TESTING
NVLAP LAB CODE 600118-0

# SAR TEST REPORT

## No. I22Z60452-SEM07

**For**

**HMD Global Oy**

**Smart Phone**

**Model Name: N1530DL**

**with**

**Hardware Version: v1.0**

**Software Version: 02US_1_110**

**FCC ID: 2AJOTTA-1530**

**Issued Date: 2022-6-29**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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## REPORT HISTORY

| Report Number | Revision | Issue Date | Description |
|---|---|---|---|
| I22Z60452-SEM07 | Rev.0 | 2022-6-1 | Initial creation of test report |
| I22Z60452-SEM07 | Rev.1 | 2022-6-29 | Updated 2.4g /5G WIFI&BT measurement results on page 275.<br>Page 9, GPRS/EGPRS multislot class 12 is updated to class 33.<br>Updated Tune up power of WCDMA 1900 on page 33.<br>Add N5 Conducted Output Power on page 278.<br>CA_2A-2A-13A-66A measured with downlink carrier aggregation on page 77. |

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# 1 Test Laboratory

## 1.1 Testing Location

| | |
|---|---|
| Company Name: | CTTL(Shouxiang) |
| Address: | No. 51 Shouxiang Science Building, Xueyuan Road, Haidian District, Beijing, P. R. China100191 |

## 1.2 Testing Environment

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

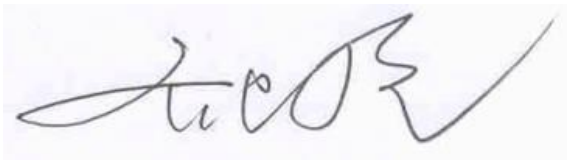
## 1.3 Project Data

| | |
|---|---|
| Project Leader: | Qi Dianyuan |
| Test Engineer: | Lin Xiaojun |
| Testing Start Date: | May 5, 2022 |
| Testing End Date: | May 28, 2022 |

## 1.4 Signature

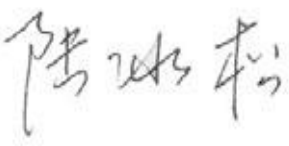
**Lin Xiaojun**

**(Prepared this test report)**



**Qi Dianyuan**

**(Reviewed this test report)**



**Lu Bingsong**

**Deputy Director of the laboratory**

**(Approved this test report)**

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## 2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for HMD Global Oy Smart Phone N1530DL are as follows:

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

| | | Antenna | Highest Reported SAR (1g) | |
|---|---|---|---|---|
| | | | Head SAR | Body-worn SAR |
| GSM | GSM 850 | 0 | 0.32 | 0.71 |
| | PCS 1900 | 2 | 0.46 | 0.43 |
| WCDMA | UMTS FDD 2 | 2 | 0.96 | 0.65 |
| | UMTS FDD 4 | 2 | 0.71 | 0.46 |
| | UMTS FDD 5 | 0 | 0.42 | 0.62 |
| LTE | LTE Band 2 | 0 | 0.13 | 0.18 |
| | LTE Band 12 | 0 | 0.10 | 0.51 |
| | LTE Band 13 | 0 | 0.13 | 0.45 |
| | LTE Band 25 | 2 | 0.77 | 0.54 |
| | LTE Band 26 | 0 | 0.23 | 0.35 |
| | LTE Band 41 PC3 | 4 | 0.38 | 0.77 |
| | LTE Band 41 PC2 | 4 | 0.31 | 0.60 |
| | LTE Band 66 | 2 | 0.50 | 0.39 |
| | LTE Band 66 | 0 | 0.25 | 0.22 |
| | LTE Band 71 | 0 | 0.11 | 0.55 |
| NR SA/NSA | N25 | 2 | 0.67 | 0.37 |
| | N41PC2 | 4 | 0.79 | 0.60 |
| | N41PC3 | 4 | 0.73 | 0.75 |
| | N66 | 2 | 0.48 | 0.27 |
| | N77 3450M-3550M PC2 | 5 | 0.77 | 0.76 |
| | N77 3700M-3980M PC2 | 5 | 1.05 | 0.88 |
| | N77 3450M-3550M PC3 | 5 | 0.61 | 0.69 |
| | N77 3700M-3980M PC3 | 5 | 1.05 | 0.88 |
| | N71 | 0 | 0.23 | 0.47 |
| | N5 | 0 | 0.24 | 0.49 |
| WLAN 2.4 GHz | | 9 | 0.20 | 0.25 |
| WLAN 5 GHz | | 9 | 0.17 | 0.44 |
| BT | | 9 | <0.01 | <0.01 |

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 10 mm for body worn 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. A detailed description of the equipment under test can be found in chapter 4 of this test report. **The highest**

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**reported SAR for Head, Body Worn are 1.05W/kg, 0.88W/kg.**

**Table 2.2: Highest Reported SAR -Simultaneous transmission**

| reported SAR 1g (W/kg) | | | | | |
|---|---|---|---|---|---|
| Body | WWAN | | WIFI5G | BT | WWAN+WiFi2.4G +BT |
| | LTE Band66 ANT0 | N71 | | | |
| Right Edge 10mm | 0.22 | 0.47 | 0.44 | <0.01 | 1.13 |

According to the above tables, the highest sum of reported SAR values is **1.13 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

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# 3 Client Information

## 3.1 Applicant Information

| | |
|---|---|
| Company Name: | HMD Global Oy |
| Address/Post: | Bertel Jungin aukio 9 02600 Espoo Finland |
| Contact Person: | / |
| E-mail: | / |
| Telephone: | / |
| Fax: | / |

## 3.2 Manufacturer Information

| | |
|---|---|
| Company Name: | HMD Global Oy |
| Address/Post: | Bertel Jungin aukio 9 02600 Espoo Finland |
| Contact Person: | / |
| E-mail: | / |
| Telephone: | / |
| Fax: | / |

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

**This EUT is a variant product and the report of original sample is No.I22Z60412-SEM014. According to the client request, we share the test results of original sample directly.This EUT add the measurement of NR n2/n5 and remove the values of LTE Band7. The results of spot check are presented in the annex I.**

## 4.1 About EUT

| | |
|---|---|
| Description: | Smart Phone |
| Model name: | N1530DL |
| Tested mode(s): | GSM8501900,<br>WCDMA1900/1700/850,<br>LTE Band 2/7/12/13/25/26/40/41/66/71<br>n5//n25/n41/n66/n71/n77,<br>BT, Wi-Fi (2.4G/5G), |
| Tested Tx Frequency: | 824 – 849 MHz (GSM 850) |
| | 1850 – 1910 MHz (GSM 1900) |
| | 824–849 MHz (WCDMA 850 Band V) |
| | 1710 – 1755 MHz (WCDMA 1700 Band IV) |
| | 1850–1910 MHz (WCDMA1900 Band II) |
| | 1850 – 1910 MHz (LTE Band 2) |
| | 699 – 716 MHz (LTE Band 12) |
| | 777 –787 MHz (LTE Band 13) |
| | 1850.7 – 1914.3 MHz (LTE Band 25) |
| | 814 – 849 MHz (LTE Band 26) |
| | 2496 – 2690 MHz (LTE Band 41) |
| | 1710 – 1780 MHz (LTE Band 66) |
| | 665.5 – 695.5 MHz (LTE Band 71) |
| | 824 MHz - 849 MHz (NR n5) |
| | 1852.5 – 1912.5 MHz (NR n25) |
| | 2506.02 – 2679.99 MHz (NR n41) |
| | 2570 – 2620 MHz (NR n66) |
| | 665.5 – 695.5 MHz (NR n71) |
| | 3450 – 3550 MHz (NR n77L) |
| | 3700 – 3980 MHz (NR n77H) |
| | 2402 – 2480 MHz (Bluetooth) |
| | 2412 – 2462 MHz (Wi-Fi 2.4G) |
| | 5150-5825 MHz (Wi-Fi 5G) |
| GPRS/EGPRS Multislot Class: | 33 |
| GPRS capability Class: | B |
| Antenna type: | Integrated antenna |
| Hotspot mode: | Support |
| Note：<br>1. The n77 frequency is divided into two parts. The first part of the frequency range is 3700-3900MHz, represented by n77H, and the second part of the frequency range is 3450-3550 MHz, represented by n77L.<br>2. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission. | |

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## 4.2 Internal Identification of EUT used during the test

| EUT ID* | IMEI/SN | HW | SW Version |
|---|---|---|---|
| EUT1 | 358503170026208 | v1.0 | 02US_1_110 |
| EUT2 | 358503170026166 | v1.0 | 02US_1_110 |
| EUT3 | 358503170001862 | v1.0 | 02US_1_110 |
| EUT4 | 358503170001870 | v1.0 | 02US_1_110 |

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

**Note:** It is performed to test SAR with the EUT1-2 and conducted power with the EUT3-4.

## 4.3 Internal Identification of AE used during the test

| AE ID* | Description | Model | SN | Manufacturer |
|---|---|---|---|---|
| AE1 | Battery | HQ610 | / | Ningde Amperex Technology Limited |
| AE2 | Battery | HQ610 | / | GUANGDONG FENGHUA NEW ENERGY CO., LTD |
| AE3 | Headset | JWEP239-H17H | / | JUWEI ELECTRONICS CO.,LTD |

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

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# 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 D01SAR measurement 100 MHz to 6 GHz v01r04:** SAR Measurement Requirements for 100 MHz to 6 GHz.

**KDB865664 D02RF Exposure Reporting v01r02:** RF Exposure Compliance Reporting and Documentation Considerations

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# 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 head 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.

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# 7 Tissue Simulating Liquids

The temperature of the tissue-equivalent medium used during measurement must also be within 18 °C to 25 °C and within ± 2 °C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.

The dielectric constant (εr) and conductivity (σ) of typical tissue-equivalent media recipes are expected to be within ± 5% of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for εr and σ may be relaxed to ± 10%. This is limited to frequencies ≤ 3 GHz.

## 7.1 Targets for tissue simulating liquid

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

| Frequency(MHz) | Liquid Type | Conductivity(σ) | ±10% Range | Permittivity(ε) | ± 10% Range |
|---|---|---|---|---|---|
| 750 | Head | 0.89 | 0.80～0.98 | 41.94 | 37.75～46.13 |
| 835 | Head | 0.90 | 0.81～0.99 | 41.5 | 37.35～45.65 |
| 1750 | Head | 1.40 | 1.26～1.54 | 40.0 | 36～44 |
| 1900 | Head | 1.40 | 1.26～1.54 | 40.0 | 36～44 |
| 2450 | Head | 1.80 | 1.62～1.98 | 39.2 | 35.28～43.12 |
| 2600 | Head | 1.96 | 1.76～2.16 | 39.01 | 35.11～42.91 |

**Table 7.2: Targets for tissue simulating liquid**

| Frequency(MHz) | Liquid Type | Conductivity(σ) | ± 5% Range | Permittivity(ε) | ± 5% Range |
|---|---|---|---|---|---|
| 3700 | Head | 3.12 | 2.96～3.28 | 37.70 | 35.82～39.59 |
| 3900 | Head | 3.32 | 3.15～3.49 | 37.47 | 35.6～39.34 |
| 5250 | Head | 4.71 | 4.47～4.95 | 35.93 | 34.13～37.73 |
| 5600 | Head | 5.07 | 4.82～5.32 | 35.53 | 33.8～37.3 |
| 5750 | Head | 5.22 | 4.96～5.48 | 35.36 | 33.59～37.13 |

## 7.2 Dielectric Performance

**Table 7.3: Dielectric Performance of Tissue Simulating Liquid**

| Measurement Date yyyy/mm/dd | Frequency | Type | Permittivity ε | Drift (%) | Conductivity σ (S/m) | Drift (%) |
|---|---|---|---|---|---|---|
| 2022/5/5 | 750 MHz | Head | 42.07 | 0.31 | 0.897 | 0.79 |
| 2022/5/6 | 750 MHz | Head | 41.89 | -0.12 | 0.874 | -1.80 |
| 2022/5/7 | 835 MHz | Head | 40.84 | -1.59 | 0.903 | 0.33 |
| 2022/5/8 | 835 MHz | Head | 40.8 | -1.69 | 0.889 | -1.22 |
| 2022/5/9 | 1750 MHz | Head | 40.1 | 0.05 | 1.38 | 0.73 |
| 2022/5/10 | 1750 MHz | Head | 39.45 | -1.57 | 1.37 | 0.00 |

