



# SAR TEST REPORT

No. I21Z60613-SEM06

For

**Wingtech Mobile Communications Co.,Ltd.**

**5G Mobile Phone**

**Model Name: WTCELERO5G**

with

**Hardware Version: V1.0**

**Software Version: WTCELERO5G\_0.01.01**

**FCC ID: 2APXW-WTCELERO5G**

**Issued Date: 2021-6-22**

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Issue Date</b>	<b>Description</b>
I21Z60613-SEM06	Rev.0	2021-6-22	Initial creation of test report

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## 1 Test Laboratory

### 1.1 Testing Location

Company Name:	CTTL(Shouxiang)
Address:	No. 51, Xueyuan Road, Haidian District, Beijing, P. R. China 100191.

### 1.2 Testing Environment

Temperature:	18°C~25°C,
Relative humidity:	30%~ 70%
Ground system resistance:	< 0.5 $\Omega$
Ambient noise & Reflection:	< 0.012 W/kg

### 1.3 Project Data

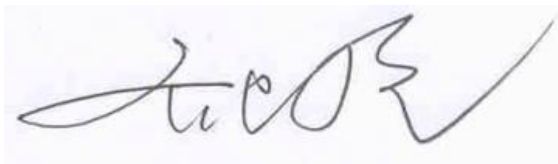
Project Leader:	Qi Dianyuan
Test Engineer:	Yao Juming
Testing Start Date:	June 2, 2021
Testing End Date:	June 14, 2021

### 1.4 Signature



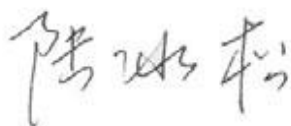
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**Yao Juming**  
(Prepared this test report)



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**Qi Dianyuan**  
(Reviewed this test report)



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**Lu Bingsong**  
Deputy Director of the laboratory  
(Approved this test report)

## 2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Wingtech Group (Hong Kong) Limited. 5G Mobile Phone WTCELERO5G is as follows:

**Table 2.1: Highest Reported SAR (1g)**

Technology Band	Head (Separation Distance 0mm)	Hotspot (Separation Distance 10mm)	Body-Worn (Separation Distance 15mm)	Phablet-10g (Separation Distance 0mm)	Equipment Class
GSM850	0.25	0.74	/	/	PCE
GSM1900	0.23	0.59	0.43	/	
WCDMA1900	0.49	0.40	0.44	/	
WCDMA1700	0.56	0.42	0.65	/	
WCDMA 850	0.35	0.61	/	/	
LTE Band2-ANT1	0.46	0.41	0.46	/	
LTE Band2-ANT4	0.67	0.71	0.36	/	
LTE Band7	0.31	0.33	0.35	/	
LTE Band12	0.17	0.34	/	/	
LTE Band13	0.27	0.47	/	/	
LTE Band25	0.47	0.52	0.46	/	
LTE Band26	0.30	0.68	/	/	
LTE Band38	0.18	0.42	0.34	/	
LTE Band41-PC3	0.20	0.28	0.37	/	
LTE Band41-PC2	0.22	0.39	0.33	/	
LTE Band66-ANT1	0.27	0.50	0.58	/	
LTE Band66-ANT4	0.54	0.21	0.14	/	
LTE Band71	0.08	0.28	/	/	
5G NR n25-ANT1	0.28	0.42	0.44	/	
5G NR n25-ANT4	0.75	0.68	0.32	/	
5G NR n41	0.68	0.62	0.41	/	
5G NR n66-ANT1	0.28	0.31	0.50	/	
5G NR n66-ANT4	0.73	0.28	/	/	
5G NR n71	0.07	0.16	/	/	
WLAN 2.4GHz	1.07	0.20	0.06	/	DTS
WLAN 5GHz	1.08	0.40	0.40	/	NII

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/kg as averaged over any 1g tissue according to the ANSI C95.1-1992.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and which provides a minimum separation distance of 15/10 mm between this device and the body of the user. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of **(Table 2.1)**, and the values are: **1.08 W/kg(1g)**.

Remark:

This device supports both LTE B4/B5 and LTE B66/B26. Since the supported frequency span for LTE B4/B5 falls completely within the supports frequency span for LTE B66/B26, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/B26.

**Table 2.2: The sum of SAR values for Main antenna + WiFi-2.4G**

	Position	Main antenna	WiFi-2.4G	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.56	<b>1.34</b>
<b>Highest SAR value for Body</b>	Rear 10mm (ULCA 2A-12A)	1.05	0.33	<b>1.38</b>

**Table 2.3: The sum of SAR values for Main antenna + WiFi-5G**

	Position	Main antenna	WiFi-5G	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.75	<b>1.53</b>
<b>Highest SAR value for Body</b>	Rear 15mm (ENDC 66A-n41A)	0.99	0.40	<b>1.39</b>

**Table 2.4: The sum of SAR values for Main antenna +BT**

	Position	Main antenna	BT	Sum
<b>Highest SAR value for Head</b>	Right head, Touch (ENDC 2A-n41A)	0.94	<0.01	<b>0.94</b>
<b>Highest SAR value for Body</b>	Rear 10mm (ENDC 12A-n25A)	1.02	<0.01	<b>1.02</b>

**Table 2.5: The sum of SAR values for Main antenna + Wifi2.4G +BT**

	Position	Main antenna	WiFi-2.4G	BT	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.56	<0.01	<b>1.34</b>
<b>Highest SAR value for Body</b>	Rear 10mm (ULCA 2A-12A)	1.05	0.33	<0.01	<b>1.38</b>

**Table 2.6: The sum of SAR values for Main antenna + Wifi5G +BT**

	Position	Main antenna	WiFi-5G	BT	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.75	<0.01	<b>1.53</b>
<b>Highest SAR value for Body</b>	Rear 15mm (ENDC 66A-n41A)	0.99	0.40	<0.01	<b>1.39</b>

According to the above tables, the highest sum of reported SAR values is **1.53 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

**Table 2.7: The SAR values for UL CA**

LTE Band	LTE Band	Mode	Position	Reported SAR 1g(W/kg)
LTE Band 2-ANT4	LTE Band 12-ANT0	Head	Right Tilt	<b>0.83(0.67+0.16)</b>
		Body	Rear 10mm	<b>1.05(0.71+0.34)</b>
LTE Band 12-ANT0	LTE Band 66-ANT4	Head	Right Tilt	<b>0.54(0.16+0.38)</b>
		Body	Rear 10mm	<b>0.55(0.34+0.21)</b>

**Table 2.8: The SAR values for ENDC**

LTE	NR	Mode	Position	Reported SAR 1g(W/kg)
LTE Band 2-ANT1	n41	Head	Right Tilt	<b>0.94(0.26+0.68)</b>
		Body	Rear 15mm	<b>0.87(0.46+0.41)</b>
	n66-ANT4	Head	Left Cheek	<b>0.64(0.48+0.18)</b>
		Body	Rear 15mm	<b>0.60(0.46+0.14)</b>
LTE Band 2-ANT4	n71	Head	Right Tilt	<b>0.67(0.67+0.00)</b>
		Body	Rear 10mm	<b>0.87(0.71+0.16)</b>
LTE Band 12	n25-ANT4	Head	Right Tilt	<b>0.91(0.16+0.75)</b>
		Body	Rear 10mm	<b>1.02(0.34+0.68)</b>
	n66-ANT4	Head	Right Tilt	<b>0.54(0.16+0.38)</b>
		Body	Rear 10mm	<b>0.55(0.34+0.21)</b>
LTE Band 66-ANT1	n25-ANT4	Head	Right Tilt	<b>0.92(0.17+0.75)</b>
		Body	Rear 10mm	<b>0.95(0.27+0.68)</b>
	n41	Head	Right Tilt	<b>0.85(0.17+0.68)</b>
		Body	Rear 15mm	<b>0.99(0.58+0.41)</b>
LTE Band 66-ANT4	n71	Head	Right Cheek	<b>0.41(0.34+0.07)</b>
		Body	Rear 10mm	<b>0.37(0.21+0.16)</b>

**Conclusion:**

According to the above tables, the sum of reported SAR values is <1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.



### 3 Client Information

#### 3.1 Applicant Information

Company Name:	Wingtech Group (Hong Kong) Limited
Address/Post:	Flat/RM 1903, 19/F, Podium Plaza 5 Hanoi Road, Tsim Sha Tsui Kowloon, Hong Kong
Contact Person:	NA
Contact Email:	NA
Telephone:	NA

#### 3.2 Manufacturer Information

Company Name:	Wingtech Group (Hong Kong) Limited
Address/Post:	Flat/RM 1903, 19/F, Podium Plaza 5 Hanoi Road, Tsim Sha Tsui Kowloon, Hong Kong
Contact Person:	NA
Contact Email:	NA
Telephone:	NA

## 4 Equipment Under Test (EUT) and Ancillary Equipment (AE)

### 4.1 About EUT

Description:	5G Mobile Phone
Model name:	WTCELERO5G
Operating mode(s):	GSM850/900/1800/1900, WCDMA B1/B2/B4/B5/B8 LTEBand1/2/3/4/5/7/8/12/13/20/25/26/28/38/40/41/66/71 BT, Wi-Fi(2.4G/5G) 5G NR n2/n5/n25/n26/n41/n71/n77
Tested Tx Frequency:	824 – 849 MHz (GSM 850)
	1850 – 1910 MHz (GSM 1900)
	824 – 849 MHz (WCDMA 850 Band V)
	1850 – 1910 MHz (WCDMA1900 Band IV)
	1710-1755 MHz (WCDMA1700 Band II)
	1850.7 – 1909.3 MHz (LTE Band 2)
	2502.5 – 2567.5 MHz (LTE Band 7)
	699.7 – 715.3 MHz (LTE Band 12)
	779.5 – 784.5 MHz (LTE Band 13)
	1850.7–1914.3 MHz (LTE Band 25)
	814.7–848.3 MHz (LTE Band 26)
	2498.5 – 2687.5 MHz (LTE Band41)
	1710.7 –1779.3 MHz (LTE Band 66)
	665.5 –695.5 MHz (LTE Band 71)
	2412 – 2462 MHz (Wi-Fi 2.4G)
	5180 – 5240 MHz (Wi-Fi 5.2G)
	5260 – 5320 MHz (Wi-Fi 5.3G)
	5500 – 5720 MHz (Wi-Fi 5.5G)
	5745 – 5825 MHz (Wi-Fi 5.8G)
	2400 – 2483.5 MHz (Bluetooth)
1850 – 1915 MHz(n25)	
2496 – 2690 MHz(n41)	
1710 – 1780 MHz(n66)	
663 – 698 MHz(n71)	
GPRS/EGPRS Multislot Class:	12
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support

#### 4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	862533050007639	V1.0	WTCELERO5G_0.01.01
EUT2	862533050007589	V1.0	WTCELERO5G_0.01.01
EUT3	862533050007597	V1.0	WTCELERO5G_0.01.01
EUT4	862533050007506	V1.0	WTCELERO5G_0.01.01
EUT5	862533050007613	V1.0	WTCELERO5G_0.01.01
EUT6	862533050001194	V1.0	WTCELERO5G_0.01.01
EUT7	862533050002754	V1.0	WTCELERO5G_0.01.01
EUT8	862533050002556	V1.0	WTCELERO5G_0.01.01
EUT9	862533050002671	V1.0	WTCELERO5G_0.01.01
EUT10	862533050002655	V1.0	WTCELERO5G_0.01.01
EUT11	862533050002663	V1.0	WTCELERO5G_0.01.01
EUT12	862533050002739	V1.0	WTCELERO5G_0.01.01

\*EUT ID: is used to identify the test sample in the lab internally.

**Note:** It is performed to test SAR with the EUT1~5 and conducted power with the EUT6~12.

#### 4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	JU001	/	Jiade Energy Technology (Zhuhai) Co.,Ltd

\*AE ID: is used to identify the test sample in the lab internally.

## 5 TEST METHODOLOGY

### 5.1 Applicable Limit Regulations

**ANSI C95.1–1992:**IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

### 5.2 Applicable Measurement Standards

**IEEE 1528–2013:** Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

**KDB447498 D01: General RF Exposure Guidance v06:** Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

**KDB648474 D04 Handset SAR v01r03:** SAR Evaluation Considerations for Wireless Handsets.

**KDB941225 D01 SAR test for 3G devices v03r01:** SAR Measurement Procedures for 3G Devices

**KDB941225 D05 SAR for LTE Devices v02r05:** SAR Evaluation Considerations for LTE Devices

**KDB941225 D06 Hotspot Mode SAR v02r01:** SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

**KDB248227 D01 802.11 Wi-Fi SAR v02r02:** SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

**KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04:** SAR Measurement Requirements for 100 MHz to 6 GHz.

**KDB865664 D02 RF Exposure Reporting v01r02:** RF Exposure Compliance Reporting and Documentation Considerations

**TCB Workshop Nov 2017:**RF Exposure Procedures (Carrier Aggregation SAR)

**TCB Workshop Nov 2019:**RF Exposure Policy Updates (5G NR NSA Sub 6G SAR)

## 6 Specific Absorption Rate (SAR)

### 6.1 Introduction

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.

### 6.2 SAR Definition

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:

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

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

$$SAR = c \left( \frac{\delta T}{\delta t} \right)$$

Where:  $C$  is the specific heat capacity,  $\delta T$  is the temperature rise and  $\delta t$  is the exposure duration, or related to the electrical field in the tissue by

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

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  is the mass density of tissue and  $E$  is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

## 7 Tissue Simulating Liquids

### 7.1 Targets for tissue simulating liquid

**Table 7.1: Targets for tissue simulating liquid**

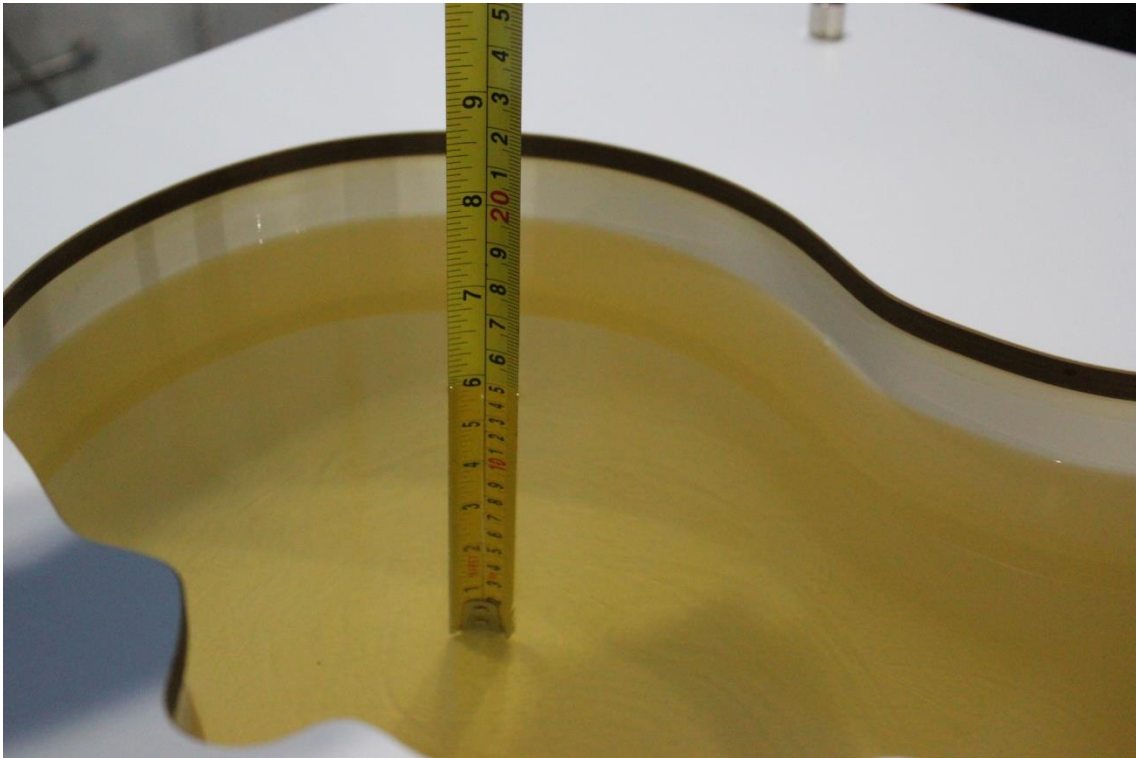
Frequency(MHz)	Liquid Type	Conductivity( $\sigma$ )	$\pm 5\%$ Range	Permittivity( $\epsilon$ )	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.94	39.8~44.0
835	Head	0.90	0.86~0.95	41.5	39.4~43.6
1750	Head	1.37	1.30~1.44	40.08	38.1~42.1
1900	Head	1.40	1.33~1.47	40.0	38.0~42.0
2450	Head	1.67	1.59~1.75	39.47	37.5~41.4
2600	Head	1.96	1.86~2.06	39.01	37.1~41.0
5250	Head	4.66	4.43~4.89	35.99	34.19~37.79
5600	Head	5.07	4.82~5.32	35.53	33.75~37.31
5750	Head	5.27	5.01~5.53	35.3	33.5~37.1

### 7.2 Dielectric Performance

**Table 7.2: Dielectric Performance of Tissue Simulating Liquid**

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity $\epsilon$	Drift (%)	Conductivity $\sigma$ (S/m)	Drift (%)
2021-6-2	Head	750 MHz	42.22	0.67	0.881	-1.01
2021-6-3	Head	750 MHz	42.13	0.45	0.873	-1.91
2021-6-4	Head	835 MHz	41.72	0.53	0.91	1.11
2021-6-5	Head	1750 MHz	40.85	1.92	1.358	-0.88
2021-6-6	Head	1750 MHz	40.25	0.42	1.36	-0.73
2021-6-7	Head	1900 MHz	40.17	0.43	1.418	1.29
2021-6-8	Head	1900 MHz	39.81	-0.47	1.396	-0.29
2021-6-9	Head	2450 MHz	39.01	-0.48	1.797	-0.17
2021-6-10	Head	2600 MHz	38.96	-0.13	1.985	1.28
2021-6-11	Head	2600 MHz	38.44	-1.46	1.966	0.31
2021-6-12	Head	5250 MHz	35.52	-1.14	4.685	-0.53
2021-6-13	Head	5600 MHz	35.74	0.59	5.019	-1.01
2021-6-14	Head	5750 MHz	35.92	1.58	5.161	-1.13

Note: The liquid temperature is 22.0°C

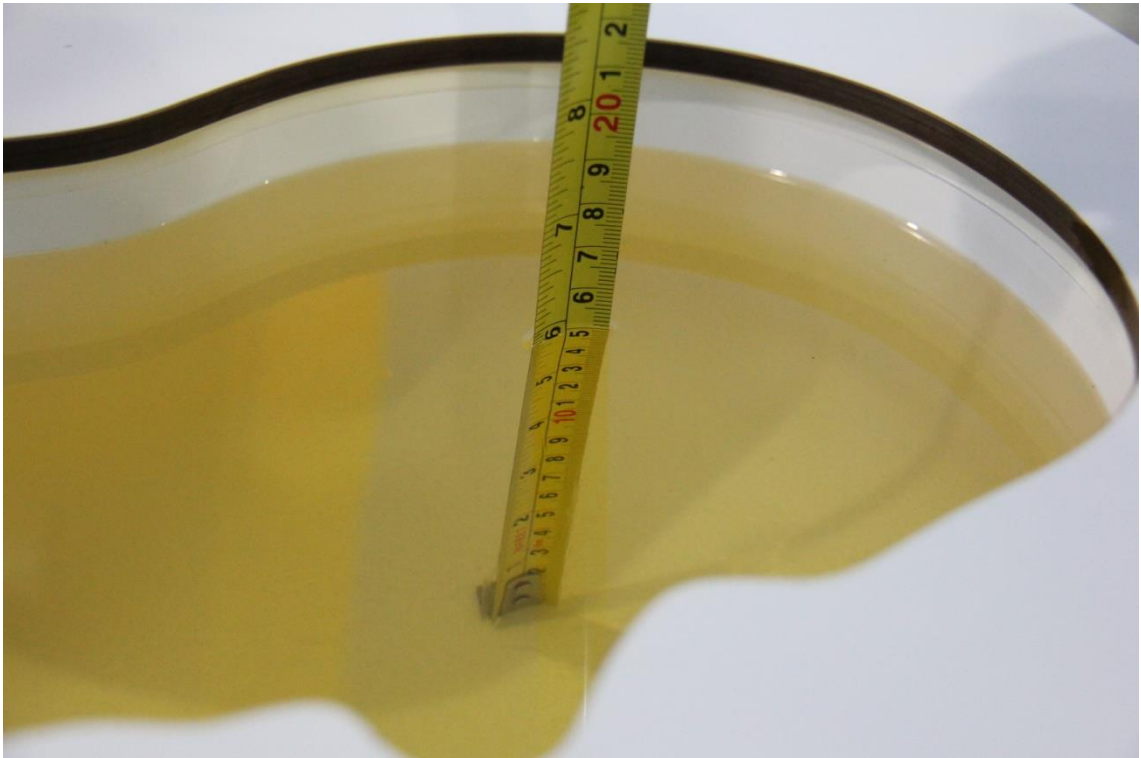


**Picture 7-1 Liquid depth in the Head Phantom (750MHz)**

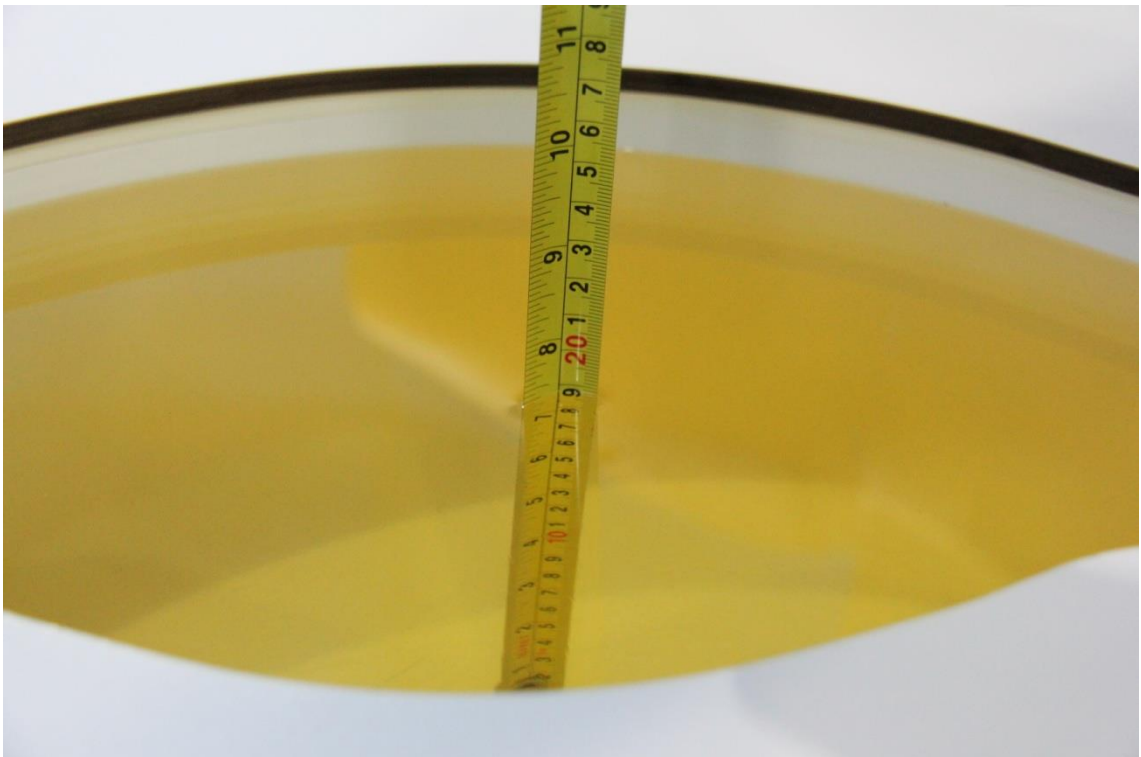


**Picture 7-2 Liquid depth in the Flat Phantom (750MHz)**



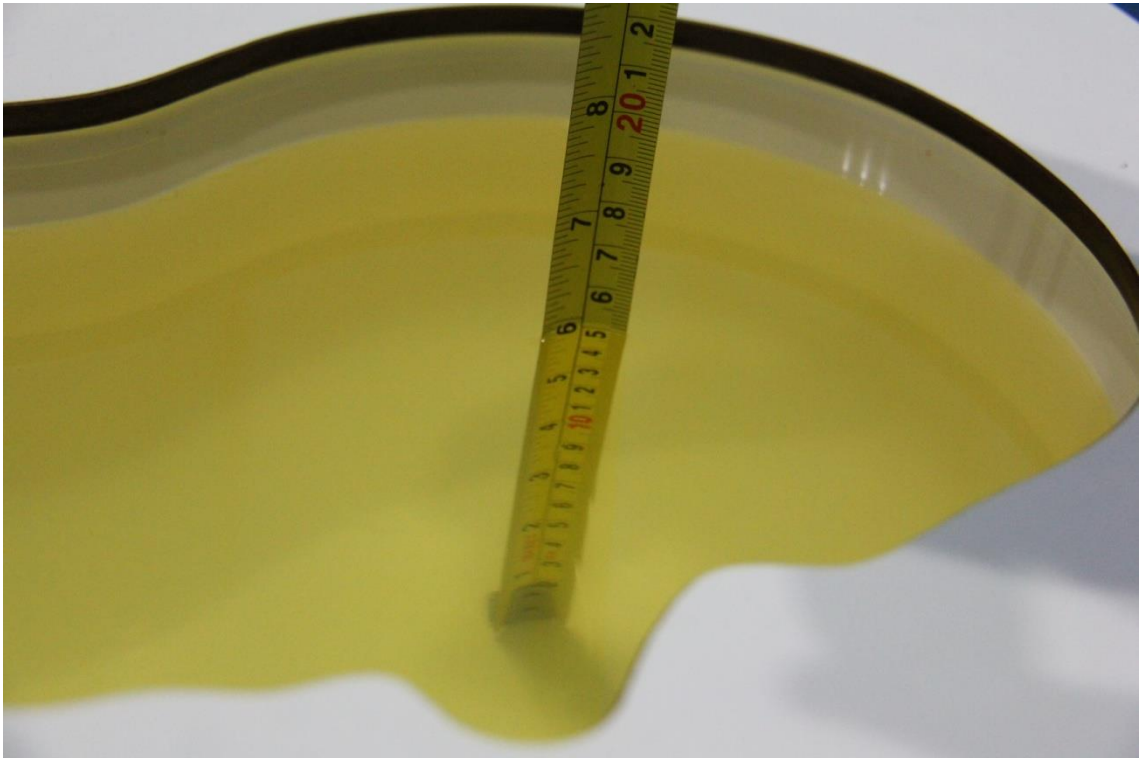


Picture 7-3 Liquid depth in the Head Phantom (835 MHz)

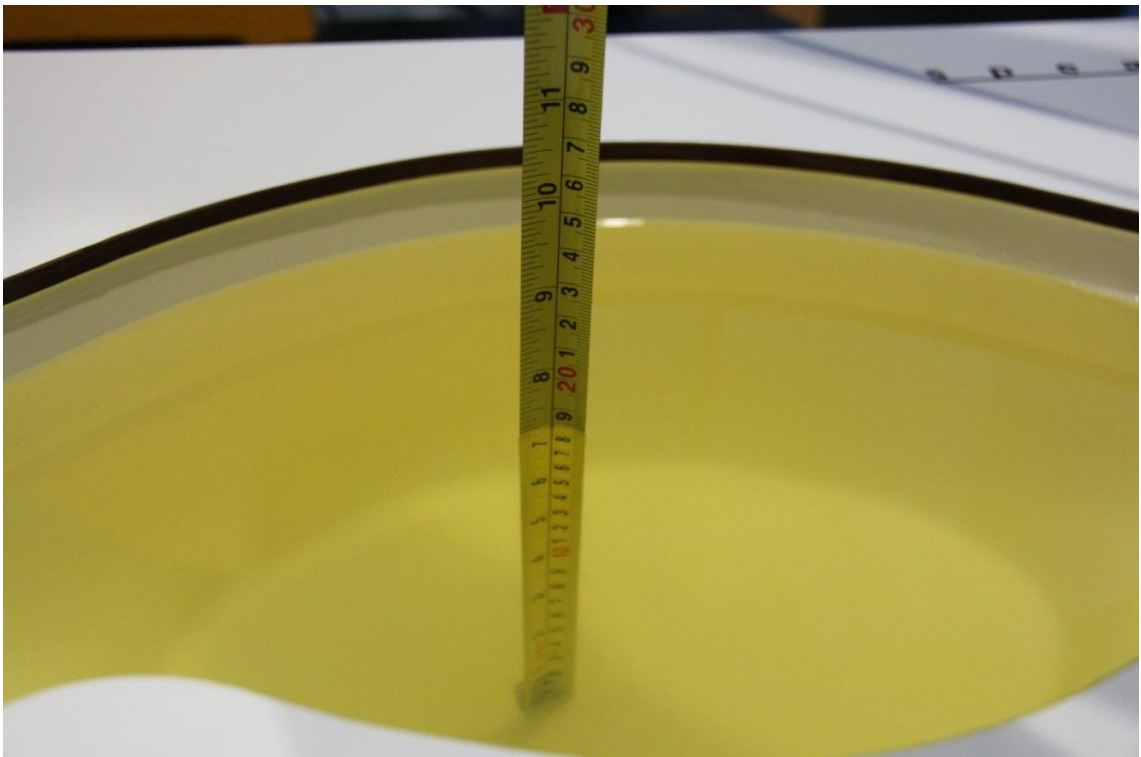


Picture 7-4 Liquid depth in the Flat Phantom (835 MHz)

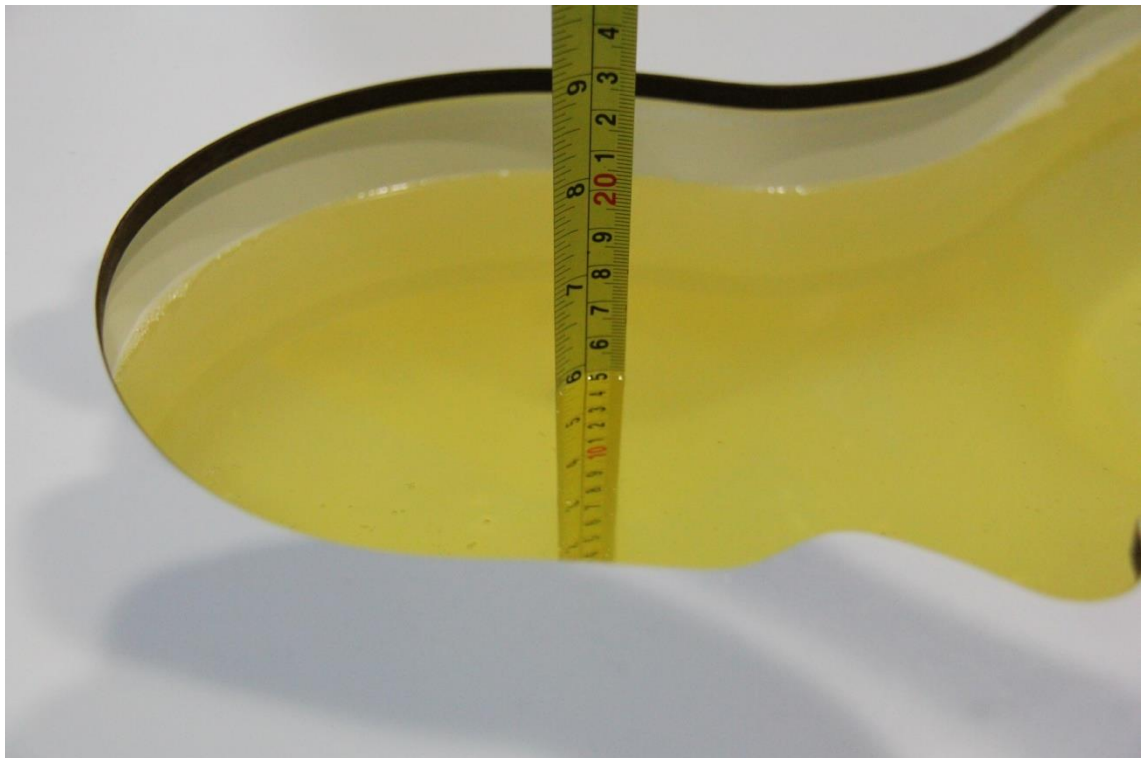




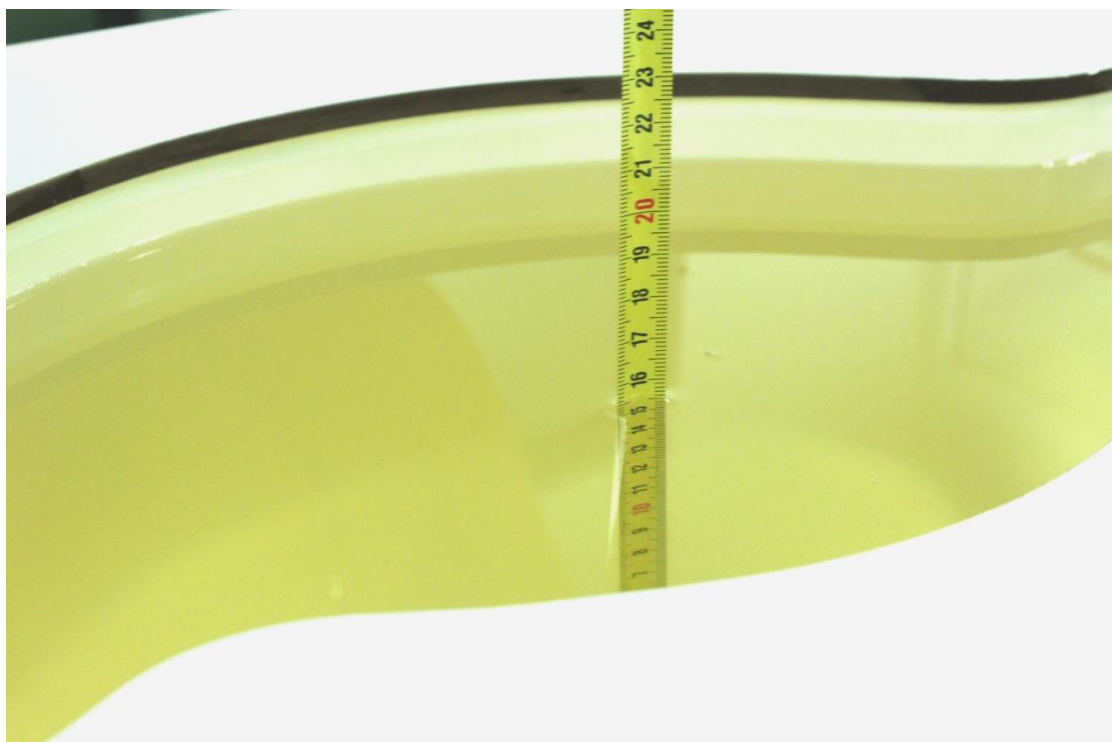
Picture 7-5 Liquid depth in the Head Phantom (1900 MHz)



Picture 7-6 Liquid depth in the Flat Phantom (1900MHz)



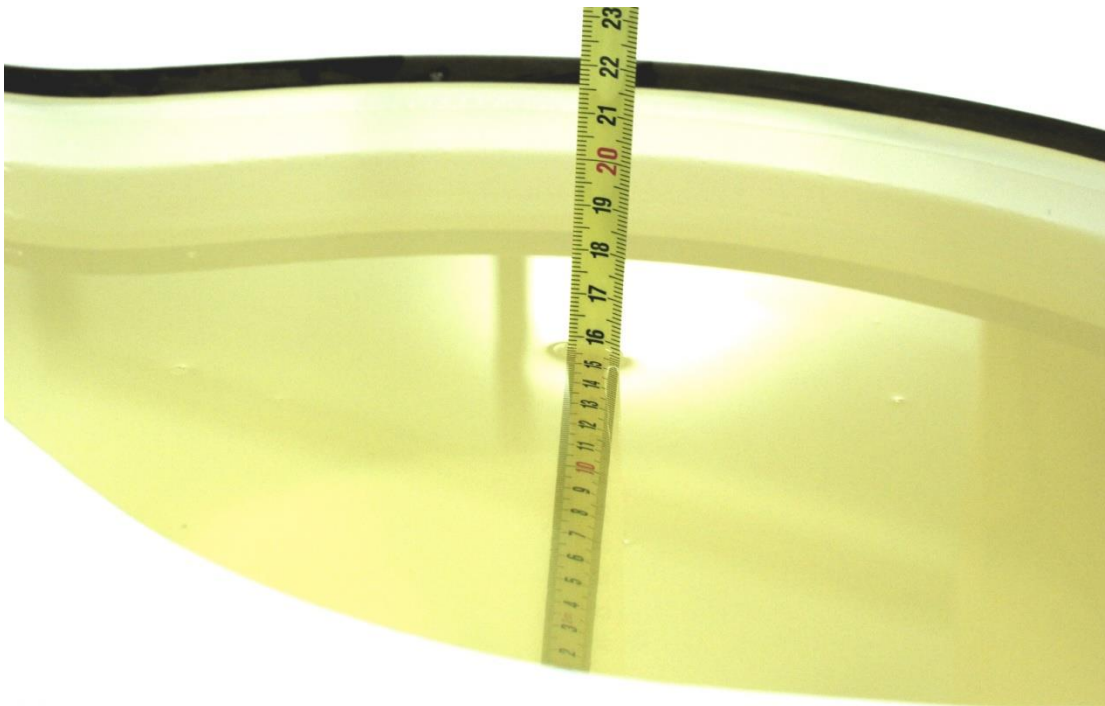
**Picture 7-7 Liquid depth in the Head Phantom (2450MHz)**



**Picture 7-8 Liquid depth in the Flat Phantom (2450MHz)**



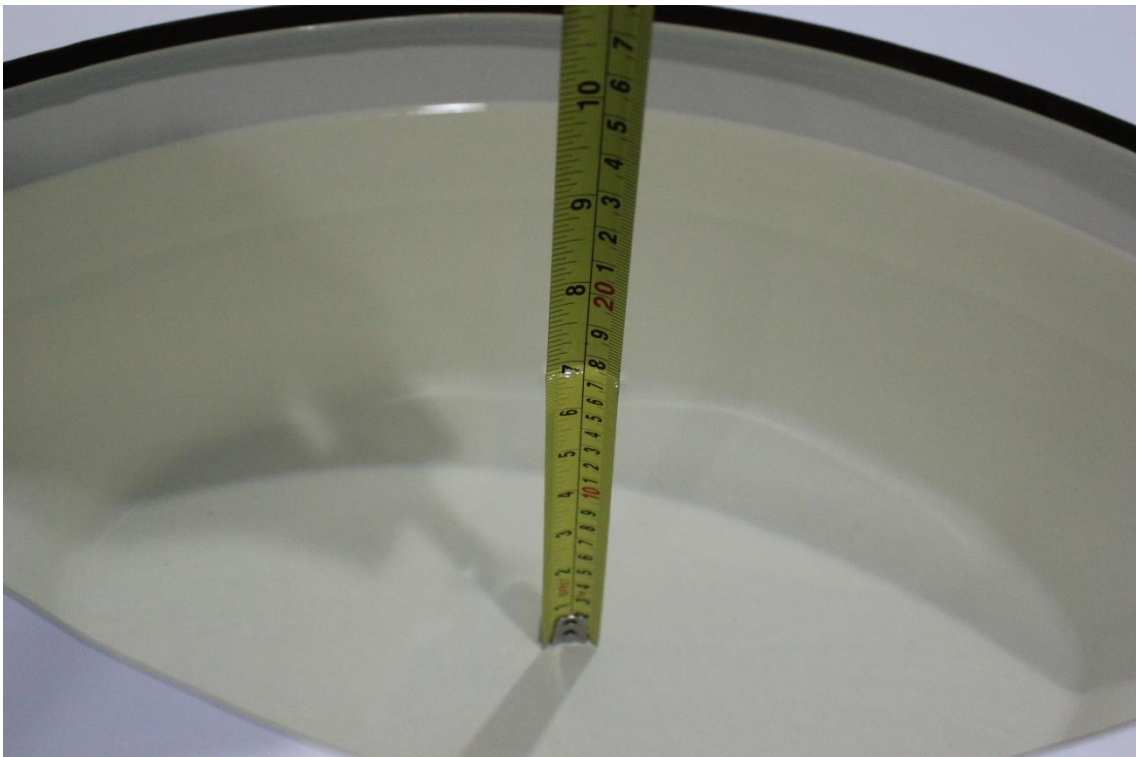
Picture 7-9 Liquid depth in the Head Phantom (2600 MHz)



Picture 7-10 Liquid depth in the Flat Phantom (2600MHz)



Picture 7-11 Liquid depth in the Head Phantom (5GHz)



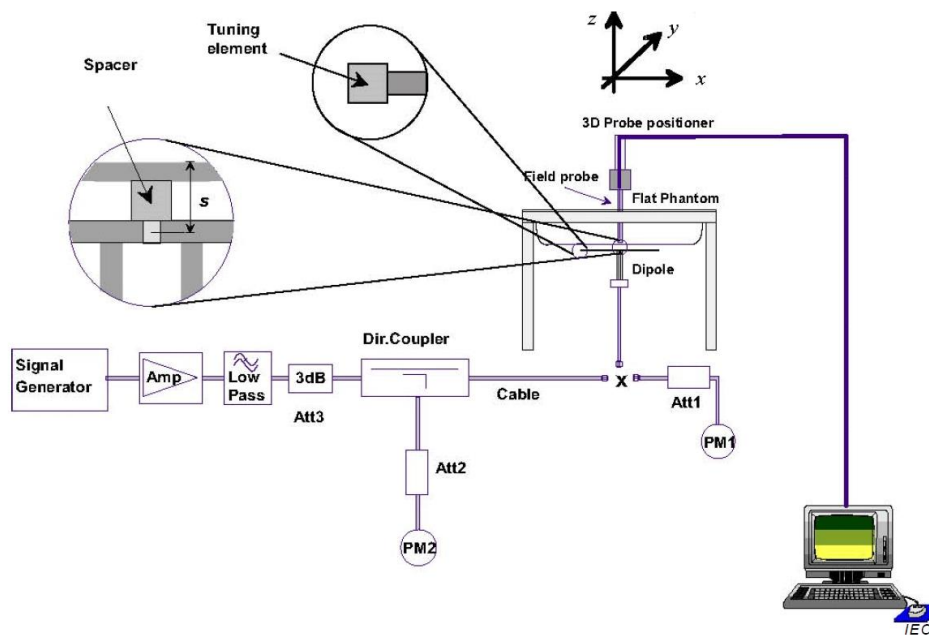
Picture 7-12 Liquid depth in the Flat Phantom (5GHz)



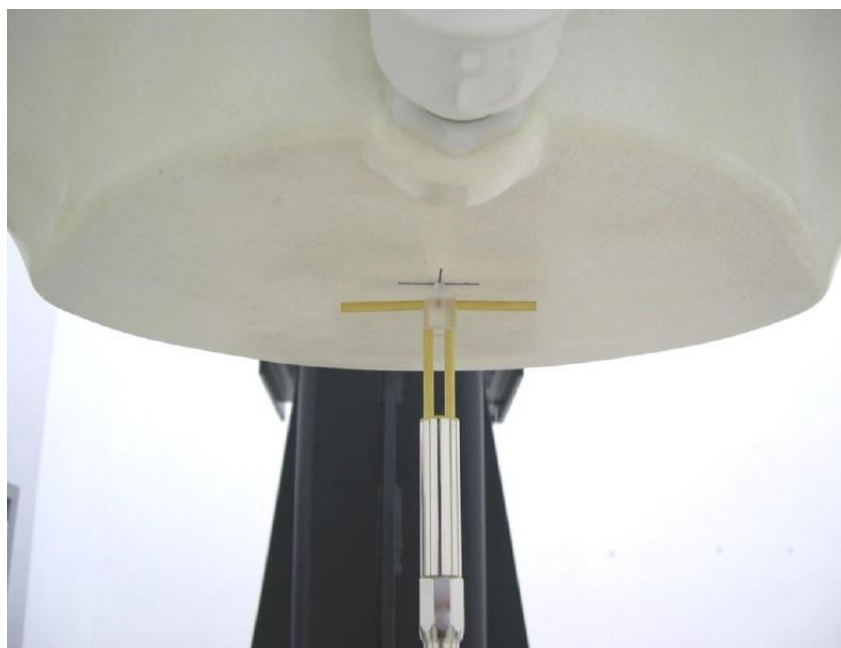
## 8 System verification

### 8.1 System Setup

In the simplified setup for system evaluation, the DUT 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:



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

## 8.2 System Verification

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device.

The system verification results are required that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR. The details are presented in annex B.

**Table 8.1: System Verification of Head**

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2021-6-2	750 MHz	5.53	8.47	5.44	8.48	-1.63%	0.12%
2021-6-3	750 MHz	5.53	8.47	5.56	8.52	0.54%	0.59%
2021-6-4	835 MHz	6.25	9.60	6.24	9.72	-0.16%	1.25%
2021-6-5	1750 MHz	19.1	36.5	18.96	36.64	-0.73%	0.38%
2021-6-6	1750 MHz	19.1	36.5	18.92	36.52	-0.94%	0.05%
2021-6-7	1900 MHz	20.6	39.6	20.44	39.6	-0.78%	0.00%
2021-6-8	1900 MHz	20.6	39.6	20.64	40.08	0.19%	1.21%
2021-6-9	2450 MHz	24.5	52.5	24.04	52.92	-1.88%	0.80%
2021-6-10	2600 MHz	25.3	57.0	24.84	57.48	-1.82%	0.84%
2021-6-11	2600 MHz	25.3	57.0	25.44	57.12	0.55%	0.21%
2021-6-12	5250 MHz	22.9	80.5	22.7	80.2	-0.79%	-0.42%
2021-6-13	5600 MHz	23.6	83.3	23.4	83.0	-0.85%	-0.41%
2021-6-14	5750 MHz	22.7	80.4	22.7	80.0	0.09%	-0.55%

## 9 Measurement Procedures

### 9.1 Tests to be performed

In order to determine the highest value of the peak spatial-average SAR of a handset, all device positions, configurations and operational modes shall be tested for each frequency band according to steps 1 to 3 below. A flowchart of the test process is shown in picture 9.1.

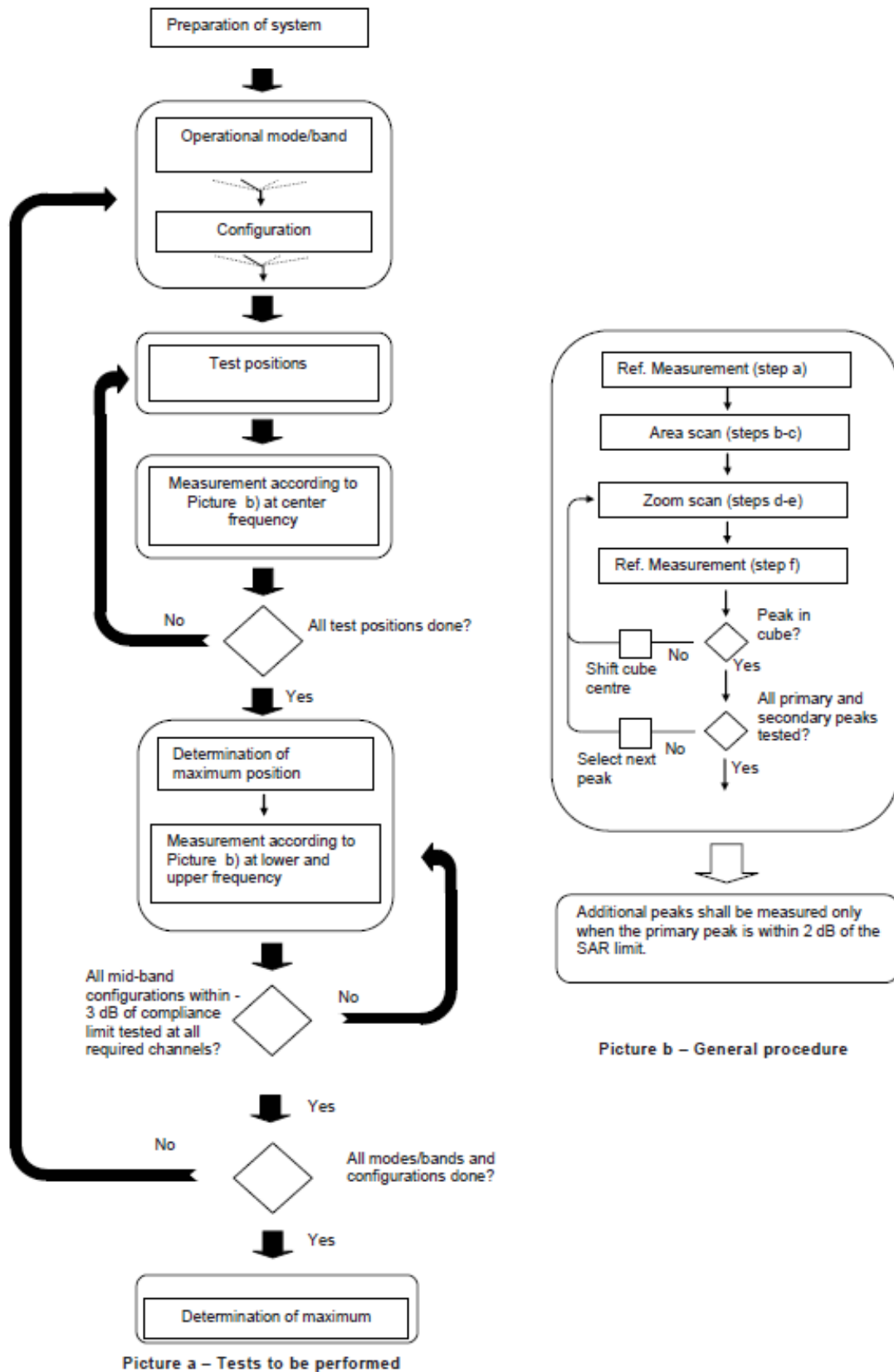
**Step 1:** The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band ( $f_c$ ) for:

- a) all device positions (cheek and tilt, for both left and right sides of the SAM phantom, as described in annex D),
- b) all configurations for each device position in a), e.g., antenna extended and retracted, and
- c) all operational modes, e.g., analogue and digital, for each device position in a) and configuration in b) in each frequency band.

If more than three frequencies need to be tested according to 11.1 (i.e.,  $N_c > 3$ ), then all frequencies, configurations and modes shall be tested for all of the above test conditions.

**Step 2:** For the condition providing highest peak spatial-average SAR determined in Step 1, perform all tests described in 9.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within 3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

**Step 3:** Examine all data to determine the highest value of the peak spatial-average SAR found in Steps 1 to 2.



Picture 9.1 Block diagram of the tests to be performed



## 9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. 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 1528-2003. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

		$\leq 3$ GHz	$> 3$ GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		$5 \pm 1$ mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{Area}$ , $\Delta y_{Area}$		$\leq 2$ GHz: $\leq 15$ mm 2 – 3 GHz: $\leq 12$ mm	3 – 4 GHz: $\leq 12$ mm 4 – 6 GHz: $\leq 10$ mm
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}$ , $\Delta y_{Zoom}$		$\leq 2$ GHz: $\leq 8$ mm 2 – 3 GHz: $\leq 5$ mm*	3 – 4 GHz: $\leq 5$ mm* 4 – 6 GHz: $\leq 4$ mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	$\leq 5$ mm	3 – 4 GHz: $\leq 4$ mm 4 – 5 GHz: $\leq 3$ mm 5 – 6 GHz: $\leq 2$ mm
	graded grid	$\Delta z_{Zoom}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface	$\leq 4$ mm
		$\Delta z_{Zoom}(n>1)$ : between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$
Minimum zoom scan volume	x, y, z	$\geq 30$ mm	3 – 4 GHz: $\geq 28$ mm 4 – 5 GHz: $\geq 25$ mm 5 – 6 GHz: $\geq 22$ mm
Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the <i>reported</i> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is $\leq 1.4$ W/kg, $\leq 8$ mm, $\leq 7$ mm and $\leq 5$ mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.			

### 9.3 WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & DPDCH<sub>n</sub>), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

#### For Release 5 HSDPA Data Devices:

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c / \beta_d$	$\beta_{hs}$	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

#### For Release 6 HSPA Data Devices

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c / \beta_d$	$\beta_{hs}$	$\beta_{ec}$	$\beta_{ed}$	$\beta_{ed}$ (SF)	$\beta_{ed}$ (codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.5	1.5	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	1.5	1.5	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$	4	2	1.5	1.5	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	1.5	1.5	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.5	1.5	21	81

#### Rel.8 DC-HSDPA (Cat 24)

SAR test exclusion for Rel.8 DC-HSDPA must satisfy the SAR test exclusion requirements of Rel.5 HSDPA. SAR test exclusion for DC-HSDPA devices is determined by power measurements according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to qualify for SAR test exclusion.

## 9.4 SAR Measurement for LTE

SAR tests for LTE are performed with a base station simulator, Rohde & Schwarz CMW500. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the CMW 500.

It is performed for conducted power and SAR based on the KDB941225 D05.

SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

### 1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is  $> 1.45$  W/kg, SAR is required for all three RB offset configurations for that required test channel.

### 2) QPSK with 50% RB allocation

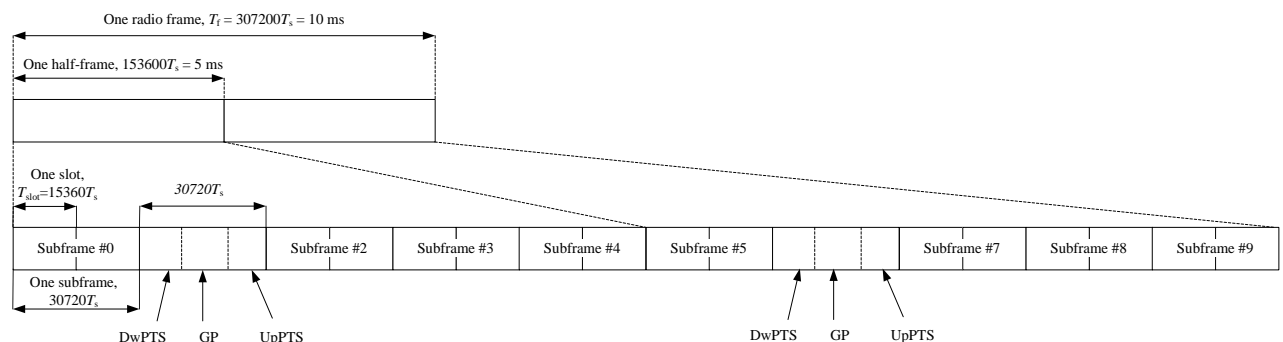
The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

### 3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.

## TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.



**Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)**

**Table 9.1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)**

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

**Table 9.2: Uplink-downlink configurations**

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

Duty factor is calculated by:

$$\begin{aligned}
 \text{Duty factor} &= \text{uplink frame} \cdot 6 + \text{UpPTS} \cdot 2 / \text{one frame length} \\
 &= (30720 \cdot T_s + 6 + 5120 \cdot T_s \cdot 2) / 307200 \cdot T_s \\
 &= 0.633
 \end{aligned}$$

## 9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

## 9.6 Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section 14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

## 10 Area Scan Based 1-g SAR

### 10.1 Requirement of KDB

According to the KDB447498 D01, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-gSAR is  $\leq 1.2$  W/kg, a zoom scan measurement is not required provided it is also not needed for any other purpose; for example, if the peak SAR location required for simultaneous transmission SAR test exclusion can be determined accurately by the SAR system or manually to discriminate between distinctive peaks and scattered noisy SAR distributions from area scans.

There must not be any warning or alert messages due to various measurement concerns identified by the SAR system; for example, noise in measurements, peaks too close to scan boundary, peaks are too sharp, spatial resolution and uncertainty issues etc. The SAR system verification must also demonstrate that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR (See Annex B). When all the SAR results for each exposure condition in a frequency band and wireless mode are based on estimated 1-g SAR, the 1-g SAR for the highest SAR configuration must be determined by a zoom scan.

### 10.2 Fast SAR Algorithms

The approach is based on the area scan measurement applying a frequency dependent attenuation parameter. This attenuation parameter was empirically determined by analyzing a large number of phones. The MOTOROLA FAST SAR was developed and validated by the MOTOROLA Research Group in Ft. Lauderdale.

In the initial study, an approximation algorithm based on Linear fit was developed. The accuracy of the algorithm has been demonstrated across a broad frequency range (136-2450 MHz) and for both 1- and 10-g averaged SAR using a sample of 264 SAR measurements from 55 wireless handsets. For the sample size studied, the root-mean-squared errors of the algorithm are 1.2% and 5.8% for 1- and 10-g averaged SAR, respectively. The paper describing the algorithm in detail is expected to be published in August 2004 within the Special Issue of Transactions on MTT.

In the second step, the same research group optimized the fitting algorithm to an Polynomial fit whereby the frequency validity was extended to cover the range 30-6000MHz. Details of this study can be found in the BEMS 2007 Proceedings.

Both algorithms are implemented in DASY software.

## 11 Conducted Output Power

**Table11.1: Summary of Receiver detection mechanism-Main antenna**

Antenna	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WLAN off (DSI2)	Receiver on+ WLAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WLAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WLAN on (DSI5)
Main Antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1

Antenna	Receiver off+ sensor on+ Hotspot off+ WLAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WLAN on (DSI5)
Main Antenna -Only for LTE B2/B66-ANT1 under ENDC	Power Level E2	Power Level F2

**Table11.2: Summary of Receiver detection mechanism-WiFi antenna**

Antenna	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WWAN off (DSI2)	Receiver on+ WWAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WWAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WWAN on (DSI5)
WLAN Antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1

## 11.1 GSM Measurement result

During the process of testing, the EUT was controlled via Agilent Digital Radio Communication tester (E5515C) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

**Table 11.1-1: The conducted power measurement results –GSM850  
-Power Level A1/B1/C1/D1/E1/F1**

GSM 850 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.34	32.31	32.25	33.50	/	/	/	/
GSM 850 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.27	32.25	32.19	33.50	-9.03	23.24	23.22	23.16
2 Txslots	31.55	31.51	31.43	32.50	-6.02	25.53	25.49	25.41
3Txslots	29.81	29.74	29.63	30.50	-4.26	25.55	25.48	25.37
<b>4 Txslots</b>	<b>28.72</b>	<b>28.63</b>	<b>28.49</b>	<b>29.50</b>	<b>-3.01</b>	<b>25.71</b>	<b>25.62</b>	<b>25.48</b>
GSM 850 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.24	32.20	32.14	33.50	-9.03	23.21	23.17	23.11
2 Txslots	31.51	31.46	31.38	32.50	-6.02	25.49	25.44	25.36
3Txslots	29.77	29.69	29.58	30.50	-4.26	25.51	25.43	25.32
<b>4 Txslots</b>	<b>28.68</b>	<b>28.58</b>	<b>28.44</b>	<b>29.50</b>	<b>-3.01</b>	<b>25.67</b>	<b>25.57</b>	<b>25.43</b>
GSM 850 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	26.99	26.87	26.97	27.50	-9.03	17.96	17.84	17.94
2 Txslots	25.91	26.84	25.76	26.50	-6.02	19.89	20.82	19.74
3Txslots	23.94	24.14	23.75	24.50	-4.26	19.68	19.88	19.49
4 Txslots	23.07	22.73	22.54	23.00	-3.01	20.06	19.72	19.53

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

**According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850.**



**Table 11.1-2: The conducted power measurement results-GSM1900  
-Power Level A1/C1/D1/E1**

PCS1900 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.30	29.29	29.26	30.50	/	/	/	/
PCS1900 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.24	29.20	29.18	30.50	-9.03	20.21	20.17	20.15
2 Txslots	28.50	28.46	28.43	29.50	-6.02	22.48	22.44	22.41
3 Txslots	26.76	26.69	26.61	27.50	-4.26	22.50	22.43	22.35
<b>4 Txslots</b>	25.62	25.53	25.44	26.50	-3.01	22.61	22.52	22.43
PCS1900 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.38	29.36	29.29	30.50	-9.03	20.35	20.33	20.26
2 Txslots	28.64	28.61	28.46	29.50	-6.02	22.62	22.59	22.44
3Txslots	26.90	26.81	26.69	27.50	-4.26	22.64	22.55	22.43
<b>4 Txslots</b>	25.74	25.64	25.46	26.50	-3.01	22.73	22.63	22.45
PCS1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.92	25.79	25.57	26.50	-9.03	16.89	16.76	16.54
2 Txslots	24.75	24.45	24.13	25.50	-6.02	18.73	18.43	18.11
3Txslots	22.47	22.24	21.88	23.50	-4.26	18.21	17.98	17.62
4 Txslots	21.19	20.94	20.60	22.50	-3.01	18.18	17.93	17.59

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

**According to the conducted power as above, the body measurements are performed with 4Txslots for GSM1900.**

**Table 11.1-3: The conducted power measurement results-GSM1900-Power Level B1/F1**

PCS1900 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	27.18	27.26	27.21	28.50	/	/	/	/
PCS1900 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	27.15	27.23	27.18	28.50	-9.03	18.12	18.20	18.15
2 Txslots	26.46	26.51	26.45	27.50	-6.02	20.44	20.49	20.43
3Txslots	24.93	24.89	24.71	25.50	-4.26	20.67	20.63	20.45
<b>4 Txslots</b>	<b>23.87</b>	<b>23.79</b>	<b>23.57</b>	<b>24.50</b>	<b>-3.01</b>	<b>20.86</b>	<b>20.78</b>	<b>20.56</b>
PCS1900 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	27.14	27.22	27.19	28.50	-9.03	18.11	18.19	18.16
2 Txslots	26.45	26.50	26.46	27.50	-6.02	20.43	20.48	20.44
3Txslots	24.92	24.88	24.71	25.50	-4.26	20.66	20.62	20.45
<b>4 Txslots</b>	<b>23.86</b>	<b>23.79</b>	<b>23.57</b>	<b>24.50</b>	<b>-3.01</b>	<b>20.85</b>	<b>20.78</b>	<b>20.56</b>
PCS1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	23.94	23.52	23.13	24.50	-9.03	14.91	14.49	14.10
2 Txslots	22.69	22.29	22.28	23.50	-6.02	16.67	16.27	16.26
3Txslots	20.38	20.57	19.71	21.50	-4.26	16.12	16.31	15.45
4 Txslots	19.49	18.80	18.31	20.50	-3.01	16.48	15.79	15.30

## NOTES:

## 1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

**According to the conducted power as above, the body measurements are performed with 4Txslots for GSM1900.**

**Table 11.1-4: The conducted power measurement results-GSM1900-Power Level C1**

PCS1900 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	26.11	26.14	25.88	27.00	/	/	/	/
PCS1900 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.60	26.15	25.74	27.00	-9.03	22.59	23.14	22.73
<b>2 Txslots</b>	24.18	25.14	25.67	26.00	-6.02	24.18	25.14	25.67
3Txslots	23.21	24.00	24.48	24.80	-4.26	23.21	24.00	24.48
4 Txslots	21.79	22.61	23.10	23.50	-3.01	21.79	22.61	23.10
PCS1900 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.99	25.91	25.63	27.00	-9.03	22.98	22.90	22.62
<b>2 Txslots</b>	24.53	25.35	25.81	26.00	-6.02	24.53	25.35	25.81
3Txslots	22.98	23.83	24.37	24.80	-4.26	22.98	23.83	24.37
4 Txslots	21.60	22.45	22.99	23.50	-3.01	21.60	22.45	22.99
PCS1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.35	25.50	25.55	27.00	-9.03	16.32	16.47	16.52
2 Txslots	23.64	23.74	23.76	24.00	-6.02	17.62	17.72	17.74
3Txslots	21.32	21.72	21.25	22.00	-4.26	17.06	17.46	16.99
4 Txslots	19.32	19.43	19.15	20.50	-3.01	16.31	16.42	16.14

**NOTES:**

## 1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

**According to the conducted power as above, the body measurements are performed with 2Txslots for GSM1900.**

## 11.2 WCDMA Measurement result

Table 11.2-1: The conducted Power for WCDMA B2/B4 -Power Level A1/C1/D1

WCDMA1900	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	22.23	22.38	22.42	24.00
HSUPA	19.89	20.00	20.09	21.00
	19.38	19.52	19.59	21.00
	19.39	19.53	19.62	21.00
	18.94	19.06	18.93	20.50
	20.41	20.53	20.59	22.00
DC-HSDPA	21.38	21.41	21.45	23.00
	21.37	21.40	21.47	23.00
	21.09	21.12	21.20	22.50
	21.07	21.11	21.17	22.50

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	22.10	22.04	22.08	24.00
HSUPA	19.73	19.65	19.73	21.00
	19.23	19.16	19.21	21.00
	19.25	19.19	20.27	21.00
	18.77	18.72	18.75	20.50
	20.22	20.16	20.21	22.00
DC-HSDPA	21.17	21.23	21.29	22.00
	21.11	21.18	21.29	22.00
	20.72	20.75	20.84	21.50
	20.68	20.75	20.79	21.50

**Table 11.2-2: The conducted Power for WCDMA B2/B4 -Power Level B1/F1**

WCDMA1900	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	17.36	17.60	17.56	19.00
HSUPA	14.41	14.56	14.67	15.50
	14.40	14.53	14.55	15.50
	14.41	14.53	14.58	15.50
	13.89	14.04	13.88	15.50
	15.34	15.47	15.48	15.50
DC-HSDPA	16.40	16.49	16.51	17.00
	16.31	16.35	16.47	17.00
	15.95	16.05	16.08	17.00
	15.91	15.97	16.02	17.00

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	17.26	17.20	17.25	19.00
HSUPA	14.91	14.89	14.92	15.50
	14.40	14.35	14.37	15.50
	14.37	14.33	14.35	15.50
	13.87	13.82	13.85	15.50
	15.31	15.30	15.33	15.50
DC-HSDPA	16.22	16.23	16.31	17.00
	16.15	16.05	16.16	17.00
	15.84	15.81	15.78	17.00
	15.75	15.77	15.81	17.00

Table 11.2-3: The conducted Power for WCDMA B2/B4 -Power Level E1

WCDMA1900	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	19.46	19.65	19.70	21.00
HSUPA	16.76	16.97	16.49	17.80
	16.26	16.47	16.28	17.80
	16.27	16.49	16.52	17.80
	15.89	16.05	16.09	17.80
	17.36	17.55	17.55	17.80
DC-HSDPA	18.50	18.60	18.61	19.00
	18.47	18.54	18.62	19.00
	18.02	18.14	18.17	19.00
	18.01	18.10	18.10	19.00

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	19.36	19.32	19.40	21.00
HSUPA	16.68	16.64	16.68	17.50
	16.19	16.12	16.17	17.50
	16.24	16.19	16.17	17.50
	16.21	15.71	15.72	17.50
	17.36	17.32	17.34	17.50
DC-HSDPA	18.34	18.34	18.41	19.00
	18.38	18.27	18.20	19.00
	17.86	17.88	17.94	19.00
	17.81	17.82	17.82	19.00

**Table 11.2-4: The conducted Power for WCDMA B5 -Power Level A1/B1/C1/D1/E1/F1**

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	22.20	22.24	22.27	24.00
HSUPA	19.59	19.63	19.55	21.00
	19.10	19.14	19.15	21.00
	19.13	19.10	19.18	21.00
	18.61	18.68	18.71	20.50
	20.09	20.14	20.15	22.00
HSPA+	21.16	21.17	21.19	22.50
DC-HSDPA	21.13	21.08	21.18	22.50
	20.69	20.69	20.73	21.50
	20.67	20.66	20.69	21.50
	19.59	19.63	19.55	21.00

### 11.3 LTE Measurement result

#### Maximum Target Power for Production Unit

Band	Tune up (dBm)					
	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WLAN off (DSI2)	Receiver on+ WLAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WLAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WLAN on (DSI5)
	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1
Band 2-ANT1	24	20.5	24	24	22.5	20.5
Band 2-ANT4	24	17	17	17	20	17
Band 7	24	17	24	24	19	17
Band 12	24	24	24	24	24	24
Band 13	24	24	24	24	24	24
Band 25	24	21.5	24	24	23.5	21.5
Band 26	24	24	24	24	24	24
Band 38	24	21	24	24	23	21
Band 41-PC3	24	19	24	24	21	19
Band 41-PC2	27	22.5	24	24	24.5	22.5
Band 66-ANT1	24	20	24	24	22	20
Band 66-ANT4	24	17	19.5	17	20	17
Band 71	24	24	24	24	24	24

Band	Tune up (dBm)	
	Receiver off+ sensor on+ WLAN off (DSI4)	Receiver off+ sensor on+ WLAN on (DSI5)
	Power Level E2	Power Level F2
LTE B2-ANT1 under ENDC	20.5	18
LTE B66-ANT1 under ENDC	20	18



LTE Band2 ANT1-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	23.52	22.89	21.71
		1880 (18900)	23.54	22.74	21.84
		1850.7 (18607)	23.62	22.93	21.88
	1RB-Middle (3)	1909.3 (19193)	23.58	22.85	21.82
		1880 (18900)	23.55	22.79	21.85
		1850.7 (18607)	23.63	22.85	21.82
	1RB-Low (0)	1909.3 (19193)	23.53	22.76	21.81
		1880 (18900)	23.52	22.56	21.93
		1850.7 (18607)	23.62	22.74	21.88
	3RB-High (3)	1909.3 (19193)	23.52	22.65	21.73
		1880 (18900)	23.52	22.47	21.72
		1850.7 (18607)	23.63	22.83	21.81
	3RB-Middle (1)	1909.3 (19193)	23.56	22.62	21.70
		1880 (18900)	23.55	22.60	21.81
		1850.7 (18607)	23.64	22.74	21.83
	3RB-Low (0)	1909.3 (19193)	23.58	22.68	21.71
		1880 (18900)	23.57	22.58	21.84
		1850.7 (18607)	23.65	22.81	21.85
	6RB (0)	1909.3 (19193)	22.54	21.69	20.58
		1880 (18900)	22.55	21.78	20.61
		1850.7 (18607)	22.81	21.83	20.75
3MHz	1RB-High (14)	1908.5 (19185)	23.51	22.79	21.74
		1880 (18900)	23.58	22.69	21.83
		1851.5 (18615)	23.66	22.99	21.85
	1RB-Middle (7)	1908.5 (19185)	23.57	22.74	21.86
		1880 (18900)	23.64	22.76	21.80
		1851.5 (18615)	23.61	22.81	21.90
	1RB-Low (0)	1908.5 (19185)	23.49	22.91	21.86
		1880 (18900)	23.59	22.74	21.85
		1851.5 (18615)	23.63	22.76	21.90
	8RB-High (7)	1908.5 (19185)	22.61	21.72	20.59
		1880 (18900)	22.52	21.73	20.66
		1851.5 (18615)	22.77	21.84	20.73
	8RB-Middle (4)	1908.5 (19185)	22.62	21.66	20.65
		1880 (18900)	22.48	21.75	20.66
		1851.5 (18615)	22.78	21.82	20.77
	8RB-Low (0)	1908.5 (19185)	22.67	21.69	20.63
		1880 (18900)	22.49	21.76	20.72
		1851.5 (18615)	22.78	21.84	20.76
	15RB (0)	1908.5 (19185)	22.65	21.64	20.60
		1880 (18900)	22.52	21.73	20.63
		1851.5 (18615)	22.76	21.79	20.77

