	LOW	-0.09	0.371	14.98	15.30	1.076	0.399	/
	Level2&3		Right Cheek	0	20175	1732.5	1	MID	-0.17	0.382	14.91	15.30	1.094	0.418	/
	Level2&3			0	20050	1720	50	LOW	-0.04	0.368	14.98	15.30	1.076	0.396	/
	Level2&3		Right Tilt	0	20175	1732.5	1	MID	-0.05	0.531	14.91	15.30	1.094	0.581	/
	Level2&3			0	20050	1720	50	LOW	-0.09	0.503	14.98	15.30	1.076	0.541	/
Down	Off	QPSK	Left Cheek	0	20050	1720	1	MID	-0.07	0.069	23.38	23.80	1.102	0.076	/
	Off			0	20050	1720	50	LOW	-0.18	0.051	21.97	22.80	1.211	0.062	/
	Off		Left Tilt	0	20050	1720	1	MID	-0.01	0.055	23.38	23.80	1.102	0.061	/
	Off			0	20050	1720	50	LOW	0.17	0.041	21.97	22.80	1.211	0.050	/
	Off		Right Cheek	0	20050	1720	1	MID	-0.05	0.062	23.38	23.80	1.102	0.068	/
	Off			0	20050	1720	50	LOW	0.05	0.051	21.97	22.80	1.211	0.062	/
	Off		Right Tilt	0	20050	1720	1	MID	-0.01	0.041	23.38	23.80	1.102	0.045	/
	Off			0	20050	1720	50	LOW	0.06	0.030	21.97	22.80	1.211	0.036	/
<b>Body-worn Accessory</b>															
Up	Level4	QPSK	Front Side	15	20175	1732.5	1	MID	-0.05	0.163	19.47	19.80	1.079	0.176	/
	Level4			15	20050	1720	50	HIGH	-0.09	0.151	19.55	19.80	1.059	0.160	/
	Level4		Back Side	15	20175	1732.5	1	MID	-0.14	0.203	19.47	19.80	1.079	0.219	/
	Level4			15	20050	1720	50	HIGH	-0.01	0.189	19.55	19.80	1.059	0.200	/
Up	Level5&6	QPSK	Front Side	15	20175	1732.5	1	MID	-0.09	0.163	18.98	19.30	1.076	0.175	/
	Level5&6			15	20050	1720	50	HIGH	-0.03	0.151	19.06	19.30	1.057	0.160	/
	Level5&6		Back Side	15	20175	1732.5	1	MID	0.15	0.203	18.98	19.30	1.076	0.219	/
	Level5&6			15	20050	1720	50	HIGH	-0.13	0.189	19.06	19.30	1.057	0.200	/
Down	Level7	QPSK	Front Side	10	20175	1732.5	1	MID	0.18	0.177	21.58	22.30	1.180	0.209	/
	Level7			10	20050	1720	50	LOW	0.12	0.173	21.66	22.30	1.159	0.200	/
	Level7		Back Side	10	20175	1732.5	1	MID	-0.05	0.270	21.58	22.30	1.180	<b>0.319</b>	23#
	Level7			10	20050	1720	50	LOW	-0.07	0.263	21.66	22.30	1.159	0.305	/
Down	Level8&9	QPSK	Front Side	10	20175	1732.5	1	LOW	-0.11	0.177	21.37	21.80	1.104	0.195	/
	Level8&9			10	20050	1720	50	LOW	-0.13	0.173	21.48	21.80	1.076	0.186	/
	Level8&9		Back Side	10	20175	1732.5	1	LOW	-0.05	0.270	21.37	21.80	1.104	0.298	/
	Level8&9			10	20050	1720	50	LOW	0.05	0.263	21.48	21.80	1.076	0.283	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	20175	1732.5	1	MID	-0.05	0.326	19.47	19.80	1.079	0.352	/
	Level4			10	20050	1720	50	HIGH	-0.09	0.311	19.55	19.80	1.059	0.329	/
	Level4		Back Side	10	20175	1732.5	1	MID	-0.15	0.392	19.47	19.80	1.079	0.422	/
	Level4			10	20050	1720	50	HIGH	-0.10	0.385	19.55	19.80	1.059	0.408	/
	Level4		Left Edge	10	20175	1732.5	1	MID	-0.03	0.035	19.47	19.80	1.079	0.038	/
	Level4			10	20050	1720	50	HIGH	0.00	0.032	19.55	19.80	1.059	0.034	/
	Level4		Right Edge	10	20175	1732.5	1	MID	-0.13	0.053	19.47	19.80	1.079	0.058	/
	Level4			10	20050	1720	50	HIGH	0.10	0.050	19.55	19.80	1.059	0.053	/

	Level4		Top Edge	10	20175	1732.5	1	MID	0.06	0.584	19.47	19.80	1.079	0.630	/
	Level4			10	20050	1720	50	HIGH	0.00	0.532	19.55	19.80	1.059	0.564	/
Up	Level5&6	QPSK	Front Side	10	20175	1732.5	1	MID	0.16	0.294	18.98	19.30	1.076	0.316	/
	Level5&6			10	20050	1720	50	HIGH	-0.05	0.284	19.06	19.30	1.057	0.300	/
	Level5&6		Back Side	10	20175	1732.5	1	MID	0.08	0.355	18.98	19.30	1.076	0.382	/
	Level5&6			10	20050	1720	50	HIGH	-0.08	0.352	19.06	19.30	1.057	0.372	/
	Level5&6		Left Edge	10	20175	1732.5	1	MID	0.03	0.026	18.98	19.30	1.076	0.028	/
	Level5&6			10	20050	1720	50	HIGH	-0.07	0.022	19.06	19.30	1.057	0.023	/
	Level5&6		Right Edge	10	20175	1732.5	1	MID	0.14	0.038	18.98	19.30	1.076	0.041	/
	Level5&6			10	20050	1720	50	HIGH	0.00	0.033	19.06	19.30	1.057	0.035	/
	Level5&6		Top Edge	10	20175	1732.5	1	MID	-0.16	0.519	18.98	19.30	1.076	0.559	/
	Level5&6			10	20050	1720	50	HIGH	-0.01	0.505	19.06	19.30	1.057	0.534	/
Down	Level7	QPSK	Front Side	10	20175	1732.5	1	MID	0.17	0.357	21.58	22.30	1.180	0.421	/
	Level7			10	20050	1720	50	LOW	-0.19	0.342	21.66	22.30	1.159	0.396	/
	Level7		Back Side	10	20175	1732.5	1	MID	0.09	0.593	21.58	22.30	1.180	0.700	/
	Level7			10	20050	1720	50	LOW	0.16	0.581	21.66	22.30	1.159	0.673	/
	Level7		Left Edge	10	20175	1732.5	1	MID	0.02	0.120	21.58	22.30	1.180	0.142	/
	Level7			10	20050	1720	50	LOW	0.01	0.112	21.66	22.30	1.159	0.130	/
	Level7		Right Edge	10	20175	1732.5	1	MID	-0.05	0.074	21.58	22.30	1.180	0.087	/
	Level7			10	20050	1720	50	LOW	-0.18	0.068	21.66	22.30	1.159	0.079	/
	Level7		Bottom Edge	10	20175	1732.5	1	MID	0.09	0.706	21.58	22.30	1.180	<b>0.833</b>	24#
	Level7			10	20050	1720	1	MID	-0.07	0.683	21.58	22.30	1.180	0.806	/
	Level7			10	20300	1745	1	MID	-0.01	0.688	21.49	22.30	1.205	0.829	/
	Level7			10	20050	1720	50	LOW	-0.17	0.652	21.66	22.30	1.159	0.756	/
Level7	10	20050		1720	100	LOW	0.10	0.613	21.60	22.30	1.175	0.720	/		
Down	Level8&9	QPSK	Front Side	10	20175	1732.5	1	LOW	0.11	0.356	21.37	21.80	1.104	0.393	/
	Level8&9			10	20050	1720	50	LOW	0.12	0.352	21.48	21.80	1.076	0.379	/
	Level8&9		Back Side	10	20175	1732.5	1	LOW	-0.16	0.556	21.37	21.80	1.104	0.614	/
	Level8&9			10	20050	1720	50	LOW	-0.15	0.545	21.48	21.80	1.076	0.587	/
	Level8&9		Left Edge	10	20175	1732.5	1	LOW	0.15	0.101	21.37	21.80	1.104	0.112	/
	Level8&9			10	20050	1720	50	LOW	0.01	0.098	21.48	21.80	1.076	0.105	/
	Level8&9		Right Edge	10	20175	1732.5	1	LOW	-0.18	0.062	21.37	21.80	1.104	0.068	/
	Level8&9			10	20050	1720	50	LOW	-0.07	0.055	21.48	21.80	1.076	0.059	/
	Level8&9		Bottom Edge	10	20175	1732.5	1	LOW	-0.04	0.654	21.37	21.80	1.104	0.722	/
	Level8&9			10	20050	1720	50	LOW	-0.10	0.578	21.48	21.80	1.076	0.622	/

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</b>															
Up	Level4	QPSK	Front Side	0	20175	1732.5	1	MID	0.03	0.907	19.47	19.80	1.079	0.979	/
	Level4			0	20050	1720	50	LOW	-0.18	0.822	19.55	19.80	1.059	0.871	
	Level4		Back Side	0	20175	1732.5	1	MID	-0.12	0.747	19.47	19.80	1.079	0.806	/
	Level4			0	20050	1720	50	LOW	0.08	0.657	19.55	19.80	1.059	0.695	/
	Level4		Left Edge	0	20175	1732.5	1	MID	0.19	0.067	19.55	19.80	1.059	0.071	/
	Level4			0	20050	1720	50	LOW	-0.19	0.050	19.47	19.80	1.079	0.054	/
	Level4		Right Edge	0	20175	1732.5	1	MID	0.01	0.075	19.47	19.80	1.079	0.081	/
	Level4			0	20050	1720	50	LOW	0.14	0.066	19.55	19.80	1.059	0.070	/
	Level4		Top Edge	0	20175	1732.5	1	MID	0.01	1.690	19.47	19.80	1.079	<b>1.823</b>	25#
	Level4			0	20050	1720	50	LOW	-0.19	1.634	19.55	19.80	1.059	1.731	/
Up	Level5&6	QPSK	Front Side	0	20175	1732.5	1	LOW	-0.16	0.821	18.98	19.30	1.076	0.884	/
	Level5&6			0	20050	1720	50	LOW	0.02	0.748	19.06	19.30	1.057	0.790	/
	Level5&6		Back Side	0	20175	1732.5	1	LOW	0.05	0.685	18.98	19.30	1.076	0.737	/
	Level5&6			0	20050	1720	50	LOW	0.12	0.599	19.06	19.30	1.057	0.633	/
	Level5&6		Left Edge	0	20175	1732.5	1	LOW	0.09	0.066	18.98	19.30	1.076	0.071	/
	Level5&6			0	20050	1720	50	LOW	0.18	0.045	19.06	19.30	1.057	0.048	/
	Level5&6		Right Edge	0	20175	1732.5	1	LOW	0.12	0.069	18.98	19.30	1.076	0.074	/
	Level5&6			0	20050	1720	50	LOW	-0.18	0.062	19.06	19.30	1.057	0.066	/
	Level5&6		Top Edge	0	20175	1732.5	1	LOW	0.01	1.520	18.98	19.30	1.076	1.636	/
	Level5&6			0	20050	1720	50	LOW	-0.02	1.510	19.06	19.30	1.057	1.596	/

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

### 10.8LTE 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	20450	829	1	MID	-0.19	0.351	23.66	24.30	1.159	0.407	/
	Off			0	20450	829	50	MID	0.15	0.295	22.15	23.30	1.303	0.384	/
	Off		Left Tilt	0	20450	829	1	MID	-0.19	0.281	23.66	24.30	1.159	0.326	/
	Off			0	20450	829	50	MID	-0.18	0.201	22.15	23.30	1.303	0.262	/
	Off		Right Cheek	0	20450	829	1	MID	0.06	0.438	23.66	24.30	1.159	<b>0.508</b>	26#
	Off			0	20450	829	50	MID	-0.11	0.331	22.15	23.30	1.303	0.431	/
	Off		Right Tilt	0	20450	829	1	MID	-0.11	0.383	23.66	24.30	1.159	0.444	/
	Off			0	20450	829	50	MID	0.09	0.309	22.15	23.30	1.303	0.403	/
Up	Level2&3	QPSK	Left Cheek	0	20450	829	1	MID	0.06	0.202	22.74	23.30	1.138	0.230	/
	Level2&3			0	20450	829	50	HIGH	-0.16	0.184	22.20	23.30	1.288	0.237	/
	Level2&3		Left Tilt	0	20450	829	1	MID	-0.04	0.169	22.74	23.30	1.138	0.192	/
	Level2&3			0	20450	829	50	HIGH	-0.05	0.145	22.20	23.30	1.288	0.187	/

	Level2&3	QPSK	Right Cheek	0	20450	829	1	MID	-0.04	0.258	22.74	23.30	1.138	0.294	/	
	Level2&3			0	20450	829	50	HIGH	-0.08	0.232	22.20	23.30	1.288	0.299	/	
	Level2&3		Right Tilt	0	20450	829	1	MID	0.03	0.241	22.74	23.30	1.138	0.274	/	
	Level2&3			0	20450	829	50	HIGH	0.09	0.203	22.20	23.30	1.288	0.262	/	
Down	Off		QPSK	Left Cheek	0	20450	829	1	MID	0.02	0.144	23.66	24.30	1.159	0.167	/
	Off				0	20450	829	50	MID	-0.11	0.098	22.15	23.30	1.303	0.128	/
	Off			Left Tilt	0	20450	829	1	MID	-0.02	0.070	23.66	24.30	1.159	0.081	/
	Off				0	20450	829	50	MID	0.09	0.051	22.15	23.30	1.303	0.066	/
	Off	Right Cheek		0	20450	829	1	MID	-0.01	0.106	23.66	24.30	1.159	0.123	/	
	Off			0	20450	829	50	MID	0.09	0.067	22.15	23.30	1.303	0.087	/	
	Off	Right Tilt		0	20450	829	1	MID	-0.10	0.064	23.66	24.30	1.159	0.074	/	
	Off			0	20450	829	50	MID	-0.19	0.041	22.15	23.30	1.303	0.053	/	
<b>Body-worn Accessory</b>																
Up	Off	QPSK	Front Side	15	20450	829	1	MID	0.03	0.054	23.66	24.30	1.159	0.063	/	
	Off			15	20450	829	50	MID	-0.16	0.035	22.15	23.30	1.303	0.046	/	
	Off		Back Side	15	20450	829	1	MID	-0.19	0.022	23.66	24.30	1.159	0.025	/	
	Off			15	20450	829	50	MID	0.02	0.016	22.15	23.30	1.303	0.021	/	
Down	Off		QPSK	Front Side	15	20450	829	1	MID	0.00	0.133	23.66	24.30	1.159	<b>0.154</b>	<b>27#</b>
	Off				15	20450	829	50	MID	0.19	0.105	22.15	23.30	1.303	0.137	/
	Off			Back Side	15	20450	829	1	MID	0.02	0.106	23.66	24.30	1.159	0.123	/
	Off				15	20450	829	50	MID	-0.14	0.077	22.15	23.30	1.303	0.100	/
<b>Hotspot</b>																
Up	Off	QPSK		Front Side	10	20450	829	1	MID	0.17	0.067	23.66	24.30	1.159	0.078	/
	Off				10	20450	829	50	MID	-0.10	0.045	22.15	23.30	1.303	0.059	/
	Off			Back Side	10	20450	829	1	MID	0.16	0.051	23.66	24.30	1.159	0.059	/
	Off		10		20450	829	50	MID	-0.19	0.035	22.15	23.30	1.303	0.046	/	
	Off		Left Edge	10	20450	829	1	MID	0.01	0.013	23.66	24.30	1.159	0.015	/	
	Off			10	20450	829	50	MID	-0.19	0.011	22.15	23.30	1.303	0.014	/	
	Off		Right Edge	10	20450	829	1	MID	0.06	0.015	23.66	24.30	1.159	0.017	/	
	Off			10	20450	829	50	MID	-0.04	0.011	22.15	23.30	1.303	0.014	/	
	Off		Top Edge	10	20450	829	1	MID	-0.03	0.060	23.66	24.30	1.159	0.070	/	
	Off			10	20450	829	50	MID	0.11	0.048	22.15	23.30	1.303	0.063	/	
Down	Off	QPSK	Front Side	10	20450	829	1	MID	0.06	0.154	23.66	24.30	1.159	0.178	/	
	Off			10	20450	829	50	MID	0.12	0.125	22.15	23.30	1.303	0.163	/	
	Off		Back Side	10	20450	829	1	MID	0.00	0.224	23.66	24.30	1.159	<b>0.260</b>	<b>28#</b>	
	Off			10	20450	829	50	MID	-0.12	0.185	22.15	23.30	1.303	0.241	/	
	Off		Left Edge	10	20450	829	1	MID	-0.04	0.074	23.66	24.30	1.159	0.086	/	
	Off			10	20450	829	50	MID	-0.13	0.055	22.15	23.30	1.303	0.072	/	
	Off		Right Edge	10	20450	829	1	MID	-0.14	0.157	23.66	24.30	1.159	0.182	/	
	Off			10	20450	829	50	MID	-0.11	0.131	22.15	23.30	1.303	0.171	/	
	Off		Bottom Edge	10	20450	829	1	MID	0.02	0.193	23.66	24.30	1.159	0.224	/	
	Off			10	20450	829	50	MID	-0.01	0.138	22.15	23.30	1.303	0.180	/	

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

### 10.9LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Nu m.	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	20850	2510	1	LOW	0.18	0.160	15.44	15.80	1.086	0.174	/
	Level1			0	20850	2510	50	LOW	0.15	0.155	15.42	15.80	1.091	0.169	/
	Level1		Left Tilt	0	20850	2510	1	LOW	-0.17	0.148	15.44	15.80	1.086	0.161	/
	Level1			0	20850	2510	50	LOW	-0.11	0.142	15.42	15.80	1.091	0.155	/
	Level1		Right Cheek	0	20850	2510	1	LOW	0.14	0.398	15.44	15.80	1.086	0.432	/
	Level1			0	20850	2510	50	LOW	-0.17	0.385	15.42	15.80	1.091	0.420	/
	Level1		Right Tilt	0	20850	2510	1	LOW	-0.17	0.416	15.44	15.80	1.086	0.452	/
	Level1			0	20850	2510	50	LOW	0.19	0.421	15.42	15.80	1.091	<b>0.459</b>	29#
Up	Level2&3	QPSK	Left Cheek	0	20850	2510	1	LOW	-0.05	0.132	14.38	14.80	1.102	0.145	/
	Level2&3			0	20850	2510	50	LOW	0.10	0.125	14.45	14.80	1.084	0.135	/
	Level2&3		Left Tilt	0	20850	2510	1	LOW	-0.14	0.123	14.38	14.80	1.102	0.135	/
	Level2&3			0	20850	2510	50	LOW	0.10	0.118	14.45	14.80	1.084	0.128	/
	Level2&3		Right Cheek	0	20850	2510	1	LOW	0.09	0.331	14.38	14.80	1.102	0.365	/
	Level2&3			0	20850	2510	50	LOW	-0.19	0.315	14.45	14.80	1.084	0.341	/
	Level2&3		Right Tilt	0	20850	2510	1	LOW	-0.06	0.354	14.38	14.80	1.102	0.390	/
	Level2&3			0	20850	2510	50	LOW	-0.10	0.341	14.45	14.80	1.084	0.370	/
Down	Off	QPSK	Left Cheek	0	20850	2510	1	LOW	-0.14	0.145	23.68	23.80	1.028	0.149	/
	Off			0	20850	2510	50	LOW	-0.15	0.103	22.10	22.80	1.175	0.121	/
	Off		Left Tilt	0	20850	2510	1	LOW	0.08	0.110	23.68	23.80	1.028	0.113	/
	Off			0	20850	2510	50	LOW	0.17	0.078	22.10	22.80	1.175	0.092	/
	Off		Right Cheek	0	20850	2510	1	LOW	0.15	0.207	23.68	23.80	1.028	0.213	/
	Off			0	20850	2510	50	LOW	0.01	0.165	22.10	22.80	1.175	0.194	/
	Off		Right Tilt	0	20850	2510	1	LOW	-0.03	0.119	23.68	23.80	1.028	0.122	/
	Off			0	20850	2510	50	LOW	-0.16	0.081	22.10	22.80	1.175	0.095	/
<b>Body-worn Accessory</b>															
Up	Level4	QPSK	Front Side	15	20850	2510	1	LOW	-0.02	0.359	22.63	22.80	1.040	0.373	/
	Level4			15	20850	2510	50	LOW	-0.14	0.297	22.09	22.80	1.178	0.350	/
	Level4		Back Side	15	20850	2510	1	LOW	-0.08	0.460	22.63	22.80	1.040	<b>0.478</b>	30#
	Level4			15	20850	2510	50	LOW	-0.19	0.390	22.09	22.80	1.178	0.459	/
Up	Level5&6	QPSK	Front Side	15	20850	2510	1	LOW	0.04	0.296	21.56	21.80	1.057	0.313	/
	Level5&6			15	20850	2510	50	LOW	-0.14	0.244	21.54	21.80	1.062	0.259	/
	Level5&6		Back Side	15	20850	2510	1	LOW	0.08	0.373	21.56	21.80	1.057	0.394	/
	Level5&6			15	20850	2510	50	LOW	0.12	0.325	21.54	21.80	1.062	0.345	/
Down	Off	QPSK	Front Side	15	20850	2510	1	LOW	0.13	0.283	23.68	23.80	1.028	0.291	/
	Off			15	20850	2510	50	LOW	0.15	0.198	22.10	22.80	1.175	0.233	/
	Off		Back Side	15	20850	2510	1	LOW	-0.19	0.257	23.68	23.80	1.028	0.264	/
	Off			15	20850	2510	50	LOW	-0.18	0.207	22.10	22.80	1.175	0.243	/
<b>Hotspot</b>															
Up	Level4	QPSK	Front Side	10	20850	2510	1	LOW	-0.04	0.404	22.63	22.80	1.040	0.420	/

Level4	QPSK		10	20850	2510	50	LOW	0.13	0.381	22.09	22.80	1.178	0.449	/
		Back Side	10	20850	2510	1	LOW	0.19	0.651	22.63	22.80	1.040	0.677	/
			10	20850	2510	50	LOW	0.03	0.612	22.09	22.80	1.178	<b>0.721</b>	31#
		Left Edge	10	20850	2510	1	LOW	0.09	0.229	22.63	22.80	1.040	0.238	/
			10	20850	2510	50	LOW	0.18	0.208	22.09	22.80	1.178	0.245	/
		Right Edge	10	20850	2510	1	LOW	0.01	0.431	22.63	22.80	1.040	0.448	/
			10	20850	2510	50	LOW	-0.05	0.401	22.09	22.80	1.178	0.472	/
		Top Edge	10	20850	2510	1	LOW	0.19	0.514	22.63	22.80	1.040	0.535	/
			10	20850	2510	50	LOW	-0.17	0.487	22.09	22.80	1.178	0.573	/
Up	QPSK	Front Side	10	21100	2535	1	LOW	0.11	0.286	21.56	21.80	1.057	0.302	/
			10	21100	2535	50	LOW	0.14	0.245	21.54	21.80	1.062	0.260	/
		Back Side	10	21100	2535	1	LOW	-0.03	0.483	21.56	21.80	1.057	0.510	/
			10	21100	2535	50	LOW	-0.10	0.441	21.54	21.80	1.062	0.468	/
		Left Edge	10	21100	2535	1	LOW	0.14	0.165	21.56	21.80	1.057	0.174	/
			10	21100	2535	50	LOW	0.08	0.141	21.54	21.80	1.062	0.150	/
		Right Edge	10	21100	2535	1	LOW	-0.19	0.248	21.56	21.80	1.057	0.262	/
			10	21100	2535	50	LOW	-0.16	0.206	21.54	21.80	1.062	0.219	/
		Top Edge	10	21100	2535	1	LOW	0.17	0.414	21.56	21.80	1.057	0.438	/
			10	21100	2535	50	LOW	0.07	0.378	21.54	21.80	1.062	0.401	/
Down	QPSK	Front Side	10	20850	2510	1	LOW	-0.04	0.455	23.68	23.80	1.028	0.468	/
			10	20850	2510	50	LOW	-0.04	0.335	22.10	22.80	1.175	0.394	/
		Back Side	10	20850	2510	1	LOW	0.08	0.463	23.68	23.80	1.028	0.476	/
			10	20850	2510	50	LOW	0.02	0.376	22.10	22.80	1.175	0.442	/
		Left Edge	10	20850	2510	1	LOW	-0.09	0.383	23.68	23.80	1.028	0.394	/
			10	20850	2510	50	LOW	-0.03	0.254	22.10	22.80	1.175	0.298	/
		Right Edge	10	20850	2510	1	LOW	0.02	0.152	23.68	23.80	1.028	0.156	/
			10	20850	2510	50	LOW	0.13	0.117	22.10	22.80	1.175	0.137	/
		Bottom Edge	10	20850	2510	1	LOW	-0.01	0.442	23.68	23.80	1.028	0.454	/
			10	20850	2510	50	LOW	-0.01	0.347	22.10	22.80	1.175	0.408	/

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

### 10.10 LTE Band 7 (20MHz Bandwidth) Worse case for CA Test

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	Right Tilt	0	PCC 20850 + SCC 21048	2510 + 2529.8	1	Low + High	-0.12	0.398	15.31	15.80	1.119	0.446	/
<b>Body-worn Accessory</b>															
Up	Level4	QPSK	Back Side	15	PCC 20850 + SCC 21048	2510 + 2529.8	1	Low + High	0.13	0.432	22.38	22.80	1.102	0.476	/
<b>Hotspot</b>															
Up	Level4	QPSK	Back Side	10	PCC 20850 + SCC 21048	2510 + 2529.8	1	Low + High	-0.05	0.630	22.38	22.80	1.102	0.694	/

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

### 10.11 LTE Band 12 (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	23130	711	1	LOW	-0.04	0.046	22.92	23.80	1.225	0.056	/
	Off			0	23130	711	50	HIGH	0.14	0.038	21.47	22.80	1.358	0.052	/
	Off		Left Tilt	0	23130	711	1	LOW	-0.13	0.036	22.92	23.80	1.225	0.044	/
	Off			0	23130	711	50	HIGH	-0.07	0.029	21.47	22.80	1.358	0.039	/
	Off		Right Cheek	0	23130	711	1	LOW	0.06	0.065	22.92	23.80	1.225	0.080	/
	Off			0	23130	711	50	HIGH	-0.11	0.052	21.47	22.80	1.358	0.071	/
	Off		Right Tilt	0	23130	711	1	LOW	0.07	0.055	22.92	23.80	1.225	0.067	/
	Off			0	23130	711	50	HIGH	-0.10	0.044	21.47	22.80	1.358	0.060	/
Down	Off	QPSK	Left Cheek	0	23130	711	1	LOW	0.03	0.084	22.92	23.80	1.225	<b>0.102</b>	<b>32#</b>
	Off			0	23130	711	50	HIGH	-0.13	0.071	21.47	22.80	1.358	0.096	/
	Off		Left Tilt	0	23130	711	1	LOW	0.02	0.045	22.92	23.80	1.225	0.055	/
	Off			0	23130	711	50	HIGH	-0.08	0.035	21.47	22.80	1.358	0.048	/
	Off		Right Cheek	0	23130	711	1	LOW	-0.14	0.059	22.92	23.80	1.225	0.072	/
	Off			0	23130	711	50	HIGH	0.04	0.048	21.47	22.80	1.358	0.065	/
	Off		Right Tilt	0	23130	711	1	LOW	0.10	0.035	22.92	23.80	1.225	0.043	/
	Off			0	23130	711	50	HIGH	-0.08	0.026	21.47	22.80	1.358	0.035	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	23130	711	1	LOW	0.18	0.028	22.92	23.80	1.225	0.034	/
	Off			15	23130	711	50	HIGH	-0.14	0.021	21.47	22.80	1.358	0.029	/
	Off		Back Side	15	23130	711	1	LOW	0.00	0.045	22.92	23.80	1.225	0.055	/

	Off			15	23130	711	50	HIGH	0.06	0.038	21.47	22.80	1.358	0.052	/
Down	Off	QPSK	Front Side	15	23130	711	1	LOW	0.03	0.127	22.92	23.80	1.225	<b>0.156</b>	33#
	Off			15	23130	711	50	HIGH	-0.12	0.110	21.47	22.80	1.358	0.149	/
	Off		Back Side	15	23130	711	1	LOW	0.03	0.106	22.92	23.80	1.225	0.130	/
	Off			15	23130	711	50	HIGH	-0.08	0.082	21.47	22.80	1.358	0.111	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	23130	711	1	LOW	0.09	0.035	22.92	23.80	1.225	0.043	/
	Off			10	23130	711	50	HIGH	-0.16	0.028	21.47	22.80	1.358	0.038	/
	Off		Back Side	10	23130	711	1	LOW	0.19	0.051	22.92	23.80	1.225	0.062	/
	Off			10	23130	711	50	HIGH	0.13	0.044	21.47	22.80	1.358	0.060	/
	Off		Left Edge	10	23130	711	1	LOW	-0.01	0.016	22.92	23.80	1.225	0.020	/
	Off			10	23130	711	50	HIGH	-0.13	0.011	21.47	22.80	1.358	0.015	/
	Off		Right Edge	10	23130	711	1	LOW	0.11	0.011	22.92	23.80	1.225	0.013	/
	Off			10	23130	711	50	HIGH	0.04	0.008	21.47	22.80	1.358	0.011	/
	Off		Top Edge	10	23130	711	1	LOW	-0.09	0.056	22.92	23.80	1.225	0.069	/
	Off			10	23130	711	50	HIGH	0.07	0.044	21.47	22.80	1.358	0.060	/
Down	Off	QPSK	Front Side	10	23130	711	1	LOW	0.04	0.125	22.92	23.80	1.225	0.153	/
	Off			10	23130	711	50	HIGH	-0.16	0.110	21.47	22.80	1.358	0.149	/
	Off		Back Side	10	23130	711	1	LOW	-0.04	0.187	22.92	23.80	1.225	0.229	/
	Off			10	23130	711	50	HIGH	-0.07	0.163	21.47	22.80	1.358	0.221	/
	Off		Left Edge	10	23130	711	1	LOW	0.19	0.114	22.92	23.80	1.225	0.140	/
	Off			10	23130	711	50	HIGH	0.13	0.102	21.47	22.80	1.358	0.139	/
	Off		Right Edge	10	23130	711	1	LOW	-0.02	0.213	22.92	23.80	1.225	<b>0.261</b>	34#
	Off			10	23130	711	50	HIGH	-0.07	0.185	21.47	22.80	1.358	0.251	/
	Off		Bottom Edge	10	23130	711	1	LOW	0.18	0.081	22.92	23.80	1.225	0.099	/
	Off			10	23130	711	50	HIGH	-0.18	0.074	21.47	22.80	1.358	0.101	/

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

## 10.12 LTE Band 26 (15MHz 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	26965	841.5	1	MID	0.16	0.335	23.86	24.30	1.107	0.371	/
	Off			0	26765	821.5	50	MID	0.03	0.251	22.36	23.30	1.242	0.312	/
	Off		Left Tilt	0	26965	841.5	1	MID	0.03	0.274	23.86	24.30	1.107	0.303	/
	Off			0	26765	821.5	50	MID	-0.12	0.215	22.36	23.30	1.242	0.267	/
	Off		Right Cheek	0	26965	841.5	1	MID	-0.08	0.408	23.86	24.30	1.107	<b>0.452</b>	35#
	Off			0	26765	821.5	50	MID	-0.04	0.315	22.36	23.30	1.242	0.391	/
	Off		Right Tilt	0	26965	841.5	1	MID	0.17	0.362	23.86	24.30	1.107	0.401	/
	Off			0	26765	821.5	50	MID	-0.04	0.291	22.36	23.30	1.242	0.361	/
Down	Off	QPSK	Left Cheek	0	26965	841.5	1	MID	0.16	0.132	23.86	24.30	1.107	0.146	/
	Off			0	26765	821.5	50	MID	0.05	0.112	22.36	23.30	1.242	0.139	/
	Off		Left Tilt	0	26965	841.5	1	MID	-0.15	0.063	23.86	24.30	1.107	0.070	/

	Off		Right Cheek	0	26765	821.5	50	MID	-0.02	0.050	22.36	23.30	1.242	0.062	/	
	Off			0	26965	841.5	1	MID	0.13	0.096	23.86	24.30	1.107	0.106	/	
	Off			0	26765	821.5	50	MID	-0.02	0.077	22.36	23.30	1.242	0.096	/	
	Off			Right Tilt	0	26965	841.5	1	MID	-0.17	0.058	23.86	24.30	1.107	0.064	/
	Off				0	26765	821.5	50	MID	-0.11	0.041	22.36	23.30	1.242	0.051	/
<b>Body-worn Accessory</b>																
Up	Off	QPSK	Front Side	15	26965	841.5	1	MID	0.00	0.059	23.86	24.30	1.107	0.065	/	
	Off			15	26765	821.5	50	MID	0.10	0.041	22.36	23.30	1.242	0.051	/	
	Off		Back Side	15	26965	841.5	1	MID	0.15	0.055	23.86	24.30	1.107	0.061	/	
	Off			15	26765	821.5	50	MID	-0.13	0.042	22.36	23.30	1.242	0.052	/	
Down	Off	QPSK	Front Side	15	26965	841.5	1	MID	0.07	0.162	23.86	24.30	1.107	<b>0.179</b>	36#	
	Off			15	26765	821.5	50	MID	0.15	0.125	22.36	23.30	1.242	0.155	/	
	Off		Back Side	15	26965	841.5	1	MID	-0.01	0.103	23.86	24.30	1.107	0.114	/	
	Off			15	26765	821.5	50	MID	0.13	0.075	22.36	23.30	1.242	0.093	/	
<b>Hotspot</b>																
Up	Off	QPSK	Front Side	10	26965	841.5	1	MID	0.13	0.070	23.86	24.30	1.107	0.077	/	
	Off			10	26765	821.5	50	MID	-0.19	0.056	22.36	23.30	1.242	0.070	/	
	Off		Back Side	10	26965	841.5	1	MID	-0.11	0.052	23.86	24.30	1.107	0.058	/	
	Off			10	26765	821.5	50	MID	0.01	0.041	22.36	23.30	1.242	0.051	/	
	Off		Left Edge	10	26965	841.5	1	MID	-0.18	0.044	23.86	24.30	1.107	0.049	/	
	Off			10	26765	821.5	50	MID	0.05	0.029	22.36	23.30	1.242	0.036	/	
	Off		Right Edge	10	26965	841.5	1	MID	-0.18	0.012	23.86	24.30	1.107	0.013	/	
	Off			10	26765	821.5	50	MID	-0.10	0.008	22.36	23.30	1.242	0.010	/	
	Off		Top Edge	10	26965	841.5	1	MID	0.10	0.076	23.86	24.30	1.107	0.084	/	
	Off			10	26765	821.5	50	MID	-0.14	0.058	22.36	23.30	1.242	0.072	/	
Down	Off	QPSK	Front Side	10	26965	841.5	1	MID	0.03	0.158	23.86	24.30	1.107	0.175	/	
	Off			10	26765	821.5	50	MID	-0.14	0.132	22.36	23.30	1.242	0.164	/	
	Off		Back Side	10	26965	841.5	1	MID	0.04	0.165	23.86	24.30	1.107	<b>0.183</b>	37#	
	Off			10	26765	821.5	50	MID	0.12	0.131	22.36	23.30	1.242	0.163	/	
	Off		Left Edge	10	26965	841.5	1	MID	-0.07	0.094	23.86	24.30	1.107	0.104	/	
	Off			10	26765	821.5	50	MID	0.13	0.077	22.36	23.30	1.242	0.096	/	
	Off		Right Edge	10	26965	841.5	1	MID	0.08	0.129	23.86	24.30	1.107	0.143	/	
	Off			10	26765	821.5	50	MID	-0.15	0.098	22.36	23.30	1.242	0.122	/	
	Off		Bottom Edge	10	26965	841.5	1	MID	0.04	0.140	23.86	24.30	1.107	0.155	/	
	Off			10	26765	821.5	50	MID	0.12	0.103	22.36	23.30	1.242	0.128	/	
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

### 10.13 LTE Band 66 (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	0	132072	1720	1	MID	-0.17	0.496	16.92	17.60	1.169	0.580	/	
	Level1			Cheek	0	132072	1720	50	HIGH	-0.17	0.481	17.03	17.60	1.140	0.548	/
	Level1		Left Tilt		0	132072	1720	1	MID	0.03	0.692	16.92	17.60	1.169	0.809	/
	Level1				0	132322	1745	1	MID	0.18	0.682	16.89	17.60	1.178	0.803	/
	Level1				0	132572	1770	1	MID	0.08	0.658	16.92	17.60	1.169	0.770	/
	Level1				0	132072	1720	50	HIGH	-0.09	0.696	17.03	17.60	1.140	0.794	/
	Level1				0	132072	1720	100	LOW	0.11	0.623	17.01	17.60	1.146	0.714	/
	Level1				0	132572	1720	1	MID	0.13	0.626	16.92	17.60	1.169	0.732	/
	Level1		Right	Cheek	0	132572	1720	50	HIGH	0.05	0.610	17.03	17.60	1.140	0.696	/
	Level1				0	132072	1720	1	MID	0.03	0.787	16.92	17.60	1.169	0.920	/
	Level1		Right Tilt		0	132322	1745	1	MID	-0.12	0.766	16.89	17.60	1.178	0.902	/
	Level1				0	132572	1770	1	MID	0.08	0.794	16.92	17.60	1.169	0.929	/
	Level1				0	132072	1720	50	HIGH	0.11	0.823	17.03	17.60	1.140	<b>0.938</b>	<b>38#</b>
	Level1				0	132322	1745	50	MID	0.03	0.745	16.89	17.60	1.178	0.877	/
	Level1				0	132572	1770	50	MID	0.12	0.736	17.01	17.60	1.146	0.843	/
	Level1				0	132072	1720	100	LOW	-0.10	0.788	17.01	17.60	1.146	0.903	/
	Level1				0	132322	1745	100	LOW	0.05	0.717	16.81	17.60	1.199	0.860	/
	Level1				0	132572	1770	100	LOW	0.12	0.688	16.76	17.60	1.213	0.835	/
Up	Level2&3	QPSK	Left	0	132572	1770	1	MID	0.16	0.255	13.91	14.60	1.172	0.299	/	
	Level2&3			Cheek	0	132572	1770	50	HIGH	-0.01	0.248	13.97	14.60	1.156	0.287	/
	Level2&3		Left Tilt		0	132572	1770	1	MID	-0.03	0.344	13.91	14.60	1.172	0.403	/
	Level2&3				0	132572	1770	50	HIGH	0.15	0.335	13.97	14.60	1.156	0.387	/
	Level2&3		Right	Cheek	0	132572	1770	1	MID	0.19	0.308	13.91	14.60	1.172	0.361	/
	Level2&3				0	132572	1770	50	HIGH	0.05	0.289	13.97	14.60	1.156	0.334	/
	Level2&3		Right Tilt		0	132572	1770	1	MID	-0.12	0.386	13.91	14.60	1.172	0.452	/
	Level2&3				0	132572	1770	50	HIGH	0.10	0.371	13.97	14.60	1.156	0.429	/
Down	Off	QPSK	Left	0	132572	1770	1	MID	-0.16	0.063	23.40	24.10	1.175	0.074	/	
	Off			Cheek	0	132572	1770	50	MID	0.19	0.041	21.93	23.10	1.309	0.054	/
	Off		Left Tilt		0	132572	1770	1	MID	0.10	0.056	23.40	24.10	1.175	0.066	/
	Off				0	132572	1770	50	MID	0.01	0.040	21.93	23.10	1.309	0.052	/
	Off		Right	Cheek	0	132572	1770	1	MID	-0.05	0.058	23.40	24.10	1.175	0.068	/
	Off				0	132572	1770	50	MID	0.16	0.035	21.93	23.10	1.309	0.046	/
	Off		Right Tilt		0	132572	1770	1	MID	0.02	0.046	23.40	24.10	1.175	0.054	/
	Off				0	132572	1770	50	MID	-0.17	0.031	21.93	23.10	1.309	0.041	/
<b>Body-worn Accessory</b>																
Up	Level4&5&6	QPSK	Front	15	132572	1770	1	MID	0.19	0.368	19.45	20.10	1.161	0.427	/	
	Level4&5&6			Side	15	132072	1720	50	HIGH	-0.02	0.358	19.51	20.10	1.146	0.410	/
	Level4&5&6		Side		15	132572	1770	1	MID	0.09	0.301	19.45	20.10	1.161	0.350	/
	Level4&5&6				15	132072	1720	50	HIGH	0.08	0.287	19.51	20.10	1.146	0.329	/



Down	Level7&8&9	QPSK	Front	15	132572	1770	1	MID	0.07	0.411	21.31	22.10	1.199	<b>0.493</b>	39#
	Level7&8&9		Side	15	132572	1770	50	MID	0.07	0.402	21.43	22.10	1.167	0.469	/
	Level7&8&9		Back	15	132572	1770	1	MID	-0.18	0.332	21.31	22.10	1.199	0.398	/
	Level7&8&9		Side	15	132572	1770	50	MID	-0.15	0.315	21.43	22.10	1.167	0.368	/
<b>Hotspot</b>															
Up	Level4&5&6	QPSK	Front	10	132572	1770	1	MID	-0.11	0.341	19.45	20.10	1.161	0.396	/
	Level4&5&6		Side	10	132072	1720	50	HIGH	-0.07	0.332	19.51	20.10	1.146	0.380	/
	Level4&5&6		Back	10	132572	1770	1	MID	-0.18	0.256	19.45	20.10	1.161	0.297	/
	Level4&5&6		Side	10	132572	1770	50	MID	0.06	0.241	19.51	20.10	1.146	0.276	/
	Level4&5&6		Left	10	132572	1770	1	MID	0.04	0.033	19.45	20.10	1.161	0.038	/
	Level4&5&6		Edge	10	132572	1770	50	MID	-0.12	0.028	19.51	20.10	1.146	0.032	/
	Level4&5&6		Right	10	132572	1770	1	MID	0.14	0.036	19.45	20.10	1.161	0.042	/
	Level4&5&6		Edge	10	132572	1770	50	MID	0.02	0.029	19.51	20.10	1.146	0.033	/
	Level4&5&6		Top Edge	10	132572	1770	1	MID	0.17	0.554	19.45	20.10	1.161	0.643	/
	Level4&5&6		Top Edge	10	132572	1770	50	MID	0.14	0.521	19.51	20.10	1.146	0.597	/
Down	Level7&8&9	QPSK	Front	10	132322	1745	1	MID	0.01	0.385	21.31	22.10	1.199	0.462	/
	Level7&8&9		Side	10	132072	1720	50	HIGH	-0.04	0.352	21.43	22.10	1.167	0.411	/
	Level7&8&9		Back	10	132322	1745	1	MID	-0.16	0.418	21.31	22.10	1.199	0.501	/
	Level7&8&9		Side	10	132072	1720	50	HIGH	-0.15	0.389	21.43	22.10	1.167	0.454	/
	Level7&8&9		Left	10	132322	1745	1	MID	0.05	0.132	21.31	22.10	1.199	0.158	/
	Level7&8&9		Edge	10	132072	1720	50	HIGH	0.14	0.115	21.43	22.10	1.167	0.134	/
	Level7&8&9		Right	10	132322	1745	1	MID	0.07	0.102	21.31	22.10	1.199	0.122	/
	Level7&8&9		Edge	10	132072	1720	50	HIGH	0.06	0.089	21.43	22.10	1.167	0.104	/
	Level7&8&9		Bottom Edge	10	132322	1745	1	MID	0.03	0.814	21.31	22.10	1.199	<b>0.976</b>	40#
	Level7&8&9			10	132072	1720	1	MID	-0.11	0.788	21.29	22.10	1.205	0.950	/
	Level7&8&9			10	132572	1770	1	MID	-0.04	0.796	21.30	22.10	1.202	0.957	/
	Level7&8&9			10	132072	1720	50	HIGH	0.18	0.785	21.43	22.10	1.167	0.916	/
	Level7&8&9			10	132322	1745	50	LOW	0.12	0.732	21.30	22.10	1.202	0.880	/
	Level7&8&9			10	132572	1770	50	MID	0.11	0.729	21.37	22.10	1.183	0.862	/
Level7&8&9	10	132072		1720	100	LOW	-0.17	0.771	21.38	22.10	1.180	0.910	/		
Level7&8&9	10	132322		1745	100	LOW	0.02	0.719	21.24	22.10	1.219	0.876	/		
Level7&8&9	10	132572	1770	100	LOW	0.11	0.738	21.15	22.10	1.245	0.918	/			

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</b>															
Up	Level4&5&6	QPSK	Front	0	132572	1770	1	MID	0.07	0.577	19.45	20.10	1.161	0.670	/
	Level4&5&6		Side	0	132072	1720	50	HIGH	0.05	0.532	19.51	20.10	1.146	0.609	/
	Level4&5&6		Back	0	132572	1770	1	MID	-0.07	0.529	19.45	20.10	1.161	0.615	/
	Level4&5&6		Side	0	132072	1720	50	HIGH	0.12	0.501	19.51	20.10	1.146	0.574	/
	Level4&5&6		Left	0	132572	1770	1	MID	-0.19	0.033	19.45	20.10	1.161	0.039	/
	Level4&5&6		Edge	0	132072	1720	50	HIGH	-0.19	0.028	19.51	20.10	1.146	0.032	/
	Level4&5&6		Right	0	132572	1770	1	MID	0.18	0.046	19.45	20.10	1.161	0.054	/
	Level4&5&6		Edge	0	132072	1720	50	HIGH	0.15	0.037	19.51	20.10	1.146	0.042	/
	Level4&5&6		Top Edge	0	132572	1770	1	MID	0.18	1.700	19.45	20.10	1.161	1.974	/
	Level4&5&6			0	132072	1720	50	HIGH	-0.05	1.630	19.51	20.10	1.146	1.867	/
Down	Level7&8&9	QPSK	Front	0	132322	1745	1	MID	0.15	0.877	21.31	22.10	1.199	1.052	/
	Level7&8&9		Side	0	132072	1720	50	HIGH	-0.09	0.846	21.43	22.10	1.167	0.987	/
	Level7&8&9		Back	0	132322	1745	1	MID	-0.06	1.330	21.31	22.10	1.199	1.595	/
	Level7&8&9		Side	0	132072	1720	50	HIGH	-0.07	1.280	21.43	22.10	1.167	1.494	/
	Level7&8&9		Left	0	132322	1745	1	MID	-0.06	0.342	21.43	22.10	1.167	0.399	/
	Level7&8&9		Edge	0	132072	1720	50	HIGH	0.17	0.298	21.31	22.10	1.199	0.357	/
	Level7&8&9		Right	0	132322	1745	1	MID	0.12	0.056	21.31	22.10	1.199	0.067	/
	Level7&8&9		Edge	0	132072	1720	50	HIGH	0.12	0.048	21.43	22.10	1.167	0.056	/
	Level7&8&9		Bottom Edge	0	132322	1745	1	MID	0.12	1.880	21.31	22.10	1.199	<b>2.255</b>	41#
	Level7&8&9			0	132072	1720	1	MID	0.01	1.730	21.29	22.10	1.205	2.085	/
	Level7&8&9			0	132572	1770	1	MID	0.08	1.810	21.30	22.10	1.202	2.176	/
	Level7&8&9			0	132072	1720	50	HIGH	0.11	1.683	21.43	22.10	1.167	1.964	/
Level7&8&9	0	132072		1720	100	LOW	0.06	1.671	21.38	22.10	1.180	1.972	/		

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

### 10.14 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	QPSK	Left Cheek	0	38150	2610	1	MID	-0.07	0.232	20.58	20.80	1.052	0.244	/
	Level1			0	38150	2610	50	MID	0.16	0.218	20.44	20.80	1.086	0.237	/
	Level1		Left Tilt	0	38150	2610	1	MID	0.09	0.211	20.58	20.80	1.052	0.222	/
	Level1			0	38150	2610	50	MID	0.08	0.203	20.44	20.80	1.086	0.221	/
	Level1		Right Cheek	0	38150	2610	1	MID	0.00	0.573	20.58	20.80	1.052	0.603	/
	Level1			0	38150	2610	50	MID	0.08	0.551	20.44	20.80	1.086	0.599	/
	Level1		Right Tilt	0	38150	2610	1	MID	0.04	0.609	20.58	20.80	1.052	<b>0.641</b>	42#
	Level1			0	38150	2610	50	MID	-0.19	0.577	20.44	20.80	1.086	0.627	/
Up	Level2&3	QPSK	Left Cheek	0	38150	2610	1	MID	-0.16	0.211	20.04	20.30	1.062	0.224	/
	Level2&3			0	37850	2580	50	LOW	0.15	0.195	19.92	20.30	1.091	0.213	/
	Level2&3		Left Tilt	0	38150	2610	1	MID	0.02	0.193	20.04	20.30	1.062	0.205	/
	Level2&3			0	37850	2580	50	LOW	0.14	0.186	19.92	20.30	1.091	0.203	/
	Level2&3		Right Cheek	0	38150	2610	1	MID	-0.15	0.523	20.04	20.30	1.062	0.555	/
	Level2&3			0	37850	2580	50	LOW	0.00	0.506	19.92	20.30	1.091	0.552	/
	Level2&3		Right Tilt	0	38150	2610	1	MID	-0.01	0.540	20.04	20.30	1.062	0.573	/
	Level2&3			0	37850	2580	50	LOW	-0.06	0.512	19.92	20.30	1.091	0.559	/
Down	Off	QPSK	Left Cheek	0	38150	2610	1	MID	-0.17	0.168	23.67	23.80	1.030	0.173	/
	Off			0	37850	2580	50	LOW	0.10	0.110	22.05	22.80	1.189	0.131	/
	Off		Left Tilt	0	38150	2610	1	MID	0.15	0.132	23.67	23.80	1.030	0.136	/
	Off			0	37850	2580	50	LOW	0.16	0.103	22.05	22.80	1.189	0.122	/
	Off		Right Cheek	0	38150	2610	1	MID	0.12	0.228	23.67	23.80	1.030	0.235	/
	Off			0	37850	2580	50	LOW	-0.07	0.159	22.05	22.80	1.189	0.189	/
	Off		Right Tilt	0	38150	2610	1	MID	-0.01	0.145	23.67	23.80	1.030	0.149	/
	Off			0	37850	2580	50	LOW	0.15	0.102	22.05	22.80	1.189	0.121	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	38150	2610	1	MID	-0.13	0.098	23.67	23.80	1.030	0.101	/
	Off			15	37850	2580	50	LOW	0.02	0.071	22.05	22.80	1.189	0.084	/
	Off		Back Side	15	38150	2610	1	MID	-0.10	0.145	23.67	23.80	1.030	<b>0.149</b>	43#
	Off			15	37850	2580	50	LOW	0.00	0.103	22.05	22.80	1.189	0.122	/
Down	Off	QPSK	Front Side	15	38150	2610	1	MID	-0.03	0.131	23.67	23.80	1.030	0.135	/
	Off			15	37850	2580	50	LOW	-0.04	0.108	22.05	22.80	1.189	0.128	/
	Off		Back Side	15	38150	2610	1	MID	-0.01	0.129	23.67	23.80	1.030	0.133	/
	Off			15	37850	2580	50	LOW	0.11	0.095	22.05	22.80	1.189	0.113	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	38150	2610	1	MID	-0.12	0.193	23.67	23.80	1.030	0.199	/
	Off			10	37850	2580	50	LOW	-0.08	0.152	22.05	22.80	1.189	0.181	/
	Off		Back Side	10	38150	2610	1	MID	0.00	0.321	23.67	23.80	1.030	0.331	/
	Off			10	37850	2580	50	LOW	0.06	0.268	22.05	22.80	1.189	0.319	/
	Off		Left Edge	10	38150	2610	1	MID	-0.18	0.160	23.67	23.80	1.030	0.165	/