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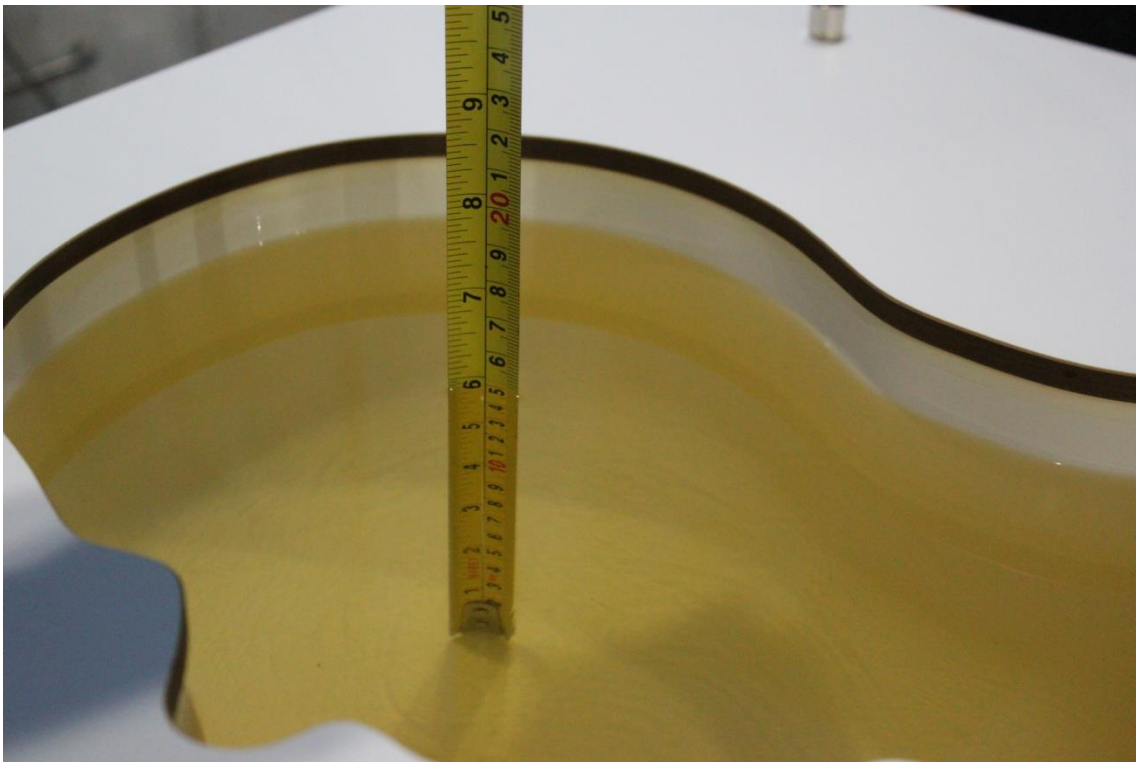
| | | | | | | |
|---|---|---|---|---|---|---|
| 2022/5/11 | 1900 MHz | Head | 39.44 | -1.40 | 1.397 | -0.21 |
| 2022/5/12 | 1900 MHz | Head | 39.61 | -0.98 | 1.387 | -0.93 |
| 2022/5/13 | 2600 MHz | Head | 39.73 | 1.85 | 1.971 | 0.56 |
| 2022/5/14 | 2600 MHz | Head | 39 | -0.03 | 1.999 | 1.99 |
| 2022/5/15 | 2450 MHz | Head | 39.32 | 0.31 | 1.815 | 0.83 |
| 2022/5/16 | 5250 MHz | Head | 35.89 | -0.11 | 4.626 | -1.78 |
| 2022/5/17 | 5600 MHz | Head | 34.97 | -1.58 | 5.085 | 0.30 |
| 2022/5/18 | 5750 MHz | Head | 34.77 | -1.67 | 5.154 | -1.26 |
| 2022/5/18 | 750 MHz | Head | 42.07 | 0.31 | 0.897 | 0.79 |
| 2022/5/19 | 1750 MHz | Head | 40.03 | -0.12 | 1.346 | -1.75 |
| 2022/5/20 | 1900 MHz | Head | 39.36 | -1.60 | 1.404 | 0.29 |
| 2022/5/21 | 2600 MHz | Head | 38.36 | -1.67 | 1.935 | -1.28 |
| 2022/5/22 | 3500 MHz | Head | 37.72 | 0.05 | 3.142 | 0.71 |
| 2022/5/23 | 3900 MHz | Head | 36.88 | -1.57 | 3.321 | 0.03 |
| 2022/5/19 | 1750 MHz | Head | 40.21 | 0.32 | 1.381 | 0.80 |
| 2022/5/20 | 1900 MHz | Head | 39.95 | -0.12 | 1.375 | -1.79 |

Note: The liquid temperature is (22.0 -23.0)°C



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

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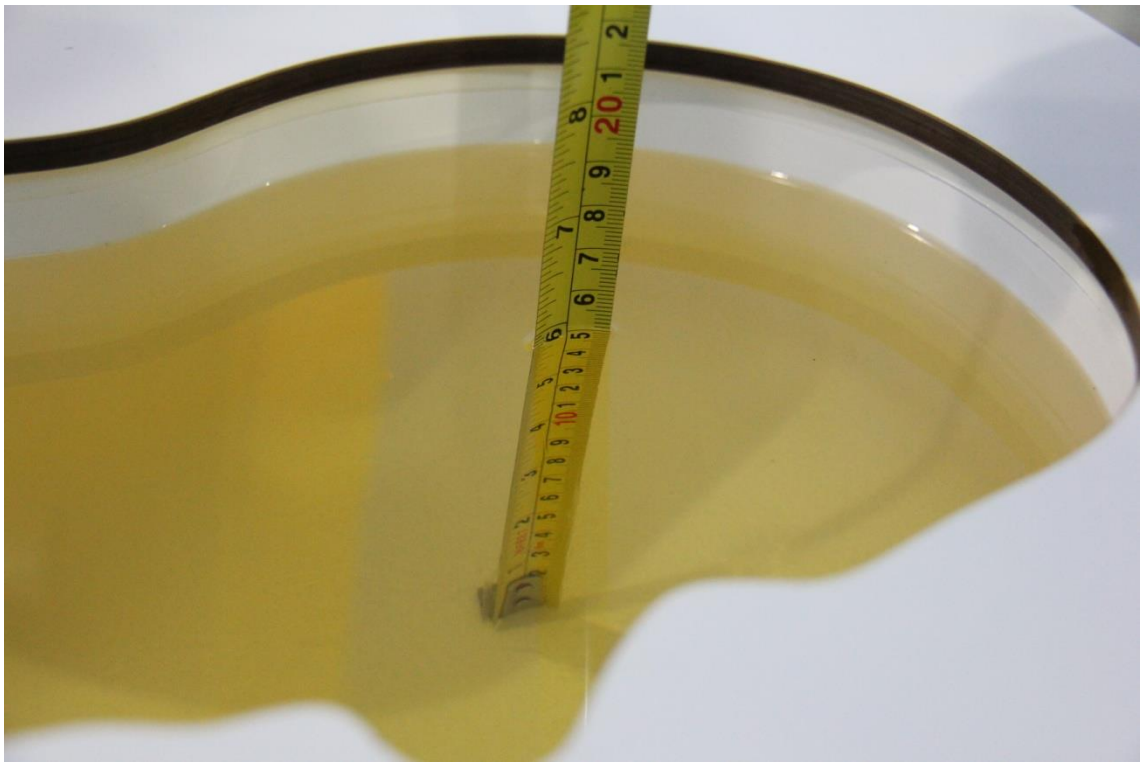
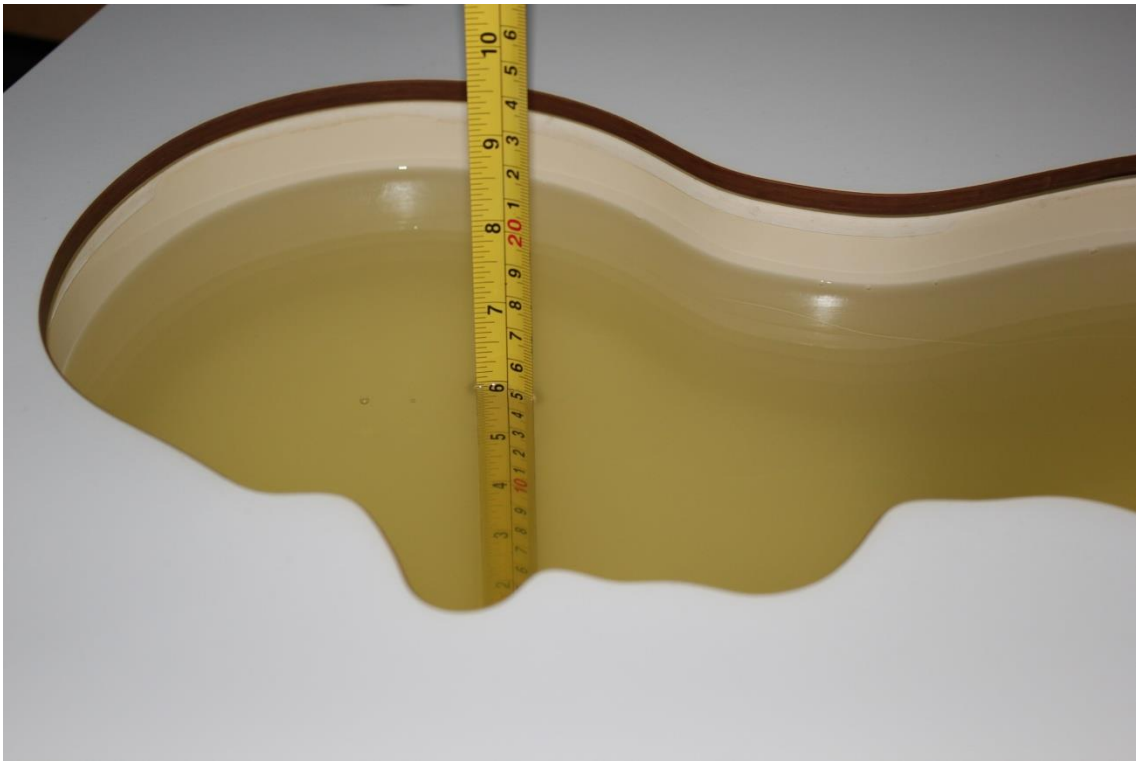


**Picture 7-2 Liquid depth in the Head Phantom (835 MHz)**



**Picture 7-3 Liquid depth in the Head Phantom (1750 MHz)**

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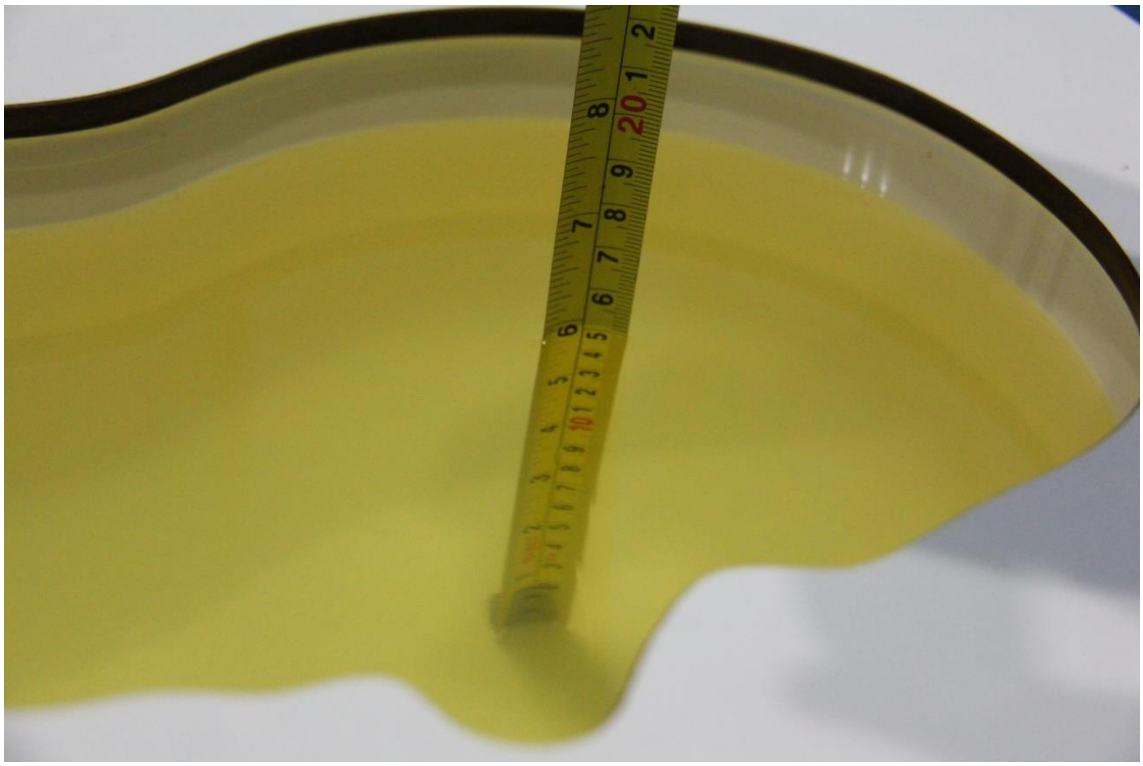
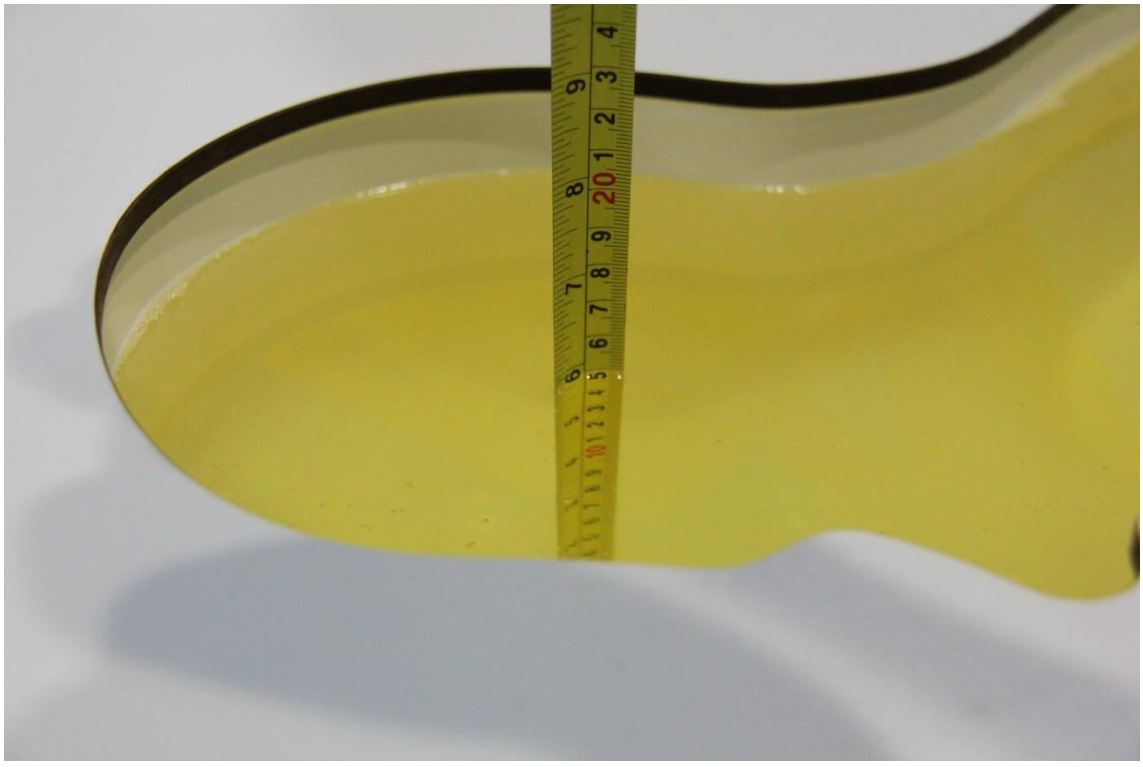