5MHz	1RB-High (24)	1907.5 (19175)	23.54	22.79	21.67	
		1880 (18900)	23.62	22.82	21.87	
		1852.5 (18625)	23.67	22.94	21.85	
	1RB-Middle (12)	1907.5 (19175)	23.64	22.85	21.87	
		1880 (18900)	23.60	22.80	21.87	
		1852.5 (18625)	23.79	22.62	21.92	
	1RB-Low (0)	1907.5 (19175)	23.58	22.86	21.86	
		1880 (18900)	23.64	22.86	21.84	
		1852.5 (18625)	23.69	22.95	21.87	
	12RB-High (13)	1907.5 (19175)	22.53	21.57	20.61	
		1880 (18900)	22.55	21.73	20.70	
		1852.5 (18625)	22.76	21.76	20.71	
	12RB-Middle (6)	1907.5 (19175)	22.52	21.61	20.61	
		1880 (18900)	22.56	21.71	20.73	
		1852.5 (18625)	22.81	21.78	20.78	
	12RB-Low (0)	1907.5 (19175)	22.55	21.70	20.61	
		1880 (18900)	22.57	21.75	20.69	
		1852.5 (18625)	22.83	21.80	20.80	
	25RB (0)	1907.5 (19175)	22.56	21.66	20.60	
		1880 (18900)	22.56	21.76	20.70	
		1852.5 (18625)	22.80	21.77	20.76	
	10MHz	1RB-High (49)	1905 (19150)	23.55	22.91	21.75
			1880 (18900)	23.66	22.89	21.87
			1855 (18650)	23.71	22.98	21.80
1RB-Middle (24)		1905 (19150)	23.67	22.98	21.85	
		1880 (18900)	23.74	22.96	21.83	
		1855 (18650)	23.79	22.99	21.99	
1RB-Low (0)		1905 (19150)	23.65	22.94	21.91	
		1880 (18900)	23.73	22.96	21.91	
		1855 (18650)	23.76	22.84	21.98	
25RB-High (25)		1905 (19150)	22.77	21.73	20.71	
		1880 (18900)	22.59	21.74	20.71	
		1855 (18650)	22.82	21.77	20.77	
25RB-Middle (12)		1905 (19150)	22.72	21.75	20.71	
		1880 (18900)	22.59	21.74	20.71	
		1855 (18650)	22.85	21.83	20.80	
25RB-Low (0)		1905 (19150)	22.79	21.78	20.69	
		1880 (18900)	22.58	21.76	20.74	
		1855 (18650)	22.82	21.82	20.81	
50RB (0)		1905 (19150)	22.80	21.75	20.68	
		1880 (18900)	22.58	21.70	20.71	
		1855 (18650)	22.84	21.83	20.77	

15MHz	1RB-High (74)	1902.5 (19125)	23.57	22.94	21.84	
		1880 (18900)	23.65	22.79	21.88	
		1857.5 (18675)	23.71	22.68	21.87	
	1RB-Middle (37)	1902.5 (19125)	23.69	22.74	21.83	
		1880 (18900)	23.73	22.84	22.00	
		1857.5 (18675)	23.73	22.82	21.94	
	1RB-Low (0)	1902.5 (19125)	23.62	22.65	21.85	
		1880 (18900)	23.75	22.88	21.89	
		1857.5 (18675)	23.76	22.75	21.96	
	36RB-High (38)	1902.5 (19125)	22.78	21.80	20.70	
		1880 (18900)	22.65	21.76	20.75	
		1857.5 (18675)	22.80	21.80	20.76	
	36RB-Middle (19)	1902.5 (19125)	22.79	21.75	20.74	
		1880 (18900)	22.70	21.84	20.80	
		1857.5 (18675)	22.83	21.83	20.78	
	36RB-Low (0)	1902.5 (19125)	22.80	21.83	20.75	
		1880 (18900)	22.62	21.87	20.74	
		1857.5 (18675)	22.87	21.83	20.86	
	75RB (0)	1902.5 (19125)	22.88	21.82	20.72	
		1880 (18900)	22.67	21.80	20.75	
		1857.5 (18675)	22.89	21.80	20.79	
	20MHz	1RB-High (99)	1900 (19100)	22.63	21.95	20.90
			1880 (18900)	22.53	21.91	20.70
			1860 (18700)	22.54	21.87	20.78
		1RB-Middle (50)	1900 (19100)	22.67	21.98	20.90
			1880 (18900)	22.59	21.96	20.84
			1860 (18700)	22.61	21.96	20.95
1RB-Low (0)		1900 (19100)	22.57	21.91	20.83	
		1880 (18900)	22.58	22.00	20.84	
		1860 (18700)	22.59	21.98	20.82	
50RB-High (50)		1900 (19100)	21.87	20.82	19.81	
		1880 (18900)	21.75	20.74	19.70	
		1860 (18700)	21.69	20.67	19.65	
50RB-Middle (25)		1900 (19100)	21.83	20.83	19.77	
		1880 (18900)	21.75	20.70	19.69	
		1860 (18700)	21.76	20.81	19.75	
50RB-Low (0)		1900 (19100)	21.88	20.92	19.87	
		1880 (18900)	21.71	20.68	19.68	
		1860 (18700)	21.73	20.76	19.74	
100RB (0)		1900 (19100)	21.89	20.85	19.80	
		1880 (18900)	21.75	20.66	19.62	
		1860 (18700)	21.77	20.71	19.71	

LTE Band2 ANT1-Power Level B1/F1/E2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	19.38	18.62	17.51
		1880 (18900)	19.53	18.77	17.72
		1850.7 (18607)	19.72	19.07	17.86
	1RB-Middle (3)	1909.3 (19193)	19.43	18.67	17.59
		1880 (18900)	19.56	18.81	17.71
		1850.7 (18607)	19.81	19.09	17.89
	1RB-Low (0)	1909.3 (19193)	19.38	18.80	17.51
		1880 (18900)	19.57	18.78	17.71
		1850.7 (18607)	19.73	19.00	17.87
	3RB-High (3)	1909.3 (19193)	19.47	18.46	17.52
		1880 (18900)	19.58	18.58	17.66
		1850.7 (18607)	19.76	18.80	17.87
	3RB-Middle (1)	1909.3 (19193)	19.44	18.47	17.52
		1880 (18900)	19.58	18.58	17.61
		1850.7 (18607)	19.80	18.76	17.83
	3RB-Low (0)	1909.3 (19193)	19.46	18.41	17.55
		1880 (18900)	19.59	18.55	17.61
		1850.7 (18607)	19.77	18.69	17.79
	6RB (0)	1909.3 (19193)	18.43	17.48	16.41
		1880 (18900)	18.57	17.63	16.50
		1850.7 (18607)	18.76	17.84	16.71
3MHz	1RB-High (14)	1908.5 (19185)	19.35	18.73	17.53
		1880 (18900)	19.51	18.95	17.73
		1851.5 (18615)	19.69	18.85	17.79
	1RB-Middle (7)	1908.5 (19185)	19.39	18.78	17.59
		1880 (18900)	19.56	18.94	17.74
		1851.5 (18615)	19.77	19.00	17.94
	1RB-Low (0)	1908.5 (19185)	19.45	18.77	17.65
		1880 (18900)	19.52	18.77	17.71
		1851.5 (18615)	19.69	19.09	17.95
	8RB-High (7)	1908.5 (19185)	18.41	17.53	16.45
		1880 (18900)	18.51	17.60	16.59
		1851.5 (18615)	18.72	17.77	16.77
	8RB-Middle (4)	1908.5 (19185)	18.41	17.51	16.48
		1880 (18900)	18.51	17.61	16.60
		1851.5 (18615)	18.69	17.80	16.78
	8RB-Low (0)	1908.5 (19185)	18.42	17.48	16.49
		1880 (18900)	18.52	17.59	16.58
		1851.5 (18615)	18.72	17.78	16.77
	15RB (0)	1908.5 (19185)	18.42	17.43	16.47
		1880 (18900)	18.54	17.55	16.58
		1851.5 (18615)	18.70	17.74	16.74

5MHz	1RB-High (24)	1907.5 (19175)	19.36	18.66	17.64	
		1880 (18900)	19.49	18.84	17.72	
		1852.5 (18625)	19.72	19.10	17.87	
	1RB-Middle (12)	1907.5 (19175)	19.43	18.83	17.63	
		1880 (18900)	19.62	18.90	17.74	
		1852.5 (18625)	19.75	19.01	17.83	
	1RB-Low (0)	1907.5 (19175)	19.45	18.70	17.66	
		1880 (18900)	19.56	18.98	17.73	
		1852.5 (18625)	19.78	19.01	17.97	
	12RB-High (13)	1907.5 (19175)	18.38	17.36	16.45	
		1880 (18900)	18.51	17.46	16.52	
		1852.5 (18625)	18.69	17.64	16.72	
	12RB-Middle (6)	1907.5 (19175)	18.45	17.44	16.45	
		1880 (18900)	18.57	17.57	16.58	
		1852.5 (18625)	18.72	17.73	16.72	
	12RB-Low (0)	1907.5 (19175)	18.49	17.44	16.52	
		1880 (18900)	18.62	17.56	16.58	
		1852.5 (18625)	18.76	17.70	16.77	
	25RB (0)	1907.5 (19175)	18.45	17.45	16.46	
		1880 (18900)	18.49	17.53	16.58	
		1852.5 (18625)	18.74	17.73	16.73	
	10MHz	1RB-High (49)	1905 (19150)	19.42	18.71	17.60
			1880 (18900)	19.50	18.78	17.69
			1855 (18650)	19.61	18.90	17.77
1RB-Middle (24)		1905 (19150)	19.46	18.88	17.68	
		1880 (18900)	19.65	18.91	17.79	
		1855 (18650)	19.77	19.05	17.84	
1RB-Low (0)		1905 (19150)	19.51	18.78	17.75	
		1880 (18900)	19.63	18.94	17.74	
		1855 (18650)	19.80	19.19	17.90	
25RB-High (25)		1905 (19150)	18.54	17.51	16.46	
		1880 (18900)	18.53	17.54	16.52	
		1855 (18650)	18.71	17.71	16.68	
25RB-Middle (12)		1905 (19150)	18.51	17.49	16.48	
		1880 (18900)	18.57	17.58	16.61	
		1855 (18650)	18.67	17.76	16.72	
25RB-Low (0)		1905 (19150)	18.52	17.55	16.48	
		1880 (18900)	18.58	17.58	16.62	
		1855 (18650)	18.77	17.77	16.74	
50RB (0)		1905 (19150)	18.56	17.50	16.50	
		1880 (18900)	18.60	17.55	16.60	
		1855 (18650)	18.76	17.74	16.72	

15MHz	1RB-High (74)	1902.5 (19125)	19.39	18.67	17.53
		1880 (18900)	19.36	18.64	17.54
		1857.5 (18675)	19.61	18.85	17.79
	1RB-Middle (37)	1902.5 (19125)	19.47	18.78	17.66
		1880 (18900)	19.55	18.84	17.81
		1857.5 (18675)	19.66	18.93	17.79
	1RB-Low (0)	1902.5 (19125)	19.45	18.67	17.62
		1880 (18900)	19.53	18.90	17.76
		1857.5 (18675)	19.72	19.03	17.94
	36RB-High (38)	1902.5 (19125)	18.40	17.46	16.49
		1880 (18900)	18.52	17.53	16.49
		1857.5 (18675)	18.59	17.55	16.68
	36RB-Middle (19)	1902.5 (19125)	18.49	17.46	16.52
		1880 (18900)	18.54	17.54	16.57
		1857.5 (18675)	18.68	17.65	16.72
	36RB-Low (0)	1902.5 (19125)	18.47	17.47	16.57
		1880 (18900)	18.51	17.50	16.60
		1857.5 (18675)	18.72	17.70	16.71
	75RB (0)	1902.5 (19125)	18.52	17.48	16.49
		1880 (18900)	18.55	17.53	16.57
		1857.5 (18675)	18.71	17.70	16.64
20MHz	1RB-High (99)	1900 (19100)	19.39	18.73	17.61
		1880 (18900)	19.43	18.82	17.67
		1860 (18700)	19.63	19.00	17.75
	1RB-Middle (50)	1900 (19100)	19.56	18.77	17.68
		1880 (18900)	19.68	19.02	17.83
		1860 (18700)	19.70	19.01	17.85
	1RB-Low (0)	1900 (19100)	19.47	18.84	17.68
		1880 (18900)	19.65	19.06	17.81
		1860 (18700)	19.76	19.10	17.99
	50RB-High (50)	1900 (19100)	18.55	17.52	16.48
		1880 (18900)	18.56	17.54	16.53
		1860 (18700)	18.71	17.67	16.73
	50RB-Middle (25)	1900 (19100)	18.56	17.56	16.54
		1880 (18900)	18.64	17.59	16.63
		1860 (18700)	18.75	17.71	16.69
	50RB-Low (0)	1900 (19100)	18.65	17.63	16.65
		1880 (18900)	18.65	17.63	16.62
		1860 (18700)	18.78	17.76	16.84
	100RB (0)	1900 (19100)	18.58	17.54	16.57
		1880 (18900)	18.62	17.59	16.55
		1860 (18700)	18.76	17.73	16.69

LTE Band2 ANT1-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	21.55	20.81	19.69
		1880 (18900)	21.68	20.90	19.82
		1850.7 (18607)	21.79	21.10	19.90
	1RB-Middle (3)	1909.3 (19193)	21.55	20.82	19.65
		1880 (18900)	21.70	20.93	19.84
		1850.7 (18607)	21.83	21.10	19.92
	1RB-Low (0)	1909.3 (19193)	21.60	20.84	19.69
		1880 (18900)	21.71	20.94	19.84
		1850.7 (18607)	21.79	21.06	19.98
	3RB-High (3)	1909.3 (19193)	21.63	20.55	19.70
		1880 (18900)	21.74	20.69	19.73
		1850.7 (18607)	21.83	20.78	19.91
	3RB-Middle (1)	1909.3 (19193)	21.61	20.66	19.73
		1880 (18900)	21.77	20.71	19.80
		1850.7 (18607)	21.85	20.77	19.91
	3RB-Low (0)	1909.3 (19193)	21.64	20.60	19.67
		1880 (18900)	21.76	20.76	19.83
		1850.7 (18607)	21.85	20.83	19.89
	6RB (0)	1909.3 (19193)	20.58	19.67	18.58
		1880 (18900)	20.74	19.73	18.64
		1850.7 (18607)	20.83	19.85	18.76
3MHz	1RB-High (14)	1908.5 (19185)	21.60	20.90	19.78
		1880 (18900)	21.73	21.02	19.85
		1851.5 (18615)	21.85	21.21	20.03
	1RB-Middle (7)	1908.5 (19185)	21.63	20.87	19.82
		1880 (18900)	21.78	21.07	19.86
		1851.5 (18615)	21.82	21.14	20.05
	1RB-Low (0)	1908.5 (19185)	21.62	21.00	19.79
		1880 (18900)	21.75	21.08	19.85
		1851.5 (18615)	21.82	21.18	20.00
	8RB-High (7)	1908.5 (19185)	20.63	19.71	18.65
		1880 (18900)	20.71	19.71	18.71
		1851.5 (18615)	20.81	19.90	18.83
	8RB-Middle (4)	1908.5 (19185)	20.56	19.68	18.61
		1880 (18900)	20.70	19.78	18.73
		1851.5 (18615)	20.84	19.92	18.84
	8RB-Low (0)	1908.5 (19185)	20.64	19.67	18.61
		1880 (18900)	20.77	19.78	18.77
		1851.5 (18615)	20.86	19.88	18.84
	15RB (0)	1908.5 (19185)	20.65	19.61	18.62
		1880 (18900)	20.72	19.77	18.71
		1851.5 (18615)	20.85	19.86	18.78

5MHz	1RB-High (24)	1907.5 (19175)	21.70	20.86	19.78	
		1880 (18900)	21.72	20.95	19.77	
		1852.5 (18625)	21.89	21.05	19.95	
	1RB-Middle (12)	1907.5 (19175)	21.78	20.94	19.84	
		1880 (18900)	21.84	21.11	19.95	
		1852.5 (18625)	21.94	21.13	20.02	
	1RB-Low (0)	1907.5 (19175)	21.72	20.99	19.83	
		1880 (18900)	21.81	21.06	19.90	
		1852.5 (18625)	21.86	21.15	20.00	
	12RB-High (13)	1907.5 (19175)	20.64	19.59	18.58	
		1880 (18900)	20.67	19.66	18.70	
		1852.5 (18625)	20.81	19.84	18.82	
	12RB-Middle (6)	1907.5 (19175)	20.72	19.62	18.61	
		1880 (18900)	20.78	19.73	18.75	
		1852.5 (18625)	20.84	19.86	18.82	
	12RB-Low (0)	1907.5 (19175)	20.74	19.71	18.64	
		1880 (18900)	20.83	19.81	18.76	
		1852.5 (18625)	20.87	19.91	18.89	
	25RB (0)	1907.5 (19175)	20.72	19.64	18.61	
		1880 (18900)	20.75	19.77	18.75	
		1852.5 (18625)	20.91	19.87	18.84	
	10MHz	1RB-High (49)	1905 (19150)	21.59	20.80	19.72
			1880 (18900)	21.70	20.91	19.78
			1855 (18650)	21.84	21.00	19.94
1RB-Middle (24)		1905 (19150)	21.70	21.03	19.84	
		1880 (18900)	21.78	21.12	19.94	
		1855 (18650)	21.88	21.17	20.06	
1RB-Low (0)		1905 (19150)	21.75	20.98	19.89	
		1880 (18900)	21.83	21.00	19.98	
		1855 (18650)	21.89	21.06	20.03	
25RB-High (25)		1905 (19150)	20.68	19.63	18.64	
		1880 (18900)	20.76	19.70	18.69	
		1855 (18650)	20.85	19.84	18.78	
25RB-Middle (12)		1905 (19150)	20.71	19.72	18.65	
		1880 (18900)	20.75	19.76	18.73	
		1855 (18650)	20.82	19.80	18.84	
25RB-Low (0)		1905 (19150)	20.71	19.74	18.72	
		1880 (18900)	20.79	19.80	18.77	
		1855 (18650)	20.84	19.82	18.86	
50RB (0)		1905 (19150)	20.72	19.70	18.68	
		1880 (18900)	20.79	19.75	18.69	
		1855 (18650)	20.87	19.84	18.81	



15MHz	1RB-High (74)	1902.5 (19125)	21.48	20.78	19.65
		1880 (18900)	21.55	21.32	19.74
		1857.5 (18675)	21.72	21.03	19.92
	1RB-Middle (37)	1902.5 (19125)	21.61	20.98	19.80
		1880 (18900)	21.74	20.96	19.91
		1857.5 (18675)	21.74	21.05	19.95
	1RB-Low (0)	1902.5 (19125)	21.60	20.92	19.78
		1880 (18900)	21.78	21.01	19.87
		1857.5 (18675)	21.76	21.13	19.90
	36RB-High (38)	1902.5 (19125)	20.55	19.57	18.61
		1880 (18900)	20.60	19.61	18.70
		1857.5 (18675)	20.70	19.75	18.69
	36RB-Middle (19)	1902.5 (19125)	20.60	19.64	18.62
		1880 (18900)	20.68	19.65	18.66
		1857.5 (18675)	20.73	19.75	18.76
	36RB-Low (0)	1902.5 (19125)	20.66	19.71	18.69
		1880 (18900)	20.77	19.71	18.70
		1857.5 (18675)	20.82	19.84	18.74
	75RB (0)	1902.5 (19125)	20.68	19.66	18.65
		1880 (18900)	20.68	19.62	18.65
		1857.5 (18675)	20.73	19.74	18.71
20MHz	1RB-High (99)	1900 (19100)	21.51	20.75	19.65
		1880 (18900)	21.53	20.86	19.63
		1860 (18700)	21.70	20.85	19.76
	1RB-Middle (50)	1900 (19100)	21.71	20.91	19.83
		1880 (18900)	21.72	20.94	19.80
		1860 (18700)	21.78	21.00	19.88
	1RB-Low (0)	1900 (19100)	21.57	20.78	19.76
		1880 (18900)	21.73	21.02	19.79
		1860 (18700)	21.76	21.09	19.96
	50RB-High (50)	1900 (19100)	20.62	19.64	18.63
		1880 (18900)	20.66	19.65	18.61
		1860 (18700)	20.78	19.71	18.72
	50RB-Middle (25)	1900 (19100)	20.71	19.72	18.66
		1880 (18900)	20.76	19.73	18.67
		1860 (18700)	20.78	19.74	18.73
	50RB-Low (0)	1900 (19100)	20.75	19.75	18.73
		1880 (18900)	20.77	19.76	18.71
		1860 (18700)	20.80	19.79	18.75
	100RB (0)	1900 (19100)	20.73	19.69	18.63
		1880 (18900)	20.72	19.69	18.63
		1860 (18700)	20.82	19.76	18.73

LTE Band2 ANT1-Power Level F2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	17.39	16.71	15.60
		1880 (18900)	17.51	16.67	15.56
		1850.7 (18607)	17.29	16.77	15.73
	1RB-Middle (3)	1909.3 (19193)	17.53	16.85	15.79
		1880 (18900)	17.50	16.96	15.94
		1850.7 (18607)	17.73	16.94	15.88
	1RB-Low (0)	1909.3 (19193)	17.54	16.88	15.78
		1880 (18900)	17.60	16.91	15.84
		1850.7 (18607)	17.35	16.82	15.69
	3RB-High (3)	1909.3 (19193)	16.65	15.71	14.47
		1880 (18900)	16.48	15.53	14.51
		1850.7 (18607)	16.53	15.47	14.53
	3RB-Middle (1)	1909.3 (19193)	16.51	15.56	14.54
		1880 (18900)	16.42	15.72	14.34
		1850.7 (18607)	16.74	15.52	14.41
	3RB-Low (0)	1909.3 (19193)	16.69	15.68	14.73
		1880 (18900)	16.40	15.47	14.64
		1850.7 (18607)	16.56	15.70	14.52
	6RB (0)	1909.3 (19193)	16.65	15.72	14.44
		1880 (18900)	16.52	15.47	14.42
		1850.7 (18607)	16.56	15.53	14.44
3MHz	1RB-High (14)	1908.5 (19185)	17.30	16.76	15.52
		1880 (18900)	17.31	16.62	15.61
		1851.5 (18615)	17.53	16.68	15.55
	1RB-Middle (7)	1908.5 (19185)	17.42	16.80	15.80
		1880 (18900)	17.43	16.85	16.01
		1851.5 (18615)	17.62	16.85	15.68
	1RB-Low (0)	1908.5 (19185)	17.29	16.77	15.66
		1880 (18900)	17.62	16.90	15.62
		1851.5 (18615)	17.57	16.93	15.69
	8RB-High (7)	1908.5 (19185)	16.55	15.55	14.50
		1880 (18900)	16.64	15.63	14.46
		1851.5 (18615)	16.76	15.51	14.69
	8RB-Middle (4)	1908.5 (19185)	16.66	15.47	14.58
		1880 (18900)	16.37	15.71	14.56
		1851.5 (18615)	16.70	15.49	14.34
	8RB-Low (0)	1908.5 (19185)	16.63	15.81	14.71
		1880 (18900)	16.36	15.71	14.68
		1851.5 (18615)	16.65	15.61	14.58
	15RB (0)	1908.5 (19185)	16.52	15.66	14.55
		1880 (18900)	16.56	15.57	14.58
		1851.5 (18615)	16.68	15.48	14.59

5MHz	1RB-High (24)	1907.5 (19175)	17.36	16.59	15.50	
		1880 (18900)	17.33	16.54	15.51	
		1852.5 (18625)	17.49	16.57	15.56	
	1RB-Middle (12)	1907.5 (19175)	17.46	16.82	15.76	
		1880 (18900)	17.61	16.93	15.86	
		1852.5 (18625)	17.58	16.73	15.75	
	1RB-Low (0)	1907.5 (19175)	17.37	16.60	15.65	
		1880 (18900)	17.56	16.87	15.84	
		1852.5 (18625)	17.53	16.89	15.65	
	12RB-High (13)	1907.5 (19175)	16.61	15.57	14.32	
		1880 (18900)	16.45	15.71	14.56	
		1852.5 (18625)	16.54	15.65	14.71	
	12RB-Middle (6)	1907.5 (19175)	16.43	15.48	14.68	
		1880 (18900)	16.54	15.73	14.53	
		1852.5 (18625)	16.80	15.70	14.56	
	12RB-Low (0)	1907.5 (19175)	16.80	15.54	14.78	
		1880 (18900)	16.45	15.56	14.58	
		1852.5 (18625)	16.59	15.66	14.62	
	25RB (0)	1907.5 (19175)	16.52	15.70	14.47	
		1880 (18900)	16.47	15.69	14.61	
		1852.5 (18625)	16.73	15.48	14.51	
	10MHz	1RB-High (49)	1905 (19150)	17.39	16.53	15.65
			1880 (18900)	17.43	16.67	15.57
			1855 (18650)	17.57	16.73	15.50
1RB-Middle (24)		1905 (19150)	17.44	16.79	15.84	
		1880 (18900)	17.70	16.82	16.02	
		1855 (18650)	17.69	16.88	15.89	
1RB-Low (0)		1905 (19150)	17.38	16.66	15.67	
		1880 (18900)	17.65	16.77	15.77	
		1855 (18650)	17.57	17.00	15.77	
25RB-High (25)		1905 (19150)	16.50	15.52	14.27	
		1880 (18900)	16.56	15.55	14.63	
		1855 (18650)	16.59	15.52	14.46	
25RB-Middle (12)		1905 (19150)	16.62	15.49	14.61	
		1880 (18900)	16.48	15.56	14.61	
		1855 (18650)	16.78	15.70	14.57	
25RB-Low (0)		1905 (19150)	16.77	15.77	14.65	
		1880 (18900)	16.57	15.56	14.40	
		1855 (18650)	16.59	15.54	14.60	
50RB (0)		1905 (19150)	16.69	15.68	14.62	
		1880 (18900)	16.54	15.64	14.45	
		1855 (18650)	16.77	15.72	14.48	

15MHz	1RB-High (74)	1902.5 (19125)	17.25	16.81	15.61
		1880 (18900)	17.26	16.48	15.66
		1857.5 (18675)	17.46	16.86	15.61
	1RB-Middle (37)	1902.5 (19125)	17.41	16.94	15.91
		1880 (18900)	17.67	16.97	15.94
		1857.5 (18675)	17.53	16.93	15.74
	1RB-Low (0)	1902.5 (19125)	17.53	16.62	15.67
		1880 (18900)	17.39	16.81	15.68
		1857.5 (18675)	17.51	16.78	15.89
	36RB-High (38)	1902.5 (19125)	16.57	15.66	14.48
		1880 (18900)	16.44	15.59	14.50
		1857.5 (18675)	16.80	15.54	14.57
	36RB-Middle (19)	1902.5 (19125)	16.68	15.56	14.68
		1880 (18900)	16.52	15.65	14.39
		1857.5 (18675)	16.54	15.70	14.43
	36RB-Low (0)	1902.5 (19125)	16.56	15.81	14.53
		1880 (18900)	16.56	15.53	14.67
		1857.5 (18675)	16.83	15.57	14.53
	75RB (0)	1902.5 (19125)	16.60	15.57	14.53
		1880 (18900)	16.61	15.56	14.51
		1857.5 (18675)	16.79	15.55	14.54
20MHz	1RB-High (99)	1900 (19100)	17.31	16.67	15.59
		1880 (18900)	17.41	16.60	15.53
		1860 (18700)	17.44	16.71	15.60
	1RB-Middle (50)	1900 (19100)	17.47	16.90	15.79
		1880 (18900)	17.56	16.89	15.88
		1860 (18700)	17.58	16.88	15.76
	1RB-Low (0)	1900 (19100)	17.43	16.74	15.72
		1880 (18900)	17.53	16.81	15.73
		1860 (18700)	17.48	16.92	15.80
	50RB-High (50)	1900 (19100)	16.57	15.56	14.37
		1880 (18900)	16.50	15.62	14.52
		1860 (18700)	16.65	15.59	14.59
	50RB-Middle (25)	1900 (19100)	16.56	15.60	14.58
		1880 (18900)	16.49	15.61	14.47
		1860 (18700)	16.66	15.64	14.48
	50RB-Low (0)	1900 (19100)	16.70	15.68	14.65
		1880 (18900)	16.50	15.60	14.55
		1860 (18700)	16.69	15.69	14.67
	100RB (0)	1900 (19100)	16.59	15.63	14.50
		1880 (18900)	16.46	15.57	14.53
		1860 (18700)	16.67	15.61	14.56

LTE Band2 ANT4-Power Level A1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	23.06	21.95	20.86
		1880 (18900)	23.23	22.18	21.16
		1850.7 (18607)	23.53	22.26	21.22
	1RB-Middle (3)	1909.3 (19193)	23.16	22.11	21.14
		1880 (18900)	23.57	22.26	21.48
		1850.7 (18607)	23.42	22.31	21.54
	1RB-Low (0)	1909.3 (19193)	23.13	22.00	20.97
		1880 (18900)	23.42	22.34	21.23
		1850.7 (18607)	23.64	22.50	21.35
	3RB-High (3)	1909.3 (19193)	22.14	21.32	20.98
		1880 (18900)	22.13	21.20	21.42
		1850.7 (18607)	22.51	21.43	21.44
	3RB-Middle (1)	1909.3 (19193)	22.06	21.18	21.02
		1880 (18900)	22.31	21.15	21.46
		1850.7 (18607)	22.64	21.40	21.55
	3RB-Low (0)	1909.3 (19193)	22.20	21.17	21.10
		1880 (18900)	22.41	21.25	21.39
		1850.7 (18607)	22.64	21.37	21.32
	6RB (0)	1909.3 (19193)	22.07	20.82	20.10
		1880 (18900)	22.39	21.08	20.42
		1850.7 (18607)	22.51	21.49	20.41
3MHz	1RB-High (14)	1908.5 (19185)	22.92	21.86	20.82
		1880 (18900)	23.34	22.22	21.31
		1851.5 (18615)	23.33	22.27	21.20
	1RB-Middle (7)	1908.5 (19185)	23.21	22.15	21.18
		1880 (18900)	23.47	22.16	21.35
		1851.5 (18615)	23.45	22.30	21.46
	1RB-Low (0)	1908.5 (19185)	23.09	22.06	21.16
		1880 (18900)	23.31	22.41	21.24
		1851.5 (18615)	23.46	22.33	21.60
	8RB-High (7)	1908.5 (19185)	21.99	20.97	19.90
		1880 (18900)	22.31	21.09	20.17
		1851.5 (18615)	22.53	21.44	20.34
	8RB-Middle (4)	1908.5 (19185)	22.24	21.04	20.13
		1880 (18900)	22.20	21.35	20.37
		1851.5 (18615)	22.59	21.46	20.52
	8RB-Low (0)	1908.5 (19185)	22.11	21.24	20.11
		1880 (18900)	22.40	21.37	20.38
		1851.5 (18615)	22.59	21.53	20.42
	15RB (0)	1908.5 (19185)	22.07	21.01	20.12
		1880 (18900)	22.38	21.15	20.36
		1851.5 (18615)	22.51	21.41	20.42

5MHz	1RB-High (24)	1907.5 (19175)	22.94	21.96	20.81	
		1880 (18900)	23.07	22.22	21.03	
		1852.5 (18625)	23.44	22.22	21.45	
	1RB-Middle (12)	1907.5 (19175)	23.28	22.25	21.07	
		1880 (18900)	23.41	22.43	21.41	
		1852.5 (18625)	23.54	22.29	21.63	
	1RB-Low (0)	1907.5 (19175)	23.24	21.96	21.18	
		1880 (18900)	23.54	22.39	21.28	
		1852.5 (18625)	23.59	22.54	21.38	
	12RB-High (13)	1907.5 (19175)	22.04	20.86	19.76	
		1880 (18900)	22.20	21.21	20.17	
		1852.5 (18625)	22.39	21.60	20.55	
	12RB-Middle (6)	1907.5 (19175)	22.29	21.18	20.03	
		1880 (18900)	22.20	21.14	20.38	
		1852.5 (18625)	22.63	21.32	20.48	
	12RB-Low (0)	1907.5 (19175)	22.23	21.06	20.20	
		1880 (18900)	22.40	21.42	20.50	
		1852.5 (18625)	22.56	21.40	20.32	
	25RB (0)	1907.5 (19175)	22.10	20.83	19.99	
		1880 (18900)	22.29	21.23	20.33	
		1852.5 (18625)	22.68	21.50	20.50	
	10MHz	1RB-High (49)	1905 (19150)	22.92	21.81	20.89
			1880 (18900)	23.08	22.19	21.26
			1855 (18650)	23.28	22.25	21.19
1RB-Middle (24)		1905 (19150)	23.28	22.23	21.12	
		1880 (18900)	23.43	22.42	21.37	
		1855 (18650)	23.54	22.48	21.52	
1RB-Low (0)		1905 (19150)	23.12	22.15	21.07	
		1880 (18900)	23.27	22.23	21.51	
		1855 (18650)	23.49	22.35	21.56	
25RB-High (25)		1905 (19150)	22.12	20.96	20.01	
		1880 (18900)	22.40	21.11	20.37	
		1855 (18650)	22.57	21.48	20.34	
25RB-Middle (12)		1905 (19150)	22.10	21.01	20.07	
		1880 (18900)	22.21	21.21	20.46	
		1855 (18650)	22.41	21.37	20.46	
25RB-Low (0)		1905 (19150)	22.19	20.97	20.12	
		1880 (18900)	22.27	21.20	20.38	
		1855 (18650)	22.49	21.52	20.58	
50RB (0)		1905 (19150)	21.93	21.05	19.95	
		1880 (18900)	22.19	20.99	20.48	
		1855 (18650)	22.68	21.58	20.68	

15MHz	1RB-High (74)	1902.5 (19125)	23.09	21.89	20.97
		1880 (18900)	23.28	22.15	21.27
		1857.5 (18675)	23.37	22.32	21.31
	1RB-Middle (37)	1902.5 (19125)	23.08	22.14	20.95
		1880 (18900)	23.53	22.37	21.55
		1857.5 (18675)	23.60	22.44	21.67
	1RB-Low (0)	1902.5 (19125)	23.03	21.98	21.16
		1880 (18900)	23.40	22.32	21.33
		1857.5 (18675)	23.49	22.55	21.49
	36RB-High (38)	1902.5 (19125)	22.06	21.02	19.83
		1880 (18900)	22.24	21.21	20.14
		1857.5 (18675)	22.42	21.34	20.29
	36RB-Middle (19)	1902.5 (19125)	22.33	21.08	20.18
		1880 (18900)	22.29	21.22	20.45
		1857.5 (18675)	22.47	21.54	20.33
	36RB-Low (0)	1902.5 (19125)	22.05	20.95	20.18
		1880 (18900)	22.31	21.36	20.21
		1857.5 (18675)	22.62	21.38	20.36
	75RB (0)	1902.5 (19125)	22.16	20.97	20.19
		1880 (18900)	22.24	21.00	20.22
		1857.5 (18675)	22.44	21.56	20.45
20MHz	1RB-High (99)	1900 (19100)	23.07	21.93	20.96
		1880 (18900)	23.22	22.10	21.17
		1860 (18700)	23.38	22.25	21.34
	1RB-Middle (50)	1900 (19100)	23.17	22.10	21.03
		1880 (18900)	23.43	22.30	21.48
		1860 (18700)	23.54	22.41	21.61
	1RB-Low (0)	1900 (19100)	23.15	22.07	21.05
		1880 (18900)	23.41	22.31	21.37
		1860 (18700)	23.57	22.46	21.46
	50RB-High (50)	1900 (19100)	22.02	20.87	19.88
		1880 (18900)	22.27	21.18	20.29
		1860 (18700)	22.47	21.47	20.40
	50RB-Middle (25)	1900 (19100)	22.18	21.08	20.15
		1880 (18900)	22.33	21.25	20.38
		1860 (18700)	22.54	21.47	20.46
	50RB-Low (0)	1900 (19100)	22.13	21.10	20.11
		1880 (18900)	22.32	21.29	20.36
		1860 (18700)	22.53	21.40	20.43
	100RB (0)	1900 (19100)	22.06	20.95	20.09
		1880 (18900)	22.29	21.14	20.35
		1860 (18700)	22.53	21.43	20.53

LTE Band2 ANT4-Power Level B1/C1/D1/F1					
1.4MHz	1RB-High (5)	1909.3 (19193)	15.63	16.06	15.80
		1880 (18900)	15.75	16.39	15.84
		1850.7 (18607)	15.87	16.20	16.29
	1RB-Middle (3)	1909.3 (19193)	15.64	15.88	15.81
		1880 (18900)	15.57	16.16	16.30
		1850.7 (18607)	16.00	16.03	15.76
	1RB-Low (0)	1909.3 (19193)	15.84	16.02	16.31
		1880 (18900)	16.14	16.15	15.89
		1850.7 (18607)	16.06	15.94	16.36
	3RB-High (3)	1909.3 (19193)	15.54	15.97	16.30
		1880 (18900)	15.69	16.22	16.03
		1850.7 (18607)	16.03	16.25	16.03
	3RB-Middle (1)	1909.3 (19193)	15.65	15.96	16.16
		1880 (18900)	15.86	15.94	15.86
		1850.7 (18607)	16.29	16.23	16.16
	3RB-Low (0)	1909.3 (19193)	15.61	16.15	16.24
		1880 (18900)	16.06	16.22	16.33
		1850.7 (18607)	16.25	15.81	16.18
	6RB (0)	1909.3 (19193)	15.81	15.79	16.32
		1880 (18900)	15.93	15.86	16.01
		1850.7 (18607)	16.05	16.19	16.24
3MHz	1RB-High (14)	1908.5 (19185)	15.62	16.08	15.98
		1880 (18900)	15.84	16.14	15.96
		1851.5 (18615)	15.93	16.29	16.22
	1RB-Middle (7)	1908.5 (19185)	15.69	15.73	15.79
		1880 (18900)	15.76	16.03	16.30
		1851.5 (18615)	16.05	16.22	15.79
	1RB-Low (0)	1908.5 (19185)	15.85	16.00	16.17
		1880 (18900)	16.04	16.29	15.91
		1851.5 (18615)	16.00	16.06	16.23
	8RB-High (7)	1908.5 (19185)	15.56	15.86	16.09
		1880 (18900)	15.62	16.32	16.05
		1851.5 (18615)	16.04	16.31	16.27
	8RB-Middle (4)	1908.5 (19185)	15.77	15.78	16.16
		1880 (18900)	15.82	15.82	15.88
		1851.5 (18615)	16.23	16.11	16.22
	8RB-Low (0)	1908.5 (19185)	15.67	16.36	16.23
		1880 (18900)	16.05	16.25	16.30
		1851.5 (18615)	16.26	16.01	16.23
	15RB (0)	1908.5 (19185)	15.83	16.00	16.33
		1880 (18900)	15.99	16.10	16.05
		1851.5 (18615)	16.12	16.34	16.31



5MHz	1RB-High (24)	1907.5 (19175)	15.66	15.95	15.74	
		1880 (18900)	15.85	16.32	15.71	
		1852.5 (18625)	15.77	16.21	16.16	
	1RB-Middle (12)	1907.5 (19175)	15.69	15.96	16.07	
		1880 (18900)	15.68	16.31	16.27	
		1852.5 (18625)	16.05	16.25	15.97	
	1RB-Low (0)	1907.5 (19175)	15.86	15.81	16.10	
		1880 (18900)	16.05	16.16	15.84	
		1852.5 (18625)	16.02	16.14	16.30	
	12RB-High (13)	1907.5 (19175)	15.48	15.87	16.28	
		1880 (18900)	15.73	16.37	16.09	
		1852.5 (18625)	16.15	16.20	16.02	
	12RB-Middle (6)	1907.5 (19175)	15.60	15.70	16.04	
		1880 (18900)	15.95	15.96	15.86	
		1852.5 (18625)	16.09	16.14	16.19	
	12RB-Low (0)	1907.5 (19175)	15.60	16.24	16.17	
		1880 (18900)	16.03	16.07	16.19	
		1852.5 (18625)	16.17	15.90	16.04	
	25RB (0)	1907.5 (19175)	15.79	15.74	16.39	
		1880 (18900)	15.83	16.11	15.93	
		1852.5 (18625)	16.20	16.19	16.15	
	10MHz	1RB-High (49)	1905 (19150)	15.60	15.82	15.79
			1880 (18900)	15.85	16.36	15.78
			1855 (18650)	15.88	16.13	16.31
1RB-Middle (24)		1905 (19150)	15.66	15.75	16.04	
		1880 (18900)	15.85	16.30	16.27	
		1855 (18650)	16.04	16.01	15.92	
1RB-Low (0)		1905 (19150)	15.72	15.99	16.18	
		1880 (18900)	16.00	16.30	16.10	
		1855 (18650)	16.06	15.85	16.35	
25RB-High (25)		1905 (19150)	15.63	15.89	16.09	
		1880 (18900)	15.72	16.10	15.93	
		1855 (18650)	16.24	16.17	16.03	
25RB-Middle (12)		1905 (19150)	15.82	15.79	16.29	
		1880 (18900)	15.98	15.89	15.92	
		1855 (18650)	16.04	16.16	15.97	
25RB-Low (0)		1905 (19150)	15.66	16.32	16.20	
		1880 (18900)	16.14	16.02	16.26	
		1855 (18650)	16.34	15.98	15.97	
50RB (0)		1905 (19150)	15.63	15.81	16.38	
		1880 (18900)	15.86	16.11	15.99	
		1855 (18650)	16.15	16.15	16.29	

15MHz	1RB-High (74)	1902.5 (19125)	15.52	16.05	15.72
		1880 (18900)	15.84	16.21	15.72
		1857.5 (18675)	15.84	16.08	16.12
	1RB-Middle (37)	1902.5 (19125)	15.72	15.98	15.81
		1880 (18900)	15.84	16.08	16.33
		1857.5 (18675)	16.11	16.26	15.77
	1RB-Low (0)	1902.5 (19125)	15.87	16.00	16.35
		1880 (18900)	16.18	16.30	16.08
		1857.5 (18675)	16.24	15.84	16.28
	36RB-High (38)	1902.5 (19125)	15.72	15.86	16.13
		1880 (18900)	15.81	16.22	16.12
		1857.5 (18675)	16.07	16.28	16.07
	36RB-Middle (19)	1902.5 (19125)	15.79	15.95	16.08
		1880 (18900)	15.80	15.98	15.98
		1857.5 (18675)	16.20	16.11	15.99
	36RB-Low (0)	1902.5 (19125)	15.64	16.26	16.08
		1880 (18900)	15.97	16.15	16.13
		1857.5 (18675)	16.06	15.77	15.97
	75RB (0)	1902.5 (19125)	15.80	16.00	16.29
		1880 (18900)	15.89	16.03	16.08
		1857.5 (18675)	16.24	16.33	16.30
20MHz	1RB-High (99)	1900 (19100)	15.67	15.97	15.86
		1880 (18900)	15.74	16.24	15.85
		1860 (18700)	15.92	16.23	16.25
	1RB-Middle (50)	1900 (19100)	15.71	15.85	15.92
		1880 (18900)	15.72	16.18	16.25
		1860 (18700)	16.10	16.15	15.89
	1RB-Low (0)	1900 (19100)	15.74	15.92	16.25
		1880 (18900)	16.03	16.25	15.97
		1860 (18700)	16.13	15.99	16.23
	50RB-High (50)	1900 (19100)	15.60	15.98	16.21
		1880 (18900)	15.73	16.23	16.08
		1860 (18700)	16.11	16.19	16.13
	50RB-Middle (25)	1900 (19100)	15.70	15.85	16.14
		1880 (18900)	15.86	15.93	15.95
		1860 (18700)	16.19	16.22	16.12
	50RB-Low (0)	1900 (19100)	15.68	16.23	16.23
		1880 (18900)	16.07	16.12	16.21
		1860 (18700)	16.20	15.87	16.09
	100RB (0)	1900 (19100)	15.71	15.87	16.25
		1880 (18900)	15.95	15.96	15.99
		1860 (18700)	16.18	16.19	16.25

LTE Band2 ANT4-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	21.99	22.29	21.52
		1880 (18900)	22.05	22.57	21.56
		1850.7 (18607)	22.45	22.67	21.50
	1RB-Middle (3)	1909.3 (19193)	22.04	22.51	21.43
		1880 (18900)	22.03	22.49	21.77
		1850.7 (18607)	22.51	22.38	21.69
	1RB-Low (0)	1909.3 (19193)	21.99	22.58	21.68
		1880 (18900)	22.26	22.75	21.37
		1850.7 (18607)	22.50	22.29	21.73
	3RB-High (3)	1909.3 (19193)	22.11	21.54	20.68
		1880 (18900)	22.30	21.51	20.50
		1850.7 (18607)	22.55	21.59	20.42
	3RB-Middle (1)	1909.3 (19193)	22.14	21.46	20.74
		1880 (18900)	22.29	21.33	20.65
		1850.7 (18607)	22.51	21.65	20.42
	3RB-Low (0)	1909.3 (19193)	22.21	21.31	20.47
		1880 (18900)	22.36	21.24	20.63
		1850.7 (18607)	22.59	21.47	20.36
	6RB (0)	1909.3 (19193)	21.92	21.48	20.36
		1880 (18900)	22.27	21.62	20.60
		1850.7 (18607)	22.51	21.57	20.41
3MHz	1RB-High (14)	1908.5 (19185)	22.21	22.33	21.48
		1880 (18900)	22.03	22.41	21.43
		1851.5 (18615)	22.35	22.78	21.59
	1RB-Middle (7)	1908.5 (19185)	22.24	22.46	21.47
		1880 (18900)	22.26	22.57	21.72
		1851.5 (18615)	22.46	22.66	21.65
	1RB-Low (0)	1908.5 (19185)	21.98	22.63	21.65
		1880 (18900)	22.36	22.55	21.51
		1851.5 (18615)	22.64	22.51	21.76
	8RB-High (7)	1908.5 (19185)	22.19	21.33	20.67
		1880 (18900)	22.23	21.36	20.45
		1851.5 (18615)	22.61	21.60	20.42
	8RB-Middle (4)	1908.5 (19185)	22.10	21.38	20.59
		1880 (18900)	22.28	21.61	20.71
		1851.5 (18615)	22.42	21.46	20.38
	8RB-Low (0)	1908.5 (19185)	22.06	21.56	20.29
		1880 (18900)	22.35	21.31	20.37
		1851.5 (18615)	22.54	21.58	20.44
	15RB (0)	1908.5 (19185)	22.11	21.46	20.45
		1880 (18900)	22.19	21.53	20.68
		1851.5 (18615)	22.38	21.56	20.63

5MHz	1RB-High (24)	1907.5 (19175)	22.11	22.38	21.36	
		1880 (18900)	22.21	22.56	21.70	
		1852.5 (18625)	22.26	22.60	21.68	
	1RB-Middle (12)	1907.5 (19175)	22.29	22.51	21.35	
		1880 (18900)	22.07	22.57	21.75	
		1852.5 (18625)	22.58	22.61	21.59	
	1RB-Low (0)	1907.5 (19175)	22.10	22.52	21.55	
		1880 (18900)	22.33	22.52	21.29	
		1852.5 (18625)	22.70	22.31	21.49	
	12RB-High (13)	1907.5 (19175)	22.14	21.61	20.72	
		1880 (18900)	22.18	21.40	20.54	
		1852.5 (18625)	22.53	21.60	20.54	
	12RB-Middle (6)	1907.5 (19175)	22.27	21.32	20.68	
		1880 (18900)	22.23	21.39	20.51	
		1852.5 (18625)	22.49	21.59	20.50	
	12RB-Low (0)	1907.5 (19175)	21.99	21.53	20.34	
		1880 (18900)	22.46	21.46	20.59	
		1852.5 (18625)	22.52	21.61	20.39	
	25RB (0)	1907.5 (19175)	22.17	21.43	20.49	
		1880 (18900)	22.30	21.53	20.70	
		1852.5 (18625)	22.48	21.75	20.56	
	10MHz	1RB-High (49)	1905 (19150)	22.22	22.51	21.36
			1880 (18900)	22.09	22.35	21.66
			1855 (18650)	22.47	22.67	21.66
1RB-Middle (24)		1905 (19150)	22.17	22.38	21.51	
		1880 (18900)	22.04	22.50	21.63	
		1855 (18650)	22.55	22.48	21.77	
1RB-Low (0)		1905 (19150)	21.99	22.62	21.51	
		1880 (18900)	22.30	22.65	21.34	
		1855 (18650)	22.68	22.25	21.55	
25RB-High (25)		1905 (19150)	22.15	21.59	20.59	
		1880 (18900)	22.21	21.52	20.69	
		1855 (18650)	22.40	21.48	20.51	
25RB-Middle (12)		1905 (19150)	22.19	21.40	20.50	
		1880 (18900)	22.13	21.62	20.70	
		1855 (18650)	22.51	21.58	20.22	
25RB-Low (0)		1905 (19150)	22.01	21.50	20.44	
		1880 (18900)	22.41	21.27	20.59	
		1855 (18650)	22.43	21.62	20.56	
50RB (0)		1905 (19150)	22.16	21.51	20.40	
		1880 (18900)	22.23	21.58	20.67	
		1855 (18650)	22.63	21.55	20.61	

15MHz	1RB-High (74)	1902.5 (19125)	21.94	22.29	21.59
		1880 (18900)	22.04	22.53	21.41
		1857.5 (18675)	22.29	22.48	21.65
	1RB-Middle (37)	1902.5 (19125)	22.08	22.32	21.28
		1880 (18900)	22.21	22.65	21.79
		1857.5 (18675)	22.66	22.67	21.74
	1RB-Low (0)	1902.5 (19125)	21.96	22.72	21.50
		1880 (18900)	22.47	22.73	21.58
		1857.5 (18675)	22.48	22.35	21.48
	36RB-High (38)	1902.5 (19125)	22.04	21.50	20.65
		1880 (18900)	22.15	21.51	20.51
		1857.5 (18675)	22.43	21.65	20.39
	36RB-Middle (19)	1902.5 (19125)	22.29	21.32	20.68
		1880 (18900)	22.15	21.60	20.69
		1857.5 (18675)	22.43	21.52	20.34
	36RB-Low (0)	1902.5 (19125)	22.23	21.34	20.48
		1880 (18900)	22.50	21.24	20.46
		1857.5 (18675)	22.43	21.47	20.29
	75RB (0)	1902.5 (19125)	21.91	21.45	20.58
		1880 (18900)	22.21	21.44	20.52
		1857.5 (18675)	22.34	21.56	20.50
20MHz	1RB-High (99)	1900 (19100)	22.08	22.38	21.45
		1880 (18900)	22.17	22.46	21.56
		1860 (18700)	22.33	22.63	21.62
	1RB-Middle (50)	1900 (19100)	22.14	22.43	21.37
		1880 (18900)	22.16	22.61	21.64
		1860 (18700)	22.54	22.53	21.64
	1RB-Low (0)	1900 (19100)	22.11	22.57	21.54
		1880 (18900)	22.33	22.65	21.44
		1860 (18700)	22.56	22.37	21.62
	50RB-High (50)	1900 (19100)	22.04	21.48	20.57
		1880 (18900)	22.18	21.46	20.55
		1860 (18700)	22.52	21.57	20.43
	50RB-Middle (25)	1900 (19100)	22.17	21.45	20.64
		1880 (18900)	22.24	21.47	20.57
		1860 (18700)	22.53	21.55	20.36
	50RB-Low (0)	1900 (19100)	22.14	21.43	20.44
		1880 (18900)	22.37	21.38	20.49
		1860 (18700)	22.52	21.60	20.43
	100RB (0)	1900 (19100)	22.03	21.36	20.47
		1880 (18900)	22.31	21.58	20.65
		1860 (18700)	22.49	21.61	20.54

LTE Band7-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	23.17	22.58	21.44
		2535 (21100)	23.36	22.51	21.63
		2502.5 (20775)	23.36	22.58	21.60
	1RB-Middle (12)	2567.5 (21425)	23.24	22.60	21.50
		2535 (21100)	23.38	22.49	21.57
		2502.5 (20775)	23.40	22.52	21.63
	1RB-Low (0)	2567.5 (21425)	23.18	22.64	21.49
		2535 (21100)	23.33	22.43	21.62
		2502.5 (20775)	23.28	22.43	21.56
	12RB-High (13)	2567.5 (21425)	22.29	21.28	20.25
		2535 (21100)	22.25	21.44	20.44
		2502.5 (20775)	22.30	21.50	20.47
	12RB-Middle (6)	2567.5 (21425)	22.34	21.29	20.34
		2535 (21100)	22.29	21.42	20.46
		2502.5 (20775)	22.32	21.49	20.48
	12RB-Low (0)	2567.5 (21425)	22.35	21.37	20.34
		2535 (21100)	22.28	21.46	20.49
		2502.5 (20775)	22.28	21.47	20.47
	25RB (0)	2567.5 (21425)	22.35	21.35	20.36
		2535 (21100)	22.29	21.47	20.47
		2502.5 (20775)	22.36	21.54	20.51
10MHz	1RB-High (49)	2565 (21400)	23.20	22.53	21.43
		2535 (21100)	23.36	22.56	21.62
		2505 (20800)	23.31	22.51	21.59
	1RB-Middle (24)	2565 (21400)	23.28	22.47	21.55
		2535 (21100)	23.39	22.54	21.62
		2505 (20800)	23.38	22.51	21.69
	1RB-Low (0)	2565 (21400)	23.24	22.62	21.40
		2535 (21100)	23.38	22.58	21.58
		2505 (20800)	23.32	22.47	21.51
	25RB-High (25)	2565 (21400)	22.26	21.28	20.27
		2535 (21100)	22.32	21.51	20.47
		2505 (20800)	22.32	21.51	20.49
	25RB-Middle (12)	2565 (21400)	22.39	21.39	20.36
		2535 (21100)	22.24	21.47	20.47
		2505 (20800)	22.29	21.50	20.47
	25RB-Low (0)	2565 (21400)	22.42	21.44	20.36
		2535 (21100)	22.33	21.53	20.49
		2505 (20800)	22.29	21.51	20.46
	50RB (0)	2565 (21400)	22.34	21.34	20.37
		2535 (21100)	22.29	21.49	20.43
		2505 (20800)	22.29	21.49	20.44

15MHz	1RB-High (74)	2562.5 (21375)	23.06	22.44	21.35
		2535 (21100)	23.21	22.47	21.45
		2507.5 (20825)	23.22	22.39	21.44
	1RB-Middle (37)	2562.5 (21375)	23.19	22.47	21.49
		2535 (21100)	23.35	22.55	21.54
		2507.5 (20825)	23.32	22.53	21.52
	1RB-Low (0)	2562.5 (21375)	23.17	22.38	21.47
		2535 (21100)	23.23	22.43	21.46
		2507.5 (20825)	23.20	22.31	21.47
	36RB-High (38)	2562.5 (21375)	22.24	21.24	20.25
		2535 (21100)	22.24	21.38	20.41
		2507.5 (20825)	22.25	21.44	20.43
	36RB-Middle (19)	2562.5 (21375)	22.30	21.32	20.27
		2535 (21100)	22.22	21.47	20.49
		2507.5 (20825)	22.28	21.42	20.46
	36RB-Low (0)	2562.5 (21375)	22.19	21.35	20.36
		2535 (21100)	22.28	21.43	20.43
		2507.5 (20825)	22.18	21.39	20.36
	75RB (0)	2562.5 (21375)	22.28	21.29	20.28
		2535 (21100)	22.28	21.44	20.45
		2507.5 (20825)	22.30	21.47	20.44
20MHz	1RB-High (99)	2560 (21350)	22.64	22.07	20.93
		2535 (21100)	22.46	21.95	20.75
		2510 (20850)	22.54	21.90	20.77
	1RB-Middle (50)	2560 (21350)	22.65	22.13	20.95
		2535 (21100)	22.57	21.91	20.81
		2510 (20850)	22.60	21.95	20.84
	1RB-Low (0)	2560 (21350)	22.63	21.93	20.88
		2535 (21100)	22.53	21.89	20.72
		2510 (20850)	22.59	22.01	20.88
	50RB-High (50)	2560 (21350)	21.79	20.79	19.77
		2535 (21100)	21.70	20.69	19.73
		2510 (20850)	21.78	20.76	19.67
	50RB-Middle (25)	2560 (21350)	21.90	20.86	19.83
		2535 (21100)	21.77	20.74	19.73
		2510 (20850)	21.75	20.75	19.75
	50RB-Low (0)	2560 (21350)	21.91	20.88	19.86
		2535 (21100)	21.77	20.75	19.66
		2510 (20850)	21.75	20.75	19.72
	100RB (0)	2560 (21350)	21.83	20.77	19.75
		2535 (21100)	21.74	20.70	19.71
		2510 (20850)	21.74	20.72	19.70

LTE Band7-Power Level B1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	16.11	15.37	14.31
		2535 (21100)	16.30	15.60	14.48
		2502.5 (20775)	16.31	15.55	14.45
	1RB-Middle (12)	2567.5 (21425)	16.15	15.46	14.35
		2535 (21100)	16.36	15.67	14.55
		2502.5 (20775)	16.31	15.60	14.59
	1RB-Low (0)	2567.5 (21425)	16.14	15.32	14.33
		2535 (21100)	16.32	15.64	14.51
		2502.5 (20775)	16.24	15.41	14.36
	12RB-High (13)	2567.5 (21425)	15.13	14.14	13.13
		2535 (21100)	15.30	14.24	13.30
		2502.5 (20775)	15.34	14.28	13.36
	12RB-Middle (6)	2567.5 (21425)	15.16	14.18	13.20
		2535 (21100)	15.34	14.30	13.32
		2502.5 (20775)	15.34	14.30	13.30
	12RB-Low (0)	2567.5 (21425)	15.15	14.15	13.21
		2535 (21100)	15.33	14.29	13.33
		2502.5 (20775)	15.29	14.26	13.26
	25RB (0)	2567.5 (21425)	15.15	14.19	13.18
		2535 (21100)	15.31	14.33	13.30
		2502.5 (20775)	15.28	14.33	13.33
10MHz	1RB-High (49)	2565 (21400)	16.07	15.32	14.33
		2535 (21100)	16.26	15.56	14.33
		2505 (20800)	16.29	15.63	14.43
	1RB-Middle (24)	2565 (21400)	16.24	15.47	14.40
		2535 (21100)	16.37	15.69	14.53
		2505 (20800)	16.34	15.64	14.42
	1RB-Low (0)	2565 (21400)	16.26	15.41	14.44
		2535 (21100)	16.36	15.70	14.43
		2505 (20800)	16.21	15.56	14.44
	25RB-High (25)	2565 (21400)	15.14	14.15	13.11
		2535 (21100)	15.31	14.32	13.25
		2505 (20800)	15.32	14.37	13.37
	25RB-Middle (12)	2565 (21400)	15.21	14.20	13.18
		2535 (21100)	15.35	14.35	13.35
		2505 (20800)	15.33	14.28	13.29
	25RB-Low (0)	2565 (21400)	15.25	14.23	13.27
		2535 (21100)	15.36	14.34	13.33
		2505 (20800)	15.31	14.28	13.30
	50RB (0)	2565 (21400)	15.17	14.19	13.18
		2535 (21100)	15.37	14.30	13.31
		2505 (20800)	15.33	14.26	13.27



15MHz	1RB-High (74)	2562.5 (21375)	16.22	15.39	14.29
		2535 (21100)	16.21	15.61	14.40
		2507.5 (20825)	16.19	15.54	14.40
	1RB-Middle (37)	2562.5 (21375)	16.37	15.44	14.41
		2535 (21100)	16.30	15.67	14.50
		2507.5 (20825)	16.31	15.65	14.37
	1RB-Low (0)	2562.5 (21375)	16.30	15.53	14.36
		2535 (21100)	16.25	15.56	14.48
		2507.5 (20825)	16.21	15.43	14.30
	36RB-High (38)	2562.5 (21375)	15.31	14.10	13.13
		2535 (21100)	15.32	14.27	13.34
		2507.5 (20825)	15.30	14.29	13.27
	36RB-Middle (19)	2562.5 (21375)	15.34	14.23	13.24
		2535 (21100)	15.27	14.32	13.30
		2507.5 (20825)	15.28	14.28	13.31
	36RB-Low (0)	2562.5 (21375)	15.38	14.26	13.22
		2535 (21100)	15.38	14.37	13.31
		2507.5 (20825)	15.27	14.22	13.22
	75RB (0)	2562.5 (21375)	15.30	14.20	13.14
		2535 (21100)	15.34	14.32	13.29
		2507.5 (20825)	15.30	14.28	13.26
20MHz	1RB-High (99)	2560 (21350)	15.91	15.23	14.14
		2535 (21100)	16.06	15.45	14.17
		2510 (20850)	16.12	15.43	14.29
	1RB-Middle (50)	2560 (21350)	16.08	15.39	14.27
		2535 (21100)	16.21	15.54	14.30
		2510 (20850)	16.14	15.48	14.27
	1RB-Low (0)	2560 (21350)	15.99	15.25	14.17
		2535 (21100)	16.10	15.30	14.29
		2510 (20850)	15.96	15.33	14.22
	50RB-High (50)	2560 (21350)	15.01	13.97	12.97
		2535 (21100)	15.12	14.16	13.10
		2510 (20850)	15.18	14.12	13.14
	50RB-Middle (25)	2560 (21350)	15.13	14.14	13.13
		2535 (21100)	15.19	14.17	13.17
		2510 (20850)	15.13	14.16	13.14
	50RB-Low (0)	2560 (21350)	15.10	14.09	13.10
		2535 (21100)	15.20	14.23	13.23
		2510 (20850)	15.17	14.14	13.10
	100RB (0)	2560 (21350)	15.06	14.02	13.07
		2535 (21100)	15.22	14.17	13.19
		2510 (20850)	15.13	14.06	13.08

LTE Band7-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	18.29	17.47	16.49
		2535 (21100)	18.42	17.54	16.66
		2502.5 (20775)	18.20	17.39	16.30
	1RB-Middle (12)	2567.5 (21425)	18.33	17.56	16.50
		2535 (21100)	18.37	17.74	16.58
		2502.5 (20775)	18.23	17.45	16.27
	1RB-Low (0)	2567.5 (21425)	18.32	17.62	16.49
		2535 (21100)	18.36	17.70	16.57
		2502.5 (20775)	18.20	17.50	16.34
	12RB-High (13)	2567.5 (21425)	17.27	16.32	15.33
		2535 (21100)	17.33	16.30	15.42
		2502.5 (20775)	17.16	16.16	15.28
	12RB-Middle (6)	2567.5 (21425)	17.23	16.36	15.33
		2535 (21100)	17.37	16.31	15.39
		2502.5 (20775)	17.21	16.20	15.30
	12RB-Low (0)	2567.5 (21425)	17.25	16.35	15.41
		2535 (21100)	17.36	16.30	15.42
		2502.5 (20775)	17.22	16.19	15.23
	25RB (0)	2567.5 (21425)	17.32	16.37	15.34
		2535 (21100)	17.39	16.36	15.42
		2502.5 (20775)	17.23	16.22	15.26
10MHz	1RB-High (49)	2565 (21400)	18.24	17.55	16.45
		2535 (21100)	18.42	17.70	16.59
		2505 (20800)	18.23	17.58	16.41
	1RB-Middle (24)	2565 (21400)	18.33	17.76	16.59
		2535 (21100)	18.43	17.74	16.53
		2505 (20800)	18.25	17.55	16.40
	1RB-Low (0)	2565 (21400)	18.36	17.67	16.55
		2535 (21100)	18.35	17.62	16.55
		2505 (20800)	18.22	17.55	16.27
	25RB-High (25)	2565 (21400)	17.27	16.31	15.36
		2535 (21100)	17.43	16.43	15.48
		2505 (20800)	17.24	16.26	15.32
	25RB-Middle (12)	2565 (21400)	17.35	16.41	15.39
		2535 (21100)	17.38	16.38	15.46
		2505 (20800)	17.22	16.20	15.26
	25RB-Low (0)	2565 (21400)	17.40	16.48	15.43
		2535 (21100)	17.40	16.41	15.51
		2505 (20800)	17.19	16.18	15.24
	50RB (0)	2565 (21400)	17.35	16.45	15.41
		2535 (21100)	17.42	16.41	15.51
		2505 (20800)	17.26	16.22	15.26

15MHz	1RB-High (74)	2562.5 (21375)	18.24	17.44	16.48
		2535 (21100)	18.33	17.53	16.55
		2507.5 (20825)	18.15	17.48	16.38
	1RB-Middle (37)	2562.5 (21375)	18.37	17.60	16.49
		2535 (21100)	18.38	17.72	16.56
		2507.5 (20825)	18.18	17.50	16.29
	1RB-Low (0)	2562.5 (21375)	18.25	17.53	16.54
		2535 (21100)	18.27	17.63	16.45
		2507.5 (20825)	18.12	17.33	16.31
	36RB-High (38)	2562.5 (21375)	17.34	16.31	15.28
		2535 (21100)	17.38	16.30	15.45
		2507.5 (20825)	17.19	16.26	15.30
	36RB-Middle (19)	2562.5 (21375)	17.33	16.33	15.43
		2535 (21100)	17.38	16.35	15.45
		2507.5 (20825)	17.19	16.18	15.27
	36RB-Low (0)	2562.5 (21375)	17.33	16.45	15.41
		2535 (21100)	17.34	16.32	15.42
		2507.5 (20825)	17.22	16.13	15.27
	75RB (0)	2562.5 (21375)	17.36	16.42	15.35
		2535 (21100)	17.38	16.34	15.36
		2507.5 (20825)	17.21	16.20	15.24
20MHz	1RB-High (99)	2560 (21350)	18.03	17.35	16.18
		2535 (21100)	18.12	17.29	16.36
		2510 (20850)	18.13	17.36	16.25
	1RB-Middle (50)	2560 (21350)	18.15	17.56	16.38
		2535 (21100)	18.25	17.42	16.35
		2510 (20850)	18.06	17.32	16.20
	1RB-Low (0)	2560 (21350)	18.14	17.41	16.38
		2535 (21100)	18.14	17.37	16.31
		2510 (20850)	17.96	17.19	16.11
	50RB-High (50)	2560 (21350)	17.11	16.13	15.17
		2535 (21100)	17.25	16.18	15.27
		2510 (20850)	17.12	16.09	15.20
	50RB-Middle (25)	2560 (21350)	17.23	16.24	15.24
		2535 (21100)	17.24	16.24	15.27
		2510 (20850)	17.12	16.09	15.17
	50RB-Low (0)	2560 (21350)	17.24	16.33	15.30
		2535 (21100)	17.20	16.21	15.32
		2510 (20850)	17.04	16.01	15.12
	100RB (0)	2560 (21350)	17.17	16.21	15.21
		2535 (21100)	17.24	16.18	15.22
		2510 (20850)	17.06	16.04	15.07

LTE Band12-Power Level A1/B1/C1/D1/E1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3 (23173)	23.24	22.42	21.33
		707.5 (23095)	23.24	22.42	21.22
		699.7 (23017)	23.20	22.45	21.32
	1RB-Middle (3)	715.3 (23173)	23.27	22.41	21.34
		707.5 (23095)	23.22	22.39	21.44
		699.7 (23017)	23.24	22.44	21.35
	1RB-Low (0)	715.3 (23173)	23.21	22.43	21.31
		707.5 (23095)	23.23	22.42	21.40
		699.7 (23017)	23.20	22.37	21.25
	3RB-High (3)	715.3 (23173)	23.28	22.25	21.24
		707.5 (23095)	23.23	22.13	21.22
		699.7 (23017)	23.21	22.20	21.20
	3RB-Middle (1)	715.3 (23173)	23.24	22.26	21.30
		707.5 (23095)	23.25	22.27	21.27
		699.7 (23017)	23.19	22.17	21.22
	3RB-Low (0)	715.3 (23173)	23.26	22.17	21.23
		707.5 (23095)	23.26	22.28	21.28
		699.7 (23017)	23.20	22.24	21.21
	6RB (0)	715.3 (23173)	22.25	21.25	20.15
		707.5 (23095)	22.23	21.25	20.15
		699.7 (23017)	22.20	21.23	20.15
3MHz	1RB-High (14)	714.5 (23165)	22.17	22.44	21.36
		707.5 (23095)	23.20	22.41	21.34
		700.5 (23025)	23.21	22.44	21.31
	1RB-Middle (7)	714.5 (23165)	22.16	22.36	21.33
		707.5 (23095)	23.28	22.34	21.46
		700.5 (23025)	23.25	22.47	21.34
	1RB-Low (0)	714.5 (23165)	22.15	22.47	21.34
		707.5 (23095)	23.32	22.39	21.31
		700.5 (23025)	23.23	22.42	21.31
	8RB-High (7)	714.5 (23165)	22.18	21.29	20.22
		707.5 (23095)	22.13	21.25	20.13
		700.5 (23025)	22.18	21.21	20.19
	8RB-Middle (4)	714.5 (23165)	22.21	21.30	20.19
		707.5 (23095)	22.20	21.23	20.22
		700.5 (23025)	22.20	21.25	20.23
	8RB-Low (0)	714.5 (23165)	22.19	21.27	20.20
		707.5 (23095)	22.20	21.23	20.22
		700.5 (23025)	22.16	21.25	20.17
	15RB (0)	714.5 (23165)	22.18	21.23	20.12
		707.5 (23095)	22.18	21.18	20.20
		700.5 (23025)	22.18	21.19	20.14