	Off		Right Edge	10	37850	2580	50	LOW	-0.04	0.121	22.05	22.80	1.189	0.144	/	
	Off			10	38150	2610	1	MID	0.03	0.224	23.67	23.80	1.030	0.231	/	
	Off			10	37850	2580	50	LOW	0.13	0.187	22.05	22.80	1.189	0.222	/	
	Off			Top Edge	10	38150	2610	1	MID	0.18	0.281	23.67	23.80	1.030	0.290	/
	Off				10	37850	2580	50	LOW	0.17	0.215	22.05	22.80	1.189	0.256	/
Down	Off	QPSK	Front Side	10	38150	2610	1	MID	0.05	0.235	23.67	23.80	1.030	0.242	/	
	Off			10	37850	2580	50	LOW	-0.10	0.181	22.05	22.80	1.189	0.215	/	
	Off		Back Side	10	38150	2610	1	MID	0.10	0.323	23.67	23.80	1.030	<b>0.333</b>	<b>44#</b>	
	Off			10	37850	2580	50	LOW	0.07	0.238	22.05	22.80	1.189	0.283	/	
	Off		Left Edge	10	38150	2610	1	MID	-0.19	0.201	23.67	23.80	1.030	0.207	/	
	Off			10	37850	2580	50	LOW	-0.18	0.135	22.05	22.80	1.189	0.160	/	
	Off		Right Edge	10	38150	2610	1	MID	-0.07	0.045	23.67	23.80	1.030	0.046	/	
	Off			10	37850	2580	50	LOW	0.19	0.041	22.05	22.80	1.189	0.049	/	
	Off		Bottom Edge	10	38150	2610	1	MID	-0.06	0.167	23.67	23.80	1.030	0.172	/	
	Off			10	37850	2580	50	LOW	-0.11	0.132	22.05	22.80	1.189	0.157	/	

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

### 10.15 LTE Band 38 (20MHz Bandwidth) Worse case for CA Test

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	Right Tilt	0	PCC 38150 + SCC 37952	2595 + 2574.2	1	High + Low	0.11	0.545	20.43	20.80	1.089	0.593	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Back Side	15	PCC 38150 + SCC 37952	2595 + 2574.2	1	High + Low	0.18	0.121	23.53	23.80	1.064	0.129	/
<b>Hotspot</b>															
Down	Off	QPSK	Back Side	10	PCC 38150 + SCC 37952	2595 + 2574.2	1	High + Low	0.13	0.278	23.53	23.80	1.064	0.296	/

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

### 10.16 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	QPSK	Left Cheek	0	41490	2680	1	MID	-0.12	0.212	20.47	20.80	1.079	0.229	/
	Level1			0	41490	2680	50	MID	0.17	0.206	20.37	20.80	1.104	0.227	/
	Level1		Left Tilt	0	41490	2680	1	MID	-0.11	0.203	20.47	20.80	1.079	0.219	/
	Level1			0	41490	2680	50	MID	-0.15	0.192	20.37	20.80	1.104	0.212	/
	Level1		Right Cheek	0	41490	2680	1	MID	0.02	0.545	20.47	20.80	1.079	0.588	/
	Level1			0	41490	2680	50	MID	-0.07	0.511	20.37	20.80	1.104	0.564	/
	Level1		Right Tilt	0	41490	2680	1	MID	-0.01	0.566	20.47	20.80	1.079	<b>0.611</b>	45#
	Level1			0	41490	2680	50	MID	-0.17	0.551	20.37	20.80	1.104	0.608	/
Up	Level2&3	QPSK	Left Cheek	0	41490	2680	1	MID	0.00	0.192	19.97	20.30	1.079	0.207	/
	Level2&3			0	41490	2680	50	MID	-0.06	0.185	19.88	20.30	1.102	0.204	/
	Level2&3		Left Tilt	0	41490	2680	1	MID	0.00	0.183	19.97	20.30	1.079	0.197	/
	Level2&3			0	41490	2680	50	MID	0.02	0.176	19.88	20.30	1.102	0.194	/
	Level2&3		Right Cheek	0	41490	2680	1	MID	0.01	0.492	19.97	20.30	1.079	0.531	/
	Level2&3			0	41490	2680	50	MID	0.00	0.463	19.88	20.30	1.102	0.510	/
	Level2&3		Right Tilt	0	41490	2680	1	MID	0.12	0.502	19.97	20.30	1.079	0.542	/
	Level2&3			0	41490	2680	50	MID	-0.10	0.481	19.88	20.30	1.102	0.530	/
Down	Off	QPSK	Left Cheek	0	41490	2680	1	MID	0.05	0.159	23.49	23.80	1.074	0.171	/
	Off			0	41490	2680	50	LOW	0.17	0.112	21.89	22.80	1.233	0.138	/
	Off		Left Tilt	0	41490	2680	1	MID	0.00	0.129	23.49	23.80	1.074	0.139	/
	Off			0	41490	2680	50	LOW	0.10	0.095	21.89	22.80	1.233	0.117	/
	Off		Right Cheek	0	41490	2680	1	MID	0.03	0.215	23.49	23.80	1.074	0.231	/
	Off			0	41490	2680	50	LOW	0.03	0.171	21.89	22.80	1.233	0.211	/
	Off		Right Tilt	0	41490	2680	1	MID	0.08	0.138	23.49	23.80	1.074	0.148	/
	Off			0	41490	2680	50	LOW	0.13	0.088	21.89	22.80	1.233	0.109	/
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Front Side	15	41490	2680	1	MID	-0.07	0.117	23.49	23.80	1.074	0.126	/
	Off			15	41490	2680	50	LOW	0.14	0.081	21.89	22.80	1.233	0.100	/
	Off		Back Side	15	41490	2680	1	MID	0.06	0.172	23.49	23.80	1.074	<b>0.185</b>	46#
	Off			15	41490	2680	50	LOW	-0.19	0.131	21.89	22.80	1.233	0.162	/
Down	Off	QPSK	Front Side	15	41490	2680	1	MID	-0.07	0.164	23.49	23.80	1.074	0.176	/
	Off			15	41490	2680	50	LOW	-0.16	0.125	21.89	22.80	1.233	0.154	/
	Off		Back Side	15	41490	2680	1	MID	0.18	0.160	23.49	23.80	1.074	0.172	/
	Off			15	41490	2680	50	LOW	0.15	0.118	21.89	22.80	1.233	0.146	/
<b>Hotspot</b>															
Up	Off	QPSK	Front Side	10	41490	2680	1	MID	0.17	0.172	23.49	23.80	1.074	0.185	/
	Off			10	41490	2680	50	LOW	-0.14	0.129	21.89	22.80	1.233	0.159	/
	Off		Back Side	10	41490	2680	1	MID	-0.04	0.325	23.49	23.80	1.074	<b>0.349</b>	47#
	Off			10	41490	2680	50	LOW	0.08	0.241	21.89	22.80	1.233	0.297	/
	Off		Left Edge	10	41490	2680	1	MID	0.08	0.152	23.49	23.80	1.074	0.163	/

	Off		Right Edge	10	41490	2680	50	LOW	0.12	0.103	21.89	22.80	1.233	0.127	/	
	Off			10	41490	2680	1	MID	-0.13	0.219	23.49	23.80	1.074	0.236	/	
	Off			10	41490	2680	50	LOW	0.12	0.171	21.89	22.80	1.233	0.211	/	
	Off			Top Edge	10	41490	2680	1	MID	-0.03	0.273	23.49	23.80	1.074	0.293	/
	Off				10	41490	2680	50	LOW	0.19	0.211	21.89	22.80	1.233	0.260	/
Down	Off	QPSK	Front Side	10	41490	2680	1	MID	-0.08	0.231	23.49	23.80	1.074	0.248	/	
	Off			10	41490	2680	50	LOW	-0.01	0.163	21.89	22.80	1.233	0.201	/	
	Off		Back Side	10	41490	2680	1	MID	-0.10	0.305	23.49	23.80	1.074	0.328	/	
	Off			10	41490	2680	50	LOW	-0.18	0.214	21.89	22.80	1.233	0.264	/	
	Off		Left Edge	10	41490	2680	1	MID	0.11	0.213	23.49	23.80	1.074	0.229	/	
	Off			10	41490	2680	50	LOW	0.08	0.165	21.89	22.80	1.233	0.203	/	
	Off		Right Edge	10	41490	2680	1	MID	-0.04	0.088	23.49	23.80	1.074	0.095	/	
	Off			10	41490	2680	50	LOW	-0.07	0.066	21.89	22.80	1.233	0.081	/	
	Off		Top Edge	10	41490	2680	1	MID	-0.08	0.266	23.49	23.80	1.074	0.286	/	
	Off			10	41490	2680	50	LOW	0.07	0.205	21.89	22.80	1.233	0.253	/	

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

### 10.17 LTE Band 41 (20MHz Bandwidth) Worse case for CA Test

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	Right Tilt	0	PCC 41490	2680	1	High	-0.15	0.516	19.71	20.30	1.146	0.591	/
					+	+	+	+							
<b>Body-worn Accessory</b>															
Up	Off	QPSK	Back Side	15	PCC 41490	2680	1	High	0.05	0.149	23.24	23.80	1.138	0.170	/
					+	+	1	+							
<b>Hotspot</b>															
Up	Off	QPSK	Back Side	10	PCC 41490	2680	1	High	-0.15	0.288	23.24	23.80	1.138	0.328	/
					+	+	1	+							

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

**10.18 WIFI 2.4GHz**

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>														
802.11 b	Level1	Left Cheek	0	6	2437	-0.11	0.863	15.60	16.00	1.096	99.17	1.008	<b>0.954</b>	48#
	Level1		0	2	2417	0.05	0.805	15.39	16.00	1.151	99.17	1.008	0.934	/
	Level1		0	10	2457	0.09	0.813	15.55	16.00	1.109	99.17	1.008	0.909	/
	Level1	Left Tilt	0	6	2437	-0.04	0.602	15.60	16.00	1.096	99.17	1.008	0.666	/
	Level1	Right Cheek	0	6	2437	-0.01	0.365	15.60	16.00	1.096	99.17	1.008	0.404	/
	Level1	Right Tilt	0	6	2437	-0.13	0.302	15.60	16.00	1.096	99.17	1.008	0.334	/
802.11 b	Level2	Left Cheek	0	6	2437	0.18	0.556	13.66	14.50	1.213	99.17	1.008	0.680	/
	Level2	Left Tilt	0	6	2437	-0.16	0.411	13.66	14.50	1.213	99.17	1.008	0.503	/
	Level2	Right Cheek	0	6	2437	-0.09	0.243	13.66	14.50	1.213	99.17	1.008	0.297	/
	Level2	Right Tilt	0	6	2437	0.18	0.213	13.66	14.50	1.213	99.17	1.008	0.261	/
<b>Body-worn Accessory</b>														
802.11 b	Off	Front Side	15	6	2437	0.17	0.132	18.05	20.00	1.567	99.17	1.008	0.209	/
	Off	Back Side	15	6	2437	-0.09	0.150	18.05	20.00	1.567	99.17	1.008	<b>0.238</b>	49#
802.11 b	Level4	Front Side	15	6	2437	0.03	0.045	13.66	14.50	1.213	99.17	1.008	0.071	/
	Level4	Back Side	15	6	2437	-0.12	0.055	13.66	14.50	1.213	99.17	1.008	0.087	/
<b>Hotspot</b>														
802.11 b	Off	Front Side	10	6	2437	0.10	0.287	18.05	20.00	1.567	99.17	1.008	0.455	/
	Off	Back Side	10	6	2437	0.08	0.347	18.05	20.00	1.567	99.17	1.008	<b>0.550</b>	50#
	Off	Left Edge	10	6	2437	0.14	0.207	18.05	20.00	1.567	99.17	1.008	0.328	/
	Off	Right Edge	10	6	2437	0.11	0.015	18.05	20.00	1.567	99.17	1.008	0.024	/
	Off	Top Edge	10	6	2437	0.18	0.318	18.05	20.00	1.567	99.17	1.008	0.504	/
802.11 b	Level4	Front Side	10	6	2437	-0.09	0.065	13.66	14.50	1.213	99.17	1.008	0.103	/
	Level4	Back Side	10	6	2437	-0.19	0.081	13.66	14.50	1.213	99.17	1.008	0.128	/
	Level4	Left Edge	10	6	2437	0.13	0.046	13.66	14.50	1.213	99.17	1.008	0.073	/
	Level4	Right Edge	10	6	2437	-0.13	0.012	13.66	14.50	1.213	99.17	1.008	0.019	/
	Level4	Top Edge	10	6	2437	0.00	0.074	13.66	14.50	1.213	99.17	1.008	0.117	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

### 10.19 WIFI 5GHz

Fre. Band	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>															
5.3G	802.11 n40	Level1	Left Cheek	0	54	5270	-0.16	1.100	16.95	17.00	1.012	93.51	1.069	<b>1.190</b>	51#
		Level1		0	62	5310	0.02	0.512	13.46	14.00	1.132	94.51	1.058	0.613	/
		Level1	Left Tilt	0	54	5270	-0.16	1.070	16.95	17.00	1.012	95.51	1.047	1.133	/
		Level1		0	62	5310	0.13	0.489	13.46	14.00	1.132	96.51	1.036	0.574	/
		Level1	Right Cheek	0	54	5270	-0.09	0.477	16.95	17.00	1.012	97.51	1.026	0.495	/
		Level1	Right Tilt	0	54	5270	0.01	0.496	16.95	17.00	1.012	98.51	1.015	0.510	/
5.3G	802.11 ac80	Level2	Left Cheek	0	58	5290	-0.11	0.397	12.24	12.50	1.062	99.51	1.005	0.423	/
		Level2	Left Tilt	0	58	5290	0.05	0.385	12.24	12.50	1.062	100.51	0.995	0.407	/
		Level2	Right Cheek	0	58	5290	0.11	0.179	12.24	12.50	1.062	101.51	0.985	0.187	/
		Level2	Right Tilt	0	58	5290	0.13	0.191	12.24	12.50	1.062	102.51	0.976	0.198	/
5.6G	802.11 ac80	Level1	Left Cheek	0	122	5610	0.14	0.970	15.14	15.50	1.086	88.10	1.135	<b>1.196</b>	52#
		Level1		0	106	5530	0.02	0.954	13.96	14.00	1.009	88.10	1.135	1.093	/
		Level1	Left Tilt	0	122	5610	-0.18	0.947	15.14	15.50	1.086	88.10	1.135	1.168	/
		Level1		0	106	5530	0.15	0.922	13.96	14.00	1.009	88.10	1.135	1.056	/
		Level1	Right Cheek	0	122	5610	0.16	0.413	15.14	15.50	1.086	88.10	1.135	0.509	/
		Level1	Right Tilt	0	122	5610	0.18	0.421	15.14	15.50	1.086	88.10	1.135	0.519	/
5.6G	802.11 ac80	Level2	Left Cheek	0	106	5530	-0.10	0.442	10.70	11.50	1.202	88.10	1.135	0.603	/
		Level2	Left Tilt	0	106	5530	-0.16	0.432	10.70	11.50	1.202	88.10	1.135	0.590	/
		Level2	Right Cheek	0	106	5530	-0.11	0.195	10.70	11.50	1.202	88.10	1.135	0.266	/
		Level2	Right Tilt	0	106	5530	-0.11	0.199	10.70	11.50	1.202	88.10	1.135	0.272	/
5.8G	802.11 ac80	Level1	Left Cheek	0	155	5775	-0.13	0.699	13.98	14.50	1.127	88.10	1.135	0.894	/
		Level1	Left Tilt	0	155	5775	0.09	0.930	13.98	14.50	1.127	88.10	1.135	<b>1.190</b>	53#
		Level1	Right Cheek	0	155	5775	-0.16	0.416	13.98	14.50	1.127	88.10	1.135	0.532	/
		Level1	Right Tilt	0	155	5775	0.14	0.432	13.98	14.50	1.127	88.10	1.135	0.553	/
5.8G	802.11 ac80	Level2	Left Cheek	0	155	5775	0.01	0.501	10.81	11.50	1.172	88.10	1.135	0.667	/
		Level2	Left Tilt	0	155	5775	-0.18	0.532	10.81	11.50	1.172	88.10	1.135	0.708	/
		Level2	Right Cheek	0	155	5775	0.17	0.241	10.81	11.50	1.172	88.10	1.135	0.321	/
		Level2	Right Tilt	0	155	5775	0.00	0.255	10.81	11.50	1.172	88.10	1.135	0.339	/
<b>Body-worn Accessory</b>															
5.3G	802.11 n40	Level3	Front Side	15	54	5270	-0.12	0.134	17.06	17.50	1.107	93.51	1.069	0.159	/
		Level3	Back Side	15	54	5270	0.08	0.778	17.06	17.50	1.107	93.51	1.069	<b>0.921</b>	54#
		Level3		15	62	5310	0.11	0.312	13.63	14.50	1.222	94.51	1.058	0.403	/
5.3G	802.11 ac80	Level4	Front Side	15	58	5290	-0.04	0.068	13.87	14.50	1.156	88.10	1.135	0.089	/
		Level4	Back Side	15	58	5290	-0.03	0.389	13.87	14.50	1.156	88.10	1.135	0.510	/
5.6G	802.11 n40	Level3	Front Side	15	110	5550	-0.13	0.157	17.33	18.50	1.309	88.10	1.135	0.233	/
		Level3	Back Side	15	110	5550	-0.11	0.553	17.33	18.50	1.309	88.10	1.135	<b>0.822</b>	55#
		Level3		15	102	5510	0.11	0.299	13.99	14.50	1.125	89.10	1.122	0.377	/
		Level3		15	134	5670	-0.07	0.521	16.48	17.50	1.265	90.10	1.110	0.731	/
5.6G	802.11	Level4	Front Side	15	106	5530	-0.13	0.071	14.41	14.50	1.021	88.10	1.135	0.082	/



	ac80	Level4	Back Side	15	106	5530	0.06	0.187	14.41	14.50	1.021	88.10	1.135	0.217	/
5.8G	802.11 n40	Level3	Front Side	15	151	5755	0.19	0.157	17.04	18.50	1.400	88.10	1.135	0.249	/
		Level3	Back Side	15	151	5755	-0.08	0.200	17.04	18.50	1.400	88.10	1.135	<b>0.318</b>	56#
5.8G	802.11 ac80	Level4	Front Side	15	155	5775	0.13	0.066	13.98	14.50	1.127	88.10	1.135	0.084	/
		Level4	Back Side	15	155	5775	0.10	0.076	13.98	14.50	1.127	88.10	1.135	0.097	/
<b>Hotspot</b>															
5.2G	802.11 n40	Level3	Front Side	10	46	5230	0.06	0.216	17.08	17.50	1.102	93.51	1.069	0.254	/
		Level3	Back Side	10	46	5230	-0.14	0.831	17.08	17.50	1.102	93.51	1.069	<b>0.979</b>	57#
		Level3		10	38	5190	0.02	0.398	13.63	14.50	1.222	94.51	1.058	0.515	/
		Level3	Left Edge	10	46	5230	-0.18	0.143	17.08	17.50	1.102	93.51	1.069	0.169	/
		Level3	Right Edge	10	46	5230	-0.17	0.031	17.08	17.50	1.102	93.51	1.069	0.036	/
		Level3	Top Edge	10	46	5230	-0.11	0.418	17.08	17.50	1.102	93.51	1.069	0.492	/
5.2G	802.11 ac80	Level4	Front Side	10	42	5210	0.12	0.112	14.25	14.50	1.059	88.10	1.135	0.135	/
		Level4	Back Side	10	42	5210	0.19	0.423	14.25	14.50	1.059	88.10	1.135	0.509	/
		Level4	Left Edge	10	42	5210	-0.08	0.077	14.25	14.50	1.059	88.10	1.135	0.093	/
		Level4	Right Edge	10	42	5210	0.04	0.018	14.25	14.50	1.059	88.10	1.135	0.022	/
		Level4	Top Edge	10	42	5210	0.09	0.213	14.25	14.50	1.059	88.10	1.135	0.256	/
5.8G	802.11 n40	Level3	Front Side	10	151	5755	0.11	0.249	17.04	18.50	1.400	93.51	1.069	0.372	/
		Level3	Back Side	10	151	5755	-0.04	0.309	17.04	18.50	1.400	93.51	1.069	0.462	/
		Level3	Left Edge	10	151	5755	0.08	0.144	17.04	18.50	1.400	93.51	1.069	0.216	/
		Level3	Right Edge	10	151	5755	0.06	0.025	17.04	18.50	1.400	93.51	1.069	0.038	/
		Level3	Top Edge	10	151	5755	-0.17	0.652	17.04	18.50	1.400	93.51	1.069	<b>0.976</b>	58#
		Level3	Top Edge	10	159	5795	0.02	0.512	16.50	17.50	1.259	93.51	1.069	0.689	/
5.8G	802.11 ac80	Level4	Front Side	10	155	5775	0.14	0.125	13.98	14.50	1.127	88.10	1.135	0.160	/
		Level4	Back Side	10	155	5775	0.06	0.145	13.98	14.50	1.127	88.10	1.135	0.186	/
		Level4	Left Edge	10	155	5775	0.17	0.066	13.98	14.50	1.127	88.10	1.135	0.084	/
		Level4	Right Edge	10	155	5775	0.07	0.015	13.98	14.50	1.127	88.10	1.135	0.019	/
		Level4	Top Edge	10	155	5775	0.18	0.328	13.98	14.50	1.127	88.10	1.135	0.420	/

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

Fre. Band	Mode	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</b>															
5.2G	802.11 n40	Level3	Front Side	0	46	5230	0.09	0.421	17.08	17.50	1.102	93.51	1.069	0.496	/
		Level3	Back Side	0	46	5230	0.18	0.648	17.08	17.50	1.102	93.51	1.069	0.763	/
		Level3	Left Edge	0	46	5230	0.16	0.156	17.08	17.50	1.102	93.51	1.069	0.184	/
		Level3	Right Edge	0	46	5230	-0.02	0.022	17.08	17.50	1.102	93.51	1.069	0.026	/
		Level3	Top Edge	0	46	5230	0.17	1.260	17.08	17.50	1.102	93.51	1.069	<b>1.484</b>	59#
		Level3	Bottom Edge	0	46	5230	0.01	0.005	17.08	17.50	1.102	93.51	1.069	0.006	/
5.2G	802.11 ac80	Level4	Front Side	0	42	5210	0.10	0.215	14.25	14.50	1.059	88.10	1.135	0.259	/
		Level4	Back Side	0	42	5210	0.03	0.338	14.25	14.50	1.059	88.10	1.135	0.406	/
		Level4	Left Edge	0	42	5210	0.02	0.072	14.25	14.50	1.059	88.10	1.135	0.087	/
		Level4	Right Edge	0	42	5210	-0.14	0.013	14.25	14.50	1.059	88.10	1.135	0.016	/
		Level4	Top Edge	0	42	5210	0.02	0.648	14.25	14.50	1.059	88.10	1.135	0.779	/

		Level4	Bottom Edge	0	42	5210	0.03	0.002	17.08	17.50	1.102	93.51	1.069	0.002	/
5.3G	802.11 n40	Level3	Front Side	0	54	5270	0.13	0.426	17.06	17.50	1.107	93.51	1.069	0.504	/
		Level3	Back Side	0	54	5270	-0.05	0.504	17.06	17.50	1.107	93.51	1.069	0.596	/
		Level3	Left Edge	0	54	5270	0.11	0.175	17.06	17.50	1.107	93.51	1.069	0.207	/
		Level3	Right Edge	0	54	5270	0.12	0.028	17.06	17.50	1.107	93.51	1.069	0.033	/
		Level3	Top Edge	0	54	5270	0.02	1.290	17.06	17.50	1.107	93.51	1.069	<b>1.527</b>	60#
		Level3	Bottom Edge	0	54	5270	0.03	0.006	17.06	17.50	1.107	93.51	1.069	0.007	/
		Level4	Front Side	0	58	5290	0.03	0.213	13.87	14.50	1.156	88.10	1.135	0.280	/
5.3G	802.11 ac80	Level4	Back Side	0	58	5290	0.03	0.681	13.87	14.50	1.156	88.10	1.135	0.894	/
		Level4	Left Edge	0	58	5290	-0.19	0.088	13.87	14.50	1.156	88.10	1.135	0.115	/
		Level4	Right Edge	0	58	5290	0.05	0.016	13.87	14.50	1.156	88.10	1.135	0.021	/
		Level4	Top Edge	0	58	5290	-0.02	0.509	13.87	14.50	1.156	88.10	1.135	0.668	/
		Level4	Bottom Edge	0	58	5290	0.11	0.003	13.87	14.50	1.156	88.10	1.135	0.004	/
		Level3	Front Side	0	110	5550	0.02	0.647	17.33	18.50	1.309	93.51	1.069	0.906	/
5.6G	802.11 n(HT4 0)	Level3	Back Side	0	110	5550	0.05	0.568	17.33	18.50	1.309	93.51	1.069	0.795	/
		Level3	Left Edge	0	110	5550	-0.13	0.155	17.33	18.50	1.309	93.51	1.069	0.217	/
		Level3	Right Edge	0	110	5550	-0.10	0.040	17.33	18.50	1.309	93.51	1.069	0.055	/
		Level3	Top Edge	0	110	5550	0.14	1.570	17.33	18.50	1.309	93.51	1.069	<b>2.198</b>	61#
		Level3		0	102	5510	-0.03	0.880	13.99	14.50	1.125	94.51	1.058	1.047	/
		Level3		0	134	5670	0.11	1.340	16.48	17.50	1.265	95.51	1.047	1.774	/
		Level3	Bottom Edge	0	134	5670	0.02	0.005	16.48	17.50	1.265	95.51	1.047	0.007	/
		5.6G	802.11 ac80	Level4	Front Side	0	106	5530	0.19	0.274	14.41	14.50	1.021	88.10	1.135
Level4	Back Side			0	106	5530	0.07	0.252	14.41	14.50	1.021	88.10	1.135	0.292	/
Level4	Left Edge			0	106	5530	0.10	0.062	14.41	14.50	1.021	88.10	1.135	0.072	/
Level4	Right Edge			0	106	5530	0.14	0.016	14.41	14.50	1.021	88.10	1.135	0.018	/
Level4	Top Edge			0	106	5530	-0.11	0.689	14.41	14.50	1.021	88.10	1.135	0.798	/
Level4	Bottom Edge			0	106	5530	-0.18	0.003	14.41	14.50	1.021	88.10	1.135	0.003	/

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

## 10.20 Bluetooth

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	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
DH5	Left Cheek	0	39	2441	0.03	0.221	11.22	13.00	1.507	76.5	1.307	<b>0.393</b>	62#
	Left Tilt	0	39	2441	-0.16	0.186	11.22	13.00	1.507	76.5	1.307	0.331	/
	Right Cheek	0	39	2441	0.17	0.086	11.22	13.00	1.507	76.5	1.307	0.153	/
	Right Tilt	0	39	2441	0.02	0.078	11.22	13.00	1.507	76.5	1.307	0.139	/
<b>Body-worn Accessory</b>													
DH5	Front Side	15	39	2441	0.06	0.015	11.22	13.00	1.507	76.5	1.307	0.027	/
	Back Side	15	39	2441	0.01	0.017	11.22	13.00	1.507	76.5	1.307	<b>0.031</b>	63#
<b>Hotspot</b>													
DH5	Front Side	10	39	2441	0.05	0.024	11.22	13.00	1.507	76.5	1.307	0.043	/
	Back Side	10	39	2441	-0.08	0.033	11.22	13.00	1.507	76.5	1.307	<b>0.058</b>	64#
	Left Edge	10	39	2441	-0.19	0.015	11.22	13.00	1.507	76.5	1.307	0.027	/
	Right Edge	10	39	2441	0.09	0.006	11.22	13.00	1.507	76.5	1.307	0.011	/
	Top Edge	10	39	2441	0.19	0.011	11.22	13.00	1.507	76.5	1.307	0.020	/
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.

1g Repeated SAR measurement table:

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1907.6	WCDMA Band 2	Head	Right Tilt	0.876	Yes	0.799	1.10
1712.4	WCDMA Band 4	Head	Right Tilt	0.841	Yes	0.786	1.07
1752.6	WCDMA Band 4	Hotspot	Bottom Edge	0.817	Yes	0.774	1.06
1900	LTE Band 2	Hotspot	Bottom Edge	1.010	Yes	0.958	1.05
1745	LTE Band 4	Head	Right Tilt	0.933	Yes	0.869	1.07
1720	LTE Band 66	Head	Right Tilt	0.823	Yes	0.785	1.04
1745	LTE Band 66	Hotspot	Bottom Edge	0.814	Yes	0.781	1.04
2437	WIFI 2.4GHz	Head	Left Cheek	0.863	Yes	0.791	1.09
5270	WIFI 5GHz	Head	Left Cheek	1.100	Yes	1.034	1.06
5610	WIFI 5GHz	Head	Left Cheek	0.970	Yes	0.953	1.02
5775	WIFI 5GHz	Head	Left Tilt	0.930	Yes	0.904	1.03
5230	WIFI 5GHz	Hotspot	Back Side	0.831	Yes	0.809	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	Specific
1	GSM + WiFi 2.4G	Yes	Yes	Yes	Yes
2	UMTS + WiFi 2.4G	Yes	Yes	Yes	Yes
3	LTE + WiFi 2.4G	Yes	Yes	Yes	Yes
4	GSM + 5G WIFI	Yes	Yes	Yes	Yes
5	UMTS + 5G WIFI	Yes	Yes	Yes	Yes
6	LTE + 5G WIFI	Yes	Yes	Yes	Yes
7	GSM + Bluetooth	Yes	Yes	Yes	Yes
8	UMTS + Bluetooth	Yes	Yes	Yes	Yes
9	LTE + Bluetooth	Yes	Yes	Yes	Yes
10	GSM + 5G WIFI + Bluetooth	Yes	Yes	Yes	Yes
11	UMTS + 5G WIFI + Bluetooth	Yes	Yes	Yes	Yes
12	LTE + 5G WIFI + Bluetooth	Yes	Yes	Yes	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 2.4G

Band	Power Reduction	Position	Stand alone SAR		SUM SAR
			1	2	Sum SAR
			WWAN	2.4GWIFI	(1+2)
GSM850	Level2&3	Left Cheek	0.326	0.680	1.007
	Level2&3	Left Tilt	0.299	0.503	0.802
	Level2&3	Right Cheek	0.436	0.297	0.733
	Level2&3	Right Tilt	0.376	0.261	0.637
GSM 1900	Level2&3	Left Cheek	0.299	0.680	0.979
	Level2&3	Left Tilt	0.364	0.503	0.867
	Level2&3	Right Cheek	0.406	0.297	0.704
	Level2&3	Right Tilt	0.548	0.261	0.808
WCDMA B2	Level2&3	Left Cheek	0.208	0.680	0.888
	Level2&3	Left Tilt	0.271	0.503	0.774
	Level2&3	Right Cheek	0.248	0.297	0.545
	Level2&3	Right Tilt	0.330	0.261	0.590
WCDMA B4	Level2&3	Left Cheek	0.286	0.680	0.967
	Level2&3	Left Tilt	0.401	0.503	0.904
	Level2&3	Right Cheek	0.378	0.297	0.675
	Level2&3	Right Tilt	0.475	0.261	0.735
WCDMA B5	Off	Left Cheek	0.348	0.680	1.028
	Off	Left Tilt	0.271	0.503	0.774
	Off	Right Cheek	0.452	0.297	0.749
	Off	Right Tilt	0.383	0.261	0.643
LTE B2	Level2&3	Left Cheek	0.298	0.680	0.979
	Level2&3	Left Tilt	0.384	0.503	0.887
	Level2&3	Right Cheek	0.348	0.297	0.646
	Level2&3	Right Tilt	0.663	0.261	0.924
LTE B4	Level2&3	Left Cheek	0.316	0.680	0.996
	Level2&3	Left Tilt	0.426	0.503	0.928
	Level2&3	Right Cheek	0.418	0.297	0.715
	Level2&3	Right Tilt	0.581	0.261	0.842
LTE B5	Level2&3	Left Cheek	0.230	0.680	0.910
	Level2&3	Left Tilt	0.192	0.503	0.695
	Level2&3	Right Cheek	0.294	0.297	0.591
	Level2&3	Right Tilt	0.274	0.261	0.535
LTE B7	Level2&3	Left Cheek	0.145	0.680	0.826
	Level2&3	Left Tilt	0.135	0.503	0.638
	Level2&3	Right Cheek	0.365	0.297	0.662
	Level2&3	Right Tilt	0.390	0.261	0.651
LTE B12	Off	Left Cheek	0.056	0.680	0.737

	Off	Left Tilt	0.044	0.503	0.547
	Off	Right Cheek	0.080	0.297	0.377
	Off	Right Tilt	0.067	0.261	0.328
LTE B26	Off	Left Cheek	0.371	0.680	<b>1.051</b>
	Off	Left Tilt	0.303	0.503	0.806
	Off	Right Cheek	0.452	0.297	0.749
	Off	Right Tilt	0.401	0.261	0.661
LTE B66	Level2&3	Left Cheek	0.299	0.680	0.979
	Level2&3	Left Tilt	0.403	0.503	0.906
	Level2&3	Right Cheek	0.361	0.297	0.658
	Level2&3	Right Tilt	0.452	0.261	0.713
LTE B38	Level2&3	Left Cheek	0.224	0.680	0.904
	Level2&3	Left Tilt	0.205	0.503	0.708
	Level2&3	Right Cheek	0.555	0.297	0.853
	Level2&3	Right Tilt	0.573	0.261	0.834
LTE B41	Level2&3	Left Cheek	0.207	0.680	0.887
	Level2&3	Left Tilt	0.197	0.503	0.700
	Level2&3	Right Cheek	0.531	0.297	0.828
	Level2&3	Right Tilt	0.542	0.261	0.802

**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 1.051 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.2 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN 5G and Bluetooth

Band	Power Reduction	Position	Stand alone SAR					SUM SAR		
			1	2	3	4	5	Sum SAR (1+2+5)	Sum SAR (1+3+5)	Sum SAR (1+4+5)
			WWAN	5.3GWIFI	5.6GWIFI	5.8GWIFI	Bluetooth			
GSM850	Level2&3	Left Cheek	0.326	0.423	0.603	0.667	0.393	1.143	1.323	1.386
	Level2&3	Left Tilt	0.299	0.407	0.590	0.708	0.331	1.036	1.219	1.337
	Level2&3	Right Cheek	0.436	0.187	0.266	0.321	0.153	0.776	0.855	0.910
	Level2&3	Right Tilt	0.376	0.198	0.272	0.339	0.139	0.713	0.786	0.854
GSM 1900	Level2&3	Left Cheek	0.299	0.423	0.603	0.667	0.393	1.115	1.295	1.358
	Level2&3	Left Tilt	0.364	0.407	0.590	0.708	0.331	1.102	1.284	1.403
	Level2&3	Right Cheek	0.406	0.187	0.266	0.321	0.153	0.746	0.826	0.880
	Level2&3	Right Tilt	0.548	0.198	0.272	0.339	0.139	0.884	0.958	1.026
WCDMA B2	Level2&3	Left Cheek	0.208	0.423	0.603	0.667	0.393	1.024	1.204	1.268
	Level2&3	Left Tilt	0.271	0.407	0.590	0.708	0.331	1.009	1.192	1.310
	Level2&3	Right Cheek	0.248	0.187	0.266	0.321	0.153	0.588	0.667	0.722
	Level2&3	Right Tilt	0.330	0.198	0.272	0.339	0.139	0.666	0.740	0.808
WCDMA B4	Level2&3	Left Cheek	0.286	0.423	0.603	0.667	0.393	1.102	1.283	1.346
	Level2&3	Left Tilt	0.401	0.407	0.590	0.708	0.331	1.138	1.321	1.439
	Level2&3	Right Cheek	0.378	0.187	0.266	0.321	0.153	0.718	0.797	0.852
	Level2&3	Right Tilt	0.475	0.198	0.272	0.339	0.139	0.812	0.885	0.953
WCDMA B5	Off	Left Cheek	0.348	0.423	0.603	0.667	0.393	1.164	1.344	1.408
	Off	Left Tilt	0.271	0.407	0.590	0.708	0.331	1.008	1.191	1.309
	Off	Right Cheek	0.452	0.187	0.266	0.321	0.153	0.792	0.871	0.925
	Off	Right Tilt	0.383	0.198	0.272	0.339	0.139	0.720	0.793	0.861
LTE B2	Level2&3	Left Cheek	0.298	0.423	0.603	0.667	0.393	1.114	1.294	1.358
	Level2&3	Left Tilt	0.384	0.407	0.590	0.708	0.331	1.122	1.304	1.422
	Level2&3	Right Cheek	0.348	0.187	0.266	0.321	0.153	0.688	0.767	0.822
	Level2&3	Right Tilt	0.663	0.198	0.272	0.339	0.139	1.000	1.073	1.141
LTE B4	Level2&3	Left Cheek	0.316	0.423	0.603	0.667	0.393	1.132	1.312	1.376
	Level2&3	Left Tilt	0.426	0.407	0.590	0.708	0.331	1.163	1.346	<b>1.464</b>
	Level2&3	Right Cheek	0.418	0.187	0.266	0.321	0.153	0.758	0.837	0.892
	Level2&3	Right Tilt	0.581	0.198	0.272	0.339	0.139	0.918	0.991	1.059
LTE B5	Level2&3	Left Cheek	0.230	0.423	0.603	0.667	0.393	1.046	1.226	1.289
	Level2&3	Left Tilt	0.192	0.407	0.590	0.708	0.331	0.930	1.113	1.231
	Level2&3	Right Cheek	0.294	0.187	0.266	0.321	0.153	0.634	0.713	0.767
	Level2&3	Right Tilt	0.274	0.198	0.272	0.339	0.139	0.611	0.684	0.752
LTE B7	Level2&3	Left Cheek	0.145	0.423	0.603	0.667	0.393	0.962	1.142	1.205
	Level2&3	Left Tilt	0.135	0.407	0.590	0.708	0.331	0.873	1.056	1.174
	Level2&3	Right Cheek	0.365	0.187	0.266	0.321	0.153	0.705	0.784	0.838
	Level2&3	Right Tilt	0.390	0.198	0.272	0.339	0.139	0.727	0.800	0.868
LTE B12	Off	Left Cheek	0.056	0.423	0.603	0.667	0.393	0.872	1.053	1.116
	Off	Left Tilt	0.044	0.407	0.590	0.708	0.331	0.782	0.964	1.083
	Off	Right Cheek	0.080	0.187	0.266	0.321	0.153	0.420	0.499	0.554



	Off	Right Tilt	0.067	0.198	0.272	0.339	0.139	0.404	0.478	0.545
LTE B26	Off	Left Cheek	0.371	0.423	0.603	0.667	0.393	1.187	1.367	1.430
	Off	Left Tilt	0.303	0.407	0.590	0.708	0.331	1.041	1.224	1.342
	Off	Right Cheek	0.452	0.187	0.266	0.321	0.153	0.792	0.871	0.925
	Off	Right Tilt	0.401	0.198	0.272	0.339	0.139	0.737	0.811	0.879
	Level2&3	Left Cheek	0.299	0.423	0.603	0.667	0.393	1.115	1.295	1.359
LTE B66	Level2&3	Left Tilt	0.403	0.407	0.590	0.708	0.331	1.141	1.324	1.442
	Level2&3	Right Cheek	0.361	0.187	0.266	0.321	0.153	0.701	0.780	0.835
	Level2&3	Right Tilt	0.452	0.198	0.272	0.339	0.139	0.789	0.863	0.930
	Level2&3	Left Cheek	0.224	0.423	0.603	0.667	0.393	1.040	1.220	1.284
LTE B38	Level2&3	Left Tilt	0.205	0.407	0.590	0.708	0.331	0.943	1.125	1.244
	Level2&3	Right Cheek	0.555	0.187	0.266	0.321	0.153	0.895	0.974	1.029
	Level2&3	Right Tilt	0.573	0.198	0.272	0.339	0.139	0.910	0.984	1.051
	Level2&3	Left Cheek	0.207	0.423	0.603	0.667	0.393	1.023	1.203	1.267
LTE B41	Level2&3	Left Tilt	0.197	0.407	0.590	0.708	0.331	0.935	1.118	1.236
	Level2&3	Right Cheek	0.531	0.187	0.266	0.321	0.153	0.871	0.950	1.005
	Level2&3	Right Tilt	0.542	0.198	0.272	0.339	0.139	0.879	0.952	1.020

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 1.464 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN 2.4G

Band	Power Reduction	Position	Stand alone SAR		SUM SAR
			1	2	Sum SAR (1+2)
			WWAN	2.4GWIFI	
GSM850	Off	Front Side 10mm	0.143	0.103	0.246
	Off	Back Side 10mm	0.171	0.128	0.299
	Off	Left Edge 10mm	0.025	0.073	0.098
	Off	Right Edge 10mm	0.018	0.019	0.037
	Off	Top Edge 10mm	0.180	0.117	0.298
GSM 1900	Level5&6	Front Side 10mm	0.231	0.103	0.334
	Level5&6	Back Side 10mm	0.316	0.128	0.444
	Level5&6	Left Edge 10mm	0.028	0.073	0.101
	Level5&6	Right Edge 10mm	0.018	0.019	0.038
	Level5&6	Top Edge 10mm	0.462	0.117	0.580
WCDMA B2	Level5&6	Front Side 10mm	0.209	0.103	0.312
	Level5&6	Back Side 10mm	0.292	0.128	0.421
	Level5&6	Left Edge 10mm	0.011	0.073	0.084
	Level5&6	Right Edge 10mm	0.037	0.019	0.056
	Level5&6	Top Edge 10mm	0.510	0.117	0.628
WCDMA B4	Level5&6	Front Side 10mm	0.209	0.103	0.312
	Level5&6	Back Side 10mm	0.266	0.128	0.394
	Level5&6	Left Edge 10mm	0.026	0.073	0.099
	Level5&6	Right Edge 10mm	0.030	0.019	0.049
	Level5&6	Top Edge 10mm	0.525	0.117	0.643
WCDMA B5	Off	Front Side 10mm	0.078	0.103	0.181
	Off	Back Side 10mm	0.101	0.128	0.229
	Off	Left Edge 10mm	0.073	0.073	0.145
	Off	Right Edge 10mm	0.018	0.019	0.037
	Off	Top Edge 10mm	0.089	0.117	0.206
LTE B2	Level5&6	Front Side 10mm	0.157	0.103	0.260
	Level5&6	Back Side 10mm	0.228	0.128	0.356
	Level5&6	Left Edge 10mm	0.020	0.073	0.093
	Level5&6	Right Edge 10mm	0.024	0.019	0.043
	Level5&6	Top Edge 10mm	0.403	0.117	0.520
LTE B4	Level5&6	Front Side 10mm	0.316	0.103	0.419
	Level5&6	Back Side 10mm	0.382	0.128	0.511
	Level5&6	Left Edge 10mm	0.028	0.073	0.101
	Level5&6	Right Edge 10mm	0.041	0.019	0.060
	Level5&6	Top Edge 10mm	0.559	0.117	0.676
LTE B5	Off	Front Side 10mm	0.078	0.103	0.181
	Off	Back Side 10mm	0.059	0.128	0.187
	Off	Left Edge 10mm	0.015	0.073	0.088
	Off	Right Edge 10mm	0.017	0.019	0.036

	Off	Top Edge 10mm	0.070	0.117	0.187
LTE B7	Level5&6	Front Side 10mm	0.302	0.103	0.405
	Level5&6	Back Side 10mm	0.510	0.128	0.639
	Level5&6	Left Edge 10mm	0.174	0.073	0.247
	Level5&6	Right Edge 10mm	0.262	0.019	0.281
	Level5&6	Top Edge 10mm	0.438	0.117	0.555
LTE B12	Off	Front Side 10mm	0.043	0.103	0.146
	Off	Back Side 10mm	0.062	0.128	0.191
	Off	Left Edge 10mm	0.020	0.073	0.092
	Off	Right Edge 10mm	0.013	0.019	0.032
	Off	Top Edge 10mm	0.069	0.117	0.186
LTE B26	Off	Front Side 10mm	0.077	0.103	0.180
	Off	Back Side 10mm	0.058	0.128	0.186
	Off	Left Edge 10mm	0.049	0.073	0.122
	Off	Right Edge 10mm	0.013	0.019	0.032
	Off	Top Edge 10mm	0.084	0.117	0.201
LTE B66	Level5&6	Front Side 10mm	0.396	0.103	0.499
	Level5&6	Back Side 10mm	0.297	0.128	0.426
	Level5&6	Left Edge 10mm	0.038	0.073	0.111
	Level5&6	Right Edge 10mm	0.042	0.019	0.061
	Level5&6	Top Edge 10mm	0.643	0.117	<b>0.761</b>
LTE B38	Off	Front Side 10mm	0.199	0.103	0.302
	Off	Back Side 10mm	0.331	0.128	0.459
	Off	Left Edge 10mm	0.165	0.073	0.238
	Off	Right Edge 10mm	0.231	0.019	0.250
	Off	Top Edge 10mm	0.290	0.117	0.407
LTE B41	Off	Front Side 10mm	0.185	0.103	0.288
	Off	Back Side 10mm	0.349	0.128	0.477
	Off	Left Edge 10mm	0.163	0.073	0.236
	Off	Right Edge 10mm	0.236	0.019	0.255
	Off	Top Edge 10mm	0.293	0.117	0.410

**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 0.761 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.4 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN 5G and Bluetooth

Band	Power Reduction	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	Sum SAR (1+2+4)	Sum SAR (1+3+4)
			WWAN	5.2G WIFI MAX	5.8G WIFI MAX	Bluetooth		
GSM850	Off	Front Side 10mm	0.143	0.135	0.160	0.043	0.321	0.346
	Off	Back Side 10mm	0.171	0.509	0.186	0.058	0.737	0.414
	Off	Left Edge 10mm	0.025	0.093	0.084	0.027	0.144	0.136
	Off	Right Edge 10mm	0.018	0.022	0.019	0.011	0.050	0.048
	Off	Top Edge 10mm	0.180	0.256	0.420	0.020	0.456	0.620
GSM 1900	Level5&6	Front Side 10mm	0.231	0.135	0.160	0.043	0.409	0.434
	Level5&6	Back Side 10mm	0.316	0.509	0.186	0.058	0.882	0.559
	Level5&6	Left Edge 10mm	0.028	0.093	0.084	0.027	0.147	0.139
	Level5&6	Right Edge 10mm	0.018	0.022	0.019	0.011	0.051	0.048
	Level5&6	Top Edge 10mm	0.462	0.256	0.420	0.020	0.738	0.902
WCDMA B2	Level5&6	Front Side 10mm	0.209	0.135	0.160	0.043	0.386	0.412
	Level5&6	Back Side 10mm	0.292	0.509	0.186	0.058	0.859	0.536
	Level5&6	Left Edge 10mm	0.011	0.093	0.084	0.027	0.130	0.122
	Level5&6	Right Edge 10mm	0.037	0.022	0.019	0.011	0.070	0.067
	Level5&6	Top Edge 10mm	0.510	0.256	0.420	0.020	0.786	0.949
WCDMA B4	Level5&6	Front Side 10mm	0.209	0.135	0.160	0.043	0.386	0.411
	Level5&6	Back Side 10mm	0.266	0.509	0.186	0.058	0.832	0.509
	Level5&6	Left Edge 10mm	0.026	0.093	0.084	0.027	0.145	0.137
	Level5&6	Right Edge 10mm	0.030	0.022	0.019	0.011	0.062	0.060
	Level5&6	Top Edge 10mm	0.525	0.256	0.420	0.020	0.801	0.964
WCDMA B5	Off	Front Side 10mm	0.078	0.135	0.160	0.043	0.255	0.280
	Off	Back Side 10mm	0.101	0.509	0.186	0.058	0.667	0.344
	Off	Left Edge 10mm	0.073	0.093	0.084	0.027	0.192	0.184
	Off	Right Edge 10mm	0.018	0.022	0.019	0.011	0.051	0.048
	Off	Top Edge 10mm	0.089	0.256	0.420	0.020	0.364	0.528
LTE B2	Level5&6	Front Side 10mm	0.157	0.135	0.160	0.043	0.335	0.360
	Level5&6	Back Side 10mm	0.228	0.509	0.186	0.058	0.794	0.471
	Level5&6	Left Edge 10mm	0.020	0.093	0.084	0.027	0.139	0.131
	Level5&6	Right Edge 10mm	0.024	0.022	0.019	0.011	0.056	0.054
	Level5&6	Top Edge 10mm	0.403	0.256	0.420	0.020	0.679	0.842
LTE B4	Level5&6	Front Side 10mm	0.316	0.135	0.160	0.043	0.494	0.519
	Level5&6	Back Side 10mm	0.382	0.509	0.186	0.058	0.949	0.625
	Level5&6	Left Edge 10mm	0.028	0.093	0.084	0.027	0.147	0.139
	Level5&6	Right Edge 10mm	0.041	0.022	0.019	0.011	0.073	0.071
	Level5&6	Top Edge 10mm	0.559	0.256	0.420	0.020	0.834	0.998
LTE B5	Off	Front Side 10mm	0.078	0.135	0.160	0.043	0.255	0.280
	Off	Back Side 10mm	0.059	0.509	0.186	0.058	0.625	0.302
	Off	Left Edge 10mm	0.015	0.093	0.084	0.027	0.134	0.126
	Off	Right Edge 10mm	0.017	0.022	0.019	0.011	0.050	0.047

	Off	Top Edge 10mm	0.070	0.256	0.420	0.020	0.345	0.509
LTE B7	Level5&6	Front Side 10mm	0.302	0.135	0.160	0.043	0.480	0.505
	Level5&6	Back Side 10mm	0.510	0.509	0.186	0.058	1.077	0.754
	Level5&6	Left Edge 10mm	0.174	0.093	0.084	0.027	0.294	0.285
	Level5&6	Right Edge 10mm	0.262	0.022	0.019	0.011	0.294	0.292
	Level5&6	Top Edge 10mm	0.438	0.256	0.420	0.020	0.713	0.877
LTE B12	Off	Front Side 10mm	0.043	0.135	0.160	0.043	0.220	0.245
	Off	Back Side 10mm	0.062	0.509	0.186	0.058	0.629	0.306
	Off	Left Edge 10mm	0.020	0.093	0.084	0.027	0.139	0.131
	Off	Right Edge 10mm	0.013	0.022	0.019	0.011	0.046	0.043
	Off	Top Edge 10mm	0.069	0.256	0.420	0.020	0.344	0.508
LTE B26	Off	Front Side 10mm	0.077	0.135	0.160	0.043	0.255	0.280
	Off	Back Side 10mm	0.058	0.509	0.186	0.058	0.624	0.301
	Off	Left Edge 10mm	0.049	0.093	0.084	0.027	0.168	0.160
	Off	Right Edge 10mm	0.013	0.022	0.019	0.011	0.046	0.043
	Off	Top Edge 10mm	0.084	0.256	0.420	0.020	0.360	0.523
LTE B66	Level5&6	Front Side 10mm	0.396	0.135	0.160	0.043	0.573	0.599
	Level5&6	Back Side 10mm	0.297	0.509	0.186	0.058	0.864	0.541
	Level5&6	Left Edge 10mm	0.038	0.093	0.084	0.027	0.158	0.149
	Level5&6	Right Edge 10mm	0.042	0.022	0.019	0.011	0.074	0.072
	Level5&6	Top Edge 10mm	0.643	0.256	0.420	0.020	0.919	<b>1.083</b>
LTE B38	Off	Front Side 10mm	0.199	0.135	0.160	0.043	0.376	0.401
	Off	Back Side 10mm	0.331	0.509	0.186	0.058	0.897	0.574
	Off	Left Edge 10mm	0.165	0.093	0.084	0.027	0.284	0.276
	Off	Right Edge 10mm	0.231	0.022	0.019	0.011	0.263	0.261
	Off	Top Edge 10mm	0.290	0.256	0.420	0.020	0.565	0.729
LTE B41	Off	Front Side 10mm	0.185	0.135	0.160	0.043	0.362	0.387
	Off	Back Side 10mm	0.349	0.509	0.186	0.058	0.915	0.592
	Off	Left Edge 10mm	0.163	0.093	0.084	0.027	0.283	0.274
	Off	Right Edge 10mm	0.236	0.022	0.019	0.011	0.268	0.265
	Off	Top Edge 10mm	0.293	0.256	0.420	0.020	0.569	0.732