**Picture 7-4 Liquid depth in the Head Phantom (1900 MHz)**



**Picture 7-5 Liquid depth in the Head Phantom (2450MHz)**

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**Picture 7-6 Liquid depth in the Head Phantom (2600 MHz)**

**Picture 7-7 Liquid depth in the Head Phantom (3500-3900 MHz)**

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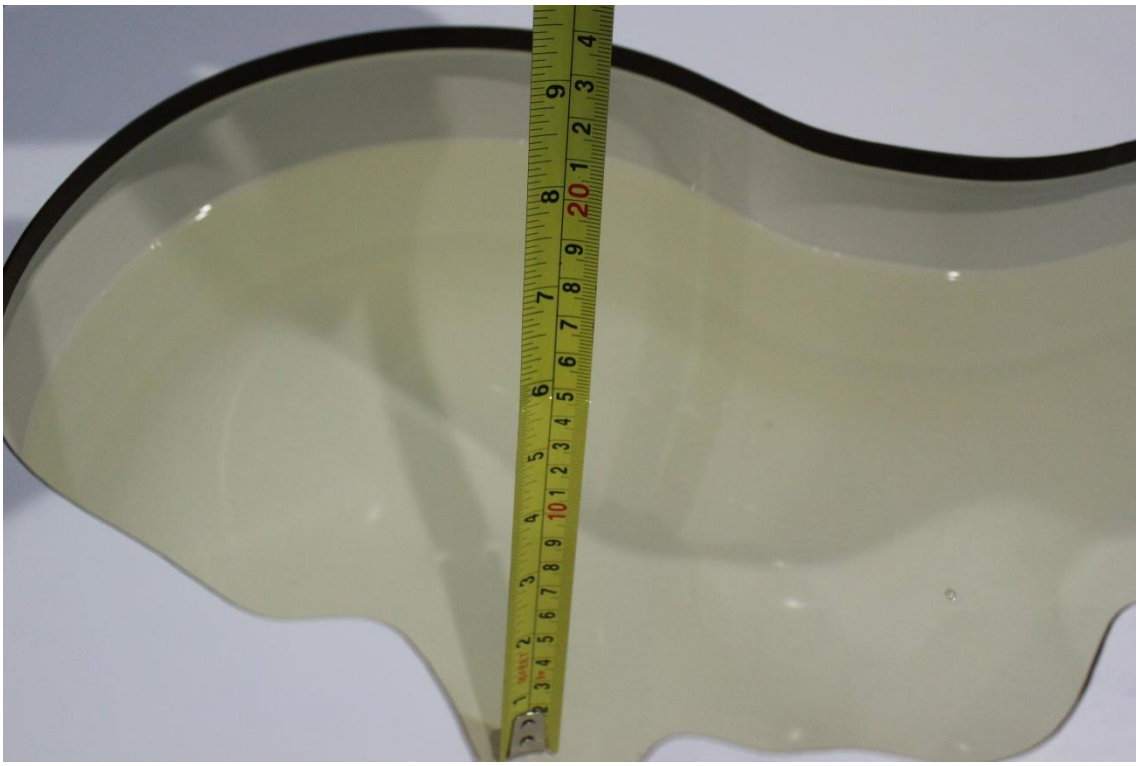

**Picture 7-8 Liquid depth in the Head Phantom (5GHz)**

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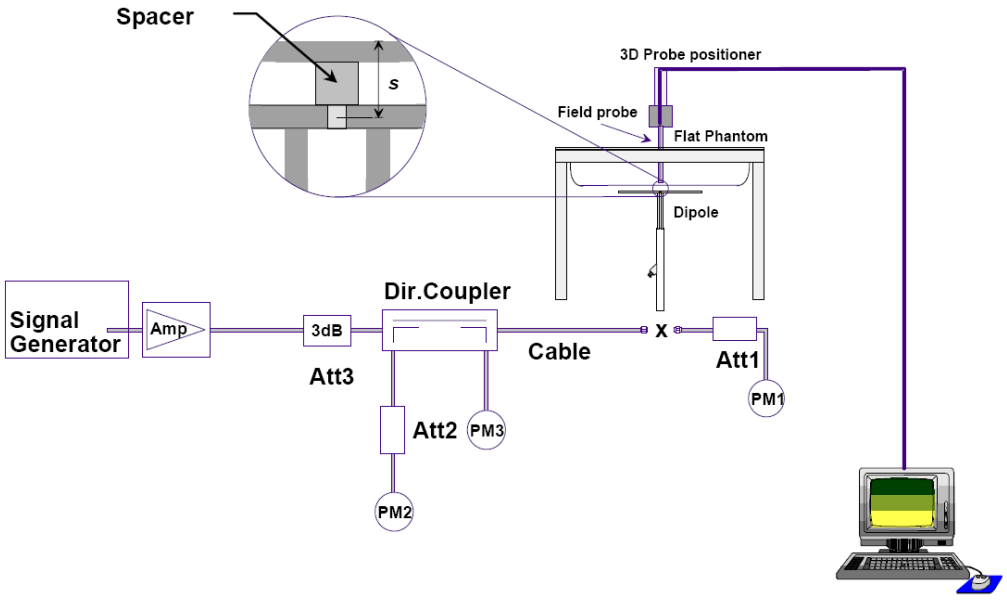
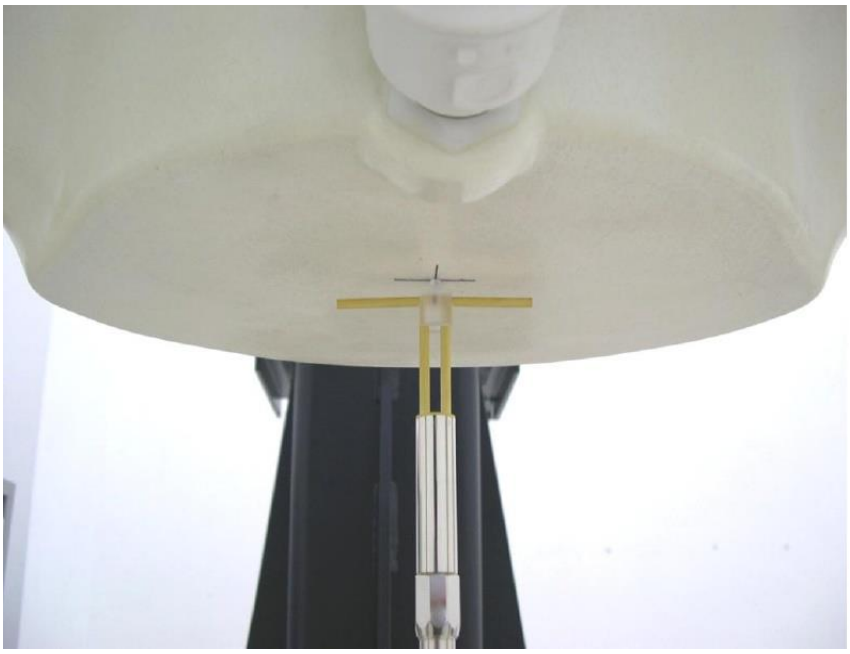
# 8 System verification

## 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**

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## 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.

**Table 8.1: System Verification of Head**

| Calibration Date | 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 |
| 2022/5/5 | 750 MHz | 5.53 | 8.47 | 5.6 | 8.44 | 1.27% | -0.35% |
| 2022/5/6 | 750 MHz | 5.53 | 8.47 | 5.48 | 8.52 | -0.90% | 0.59% |
| 2022/5/7 | 835 MHz | 6.25 | 9.60 | 6.24 | 9.48 | -0.16% | -1.25% |
| 2022/5/8 | 835 MHz | 6.25 | 9.60 | 6.36 | 9.64 | 1.76% | 0.42% |
| 2022/5/9 | 1750 MHz | 19.1 | 36.5 | 18.92 | 36 | -0.94% | -1.37% |
| 2022/5/10 | 1750 MHz | 19.1 | 36.5 | 19.2 | 35.76 | 0.52% | -2.03% |
| 2022/5/11 | 1900 MHz | 20.6 | 39.6 | 20.96 | 39.76 | 1.75% | 0.40% |
| 2022/5/12 | 1900 MHz | 20.6 | 39.6 | 20.68 | 39.12 | 0.39% | -1.21% |
| 2022/5/13 | 2600 MHz | 25.3 | 57.0 | 25.32 | 57.12 | 0.08% | 0.21% |
| 2022/5/14 | 2600 MHz | 25.3 | 57.0 | 25.68 | 56.96 | 1.50% | -0.07% |
| 2022/5/15 | 2450 MHz | 24.5 | 52.5 | 24.88 | 52.24 | 1.55% | -0.50% |
| 2022/5/16 | 5250 MHz | 22.9 | 80.5 | 22.7 | 81.1 | -0.96% | 0.77% |
| 2022/5/17 | 5600 MHz | 23.6 | 83.3 | 23.5 | 82.2 | -0.34% | -1.37% |
| 2022/5/18 | 5750 MHz | 22.7 | 80.4 | 23.1 | 80.6 | 1.67% | 0.25% |
| 2022/5/18 | 750 MHz | 5.53 | 8.47 | 5.6 | 8.44 | 1.27% | -0.35% |
| 2022/5/19 | 1750 MHz | 19.1 | 36.5 | 18.92 | 36.8 | -0.94% | 0.82% |
| 2022/5/20 | 1900 MHz | 20.6 | 39.6 | 20.52 | 39.08 | -0.39% | -1.31% |
| 2022/5/21 | 2600 MHz | 25.3 | 57.0 | 25.72 | 57.12 | 1.66% | 0.21% |
| 2022/5/22 | 3500 MHz | 25.2 | 67.3 | 25.0 | 66.4 | -0.95% | -1.40% |
| 2022/5/23 | 3900 MHz | 24.1 | 69.3 | 24.2 | 67.9 | 0.58% | -1.99% |
| 2022/5/19 | 1750 MHz | 19.1 | 36.5 | 19.4 | 36.32 | 1.57% | -0.49% |
| 2022/5/20 | 1900 MHz | 20.6 | 39.6 | 20.4 | 39.92 | -0.97% | 0.81% |

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# 9 General Measurement Procedure

## 9.1 *Power Reference Measurement*

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

## 9.2 *Area Scan*

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0 is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.
Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

| | ≤ 3 GHz | > 3 GHz |
|---|---|---|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface | 5 ± 1 mm | ½·δ·ln(2) ± 0.5 mm |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location | 30° ± 1° | 20° ± 1° |
| Maximum area scan spatial resolution: $\Delta x_{Area}$, $\Delta y_{Area}$ | ≤ 2 GHz: ≤ 15 mm<br>2 – 3 GHz: ≤ 12 mm | 3 – 4 GHz: ≤ 12 mm<br>4 – 6 GHz: ≤ 10 mm |
| | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device. | |

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## 9.3 *Zoom Scan*

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job’s label.