5MHz	1RB-High (24)	713.5 (23155)	23.32	22.45	21.35	
		707.5 (23095)	23.28	22.43	21.27	
		701.5 (23035)	23.30	22.47	21.39	
	1RB-Middle (12)	713.5 (23155)	23.31	22.43	21.33	
		707.5 (23095)	23.33	22.53	21.43	
		701.5 (23035)	23.32	22.44	21.38	
	1RB-Low (0)	713.5 (23155)	23.29	22.52	21.39	
		707.5 (23095)	23.31	22.43	21.41	
		701.5 (23035)	23.28	22.50	21.32	
	12RB-High (13)	713.5 (23155)	22.21	21.17	20.16	
		707.5 (23095)	22.17	21.17	20.15	
		701.5 (23035)	22.21	21.20	20.19	
	12RB-Middle (6)	713.5 (23155)	22.22	21.21	20.23	
		707.5 (23095)	22.22	21.21	20.20	
		701.5 (23035)	22.22	21.22	20.21	
	12RB-Low (0)	713.5 (23155)	22.26	21.23	20.27	
		707.5 (23095)	22.28	21.21	20.25	
		701.5 (23035)	22.22	21.16	20.21	
	25RB (0)	713.5 (23155)	22.25	21.26	20.16	
		707.5 (23095)	22.25	21.24	20.18	
		701.5 (23035)	22.22	21.21	20.19	
	10MHz	1RB-High (49)	711 (23130)	22.69	21.88	20.63
			707.5 (23095)	22.67	21.79	20.67
			704 (23060)	22.64	21.83	20.63
1RB-Middle (24)		711 (23130)	22.67	21.85	20.79	
		707.5 (23095)	22.69	21.78	20.75	
		704 (23060)	22.67	21.87	20.75	
1RB-Low (0)		711 (23130)	22.70	21.98	20.83	
		707.5 (23095)	22.65	21.91	20.74	
		704 (23060)	22.76	21.95	20.75	
25RB-High (25)		711 (23130)	21.57	20.56	19.53	
		707.5 (23095)	21.62	20.63	19.55	
		704 (23060)	21.65	20.62	19.58	
25RB-Middle (12)		711 (23130)	21.64	20.59	19.60	
		707.5 (23095)	21.58	20.64	19.58	
		704 (23060)	21.63	20.61	19.73	
25RB-Low (0)		711 (23130)	21.63	20.62	19.56	
		707.5 (23095)	21.57	20.62	19.75	
		704 (23060)	21.55	20.59	19.71	
50RB (0)		711 (23130)	21.57	20.57	19.55	
		707.5 (23095)	21.62	20.62	19.56	
		704 (23060)	21.66	20.57	19.76	

LTE Band13-Power Level A1/B1/C1/D1/E1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	784.5 (23255)	22.56	21.84	20.66
		782 (23230)	22.64	21.92	20.71
		779.5 (23205)	22.63	21.80	20.75
	1RB-Middle (12)	784.5 (23255)	22.61	21.79	20.75
		782 (23230)	22.69	21.85	20.81
		779.5 (23205)	22.60	21.87	20.70
	1RB-Low (0)	784.5 (23255)	22.67	21.79	20.66
		782 (23230)	22.69	21.73	20.75
		779.5 (23205)	22.59	21.72	20.73
	12RB-High (13)	784.5 (23255)	21.56	20.49	19.49
		782 (23230)	21.49	20.49	19.51
		779.5 (23205)	21.53	20.51	19.56
	12RB-Middle (6)	784.5 (23255)	21.52	20.54	19.52
		782 (23230)	21.55	20.53	19.54
		779.5 (23205)	21.58	20.54	19.52
	12RB-Low (0)	784.5 (23255)	21.60	20.51	19.54
		782 (23230)	21.60	20.54	19.51
		779.5 (23205)	21.46	20.44	19.46
	25RB (0)	784.5 (23255)	21.59	20.60	19.53
		782 (23230)	21.58	20.57	19.51
		779.5 (23205)	21.51	20.52	19.51
10MHz	1RB-High (49)	782 (23230)	22.53	21.82	20.60
	1RB-Middle (24)	782 (23230)	22.72	21.85	20.78
	1RB-Low (0)	782 (23230)	22.63	21.85	20.72
	25RB-High (25)	782 (23230)	21.51	20.52	19.53
	25RB-Middle (12)	782 (23230)	21.57	20.58	19.53
	25RB-Low (0)	782 (23230)	21.49	20.52	19.46
	50RB (0)	782 (23230)	21.55	20.46	19.48

LTE Band25-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	23.52	22.74	21.84
		1882.5 (26365)	23.54	22.80	21.83
		1850.7 (26047)	23.69	23.00	21.94
	1RB-Middle (3)	1914.3 (26683)	23.46	22.93	21.81
		1882.5 (26365)	23.60	22.77	21.80
		1850.7 (26047)	23.71	22.82	21.99
	1RB-Low (0)	1914.3 (26683)	23.50	22.85	21.76
		1882.5 (26365)	23.55	22.72	21.87
		1850.7 (26047)	23.71	22.76	21.94
	3RB-High (3)	1914.3 (26683)	23.50	22.68	21.71
		1882.5 (26365)	23.52	22.50	21.75
		1850.7 (26047)	23.71	22.86	21.95
	3RB-Middle (1)	1914.3 (26683)	23.54	22.73	21.68
		1882.5 (26365)	23.58	22.55	21.81
		1850.7 (26047)	23.70	22.87	21.95
	3RB-Low (0)	1914.3 (26683)	23.55	22.73	21.72
		1882.5 (26365)	23.59	22.59	21.80
		1850.7 (26047)	23.75	22.83	21.94
	6RB (0)	1914.3 (26683)	22.68	21.70	20.61
		1882.5 (26365)	22.54	21.78	20.63
		1850.7 (26047)	22.87	21.94	20.82
3MHz	1RB-High (14)	1913.5 (26675)	23.50	22.75	21.77
		1882.5 (26365)	23.57	22.68	21.91
		1851.5 (26055)	23.68	22.84	21.92
	1RB-Middle (7)	1913.5 (26675)	23.59	22.95	21.77
		1882.5 (26365)	23.59	22.84	21.85
		1851.5 (26055)	23.74	22.69	21.93
	1RB-Low (0)	1913.5 (26675)	23.53	22.97	21.84
		1882.5 (26365)	23.54	22.76	21.88
		1851.5 (26055)	23.69	22.94	21.92
	8RB-High (7)	1913.5 (26675)	22.47	21.71	20.65
		1882.5 (26365)	22.48	21.68	20.63
		1851.5 (26055)	22.81	21.83	20.77
	8RB-Middle (4)	1913.5 (26675)	22.50	21.69	20.58
		1882.5 (26365)	22.48	21.74	20.66
		1851.5 (26055)	22.80	21.85	20.82
	8RB-Low (0)	1913.5 (26675)	22.53	21.73	20.68
		1882.5 (26365)	22.52	21.73	20.75
		1851.5 (26055)	22.86	21.90	20.85
	15RB (0)	1913.5 (26675)	22.47	21.71	20.68
		1882.5 (26365)	22.51	21.67	20.68
		1851.5 (26055)	22.79	21.80	20.74



5MHz	1RB-High (24)	1912.5 (26665)	23.53	22.85	21.82	
		1882.5 (26365)	23.56	22.84	21.86	
		1852.5 (26065)	23.71	22.95	21.95	
	1RB-Middle (12)	1912.5 (26665)	23.60	22.84	21.77	
		1882.5 (26365)	23.62	22.84	21.82	
		1852.5 (26065)	23.71	22.81	21.93	
	1RB-Low (0)	1912.5 (26665)	23.59	22.86	21.74	
		1882.5 (26365)	23.59	22.77	21.89	
		1852.5 (26065)	23.75	22.76	21.95	
	12RB-High (13)	1912.5 (26665)	22.49	21.58	20.57	
		1882.5 (26365)	22.52	21.72	20.71	
		1852.5 (26065)	22.77	21.76	20.73	
	12RB-Middle (6)	1912.5 (26665)	22.52	21.65	20.72	
		1882.5 (26365)	22.54	21.69	20.67	
		1852.5 (26065)	22.80	21.79	20.81	
	12RB-Low (0)	1912.5 (26665)	22.56	21.73	20.75	
		1882.5 (26365)	22.58	21.70	20.77	
		1852.5 (26065)	22.81	21.85	20.83	
	25RB (0)	1912.5 (26665)	22.54	21.68	20.65	
		1882.5 (26365)	22.54	21.77	20.72	
		1852.5 (26065)	22.80	21.84	20.79	
	10MHz	1RB-High (49)	1910 (26640)	23.54	22.89	21.81
			1882.5 (26365)	23.57	22.74	21.78
			1855 (26090)	23.69	22.81	21.92
1RB-Middle (24)		1910 (26640)	23.64	22.94	21.89	
		1882.5 (26365)	23.61	22.88	21.93	
		1855 (26090)	23.74	22.75	21.96	
1RB-Low (0)		1910 (26640)	23.61	22.91	21.77	
		1882.5 (26365)	23.65	22.86	21.89	
		1855 (26090)	23.75	22.87	21.99	
25RB-High (25)		1910 (26640)	22.54	21.67	20.63	
		1882.5 (26365)	22.53	21.77	20.76	
		1855 (26090)	22.83	21.80	20.79	
25RB-Middle (12)		1910 (26640)	22.53	21.70	20.65	
		1882.5 (26365)	22.57	21.74	20.73	
		1855 (26090)	22.85	21.85	20.84	
25RB-Low (0)		1910 (26640)	22.52	21.63	20.59	
		1882.5 (26365)	22.55	21.73	20.73	
		1855 (26090)	22.85	21.88	20.84	
50RB (0)		1910 (26640)	22.58	21.66	20.63	
		1882.5 (26365)	22.59	21.72	20.73	
		1855 (26090)	22.82	21.84	20.81	

15MHz	1RB-High (74)	1907.5 (26615)	23.55	22.91	21.80	
		1882.5 (26365)	23.57	22.75	21.81	
		1857.5 (26115)	23.63	22.88	21.87	
	1RB-Middle (37)	1907.5 (26615)	23.55	22.83	21.81	
		1882.5 (26365)	23.63	22.78	21.93	
		1857.5 (26115)	23.77	23.00	21.91	
	1RB-Low (0)	1907.5 (26615)	23.67	22.85	21.96	
		1882.5 (26365)	23.63	22.89	21.96	
		1857.5 (26115)	23.73	22.86	21.93	
	36RB-High (38)	1907.5 (26615)	22.71	21.68	20.66	
		1882.5 (26365)	22.52	21.68	20.68	
		1857.5 (26115)	22.76	21.84	20.75	
	36RB-Middle (19)	1907.5 (26615)	22.70	21.72	20.72	
		1882.5 (26365)	22.59	21.76	20.71	
		1857.5 (26115)	22.86	21.78	20.81	
	36RB-Low (0)	1907.5 (26615)	22.74	21.66	20.69	
		1882.5 (26365)	22.59	21.70	20.71	
		1857.5 (26115)	22.88	21.87	20.86	
	75RB (0)	1907.5 (26615)	22.71	21.70	20.69	
		1882.5 (26365)	22.56	21.67	20.65	
		1857.5 (26115)	22.87	21.82	20.81	
	20MHz	1RB-High (99)	1905 (26590)	22.61	22.01	20.93
			1882.5 (26365)	22.61	22.00	20.85
			1860 (26140)	22.61	21.98	20.77
		1RB-Middle (50)	1905 (26590)	22.74	22.11	21.00
			1882.5 (26365)	22.66	22.12	20.92
			1860 (26140)	22.70	22.10	20.97
1RB-Low (0)		1905 (26590)	22.68	22.03	20.95	
		1882.5 (26365)	22.57	22.00	20.81	
		1860 (26140)	22.62	21.98	20.82	
50RB-High (50)		1905 (26590)	21.85	20.80	19.79	
		1882.5 (26365)	21.75	20.78	19.70	
		1860 (26140)	21.79	20.78	19.72	
50RB-Middle (25)		1905 (26590)	21.94	20.91	19.86	
		1882.5 (26365)	21.88	20.84	19.82	
		1860 (26140)	21.78	20.78	19.80	
50RB-Low (0)		1905 (26590)	21.93	20.90	19.84	
		1882.5 (26365)	21.74	20.76	19.71	
		1860 (26140)	21.84	20.84	19.77	
100RB (0)		1905 (26590)	21.85	20.85	19.81	
		1882.5 (26365)	21.77	20.74	19.69	
		1860 (26140)	21.81	20.77	19.66	

LTE Band25-Power Level B1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	20.43	19.76	18.56
		1882.5 (26365)	20.51	19.84	18.62
		1850.7 (26047)	20.68	19.98	18.77
	1RB-Middle (3)	1914.3 (26683)	20.46	19.80	18.52
		1882.5 (26365)	20.56	19.85	18.66
		1850.7 (26047)	20.71	20.02	18.83
	1RB-Low (0)	1914.3 (26683)	20.42	19.77	18.49
		1882.5 (26365)	20.55	19.85	18.74
		1850.7 (26047)	20.70	19.96	18.78
	3RB-High (3)	1914.3 (26683)	20.46	19.46	18.55
		1882.5 (26365)	20.57	19.57	18.60
		1850.7 (26047)	20.72	19.73	18.76
	3RB-Middle (1)	1914.3 (26683)	20.44	19.50	18.55
		1882.5 (26365)	20.55	19.54	18.66
		1850.7 (26047)	20.75	19.73	18.77
	3RB-Low (0)	1914.3 (26683)	20.48	19.39	18.50
		1882.5 (26365)	20.58	19.49	18.64
		1850.7 (26047)	20.69	19.70	18.73
	6RB (0)	1914.3 (26683)	19.39	18.49	17.39
		1882.5 (26365)	19.57	18.66	17.47
		1850.7 (26047)	19.70	18.78	17.64
3MHz	1RB-High (14)	1913.5 (26675)	20.40	19.77	18.62
		1882.5 (26365)	20.54	19.88	18.75
		1851.5 (26055)	20.67	19.87	18.79
	1RB-Middle (7)	1913.5 (26675)	20.44	19.75	18.68
		1882.5 (26365)	20.55	19.79	18.75
		1851.5 (26055)	20.68	20.07	18.82
	1RB-Low (0)	1913.5 (26675)	20.43	19.80	18.65
		1882.5 (26365)	20.53	19.89	18.66
		1851.5 (26055)	20.70	19.99	18.81
	8RB-High (7)	1913.5 (26675)	19.44	18.50	17.46
		1882.5 (26365)	19.53	18.53	17.52
		1851.5 (26055)	19.62	18.71	17.66
	8RB-Middle (4)	1913.5 (26675)	19.47	18.53	17.44
		1882.5 (26365)	19.54	18.53	17.53
		1851.5 (26055)	19.65	18.70	17.67
	8RB-Low (0)	1913.5 (26675)	19.48	18.49	17.43
		1882.5 (26365)	19.57	18.63	17.57
		1851.5 (26055)	19.73	18.77	17.73
	15RB (0)	1913.5 (26675)	19.46	18.48	17.46
		1882.5 (26365)	19.54	18.55	17.45
		1851.5 (26055)	19.69	18.68	17.65

5MHz	1RB-High (24)	1912.5 (26665)	20.47	19.87	18.61	
		1882.5 (26365)	20.56	19.93	18.75	
		1852.5 (26065)	20.70	19.98	18.81	
	1RB-Middle (12)	1912.5 (26665)	20.50	19.74	18.63	
		1882.5 (26365)	20.64	19.79	18.79	
		1852.5 (26065)	20.71	19.97	18.79	
	1RB-Low (0)	1912.5 (26665)	20.43	19.82	18.68	
		1882.5 (26365)	20.61	19.86	18.75	
		1852.5 (26065)	20.76	19.96	18.91	
	12RB-High (13)	1912.5 (26665)	19.42	18.40	17.43	
		1882.5 (26365)	19.56	18.54	17.55	
		1852.5 (26065)	19.68	18.68	17.68	
	12RB-Middle (6)	1912.5 (26665)	19.46	18.48	17.46	
		1882.5 (26365)	19.55	18.59	17.58	
		1852.5 (26065)	19.67	18.69	17.68	
	12RB-Low (0)	1912.5 (26665)	19.49	18.51	17.49	
		1882.5 (26365)	19.66	18.54	17.59	
		1852.5 (26065)	19.67	18.69	17.65	
	25RB (0)	1912.5 (26665)	19.48	18.50	17.43	
		1882.5 (26365)	19.58	18.60	17.53	
		1852.5 (26065)	19.72	18.70	17.64	
	10MHz	1RB-High (49)	1910 (26640)	20.44	19.74	18.60
			1882.5 (26365)	20.56	19.72	18.71
			1855 (26090)	20.65	19.94	18.78
1RB-Middle (24)		1910 (26640)	20.44	19.78	18.58	
		1882.5 (26365)	20.60	19.96	18.81	
		1855 (26090)	20.70	19.99	18.85	
1RB-Low (0)		1910 (26640)	20.49	19.65	18.67	
		1882.5 (26365)	20.57	19.98	18.71	
		1855 (26090)	20.75	20.00	18.78	
25RB-High (25)		1910 (26640)	19.43	18.45	17.42	
		1882.5 (26365)	19.59	18.61	17.58	
		1855 (26090)	19.71	18.69	17.64	
25RB-Middle (12)		1910 (26640)	19.50	18.49	17.46	
		1882.5 (26365)	19.62	18.60	17.58	
		1855 (26090)	19.72	18.73	17.67	
25RB-Low (0)		1910 (26640)	19.49	18.50	17.45	
		1882.5 (26365)	19.53	18.59	17.55	
		1855 (26090)	19.72	18.72	17.64	
50RB (0)		1910 (26640)	19.47	18.49	17.48	
		1882.5 (26365)	19.57	18.60	17.59	
		1855 (26090)	19.76	18.73	17.62	

15MHz	1RB-High (74)	1907.5 (26615)	20.40	19.70	18.58
		1882.5 (26365)	20.52	19.71	18.66
		1857.5 (26115)	20.65	20.01	18.82
	1RB-Middle (37)	1907.5 (26615)	20.45	19.86	18.59
		1882.5 (26365)	20.61	19.96	18.71
		1857.5 (26115)	20.71	19.91	18.86
	1RB-Low (0)	1907.5 (26615)	20.45	19.67	18.69
		1882.5 (26365)	20.60	19.85	18.68
		1857.5 (26115)	20.70	20.01	18.87
	36RB-High (38)	1907.5 (26615)	19.49	18.47	17.43
		1882.5 (26365)	19.55	18.51	17.49
		1857.5 (26115)	19.61	18.62	17.64
	36RB-Middle (19)	1907.5 (26615)	19.47	18.51	17.50
		1882.5 (26365)	19.59	18.57	17.56
		1857.5 (26115)	19.69	18.70	17.65
	36RB-Low (0)	1907.5 (26615)	19.53	18.53	17.48
		1882.5 (26365)	19.60	18.55	17.55
		1857.5 (26115)	19.71	18.70	17.66
	75RB (0)	1907.5 (26615)	19.50	18.46	17.45
		1882.5 (26365)	19.54	18.49	17.54
		1857.5 (26115)	19.65	18.65	17.67
20MHz	1RB-High (99)	1905 (26590)	20.41	19.74	18.59
		1882.5 (26365)	20.51	19.76	18.65
		1860 (26140)	20.51	19.70	18.60
	1RB-Middle (50)	1905 (26590)	20.54	19.86	18.68
		1882.5 (26365)	20.60	19.87	18.66
		1860 (26140)	20.70	20.03	18.83
	1RB-Low (0)	1905 (26590)	20.45	19.65	18.50
		1882.5 (26365)	20.58	19.77	18.72
		1860 (26140)	20.68	19.99	18.76
	50RB-High (50)	1905 (26590)	19.49	18.50	17.47
		1882.5 (26365)	19.55	18.54	18.56
		1860 (26140)	19.64	18.64	17.62
	50RB-Middle (25)	1905 (26590)	19.58	18.58	17.54
		1882.5 (26365)	19.63	18.57	18.52
		1860 (26140)	19.68	18.72	17.66
	50RB-Low (0)	1905 (26590)	19.62	18.63	17.57
		1882.5 (26365)	19.58	18.57	18.57
		1860 (26140)	19.77	18.74	17.66
	100RB (0)	1905 (26590)	19.58	18.54	17.49
		1882.5 (26365)	19.58	18.53	18.50
		1860 (26140)	19.69	18.63	17.62

LTE Band25-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	22.32	21.77	20.69
		1882.5 (26365)	22.44	21.88	20.71
		1850.7 (26047)	22.55	22.02	20.94
	1RB-Middle (3)	1914.3 (26683)	22.52	21.82	20.62
		1882.5 (26365)	22.47	21.85	20.74
		1850.7 (26047)	22.60	22.06	20.86
	1RB-Low (0)	1914.3 (26683)	22.48	21.73	20.63
		1882.5 (26365)	22.41	21.87	20.79
		1850.7 (26047)	22.55	22.06	20.89
	3RB-High (3)	1914.3 (26683)	22.51	21.55	20.55
		1882.5 (26365)	22.40	21.55	20.69
		1850.7 (26047)	22.59	21.80	20.83
	3RB-Middle (1)	1914.3 (26683)	22.52	21.54	20.66
		1882.5 (26365)	22.45	21.66	20.72
		1850.7 (26047)	22.57	21.79	20.82
	3RB-Low (0)	1914.3 (26683)	22.53	21.49	20.59
		1882.5 (26365)	22.45	21.67	20.69
		1850.7 (26047)	22.59	21.80	20.79
	6RB (0)	1914.3 (26683)	21.51	20.60	19.42
		1882.5 (26365)	21.63	20.66	19.55
		1850.7 (26047)	21.75	20.83	19.66
3MHz	1RB-High (14)	1913.5 (26675)	22.33	21.82	20.63
		1882.5 (26365)	22.41	21.87	20.72
		1851.5 (26055)	22.55	21.88	20.90
	1RB-Middle (7)	1913.5 (26675)	22.57	21.81	20.67
		1882.5 (26365)	22.51	21.87	20.80
		1851.5 (26055)	22.60	22.00	20.95
	1RB-Low (0)	1913.5 (26675)	22.51	21.77	20.67
		1882.5 (26365)	22.46	21.88	20.74
		1851.5 (26055)	22.58	22.07	20.88
	8RB-High (7)	1913.5 (26675)	21.50	20.59	19.52
		1882.5 (26365)	21.57	20.64	19.59
		1851.5 (26055)	21.72	20.80	19.73
	8RB-Middle (4)	1913.5 (26675)	21.50	20.55	19.49
		1882.5 (26365)	21.62	20.63	19.56
		1851.5 (26055)	21.73	20.80	19.75
	8RB-Low (0)	1913.5 (26675)	21.52	20.61	19.51
		1882.5 (26365)	21.64	20.71	19.66
		1851.5 (26055)	21.77	20.80	19.77
	15RB (0)	1913.5 (26675)	21.55	20.56	19.47
		1882.5 (26365)	21.63	20.56	19.60
		1851.5 (26055)	21.71	20.76	19.67

5MHz	1RB-High (24)	1912.5 (26665)	22.34	21.83	20.76	
		1882.5 (26365)	22.37	21.86	20.67	
		1852.5 (26065)	22.57	21.95	20.86	
	1RB-Middle (12)	1912.5 (26665)	22.54	21.85	20.75	
		1882.5 (26365)	22.47	21.86	20.86	
		1852.5 (26065)	22.62	22.00	20.91	
	1RB-Low (0)	1912.5 (26665)	22.52	21.85	20.68	
		1882.5 (26365)	22.48	21.96	20.73	
		1852.5 (26065)	22.62	21.93	20.87	
	12RB-High (13)	1912.5 (26665)	21.52	20.48	19.49	
		1882.5 (26365)	21.54	20.46	19.55	
		1852.5 (26065)	21.75	20.67	19.71	
	12RB-Middle (6)	1912.5 (26665)	21.54	20.57	19.54	
		1882.5 (26365)	21.64	20.65	19.63	
		1852.5 (26065)	21.73	20.73	19.71	
	12RB-Low (0)	1912.5 (26665)	21.54	20.49	19.57	
		1882.5 (26365)	21.63	20.60	19.66	
		1852.5 (26065)	21.77	20.75	19.73	
	25RB (0)	1912.5 (26665)	21.52	20.56	19.47	
		1882.5 (26365)	21.59	20.65	19.57	
		1852.5 (26065)	21.77	20.78	19.72	
	10MHz	1RB-High (49)	1910 (26640)	22.49	21.80	20.63
			1882.5 (26365)	22.31	21.83	20.69
			1855 (26090)	22.51	21.89	20.85
1RB-Middle (24)		1910 (26640)	22.52	21.79	20.68	
		1882.5 (26365)	22.49	21.86	20.83	
		1855 (26090)	22.60	21.94	20.82	
1RB-Low (0)		1910 (26640)	22.55	21.82	20.66	
		1882.5 (26365)	22.49	21.98	20.82	
		1855 (26090)	22.58	22.06	20.91	
25RB-High (25)		1910 (26640)	21.52	20.55	19.49	
		1882.5 (26365)	21.65	20.59	19.61	
		1855 (26090)	21.70	20.76	19.68	
25RB-Middle (12)		1910 (26640)	21.47	20.50	19.48	
		1882.5 (26365)	21.68	20.67	19.64	
		1855 (26090)	21.71	20.76	19.69	
25RB-Low (0)		1910 (26640)	21.52	20.57	19.49	
		1882.5 (26365)	21.63	20.60	19.64	
		1855 (26090)	21.70	20.76	19.68	
50RB (0)		1910 (26640)	21.49	20.53	19.49	
		1882.5 (26365)	21.60	20.60	19.55	
		1855 (26090)	21.77	20.77	19.74	

15MHz	1RB-High (74)	1907.5 (26615)	22.48	21.80	20.64
		1882.5 (26365)	22.31	21.80	20.67
		1857.5 (26115)	22.47	21.90	20.75
	1RB-Middle (37)	1907.5 (26615)	22.52	21.91	20.70
		1882.5 (26365)	22.46	21.87	20.81
		1857.5 (26115)	22.59	22.00	20.90
	1RB-Low (0)	1907.5 (26615)	22.42	21.95	20.80
		1882.5 (26365)	22.46	21.84	20.84
		1857.5 (26115)	22.54	22.02	20.88
	36RB-High (38)	1907.5 (26615)	21.56	20.53	19.44
		1882.5 (26365)	21.61	20.52	19.57
		1857.5 (26115)	21.71	20.69	19.68
	36RB-Middle (19)	1907.5 (26615)	21.49	20.54	19.48
		1882.5 (26365)	21.60	20.56	19.51
		1857.5 (26115)	21.70	20.71	19.74
	36RB-Low (0)	1907.5 (26615)	21.59	20.59	19.55
		1882.5 (26365)	21.60	20.66	19.65
		1857.5 (26115)	21.74	20.75	19.73
	75RB (0)	1907.5 (26615)	21.57	20.57	19.48
		1882.5 (26365)	21.58	20.60	19.57
		1857.5 (26115)	21.69	20.71	19.66
20MHz	1RB-High (99)	1905 (26590)	22.52	21.86	20.70
		1882.5 (26365)	22.38	21.86	20.73
		1860 (26140)	22.53	22.00	20.83
	1RB-Middle (50)	1905 (26590)	22.63	21.94	20.80
		1882.5 (26365)	22.55	21.99	20.79
		1860 (26140)	22.63	22.06	20.83
	1RB-Low (0)	1905 (26590)	22.46	21.93	20.76
		1882.5 (26365)	22.49	21.98	20.82
		1860 (26140)	22.56	22.01	20.98
	50RB-High (50)	1905 (26590)	21.64	20.63	19.58
		1882.5 (26365)	21.64	20.65	19.60
		1860 (26140)	21.72	20.76	19.69
	50RB-Middle (25)	1905 (26590)	21.64	20.65	19.66
		1882.5 (26365)	21.64	20.67	19.64
		1860 (26140)	21.82	20.78	19.79
	50RB-Low (0)	1905 (26590)	21.75	20.73	19.74
		1882.5 (26365)	21.69	20.70	19.61
		1860 (26140)	21.77	20.79	19.80
	100RB (0)	1905 (26590)	21.67	20.61	19.61
		1882.5 (26365)	21.69	20.57	19.60
		1860 (26140)	21.78	20.72	19.72



LTE Band26-Power Level A1/B1/C1/D1/E1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (27033)	22.96	22.27	21.16
		831.5 (26865)	22.99	22.23	21.17
		814.7 (26697)	23.01	22.14	21.14
	1RB-Middle (3)	848.3 (27033)	22.87	22.21	21.12
		831.5 (26865)	23.02	22.22	21.18
		814.7 (26697)	23.01	22.13	21.09
	1RB-Low (0)	848.3 (27033)	22.93	22.28	21.15
		831.5 (26865)	23.04	22.26	21.14
		814.7 (26697)	23.03	22.21	21.13
	3RB-High (3)	848.3 (27033)	23.01	22.06	21.12
		831.5 (26865)	23.02	22.00	21.09
		814.7 (26697)	23.00	22.00	21.12
	3RB-Middle (1)	848.3 (27033)	23.02	22.08	21.08
		831.5 (26865)	23.00	21.98	21.02
		814.7 (26697)	23.05	22.00	21.09
	3RB-Low (0)	848.3 (27033)	23.01	22.10	21.06
		831.5 (26865)	23.03	22.06	21.04
		814.7 (26697)	23.02	22.06	21.03
	6RB (0)	848.3 (27033)	22.03	21.14	19.98
		831.5 (26865)	22.03	21.09	19.95
		814.7 (26697)	22.03	21.07	19.92
3MHz	1RB-High (14)	847.5 (27025)	23.03	22.21	21.11
		831.5 (26865)	23.03	22.24	21.10
		815.5 (26705)	23.01	22.02	21.06
	1RB-Middle (7)	847.5 (27025)	23.07	22.27	21.21
		831.5 (26865)	23.04	22.17	21.11
		815.5 (26705)	23.01	22.02	21.14
	1RB-Low (0)	847.5 (27025)	23.05	22.30	21.24
		831.5 (26865)	23.06	22.37	21.19
		815.5 (26705)	23.05	22.06	21.19
	8RB-High (7)	847.5 (27025)	21.98	21.07	20.02
		831.5 (26865)	22.01	21.03	20.04
		815.5 (26705)	22.02	21.09	19.97
	8RB-Middle (4)	847.5 (27025)	21.99	21.10	20.03
		831.5 (26865)	21.99	21.03	19.96
		815.5 (26705)	21.99	21.09	20.00
	8RB-Low (0)	847.5 (27025)	22.03	21.09	20.03
		831.5 (26865)	22.05	21.07	19.98
		815.5 (26705)	22.03	21.07	20.00
	15RB (0)	847.5 (27025)	22.03	21.09	20.02
		831.5 (26865)	22.05	21.06	20.01
		815.5 (26705)	22.01	21.06	19.97

5MHz	1RB-High (24)	846.5 (27015)	23.13	22.24	21.18	
		831.5 (26865)	23.07	22.32	21.16	
		816.5 (26715)	23.06	22.23	21.19	
	1RB-Middle (12)	846.5 (27015)	23.08	22.29	21.23	
		831.5 (26865)	23.15	22.26	21.26	
		816.5 (26715)	23.07	22.29	21.21	
	1RB-Low (0)	846.5 (27015)	23.04	22.24	21.17	
		831.5 (26865)	23.08	22.30	21.26	
		816.5 (26715)	23.10	22.27	21.20	
	12RB-High (13)	846.5 (27015)	22.01	21.00	20.02	
		831.5 (26865)	22.03	21.02	20.00	
		816.5 (26715)	22.05	21.02	20.00	
	12RB-Middle (6)	846.5 (27015)	22.05	21.03	20.06	
		831.5 (26865)	22.03	21.03	20.03	
		816.5 (26715)	22.04	21.03	20.01	
	12RB-Low (0)	846.5 (27015)	22.06	21.08	20.07	
		831.5 (26865)	22.02	20.97	19.99	
		816.5 (26715)	22.04	20.97	20.06	
	25RB (0)	846.5 (27015)	22.08	21.04	20.03	
		831.5 (26865)	22.06	21.05	20.05	
		816.5 (26715)	22.05	21.08	20.03	
	10MHz	1RB-High (49)	844 (26990)	23.09	22.29	21.13
			831.5 (26865)	23.04	22.26	21.08
			820 (26750)	23.02	22.25	21.16
1RB-Middle (24)		844 (26990)	23.09	22.24	21.20	
		831.5 (26865)	23.07	22.41	21.18	
		820 (26750)	23.10	22.26	21.20	
1RB-Low (0)		844 (26990)	23.06	22.33	21.13	
		831.5 (26865)	23.05	22.35	21.14	
		820 (26750)	23.14	22.32	21.19	
25RB-High (25)		844 (26990)	21.99	20.98	20.07	
		831.5 (26865)	22.04	21.08	20.03	
		820 (26750)	22.02	21.01	20.02	
25RB-Middle (12)		844 (26990)	22.04	21.05	20.01	
		831.5 (26865)	21.99	21.07	20.03	
		820 (26750)	22.04	21.07	20.05	
25RB-Low (0)		844 (26990)	22.10	21.11	20.07	
		831.5 (26865)	22.05	21.07	20.04	
		820 (26750)	22.02	21.03	20.01	
50RB (0)		844 (26990)	22.06	21.05	20.04	
		831.5 (26865)	22.06	21.03	20.02	
		820 (26750)	22.08	21.04	20.03	

15MHz	1RB-High (74)	841.5 (26965)	22.65	21.78	20.69
		831.5 (26865)	22.49	21.69	20.56
		822.5 (26775)	22.39	21.70	20.56
	1RB-Middle (37)	841.5 (26965)	22.57	21.76	20.69
		831.5 (26865)	22.52	21.73	20.67
		822.5 (26775)	22.53	21.78	20.64
	1RB-Low (0)	841.5 (26965)	22.50	21.76	20.62
		831.5 (26865)	22.44	21.77	20.58
		822.5 (26775)	22.52	21.71	20.61
	36RB-High (38)	841.5 (26965)	21.57	20.55	19.50
		831.5 (26865)	21.51	20.47	19.49
		822.5 (26775)	21.44	20.39	19.45
	36RB-Middle (19)	841.5 (26965)	21.56	20.58	19.55
		831.5 (26865)	21.44	20.51	19.46
		822.5 (26775)	21.51	20.46	19.49
	36RB-Low (0)	841.5 (26965)	21.53	20.54	19.53
		831.5 (26865)	21.49	20.44	19.41
		822.5 (26775)	21.48	20.45	19.46
	75RB (0)	841.5 (26965)	21.56	20.56	19.52
		831.5 (26865)	21.50	20.42	19.47
		822.5 (26775)	21.48	20.45	19.42

LTE Band38-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2617.5 (38225)	23.41	22.55	21.20
		2595 (38000)	23.37	22.51	21.16
		2572.5 (37775)	23.31	22.47	21.10
	1RB-Middle (12)	2617.5 (38225)	23.53	22.59	21.26
		2595 (38000)	23.46	22.51	21.19
		2572.5 (37775)	23.37	22.49	21.14
	1RB-Low (0)	2617.5 (38225)	23.45	22.59	21.25
		2595 (38000)	23.38	22.51	21.16
		2572.5 (37775)	23.38	22.51	21.15
	12RB-High (13)	2617.5 (38225)	22.52	21.41	20.48
		2595 (38000)	22.48	21.39	20.47
		2572.5 (37775)	22.45	21.36	20.42
	12RB-Middle (6)	2617.5 (38225)	22.53	21.45	20.49
		2595 (38000)	22.50	21.42	20.45
		2572.5 (37775)	22.49	21.40	20.46
	12RB-Low (0)	2617.5 (38225)	22.57	21.49	20.57
		2595 (38000)	22.54	21.44	20.52
		2572.5 (37775)	22.51	21.45	20.50
	25RB (0)	2617.5 (38225)	22.50	21.53	20.52
		2595 (38000)	22.50	21.53	20.51
		2572.5 (37775)	22.49	21.52	20.51
10MHz	1RB-High (49)	2615 (38200)	23.35	22.52	21.15
		2595 (38000)	23.28	22.44	21.08
		2575 (37800)	23.34	22.50	21.13
	1RB-Middle (24)	2615 (38200)	23.47	22.58	21.22
		2595 (38000)	23.42	22.55	21.18
		2575 (37800)	23.39	22.54	21.15
	1RB-Low (0)	2615 (38200)	23.39	22.56	21.19
		2595 (38000)	23.36	22.53	21.16
		2575 (37800)	23.38	22.54	21.15
	25RB-High (25)	2615 (38200)	22.49	21.53	20.52
		2595 (38000)	22.45	21.46	20.48
		2575 (37800)	22.50	21.52	20.51
	25RB-Middle (12)	2615 (38200)	22.52	21.55	20.54
		2595 (38000)	22.46	21.47	20.49
		2575 (37800)	22.51	21.54	20.53
	25RB-Low (0)	2615 (38200)	22.51	21.55	20.57
		2595 (38000)	22.50	21.53	20.53
		2575 (37800)	22.54	21.55	20.57
	50RB (0)	2615 (38200)	22.56	21.57	20.53
		2595 (38000)	22.50	21.50	20.48
		2575 (37800)	22.56	21.55	20.52

15MHz	1RB-High (74)	2612.5 (38175)	23.28	22.43	21.07
		2595 (38000)	23.20	22.36	20.98
		2577.5 (37825)	23.22	22.42	21.02
	1RB-Middle (37)	2612.5 (38175)	23.35	22.50	21.14
		2595 (38000)	23.37	22.53	21.14
		2577.5 (37825)	23.34	22.50	21.13
	1RB-Low (0)	2612.5 (38175)	23.34	22.50	21.12
		2595 (38000)	23.33	22.48	21.11
		2577.5 (37825)	23.33	22.49	21.10
	36RB-High (38)	2612.5 (38175)	22.43	21.44	20.43
		2595 (38000)	22.42	21.41	20.40
		2577.5 (37825)	22.43	21.40	20.38
	36RB-Middle (19)	2612.5 (38175)	22.45	21.42	20.43
		2595 (38000)	22.46	21.42	20.46
		2577.5 (37825)	22.45	21.43	20.46
	36RB-Low (0)	2612.5 (38175)	22.45	21.44	20.46
		2595 (38000)	22.42	21.43	20.43
		2577.5 (37825)	22.43	21.40	20.43
	75RB (0)	2612.5 (38175)	22.45	21.47	20.48
		2595 (38000)	22.45	21.46	20.43
		2577.5 (37825)	22.46	21.48	20.46
20MHz	1RB-High (99)	2610 (38150)	22.82	21.82	20.43
		2595 (38000)	22.71	21.88	20.48
		2580 (37850)	22.59	21.77	20.37
	1RB-Middle (50)	2610 (38150)	22.98	21.98	20.57
		2595 (38000)	22.78	21.93	20.52
		2580 (37850)	22.66	21.81	20.41
	1RB-Low (0)	2610 (38150)	22.80	21.96	20.56
		2595 (38000)	22.70	21.88	20.46
		2580 (37850)	22.63	21.84	20.42
	50RB-High (50)	2610 (38150)	21.90	20.91	19.86
		2595 (38000)	21.82	20.84	19.79
		2580 (37850)	21.80	20.83	19.77
	50RB-Middle (25)	2610 (38150)	21.91	20.94	19.89
		2595 (38000)	21.83	20.85	19.82
		2580 (37850)	21.82	20.83	19.80
	50RB-Low (0)	2610 (38150)	21.95	20.94	19.93
		2595 (38000)	21.90	20.90	19.88
		2580 (37850)	21.85	20.87	19.82
	100RB (0)	2610 (38150)	21.90	20.90	19.88
		2595 (38000)	21.88	20.88	19.83
		2580 (37850)	21.86	20.86	19.81

LTE Band25-Power Level B1/F1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
5MHz	1RB-High (24)	2617.5 (38225)	20.38	19.16	17.94	
		2595 (38000)	20.26	19.36	17.76	
		2572.5 (37775)	20.24	19.27	17.99	
	1RB-Middle (12)	2617.5 (38225)	20.39	19.41	18.04	
		2595 (38000)	20.40	19.59	18.23	
		2572.5 (37775)	20.53	19.42	18.05	
	1RB-Low (0)	2617.5 (38225)	20.38	19.35	18.03	
		2595 (38000)	20.39	19.51	18.15	
		2572.5 (37775)	20.46	19.64	18.00	
	12RB-High (13)	2617.5 (38225)	19.43	18.49	17.36	
		2595 (38000)	19.43	18.21	17.34	
		2572.5 (37775)	19.36	18.40	17.20	
	12RB-Middle (6)	2617.5 (38225)	19.27	18.35	17.36	
		2595 (38000)	19.46	18.47	17.27	
		2572.5 (37775)	19.59	18.44	17.47	
	12RB-Low (0)	2617.5 (38225)	19.27	18.58	17.31	
		2595 (38000)	19.53	18.33	17.30	
		2572.5 (37775)	19.47	18.38	17.40	
	25RB (0)	2617.5 (38225)	19.52	18.54	17.34	
		2595 (38000)	19.30	18.28	17.37	
		2572.5 (37775)	19.35	18.46	17.25	
	10MHz	1RB-High (49)	2615 (38200)	20.34	19.37	17.99
			2595 (38000)	20.22	19.34	18.02
			2575 (37800)	20.43	19.45	17.84
1RB-Middle (24)		2615 (38200)	20.54	19.46	17.96	
		2595 (38000)	20.47	19.35	18.20	
		2575 (37800)	20.43	19.29	17.97	
1RB-Low (0)		2615 (38200)	20.28	19.55	18.10	
		2595 (38000)	20.29	19.63	18.08	
		2575 (37800)	20.34	19.54	17.93	
25RB-High (25)		2615 (38200)	19.42	18.22	17.28	
		2595 (38000)	19.35	18.32	17.37	
		2575 (37800)	19.23	18.52	17.23	
25RB-Middle (12)		2615 (38200)	19.31	18.47	17.38	
		2595 (38000)	19.43	18.58	17.32	
		2575 (37800)	19.54	18.43	17.38	
25RB-Low (0)		2615 (38200)	19.30	18.44	17.30	
		2595 (38000)	19.43	18.54	17.36	
		2575 (37800)	19.37	18.53	17.43	
50RB (0)		2615 (38200)	19.26	18.37	17.22	
		2595 (38000)	19.37	18.34	17.33	
		2575 (37800)	19.43	18.30	17.36	

15MHz	1RB-High (74)	2612.5 (38175)	20.36	19.27	17.84
		2595 (38000)	20.27	19.22	17.96
		2577.5 (37825)	20.38	19.28	17.83
	1RB-Middle (37)	2612.5 (38175)	20.29	19.52	18.01
		2595 (38000)	20.42	19.41	18.05
		2577.5 (37825)	20.34	19.57	18.00
	1RB-Low (0)	2612.5 (38175)	20.40	19.43	18.13
		2595 (38000)	20.38	19.46	18.05
		2577.5 (37825)	20.42	19.45	18.18
	36RB-High (38)	2612.5 (38175)	19.23	18.32	17.19
		2595 (38000)	19.39	18.28	17.39
		2577.5 (37825)	19.45	18.44	17.34
	36RB-Middle (19)	2612.5 (38175)	19.45	18.25	17.19
		2595 (38000)	19.47	18.45	17.38
		2577.5 (37825)	19.54	18.43	17.52
	36RB-Low (0)	2612.5 (38175)	19.48	18.29	17.45
		2595 (38000)	19.29	18.58	17.49
		2577.5 (37825)	19.60	18.57	17.54
	75RB (0)	2612.5 (38175)	19.41	18.35	17.24
		2595 (38000)	19.47	18.50	17.34
		2577.5 (37825)	19.32	18.52	17.55
20MHz	1RB-High (99)	2610 (38150)	20.25	19.29	17.87
		2595 (38000)	20.28	19.35	17.91
		2580 (37850)	20.29	19.33	17.89
	1RB-Middle (50)	2610 (38150)	20.41	19.43	17.96
		2595 (38000)	20.44	19.48	18.11
		2580 (37850)	20.42	19.44	18.03
	1RB-Low (0)	2610 (38150)	20.41	19.44	18.00
		2595 (38000)	20.42	19.48	18.03
		2580 (37850)	20.45	19.50	18.05
	50RB-High (50)	2610 (38150)	19.34	18.35	17.33
		2595 (38000)	19.36	18.36	17.32
		2580 (37850)	19.37	18.37	17.33
	50RB-Middle (25)	2610 (38150)	19.36	18.39	17.33
		2595 (38000)	19.41	18.44	17.39
		2580 (37850)	19.46	18.46	17.42
	50RB-Low (0)	2610 (38150)	19.41	18.43	17.39
		2595 (38000)	19.44	18.44	17.41
		2580 (37850)	19.49	18.50	17.47
	100RB (0)	2610 (38150)	19.37	18.39	17.35
		2595 (38000)	19.40	18.40	17.36
		2580 (37850)	19.41	18.43	17.40

LTE Band38-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2617.5 (38225)	22.67	21.49	20.27
		2595 (38000)	22.63	21.42	20.05
		2572.5 (37775)	22.45	21.53	20.11
	1RB-Middle (12)	2617.5 (38225)	22.49	21.58	20.07
		2595 (38000)	22.63	21.81	20.29
		2572.5 (37775)	22.35	21.78	20.30
	1RB-Low (0)	2617.5 (38225)	22.65	21.60	20.34
		2595 (38000)	22.53	21.66	20.34
		2572.5 (37775)	22.31	21.53	20.16
	12RB-High (13)	2617.5 (38225)	21.57	20.58	19.54
		2595 (38000)	21.61	20.64	19.65
		2572.5 (37775)	21.58	20.70	19.44
	12RB-Middle (6)	2617.5 (38225)	21.46	20.75	19.58
		2595 (38000)	21.75	20.70	19.68
		2572.5 (37775)	21.65	20.56	19.55
	12RB-Low (0)	2617.5 (38225)	21.76	20.76	19.59
		2595 (38000)	21.84	20.75	19.59
		2572.5 (37775)	21.61	20.68	19.59
	25RB (0)	2617.5 (38225)	21.58	20.62	19.55
		2595 (38000)	21.60	20.52	19.43
		2572.5 (37775)	21.63	20.74	19.51
10MHz	1RB-High (49)	2615 (38200)	22.61	21.56	20.28
		2595 (38000)	22.61	21.46	20.14
		2575 (37800)	22.40	21.65	20.07
	1RB-Middle (24)	2615 (38200)	22.62	21.71	20.19
		2595 (38000)	22.48	21.56	20.34
		2575 (37800)	22.51	21.64	20.35
	1RB-Low (0)	2615 (38200)	22.70	21.54	20.08
		2595 (38000)	22.47	21.77	20.21
		2575 (37800)	22.47	21.72	20.27
	25RB-High (25)	2615 (38200)	21.63	20.40	19.44
		2595 (38000)	21.60	20.52	19.49
		2575 (37800)	21.48	20.54	19.56
	25RB-Middle (12)	2615 (38200)	21.73	20.69	19.53
		2595 (38000)	21.75	20.57	19.73
		2575 (37800)	21.55	20.74	19.49
	25RB-Low (0)	2615 (38200)	21.57	20.82	19.49
		2595 (38000)	21.66	20.79	19.80
		2575 (37800)	21.85	20.80	19.57
	50RB (0)	2615 (38200)	21.59	20.47	19.52
		2595 (38000)	21.72	20.73	19.45
		2575 (37800)	21.65	20.63	19.57



15MHz	1RB-High (74)	2612.5 (38175)	22.51	21.52	20.29	
		2595 (38000)	22.52	21.50	20.24	
		2577.5 (37825)	22.46	21.65	20.27	
	1RB-Middle (37)	2612.5 (38175)	22.59	21.61	20.21	
		2595 (38000)	22.60	21.82	20.22	
		2577.5 (37825)	22.33	21.58	20.38	
	1RB-Low (0)	2612.5 (38175)	22.68	21.72	20.11	
		2595 (38000)	22.38	21.67	20.32	
		2577.5 (37825)	22.37	21.57	20.25	
	36RB-High (38)	2612.5 (38175)	21.55	20.59	19.37	
		2595 (38000)	21.44	20.61	19.44	
		2577.5 (37825)	21.75	20.75	19.57	
	36RB-Middle (19)	2612.5 (38175)	21.55	20.62	19.72	
		2595 (38000)	21.65	20.55	19.52	
		2577.5 (37825)	21.63	20.82	19.52	
	36RB-Low (0)	2612.5 (38175)	21.77	20.67	19.69	
		2595 (38000)	21.60	20.70	19.75	
		2577.5 (37825)	21.85	20.79	19.63	
	75RB (0)	2612.5 (38175)	21.54	20.64	19.65	
		2595 (38000)	21.69	20.56	19.71	
		2577.5 (37825)	21.58	20.55	19.77	
	20MHz	1RB-High (99)	2610 (38150)	22.54	21.54	20.14
			2595 (38000)	22.53	21.57	20.14
			2580 (37850)	22.34	21.56	20.16
1RB-Middle (50)		2610 (38150)	22.62	21.62	20.22	
		2595 (38000)	22.53	21.71	20.29	
		2580 (37850)	22.47	21.66	20.25	
1RB-Low (0)		2610 (38150)	22.63	21.62	20.23	
		2595 (38000)	22.45	21.65	20.26	
		2580 (37850)	22.43	21.63	20.22	
50RB-High (50)		2610 (38150)	21.56	20.54	19.50	
		2595 (38000)	21.59	20.59	19.53	
		2580 (37850)	21.61	20.60	19.56	
50RB-Middle (25)		2610 (38150)	21.61	20.61	19.57	
		2595 (38000)	21.64	20.65	19.60	
		2580 (37850)	21.66	20.67	19.63	
50RB-Low (0)		2610 (38150)	21.66	20.67	19.62	
		2595 (38000)	21.70	20.70	19.67	
		2580 (37850)	21.72	20.71	19.66	
100RB (0)		2610 (38150)	21.61	20.60	19.55	
		2595 (38000)	21.62	20.61	19.58	
		2580 (37850)	21.64	20.65	19.62	

LTE Band41 PC3-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	23.28	22.44	21.03
		2640.3(41093)	23.16	22.35	20.92
		2593 (40620)	23.28	22.44	21.05
		2545.8(40148)	23.18	22.40	20.98
		2498.5 (39675)	23.32	22.32	21.12
	1RB-Middle (12)	2687.5 (41565)	23.33	22.46	21.08
		2640.3(41093)	23.28	22.39	20.98
		2593 (40620)	23.35	22.46	21.06
		2545.8(40148)	23.25	22.39	21.00
		2498.5 (39675)	23.35	22.33	21.11
	1RB-Low (0)	2687.5 (41565)	23.28	22.43	21.04
		2640.3(41093)	23.20	22.40	20.95
		2593 (40620)	23.29	22.44	21.06
		2545.8(40148)	23.25	22.25	21.04
		2498.5 (39675)	23.29	22.29	21.07
	12RB-High (13)	2687.5 (41565)	22.36	21.27	20.34
		2640.3(41093)	22.23	21.16	20.23
		2593 (40620)	22.36	21.28	20.33
		2545.8(40148)	22.31	21.22	20.31
		2498.5 (39675)	22.24	21.34	20.38
	12RB-Middle (6)	2687.5 (41565)	22.36	21.28	20.33
		2640.3(41093)	22.30	21.22	20.29
		2593 (40620)	22.37	21.26	20.35
		2545.8(40148)	22.32	21.25	20.32
		2498.5 (39675)	22.23	21.34	20.40
	12RB-Low (0)	2687.5 (41565)	22.38	21.32	20.41
		2640.3(41093)	22.33	21.26	20.33
		2593 (40620)	22.39	21.28	20.36
		2545.8(40148)	22.19	21.32	20.36
		2498.5 (39675)	22.24	21.36	20.40
25RB (0)	2687.5 (41565)	22.36	21.36	20.38	
	2640.3(41093)	22.31	21.26	20.28	
	2593 (40620)	22.38	21.36	20.39	
	2545.8(40148)	22.19	21.37	20.39	
	2498.5 (39675)	22.26	21.45	20.46	

10MHz	1RB-High (49)	2685 (41540)	22.40	22.41	21.00
		2639(41080)	23.12	22.28	20.87
		2593 (40620)	23.21	22.37	20.98
		2547(40160)	23.12	22.31	20.93
		2501 (39700)	23.30	22.33	21.08
	1RB-Middle (24)	2685 (41540)	22.38	22.46	21.03
		2639(41080)	23.19	22.40	20.98
		2593 (40620)	23.31	22.50	21.06
		2547(40160)	23.23	22.42	21.02
		2501 (39700)	23.34	22.38	21.10
	1RB-Low (0)	2685 (41540)	22.39	22.40	21.02
		2639(41080)	23.22	22.39	20.99
		2593 (40620)	23.26	22.43	21.03
		2547(40160)	23.23	22.26	21.01
		2501 (39700)	23.24	22.25	21.02
	25RB-High (25)	2685 (41540)	22.34	21.34	20.37
		2639(41080)	22.25	21.22	20.25
		2593 (40620)	22.34	21.29	20.34
		2547(40160)	22.33	21.30	20.35
		2501 (39700)	22.27	21.45	20.47
	25RB-Middle (12)	2685 (41540)	22.40	21.36	20.38
		2639(41080)	22.28	21.30	20.33
		2593 (40620)	22.40	21.42	20.39
		2547(40160)	22.34	21.29	20.34
		2501 (39700)	22.24	21.41	20.44
25RB-Low (0)	2685 (41540)	22.40	21.35	20.37	
	2639(41080)	22.32	21.29	20.33	
	2593 (40620)	22.40	21.39	20.41	
	2547(40160)	22.18	21.39	20.37	
	2501 (39700)	22.21	21.40	20.39	
50RB (0)	2685 (41540)	22.40	21.38	20.34	
	2639(41080)	22.30	21.33	20.27	
	2593 (40620)	22.40	21.38	20.32	
	2547(40160)	22.37	21.35	20.30	
	2501 (39700)	22.27	21.45	20.42	

15MHz	1RB-High (74)	2682.5 (41515)	22.34	22.37	20.94
		2637.8(41068)	23.07	22.27	20.82
		2593 (40620)	23.19	22.35	20.96
		2548.3(40173)	23.05	22.28	20.85
		2503.5 (39725)	23.28	22.31	21.10
	1RB-Middle (37)	2682.5 (41515)	22.34	22.41	21.01
		2637.8(41068)	23.16	22.37	20.97
		2593 (40620)	23.26	22.49	21.04
		2548.3(40173)	23.18	22.38	21.00
		2503.5 (39725)	23.27	22.32	21.08
	1RB-Low (0)	2682.5 (41515)	22.36	22.35	20.92
		2637.8(41068)	23.21	22.40	20.98
		2593 (40620)	23.16	22.40	20.97
		2548.3(40173)	23.18	22.20	20.99
		2503.5 (39725)	23.17	22.21	20.97
	36RB-High (38)	2682.5 (41515)	22.29	21.27	20.28
		2637.8(41068)	22.20	21.19	20.17
		2593 (40620)	22.30	21.27	20.27
		2548.3(40173)	22.25	21.25	20.19
		2503.5 (39725)	22.28	21.41	20.37
	36RB-Middle (19)	2682.5 (41515)	22.34	21.26	20.28
		2637.8(41068)	22.27	21.24	20.26
		2593 (40620)	22.37	21.32	20.33
		2548.3(40173)	22.31	21.22	20.27
		2503.5 (39725)	22.25	21.42	20.38
36RB-Low (0)	2682.5 (41515)	22.33	21.26	20.24	
	2637.8(41068)	22.28	21.29	20.30	
	2593 (40620)	22.33	21.33	20.34	
	2548.3(40173)	22.17	21.30	20.31	
	2503.5 (39725)	22.19	21.37	20.31	
75RB (0)	2682.5 (41515)	22.35	21.29	20.29	
	2637.8(41068)	22.27	21.28	20.26	
	2593 (40620)	22.36	21.35	20.34	
	2548.3(40173)	22.33	21.30	20.29	
	2503.5 (39725)	22.27	21.43	20.41	

20MHz	1RB-High (99)	2680 (41490)	22.64	21.68	20.27
		2636.5(41055)	22.63	21.66	20.26
		2593 (40620)	22.44	21.62	20.21
		2549.5(40185)	22.43	21.63	20.23
		2506 (39750)	22.43	21.64	20.24
	1RB-Middle (50)	2680 (41490)	22.82	21.82	20.39
		2636.5(41055)	22.58	21.77	20.33
		2593 (40620)	22.66	21.83	20.38
		2549.5(40185)	22.49	21.67	20.26
		2506 (39750)	22.54	21.73	20.31
	1RB-Low (0)	2680 (41490)	22.79	21.78	20.39
		2636.5(41055)	22.48	21.67	20.24
		2593 (40620)	22.60	21.77	20.37
		2549.5(40185)	22.42	21.61	20.19
		2506 (39750)	22.48	21.66	20.24
	50RB-High (50)	2680 (41490)	21.72	20.71	19.70
		2636.5(41055)	21.67	20.67	19.65
		2593 (40620)	21.69	20.68	19.65
		2549.5(40185)	21.64	20.67	19.61
		2506 (39750)	21.66	20.67	19.64
	50RB-Middle (25)	2680 (41490)	21.77	20.80	19.75
		2636.5(41055)	21.70	20.69	19.64
		2593 (40620)	21.72	20.74	19.67
		2549.5(40185)	21.67	20.66	19.63
		2506 (39750)	21.73	20.71	19.69
50RB-Low (0)	2680 (41490)	21.82	20.84	19.78	
	2636.5(41055)	21.74	20.74	19.71	
	2593 (40620)	21.83	20.80	19.77	
	2549.5(40185)	21.63	20.64	19.60	
	2506 (39750)	21.71	20.70	19.66	
100RB (0)	2680 (41490)	21.78	20.78	19.72	
	2636.5(41055)	21.71	20.69	19.70	
	2593 (40620)	21.73	20.76	19.71	
	2549.5(40185)	21.65	20.61	19.65	
	2506 (39750)	21.71	20.68	19.65	

LTE Band41 PC3-Power Level B1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	18.72	17.80	16.42
		2640.3(41093)	18.48	17.51	16.15
		2593 (40620)	18.63	17.65	16.26
		2545.8(40148)	18.65	17.70	16.33
		2498.5 (39675)	18.76	17.81	16.35
	1RB-Middle (12)	2687.5 (41565)	18.77	17.80	16.42
		2640.3(41093)	18.59	17.59	16.22
		2593 (40620)	18.66	17.67	16.28
		2545.8(40148)	18.72	17.74	16.38
		2498.5 (39675)	18.77	17.77	16.36
	1RB-Low (0)	2687.5 (41565)	18.72	17.76	16.38
		2640.3(41093)	18.54	17.57	16.18
		2593 (40620)	18.62	17.63	16.28
		2545.8(40148)	18.70	17.71	16.37
		2498.5 (39675)	18.76	17.78	16.37
	12RB-High (13)	2687.5 (41565)	17.69	16.64	15.75
		2640.3(41093)	17.42	16.45	15.47
		2593 (40620)	17.53	16.51	15.55
		2545.8(40148)	17.64	16.59	15.69
		2498.5 (39675)	17.71	16.63	15.77
	12RB-Middle (6)	2687.5 (41565)	17.67	16.67	15.73
		2640.3(41093)	17.46	16.44	15.54
		2593 (40620)	17.53	16.49	15.55
		2545.8(40148)	17.64	16.63	15.68
		2498.5 (39675)	17.72	16.64	15.75
	12RB-Low (0)	2687.5 (41565)	17.68	16.66	15.77
		2640.3(41093)	17.49	16.48	15.53
		2593 (40620)	17.58	16.54	15.63
		2545.8(40148)	17.67	16.65	15.69
		2498.5 (39675)	17.71	16.65	15.76
	25RB (0)	2687.5 (41565)	17.70	16.75	15.78
		2640.3(41093)	17.47	16.50	15.52
2593 (40620)		17.57	16.59	15.61	
2545.8(40148)		17.69	16.70	15.72	
2498.5 (39675)		17.75	16.73	15.82	

10MHz	1RB-High (49)	2685 (41540)	18.69	17.73	16.36
		2639(41080)	18.43	17.48	16.10
		2593 (40620)	18.51	17.55	16.18
		2547(40160)	18.62	17.64	16.26
		2501 (39700)	18.72	17.74	16.34
	1RB-Middle (24)	2685 (41540)	18.71	17.80	16.39
		2639(41080)	18.53	17.57	16.18
		2593 (40620)	18.62	17.68	16.29
		2547(40160)	18.66	17.72	16.36
		2501 (39700)	18.76	17.79	16.40
	1RB-Low (0)	2685 (41540)	18.68	17.73	16.36
		2639(41080)	18.53	17.55	16.22
		2593 (40620)	18.58	17.60	16.28
		2547(40160)	18.72	17.73	16.38
		2501 (39700)	18.72	17.76	16.33
	25RB-High (25)	2685 (41540)	17.67	16.71	15.74
		2639(41080)	17.44	16.49	15.54
		2593 (40620)	17.52	16.53	15.57
		2547(40160)	17.63	16.64	15.68
		2501 (39700)	17.75	16.72	15.79
	25RB-Middle (12)	2685 (41540)	17.67	16.68	15.76
		2639(41080)	17.49	16.50	15.55
		2593 (40620)	17.58	16.64	15.64
		2547(40160)	17.68	16.69	15.72
		2501 (39700)	17.71	16.69	15.79
25RB-Low (0)	2685 (41540)	17.66	16.70	15.73	
	2639(41080)	17.49	16.53	15.56	
	2593 (40620)	17.59	16.62	15.63	
	2547(40160)	17.68	16.71	15.72	
	2501 (39700)	17.72	16.71	15.76	
50RB (0)	2685 (41540)	17.68	16.75	15.73	
	2639(41080)	17.51	16.55	15.53	
	2593 (40620)	17.59	16.60	15.55	
	2547(40160)	17.68	16.73	15.69	
	2501 (39700)	17.73	16.72	15.72	

15MHz	1RB-High (74)	2682.5 (41515)	18.63	17.70	16.34
		2637.8(41068)	18.40	17.47	16.10
		2593 (40620)	18.48	17.57	16.18
		2548.3(40173)	18.53	17.59	16.26
		2503.5 (39725)	18.67	17.72	16.33
	1RB-Middle (37)	2682.5 (41515)	18.69	17.75	16.39
		2637.8(41068)	18.50	17.54	16.18
		2593 (40620)	18.58	17.65	16.29
		2548.3(40173)	18.65	17.71	16.31
		2503.5 (39725)	18.71	17.75	16.31
	1RB-Low (0)	2682.5 (41515)	18.64	17.69	16.33
		2637.8(41068)	18.52	17.54	16.22
		2593 (40620)	18.57	17.60	16.25
		2548.3(40173)	18.67	17.71	16.34
		2503.5 (39725)	18.67	17.71	16.29
	36RB-High (38)	2682.5 (41515)	17.63	16.64	15.62
		2637.8(41068)	17.43	16.45	15.45
		2593 (40620)	17.49	16.50	15.49
		2548.3(40173)	17.57	16.56	15.62
		2503.5 (39725)	17.71	16.64	15.73
	36RB-Middle (19)	2682.5 (41515)	17.59	16.61	15.66
		2637.8(41068)	17.45	16.43	15.46
		2593 (40620)	17.54	16.56	15.55
		2548.3(40173)	17.61	16.65	15.61
		2503.5 (39725)	17.70	16.68	15.71
36RB-Low (0)	2682.5 (41515)	17.61	16.66	15.65	
	2637.8(41068)	17.49	16.51	15.54	
	2593 (40620)	17.55	16.56	15.55	
	2548.3(40173)	17.65	16.63	15.66	
	2503.5 (39725)	17.66	16.64	15.67	
75RB (0)	2682.5 (41515)	17.64	16.69	15.67	
	2637.8(41068)	17.49	16.55	15.50	
	2593 (40620)	17.55	16.57	15.56	
	2548.3(40173)	17.64	16.63	15.67	
	2503.5 (39725)	17.74	16.72	15.73	



20MHz	1RB-High (99)	2680 (41490)	18.80	17.82	16.39
		2636.5(41055)	18.55	17.56	16.18
		2593 (40620)	18.66	17.65	16.27
		2549.5(40185)	18.70	17.70	16.31
		2506 (39750)	18.83	17.86	16.41
	1RB-Middle (50)	2680 (41490)	18.85	17.86	16.45
		2636.5(41055)	18.70	17.73	16.32
		2593 (40620)	18.78	17.78	16.37
		2549.5(40185)	18.85	17.85	16.41
		2506 (39750)	18.91	17.92	16.45
	1RB-Low (0)	2680 (41490)	18.77	17.77	16.35
		2636.5(41055)	18.69	17.67	16.32
		2593 (40620)	18.75	17.75	16.33
		2549.5(40185)	18.82	17.83	16.43
		2506 (39750)	18.82	17.84	16.38
	50RB-High (50)	2680 (41490)	17.82	16.84	15.79
		2636.5(41055)	17.64	16.68	15.61
		2593 (40620)	17.69	16.69	15.61
		2549.5(40185)	17.74	16.75	15.70
		2506 (39750)	17.91	16.90	15.88
	50RB-Middle (25)	2680 (41490)	17.81	16.83	15.79
		2636.5(41055)	17.68	16.71	15.60
		2593 (40620)	17.76	16.75	15.67
		2549.5(40185)	17.83	16.83	15.80
		2506 (39750)	17.90	16.89	15.88
50RB-Low (0)	2680 (41490)	17.83	16.87	15.79	
	2636.5(41055)	17.75	16.79	15.71	
	2593 (40620)	17.79	16.80	15.75	
	2549.5(40185)	17.87	16.87	15.81	
	2506 (39750)	17.83	16.84	15.83	
100RB (0)	2680 (41490)	17.82	16.81	15.77	
	2636.5(41055)	17.68	16.70	15.67	
	2593 (40620)	17.75	16.74	15.73	
	2549.5(40185)	17.81	16.82	15.76	
	2506 (39750)	17.88	16.86	15.87	

LTE Band41 PC3-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	20.84	19.87	18.45
		2640.3(41093)	20.67	19.73	18.30
		2593 (40620)	20.80	19.86	18.42
		2545.8(40148)	20.90	19.91	18.52
		2498.5 (39675)	20.80	19.83	18.40
	1RB-Middle (12)	2687.5 (41565)	20.82	19.84	18.44
		2640.3(41093)	20.72	19.73	18.32
		2593 (40620)	20.89	19.92	18.48
		2545.8(40148)	20.92	19.95	18.52
		2498.5 (39675)	20.78	19.81	18.42
	1RB-Low (0)	2687.5 (41565)	20.82	19.84	18.42
		2640.3(41093)	20.69	19.72	18.31
		2593 (40620)	20.87	19.89	18.48
		2545.8(40148)	20.92	19.96	18.53
		2498.5 (39675)	20.79	19.80	18.36
	12RB-High (13)	2687.5 (41565)	19.75	18.67	17.73
		2640.3(41093)	19.62	18.55	17.63
		2593 (40620)	19.73	18.62	17.73
		2545.8(40148)	19.81	18.74	17.81
		2498.5 (39675)	19.73	18.62	17.70
	12RB-Middle (6)	2687.5 (41565)	19.77	18.69	17.73
		2640.3(41093)	19.65	18.56	17.60
		2593 (40620)	19.78	18.71	17.77
		2545.8(40148)	19.83	18.76	17.82
		2498.5 (39675)	19.74	18.65	17.70
	12RB-Low (0)	2687.5 (41565)	19.78	18.72	17.78
		2640.3(41093)	19.66	18.58	17.65
		2593 (40620)	19.81	18.76	17.78
		2545.8(40148)	19.94	18.85	17.84
		2498.5 (39675)	19.68	18.68	17.72
25RB (0)	2687.5 (41565)	19.81	18.79	17.77	
	2640.3(41093)	19.67	18.65	17.65	
	2593 (40620)	19.80	18.77	17.77	
	2545.8(40148)	19.91	18.86	17.87	
	2498.5 (39675)	19.76	18.72	17.74	

10MHz	1RB-High (49)	2685 (41540)	20.80	19.84	18.42
		2639(41080)	20.65	19.68	18.28
		2593 (40620)	20.79	19.86	18.39
		2547(40160)	20.85	19.88	18.48
		2501 (39700)	20.82	19.87	18.18
	1RB-Middle (24)	2685 (41540)	20.81	19.86	18.43
		2639(41080)	20.70	19.75	18.32
		2593 (40620)	20.86	19.92	18.48
		2547(40160)	20.91	19.97	18.54
		2501 (39700)	20.79	19.84	18.42
	1RB-Low (0)	2685 (41540)	20.81	19.82	18.41
		2639(41080)	20.71	19.75	18.33
		2593 (40620)	20.83	19.86	18.47
		2547(40160)	20.94	19.94	18.55
		2501 (39700)	20.76	19.79	18.36
	25RB-High (25)	2685 (41540)	19.78	18.75	17.77
		2639(41080)	19.66	18.64	17.64
		2593 (40620)	19.78	18.77	17.78
		2547(40160)	19.86	18.85	17.84
		2501 (39700)	19.79	18.84	17.77
	25RB-Middle (12)	2685 (41540)	19.76	18.77	17.76
		2639(41080)	19.66	18.64	17.63
		2593 (40620)	19.81	18.79	17.81
		2547(40160)	19.90	18.85	17.87
		2501 (39700)	19.79	18.75	17.78
25RB-Low (0)	2685 (41540)	19.75	18.74	17.74	
	2639(41080)	19.64	18.62	17.65	
	2593 (40620)	19.86	18.82	17.84	
	2547(40160)	19.91	18.87	17.91	
	2501 (39700)	19.73	18.67	17.71	
50RB (0)	2685 (41540)	19.77	18.78	17.73	
	2639(41080)	19.70	18.64	17.61	
	2593 (40620)	19.84	18.80	17.78	
	2547(40160)	19.90	18.86	17.84	
	2501 (39700)	19.80	18.78	17.77	

15MHz	1RB-High (74)	2682.5 (41515)	20.68	19.78	18.37
		2637.8(41068)	20.60	19.65	18.25
		2593 (40620)	20.72	19.72	18.34
		2548.3(40173)	20.77	19.82	18.47
		2503.5 (39725)	20.76	19.81	18.40
	1RB-Middle (37)	2682.5 (41515)	20.74	19.80	18.40
		2637.8(41068)	20.69	19.73	18.33
		2593 (40620)	20.83	19.89	18.51
		2548.3(40173)	20.89	19.92	18.56
		2503.5 (39725)	20.80	19.85	18.58
	1RB-Low (0)	2682.5 (41515)	20.65	19.73	18.32
		2637.8(41068)	20.68	19.75	18.33
		2593 (40620)	20.79	19.84	18.42
		2548.3(40173)	20.86	19.91	18.52
		2503.5 (39725)	20.67	19.72	18.50
	36RB-High (38)	2682.5 (41515)	19.70	18.66	17.66
		2637.8(41068)	19.58	18.52	17.53
		2593 (40620)	19.79	18.67	17.70
		2548.3(40173)	19.81	18.74	17.73
		2503.5 (39725)	19.81	18.74	17.78
	36RB-Middle (19)	2682.5 (41515)	19.68	18.64	17.64
		2637.8(41068)	19.54	18.56	17.57
		2593 (40620)	19.85	18.70	17.69
		2548.3(40173)	19.84	18.83	17.78
		2503.5 (39725)	19.77	18.82	17.70
36RB-Low (0)	2682.5 (41515)	19.68	18.63	17.66	
	2637.8(41068)	19.67	18.62	17.61	
	2593 (40620)	19.88	18.74	17.80	
	2548.3(40173)	19.89	18.85	17.86	
	2503.5 (39725)	19.72	18.84	17.65	
75RB (0)	2682.5 (41515)	19.69	18.71	17.67	
	2637.8(41068)	19.70	18.62	17.59	
	2593 (40620)	19.72	18.79	17.72	
	2548.3(40173)	19.88	18.86	17.83	
	2503.5 (39725)	19.75	18.73	17.72	