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 1.083 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.5 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN 2.4G

Band	Power Reduction	Position	Stand alone SAR		SUM SAR
			1	2	Sum SAR (1+2)
			WWAN	2.4GWIFI	
GSM850	Off	Front Side 15mm	0.118	0.071	0.189
	Off	Back Side 15mm	0.127	0.087	0.214
GSM 1900	Level5&6	Front Side 15mm	0.094	0.071	0.165
	Level5&6	Back Side 15mm	0.118	0.087	0.205
WCDMA B2	Level5&6	Front Side 15mm	0.163	0.071	0.234
	Level5&6	Back Side 15mm	0.251	0.087	0.339
WCDMA B4	Level5&6	Front Side 15mm	0.279	0.071	0.350
	Level5&6	Back Side 15mm	0.358	0.087	0.445
WCDMA B5	Off	Front Side 15mm	0.028	0.071	0.100
	Off	Back Side 15mm	0.074	0.087	0.161
LTE B2	Level5&6	Front Side 15mm	0.147	0.071	0.219
	Level5&6	Back Side 15mm	0.207	0.087	0.294
LTE B4	Level5&6	Front Side 15mm	0.175	0.071	0.247
	Level5&6	Back Side 15mm	0.219	0.087	0.306
LTE B5	Off	Front Side 15mm	0.063	0.071	0.134
	Off	Back Side 15mm	0.025	0.087	0.113
LTE B7	Level5&6	Front Side 15mm	0.313	0.071	0.384
	Level5&6	Back Side 15mm	0.394	0.087	0.481
LTE B12	Off	Front Side 15mm	0.034	0.071	0.106
	Off	Back Side 15mm	0.055	0.087	0.142
LTE B26	Off	Front Side 15mm	0.065	0.071	0.137
	Off	Back Side 15mm	0.061	0.087	0.148
LTE B66	Level5&6	Front Side 15mm	0.427	0.071	<b>0.499</b>
	Level5&6	Back Side 15mm	0.350	0.087	0.437
LTE B38	Off	Front Side 15mm	0.101	0.071	0.172
	Off	Back Side 15mm	0.149	0.087	0.237
LTE B41	Off	Front Side 15mm	0.126	0.071	0.197
	Off	Back Side 15mm	0.185	0.087	0.272

**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 15g SAR is 0.499 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.6 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN 5G and Bluetooth

Band	Power Reduction	Position	Stand alone SAR					SUM SAR		
			1	2	3	4	5	Sum SAR	Sum SAR	Sum SAR
			WWAN	5.3G WIFI MAX	5.6G WIFI MAX	5.8G WIFI MAX	Bluetooth	(1+2+5)	(1+3+5)	(1+4+5)
GSM850	Off	Front Side 15mm	0.118	0.089	0.093	0.084	0.027	0.234	0.238	0.229
	Off	Back Side 15mm	0.127	0.510	0.245	0.097	0.031	0.667	0.402	0.254
GSM 1900	Level5&6	Front Side 15mm	0.094	0.089	0.093	0.084	0.027	0.209	0.213	0.204
	Level5&6	Back Side 15mm	0.118	0.510	0.245	0.097	0.031	0.144	0.148	0.139
WCDMA B2	Level5&6	Front Side 15mm	0.163	0.089	0.093	0.084	0.027	0.279	0.283	0.274
	Level5&6	Back Side 15mm	0.251	0.510	0.245	0.097	0.031	0.792	0.527	0.379
WCDMA B4	Level5&6	Front Side 15mm	0.279	0.089	0.093	0.084	0.027	0.394	0.398	0.389
	Level5&6	Back Side 15mm	0.358	0.510	0.245	0.097	0.031	0.899	0.634	0.486
WCDMA B5	Off	Front Side 15mm	0.028	0.089	0.093	0.084	0.027	0.144	0.148	0.139
	Off	Back Side 15mm	0.074	0.510	0.245	0.097	0.031	0.615	0.350	0.202
LTE B2	Level5&6	Front Side 15mm	0.147	0.089	0.093	0.084	0.027	0.263	0.267	0.258
	Level5&6	Back Side 15mm	0.207	0.510	0.245	0.097	0.031	0.747	0.482	0.334
LTE B4	Level5&6	Front Side 15mm	0.175	0.089	0.093	0.084	0.027	0.291	0.295	0.286
	Level5&6	Back Side 15mm	0.219	0.510	0.245	0.097	0.031	0.759	0.494	0.346
LTE B5	Off	Front Side 15mm	0.063	0.089	0.093	0.084	0.027	0.178	0.182	0.173
	Off	Back Side 15mm	0.025	0.510	0.245	0.097	0.031	0.566	0.301	0.153
LTE B7	Level5&6	Front Side 15mm	0.313	0.089	0.093	0.084	0.027	0.428	0.432	0.423
	Level5&6	Back Side 15mm	0.394	0.510	0.245	0.097	0.031	<b>0.935</b>	0.670	0.522
LTE B12	Off	Front Side 15mm	0.034	0.089	0.093	0.084	0.027	0.150	0.154	0.145
	Off	Back Side 15mm	0.055	0.510	0.245	0.097	0.031	0.596	0.331	0.183
LTE B26	Off	Front Side 15mm	0.065	0.089	0.093	0.084	0.027	0.181	0.185	0.176
	Off	Back Side 15mm	0.061	0.510	0.245	0.097	0.031	0.602	0.337	0.189
LTE B66	Level5&6	Front Side 15mm	0.427	0.089	0.093	0.084	0.027	0.543	0.547	0.538
	Level5&6	Back Side 15mm	0.350	0.510	0.245	0.097	0.031	0.890	0.625	0.477
LTE B38	Off	Front Side 15mm	0.101	0.089	0.093	0.084	0.027	0.217	0.221	0.212
	Off	Back Side 15mm	0.149	0.510	0.245	0.097	0.031	0.690	0.425	0.277
LTE B41	Off	Front Side 15mm	0.126	0.089	0.093	0.084	0.027	0.241	0.245	0.236
	Off	Back Side 15mm	0.185	0.510	0.245	0.097	0.031	0.725	0.460	0.312

**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 15g SAR is 0.935 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.7 Specific Simultaneous Transmission SAR Evaluation for WWAN Antenna Up and WLAN 5G

Band	Power Reduction	Position	Stand alone SAR				Combined SAR		
			1	2	3	4	Sum SAR (1+2)	Sum SAR (1+3)	Sum SAR (1+4)
			WWAN	5.2G WIFI	5.3G WIFI	5.6G WIFI			
WCDMA B2	Level5&6	Front Side 0mm	0.676	0.259	0.280	0.318	0.934	0.956	0.993
	Level5&6	Back Side 0mm	0.636	0.406	0.894	0.292	1.042	1.530	0.928
	Level5&6	Left Edge 0mm	0.034	0.087	0.115	0.072	0.120	0.149	0.105
	Level5&6	Right Edge 0mm	0.055	0.016	0.021	0.018	0.070	0.076	0.073
	Level5&6	Top Edge 0mm	1.730	0.779	0.668	0.798	2.509	2.397	2.528
WCDMA B4	Level5&6	Front Side 0mm	0.882	0.259	0.280	0.318	1.141	1.162	1.200
	Level5&6	Back Side 0mm	0.780	0.406	0.894	0.292	1.187	1.675	1.072
	Level5&6	Left Edge 0mm	0.053	0.087	0.115	0.072	0.140	0.168	0.125
	Level5&6	Right Edge 0mm	0.072	0.016	0.021	0.018	0.087	0.093	0.090
	Level5&6	Top Edge 0mm	1.771	0.779	0.668	0.798	2.551	2.439	2.570
LTE B2	Level5&6	Front Side 0mm	0.627	0.259	0.280	0.318	0.885	0.907	0.944
	Level5&6	Back Side 0mm	0.547	0.406	0.894	0.292	0.953	1.441	0.839
	Level5&6	Left Edge 0mm	0.065	0.087	0.115	0.072	0.151	0.180	0.136
	Level5&6	Right Edge 0mm	0.039	0.016	0.021	0.018	0.055	0.060	0.057
	Level5&6	Top Edge 0mm	1.162	0.779	0.668	0.798	1.941	1.829	1.960
LTE B4	Level5&6	Front Side 0mm	0.884	0.259	0.280	0.318	1.142	1.164	1.201
	Level5&6	Back Side 0mm	0.737	0.406	0.894	0.292	1.144	1.632	1.029
	Level5&6	Left Edge 0mm	0.071	0.087	0.115	0.072	0.158	0.186	0.143
	Level5&6	Right Edge 0mm	0.074	0.016	0.021	0.018	0.090	0.095	0.093
	Level5&6	Top Edge 0mm	1.636	0.779	0.668	0.798	2.415	2.304	2.435
LTE B66	Level5&6	Front Side 0mm	0.670	0.259	0.280	0.318	0.929	0.950	0.988
	Level5&6	Back Side 0mm	0.615	0.406	0.894	0.292	1.021	1.509	0.907
	Level5&6	Left Edge 0mm	0.039	0.087	0.115	0.072	0.125	0.154	0.110
	Level5&6	Right Edge 0mm	0.054	0.016	0.021	0.018	0.069	0.074	0.072
	Level5&6	Top Edge 0mm	1.974	0.779	0.668	0.798	2.754	2.642	<b>2.773</b>

**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 2.773 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.



12.2.8 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN  
 2.4G

Band	Power Reduction	Position	Stand alone SAR		SUM SAR
			1	2	Sum SAR (1+2)
			WWAN	2.4GWIFI	
GSM850	Off	Left Cheek	0.220	0.680	<b>0.900</b>
	Off	Left Tilt	0.107	0.503	0.610
	Off	Right Cheek	0.162	0.297	0.460
	Off	Right Tilt	0.086	0.261	0.347
GSM 1900	Off	Left Cheek	0.073	0.680	0.753
	Off	Left Tilt	0.058	0.503	0.561
	Off	Right Cheek	0.069	0.297	0.366
	Off	Right Tilt	0.052	0.261	0.313
WCDMA B2	Off	Left Cheek	0.071	0.680	0.752
	Off	Left Tilt	0.055	0.503	0.558
	Off	Right Cheek	0.067	0.297	0.365
	Off	Right Tilt	0.051	0.261	0.312
WCDMA B4	Off	Left Cheek	0.089	0.680	0.769
	Off	Left Tilt	0.070	0.503	0.573
	Off	Right Cheek	0.079	0.297	0.376
	Off	Right Tilt	0.065	0.261	0.325
WCDMA B5	Off	Left Cheek	0.161	0.680	0.841
	Off	Left Tilt	0.080	0.503	0.583
	Off	Right Cheek	0.129	0.297	0.426
	Off	Right Tilt	0.080	0.261	0.341
LTE B2	Off	Left Cheek	0.059	0.680	0.739
	Off	Left Tilt	0.046	0.503	0.549
	Off	Right Cheek	0.054	0.297	0.352
	Off	Right Tilt	0.037	0.261	0.298
LTE B4	Off	Left Cheek	0.076	0.680	0.756
	Off	Left Tilt	0.061	0.503	0.563
	Off	Right Cheek	0.068	0.297	0.366
	Off	Right Tilt	0.045	0.261	0.306
LTE B5	Off	Left Cheek	0.167	0.680	0.847
	Off	Left Tilt	0.081	0.503	0.584
	Off	Right Cheek	0.123	0.297	0.420
	Off	Right Tilt	0.074	0.261	0.335
LTE B7	Off	Left Cheek	0.149	0.680	0.829
	Off	Left Tilt	0.113	0.503	0.616
	Off	Right Cheek	0.213	0.297	0.510
	Off	Right Tilt	0.122	0.261	0.383
LTE B12	Off	Left Cheek	0.102	0.680	0.783
	Off	Left Tilt	0.055	0.503	0.558
	Off	Right Cheek	0.072	0.297	0.370

	Off	Right Tilt	0.043	0.261	0.303
LTE B26	Off	Left Cheek	0.146	0.680	0.826
	Off	Left Tilt	0.070	0.503	0.573
	Off	Right Cheek	0.106	0.297	0.404
	Off	Right Tilt	0.064	0.261	0.325
LTE B66	Off	Left Cheek	0.074	0.680	0.754
	Off	Left Tilt	0.066	0.503	0.569
	Off	Right Cheek	0.068	0.297	0.365
	Off	Right Tilt	0.054	0.261	0.315
LTE B38	Off	Left Cheek	0.173	0.680	0.853
	Off	Left Tilt	0.136	0.503	0.639
	Off	Right Cheek	0.235	0.297	0.532
	Off	Right Tilt	0.149	0.261	0.410
LTE B41	Off	Left Cheek	0.171	0.680	0.851
	Off	Left Tilt	0.139	0.503	0.641
	Off	Right Cheek	0.231	0.297	0.528
	Off	Right Tilt	0.148	0.261	0.409

**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 0.900 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.9 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN 5G and Bluetooth

Band	Power Reduction	Position	Stand alone SAR					SUM SAR		
			1	2	3	4	5	Sum SAR (1+2+5)	Sum SAR (1+3+5)	Sum SAR (1+4+5)
			WWAN	5.3GWIFI	5.6GWIFI	5.8GWIFI	Bluetooth			
GSM850	Off	Left Cheek	0.220	0.423	0.603	0.667	0.393	1.036	1.216	<b>1.279</b>
	Off	Left Tilt	0.107	0.407	0.590	0.708	0.331	0.845	1.028	1.146
	Off	Right Cheek	0.162	0.187	0.266	0.321	0.153	0.502	0.582	0.636
	Off	Right Tilt	0.086	0.198	0.272	0.339	0.139	0.423	0.496	0.564
GSM 1900	Off	Left Cheek	0.073	0.423	0.603	0.667	0.393	0.889	1.069	1.132
	Off	Left Tilt	0.058	0.407	0.590	0.708	0.331	0.796	0.978	1.096
	Off	Right Cheek	0.069	0.187	0.266	0.321	0.153	0.409	0.488	0.542
	Off	Right Tilt	0.052	0.198	0.272	0.339	0.139	0.389	0.463	0.530
WCDMA B2	Off	Left Cheek	0.071	0.423	0.603	0.667	0.393	0.887	1.067	1.131
	Off	Left Tilt	0.055	0.407	0.590	0.708	0.331	0.792	0.975	1.093
	Off	Right Cheek	0.067	0.187	0.266	0.321	0.153	0.408	0.487	0.541
	Off	Right Tilt	0.051	0.198	0.272	0.339	0.139	0.388	0.461	0.529
WCDMA B4	Off	Left Cheek	0.089	0.423	0.603	0.667	0.393	0.905	1.085	1.148
	Off	Left Tilt	0.070	0.407	0.590	0.708	0.331	0.808	0.990	1.108
	Off	Right Cheek	0.079	0.187	0.266	0.321	0.153	0.419	0.498	0.552
	Off	Right Tilt	0.065	0.198	0.272	0.339	0.139	0.402	0.475	0.543
WCDMA B5	Off	Left Cheek	0.161	0.423	0.603	0.667	0.393	0.977	1.157	1.221
	Off	Left Tilt	0.080	0.407	0.590	0.708	0.331	0.818	1.000	1.119
	Off	Right Cheek	0.129	0.187	0.266	0.321	0.153	0.469	0.548	0.603
	Off	Right Tilt	0.080	0.198	0.272	0.339	0.139	0.417	0.490	0.558
LTE B2	Off	Left Cheek	0.059	0.423	0.603	0.667	0.393	0.875	1.055	1.118
	Off	Left Tilt	0.046	0.407	0.590	0.708	0.331	0.784	0.967	1.085
	Off	Right Cheek	0.054	0.187	0.266	0.321	0.153	0.394	0.474	0.528
	Off	Right Tilt	0.037	0.198	0.272	0.339	0.139	0.374	0.448	0.515
LTE B4	Off	Left Cheek	0.076	0.423	0.603	0.667	0.393	0.892	1.072	1.136
	Off	Left Tilt	0.061	0.407	0.590	0.708	0.331	0.798	0.981	1.099
	Off	Right Cheek	0.068	0.187	0.266	0.321	0.153	0.408	0.488	0.542
	Off	Right Tilt	0.045	0.198	0.272	0.339	0.139	0.382	0.455	0.523
LTE B5	Off	Left Cheek	0.167	0.423	0.603	0.667	0.393	0.983	1.163	1.226
	Off	Left Tilt	0.081	0.407	0.590	0.708	0.331	0.819	1.001	1.120
	Off	Right Cheek	0.123	0.187	0.266	0.321	0.153	0.463	0.542	0.597
	Off	Right Tilt	0.074	0.198	0.272	0.339	0.139	0.411	0.484	0.552
LTE B7	Off	Left Cheek	0.149	0.423	0.603	0.667	0.393	0.965	1.145	1.209
	Off	Left Tilt	0.113	0.407	0.590	0.708	0.331	0.851	1.033	1.152
	Off	Right Cheek	0.213	0.187	0.266	0.321	0.153	0.553	0.632	0.687
	Off	Right Tilt	0.122	0.198	0.272	0.339	0.139	0.459	0.533	0.600
LTE B12	Off	Left Cheek	0.102	0.423	0.603	0.667	0.393	0.918	1.099	1.162
	Off	Left Tilt	0.055	0.407	0.590	0.708	0.331	0.793	0.975	1.093
	Off	Right Cheek	0.072	0.187	0.266	0.321	0.153	0.413	0.492	0.546

	Off	Right Tilt	0.043	0.198	0.272	0.339	0.139	0.380	0.453	0.521
LTE B26	Off	Left Cheek	0.146	0.423	0.603	0.667	0.393	0.962	1.142	1.206
	Off	Left Tilt	0.070	0.407	0.590	0.708	0.331	0.807	0.990	1.108
	Off	Right Cheek	0.106	0.187	0.266	0.321	0.153	0.446	0.525	0.580
	Off	Right Tilt	0.064	0.198	0.272	0.339	0.139	0.401	0.474	0.542
LTE B66	Off	Left Cheek	0.074	0.423	0.603	0.667	0.393	0.890	1.070	1.134
	Off	Left Tilt	0.066	0.407	0.590	0.708	0.331	0.803	0.986	1.104
	Off	Right Cheek	0.068	0.187	0.266	0.321	0.153	0.408	0.487	0.542
	Off	Right Tilt	0.054	0.198	0.272	0.339	0.139	0.391	0.464	0.532
LTE B38	Off	Left Cheek	0.173	0.423	0.603	0.667	0.393	0.989	1.169	1.233
	Off	Left Tilt	0.136	0.407	0.590	0.708	0.331	0.874	1.056	1.175
	Off	Right Cheek	0.235	0.187	0.266	0.321	0.153	0.575	0.654	0.709
	Off	Right Tilt	0.149	0.198	0.272	0.339	0.139	0.486	0.560	0.627
LTE B41	Off	Left Cheek	0.171	0.423	0.603	0.667	0.393	0.987	1.167	1.230
	Off	Left Tilt	0.139	0.407	0.590	0.708	0.331	0.876	1.059	1.177
	Off	Right Cheek	0.231	0.187	0.266	0.321	0.153	0.571	0.650	0.705
	Off	Right Tilt	0.148	0.198	0.272	0.339	0.139	0.485	0.558	0.626

**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 1.279 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

## 12.2.10 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN 2.4G

Band	Power Reduction	Position	Stand alone SAR		SUM SAR
			1	2	Sum SAR (1+2)
			WWAN	2.4GWIFI	
GSM850	Off	Front Side 10mm	0.201	0.103	0.304
	Off	Back Side 10mm	0.331	0.128	0.459
	Off	Left Edge 10mm	0.026	0.073	0.099
	Off	Right Edge 10mm	0.100	0.019	0.119
	Off	Bottom Edge 10mm	0.261	0.000	0.261
GSM 1900	Off	Front Side 10mm	0.420	0.103	0.523
	Off	Back Side 10mm	0.623	0.128	0.752
	Off	Left Edge 10mm	0.135	0.073	0.207
	Off	Right Edge 10mm	0.079	0.019	0.098
	Off	Bottom Edge 10mm	0.856	0.000	0.856
WCDMA B2	Off	Front Side 10mm	0.606	0.103	0.709
	Off	Back Side 10mm	0.867	0.128	0.996
	Off	Left Edge 10mm	0.228	0.073	0.301
	Off	Right Edge 10mm	0.117	0.019	0.136
	Off	Bottom Edge 10mm	1.011	0.000	1.011
WCDMA B4	Level8&9	Front Side 10mm	0.364	0.103	0.467
	Level8&9	Back Side 10mm	0.548	0.128	0.676
	Level8&9	Left Edge 10mm	0.155	0.073	0.228
	Level8&9	Right Edge 10mm	0.087	0.019	0.106
	Level8&9	Bottom Edge 10mm	0.721	0.000	0.721
WCDMA B5	Off	Front Side 10mm	0.215	0.103	0.318
	Off	Back Side 10mm	0.272	0.128	0.400
	Off	Left Edge 10mm	0.059	0.073	0.132
	Off	Right Edge 10mm	0.170	0.019	0.189
	Off	Bottom Edge 10mm	0.212	0.000	0.212
LTE B2	Off	Front Side 10mm	0.395	0.103	0.498
	Off	Back Side 10mm	0.601	0.128	0.730
	Off	Left Edge 10mm	0.131	0.073	0.204
	Off	Right Edge 10mm	0.074	0.019	0.093
	Off	Bottom Edge 10mm	1.165	0.000	<b>1.165</b>
LTE B4	Level8&9	Front Side 10mm	0.393	0.103	0.496
	Level8&9	Back Side 10mm	0.614	0.128	0.742
	Level8&9	Left Edge 10mm	0.112	0.073	0.184
	Level8&9	Right Edge 10mm	0.068	0.019	0.087
	Level8&9	Bottom Edge 10mm	0.722	0.000	0.722
LTE B5	Off	Front Side 10mm	0.178	0.103	0.281
	Off	Back Side 10mm	0.260	0.128	0.388
	Off	Left Edge 10mm	0.086	0.073	0.159
	Off	Right Edge 10mm	0.182	0.019	0.201

	Off	Bottom Edge 10mm	0.224	0.000	0.224
LTE B7	Off	Front Side 10mm	0.468	0.103	0.571
	Off	Back Side 10mm	0.476	0.128	0.604
	Off	Left Edge 10mm	0.394	0.073	0.467
	Off	Right Edge 10mm	0.156	0.019	0.175
	Off	Bottom Edge 10mm	0.454	0.000	0.454
	LTE B12	Off	Front Side 10mm	0.153	0.103
Off		Back Side 10mm	0.229	0.128	0.357
Off		Left Edge 10mm	0.140	0.073	0.213
Off		Right Edge 10mm	0.261	0.019	0.280
Off		Bottom Edge 10mm	0.099	0.000	0.099
LTE B26	Off	Front Side 10mm	0.175	0.103	0.278
	Off	Back Side 10mm	0.183	0.128	0.311
	Off	Left Edge 10mm	0.104	0.073	0.177
	Off	Right Edge 10mm	0.143	0.019	0.162
	Off	Bottom Edge 10mm	0.155	0.000	0.155
LTE B66	Level8&9	Front Side 10mm	0.462	0.103	0.565
	Level8&9	Back Side 10mm	0.501	0.128	0.630
	Level8&9	Left Edge 10mm	0.158	0.073	0.231
	Level8&9	Right Edge 10mm	0.122	0.019	0.141
	Level8&9	Bottom Edge 10mm	0.976	0.000	0.976
LTE B38	Off	Front Side 10mm	0.242	0.103	0.345
	Off	Back Side 10mm	0.333	0.128	0.461
	Off	Left Edge 10mm	0.207	0.073	0.280
	Off	Right Edge 10mm	0.046	0.019	0.065
	Off	Bottom Edge 10mm	0.172	0.000	0.172
LTE B41	Off	Front Side 10mm	0.248	0.103	0.351
	Off	Back Side 10mm	0.328	0.128	0.456
	Off	Left Edge 10mm	0.229	0.073	0.302
	Off	Right Edge 10mm	0.095	0.019	0.114
	Off	Bottom Edge 10mm	0.286	0.000	0.286

**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 1.165 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

## 12.2.11 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN 5G and Bluetooth

Band	Power Reduction	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	Sum SAR (1+2+4)	Sum SAR (1+3+4)
			WWAN	5.2G WIFI MAX	5.8G WIFI MAX	Bluetooth		
GSM850	Off	Front Side 10mm	0.201	0.135	0.160	0.043	0.378	0.403
	Off	Back Side 10mm	0.331	0.509	0.186	0.058	0.897	0.574
	Off	Left Edge 10mm	0.026	0.093	0.084	0.027	0.146	0.137
	Off	Right Edge 10mm	0.100	0.022	0.019	0.011	0.133	0.130
	Off	Bottom Edge 10mm	0.261	0.000	0.000	0.000	0.261	0.261
GSM 1900	Off	Front Side 10mm	0.420	0.135	0.160	0.043	0.597	0.623
	Off	Back Side 10mm	0.623	0.509	0.186	0.058	1.190	0.866
	Off	Left Edge 10mm	0.135	0.093	0.084	0.027	0.254	0.246
	Off	Right Edge 10mm	0.079	0.022	0.019	0.011	0.112	0.109
	Off	Bottom Edge 10mm	0.856	0.000	0.000	0.000	0.856	0.856
WCDMA B2	Off	Front Side 10mm	0.606	0.135	0.160	0.043	0.784	0.809
	Off	Back Side 10mm	0.867	0.509	0.186	0.058	<b>1.434</b>	1.111
	Off	Left Edge 10mm	0.228	0.093	0.084	0.027	0.347	0.339
	Off	Right Edge 10mm	0.117	0.022	0.019	0.011	0.149	0.147
	Off	Bottom Edge 10mm	1.011	0.000	0.000	0.000	1.011	1.011
WCDMA B4	Level8&9	Front Side 10mm	0.364	0.135	0.160	0.043	0.541	0.566
	Level8&9	Back Side 10mm	0.548	0.509	0.186	0.058	1.114	0.791
	Level8&9	Left Edge 10mm	0.155	0.093	0.084	0.027	0.274	0.266
	Level8&9	Right Edge 10mm	0.087	0.022	0.019	0.011	0.119	0.117
	Level8&9	Bottom Edge 10mm	0.721	0.000	0.000	0.000	0.721	0.721
WCDMA B5	Off	Front Side 10mm	0.215	0.135	0.160	0.043	0.393	0.418
	Off	Back Side 10mm	0.272	0.509	0.186	0.058	0.838	0.515
	Off	Left Edge 10mm	0.059	0.093	0.084	0.027	0.178	0.170
	Off	Right Edge 10mm	0.170	0.022	0.019	0.011	0.202	0.200
	Off	Bottom Edge 10mm	0.212	0.000	0.000	0.000	0.212	0.212
LTE B2	Off	Front Side 10mm	0.395	0.135	0.160	0.043	0.573	0.598
	Off	Back Side 10mm	0.601	0.509	0.186	0.058	1.168	0.845
	Off	Left Edge 10mm	0.131	0.093	0.084	0.027	0.251	0.242
	Off	Right Edge 10mm	0.074	0.022	0.019	0.011	0.106	0.103
	Off	Bottom Edge 10mm	1.165	0.000	0.000	0.000	1.165	1.165
LTE B4	Level8&9	Front Side 10mm	0.393	0.135	0.160	0.043	0.570	0.596
	Level8&9	Back Side 10mm	0.614	0.509	0.186	0.058	1.180	0.857
	Level8&9	Left Edge 10mm	0.112	0.093	0.084	0.027	0.231	0.223
	Level8&9	Right Edge 10mm	0.068	0.022	0.019	0.011	0.101	0.098
	Level8&9	Bottom Edge 10mm	0.722	0.000	0.000	0.000	0.722	0.722
LTE B5	Off	Front Side 10mm	0.178	0.135	0.160	0.043	0.356	0.381
	Off	Back Side 10mm	0.260	0.509	0.186	0.058	0.826	0.503
	Off	Left Edge 10mm	0.086	0.093	0.084	0.027	0.205	0.197
	Off	Right Edge 10mm	0.182	0.022	0.019	0.011	0.214	0.212

	Off	Bottom Edge 10mm	0.224	0.000	0.000	0.000	0.224	0.224
LTE B7	Off	Front Side 10mm	0.468	0.135	0.160	0.043	0.645	0.670
	Off	Back Side 10mm	0.476	0.509	0.186	0.058	1.042	0.719
	Off	Left Edge 10mm	0.394	0.093	0.084	0.027	0.513	0.505
	Off	Right Edge 10mm	0.156	0.022	0.019	0.011	0.189	0.186
	Off	Bottom Edge 10mm	0.454	0.000	0.000	0.000	0.454	0.454
	LTE B12	Off	Front Side 10mm	0.153	0.135	0.160	0.043	0.330
Off		Back Side 10mm	0.229	0.509	0.186	0.058	0.795	0.472
Off		Left Edge 10mm	0.140	0.093	0.084	0.027	0.259	0.251
Off		Right Edge 10mm	0.261	0.022	0.019	0.011	0.293	0.291
Off		Bottom Edge 10mm	0.099	0.000	0.000	0.000	0.099	0.099
LTE B26	Off	Front Side 10mm	0.175	0.135	0.160	0.043	0.352	0.377
	Off	Back Side 10mm	0.183	0.509	0.186	0.058	0.749	0.426
	Off	Left Edge 10mm	0.104	0.093	0.084	0.027	0.223	0.215
	Off	Right Edge 10mm	0.143	0.022	0.019	0.011	0.175	0.173
	Off	Bottom Edge 10mm	0.155	0.000	0.000	0.000	0.155	0.155
LTE B66	Level8&9	Front Side 10mm	0.462	0.135	0.160	0.043	0.639	0.664
	Level8&9	Back Side 10mm	0.501	0.509	0.186	0.058	1.068	0.745
	Level8&9	Left Edge 10mm	0.158	0.093	0.084	0.027	0.278	0.269
	Level8&9	Right Edge 10mm	0.122	0.022	0.019	0.011	0.155	0.152
	Level8&9	Bottom Edge 10mm	0.976	0.000	0.000	0.000	0.976	0.976
LTE B38	Off	Front Side 10mm	0.242	0.135	0.160	0.043	0.419	0.445
	Off	Back Side 10mm	0.333	0.509	0.186	0.058	0.899	0.576
	Off	Left Edge 10mm	0.207	0.093	0.084	0.027	0.326	0.318
	Off	Right Edge 10mm	0.046	0.022	0.019	0.011	0.079	0.076
	Off	Bottom Edge 10mm	0.172	0.000	0.000	0.000	0.172	0.172
LTE B41	Off	Front Side 10mm	0.248	0.135	0.160	0.043	0.425	0.451
	Off	Back Side 10mm	0.328	0.509	0.186	0.058	0.894	0.571
	Off	Left Edge 10mm	0.229	0.093	0.084	0.027	0.348	0.340
	Off	Right Edge 10mm	0.095	0.022	0.019	0.011	0.127	0.124
	Off	Bottom Edge 10mm	0.286	0.000	0.000	0.000	0.286	0.286

**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 1.434 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.



## 12.2.12 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN 2.4G

Band	Power Reduction	Position	Stand alone SAR		SUM SAR
			1	2	Sum SAR (1+2)
			WWAN	2.4GWIFI	
GSM850	Off	Front Side 15mm	0.246	0.071	0.317
	Off	Back Side 15mm	0.279	0.087	0.367
GSM 1900	Off	Front Side 15mm	0.186	0.071	0.257
	Off	Back Side 15mm	0.318	0.087	0.405
WCDMA B2	Off	Front Side 15mm	0.257	0.071	0.329
	Off	Back Side 15mm	0.358	0.087	0.445
WCDMA B4	Level8&9	Front Side 15mm	0.167	0.071	0.239
	Level8&9	Back Side 15mm	0.260	0.087	0.347
WCDMA B5	Off	Front Side 15mm	0.113	0.071	0.185
	Off	Back Side 15mm	0.150	0.087	0.237
LTE B2	Off	Front Side 15mm	0.114	0.071	0.186
	Off	Back Side 15mm	0.171	0.087	0.258
LTE B4	Level8&9	Front Side 15mm	0.195	0.071	0.267
	Level8&9	Back Side 15mm	0.298	0.087	0.385
LTE B5	Off	Front Side 15mm	0.154	0.071	0.225
	Off	Back Side 15mm	0.123	0.087	0.210
LTE B7	Off	Front Side 15mm	0.291	0.071	0.362
	Off	Back Side 15mm	0.264	0.087	0.351
LTE B12	Off	Front Side 15mm	0.156	0.071	0.227
	Off	Back Side 15mm	0.130	0.087	0.217
LTE B26	Off	Front Side 15mm	0.179	0.071	0.251
	Off	Back Side 15mm	0.114	0.087	0.201
LTE B66	Level5&6	Front Side 15mm	0.493	0.071	<b>0.564</b>
	Level5&6	Back Side 15mm	0.398	0.087	0.485
LTE B38	Off	Front Side 15mm	0.135	0.071	0.206
	Off	Back Side 15mm	0.133	0.087	0.220
LTE B41	Off	Front Side 15mm	0.176	0.071	0.247
	Off	Back Side 15mm	0.172	0.087	0.259

## 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 15g SAR is 0.564 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

### 12.2.13 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN 5G and Bluetooth

Band	Power Reduction	Position	Stand alone SAR					SUM SAR		
			1	2	3	4	5	Sum SAR	Sum SAR	Sum SAR
			WWAN	5.3G WIFI MAX	5.6G WIFI MAX	5.8G WIFI MAX	Bluetooth	(1+2+5)	(1+3+5)	(1+4+5)
GSM850	Off	Front Side 15mm	0.246	0.089	0.093	0.084	0.027	0.362	0.366	0.357
	Off	Back Side 15mm	0.279	0.510	0.245	0.097	0.031	0.820	0.555	0.407
GSM 1900	Off	Front Side 15mm	0.186	0.089	0.093	0.084	0.027	0.301	0.305	0.296
	Off	Back Side 15mm	0.318	0.510	0.245	0.097	0.031	0.229	0.233	0.224
WCDMA B2	Off	Front Side 15mm	0.257	0.089	0.093	0.084	0.027	0.373	0.377	0.368
	Off	Back Side 15mm	0.358	0.510	0.245	0.097	0.031	0.899	0.634	0.486
WCDMA B4	Level8&9	Front Side 15mm	0.167	0.089	0.093	0.084	0.027	0.283	0.287	0.278
	Level8&9	Back Side 15mm	0.260	0.510	0.245	0.097	0.031	0.801	0.536	0.388
WCDMA B5	Off	Front Side 15mm	0.113	0.089	0.093	0.084	0.027	0.229	0.233	0.224
	Off	Back Side 15mm	0.150	0.510	0.245	0.097	0.031	0.691	0.426	0.278
LTE B2	Off	Front Side 15mm	0.114	0.089	0.093	0.084	0.027	0.230	0.234	0.225
	Off	Back Side 15mm	0.171	0.510	0.245	0.097	0.031	0.712	0.447	0.299
LTE B4	Level8&9	Front Side 15mm	0.195	0.089	0.093	0.084	0.027	0.311	0.315	0.306
	Level8&9	Back Side 15mm	0.298	0.510	0.245	0.097	0.031	0.839	0.574	0.426
LTE B5	Off	Front Side 15mm	0.154	0.089	0.093	0.084	0.027	0.270	0.274	0.265
	Off	Back Side 15mm	0.123	0.510	0.245	0.097	0.031	0.664	0.399	0.251
LTE B7	Off	Front Side 15mm	0.291	0.089	0.093	0.084	0.027	0.407	0.411	0.402
	Off	Back Side 15mm	0.264	0.510	0.245	0.097	0.031	0.805	0.540	0.392
LTE B12	Off	Front Side 15mm	0.156	0.089	0.093	0.084	0.027	0.271	0.275	0.266
	Off	Back Side 15mm	0.130	0.510	0.245	0.097	0.031	0.671	0.406	0.258
LTE B26	Off	Front Side 15mm	0.179	0.089	0.093	0.084	0.027	0.295	0.299	0.290
	Off	Back Side 15mm	0.114	0.510	0.245	0.097	0.031	0.655	0.390	0.242
LTE B66	Level5&6	Front Side 15mm	0.493	0.089	0.093	0.084	0.027	0.609	0.613	0.604
	Level5&6	Back Side 15mm	0.398	0.510	0.245	0.097	0.031	<b>0.939</b>	0.674	0.526
LTE B38	Off	Front Side 15mm	0.135	0.089	0.093	0.084	0.027	0.251	0.255	0.246
	Off	Back Side 15mm	0.133	0.510	0.245	0.097	0.031	0.674	0.409	0.261
LTE B41	Off	Front Side 15mm	0.176	0.089	0.093	0.084	0.027	0.292	0.296	0.287
	Off	Back Side 15mm	0.172	0.510	0.245	0.097	0.031	0.713	0.448	0.300

**Note:**

- 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.
- The highest Summed 15g SAR is 0.939 W/Kg < 2.0 W/kg, so Simultaneous Transmission SAR test is not required.

## 12.2.14 Specific Simultaneous Transmission SAR Evaluation for WWAN Antenna Down and WLAN 5G

Band	Power Reduction	Position	Stand alone SAR				Combined SAR		
			1	2	3	4	Sum SAR (1+2)	Sum SAR (1+3)	Sum SAR (1+4)
			WWAN	5.2G WIFI	5.3G WIFI	5.6G WIFI			
LTE B66	Level5&6	Front Side 0mm	1.052	0.259	0.280	0.318	1.310	1.332	1.369
	Level5&6	Back Side 0mm	1.595	0.406	0.894	0.292	2.002	<b>2.490</b>	1.887
	Level5&6	Left Edge 0mm	0.399	0.087	0.115	0.072	0.486	0.514	0.471
	Level5&6	Right Edge 0mm	0.067	0.016	0.021	0.018	0.083	0.088	0.086
	Level5&6	Bottom Edge 0mm	2.255	0.002	0.004	0.003	2.257	2.259	2.258

## 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 2.490 W/Kg < 4.0 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
750MHz Validation Dipole	Speag	D750V3	SN: 1055	2020/02/20	2021/02/19
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: 7510	2019/08/02	2020/08/01
Data Acquisition Electronics	Speag	DAE4	SN: 1454	2019/08/02	2020/08/01
Signal Generator	R&S	SMB100A	177746	2020/06/08	2021/06/07
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2019/10/30	2020/10/29
Power Sensor	R&S	NRV-Z4	100381	2019/10/30	2020/10/29
Power Sensor	R&S	NRV-Z2	100211	2019/10/30	2020/10/29
Wireless Communication Test Set	Agilent	8960-E5515C	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	2019/11/02	2020/11/01
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	N/A	N/A
Phantom1	Speag	SAM	SN: 1859	N/A	N/A
Phantom2	Speag	SAM	SN: 1857	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

## ANNEX A SIMULATING LIQUID VERIFICATION RESULT

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

### Head Liquid

Date	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 (%)
2020.06.19	Head	750	21.3	0.90	42.108	0.89	41.94	1.12	0.40
2020.06.20	Head	835	21.1	0.90	41.53	0.90	41.50	0.00	0.07
2020.06.21	Head	835	21.4	0.91	41.78	0.90	41.50	1.11	0.67
2020.06.22	Head	835	21.6	0.90	41.79	0.90	41.50	0.00	0.70
2020.06.23	Head	835	21.6	0.89	41.93	0.90	41.50	-1.11	1.04
2020.06.24	Head	835	21.4	0.90	41.80	0.90	41.50	0.00	0.72
2020.06.06	Head	1750	21.3	1.36	40.00	1.37	40.08	-0.73	-0.20
2020.06.07	Head	1750	21.7	1.36	40.07	1.37	40.08	-0.73	-0.02
2020.06.08	Head	1750	21.7	1.37	40.37	1.37	40.08	0.00	0.72
2020.07.03	Head	1750	21.6	1.38	39.95	1.37	40.08	0.73	-0.32
2020.07.04	Head	1750	21.7	1.37	40.19	1.37	40.08	0.00	0.27
2020.06.09	Head	1900	21.1	1.41	39.93	1.40	40.00	0.71	-0.18
2020.06.10	Head	1900	21.6	1.40	40.25	1.40	40.00	0.00	0.63
2020.06.11	Head	1900	21.1	1.40	40.34	1.40	40.00	0.00	0.85
2020.06.12	Head	1900	21.4	1.41	40.10	1.40	40.00	0.71	0.25
2020.06.25	Head	2450	21.6	1.81	39.41	1.80	39.20	0.56	0.54
2020.06.26	Head	2450	21.6	1.80	39.18	1.80	39.20	0.00	-0.05
2020.06.27	Head	2600	21.6	1.95	38.62	1.96	39.01	-0.51	-1.00
2020.06.28	Head	2600	21.3	1.97	38.75	1.96	39.01	0.51	-0.67
2020.06.29	Head	2600	21.2	1.94	39.56	1.96	39.01	-1.02	1.41
2020.06.30	Head	2600	21.5	1.96	39.20	1.96	39.01	0.00	0.49
2020.07.01	Head	2600	20.9	1.96	39.06	1.96	39.01	0.00	0.13
2020.07.02	Head	2600	21.3	1.97	38.95	1.96	39.01	0.51	-0.15
2020.06.15	Head	5200	21.3	4.64	36.33	4.66	35.99	-0.43	0.94
2020.06.14	Head	5300	21.4	4.76	35.80	4.76	35.87	0.00	-0.20
2020.06.16	Head	5500	21.5	4.95	36.23	4.96	35.64	-0.20	1.66
2020.06.17	Head	5600	21.2	5.06	35.72	5.07	35.53	-0.20	0.53
2020.06.18	Head	5800	21.5	5.27	35.60	5.27	35.30	0.00	0.85

Note: The tolerance limit of Conductivity and Permittivity is  $\pm 5\%$ .

## ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2020.06.19	Head	750	100	0.798	7.98	8.55	-6.67
2020.06.20	Head	835	100	0.945	9.45	9.49	-0.42
2020.06.21	Head	835	100	0.958	9.58	9.49	0.95
2020.06.22	Head	835	100	0.914	9.14	9.49	-3.69
2020.06.23	Head	835	100	0.957	9.57	9.49	0.84
2020.06.24	Head	835	100	0.945	9.45	9.49	-0.42
2020.06.06	Head	1750	100	3.570	35.70	36.80	-2.99
2020.06.07	Head	1750	100	3.710	37.10	36.80	0.82
2020.06.08	Head	1750	100	3.730	37.30	36.80	1.36
2020.07.03	Head	1750	100	3.770	37.70	36.80	2.45
2020.07.04	Head	1750	100	3.810	38.10	36.80	3.53
2020.06.09	Head	1900	100	4.250	42.50	39.40	7.87
2020.06.10	Head	1900	100	3.870	38.70	39.40	-1.78
2020.06.11	Head	1900	100	4.040	40.40	39.40	2.54
2020.06.12	Head	1900	100	4.130	41.30	39.40	4.82
2020.06.25	Head	2450	100	5.270	52.70	52.60	0.19
2020.06.26	Head	2450	100	5.050	50.50	52.60	-3.99
2020.06.27	Head	2600	100	5.590	55.90	56.30	-0.71
2020.06.28	Head	2600	100	5.420	54.20	56.30	-3.73
2020.06.29	Head	2600	100	5.530	55.30	56.30	-1.78
2020.06.30	Head	2600	100	5.700	57.00	56.30	1.24
2020.07.01	Head	2600	100	5.510	55.10	56.30	-2.13
2020.07.02	Head	2600	100	5.470	54.70	56.30	-2.84
2020.06.15	Head	5200	100	7.550	75.50	73.90	2.17
2020.06.14	Head	5300	100	7.490	74.90	78.10	-4.10
2020.06.16	Head	5500	100	8.690	86.90	81.10	7.15
2020.06.17	Head	5600	100	8.470	84.70	80.30	5.48
2020.06.18	Head	5800	100	7.680	76.80	76.90	-0.13

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

## Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2020.06.06	Head	1750	100	1.850	18.50	19.80	-6.57
2020.06.07	Head	1750	100	2.040	20.40	19.80	3.03
2020.06.08	Head	1750	100	1.960	19.60	19.80	-1.01
2020.07.03	Head	1750	100	1.980	19.80	19.80	0.00
2020.07.04	Head	1750	100	2.000	20.00	19.80	1.01
2020.06.10	Head	1900	100	2.080	20.80	20.40	1.96
2020.06.11	Head	1900	100	2.140	21.40	20.40	4.90
2020.06.12	Head	1900	100	2.120	21.20	20.40	3.92
2020.06.15	Head	5200	100	2.150	21.50	20.70	3.86
2020.06.14	Head	5300	100	2.070	20.70	22.20	-6.76
2020.06.16	Head	5500	100	2.350	23.50	22.80	3.07
2020.06.17	Head	5600	100	2.400	24.00	22.60	6.19
2020.06.18	Head	5800	100	2.130	21.30	21.40	-0.47

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

# System Performance Check Data (750MHz Head)

Date: 2020.06.19

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

Medium parameters used (extrapolated):  $f = 750 \text{ MHz}$ ;  $\sigma = 0.895 \text{ S/m}$ ;  $\epsilon_r = 42.108$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD00P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 750 100mW/Area Scan (61x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.858 W/kg

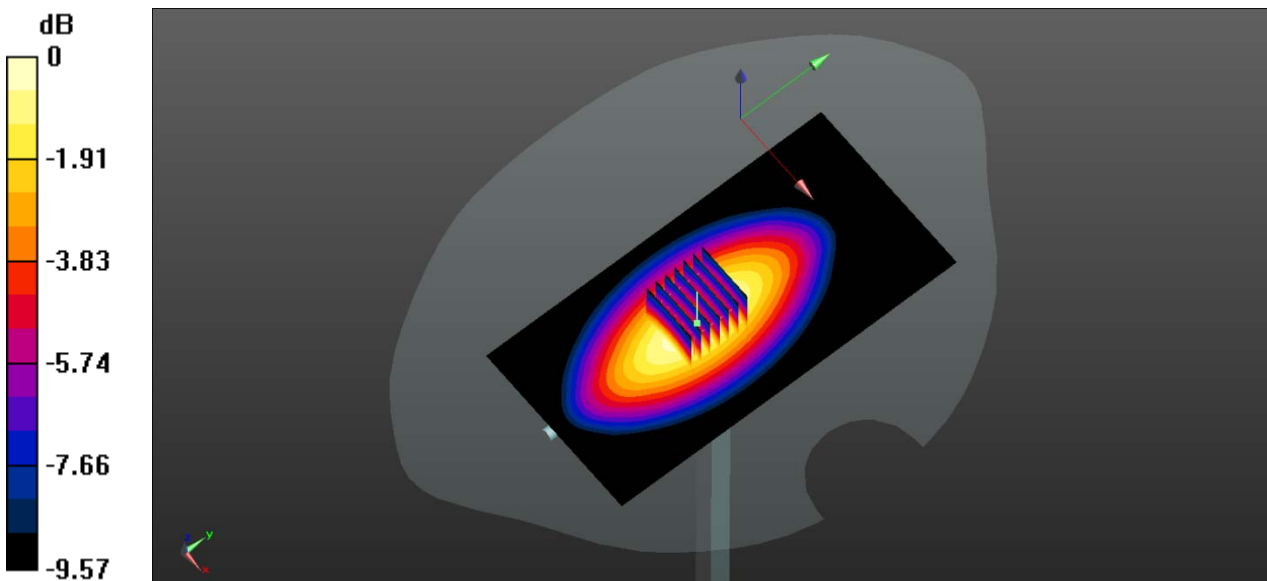
**CW 750 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 28.52 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.09 W/kg

**SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.526 W/kg**

Maximum value of SAR (measured) = 0.861 W/kg



0 dB = 0.861 W/kg



# System Performance Check Data (835MHz Head)

Date: 2020.06.20

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.896 \text{ S/m}$ ;  $\epsilon_r = 41.526$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

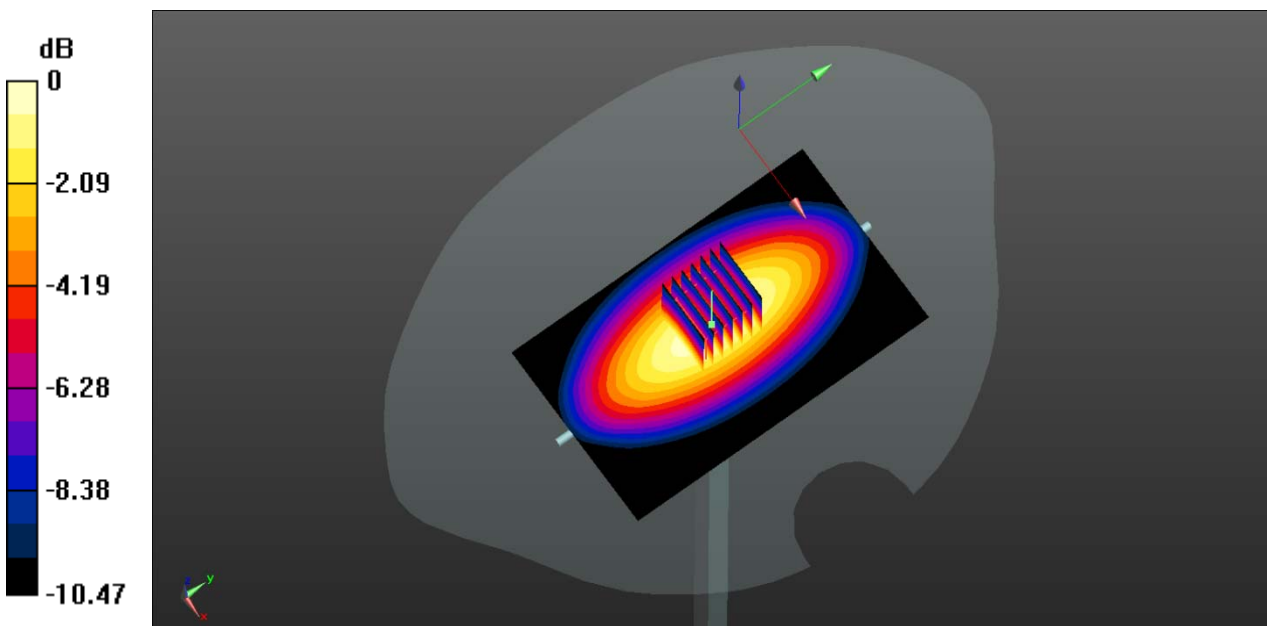
**CW 835 100mW HEAD/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

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

Peak SAR (extrapolated) = 1.41 W/kg

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

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



0 dB = 1.02 W/kg

# System Performance Check Data (835MHz Head)

Date: 2020.06.21

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.905$  S/m;  $\epsilon_r = 41.783$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.992 W/kg