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

| | | | | |
|---|---|---|---|---|
| Maximum zoom scan spatial resolution: $\Delta x_{Zoom}$, $\Delta y_{Zoom}$ | | | ≤ 2 GHz: ≤ 8 mm<br>2 – 3 GHz: ≤ 5 mm* | 3 – 4 GHz: ≤ 5 mm*<br>4 – 6 GHz: ≤ 4 mm* |
| Maximum zoom scan spatial resolution, normal to phantom surface | uniform grid: $\Delta z_{Zoom}(n)$ | | ≤ 5 mm | 3 – 4 GHz: ≤ 4 mm<br>4 – 5 GHz: ≤ 3 mm<br>5 – 6 GHz: ≤ 2 mm |
| | graded grid | $\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface | ≤ 4 mm | 3 – 4 GHz: ≤ 3 mm<br>4 – 5 GHz: ≤ 2.5 mm<br>5 – 6 GHz: ≤ 2 mm |
| | | $\Delta z_{Zoom}(n>1)$: between subsequent points | ≤ 1.5·$\Delta z_{Zoom}(n-1)$ | |
| Minimum zoom scan volume | x, y, z | | ≥ 30 mm | 3 – 4 GHz: ≥ 28 mm<br>4 – 5 GHz: ≥ 25 mm<br>5 – 6 GHz: ≥ 22 mm |

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

## 9.4 *Power drift measurement*

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as 10.1.

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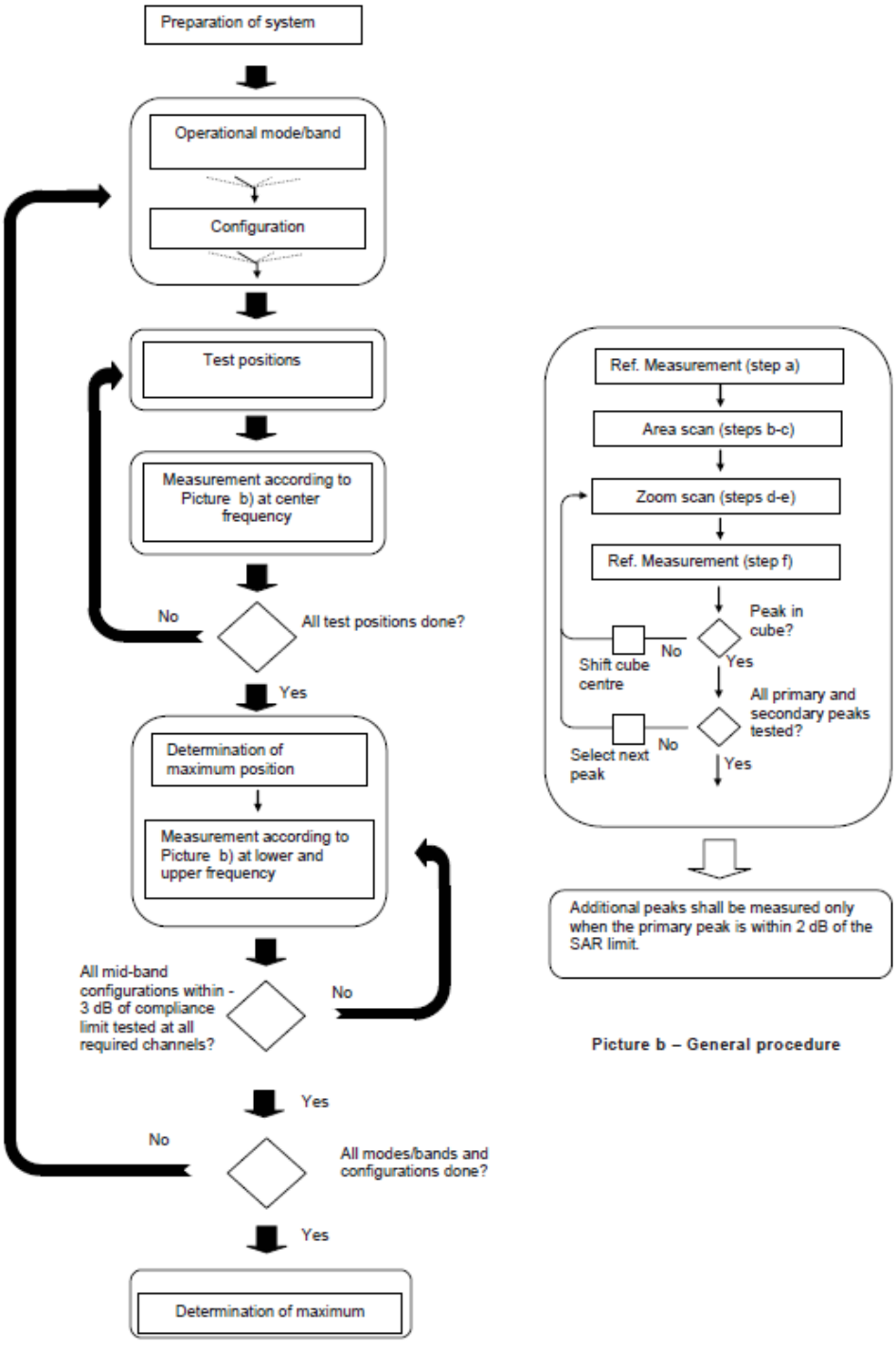


Picture a – Tests to be performed

Picture b – General procedure

**Picture 9.1Block diagram of the tests to be performed**

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## 9.5 *Area Scan Based 1-g SAR*

### 9.5-1 Requirement of KDB

According to the KDB447498 D01 v06, 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 ≤ 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.

### 9.5-2 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 55wireless handsets. For the sample size studied, the root-mean-squared errors of the algorithm mare 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.

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# 10 Measurement Procedure for different technologies

## 10.1 GSM/GPRS Measurement Procedures for SAR

GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

## 10.2 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 & $DPDCH_n$), 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 | 4 | 2 | 1.5 | 1.5 | 15 | 92 |

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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | $\beta_{ed2}$:47/15 | | | | | | |
| 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.7 Release 7 HSPA+ Data Devices**

**Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM**

| Sub-test | $\beta_c$ (Note3) | $\beta_d$ | $\beta_{HS}$ (Note1) | $\beta_{ec}$ | $\beta_{ed}$ (2xSF2) (Note 4) | $\beta_{ed}$ (2xSF4) (Note 4) | CM (dB) (Note 2) | MPR (dB) (Note 2) | AG Index (Note 4) | E-TFCI (Note 5) | E-TFCI (boost) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 30/15 | 30/15 | $\beta_{ed}$1: 30/15<br>$\beta_{ed}$2: 30/15 | $\beta_{ed}$3: 24/15<br>$\beta_{ed}$4: 24/15 | 3.5 | 2.5 | 14 | 105 | 105 |

Note 1: $\Delta_{ACK}$, $\Delta_{NACK}$ and $\Delta_{CQI}$ = 30/15 with $\beta_{hs}$ = 30/15 * $\beta_c$.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the $\beta_c$ is set to 1 and $\beta_d$ = 0 by default.
Note 4: $\beta_{ed}$ can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

**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.

**Table C.8.1.12: Fixed Reference Channel H-Set 12**

| Parameter | Unit | Value |
|---|---|---|
| Nominal Avg. Inf. Bit Rate | kbps | 60 |
| Inter-TTI Distance | TTI's | 1 |
| Number of HARQ Processes | Processes | 6 |
| Information Bit Payload ( $N_{INF}$ ) | Bits | 120 |
| Number Code Blocks | Blocks | 1 |
| Binary Channel Bits Per TTI | Bits | 960 |
| Total Available SML's in UE | SML's | 19200 |
| Number of SML's per HARQ Proc. | SML's | 3200 |
| Coding Rate | | 0.15 |
| Number of Physical Channel Codes | Codes | 1 |
| Modulation | | QPSK |

Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

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## 10.3 LTE Measurement Procedures for SAR

SAR tests for LTE are performed with a base station simulator, Rohde & Rchwarz CMW500 or . Anritsu MT8821C Closed loop power control was used so the UE transmits with maximum output power during SAR testing.

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 ≤ 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 ≤ 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 v02r05 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 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

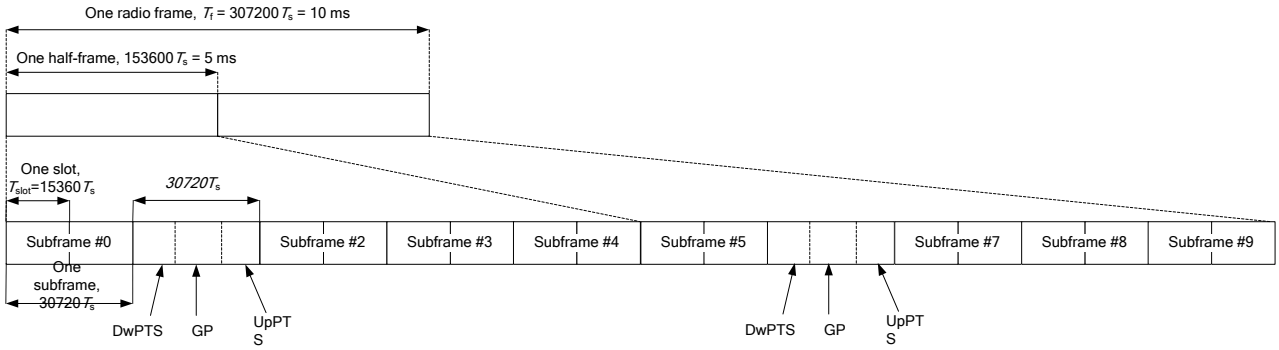


**Figure 10.2: Frame structure type 2 (for 5 ms switch-point periodicity)**

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**Table 10.1: 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 | $26336 \cdot T_s$ | | | $7680 \cdot T_s$ | $4384 \cdot T_s$ | $5120 \cdot T_s$ |
| 5 | $6592 \cdot T_s$ | $4384 \cdot T_s$ | $5120 \cdot T_s$ | $20480 \cdot T_s$ | | |
| 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 10.2: 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:

Duty factor = uplink frame*6+UpPTS*2/one frame length

= (30720.$T_s$ * 6+5120. $T_s$*2)/307200.$T_s$

= 0.633

According to the KDB 447498 D01, SAR should be evaluated at more than 3 frequencies for devices supporting transmit bands wider than 100MHz. Oct.2014 FCC-TCB conference notes (Dec. 2014 rev.) specifies the 5 test channels to use for 3GPP band 38/41 SAR evaluation.

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## 10.4 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.

## 10.5 SAR Measurement for ENDC

1. Test LTE SAR with single uplink at maximum power following LTE SAR test procedure.
2. Test conducted power of 5G NR sub-carrier under EN-DC at maximum power ( FDD and TDD)[1] and change the different parameters to find the worst-case configuration, see detail procedure as attached.

[1] For TDD band (n41), PC2 mode is only tested, because the duty cycle of both PC2 and PC3 are the same and PC2 has higher power than PC3.

3. Test SAR in worst case configuration for 5G NR in single uplink (test mode).
4. If the single uplink 1g SAR values for 5G NR and LTE are both less than 0.8W/kg and the algebraic summation of the 1g SAR values are less than 1.45W/kg, no additional measurements need to be performed.