20MHz	1RB-High (99)	2680 (41490)	20.50	19.57	18.15
		2636.5(41055)	20.38	19.41	18.00
		2593 (40620)	20.50	19.53	18.11
		2549.5(40185)	20.58	19.64	18.21
		2506 (39750)	20.62	19.62	18.08
	1RB-Middle (50)	2680 (41490)	20.62	19.64	18.20
		2636.5(41055)	20.55	19.58	18.15
		2593 (40620)	20.70	19.73	18.31
		2549.5(40185)	20.71	19.74	18.30
		2506 (39750)	20.68	19.74	18.30
	1RB-Low (0)	2680 (41490)	20.49	19.53	18.12
		2636.5(41055)	20.51	19.56	18.15
		2593 (40620)	20.62	19.65	18.23
		2549.5(40185)	20.69	19.71	18.28
		2506 (39750)	20.51	19.52	18.11
	50RB-High (50)	2680 (41490)	19.57	18.59	17.52
		2636.5(41055)	19.48	18.49	17.42
		2593 (40620)	19.58	18.57	17.51
		2549.5(40185)	19.55	18.63	17.56
		2506 (39750)	19.68	18.77	17.64
	50RB-Middle (25)	2680 (41490)	19.55	18.58	17.53
		2636.5(41055)	19.50	18.49	17.47
		2593 (40620)	19.66	18.62	17.62
		2549.5(40185)	19.67	18.72	17.68
		2506 (39750)	19.66	18.68	17.60
50RB-Low (0)	2680 (41490)	19.58	18.57	17.54	
	2636.5(41055)	19.56	18.58	17.53	
	2593 (40620)	19.69	18.68	17.65	
	2549.5(40185)	19.75	18.73	17.68	
	2506 (39750)	19.62	18.62	17.56	
100RB (0)	2680 (41490)	19.55	18.53	17.51	
	2636.5(41055)	19.53	18.51	17.46	
	2593 (40620)	19.60	18.61	17.56	
	2549.5(40185)	19.68	18.68	17.61	
	2506 (39750)	19.62	18.69	17.54	

LTE Band41 PC2-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	26.32	25.40	24.16
		2640.3(41093)	26.21	25.30	24.06
		2593 (40620)	26.36	25.45	24.21
		2545.8(40148)	26.27	25.40	24.15
		2498.5 (39675)	26.39	25.52	24.27
	1RB-Middle (12)	2687.5 (41565)	26.39	25.45	24.24
		2640.3(41093)	26.30	25.37	24.14
		2593 (40620)	26.39	25.45	24.24
		2545.8(40148)	26.33	25.39	24.19
		2498.5 (39675)	26.44	25.48	24.28
	1RB-Low (0)	2687.5 (41565)	26.32	25.38	24.16
		2640.3(41093)	26.27	25.33	24.13
		2593 (40620)	26.33	25.44	24.21
		2545.8(40148)	26.32	25.41	24.19
		2498.5 (39675)	26.35	25.44	24.21
	12RB-High (13)	2687.5 (41565)	25.20	24.23	23.25
		2640.3(41093)	25.13	24.11	23.16
		2593 (40620)	25.24	24.24	23.26
		2545.8(40148)	25.15	24.19	23.20
		2498.5 (39675)	25.30	24.28	23.35
	12RB-Middle (6)	2687.5 (41565)	25.21	24.22	23.24
		2640.3(41093)	25.18	24.20	23.19
		2593 (40620)	25.23	24.24	23.26
		2545.8(40148)	25.20	24.22	23.21
		2498.5 (39675)	25.28	24.31	23.34
	12RB-Low (0)	2687.5 (41565)	25.26	24.29	23.28
		2640.3(41093)	25.20	24.23	23.23
		2593 (40620)	25.24	24.27	23.28
2545.8(40148)		25.29	24.28	23.32	
2498.5 (39675)		25.27	24.31	23.37	
25RB (0)	2687.5 (41565)	25.23	24.26	23.24	
	2640.3(41093)	25.13	24.20	23.18	
	2593 (40620)	25.27	24.29	23.28	
	2545.8(40148)	25.23	24.31	23.27	
	2498.5 (39675)	25.32	24.36	23.34	

10MHz	1RB-High (49)	2685 (41540)	26.25	25.41	24.12
		2639(41080)	26.18	25.27	24.02
		2593 (40620)	26.26	25.38	24.12
		2547(40160)	26.20	25.36	24.11
		2501 (39700)	26.36	25.50	24.27
	1RB-Middle (24)	2685 (41540)	26.29	25.43	24.17
		2639(41080)	26.24	25.38	24.13
		2593 (40620)	26.35	25.48	24.24
		2547(40160)	26.29	25.43	24.18
		2501 (39700)	26.39	25.54	24.28
	1RB-Low (0)	2685 (41540)	26.26	25.40	24.12
		2639(41080)	26.27	25.38	24.11
		2593 (40620)	26.30	25.44	24.19
		2547(40160)	26.29	25.44	24.17
		2501 (39700)	26.30	25.44	24.20
	25RB-High (25)	2685 (41540)	25.18	24.22	23.24
		2639(41080)	25.12	24.16	23.16
		2593 (40620)	25.23	24.26	23.28
		2547(40160)	25.20	24.23	23.27
		2501 (39700)	25.34	24.39	23.39
	25RB-Middle (12)	2685 (41540)	25.22	24.26	23.28
		2639(41080)	25.18	24.20	23.21
		2593 (40620)	25.28	24.31	23.33
		2547(40160)	25.22	24.24	23.26
		2501 (39700)	25.30	24.33	23.39
25RB-Low (0)	2685 (41540)	25.20	24.25	23.24	
	2639(41080)	25.15	24.23	23.22	
	2593 (40620)	25.28	24.33	23.32	
	2547(40160)	25.27	24.29	23.30	
	2501 (39700)	25.29	24.33	23.34	
50RB (0)	2685 (41540)	25.24	24.27	23.21	
	2639(41080)	25.19	24.22	23.16	
	2593 (40620)	25.28	24.30	23.26	
	2547(40160)	25.22	24.27	23.22	
	2501 (39700)	25.32	24.36	23.35	

15MHz	1RB-High (74)	2682.5 (41515)	26.18	25.32	24.07
		2637.8(41068)	26.11	25.21	24.16
		2593 (40620)	26.21	25.36	24.09
		2548.3(40173)	26.11	25.28	24.01
		2503.5 (39725)	26.35	25.51	24.28
	1RB-Middle (37)	2682.5 (41515)	26.26	25.41	24.12
		2637.8(41068)	26.22	25.36	24.09
		2593 (40620)	26.33	25.45	24.18
		2548.3(40173)	26.25	25.41	24.14
		2503.5 (39725)	26.35	25.50	24.23
	1RB-Low (0)	2682.5 (41515)	26.16	25.31	24.07
		2637.8(41068)	26.24	25.38	24.12
		2593 (40620)	26.25	25.38	24.13
		2548.3(40173)	26.25	25.41	24.14
		2503.5 (39725)	26.23	25.43	24.13
	36RB-High (38)	2682.5 (41515)	25.18	24.16	23.17
		2637.8(41068)	25.09	24.07	23.10
		2593 (40620)	25.21	24.17	23.20
		2548.3(40173)	25.15	24.12	23.15
		2503.5 (39725)	25.35	24.32	23.30
	36RB-Middle (19)	2682.5 (41515)	25.16	24.15	23.14
		2637.8(41068)	25.15	24.15	23.14
		2593 (40620)	25.27	24.26	23.26
		2548.3(40173)	25.20	24.17	23.16
		2503.5 (39725)	25.34	24.31	23.33
36RB-Low (0)	2682.5 (41515)	25.16	24.14	23.14	
	2637.8(41068)	25.22	24.19	23.24	
	2593 (40620)	25.26	24.20	23.20	
	2548.3(40173)	25.27	24.19	23.23	
	2503.5 (39725)	25.31	24.22	23.27	
75RB (0)	2682.5 (41515)	25.18	24.18	23.18	
	2637.8(41068)	25.16	24.18	23.17	
	2593 (40620)	25.26	24.24	23.24	
	2548.3(40173)	25.25	24.25	23.21	
	2503.5 (39725)	25.35	24.35	23.36	



20MHz	1RB-High (99)	2680 (41490)	25.50	24.61	23.38
		2636.5(41055)	25.54	24.66	23.39
		2593 (40620)	25.51	24.63	23.37
		2549.5(40185)	25.52	24.67	23.39
		2506 (39750)	25.52	24.66	23.41
	1RB-Middle (50)	2680 (41490)	25.67	24.77	23.53
		2636.5(41055)	25.63	24.74	23.49
		2593 (40620)	25.72	24.81	23.56
		2549.5(40185)	25.55	24.68	23.42
		2506 (39750)	25.63	24.75	23.48
	1RB-Low (0)	2680 (41490)	25.64	24.77	23.49
		2636.5(41055)	25.56	24.66	23.41
		2593 (40620)	25.66	24.78	23.53
		2549.5(40185)	25.48	25.04	23.35
		2506 (39750)	25.57	24.70	23.42
	50RB-High (50)	2680 (41490)	24.55	23.57	22.68
		2636.5(41055)	24.57	23.52	22.49
		2593 (40620)	24.55	23.59	22.48
		2549.5(40185)	24.54	23.56	22.47
		2506 (39750)	24.53	23.55	22.51
	50RB-Middle (25)	2680 (41490)	24.64	23.62	22.75
		2636.5(41055)	24.56	23.57	22.53
		2593 (40620)	24.64	23.64	22.58
		2549.5(40185)	24.58	23.58	22.48
		2506 (39750)	24.63	23.64	22.56
50RB-Low (0)	2680 (41490)	24.68	23.70	22.82	
	2636.5(41055)	24.62	23.64	22.56	
	2593 (40620)	24.70	23.74	22.67	
	2549.5(40185)	24.51	23.57	22.45	
	2506 (39750)	24.58	23.61	22.54	
100RB (0)	2680 (41490)	24.61	23.61	22.77	
	2636.5(41055)	24.54	23.57	22.54	
	2593 (40620)	24.59	23.61	22.56	
	2549.5(40185)	24.56	23.55	22.48	
	2506 (39750)	24.55	23.59	22.52	

LTE Band41 PC2-Power Level B1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	21.80	20.99	19.70
		2640.3(41093)	21.56	20.73	19.44
		2593 (40620)	21.68	20.84	19.62
		2545.8(40148)	21.70	20.91	19.65
		2498.5 (39675)	21.86	21.03	19.73
	1RB-Middle (12)	2687.5 (41565)	21.79	20.98	19.72
		2640.3(41093)	21.63	20.78	19.50
		2593 (40620)	21.70	20.87	19.61
		2545.8(40148)	21.79	20.95	19.69
		2498.5 (39675)	21.84	21.01	19.73
	1RB-Low (0)	2687.5 (41565)	21.77	20.93	19.68
		2640.3(41093)	21.59	20.76	19.51
		2593 (40620)	21.66	20.83	19.58
		2545.8(40148)	21.71	20.93	19.66
		2498.5 (39675)	21.81	21.01	19.73
	12RB-High (13)	2687.5 (41565)	20.73	19.69	18.74
		2640.3(41093)	20.44	19.45	18.51
		2593 (40620)	20.55	19.57	18.57
		2545.8(40148)	20.64	19.69	18.71
		2498.5 (39675)	20.75	19.71	18.76
	12RB-Middle (6)	2687.5 (41565)	20.69	19.70	18.73
		2640.3(41093)	20.50	19.51	18.56
		2593 (40620)	20.57	19.56	18.63
		2545.8(40148)	20.68	19.68	18.72
		2498.5 (39675)	20.77	19.76	18.81
	12RB-Low (0)	2687.5 (41565)	20.70	19.72	18.73
		2640.3(41093)	20.52	19.55	18.57
		2593 (40620)	20.63	19.63	18.69
		2545.8(40148)	20.73	19.68	18.74
		2498.5 (39675)	20.79	19.76	18.88
	25RB (0)	2687.5 (41565)	20.73	19.75	18.75
		2640.3(41093)	20.49	19.51	18.52
2593 (40620)		20.62	19.61	18.62	
2545.8(40148)		20.70	19.73	18.73	
2498.5 (39675)		20.77	19.81	18.85	

10MHz	1RB-High (49)	2685 (41540)	21.73	20.96	19.68
		2639(41080)	21.51	20.70	19.42
		2593 (40620)	21.59	20.78	19.49
		2547(40160)	21.67	20.89	19.57
		2501 (39700)	21.80	20.98	19.68
	1RB-Middle (24)	2685 (41540)	21.76	20.98	19.71
		2639(41080)	21.57	20.79	19.52
		2593 (40620)	21.68	20.92	19.63
		2547(40160)	21.75	20.99	19.68
		2501 (39700)	21.81	21.04	19.74
	1RB-Low (0)	2685 (41540)	21.72	20.93	19.65
		2639(41080)	21.56	20.76	19.51
		2593 (40620)	21.61	20.85	19.56
		2547(40160)	21.74	20.98	19.70
		2501 (39700)	21.76	20.98	19.68
	25RB-High (25)	2685 (41540)	20.71	19.74	18.77
		2639(41080)	20.49	19.47	18.49
		2593 (40620)	20.52	19.57	18.60
		2547(40160)	20.65	19.69	18.72
		2501 (39700)	20.78	19.80	18.83
	25RB-Middle (12)	2685 (41540)	20.71	19.74	18.76
		2639(41080)	20.52	19.52	18.57
		2593 (40620)	20.61	19.62	18.68
		2547(40160)	20.70	19.74	18.77
		2501 (39700)	20.71	19.76	18.80
25RB-Low (0)	2685 (41540)	20.68	19.72	18.73	
	2639(41080)	20.48	19.56	18.57	
	2593 (40620)	20.63	19.62	18.66	
	2547(40160)	20.70	19.75	18.76	
	2501 (39700)	20.73	19.76	18.81	
50RB (0)	2685 (41540)	20.75	19.70	18.67	
	2639(41080)	20.48	19.54	18.52	
	2593 (40620)	20.57	19.63	18.58	
	2547(40160)	20.71	19.75	18.71	
	2501 (39700)	20.77	19.79	18.76	

15MHz	1RB-High (74)	2682.5 (41515)	21.69	20.91	19.63
		2637.8(41068)	21.43	20.69	19.37
		2593 (40620)	21.57	20.80	19.46
		2548.3(40173)	21.56	20.77	19.53
		2503.5 (39725)	21.72	20.95	19.68
	1RB-Middle (37)	2682.5 (41515)	21.70	20.94	19.63
		2637.8(41068)	21.58	20.78	19.43
		2593 (40620)	21.68	20.88	19.57
		2548.3(40173)	21.73	20.93	19.64
		2503.5 (39725)	21.76	20.96	19.68
	1RB-Low (0)	2682.5 (41515)	21.65	20.87	19.61
		2637.8(41068)	21.60	20.81	19.53
		2593 (40620)	21.62	20.84	19.54
		2548.3(40173)	21.68	20.97	19.68
		2503.5 (39725)	21.70	20.93	19.66
	36RB-High (38)	2682.5 (41515)	20.64	19.60	18.67
		2637.8(41068)	20.43	19.40	18.44
		2593 (40620)	20.57	19.47	18.51
		2548.3(40173)	20.62	19.62	18.59
		2503.5 (39725)	20.75	19.73	18.73
	36RB-Middle (19)	2682.5 (41515)	20.64	19.63	18.65
		2637.8(41068)	20.50	19.47	18.44
		2593 (40620)	20.60	19.54	18.58
		2548.3(40173)	20.64	19.66	18.65
		2503.5 (39725)	20.72	19.74	18.74
36RB-Low (0)	2682.5 (41515)	20.61	19.61	18.66	
	2637.8(41068)	20.49	19.45	18.51	
	2593 (40620)	20.60	19.55	18.58	
	2548.3(40173)	20.70	19.65	18.66	
	2503.5 (39725)	20.67	19.66	18.68	
75RB (0)	2682.5 (41515)	20.62	19.63	18.66	
	2637.8(41068)	20.49	19.48	18.51	
	2593 (40620)	20.57	19.58	18.58	
	2548.3(40173)	20.68	19.66	18.69	
	2503.5 (39725)	20.79	19.78	18.76	

20MHz	1RB-High (99)	2680 (41490)	21.74	20.95	19.66
		2636.5(41055)	21.51	20.73	19.43
		2593 (40620)	21.64	20.83	19.54
		2549.5(40185)	21.68	20.89	19.58
		2506 (39750)	21.80	21.03	19.73
	1RB-Middle (50)	2680 (41490)	21.81	21.00	19.73
		2636.5(41055)	21.70	20.87	19.61
		2593 (40620)	21.76	20.97	19.64
		2549.5(40185)	21.82	21.02	19.72
		2506 (39750)	21.90	21.08	19.80
	1RB-Low (0)	2680 (41490)	21.71	20.90	19.60
		2636.5(41055)	21.63	20.85	19.59
		2593 (40620)	21.74	20.93	19.64
		2549.5(40185)	21.81	21.00	19.70
		2506 (39750)	21.79	21.02	19.71
	50RB-High (50)	2680 (41490)	20.76	19.76	18.72
		2636.5(41055)	20.55	19.57	18.55
		2593 (40620)	20.64	19.68	18.62
		2549.5(40185)	20.71	19.70	18.69
		2506 (39750)	20.89	19.88	18.84
	50RB-Middle (25)	2680 (41490)	20.78	19.76	18.72
		2636.5(41055)	20.63	19.65	18.57
		2593 (40620)	20.66	19.74	18.66
		2549.5(40185)	20.80	19.81	18.77
		2506 (39750)	20.86	19.89	18.85
50RB-Low (0)	2680 (41490)	20.76	19.77	18.72	
	2636.5(41055)	20.69	19.72	18.68	
	2593 (40620)	20.76	19.78	18.72	
	2549.5(40185)	20.82	19.87	18.83	
	2506 (39750)	20.80	19.84	18.80	
100RB (0)	2680 (41490)	20.71	19.73	18.67	
	2636.5(41055)	20.59	19.65	18.62	
	2593 (40620)	20.68	19.71	18.68	
	2549.5(40185)	20.78	19.79	18.76	
	2506 (39750)	20.85	19.86	18.85	

LTE Band41 PC2-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	23.67	23.05	21.78
		2640.3(41093)	23.55	22.91	21.63
		2593 (40620)	23.67	23.00	21.77
		2545.8(40148)	23.76	22.94	21.88
		2498.5 (39675)	23.67	22.84	21.77
	1RB-Middle (12)	2687.5 (41565)	23.74	23.02	21.79
		2640.3(41093)	23.63	22.94	21.67
		2593 (40620)	23.79	22.90	21.84
		2545.8(40148)	23.79	22.92	21.88
		2498.5 (39675)	23.65	22.84	21.76
	1RB-Low (0)	2687.5 (41565)	23.65	23.01	21.77
		2640.3(41093)	23.56	22.92	21.65
		2593 (40620)	23.73	22.86	21.84
		2545.8(40148)	23.78	22.96	21.90
		2498.5 (39675)	23.62	22.79	21.70
	12RB-High (13)	2687.5 (41565)	22.80	21.80	20.78
		2640.3(41093)	22.68	21.65	20.70
		2593 (40620)	22.74	21.77	20.80
		2545.8(40148)	22.68	21.84	20.92
		2498.5 (39675)	22.56	21.72	20.84
	12RB-Middle (6)	2687.5 (41565)	22.78	21.78	20.83
		2640.3(41093)	22.67	21.64	20.69
		2593 (40620)	22.59	21.83	20.83
		2545.8(40148)	22.72	21.92	20.92
		2498.5 (39675)	22.57	21.80	20.80
	12RB-Low (0)	2687.5 (41565)	22.81	21.82	20.80
		2640.3(41093)	22.68	21.73	20.78
		2593 (40620)	22.61	21.83	20.85
		2545.8(40148)	22.77	21.97	21.02
		2498.5 (39675)	22.56	21.80	20.79
25RB (0)	2687.5 (41565)	22.82	21.83	20.82	
	2640.3(41093)	22.69	21.72	20.73	
	2593 (40620)	22.82	21.82	20.86	
	2545.8(40148)	22.75	21.93	20.97	
	2498.5 (39675)	22.61	21.79	20.82	

10MHz	1RB-High (49)	2685 (41540)	23.64	23.03	21.77
		2639(41080)	23.49	22.89	21.60
		2593 (40620)	23.66	23.03	21.72
		2547(40160)	23.70	22.90	21.85
		2501 (39700)	23.69	22.86	21.80
	1RB-Middle (24)	2685 (41540)	23.64	23.01	21.77
		2639(41080)	23.55	22.92	21.65
		2593 (40620)	23.77	22.96	21.86
		2547(40160)	23.80	23.00	21.89
		2501 (39700)	23.68	22.88	21.75
	1RB-Low (0)	2685 (41540)	23.61	22.99	21.73
		2639(41080)	23.56	22.94	21.66
		2593 (40620)	23.71	22.88	21.83
		2547(40160)	23.81	22.97	21.88
		2501 (39700)	23.61	22.76	21.71
	25RB-High (25)	2685 (41540)	22.80	21.85	20.86
		2639(41080)	22.65	21.68	20.71
		2593 (40620)	22.84	21.81	20.91
		2547(40160)	22.71	21.95	20.93
		2501 (39700)	22.66	21.85	20.90
	25RB-Middle (12)	2685 (41540)	22.78	21.84	20.84
		2639(41080)	22.68	21.72	20.73
		2593 (40620)	22.61	21.87	20.91
		2547(40160)	22.72	21.91	20.95
		2501 (39700)	22.65	21.85	20.89
25RB-Low (0)	2685 (41540)	22.78	21.80	20.85	
	2639(41080)	22.71	21.70	20.76	
	2593 (40620)	22.68	21.88	20.97	
	2547(40160)	22.75	21.94	20.98	
	2501 (39700)	22.53	21.76	20.80	
50RB (0)	2685 (41540)	22.79	21.82	20.78	
	2639(41080)	22.73	21.71	20.69	
	2593 (40620)	22.63	21.87	20.84	
	2547(40160)	22.72	21.91	20.93	
	2501 (39700)	22.62	21.88	20.80	

15MHz	1RB-High (74)	2682.5 (41515)	23.58	22.95	21.73
		2637.8(41068)	23.47	22.85	21.60
		2593 (40620)	23.57	22.95	21.67
		2548.3(40173)	23.65	22.85	21.79
		2503.5 (39725)	23.61	22.83	21.79
	1RB-Middle (37)	2682.5 (41515)	23.62	23.00	21.73
		2637.8(41068)	23.58	22.94	21.68
		2593 (40620)	23.74	22.93	21.87
		2548.3(40173)	23.75	23.00	21.89
		2503.5 (39725)	23.66	22.87	21.76
	1RB-Low (0)	2682.5 (41515)	23.53	22.92	21.69
		2637.8(41068)	23.55	22.92	21.71
		2593 (40620)	23.65	22.83	21.80
		2548.3(40173)	23.71	22.94	21.84
		2503.5 (39725)	23.53	22.77	21.64
	36RB-High (38)	2682.5 (41515)	22.72	21.73	20.75
		2637.8(41068)	22.63	21.59	20.66
		2593 (40620)	22.80	21.73	20.72
		2548.3(40173)	22.64	21.80	20.87
		2503.5 (39725)	22.67	21.81	20.82
	36RB-Middle (19)	2682.5 (41515)	22.72	21.71	20.69
		2637.8(41068)	22.64	21.65	20.60
		2593 (40620)	22.62	21.80	20.81
		2548.3(40173)	22.72	21.84	20.86
		2503.5 (39725)	22.64	21.78	20.80
36RB-Low (0)	2682.5 (41515)	22.73	21.73	20.70	
	2637.8(41068)	22.72	21.66	20.71	
	2593 (40620)	22.61	21.81	20.86	
	2548.3(40173)	22.68	21.88	20.93	
	2503.5 (39725)	22.55	21.73	20.74	
75RB (0)	2682.5 (41515)	22.76	21.79	20.71	
	2637.8(41068)	22.69	21.68	20.64	
	2593 (40620)	22.61	21.82	20.85	
	2548.3(40173)	22.70	21.89	20.93	
	2503.5 (39725)	22.61	21.78	20.77	



20MHz	1RB-High (99)	2680 (41490)	23.38	22.75	21.49
		2636.5(41055)	23.23	22.60	21.35
		2593 (40620)	23.35	22.77	21.46
		2549.5(40185)	23.46	22.60	21.56
		2506 (39750)	23.49	22.66	21.61
	1RB-Middle (50)	2680 (41490)	23.49	22.81	21.58
		2636.5(41055)	23.44	22.77	21.50
		2593 (40620)	23.61	22.75	21.66
		2549.5(40185)	23.62	22.75	21.68
		2506 (39750)	23.59	22.73	21.64
	1RB-Low (0)	2680 (41490)	23.34	22.72	21.46
		2636.5(41055)	23.40	22.80	21.50
		2593 (40620)	23.49	22.70	21.56
		2549.5(40185)	23.55	22.72	21.63
		2506 (39750)	23.39	22.50	21.49
	50RB-High (50)	2680 (41490)	22.59	21.62	20.60
		2636.5(41055)	22.49	21.57	20.49
		2593 (40620)	22.64	21.61	20.54
		2549.5(40185)	22.51	21.71	20.69
		2506 (39750)	22.52	21.73	20.66
	50RB-Middle (25)	2680 (41490)	22.60	21.61	20.54
		2636.5(41055)	22.58	21.62	20.53
		2593 (40620)	22.52	21.68	20.69
		2549.5(40185)	22.55	21.77	20.81
		2506 (39750)	22.48	21.73	20.69
50RB-Low (0)	2680 (41490)	22.62	21.63	20.61	
	2636.5(41055)	22.63	21.63	20.62	
	2593 (40620)	22.54	21.73	20.69	
	2549.5(40185)	22.54	21.77	20.74	
	2506 (39750)	22.42	21.70	20.63	
100RB (0)	2680 (41490)	22.58	21.59	20.58	
	2636.5(41055)	22.53	21.56	20.56	
	2593 (40620)	22.70	21.66	20.60	
	2549.5(40185)	22.49	21.71	20.75	
	2506 (39750)	22.45	21.66	20.62	

LTE Band66-Power Level A1/C1/D1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	23.52	22.94	21.80
		1745 (132322)	23.35	22.71	21.63
		1710.7 (131979)	23.36	22.66	21.67
	1RB-Middle (3)	1779.3 (132665)	23.54	22.98	21.87
		1745 (132322)	23.41	22.89	21.69
		1710.7 (131979)	23.39	22.62	21.60
	1RB-Low (0)	1779.3 (132665)	23.54	22.93	21.86
		1745 (132322)	23.37	22.82	21.66
		1710.7 (131979)	23.39	22.82	21.64
	3RB-High (3)	1779.3 (132665)	23.57	22.69	21.72
		1745 (132322)	23.36	22.49	21.58
		1710.7 (131979)	23.37	22.45	21.55
	3RB-Middle (1)	1779.3 (132665)	23.57	22.77	21.81
		1745 (132322)	23.37	22.46	21.61
		1710.7 (131979)	23.38	22.53	21.61
	3RB-Low (0)	1779.3 (132665)	23.56	22.72	21.81
		1745 (132322)	23.35	22.53	21.60
		1710.7 (131979)	23.40	22.58	21.55
	6RB (0)	1779.3 (132665)	22.74	21.78	20.63
		1745 (132322)	22.49	21.56	20.44
		1710.7 (131979)	22.53	21.62	20.47
3MHz	1RB-High (14)	1778.5 (132657)	23.50	22.90	21.86
		1745 (132322)	23.34	22.77	21.66
		1711.5 (131987)	23.30	22.72	21.58
	1RB-Middle (7)	1778.5 (132657)	23.56	22.95	21.80
		1745 (132322)	23.45	22.74	21.72
		1711.5 (131987)	23.44	22.78	21.68
	1RB-Low (0)	1778.5 (132657)	23.52	22.96	21.81
		1745 (132322)	23.39	22.85	21.65
		1711.5 (131987)	23.37	22.67	21.69
	8RB-High (7)	1778.5 (132657)	22.66	21.79	20.68
		1745 (132322)	22.47	21.54	20.47
		1711.5 (131987)	22.50	21.55	20.41
	8RB-Middle (4)	1778.5 (132657)	22.67	21.74	20.70
		1745 (132322)	22.52	21.58	20.47
		1711.5 (131987)	22.46	21.55	20.47
	8RB-Low (0)	1778.5 (132657)	22.72	21.78	20.70
		1745 (132322)	22.51	21.54	20.49
		1711.5 (131987)	22.48	21.54	20.50
	15RB (0)	1778.5 (132657)	22.75	21.77	20.67
		1745 (132322)	22.48	21.51	20.46
		1711.5 (131987)	22.49	21.50	20.41

5MHz	1RB-High (24)	1777.5 (132647)	23.62	22.93	21.77
		1745 (132322)	23.43	22.75	21.73
		1712.5 (131997)	23.35	22.66	21.59
	1RB-Middle (12)	1777.5 (132647)	23.58	22.90	21.89
		1745 (132322)	23.45	22.86	21.62
		1712.5 (131997)	23.36	22.75	21.61
	1RB-Low (0)	1777.5 (132647)	23.60	22.96	21.81
		1745 (132322)	23.46	22.82	21.67
		1712.5 (131997)	23.44	22.86	21.70
	12RB-High (13)	1777.5 (132647)	22.68	21.65	20.68
		1745 (132322)	22.47	21.45	20.43
		1712.5 (131997)	22.44	21.43	20.37
	12RB-Middle (6)	1777.5 (132647)	22.73	21.75	20.73
		1745 (132322)	22.53	21.51	20.51
		1712.5 (131997)	22.48	21.50	20.49
	12RB-Low (0)	1777.5 (132647)	22.75	21.74	20.77
		1745 (132322)	22.59	21.49	20.52
		1712.5 (131997)	22.49	21.51	20.52
	25RB (0)	1777.5 (132647)	22.75	21.76	20.73
		1745 (132322)	22.53	21.53	20.47
		1712.5 (131997)	22.51	21.51	20.47
10MHz	1RB-High (49)	1775 (132622)	23.59	22.87	21.79
		1745 (132322)	23.36	22.77	21.57
		1715 (132022)	23.35	22.72	21.62
	1RB-Middle (24)	1775 (132622)	23.65	22.86	21.75
		1745 (132322)	23.46	22.75	21.71
		1715 (132022)	23.34	22.72	21.62
	1RB-Low (0)	1775 (132622)	23.53	22.88	21.72
		1745 (132322)	23.41	22.83	21.58
		1715 (132022)	23.42	22.78	21.60
	25RB-High (25)	1775 (132622)	22.75	21.77	20.73
		1745 (132322)	22.55	21.53	20.47
		1715 (132022)	22.52	21.48	20.42
	25RB-Middle (12)	1775 (132622)	22.74	21.69	20.71
		1745 (132322)	22.54	21.49	20.49
		1715 (132022)	22.47	21.47	20.43
	25RB-Low (0)	1775 (132622)	22.81	21.79	20.78
		1745 (132322)	22.58	21.49	20.51
		1715 (132022)	22.51	21.49	20.45
	50RB (0)	1775 (132622)	22.81	21.79	20.72
		1745 (132322)	22.57	21.54	20.51
		1715 (132022)	22.48	21.44	20.46

15MHz	1RB-High (74)	1772.5 (132597)	23.54	22.94	21.76
		1745 (132322)	23.35	22.68	21.68
		1717.5 (132047)	23.34	22.79	21.56
	1RB-Middle (37)	1772.5 (132597)	23.54	22.98	21.83
		1745 (132322)	23.39	22.81	21.74
		1717.5 (132047)	23.36	22.70	21.68
	1RB-Low (0)	1772.5 (132597)	23.40	22.76	21.61
		1745 (132322)	23.44	22.78	21.73
		1717.5 (132047)	23.37	22.75	21.61
	36RB-High (38)	1772.5 (132597)	22.67	21.64	20.66
		1745 (132322)	22.43	21.44	20.44
		1717.5 (132047)	22.46	21.42	20.45
	36RB-Middle (19)	1772.5 (132597)	22.67	21.68	20.68
		1745 (132322)	22.53	21.47	20.47
		1717.5 (132047)	22.50	21.47	20.40
	36RB-Low (0)	1772.5 (132597)	22.66	21.67	20.65
		1745 (132322)	22.54	21.48	20.51
		1717.5 (132047)	22.48	21.46	20.43
	75RB (0)	1772.5 (132597)	22.74	21.69	20.66
		1745 (132322)	22.54	21.48	20.45
		1717.5 (132047)	22.51	21.45	20.40
20MHz	1RB-High (99)	1770 (132572)	22.69	22.07	20.91
		1745 (132322)	22.72	21.85	20.74
		1720 (132072)	22.68	21.86	20.82
	1RB-Middle (50)	1770 (132572)	22.81	22.04	20.97
		1745 (132322)	22.79	21.94	20.90
		1720 (132072)	22.82	22.10	20.91
	1RB-Low (0)	1770 (132572)	22.74	22.07	20.87
		1745 (132322)	22.72	21.91	20.86
		1720 (132072)	22.79	21.97	20.88
	50RB-High (50)	1770 (132572)	21.79	20.79	19.75
		1745 (132322)	21.69	20.68	19.63
		1720 (132072)	21.77	20.70	19.70
	50RB-Middle (25)	1770 (132572)	21.89	20.91	19.87
		1745 (132322)	21.79	20.77	19.71
		1720 (132072)	21.82	20.81	19.76
	50RB-Low (0)	1770 (132572)	21.83	20.85	19.80
		1745 (132322)	21.77	20.73	19.72
		1720 (132072)	21.78	20.73	19.76
	100RB (0)	1770 (132572)	21.81	20.79	19.74
		1745 (132322)	21.75	20.67	19.69
		1720 (132072)	21.78	20.69	19.65

LTE Band66-Power Level B1/F1/E2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	19.49	18.87	17.58
		1745 (132322)	19.3	18.63	17.43
		1710.7 (131979)	19.3	18.61	17.45
	1RB-Middle (3)	1779.3 (132665)	19.5	18.87	17.66
		1745 (132322)	19.32	18.52	17.42
		1710.7 (131979)	19.32	18.68	17.41
	1RB-Low (0)	1779.3 (132665)	19.46	18.88	17.58
		1745 (132322)	19.27	18.55	17.47
		1710.7 (131979)	19.33	18.56	17.48
	3RB-High (3)	1779.3 (132665)	19.56	18.6	17.61
		1745 (132322)	19.33	18.32	17.41
		1710.7 (131979)	19.32	18.33	17.41
	3RB-Middle (1)	1779.3 (132665)	19.51	18.56	17.64
		1745 (132322)	19.38	18.34	17.37
		1710.7 (131979)	19.31	18.31	17.39
	3RB-Low (0)	1779.3 (132665)	19.56	18.54	17.61
		1745 (132322)	19.35	18.38	17.37
		1710.7 (131979)	19.36	18.31	17.38
	6RB (0)	1779.3 (132665)	18.57	17.64	16.44
		1745 (132322)	18.34	17.39	16.3
		1710.7 (131979)	18.31	17.39	16.29
3MHz	1RB-High (14)	1778.5 (132657)	19.49	18.79	17.7
		1745 (132322)	19.26	18.58	17.51
		1711.5 (131987)	19.32	18.65	17.48
	1RB-Middle (7)	1778.5 (132657)	19.49	18.87	17.7
		1745 (132322)	19.38	18.58	17.52
		1711.5 (131987)	19.34	18.56	17.54
	1RB-Low (0)	1778.5 (132657)	19.51	18.83	17.7
		1745 (132322)	19.34	18.58	17.39
		1711.5 (131987)	19.3	18.64	17.51
	8RB-High (7)	1778.5 (132657)	18.52	17.59	16.57
		1745 (132322)	18.3	17.37	16.41
		1711.5 (131987)	18.28	17.33	16.31
	8RB-Middle (4)	1778.5 (132657)	18.5	17.55	16.53
		1745 (132322)	18.3	17.34	16.34
		1711.5 (131987)	18.29	17.32	16.29
	8RB-Low (0)	1778.5 (132657)	18.56	17.61	16.59
		1745 (132322)	18.32	17.36	16.39
		1711.5 (131987)	18.31	17.35	16.38
	15RB (0)	1778.5 (132657)	18.53	17.56	16.57
		1745 (132322)	18.3	17.33	16.35
		1711.5 (131987)	18.28	17.32	16.27

5MHz	1RB-High (24)	1777.5 (132647)	19.5	18.85	17.63	
		1745 (132322)	19.33	18.59	17.47	
		1712.5 (131997)	19.33	18.7	17.46	
	1RB-Middle (12)	1777.5 (132647)	19.57	18.87	17.77	
		1745 (132322)	19.37	18.61	17.55	
		1712.5 (131997)	19.31	18.59	17.49	
	1RB-Low (0)	1777.5 (132647)	19.54	18.86	17.77	
		1745 (132322)	19.36	18.71	17.55	
		1712.5 (131997)	19.33	18.64	17.5	
	12RB-High (13)	1777.5 (132647)	18.5	17.49	16.58	
		1745 (132322)	18.31	17.26	16.36	
		1712.5 (131997)	18.32	17.28	16.33	
	12RB-Middle (6)	1777.5 (132647)	18.57	17.53	16.62	
		1745 (132322)	18.38	17.3	16.4	
		1712.5 (131997)	18.26	17.27	16.36	
	12RB-Low (0)	1777.5 (132647)	18.59	17.61	16.64	
		1745 (132322)	18.42	17.3	16.37	
		1712.5 (131997)	18.31	17.32	16.31	
	25RB (0)	1777.5 (132647)	18.6	17.54	16.59	
		1745 (132322)	18.38	17.36	16.36	
		1712.5 (131997)	18.33	17.28	16.33	
	10MHz	1RB-High (49)	1775 (132622)	19.54	18.87	17.74
			1745 (132322)	19.3	18.69	17.5
			1715 (132022)	19.25	18.61	17.42
1RB-Middle (24)		1775 (132622)	19.52	18.9	17.71	
		1745 (132322)	19.34	18.63	17.55	
		1715 (132022)	19.35	18.64	17.51	
1RB-Low (0)		1775 (132622)	19.44	18.67	17.62	
		1745 (132322)	19.36	18.7	17.48	
		1715 (132022)	19.28	18.67	17.46	
25RB-High (25)		1775 (132622)	18.54	17.55	16.55	
		1745 (132322)	18.29	17.32	16.35	
		1715 (132022)	18.29	17.26	16.28	
25RB-Middle (12)		1775 (132622)	18.53	17.56	16.57	
		1745 (132322)	18.37	17.35	16.38	
		1715 (132022)	18.29	17.28	16.27	
25RB-Low (0)		1775 (132622)	18.57	17.61	16.62	
		1745 (132322)	18.32	17.36	16.4	
		1715 (132022)	18.25	17.24	16.3	
50RB (0)		1775 (132622)	18.59	17.58	16.6	
		1745 (132322)	18.39	17.36	16.33	
		1715 (132022)	18.3	17.24	16.33	

15MHz	1RB-High (74)	1772.5 (132597)	19.19	18.75	17.65
		1745 (132322)	19.18	18.59	17.41
		1717.5 (132047)	19.2	18.51	17.26
	1RB-Middle (37)	1772.5 (132597)	19.27	18.87	17.56
		1745 (132322)	19.3	18.64	17.53
		1717.5 (132047)	19.22	18.58	17.32
	1RB-Low (0)	1772.5 (132597)	19.21	18.58	17.52
		1745 (132322)	19.19	18.5	17.47
		1717.5 (132047)	19.24	18.49	17.37
	36RB-High (38)	1772.5 (132597)	18.26	17.42	16.45
		1745 (132322)	18.2	17.26	16.26
		1717.5 (132047)	18.19	17.23	16.28
	36RB-Middle (19)	1772.5 (132597)	18.3	17.45	16.53
		1745 (132322)	18.28	17.3	16.33
		1717.5 (132047)	18.23	17.26	16.27
	36RB-Low (0)	1772.5 (132597)	18.3	17.48	16.48
		1745 (132322)	18.28	17.28	16.39
		1717.5 (132047)	18.16	17.21	16.28
	75RB (0)	1772.5 (132597)	18.33	17.41	16.46
		1745 (132322)	18.31	17.28	16.31
		1717.5 (132047)	18.24	17.18	16.26
20MHz	1RB-High (99)	1770 (132572)	19.42	18.83	17.58
		1745 (132322)	19.25	18.67	17.38
		1720 (132072)	19.25	18.48	17.4
	1RB-Middle (50)	1770 (132572)	19.45	18.78	17.63
		1745 (132322)	19.39	18.6	17.53
		1720 (132072)	19.29	18.54	17.4
	1RB-Low (0)	1770 (132572)	19.33	18.54	17.52
		1745 (132322)	19.28	18.49	17.41
		1720 (132072)	19.25	18.64	17.4
	50RB-High (50)	1770 (132572)	18.45	17.47	16.49
		1745 (132322)	18.31	17.28	16.32
		1720 (132072)	18.29	17.25	16.29
	50RB-Middle (25)	1770 (132572)	18.48	17.5	16.53
		1745 (132322)	18.36	17.4	16.43
		1720 (132072)	18.35	17.33	16.3
	50RB-Low (0)	1770 (132572)	18.47	17.48	16.48
		1745 (132322)	18.39	17.35	16.37
		1720 (132072)	18.29	17.25	16.28
	100RB (0)	1770 (132572)	18.42	17.4	16.44
		1745 (132322)	18.35	17.3	16.34
		1720 (132072)	18.28	17.26	16.24

LTE Band66-Power Level E1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	21.62	20.94	19.75
		1745 (132322)	21.47	20.70	19.60
		1710.7 (131979)	21.43	20.76	19.57
	1RB-Middle (3)	1779.3 (132665)	21.64	20.88	19.78
		1745 (132322)	21.44	20.69	19.61
		1710.7 (131979)	21.43	20.66	19.54
	1RB-Low (0)	1779.3 (132665)	21.61	20.88	19.79
		1745 (132322)	21.46	20.68	19.62
		1710.7 (131979)	21.44	20.76	19.50
	3RB-High (3)	1779.3 (132665)	21.65	20.61	19.75
		1745 (132322)	21.46	20.36	19.45
		1710.7 (131979)	21.46	20.44	19.44
	3RB-Middle (1)	1779.3 (132665)	21.66	20.67	19.76
		1745 (132322)	21.49	20.38	19.55
		1710.7 (131979)	21.45	20.42	19.46
	3RB-Low (0)	1779.3 (132665)	21.68	20.57	19.72
		1745 (132322)	21.47	20.39	19.54
		1710.7 (131979)	21.44	20.40	19.53
	6RB (0)	1779.3 (132665)	20.66	19.70	18.54
		1745 (132322)	20.47	19.53	18.36
		1710.7 (131979)	20.41	19.54	18.38
3MHz	1RB-High (14)	1778.5 (132657)	21.62	20.82	19.74
		1745 (132322)	21.43	20.69	19.60
		1711.5 (131987)	21.41	20.69	19.65
	1RB-Middle (7)	1778.5 (132657)	21.65	20.97	19.79
		1745 (132322)	21.49	20.70	19.69
		1711.5 (131987)	21.46	20.73	19.56
	1RB-Low (0)	1778.5 (132657)	21.59	20.90	19.73
		1745 (132322)	21.44	20.69	19.66
		1711.5 (131987)	21.42	20.66	19.60
	8RB-High (7)	1778.5 (132657)	20.60	19.69	18.64
		1745 (132322)	20.40	19.44	18.36
		1711.5 (131987)	20.42	19.46	18.40
	8RB-Middle (4)	1778.5 (132657)	20.60	19.65	18.60
		1745 (132322)	20.44	19.51	18.41
		1711.5 (131987)	20.40	19.45	18.42
	8RB-Low (0)	1778.5 (132657)	20.65	19.67	18.59
		1745 (132322)	20.45	19.53	18.41
		1711.5 (131987)	20.41	19.45	18.41
	15RB (0)	1778.5 (132657)	20.64	19.65	18.59
		1745 (132322)	20.41	19.42	18.32
		1711.5 (131987)	20.43	19.40	18.38



5MHz	1RB-High (24)	1777.5 (132647)	21.67	20.89	19.82	
		1745 (132322)	21.46	20.75	19.50	
		1712.5 (131997)	21.49	20.72	19.53	
	1RB-Middle (12)	1777.5 (132647)	21.69	20.97	19.81	
		1745 (132322)	21.43	20.88	19.68	
		1712.5 (131997)	21.46	20.73	19.57	
	1RB-Low (0)	1777.5 (132647)	21.59	20.86	19.70	
		1745 (132322)	21.53	20.76	19.60	
		1712.5 (131997)	21.47	20.69	19.57	
	12RB-High (13)	1777.5 (132647)	20.63	19.60	18.61	
		1745 (132322)	20.40	19.32	18.36	
		1712.5 (131997)	20.44	19.41	18.38	
	12RB-Middle (6)	1777.5 (132647)	20.65	19.59	18.61	
		1745 (132322)	20.49	19.43	18.41	
		1712.5 (131997)	20.41	19.42	18.41	
	12RB-Low (0)	1777.5 (132647)	20.67	19.64	18.66	
		1745 (132322)	20.51	19.45	18.51	
		1712.5 (131997)	20.39	19.43	18.41	
	25RB (0)	1777.5 (132647)	20.66	19.63	18.61	
		1745 (132322)	20.44	19.45	18.38	
		1712.5 (131997)	20.42	19.38	18.39	
	10MHz	1RB-High (49)	1775 (132622)	21.66	20.88	19.76
			1745 (132322)	21.44	20.73	19.57
			1715 (132022)	21.47	20.72	19.61
1RB-Middle (24)		1775 (132622)	21.61	20.83	19.80	
		1745 (132322)	21.50	20.80	19.63	
		1715 (132022)	21.46	20.65	19.56	
1RB-Low (0)		1775 (132622)	21.59	20.86	19.69	
		1745 (132322)	21.51	20.75	19.64	
		1715 (132022)	21.45	20.73	19.61	
25RB-High (25)		1775 (132622)	20.63	19.57	18.55	
		1745 (132322)	20.43	19.47	18.41	
		1715 (132022)	20.43	19.44	18.40	
25RB-Middle (12)		1775 (132622)	20.61	19.58	18.57	
		1745 (132322)	20.48	19.52	18.48	
		1715 (132022)	20.48	19.49	18.46	
25RB-Low (0)		1775 (132622)	20.68	19.67	18.67	
		1745 (132322)	20.49	19.51	18.48	
		1715 (132022)	20.35	19.36	18.33	
50RB (0)		1775 (132622)	20.66	19.67	18.66	
		1745 (132322)	20.46	19.46	18.47	
		1715 (132022)	20.44	19.39	18.38	

15MHz	1RB-High (74)	1772.5 (132597)	21.58	20.85	19.69
		1745 (132322)	21.35	20.61	19.53
		1717.5 (132047)	21.38	20.64	19.50
	1RB-Middle (37)	1772.5 (132597)	21.58	20.91	19.67
		1745 (132322)	21.47	20.78	19.65
		1717.5 (132047)	21.42	20.58	19.53
	1RB-Low (0)	1772.5 (132597)	21.46	20.81	19.59
		1745 (132322)	21.42	20.61	19.54
		1717.5 (132047)	21.38	20.57	19.45
	36RB-High (38)	1772.5 (132597)	20.49	19.51	18.55
		1745 (132322)	20.35	19.34	18.33
		1717.5 (132047)	20.34	19.41	18.34
	36RB-Middle (19)	1772.5 (132597)	20.53	19.49	18.51
		1745 (132322)	20.43	19.39	18.44
		1717.5 (132047)	20.42	19.34	18.38
	36RB-Low (0)	1772.5 (132597)	20.52	19.51	18.51
		1745 (132322)	20.43	19.41	18.46
		1717.5 (132047)	20.30	19.35	18.35
	75RB (0)	1772.5 (132597)	20.52	19.52	18.47
		1745 (132322)	20.43	19.47	18.37
		1717.5 (132047)	20.38	19.38	18.33
20MHz	1RB-High (99)	1770 (132572)	21.62	20.82	19.72
		1745 (132322)	21.45	20.76	19.63
		1720 (132072)	21.43	20.69	19.45
	1RB-Middle (50)	1770 (132572)	21.62	20.77	19.65
		1745 (132322)	21.51	20.80	19.71
		1720 (132072)	21.48	20.68	19.61
	1RB-Low (0)	1770 (132572)	21.46	20.76	19.55
		1745 (132322)	21.43	20.66	19.51
		1720 (132072)	21.39	20.75	19.49
	50RB-High (50)	1770 (132572)	20.47	19.48	18.45
		1745 (132322)	20.37	19.44	18.37
		1720 (132072)	20.47	19.40	18.41
	50RB-Middle (25)	1770 (132572)	20.59	19.58	18.59
		1745 (132322)	20.53	19.51	18.51
		1720 (132072)	20.49	19.48	18.39
	50RB-Low (0)	1770 (132572)	20.52	19.54	18.54
		1745 (132322)	20.47	19.49	18.45
		1720 (132072)	20.45	19.40	18.38
	100RB (0)	1770 (132572)	20.53	19.50	18.46
		1745 (132322)	20.45	19.39	18.37
		1720 (132072)	20.44	19.37	18.37

LTE Band66-Power Level F2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	17.26	16.92	15.62
		1745 (132322)	17.32	16.57	15.25
		1710.7 (131979)	17.21	16.66	15.5
	1RB-Middle (3)	1779.3 (132665)	17.6	16.96	15.79
		1745 (132322)	17.27	16.73	15.45
		1710.7 (131979)	17.12	16.79	15.44
	1RB-Low (0)	1779.3 (132665)	17.37	16.68	15.54
		1745 (132322)	17.26	16.84	15.5
		1710.7 (131979)	17.21	16.47	15.4
	3RB-High (3)	1779.3 (132665)	16.37	15.55	14.34
		1745 (132322)	16.18	15.31	14.35
		1710.7 (131979)	16.29	15.46	14.43
	3RB-Middle (1)	1779.3 (132665)	16.45	15.56	14.58
		1745 (132322)	16.56	15.52	14.42
		1710.7 (131979)	16.43	15.51	14.26
	3RB-Low (0)	1779.3 (132665)	16.64	15.48	14.59
		1745 (132322)	16.24	15.44	14.42
		1710.7 (131979)	16.51	15.36	14.26
	6RB (0)	1779.3 (132665)	16.4	15.61	14.47
		1745 (132322)	16.47	15.24	14.19
		1710.7 (131979)	16.4	15.26	14.26
3MHz	1RB-High (14)	1778.5 (132657)	17.44	16.85	15.81
		1745 (132322)	17.21	16.6	15.48
		1711.5 (131987)	17.13	16.56	15.5
	1RB-Middle (7)	1778.5 (132657)	17.36	16.68	15.77
		1745 (132322)	17.23	16.87	15.53
		1711.5 (131987)	17.09	16.69	15.63
	1RB-Low (0)	1778.5 (132657)	17.35	16.68	15.48
		1745 (132322)	17.29	16.78	15.61
		1711.5 (131987)	17.13	16.52	15.37
	8RB-High (7)	1778.5 (132657)	16.49	15.44	14.42
		1745 (132322)	16.37	15.24	14.32
		1711.5 (131987)	16.33	15.33	14.25
	8RB-Middle (4)	1778.5 (132657)	16.58	15.68	14.59
		1745 (132322)	16.27	15.46	14.35
		1711.5 (131987)	16.37	15.23	14.36
	8RB-Low (0)	1778.5 (132657)	16.47	15.37	14.36
		1745 (132322)	16.42	15.59	14.24
		1711.5 (131987)	16.28	15.33	14.25
	15RB (0)	1778.5 (132657)	16.67	15.51	14.43
		1745 (132322)	16.35	15.43	14.3
		1711.5 (131987)	16.37	15.22	14.14

5MHz	1RB-High (24)	1777.5 (132647)	17.27	16.92	15.64	
		1745 (132322)	17.35	16.75	15.53	
		1712.5 (131997)	17.34	16.71	15.29	
	1RB-Middle (12)	1777.5 (132647)	17.65	16.75	15.6	
		1745 (132322)	17.47	16.91	15.64	
		1712.5 (131997)	17.12	16.59	15.36	
	1RB-Low (0)	1777.5 (132647)	17.14	16.66	15.46	
		1745 (132322)	17.25	16.64	15.61	
		1712.5 (131997)	17.16	16.55	15.4	
	12RB-High (13)	1777.5 (132647)	16.46	15.46	14.29	
		1745 (132322)	16.32	15.21	14.43	
		1712.5 (131997)	16.2	15.3	14.27	
	12RB-Middle (6)	1777.5 (132647)	16.62	15.57	14.56	
		1745 (132322)	16.31	15.48	14.48	
		1712.5 (131997)	16.4	15.27	14.28	
	12RB-Low (0)	1777.5 (132647)	16.38	15.62	14.56	
		1745 (132322)	16.38	15.51	14.2	
		1712.5 (131997)	16.42	15.32	14.31	
	25RB (0)	1777.5 (132647)	16.65	15.61	14.58	
		1745 (132322)	16.31	15.45	14.21	
		1712.5 (131997)	16.52	15.21	14.25	
	10MHz	1RB-High (49)	1775 (132622)	17.27	16.9	15.86
			1745 (132322)	17.36	16.77	15.45
			1715 (132022)	17.21	16.74	15.23
1RB-Middle (24)		1775 (132622)	17.38	16.9	15.76	
		1745 (132322)	17.22	16.83	15.64	
		1715 (132022)	17.24	16.77	15.33	
1RB-Low (0)		1775 (132622)	17.16	16.72	15.72	
		1745 (132322)	17.32	16.63	15.57	
		1715 (132022)	17.23	16.63	15.57	
25RB-High (25)		1775 (132622)	16.37	15.63	14.48	
		1745 (132322)	16.38	15.43	14.19	
		1715 (132022)	16.31	15.23	14.31	
25RB-Middle (12)		1775 (132622)	16.6	15.68	14.46	
		1745 (132322)	16.26	15.51	14.25	
		1715 (132022)	16.45	15.39	14.49	
25RB-Low (0)		1775 (132622)	16.6	15.42	14.41	
		1745 (132322)	16.5	15.48	14.46	
		1715 (132022)	16.38	15.19	14.15	
50RB (0)		1775 (132622)	16.44	15.48	14.57	
		1745 (132322)	16.33	15.43	14.34	
		1715 (132022)	16.23	15.39	14.17	

15MHz	1RB-High (74)	1772.5 (132597)	17.36	16.86	15.72
		1745 (132322)	17.34	16.57	15.45
		1717.5 (132047)	17.14	16.81	15.46
	1RB-Middle (37)	1772.5 (132597)	17.53	16.84	15.68
		1745 (132322)	17.41	16.84	15.59
		1717.5 (132047)	17.36	16.64	15.59
	1RB-Low (0)	1772.5 (132597)	17.42	16.69	15.55
		1745 (132322)	17.3	16.71	15.43
		1717.5 (132047)	17.26	16.59	15.52
	36RB-High (38)	1772.5 (132597)	16.44	15.6	14.34
		1745 (132322)	16.15	15.31	14.37
		1717.5 (132047)	16.48	15.44	14.28
	36RB-Middle (19)	1772.5 (132597)	16.69	15.67	14.71
		1745 (132322)	16.36	15.47	14.45
		1717.5 (132047)	16.31	15.5	14.25
	36RB-Low (0)	1772.5 (132597)	16.37	15.6	14.39
		1745 (132322)	16.24	15.37	14.35
		1717.5 (132047)	16.26	15.4	14.27
	75RB (0)	1772.5 (132597)	16.47	15.36	14.48
		1745 (132322)	16.55	15.32	14.29
		1717.5 (132047)	16.47	15.44	14.19
20MHz	1RB-High (99)	1770 (132572)	17.38	16.88	15.74
		1745 (132322)	17.25	16.65	15.4
		1720 (132072)	17.24	16.66	15.38
	1RB-Middle (50)	1770 (132572)	17.51	16.81	15.68
		1745 (132322)	17.32	16.79	15.55
		1720 (132072)	17.24	16.68	15.48
	1RB-Low (0)	1770 (132572)	17.27	16.62	15.6
		1745 (132322)	17.21	16.7	15.5
		1720 (132072)	17.23	16.59	15.48
	50RB-High (50)	1770 (132572)	16.45	15.5	14.42
		1745 (132322)	16.29	15.32	14.31
		1720 (132072)	16.34	15.38	14.32
	50RB-Middle (25)	1770 (132572)	16.56	15.6	14.57
		1745 (132322)	16.41	15.42	14.39
		1720 (132072)	16.32	15.38	14.36
	50RB-Low (0)	1770 (132572)	16.5	15.51	14.47
		1745 (132322)	16.38	15.44	14.34
		1720 (132072)	16.38	15.3	14.27
	100RB (0)	1770 (132572)	16.53	15.49	14.45
		1745 (132322)	16.43	15.32	14.32
		1720 (132072)	16.37	15.29	14.25

LTE Band66 ANT4-Power Level A1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	22.60	22.03	20.79
		1745 (132322)	22.81	22.12	20.94
		1710.7 (131979)	22.78	22.07	20.86
	1RB-Middle (3)	1779.3 (132665)	22.75	22.21	20.89
		1745 (132322)	22.80	22.06	21.08
		1710.7 (131979)	22.74	22.03	20.90
	1RB-Low (0)	1779.3 (132665)	22.82	22.08	20.92
		1745 (132322)	22.92	22.03	20.83
		1710.7 (131979)	23.04	21.96	20.91
	3RB-High (3)	1779.3 (132665)	22.59	21.73	20.72
		1745 (132322)	22.85	21.98	20.82
		1710.7 (131979)	22.81	21.98	20.75
	3RB-Middle (1)	1779.3 (132665)	22.68	21.97	20.97
		1745 (132322)	22.79	21.96	20.97
		1710.7 (131979)	22.98	21.86	20.86
	3RB-Low (0)	1779.3 (132665)	22.73	21.96	20.91
		1745 (132322)	22.89	21.95	21.06
		1710.7 (131979)	22.63	21.95	20.68
	6RB (0)	1779.3 (132665)	21.78	20.98	19.77
		1745 (132322)	21.78	21.02	19.79
		1710.7 (131979)	21.70	20.91	19.87
3MHz	1RB-High (14)	1778.5 (132657)	22.51	21.85	20.92
		1745 (132322)	22.70	21.89	20.80
		1711.5 (131987)	22.75	21.98	20.87
	1RB-Middle (7)	1778.5 (132657)	22.72	22.03	21.00
		1745 (132322)	22.71	22.15	21.10
		1711.5 (131987)	22.78	22.21	20.92
	1RB-Low (0)	1778.5 (132657)	22.80	22.12	21.01
		1745 (132322)	23.00	22.15	20.91
		1711.5 (131987)	22.84	21.97	21.08
	8RB-High (7)	1778.5 (132657)	21.62	20.85	19.81
		1745 (132322)	21.73	20.90	19.72
		1711.5 (131987)	21.65	20.88	19.80
	8RB-Middle (4)	1778.5 (132657)	21.79	20.92	19.85
		1745 (132322)	21.85	20.99	19.99
		1711.5 (131987)	22.01	20.86	19.82
	8RB-Low (0)	1778.5 (132657)	21.74	20.85	19.88
		1745 (132322)	21.86	21.01	20.08
		1711.5 (131987)	21.78	20.81	19.80
	15RB (0)	1778.5 (132657)	21.60	20.94	19.88
		1745 (132322)	21.92	20.92	19.85
		1711.5 (131987)	21.72	20.89	19.88

5MHz	1RB-High (24)	1777.5 (132647)	22.59	21.92	20.92
		1745 (132322)	22.69	22.12	20.87
		1712.5 (131997)	22.79	22.10	20.87
	1RB-Middle (12)	1777.5 (132647)	22.62	22.19	20.91
		1745 (132322)	22.88	22.01	21.20
		1712.5 (131997)	22.68	22.12	21.00
	1RB-Low (0)	1777.5 (132647)	22.72	22.12	21.03
		1745 (132322)	22.92	22.07	20.89
		1712.5 (131997)	22.92	22.06	21.09
	12RB-High (13)	1777.5 (132647)	21.62	20.95	19.65
		1745 (132322)	21.82	20.83	19.91
		1712.5 (131997)	21.81	20.97	19.90
	12RB-Middle (6)	1777.5 (132647)	21.83	20.96	19.79
		1745 (132322)	21.74	20.92	19.93
		1712.5 (131997)	21.94	21.02	19.96
	12RB-Low (0)	1777.5 (132647)	21.64	20.80	19.85
		1745 (132322)	21.76	21.05	19.88
		1712.5 (131997)	21.76	20.78	19.79
	25RB (0)	1777.5 (132647)	21.74	20.88	19.85
		1745 (132322)	21.87	20.92	19.98
		1712.5 (131997)	21.63	21.03	19.71
10MHz	1RB-High (49)	1775 (132622)	22.52	22.04	20.71
		1745 (132322)	22.66	22.04	21.02
		1715 (132022)	22.78	21.91	20.89
	1RB-Middle (24)	1775 (132622)	22.72	22.10	21.10
		1745 (132322)	22.67	22.13	20.99
		1715 (132022)	22.71	22.03	20.94
	1RB-Low (0)	1775 (132622)	22.86	22.05	20.81
		1745 (132322)	22.83	22.14	21.05
		1715 (132022)	22.86	21.90	20.90
	25RB-High (25)	1775 (132622)	21.55	20.83	19.66
		1745 (132322)	21.78	20.92	19.86
		1715 (132022)	21.62	20.95	19.90
	25RB-Middle (12)	1775 (132622)	21.80	20.85	19.77
		1745 (132322)	21.93	20.94	19.85
		1715 (132022)	22.01	21.02	19.88
	25RB-Low (0)	1775 (132622)	21.79	20.79	19.77
		1745 (132322)	21.85	20.93	20.05
		1715 (132022)	21.65	20.84	19.79
	50RB (0)	1775 (132622)	21.55	20.79	19.82
		1745 (132322)	21.72	21.14	19.87
		1715 (132022)	21.87	21.04	19.87

15MHz	1RB-High (74)	1772.5 (132597)	22.68	22.03	20.81
		1745 (132322)	22.72	21.94	20.89
		1717.5 (132047)	22.72	22.07	21.04
	1RB-Middle (37)	1772.5 (132597)	22.86	22.25	21.03
		1745 (132322)	22.87	22.07	21.18
		1717.5 (132047)	22.67	22.22	20.95
	1RB-Low (0)	1772.5 (132597)	22.79	22.09	20.80
		1745 (132322)	22.85	22.13	20.88
		1717.5 (132047)	23.01	21.90	20.96
	36RB-High (38)	1772.5 (132597)	21.48	20.93	19.66
		1745 (132322)	21.76	20.85	19.97
		1717.5 (132047)	21.80	20.80	19.91
	36RB-Middle (19)	1772.5 (132597)	21.81	20.94	19.81
		1745 (132322)	21.78	20.90	19.91
		1717.5 (132047)	21.82	20.93	19.93
	36RB-Low (0)	1772.5 (132597)	21.57	20.98	19.80
		1745 (132322)	21.90	21.15	20.08
		1717.5 (132047)	21.76	20.81	19.76
75RB (0)	1772.5 (132597)	21.64	21.02	19.65	
	1745 (132322)	21.85	21.04	19.79	
	1717.5 (132047)	21.79	20.93	19.79	
20MHz	1RB-High (99)	1770 (132572)	22.65	21.94	20.85
		1745 (132322)	22.77	22.04	20.93
		1720 (132072)	22.74	22.01	20.99
	1RB-Middle (50)	1770 (132572)	22.76	22.15	21.01
		1745 (132322)	22.79	22.16	21.12
		1720 (132072)	22.75	22.15	21.03
	1RB-Low (0)	1770 (132572)	22.87	22.03	20.93
		1745 (132322)	22.93	22.05	20.96
		1720 (132072)	22.98	22.02	20.99
	50RB-High (50)	1770 (132572)	21.62	20.85	19.75
		1745 (132322)	21.75	20.96	19.87
		1720 (132072)	21.74	20.94	19.89
	50RB-Middle (25)	1770 (132572)	21.77	20.99	19.92
		1745 (132322)	21.89	21.04	19.98
		1720 (132072)	21.91	20.99	19.95
	50RB-Low (0)	1770 (132572)	21.71	20.92	19.84
		1745 (132322)	21.84	21.07	20.03
		1720 (132072)	21.74	20.89	19.82
100RB (0)	1770 (132572)	21.69	20.93	19.79	
	1745 (132322)	21.82	21.04	19.92	
	1720 (132072)	21.78	20.96	19.85	



LTE Band66 ANT4-Power Level B1/D1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	15.56	15.69	15.60
		1745 (132322)	15.66	15.66	15.59
		1710.7 (131979)	15.72	15.67	15.57
	1RB-Middle (3)	1779.3 (132665)	15.42	15.85	15.73
		1745 (132322)	15.80	15.70	15.24
		1710.7 (131979)	15.81	15.97	15.50
	1RB-Low (0)	1779.3 (132665)	15.41	15.85	15.55
		1745 (132322)	15.37	15.59	15.63
		1710.7 (131979)	15.41	15.73	15.42
	3RB-High (3)	1779.3 (132665)	15.69	15.51	15.75
		1745 (132322)	15.77	15.66	15.75
		1710.7 (131979)	15.83	15.66	15.66
	3RB-Middle (1)	1779.3 (132665)	15.51	15.82	15.41
		1745 (132322)	15.79	15.66	15.88
		1710.7 (131979)	15.93	15.53	15.73
	3RB-Low (0)	1779.3 (132665)	15.61	15.75	15.64
		1745 (132322)	15.71	15.68	15.80
		1710.7 (131979)	15.55	15.78	15.69
	6RB (0)	1779.3 (132665)	15.68	15.74	15.53
		1745 (132322)	15.70	15.84	15.76
		1710.7 (131979)	15.91	15.82	15.70
3MHz	1RB-High (14)	1778.5 (132657)	15.69	15.65	15.41
		1745 (132322)	15.72	15.81	15.53
		1711.5 (131987)	15.78	15.55	15.39
	1RB-Middle (7)	1778.5 (132657)	15.54	15.77	15.71
		1745 (132322)	15.81	15.65	15.34
		1711.5 (131987)	15.55	15.84	15.79
	1RB-Low (0)	1778.5 (132657)	15.59	15.70	15.33
		1745 (132322)	15.57	15.59	15.50
		1711.5 (131987)	15.46	15.71	15.49
	8RB-High (7)	1778.5 (132657)	15.52	15.42	15.75
		1745 (132322)	15.86	15.84	15.79
		1711.5 (131987)	15.86	15.73	15.82
	8RB-Middle (4)	1778.5 (132657)	15.67	15.64	15.41
		1745 (132322)	15.90	15.71	15.76
		1711.5 (131987)	15.75	15.48	15.88
	8RB-Low (0)	1778.5 (132657)	15.62	15.58	15.56
		1745 (132322)	15.43	15.77	15.83
		1711.5 (131987)	15.72	15.76	15.69
	15RB (0)	1778.5 (132657)	15.58	15.81	15.66
		1745 (132322)	15.68	15.64	15.96
		1711.5 (131987)	15.81	15.97	15.59

5MHz	1RB-High (24)	1777.5 (132647)	15.48	15.62	15.56
		1745 (132322)	15.67	15.71	15.50
		1712.5 (131997)	15.58	15.64	15.44
	1RB-Middle (12)	1777.5 (132647)	15.53	15.75	15.70
		1745 (132322)	15.75	15.75	15.38
		1712.5 (131997)	15.74	15.97	15.79
	1RB-Low (0)	1777.5 (132647)	15.48	15.88	15.39
		1745 (132322)	15.46	15.59	15.63
		1712.5 (131997)	15.29	15.93	15.45
	12RB-High (13)	1777.5 (132647)	15.61	15.62	15.77
		1745 (132322)	15.78	15.63	15.86
		1712.5 (131997)	15.78	15.57	15.65
	12RB-Middle (6)	1777.5 (132647)	15.46	15.76	15.56
		1745 (132322)	15.79	15.85	15.80
		1712.5 (131997)	15.93	15.69	15.68
	12RB-Low (0)	1777.5 (132647)	15.51	15.55	15.49
		1745 (132322)	15.66	15.83	15.81
		1712.5 (131997)	15.71	15.74	15.88
	25RB (0)	1777.5 (132647)	15.69	15.77	15.60
		1745 (132322)	15.50	15.77	15.68
		1712.5 (131997)	15.73	15.81	15.81
10MHz	1RB-High (49)	1775 (132622)	15.46	15.76	15.62
		1745 (132322)	15.51	15.77	15.68
		1715 (132022)	15.71	15.58	15.37
	1RB-Middle (24)	1775 (132622)	15.38	15.94	15.57
		1745 (132322)	15.55	15.56	15.39
		1715 (132022)	15.79	16.03	15.61
	1RB-Low (0)	1775 (132622)	15.60	15.87	15.43
		1745 (132322)	15.48	15.68	15.54
		1715 (132022)	15.54	15.95	15.51
	25RB-High (25)	1775 (132622)	15.50	15.41	15.69
		1745 (132322)	15.71	15.67	15.84
		1715 (132022)	15.67	15.59	15.75
	25RB-Middle (12)	1775 (132622)	15.50	15.92	15.52
		1745 (132322)	15.84	15.84	15.74
		1715 (132022)	15.95	15.65	15.66
	25RB-Low (0)	1775 (132622)	15.67	15.62	15.62
		1745 (132322)	15.69	15.80	15.71
		1715 (132022)	15.63	15.99	15.78
	50RB (0)	1775 (132622)	15.61	15.65	15.43
		1745 (132322)	15.50	15.78	15.66
		1715 (132022)	15.73	15.91	15.58