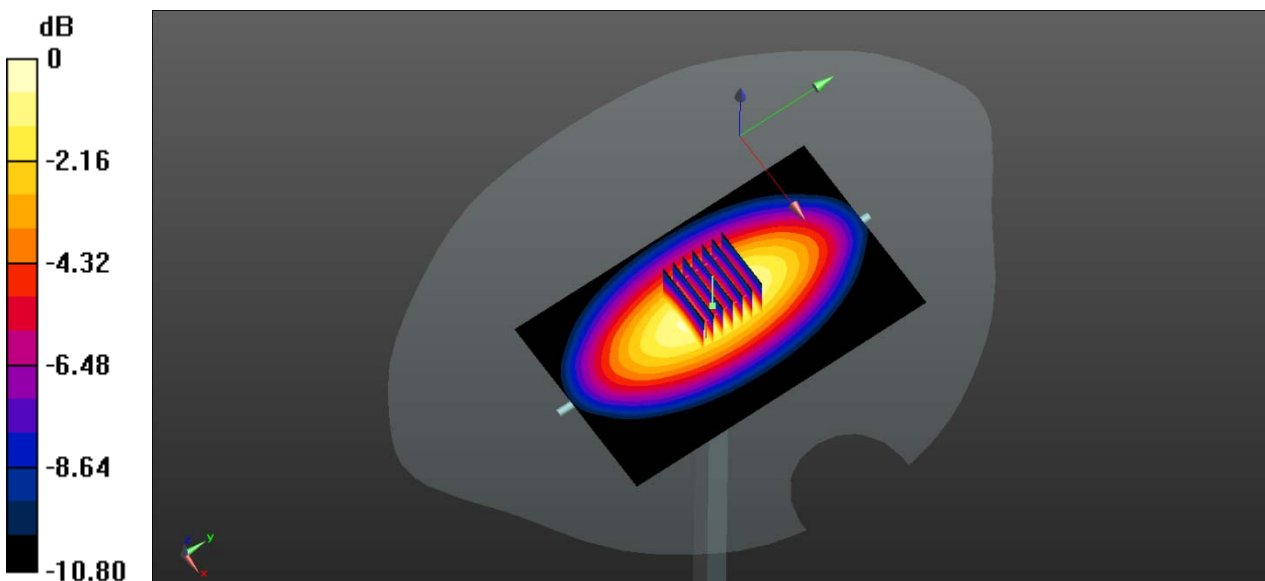
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.58 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.44 W/kg

**SAR(1 g) = 0.958 W/kg; SAR(10 g) = 0.621 W/kg**

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



# System Performance Check Data (835MHz Head)

Date: 2020.06.22

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.898 \text{ S/m}$ ;  $\epsilon_r = 41.786$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 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) = 0.981 W/kg

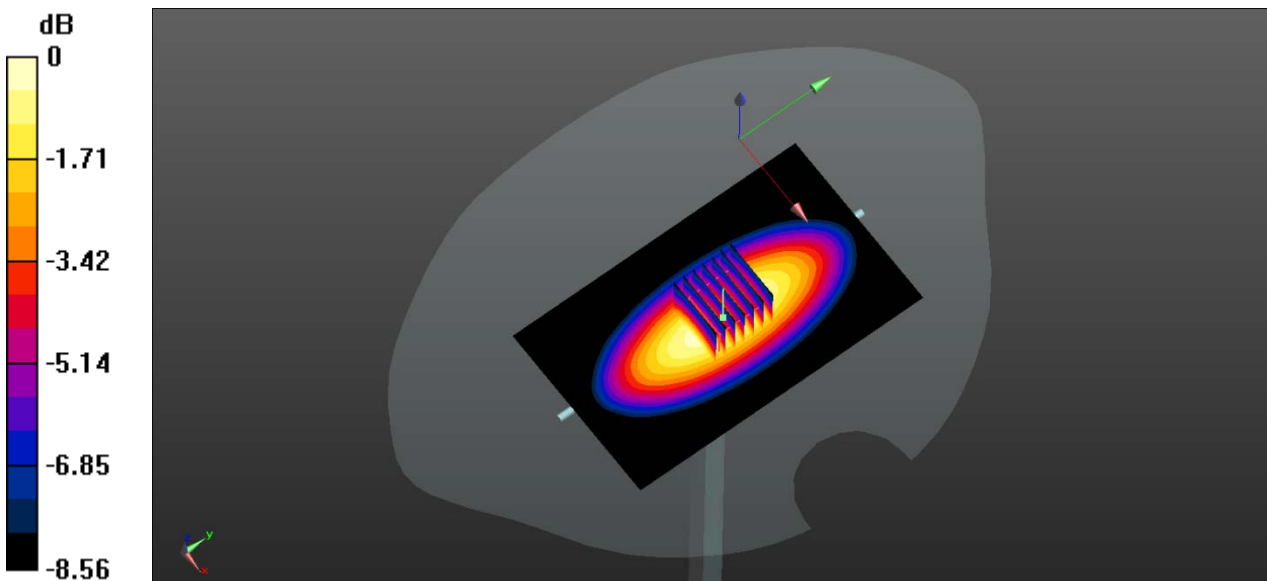
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 31.06 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.27 W/kg

**SAR(1 g) = 0.914 W/kg; SAR(10 g) = 0.629 W/kg**

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



0 dB = 0.983 W/kg

# System Performance Check Data (835MHz Head)

Date: 2020.06.23

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.893$  S/m;  $\epsilon_r = 41.925$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.990 W/kg

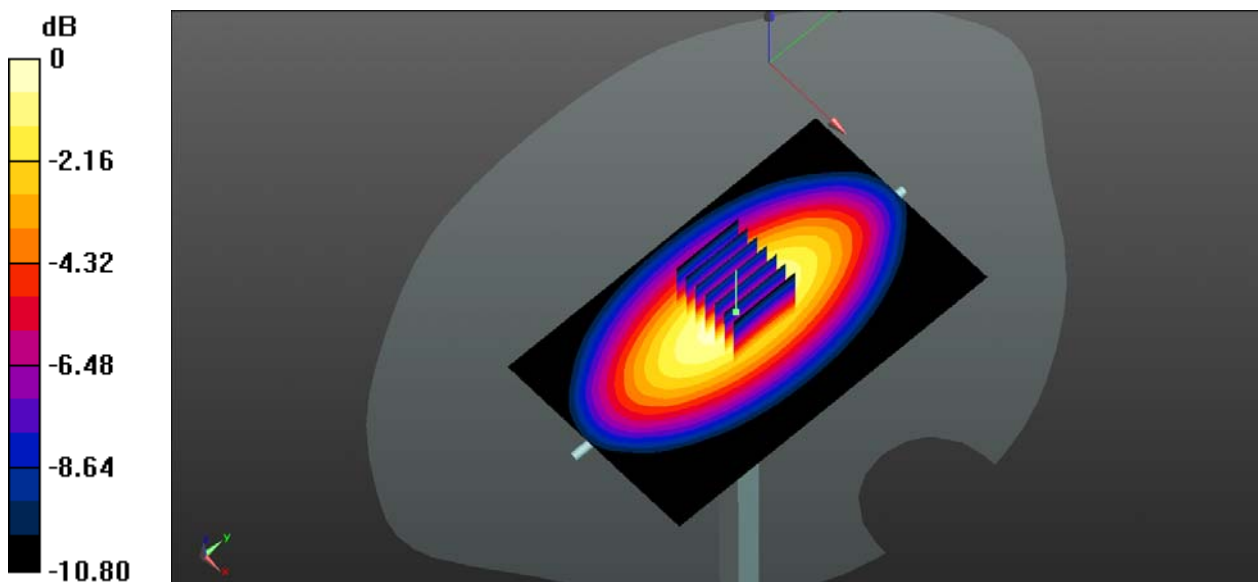
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.63 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.44 W/kg

**SAR(1 g) = 0.957 W/kg; SAR(10 g) = 0.619 W/kg**

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



0 dB = 1.04 W/kg

# System Performance Check Data (835MHz Head)

Date: 2020.06.24

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.903 \text{ S/m}$ ;  $\epsilon_r = 41.802$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 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

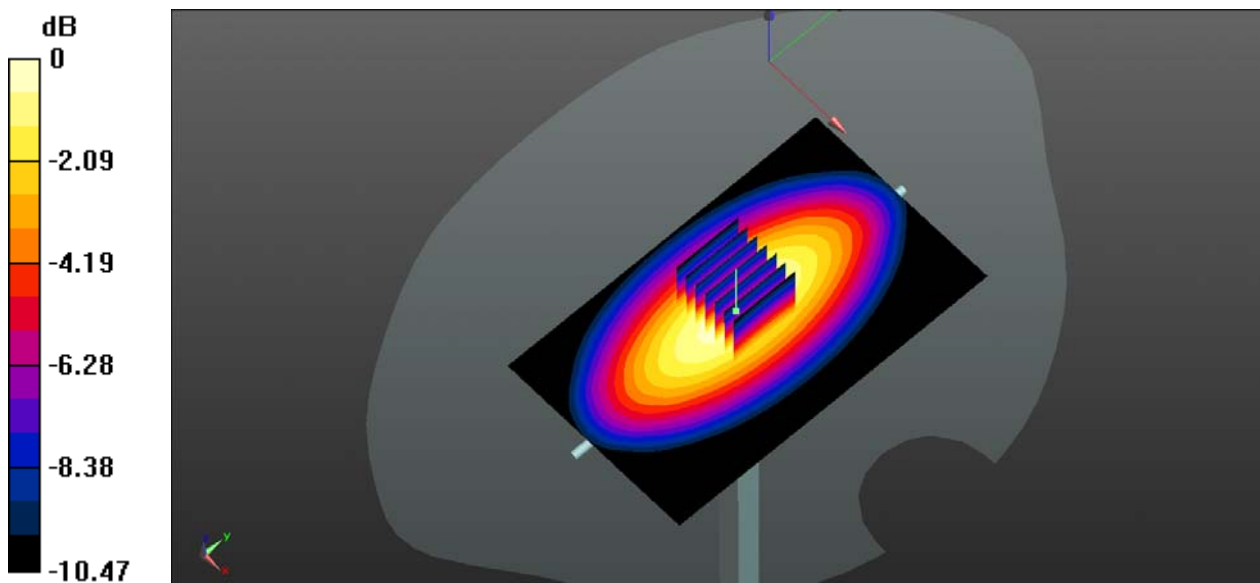
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 33.15 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.40 W/kg

**SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.618 W/kg**

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



0 dB = 1.02 W/kg

# System Performance Check Data (1750MHz Head)

Date: 2020.06.06

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.364$  S/m;  $\epsilon_r = 40.004$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

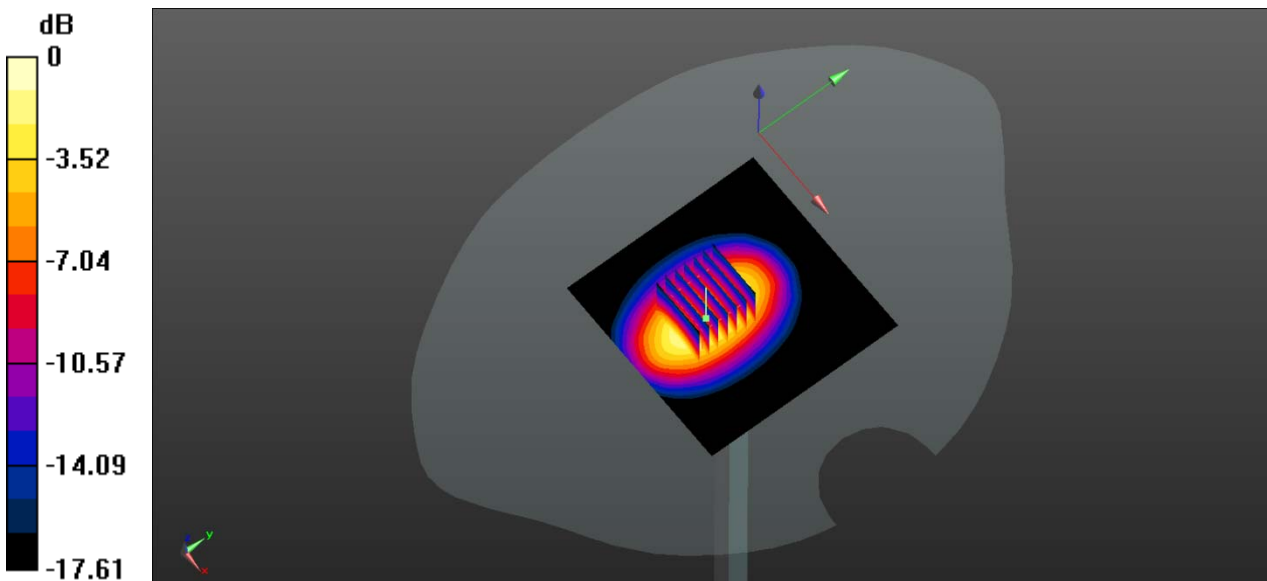
**CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 6.75 W/kg

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

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



0 dB = 4.01 W/kg

# System Performance Check Data (1750MHz Head)

Date: 2020.06.07

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.362$  S/m;  $\epsilon_r = 40.067$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

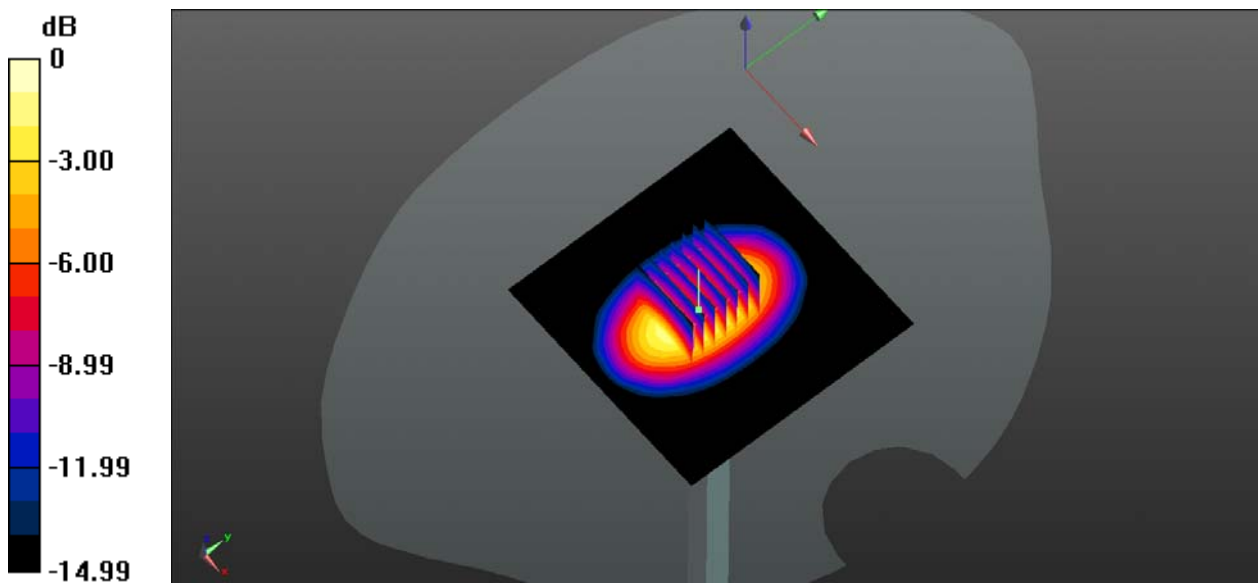
**CW 1750 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 6.48 W/kg

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

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



0 dB = 4.18 W/kg

# System Performance Check Data (1750MHz Head)

Date: 2020.06.08

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

Medium parameters used (interpolated):  $f = 1750$  MHz;  $\sigma = 1.366$  S/m;  $\epsilon_r = 40.365$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW1750 HEAD 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

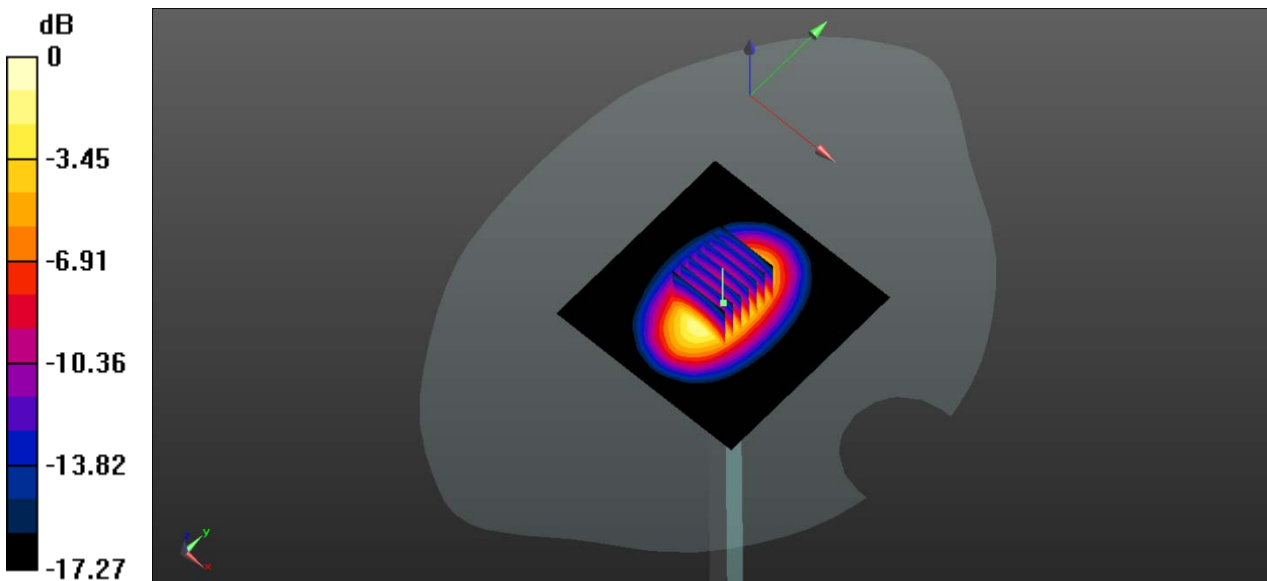
**CW1750 HEAD 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.03 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 6.97 W/kg

**SAR(1 g) = 3.73 W/kg; SAR(10 g) = 1.96 W/kg**

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



0 dB = 4.19 W/kg



# System Performance Check Data (1750MHz Head)

Date: 2020.07.03

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;  $\epsilon_r = 39.947$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 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) = 4.22 W/kg

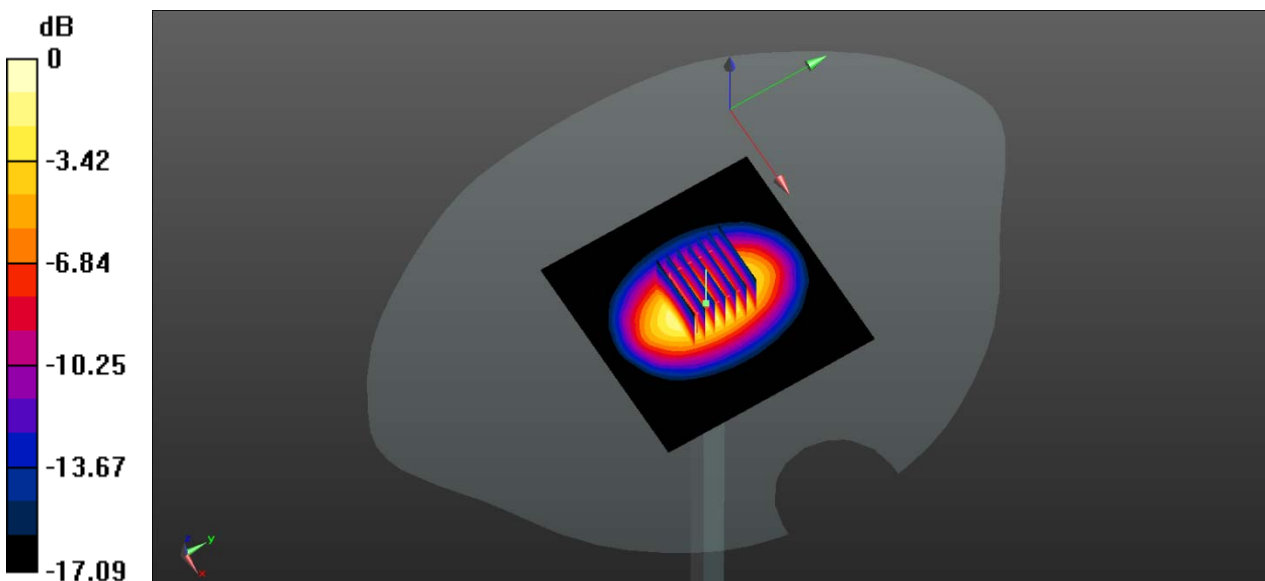
**CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.14 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 7.02 W/kg

**SAR(1 g) = 3.77 W/kg; SAR(10 g) = 1.98 W/kg**

Maximum value of SAR (measured) = 4.23 W/kg



# System Performance Check Data (1750MHz Head)

Date: 2020.07.04

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

Medium parameters used (interpolated):  $f = 1750$  MHz;  $\sigma = 1.366$  S/m;  $\epsilon_r = 40.186$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW1750 100mW/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

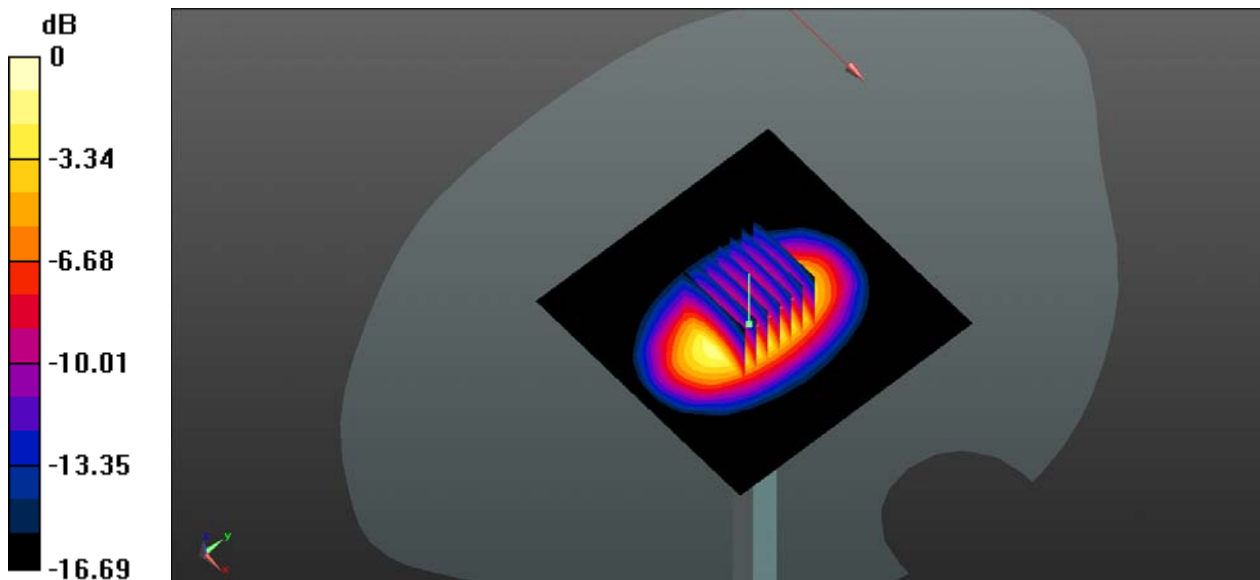
**CW1750 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.81 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 7.04 W/kg

**SAR(1 g) = 3.81 W/kg; SAR(10 g) = 2 W/kg**

Maximum value of SAR (measured) = 4.30 W/kg



0 dB = 4.30 W/kg

# System Performance Check Data (1900MHz Head)

Date: 2020.06.09

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.413$  S/m;  $\epsilon_r = 39.923$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.1

DASY5 Configuration:

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

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

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

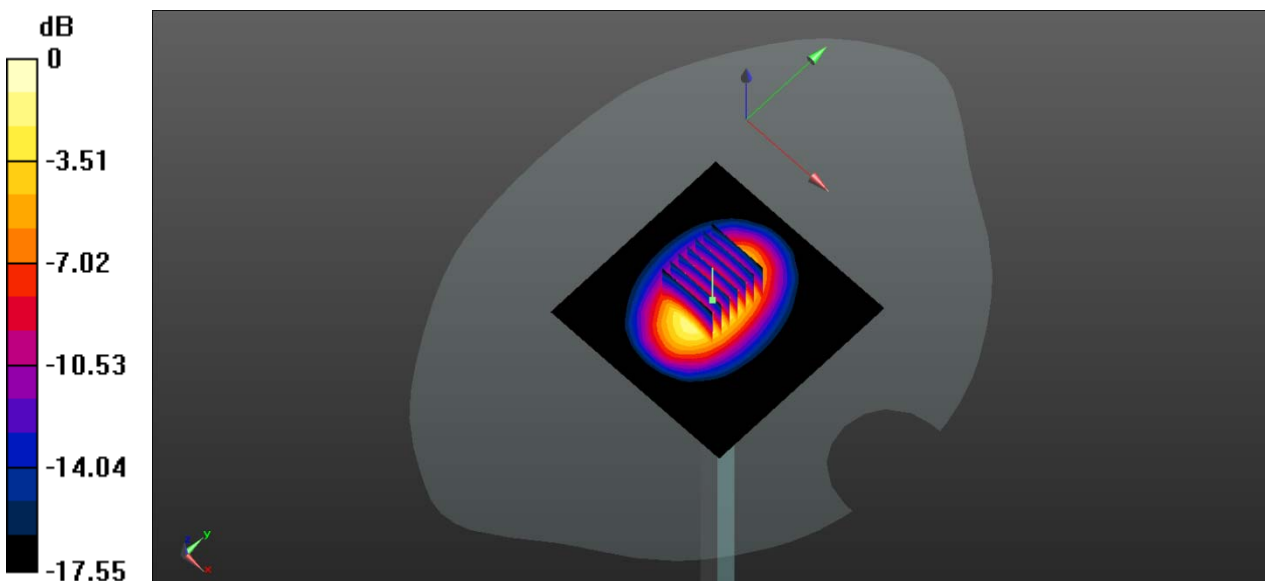
**CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 8.12 W/kg

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

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



0 dB = 4.73 W/kg

# System Performance Check Data (1900MHz Head)

Date: 2020.06.10

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 40.245$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.6

DASY5 Configuration:

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

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

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

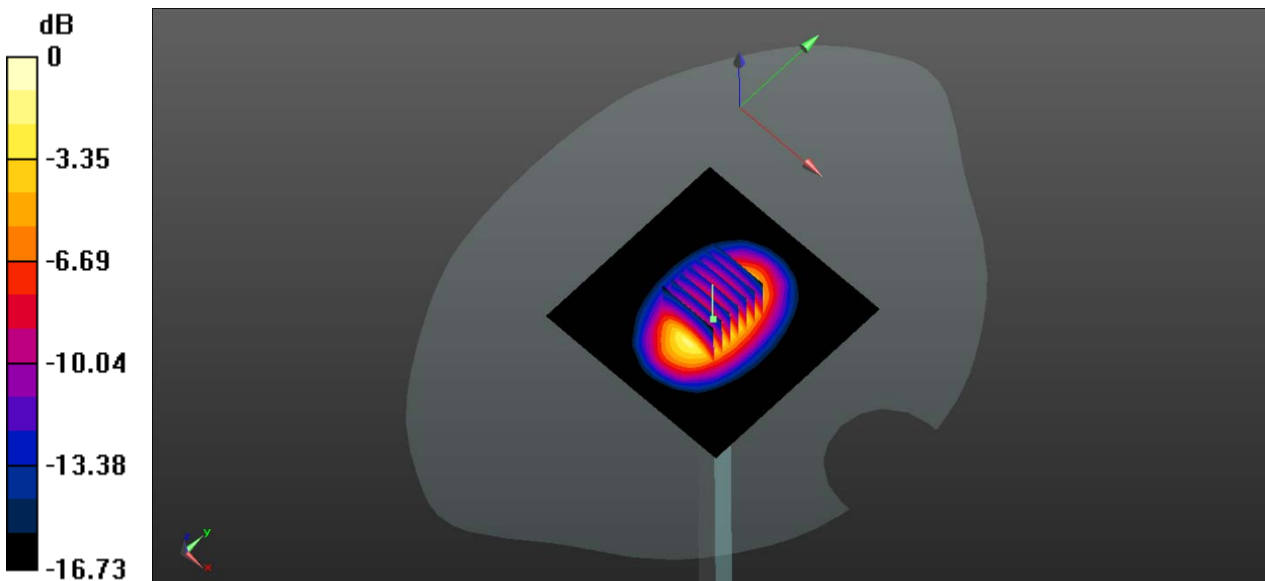
**CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.95 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 7.01 W/kg

**SAR(1 g) = 3.87 W/kg; SAR(10 g) = 2.08 W/kg**

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



0 dB = 4.41 W/kg

# System Performance Check Data (1900MHz Head)

Date: 2020.06.11

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.404$  S/m;  $\epsilon_r = 40.343$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.9 Liquid Temperature: 21.1

DASY5 Configuration:

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

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

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

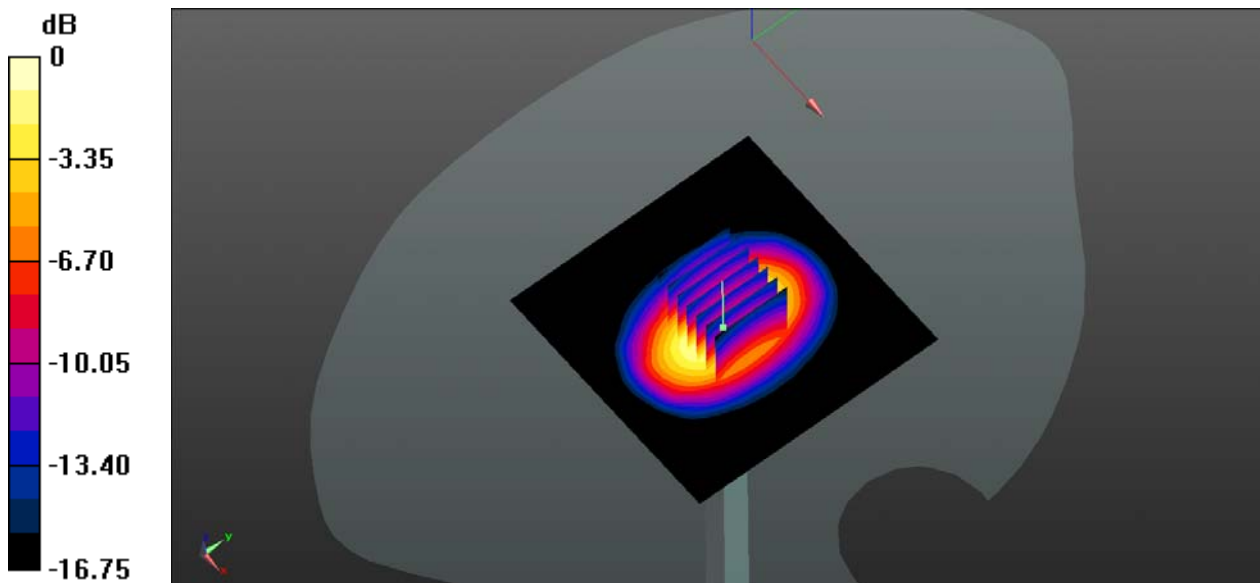
**CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 7.32 W/kg

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

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



0 dB = 4.55 W/kg

# System Performance Check Data (1900MHz Head)

Date: 2020.06.12

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.412$  S/m;  $\epsilon_r = 40.098$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.4

DASY5 Configuration:

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

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

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

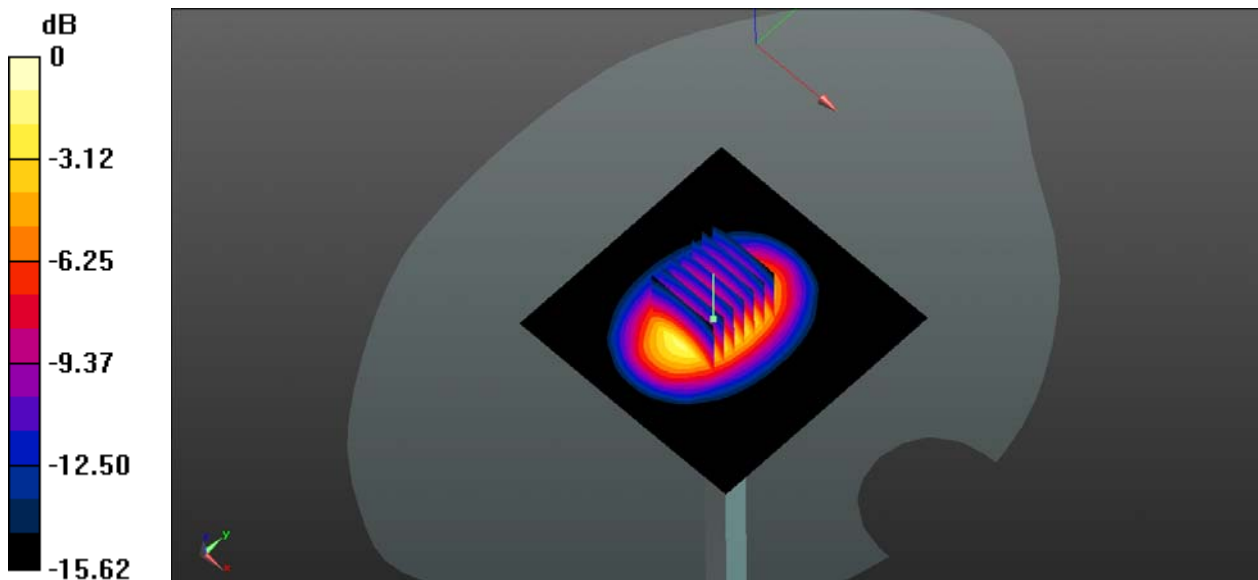
**CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 7.36 W/kg

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

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



0 dB = 4.66 W/kg

# System Performance Check Data (2450MHz Head)

Date: 2020.06.25

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.805$  S/m;  $\epsilon_r = 39.411$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.9 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 6.25 W/kg

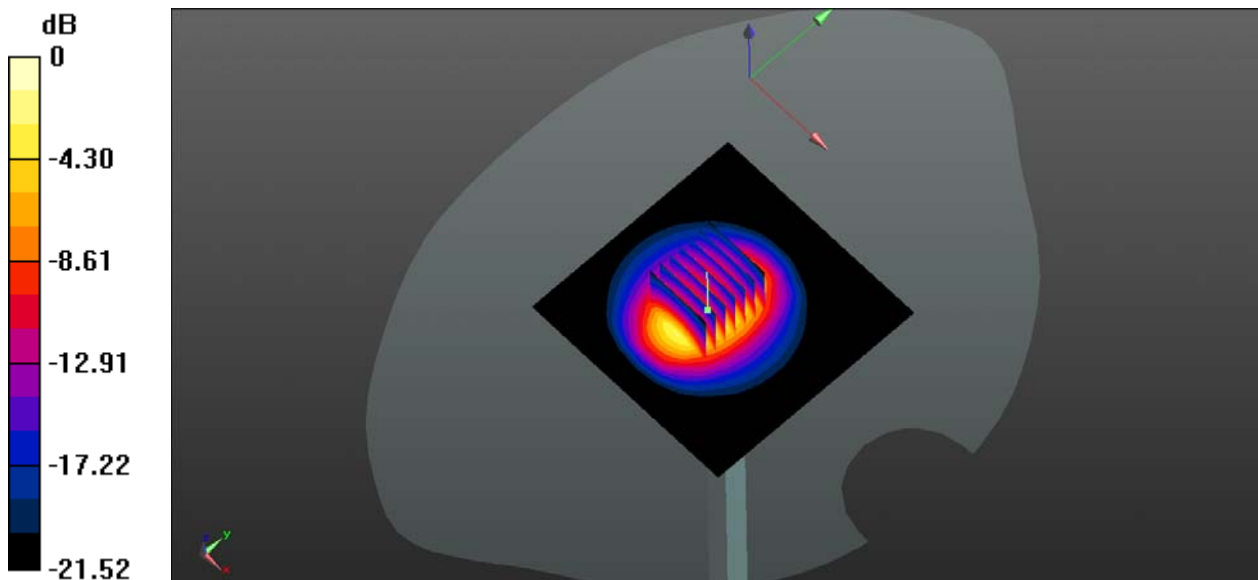
**CW 2450 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.73 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 10.8 W/kg

**SAR(1 g) = 5.27 W/kg; SAR(10 g) = 2.43 W/kg**

Maximum value of SAR (measured) = 6.10 W/kg



0 dB = 6.10 W/kg

# System Performance Check Data (2450MHz Head)

Date: 2020.06.26

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.802$  S/m;  $\epsilon_r = 39.184$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 5.91 W/kg

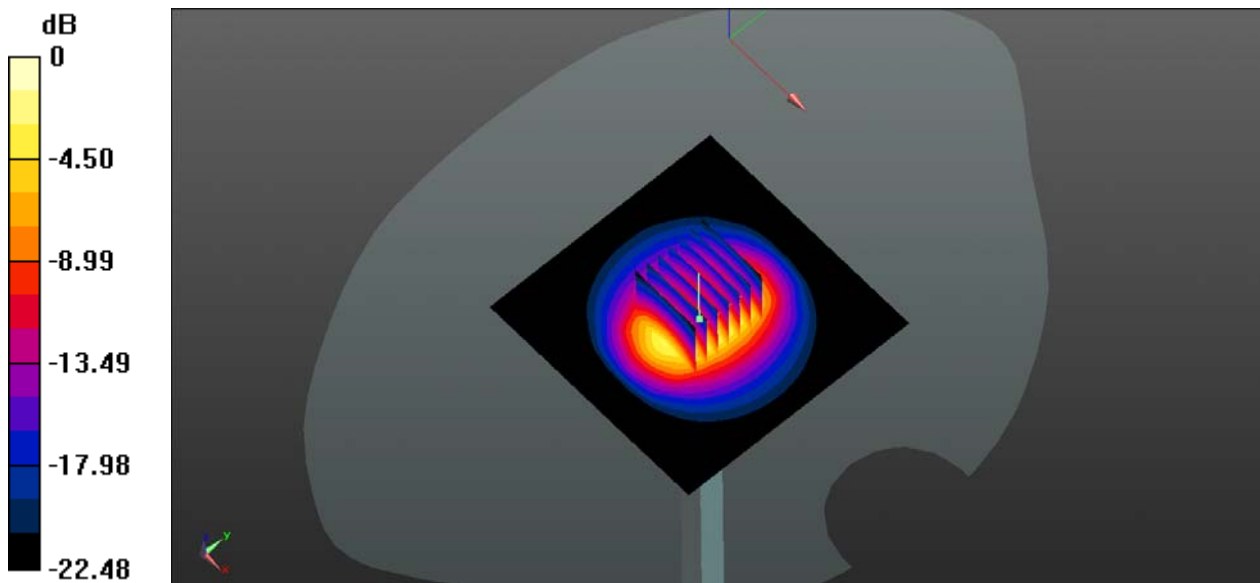
**CW 2450 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.65 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 10.7 W/kg

**SAR(1 g) = 5.05 W/kg; SAR(10 g) = 2.3 W/kg**

Maximum value of SAR (measured) = 5.81 W/kg



0 dB = 5.81 W/kg



# System Performance Check Data (2600MHz Head)

Date: 2020.06.27

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 1.953$  S/m;  $\epsilon_r = 38.618$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 6.46 W/kg

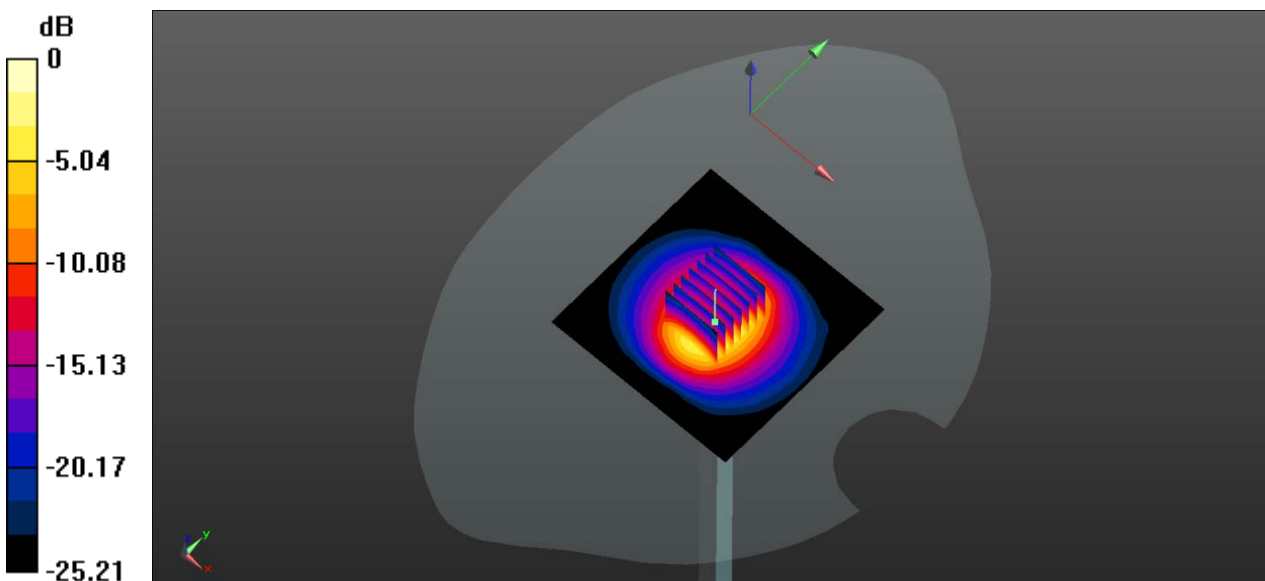
**CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.55 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 12.7 W/kg

**SAR(1 g) = 5.59 W/kg; SAR(10 g) = 2.45 W/kg**

Maximum value of SAR (measured) = 6.43 W/kg



0 dB = 6.43 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.06.28

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.965$  S/m;  $\epsilon_r = 38.752$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- 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) = 6.45 W/kg

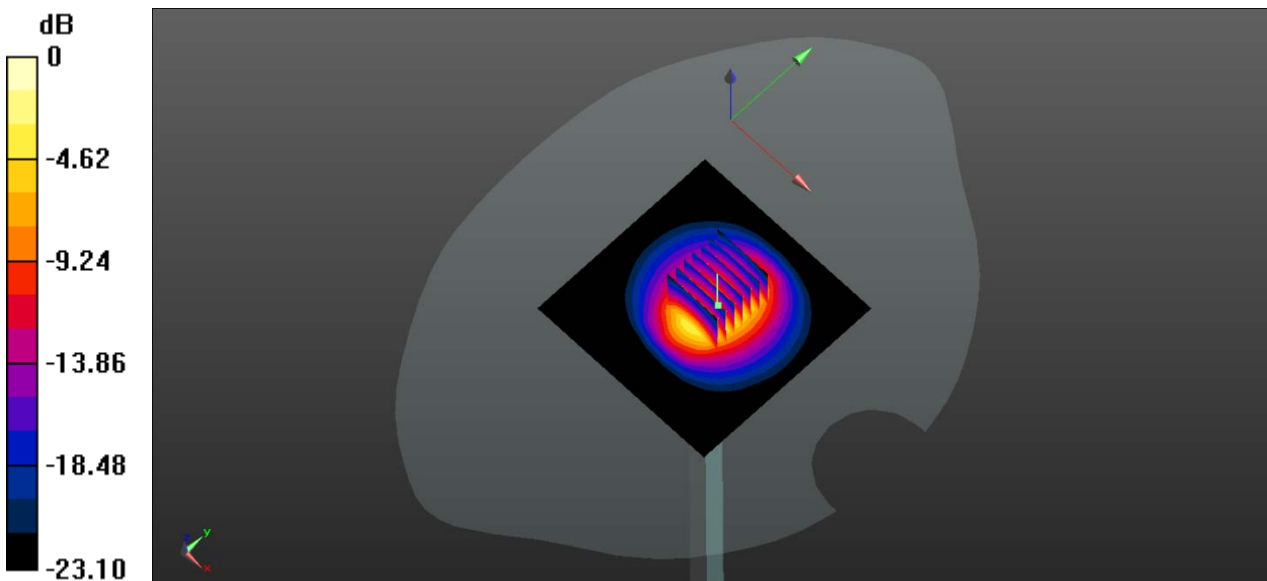
**CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.43 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 11.3 W/kg

**SAR(1 g) = 5.42 W/kg; SAR(10 g) = 2.41 W/kg**

Maximum value of SAR (measured) = 6.33 W/kg



0 dB = 6.33 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.06.29

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

Medium parameters used (interpolated):  $f = 2600$  MHz;  $\sigma = 1.935$  S/m;  $\epsilon_r = 39.557$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

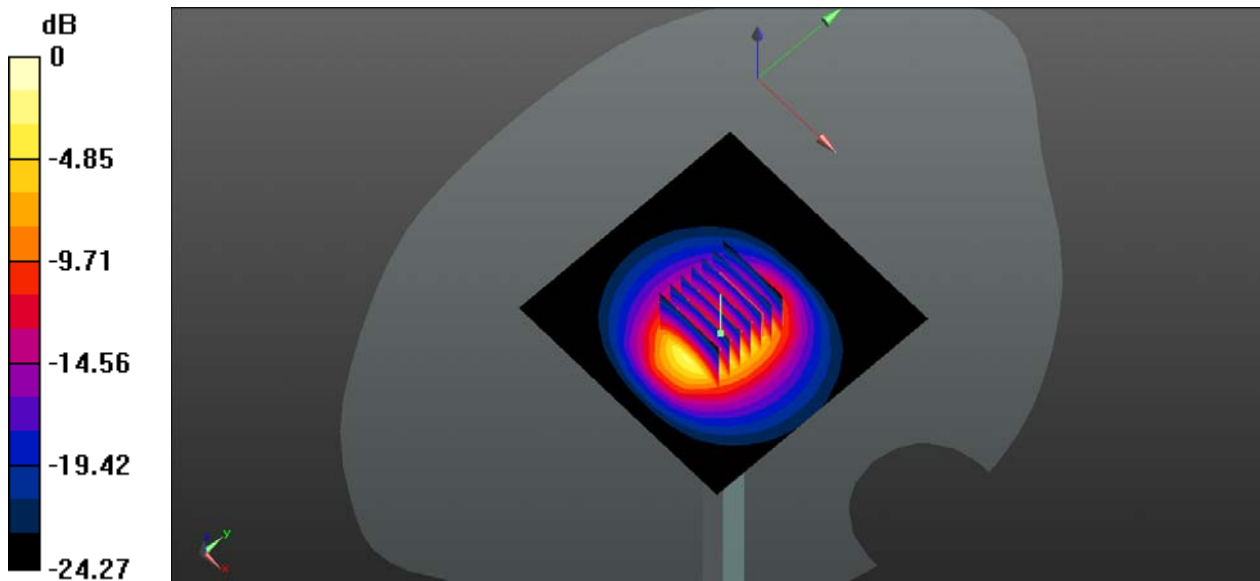
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm**

Reference Value = 45.73 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 12.5 W/kg

**SAR(1 g) = 5.53 W/kg; SAR(10 g) = 2.36 W/kg**

Maximum value of SAR (measured) = 6.37 W/kg



0 dB = 6.37 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.06.30

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

Medium parameters used (interpolated):  $f = 2600$  MHz;  $\sigma = 1.959$  S/m;  $\epsilon_r = 39.204$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

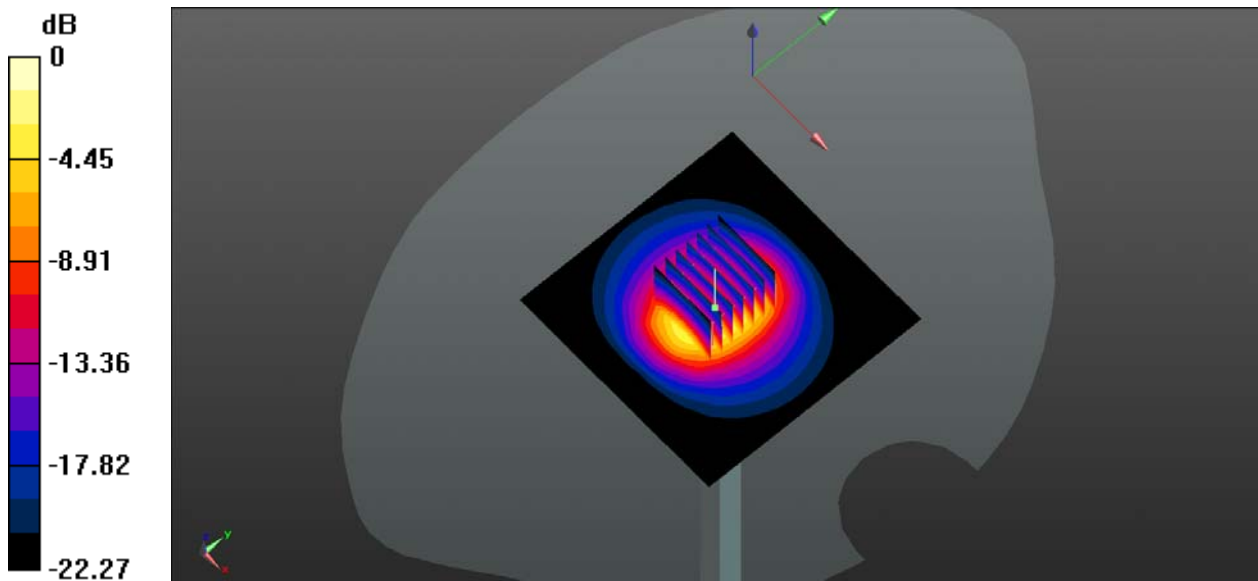
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 13.2 W/kg

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

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



0 dB = 6.50 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.07.01

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.958$  S/m;  $\epsilon_r = 39.062$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1 Liquid Temperature: 20.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

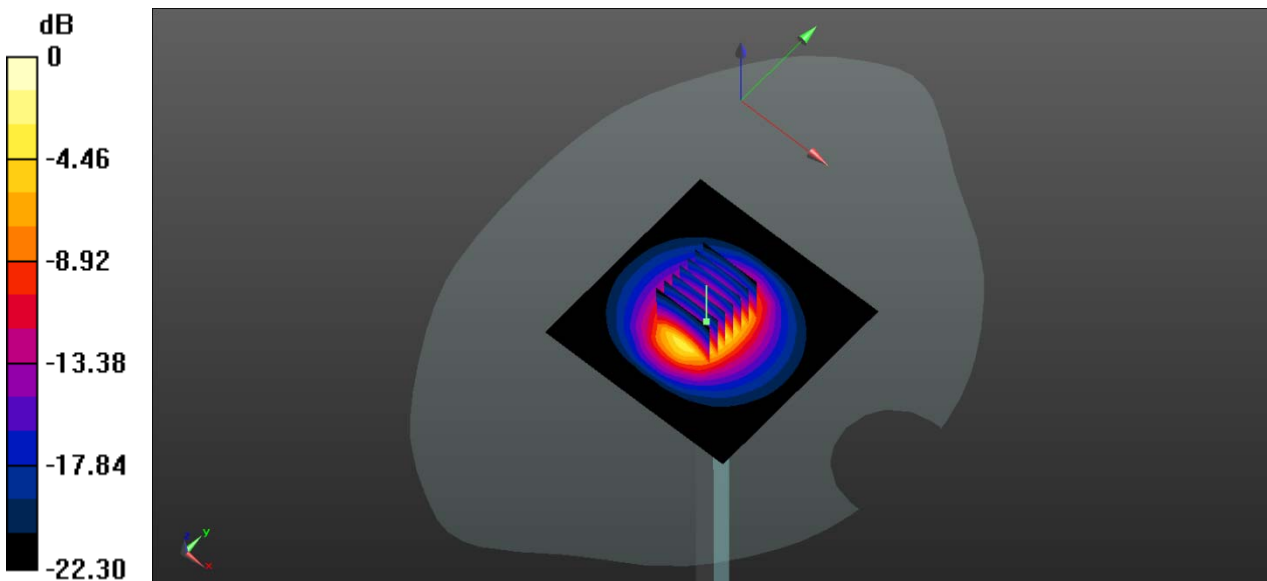
**CW2600 HEAD 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 12.7 W/kg