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## 11 Conducted Output Power

| Antenna | Receiver ON (Head scenario) | Receiver OFF/ Sensor On (Body scenario) | Receiver OFF/ Sensor Off (Body scenario) |
|---|---|---|---|
| **Standalone** | Low Power | Low Power | Normal Power |

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## 11.1 GSM Measurement result

**GSM850(Normal Power)**

| GSM 850 Speech（GMSK） | Measured timeslot-averaged output power (dBm) | | | Tune up | calculation | Source-based time-averaged output power (dBm) | | |
|---|---|---|---|---|---|---|---|---|
| | **251** | **190** | **128** | | | **251** | **190** | **128** |
| 1Txslot | 32.73 | 32.96 | 32.83 | 33.50 | / | / | / | / |
| GSM 850 GPRS（GMSK） | Measured timeslot-averaged output power (dBm) | | | Tune up | calculation | Source-based time-averaged output power (dBm) | | |
| | **251** | **190** | **128** | | | **251** | **190** | **128** |
| 1Txslot | 32.91 | 32.91 | 32.93 | 33.50 | -9.03 | 23.88 | 23.88 | 23.90 |
| **2Txslots** | **31.20** | **31.14** | **31.04** | **32.00** | **-6.02** | **25.18** | **25.12** | **25.02** |
| 3Txslots | 29.07 | 29.06 | 28.99 | 30.00 | -4.26 | 24.81 | 24.80 | 24.73 |
| 4Txslots | 27.05 | 27.04 | 27.08 | 28.00 | -3.01 | 24.04 | 24.03 | 24.07 |
| GSM 850 EGPRS (GMSK) | Measured timeslot-averaged output power (dBm) | | | | | Source-based time-averaged output power (dBm) | | |
| | **251** | **190** | **128** | | | **251** | **190** | **128** |
| 1Txslot | 32.86 | 32.88 | 32.86 | 33.50 | -9.03 | 23.83 | 23.85 | 23.83 |
| **2Txslots** | **31.13** | **31.09** | **30.98** | **32.00** | **-6.02** | **25.11** | **25.07** | **24.96** |
| 3Txslots | 29.00 | 29.01 | 28.93 | 30.00 | -4.26 | 24.74 | 24.75 | 24.67 |
| 4Txslots | 26.97 | 26.98 | 27.02 | 28.00 | -3.01 | 23.96 | 23.97 | 24.01 |
| GSM 850 EGPRS(8PSK) | Measured timeslot-averaged output power (dBm) | | | | | Source-based time-averaged output power (dBm) | | |
| | **251** | **190** | **128** | | | **251** | **190** | **128** |
| 1Txslot | 26.84 | 26.88 | 26.90 | 28.00 | -9.03 | 17.81 | 17.85 | 17.87 |
| 2Txslots | 24.83 | 25.10 | 24.86 | 26.00 | -6.02 | 18.81 | 19.08 | 18.84 |
| 3Txslots | 23.73 | 22.82 | 23.58 | 24.00 | -4.26 | 19.47 | 18.56 | 19.32 |
| 4Txslots | 21.00 | 20.99 | 21.01 | 22.00 | -3.01 | 17.99 | 17.98 | 18.00 |
| GSM 1900 Speech（GMSK） | Measured timeslot-averaged output power (dBm) | | | Tune up | calculation | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| 1Txslot | 29.72 | 29.75 | 29.49 | 30.50 | / | / | / | / |
| GSM 1900 GPRS（GMSK） | Measured timeslot-averaged output power (dBm) | | | Tune up | calculation | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| 1Txslot | 29.83 | 29.98 | 29.67 | 30.50 | -9.03 | 20.80 | 20.95 | 20.64 |
| **2Txslots** | **28.05** | **28.00** | **27.89** | **29.00** | **-6.02** | **22.03** | **21.98** | **21.87** |
| 3Txslots | 25.89 | 25.95 | 25.96 | 27.00 | -4.26 | 21.63 | 21.69 | 21.70 |
| 4Txslots | 24.13 | 24.14 | 24.11 | 25.00 | -3.01 | 21.12 | 21.13 | 21.10 |
| GSM 1900 EGPRS (GMSK) | Measured timeslot-averaged output power (dBm) | | | | | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| 1Txslot | 29.96 | 29.84 | 29.60 | 30.50 | -9.03 | 20.93 | 20.81 | 20.57 |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **2Txslots** | **28.02** | **27.86** | **27.81** | **29.00** | **-6.02** | **22.00** | **21.84** | **21.79** |
| 3Txslots | 26.00 | 25.82 | 25.87 | 27.00 | -4.26 | 21.74 | 21.56 | 21.61 |
| 4Txslots | 23.98 | 23.99 | 24.01 | 25.00 | -3.01 | 20.97 | 20.98 | 21.00 |
| GSM 1900 EGPRS(8PSK) | Measured timeslot-averaged output power (dBm) | | | | | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| 1Txslot | 26.10 | 26.16 | 26.12 | 27.00 | -9.03 | 17.07 | 17.13 | 17.09 |
| 2Txslots | 24.22 | 23.73 | 24.08 | 25.00 | -6.02 | 18.20 | 17.71 | 18.06 |
| 3Txslots | 21.77 | 21.73 | 21.65 | 23.00 | -4.26 | 17.51 | 17.47 | 17.39 |
| 4Txslots | 19.73 | 19.86 | 19.48 | 21.00 | -3.01 | 16.72 | 16.85 | 16.47 |

**GSM1900(Low Power)**

| GSM 1900 Speech（GMSK） | Measured timeslot-averaged output power (dBm) | | | Tune up | calculation | Source-based time-averaged output power (dBm) | | |
|---|---|---|---|---|---|---|---|---|
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| 1Txslot | 21.91 | 21.89 | 21.87 | 22.50 | / | / | / | / |
| GSM 1900 GPRS（GMSK） | Measured timeslot-averaged output power (dBm) | | | Tune up | calculation | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| **1Txslot** | **21.92** | **21.92** | **21.91** | **22.50** | **-9.03** | **12.89** | **12.89** | **12.88** |
| 2Txslots | 18.01 | 17.97 | 17.91 | 18.50 | -6.02 | 11.99 | 11.95 | 11.89 |
| 3Txslots | 16.52 | 16.47 | 16.45 | 17.00 | -4.26 | 12.26 | 12.21 | 12.19 |
| 4Txslots | 15.05 | 14.95 | 15.06 | 15.50 | -3.01 | 12.04 | 11.94 | 12.05 |
| GSM 1900 EGPRS (GMSK) | Measured timeslot-averaged output power (dBm) | | | | | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| **1Txslot** | **21.85** | **21.81** | **21.77** | **22.50** | **-9.03** | **12.82** | **12.78** | **12.74** |
| 2Txslots | 17.96 | 17.87 | 17.80 | 18.50 | -6.02 | 11.94 | 11.85 | 11.78 |
| 3Txslots | 16.48 | 16.39 | 16.38 | 17.00 | -4.26 | 12.22 | 12.13 | 12.12 |
| 4Txslots | 15.01 | 14.87 | 14.98 | 15.50 | -3.01 | 12.00 | 11.86 | 11.97 |
| GSM 1900 EGPRS(8PSK) | Measured timeslot-averaged output power (dBm) | | | | | Source-based time-averaged output power (dBm) | | |
| | **810** | **661** | **512** | | | **810** | **661** | **512** |
| 1Txslot | 18.73 | 18.66 | 18.66 | 19.50 | -9.03 | 9.70 | 9.63 | 9.63 |
| 2Txslots | 15.42 | 15.45 | 15.26 | 16.50 | -6.02 | 9.40 | 9.43 | 9.24 |
| 3Txslots | 14.54 | 14.33 | 14.24 | 15.50 | -4.26 | 10.28 | 10.07 | 9.98 |
| 4Txslots | 13.91 | 13.86 | 13.83 | 14.50 | -3.01 | 10.90 | 10.85 | 10.82 |

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## 11.2 WCDMA Measurement result

**WCDMA1900(Normal Power)**

| Item | band | FDDII result | | | |
|---|---|---|---|---|---|
| | ARFCN | 9538 (1907.6MHz) | 9400 (1880MHz) | 9262 (1852.4MHz) | Tune up |
| WCDMA | \ | 24.15 | 24.22 | 24.29 | 25.00 |
| HSUPA | 1 | 23.71 | 23.76 | 23.75 | 24.00 |
| | 2 | 21.71 | 21.75 | 21.67 | 22.00 |
| | 3 | 22.7 | 22.72 | 22.66 | 23.00 |
| | 4 | 21.73 | 21.77 | 21.67 | 22.00 |
| | 5 | 23.69 | 23.71 | 23.73 | 24.00 |
| DC-HSDPA | 1 | 22.86 | 22.89 | 22.83 | 24.00 |
| | 2 | 22.83 | 22.87 | 22.86 | 24.00 |
| | 3 | 21.93 | 22.01 | 21.99 | 23.50 |
| | 4 | 22.35 | 22.41 | 22.38 | 23.50 |

**WCDMA1900(Low Power)**

| Item | band | FDDII result | | | |
|---|---|---|---|---|---|
| | ARFCN | 9538 (1907.6MHz) | 9400 (1880MHz) | 9262 (1852.4MHz) | Tune up |
| WCDMA | \ | 16.22 | 16.26 | 16.21 | 17.00 |
| HSUPA | 1 | 14.21 | 14.39 | 14.22 | 16.00 |
| | 2 | 12.21 | 12.34 | 12.27 | 14.00 |
| | 3 | 13.32 | 13.37 | 13.27 | 15.00 |
| | 4 | 12.43 | 12.31 | 12.34 | 14.00 |
| | 5 | 14.3 | 14.32 | 14.27 | 16.00 |
| DC-HSDPA | 1 | 14.35 | 14.39 | 14.34 | 16.00 |
| | 2 | 14.37 | 14.40 | 14.44 | 16.00 |
| | 3 | 13.89 | 13.87 | 13.83 | 15.50 |
| | 4 | 15.42 | 15.36 | 15.29 | 15.50 |

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**WCDMA1700(Normal Power)**

| Item | band | FDDIV result | | | |
|---|---|---|---|---|---|
| | ARFCN | 1513 (1752.6MHz) | 1412 (1732.4MHz) | 1312 (1712.4MHz) | Tune up |
| WCDMA | \ | 24.06 | 24.02 | 24.12 | 25.00 |
| HSUPA | 1 | 23.86 | 23.82 | 23.77 | 24.00 |
| | 2 | 21.81 | 21.86 | 21.84 | 22.00 |
| | 3 | 22.87 | 22.83 | 22.85 | 23.00 |
| | 4 | 21.76 | 21.88 | 21.80 | 22.00 |
| | 5 | 23.76 | 23.82 | 23.78 | 24.00 |
| DC-HSDPA | 1 | 22.88 | 22.97 | 22.83 | 24.00 |
| | 2 | 22.85 | 22.86 | 22.87 | 24.00 |
| | 3 | 21.97 | 22.42 | 22.46 | 23.50 |
| | 4 | 22.38 | 22.46 | 22.39 | 23.50 |

**WCDMA1700(Low Power)**

| Item | band | FDDIV result | | | |
|---|---|---|---|---|---|
| | ARFCN | 1513 (1752.6MHz) | 1412 (1732.4MHz) | 1312 (1712.4MHz) | Tune up |
| WCDMA | \ | 16.09 | 16.15 | 16.04 | 17.00 |
| HSUPA | 1 | 14.37 | 14.38 | 14.39 | 16.00 |
| | 2 | 12.45 | 12.42 | 12.41 | 14.00 |
| | 3 | 13.35 | 13.34 | 13.37 | 15.00 |
| | 4 | 12.4 | 12.43 | 12.45 | 14.00 |
| | 5 | 14.35 | 14.48 | 14.44 | 16.00 |
| DC-HSDPA | 1 | 14.37 | 14.43 | 14.39 | 16.00 |
| | 2 | 14.39 | 14.41 | 14.46 | 16.00 |
| | 3 | 14.39 | 14.42 | 14.45 | 15.50 |
| | 4 | 13.96 | 13.85 | 13.90 | 15.50 |

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**WCDMA850**

| Item | band | FDDV result | | | |
|---|---|---|---|---|---|
| | ARFCN | 4233 (846.6MHz) | 4183 (836.6MHz) | 4132 (826.4MHz) | Tune up |
| WCDMA | \ | 24.46 | 24.58 | 24.57 | 25.00 |
| HSUPA | 1 | 23.53 | 23.56 | 23.51 | 24.00 |
| | 2 | 21.55 | 21.51 | 21.46 | 22.00 |
| | 3 | 22.6 | 22.61 | 22.52 | 23.00 |
| | 4 | 21.54 | 21.57 | 21.46 | 22.00 |
| | 5 | 23.56 | 23.57 | 23.46 | 24.00 |
| DC-HSDPA | 1 | 23.28 | 23.22 | 23.18 | 24.00 |
| | 2 | 23.24 | 23.21 | 23.18 | 24.00 |
| | 3 | 22.81 | 22.73 | 22.70 | 23.50 |
| | 4 | 22.78 | 22.66 | 22.71 | 23.50 |

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## 11.3 LTE Measurement result

**Table 11.3-1: Maximum Power Reduction (MPR) for LTE**-Normal Power

| Modulation | Channel bandwidth / Transmission bandwidth configuration [RB] | | | | | | MPR (dB) |
|---|---|---|---|---|---|---|---|
| | 1.4 MHz | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | |
| QPSK | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | 1 |
| 16 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | 1 |
| 16 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | 2 |
| 64 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | 2 |
| 64 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | 3 |

**Table 11.3-2: Maximum Power Reduction (MPR) for LTE-** Low Power

| Modulation | Channel bandwidth / Transmission bandwidth configuration [RB] | | | | | | MPR (dB) |
|---|---|---|---|---|---|---|---|
| | 1.4 MHz | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | |
| QPSK | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | 1 |
| 16 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | 1 |
| 16 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | 2 |
| 64 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | 2 |
| 64 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | 3 |