15MHz	1RB-High (74)	1772.5 (132597)	15.48	15.77	15.41
		1745 (132322)	15.63	15.56	15.67
		1717.5 (132047)	15.68	15.76	15.42
	1RB-Middle (37)	1772.5 (132597)	15.43	15.81	15.66
		1745 (132322)	15.66	15.55	15.35
		1717.5 (132047)	15.62	15.82	15.79
	1RB-Low (0)	1772.5 (132597)	15.62	15.78	15.55
		1745 (132322)	15.50	15.54	15.76
		1717.5 (132047)	15.38	15.68	15.55
	36RB-High (38)	1772.5 (132597)	15.55	15.58	15.63
		1745 (132322)	15.64	15.60	15.80
		1717.5 (132047)	15.75	15.76	15.87
	36RB-Middle (19)	1772.5 (132597)	15.72	15.67	15.60
		1745 (132322)	15.87	15.82	15.83
		1717.5 (132047)	16.00	15.62	15.96
	36RB-Low (0)	1772.5 (132597)	15.74	15.69	15.58
		1745 (132322)	15.73	15.75	15.76
		1717.5 (132047)	15.74	15.97	15.88
75RB (0)	1772.5 (132597)	15.67	15.80	15.70	
	1745 (132322)	15.51	15.71	15.93	
	1717.5 (132047)	15.98	15.92	15.61	
20MHz	1RB-High (99)	1770 (132572)	15.55	15.62	15.47
		1745 (132322)	15.59	15.70	15.65
		1720 (132072)	15.65	15.64	15.45
	1RB-Middle (50)	1770 (132572)	15.41	15.88	15.60
		1745 (132322)	15.67	15.65	15.39
		1720 (132072)	15.68	15.92	15.65
	1RB-Low (0)	1770 (132572)	15.56	15.77	15.48
		1745 (132322)	15.47	15.67	15.63
		1720 (132072)	15.42	15.83	15.47
	50RB-High (50)	1770 (132572)	15.59	15.54	15.71
		1745 (132322)	15.74	15.72	15.72
		1720 (132072)	15.71	15.64	15.74
	50RB-Middle (25)	1770 (132572)	15.60	15.78	15.52
		1745 (132322)	15.87	15.77	15.81
		1720 (132072)	15.89	15.62	15.81
	50RB-Low (0)	1770 (132572)	15.62	15.66	15.51
		1745 (132322)	15.58	15.77	15.79
		1720 (132072)	15.63	15.86	15.74
100RB (0)	1770 (132572)	15.56	15.66	15.55	
	1745 (132322)	15.56	15.69	15.81	
	1720 (132072)	15.84	15.85	15.66	

LTE Band66 ANT4-Power Level C1						
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1779.3 (132665)	18.20	18.48	18.45	
		1745 (132322)	18.09	18.63	18.57	
		1710.7 (131979)	18.04	18.53	18.33	
	1RB-Middle (3)	1779.3 (132665)	18.19	18.44	18.52	
		1745 (132322)	18.01	18.51	18.43	
		1710.7 (131979)	18.18	18.71	18.58	
	1RB-Low (0)	1779.3 (132665)	18.07	18.69	18.50	
		1745 (132322)	18.22	18.55	18.40	
		1710.7 (131979)	18.20	18.58	18.48	
	3RB-High (3)	1779.3 (132665)	18.22	18.41	18.16	
		1745 (132322)	18.20	18.57	18.56	
		1710.7 (131979)	18.23	18.69	18.48	
	3RB-Middle (1)	1779.3 (132665)	18.05	18.57	18.11	
		1745 (132322)	18.00	18.70	18.61	
		1710.7 (131979)	18.31	18.62	18.44	
	3RB-Low (0)	1779.3 (132665)	18.30	18.47	18.47	
		1745 (132322)	18.35	18.32	18.36	
		1710.7 (131979)	18.14	18.47	18.25	
	6RB (0)	1779.3 (132665)	18.13	18.55	18.42	
		1745 (132322)	18.28	18.58	18.41	
		1710.7 (131979)	18.29	18.47	18.26	
	3MHz	1RB-High (14)	1778.5 (132657)	18.08	18.50	18.38
			1745 (132322)	18.07	18.51	18.55
			1711.5 (131987)	18.23	18.44	18.32
		1RB-Middle (7)	1778.5 (132657)	18.12	18.30	18.38
			1745 (132322)	18.19	18.50	18.21
			1711.5 (131987)	18.38	18.60	18.41
1RB-Low (0)		1778.5 (132657)	18.02	18.69	18.51	
		1745 (132322)	18.12	18.34	18.49	
		1711.5 (131987)	18.34	18.53	18.61	
8RB-High (7)		1778.5 (132657)	17.97	18.66	18.12	
		1745 (132322)	18.18	18.67	18.43	
		1711.5 (131987)	18.19	18.59	18.56	
8RB-Middle (4)		1778.5 (132657)	18.17	18.34	18.19	
		1745 (132322)	18.16	18.54	18.51	
		1711.5 (131987)	18.26	18.42	18.20	
8RB-Low (0)		1778.5 (132657)	18.10	18.50	18.53	
		1745 (132322)	18.21	18.32	18.48	
		1711.5 (131987)	18.34	18.51	18.34	
15RB (0)		1778.5 (132657)	18.05	18.41	18.46	
		1745 (132322)	18.37	18.33	18.23	
		1711.5 (131987)	18.39	18.63	18.42	

5MHz	1RB-High (24)	1777.5 (132647)	18.20	18.33	18.24
		1745 (132322)	18.11	18.54	18.45
		1712.5 (131997)	18.02	18.31	18.33
	1RB-Middle (12)	1777.5 (132647)	18.07	18.52	18.59
		1745 (132322)	18.01	18.60	18.22
		1712.5 (131997)	18.16	18.69	18.56
	1RB-Low (0)	1777.5 (132647)	18.15	18.69	18.49
		1745 (132322)	18.13	18.52	18.50
		1712.5 (131997)	18.32	18.40	18.42
	12RB-High (13)	1777.5 (132647)	18.18	18.40	18.20
		1745 (132322)	18.10	18.71	18.49
		1712.5 (131997)	18.20	18.53	18.53
	12RB-Middle (6)	1777.5 (132647)	18.11	18.48	18.32
		1745 (132322)	18.15	18.49	18.43
		1712.5 (131997)	18.33	18.36	18.46
	12RB-Low (0)	1777.5 (132647)	18.35	18.61	18.42
		1745 (132322)	18.25	18.30	18.47
		1712.5 (131997)	18.07	18.56	18.26
	25RB (0)	1777.5 (132647)	18.11	18.59	18.52
		1745 (132322)	18.39	18.51	18.33
		1712.5 (131997)	18.37	18.43	18.37
10MHz	1RB-High (49)	1775 (132622)	18.18	18.46	18.40
		1745 (132322)	18.32	18.62	18.65
		1715 (132022)	18.24	18.42	18.49
	1RB-Middle (24)	1775 (132622)	17.98	18.56	18.44
		1745 (132322)	18.25	18.42	18.21
		1715 (132022)	18.22	18.57	18.55
	1RB-Low (0)	1775 (132622)	18.06	18.69	18.72
		1745 (132322)	18.12	18.25	18.23
		1715 (132022)	18.15	18.64	18.66
	25RB-High (25)	1775 (132622)	18.03	18.46	18.19
		1745 (132322)	18.13	18.56	18.38
		1715 (132022)	18.14	18.59	18.60
	25RB-Middle (12)	1775 (132622)	18.07	18.33	18.19
		1745 (132322)	18.04	18.69	18.37
		1715 (132022)	18.28	18.36	18.26
	25RB-Low (0)	1775 (132622)	18.06	18.62	18.57
		1745 (132322)	18.33	18.54	18.37
		1715 (132022)	18.23	18.68	18.31
	50RB (0)	1775 (132622)	17.99	18.53	18.48
		1745 (132322)	18.36	18.42	18.19
		1715 (132022)	18.24	18.54	18.13

15MHz	1RB-High (74)	1772.5 (132597)	17.97	18.31	18.48
		1745 (132322)	18.13	18.49	18.69
		1717.5 (132047)	18.08	18.55	18.26
	1RB-Middle (37)	1772.5 (132597)	18.18	18.38	18.55
		1745 (132322)	18.12	18.60	18.38
		1717.5 (132047)	18.36	18.46	18.45
	1RB-Low (0)	1772.5 (132597)	18.23	18.62	18.47
		1745 (132322)	18.17	18.29	18.42
		1717.5 (132047)	18.31	18.43	18.44
	36RB-High (38)	1772.5 (132597)	17.92	18.40	18.32
		1745 (132322)	18.17	18.46	18.55
		1717.5 (132047)	18.06	18.66	18.60
	36RB-Middle (19)	1772.5 (132597)	18.05	18.33	18.21
		1745 (132322)	18.00	18.49	18.53
		1717.5 (132047)	18.25	18.53	18.43
	36RB-Low (0)	1772.5 (132597)	18.16	18.70	18.52
		1745 (132322)	18.30	18.56	18.27
		1717.5 (132047)	18.27	18.58	18.22
	75RB (0)	1772.5 (132597)	18.18	18.48	18.37
		1745 (132322)	18.12	18.39	18.45
		1717.5 (132047)	18.14	18.55	18.25
20MHz	1RB-High (99)	1770 (132572)	18.10	18.41	18.34
		1745 (132322)	18.21	18.57	18.59
		1720 (132072)	18.09	18.43	18.38
	1RB-Middle (50)	1770 (132572)	18.09	18.44	18.51
		1745 (132322)	18.12	18.47	18.36
		1720 (132072)	18.23	18.58	18.52
	1RB-Low (0)	1770 (132572)	18.16	18.58	18.59
		1745 (132322)	18.14	18.40	18.37
		1720 (132072)	18.20	18.50	18.51
	50RB-High (50)	1770 (132572)	18.07	18.54	18.26
		1745 (132322)	18.06	18.58	18.43
		1720 (132072)	18.09	18.66	18.47
	50RB-Middle (25)	1770 (132572)	18.04	18.45	18.20
		1745 (132322)	18.06	18.57	18.52
		1720 (132072)	18.25	18.50	18.33
	50RB-Low (0)	1770 (132572)	18.20	18.60	18.52
		1745 (132322)	18.23	18.44	18.42
		1720 (132072)	18.19	18.61	18.24
	100RB (0)	1770 (132572)	18.13	18.45	18.52
		1745 (132322)	18.24	18.45	18.33
		1720 (132072)	18.26	18.51	18.27

LTE Band66 ANT4-Power Level C1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	21.74	22.41	21.02
		1745 (132322)	21.86	22.22	21.02
		1710.7 (131979)	21.79	22.53	21.09
	1RB-Middle (3)	1779.3 (132665)	22.04	22.38	20.99
		1745 (132322)	22.06	22.56	21.08
		1710.7 (131979)	22.05	22.62	21.12
	1RB-Low (0)	1779.3 (132665)	21.98	22.47	21.03
		1745 (132322)	22.13	22.65	21.01
		1710.7 (131979)	22.00	22.30	21.10
	3RB-High (3)	1779.3 (132665)	21.78	21.08	19.83
		1745 (132322)	21.92	20.93	20.25
		1710.7 (131979)	21.89	21.10	19.77
	3RB-Middle (1)	1779.3 (132665)	21.87	20.88	20.01
		1745 (132322)	22.15	21.01	19.96
		1710.7 (131979)	22.24	20.96	20.19
	3RB-Low (0)	1779.3 (132665)	22.04	21.04	20.01
		1745 (132322)	22.06	21.07	19.96
		1710.7 (131979)	21.98	20.68	20.18
	6RB (0)	1779.3 (132665)	21.94	20.81	20.20
		1745 (132322)	21.86	20.94	19.99
		1710.7 (131979)	22.00	20.81	20.09
3MHz	1RB-High (14)	1778.5 (132657)	21.78	22.42	20.86
		1745 (132322)	22.15	22.33	20.99
		1711.5 (131987)	21.99	22.53	21.27
	1RB-Middle (7)	1778.5 (132657)	22.06	22.47	21.13
		1745 (132322)	22.00	22.47	20.97
		1711.5 (131987)	22.13	22.42	21.18
	1RB-Low (0)	1778.5 (132657)	22.03	22.44	20.87
		1745 (132322)	21.91	22.50	21.12
		1711.5 (131987)	22.10	22.17	21.30
	8RB-High (7)	1778.5 (132657)	21.83	20.88	19.90
		1745 (132322)	21.97	20.86	20.09
		1711.5 (131987)	21.89	21.11	19.83
	8RB-Middle (4)	1778.5 (132657)	21.94	20.96	20.03
		1745 (132322)	22.10	21.10	20.01
		1711.5 (131987)	22.11	20.94	20.10
	8RB-Low (0)	1778.5 (132657)	21.91	21.06	20.00
		1745 (132322)	22.08	20.89	19.76
		1711.5 (131987)	21.97	20.73	20.00
	15RB (0)	1778.5 (132657)	21.88	21.02	20.19
		1745 (132322)	21.92	20.94	20.07
		1711.5 (131987)	22.03	21.05	19.94

5MHz	1RB-High (24)	1777.5 (132647)	21.88	22.38	20.89	
		1745 (132322)	22.04	22.26	21.24	
		1712.5 (131997)	21.89	22.54	21.11	
	1RB-Middle (12)	1777.5 (132647)	21.99	22.45	21.02	
		1745 (132322)	22.20	22.51	21.17	
		1712.5 (131997)	22.21	22.48	21.01	
	1RB-Low (0)	1777.5 (132647)	22.01	22.54	20.90	
		1745 (132322)	21.89	22.45	21.12	
		1712.5 (131997)	21.80	22.43	21.12	
	12RB-High (13)	1777.5 (132647)	21.70	21.05	19.86	
		1745 (132322)	22.10	21.01	20.13	
		1712.5 (131997)	21.84	21.13	19.69	
	12RB-Middle (6)	1777.5 (132647)	21.90	21.03	19.85	
		1745 (132322)	22.14	20.90	19.99	
		1712.5 (131997)	21.96	20.76	19.97	
	12RB-Low (0)	1777.5 (132647)	22.02	21.06	20.07	
		1745 (132322)	22.22	20.97	19.77	
		1712.5 (131997)	21.92	20.68	20.02	
	25RB (0)	1777.5 (132647)	21.78	20.86	20.24	
		1745 (132322)	22.01	20.83	19.97	
		1712.5 (131997)	21.97	20.85	20.08	
	10MHz	1RB-High (49)	1775 (132622)	21.81	22.29	21.00
			1745 (132322)	22.15	22.23	21.23
			1715 (132022)	21.89	22.63	21.19
1RB-Middle (24)		1775 (132622)	22.05	22.42	21.00	
		1745 (132322)	22.06	22.57	21.21	
		1715 (132022)	22.12	22.68	21.00	
1RB-Low (0)		1775 (132622)	22.12	22.33	21.08	
		1745 (132322)	21.98	22.69	20.96	
		1715 (132022)	22.01	22.42	21.34	
25RB-High (25)		1775 (132622)	21.82	21.09	19.88	
		1745 (132322)	22.00	20.85	19.99	
		1715 (132022)	21.83	21.13	19.95	
25RB-Middle (12)		1775 (132622)	21.90	20.81	19.75	
		1745 (132322)	22.04	20.85	20.00	
		1715 (132022)	22.01	20.83	20.25	
25RB-Low (0)		1775 (132622)	21.84	21.03	20.11	
		1745 (132322)	22.20	21.12	19.71	
		1715 (132022)	22.06	20.84	20.13	
50RB (0)		1775 (132622)	21.89	20.93	20.07	
		1745 (132322)	21.95	20.92	20.04	
		1715 (132022)	22.04	20.97	19.91	



15MHz	1RB-High (74)	1772.5 (132597)	21.88	22.21	21.07
		1745 (132322)	21.89	22.30	21.16
		1717.5 (132047)	21.88	22.43	21.26
	1RB-Middle (37)	1772.5 (132597)	22.09	22.58	21.02
		1745 (132322)	22.17	22.41	21.11
		1717.5 (132047)	22.23	22.60	21.17
	1RB-Low (0)	1772.5 (132597)	21.88	22.50	21.00
		1745 (132322)	21.87	22.54	20.91
		1717.5 (132047)	21.84	22.29	21.12
	36RB-High (38)	1772.5 (132597)	21.90	20.84	19.99
		1745 (132322)	22.19	20.76	20.24
		1717.5 (132047)	21.91	20.92	19.93
	36RB-Middle (19)	1772.5 (132597)	21.95	21.03	20.04
		1745 (132322)	21.94	20.81	20.14
		1717.5 (132047)	22.15	20.93	20.10
	36RB-Low (0)	1772.5 (132597)	21.94	20.96	19.94
		1745 (132322)	22.20	20.85	19.81
		1717.5 (132047)	21.91	20.83	20.02
75RB (0)	1772.5 (132597)	21.74	20.85	20.03	
	1745 (132322)	21.91	21.10	20.07	
	1717.5 (132047)	22.11	21.01	19.95	
20MHz	1RB-High (99)	1770 (132572)	21.88	22.32	21.01
		1745 (132322)	22.00	22.30	21.11
		1720 (132072)	21.93	22.53	21.21
	1RB-Middle (50)	1770 (132572)	22.06	22.51	21.08
		1745 (132322)	22.14	22.52	21.10
		1720 (132072)	22.15	22.53	21.04
	1RB-Low (0)	1770 (132572)	21.97	22.43	20.97
		1745 (132322)	22.00	22.59	20.98
		1720 (132072)	21.95	22.31	21.21
	50RB-High (50)	1770 (132572)	21.78	20.97	19.92
		1745 (132322)	22.05	20.86	20.10
		1720 (132072)	21.94	21.01	19.84
	50RB-Middle (25)	1770 (132572)	22.00	20.91	19.89
		1745 (132322)	22.06	20.96	20.08
		1720 (132072)	22.11	20.86	20.11
	50RB-Low (0)	1770 (132572)	21.90	21.03	19.99
		1745 (132322)	22.09	21.00	19.86
		1720 (132072)	21.91	20.77	20.09
100RB (0)	1770 (132572)	21.89	20.95	20.10	
	1745 (132322)	22.00	20.97	20.04	
	1720 (132072)	21.96	20.91	20.00	

LTE Band71-Power Level A1/B1/C1/D1/E1/F1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	695.5 (133447)	23.17	22.34	21.29
		680.5 (133297)	23.20	22.35	21.24
		665.5 (133147)	23.09	22.34	21.09
	1RB-Middle (12)	695.5 (133447)	23.27	22.40	21.28
		680.5 (133297)	23.29	22.38	21.28
		665.5 (133147)	23.15	22.30	21.14
	1RB-Low (0)	695.5 (133447)	23.18	22.27	21.21
		680.5 (133297)	23.19	22.42	21.28
		665.5 (133147)	23.13	22.29	21.23
	12RB-High (13)	695.5 (133447)	22.12	21.12	20.08
		680.5 (133297)	22.14	21.12	20.16
		665.5 (133147)	22.04	21.02	20.18
	12RB-Middle (6)	695.5 (133447)	22.12	21.11	20.12
		680.5 (133297)	22.16	21.15	20.13
		665.5 (133147)	22.05	21.04	20.23
	12RB-Low (0)	695.5 (133447)	22.16	21.14	20.13
		680.5 (133297)	22.16	21.13	20.10
		665.5 (133147)	22.01	20.94	20.19
	25RB (0)	695.5 (133447)	22.14	21.18	20.12
		680.5 (133297)	22.19	21.16	20.13
		665.5 (133147)	22.06	21.07	20.18
10MHz	1RB-High (49)	693 (132422)	23.12	22.17	21.12
		680.5 (133297)	23.16	22.20	21.21
		668 (133172)	23.10	22.23	21.14
	1RB-Middle (24)	693 (132422)	23.27	22.15	21.34
		680.5 (133297)	23.26	22.44	21.28
		668 (133172)	23.14	22.38	21.19
	1RB-Low (0)	693 (132422)	23.15	22.15	21.14
		680.5 (133297)	23.18	22.29	21.25
		668 (133172)	23.17	22.26	21.22
	25RB-High (25)	693 (132422)	22.12	21.12	20.10
		680.5 (133297)	22.13	21.11	20.09
		668 (133172)	22.07	21.09	20.19
	25RB-Middle (12)	693 (132422)	22.17	21.18	20.14
		680.5 (133297)	22.20	21.15	20.12
		668 (133172)	22.08	21.06	20.22
	25RB-Low (0)	693 (132422)	22.16	21.14	20.12
		680.5 (133297)	22.11	21.13	20.11
		668 (133172)	22.02	21.02	20.19
	50RB (0)	693 (132422)	22.11	21.10	20.13
		680.5 (133297)	22.14	21.12	20.10
		668 (133172)	22.07	21.01	20.20

15MHz	1RB-High (74)	690.5 (133397)	23.13	22.33	21.15
		680.5 (133297)	23.11	22.27	21.13
		670.5 (133197)	23.11	22.27	21.05
	1RB-Middle (37)	690.5 (133397)	23.18	22.42	21.22
		680.5 (133297)	23.24	22.39	21.23
		670.5 (133197)	23.15	22.42	21.23
	1RB-Low (0)	690.5 (133397)	23.19	22.35	21.24
		680.5 (133297)	23.14	22.33	21.24
		670.5 (133197)	23.14	22.35	21.23
	36RB-High (38)	690.5 (133397)	22.16	21.18	20.15
		680.5 (133297)	22.18	21.10	20.14
		670.5 (133197)	22.10	21.05	20.08
	36RB-Middle (19)	690.5 (133397)	22.17	21.10	20.13
		680.5 (133297)	22.12	21.11	20.13
		670.5 (133197)	22.11	21.04	20.24
	36RB-Low (0)	690.5 (133397)	22.10	21.09	20.17
		680.5 (133297)	22.11	21.09	20.12
		670.5 (133197)	22.02	21.06	20.24
	75RB (0)	690.5 (133397)	22.17	21.09	20.14
		680.5 (133297)	22.17	21.16	20.06
		670.5 (133197)	22.11	21.08	20.19
20MHz	1RB-High (99)	688 (133372)	22.53	21.78	20.60
		683 (133322)	22.54	21.76	20.62
		673 (133222)	22.46	21.68	20.57
	1RB-Middle (50)	688 (133372)	22.65	21.85	20.69
		683 (133322)	22.70	21.72	20.73
		673 (133222)	22.63	21.78	20.71
	1RB-Low (0)	688 (133372)	22.60	21.88	20.65
		683 (133322)	22.62	21.81	20.71
		673 (133222)	22.60	21.82	20.69
	50RB-High (50)	688 (133372)	21.60	20.59	19.70
		683 (133322)	21.56	20.55	19.75
		673 (133222)	21.52	20.53	19.68
	50RB-Middle (25)	688 (133372)	21.63	20.58	19.75
		683 (133322)	21.59	20.55	19.72
		673 (133222)	21.61	20.57	19.74
	50RB-Low (0)	688 (133372)	21.63	20.64	19.82
		683 (133322)	21.64	20.60	19.73
		673 (133222)	21.57	20.56	19.66
	100RB (0)	688 (133372)	21.60	20.54	19.74
		683 (133322)	21.59	20.56	19.69
		673 (133222)	21.52	20.49	19.66

Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum output power when downlink carrier aggregation is inactive. SAR test is not required since maximum output power when downlink carrier aggregation active is not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

The device supports Intra-band uplink LTE Carrier Aggregation (CA) CA\_B41C. The conducted power measurement results of LTE CA are provided as follow.

All other uplink communications are identical to the release 8 specifications. Other LTE Rel.10 or higher features are not supported, including Enhanced SC-FDMA or Uplink MIMO etc.

B41C PC3-Power Level A1/C1/D1										
UL LTE CA Class	PCC				SCC				Power	
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	tune up	conducted power (dBm)
CA_41C	20M	39750	1	99	5M	39867	1	0	24	22.52
CA_41C	15M	39725	1	74	10M	39845	1	0	24	22.64
CA_41C	20M	39750	1	99	10M	39894	1	0	24	22.49
CA_41C	20M	39750	1	99	15M	39921	1	0	24	22.66
CA_41C	20M	39750	1	99	20M	39948	1	0	24	22.61
CA_41C	20M	41490	1	0	5M	41373	1	24	24	22.67
CA_41C	15M	41515	1	0	10M	41395	1	49	24	22.76
CA_41C	20M	41490	1	0	10M	41346	1	49	24	22.71
CA_41C	15M	41515	1	0	15M	41365	1	74	24	22.92
CA_41C	20M	41490	1	0	15M	41319	1	74	24	22.84
CA_41C	20M	41490	1	0	20M	41292	1	99	24	22.81

B41C PC2-Power Level A1/C1/D1										
UL LTE CA Class	PCC				SCC				Power	
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	tune up	conducted power (dBm)
CA_41C	20M	39750	1	99	5M	39867	1	0	27	26.27
CA_41C	15M	39725	1	74	10M	39845	1	0	27	26.48
CA_41C	20M	39750	1	99	10M	39894	1	0	27	26.12
CA_41C	20M	39750	1	99	15M	39921	1	0	27	26.38
CA_41C	20M	39750	1	99	20M	39948	1	0	27	26.52
CA_41C	20M	41490	1	0	5M	41373	1	24	27	26.36
CA_41C	15M	41515	1	0	10M	41395	1	49	27	26.49
CA_41C	20M	41490	1	0	10M	41346	1	49	27	26.51
CA_41C	15M	41515	1	0	15M	41365	1	74	27	26.49
CA_41C	20M	41490	1	0	15M	41319	1	74	27	26.69
CA_41C	20M	41490	1	0	20M	41292	1	99	27	26.29

B41C PC3-Power Level B1/F1										
UL LTE CA Class	PCC				SCC				Power	
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	tune up	conducted power (dBm)
CA_41C	20M	39750	1	99	5M	39867	1	0	19	18.28
CA_41C	15M	39725	1	74	10M	39845	1	0	19	18.27
CA_41C	20M	39750	1	99	10M	39894	1	0	19	18.19
CA_41C	20M	39750	1	99	15M	39921	1	0	19	18.37
CA_41C	20M	39750	1	99	20M	39948	1	0	19	18.23
CA_41C	20M	41490	1	0	5M	41373	1	24	19	18.25
CA_41C	15M	41515	1	0	10M	41395	1	49	19	18.38
CA_41C	20M	41490	1	0	10M	41346	1	49	19	18.28
CA_41C	15M	41515	1	0	15M	41365	1	74	19	18.53
CA_41C	20M	41490	1	0	15M	41319	1	74	19	18.41
CA_41C	20M	41490	1	0	20M	41292	1	99	19	18.34

B41C PC2-Power Level B1/F1										
UL LTE CA Class	PCC				SCC				Power	
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	tune up	conducted power (dBm)
CA_41C	20M	39750	1	99	5M	39867	1	0	22.5	22.25
CA_41C	15M	39725	1	74	10M	39845	1	0	22.5	22.28
CA_41C	20M	39750	1	99	10M	39894	1	0	22.5	22.34
CA_41C	20M	39750	1	99	15M	39921	1	0	22.5	22.18
CA_41C	20M	39750	1	99	20M	39948	1	0	22.5	22.05
CA_41C	20M	41490	1	0	5M	41373	1	24	22.5	22.03
CA_41C	15M	41515	1	0	10M	41395	1	49	22.5	22.19
CA_41C	20M	41490	1	0	10M	41346	1	49	22.5	22.04
CA_41C	15M	41515	1	0	15M	41365	1	74	22.5	22.09
CA_41C	20M	41490	1	0	15M	41319	1	74	22.5	22.24
CA_41C	20M	41490	1	0	20M	41292	1	99	22.5	22.09

### 11.4 5G NR Measurement result

#### Maximum Target Power for Production Unit –Power Level D1/E1/F1

Band	Tune up (dBm)					
	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WLAN off (DSI2)	Receiver on+ WLAN on (DSI3)	Receiver off+ sensor on+ WLAN off (DSI4)	Receiver off+ sensor on+ WLAN on (DSI5)
	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1
n25-ANT1 (SA/NSA)	24	22	24	24	23	22
n25-ANT4 (NSA)	24	23	18.5	18.5	24	23
n66-ANT1 (SA/NSA)	24	20	24	24	24	20
n66-ANT4(NSA)	24	24	22.5	21	24	24
n41(SA/NSA)	27	21.5	17.5	17.5	24	21.5
n71(SA/NSA)	24	24	24	24	24	24

5G NR n25 ANT1-Power Level A1/C1/D1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	22.69
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	22.73
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	22.75
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	22.62
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	22.91
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	22.77
15	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	50@25	1882.5	376500	22.39
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1882.5	376500	22.78
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1882.5	376500	20.56
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1882.5	376500	18.26
15	20	CP-OFDM QPSK	Inner_Full	53@26	1882.5	376500	21.15
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1882.5	376500	21.78
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1882.5	376500	19.92
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1882.5	376500	16.35
15	20	DFT-s-OFDM QPSK	Edge_1RB_Right	1@105	1882.5	376500	22.14
15	20	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	1882.5	376500	22.32
15	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@104	1882.5	370500	22.15
15	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1882.5	370500	22.36
15	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@104	1882.5	370500	22.11
15	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1882.5	370500	22.31
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	1882.5	370500	22.42
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1882.5	376500	22.07
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1882.5	376500	22.23

5G NR n25 ANT1-Power Level B1/F1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	20.48
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	20.29
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	20.11
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	20.41
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	20.35
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	20.53
15	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	50@25	1860	372000	20.14
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1860	372000	20.76
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1860	372000	20.74
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1860	372000	19.07
15	20	CP-OFDM QPSK	Inner_Full	53@26	1860	372000	18.59
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1860	372000	21.27
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1860	372000	20.69
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1860	372000	17.32
15	20	CP-OFDM 16QAM	Edge_1RB_Right	1@105	1860	372000	21.47
15	20	CP-OFDM 16QAM	Edge_1RB_Left	1@0	1860	372000	20.17
15	20	CP-OFDM 16QAM	Edge_Full_Right	2@104	1860	372000	21.04
15	20	CP-OFDM 16QAM	Edge_Full_Left	2@0	1860	372000	20.23
15	20	CP-OFDM 16QAM	Inner_1RB_Right	1@104	1860	372000	21.48
15	20	CP-OFDM 16QAM	Inner_1RB_Left	1@1	1860	372000	20.64
15	20	CP-OFDM 16QAM	Outer_Full	100@0	1860	372000	21.26
15	10	CP-OFDM 16QAM	Inner_1RB_Left	1@1	1855	371000	21.20
15	15	CP-OFDM 16QAM	Inner_1RB_Left	1@1	1857.5	371500	21.07

5G NR n25 ANT1-Power Level E1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	22.69
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	22.73
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	22.75
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	22.62
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	22.91
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	22.77
15	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	50@25	1882.5	376500	22.39
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1882.5	376500	22.78
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1882.5	376500	20.56
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1882.5	376500	18.26
15	20	CP-OFDM QPSK	Inner_Full	53@26	1882.5	376500	21.15
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1882.5	376500	21.78
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1882.5	376500	19.92
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1882.5	376500	16.35
15	20	DFT-s-OFDM QPSK	Edge_1RB_Right	1@105	1882.5	376500	22.14
15	20	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	1882.5	376500	22.32
15	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@104	1882.5	370500	22.15
15	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1882.5	370500	22.36
15	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@104	1882.5	370500	22.11
15	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1882.5	370500	22.31
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	1882.5	370500	22.42
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1882.5	376500	22.07
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1882.5	376500	22.23

5G NR n25 ANT4-Power Level A1/E1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	n25
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	23.81
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	23.61
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	23.84
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	22.51
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	22.51
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	22.63
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	1852.5	370500	23.04
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	1852.5	370500	22.59
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	1852.5	370500	20.97
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	1852.5	370500	18.69
15	5	CP-OFDM QPSK	Inner_Full	13@6	1852.5	370500	22.47
15	5	CP-OFDM 16QAM	Inner_Full	13@6	1852.5	370500	21.95
15	5	CP-OFDM 64QAM	Inner_Full	13@6	1852.5	370500	20.41
15	5	CP-OFDM 256QAM	Inner_Full	13@6	1852.5	370500	17.13
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1@24	1852.5	370500	22.65
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	1852.5	370500	21.74
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2@23	1852.5	370500	22.69
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1852.5	370500	21.71
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1@23	1852.5	370500	23.66
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1852.5	370500	22.83
15	5	DFT-s-OFDM QPSK	Outer_Full	25@0	1852.5	370500	22.23
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1852.5	370500	22.29
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1852.5	370500	22.45

5G NR n25 ANT4-Power Level C1/D1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1912.5	382500	17.05
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1882.5	376500	17.11
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	17.38
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1905	381000	17.13
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1882.5	376500	17.09
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860	372000	17.43
15	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	50@25	1860	372000	17.31
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1860	372000	17.54
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1860	372000	17.52
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1860	372000	17.51
15	20	CP-OFDM QPSK	Inner_Full	50@25	1860	372000	15.92
15	20	CP-OFDM 16QAM	Inner_Full	50@25	1860	372000	15.84
15	20	CP-OFDM 64QAM	Inner_Full	50@25	1860	372000	17.84
15	20	CP-OFDM 256QAM	Inner_Full	50@25	1860	372000	16.59
15	20	DFT-s-OFDM 16QAM	Edge_1RB_Right	1@105	1860	372000	17.01
15	20	DFT-s-OFDM 16QAM	Edge_1RB_Left	1@0	1860	372000	16.75
15	20	DFT-s-OFDM 16QAM	Edge_Full_Right	2@104	1860	372000	17.29
15	20	DFT-s-OFDM 16QAM	Edge_Full_Left	2@0	1860	372000	17.05
15	20	DFT-s-OFDM 16QAM	Inner_1RB_Right	1@104	1860	372000	17.06
15	20	DFT-s-OFDM 16QAM	Inner_1RB_Left	1@1	1860	372000	16.74
15	20	DFT-s-OFDM 16QAM	Outer_Full	100@0	1860	372000	17.47
15	10	DFT-s-OFDM 16QAM	Inner_Full	25@12	1855	371000	17.29
15	15	DFT-s-OFDM 16QAM	Inner_Full	36@18	1857.5	371500	17.27

5G NR n66 ANT1-Power Level A1/C1/D1/E1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5		22.93
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745		22.92
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5		22.83
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1760		22.85
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745		22.98
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1730		22.92
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1745		22.58
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1745		22.67
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1745		20.47
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1745		18.11
15	20	CP-OFDM QPSK	Inner_Full	53@26	1745		21.36
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1745		21.71
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1745		19.82
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1745		16.32
15	20	DFT-s-OFDM QPSK	Edge_1RB_Right	1@105	1745		21.75
15	20	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	1745		21.77
15	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@104	1745		21.87
15	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745		21.81
15	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@104	1745		22.12
15	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745		22.06
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	1745		21.99
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745		22.05
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745		22.08



5G NR n66 ANT1-Power Level B1/F1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	18.42
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	18.45
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	18.43
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1760	352000	18.48
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	18.46
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1730	346000	18.03
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1745	349000	18.25
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1745	349000	18.68
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1745	349000	18.72
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1745	349000	18.16
15	20	CP-OFDM QPSK	Inner_Full	53@26	1745	349000	19.23
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1745	349000	19.25
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1745	349000	19.24
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1745	349000	16.23
15	20	CP-OFDM 16QAM	Edge_1RB_Right	1@105	1745	349000	19.32
15	20	CP-OFDM 16QAM	Edge_1RB_Left	1@0	1745	349000	19.29
15	20	CP-OFDM 16QAM	Edge_Full_Right	2@104	1745	349000	18.87
15	20	CP-OFDM 16QAM	Edge_Full_Left	2@0	1745	349000	18.89
15	20	CP-OFDM 16QAM	Inner_1RB_Right	1@104	1745	349000	19.31
15	20	CP-OFDM 16QAM	Inner_1RB_Left	1@1	1745	349000	19.34
15	20	CP-OFDM 16QAM	Outer_Full	100@0	1745	349000	19.16
15	10	CP-OFDM 16QAM	Inner_1RB_Left	1@1	1745	349000	19.25
15	15	CP-OFDM 16QAM	Inner_1RB_Left	1@1	1745	349000	19.43

5G NR n66 ANT4-Power Level A1/B1/E1/F1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	22.69
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	22.67
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	22.64
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1760	352000	22.64
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	22.64
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1730	346000	22.74
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1730	346000	22.34
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1730	346000	21.35
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1730	346000	20.26
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1730	346000	17.93
15	20	CP-OFDM QPSK	Inner_Full	53@26	1730	346000	20.52
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1730	346000	20.11
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1730	346000	19.46
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1730	346000	16.19
15	20	DFT-s-OFDM QPSK	Edge_1RB_Right	1@105	1730	346000	22.42
15	20	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	1730	346000	22.44
15	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@104	1730	346000	22.44
15	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1730	346000	22.55
15	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@104	1730	346000	22.44
15	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1730	346000	22.47
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	1730	346000	22.61
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1730	346000	22.43
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1730	346000	22.61

5G NR n66 ANT4-Power Level C1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	21.51
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	21.53
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	21.57
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1760	352000	21.57
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	21.52
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1730	346000	21.59
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1730	346000	21.24
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1730	346000	21.94
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1730	346000	20.24
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1730	346000	18.14
15	20	CP-OFDM QPSK	Inner_Full	53@26	1730	346000	21.45
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1730	346000	21.44
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1730	346000	19.56
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1730	346000	16.17
15	20	DFT-s-OFDM 16QAM	Edge_1RB_Right	1@105	1730	346000	20.79
15	20	DFT-s-OFDM 16QAM	Edge_1RB_Left	1@0	1730	346000	20.81
15	20	DFT-s-OFDM 16QAM	Edge_Full_Right	2@104	1730	346000	21.07
15	20	DFT-s-OFDM 16QAM	Edge_Full_Left	2@0	1730	346000	21.09
15	20	DFT-s-OFDM 16QAM	Inner_1RB_Right	1@104	1730	346000	21.33
15	20	DFT-s-OFDM 16QAM	Inner_1RB_Left	1@1	1730	346000	21.37
15	20	DFT-s-OFDM 16QAM	Outer_Full	100@0	1730	346000	21.33
15	10	DFT-s-OFDM 16QAM	Inner_Full	25@12	1715	343000	21.74
15	15	DFT-s-OFDM 16QAM	Inner_Full	36@18	1717.5	343500	21.89

5G NR n66 ANT4-Power Level D1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	19.28
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745	349000	19.31
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	19.29
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1760	352000	19.28
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745	349000	19.32
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1730	346000	19.34
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1730	346000	19.09
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1730	346000	19.64
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1730	346000	19.61
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1730	346000	18.19
15	20	CP-OFDM QPSK	Inner_Full	53@26	1730	346000	17.82
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1730	346000	17.75
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1730	346000	19.59
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1730	346000	16.19
15	20	DFT-s-OFDM 16QAM	Edge_1RB_Right	1@105	1730	346000	20.37
15	20	DFT-s-OFDM 16QAM	Edge_1RB_Left	1@0	1730	346000	20.35
15	20	DFT-s-OFDM 16QAM	Edge_Full_Right	2@104	1730	346000	19.91
15	20	DFT-s-OFDM 16QAM	Edge_Full_Left	2@0	1730	346000	19.95
15	20	DFT-s-OFDM 16QAM	Inner_1RB_Right	1@104	1730	346000	20.39
15	20	DFT-s-OFDM 16QAM	Inner_1RB_Left	1@1	1730	346000	20.41
15	20	DFT-s-OFDM 16QAM	Outer_Full	100@0	1730	346000	20.19
15	10	DFT-s-OFDM 16QAM	Inner_1RB_Left	1@1	1715	343000	20.25
15	15	DFT-s-OFDM 16QAM	Inner_1RB_Left	1@1	1717.5	343500	20.32

5G NR n41-Power Level A1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	25.13
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	25.11
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	25.36
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	25.09
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	25.24
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	25.05
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	25.04
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	25.11
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	25.12
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	25.14
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	2592.99	518598	25.05
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	24.35
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	22.52
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	20.89
30	20	CP-OFDM QPSK	Inner_Full	25@12	2592.99	518598	24.08
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2592.99	518598	23.21
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2592.99	518598	21.52
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2592.99	518598	19.48
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2592.99	518598	21.55
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2592.99	518598	21.62
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2592.99	518598	25.01
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2592.99	518598	25.02
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2592.99	518598	24.18
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2592.99	518598	25.01
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2592.99	511899	25.11

5G NR n41-Power Level B1/F1								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	21	20.45
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	21	20.07
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	21	20.09
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	21	19.42
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	21	19.51
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	21	19.93
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	21	19.89
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	21	20.01
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	21	19.86
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	21	19.74
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	2679.99	535998	21	20.20
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2679.99	535998	21	20.24
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2679.99	535998	21	20.34
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2679.99	535998	21	20.41
30	20	CP-OFDM QPSK	Inner_Full	25@12	2679.99	535998	21	19.76
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2679.99	535998	21	19.73
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2679.99	535998	21	19.60
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2679.99	535998	21	19.54
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2679.99	535998	21	20.06
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2679.99	535998	21	19.87
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2679.99	535998	21	19.89
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2679.99	535998	21	19.98
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2679.99	535998	21	20.10
30	40	DFT-s-OFDM QPSK	Inner_1RB_Right	1@105	2670	530184	21	19.43
30	60	DFT-s-OFDM QPSK	Inner_1RB_Right	1@161	2659.98	526164	21	19.71

5G NR n41-Power Level C1/D1								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	17	16.29
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	17	15.96
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	17	16.12
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	17	15.60
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	17	15.57
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	17	15.96
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	17	15.97
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	17	15.95
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	17	15.81
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	17	15.65
30	20	DFT-s-OFDM Pi/2 BPSK1	Inner_Full	25@12	2679.99	535998	17	15.94
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2679.99	535998	17	16.28
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2679.99	535998	17	16.27
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2679.99	535998	17	16.26
30	20	CP-OFDM QPSK	Inner_Full	25@12	2679.99	535998	17	15.41
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2679.99	535998	17	15.47
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2679.99	535998	17	15.31
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2679.99	535998	17	15.35
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2679.99	535998	17	16.00
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2679.99	535998	17	15.92
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2679.99	535998	17	15.90
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2679.99	535998	17	15.83
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2679.99	535998	17	16.11
30	40	DFT-s-OFDM QPSK	Inner_1RB_Right	1@105	2670	530184	17	15.37
30	60	DFT-s-OFDM QPSK	Inner_1RB_Right	1@161	2659.98	526164	17	15.69

5G NR n41-Power Level E1								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2679.99	535998	24	23.84
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2636.49	527298	24	23.44
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2592.99	518598	24	23.55
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2549.51	509902	24	23.12
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2506.02	501204	24	22.94
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2640	528000	24	23.56
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2616.51	523302	24	23.56
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2592.99	518598	24	23.53
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2569.5	513900	24	23.37
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	2546.01	509202	24	23.32
30	20	DFT-s-OFDM Pi/2 BPSK1	Inner_Full	25@12	2679.99	535998	24	23.37
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	2679.99	535998	23	21.82
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	2679.99	535998	21.5	20.71
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	2679.99	535998	19.5	19.02
30	20	CP-OFDM QPSK	Inner_Full	25@12	2679.99	535998	22.5	21.29
30	20	CP-OFDM 16QAM	Inner_Full	25@12	2679.99	535998	22	21.35
30	20	CP-OFDM 64QAM	Inner_Full	25@12	2679.99	535998	20.5	18.81
30	20	CP-OFDM 256QAM	Inner_Full	25@12	2679.99	535998	17.5	16.55
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2679.99	535998	23	19.82
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2679.99	535998	23	19.76
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2679.99	535998	24	23.55
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2679.99	535998	24	23.51
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2679.99	535998	23	22.60
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2670	530184	24	23.35
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2659.98	526164	24	23.35

5G NR n71-Power Level A1/B1/C1/D1/E1/F1							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	695.5	139100	22.72
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	680.5	136100	22.76
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	665.5	133100	22.70
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	688	137600	22.74
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	680.5	136100	22.83
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	673	134600	22.64
15	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	50@25	680.5	136100	22.43
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	680.5	136100	22.50
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	680.5	136100	20.50
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	680.5	136100	18.22
15	20	CP-OFDM QPSK	Inner_Full	53@26	680.5	136100	21.81
15	20	CP-OFDM 16QAM	Inner_Full	53@26	680.5	136100	21.40
15	20	CP-OFDM 64QAM	Inner_Full	53@26	680.5	136100	19.84
15	20	CP-OFDM 256QAM	Inner_Full	53@26	680.5	136100	16.31
15	20	DFT-s-OFDM QPSK	Edge_1RB_Right	1@105	680.5	136100	22.81
15	20	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	680.5	136100	22.81
15	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@104	680.5	136100	22.82
15	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	680.5	136100	22.79
15	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@104	680.5	136100	22.81
15	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	680.5	136100	22.77
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	680.5	136100	22.80
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	680.5	136100	22.72
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	680.5	136100	22.94

### 11.5 Wi-Fi and BT Measurement result

The maximum output power of BT antenna is 11.9dBm.

The maximum tune up of BT antenna is 12dBm.

**Table11.5: Summary of Receiver detection mechanism-WiFi antenna**

Antenna	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WWAN off (DSI2)	Receiver on+ WWAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WWAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WWAN on (DSI5)
WLAN Antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1

The average conducted power for Wi-Fi 2.4G is as following:

Power Level A1

802.11b		
Channel\data rate	1Mbps	Tune up
11(2462MHz)	21.31	22.00
6(2437(MHz)	21.65	22.50
1(2412MHz)	21.25	22.00
802.11g		
Channel\data rate	6Mbps	Tune up
11(2462MHz)	20.51	21.50
6(2437(MHz)	20.72	21.50
1(2412MHz)	20.45	21.50
802.11n-20MHz		
Channel\data rate	MCS0	Tune up
11(2462MHz)	19.98	21.00
6(2437(MHz)	20.22	21.50
1(2412MHz)	19.93	21.00

## Power Level B1/D1/F1

802.11b		
Channel\data rate	1Mbps	Tune up
11(2462MHz)	16.63	17.00
6(2437(MHz)	16.95	17.50
1(2412MHz)	16.24	17.00
802.11g		
Channel\data rate	6Mbps	Tune up
11(2462MHz)	15.71	16.50
6(2437(MHz)	16.22	16.50
1(2412MHz)	15.77	16.50
802.11n-20MHz		
Channel\data rate	MCS0	Tune up
11(2462MHz)	15.07	16.00
6(2437(MHz)	15.64	16.00
1(2412MHz)	15.31	16.00

## Power Level C1/E1

802.11b		
Channel\data rate	1Mbps	Tune up
11(2462MHz)	18.53	19.00
6(2437(MHz)	18.90	19.50
1(2412MHz)	18.24	19.00
802.11g		
Channel\data rate	6Mbps	Tune up
11(2462MHz)	18.11	19.00
6(2437(MHz)	18.59	19.00
1(2412MHz)	18.23	19.00
802.11n-20MHz		
Channel\data rate	MCS0	Tune up
11(2462MHz)	18.06	19.00
6(2437(MHz)	18.45	19.00
1(2412MHz)	18.13	19.00

The average conducted power for Wi-Fi 5G is as following:

Power Level A1:

802.11n(dBm)-20MHz	
Channel\data rate	6Mbps
36(5180 MHz)	19.00
40(5200 MHz)	18.92
44(5220 MHz)	18.96
48(5240 MHz)	19.12
52(5260 MHz)	19.52
56(5280 MHz)	19.53
60(5300 MHz)	19.68
64(5320 MHz)	19.58
Tune up	20.50
100(5500 MHz)	19.30
104(5520 MHz)	19.51
108(5540 MHz)	19.42
112(5560 MHz)	19.35
116(5580 MHz)	19.41
120(5600 MHz)	19.66
124(5620 MHz)	19.84
128(5640 MHz)	20.05
132(5660 MHz)	20.19
136(5680 MHz)	20.33
140(5700 MHz)	18.40
144(5720 MHz)	19.95
149(5745 MHz)	19.75
153(5765 MHz)	19.78
157(5785 MHz)	20.08
161(5805 MHz)	20.17
165(5825 MHz)	20.35
Tune up	21.00

Remark: The tune up for CH140 is 19.5dBm



## Power Level B1/C1/F1:

802.11n(dBm)-20MHz	
Channel\data rate	6Mbps
36(5180 MHz)	14.16
40(5200 MHz)	14.07
44(5220 MHz)	14.01
48(5240 MHz)	14.10
52(5260 MHz)	14.20
56(5280 MHz)	14.68
60(5300 MHz)	14.83
64(5320 MHz)	<b>14.37</b>
Tune up	15.00
100(5500 MHz)	14.89
104(5520 MHz)	<b>14.72</b>
108(5540 MHz)	14.70
112(5560 MHz)	14.61
116(5580 MHz)	14.63
120(5600 MHz)	14.67
124(5620 MHz)	15.02
128(5640 MHz)	15.31
132(5660 MHz)	15.32
136(5680 MHz)	15.68
140(5700 MHz)	13.13
144(5720 MHz)	15.33
149(5745 MHz)	15.18
153(5765 MHz)	14..75
157(5785 MHz)	15.26
161(5805 MHz)	<b>15.36</b>
165(5825 MHz)	15.77
Tune up	16.00

Remark: The tune up for CH140 is 14dBm

## Power Level D1:

802.11n(dBm)-20MHz	
Channel\data rate	6Mbps
36(5180 MHz)	11.99
40(5200 MHz)	11.43
44(5220 MHz)	11.83
48(5240 MHz)	11.77
Tune up	12.50
52(5260 MHz)	12.05
56(5280 MHz)	12.32
60(5300 MHz)	12.40
64(5320 MHz)	12.48
100(5500 MHz)	12.52
104(5520 MHz)	11.99
108(5540 MHz)	12.27
112(5560 MHz)	11.68
116(5580 MHz)	11.77
120(5600 MHz)	11.74
124(5620 MHz)	12.09
128(5640 MHz)	12.32
132(5660 MHz)	12.49
136(5680 MHz)	12.89
140(5700 MHz)	11.86
144(5720 MHz)	12.73
149(5745 MHz)	12.54
153(5765 MHz)	12.61
157(5785 MHz)	12.60
161(5805 MHz)	12.68
165(5825 MHz)	12.91
Tune up	13.00

Remark: The tune up for CH140 is 12dBm

## Power Level E1:

802.11n(dBm)-20MHz	
Channel\data rate	6Mbps
36(5180 MHz)	17.30
40(5200 MHz)	17.24
44(5220 MHz)	17.03
48(5240 MHz)	17.07
52(5260 MHz)	17.55
56(5280 MHz)	17.67
60(5300 MHz)	17.72
64(5320 MHz)	17.56
Tune up	18.00
100(5500 MHz)	18.31
104(5520 MHz)	18.56
108(5540 MHz)	18.25
112(5560 MHz)	17.99
116(5580 MHz)	17.75
120(5600 MHz)	17.92
124(5620 MHz)	17.89
128(5640 MHz)	18.45
132(5660 MHz)	18.73
136(5680 MHz)	18.38
140(5700 MHz)	16.30
144(5720 MHz)	18.34
149(5745 MHz)	17.70
153(5765 MHz)	18.12
157(5785 MHz)	18.17
161(5805 MHz)	18.31
165(5825 MHz)	18.65
Tune up	19.00

Remark: The tune up for CH140 is 17dBm

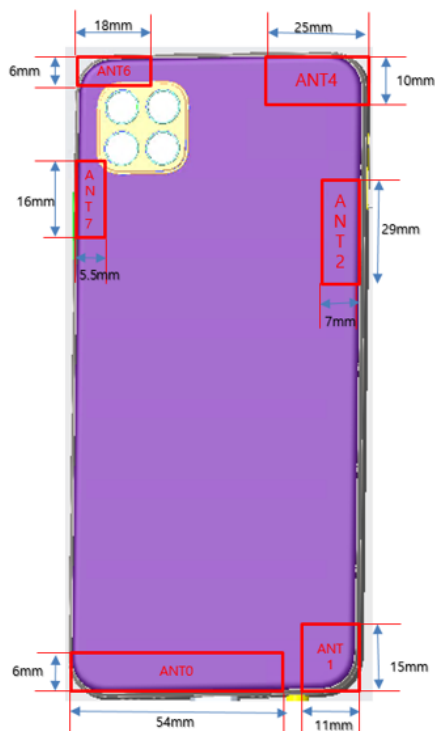
## 12 Simultaneous TX SAR Considerations

### 12.1 Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

For this device, the BT and Wi-Fi can transmit simultaneous with other transmitters.

### 12.2 Transmit Antenna Separation Distances



Antenna	Mode	Band
0	GSM	B5/B8
	WCDMA	B5
	LTE	4G:B5/B7/B8/B12/B13/B20/B26/B28/B38/B40/B41/B71
1	NR	n41/n71
	GSM	B2/B3
	WCDMA	B1/B2/B4
2	LTE	B1/B2/B3/B4/B25/B66
	NR	n25/n66
	NR	n25/n41/n66 RX MIMO
4	GSM	B2/B3/B5/B8 2 <sup>nd</sup> RX
	WCDMA	B1/B2/B4/B5 2 <sup>nd</sup> RX
	LTE	4G:B1/B2/B3/B4/B5/B7/B8/B12/B13/B20/B25/B26/B28/B38/B40/B41/B66/B71 2 <sup>nd</sup> RX
	NR	n25/n66/n71 2 <sup>nd</sup> RX /n41
6	GNSS	L1 (1575.42MHz)
	WIFI	2.4GHz/5GHz TX,RX
7	NR	n25/n41/n66 RX MIMO

Picture 12.1 Antenna Locations

### 12.3 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
ANT0	Yes	Yes	Yes	Yes	No	Yes
ANT1	Yes	Yes	Yes	No	No	Yes
ANT4	Yes	Yes	Yes	No	Yes	No
ANT6	Yes	Yes	No	Yes	Yes	No

### 12.4 Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied. The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

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

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

**Table 12.1: Standalone SAR test exclusion considerations**

Band/Mode	F(GHz)	Position	SAR test exclusion threshold(mW)	RF output power		SAR test exclusion
				dBm	mW	
Bluetooth	2.441	Head	9.60	12	15.85	No
		Body	19.20	12	15.85	Yes
2.4GHz WLAN	2.45	Head	9.58	19.5	89.13	No
		Body	19.17	22.5	177.83	No
5GHz WLAN	5.2	Head	6.58	15	31.62	No
		Body	13.16	20.5	112.2	No
	5.3	Head	6.52	15	31.62	No
		Body	13.03	20.5	112.2	No
	5.6	Head	6.34	16	39.81	No
		Body	12.68	21	125.89	No
	5.8	Head	6.23	16	39.81	No
		Body	12.46	21	125.89	No

### 13 Evaluation of Simultaneous

**Table 13.1: The sum of SAR values for Main antenna + WiFi-2.4G**

	Position	Main antenna	WiFi-2.4G	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.56	<b>1.34</b>
<b>Highest SAR value for Body</b>	Rear 10mm (ULCA 2A-12A)	1.05	0.33	<b>1.38</b>

**Table 13.2: The sum of SAR values for Main antenna + WiFi-5G**

	Position	Main antenna	WiFi-5G	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.75	<b>1.53</b>
<b>Highest SAR value for Body</b>	Rear 15mm (ENDC 66A-n41A)	0.99	0.40	<b>1.39</b>

**Table 13.3: The sum of SAR values for Main antenna +BT**

	Position	Main antenna	BT	Sum
<b>Highest SAR value for Head</b>	Right head, Touch (ENDC 2A-n41A)	0.94	<0.01	<b>0.94</b>
<b>Highest SAR value for Body</b>	Rear 10mm (ENDC 12A-n25A)	1.02	<0.01	<b>1.02</b>

**Table 13.4: The sum of SAR values for Main antenna + Wifi2.4G +BT**

	Position	Main antenna	WiFi-2.4G	BT	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.56	<0.01	<b>1.34</b>
<b>Highest SAR value for Body</b>	Rear 10mm (ULCA 2A-12A)	1.05	0.33	<0.01	<b>1.38</b>

**Table 13.5: The sum of SAR values for Main antenna + Wifi5G +BT**

	Position	Main antenna	WiFi-5G	BT	Sum
<b>Highest SAR value for Head</b>	Left head, Tilt (ENDC 66A-n25A)	0.78	0.75	<0.01	<b>1.53</b>
<b>Highest SAR value for Body</b>	Rear 15mm (ENDC 66A-n41A)	0.99	0.40	<0.01	<b>1.39</b>

**Table 13.6: The SAR values for UL CA**

LTE Band	LTE Band	Mode	Position	Reported SAR 1g(W/kg)
LTE Band 2-ANT4	LTE Band 12-ANT0	Head	Right Tilt	<b>0.83(0.67+0.16)</b>
		Body	Rear 10mm	<b>1.05(0.71+0.34)</b>
LTE Band 12-ANT0	LTE Band 66-ANT4	Head	Right Tilt	<b>0.54(0.16+0.38)</b>
		Body	Rear 10mm	<b>0.55(0.34+0.21)</b>

**Table 13.7: The SAR values for ENDC**

LTE	NR	Mode	Position	Reported SAR 1g(W/kg)
LTE Band 2-ANT1	n41	Head	Right Tilt	<b>0.94(0.26+0.68)</b>
		Body	Rear 15mm	<b>0.87(0.46+0.41)</b>
	n66-ANT4	Head	Left Cheek	<b>0.64(0.48+0.18)</b>
		Body	Rear 15mm	<b>0.60(0.46+0.14)</b>
LTE Band 2-ANT4	n71	Head	Right Tilt	<b>0.67(0.67+0.00)</b>
		Body	Rear 10mm	<b>0.87(0.71+0.16)</b>
LTE Band 12	n25-ANT4	Head	Right Tilt	<b>0.91(0.16+0.75)</b>
		Body	Rear 10mm	<b>1.02(0.34+0.68)</b>
	n66-ANT4	Head	Right Tilt	<b>0.54(0.16+0.38)</b>
		Body	Rear 10mm	<b>0.55(0.34+0.21)</b>
LTE Band 66-ANT1	n25-ANT4	Head	Right Tilt	<b>0.92(0.17+0.75)</b>
		Body	Rear 10mm	<b>0.95(0.27+0.68)</b>
	n41	Head	Right Tilt	<b>0.85(0.17+0.68)</b>
		Body	Rear 15mm	<b>0.99(0.58+0.41)</b>
LTE Band 66-ANT4	n71	Head	Right Cheek	<b>0.41(0.34+0.07)</b>
		Body	Rear 10mm	<b>0.37(0.21+0.16)</b>

**Conclusion:**

According to the above tables, the sum of reported SAR values is <math>1.6W/kg</math>. So the simultaneous transmission SAR with volume scans is not required.

## 14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.

The distance is 10 mm and just applied to the condition of body worn accessory.

It is performed for all SAR measurements with area scan based 1-g SAR estimation (Fast SAR). A zoom scan measurement is added when the estimated 1-g SAR is the highest measured SAR in each exposure configuration, wireless mode and frequency band combination or more than 1.2W/kg.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{\text{Target}} - P_{\text{Measured}})/10}$$

Where  $P_{\text{Target}}$  is the power of manufacturing upper limit;

$P_{\text{Measured}}$  is the measured power in chapter 11.

**Table 14.1: Duty Cycle**

Mode	Duty Cycle
GSM850/1900	1:8.3 or 1:2
WCDMA&LTE FDD&5G NR	1:1
LTE TDD	1:1.58 or 1:2.37

### 14.1 SAR results for 2G/3G/4G

**Table 14.1-1: SAR Values (GSM 850 MHz Band – Head)**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	Left	Cheek	/	32.31	33.50	0.119	<b>0.16</b>	0.153	<b>0.20</b>	0.08
190	836.6	Left	Tilt	/	32.31	33.50	0.105	<b>0.14</b>	0.132	<b>0.17</b>	0.11
251	848.8	Right	Cheek	/	32.34	33.50	0.113	<b>0.15</b>	0.147	<b>0.19</b>	-0.02
190	836.6	Right	Cheek	Fig.1	32.31	33.50	0.145	<b>0.19</b>	0.189	<b>0.25</b>	0.03
128	824.2	Right	Cheek	/	32.25	33.50	0.128	<b>0.17</b>	0.166	<b>0.22</b>	0.09
190	836.6	Right	Tilt	/	32.31	33.50	0.107	<b>0.14</b>	0.135	<b>0.18</b>	-0.01



**Table 14.1-2: SAR Values (GSM 850 MHz Band - Body)**

Frequency		Mode (number of timeslots)	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
190	836.6	GPRS (4)	Front	/	28.58	29.50	0.191	<b>0.24</b>	0.325	<b>0.40</b>	0.07
251	848.8	GPRS (4)	Rear	/	28.68	29.50	0.259	<b>0.31</b>	0.512	<b>0.62</b>	-0.01
190	836.6	GPRS (4)	Rear	Fig.2	28.58	29.50	0.341	<b>0.42</b>	0.600	<b>0.74</b>	-0.04
128	824.2	GPRS (4)	Rear	/	28.44	29.50	0.215	<b>0.27</b>	0.394	<b>0.50</b>	-0.11
190	836.6	GPRS (4)	Left	/	28.58	29.50	0.084	<b>0.10</b>	0.130	<b>0.16</b>	0.07
190	836.6	GPRS (4)	Right	/	28.58	29.50	0.089	<b>0.11</b>	0.142	<b>0.18</b>	0.04
190	836.6	GPRS (4)	Bottom	/	28.58	29.50	0.159	<b>0.20</b>	0.373	<b>0.46</b>	-0.09
190	836.6	EGPRS (4)	Rear	/	28.58	29.50	0.285	<b>0.35</b>	0.546	<b>0.67</b>	0.15

Note: The distance between the EUT and the phantom bottom is 10mm.

**Table 14.1-3: SAR Values (GSM 1900 MHz Band - Head)**

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measure d SAR(10g) (W/kg)	Reporte d SAR(10g) (W/kg)			
512	1850.2	Left	Cheek	Fig.3	29.26	30.50	0.115	<b>0.15</b>	0.174	<b>0.23</b>	0.03
661	1880	Left	Cheek	/	29.29	30.50	0.108	<b>0.14</b>	0.168	<b>0.22</b>	0.09
810	1909.8	Left	Cheek	/	29.30	30.50	0.103	<b>0.14</b>	0.163	<b>0.21</b>	-0.01
661	1880	Left	Tilt	/	29.29	30.50	0.043	<b>0.06</b>	0.070	<b>0.09</b>	0.07
661	1880	Right	Cheek	/	29.29	30.50	0.063	<b>0.08</b>	0.097	<b>0.13</b>	-0.02
661	1880	Right	Tilt	/	29.29	30.50	0.046	<b>0.06</b>	0.077	<b>0.10</b>	-0.01

**Table 14.1-4: SAR Values (GSM 1900 MHz Band – Body worn)**

Frequency		Mode (number of timeslots)	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz				Conducte d Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
661	1880	GPRS (4)	Front	/	25.53	26.50	0.128	<b>0.16</b>	0.214	<b>0.27</b>	0.13
661	1880	GPRS (4)	Rear	/	25.53	26.50	0.160	<b>0.20</b>	0.274	<b>0.34</b>	0.12
512	1850.2	GPRS (4)	Rear	Fig.4	25.44	26.50	0.197	<b>0.25</b>	0.333	<b>0.43</b>	0.11
810	1909.8	GPRS (4)	Rear	/	25.62	26.50	0.112	<b>0.14</b>	0.188	<b>0.23</b>	0.06
512	1850.2	EGPRS (4)	Rear	/	25.46	26.50	0.181	<b>0.23</b>	0.312	<b>0.40</b>	0.03

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.1-5: SAR Values (GSM 1900 MHz Band – Hotspot)**

Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C											
Frequency		Mode (number of timeslots)	Test Position	Figure No.	Conducte d Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)( W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
661	1880	GPRS (4)	Front	/	23.79	24.50	0.164	<b>0.19</b>	0.268	<b>0.32</b>	-0.07
512	1850.2	GPRS (4)	Rear	Fig.5	23.57	24.50	0.270	<b>0.33</b>	0.477	<b>0.59</b>	0.07
661	1880	GPRS (4)	Rear	/	23.79	24.50	0.264	<b>0.31</b>	0.463	<b>0.55</b>	0.08
810	1909.8	GPRS (4)	Rear	/	23.87	24.50	0.187	<b>0.22</b>	0.316	<b>0.37</b>	0.09
661	1880	GPRS (4)	Left	/	23.79	24.50	0.174	<b>0.20</b>	0.302	<b>0.36</b>	-0.01
661	1880	GPRS (4)	Top	/	23.79	24.50	0.192	<b>0.23</b>	0.328	<b>0.39</b>	-0.11
512	1850.2	EGPRS (4)	Rear		23.57	24.50	0.234	<b>0.29</b>	0.455	<b>0.56</b>	-0.15

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.1-6: SAR Values (WCDMA 1900 MHz Band - Head)**

Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C											
Frequency		Side	Test Position	Figur e No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measure d SAR(10g ) (W/kg)	Reported SAR(10g ) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
9538	1907.6	Left	Cheek	/	22.23	24.00	0.208	<b>0.31</b>	0.321	<b>0.48</b>	-0.02
9400	1880	Left	Cheek	/	22.38	24.00	0.214	<b>0.31</b>	0.326	<b>0.47</b>	0.12
9262	1852.4	Left	Cheek	Fig.6	22.42	24.00	0.223	<b>0.32</b>	0.339	<b>0.49</b>	-0.04
9400	1880	Left	Tilt	/	22.38	24.00	0.048	<b>0.07</b>	0.077	<b>0.11</b>	0.02
9400	1880	Right	Cheek	/	22.38	24.00	0.138	<b>0.20</b>	0.213	<b>0.31</b>	-0.17
9400	1880	Right	Tilt	/	22.38	24.00	0.120	<b>0.17</b>	0.200	<b>0.29</b>	0.12

**Table 14.1-7: SAR Values (WCDMA 1900 MHz Band – Body worn)**

Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C										
Frequency		Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
9538	1907.6	Front	/	22.23	24.00	0.136	<b>0.20</b>	0.202	<b>0.30</b>	0.05
9400	1880	Front	/	22.38	24.00	0.173	<b>0.25</b>	0.259	<b>0.38</b>	0.01
9262	1852.4	Front	Fig.7	22.42	24.00	0.203	<b>0.29</b>	0.304	<b>0.44</b>	0.01
9400	1880	Rear	/	22.38	24.00	0.200	<b>0.29</b>	0.229	<b>0.33</b>	0.03

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.1-8: SAR Values (WCDMA 1900 MHz Band - Hotspot)**

Frequency		Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Power Drift (dB)
Ch.	MHz					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
9400	1880	Front	/	17.60	19.00	0.113	<b>0.16</b>	0.189	<b>0.26</b>	0.05
9538	1907.6	Rear	/	17.36	19.00	0.153	<b>0.22</b>	0.268	<b>0.39</b>	-0.1
9400	1880	Rear	/	17.60	19.00	0.158	<b>0.22</b>	0.279	<b>0.39</b>	-0.06
9262	1852.4	Rear	Fig.8	17.56	19.00	0.160	<b>0.22</b>	0.286	<b>0.40</b>	0.17
9400	1880	Left	/	17.60	19.00	0.100	<b>0.14</b>	0.198	<b>0.27</b>	0.2
9400	1880	Bottom	/	17.60	19.00	0.127	<b>0.18</b>	0.219	<b>0.30</b>	-0.06

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.1-9: SAR Values (WCDMA 1700 MHz Band - Head)**

Frequency		Side	Test Position	Figure No.	Conducte d Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Power Drift (dB)
Ch.	MHz						Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1513	1752.6	Left	Cheek	/	22.10	24.00	0.236	<b>0.37</b>	0.352	<b>0.55</b>	-0.08
1513	1752.6	Left	Cheek	<b>Fig.9</b>	22.10	24.00	0.242	<b>0.37</b>	0.360	<b>0.56</b>	0.13
1312	1712.4	Left	Cheek	/	22.08	24.00	0.156	<b>0.24</b>	0.234	<b>0.36</b>	0.18
1412	1732.4	Left	Tilt	/	22.04	24.00	0.129	<b>0.20</b>	0.193	<b>0.30</b>	0.03
1412	1732.4	Right	Cheek	/	22.04	24.00	0.227	<b>0.36</b>	0.342	<b>0.54</b>	-0.19
1412	1732.4	Right	Tilt	/	22.04	24.00	0.087	<b>0.14</b>	0.133	<b>0.21</b>	-0.04

**Table 14.1-10: SAR Values (WCDMA 1700 MHz Band – Body worn)**

Frequency		Test Position	Figure No.	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Power Drift (dB)
Ch.	MHz					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1412	1732.5	Front	/	22.04	24.00	0.201	<b>0.32</b>	0.300	<b>0.47</b>	0.03
1513	1752.6	Rear	/	22.10	24.00	0.261	<b>0.40</b>	0.391	<b>0.61</b>	-0.11
1412	1732.5	Rear	<b>Fig.10</b>	22.04	24.00	0.278	<b>0.44</b>	0.417	<b>0.65</b>	0.18
1312	1712.4	Rear	/	22.08	24.00	0.198	<b>0.31</b>	0.297	<b>0.46</b>	0.03

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.1-11: SAR Values (WCDMA 1700 MHz Band - Hotspot)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C					
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
1412	1732.5	Front	/	17.20	19.00	0.120	<b>0.18</b>	0.183	<b>0.28</b>	-0.04
1513	1752.6	Rear	/	17.26	19.00	0.151	<b>0.23</b>	0.265	<b>0.40</b>	0.05
1412	1732.5	Rear	Fig.11	17.20	19.00	0.166	<b>0.25</b>	0.277	<b>0.42</b>	0.06
1312	1712.4	Rear	/	17.25	19.00	0.110	<b>0.16</b>	0.178	<b>0.27</b>	0.03
1412	1732.5	Left	/	17.20	19.00	0.110	<b>0.17</b>	0.181	<b>0.27</b>	0.02
1413	1733.5	Bottom	/	17.20	19.00	0.139	<b>0.21</b>	0.226	<b>0.34</b>	0.13

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.1-12: SAR Values (WCDMA 850 MHz Band - Head)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C						
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
4183	836.6	Left	Cheek	/	22.24	24.00	0.143	<b>0.21</b>	0.182	<b>0.27</b>	0.05
4183	836.6	Left	Tilt	/	22.24	24.00	0.082	<b>0.12</b>	0.100	<b>0.15</b>	0.01
4132	826.4	Right	Cheek	/	22.27	24.00	0.175	<b>0.26</b>	0.225	<b>0.34</b>	0.01
4183	836.6	Right	Cheek	Fig.12	22.24	24.00	0.182	<b>0.27</b>	0.234	<b>0.35</b>	0.03
4233	846.6	Right	Cheek	/	22.20	24.00	0.165	<b>0.25</b>	0.213	<b>0.32</b>	0.01
4183	836.6	Right	Tilt	/	22.24	24.00	0.092	<b>0.14</b>	0.113	<b>0.17</b>	0.05

**Table 14.1-13: SAR Values (WCDMA 850 MHz Band - Body)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C					
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
4183	836.6	Front	/	22.24	24.00	0.167	<b>0.25</b>	0.273	<b>0.41</b>	0.08
4233	846.6	Rear	/	22.20	24.00	0.203	<b>0.31</b>	0.354	<b>0.54</b>	0.01
4183	836.6	Rear	Fig.13	22.24	24.00	0.235	<b>0.35</b>	0.409	<b>0.61</b>	0.07
4132	826.4	Rear	/	22.27	24.00	0.222	<b>0.33</b>	0.385	<b>0.57</b>	-0.04
4183	836.6	Left	/	22.24	24.00	0.027	<b>0.04</b>	0.041	<b>0.06</b>	-0.06
4183	836.6	Right	/	22.24	24.00	0.098	<b>0.15</b>	0.149	<b>0.22</b>	0.17
4183	836.6	Bottom	/	22.24	24.00	0.134	<b>0.20</b>	0.287	<b>0.43</b>	0.12

Note: The distance between the EUT and the phantom bottom is 10mm.