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

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



0 dB = 6.28 W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.07.02

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

Medium parameters used (extrapolated):  $f = 2600$  MHz;  $\sigma = 1.966$  S/m;  $\epsilon_r = 38.952$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

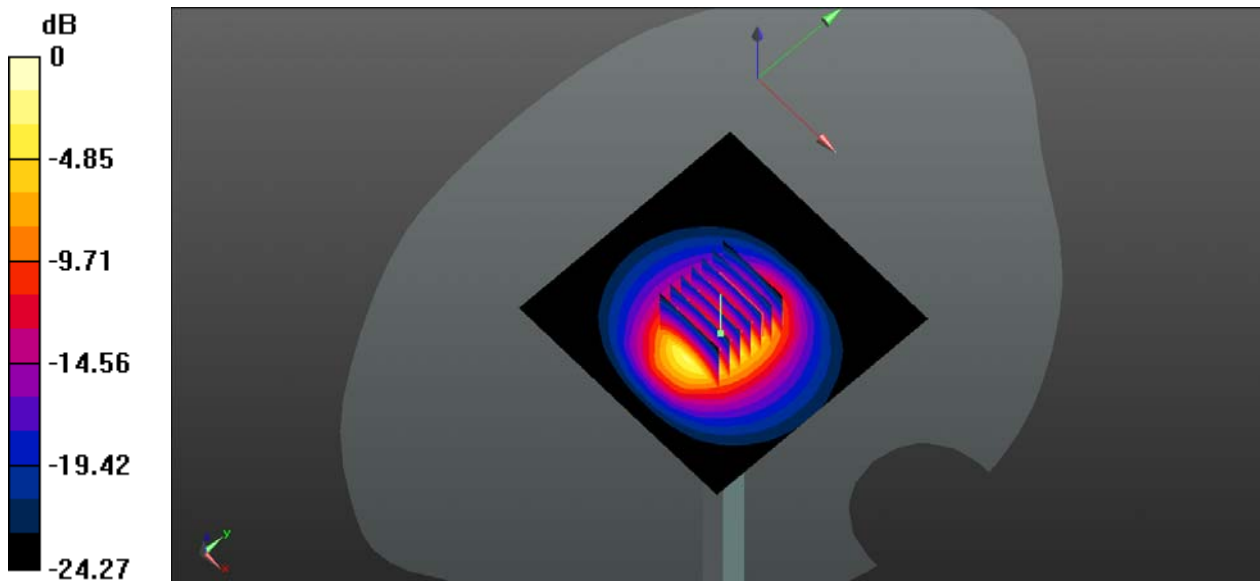
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm**

Reference Value = 45.73 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 12.5 W/kg

**SAR(1 g) = 5.47 W/kg; SAR(10 g) = 2.52W/kg**

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



0 dB = 6.71W/kg

# System Performance Check Data (2600MHz Head)

Date: 2020.06.15

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

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.641$  S/m;  $\epsilon_r = 36.328$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

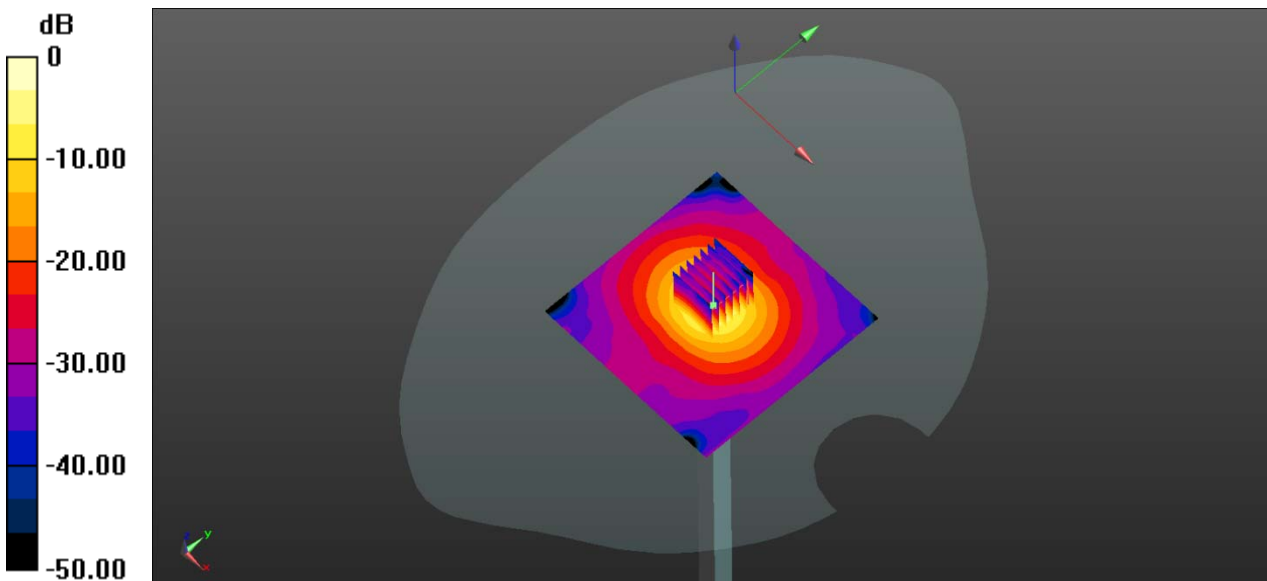
**CW 5200 100mW/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 31.9 W/kg

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

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



0 dB = 19.1 W/kg

# System Performance Check Data (5300MHz Head)

Date: 2020.06.14

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

Medium parameters used:  $f = 5300$  MHz;  $\sigma = 4.763$  S/m;  $\epsilon_r = 35.798$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 8.11 W/kg

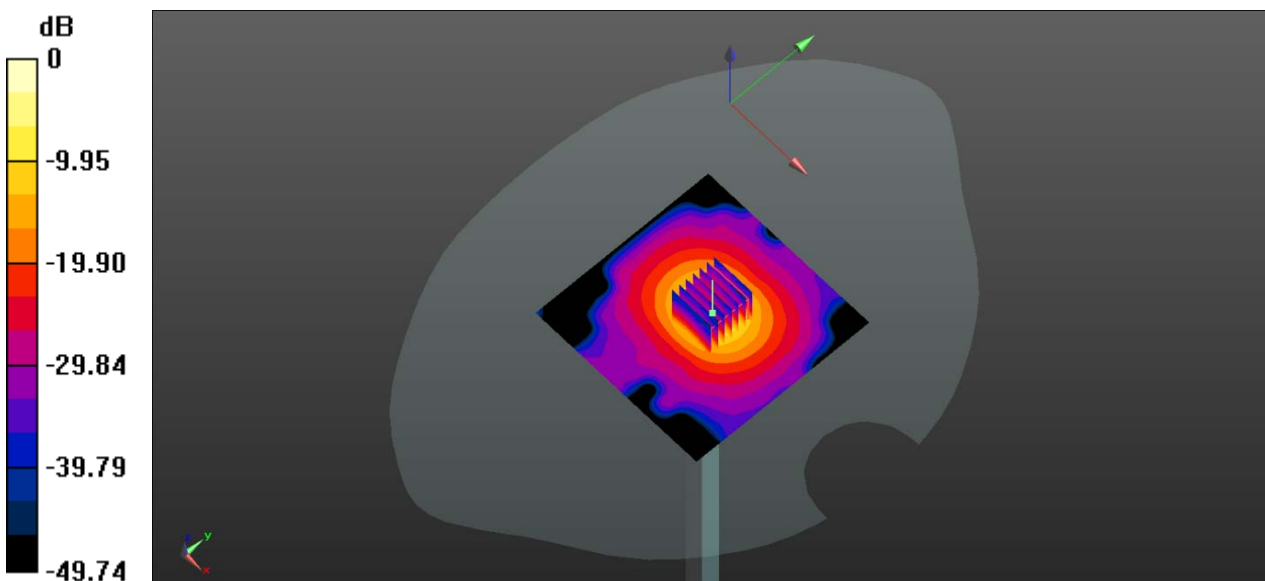
**CW 5300 100mW/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.55 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 31.8 W/kg

**SAR(1 g) = 7.49 W/kg; SAR(10 g) = 2.07 W/kg**

Maximum value of SAR (measured) = 18.9 W/kg



0 dB = 18.9 W/kg



# System Performance Check Data (5500MHz Head)

Date: 2020.06.16

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5500$  MHz;  $\sigma = 4.953$  S/m;  $\epsilon_r = 36.232$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 5500 100mW/Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.85 W/kg

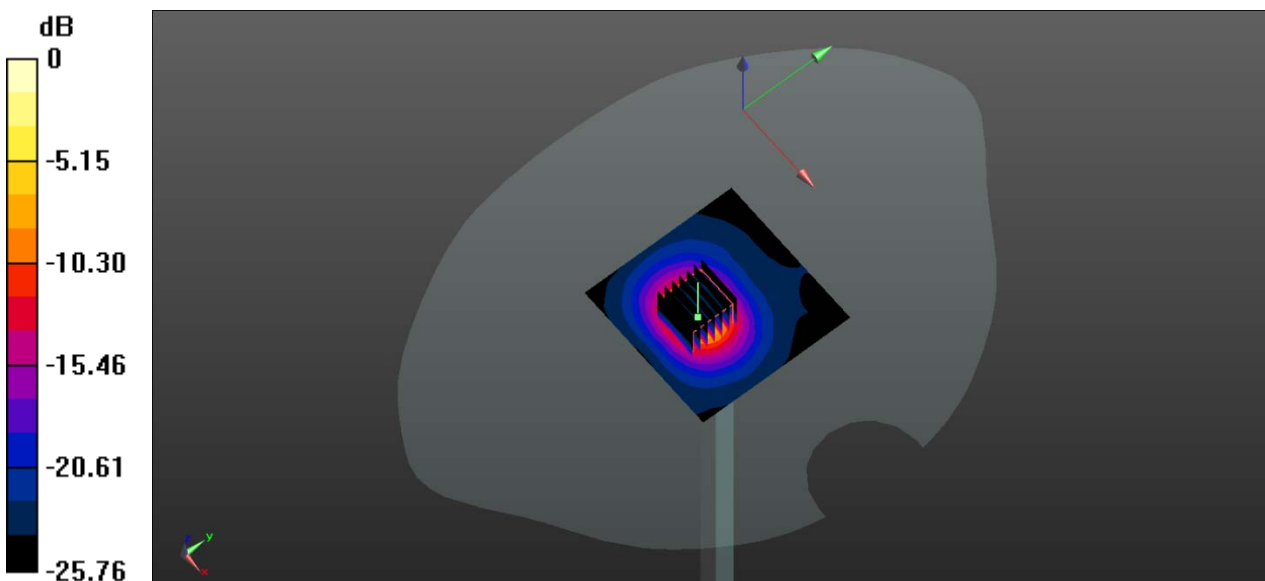
**CW 5500 100mW/Zoom Scan (7x7x15)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 26.78 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 41.4 W/kg

**SAR(1 g) = 8.69 W/kg; SAR(10 g) = 2.35 W/kg**

Maximum value of SAR (measured) = 20.2 W/kg



0 dB = 20.2 W/kg

# System Performance Check Data (5600MHz Head)

Date: 2020.06.17

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

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.062$  S/m;  $\epsilon_r = 35.718$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

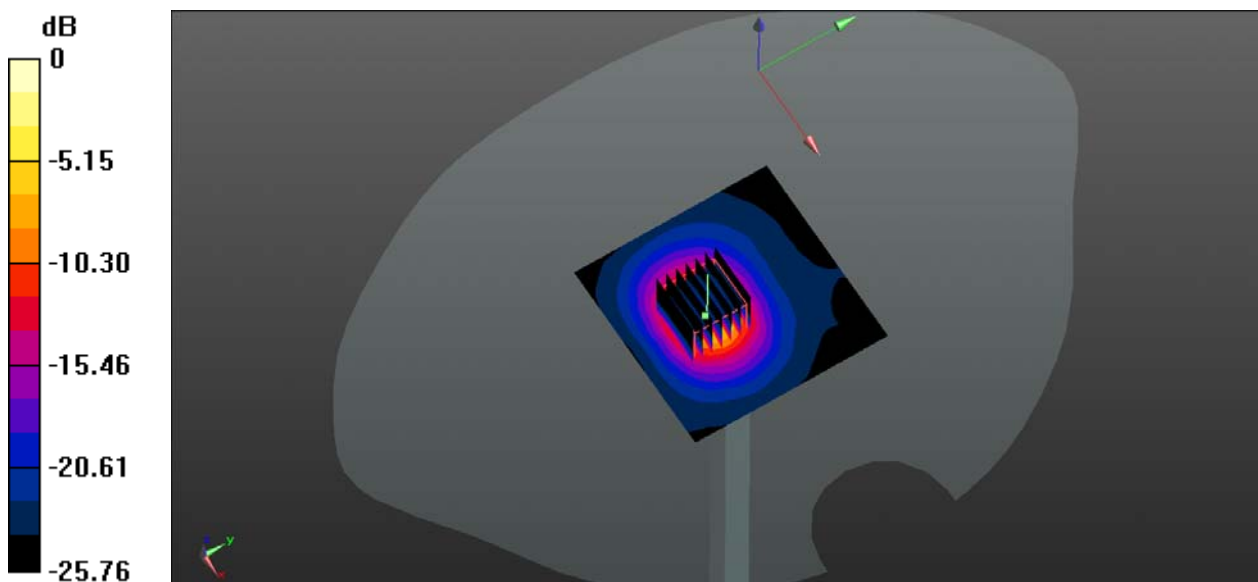
**CW 5600 100mW /Zoom Scan (7x7x15)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

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

Peak SAR (extrapolated) = 38.21 W/kg

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

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



0 dB = 17.2 W/kg

# System Performance Check Data (5800MHz Head)

Date: 2020.06.18

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

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.268$  S/m;  $\epsilon_r = 35.604$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 8.46 W/kg

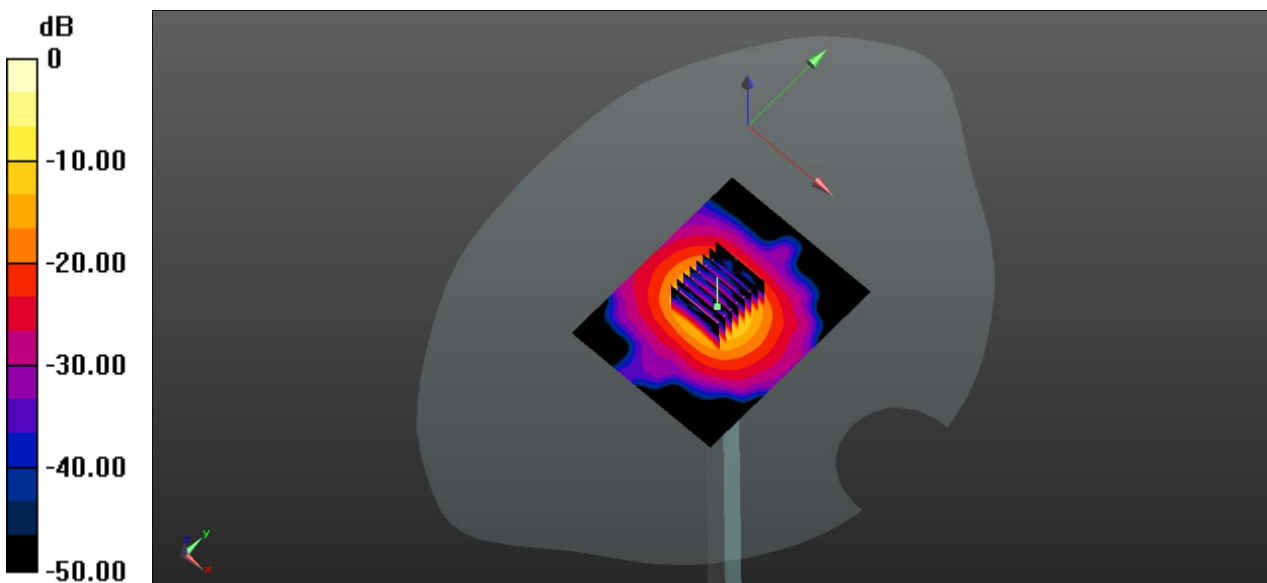
**CW 5800 100mW/Zoom Scan (8x8x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.33 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 35.3 W/kg

**SAR(1 g) = 7.68 W/kg; SAR(10 g) = 2.13 W/kg**

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



0 dB = 19.1 W/kg

## ANNEX C TEST DATA

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

Date: 2020.06.20

Communication System Band: GPRS850; Frequency: 824.2 MHz; Duty Cycle: 1:2.0

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.887$  S/m;  $\epsilon_r = 41.653$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.8 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch128/Area Scan (71x121x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.840 W/kg

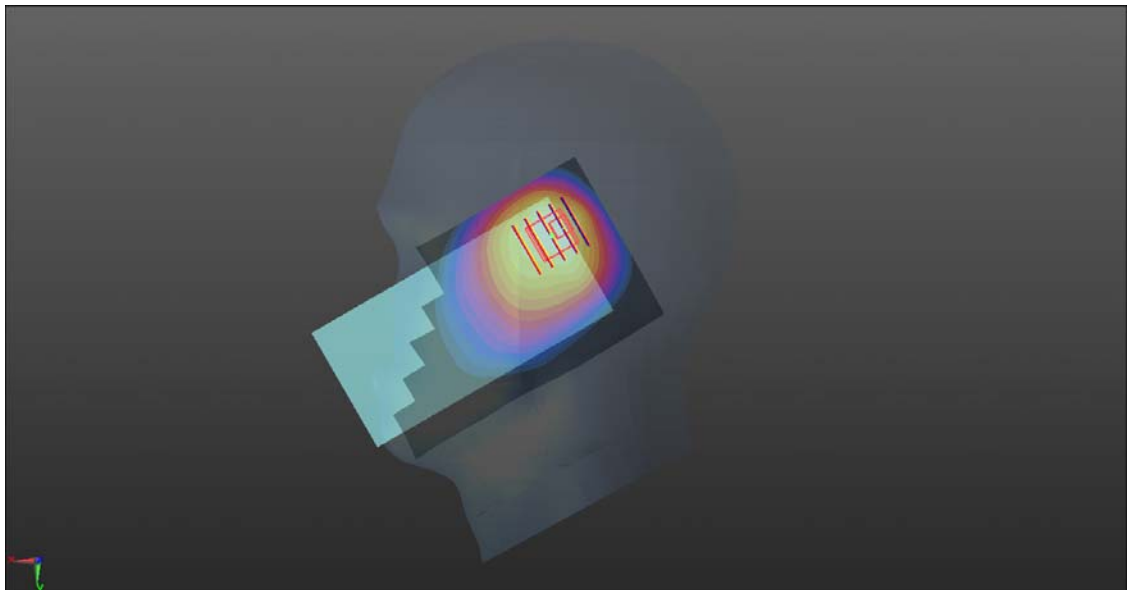
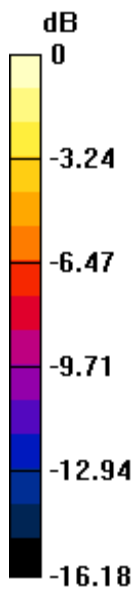
**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 25.91 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 0.791 W/kg; SAR(10 g) = 0.457 W/kg**

Maximum value of SAR (measured) = 0.854 W/kg



0 dB = 0.854 W/kg

**MEAS.2 Body Plane with Back Side 15mm on High Channel in GPRS850 4Slots mode with Antenna Down**

Date: 2020.06.20

Communication System Band: GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:2.0

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.908$  S/m;  $\epsilon_r = 41.386$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.2

DASY5 Configuration

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.254 W/kg

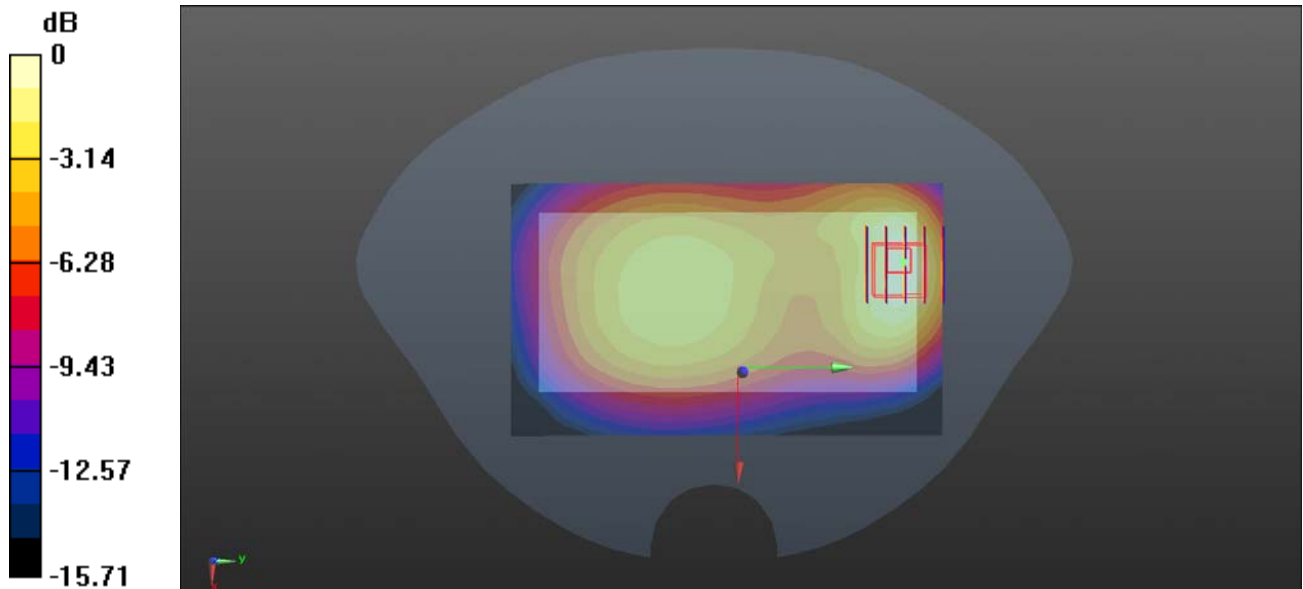
**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.17 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.434 W/kg

**SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.132 W/kg**

Maximum value of SAR (measured) = 0.255 W/kg



0 dB = 0.255 W/kg

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

Date: 2020.06.20

Communication System Band: GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:2.0

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.908$  S/m;  $\epsilon_r = 41.386$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.285 W/kg

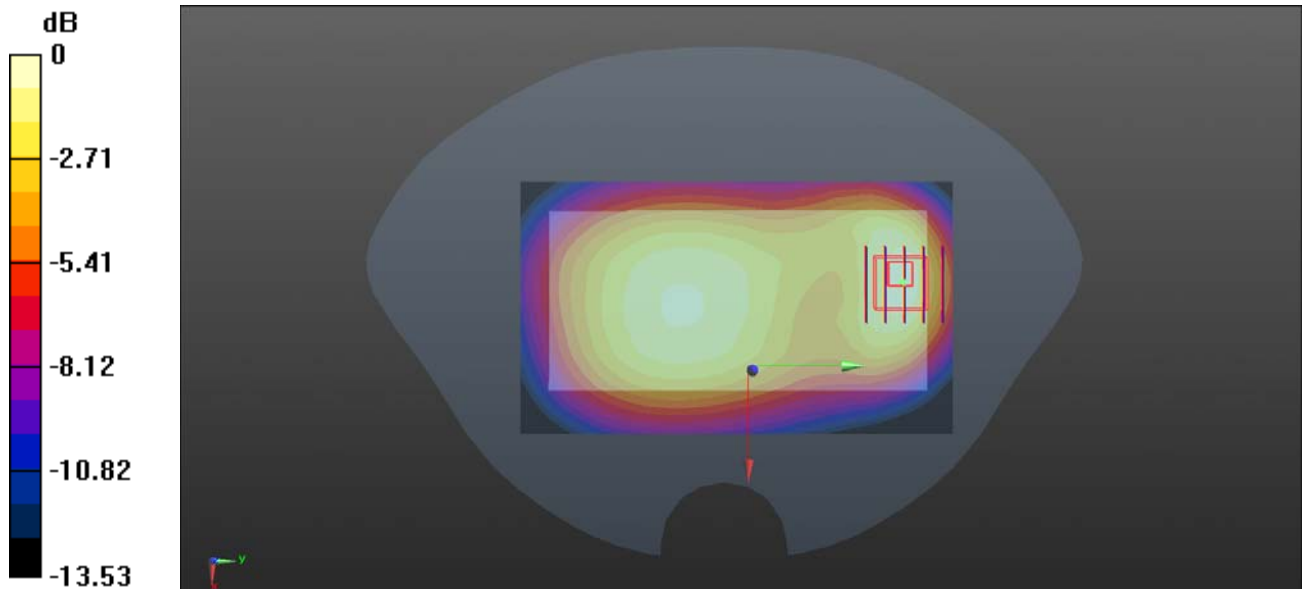
**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.33 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.490 W/kg

**SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.162 W/kg**

Maximum value of SAR (measured) = 0.302 W/kg



0 dB = 0.302 W/kg

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

Date: 2020.06.09

Communication System Band: GPRS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4.0

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.388$  S/m;  $\epsilon_r = 40.484$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.1

DASY5 Configuration:

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

**Ch 512/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.858 W/kg

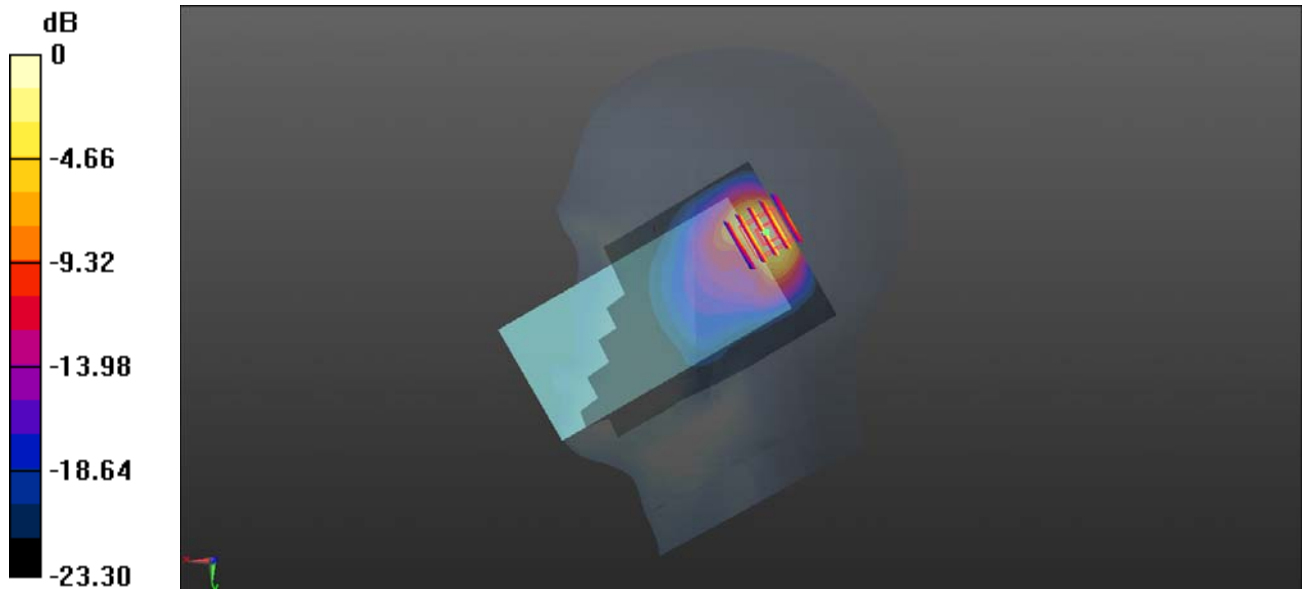
**Ch 512/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.457 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.50 W/kg

**SAR(1 g) = 0.726 W/kg; SAR(10 g) = 0.329 W/kg**

Maximum value of SAR (measured) = 0.860 W/kg



0 dB = 0.860 W/kg

**MEAS.5 Body Plane with Back Side 15mm on Low Channel in GPRS1900 4Slots mode with Antenna Down**

Date: 2020.06.09

Communication System Band: GPRS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4.0

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.388$  S/m;  $\epsilon_r = 40.484$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.1

DASY5 Configuration:

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

**Ch 512/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.259 W/kg

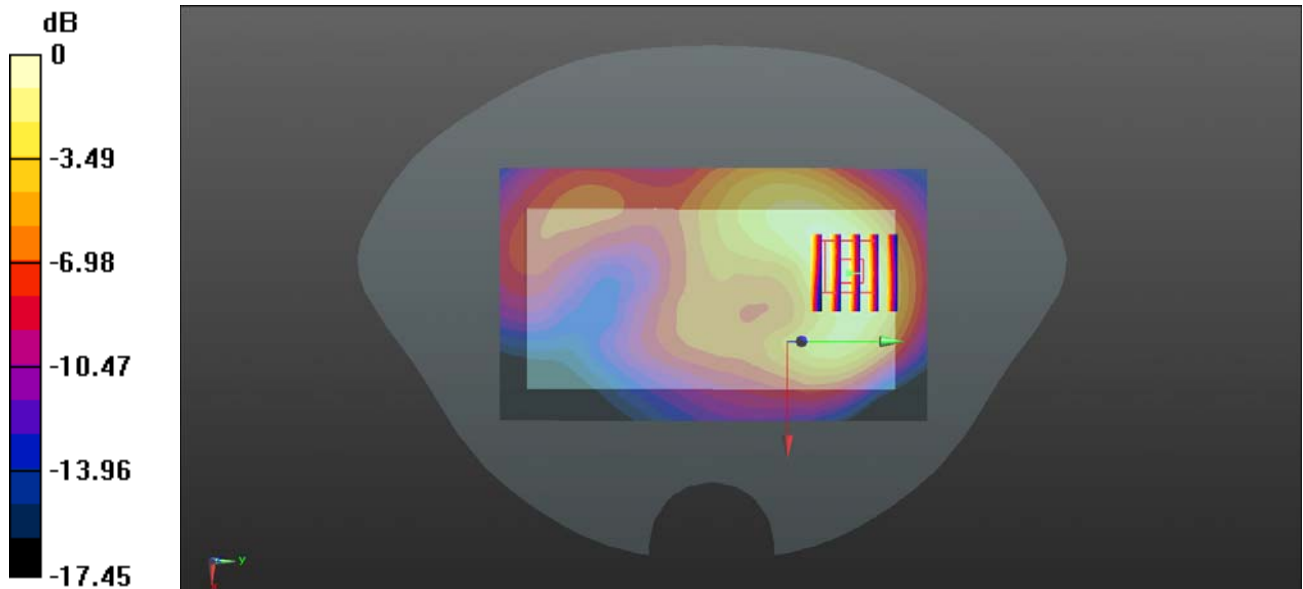
**Ch 512/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.589 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.390 W/kg

**SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.139 W/kg**

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



0 dB = 0.260 W/kg



**MEAS.6 Body Plane with Bottom Edge 10mm on Low Channel in GPRS1900 4Slots mode with Antenna Down**

Date: 2020.06.09

Communication System Band: GPRS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4.0

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.388$  S/m;  $\epsilon_r = 40.484$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.1

DASY5 Configuration:

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

**Ch 512/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.758 W/kg

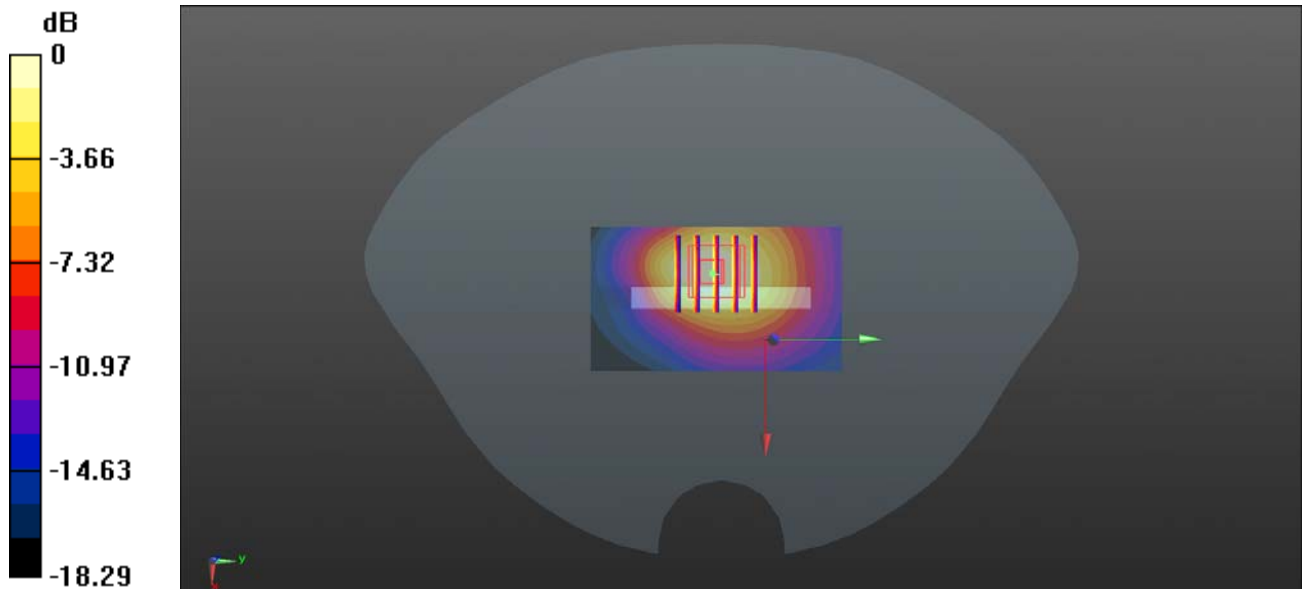
**Ch 512/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.10 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.09 W/kg

**SAR(1 g) = 0.636 W/kg; SAR(10 g) = 0.356 W/kg**

Maximum value of SAR (measured) = 0.699 W/kg



0 dB = 0.699 W/kg

**MEAS.7 Right Head with Tilt on High Channel in WCDMA Band2 mode with Antenna Up**

Date: 2020.06.10

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

Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.408$  S/m;  $\epsilon_r = 40.201$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.7 Liquid Temperature:21.6

DASY5 Configuration:

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

**Ch 9538/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.911 W/kg

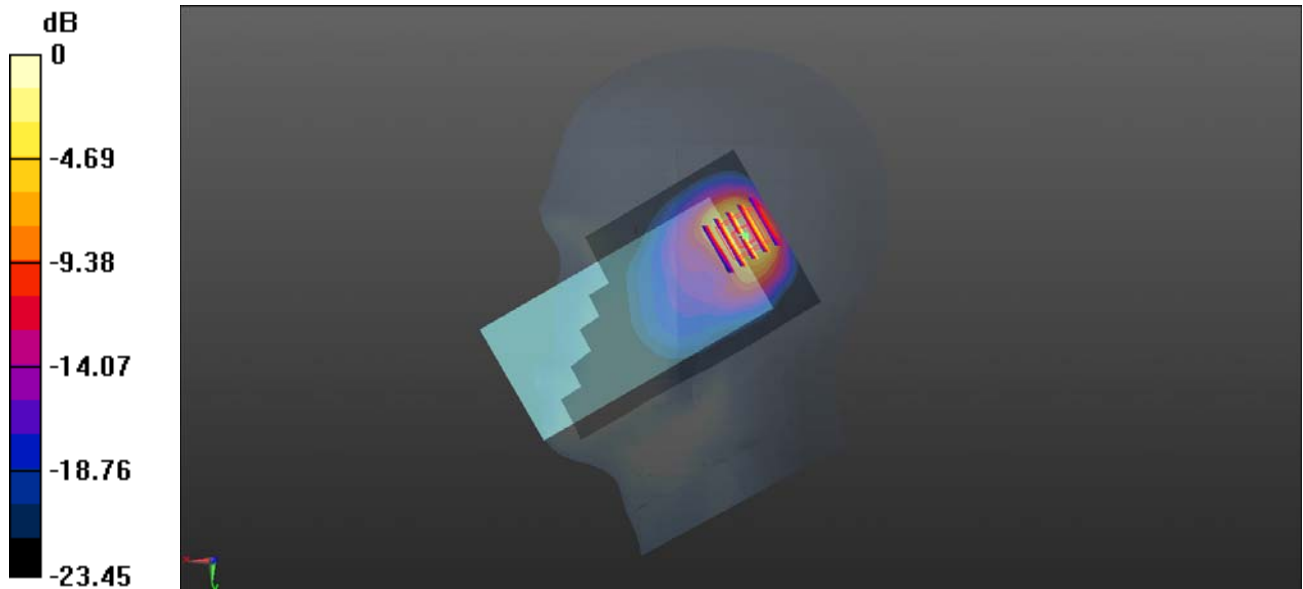
**Ch 9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.81 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.90 W/kg

**SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.387 W/kg**

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



0 dB = 1.02 W/kg

**MEAS.8 Body Plane with Back Side 15mm on Low Channel in WCDMA Band2 mode with Antenna Down**

Date: 2020.06.10

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

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.38$  S/m;  $\epsilon_r = 40.523$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.6

DASY5 Configuration:

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

**Ch 9262/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

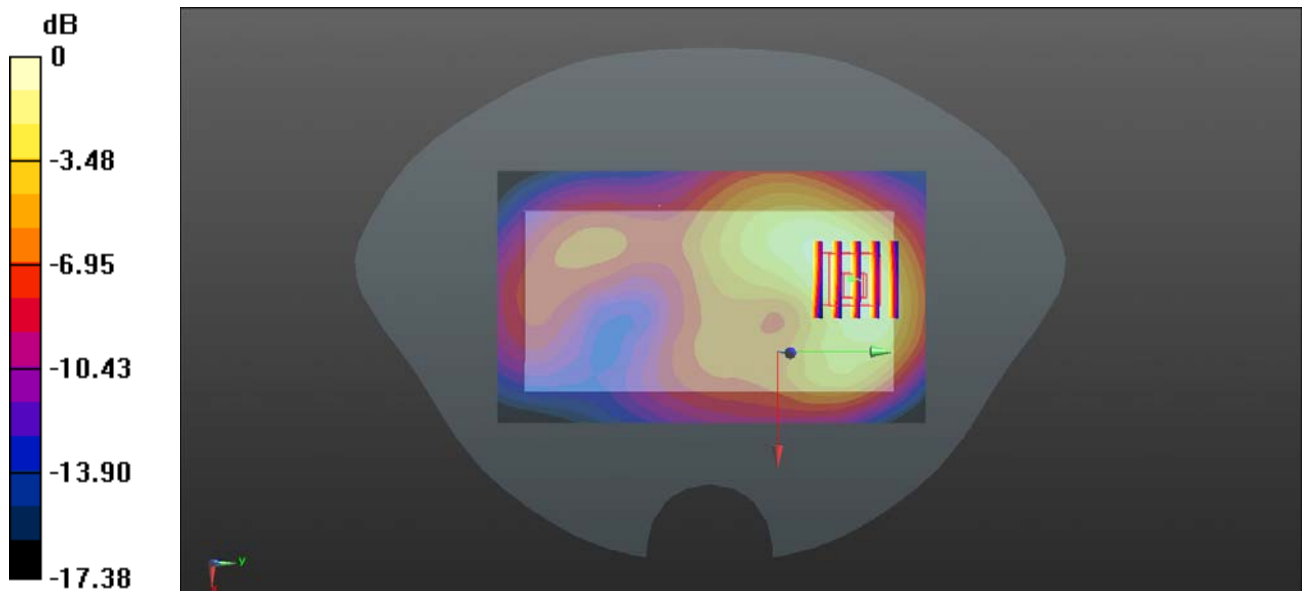
**Ch 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.121 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.459 W/kg

**SAR(1 g) = 0.281 W/kg; SAR(10 g) = 0.167 W/kg**

Maximum value of SAR (measured) = 0.303 W/kg



0 dB = 0.303 W/kg

**MEAS.9 Body Plane with Bottom Edge 10mm on Low Channel in WCDMA Band2 mode with Antenna Down**

Date: 2020.06.10

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

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.38$  S/m;  $\epsilon_r = 40.523$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.6

DASY5 Configuration:

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

**Ch 9262/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.964 W/kg

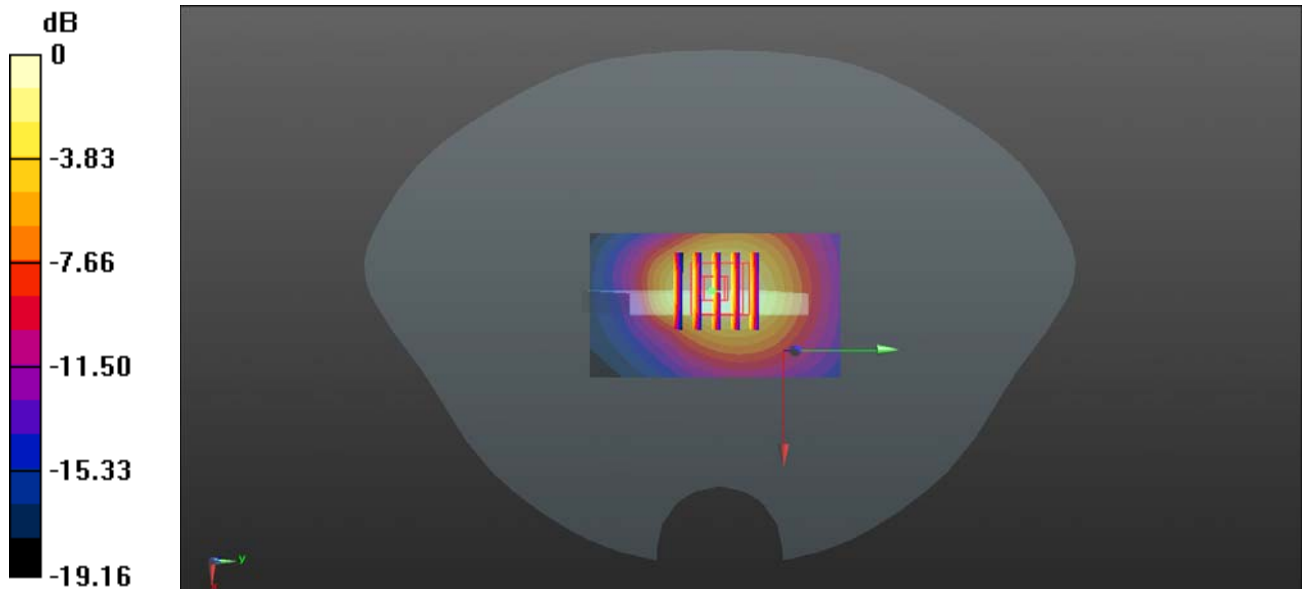
**Ch 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.33 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.794 W/kg; SAR(10 g) = 0.445 W/kg**

Maximum value of SAR (measured) = 0.870 W/kg



0 dB = 0.870 W/kg

**MEAS.10 Body Plane with Top Edge 0mm on Low Channel in WCDMA Band2 mode with Antenna Up**

Date: 2020.06.10

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

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.38$  S/m;  $\epsilon_r = 40.523$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.6

DASY5 Configuration:

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

**Ch 9262/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 5.33 W/kg

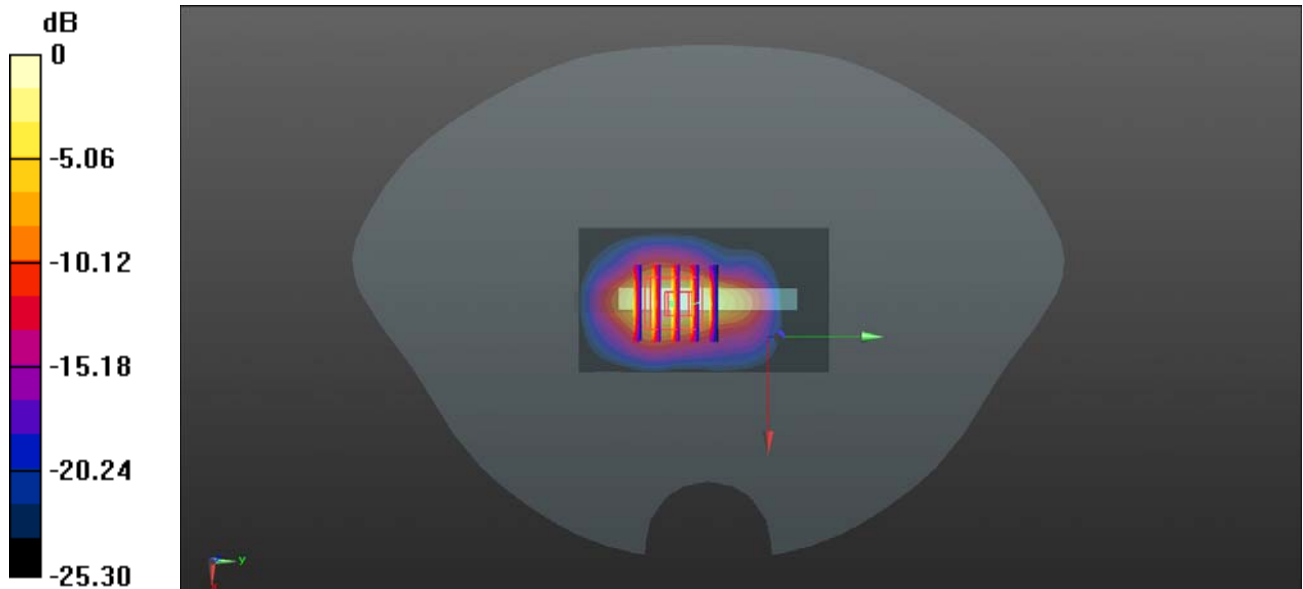
**Ch 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.47 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 10.3 W/kg

**SAR(1 g) = 3.88 W/kg; SAR(10 g) = 1.55 W/kg**

Maximum value of SAR (measured) = 5.00 W/kg



0 dB = 5.00 W/kg

**MEAS.11 Right Head with Tilt on Low Channel in WCDMA Band4 mode with Antenna Up**

Date: 2020.06.06

Communication System Band: IV; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.341$  S/m;  $\epsilon_r = 40.423$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 1312/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.901 W/kg

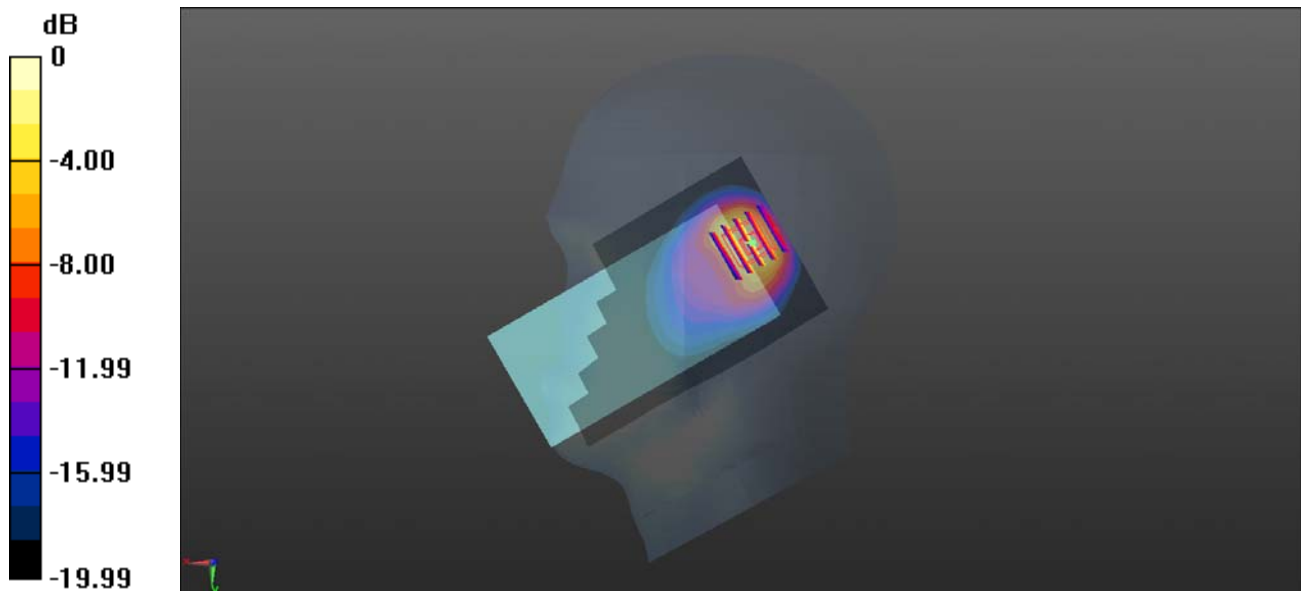
**Configuration/Ch 1312/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.63 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.80 W/kg

**SAR(1 g) = 0.841 W/kg; SAR(10 g) = 0.387 W/kg**

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



0 dB = 1.03 W/kg

**MEAS.12 Body Plane with Back Side 15mm on Low Channel in WCDMA Band4 mode with Antenna Up**

Date: 2020.06.06

Communication System Band: IV; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.341$  S/m;  $\epsilon_r = 40.423$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 1312/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.360 W/kg

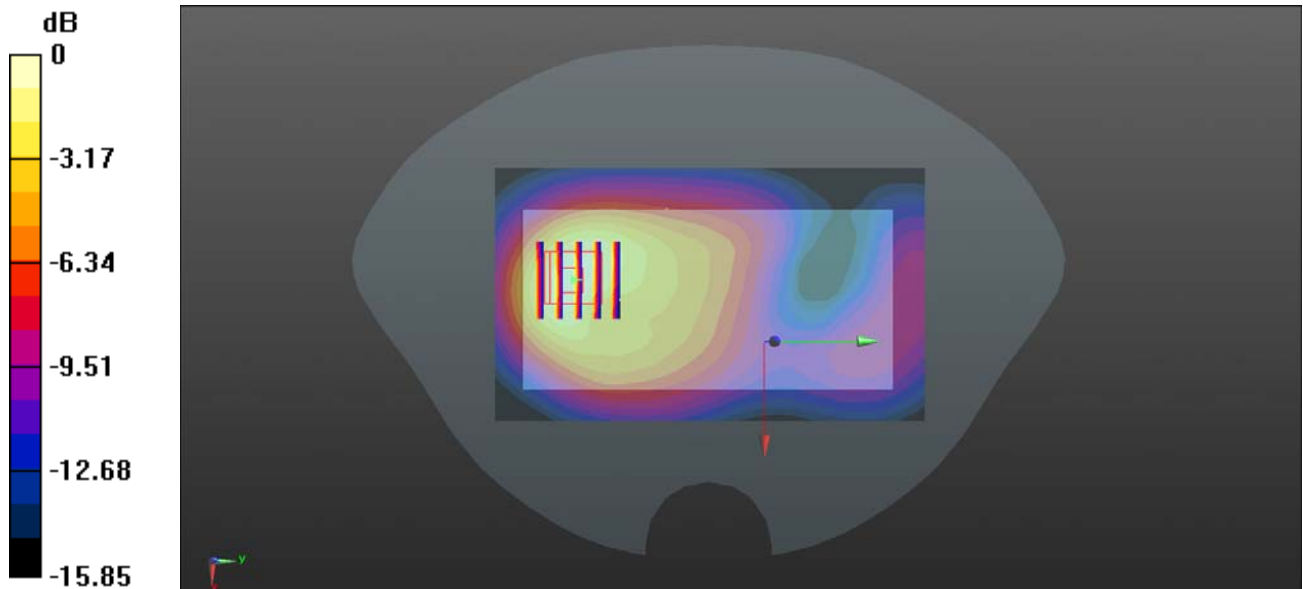
**Ch 1312/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.447 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.522 W/kg

**SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.186 W/kg**

Maximum value of SAR (measured) = 0.347 W/kg



0 dB = 0.347 W/kg

**MEAS.13 Body Plane with Bottom Edge 10mm on High Channel in WCDMA Band4 mode with Antenna Down**

Date: 2020.06.06

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

Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.365$  S/m;  $\epsilon_r = 39.975$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 1513/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