**Table 11.3-3: The tune up for LTE**

| Mode/Band | Normal Power | Low Power |
|---|---|---|
| **FDD Band 2 ANT0** | 25 | 25 |
| **FDD Band 7** | 24 | 15 |
| **FDD Band 12** | 25 | 25 |
| **FDD Band 13** | 25 | 25 |
| **FDD Band 25** | 22 | 17 |
| **FDD Band 26** | 25 | 25 |
| **TDD Band 41(PC3)** | 25 | 15 |
| **TDD Band 41(PC2)** | 27.5 | 17.5 |
| **FDD Band 66 ANT2** | 25 | 17 |
| **FDD Band 66 ANT0** | 25 | 25 |
| **FDD Band 71** | 25 | 25 |

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**LTE Band2(Normal Power)**

| Band 2 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 1.4MHz | 1RB-High | 1909.3 | 24.15 | 23.54 | 23.56 |
| | | 1880 | 24.31 | 23.67 | 23.43 |
| | | 1850.7 | 24.28 | 23.69 | 23.42 |
| | 1RB-Middle | 1909.3 | 24.39 | 23.66 | 23.63 |
| | | 1880 | 24.55 | 23.58 | 23.62 |
| | | 1850.7 | 24.61 | 23.63 | 23.68 |
| | 1RB-Low | 1909.3 | 24.30 | 23.83 | 23.64 |
| | | 1880 | 24.34 | 23.67 | 23.76 |
| | | 1850.7 | 24.41 | 23.68 | 23.49 |
| | 3RB-High | 1909.3 | 24.35 | 23.39 | 23.57 |
| | | 1880 | 24.35 | 23.41 | 23.53 |
| | | 1850.7 | 24.39 | 23.45 | 23.50 |
| | 3RB-Middle | 1909.3 | 24.49 | 23.25 | 23.43 |
| | | 1880 | 24.39 | 23.54 | 23.50 |
| | | 1850.7 | 24.42 | 23.33 | 23.57 |
| | 3RB-Low | 1909.3 | 24.38 | 23.25 | 23.60 |
| | | 1880 | 24.39 | 23.49 | 23.50 |
| | | 1850.7 | 24.42 | 23.46 | 23.54 |
| | 6RB | 1909.3 | 23.49 | 22.57 | 22.43 |
| | | 1880 | 23.44 | 22.52 | 22.44 |
| | | 1850.7 | 23.44 | 22.44 | 22.51 |
| 3MHz | 1RB-High | 1908.5 | 24.31 | 23.72 | 23.59 |
| | | 1880 | 24.34 | 23.76 | 23.54 |
| | | 1851.5 | 24.38 | 23.64 | 23.73 |
| | 1RB-Middle | 1908.5 | 24.34 | 23.93 | 23.41 |
| | | 1880 | 24.46 | 23.76 | 23.52 |
| | | 1851.5 | 24.41 | 23.76 | 23.62 |
| | 1RB-Low | 1908.5 | 24.56 | 23.95 | 23.62 |
| | | 1880 | 24.53 | 23.91 | 23.67 |
| | | 1851.5 | 24.57 | 23.92 | 23.68 |
| | 8RB-High | 1908.5 | 23.52 | 22.41 | 22.60 |
| | | 1880 | 23.48 | 22.43 | 22.50 |
| | | 1851.5 | 23.50 | 22.51 | 22.57 |
| | 8RB-Middle | 1908.5 | 23.51 | 22.62 | 22.53 |
| | | 1880 | 23.59 | 22.64 | 22.61 |
| | | 1851.5 | 23.48 | 22.56 | 22.44 |
| | 8RB-Low | 1908.5 | 23.61 | 22.64 | 22.61 |
| | | 1880 | 23.61 | 22.65 | 22.67 |
| | | 1851.5 | 23.54 | 22.68 | 22.64 |
| | 15RB | 1908.5 | 23.45 | 22.56 | 22.54 |
| | | 1880 | 23.57 | 22.62 | 22.56 |
| | | 1851.5 | 23.48 | 22.53 | 22.53 |
| 5MHz | 1RB-High | 1907.5 | 24.31 | 23.82 | 23.59 |
| | | 1880 | 24.36 | 23.69 | 23.53 |
| | | 1852.5 | 24.39 | 23.67 | 23.65 |
| | 1RB-Middle | 1907.5 | 24.37 | 23.85 | 23.36 |
| | | 1880 | 24.39 | 23.48 | 23.62 |
| | | 1852.5 | 24.41 | 23.81 | 23.68 |
| | 1RB-Low | 1907.5 | 24.44 | 23.70 | 23.63 |
| | | 1880 | 24.49 | 23.82 | 23.61 |
| | | 1852.5 | 24.44 | 23.74 | 23.69 |

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| | | | | | |
|---|---|---|---|---|---|
| | 12RB-High | 1907.5 | 23.43 | 22.53 | 22.45 |
| | | 1880 | 23.46 | 22.24 | 22.42 |
| | | 1852.5 | 23.42 | 22.47 | 22.51 |
| | 12RB-Middle | 1907.5 | 23.64 | 22.57 | 22.59 |
| | | 1880 | 23.56 | 22.64 | 22.44 |
| | | 1852.5 | 23.69 | 22.66 | 22.63 |
| | 12RB-Low | 1907.5 | 23.55 | 22.65 | 22.65 |
| | | 1880 | 23.62 | 22.55 | 22.61 |
| | | 1852.5 | 23.63 | 22.58 | 22.46 |
| | 25RB | 1907.5 | 23.51 | 22.58 | 22.61 |
| | | 1880 | 23.45 | 22.46 | 22.45 |
| | | 1852.5 | 23.53 | 22.58 | 22.58 |
| 10MHz | 1RB-High | 1905 | 24.57 | 23.63 | 23.51 |
| | | 1880 | 24.44 | 23.69 | 23.58 |
| | | 1855 | 24.47 | 23.78 | 23.42 |
| | 1RB-Middle | 1905 | 24.36 | 23.77 | 23.59 |
| | | 1880 | 24.42 | 23.67 | 23.59 |
| | | 1855 | 24.43 | 23.69 | 23.74 |
| | 1RB-Low | 1905 | 24.38 | 24.00 | 23.71 |
| | | 1880 | 24.38 | 23.93 | 23.61 |
| | | 1855 | 24.47 | 23.96 | 23.62 |
| | 25RB-High | 1905 | 23.51 | 22.63 | 22.55 |
| | | 1880 | 23.34 | 22.50 | 22.48 |
| | | 1855 | 23.54 | 22.58 | 22.59 |
| | 25RB-Middle | 1905 | 23.53 | 22.62 | 22.59 |
| | | 1880 | 23.52 | 22.60 | 22.60 |
| | | 1855 | 23.64 | 22.68 | 22.69 |
| | 25RB-Low | 1905 | 23.57 | 22.64 | 22.55 |
| | | 1880 | 23.57 | 22.53 | 22.70 |
| | | 1855 | 23.50 | 22.63 | 22.53 |
| | 50RB | 1905 | 23.60 | 22.68 | 22.67 |
| | | 1880 | 23.43 | 22.50 | 22.49 |
| | | 1855 | 23.56 | 22.62 | 22.62 |
| 15MHz | 1RB-High | 1902.5 | 24.19 | 23.68 | 23.55 |
| | | 1880 | 24.29 | 23.62 | 23.53 |
| | | 1857.5 | 24.27 | 23.61 | 23.56 |
| | 1RB-Middle | 1902.5 | 24.22 | 23.76 | 23.49 |
| | | 1880 | 24.32 | 23.65 | 23.62 |
| | | 1857.5 | 24.32 | 23.74 | 23.53 |
| | 1RB-Low | 1902.5 | 24.23 | 23.55 | 23.59 |
| | | 1880 | 24.28 | 23.69 | 23.66 |
| | | 1857.5 | 24.30 | 23.70 | 23.47 |
| | 36RB-High | 1902.5 | 23.51 | 22.39 | 22.50 |
| | | 1880 | 23.37 | 22.35 | 22.44 |
| | | 1857.5 | 23.37 | 22.47 | 22.41 |
| | 36RB-Middle | 1902.5 | 23.42 | 22.43 | 22.52 |
| | | 1880 | 23.40 | 22.34 | 22.43 |
| | | 1857.5 | 23.47 | 22.50 | 22.47 |
| | 36RB-Low | 1902.5 | 23.46 | 22.42 | 22.38 |
| | | 1880 | 23.52 | 22.49 | 22.39 |
| | | 1857.5 | 23.50 | 22.43 | 22.42 |
| | 75RB | 1902.5 | 23.43 | 22.52 | 22.53 |
| | | 1880 | 23.48 | 22.34 | 22.36 |
| | | 1857.5 | 23.47 | 22.41 | 22.32 |
| 20MHz | 1RB-High | 1900 | 24.19 | 23.56 | 23.49 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 1880 | 24.19 | 23.69 | 23.51 |
| | | 1860 | 24.25 | 23.63 | 23.51 |
| | 1RB-Middle | 1900 | 24.22 | 23.56 | 23.5 |
| | | 1880 | 24.26 | 23.53 | 23.47 |
| | | 1860 | 24.26 | 23.70 | 23.5 |
| | 1RB-Low | 1900 | 24.28 | 23.60 | 23.5 |
| | | 1880 | 24.29 | 23.62 | 23.56 |
| | | 1860 | 24.50 | 23.65 | 23.54 |
| | 50RB-High | 1900 | 23.47 | 22.48 | 22.49 |
| | | 1880 | 23.32 | 22.39 | 22.44 |
| | | 1860 | 23.42 | 22.38 | 22.37 |
| | 50RB-Middle | 1900 | 23.42 | 22.43 | 22.44 |
| | | 1880 | 23.31 | 22.37 | 22.44 |
| | | 1860 | 23.43 | 22.42 | 22.37 |
| | 50RB-Low | 1900 | 23.46 | 22.49 | 22.38 |
| | | 1880 | 23.46 | 22.43 | 22.47 |
| | | 1860 | 23.48 | 22.48 | 22.46 |
| | 100RB | 1900 | 23.45 | 22.35 | 22.45 |
| | | 1880 | 23.41 | 22.34 | 22.31 |
| | | 1860 | 23.41 | 22.39 | 22.47 |