**Table 14.1-14: SAR Values (LTE Band2 ANT1- Head)**

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C					
Ch.	MHz	Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
19100	1900	1RB_Mid	Left	Cheek	Fig.14	22.67	24.00	0.221	<b>0.30</b>	0.341	<b>0.46</b>	-0.03
19100	1900	1RB_Mid	Left	Tilt	/	22.67	24.00	0.126	<b>0.17</b>	0.197	<b>0.27</b>	-0.08
19100	1900	1RB_Mid	Right	Cheek	/	22.67	24.00	0.147	<b>0.20</b>	0.221	<b>0.30</b>	0.06
19100	1900	1RB_Mid	Right	Tilt	/	22.67	24.00	0.115	<b>0.16</b>	0.188	<b>0.26</b>	0.18
19100	1900	50RB-Low	Left	Cheek	/	21.88	23.00	0.165	<b>0.21</b>	0.256	<b>0.33</b>	0.03
19100	1900	50RB-Low	Left	Tilt	/	21.88	23.00	0.116	<b>0.15</b>	0.181	<b>0.23</b>	-0.19
19100	1900	50RB-Low	Right	Cheek	/	21.88	23.00	0.129	<b>0.17</b>	0.199	<b>0.26</b>	0.07
19100	1900	50RB-Low	Right	Tilt	/	21.88	23.00	0.084	<b>0.11</b>	0.134	<b>0.17</b>	-0.14

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-15: SAR Values (LTE Band2 ANT1– Body worn)**

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C				
Ch.	MHz	Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
19100	1900	1RB-Mid Front	/	22.67	24.00	0.135	<b>0.18</b>	0.215	<b>0.29</b>	0.02	
19100	1900	1RB-Mid Rear	Fig.15	22.67	24.00	0.201	<b>0.27</b>	0.339	<b>0.46</b>	-0.16	
19100	1900	50RB-Low Front	/	21.88	23.00	0.108	<b>0.14</b>	0.170	<b>0.22</b>	0.13	
19100	1900	50RB-Low Rear	/	21.88	23.00	0.159	<b>0.21</b>	0.270	<b>0.35</b>	0.06	

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

Note3: The results are also for ENDC.

**Table 14.1-16: SAR Values (LTE Band2 ANT1 – Hotspot)**

Frequency		Ambient Temperature: 22.9 °C				Liquid Temperature: 22.5°C				
Ch.	MHz	Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
18700	1860	1RB-Low Front	/	19.76	20.50	0.131	<b>0.16</b>	0.219	<b>0.26</b>	-0.04
18700	1860	1RB-Low Rear	Fig.16	19.76	20.50	0.196	<b>0.23</b>	0.349	<b>0.41</b>	-0.01
18700	1860	1RB-Low Left	/	19.76	20.50	0.125	<b>0.15</b>	0.227	<b>0.27</b>	-0.09
18700	1860	1RB-Low Bottom	/	19.76	20.50	0.133	<b>0.16</b>	0.230	<b>0.27</b>	0.2
18700	1860	50RB-Low Front	/	18.78	19.50	0.102	<b>0.12</b>	0.168	<b>0.20</b>	-0.01
18700	1860	50RB-Low Rear	/	18.78	19.50	0.151	<b>0.18</b>	0.266	<b>0.31</b>	0.09
18700	1860	50RB-Low Left	/	18.78	19.50	0.094	<b>0.11</b>	0.165	<b>0.19</b>	-0.08
18700	1860	50RB-Low Bottom	/	18.78	19.50	0.105	<b>0.12</b>	0.181	<b>0.21</b>	0.18
18700	1860	1RB-Mid Front	Note3	17.58	18.00	0.099	<b>0.11</b>	0.166	<b>0.18</b>	-0.04
18700	1860	1RB-Mid Rear	Note3	17.58	18.00	0.139	<b>0.15</b>	0.249	<b>0.27</b>	0.04
18700	1860	1RB-Mid Left	Note3	17.58	18.00	0.079	<b>0.08</b>	0.142	<b>0.16</b>	0.18
18700	1860	1RB-Mid Bottom	Note3	17.58	18.00	0.089	<b>0.10</b>	0.162	<b>0.18</b>	0.06
19100	1900	50RB-Low Front	Note3	16.70	17.00	0.068	<b>0.07</b>	0.118	<b>0.13</b>	-0.01
19100	1900	50RB-Low Rear	Note3	16.70	17.00	0.107	<b>0.11</b>	0.196	<b>0.21</b>	0.02
19100	1900	50RB-Low Left	Note3	16.70	17.00	0.075	<b>0.08</b>	0.115	<b>0.12</b>	0.08
19100	1900	50RB-Low Bottom	Note3	16.70	17.00	0.076	<b>0.08</b>	0.138	<b>0.15</b>	0.05

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

Note3: The results are for ENDC only.

**Table 14.1-17: SAR Values (LTE Band2 ANT4- Head)**

Frequency		Ambient Temperature: 22.9 °C				Liquid Temperature: 22.5°C						
Ch.	MHz	Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
18700	1860	1RB_Low	Left	Cheek	/	16.13	17.00	0.145	<b>0.18</b>	0.276	<b>0.34</b>	0.14
18700	1860	1RB_Low	Left	Tilt	/	16.13	17.00	0.175	<b>0.21</b>	0.367	<b>0.45</b>	0.12
18700	1860	1RB_Low	Right	Cheek	/	16.13	17.00	0.205	<b>0.25</b>	0.408	<b>0.50</b>	0.02
18700	1860	1RB_Low	Right	Tilt	/	16.13	17.00	0.232	<b>0.28</b>	0.504	<b>0.62</b>	0.09
18700	1860	50RB-Low	Left	Cheek	/	16.20	17.00	0.154	<b>0.19</b>	0.302	<b>0.36</b>	-0.18
18700	1860	50RB-Low	Left	Tilt	/	16.20	17.00	0.182	<b>0.22</b>	0.375	<b>0.45</b>	-0.05
18700	1860	50RB-Low	Right	Cheek	/	16.20	17.00	0.215	<b>0.26</b>	0.436	<b>0.52</b>	-0.09
18700	1860	50RB-Low	Right	Tilt	Fig.17	16.20	17.00	0.252	<b>0.30</b>	0.560	<b>0.67</b>	-0.1

Note1: The LTE mode is QPSK\_20MHz.

Note2: The results are for ENDC only.

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**Table 14.1-18: SAR Values (LTE Band2 ANT4– Body worn)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
18700	1860	1RB-Low Front	/	23.57	24.00	0.128	<b>0.14</b>	0.216	<b>0.24</b>	-0.05
18700	1860	1RB-Low Rear	Fig.18	23.57	24.00	0.186	<b>0.21</b>	0.325	<b>0.36</b>	0.07
18700	1860	50RB-Mid Front	/	22.54	23.00	0.113	<b>0.13</b>	0.189	<b>0.21</b>	0.19
18700	1860	50RB-Mid Rear	/	22.54	23.00	0.158	<b>0.18</b>	0.275	<b>0.31</b>	0.07

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

Note3: The results are for ENDC only.

**Table 14.1-19: SAR Values (LTE Band2 ANT4 – Hotspot)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
18700	1860	1RB-Low Front	/	22.56	23.00	0.233	<b>0.26</b>	0.426	<b>0.47</b>	0.16
18700	1860	1RB-Low Rear	/	22.56	23.00	0.333	<b>0.37</b>	0.618	<b>0.68</b>	-0.12
18700	1860	1RB-Low Left	/	22.56	23.00	0.101	<b>0.11</b>	0.174	<b>0.19</b>	0.16
18700	1860	1RB-Low Top	/	22.56	23.00	0.260	<b>0.29</b>	0.494	<b>0.55</b>	-0.1
18700	1860	50RB-Mid Front	/	22.53	23.00	0.253	<b>0.28</b>	0.459	<b>0.51</b>	0.14
18700	1860	50RB-Mid Rear	Fig.19	22.53	23.00	0.346	<b>0.39</b>	0.639	<b>0.71</b>	0.07
18700	1860	50RB-Mid Left	/	22.53	23.00	0.108	<b>0.12</b>	0.188	<b>0.21</b>	-0.04
18700	1860	50RB-Mid Top	/	22.53	23.00	0.306	<b>0.34</b>	0.591	<b>0.66</b>	-0.19

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_10MHz.

Note3: The results are for ENDC only.



**Table 14.1-20: SAR Values (LTE Band7 - Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C												
21350	2560	1RB_Mid	Left	Cheek	Fig.20	22.65	24.00	0.128	<b>0.17</b>	0.229	<b>0.31</b>	0.08
21350	2560	1RB_Mid	Left	Tilt	/	22.65	24.00	0.084	<b>0.11</b>	0.158	<b>0.22</b>	0.06
21350	2560	1RB_Mid	Right	Cheek	/	22.65	24.00	0.082	<b>0.11</b>	0.154	<b>0.21</b>	-0.15
21350	2560	1RB_Mid	Right	Tilt	/	22.65	24.00	0.049	<b>0.07</b>	0.090	<b>0.12</b>	-0.04
21350	2560	50RB-Low	Left	Cheek	/	21.91	23.00	0.074	<b>0.10</b>	0.130	<b>0.17</b>	0.05
21350	2560	50RB-Low	Left	Tilt	/	21.91	23.00	0.065	<b>0.08</b>	0.120	<b>0.15</b>	0.18
21350	2560	50RB-Low	Right	Cheek	/	21.91	23.00	0.080	<b>0.10</b>	0.150	<b>0.19</b>	0.06
21350	2560	50RB-Low	Right	Tilt	/	21.91	23.00	0.040	<b>0.05</b>	0.070	<b>0.09</b>	0.17

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-21: SAR Values (LTE Band7 – Body worn)**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C										
21350	2560	1RB-Mid Front	Fig.21	22.65	24.00	0.139	<b>0.19</b>	0.256	<b>0.35</b>	-0.10
21350	2560	1RB-Mid Rear	/	22.65	24.00	0.187	<b>0.26</b>	0.342	<b>0.47</b>	-0.11
21350	2560	50RB-Low Front	/	21.91	23.00	0.112	<b>0.14</b>	0.204	<b>0.26</b>	0.03
21350	2560	50RB-Low Rear	/	21.91	23.00	0.148	<b>0.19</b>	0.272	<b>0.35</b>	-0.19

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-22: SAR Values (LTE Band7 – Hotspot)**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C										
21100	2535	1RB-Mid Front	/	16.21	17.00	0.068	<b>0.08</b>	0.137	<b>0.16</b>	-0.13
21100	2535	1RB-Mid Rear	/	16.21	17.00	0.077	<b>0.09</b>	0.155	<b>0.19</b>	0.05
21100	2535	1RB-Mid Left	/	16.21	17.00	0.033	<b>0.04</b>	0.062	<b>0.07</b>	0.06
21100	2535	1RB-Mid Right	/	16.21	17.00	0.030	<b>0.04</b>	0.058	<b>0.07</b>	0.03
21100	2535	1RB-Mid Bottom	Fig.22	16.21	17.00	0.130	<b>0.16</b>	0.272	<b>0.33</b>	-0.10
21100	2535	50RB-Low Front	/	15.20	16.00	0.045	<b>0.05</b>	0.087	<b>0.10</b>	0.03
21100	2535	50RB-Low Rear	/	15.20	16.00	0.064	<b>0.08</b>	0.132	<b>0.16</b>	-0.12



21100	2535	50RB-Low Left	/	15.20	16.00	0.028	<b>0.03</b>	0.053	<b>0.06</b>	-0.03
21100	2535	50RB-Low Right		15.20	16.00	0.022	<b>0.03</b>	0.041	<b>0.05</b>	-0.03
21100	2535	50RB-Low Top	/	15.20	16.00	0.102	<b>0.12</b>	0.215	<b>0.26</b>	0.15

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-23: SAR Values (LTE Band12 - Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Powe r Drift (dB)
Ch.	MHz											
23060	704	1RB-Low	Left	Cheek	/	22.76	24.00	0.093	<b>0.12</b>	0.115	<b>0.15</b>	0.03
23060	704	1RB-Low	Left	Tilt	/	22.76	24.00	0.055	<b>0.07</b>	0.068	<b>0.09</b>	-0.07
23060	704	1RB-Low	Right	Cheek	Fig.23	22.76	24.00	0.101	<b>0.13</b>	0.127	<b>0.17</b>	0.02
23060	704	1RB-Low	Right	Tilt	/	22.76	24.00	0.095	<b>0.13</b>	0.118	<b>0.16</b>	-0.01
23060	704	25RB-Mid	Left	Cheek	/	21.65	23.00	0.078	<b>0.11</b>	0.085	<b>0.12</b>	0.08
23060	704	25RB-Mid	Left	Tilt	/	21.65	24.00	0.038	<b>0.07</b>	0.047	<b>0.08</b>	-0.19
23060	704	25RB-Mid	Right	Cheek	/	21.65	24.00	0.063	<b>0.11</b>	0.089	<b>0.15</b>	0.18
23060	704	25RB-Mid	Right	Tilt	/	21.65	24.00	0.057	<b>0.10</b>	0.085	<b>0.15</b>	-0.01

Note1: The LTE mode is QPSK\_10MHz.

**Table 14.1-24: SAR Values (LTE Band12 – Body)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
23060	704	1RB-Low Front	/	22.76	24.00	0.117	<b>0.16</b>	0.164	<b>0.22</b>	0.03
23060	704	1RB-Low Rear	Fig.24	22.76	24.00	0.144	<b>0.19</b>	0.252	<b>0.34</b>	-0.19
23060	704	1RB-Low Left	/	22.76	24.00	0.031	<b>0.04</b>	0.047	<b>0.06</b>	0.17
23060	704	1RB-Low Right	/	22.76	24.00	0.041	<b>0.05</b>	0.063	<b>0.08</b>	-0.04
23060	704	1RB-Low Bottom	/	22.76	24.00	0.088	<b>0.12</b>	0.206	<b>0.27</b>	0.06
23060	704	25RB-Mid Front	/	21.65	23.00	0.093	<b>0.13</b>	0.130	<b>0.18</b>	0.03
23060	704	25RB-Mid Rear	/	21.65	23.00	0.124	<b>0.17</b>	0.221	<b>0.30</b>	-0.10
23060	704	25RB-Mid Left	/	21.65	23.00	<0.01	<0.01	<0.01	<0.01	/
23060	704	25RB-Mid Right		21.65	23.00	0.036	<b>0.05</b>	0.055	<b>0.08</b>	-0.12
23060	704	25RB-Mid Bottom	/	21.65	23.00	0.071	<b>0.10</b>	0.155	<b>0.21</b>	-0.03

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.1-25: SAR Values (LTE Band13 - Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Pow er Drift (dB)
Ch.	MHz											
23230	782	1RB-Mid	Left	Cheek	/	22.72	24.00	0.126	<b>0.17</b>	0.160	<b>0.21</b>	0.05
23230	782	1RB-Mid	Left	Cheek	/	22.72	24.00	0.083	<b>0.11</b>	0.104	<b>0.14</b>	0.10
23230	782	1RB-Mid	Right	Cheek	Fig.25	22.72	24.00	0.155	<b>0.21</b>	0.200	<b>0.27</b>	-0.19
23230	782	1RB-Mid	Right	Tilt	/	22.72	24.00	0.086	<b>0.12</b>	0.107	<b>0.14</b>	0.10
23230	782	25RB-Mid	Left	Cheek	/	21.57	23.00	0.103	<b>0.14</b>	0.132	<b>0.18</b>	0.04
23230	782	25RB-Mid	Left	Tilt	/	21.57	23.00	0.048	<b>0.07</b>	0.063	<b>0.09</b>	0.19
23230	782	25RB-Mid	Right	Cheek	/	21.57	23.00	0.142	<b>0.20</b>	0.182	<b>0.25</b>	0.03
23230	782	25RB-Mid	Right	Tilt	/	21.57	23.00	0.073	<b>0.10</b>	0.093	<b>0.13</b>	-0.04

Note1: The LTE mode is QPSK\_10MHz.

**Table 14.1-26: SAR Values (LTE Band13 – Body)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
23230	782	1RB-Mid Front	/	22.72	24.00	0.119	<b>0.16</b>	0.196	<b>0.26</b>	0.18
23230	782	1RB-Mid Rear	Fig.26	22.72	24.00	0.198	<b>0.27</b>	0.353	<b>0.47</b>	0.12
23230	782	1RB-Mid Left	/	22.72	24.00	<0.01	<0.01	<0.01	<0.01	/
23230	782	1RB-Mid Right	/	22.72	24.00	0.057	<b>0.08</b>	0.087	<b>0.12</b>	0.03
23230	782	1RB-Mid Bottom	/	22.72	24.00	0.139	<b>0.19</b>	0.263	<b>0.35</b>	0.09
23230	782	25RB-Mid Front	/	21.57	23.00	0.093	<b>0.13</b>	0.153	<b>0.21</b>	0.04
23230	782	25RB-Mid Rear	/	21.57	23.00	0.151	<b>0.21</b>	0.268	<b>0.37</b>	-0.11
23230	782	25RB-Mid Left	/	21.57	23.00	<0.01	<0.01	<0.01	<0.01	/
23230	782	25RB-Mid Right	/	21.57	23.00	0.041	<b>0.06</b>	0.062	<b>0.09</b>	-0.06
23230	782	25RB-Mid Top	/	21.57	23.00	0.097	<b>0.13</b>	0.212	<b>0.29</b>	0.07

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_10MHz.

**Table 14.1-27: SAR Values (LTE Band25 - Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Pow er Drift (dB)
Ch.	MHz											
26590	1905	1RB-Mid	Left	Cheek	Fig.27	22.74	24.00	0.226	<b>0.30</b>	0.350	<b>0.47</b>	0.12
26590	1905	1RB-Mid	Left	Tilt	/	22.74	24.00	0.101	<b>0.13</b>	0.156	<b>0.21</b>	-0.03
26590	1905	1RB-Mid	Right	Cheek	/	22.74	24.00	0.120	<b>0.16</b>	0.180	<b>0.24</b>	-0.13
26590	1905	1RB-Mid	Right	Tilt	/	22.74	24.00	0.098	<b>0.13</b>	0.162	<b>0.22</b>	-0.09
26590	1905	50RB-Mid	Left	Cheek	/	21.94	23.00	0.145	<b>0.19</b>	0.221	<b>0.28</b>	0.09
26590	1905	50RB-Mid	Left	Tilt	/	21.94	23.00	0.105	<b>0.13</b>	0.167	<b>0.21</b>	0.03
26590	1905	50RB-Mid	Right	Cheek	/	21.94	23.00	0.105	<b>0.13</b>	0.155	<b>0.20</b>	-0.09
26590	1905	50RB-Mid	Right	Tilt	/	21.94	23.00	0.083	<b>0.11</b>	0.139	<b>0.18</b>	0.11

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-28: SAR Values (LTE Band25– Body worn)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
26590	1905	1RB-Mid Front		22.74	24.00	0.134	<b>0.18</b>	0.221	<b>0.30</b>	-0.01
26590	1905	1RB-Mid Rear	Fig.28	22.74	24.00	0.204	<b>0.27</b>	0.344	<b>0.46</b>	-0.10
26590	1905	50RB-Mid Front	/	21.94	23.00	0.107	<b>0.14</b>	0.172	<b>0.22</b>	-0.17
26590	1905	50RB-Mid Rear	/	21.94	23.00	0.162	<b>0.21</b>	0.273	<b>0.35</b>	0.11

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-29: SAR Values (LTE Band25 – Hotspot)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
26140	1860	1RB-Mid Front	/	20.70	21.50	0.171	<b>0.21</b>	0.290	<b>0.35</b>	0.08
26140	1860	1RB-Mid Rear	Fig.29	20.70	21.50	0.245	<b>0.29</b>	0.436	<b>0.52</b>	0.14
26140	1860	1RB-Mid Left	/	20.70	21.50	0.157	<b>0.19</b>	0.288	<b>0.35</b>	0.12
26140	1860	1RB-Mid Bottom	/	20.70	21.50	0.167	<b>0.20</b>	0.294	<b>0.35</b>	0.05
26140	1860	50RB-Low Front	/	19.77	20.50	0.134	<b>0.16</b>	0.227	<b>0.27</b>	-0.01
26140	1860	50RB-Low Rear	/	21.84	20.50	0.198	<b>0.15</b>	0.339	<b>0.25</b>	0.06
26140	1860	50RB-Low Left	/	21.84	20.50	0.099	<b>0.07</b>	0.192	<b>0.14</b>	-0.11
26140	1860	50RB-Low Bottom	/	21.84	20.50	0.123	<b>0.09</b>	0.216	<b>0.16</b>	-0.17

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-30: SAR Values (LTE Band26 - Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Pow er Drift (dB)
Ch.	MHz											
26965	841.5	1RB-High	Left	Cheek	/	22.65	24.00	0.130	<b>0.18</b>	0.167	<b>0.23</b>	-0.07
26965	841.5	1RB-High	Left	Tilt	/	22.65	24.00	0.074	<b>0.10</b>	0.092	<b>0.13</b>	0.07
26965	841.5	1RB-High	Right	Cheek	Fig.30	22.65	24.00	0.172	<b>0.23</b>	0.222	<b>0.30</b>	0.01
26965	841.5	1RB-High	Right	Tilt	/	22.65	24.00	0.102	<b>0.14</b>	0.126	<b>0.17</b>	0.13
26965	841.5	36RB-High	Left	Cheek	/	21.57	23.00	0.108	<b>0.15</b>	0.140	<b>0.19</b>	-0.18
26965	841.5	36RB-High	Left	Tilt	/	21.57	23.00	0.056	<b>0.08</b>	0.072	<b>0.10</b>	0.01
26965	841.5	36RB-High	Right	Cheek	/	21.57	23.00	0.125	<b>0.17</b>	0.161	<b>0.22</b>	-0.05
26965	841.5	36RB-High	Right	Tilt	/	21.57	23.00	0.066	<b>0.09</b>	0.084	<b>0.12</b>	0.09

Note1: The LTE mode is QPSK\_15MHz.

**Table 14.1-31: SAR Values (LTE Band26 – Body)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
26965	841.5	1RB-High Front	/	22.65	24.00	0.177	<b>0.24</b>	0.298	<b>0.41</b>	0.10
26965	841.5	1RB-High Rear	Fig.31	22.65	24.00	0.279	<b>0.38</b>	0.500	<b>0.68</b>	0.17
26965	841.5	1RB-High Left	/	22.65	24.00	<0.01	<0.01	<0.01	<0.01	/
26965	841.5	1RB-High Right	/	22.65	24.00	0.056	<b>0.08</b>	0.088	<b>0.12</b>	-0.11

26965	841.5	1RB-High Bottom	/	22.65	24.00	0.162	<b>0.22</b>	0.307	<b>0.42</b>	-0.16
26965	841.5	36RB-High Front	/	21.57	23.00	0.130	<b>0.18</b>	0.221	<b>0.31</b>	-0.19
26965	841.5	36RB-High Rear	/	21.57	23.00	0.208	<b>0.29</b>	0.376	<b>0.52</b>	0.09
26965	841.5	36RB-High Left	/	21.57	23.00	<0.01	<0.01	<0.01	<0.01	/
26965	841.5	36RB-High Right	/	21.57	23.00	0.039	<b>0.05</b>	0.063	<b>0.09</b>	-0.10
26965	841.5	36RB-High Bottom	/	21.57	23.00	0.132	<b>0.18</b>	0.302	<b>0.42</b>	0.09

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_15MHz.

**Table 14.1-32: SAR Values (LTE Band38 - Head)**

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C					Power Drift (dB)
Ch.	MHz	Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
38150	2610	1RB-Mid	Left	Cheek	Fig.32	22.98	24.00	0.078	<b>0.10</b>	0.141	<b>0.18</b>	0.07
38150	2610	1RB-Mid	Left	Tilt	/	22.98	24.00	0.050	<b>0.06</b>	0.094	<b>0.12</b>	-0.13
38150	2610	1RB-Mid	Right	Cheek	/	22.98	24.00	0.055	<b>0.07</b>	0.105	<b>0.13</b>	-0.10
38150	2610	1RB-Mid	Right	Tilt	/	22.98	24.00	0.031	<b>0.04</b>	0.057	<b>0.07</b>	-0.09
38150	2610	50RB-Low	Left	Cheek	/	21.95	23.00	0.058	<b>0.07</b>	0.106	<b>0.13</b>	-0.16
38150	2610	50RB-Low	Left	Tilt	/	21.95	23.00	0.041	<b>0.05</b>	0.074	<b>0.09</b>	-0.02
38150	2610	50RB-Low	Right	Cheek	/	21.95	23.00	0.043	<b>0.05</b>	0.084	<b>0.11</b>	0.11
38150	2610	50RB-Low	Right	Tilt	/	21.95	23.00	0.025	<b>0.03</b>	0.046	<b>0.06</b>	0.11

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-33: SAR Values (LTE Band38– Body worn)**

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C				
Ch.	MHz	Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
38150	2610	1RB-Mid Front	/	22.98	24.00	0.099	<b>0.13</b>	0.182	<b>0.23</b>	-0.09	
38150	2610	1RB-Mid Rear	Fig.33	22.98	24.00	0.142	<b>0.18</b>	0.266	<b>0.34</b>	-0.08	
38150	2610	50RB-Low Front	/	21.95	23.00	0.082	<b>0.10</b>	0.154	<b>0.20</b>	-0.17	
38150	2610	50RB-Low Rear	/	21.95	23.00	0.113	<b>0.14</b>	0.211	<b>0.27</b>	0.12	

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-34: SAR Values (LTE Band38 – Hotspot)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C			
Ch.	MHz				Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
37850	2580	1RB-Low Front	/	20.45	21.00	0.118	<b>0.13</b>	0.215	<b>0.24</b>	-0.13
37850	2580	1RB-Low Rear	/	20.45	21.00	0.143	<b>0.16</b>	0.263	<b>0.30</b>	-0.06
37850	2580	1RB-Low Left	/	20.45	21.00	0.067	<b>0.08</b>	0.118	<b>0.13</b>	0.19
37850	2580	1RB-Low Right	/	20.45	21.00	0.043	<b>0.05</b>	0.077	<b>0.09</b>	-0.06
37850	2580	1RB-Low Bottom	Fig.34	20.45	21.00	0.183	<b>0.21</b>	0.374	<b>0.42</b>	0.04
37850	2580	50RB-Low Front	/	19.49	20.00	0.096	<b>0.11</b>	0.181	<b>0.20</b>	-0.06
37850	2580	50RB-Low Rear	/	19.49	20.00	0.107	<b>0.12</b>	0.198	<b>0.22</b>	-0.15
37850	2580	50RB-Low Rear		19.49	20.00	0.049	<b>0.06</b>	0.085	<b>0.10</b>	0.12
37850	2580	50RB-Low Right	/	19.49	20.00	0.037	<b>0.04</b>	0.065	<b>0.07</b>	0.09
37850	2580	50RB-Low Bottom	/	19.49	20.00	0.159	<b>0.18</b>	0.312	<b>0.35</b>	0.07

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-35: SAR Values (LTE Band41 PC3 - Head)**

Frequency		Mode	Side	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C				
Ch.	MHz					Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
41490	2680	1RB-Mid	Left	Cheek	Fig.35	22.82	24.00	0.081	<b>0.11</b>	0.149	<b>0.20</b>	-0.09
41490	2680	1RB-Mid	Left	Tilt	/	22.82	24.00	0.078	<b>0.10</b>	0.145	<b>0.19</b>	-0.02
41490	2680	1RB-Mid	Right	Cheek	/	22.82	24.00	0.050	<b>0.07</b>	0.092	<b>0.12</b>	0.02
41490	2680	1RB-Mid	Right	Tilt	/	22.82	24.00	0.046	<b>0.06</b>	0.080	<b>0.10</b>	-0.01
40620	2593	50RB-Low	Left	Cheek	/	21.83	23.00	0.080	<b>0.10</b>	0.147	<b>0.19</b>	0.09
40620	2593	50RB-Low	Left	Tilt	/	21.83	23.00	0.075	<b>0.10</b>	0.137	<b>0.18</b>	-0.08
40620	2593	50RB-Low	Right	Cheek	/	21.83	23.00	0.048	<b>0.06</b>	0.088	<b>0.12</b>	0.13
40620	2593	50RB-Low	Right	Tilt	/	21.83	23.00	0.047	<b>0.06</b>	0.085	<b>0.11</b>	0.18
41515	2682.5	UL CA	Left	Cheek	/	22.92	24.00	0.067	<b>0.09</b>	0.138	<b>0.18</b>	-0.11

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-36: SAR Values (LTE Band41 PC3– Body worn)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C					
Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
41490	2680	1RB-Mid Front	/	22.82	24.00	0.110	<b>0.14</b>	0.204	<b>0.27</b>	-0.15
41490	2680	1RB-Mid Rear	Fig.36	22.82	24.00	0.152	<b>0.20</b>	0.282	<b>0.37</b>	-0.04
40620	2593	50RB-Low Front	/	21.83	23.00	0.081	<b>0.11</b>	0.148	<b>0.19</b>	-0.03
40620	2593	50RB-Low Rear	/	21.83	23.00	0.099	<b>0.13</b>	0.184	<b>0.24</b>	0.06
41515	2682.5	UL CA Rear	/	22.92	24.00	0.143	<b>0.18</b>	0.269	<b>0.34</b>	0.06

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-37: SAR Values (LTE Band41 PC3 – Hotspot)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C					
Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
39750	2506	1RB-Low Front	/	18.91	19.00	0.061	<b>0.06</b>	0.113	<b>0.12</b>	0.17
39750	2506	1RB-Low Rear	/	18.91	19.00	0.074	<b>0.08</b>	0.140	<b>0.14</b>	-0.11
39750	2506	1RB-Low Left	/	18.91	19.00	0.027	<b>0.03</b>	0.049	<b>0.05</b>	-0.10
39750	2506	1RB-Low Right	/	18.91	19.00	0.026	<b>0.03</b>	0.047	<b>0.05</b>	0.11
39750	2506	1RB-Low Bottom	Fig.37	18.91	19.00	0.132	<b>0.13</b>	0.275	<b>0.28</b>	0.09
39750	2506	50RB-Mid Front	/	17.91	18.00	0.045	<b>0.05</b>	0.091	<b>0.09</b>	-0.19
39750	2506	50RB-Mid Rear	/	17.91	18.00	0.061	<b>0.06</b>	0.115	<b>0.12</b>	0.03
39750	2506	50RB-Mid Rear	/	17.91	18.00	0.023	<b>0.02</b>	0.040	<b>0.04</b>	-0.13
39750	2506	50RB-Mid Right	/	17.91	18.00	0.013	<b>0.01</b>	0.027	<b>0.03</b>	-0.03
39750	2506	50RB-Mid Bottom	/	17.91	18.00	0.111	<b>0.11</b>	0.231	<b>0.24</b>	0.01
41515	2682.5	UL CA Bottom	/	18.53	19.00	0.112	<b>0.12</b>	0.238	<b>0.27</b>	0.08

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-38: SAR Values (LTE Band41 PC2 - Head)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C							
Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
40620	2593	1RB-Mid	Left	Cheek	Fig.38	25.72	27.00	0.091	<b>0.12</b>	0.165	<b>0.22</b>	-0.18
40620	2593	1RB-Mid	Left	Tilt	/	25.72	27.00	0.073	<b>0.10</b>	0.137	<b>0.18</b>	0.01
40620	2593	1RB-Mid	Right	Cheek	/	25.72	27.00	0.070	<b>0.09</b>	0.133	<b>0.18</b>	-0.05



40620	2593	1RB-Mid	Right	Tilt	/	25.72	27.00	0.042	<b>0.06</b>	0.076	<b>0.10</b>	0.09
40620	2593	50RB-Low	Left	Cheek	/	24.70	26.00	0.086	<b>0.12</b>	0.155	<b>0.21</b>	-0.11
40620	2593	50RB-Low	Left	Tilt	/	24.70	26.00	0.073	<b>0.10</b>	0.137	<b>0.18</b>	0.1
40620	2593	50RB-Low	Right	Cheek	/	24.70	26.00	0.059	<b>0.08</b>	0.112	<b>0.15</b>	0.17
40620	2593	50RB-Low	Right	Tilt	/	24.70	26.00	0.035	<b>0.05</b>	0.064	<b>0.09</b>	-0.09
41490	2680	UL CA	Left	Cheek	/	26.69	27.00	0.074	<b>0.08</b>	0.152	<b>0.16</b>	0.09

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-39: SAR Values (LTE Band41 PC2– Body worn)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
Ch.	MHz										
		Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5 °C									
40620	2593	1RB-Mid Front	/	25.72	27.00	0.105	<b>0.14</b>	0.192	<b>0.26</b>	-0.16	
40620	2593	1RB-Mid Rear	Fig.39	25.72	27.00	0.134	<b>0.18</b>	0.248	<b>0.33</b>	-0.19	
40620	2593	50RB-Low Front	/	24.70	26.00	0.092	<b>0.12</b>	0.166	<b>0.22</b>	0.09	
40620	2593	50RB-Low Rear	/	24.70	26.00	0.118	<b>0.16</b>	0.220	<b>0.30</b>	0.06	
41490	2680	UL CA Rear	/	26.69	27.00	0.120	<b>0.13</b>	0.226	<b>0.24</b>	-0.06	

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-40: SAR Values (LTE Band41 PC2 – Hotspot)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
Ch.	MHz										
		Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5 °C									
39750	2506	1RB-Mid Front	/	21.90	22.50	0.082	<b>0.09</b>	0.151	<b>0.17</b>	-0.19	
39750	2506	1RB-Mid Rear	/	21.90	22.50	0.111	<b>0.13</b>	0.214	<b>0.25</b>	0.18	
39750	2506	1RB-Mid Left	/	21.90	22.50	0.038	<b>0.04</b>	0.064	<b>0.07</b>	-0.01	
39750	2506	1RB-Mid Right	/	21.90	22.50	0.034	<b>0.04</b>	0.062	<b>0.07</b>	0.09	
39750	2506	1RB-Mid Bottom	Fig.40	21.90	22.50	0.165	<b>0.19</b>	0.343	<b>0.39</b>	0.03	
39750	2506	50RB-High Front	/	20.89	21.50	0.061	<b>0.07</b>	0.117	<b>0.13</b>	-0.19	
39750	2506	50RB-High Rear	/	20.89	21.50	0.078	<b>0.09</b>	0.154	<b>0.18</b>	0.17	
39750	2506	50RB-High Left	/	20.89	21.50	0.031	<b>0.04</b>	0.055	<b>0.06</b>	-0.04	
39750	2506	50RB-High Right	/	20.89	21.50	0.025	<b>0.03</b>	0.047	<b>0.05</b>	-0.05	
39750	2506	50RB-High Bottom	/	20.89	21.50	0.128	<b>0.15</b>	0.264	<b>0.30</b>	-0.18	
39750	2506	UL CA Bottom	/	22.34	22.50	0.144	<b>0.15</b>	0.305	<b>0.32</b>	-0.16	

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.



**Table 14.1-41: SAR Values (LTE Band66 ANT1- Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Pow er Drift (dB)
Ch.	MHz											
132072	1720	1RB-Mid	Left	Cheek	Fig.41	22.82	24.00	0.136	<b>0.18</b>	0.204	<b>0.27</b>	0.04
132072	1720	1RB-Mid	Left	Tilt	/	22.82	24.00	0.086	<b>0.11</b>	0.127	<b>0.17</b>	0.18
132072	1720	1RB-Mid	Right	Cheek		22.82	24.00	0.099	<b>0.13</b>	0.150	<b>0.20</b>	-0.06
132072	1720	1RB-Mid	Right	Tilt	/	22.82	24.00	0.082	<b>0.11</b>	0.130	<b>0.17</b>	-0.13
132572	1770	50RB-Mid	Left	Cheek	/	21.89	23.00	0.084	<b>0.11</b>	0.124	<b>0.16</b>	0.04
132572	1770	50RB-Mid	Left	Tilt	/	21.89	23.00	0.076	<b>0.10</b>	0.113	<b>0.15</b>	0.08
132572	1770	50RB-Mid	Right	Cheek	/	21.89	23.00	0.075	<b>0.10</b>	0.110	<b>0.14</b>	-0.04
132572	1770	50RB-Mid	Right	Tilt	/	21.89	23.00	0.057	<b>0.07</b>	0.088	<b>0.11</b>	0.12

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-42: SAR Values (LTE Band66 ANT1 – Body worn)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
132072	1720	1RB-Mid Front	/	22.82	24.00	0.232	<b>0.30</b>	0.340	<b>0.45</b>	0.03
132072	1720	1RB-Mid Rear	Fig.42	22.82	24.00	0.296	<b>0.39</b>	0.445	<b>0.58</b>	0.09
132572	1770	50RB-Mid Front	/	21.89	23.00	0.187	<b>0.24</b>	0.274	<b>0.35</b>	0.01
132572	1770	50RB-Mid Rear	/	21.89	23.00	0.237	<b>0.31</b>	0.356	<b>0.46</b>	-0.11

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-43: SAR Values (LTE Band66 ANT1– Hotspot)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
132572	1770	1RB-Mid Front	/	19.45	20.00	0.176	<b>0.20</b>	0.290	<b>0.33</b>	-0.06
132572	1770	1RB-Mid Rear	Fig.43	19.45	20.00	0.252	<b>0.29</b>	0.444	<b>0.50</b>	-0.01
132572	1770	1RB-Mid Left	/	19.45	20.00	0.158	<b>0.18</b>	0.274	<b>0.31</b>	-0.10
132572	1770	1RB-Mid Bottom	/	19.45	20.00	0.186	<b>0.21</b>	0.322	<b>0.37</b>	0.11
132572	1770	50RB-Mid Front	/	18.48	19.00	0.135	<b>0.15</b>	0.224	<b>0.25</b>	0.09
132572	1770	50RB-Mid Rear	/	18.48	19.00	0.194	<b>0.22</b>	0.340	<b>0.38</b>	0.08
132572	1770	50RB-Mid Left	/	18.48	19.00	0.137	<b>0.15</b>	0.238	<b>0.27</b>	0.14
132572	1770	50RB-Mid Bottom	/	18.48	19.00	0.151	<b>0.17</b>	0.265	<b>0.30</b>	-0.19

132572	1770	1RB-Mid Front	Note3	17.51	18.00	0.098	<b>0.11</b>	0.163	<b>0.18</b>	0.05
132572	1770	1RB-Mid Rear	Note3	17.51	18.00	0.134	<b>0.15</b>	0.238	<b>0.27</b>	-0.09
132572	1770	1RB-Mid Left	Note3	17.51	18.00	0.079	<b>0.09</b>	0.146	<b>0.16</b>	-0.03
132572	1770	1RB-Mid Bottom	Note3	17.51	18.00	0.098	<b>0.11</b>	0.178	<b>0.20</b>	0.11
132572	1770	50RB-Mid Front	Note3	16.56	17.00	0.070	<b>0.08</b>	0.120	<b>0.13</b>	-0.09
132572	1770	50RB-Mid Rear	Note3	16.56	17.00	0.098	<b>0.11</b>	0.175	<b>0.19</b>	0.02
132572	1770	50RB-Mid Left	Note3	16.56	17.00	0.066	<b>0.07</b>	0.117	<b>0.13</b>	-0.04
132572	1770	50RB-Mid Bottom	Note3	16.56	17.00	0.078	<b>0.09</b>	0.142	<b>0.16</b>	0.09

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

Note3: The results are for ENDC only.

**Table 14.1-44: SAR Values (LTE Band66 ANT4- Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Pow er Drift (dB)
Ch.	MHz											
Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
132072	1720	1RB-Mid	Left	Cheek	Note2	18.23	19.50	0.084	<b>0.11</b>	0.161	<b>0.22</b>	-0.04
132072	1720	1RB-Mid	Left	Tilt	Note2	18.23	19.50	0.106	<b>0.14</b>	0.212	<b>0.28</b>	0.19
132072	1720	1RB-Mid	Right	Cheek	Note2	18.23	19.50	0.149	<b>0.20</b>	0.354	<b>0.47</b>	0.03
132072	1720	1RB-Mid	Right	Tilt	Note2/ Fig.44	18.23	19.50	0.174	<b>0.23</b>	0.400	<b>0.54</b>	-0.04
132072	1720	50RB-Mid	Left	Cheek	Note2	18.25	19.50	0.086	<b>0.11</b>	0.166	<b>0.22</b>	0.04
132072	1720	50RB-Mid	Left	Tilt	Note2	18.25	19.50	0.103	<b>0.14</b>	0.211	<b>0.28</b>	0.18
132072	1720	50RB-Mid	Right	Cheek	Note2	18.25	19.50	0.140	<b>0.19</b>	0.318	<b>0.42</b>	0.04
132072	1720	50RB-Mid	Right	Tilt	Note2	18.25	19.50	0.155	<b>0.21</b>	0.345	<b>0.46</b>	-0.13
132072	1720	1RB-Mid	Left	Cheek	Note3	15.68	17.00	0.065	<b>0.09</b>	0.130	<b>0.18</b>	-0.09
132072	1720	1RB-Mid	Left	Tilt	Note3	15.68	17.00	0.084	<b>0.11</b>	0.180	<b>0.24</b>	0.04
132072	1720	1RB-Mid	Right	Cheek	Note3	15.68	17.00	0.108	<b>0.15</b>	0.251	<b>0.34</b>	0.12
132072	1720	1RB-Mid	Right	Tilt	Note3	15.68	17.00	0.118	<b>0.16</b>	0.278	<b>0.38</b>	-0.06
132072	1720	50RB-Mid	Left	Cheek	Note3	15.89	17.00	0.069	<b>0.09</b>	0.135	<b>0.17</b>	0.03
132072	1720	50RB-Mid	Left	Tilt	Note3	15.89	17.00	0.081	<b>0.10</b>	0.172	<b>0.22</b>	0.09
132072	1720	50RB-Mid	Right	Cheek	Note3	15.89	17.00	0.111	<b>0.14</b>	0.249	<b>0.32</b>	0.02
132072	1720	50RB-Mid	Right	Tilt	Note3	15.89	17.00	0.122	<b>0.16</b>	0.272	<b>0.35</b>	0.11

Note1: The LTE mode is QPSK\_20MHz.

Note2: The results are for cellular antenna transmit alone.

Note3: The results are for cellular antenna transmit with WIFI.

**Table 14.1-45: SAR Values (LTE Band66 ANT4 – Body worn)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
132072	1720	1RB-Low Front	/	23.57	24.00	0.041	<b>0.05</b>	0.072	<b>0.08</b>	0.02
132072	1720	1RB-Low Rear	Fig.45	23.57	24.00	0.069	<b>0.08</b>	0.126	<b>0.14</b>	-0.19
132072	1720	50RB-Mid Front	/	22.54	23.00	0.034	<b>0.04</b>	0.060	<b>0.07</b>	0.04
132072	1720	50RB-Mid Rear	/	22.54	23.00	0.055	<b>0.06</b>	0.102	<b>0.11</b>	0.11

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK\_20MHz.

**Table 14.1-46 SAR Values (LTE Band66 ANT4 – Hotspot)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
132072	1720	1RB-Mid Front	/	22.56	23.00	0.055	<b>0.06</b>	0.097	<b>0.11</b>	0.12
132072	1720	1RB-Mid Rear	Fig.46	22.56	23.00	0.098	<b>0.11</b>	0.194	<b>0.21</b>	-0.09
132072	1720	1RB-Mid Left	/	22.56	23.00	0.025	<b>0.03</b>	0.043	<b>0.05</b>	-0.04
132072	1720	1RB-Mid Top	/	22.56	23.00	0.094	<b>0.10</b>	0.181	<b>0.20</b>	0.09
132072	1720	50RB-Mid Front	/	22.53	23.00	0.055	<b>0.06</b>	0.097	<b>0.11</b>	0.13
132072	1720	50RB-Mid Rear	/	22.53	23.00	0.087	<b>0.10</b>	0.170	<b>0.19</b>	-0.10
132072	1720	50RB-Mid Left	/	22.53	23.00	0.024	<b>0.03</b>	0.041	<b>0.05</b>	-0.09
132072	1720	50RB-Mid Top	/	22.53	23.00	0.092	<b>0.10</b>	0.172	<b>0.19</b>	0.05

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

Note3: The results are for ENDC only.

**Table 14.1-47: SAR Values (LTE Band71- Head)**

Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Pow er Drift (dB)
Ch.	MHz											
133322	683	1RB-Mid	Left	Cheek	/	22.70	24.00	0.026	<b>0.04</b>	0.033	<b>0.04</b>	0.03
133322	683	1RB-Mid	Left	Tilt	/	22.70	24.00	<0.01	<0.01	<0.01	<0.01	/
133322	683	1RB-Mid	Right	Cheek	/	22.70	24.00	0.035	<b>0.05</b>	0.045	<b>0.06</b>	0.18
133322	683	1RB-Mid	Right	Tilt	Fig.47	22.70	24.00	0.043	<b>0.06</b>	0.056	<b>0.08</b>	0.09
133322	683	50RB-Low	Left	Cheek	/	21.64	23.00	0.021	<b>0.03</b>	0.028	<b>0.04</b>	0.02
133322	683	50RB-Low	Left	Tilt	/	21.64	23.00	<0.01	<0.01	<0.01	<0.01	/
133322	683	50RB-Low	Right	Cheek	/	21.64	23.00	0.030	<b>0.04</b>	0.039	<b>0.05</b>	-0.06
133322	683	50RB-Low	Right	Tilt	/	21.64	23.00	0.027	<b>0.04</b>	0.051	<b>0.07</b>	0.08

Note1: The LTE mode is QPSK\_20MHz.

**Table 14.1-48 SAR Values (LTE Band71 – Body)**

Frequency		Mode	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
133322	683	1RB-Mid Front	/	22.70	24.00	0.080	<b>0.11</b>	0.105	<b>0.14</b>	0.01
133322	683	1RB-Mid Rear	/	22.70	24.00	0.133	<b>0.18</b>	0.173	<b>0.23</b>	-0.1
133322	683	1RB-Mid Left	/	22.70	24.00	0.077	<b>0.10</b>	0.110	<b>0.15</b>	-0.08
133322	683	1RB-Mid Right	Fig.48	22.70	24.00	0.148	<b>0.20</b>	0.210	<b>0.28</b>	-0.07
133322	683	1RB-Mid Bottom	/	22.70	24.00	0.060	<b>0.08</b>	0.124	<b>0.17</b>	-0.09
133322	683	50RB-Mid Front	/	21.64	23.00	0.071	<b>0.10</b>	0.093	<b>0.13</b>	-0.04
133322	683	50RB-Mid Rear	/	21.64	23.00	0.117	<b>0.16</b>	0.153	<b>0.21</b>	0.09
133322	683	50RB-Mid Left	/	21.64	23.00	0.065	<b>0.09</b>	0.093	<b>0.13</b>	0.09
133322	683	50RB-Mid Right	/	21.64	23.00	0.126	<b>0.17</b>	0.179	<b>0.24</b>	0.09
133322	683	50RB-Mid Bottom	/	21.64	23.00	0.053	<b>0.07</b>	0.108	<b>0.15</b>	0.03

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK\_20MHz.

## 14.2 SAR results for 5G NR

**Table 14.2-1: SAR Values (n25 ANT1–Head) – SA/NSA**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
374592	1882.5	Left	Cheek	Fig.49	22.91	24.00	0.139	<b>0.18</b>	0.219	<b>0.28</b>	-0.13
374592	1882.5	Left	Tilt	/	22.91	24.00	0.053	<b>0.07</b>	0.082	<b>0.11</b>	0.05
374592	1882.5	Right	Cheek	/	22.91	24.00	0.075	<b>0.10</b>	0.112	<b>0.14</b>	-0.09
374592	1882.5	Right	Tilt	/	22.91	24.00	0.066	<b>0.08</b>	0.107	<b>0.14</b>	0.03

**Table 14.2-2: SAR Values (n25 ANT1–Body worn) – SA/NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
374592	1882.5	Front	/	22.91	24.00	0.133	<b>0.17</b>	0.222	<b>0.29</b>	-0.09
374592	1882.5	Rear	Fig.50	22.91	24.00	0.202	<b>0.26</b>	0.344	<b>0.44</b>	0.06

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.2-3: SAR Values (n25 ANT1–Hotspot) – SA/NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
370092	1860	Front	/	21.48	22.00	0.127	<b>0.14</b>	0.214	<b>0.24</b>	0.06
370092	1860	Rear	Fig.51	21.48	22.00	0.206	<b>0.23</b>	0.373	<b>0.42</b>	-0.12
370092	1860	Left	/	21.48	22.00	0.097	<b>0.11</b>	0.177	<b>0.20</b>	0.03
370092	1860	Bottom	/	21.48	22.00	0.166	<b>0.19</b>	0.300	<b>0.34</b>	-0.10

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.2-4: SAR Values (n25 ANT4–Head) – NSA**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
370092	1860	Left	Cheek		17.84	18.50	0.180	<b>0.21</b>	0.348	<b>0.41</b>	0.04
370092	1860	Left	Tilt	/	17.84	18.50	0.240	<b>0.28</b>	0.523	<b>0.61</b>	0.05
370092	1860	Right	Cheek	/	17.84	18.50	0.276	<b>0.32</b>	0.556	<b>0.65</b>	0.15
370092	1860	Right	Tilt	Fig.52	17.84	18.50	0.301	<b>0.35</b>	0.645	<b>0.75</b>	-0.14

**Table 14.2-5: SAR Values (n25 ANT4–Body worn) – NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
370050	1852.5	Front	/	23.84	24.00	0.134	<b>0.14</b>	0.227	<b>0.24</b>	0.07
370050	1852.5	Rear	Fig.53	23.84	24.00	0.178	<b>0.18</b>	0.310	<b>0.32</b>	-0.07

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.2-6: SAR Values (n25 ANT4–Hotspot) – NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
370092	1860	Front	/	22.16	23.00	0.207	<b>0.25</b>	0.374	<b>0.45</b>	0.13
370092	1860	Rear	Fig.54	22.16	23.00	0.305	<b>0.37</b>	0.563	<b>0.68</b>	-0.01
370092	1860	Left	/	22.16	23.00	0.093	<b>0.11</b>	0.160	<b>0.19</b>	0.07
370092	1860	Top	/	22.16	23.00	0.207	<b>0.25</b>	0.391	<b>0.47</b>	0.19

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.2-7: SAR Values (n41–Head) – SA/NSA**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C									
535988	2679.99	Left	Cheek	/	16.29	17.00	0.065	<b>0.08</b>	0.139	<b>0.16</b>	-0.09
535988	2679.99	Left	Tilt	/	16.29	17.00	0.102	<b>0.12</b>	0.231	<b>0.27</b>	0.19
535988	2679.99	Right	Cheek	/	16.29	17.00	0.198	<b>0.23</b>	0.454	<b>0.53</b>	-0.06
535988	2679.99	Right	Tilt	Fig.55	16.29	17.00	0.244	<b>0.29</b>	0.576	<b>0.68</b>	-0.14

**Table 14.2-8: SAR Values (n41–Body worn) – SA/NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
Ch.	MHz										
Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C									
518598	2592.99	Front	/	25.36	27.00	0.129	<b>0.19</b>	0.241	<b>0.35</b>	-0.01	
518598	2592.99	Rear	Fig.56	25.36	27.00	0.140	<b>0.20</b>	0.278	<b>0.41</b>	0.12	

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.2-9: SAR Values (n41–Hotspot) – SA/NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
Ch.	MHz										
Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C									
535988	2679.99	Front	/	20.45	21.50	0.152	<b>0.19</b>	0.283	<b>0.36</b>	-0.03	
535988	2679.99	Rear	/	20.45	21.50	0.138	<b>0.18</b>	0.250	<b>0.32</b>	0.06	
535988	2679.99	Left	/	20.45	21.50	0.163	<b>0.21</b>	0.306	<b>0.39</b>	0.15	
535988	2679.99	Right	/	20.45	21.50	<0.01	<0.01	<0.01	<0.01	/	
535988	2679.99	Top	Fig.57	20.45	21.50	0.199	<b>0.25</b>	0.483	<b>0.62</b>	-0.16	

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.2-10: SAR Values (n66 ANT1–Head) – SA/NSA**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
349000	1745	Left	Cheek	Fig.58	22.98	24.00	0.146	<b>0.18</b>	0.222	<b>0.28</b>	0.03
349000	1745	Left	Tilt	/	22.98	24.00	0.060	<b>0.08</b>	0.088	<b>0.11</b>	-0.12
349000	1745	Right	Cheek		22.98	24.00	0.083	<b>0.10</b>	0.118	<b>0.15</b>	-0.03
349000	1745	Right	Tilt	/	22.98	24.00	0.055	<b>0.07</b>	0.084	<b>0.11</b>	-0.03

**Table 14.2-11: SAR Values (n66 ANT1– Body worn) – SA/NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
349000	1745	Front	/	22.98	24.00	0.177	<b>0.22</b>	0.254	<b>0.32</b>	-0.03
349000	1745	Rear	Fig.59	22.98	24.00	0.260	<b>0.33</b>	0.397	<b>0.50</b>	-0.04

Note1: The distance between the EUT and the phantom bottom is 15mm

**Table 14.2-12: SAR Values (n66 ANT1 –Hotspot) – SA/NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
349000	1745	Front	/	19.43	20.00	0.106	<b>0.12</b>	0.169	<b>0.19</b>	0.02
349000	1745	Rear	Fig.60	19.43	20.00	0.157	<b>0.18</b>	0.271	<b>0.31</b>	0.09
349000	1745	Left	/	19.43	20.00	0.098	<b>0.11</b>	0.164	<b>0.19</b>	0.15
349000	1745	Bottom	/	19.43	20.00	0.138	<b>0.16</b>	0.238	<b>0.27</b>	-0.03

Note1: The distance between the EUT and the phantom bottom is 10mm



**Table 14.2-13: SAR Values (n66 ANT4–Head) – NSA**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
346000	1730	Left	Cheek	Note1	21.94	22.50	0.134	<b>0.15</b>	0.267	<b>0.30</b>	-0.09
346000	1730	Left	Tilt	Note1	21.94	22.50	0.174	<b>0.20</b>	0.361	<b>0.41</b>	-0.16
346000	1730	Right	Cheek	Note1	21.94	22.50	0.214	<b>0.24</b>	0.440	<b>0.50</b>	-0.05
346000	1730	Right	Tilt	Note1/ Fig.61	21.94	22.50	0.283	<b>0.32</b>	0.643	<b>0.73</b>	0.12
346000	1730	Left	Cheek	Note2	20.41	21.00	0.059	<b>0.07</b>	0.108	<b>0.12</b>	-0.05
346000	1730	Left	Tilt	Note2	20.41	21.00	0.106	<b>0.12</b>	0.213	<b>0.24</b>	-0.15
346000	1730	Right	Cheek	Note2	20.41	21.00	0.125	<b>0.14</b>	0.257	<b>0.29</b>	-0.11
346000	1730	Right	Tilt	Note2	20.41	21.00	0.167	<b>0.19</b>	0.376	<b>0.43</b>	-0.18

Note1: The results are for cellular antenna transmit alone.

Note2: The results are for cellular antenna transmit with WIFI.

**Table 14.2-14: SAR Values (n66 ANT4 –Body) – NSA**

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
346000	1730	Front	/	22.74	24.00	0.071	<b>0.09</b>	0.131	<b>0.18</b>	0.13
346000	1730	Rear	Fig.62	22.74	24.00	0.110	<b>0.15</b>	0.213	<b>0.28</b>	-0.06
346000	1730	Left	/	22.74	24.00	0.037	<b>0.05</b>	0.067	<b>0.09</b>	-0.11
346000	1730	Top	/	22.74	24.00	0.091	<b>0.12</b>	0.179	<b>0.24</b>	0.12

Note1: The distance between the EUT and the phantom bottom is 10mm

**Table 14.2-15: SAR Values (n71–Head) – SA/NSA**

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
134678	680.5	Left	Cheek	/	22.94	24.00	0.034	<b>0.04</b>	0.042	<b>0.05</b>	-0.14
134678	680.5	Left	Tilt	/	22.94	24.00	<0.01	<0.01	<0.01	<0.01	/
134678	680.5	Right	Cheek	Fig.63	22.94	24.00	0.045	<b>0.06</b>	0.056	<b>0.07</b>	-0.17
134678	680.5	Right	Tilt	/	22.94	24.00	<0.01	<0.01	<0.01	<0.01	0.13

**Table 14.2-16: SAR Values (n71-Body) – SA/NSA**

Ambient Temperature: 22.9 °C      Liquid Temperature: 22.5°C

Frequency		Mode	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
135164	680.5	Front	/	22.94	24.00	0.061	<b>0.08</b>	0.078	<b>0.10</b>	0.08
135164	680.5	Rear	Fig.64	22.94	24.00	0.100	<b>0.13</b>	0.128	<b>0.16</b>	-0.19
135164	680.5	Left	/	22.94	24.00	<0.01	<0.01	<0.01	<0.01	/
135164	680.5	Right	/	22.94	24.00	<0.01	<0.01	<0.01	<0.01	/
135164	680.5	Bottom	/	22.94	24.00	0.050	<b>0.06</b>	0.106	<b>0.14</b>	0.09

Note1: The distance between the EUT and the phantom bottom is 10mm

### 14.3 WLAN Evaluation for 2.4G

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

#### Head Evaluation

**Table 14.3-1: SAR Values (WLAN - Head)– 802.11b (Fast SAR)**

Frequency		Side	Test Position	Note	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Measured SAR(10g)(W/kg)	Reported SAR(10g)(W/kg)	Power Drift (dB)
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g)(W/kg)	Reported SAR(1g)(W/kg)			
11	2462	Left	Cheek	Note1	18.53	19.00	0.231	<b>0.26</b>	0.571	<b>0.64</b>	0.17
6	2437	Left	Cheek	Note1	18.90	19.50	0.455	<b>0.52</b>	0.890	<b>1.02</b>	-0.02
11	2462	Left	Tilt	Note1	18.53	19.00	0.266	<b>0.30</b>	0.607	<b>0.68</b>	0.11
6	2437	Left	Tilt	Note1	18.90	19.50	0.411	<b>0.47</b>	0.932	<b>1.07</b>	0.1
6	2437	Right	Cheek	Note1	18.90	19.50	0.296	<b>0.34</b>	0.541	<b>0.62</b>	0.05
6	2437	Right	Tilt	Note1	18.90	19.50	0.268	<b>0.31</b>	0.526	<b>0.60</b>	-0.12
6	2437	Left	Cheek	Note2	16.95	17.50	0.222	<b>0.25</b>	0.423	<b>0.48</b>	-0.08
6	2437	Left	Tilt	Note2	16.95	17.50	0.214	<b>0.24</b>	0.493	<b>0.56</b>	0.11
6	2437	Right	Cheek	Note2	16.95	17.50	0.160	<b>0.18</b>	0.282	<b>0.32</b>	0.12
6	2437	Right	Tilt	Note2	16.95	17.50	0.141	<b>0.16</b>	0.277	<b>0.31</b>	-0.09

Note1: The results are for Wifi antenna transmit standalone.

Note2: The results are for Wifi antenna transmit with WWAN.

As shown above table, the initial test position for head is “Left Tilt”. So the head SAR of WLAN is presented as below:

**Table 14.3-2: SAR Values (WLAN - Head)– 802.11b (Full SAR)**

Frequency		Side	Test Position	Figure No./ Note	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Measured SAR(10g)(W/kg)	Reported SAR(10g)(W/kg)	Power Drift (dB)
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g)(W/kg)	Reported SAR(1g)(W/kg)			
11	2462	Left	Cheek	/	18.90	19.50	0.234	<b>0.27</b>	0.575	<b>0.66</b>	0.17
6	2437	Left	Cheek	/	18.90	19.50	0.460	<b>0.53</b>	0.896	<b>1.03</b>	-0.02
11	2462	Left	Tilt	/	18.53	19.00	0.270	<b>0.30</b>	0.610	<b>0.68</b>	0.11
6	2437	Left	Tilt	Fig.65	18.90	19.50	0.409	<b>0.47</b>	0.935	<b>1.07</b>	0.1
6	2437	Right	Cheek	/	18.90	19.50	0.299	<b>0.34</b>	0.544	<b>0.62</b>	0.05

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg.

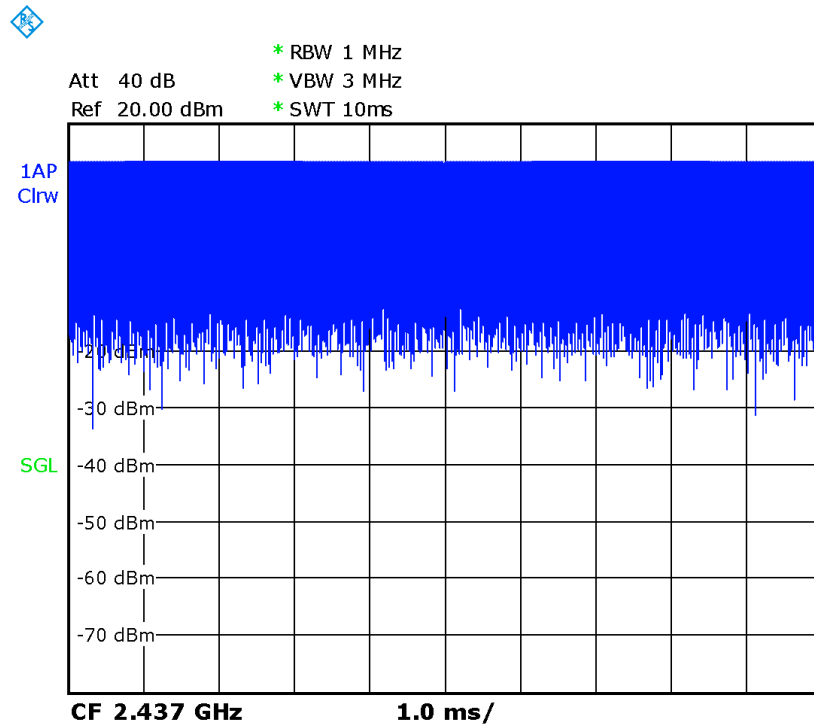
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

**Table 14.3-3: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)**

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.						
2437	6	Left	Tilt	100%	100%	<b>1.07</b>	<b>1.07</b>

SAR is not required for OFDM because the 802.11b adjusted SAR  $\leq$  1.2 W/kg.


**Picture 14.3-1 Duty factor plot**

**Body Evaluation**
**Table 14.3-4: SAR Values (WLAN - Body)– 802.11b (Fast SAR)**

Frequency		Test Position	Note	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C				Power Drift (dB)
Ch.	MHz			Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	
6	2437	Front	Note1	21.65	22.50	0.026	<b>0.03</b>	0.050	<b>0.06</b>	0.02
6	2437	Rear	Note1	21.65	22.50	0.012	<b>0.01</b>	0.025	<b>0.03</b>	0.04
6	2437	Front	Note2	16.95	17.50	0.055	<b>0.06</b>	0.108	<b>0.12</b>	0.03
6	2437	Rear	Note2	16.95	17.50	0.079	<b>0.09</b>	0.168	<b>0.19</b>	-0.06
6	2437	Right	Note2	16.95	17.50	<0.01	<0.01	<0.01	<0.01	/
6	2437	Top	Note2	16.95	17.50	0.078	<b>0.09</b>	0.176	<b>0.20</b>	0.09

Note1: The results are used for body worn mode, the distance between the EUT and the phantom bottom is 15mm.

Note2: The results are used for hotspot mode, the distance between the EUT and the phantom bottom is 10mm.

As shown above table, the initial test position for body is “Rear 10mm”. So the body SAR of WLAN is presented as below:

**Table 14.3-5: SAR Values (WLAN - Body)– 802.11b (Full SAR)**

Frequency		Test Position	Figure No./ Note	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C				Power Drift (dB)
Ch.	MHz			Conducte d Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	
6	2437	Front 15mm	Fig.A.66	21.65	22.50	0.026	<b>0.03</b>	0.050	<b>0.06</b>	0.02
6	2437	Rear 10mm	Fig.A.67	16.95	17.50	0.080	<b>0.09</b>	0.177	<b>0.20</b>	0.09

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is  $\leq$  0.8 W/kg.

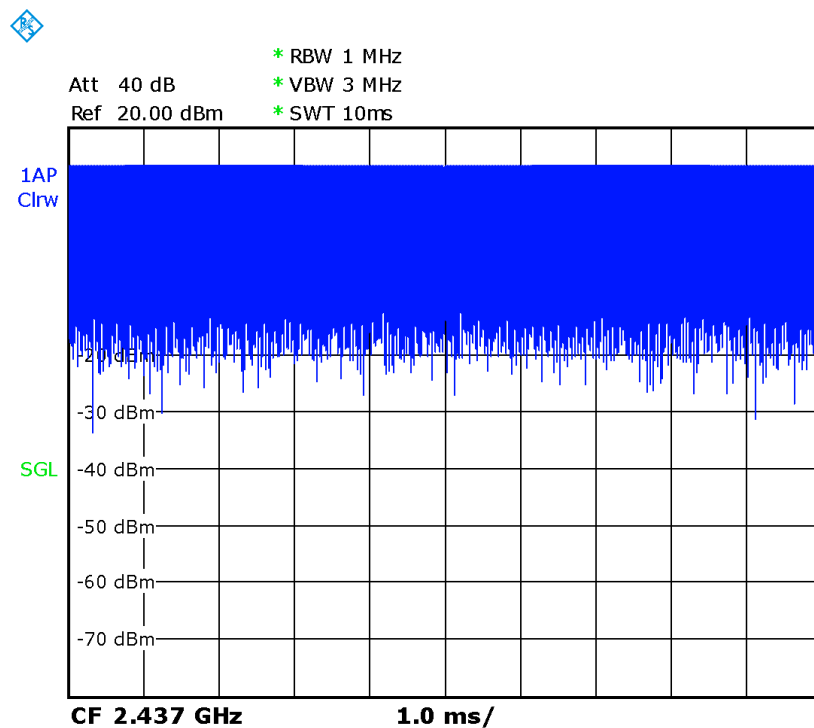
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is  $\leq$  1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

**Table 14.3-6: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)**

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
6	2437	Front 15mm	100%	100%	<b>0.06</b>	<b>0.06</b>
6	2437	Rear 10mm	100%	100%	<b>0.20</b>	<b>0.20</b>

SAR is not required for OFDM because the 802.11b adjusted SAR  $\leq 1.2$  W/kg.



**Picture 14.3-2 Duty factor plot**

## 14.4 WLAN Evaluation For 5G

**Table 14.4-1: OFDM mode specified maximum output power of WLAN antenna**

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	X		X	X	X	X	X	
U-NII-2A	X		X	X	X	X	X	
U-NII-2C	X		X	X	X	X	X	
U-NII-3	X		X	X	X	X	X	
§ 15.247 (5.8 GHz)								

X: maximum(conducted) output power(mW), including tolerance, specified for production units

**Table 14.4-2: Maximum output power specified of WLAN antenna – Body worn**

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	100		112	89	112	89	45	
U-NII-2A	100		112	45	112	45	45	
U-NII-2C	100		126	89	112	89	71	
U-NII-3	100		126	100	112	89	71	
§ 15.247 (5.8 GHz)								

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.

**Table 14.4-3: Maximum output power specified of WLAN antenna –Head (Transmit alone) and Hotspot**

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	28		32	28	32	28	25	
U-NII-2A	28		32	28	32	25	25	
U-NII-2C	35		40	28	32	28	28	
U-NII-3	35		40	32	32	28	28	
§ 15.247 (5.8 GHz)								

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.

**Table 14.4-4: Maximum output power specified of WLAN antenna  
– Head (Transmit with WWAN)**

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	16		18	16	20	16	16	
U-NII-2A	16		20	16	20	16	16	
U-NII-2C	16		20	16	20	16	16	
U-NII-3	16		20	18	20	16	16	
§ 15.247 (5.8 GHz)								

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.

**Table 14.4-5: Maximum output power specified of WLAN antenna – Body (Transmit alone)**

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	56		63	56	56	50	45	
U-NII-2A	56		63	45	56	45	45	
U-NII-2C	56		79	50	56	50	56	
U-NII-3	63		79	56	56	50	56	
§ 15.247 (5.8 GHz)								

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.



**Table 14.4-6: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations –Body worn**

802.11 Mode	a	n		ac		
	20	20	40	20	40	80
U-NII-1	36/40/44/48 Lower power	36/40/44/48 <b>79/78/79/82</b>	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 Lower power	52/56/60/64 <b>90/90/93/91</b>	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	100/104/108/112 116/120/124/128/1 32/136/140/144 <b>85/89/87/86/87/92/ 96/101/104/108/69/ 99</b>	102/110/118/ 126/134/142 Lower power	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118/ 126/134/142 Lower power	106/122/ 138 Lower power
U-NII-3	149/153/157/161/ 165 Lower power	149/153/157/161/1 65 <b>94/95/102/104/108</b>	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 Lower power
<ul style="list-style-type: none"> <li>• The <b>bold numbers</b> is the maximum output measured power (mW).</li> <li>• Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are <b>highlighted in yellow</b>.</li> </ul>						

**Table 14.4-7: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations – Head (Transmit alone) and Hotspot**

802.11 Mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 Lower power	36/40/44/48 <b>26/26/25/26</b>	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 Lower power	52/56/60/64 <b>26/29/30/27</b>	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	100/104/108/112 116/120/124/128/ 132/136/140/144 <b>31/30/30/29/29/29</b> <b>/32/34/34/37/21/3</b> 4	102/110/118/ 126/134/142 Lower power	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118/ 126/134/142 Lower power	106/122/ 138 Lower power
U-NII-3	149/153/157/161/ 165 Lower power	149/153/157/161/ 165 <b>33/30/34/34/38</b>	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 Lower power

- The **bold numbers** is the maximum output measured power (mW).
- Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are **highlighted in yellow**.