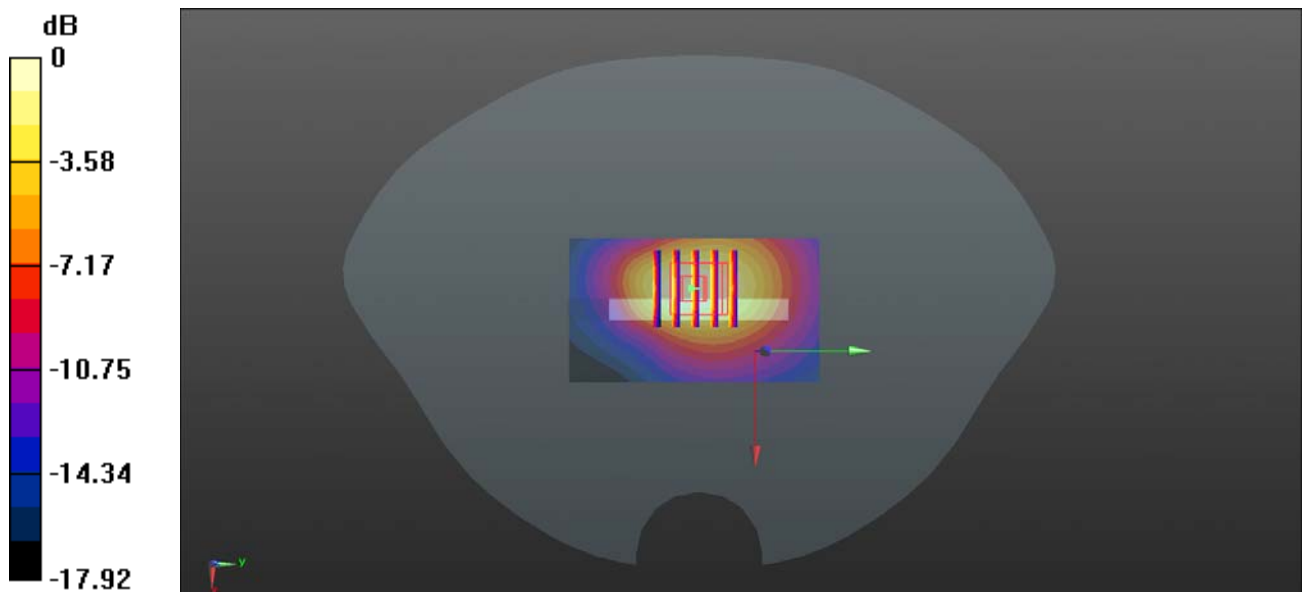
**Ch 1513/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.18 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.36 W/kg

**SAR(1 g) = 0.817 W/kg; SAR(10 g) = 0.465 W/kg**

Maximum value of SAR (measured) = 0.903 W/kg



0 dB = 0.903 W/kg



**MEAS.14 Body Plane with Top Edge 0mm on Low Channel in WCDMA Band4 mode with Antenna Up**

Date: 2020.06.06

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

Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.365$  S/m;  $\epsilon_r = 39.975$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 1513/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 5.32 W/kg

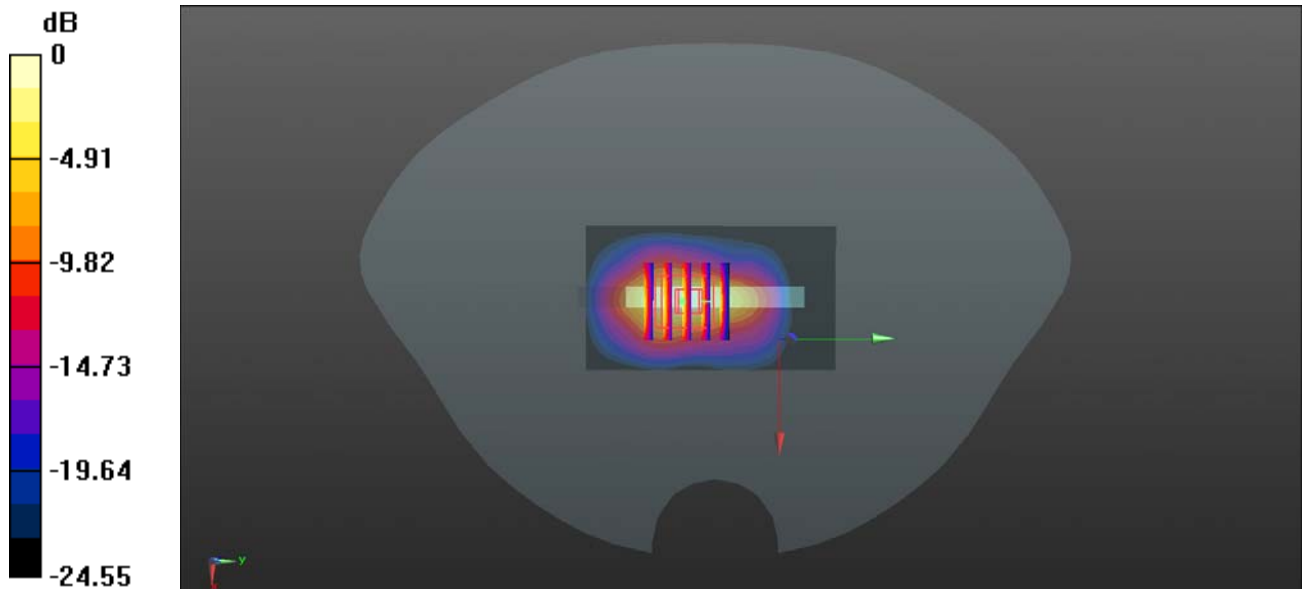
**Ch 1513/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.45 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 10.6 W/kg

**SAR(1 g) = 4.01 W/kg; SAR(10 g) = 1.6 W/kg**

Maximum value of SAR (measured) = 5.24 W/kg



0 dB = 5.24 W/kg

**MEAS.15 Right Head with Cheek on Low Channel in WCDMA Band5 mode with Antenna Up**

Date: 2020.06.21

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

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.895$  S/m;  $\epsilon_r = 41.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 4132/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

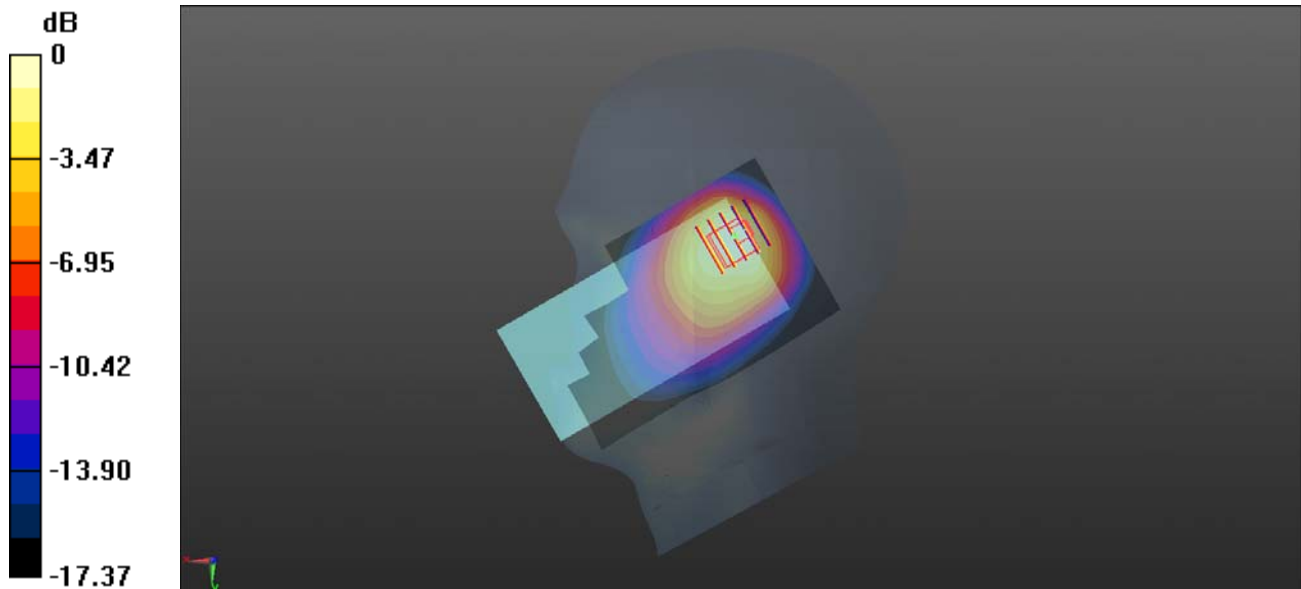
**Ch 4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.42 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.771 W/kg

**SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.215 W/kg**

Maximum value of SAR (measured) = 0.387 W/kg



0 dB = 0.387 W/kg

**MEAS.16 Body Plane with Back Side 15mm on Low Channel in WCDMA Band5 mode with Antenna Down**

Date: 2020.06.21

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

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.895$  S/m;  $\epsilon_r = 41.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.7 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 4132/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.129 W/kg

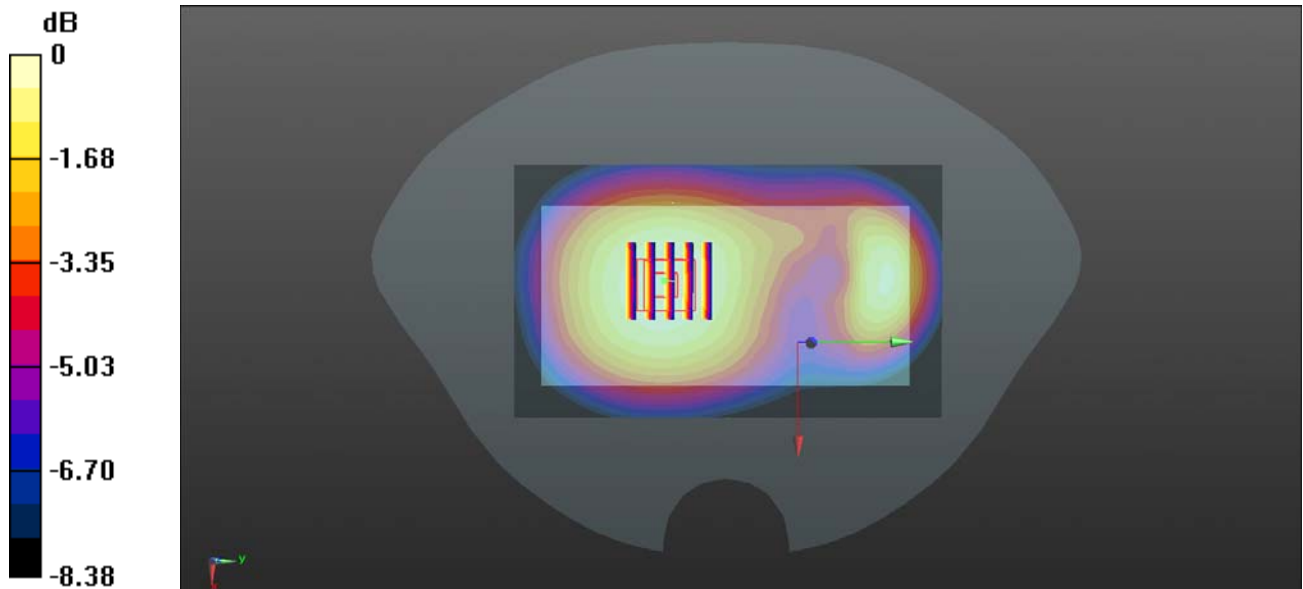
**Ch 4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.45 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.154 W/kg

**SAR(1 g) = 0.122 W/kg; SAR(10 g) = 0.092 W/kg**

Maximum value of SAR (measured) = 0.128 W/kg



0 dB = 0.128 W/kg

**MEAS.17 Body Plane with Back Side 10mm on Low Channel in WCDMA Band5 mode with Antenna Down**

Date: 2020.06.21

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

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.895$  S/m;  $\epsilon_r = 41.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.7 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.227 W/kg

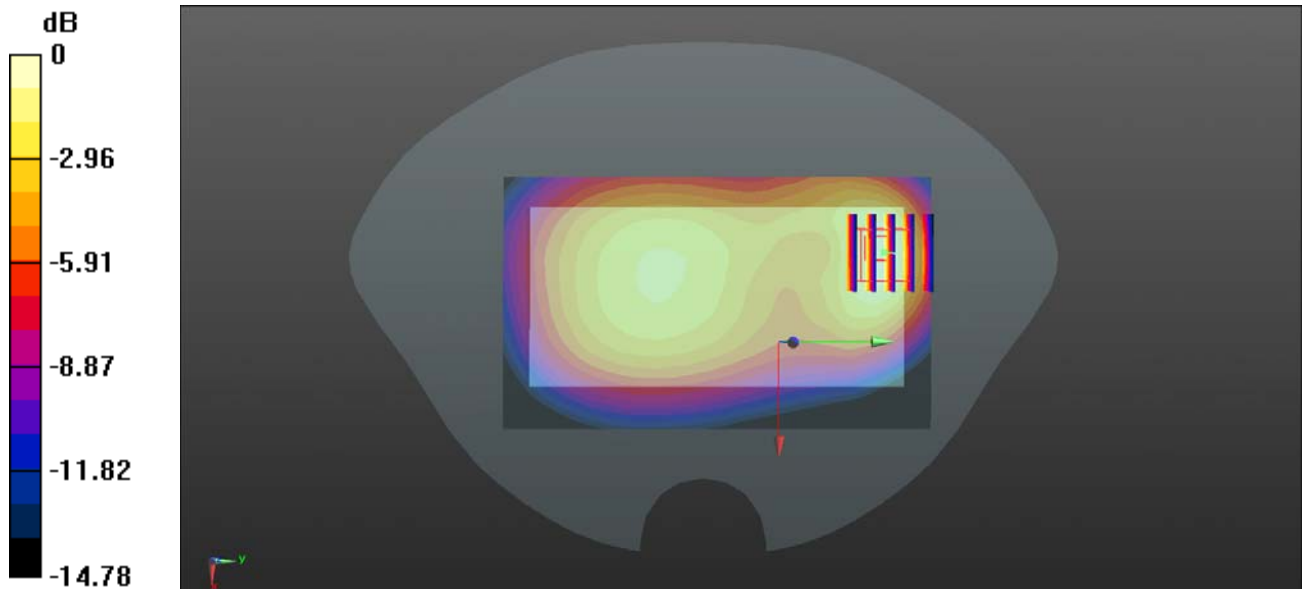
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.04 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.412 W/kg

**SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.124 W/kg**

Maximum value of SAR (measured) = 0.238 W/kg



0 dB = 0.238 W/kg

**MEAS.18 Right Head with Tilt on Middle Channel in LTE Band2 mode with Antenna Up 1RB**

Date: 2020.06.11

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

Medium parameters used (extrapolated):  $f = 1880$  MHz;  $\sigma = 1.392$  S/m;  $\epsilon_r = 40.452$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.9 Liquid Temperature: 21.1

DASY5 Configuration:

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

**Ch 18900/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.821 W/kg

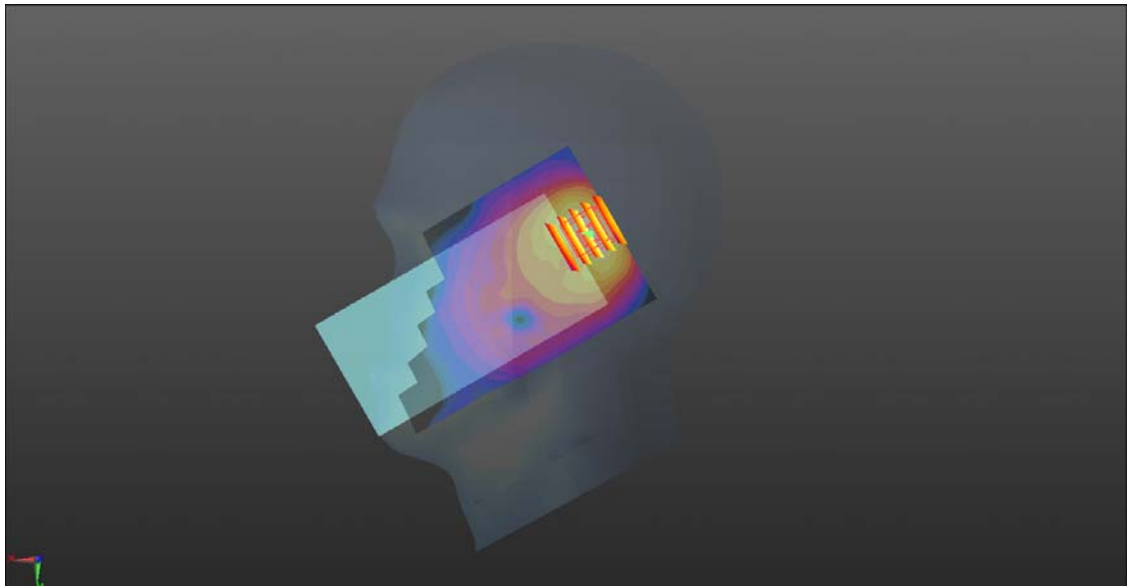
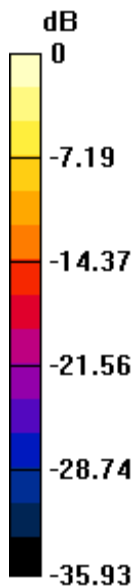
**Ch 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.343 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 0.675 W/kg; SAR(10 g) = 0.308 W/kg**

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



0 dB = 0.807 W/kg

**MEAS.19 Body Plane with Back Side 15mm on Middle Channel in LTE Band 2 mode with Antenna Up 1RB**

Date: 2020.06.11

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

Medium parameters used (extrapolated):  $f = 1880$  MHz;  $\sigma = 1.392$  S/m;  $\epsilon_r = 40.452$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.9 Liquid Temperature: 21.1

DASY5 Configuration:

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

**Ch 18900/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

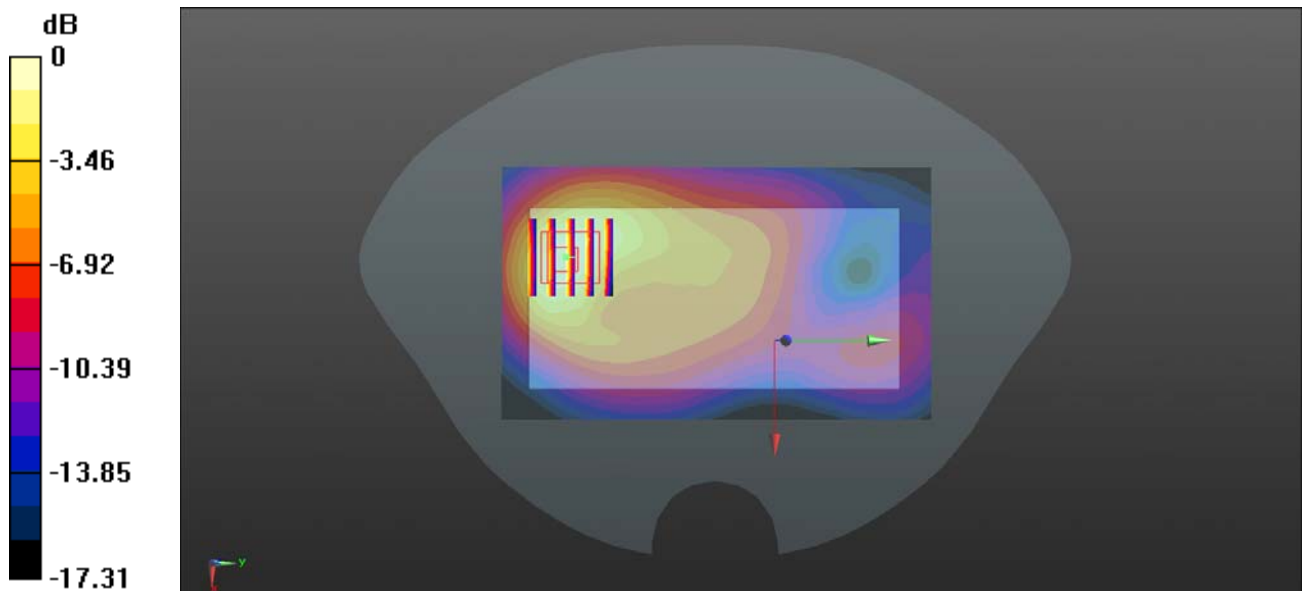
**Ch 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.231 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.327 W/kg

**SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.112 W/kg**

Maximum value of SAR (measured) = 0.214 W/kg



0 dB = 0.214 W/kg

**MEAS.20 Body Plane with Bottom Edge 10mm on High Channel in LTE Band 2 mode with Antenna Up 1RB**

Date: 2020.06.12

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;  $\sigma = 1.412$  S/m;  $\epsilon_r = 40.098$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.4

DASY5 Configuration:

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

**Ch 19100/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.22 W/kg

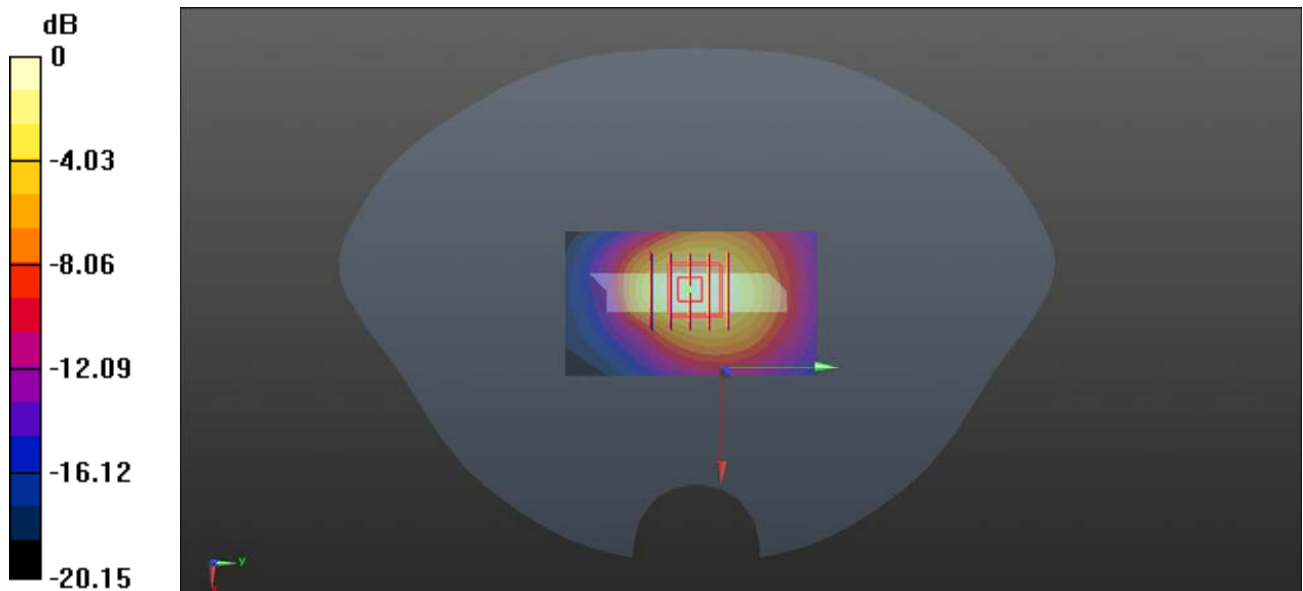
**Ch 19100/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.21 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.78 W/kg

**SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.557 W/kg**

Maximum value of SAR (measured) = 1.12 W/kg



0 dB = 1.12 W/kg

**MEAS.21 Body Plane with Top Edge 0mm on Middle Channel in LTE Band 2 mode with Antenna Up 1RB**

Date: 2020.06.12

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;  $\sigma = 1.401$  S/m;  $\epsilon_r = 40.21$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.4

DASY5 Configuration:

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

**Ch 18900/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.90 W/kg

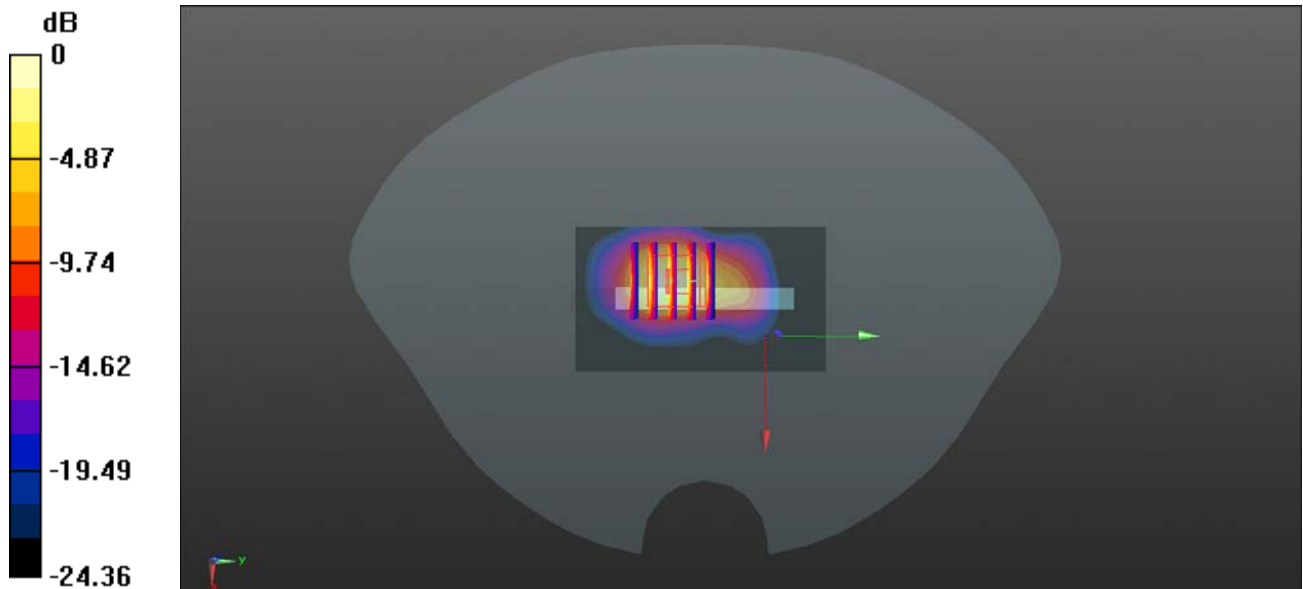
**Ch 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.27 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 8.99 W/kg

**SAR(1 g) = 3.41 W/kg; SAR(10 g) = 1.36 W/kg**

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



0 dB = 4.41 W/kg



**MEAS.22 Right Head with Tilt on High Channel in LTE Band 4 mode with Antenna Up 1RB**

Date: 2020.06.07

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

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.359$  S/m;  $\epsilon_r = 40.105$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.8 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20300/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.13 W/kg

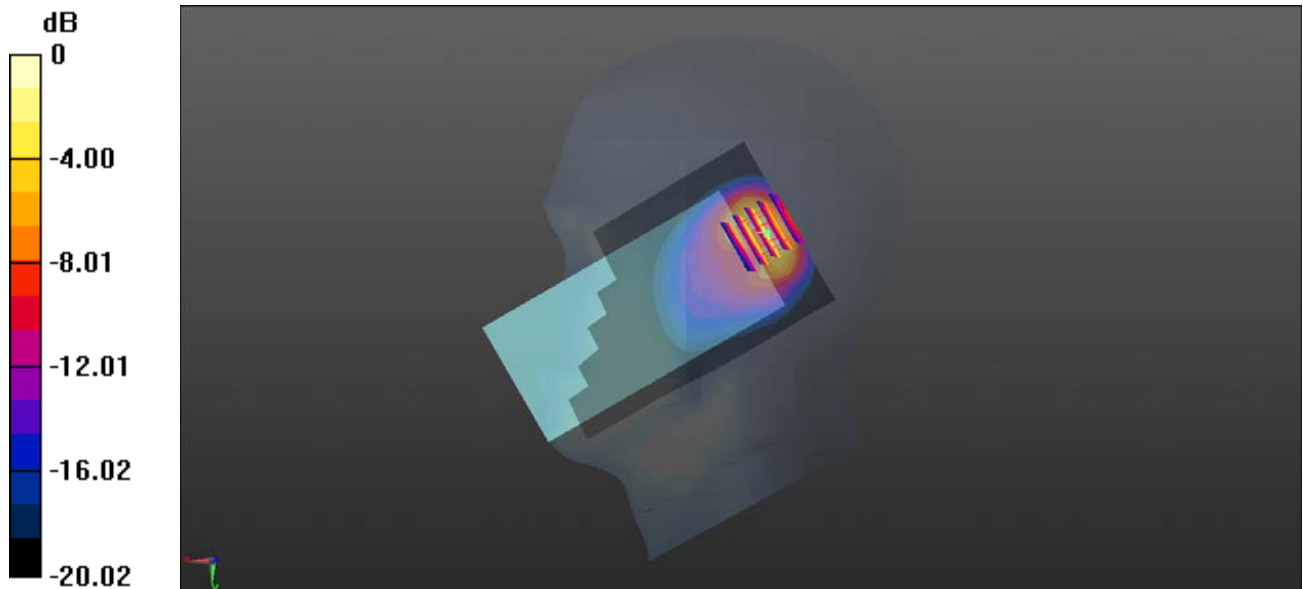
**Ch 20300/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.03 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 0.933 W/kg; SAR(10 g) = 0.439 W/kg**

Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg

**MEAS.23 Body Plane with Back Side 10mm on Middle Channel in LTE Band 4 mode with Antenna Down 1RB**

Date: 2020.06.07

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

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.359$  S/m;  $\epsilon_r = 40.105$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.8 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20175/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

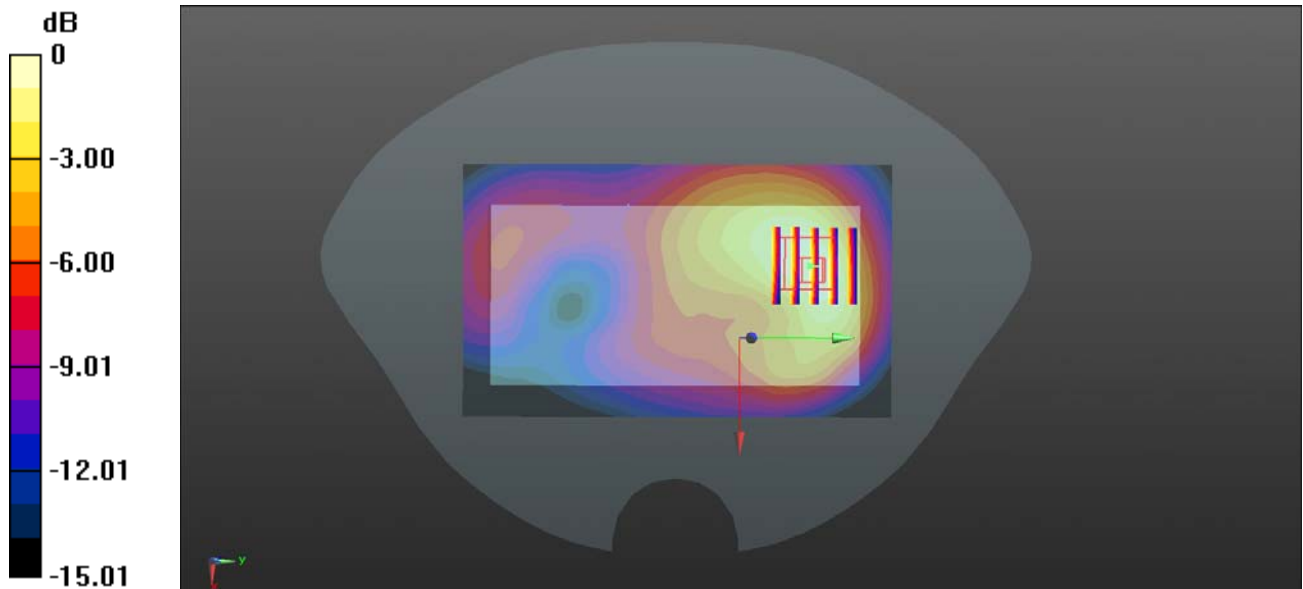
**Ch 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.558 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.270 W/kg; SAR(10 g) = 0.170 W/kg**

Maximum value of SAR (measured) = 0.292 W/kg



0 dB = 0.292 W/kg

**MEAS.24 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band 4 mode with Antenna Down 1RB**

Date: 2020.06.08

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

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.363$  S/m;  $\epsilon_r = 40.398$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20175/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.835 W/kg

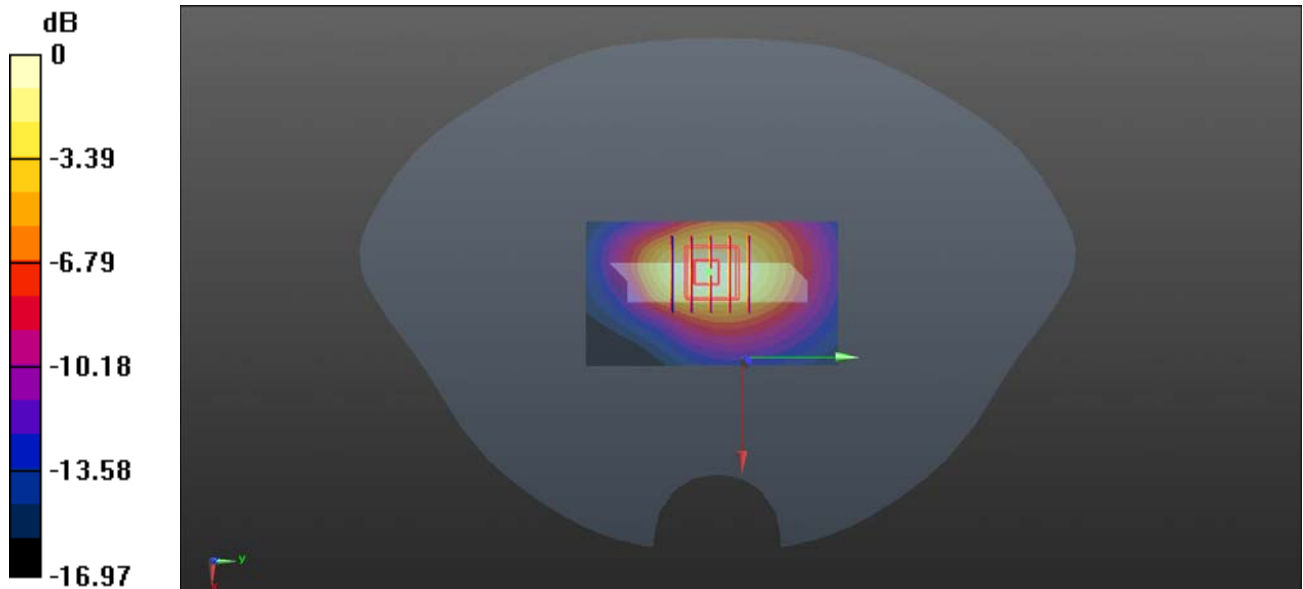
**Ch 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.64 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.15 W/kg

**SAR(1 g) = 0.706 W/kg; SAR(10 g) = 0.408 W/kg**

Maximum value of SAR (measured) = 0.778 W/kg



0 dB = 0.778 W/kg

**MEAS.25 Body Plane with Top Edge 0mm on Middle Channel in LTE Band 4 mode with Antenna Down 1RB**

Date: 2020.06.08

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

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.363$  S/m;  $\epsilon_r = 40.398$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 20175/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 4.48 W/kg

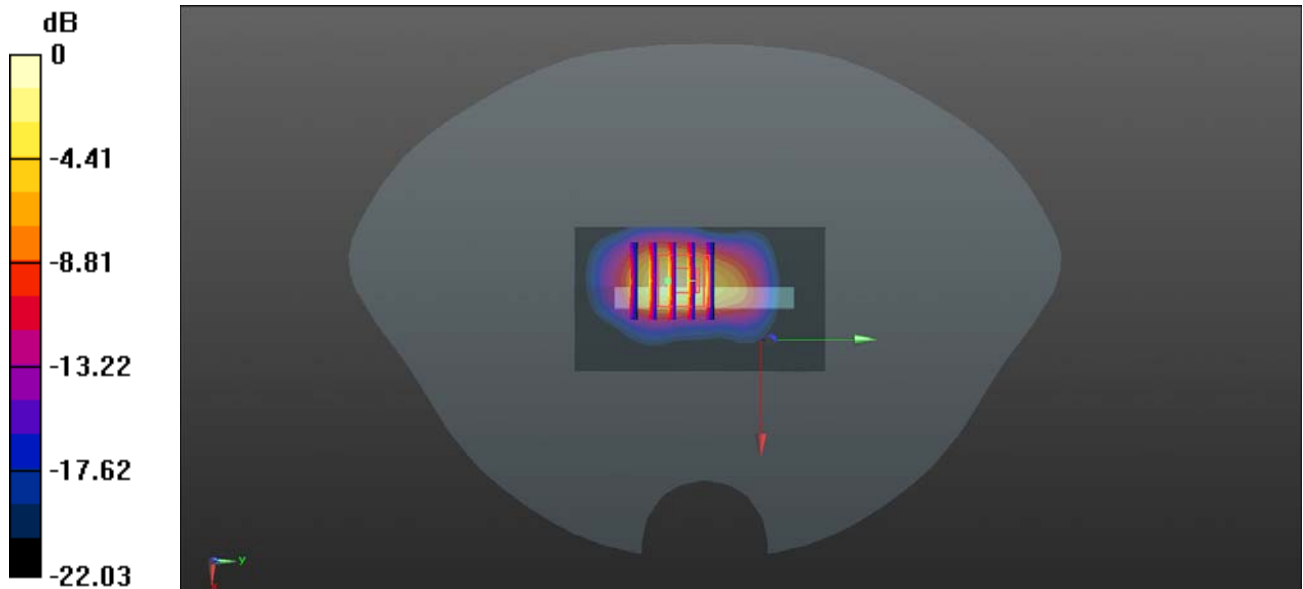
**Ch 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.64 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 10.6 W/kg

**SAR(1 g) = 4.17 W/kg; SAR(10 g) = 1.69 W/kg**

Maximum value of SAR (measured) = 5.62 W/kg



0 dB = 5.62 W/kg

**MEAS.26 Right Head with Cheek on Low Channel in LTE Band 5 mode with Antenna Up 1RB**

Date: 2020.06.22

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.892$  S/m;  $\epsilon_r = 41.852$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.8 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20450/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

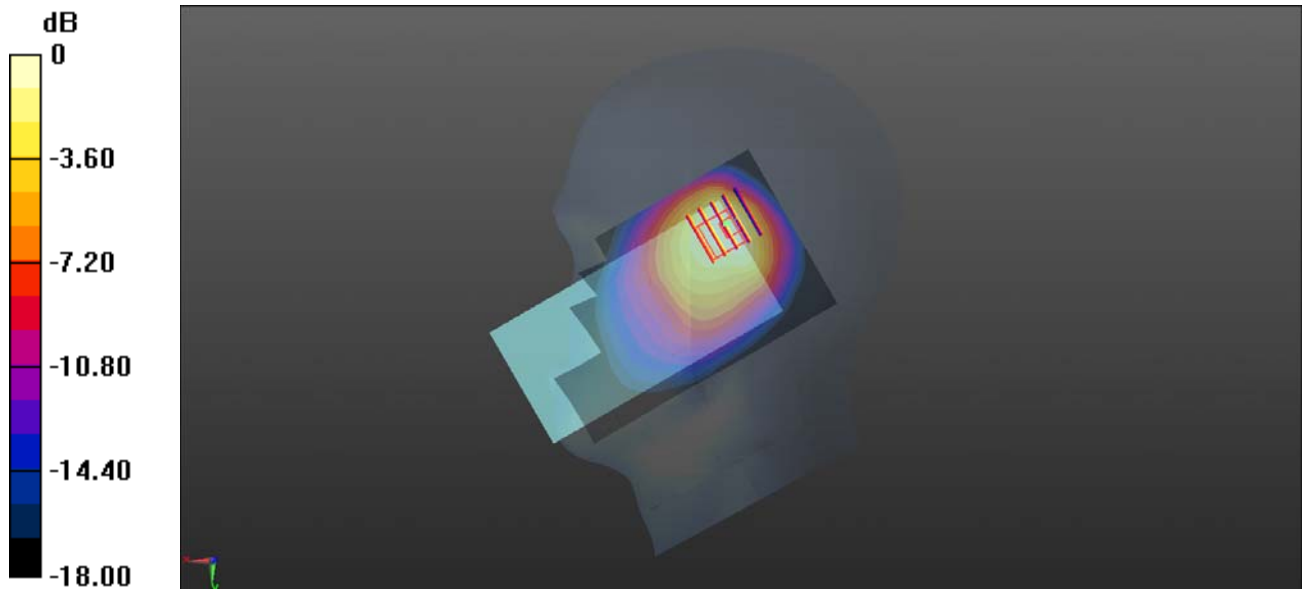
**Ch20450/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.05 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.906 W/kg

**SAR(1 g) = 0.438 W/kg; SAR(10 g) = 0.267 W/kg**

Maximum value of SAR (measured) = 0.582 W/kg



0 dB = 0.582 W/kg

**MEAS.27 Body Plane with Front 15mm on Low Channel in LTE Band 5 mode with Antenna Down 1RB**

Date: 2020.06.22

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.892$  S/m;  $\epsilon_r = 41.852$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20450/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.138 W/kg

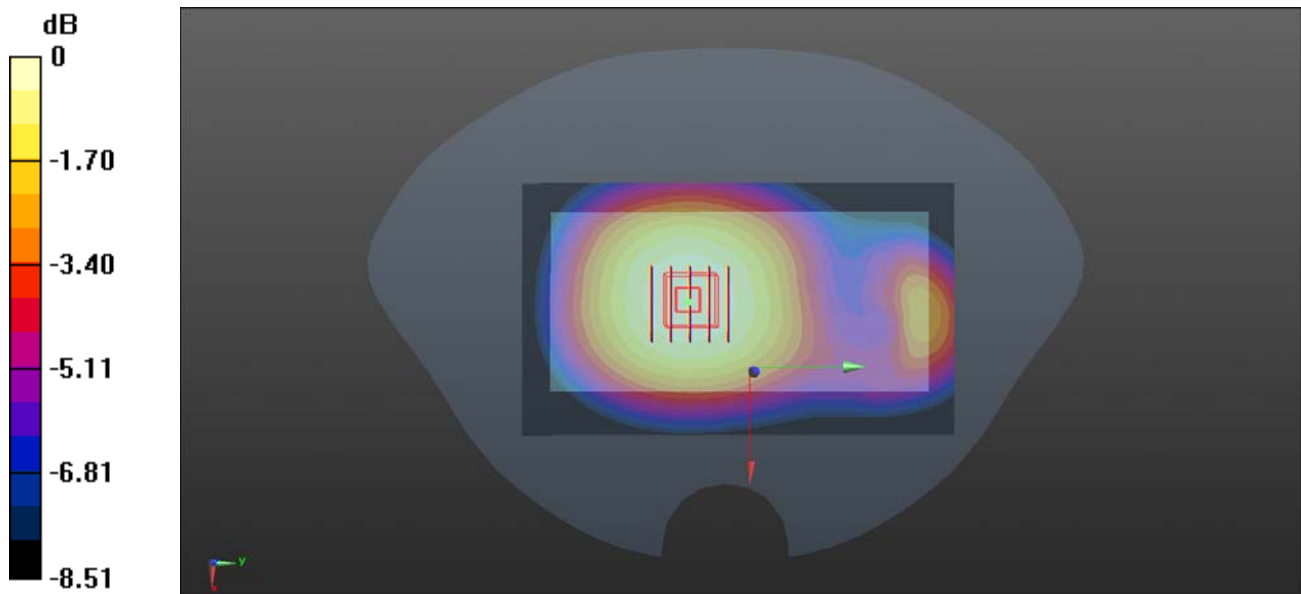
**Ch20450/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.87 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.169 W/kg

**SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.100 W/kg**

Maximum value of SAR (measured) = 0.140 W/kg



0 dB = 0.140 W/kg

**MEAS.28 Body Plane with Back 15mm on Low Channel in LTE Band 5 mode with Antenna Down 1RB**

Date: 2020.06.23

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.886$  S/m;  $\epsilon_r = 41.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20450/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.235 W/kg

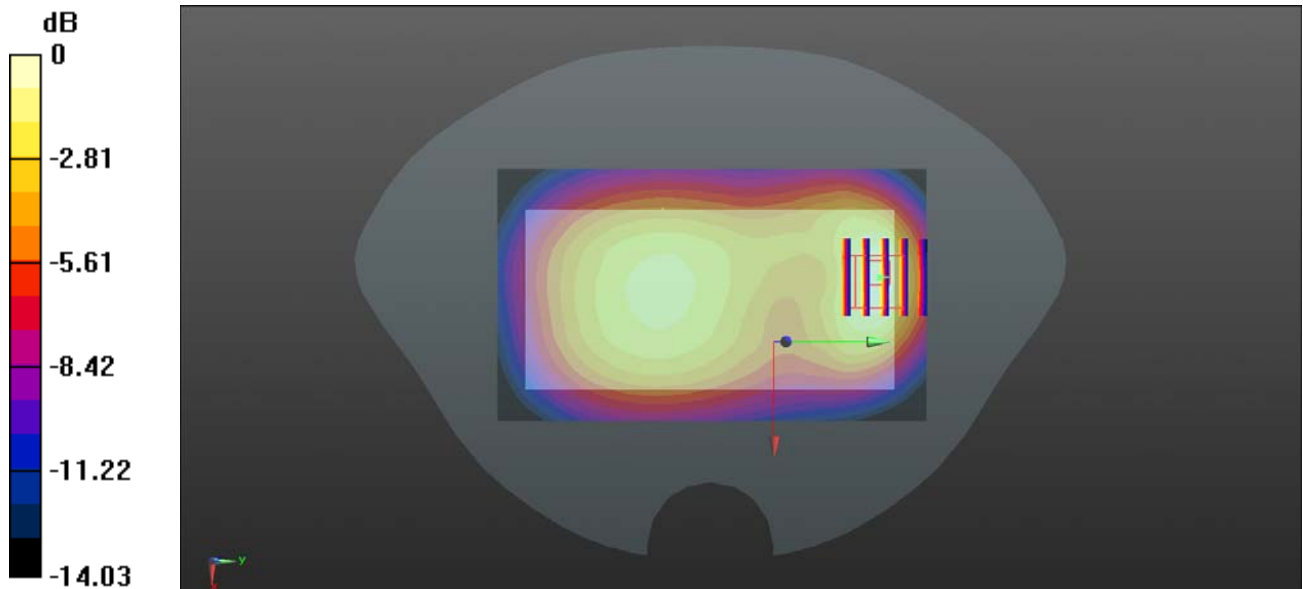
**Ch20450/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.84 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.403 W/kg

**SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.129 W/kg**

Maximum value of SAR (measured) = 0.243 W/kg



0 dB = 0.243 W/kg

**MEAS.29 Right Head with Tilt on Low Channel in LTE Band 7 mode with Antenna Up 1RB**

Date: 2020.06.27

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.842$  S/m;  $\epsilon_r = 39.568$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.514 W/kg

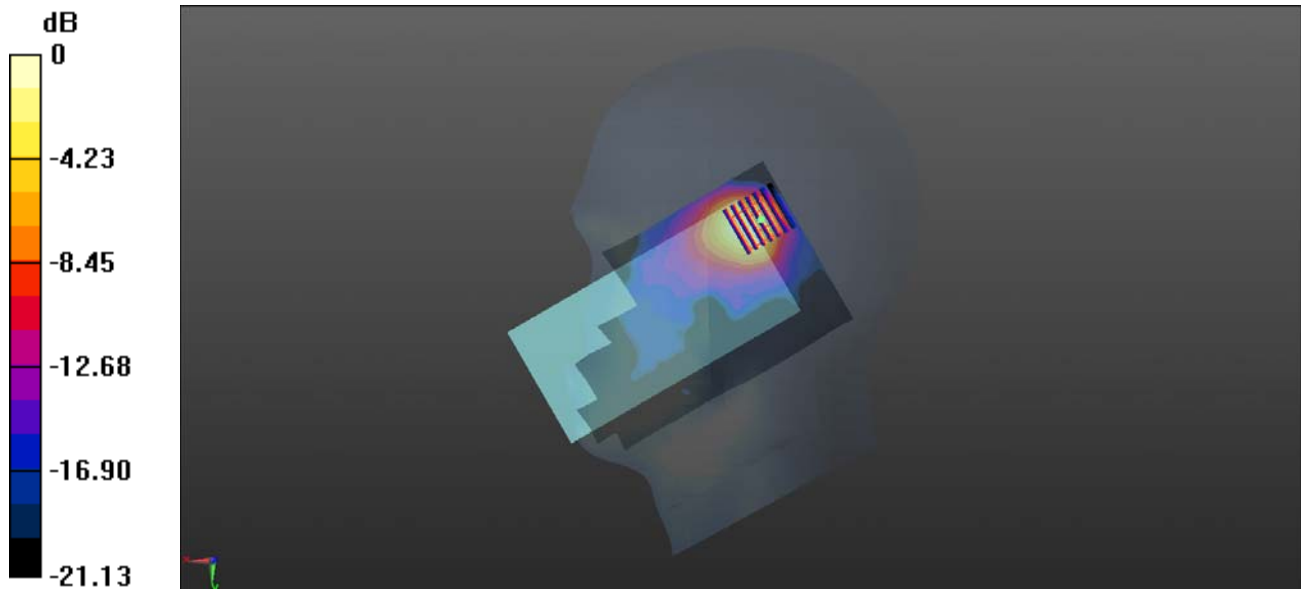
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.554 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.21 W/kg

**SAR(1 g) = 0.421 W/kg; SAR(10 g) = 0.178 W/kg**

Maximum value of SAR (measured) = 0.543 W/kg



0 dB = 0.543 W/kg



**MEAS.30 Body Plane with Back Side 15mm on Low Channel in LTE Band 7 mode with Antenna Up 1RB**

Date: 2020.06.27

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2510 MHz;Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.842$  S/m;  $\epsilon_r = 39.568$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.487 W/kg

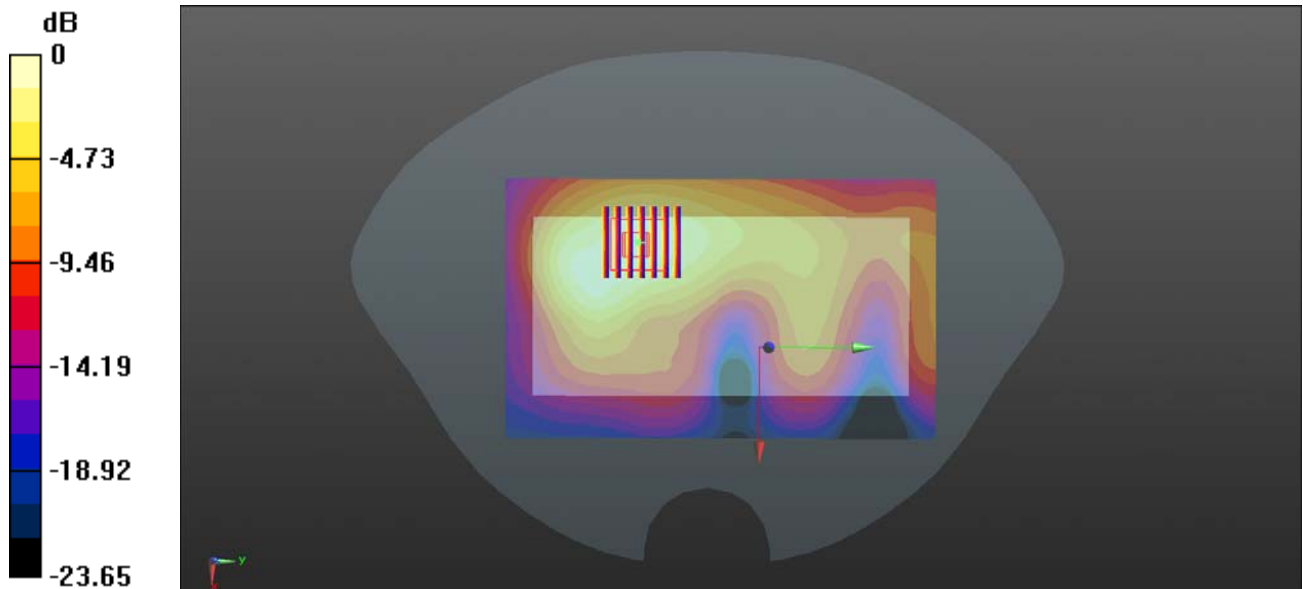
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.839 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.961 W/kg