**LTE Band7(Normal Power)**

| Band 7 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High | 2567.5 | 23.11 | 22.41 | 21.28 |
| | | 2535 | 23.11 | 22.47 | 21.33 |
| | | 2502.5 | 23.20 | 22.61 | 21.34 |
| | 1RB-Middle | 2567.5 | 23.19 | 22.55 | 21.35 |
| | | 2535 | 23.09 | 22.80 | 21.43 |
| | | 2502.5 | 23.21 | 22.83 | 21.06 |
| | 1RB-Low | 2567.5 | 23.04 | 22.51 | 21.19 |
| | | 2535 | 23.14 | 22.44 | 21.31 |
| | | 2502.5 | 23.05 | 22.54 | 21.23 |
| | 12RB-High | 2567.5 | 22.29 | 21.22 | 20.39 |
| | | 2535 | 22.25 | 21.32 | 20.28 |
| | | 2502.5 | 22.34 | 21.41 | 20.49 |
| | 12RB-Middle | 2567.5 | 22.26 | 21.34 | 20.34 |
| | | 2535 | 22.27 | 21.28 | 20.27 |
| | | 2502.5 | 22.35 | 21.41 | 20.38 |
| | 12RB-Low | 2567.5 | 22.18 | 21.31 | 20.33 |
| | | 2535 | 22.17 | 21.26 | 20.16 |
| | | 2502.5 | 22.23 | 21.36 | 20.29 |
| | 25RB | 2567.5 | 22.19 | 21.30 | 20.30 |
| | | 2535 | 22.16 | 21.20 | 20.28 |
| | | 2502.5 | 22.30 | 21.35 | 20.40 |
| 10MHz | 1RB-High | 2565 | 23.09 | 22.78 | 21.52 |
| | | 2535 | 23.19 | 22.66 | 21.34 |
| | | 2505 | 23.14 | 22.53 | 21.40 |
| | 1RB-Middle | 2565 | 23.11 | 22.37 | 21.24 |
| | | 2535 | 23.01 | 22.30 | 21.30 |
| | | 2505 | 23.08 | 22.42 | 21.34 |
| | 1RB-Low | 2565 | 23.03 | 22.70 | 21.23 |
| | | 2535 | 22.99 | 22.51 | 21.38 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2505 | 23.16 | 22.75 | 21.43 |
| | 25RB-High | 2565 | 22.18 | 21.35 | 20.36 |
| | | 2535 | 22.22 | 21.26 | 20.27 |
| | | 2505 | 22.33 | 21.42 | 20.42 |
| | 25RB-Middle | 2565 | 22.23 | 21.26 | 20.24 |
| | | 2535 | 22.25 | 21.30 | 20.31 |
| | | 2505 | 22.35 | 21.41 | 20.42 |
| | 25RB-Low | 2565 | 22.14 | 21.31 | 20.20 |
| | | 2535 | 22.17 | 21.25 | 20.23 |
| | | 2505 | 22.32 | 21.42 | 20.33 |
| | 50RB | 2565 | 22.13 | 21.22 | 20.22 |
| | | 2535 | 22.22 | 21.28 | 20.18 |
| | | 2505 | 22.28 | 21.33 | 20.36 |
| 15MHz | 1RB-High | 2562.5 | 22.84 | 22.22 | 21.46 |
| | | 2535 | 22.78 | 22.22 | 21.20 |
| | | 2507.5 | 22.87 | 22.24 | 21.37 |
| | 1RB-Middle | 2562.5 | 22.83 | 22.21 | 21.36 |
| | | 2535 | 22.92 | 22.28 | 21.18 |
| | | 2507.5 | 22.97 | 22.36 | 21.26 |
| | 1RB-Low | 2562.5 | 22.86 | 22.18 | 21.33 |
| | | 2535 | 22.87 | 22.27 | 21.15 |
| | | 2507.5 | 22.89 | 22.35 | 21.42 |
| | 36RB-High | 2562.5 | 22.11 | 21.12 | 20.14 |
| | | 2535 | 22.09 | 21.12 | 20.09 |
| | | 2507.5 | 22.13 | 21.18 | 20.17 |
| | 36RB-Middle | 2562.5 | 22.06 | 21.11 | 20.09 |
| | | 2535 | 22.04 | 21.14 | 20.20 |
| | | 2507.5 | 22.19 | 21.28 | 20.21 |
| | 36RB-Low | 2562.5 | 22.00 | 21.02 | 20.03 |
| | | 2535 | 22.01 | 21.06 | 20.04 |
| | | 2507.5 | 22.18 | 21.15 | 20.27 |
| | 75RB | 2562.5 | 22.02 | 21.15 | 20.17 |
| | | 2535 | 22.08 | 21.14 | 20.09 |
| | | 2507.5 | 22.17 | 21.27 | 20.24 |
| 20MHz | 1RB-High | 2560 | 23.07 | 22.50 | 21.27 |
| | | 2535 | 23.04 | 22.28 | 21.23 |
| | | 2510 | 23.04 | 22.44 | 21.32 |
| | 1RB-Middle | 2560 | 23.09 | 22.44 | 21.33 |
| | | 2535 | 23.05 | 22.33 | 21.13 |
| | | 2510 | 22.97 | 22.39 | 21.18 |
| | 1RB-Low | 2560 | 23.05 | 22.43 | 21.33 |
| | | 2535 | 23.03 | 22.30 | 21.28 |
| | | 2510 | 22.97 | 22.35 | 21.25 |
| | 50RB-High | 2560 | 22.24 | 21.34 | 20.29 |
| | | 2535 | 22.22 | 21.16 | 20.14 |
| | | 2510 | 22.17 | 21.23 | 20.21 |
| | 50RB-Middle | 2560 | 22.20 | 21.18 | 20.26 |
| | | 2535 | 22.18 | 21.22 | 20.19 |
| | | 2510 | 22.19 | 21.25 | 20.23 |
| | 50RB-Low | 2560 | 22.23 | 21.19 | 20.20 |
| | | 2535 | 22.14 | 21.12 | 20.05 |
| | | 2510 | 22.19 | 21.19 | 20.25 |
| | 100RB | 2560 | 22.21 | 21.20 | 20.15 |
| | | 2535 | 22.16 | 21.12 | 20.16 |
| | | 2510 | 22.23 | 21.20 | 20.20 |

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**LTE Band7(Normal Power)**

| Band 7 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High | 2567.5 | 14.36 | 13.79 | 13.71 |
| | | 2535 | 14.51 | 13.72 | 13.54 |
| | | 2502.5 | 14.46 | 13.80 | 13.54 |
| | 1RB-Middle | 2567.5 | 14.30 | 13.63 | 13.90 |
| | | 2535 | 14.29 | 13.63 | 13.16 |
| | | 2502.5 | 14.32 | 13.65 | 13.51 |
| | 1RB-Low | 2567.5 | 14.45 | 13.67 | 13.76 |
| | | 2535 | 14.42 | 13.55 | 13.47 |
| | | 2502.5 | 14.42 | 13.78 | 13.61 |
| | 12RB-High | 2567.5 | 13.43 | 12.32 | 12.43 |
| | | 2535 | 13.44 | 12.46 | 12.44 |
| | | 2502.5 | 13.50 | 12.62 | 12.57 |
| | 12RB-Middle | 2567.5 | 13.55 | 12.43 | 12.45 |
| | | 2535 | 13.48 | 12.48 | 12.44 |
| | | 2502.5 | 13.48 | 12.48 | 12.47 |
| | 12RB-Low | 2567.5 | 13.44 | 12.41 | 12.42 |
| | | 2535 | 13.26 | 12.28 | 12.24 |
| | | 2502.5 | 13.45 | 12.47 | 12.39 |
| | 25RB | 2567.5 | 13.48 | 12.37 | 12.49 |
| | | 2535 | 13.41 | 12.40 | 12.40 |
| | | 2502.5 | 13.43 | 12.51 | 12.43 |
| 10MHz | 1RB-High | 2565 | 14.45 | 13.68 | 13.85 |
| | | 2535 | 14.37 | 13.94 | 13.59 |
| | | 2505 | 14.41 | 13.66 | 13.30 |
| | 1RB-Middle | 2565 | 14.38 | 13.50 | 13.61 |
| | | 2535 | 14.44 | 13.73 | 13.61 |
| | | 2505 | 14.42 | 13.83 | 13.63 |
| | 1RB-Low | 2565 | 14.48 | 13.66 | 13.55 |
| | | 2535 | 14.30 | 13.73 | 13.45 |
| | | 2505 | 14.48 | 13.64 | 13.63 |
| | 25RB-High | 2565 | 13.53 | 12.51 | 12.50 |
| | | 2535 | 13.43 | 12.42 | 12.41 |
| | | 2505 | 13.50 | 12.47 | 12.48 |
| | 25RB-Middle | 2565 | 13.48 | 12.47 | 12.45 |
| | | 2535 | 13.45 | 12.43 | 12.43 |
| | | 2505 | 13.53 | 12.54 | 12.52 |
| | 25RB-Low | 2565 | 13.42 | 12.52 | 12.44 |
| | | 2535 | 13.39 | 12.38 | 12.37 |
| | | 2505 | 13.54 | 12.52 | 12.54 |
| | 50RB | 2565 | 13.47 | 12.45 | 12.33 |
| | | 2535 | 13.45 | 12.44 | 12.42 |
| | | 2505 | 13.47 | 12.56 | 12.34 |
| 15MHz | 1RB-High | 2562.5 | 14.15 | 13.31 | 13.38 |
| | | 2535 | 14.05 | 13.39 | 13.25 |
| | | 2507.5 | 14.19 | 13.46 | 13.40 |
| | 1RB-Middle | 2562.5 | 14.19 | 13.57 | 13.26 |
| | | 2535 | 14.13 | 13.39 | 13.20 |
| | | 2507.5 | 14.10 | 13.47 | 13.34 |
| | 1RB-Low | 2562.5 | 14.09 | 13.44 | 13.28 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2535 | 14.10 | 13.38 | 13.27 |
| | | 2507.5 | 14.10 | 13.43 | 13.20 |
| | 36RB-High | 2562.5 | 13.31 | 12.30 | 12.30 |
| | | 2535 | 13.30 | 12.25 | 12.31 |
| | | 2507.5 | 13.31 | 12.28 | 12.40 |
| | 36RB-Middle | 2562.5 | 13.29 | 12.32 | 12.30 |
| | | 2535 | 13.27 | 12.32 | 12.25 |
| | | 2507.5 | 13.33 | 12.44 | 12.31 |
| | 36RB-Low | 2562.5 | 13.30 | 12.31 | 12.31 |
| | | 2535 | 13.28 | 12.23 | 12.23 |
| | | 2507.5 | 13.30 | 12.26 | 12.28 |
| | 75RB | 2562.5 | 13.33 | 12.19 | 12.27 |
| | | 2535 | 13.29 | 12.25 | 12.28 |
| | | 2507.5 | 13.40 | 12.37 | 12.28 |
| 20MHz | 1RB-High | 2560 | 14.28 | 13.47 | 13.37 |
| | | 2535 | 14.10 | 13.45 | 13.32 |
| | | 2510 | 14.20 | 13.36 | 13.31 |
| | 1RB-Middle | 2560 | 14.21 | 13.49 | 13.23 |
| | | 2535 | 14.12 | 13.42 | 13.33 |
| | | 2510 | 14.16 | 13.41 | 13.23 |
| | 1RB-Low | 2560 | 14.16 | 13.38 | 13.31 |
| | | 2535 | 14.16 | 13.48 | 13.29 |
| | | 2510 | 14.24 | 13.29 | 13.30 |
| | 50RB-High | 2560 | 13.38 | 12.39 | 12.31 |
| | | 2535 | 13.32 | 12.32 | 12.30 |
| | | 2510 | 13.30 | 12.30 | 12.30 |
| | 50RB-Middle | 2560 | 13.36 | 12.37 | 12.35 |
| | | 2535 | 13.32 | 12.33 | 12.30 |
| | | 2510 | 13.34 | 12.32 | 12.32 |
| | 50RB-Low | 2560 | 13.39 | 12.29 | 12.28 |
| | | 2535 | 13.29 | 12.30 | 12.27 |
| | | 2510 | 13.33 | 12.42 | 12.33 |
| | 100RB | 2560 | 13.29 | 12.37 | 12.27 |
| | | 2535 | 13.36 | 12.34 | 12.23 |
| | | 2510 | 13.42 | 12.32 | 12.30 |

**LTE Band12(Normal Power)**

| Band 12 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 1.4MHz | 1RB-High | 715.3 | 23.93 | 22.91 | 22.04 |
| | | 707.5 | 24.01 | 23.31 | 22.33 |
| | | 699.7 | 23.99 | 23.23 | 22.48 |
| | 1RB-Middle | 715.3 | 24.04 | 23.08 | 22.06 |
| | | 707.5 | 24.25 | 23.38 | 22.38 |
| | | 699.7 | 24.25 | 23.35 | 22.53 |
| | 1RB-Low | 715.3 | 23.87 | 23.50 | 22.36 |
| | | 707.5 | 24.10 | 23.26 | 22.29 |
| | | 699.7 | 24.08 | 23.30 | 22.48 |
| | 3RB-High | 715.3 | 23.84 | 22.80 | 21.85 |
| | | 707.5 | 24.13 | 23.17 | 22.28 |
| | | 699.7 | 24.02 | 23.18 | 22.23 |
| | 3RB-Middle | 715.3 | 24.00 | 23.07 | 22.08 |
| | | 707.5 | 24.17 | 23.30 | 22.27 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 699.7 | 24.15 | 23.29 | 22.22 |
| | 3RB-Low | 715.3 | 24.08 | 23.15 | 22.17 |
| | | 707.5 | 24.12 | 23.24 | 22.27 |
| | | 699.7 | 24.20 | 23.20 | 22.32 |
| | 6RB | 715.3 | 23.13 | 22.21 | 21.13 |
| | | 707.5 | 23.19 | 22.28 | 21.13 |
| | | 699.7 | 23.22 | 22.30 | 21.31 |
| 3MHz | 1RB-High | 714.5 | 23.77 | 22.96 | 22.03 |
| | | 707.5 | 24.08 | 23.47 | 22.33 |
| | | 700.5 | 24.06 | 23.33 | 22.32 |
| | 1RB-Middle | 714.5 | 24.12 | 23.44 | 22.34 |
| | | 707.5 | 24.10 | 23.53 | 22.32 |
| | | 700.5 | 24.12 | 23.38 | 22.33 |
| | 1RB-Low | 714.5 | 24.03 | 23.48 | 22.27 |
| | | 707.5 | 24.13 | 23.54 | 22.42 |
| | | 700.5 | 24.26 | 23.62 | 22.48 |
| | 8RB-High | 714.5 | 23.11 | 22.28 | 21.27 |
| | | 707.5 | 23.27 | 22.37 | 21.32 |
| | | 700.5 | 23.27 | 22.28 | 21.34 |
| | 8RB-Middle | 714.5 | 23.20 | 22.37 | 21.18 |
| | | 707.5 | 23.24 | 22.32 | 21.22 |
| | | 700.5 | 23.38 | 22.38 | 21.28 |
| | 8RB-Low | 714.5 | 23.17 | 22.28 | 21.22 |
| | | 707.5 | 23.21 | 22.38 | 21.44 |
| | | 700.5 | 23.34 | 22.43 | 21.51 |
| | 15RB | 714.5 | 23.06 | 22.22 | 21.22 |
| | | 707.5 | 23.18 | 22.39 | 21.22 |
| | | 700.5 | 23.28 | 22.25 | 21.34 |
| 5MHz | 1RB-High | 713.5 | 23.65 | 22.99 | 22.09 |
| | | 707.5 | 24.14 | 23.47 | 22.32 |
| | | 701.5 | 24.12 | 23.54 | 22.24 |
| | 1RB-Middle | 713.5 | 24.13 | 23.92 | 22.35 |
| | | 707.5 | 24.33 | 23.25 | 22.47 |
| | | 701.5 | 24.21 | 23.64 | 22.11 |
| | 1RB-Low | 713.5 | 24.16 | 23.62 | 22.34 |
| | | 707.5 | 24.23 | 23.66 | 22.26 |
| | | 701.5 | 24.12 | 23.43 | 22.33 |
| | 12RB-High | 713.5 | 23.13 | 22.20 | 21.36 |
| | | 707.5 | 23.21 | 22.31 | 21.24 |
| | | 701.5 | 23.24 | 22.23 | 21.35 |
| | 12RB-Middle | 713.5 | 23.13 | 22.30 | 21.31 |
| | | 707.5 | 23.30 | 22.33 | 21.29 |
| | | 701.5 | 23.28 | 22.42 | 21.33 |
| | 12RB-Low | 713.5 | 23.18 | 22.28 | 21.26 |
| | | 707.5 | 23.23 | 22.39 | 21.33 |
| | | 701.5 | 23.32 | 22.44 | 21.31 |
| | 25RB | 713.5 | 23.06 | 22.25 | 21.16 |
| | | 707.5 | 23.22 | 22.22 | 21.26 |
| | | 701.5 | 23.30 | 22.33 | 21.29 |
| 10MHz | 1RB-High | 711 | 23.97 | 23.56 | 22.11 |
| | | 707.5 | 24.14 | 23.64 | 22.30 |
| | | 704 | 24.26 | 23.57 | 22.44 |
| | 1RB-Middle | 711 | 24.23 | 23.48 | 22.46 |
| | | 707.5 | 24.30 | 23.56 | 22.46 |
| | | 704 | 24.27 | 23.39 | 22.58 |