**Table 14.4-8: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations – Head (Transmit with WWAN)**

802.11 Mode	a	n		ac		
	20	20	40	20	40	80
U-NII-1	36/40/44/48 Lower power	<b>36</b> /40/44/48 <b>16</b> /14/15/15	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 Lower power	52/56/60/ <b>64</b> <b>16</b> /17/17/ <b>18</b>	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	100/104/108/112 116/120/124/128/ 132/ <b>136</b> /140/144 <b>18</b> / <b>16</b> / <b>17</b> / <b>15</b> / <b>15</b> / <b>15</b> <b>16</b> / <b>17</b> / <b>18</b> / <b>19</b> / <b>15</b> / <b>1</b> 9	102/110/118/ 126/134/142 Lower power	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118/ 126/134/142 Lower power	106/122/ 138 Lower power
U-NII-3	149/153/157/161/ 165 Lower power	149/153/157/161/ <b>165</b> <b>18</b> / <b>18</b> / <b>18</b> / <b>19</b> / <b>20</b>	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 Lower power
<ul style="list-style-type: none"> <li>● The <b>bold numbers</b> is the maximum output measured power (mW).</li> <li>● Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are <b>highlighted in yellow</b>.</li> </ul>						

**Table 14.4-9: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations**

– Body (Transmit alone)

802.11 Mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
<b>U-NII-1</b>	36/40/44/48 Lower power	<b>36</b> /40/44/48 <b>54/53/50/51</b>	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
<b>U-NII-2A</b>	52/56/60/64 Lower power	52/56/ <b>60</b> /64 <b>57/58/59/57</b>	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
<b>U-NII-2C</b>	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	100/104/108/112 116/120/124/128/ <b>1</b> <b>32</b> /136/140/144 <b>68/72/67/63/60/62/</b> <b>62/70/75/69/43/68</b>	102/110/118/ 126/134/142 Lower power	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118/ 126/134/142 Lower power	106/122/ 138 Lower power
<b>U-NII-3</b>	149/153/157/161/ 165 Lower power	149/153/157/161/ <b>1</b> <b>65</b> <b>59/65/66/68/73</b>	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 Lower power

- The **bold numbers** is the maximum output measured power (mW).
- Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are **highlighted in yellow**.

**Table 14.4-10: Reported SAR of initial test configuration for Head transmit alone**

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
<b>U-NII-1</b>	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
<b>U-NII-2A</b>	52/56/60/64	52/56/ <b>60</b> /64 <b>1.08</b>	54/62	52/56/60/64	54/62	58
<b>U-NII-2C</b>	100/104/108/112/116/120/ 124/128/132/136/140/144	100/104/108/112/ 116/120/124/128/ 132/ <b>136</b> /140/144 <b>0.65</b>	102/110/ 118/126/ 134/142	100/104/108/112 /116/120/124/12 8/132/136/140/1 44	102/110 /118/12 6/134/1 42	106/12 2/138
<b>U-NII-3</b>	149/153/157/161/165	149/153/157/161 / <b>165</b> <b>0.39</b>	151/159	149/153/157/161 /165	151/159	155

Highest measured output power channel tested initially are in **yellow highlight**.

**Table 14.4-11: Reported SAR of initial test configuration for Head transmit with WWAN**

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64	52/56/60/64 0.75	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/ 124/128/132/136/140/144	100/104/108/112/ 116/120/124/128/ 132/136/140/144 0.51	102/110/ 118/126/ 134/142	100/104/108/112 /116/120/124/12 8/132/136/140/1 44	102/110 /118/12 6/134/1 42	106/12 2/138
U-NII-3	149/153/157/161/165	149/153/157/161 /165 0.34	151/159	149/153/157/161 /165	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

**Table 14.4-12: Reported SAR of initial test configuration for Body worn**

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64	52/56/60/64 0.32	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/ 124/128/132/136/140/144	100/104/108/112/ 116/120/124/128/ 132/136/140/144 0.29	102/110/ 118/126/ 134/142	100/104/108/112 /116/120/124/12 8/132/136/140/1 44	102/110 /118/12 6/134/1 42	106/12 2/138
U-NII-3	149/153/157/161/165	149/153/157/161 /165 0.40	151/159	149/153/157/161 /165	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

**Table 14.4-13: Reported SAR of initial test configuration for Hotspot**

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64	52/56/60/64 0.40	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/ 124/128/132/136/140/144	100/104/108/112/ 116/120/124/128/ 132/136/140/144 0.20	102/110/ 118/126/ 134/142	100/104/108/112 /116/120/124/12 8/132/136/140/1 44	102/110 /118/12 6/134/1 42	106/12 2/138
U-NII-3	149/153/157/161/165	149/153/157/161 /165 0.19	151/159	149/153/157/161 /165	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

**Table 14.4-14: SAR Values (WLAN 5G - Head)**

Frequency		Side	Test Position	Figure No.	Conducte d Power (dBm)	Max. tune- up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g)( W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift (dB)
Ch.	MHz										
60	5300	Left	Cheek	Note1	14.83	15.00	0.193	<b>0.20</b>	0.844	<b>0.88</b>	0.07
56	5280	Left	Cheek	Note1	14.68	15.00	0.172	<b>0.19</b>	0.811	<b>0.87</b>	0.09
60	5300	Left	Tilt	Note1/ Fig.68	14.83	15.00	0.231	<b>0.24</b>	1.040	<b>1.08</b>	0.02
56	5280	Left	Tilt	Note1	14.68	15.00	0.201	<b>0.22</b>	0.985	<b>1.06</b>	0.16
60	5300	Right	Cheek	Note1	14.83	15.00	0.182	<b>0.19</b>	0.703	<b>0.73</b>	-0.19
60	5300	Right	Tilt	Note1	14.83	15.00	0.211	<b>0.22</b>	0.816	<b>0.85</b>	0.04
56	5280	Right	Tilt	Note1	14.68	15.00	0.184	<b>0.20</b>	0.789	<b>0.85</b>	-0.16
136	5680	Left	Cheek	Note1	15.68	16.00	0.143	<b>0.15</b>	0.575	<b>0.62</b>	0.10
136	5680	Left	Tilt	Note1	15.68	16.00	0.158	<b>0.17</b>	0.604	<b>0.65</b>	0.17
136	5680	Right	Cheek	Note1	15.68	16.00	0.131	<b>0.14</b>	0.451	<b>0.49</b>	-0.09
136	5680	Right	Tilt	Note1	15.68	16.00	0.131	<b>0.14</b>	0.447	<b>0.48</b>	-0.11
165	5825	Left	Cheek	Note1	15.77	16.00	0.093	<b>0.10</b>	0.331	<b>0.35</b>	0.10
165	5825	Left	Tilt	Note1	15.77	16.00	0.102	<b>0.11</b>	0.370	<b>0.39</b>	-0.06
165	5825	Right	Cheek	Note1	15.77	16.00	0.091	<b>0.10</b>	0.295	<b>0.31</b>	-0.11
165	5825	Right	Tilt	Note1	15.77	16.00	0.095	<b>0.10</b>	0.307	<b>0.32</b>	-0.04
64	5320	Left	Cheek	Note2	12.48	13.00	0.099	<b>0.11</b>	0.416	<b>0.47</b>	-0.10
64	5320	Left	Tilt	Note2	12.48	13.00	0.152	<b>0.17</b>	0.663	<b>0.75</b>	-0.07
64	5320	Right	Cheek	Note2	12.48	13.00	0.079	<b>0.09</b>	0.241	<b>0.27</b>	-0.10
64	5320	Right	Tilt	Note2	12.48	13.00	0.105	<b>0.12</b>	0.343	<b>0.39</b>	0.17
136	5680	Left	Cheek	Note2	12.89	13.00	0.078	<b>0.08</b>	0.325	<b>0.33</b>	-0.10
136	5680	Left	Tilt	Note2	12.89	13.00	0.111	<b>0.11</b>	0.501	<b>0.51</b>	0.05
136	5680	Right	Cheek	Note2	12.89	13.00	0.069	<b>0.07</b>	0.201	<b>0.21</b>	-0.10
136	5680	Right	Tilt	Note2	12.89	13.00	0.074	<b>0.08</b>	0.233	<b>0.24</b>	-0.02
165	5825	Left	Cheek	Note2	12.91	13.00	0.058	<b>0.06</b>	0.258	<b>0.26</b>	0.10
165	5825	Left	Tilt	Note2	12.91	13.00	0.073	<b>0.07</b>	0.335	<b>0.34</b>	0.12
165	5825	Right	Cheek	Note2	12.91	13.00	0.045	<b>0.05</b>	0.129	<b>0.13</b>	-0.08
165	5825	Right	Tilt	Note2	12.91	13.00	0.062	<b>0.06</b>	0.178	<b>0.18</b>	0.15

Note1: The results are for Wifi transmit standalone.

Note2: The results are for Wifi transmit with WWAN.

**Table 14.4-15: SAR Values (WLAN 5G – Body worn)**

Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift (dB)
Ch.	MHz									
60	5300	Front	/	19.68	20.50	0.099	<b>0.12</b>	0.264	<b>0.32</b>	0.06
60	5300	Rear	/	19.68	20.50	0.100	<b>0.12</b>	0.267	<b>0.32</b>	0.17
136	5680	Front	/	20.33	21.00	0.097	<b>0.11</b>	0.248	<b>0.29</b>	-0.11
136	5680	Rear	/	20.33	21.00	0.059	<b>0.07</b>	0.164	<b>0.19</b>	-0.10
165	5825	Front	/	20.35	21.00	0.065	<b>0.08</b>	0.183	<b>0.21</b>	-0.19
165	5825	Rear	Fig.69	20.35	21.00	0.122	<b>0.14</b>	0.348	<b>0.40</b>	0.03

Note1: The distance between the EUT and the phantom bottom is 15mm.

**Table 14.4-16: SAR Values (WLAN 5G – Hotspot)**

Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift (dB)
Ch.	MHz									
60	5300	Front	/	14.83	15.00	0.053	<b>0.06</b>	0.150	<b>0.16</b>	0.11
60	5300	Rear	/	14.83	15.00	0.072	<b>0.07</b>	0.220	<b>0.23</b>	0.12
60	5300	Right	/	14.83	15.00	0.012	<b>0.01</b>	0.046	<b>0.05</b>	-0.09
60	5300	Top	Fig.70	14.83	15.00	0.122	<b>0.13</b>	0.384	<b>0.40</b>	-0.04
136	5680	Front	/	15.68	16.00	0.036	<b>0.04</b>	0.110	<b>0.12</b>	-0.19
136	5680	Rear	/	15.68	16.00	0.040	<b>0.04</b>	0.158	<b>0.17</b>	0.09
136	5680	Right	/	15.68	16.00	0.014	<b>0.02</b>	0.042	<b>0.05</b>	0.13
136	5680	Top	/	15.68	16.00	0.059	<b>0.06</b>	0.182	<b>0.20</b>	-0.10
165	5825	Front	/	15.77	16.00	0.024	<b>0.03</b>	0.064	<b>0.07</b>	-0.02
165	5825	Rear	/	15.77	16.00	0.054	<b>0.06</b>	0.177	<b>0.19</b>	0.12
165	5825	Right	/	15.77	16.00	0.017	<b>0.02</b>	0.039	<b>0.04</b>	-0.09
165	5825	Top	/	15.77	16.00	0.029	<b>0.03</b>	0.089	<b>0.09</b>	-0.18

Note1: The distance between the EUT and the phantom bottom is 10mm.

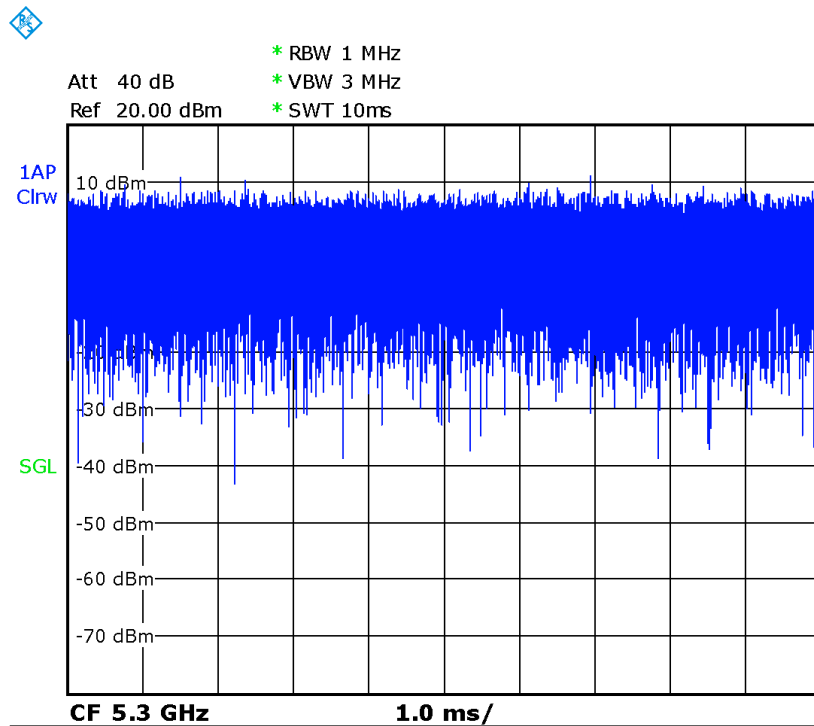
According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

**Table 14.4-16: SAR Values (WLAN 5G - Head) (Scaled Reported SAR)**

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
Ch.	MHz						
60	5300	Left	Tilt	100%	100%	<b>1.08</b>	<b>1.08</b>

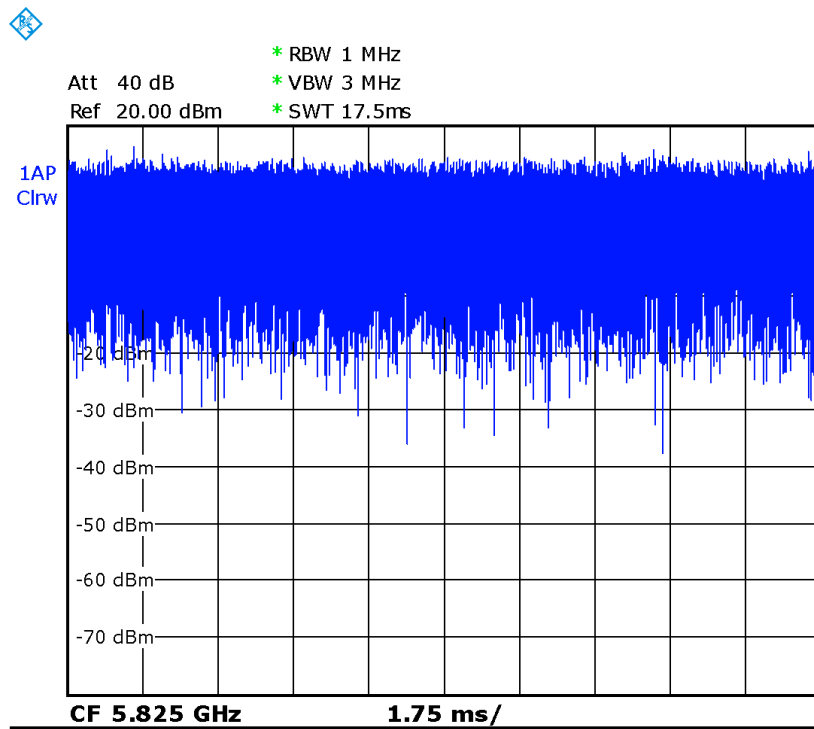
**Table 14.4-17: SAR Values (WLAN 5G - Body) (Scaled Reported SAR)**

Frequency		Test Position	D (mm)	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
Ch.	MHz						
165	5825	Rear	15	100%	100%	<b>0.40</b>	<b>0.40</b>
60	5300	Top	10	100%	100%	<b>0.40</b>	<b>0.40</b>



**Picture 14.4-1 The plot of duty factor for CH.60**





Picture 14.4-2 The plot of duty factor for CH.165

#### **14.5 SAR results for 10-g extremity SAR**

According to the KDB648474 D04, 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 Publication 865664 D01 to address interactive hand use exposure conditions. 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.

For this device, SAR is not required for 10-g extremity SAR because the scaled SAR is  $\leq 1.2$  W/kg.

## 15 SAR Measurement Variability

SAR measurement variability must be 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.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is  $< 0.80$  W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only 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 ( $\sim 10\%$  from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$

Mode	CH	Freq	Test Position	Original SAR (W/kg)	First Repeated SAR(W/kg)	The Ratio
Wi-Fi 2.4G 802.11b	6	2437MHz	Left Cheek	0.896	0.878	1.02
Wi-Fi 2.4G 802.11b	6	2437MHz	Left Tilt	0.935	0.921	1.02
Wi-Fi 5G 802.11n-20M	60	5300MHz	Left Cheek	0.844	0.831	1.02
Wi-Fi 5G 802.11n-20M	60	5300MHz	Left Tilt	1.04	0.989	1.05
Wi-Fi 5G 802.11n-20M	60	5300MHz	Right Tilt	0.816	0.789	1.03

## 16 Measurement Uncertainty

### 16.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
<b>Measurement system</b>										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	$\infty$
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	$\infty$
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	$\infty$
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	$\infty$
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	$\infty$
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	$\infty$
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	$\infty$
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	$\infty$
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	$\infty$
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	$\infty$
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	$\infty$
<b>Test sample related</b>										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	$\infty$
<b>Phantom and set-up</b>										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	$\infty$
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	$\infty$
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	$\infty$
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$							9.55	9.43	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$							19.1	18.9	

**16.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)**

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
<b>Measurement system</b>										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	$\infty$
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	$\infty$
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	$\infty$
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	$\infty$
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	$\infty$
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	$\infty$
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	$\infty$
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	$\infty$
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
11	Probe positioned mech. restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	$\infty$
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	$\infty$
13	Post-processing	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	$\infty$
<b>Test sample related</b>										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	$\infty$
<b>Phantom and set-up</b>										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	$\infty$
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	$\infty$
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	$\infty$

21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						10.7	10.6	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						21.4	21.1	

### 16.3 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
<b>Measurement system</b>										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	∞
<b>Test sample related</b>										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
<b>Phantom and set-up</b>										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞

20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	$\infty$
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						10.4	10.3	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						20.8	20.6	

#### 16.4 Measurement Uncertainty for Fast SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
<b>Measurement system</b>										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	$\infty$
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	$\infty$
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	$\infty$
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	$\infty$
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	$\infty$
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	$\infty$
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	$\infty$
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	$\infty$
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
11	Probe positioned mech. Restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	$\infty$
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	$\infty$
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	$\infty$
14	Fast SAR z-Approximation	B	14.0	R	$\sqrt{3}$	1	1	8.1	8.1	$\infty$
<b>Test sample related</b>										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5

17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	$\infty$
<b>Phantom and set-up</b>										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	$\infty$
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	$\infty$
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	$\infty$
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						13.5	13.4	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						27.0	26.8	



## 17 MAIN TEST INSTRUMENTS

**Table 17.1: List of Main Instruments**

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 14, 2021	One year
02	Power meter	NRP2	101919	June 16, 2020	One year
03	Power sensor	NRP-Z91	101547		
04	Signal Generator	E4438C	MY49071430	February 1, 2021	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159889	January 13, 2021	One year
07	E-field Probe	SPEAG EX3DV4	7548	June 16, 2020	One year
08	DAE	SPEAG DAE4	1331	September 2, 2020	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 24,2020	One year
10	Dipole Validation Kit	SPEAG D835V2	4d069	July 24,,2020	One year
11	Dipole Validation Kit	SPEAG D1750V2	1003	July 24, 2020	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 28,2020	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	July 21,2020	One year
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 21,2020	One year
15	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 27,2020	One year

\*\*\*END OF REPORT BODY\*\*\*

## ANNEX A Graph Results

### GSM850\_CH190 Right Cheek

Date: 6/4/2021

Electronics: DAE4 Sn1331

Medium: head 835 MHz

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.891$  mho/m;  $\epsilon_r = 42.29$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: GSM850 836.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.228 W/kg

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

Reference Value = 6.204 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.259 W/kg

**SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.145 W/kg**

Maximum value of SAR (measured) = 0.235 W/kg

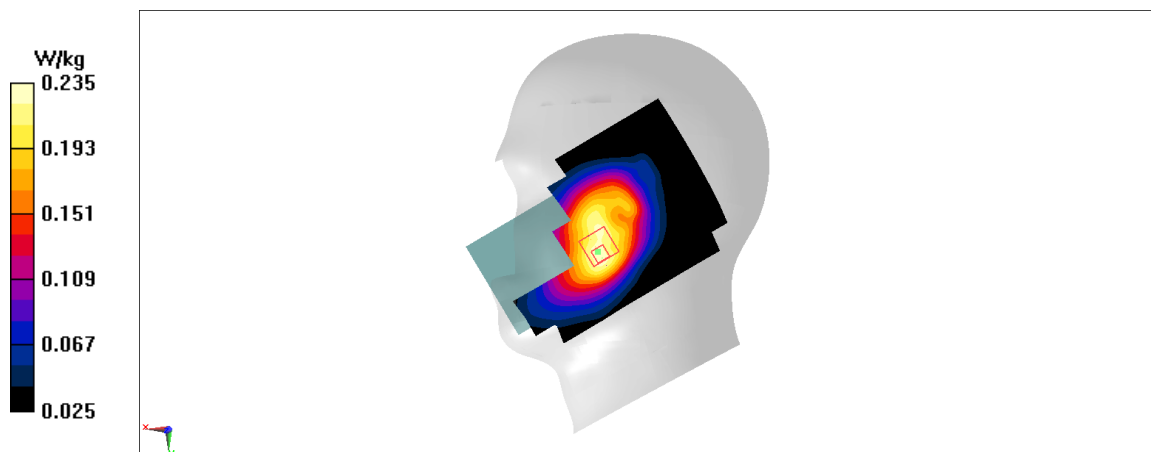


Fig A.1

**GSM850\_CH190 Rear 10mm**

Date: 6/4/2021

Electronics: DAE4 Sn1331

Medium: head 835 MHz

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.891$  mho/m;  $\epsilon_r = 42.29$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: GSM850 836.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

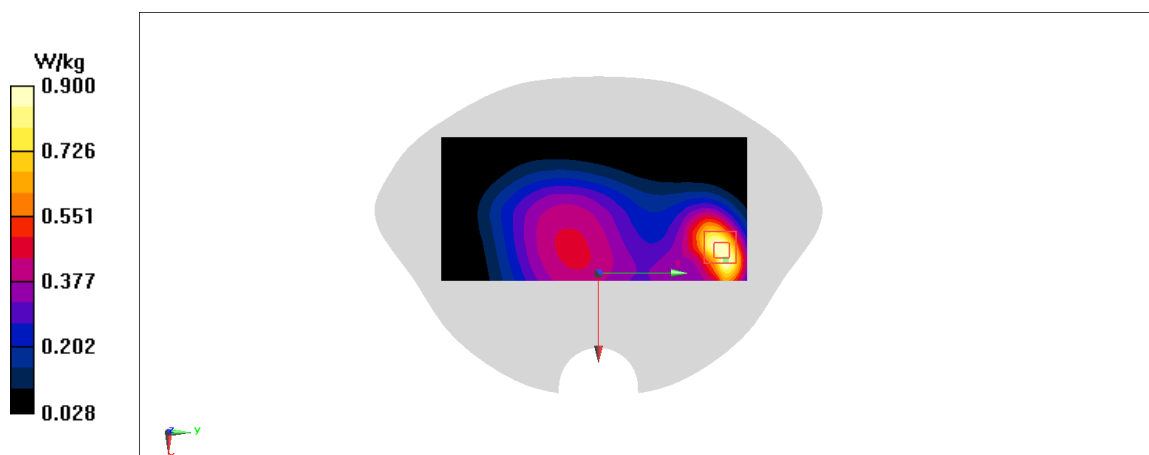
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.75 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.14 W/kg

**SAR(1 g) = 0.6 W/kg; SAR(10 g) = 0.341 W/kg**

Maximum value of SAR (measured) = 0.9 W/kg

**Fig A.2**

**PCS1900\_CH512 Left Cheek**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1850.2 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.228 W/kg

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

Reference Value = 3.421 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.257 W/kg

**SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.115 W/kg**

Maximum value of SAR (measured) = 0.228 W/kg

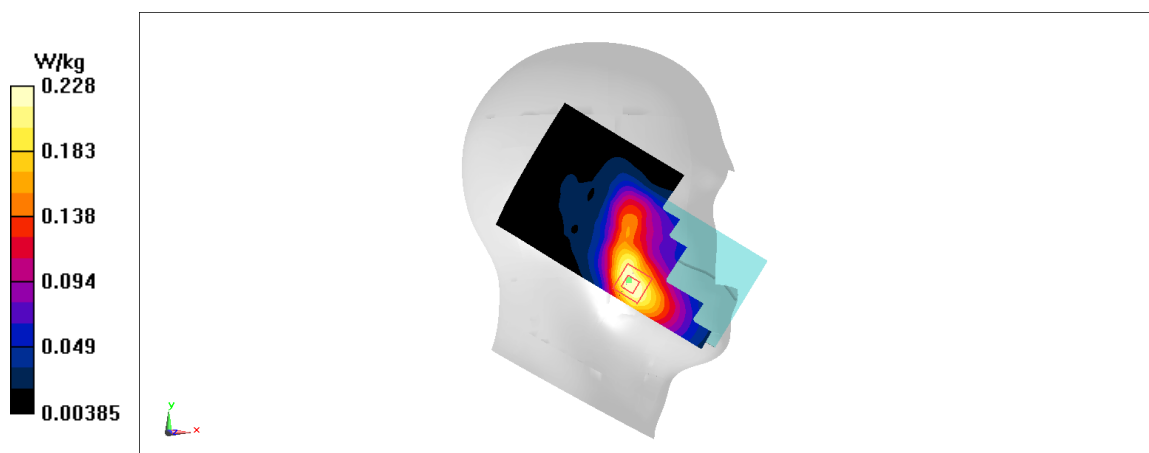


Fig A.3

**PCS1900\_CH512 Rear 15mm\_Body worn**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1850.2 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.512 W/kg

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

Reference Value = 14.51 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.58 W/kg

**SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.197 W/kg**

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

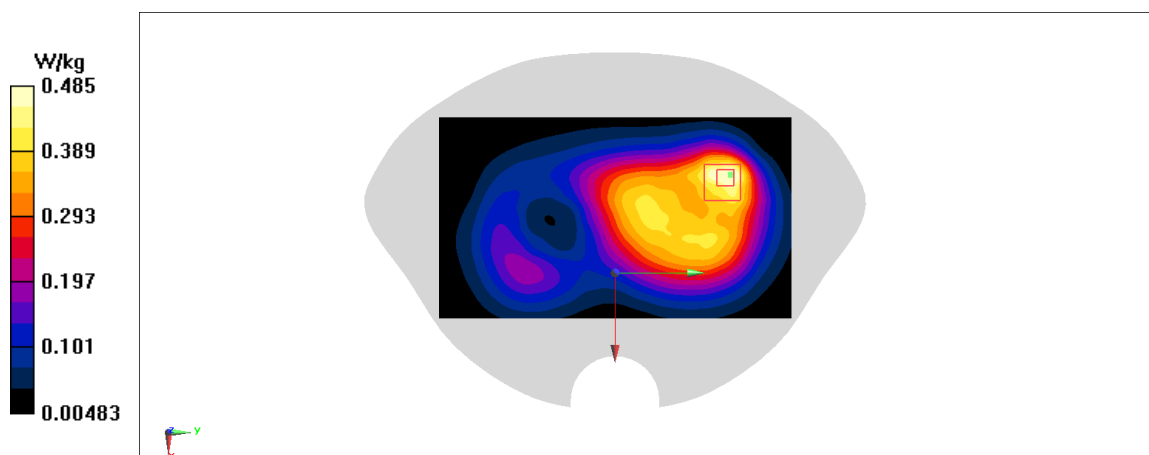


Fig A.4

**PCS1900\_CH512 Rear 10mm\_Hotspot**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1850.2 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.767 W/kg

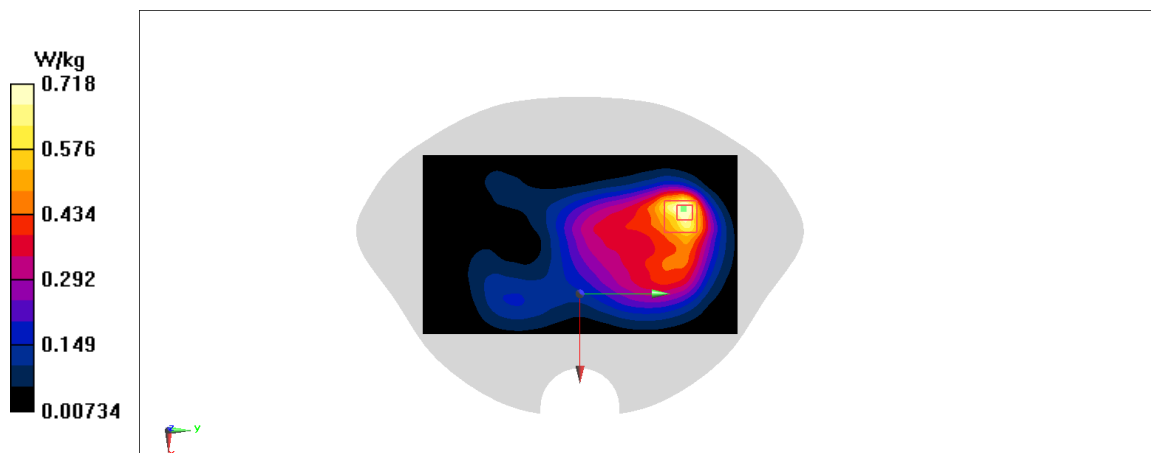
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.96 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.884 W/kg

**SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.27 W/kg**

Maximum value of SAR (measured) = 0.718 W/kg



**Fig A.5**

**WCDMA1900-BII\_CH9262 Left Cheek**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.372$  mho/m;  $\epsilon_r = 40.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.444 W/kg

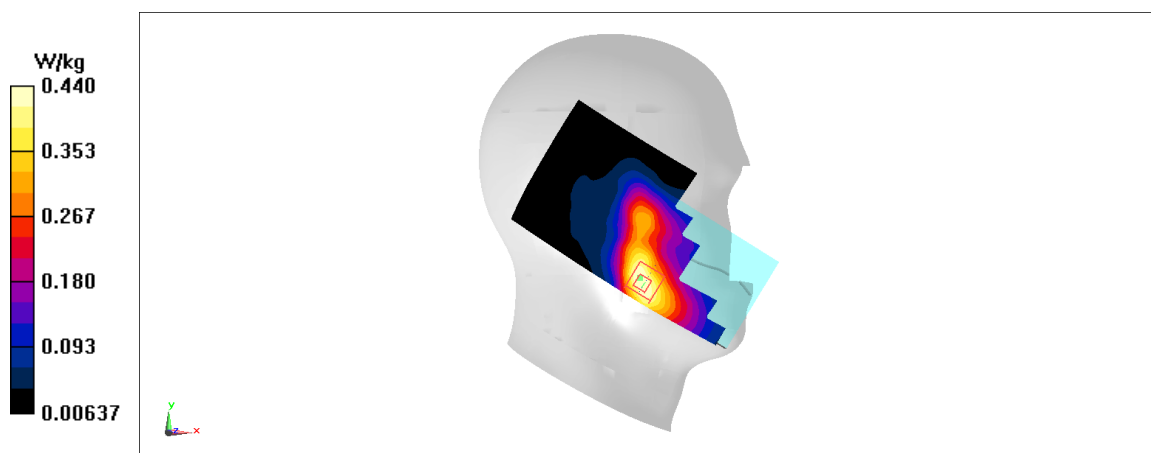
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.472 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.492 W/kg

**SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.223 W/kg**

Maximum value of SAR (measured) = 0.44 W/kg



**Fig A.6**

**WCDMA1900-BII\_CH9262 Front 15mm**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.372$  mho/m;  $\epsilon_r = 40.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

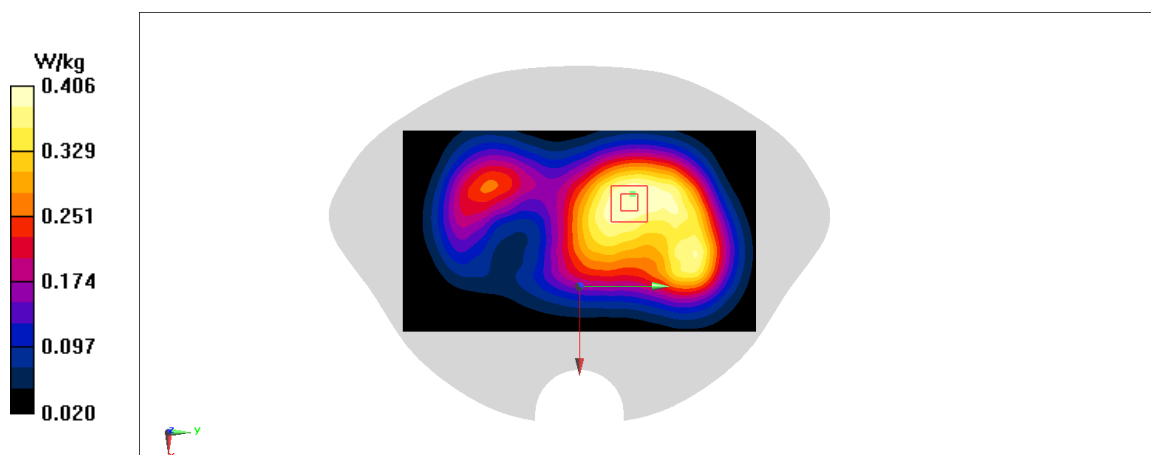
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 14.64 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.465 W/kg

**SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.203 W/kg**

Maximum value of SAR (measured) = 0.406 W/kg



**Fig A.7**



**WCDMA1900-BII\_CH9262 Rear 10mm\_Hotspot**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.372$  mho/m;  $\epsilon_r = 40.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.443 W/kg

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

Reference Value = 8.226 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.521 W/kg

**SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.16 W/kg**

Maximum value of SAR (measured) = 0.434 W/kg

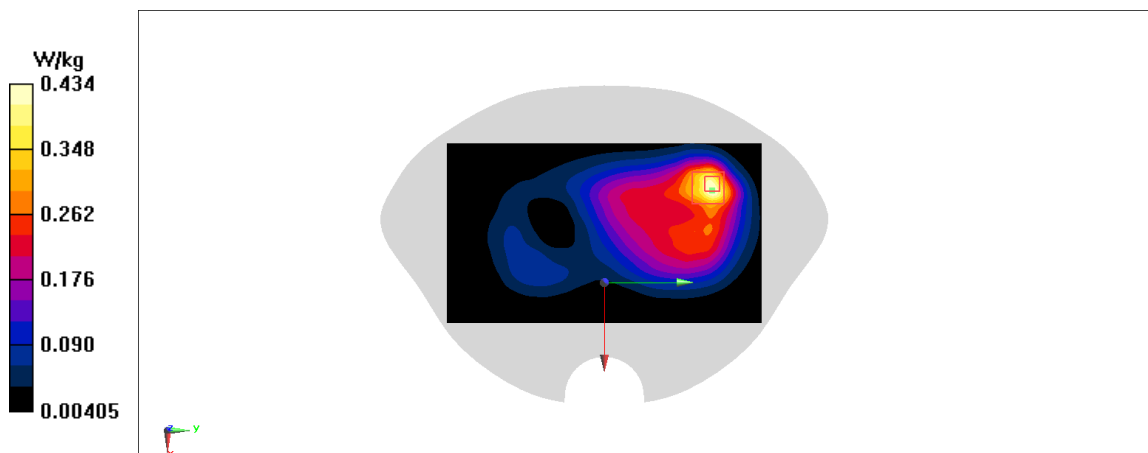


Fig A.8

**WCDMA1700-BIV\_CH1513 Left Cheek**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1752.6$  MHz;  $\sigma = 1.361$  mho/m;  $\epsilon_r = 40.85$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

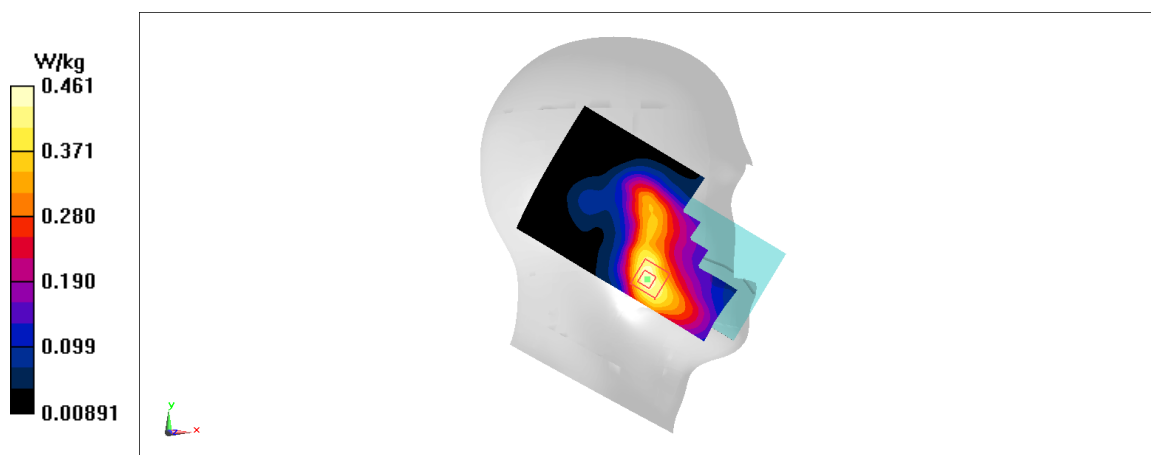
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.932 V/m; Power Drift = 0 dB

Peak SAR (extrapolated) = 0.513 W/kg

**SAR(1 g) = 0.36 W/kg; SAR(10 g) = 0.242 W/kg**

Maximum value of SAR (measured) = 0.461 W/kg



**Fig A.9**

**WCDMA1700-BIV\_CH1412 Rear 15mm\_Body worn**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1732.5$  MHz;  $\sigma = 1.341$  mho/m;  $\epsilon_r = 40.87$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1732.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

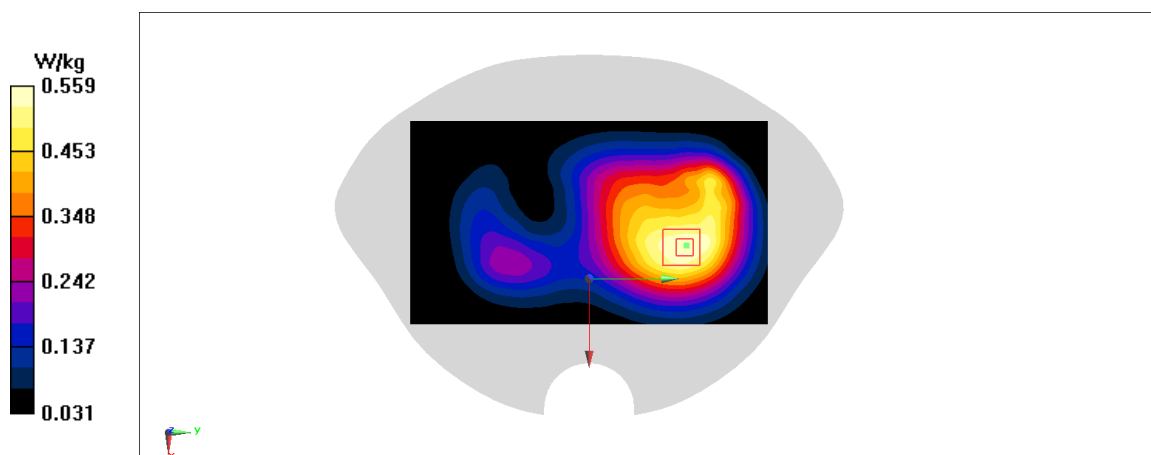
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.09 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.638 W/kg

**SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.278 W/kg**

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



**Fig A.10**

**WCDMA1700-BIV\_CH1412 Rear 10mm\_Hotspot**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1732.5$  MHz;  $\sigma = 1.341$  mho/m;  $\epsilon_r = 40.87$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1732.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.437 W/kg

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

Reference Value = 7.632 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.493 W/kg

**SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.166 W/kg**

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

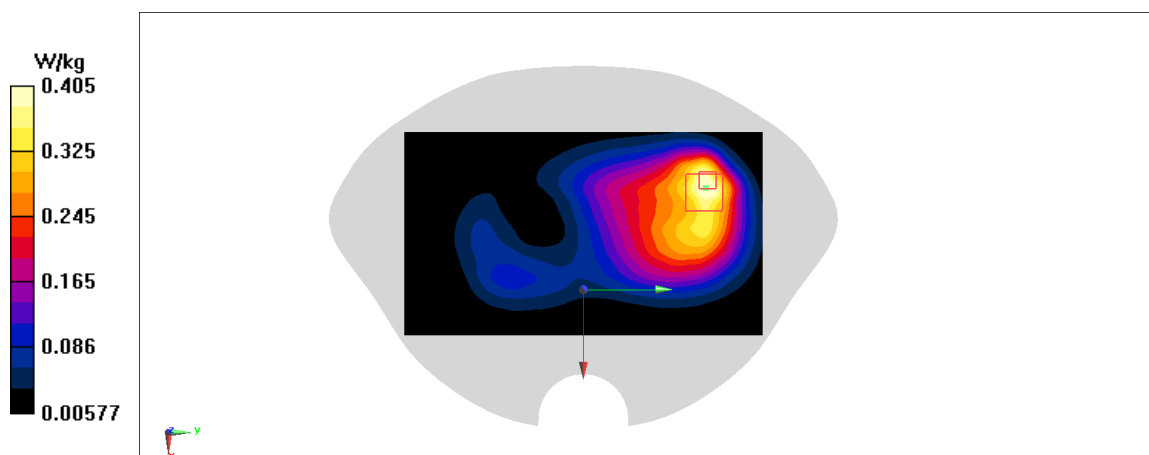


Fig A.11

**WCDMA850-BV\_CH4183 Right Cheek**

Date: 6/4/2021

Electronics: DAE4 Sn1331

Medium: head 835 MHz

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.891$  mho/m;  $\epsilon_r = 42.29$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA850-BV 836.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 4.517 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.341 W/kg

**SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.182 W/kg**

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

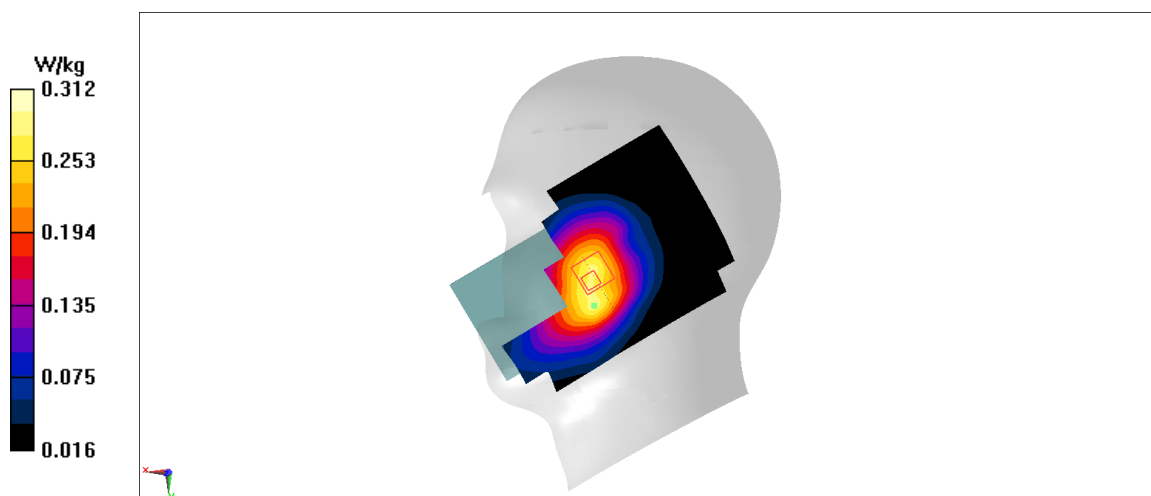


Fig A.12

**WCDMA850-BV\_CH4183 Rear 10mm**

Date: 6/4/2021

Electronics: DAE4 Sn1331

Medium: head 835 MHz

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.891$  mho/m;  $\epsilon_r = 42.29$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA850-BV 836.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.572 W/kg

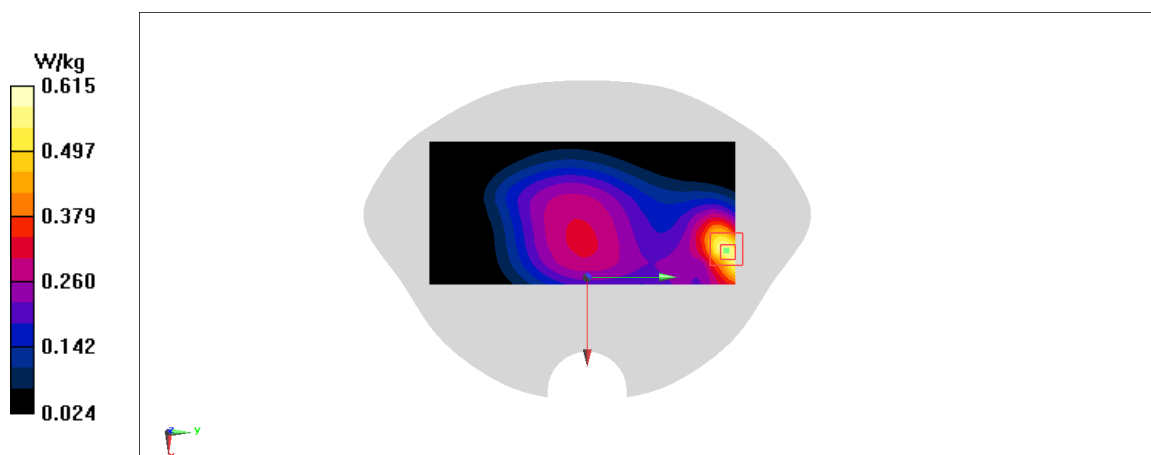
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.71 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.763 W/kg

**SAR(1 g) = 0.409 W/kg; SAR(10 g) = 0.235 W/kg**

Maximum value of SAR (measured) = 0.615 W/kg



**Fig A.13**

**LTE1900-FDD2 ANT1\_CH19100 Left Cheek**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.418$  mho/m;  $\epsilon_r = 40.17$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 5.096 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.505 W/kg

**SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.221 W/kg**

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

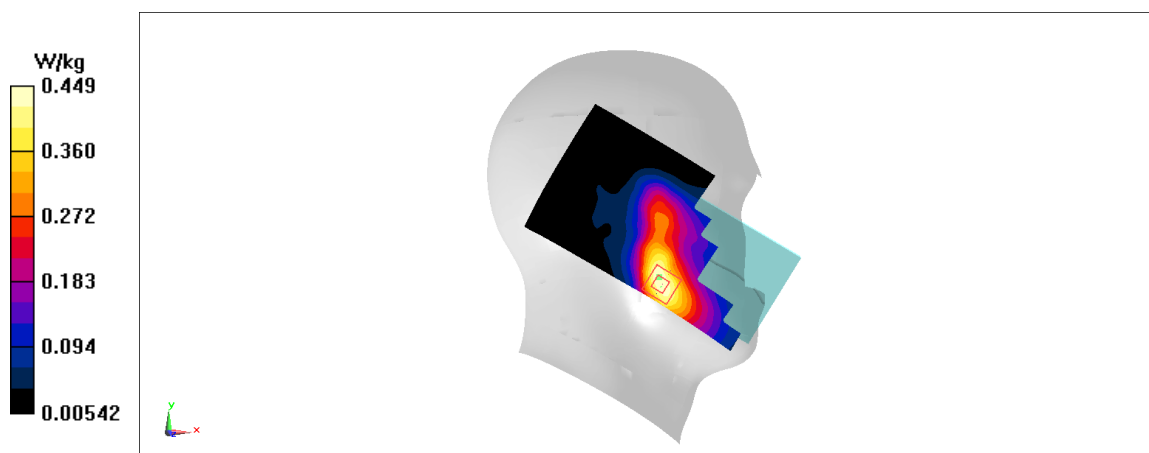


Fig A.14

**LTE1900-FDD2 ANT1\_CH19100 Rear 15mm\_Body worn**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.418$  mho/m;  $\epsilon_r = 40.17$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.510W/kg

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

Reference Value = 14.69V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.589W/kg

**SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.201 W/kg**

Maximum value of SAR (measured) = 0.495W/kg

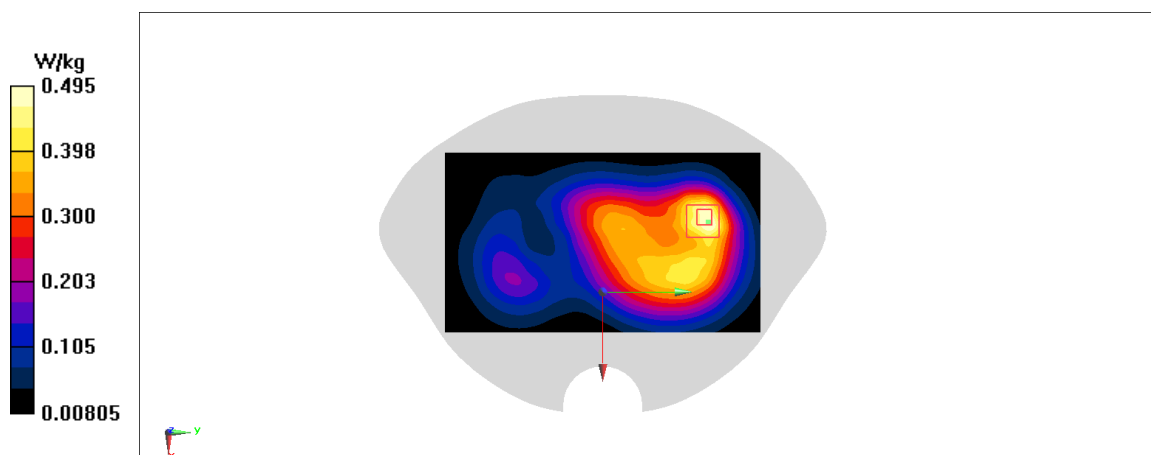


Fig A.15



**LTE1900-FDD2 ANT1\_CH18700 Rear 10mm\_Hotspot**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.544 W/kg

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

Reference Value = 9.07 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.63 W/kg

**SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.196 W/kg**

Maximum value of SAR (measured) = 0.528 W/kg

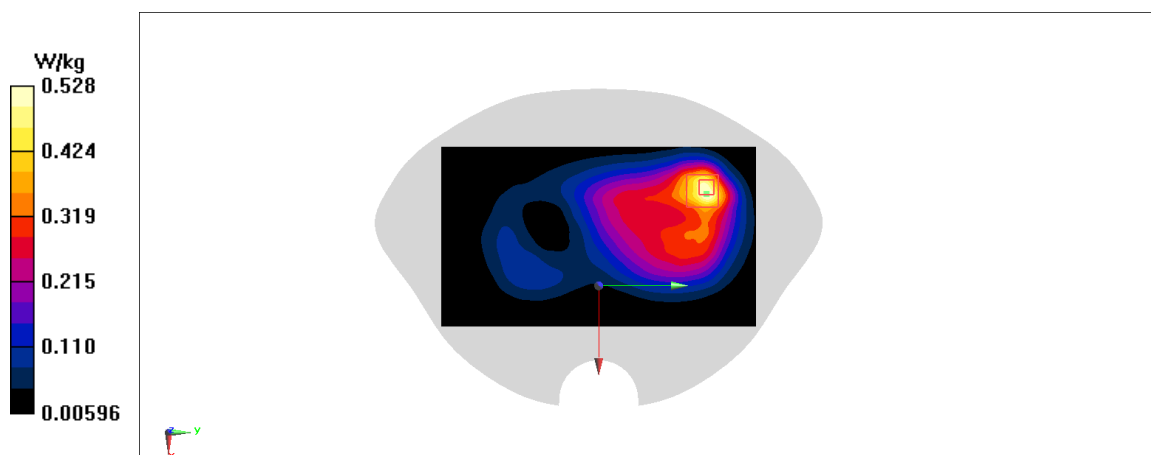


Fig A.16

**LTE1900-FDD2 ANT4\_CH18700 Right Tilt**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 19.54 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.28 W/kg

**SAR(1 g) = 0.56 W/kg; SAR(10 g) = 0.252 W/kg**

Maximum value of SAR (measured) = 0.943 W/kg

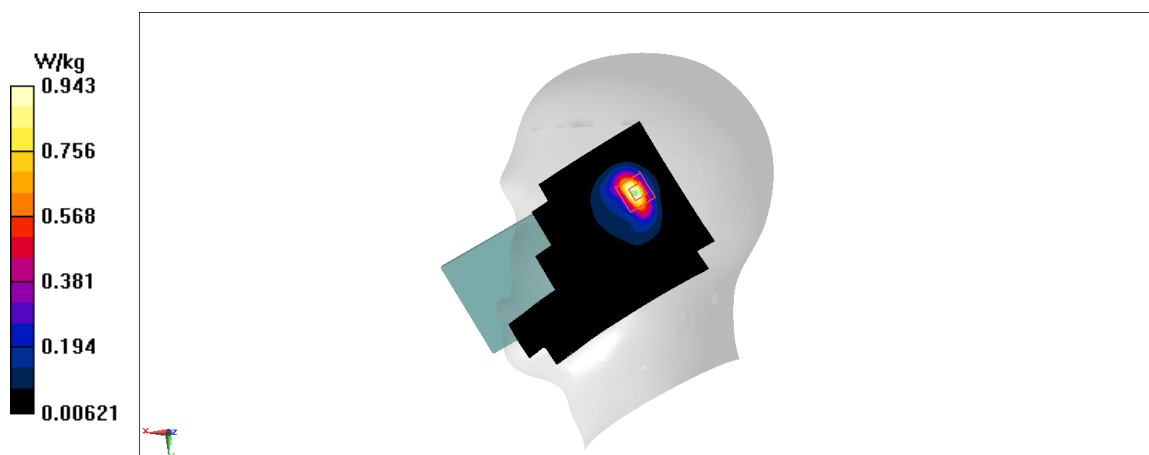


Fig A.17

**LTE1900-FDD2 ANT4\_CH18700 Rear 15mm\_Body worn**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.48W/kg

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

Reference Value = 10.21V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.568 W/kg

**SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.186 W/kg**

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

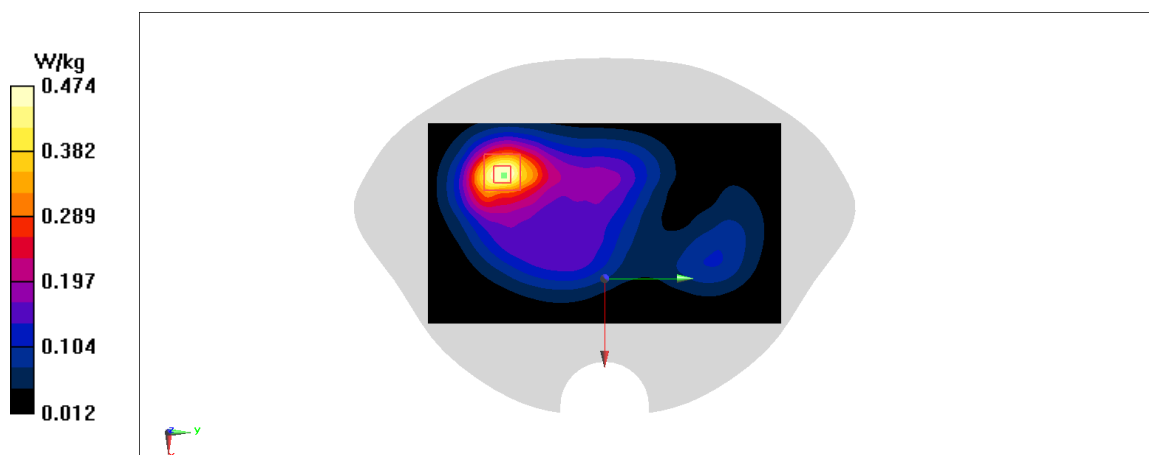


Fig A.18

**LTE1900-FDD2 ANT4\_CH18700 Rear 10mm\_Hotspot**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD2 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) =0.979W/kg

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

Reference Value = 11.12 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) =1.18W/kg

**SAR(1 g) = 0.639 W/kg; SAR(10 g) = 0.346 W/kg**

Maximum value of SAR (measured) = 0.972W/kg

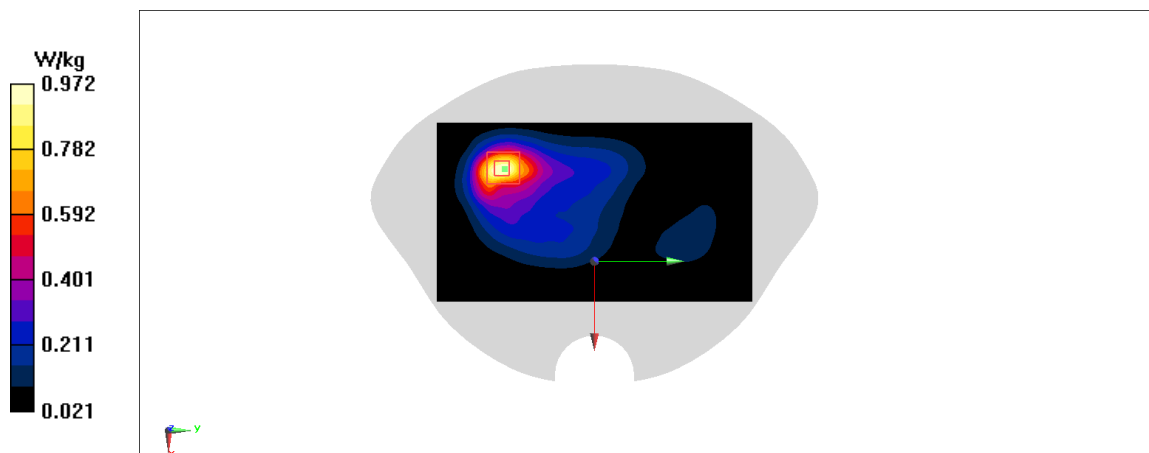


Fig A.19

**LTE2500-FDD7\_CH21350 Left Cheek**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 1.947$  mho/m;  $\epsilon_r = 39.01$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 3.524 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.393 W/kg

**SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.128 W/kg**

Maximum value of SAR (measured) = 0.333 W/kg

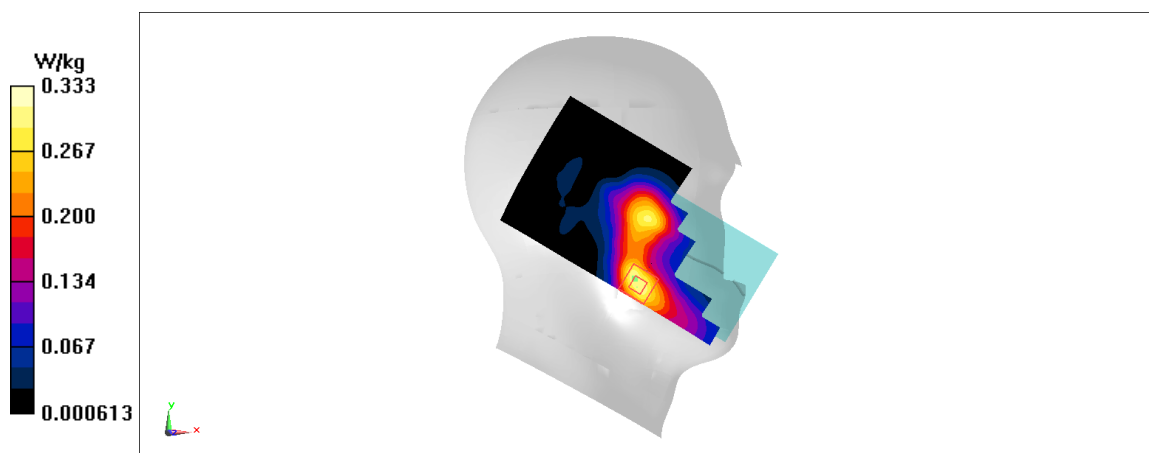


Fig A.20

**LTE2500-FDD7\_CH21350 Rear 15mm\_Body worn**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 1.947$  mho/m;  $\epsilon_r = 39.01$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.519W/kg

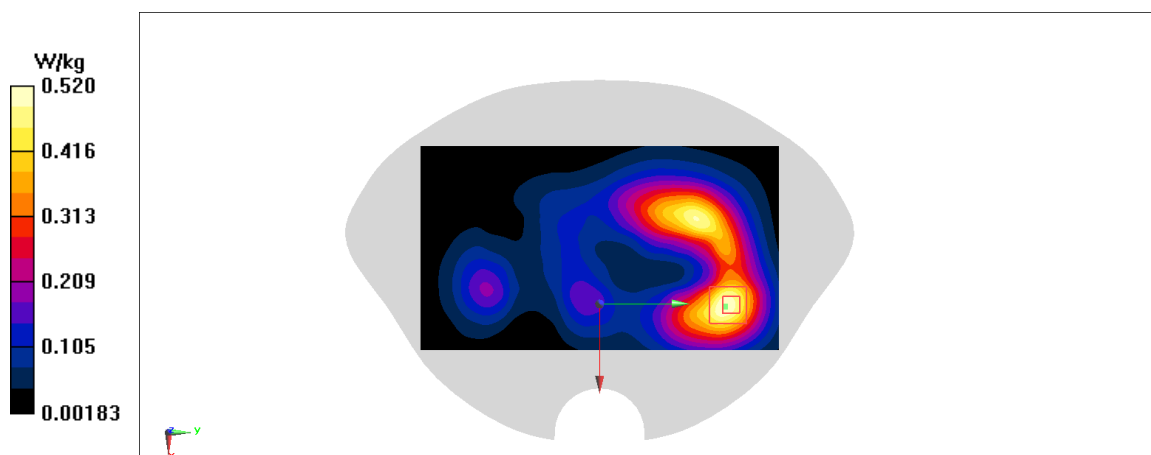
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =6.513V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.635W/kg

**SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.187 W/kg**

Maximum value of SAR (measured) =0.520W/kg



**Fig A.21**

**LTE2500-FDD7\_CH21100 Bottom 10mm\_Hotspot**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.923$  mho/m;  $\epsilon_r = 39.04$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.443 W/kg

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

Reference Value = 5.089 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.527 W/kg

**SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.13 W/kg**

Maximum value of SAR (measured) = 0.436 W/kg

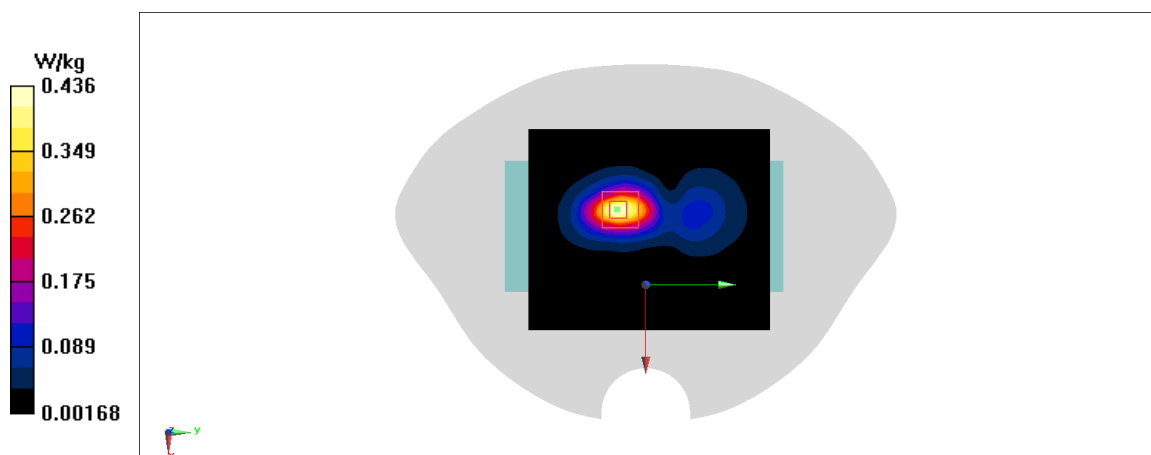


Fig A.22

**LTE700-FDD12\_CH23060 Right Cheek**

Date: 6/2/2021

Electronics: DAE4 Sn1331

Medium: head 750 MHz

Medium parameters used:  $f = 704$  MHz;  $\sigma = 0.837$  mho/m;  $\epsilon_r = 42.28$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.144 W/kg

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

Reference Value = 3.476 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.167 W/kg

**SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.101 W/kg**

Maximum value of SAR (measured) = 0.151 W/kg

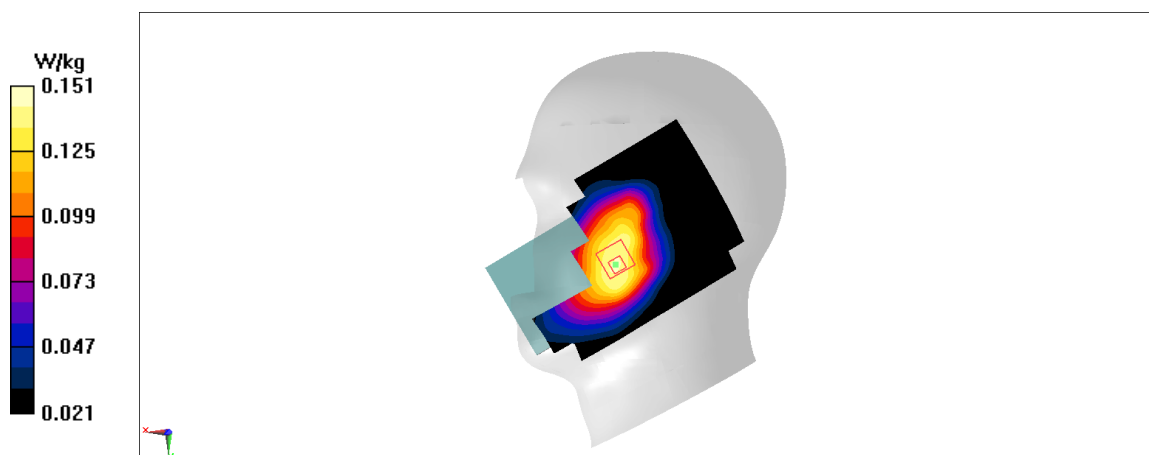


Fig A.23



**LTE700-FDD12\_CH23060 Rear 10mm**

Date: 6/2/2021

Electronics: DAE4 Sn1331

Medium: head 750 MHz

Medium parameters used:  $f = 704$  MHz;  $\sigma = 0.837$  mho/m;  $\epsilon_r = 42.28$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.369 W/kg

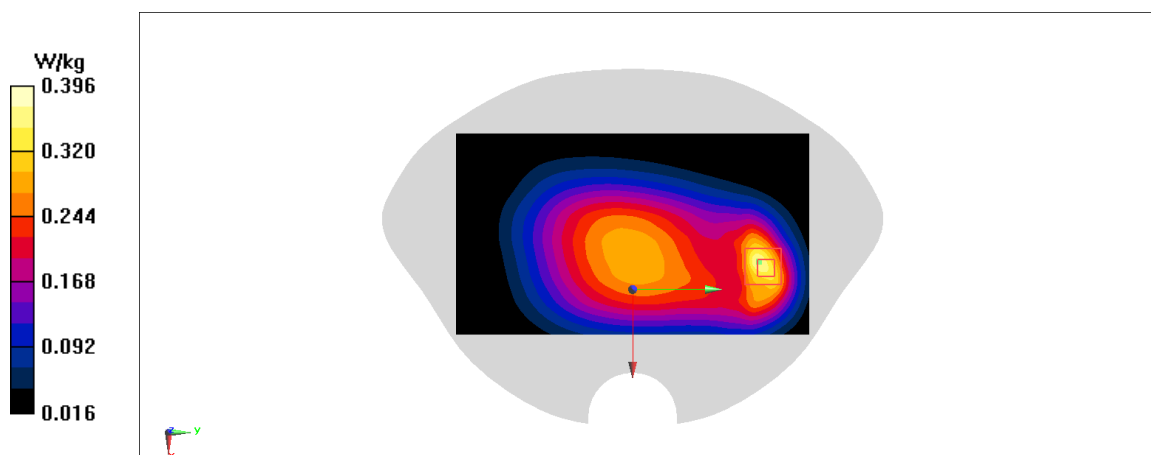
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.11 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.495 W/kg

**SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.144 W/kg**

Maximum value of SAR (measured) = 0.396 W/kg



**Fig A.24**

**LTE750-FDD13\_CH23230 Right Cheek**

Date: 6/2/2021

Electronics: DAE4 Sn1331

Medium: head 750 MHz

Medium parameters used:  $f = 782 \text{ MHz}$ ;  $\sigma = 0.911 \text{ mho/m}$ ;  $\epsilon_r = 42.18$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.5^\circ\text{C}$ , Liquid Temperature:  $22.3^\circ\text{C}$

Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) =  $0.233 \text{ W/kg}$

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

Reference Value =  $3.079 \text{ V/m}$ ; Power Drift =  $-0.19 \text{ dB}$

Peak SAR (extrapolated) =  $0.274 \text{ W/kg}$

**SAR(1 g) =  $0.2 \text{ W/kg}$ ; SAR(10 g) =  $0.155 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.25 \text{ W/kg}$