**SAR(1 g) = 0.460 W/kg; SAR(10 g) = 0.233 W/kg**

Maximum value of SAR (measured) = 0.501 W/kg



0 dB = 0.501 W/kg

**MEAS.31 Body Plane with Back Side 10mm on Low Channel in LTE Band 7 mode with Antenna Up 50RB**

Date: 2020.06.28

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.856$  S/m;  $\epsilon_r = 39.681$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.752 W/kg

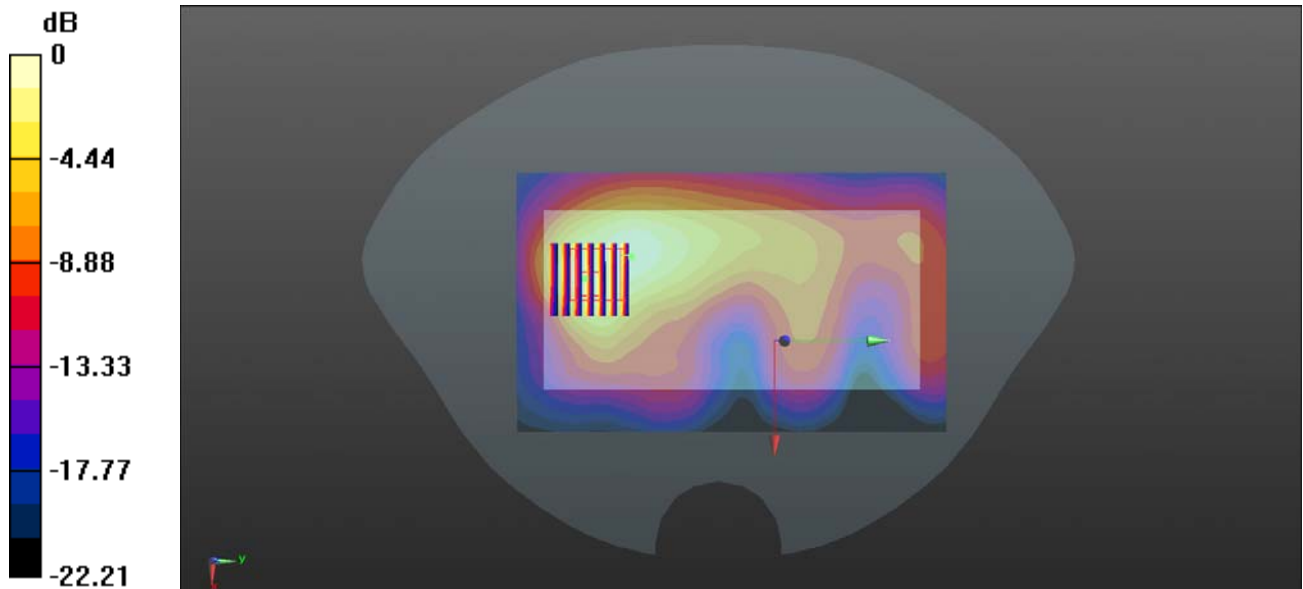
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.347 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.55 W/kg

**SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.154 W/kg**

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



0 dB = 0.724 W/kg

**MEAS.32 Left Head with Cheek on High Channel in LTE Band 12 mode with Antenna Up 1RB**

Date: 2020.06.19

Communication System Band: Band 12, E-UTRA/FDD (699.0 - 716.0 MHz); Frequency: 711 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 711 \text{ MHz}$ ;  $\sigma = 0.884 \text{ S/m}$ ;  $\epsilon_r = 42.52$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 23130/Area Scan (71x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0876 W/kg

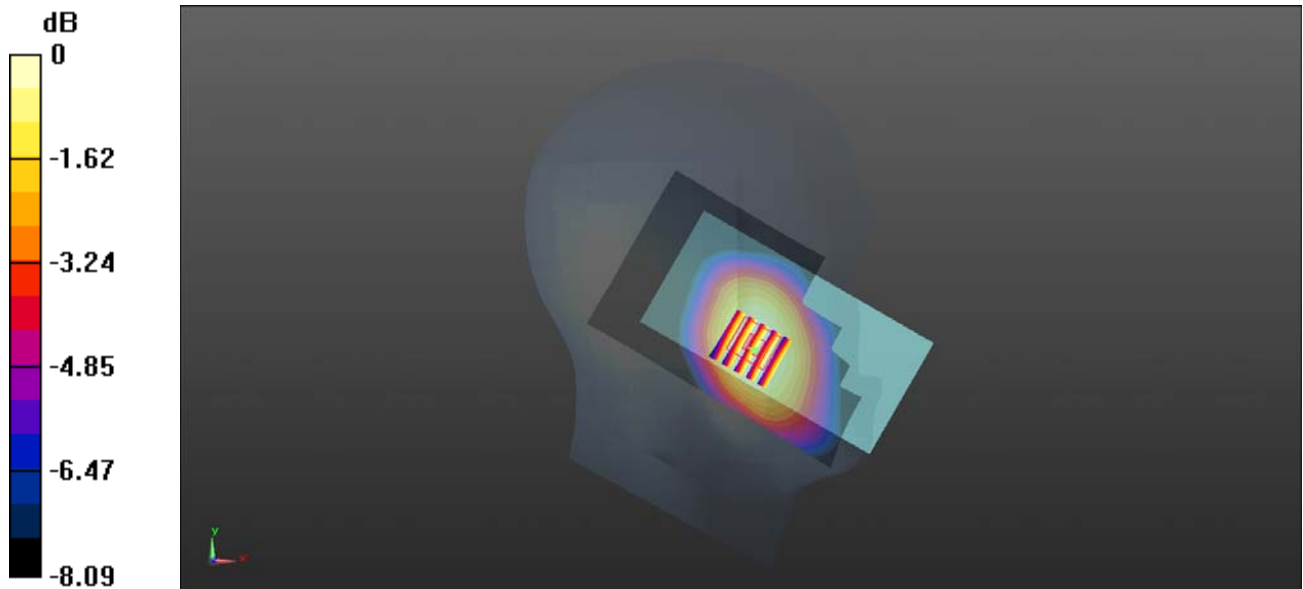
**Ch 23130/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 2.726 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.100 W/kg

**SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.067 W/kg**

Maximum value of SAR (measured) = 0.0867 W/kg



0 dB = 0.0867 W/kg

**MEAS.33 Body Plane with Front Side 15mm on High Channel in LTE Band 12 mode with Antenna Down 1RB**

Date: 2020.06.19

Communication System Band: Band 12, E-UTRA/FDD (699.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.884$  S/m;  $\epsilon_r = 42.52$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.130 W/kg

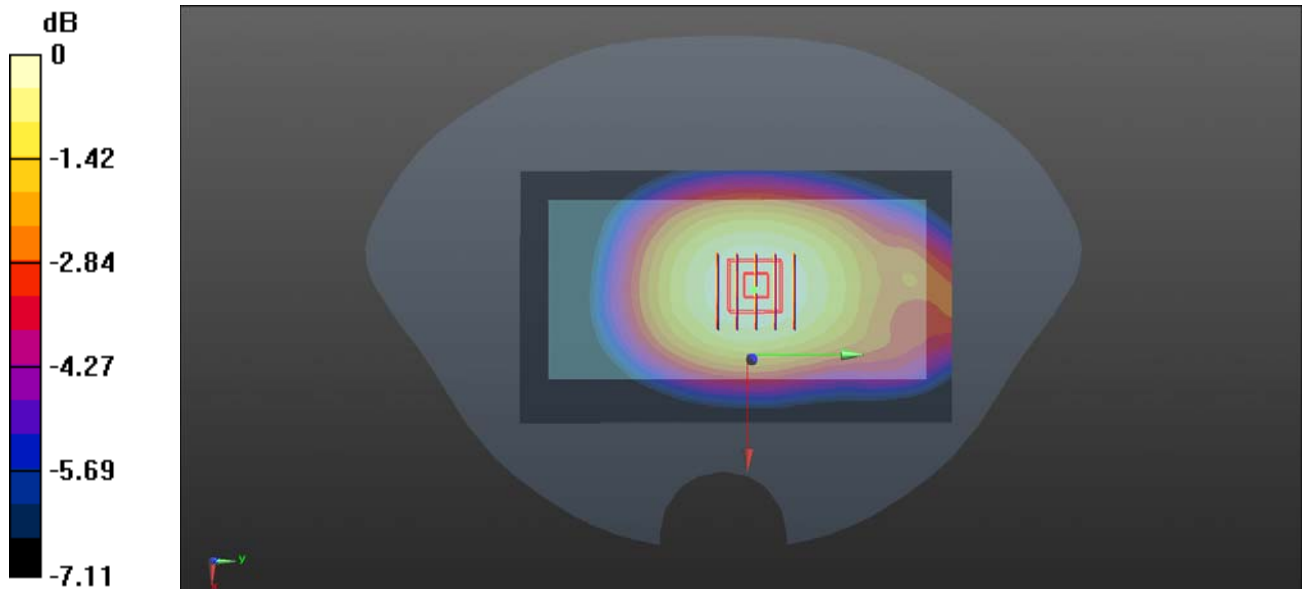
**Ch23130/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.16 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.149 W/kg

**SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.102 W/kg**

Maximum value of SAR (measured) = 0.130 W/kg



0 dB = 0.130 W/kg

**MEAS.34 Body Plane with Right Edge 10mm on High Channel in LTE Band 12 mode with Antenna Down 1RB**

Date: 2020.06.19

Communication System Band: Band 12, E-UTRA/FDD (699.0 - 716.0 MHz); Frequency: 711 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.884$  S/m;  $\epsilon_r = 42.52$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.35, 10.35, 10.35); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

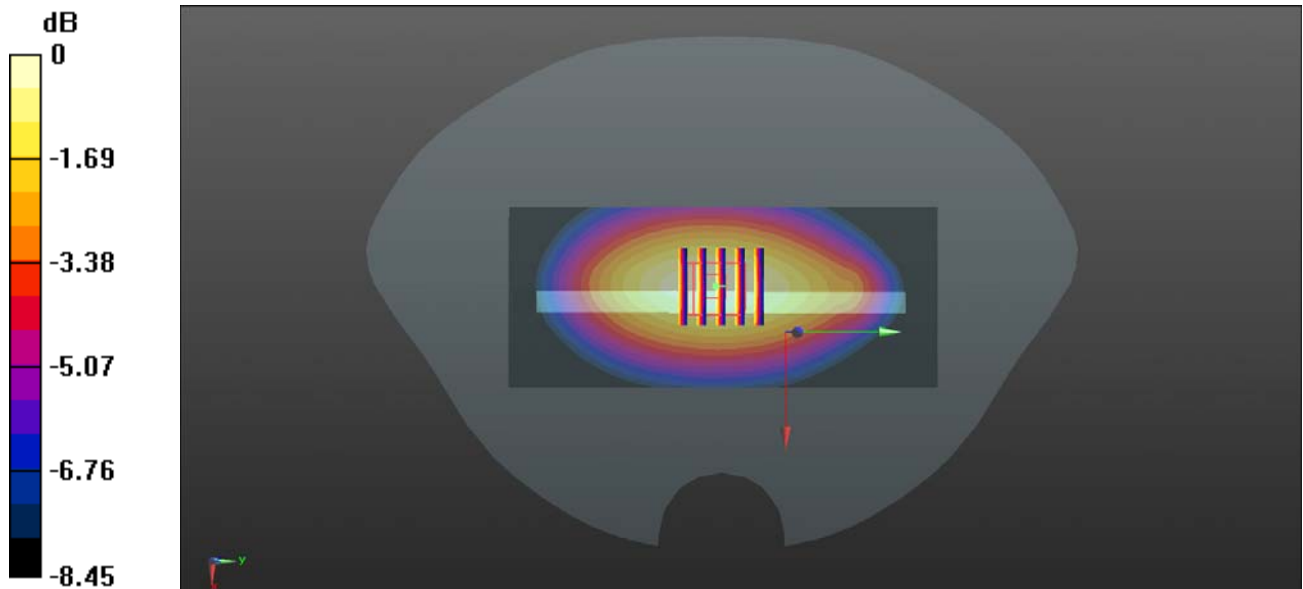
**Ch23130/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.21 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.290 W/kg

**SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.152 W/kg**

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



0 dB = 0.226 W/kg

**MEAS.35 Right Head with Cheek on High Channel in LTE Band 26 mode with Antenna Up 1RB**

Date: 2020.06.24

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

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.689$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

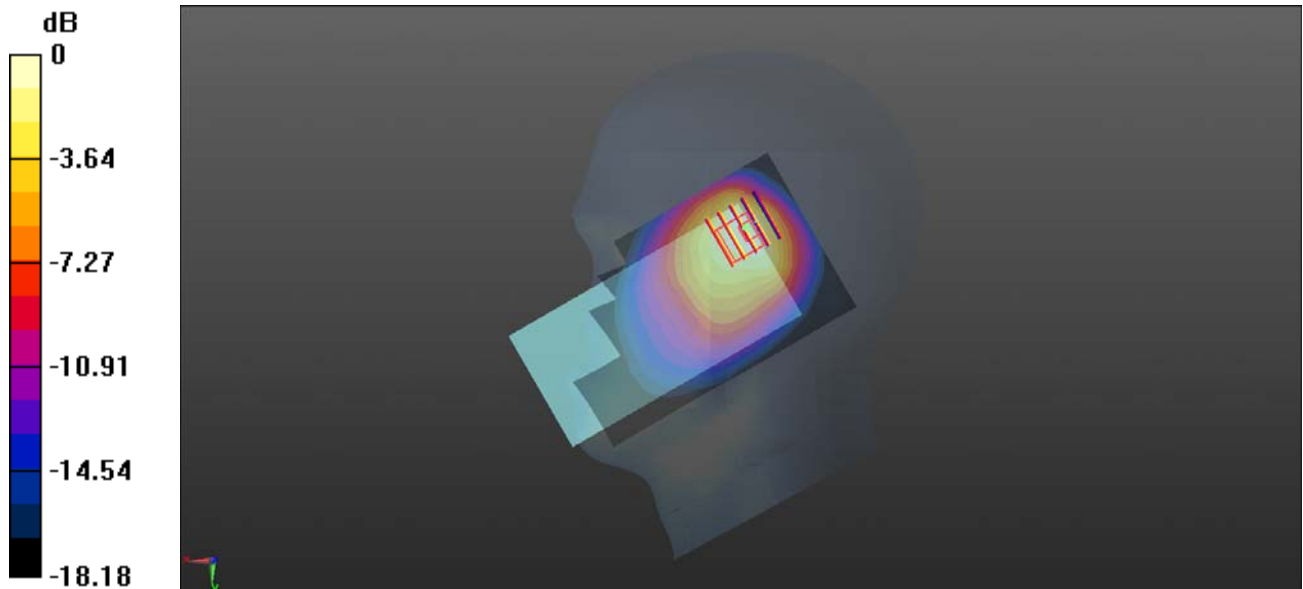
**Ch26965/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.72 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.851 W/kg

**SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.248 W/kg**

Maximum value of SAR (measured) = 0.548 W/kg



0 dB = 0.548 W/kg

**MEAS.36 Body Plane with Front Side 15mm on High Channel in LTE Band 26 mode with Antenna Down 1RB**

Date: 2020.06.24

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

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.689$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.169 W/kg

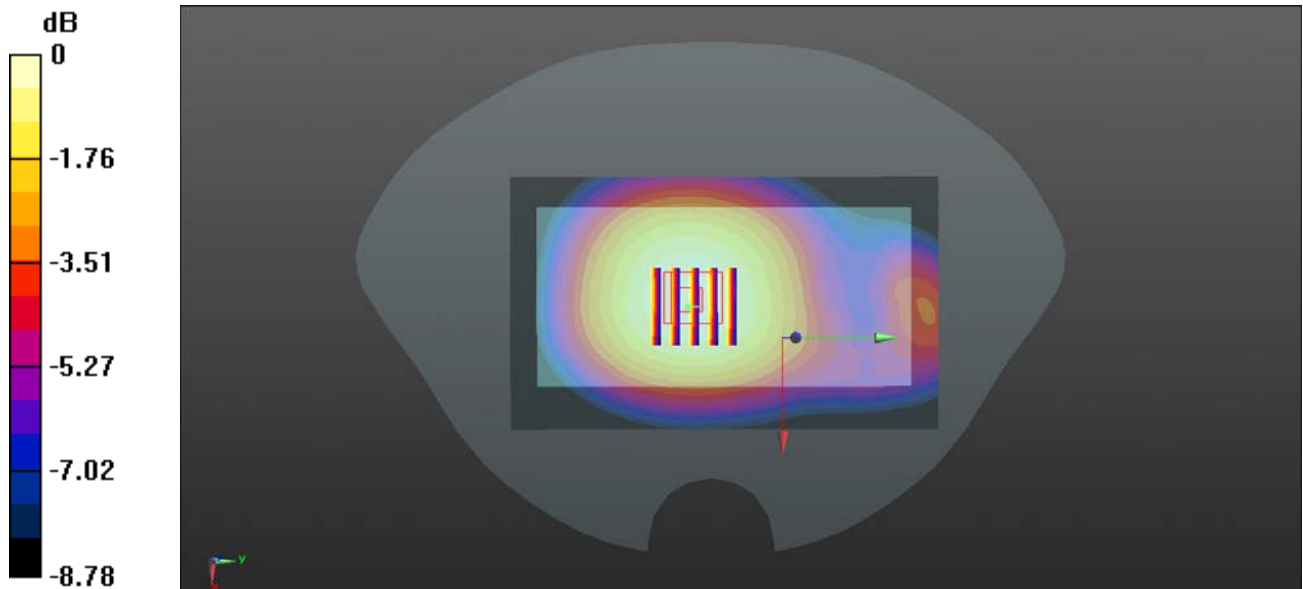
**Ch26965/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.40 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.206 W/kg

**SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.122 W/kg**

Maximum value of SAR (measured) = 0.170 W/kg



**MEAS.37 Body Plane with Back Side 10mm on High Channel in LTE Band 26 mode with Antenna Down 1RB**

Date: 2020.06.24

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

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.689$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.173 W/kg

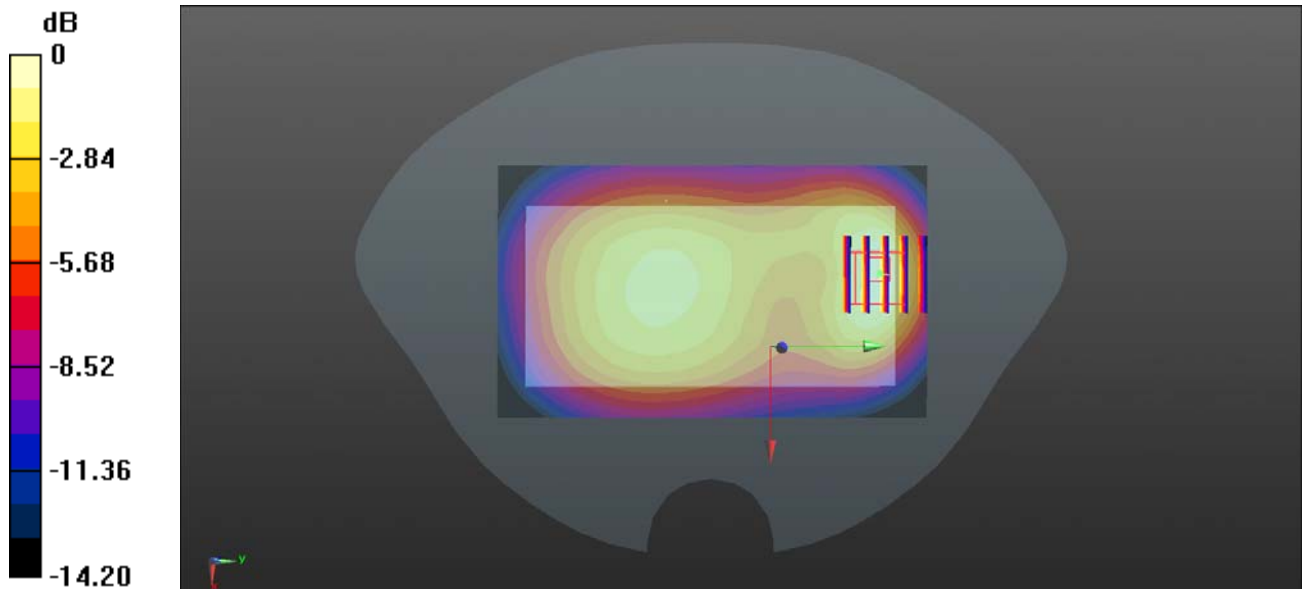
**Ch26965/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.99 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.298 W/kg

**SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.095 W/kg**

Maximum value of SAR (measured) = 0.179 W/kg



0 dB = 0.179 W/kg



**MEAS.38 Right Head with Tilt on Low Channel in LTE Band 66 mode with Antenna Up 50RB**

Date: 2020.07.04

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1780.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1720$  MHz;  $\sigma = 1.342$  S/m;  $\epsilon_r = 40.256$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.4 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 132072/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.893 W/kg

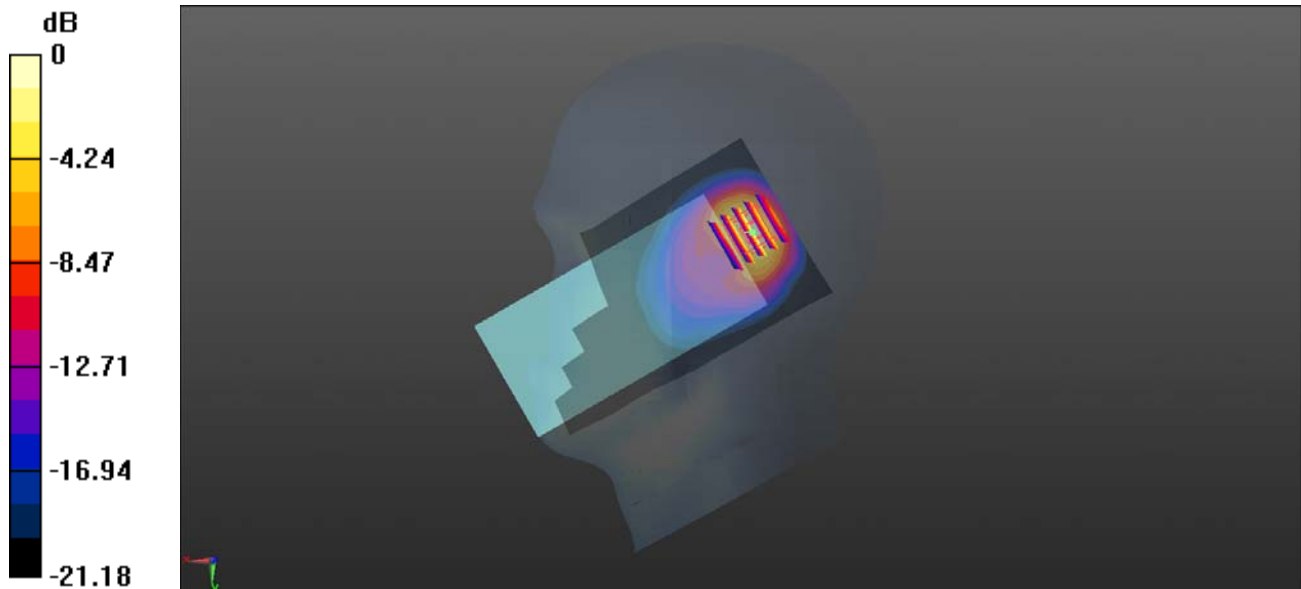
**Ch 132072/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.401 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.70 W/kg

**SAR(1 g) = 0.823 W/kg; SAR(10 g) = 0.380 W/kg**

Maximum value of SAR (measured) = 0.974 W/kg



0 dB = 0.974 W/kg

**MEAS.39 Body Plane with Front Side 15mm on High Channel in LTE Band 66 mode with Antenna Down 1RB**

Date: 2020.07.04

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1780.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1720$  MHz;  $\sigma = 1.342$  S/m;  $\epsilon_r = 40.256$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 132322/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.453 W/kg

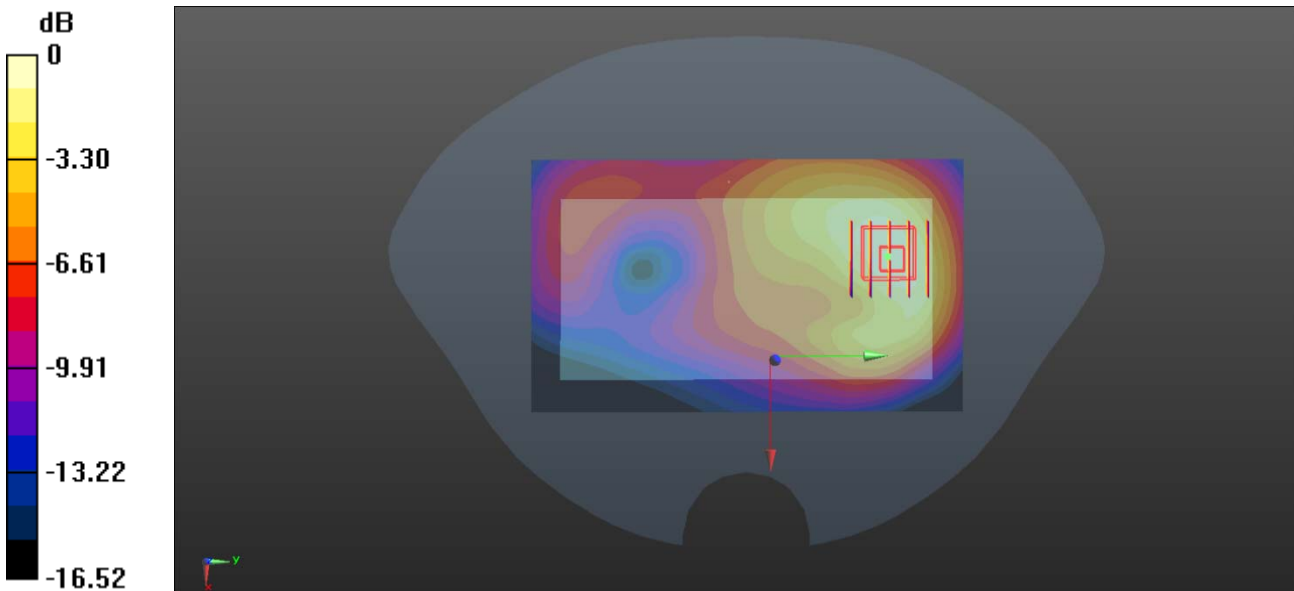
**Ch 132322/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.914 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.633 W/kg

**SAR(1 g) = 0.411 W/kg; SAR(10 g) = 0.255 W/kg**

Maximum value of SAR (measured) = 0.444 W/kg



0 dB = 0.444 W/kg

**MEAS.40 Body Plane with Bottom Edge 10mm on Low Channel in LTE Band 66 mode with Antenna Down 1RB**

Date: 2020.07.04

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1780.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1720$  MHz;  $\sigma = 1.339$  S/m;  $\epsilon_r = 40.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 132072/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.926 W/kg

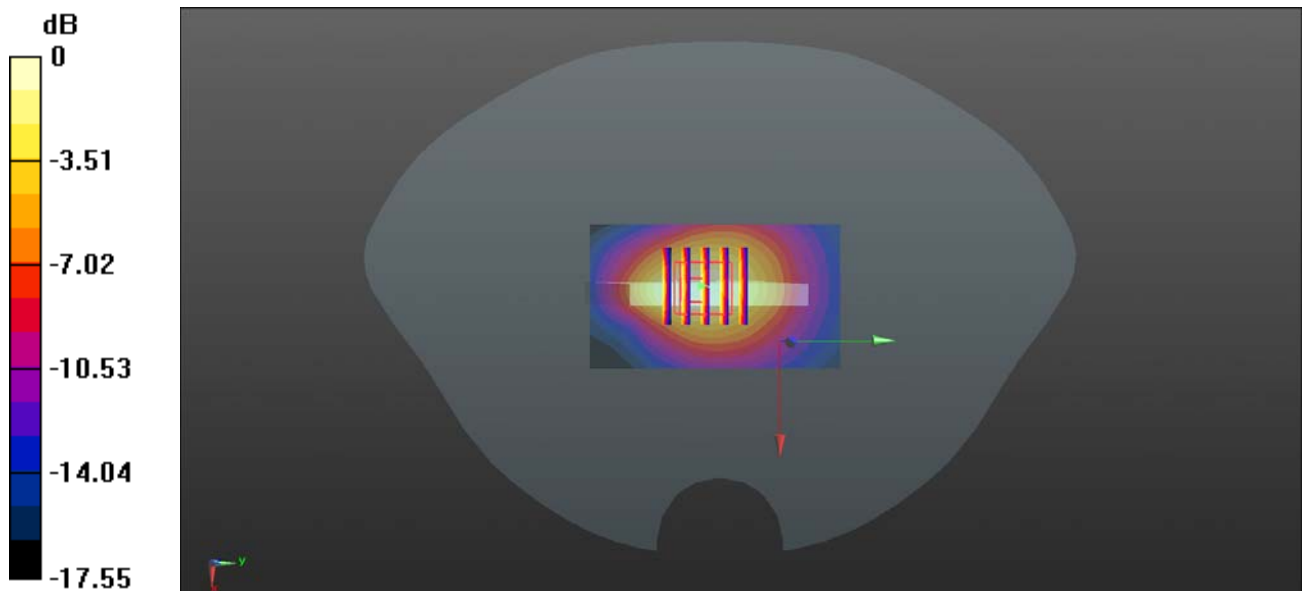
**Ch 132072/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.10 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 0.814 W/kg; SAR(10 g) = 0.455 W/kg**

Maximum value of SAR (measured) = 0.885 W/kg



0 dB = 0.885 W/kg

**MEAS.41 Body Plane with Bottom Edge 0mm on Low Channel in LTE Band 66 mode with Antenna Down 1RB**

Date: 2020.07.04

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1780.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1720$  MHz;  $\sigma = 1.339$  S/m;  $\epsilon_r = 40.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch 132072/Area Scan (41x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

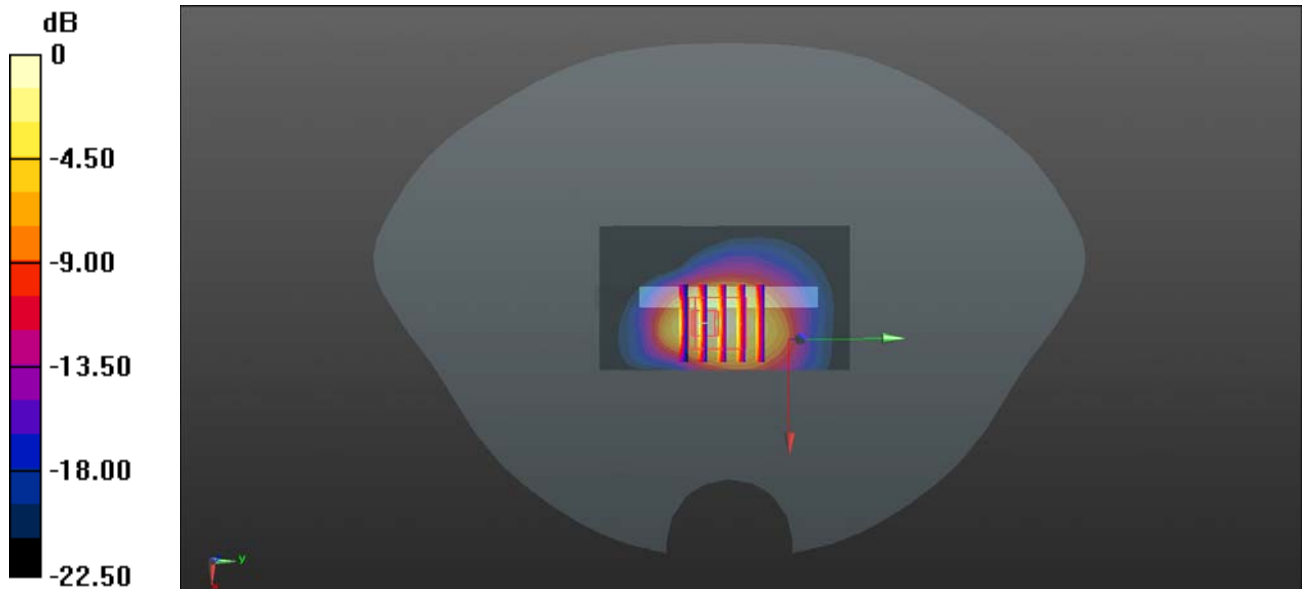
**Ch 132072/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 38.49 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 9.74 W/kg

**SAR(1 g) = 4.14 W/kg; SAR(10 g) = 1.88 W/kg**

Maximum value of SAR (measured) = 5.11 W/kg



0 dB = 5.11 W/kg

**MEAS.42 Right Head with Tilt on High Channel in LTE Band 38 mode with Antenna Up 1RB**

Date: 2020.06.29

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

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 1.949$  S/m;  $\epsilon_r = 39.423$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.7 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 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) = 0.712 W/kg

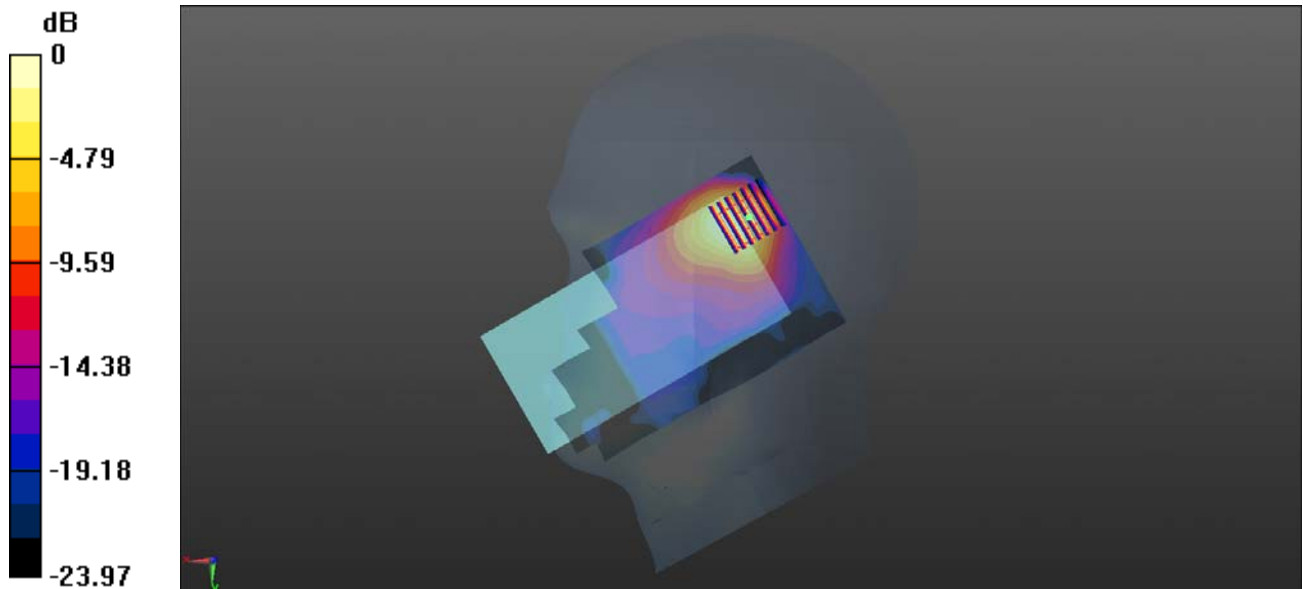
**Ch38150/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.10 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.81 W/kg

**SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.261 W/kg**

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



0 dB = 0.729 W/kg

**MEAS.43 Body Plane with Back Side 15mm on High Channel in LTE Band 38 mode with Antenna Up 1RB**

Date: 2020.06.29

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

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 1.949$  S/m;  $\epsilon_r = 39.423$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.7 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 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) = 0.154 W/kg

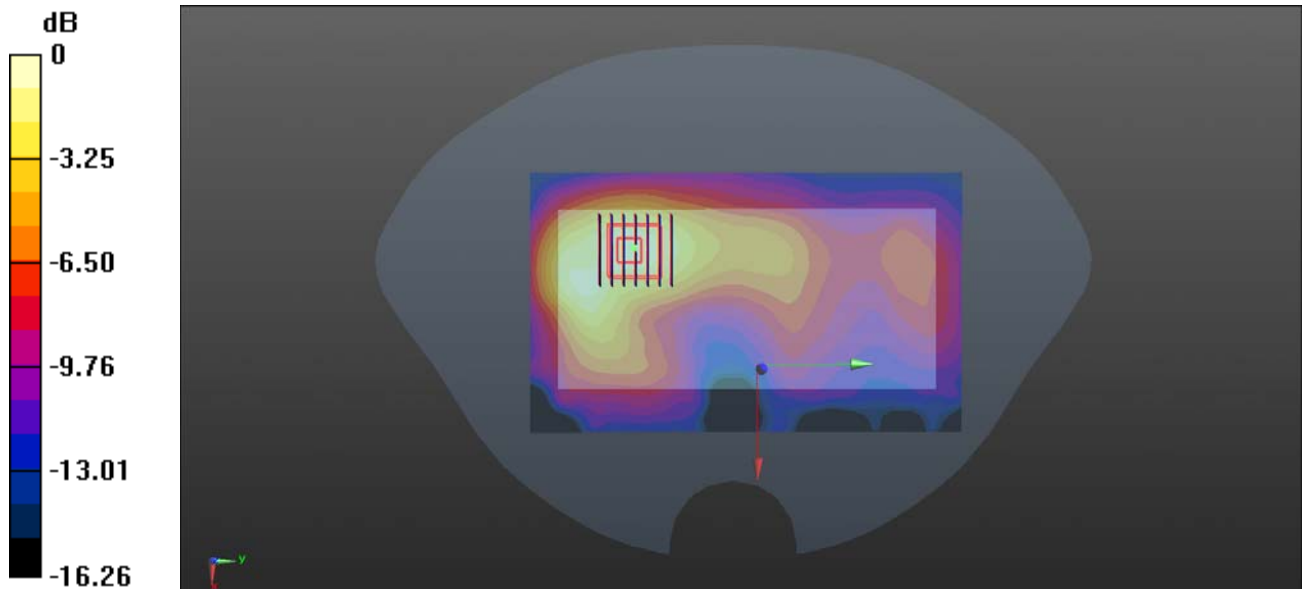
**Ch38150/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.627 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.284 W/kg

**SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.072 W/kg**

Maximum value of SAR (measured) = 0.160 W/kg



0 dB = 0.160 W/kg

**MEAS.44 Body Plane with Back Side 10mm on High Channel in LTE Band 38 mode with Antenna Down 1RB**

Date: 2020.06.13

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

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 1.972$  S/m;  $\epsilon_r = 39.089$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 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) = 0.371 W/kg

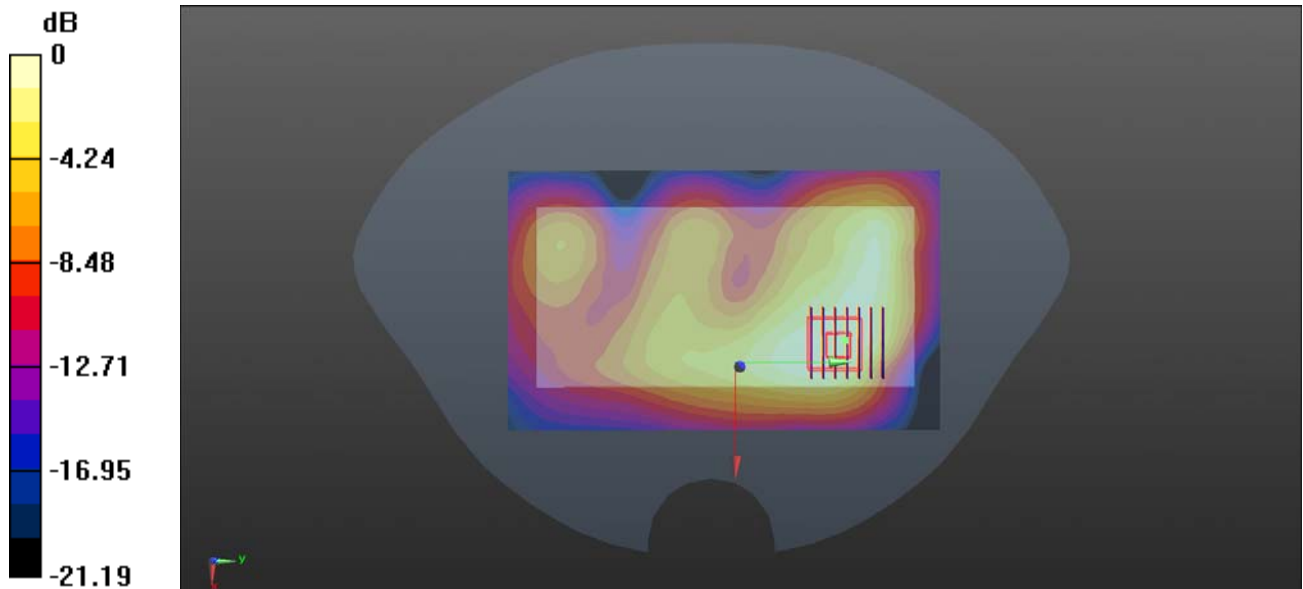
**Ch38150/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.818 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.661 W/kg

**SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.171 W/kg**

Maximum value of SAR (measured) = 0.350 W/kg



0 dB = 0.350 W/kg

**MEAS.45 Right Head with Tilt on High Channel in LTE Band 41 mode with Antenna Up 1RB**

Date: 2020.07.01

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

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.015$  S/m;  $\epsilon_r = 38.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.655 W/kg

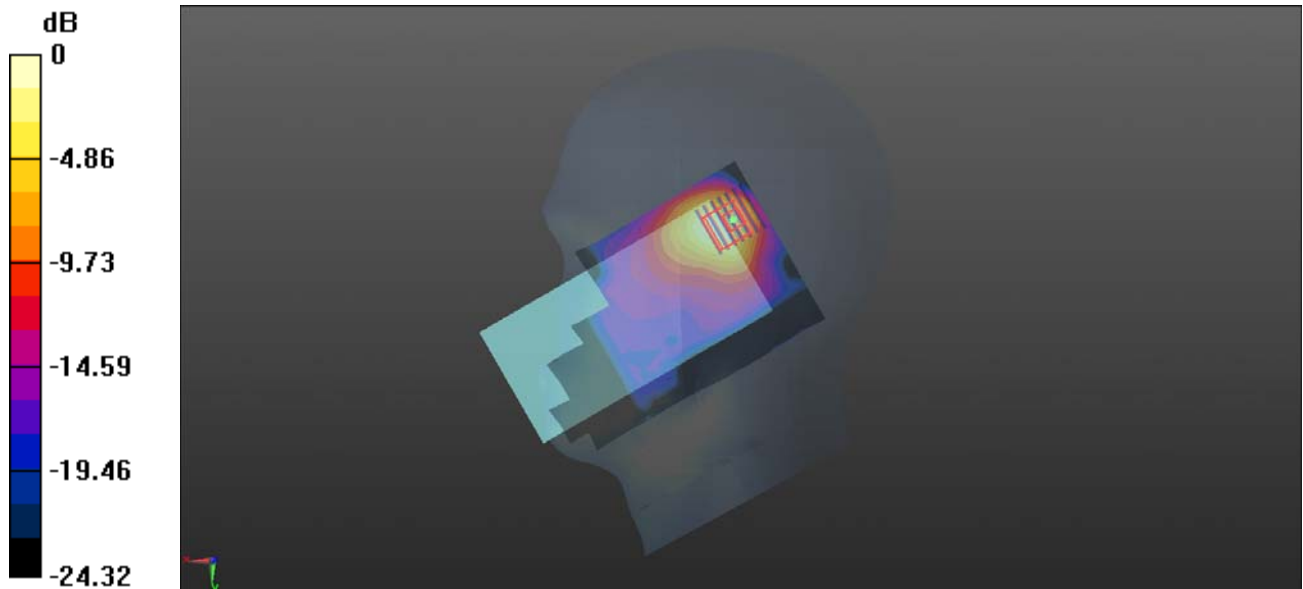
**Ch41490/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.778 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 0.566 W/kg; SAR(10 g) = 0.241 W/kg**

Maximum value of SAR (measured) = 0.676 W/kg



0 dB = 0.676 W/kg



**MEAS.46 Body Plane with Back Side 15mm on High Channel in LTE Band 41 mode with Antenna Up 1RB**

Date: 2020.07.01

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

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.015$  S/m;  $\epsilon_r = 38.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.181 W/kg

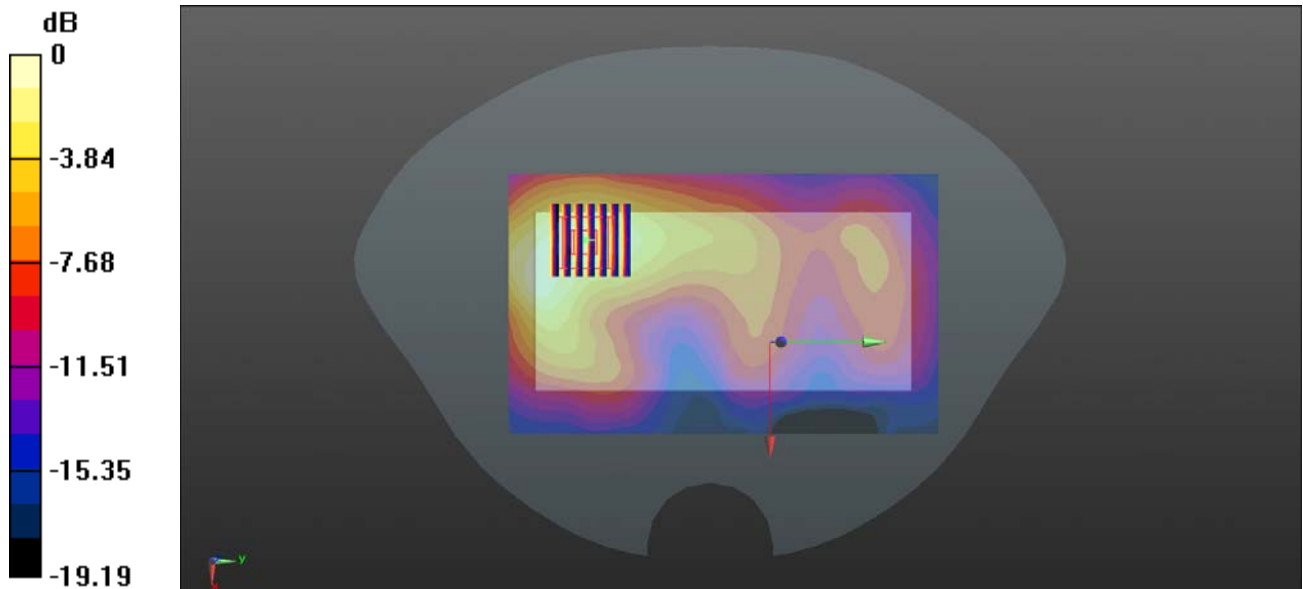
**Ch41490/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.730 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.366 W/kg

**SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.084 W/kg**

Maximum value of SAR (measured) = 0.188 W/kg



0 dB = 0.188 W/kg

**MEAS.47 Body Plane with Back Side 15mm on High Channel in LTE Band 41 mode with Antenna Up 1RB**

Date: 2020.07.02

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

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.017$  S/m;  $\epsilon_r = 38.438$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.353 W/kg

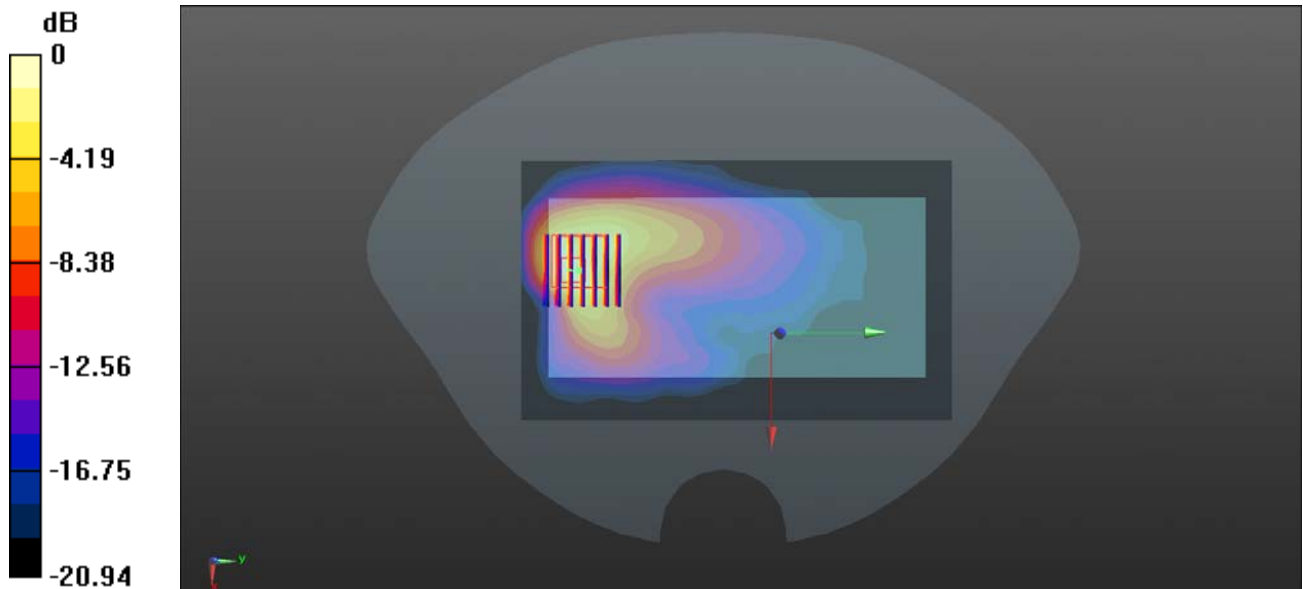
**Ch41490/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.057 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.839 W/kg

**SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.150 W/kg**

Maximum value of SAR (measured) = 0.361 W/kg



0 dB = 0.361 W/kg

**MEAS.48 Left Head with Cheek on Middle Channel in IEEE802.11b mode**

Date: 2020.06.25

Communication System Band: WLAN(b); Frequency: 2437 MHz; Duty Cycle: 1:1.008

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.798$  S/m;  $\epsilon_r = 39.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.9 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch6/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

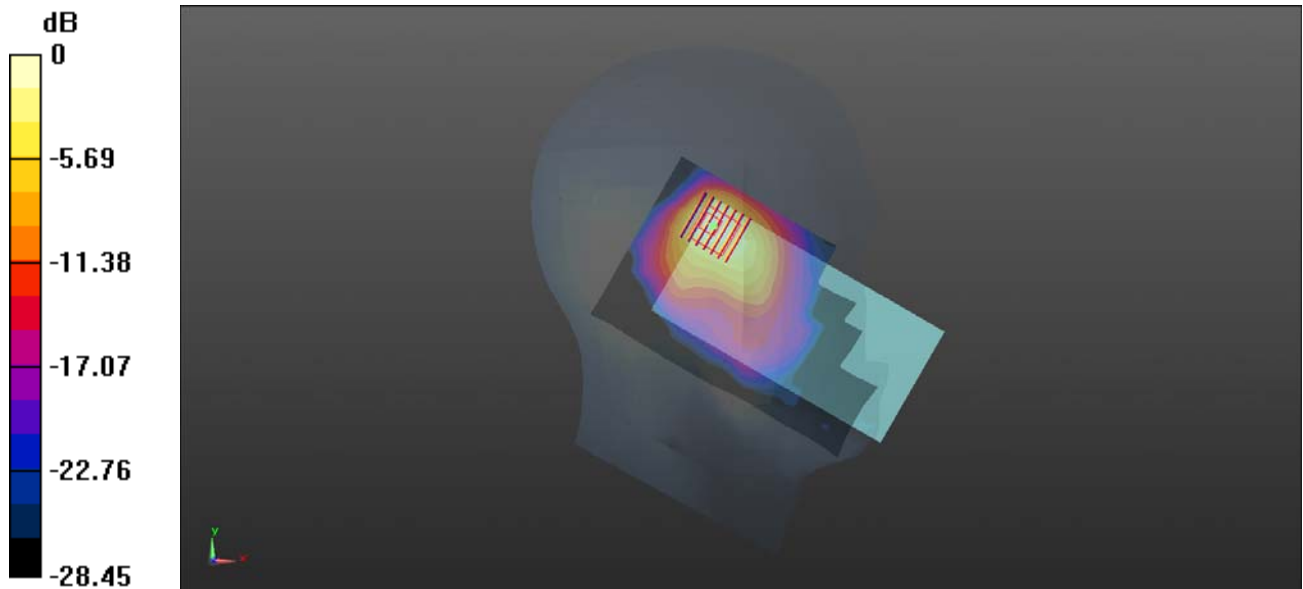
**Ch6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.51 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 2.13 W/kg

**SAR(1 g) = 0.863 W/kg; SAR(10 g) = 0.385 W/kg**

Maximum value of SAR (measured) = 0.960 W/kg



0 dB = 0.960 W/kg

**MEAS.49 Body Plane with Back Side 15mm on Middle Channel in IEEE802.11b mode**

Date: 2020.06.25

Communication System Band: WLAN(b); Frequency: 2437 MHz; Duty Cycle: 1:1.008

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.798$  S/m;  $\epsilon_r = 39.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.9 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch6/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.168 W/kg

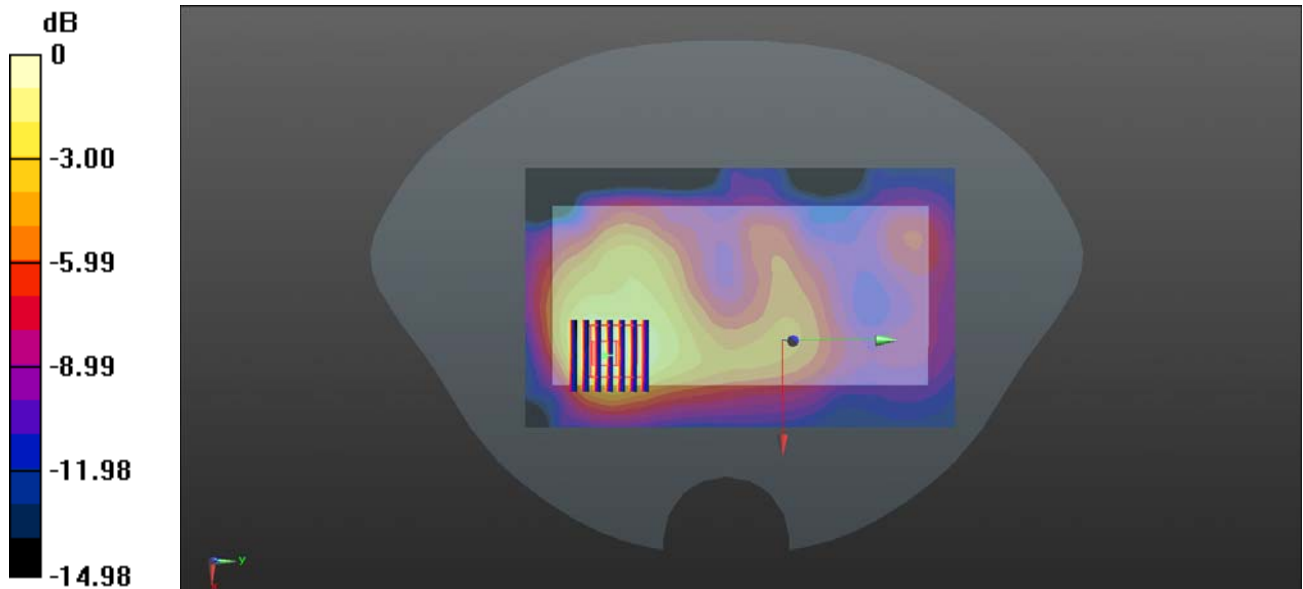
**Ch6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.365 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.279 W/kg

**SAR(1 g) = 0.150 W/kg; SAR(10 g) = 0.079 W/kg**

Maximum value of SAR (measured) = 0.166 W/kg



0 dB = 0.166 W/kg

**MEAS.50 Body Plane with Back Side 10mm on Middle Channel in IEEE802.11b mode**

Date: 2020.06.25

Communication System Band: WLAN(b); Frequency: 2437 MHz; Duty Cycle: 1:1.008

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.798$  S/m;  $\epsilon_r = 39.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.9 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch6/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.398 W/kg

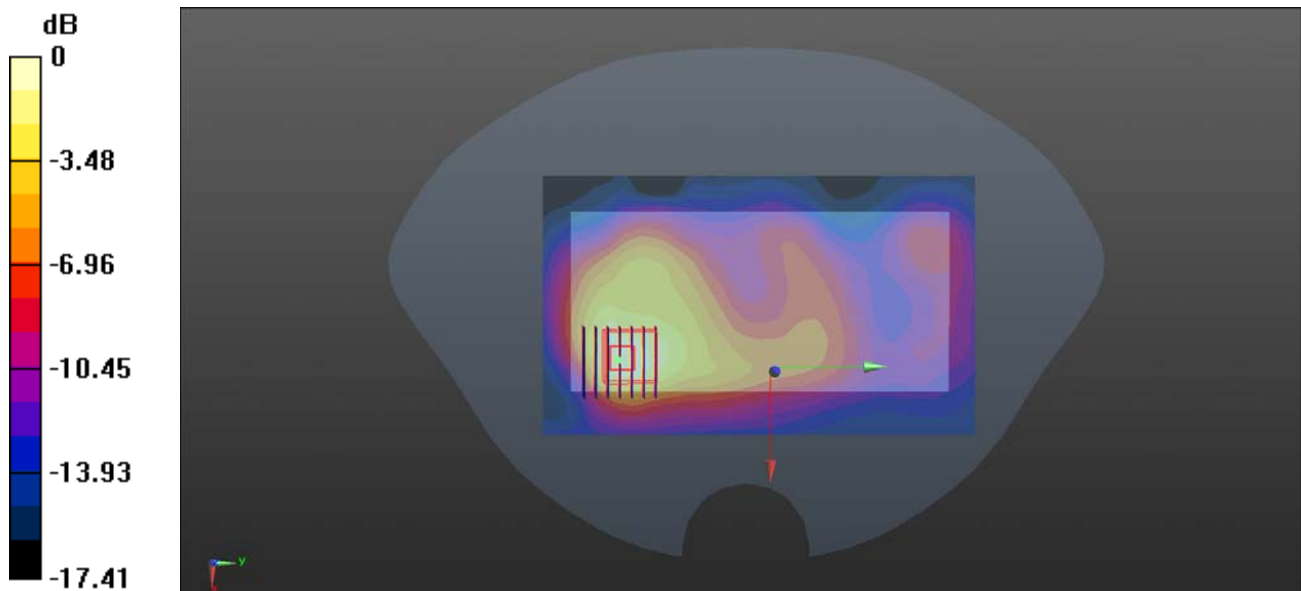
**Ch6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.899 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.685 W/kg

**SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.174 W/kg**

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



0 dB = 0.386 W/kg

**MEAS.51 Left Head with Cheek on Channel 54 in IEEE802.11n HT40 mode**

Date: 2020.06.14

Communication System Band: WLAN(ac) 80MHz; Frequency: 5270 MHz; Duty Cycle: 1:1.069

Medium parameters used:  $f = 5270$  MHz;  $\sigma = 4.728$  S/m;  $\epsilon_r = 35.962$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.3 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch54/Area Scan (111x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.88 W/kg

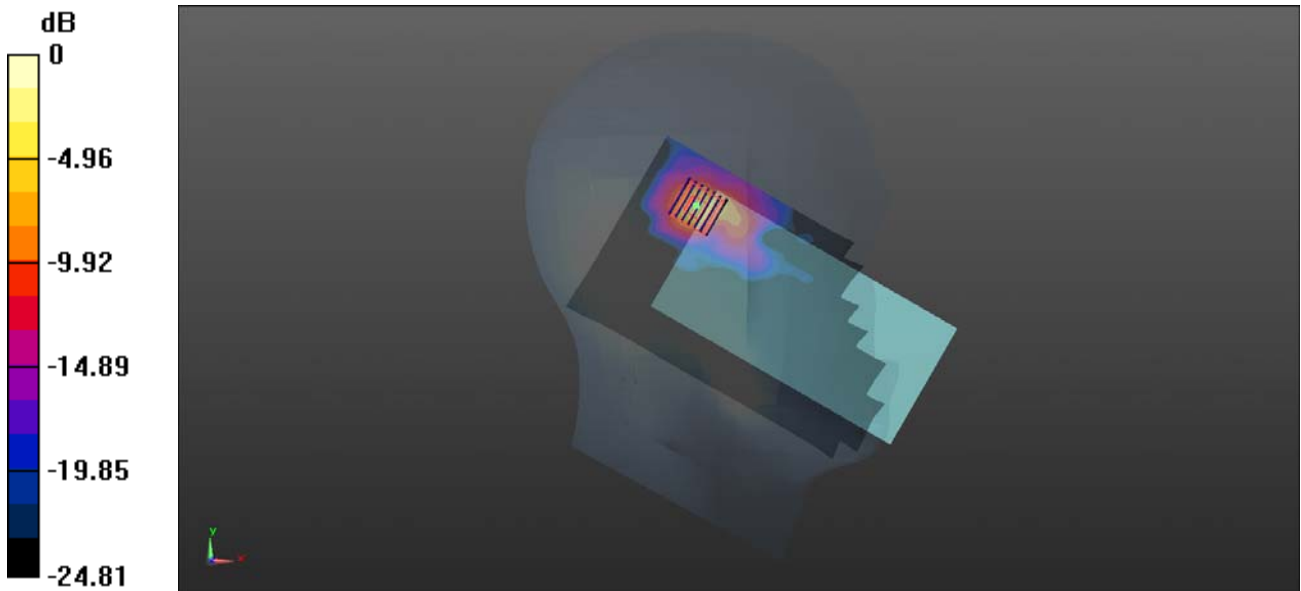
**Ch54/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.320 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 5.87 W/kg

**SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.259 W/kg**

Maximum value of SAR (measured) = 2.59 W/kg



0 dB = 2.59 W/kg

**MEAS.52 Left Head with Cheek on Channel 122 in IEEE802.11ac VHT80 mode**

Date: 2020.06.17

Communication System Band: WLAN(ac) 80MHz; Frequency: 5610 MHz; Duty Cycle: 1:1.135

Medium parameters used (interpolated):  $f = 5610$  MHz;  $\sigma = 5.075$  S/m;  $\epsilon_r = 35.657$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch122/Area Scan (111x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.38 W/kg

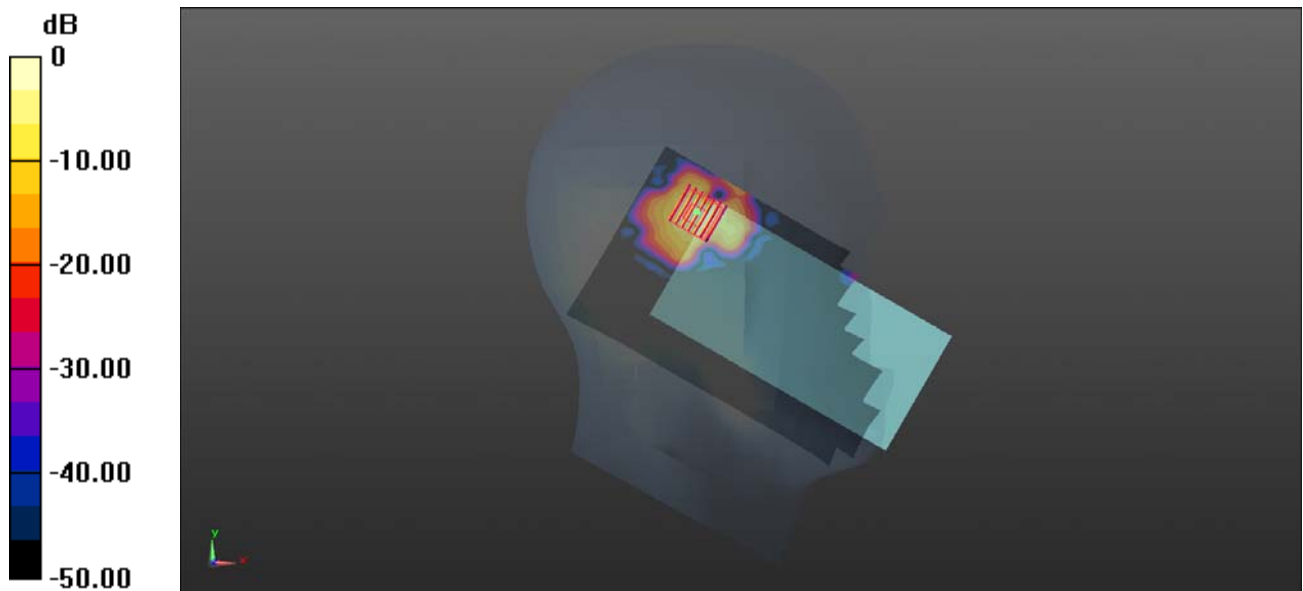
**Ch122/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.373 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 5.31 W/kg

**SAR(1 g) = 0.970 W/kg; SAR(10 g) = 0.218 W/kg**

Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.22 W/kg

**MEAS.53 Left Head with Tilt on Channel 155 in IEEE802.11ac VHT80 mode**

Date: 2020.06.18

Communication System Band: WLAN(ac) 80Mhz; Frequency: 5775 MHz;Duty Cycle: 1:1.135

Medium parameters used (interpolated):  $f = 5775$  MHz;  $\sigma = 5.238$  S/m;  $\epsilon_r = 35.733$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.8 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch155/Area Scan (111x191x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 3.42 W/kg

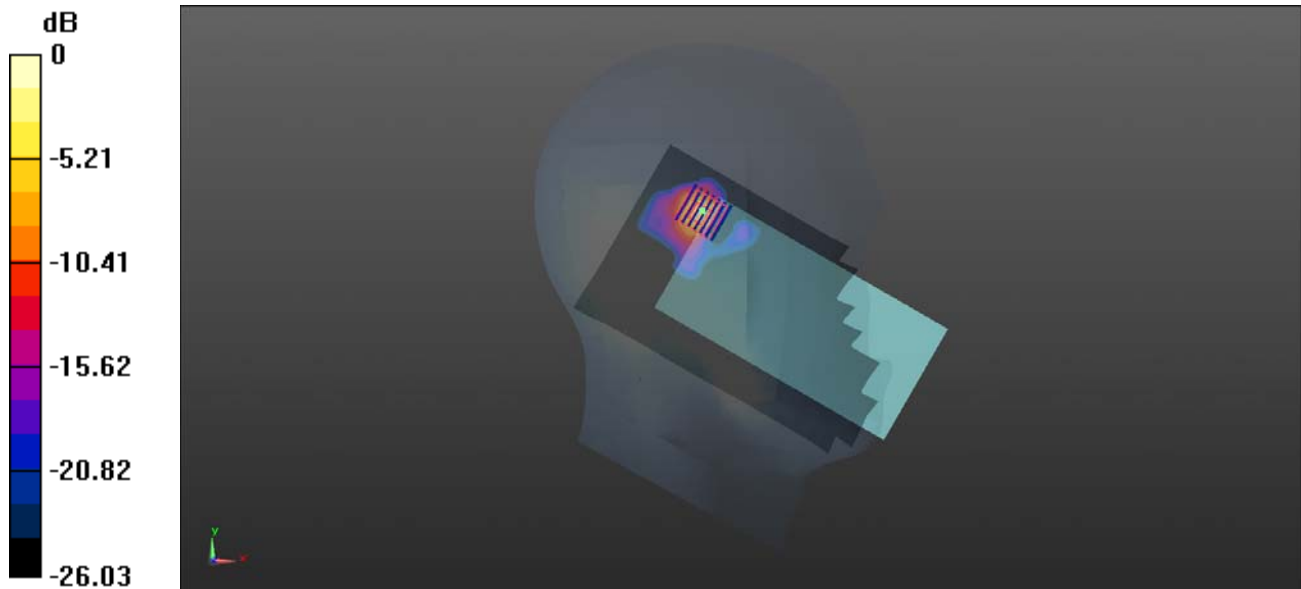
**Ch155/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.461 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 5.72 W/kg

**SAR(1 g) = 0.930 W/kg; SAR(10 g) = 0.200 W/kg**

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



0 dB = 2.23 W/kg



**MEAS.54 Body Plane with Back Side 15mm on Channel 54 in IEEE802.11n HT40 mode**

Date: 2020.06.14

Communication System Band: WLAN(n) 40Mhz; Frequency: 5270 MHz;Duty Cycle: 1:1.069

Medium parameters used: f = 5270 MHz;  $\sigma = 4.728$  S/m;  $\epsilon_r = 35.962$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch54/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

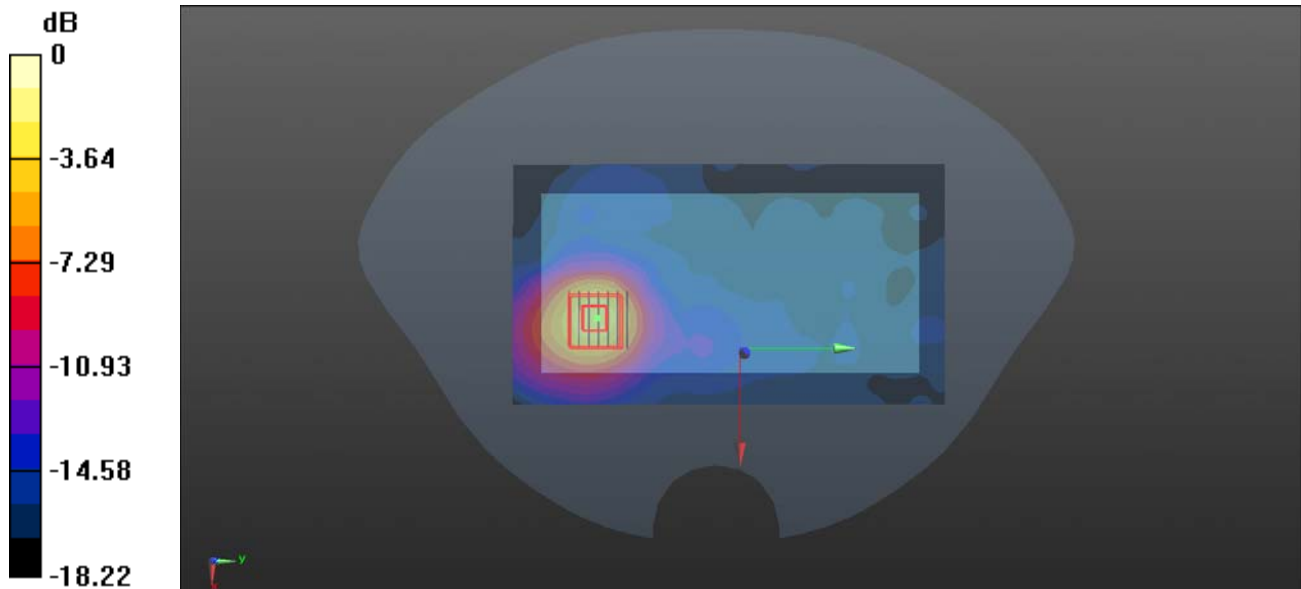
**Ch54/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.836 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 2.66 W/kg

**SAR(1 g) = 0.778 W/kg; SAR(10 g) = 0.317 W/kg**

Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg

**MEAS.55 Body Plane with Back Side 15mm on Channel 110 in IEEE802.11n HT40 mode**

Date: 2020.06.16

Communication System Band: WLAN(n) 40Mhz; Frequency: 5550 MHz;Duty Cycle: 1:1.069

Medium parameters used (interpolated):  $f = 5550$  MHz;  $\sigma = 5.007$  S/m;  $\epsilon_r = 35.968$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch110/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.579 W/kg

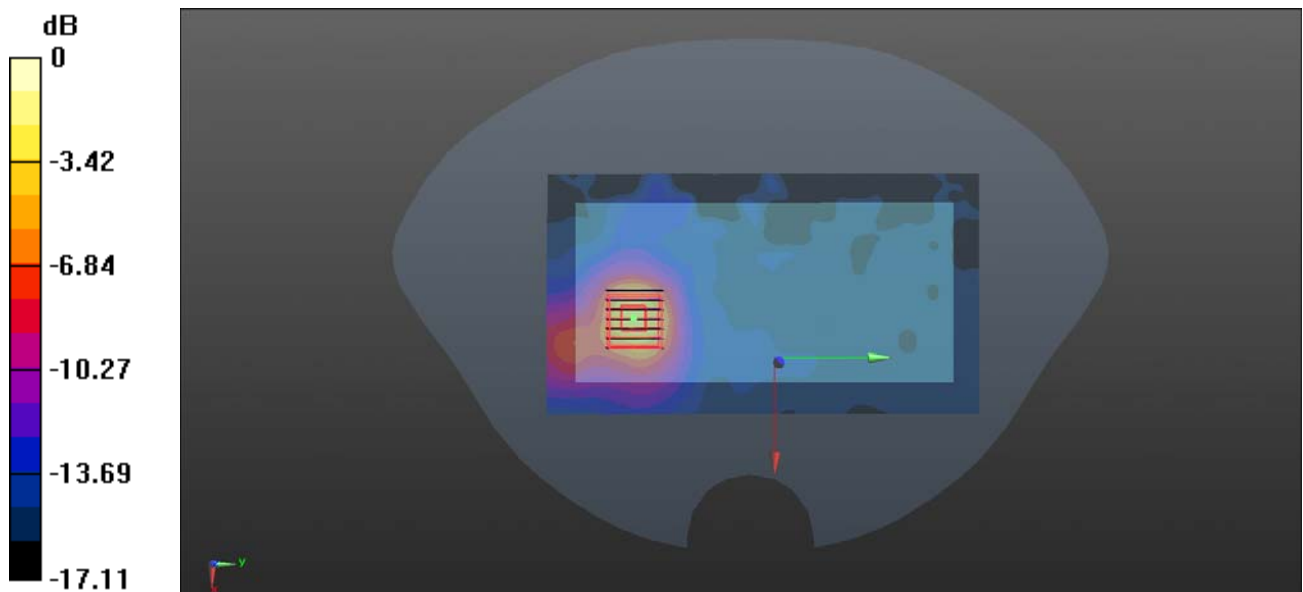
**Ch110/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.529 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 2.03 W/kg

**SAR(1 g) = 0.553 W/kg; SAR(10 g) = 0.215 W/kg**

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



0 dB = 1.04 W/kg

**MEAS.56 Body Plane with Back Side 15mm on Channel 151 in IEEE802.11n HT40 mode**

Date: 2020.06.18

Communication System Band: WLAN(n) 40MHz; Frequency: 5755 MHz; Duty Cycle: 1:1.069

Medium parameters used (interpolated):  $f = 5755$  MHz;  $\sigma = 5.213$  S/m;  $\epsilon_r = 35.841$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch151/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.232 W/kg

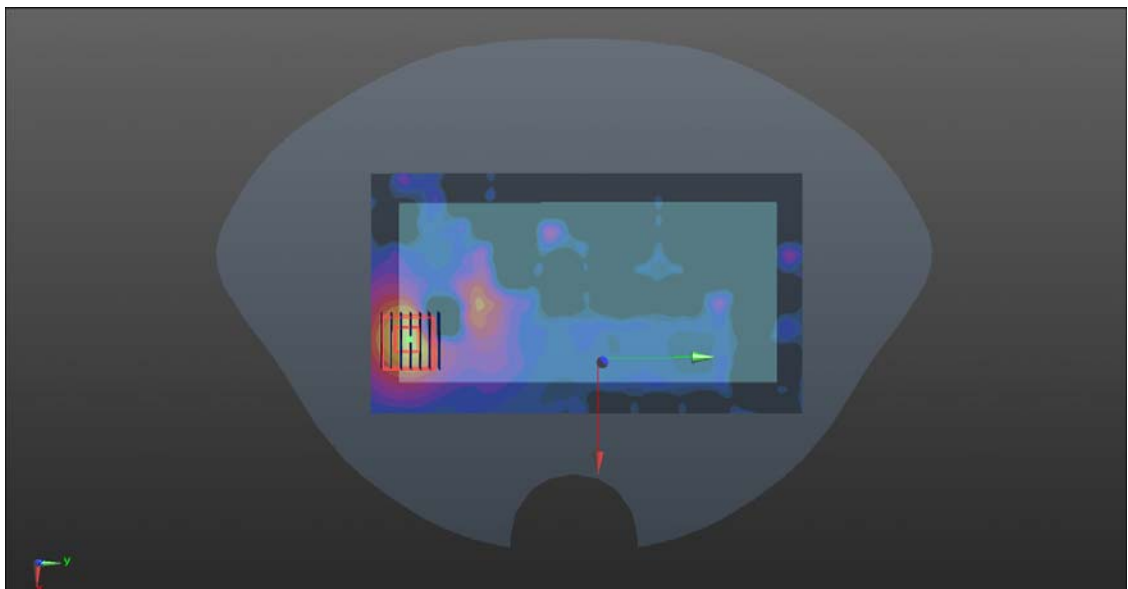
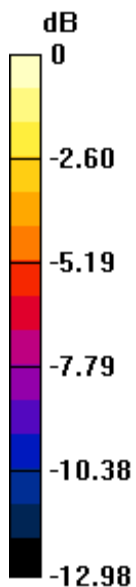
**Ch151/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.758 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.781 W/kg

**SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.077 W/kg**

Maximum value of SAR (measured) = 0.363 W/kg



0 dB = 0.363 W/kg

**MEAS.57 Body Plane with Back Side 10mm on Channel 46 in IEEE802.11n HT40 mode**

Date: 2020.06.15

Communication System Band: WLAN(n) 40MHz; Frequency: 5230 MHz; Duty Cycle: 1:1.069

Medium parameters used:  $f = 5230$  MHz;  $\sigma = 4.669$  S/m;  $\epsilon_r = 36.168$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch46/Area Scan (101x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.912 W/kg

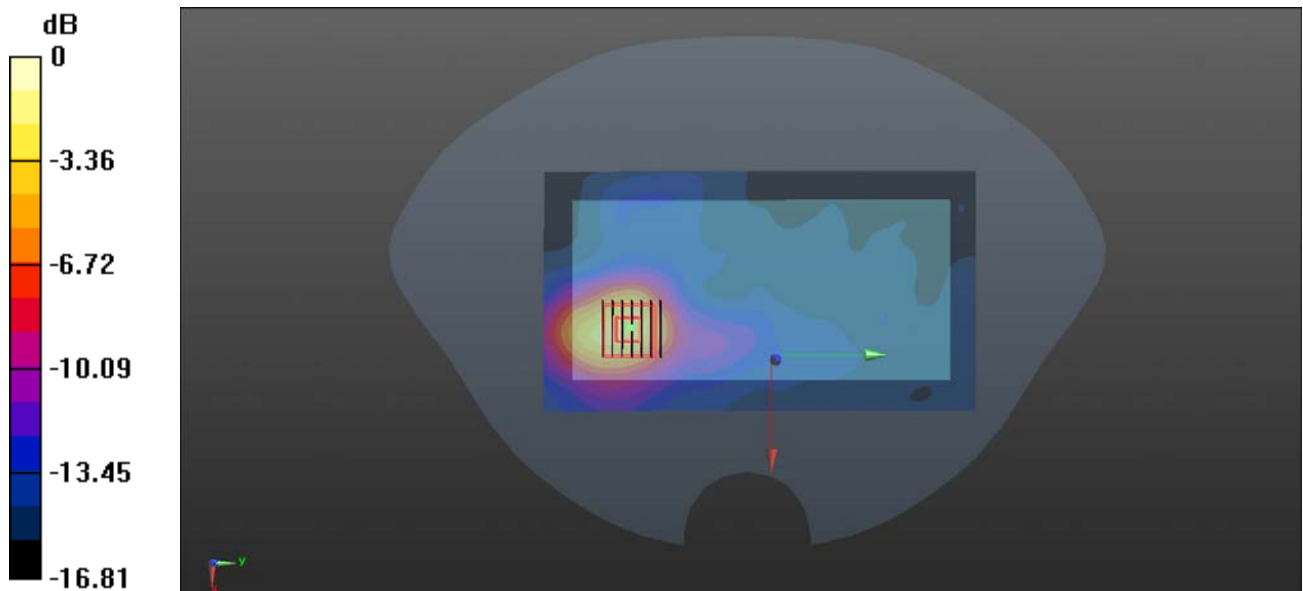
**Ch46/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.587 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 2.64 W/kg

**SAR(1 g) = 0.831 W/kg; SAR(10 g) = 0.343 W/kg**

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



0 dB = 1.51 W/kg

**MEAS.58 Body Plane with Top Edge 10mm on Channel 151 in IEEE802.11n HT40 mode**

Date: 2020.06.18

Communication System Band: WLAN(n) 40MHz; Frequency: 5755 MHz; Duty Cycle: 1:1.069

Medium parameters used (interpolated):  $f = 5755$  MHz;  $\sigma = 5.213$  S/m;  $\epsilon_r = 35.841$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.06, 5.06, 5.06); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch151/Area Scan (81x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.35 W/kg

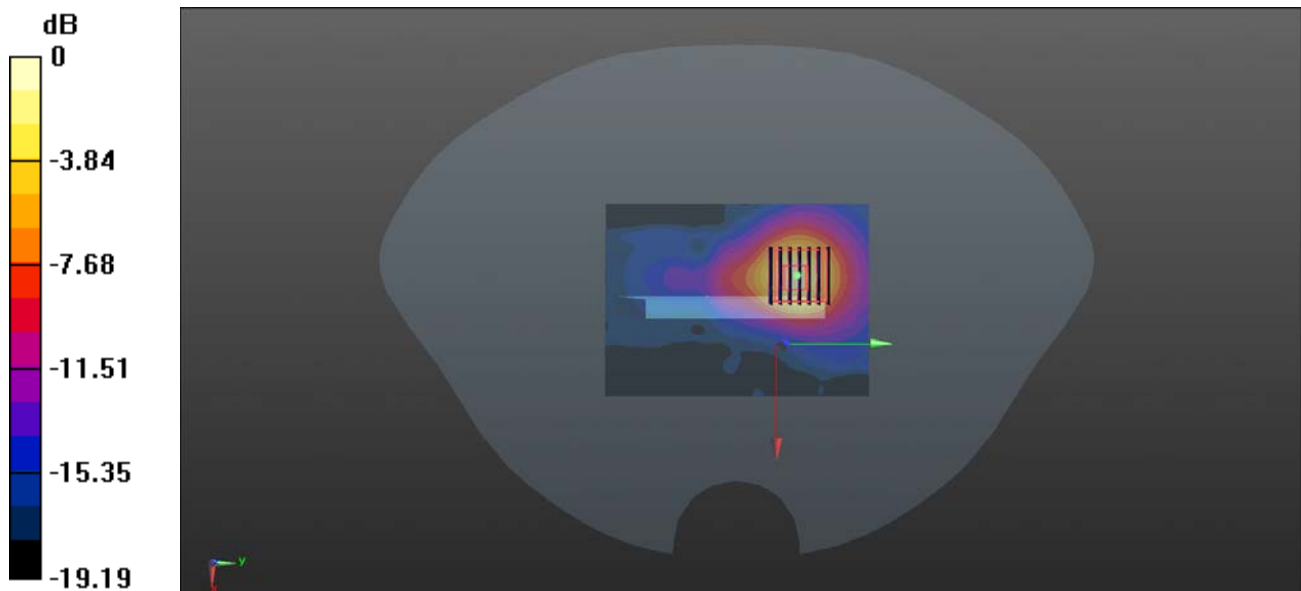
**Ch151/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.316 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 0.652 W/kg; SAR(10 g) = 0.213 W/kg**

Maximum value of SAR (measured) = 1.34 W/kg



0 dB = 1.34 W/kg

**MEAS.59 Body Plane with Top Edge 0mm on Channel 46 in IEEE802.11n HT40 mode**

Date: 2020.06.15

Communication System Band: WLAN(n) 40MHz; Frequency: 5230 MHz; Duty Cycle: 1:1.069

Medium parameters used:  $f = 5230$  MHz;  $\sigma = 4.669$  S/m;  $\epsilon_r = 36.168$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch46/Area Scan (81x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.2 W/kg

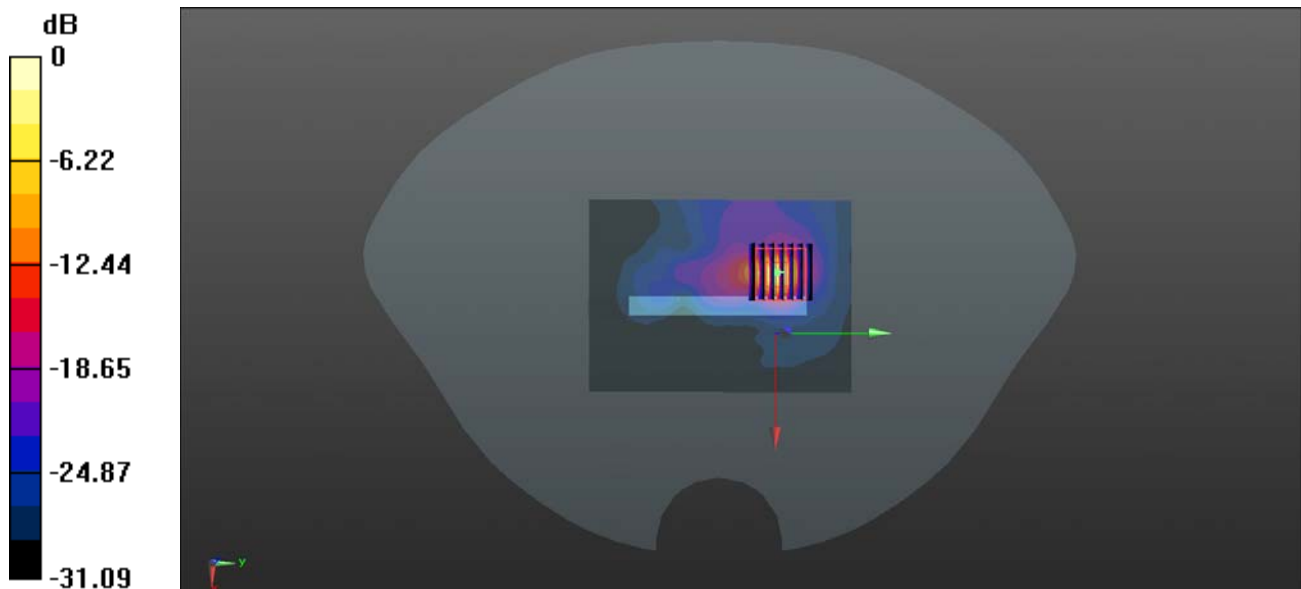
**Ch46/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.609 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 67.9 W/kg

**SAR(1 g) = 7.81 W/kg; SAR(10 g) = 1.26 W/kg**

Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg

**MEAS.60 Body Plane with Top Edge 0mm on Channel 54 in IEEE802.11n HT40 mode**

Date: 2020.06.14

Communication System Band: WLAN(n) 40Mhz; Frequency: 5270 MHz;Duty Cycle: 1:1.069

Medium parameters used: f = 5270 MHz;  $\sigma = 4.728$  S/m;  $\epsilon_r = 35.962$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.51, 5.51, 5.51); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch54/Area Scan (81x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.8 W/kg

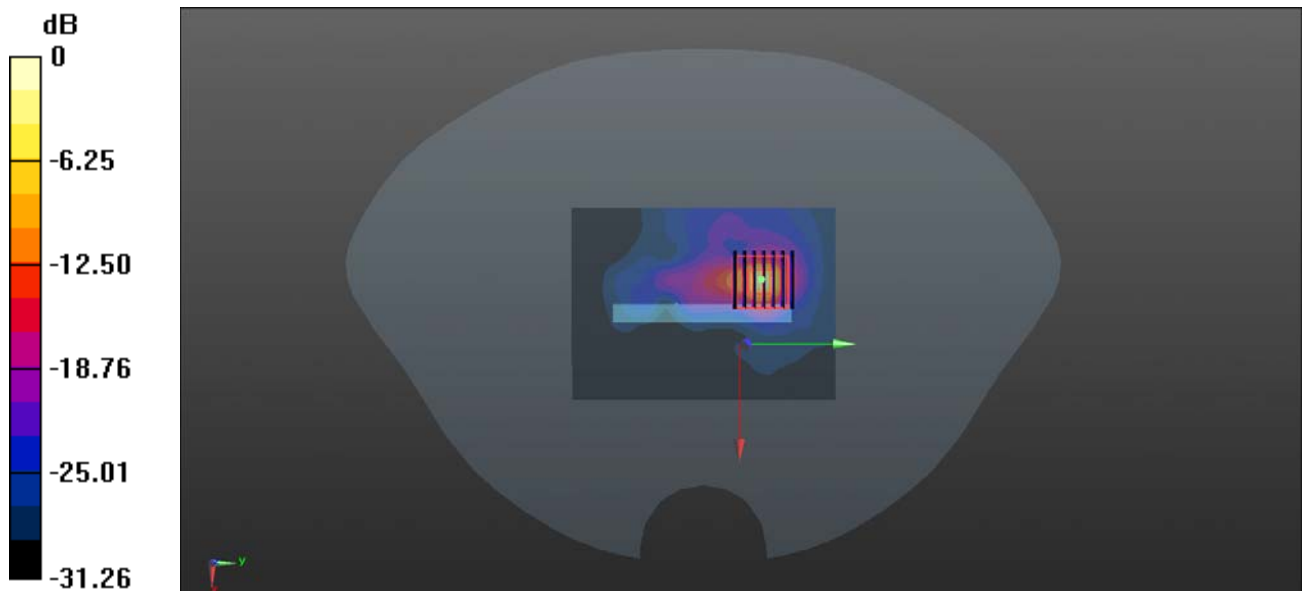
**Ch54/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.169 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 75.0 W/kg

**SAR(1 g) = 8.12 W/kg; SAR(10 g) = 1.29 W/kg**

Maximum value of SAR (measured) = 22.9 W/kg



0 dB = 22.9 W/kg

**MEAS.61 Body Plane with Top Edge 0mm on Channel 110 in IEEE802.11n HT40 mode**

Date: 2020.06.16

Communication System Band: WLAN(n) 40MHz; Frequency: 5550 MHz; Duty Cycle: 1:1.069

Medium parameters used (interpolated):  $f = 5550$  MHz;  $\sigma = 5.007$  S/m;  $\epsilon_r = 35.968$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.8, 4.8, 4.8); Calibrated: 2019.08.02;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch110/Area Scan (81x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 29.1 W/kg

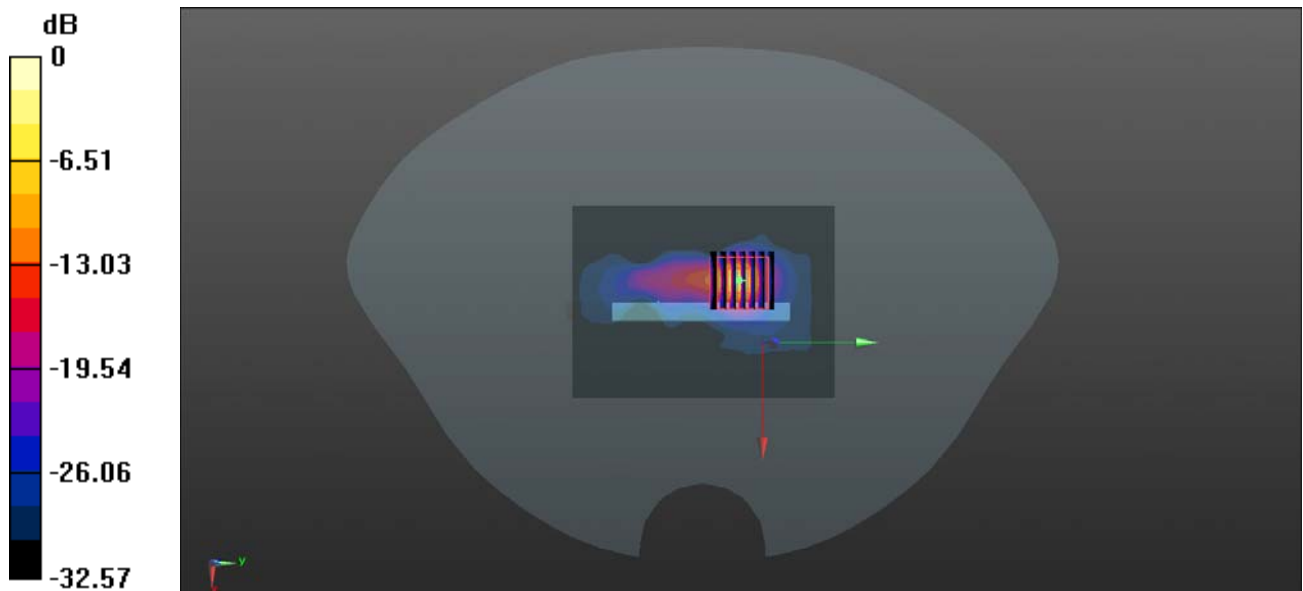
**Ch110/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.440 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 103 W/kg

**SAR(1 g) = 10.3 W/kg; SAR(10 g) = 1.57 W/kg**

Maximum value of SAR (measured) = 32.2 W/kg



0 dB = 32.2 W/kg



**MEAS.62 Left Head with Cheek on Middle Channel in Bluetooth DH5 mode**

Date: 2020.06.26

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1.307

Medium parameters used:  $f = 2441$  MHz;  $\sigma = 1.789$  S/m;  $\epsilon_r = 39.277$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.7 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch39/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.295 W/kg

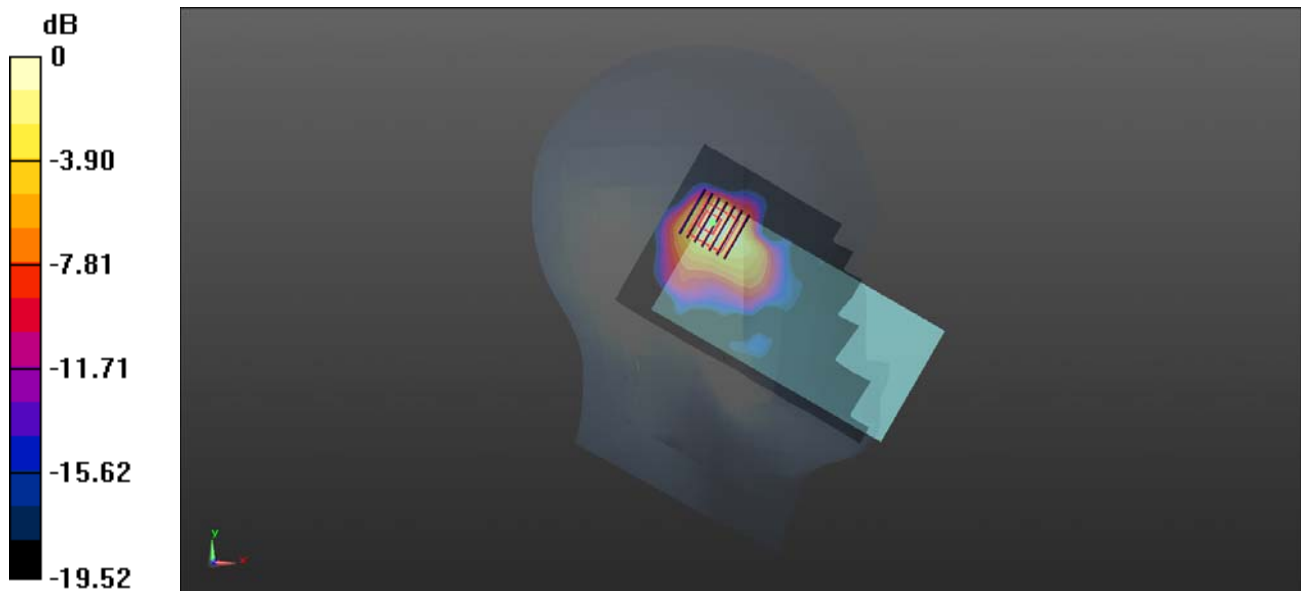
**Ch39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.541 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.513 W/kg

**SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.099 W/kg**

Maximum value of SAR (measured) = 0.251 W/kg



0 dB = 0.251 W/kg

**MEAS.63 Body Plane with Back Side 15mm on Middle Channel in Bluetooth DH5 mode**

Date: 2020.06.26

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1.307

Medium parameters used:  $f = 2441$  MHz;  $\sigma = 1.789$  S/m;  $\epsilon_r = 39.277$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature: 22.7 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch39/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0183 W/kg

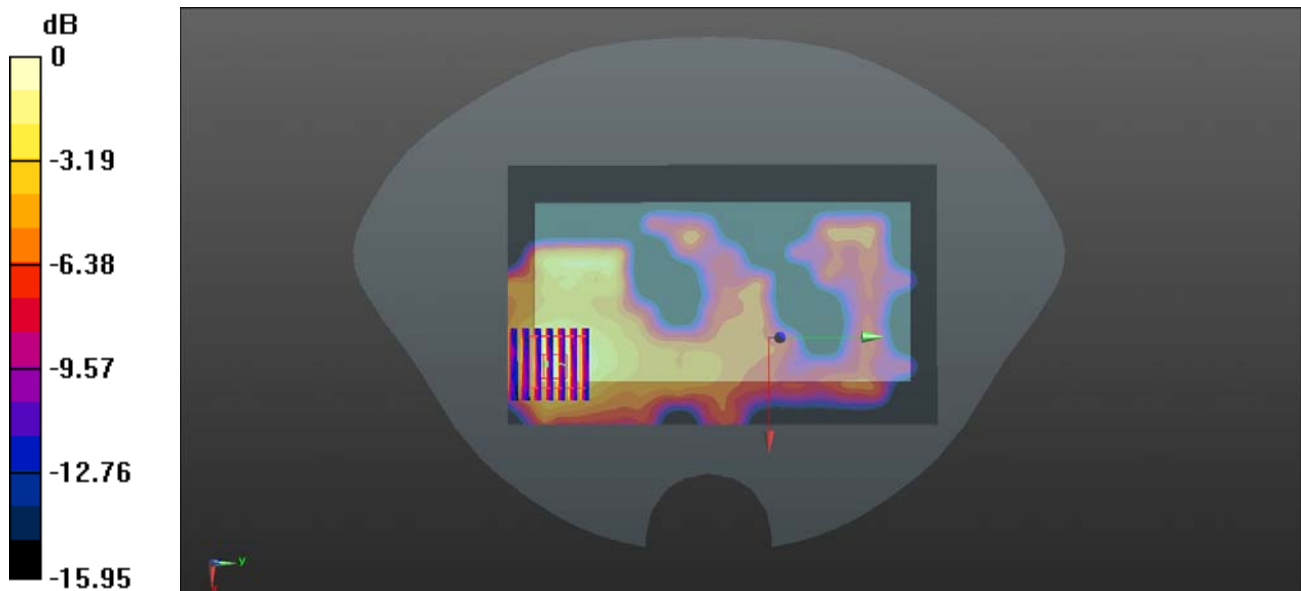
**Ch39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.077 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.0380 W/kg

**SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00849 W/kg**

Maximum value of SAR (measured) = 0.0196 W/kg



0 dB = 0.0196 W/kg

**MEAS.64 Body Plane with Back Side 10mm on Middle Channel in Bluetooth DH5 mode**

Date: 2020.06.26

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1.307

Medium parameters used:  $f = 2441$  MHz;  $\sigma = 1.789$  S/m;  $\epsilon_r = 39.277$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.7 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch39/Area Scan (91x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0361 W/kg

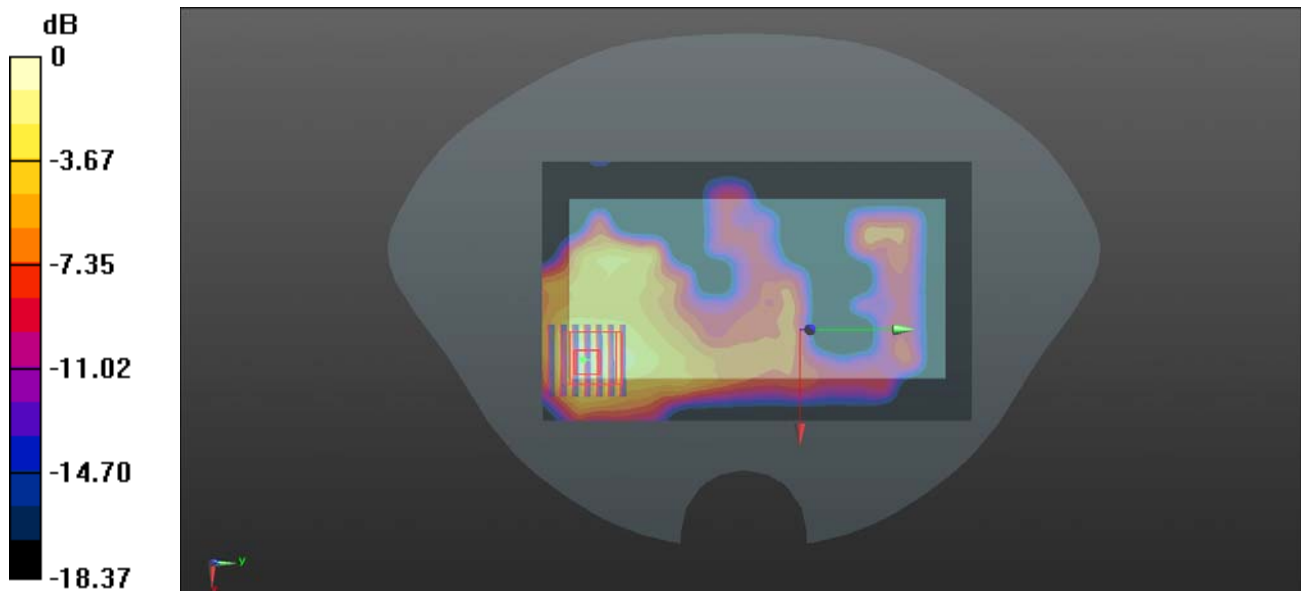
**Ch39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.466 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.0700 W/kg

**SAR(1 g) = 0.032 W/kg; SAR(10 g) = 0.015 W/kg**

Maximum value of SAR (measured) = 0.0366 W/kg



0 dB = 0.0366 W/kg

## **ANNEX D EUT EXTERNAL PHOTOS**

Please refer the document "BL-SZ2060102-AW.pdf".

## **ANNEX E SAR TEST SETUP PHOTOS**

Please refer the document "BL-SZ2060102-AS.pdf".

## **ANNEX F CALIBRATION REPORT**

Please refer the document "CALIBRATION REPORT.pdf".

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