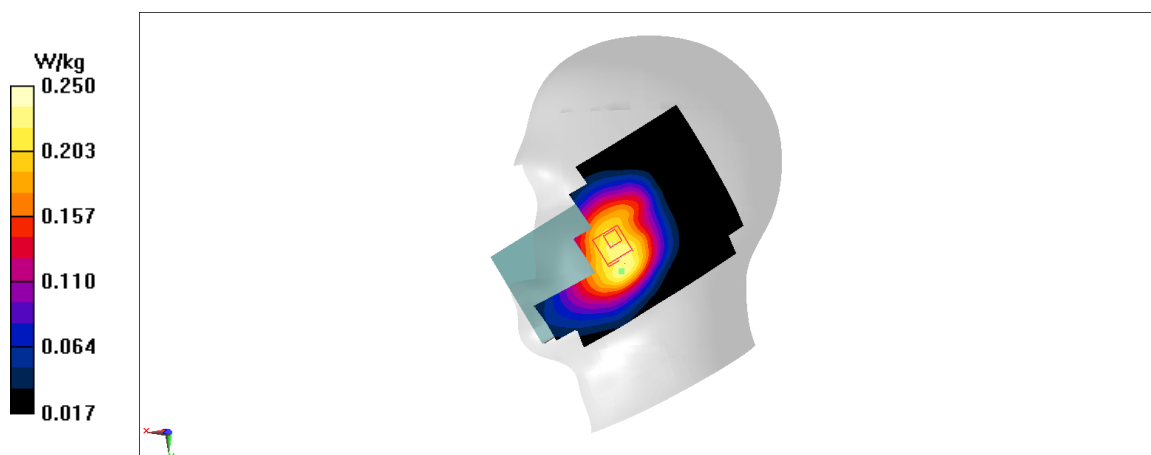


Fig A.25

**LTE750-FDD13\_CH23230 Rear 10mm**

Date: 6/2/2021

Electronics: DAE4 Sn1331

Medium: head 750 MHz

Medium parameters used:  $f = 782$  MHz;  $\sigma = 0.911$  mho/m;  $\epsilon_r = 42.18$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.51 W/kg

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

Reference Value = 19.91 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.688 W/kg

**SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.198 W/kg**

Maximum value of SAR (measured) = 0.555 W/kg

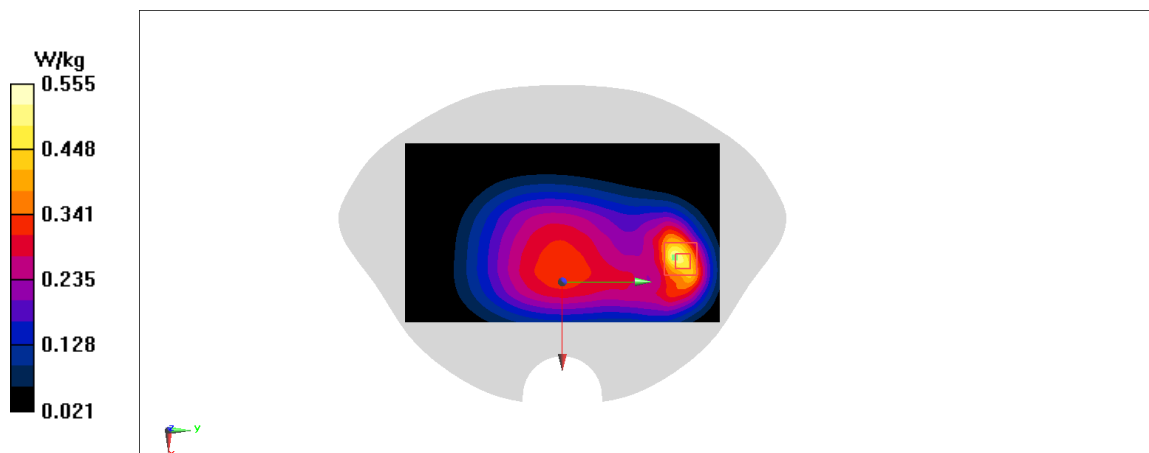


Fig A.26

**LTE1900-FDD25\_CH26590 Left Cheek**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1905$  MHz;  $\sigma = 1.423$  mho/m;  $\epsilon_r = 40.16$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1905 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.457 W/kg

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

Reference Value = 5.892 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.522 W/kg

**SAR(1 g) = 0.35 W/kg; SAR(10 g) = 0.226 W/kg**

Maximum value of SAR (measured) = 0.464 W/kg

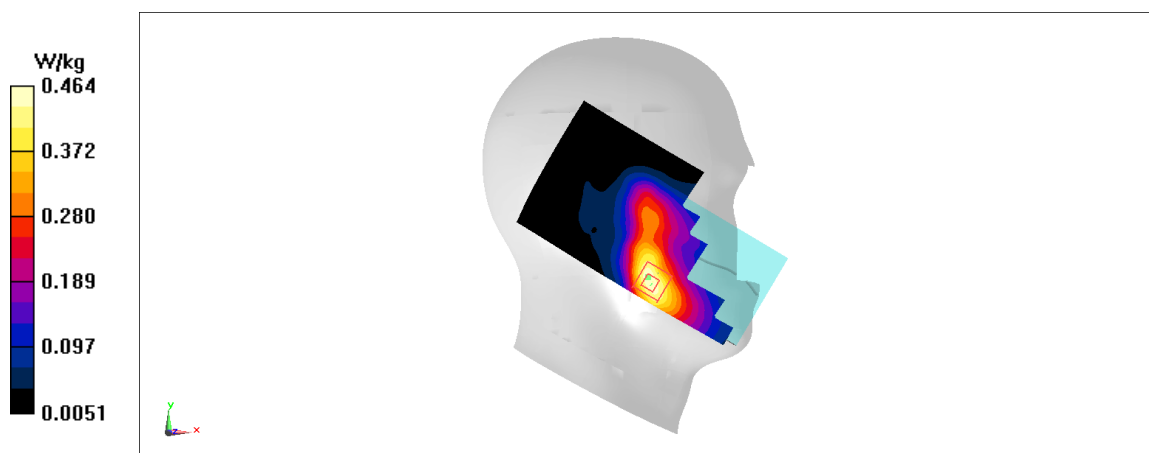


Fig A.27

**LTE1900-FDD25\_CH26590 Rear 15mm\_Body worn**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1905$  MHz;  $\sigma = 1.423$  mho/m;  $\epsilon_r = 40.16$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1905 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

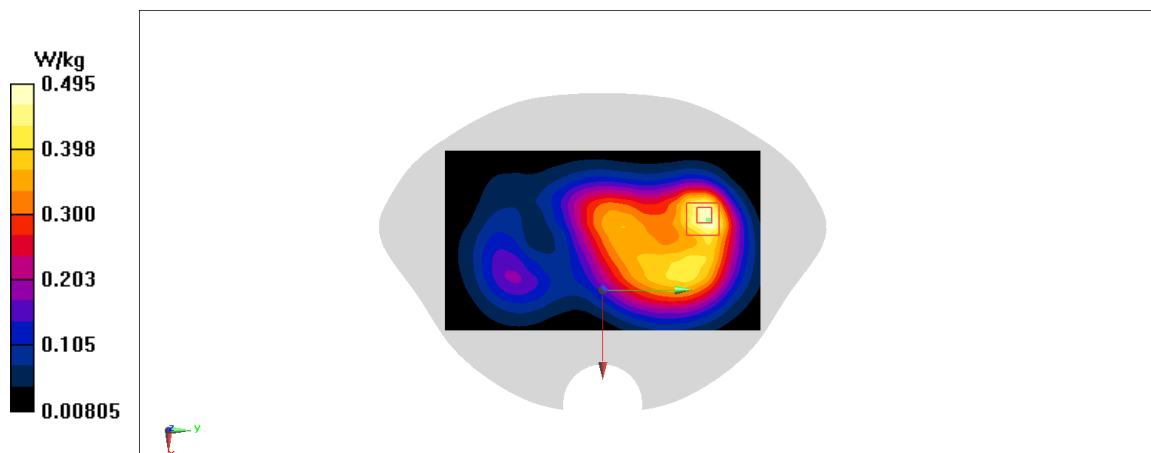
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.35V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.599W/kg

**SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.204 W/kg**

Maximum value of SAR (measured) =0.503W/kg



**Fig A.28**

**LTE1900-FDD25\_CH26140 Rear 10mm\_Hotspot**

Date: 6/7/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40.22$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

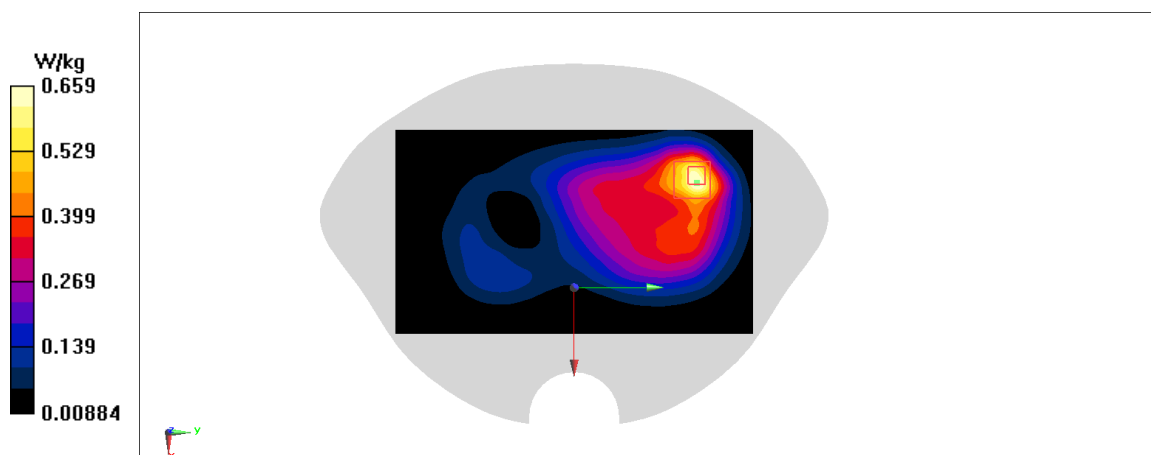
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.34 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.79 W/kg

**SAR(1 g) = 0.436 W/kg; SAR(10 g) = 0.245 W/kg**

Maximum value of SAR (measured) = 0.659 W/kg



**Fig A.29**

**LTE850-FDD26\_CH26965 Right Cheek**

Date: 6/4/2021

Electronics: DAE4 Sn1331

Medium: head 835 MHz

Medium parameters used:  $f = 841.5$  MHz;  $\sigma = 0.896$  mho/m;  $\epsilon_r = 42.28$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE850-FDD26 841.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.274 W/kg

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

Reference Value = 3.776 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.3 W/kg

**SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.172 W/kg**

Maximum value of SAR (measured) = 0.272 W/kg

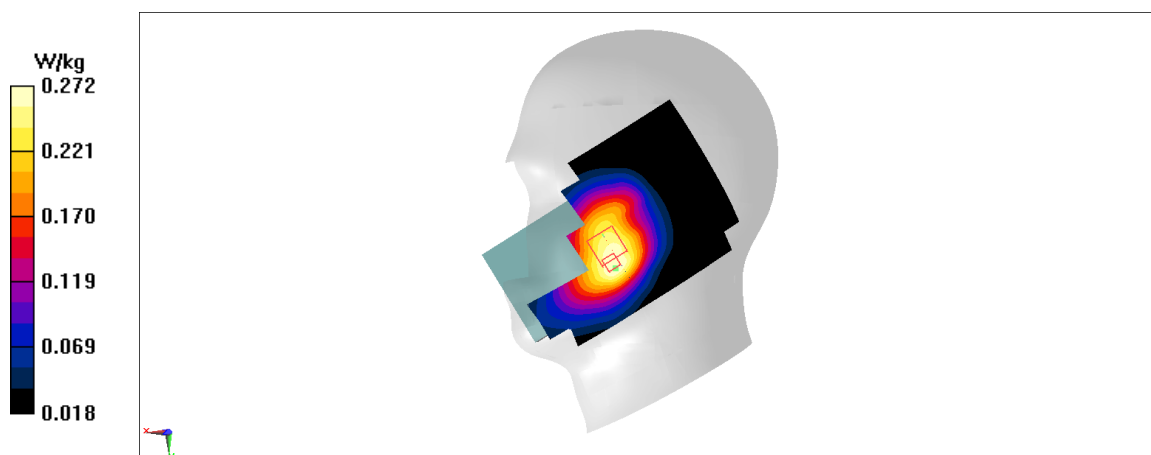


Fig A.30

**LTE850-FDD26\_CH26965 Rear 10mm**

Date: 6/4/2021

Electronics: DAE4 Sn1331

Medium: head 835 MHz

Medium parameters used:  $f = 841.5$  MHz;  $\sigma = 0.896$  mho/m;  $\epsilon_r = 42.28$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE850-FDD26 841.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

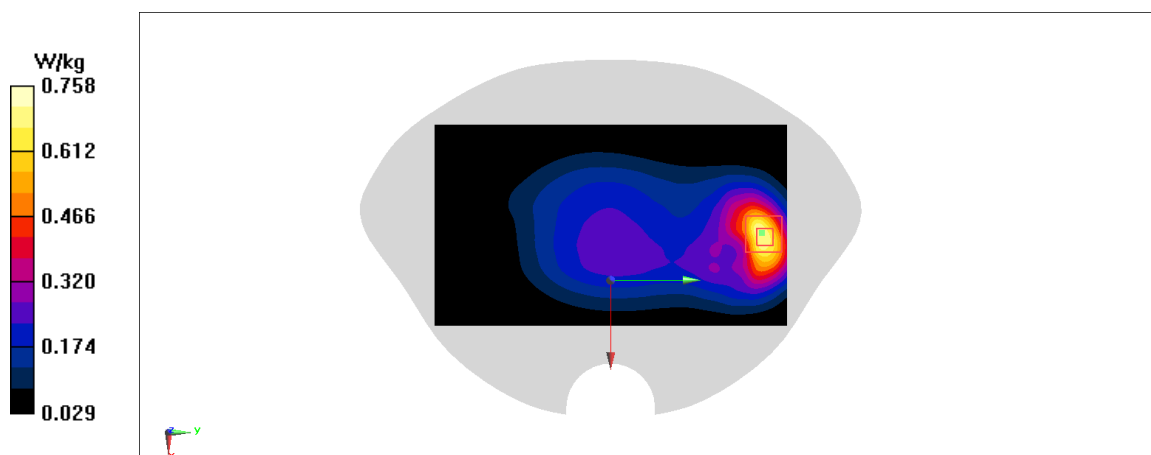
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.69 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.954 W/kg

**SAR(1 g) = 0.5 W/kg; SAR(10 g) = 0.279 W/kg**

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



**Fig A.31**



**LTE2600-TDD38\_CH38150 Left Cheek**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 1.995$  mho/m;  $\epsilon_r = 38.95$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2600-TDD38 2610 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 1.465 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.249 W/kg

**SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.078 W/kg**

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

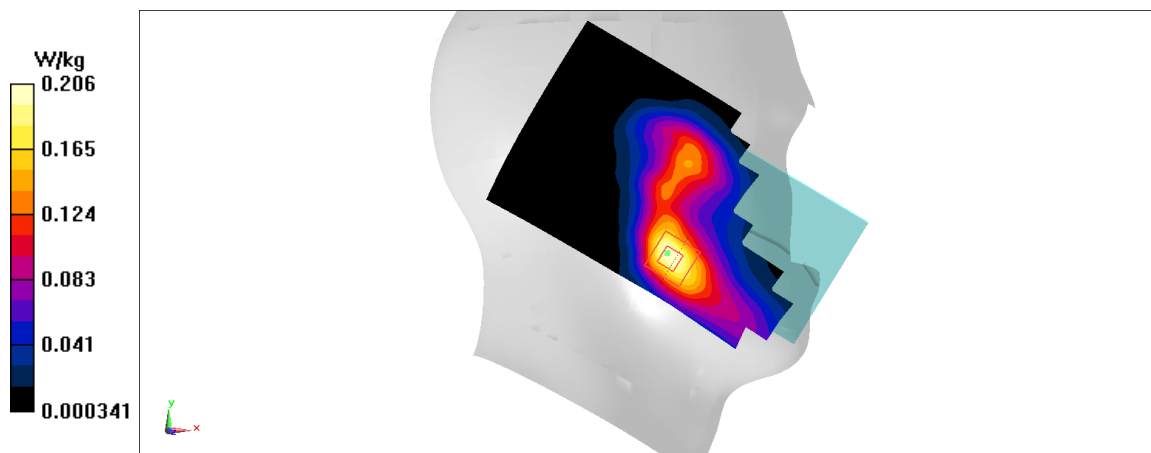


Fig A.32

**LTE2600-TDD38\_CH38150 Rear 15mm\_Body worn**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

 Medium parameters used:  $f = 2610$  MHz;  $\sigma = 1.995$  mho/m;  $\epsilon_r = 38.95$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2600-TDD38 2610 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.413 W/kg

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

Reference Value = 4.01 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.505 W/kg

**SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.142 W/kg**

Maximum value of SAR (measured) = 0.408 W/kg

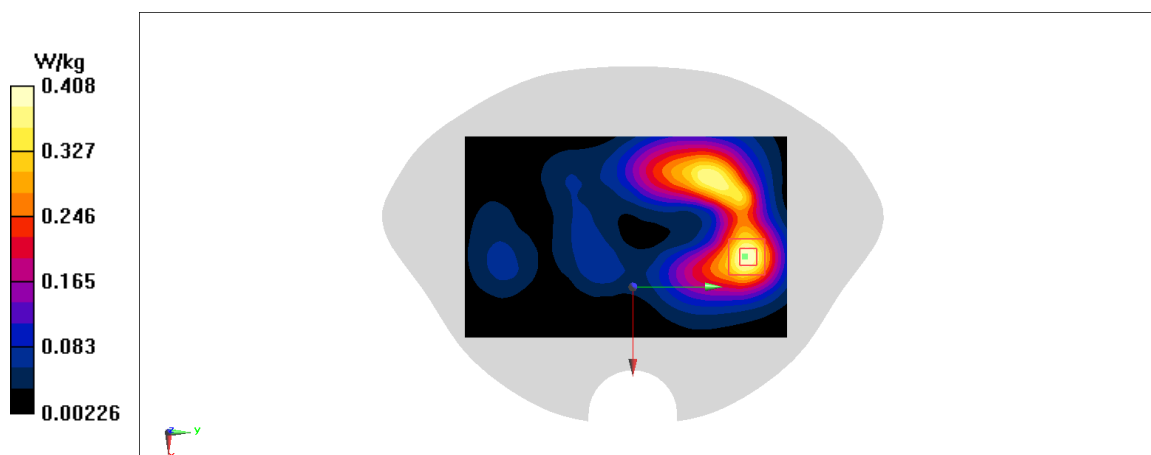


Fig A.33

**LTE2600-TDD38\_CH37850 Bottom 10mm\_Hotspot**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2580$  MHz;  $\sigma = 1.966$  mho/m;  $\epsilon_r = 38.98$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2600-TDD38 2580 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.626 W/kg

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

Reference Value = 12.77 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.735 W/kg

**SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.183 W/kg**

Maximum value of SAR (measured) = 0.6 W/kg

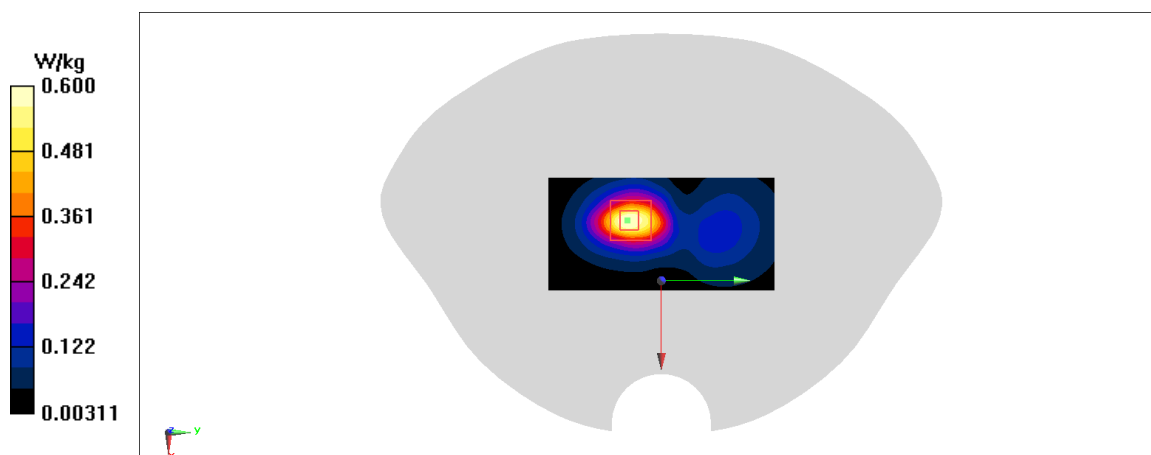


Fig A.34

**LTE2500-TDD41 PC3\_CH41490 Left Cheek**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.055$  mho/m;  $\epsilon_r = 38.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2680 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.230W/kg

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

Reference Value = 2.335V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.275W/kg

**SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.081 W/kg**

Maximum value of SAR (measured) = 0.228W/kg

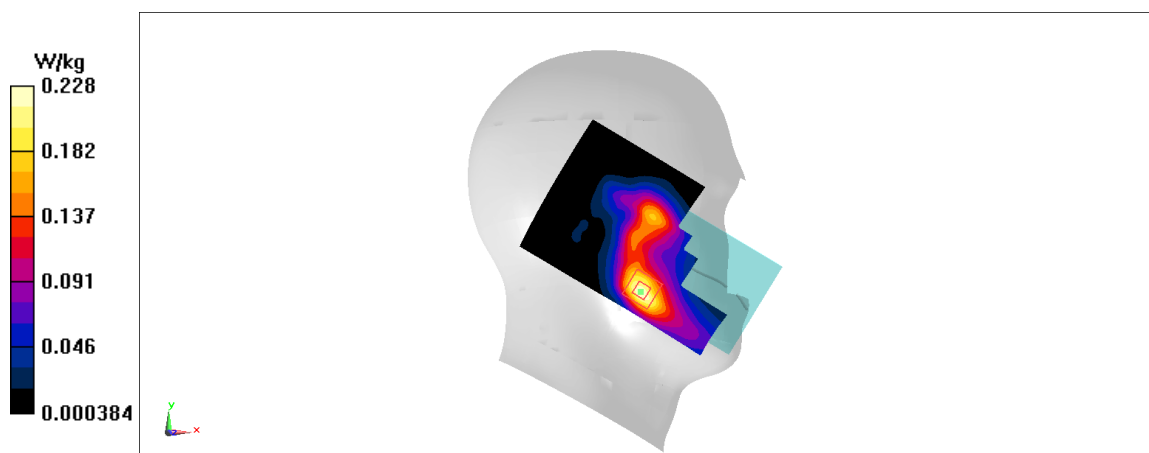


Fig A.35

**LTE2500-TDD41 PC3\_CH41490 Rear 15mm\_Body worn**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.055$  mho/m;  $\epsilon_r = 38.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2680 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) =0.434W/kg

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

Reference Value =3.924V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) =0.529W/kg

**SAR(1 g) = 0.282 W/kg; SAR(10 g) = 0.152 W/kg**

Maximum value of SAR (measured) = 0.431W/kg

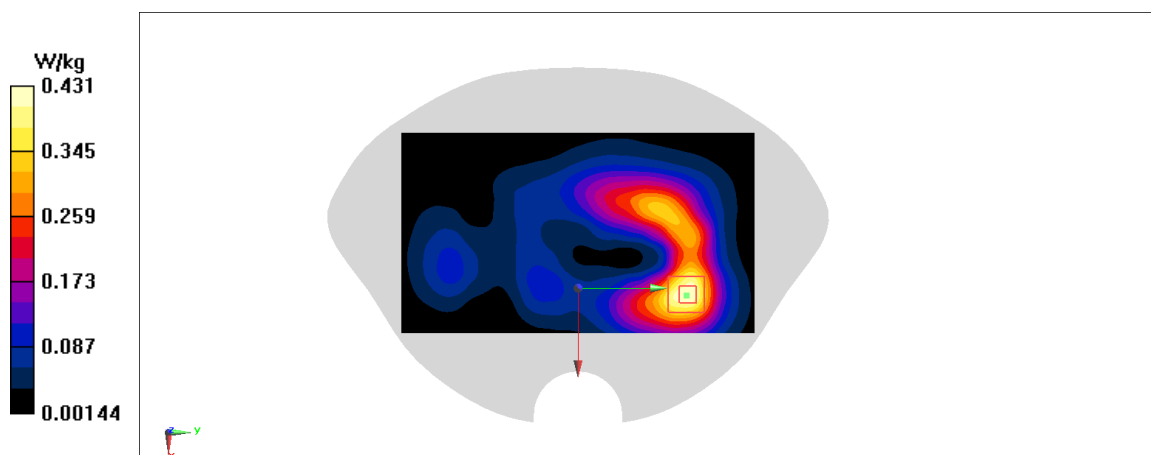


Fig A.36

**LTE2500-TDD41 PC3\_CH39750 Bottom 10mm\_Hotspot**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2506$  MHz;  $\sigma = 1.919$  mho/m;  $\epsilon_r = 39.396$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2506 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.443 W/kg

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

Reference Value = 11.67 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.528 W/kg

**SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.132 W/kg**

Maximum value of SAR (measured) = 0.435 W/kg

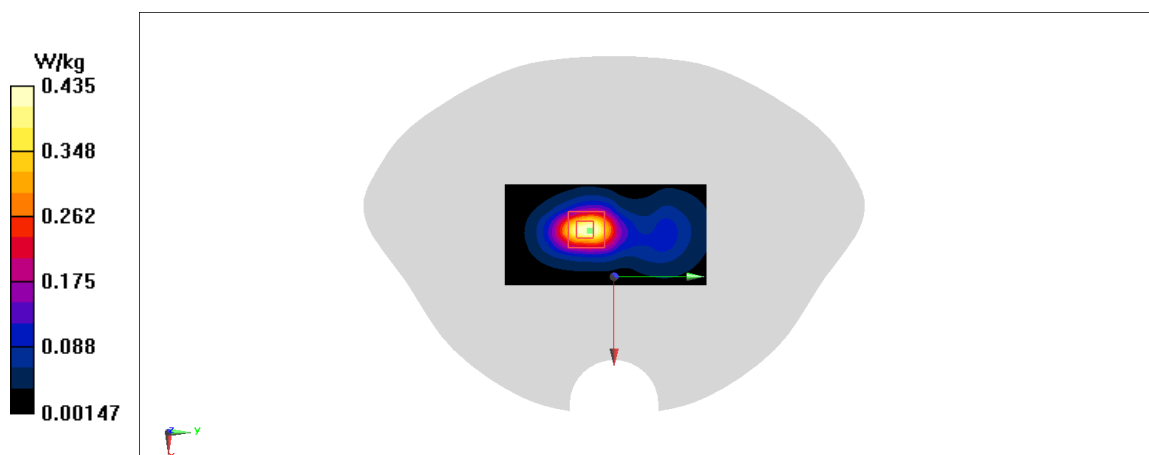


Fig A.37

**LTE2500-TDD41 PC2\_CH40620 Left Cheek**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2593$  MHz;  $\sigma = 1.988$  mho/m;  $\epsilon_r = 39.151$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2593 MHz Duty Cycle: 1:2.37

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.253W/kg

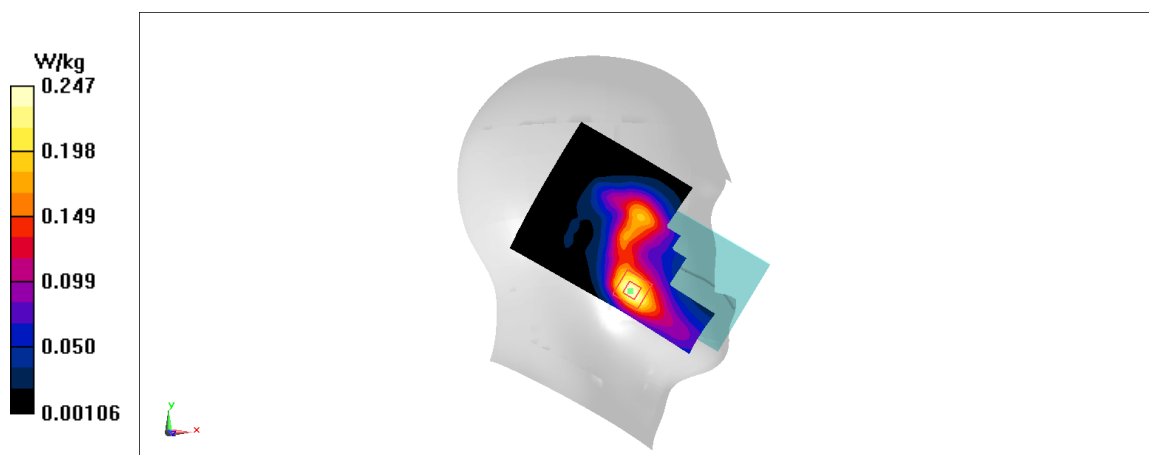
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.996V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.295W/kg

**SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.091 W/kg**

Maximum value of SAR (measured) = 0.247W/kg



**Fig A.38**

**LTE2500-TDD41 PC2\_CH40620 Rear 15mm\_Body worn**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2593$  MHz;  $\sigma = 1.988$  mho/m;  $\epsilon_r = 39.151$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 2593 MHz Duty Cycle: 1:2.37

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.384W/kg

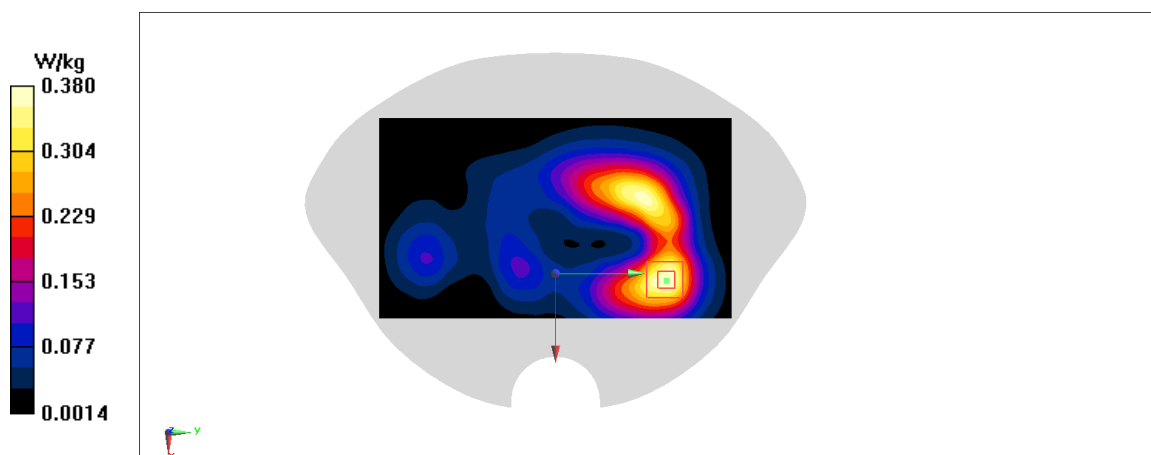
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 3.888V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = W/kg

**SAR(1 g) = 0.248 W/kg; SAR(10 g) = 0.134 W/kg**

Maximum value of SAR (measured) = 0.380W/kg



**Fig A.39**



**LTE2500-TDD41 PC2\_CH39750 Bottom 10mm\_Hotspot**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2506$  MHz;  $\sigma = 1.332$  mho/m;  $\epsilon_r = 40.648$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-TDD41 PC2 2506 MHz Duty Cycle: 1:2.37

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

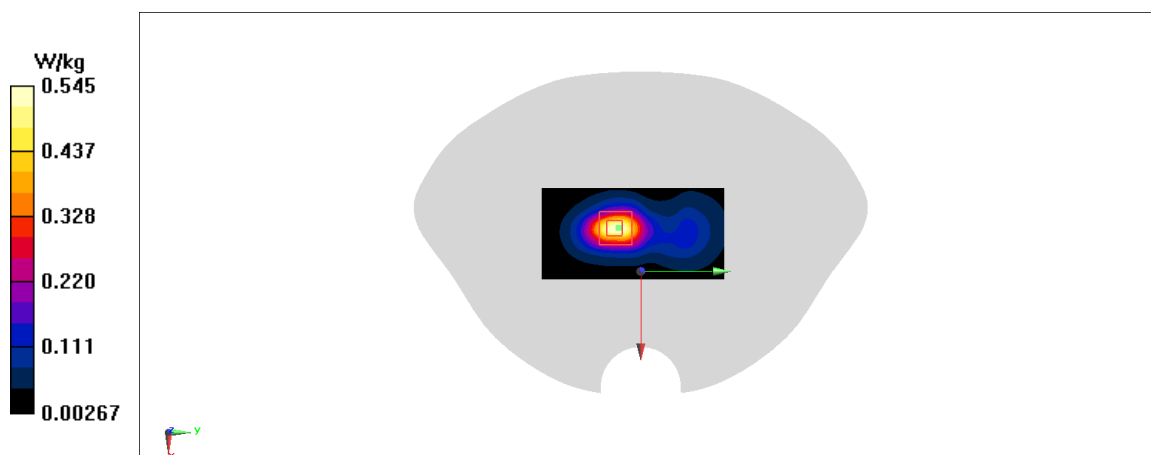
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.00 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.661 W/kg

**SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.165 W/kg**

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



**Fig A.40**

**LTE1700-FDD66 ANT1\_CH132072 Left Cheek**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.332$  mho/m;  $\epsilon_r = 40.648$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) =0.262W/kg

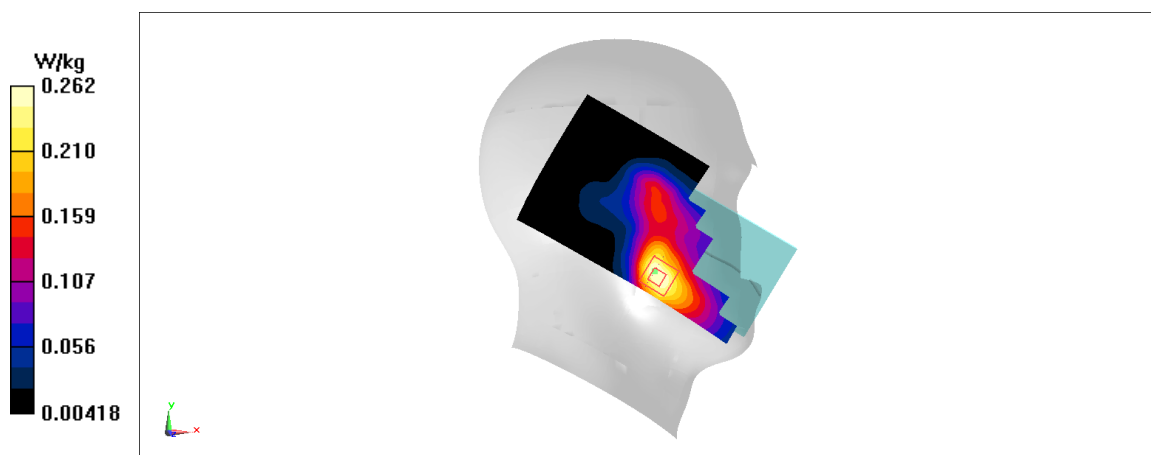
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =6.190 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.293 W/kg

**SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.136 W/kg**

Maximum value of SAR (measured) =0.262W/kg



**Fig A.41**

**LTE1700-FDD66 ANT1\_CH132072 Rear 15mm\_Body worn**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.332$  mho/m;  $\epsilon_r = 40.648$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.598W/kg

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

Reference Value =14.20V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.676W/kg

**SAR(1 g) = 0.445 W/kg; SAR(10 g) = 0.296 W/kg**

Maximum value of SAR (measured) =0.590W/kg

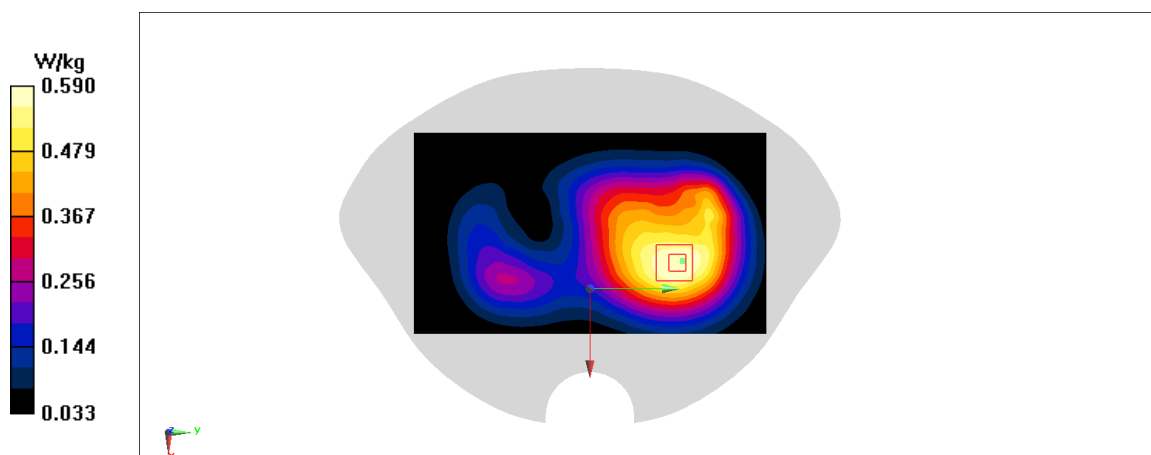


Fig A.42

**LTE1700-FDD66 ANT1\_CH132572 Rear 10mm\_Hotspot**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.439$  mho/m;  $\epsilon_r = 40.633$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1770 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (81x141x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

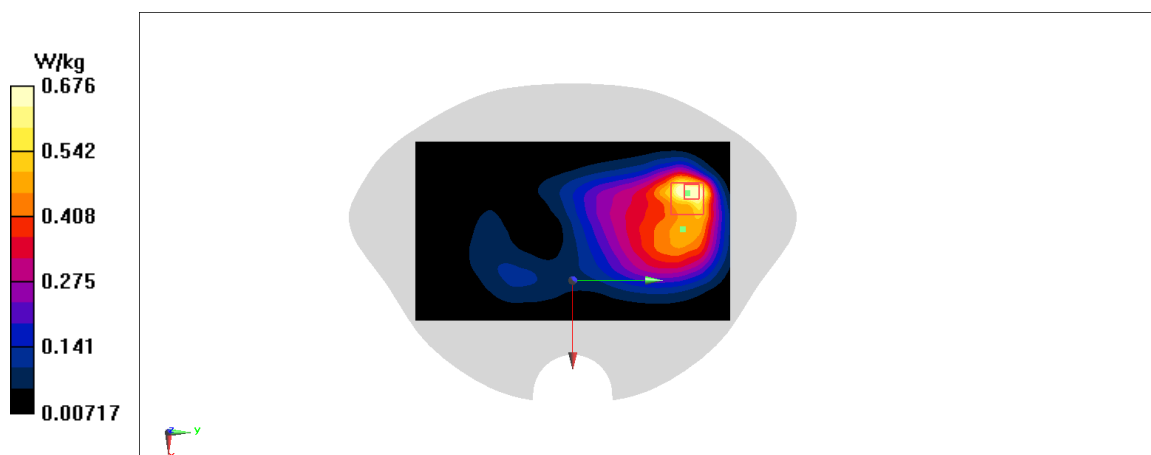
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.275V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.851W/kg

**SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.252 W/kg**

Maximum value of SAR (measured) = 0.676W/kg



**Fig A.43**

**LTE1700-FDD66 ANT4\_CH132072 Right Tilt**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 2.159$  mho/m;  $\epsilon_r = 39.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.7 W/kg

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

Reference Value = 13.33 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.95 W/kg

**SAR(1 g) = 0.4 W/kg; SAR(10 g) = 0.174 W/kg**

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

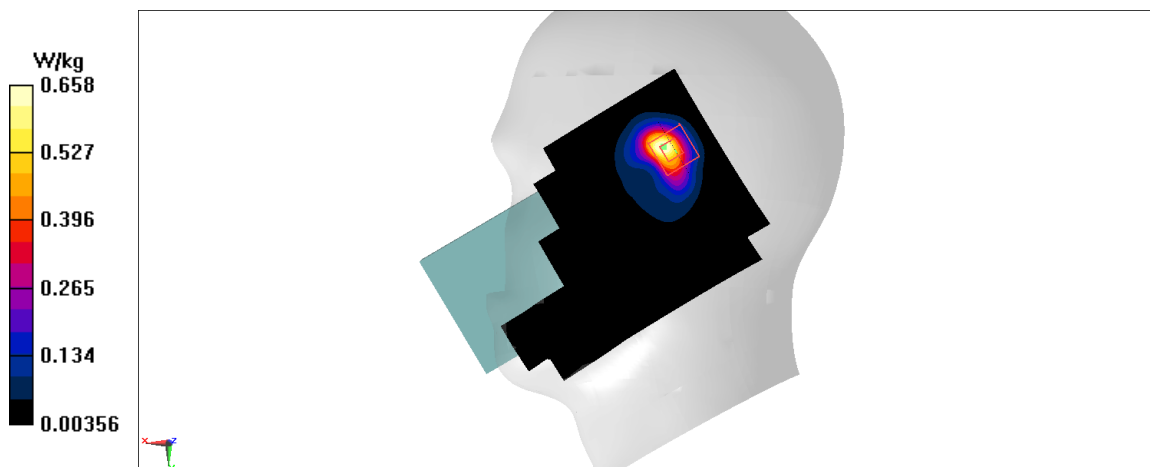


Fig A.44

**LTE1700-FDD66 ANT4\_CH132072 Rear 15mm\_Body worn**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 2.159$  mho/m;  $\epsilon_r = 39.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.168 W/kg

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

Reference Value = 6.012 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.219 W/kg

**SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.069 W/kg**

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

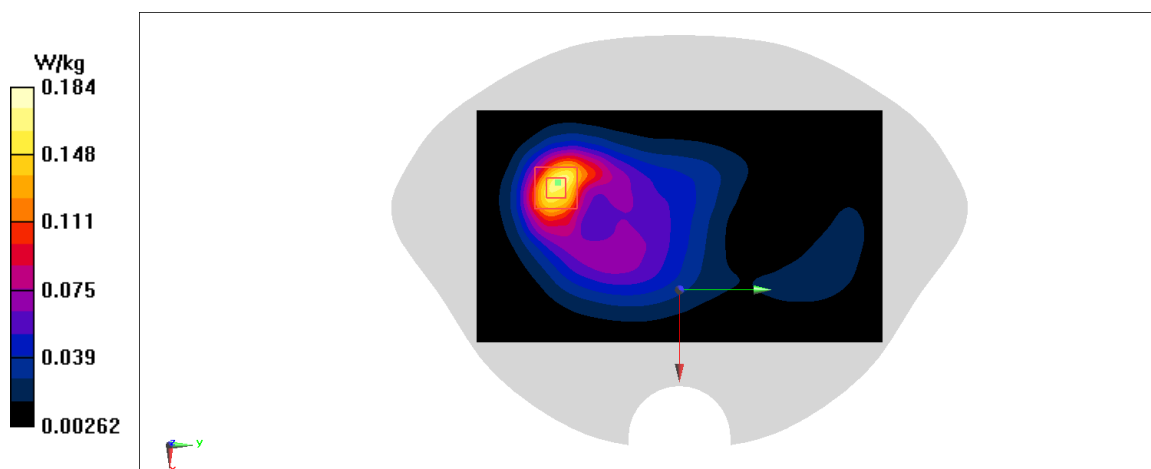


Fig A.45

**LTE1700-FDD66 ANT4\_CH132072 Rear 10mm\_Hotspot**

Date: 6/5/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.332$  mho/m;  $\epsilon_r = 40.648$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

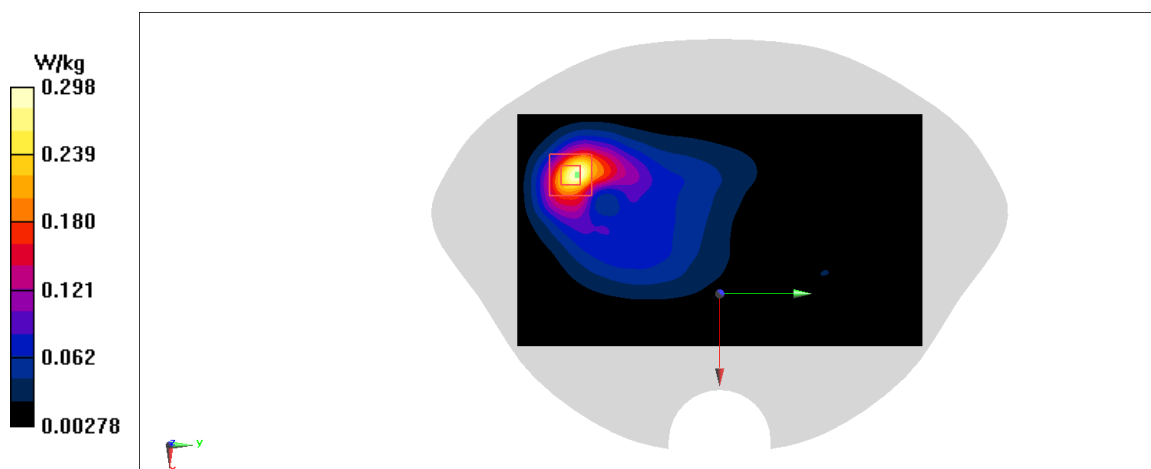
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.694 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.362 W/kg

**SAR(1 g) = 0.194 W/kg; SAR(10 g) = 0.098 W/kg**

Maximum value of SAR (measured) = 0.298 W/kg



**Fig A.46**

**LTE700-FDD71\_CH133322 Right Tilt**

Date: 6/2/2021

Electronics: DAE4 Sn1331

Medium: head 750 MHz

Medium parameters used:  $f = 683$  MHz;  $\sigma = 0.868$  mho/m;  $\epsilon_r = 44.07$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD71 683 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0611 W/kg

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

Reference Value = 4.776 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.089 W/kg

**SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.043 W/kg**

Maximum value of SAR (measured) = 0.0811 W/kg

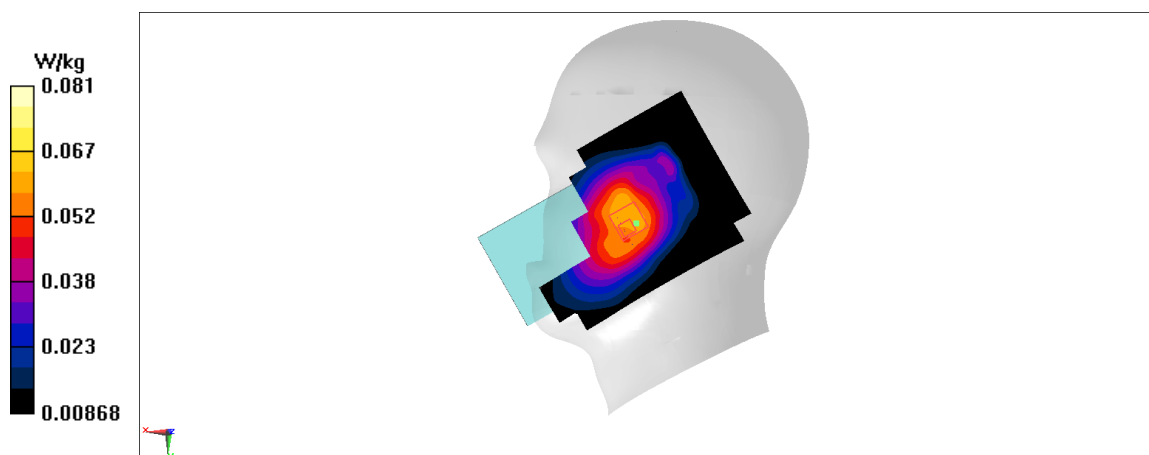


Fig A.47



**LTE700-FDD71\_CH133322 Right 10mm**

Date: 6/2/2021

Electronics: DAE4 Sn1331

Medium: head 750 MHz

Medium parameters used:  $f = 683$  MHz;  $\sigma = 0.868$  mho/m;  $\epsilon_r = 44.07$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD71 683 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(10.17,10.17,10.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 16.38 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.312 W/kg

**SAR(1 g) = 0.21 W/kg; SAR(10 g) = 0.148 W/kg**

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

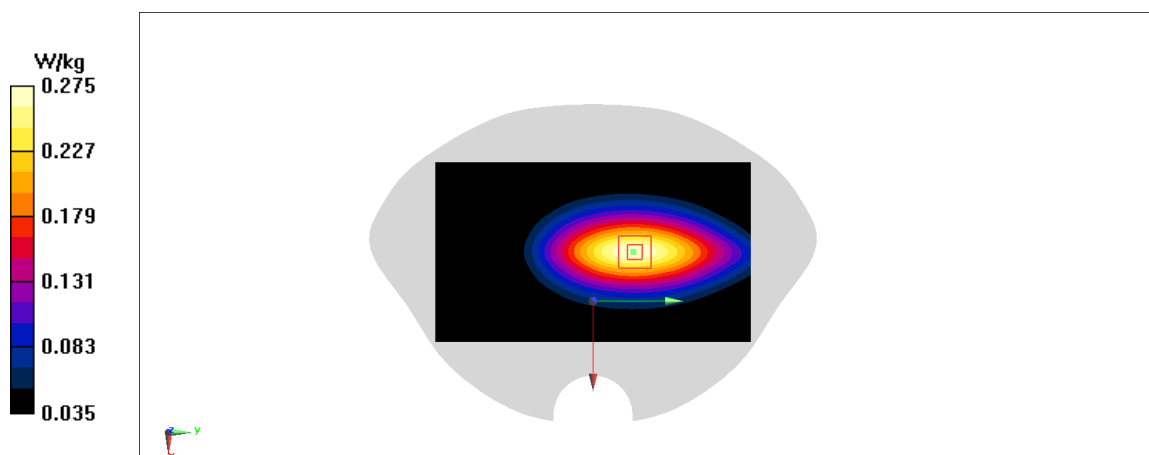


Fig A.48

**5G NR n25 ANT1\_CH374592 Left Cheek**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1882.5$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 40.382$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.313W/kg

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

Reference Value = 3.901V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.339W/kg

**SAR(1 g) = 0.219 W/kg; SAR(10 g) = 0.139 W/kg**

Maximum value of SAR (measured) = 0.298 W/kg

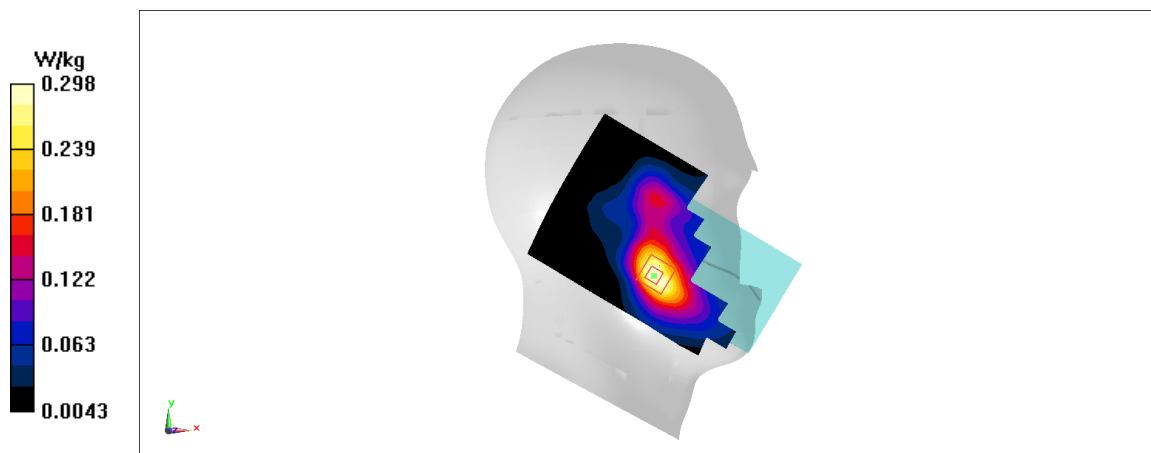


Fig A.49

**5G NR n25 ANT1\_CH374592 Rear 15mm\_Body Worn**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.487$  mho/m;  $\epsilon_r = 40.412$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n25 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) =0.503 W/kg

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

Reference Value = 12.49V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) =0.602 W/kg

**SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.202 W/kg**

Maximum value of SAR (measured) =0.508 W/kg

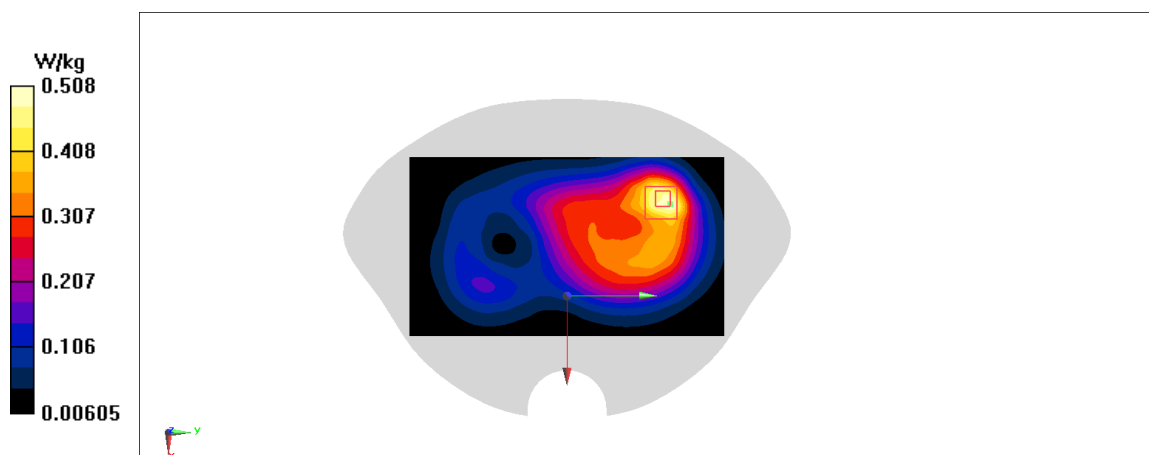


Fig A.50

**5G NR n25 ANT1\_CH370092 Rear 10mm\_Hotspot**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.487$  mho/m;  $\epsilon_r = 40.412$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n25 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

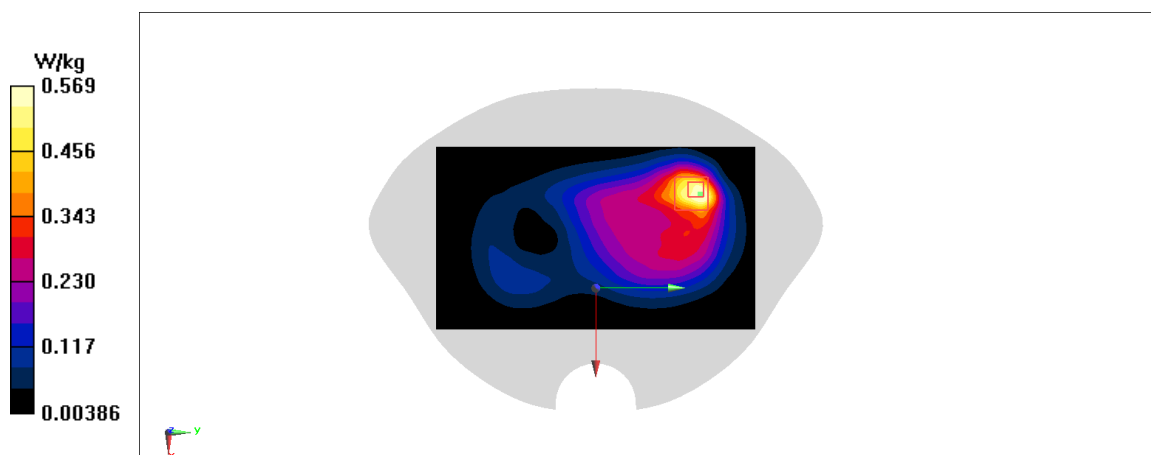
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.55V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.707W/kg

**SAR(1 g) = 0.373 W/kg; SAR(10 g) = 0.206 W/kg**

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



**Fig A.51**

**5G NR n25 ANT4\_CH370092 Right Tilt**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.487$  mho/m;  $\epsilon_r = 40.412$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n25 1860 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.10 W/kg

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

Reference Value = 21.90 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.41 W/kg

**SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.301 W/kg**

Maximum value of SAR (measured) = 1.15 W/kg

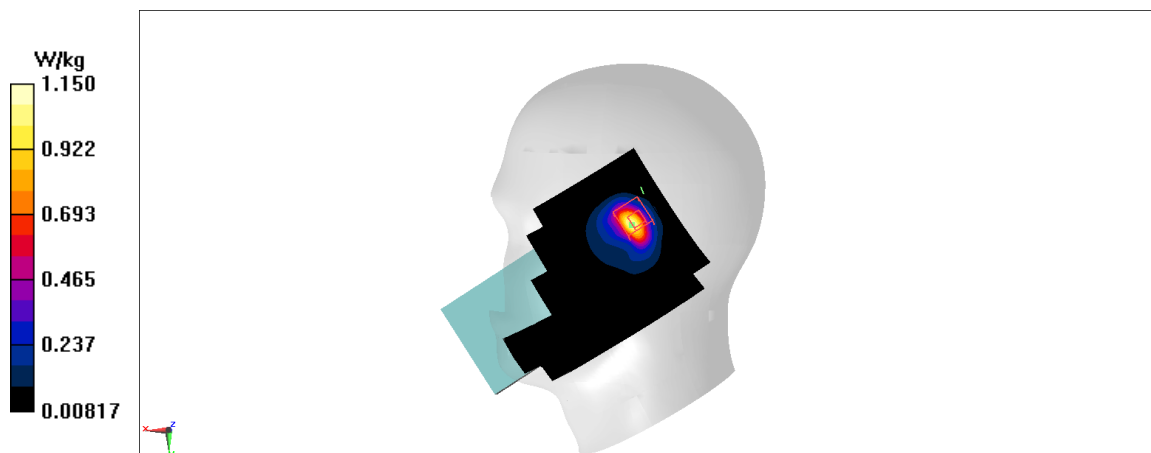


Fig A.52

**5G NR n25 ANT4\_CH370050 Rear 15mm\_Body worn**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1852.5$  MHz;  $\sigma = 1.404$  mho/m;  $\epsilon_r = 41.865$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n25 1852.5 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.459 W/kg

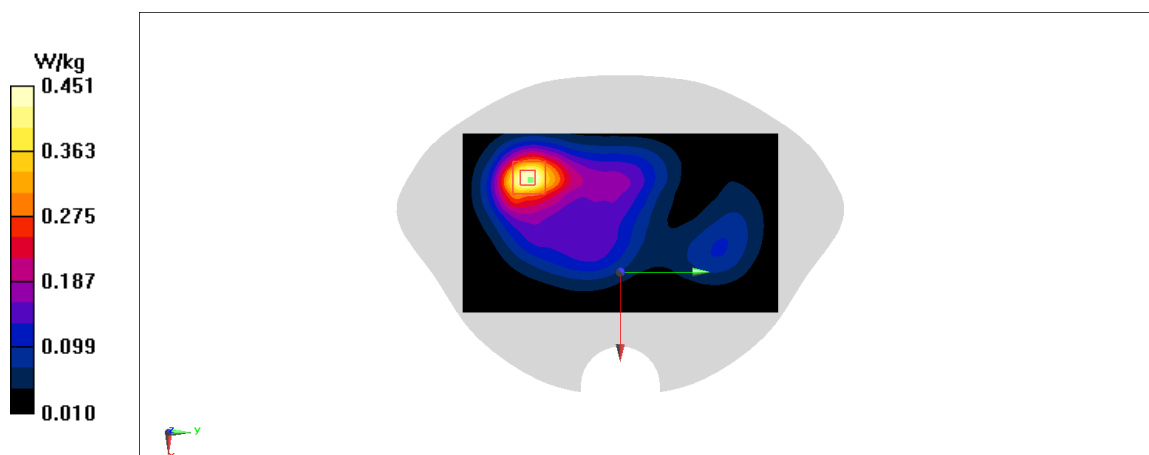
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.25V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.541 W/kg

**SAR(1 g) = 0.31 W/kg; SAR(10 g) = 0.178 W/kg**

Maximum value of SAR (measured) = 0.451 W/kg



**Fig A.53**

**5G NR n25 ANT4\_CH370092 Rear 10mm\_Hotspot**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.487$  mho/m;  $\epsilon_r = 40.412$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n25 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.85,7.85,7.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.864 W/kg

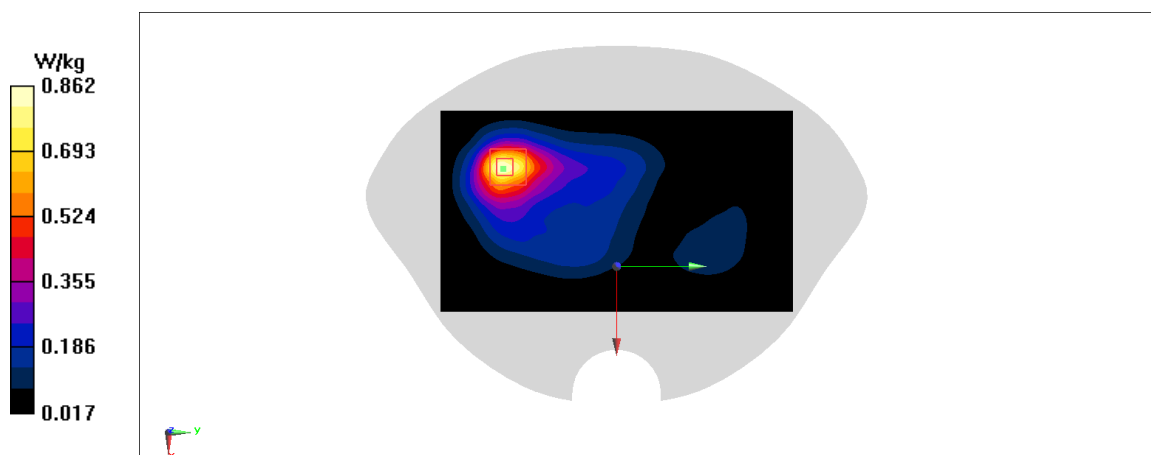
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.2 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.305 W/kg**

Maximum value of SAR (measured) = 0.862 W/kg



**Fig A.54**

**5G NR n41\_CH535988 Right Tilt**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 2679.99$  MHz;  $\sigma = 2.015$  mho/m;  $\epsilon_r = 40.588$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n41 2679.99 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.4 W/kg

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

Reference Value = 8.183 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.52 W/kg

**SAR(1 g) = 0.576 W/kg; SAR(10 g) = 0.244 W/kg**

Maximum value of SAR (measured) = 1.1 W/kg

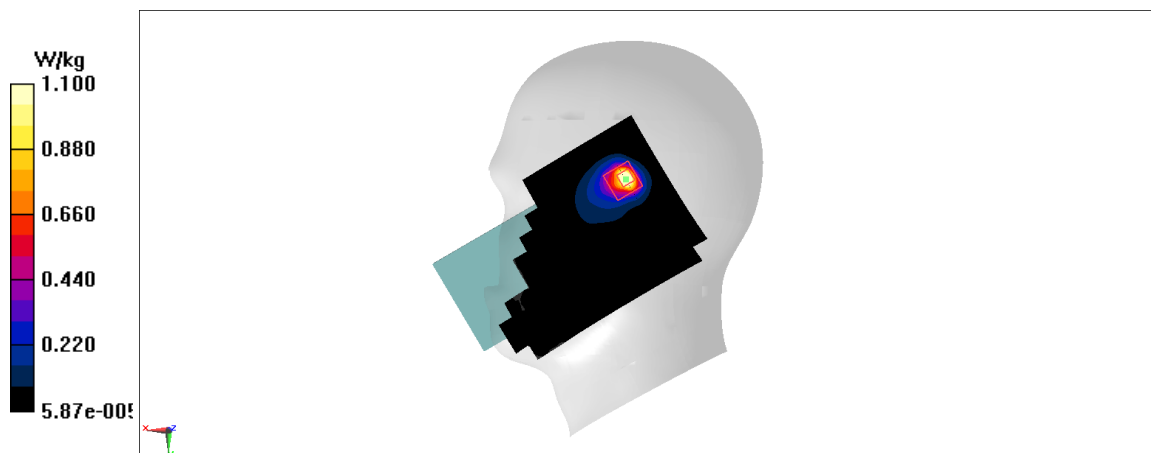


Fig A.55



**5G NR n41\_CH518598 Rear 15mm\_Body worn**

Date: 6/8/2021

Electronics: DAE4 Sn1331

Medium: head 1900 MHz

Medium parameters used:  $f = 2592.99$  MHz;  $\sigma = 1.934$  mho/m;  $\epsilon_r = 40.725$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n41 2592.99 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.463 W/kg

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

Reference Value = 3.503 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.55 W/kg

**SAR(1 g) = 0.278 W/kg; SAR(10 g) = 0.14 W/kg**

Maximum value of SAR (measured) = 0.435 W/kg

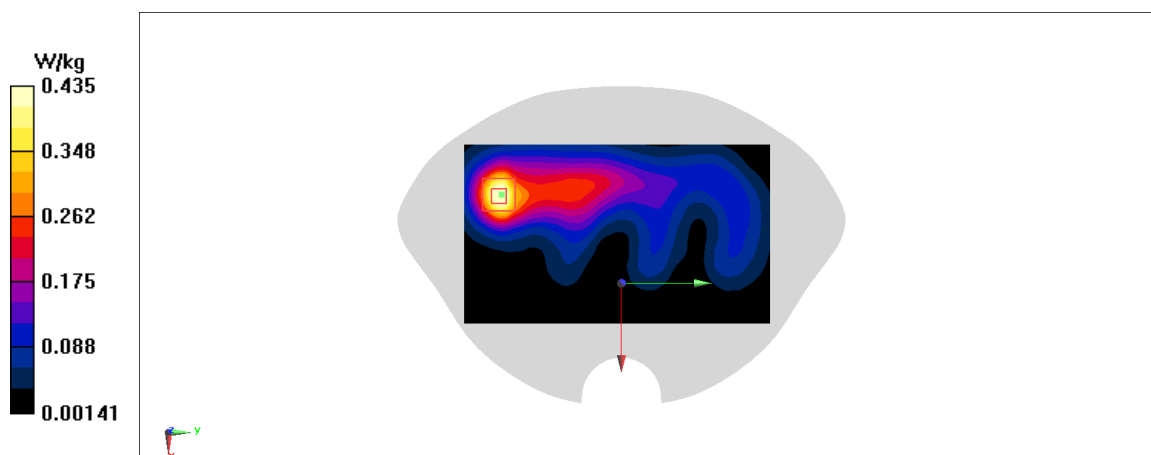


Fig A.56

**5G NR n41\_CH535988 Top 10mm\_Hotspot**

Date: 6/10/2021

Electronics: DAE4 Sn1331

Medium: head 2600 MHz

Medium parameters used:  $f = 2679.99$  MHz;  $\sigma = 2.015$  mho/m;  $\epsilon_r = 40.588$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n41 2679.99 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(7.17,7.17,7.17)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.97 W/kg

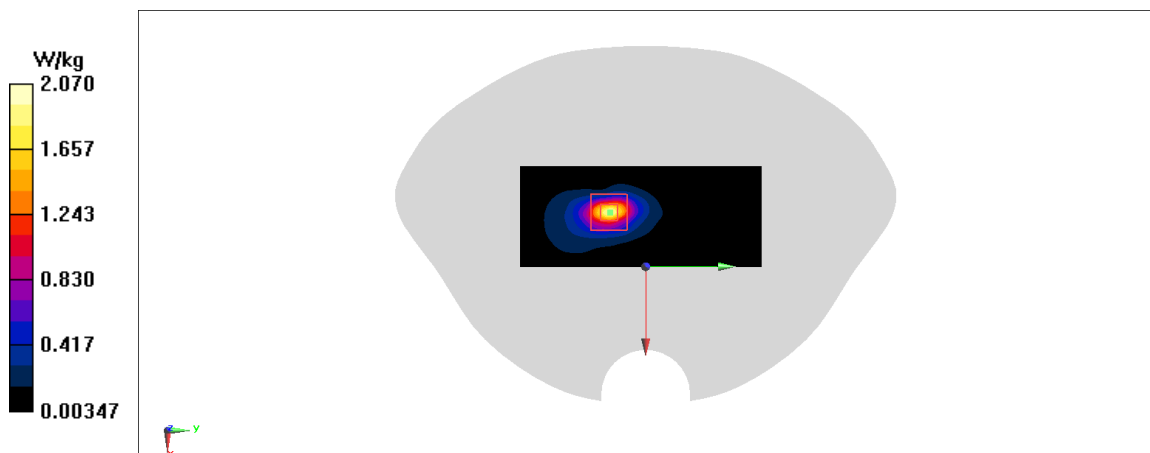
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.26 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 2.7 W/kg

**SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.199 W/kg**

Maximum value of SAR (measured) = 2.07 W/kg



**Fig A.57**

**5G NR n66 ANT1\_CH349000 Left Cheek**

Date: 6/6/2021

Electronics: DAE4 Sn1331

Medium: head 1750 MHz

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.425$  mho/m;  $\epsilon_r = 40.721$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: 5G NR n66 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7548 ConvF(8.24,8.24,8.24)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.301 W/kg

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

Reference Value = 5.084 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.334 W/kg

**SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.146 W/kg**

Maximum value of SAR (measured) = 0.291 W/kg

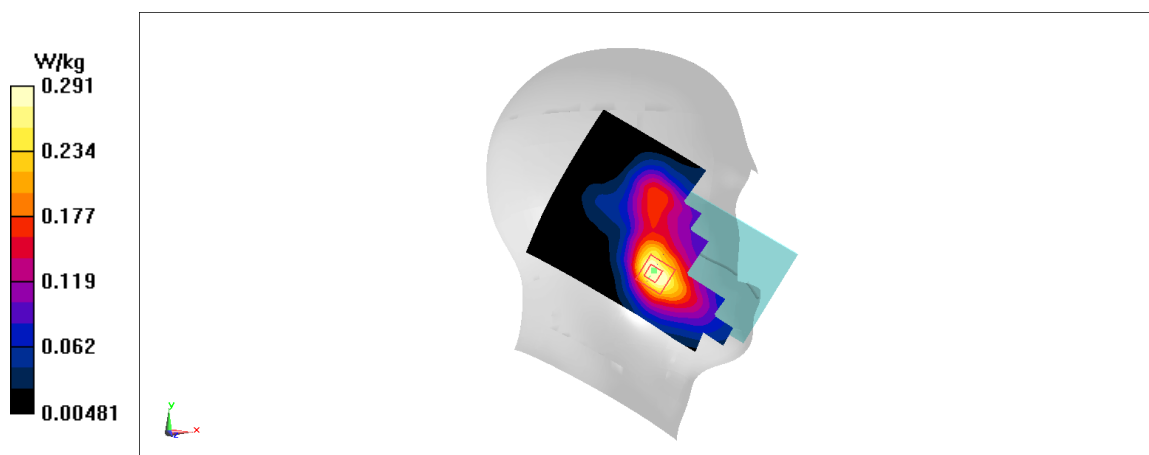


Fig A.58