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| | | | | | |
|---|---|---|---|---|---|
| | 1RB-Low | 711 | 24.46 | 23.78 | 22.62 |
| | | 707.5 | 24.24 | 23.73 | 22.56 |
| | | 704 | 24.30 | 23.72 | 22.48 |
| | 25RB-High | 711 | 23.26 | 22.38 | 21.34 |
| | | 707.5 | 23.29 | 22.32 | 21.40 |
| | | 704 | 23.30 | 22.24 | 21.39 |
| | 25RB-Middle | 711 | 23.30 | 22.33 | 21.37 |
| | | 707.5 | 23.35 | 22.35 | 21.25 |
| | | 704 | 23.34 | 22.48 | 21.43 |
| | 25RB-Low | 711 | 23.37 | 22.42 | 21.40 |
| | | 707.5 | 23.31 | 22.27 | 21.40 |
| | | 704 | 23.36 | 22.40 | 21.44 |
| | 50RB | 711 | 23.31 | 22.27 | 21.33 |
| | | 707.5 | 23.32 | 22.29 | 21.30 |
| | | 704 | 23.34 | 22.45 | 21.45 |

**LTE Band13(Normal Power)**

| Band 13 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset (Start RB) | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5 MHz | 1RB-High | 784.5 | 24.13 | 23.37 | 22.74 |
| | | 782 | 24.18 | 23.76 | 22.66 |
| | | 779.5 | 24.17 | 23.67 | 22.61 |
| | 1RB-Middle | 784.5 | 24.54 | 23.90 | 22.96 |
| | | 782 | 24.47 | 23.48 | 22.65 |
| | | 779.5 | 24.45 | 23.20 | 22.70 |
| | 1RB-Low | 784.5 | 24.26 | 23.68 | 22.73 |
| | | 782 | 24.14 | 23.79 | 22.86 |
| | | 779.5 | 23.92 | 23.37 | 22.63 |
| | 12RB-High | 784.5 | 23.38 | 22.54 | 21.84 |
| | | 782 | 23.40 | 22.58 | 21.92 |
| | | 779.5 | 23.42 | 22.54 | 21.95 |
| | 12RB-Middle | 784.5 | 23.41 | 22.59 | 21.77 |
| | | 782 | 23.44 | 22.54 | 21.83 |
| | | 779.5 | 23.48 | 22.49 | 21.92 |
| | 12RB-Low | 784.5 | 23.35 | 22.43 | 21.80 |
| | | 782 | 23.39 | 22.42 | 21.90 |
| | | 779.5 | 23.32 | 22.55 | 21.91 |
| | 25RB | 784.5 | 23.36 | 22.44 | 21.73 |
| | | 782 | 23.37 | 22.51 | 21.74 |
| | | 779.5 | 23.39 | 22.57 | 21.83 |
| 10 MHz | 1RB-High | 782 | 24.27 | 23.57 | 22.52 |
| | 1RB-Middle | 782 | 24.37 | 23.65 | 22.98 |
| | 1RB-Low | 782 | 24.21 | 23.94 | 22.28 |
| | 25RB-High | 782 | 23.45 | 22.45 | 21.46 |
| | 25RB-Middle | 782 | 23.48 | 22.47 | 21.49 |
| | 25RB-Low | 782 | 23.43 | 22.47 | 21.53 |
| | 50RB | 782 | 23.48 | 22.40 | 21.51 |

**LTE Band25(Normal Power)**

| Band 25 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset (Start RB) | Frequency (MHz) | QPSK<br>Actual output power (dBm) | 16QAM<br>Actual output power (dBm) | 64QAM<br>Actual output power (dBm) |

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| | | | | | |
|---|---|---|---|---|---|
| 1.4 MHz | 1RB High (5) | 1914.3 | 24.12 | 23.48 | 22.57 |
| | | 1882.5 | 24.24 | 23.58 | 22.76 |
| | | 1850.7 | 23.58 | 23.04 | 22.31 |
| | 1RB Middle (3) | 1914.3 | 24.16 | 23.47 | 22.67 |
| | | 1882.5 | 24.32 | 23.70 | 22.95 |
| | | 1850.7 | 23.60 | 23.02 | 22.32 |
| | 1RB Low (0) | 1914.3 | 23.95 | 23.46 | 22.58 |
| | | 1882.5 | 24.27 | 23.50 | 22.75 |
| | | 1850.7 | 23.54 | 22.96 | 22.19 |
| | 3RB High (3) | 1914.3 | 24.13 | 23.37 | 22.69 |
| | | 1882.5 | 24.33 | 23.44 | 22.83 |
| | | 1850.7 | 23.58 | 22.81 | 22.17 |
| | 3RB Middle (1) | 1914.3 | 24.31 | 23.35 | 22.73 |
| | | 1882.5 | 24.37 | 23.29 | 22.77 |
| | | 1850.7 | 23.59 | 22.86 | 22.19 |
| | 3RB Low (0) | 1914.3 | 24.18 | 23.38 | 22.64 |
| | | 1882.5 | 24.34 | 23.46 | 22.78 |
| | | 1850.7 | 23.54 | 22.78 | 22.15 |
| | 6RB (0) | 1914.3 | 23.28 | 22.42 | 21.54 |
| | | 1882.5 | 23.45 | 22.52 | 21.64 |
| | | 1850.7 | 22.78 | 22.05 | 21.32 |
| 3 MHz | 1RB High (14) | 1913.5 | 24.30 | 23.71 | 22.57 |
| | | 1882.5 | 24.38 | 23.76 | 22.81 |
| | | 1851.5 | 23.82 | 23.30 | 22.50 |
| | 1RB Middle (7) | 1913.5 | 24.35 | 23.56 | 22.77 |
| | | 1882.5 | 24.50 | 23.76 | 22.86 |
| | | 1851.5 | 23.65 | 23.10 | 22.33 |
| | 1RB Low (0) | 1913.5 | 24.14 | 23.68 | 22.71 |
| | | 1882.5 | 24.39 | 23.90 | 22.82 |
| | | 1851.5 | 23.69 | 23.11 | 22.34 |
| | 8RB High (7) | 1913.5 | 23.38 | 22.41 | 21.80 |
| | | 1882.5 | 23.50 | 22.57 | 21.95 |
| | | 1851.5 | 22.96 | 22.21 | 21.46 |
| | 8RB Middle (4) | 1913.5 | 23.44 | 22.50 | 21.73 |
| | | 1882.5 | 23.50 | 22.65 | 21.90 |
| | | 1851.5 | 22.94 | 22.20 | 21.49 |
| | 8RB Low (0) | 1913.5 | 23.41 | 22.39 | 21.78 |
| | | 1882.5 | 23.43 | 22.52 | 21.86 |
| | | 1851.5 | 22.89 | 22.16 | 21.37 |
| | 15RB (0) | 1913.5 | 23.41 | 22.50 | 21.78 |
| | | 1882.5 | 23.49 | 22.56 | 21.86 |
| | | 1851.5 | 22.94 | 22.14 | 21.44 |
| 5 MHz | 1RB High (24) | 1912.5 | 24.28 | 23.52 | 22.62 |
| | | 1882.5 | 24.41 | 23.66 | 22.86 |
| | | 1852.5 | 23.96 | 23.45 | 22.54 |
| | 1RB Middle (12) | 1912.5 | 24.29 | 23.17 | 22.80 |
| | | 1882.5 | 24.54 | 23.79 | 22.81 |
| | | 1852.5 | 23.71 | 23.05 | 22.46 |

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| | | | | | |
|---|---|---|---|---|---|
| | 1RB Low (0) | 1912.5 | 24.23 | 23.57 | 22.65 |
| | | 1882.5 | 24.30 | 23.85 | 22.79 |
| | | 1852.5 | 23.73 | 23.22 | 22.43 |
| | 12RB High (13) | 1912.5 | 23.41 | 22.57 | 21.74 |
| | | 1882.5 | 23.55 | 22.65 | 21.91 |
| | | 1852.5 | 23.07 | 22.28 | 21.59 |
| | 12RB Middle (6) | 1912.5 | 23.37 | 22.54 | 21.86 |
| | | 1882.5 | 23.48 | 22.50 | 21.79 |
| | | 1852.5 | 23.01 | 22.22 | 21.49 |
| | 12RB Low (0) | 1912.5 | 23.46 | 22.41 | 21.88 |
| | | 1882.5 | 23.48 | 22.53 | 21.81 |
| | | 1852.5 | 22.96 | 22.16 | 21.48 |
| | 25RB (0) | 1912.5 | 23.37 | 22.49 | 21.81 |
| | | 1882.5 | 23.45 | 22.52 | 21.77 |
| | | 1852.5 | 23.03 | 22.22 | 21.54 |
| 10 MHz | 1RB High (49) | 1910 | 24.23 | 23.85 | 22.76 |
| | | 1882.5 | 24.37 | 24.01 | 22.98 |
| | | 1855 | 24.32 | 23.86 | 22.99 |
| | 1RB Middle (24) | 1910 | 24.22 | 23.54 | 22.73 |
| | | 1882.5 | 24.37 | 23.74 | 22.85 |
| | | 1855 | 23.82 | 23.23 | 22.40 |
| | 1RB Low (0) | 1910 | 24.30 | 23.83 | 22.89 |
| | | 1882.5 | 24.35 | 23.93 | 22.82 |
| | | 1855 | 23.86 | 23.32 | 22.52 |
| | 25RB High (25) | 1910 | 23.42 | 22.48 | 21.81 |
| | | 1882.5 | 23.59 | 22.62 | 21.97 |
| | | 1855 | 23.50 | 22.58 | 21.81 |
| | 25RB Middle (12) | 1910 | 23.42 | 22.50 | 21.72 |
| | | 1882.5 | 23.52 | 22.61 | 21.81 |
| | | 1855 | 23.18 | 22.35 | 21.65 |
| | 25RB Low (0) | 1910 | 23.40 | 22.37 | 21.73 |
| | | 1882.5 | 23.50 | 22.59 | 21.90 |
| | | 1855 | 23.10 | 22.27 | 21.58 |
| | 50RB (0) | 1910 | 23.41 | 22.47 | 21.77 |
| | | 1882.5 | 23.45 | 22.62 | 21.76 |
| | | 1855 | 23.26 | 22.45 | 21.74 |
| 15 MHz | 1RB High (74) | 1907.5 | 24.11 | 23.37 | 22.41 |
| | | 1882.5 | 24.19 | 23.64 | 22.46 |
| | | 1857.5 | 24.09 | 23.59 | 22.44 |
| | 1RB Middle (37) | 1907.5 | 24.06 | 23.63 | 22.48 |
| | | 1882.5 | 24.13 | 23.56 | 22.68 |
| | | 1857.5 | 24.02 | 23.40 | 21.71 |
| | 1RB Low (0) | 1907.5 | 24.09 | 23.80 | 22.42 |
| | | 1882.5 | 24.18 | 23.70 | 22.39 |
| | | 1857.5 | 23.80 | 23.17 | 21.42 |
| | 36RB High (38) | 1907.5 | 23.36 | 22.43 | 21.52 |
| | | 1882.5 | 23.47 | 22.49 | 21.56 |
| | | 1857.5 | 23.46 | 22.43 | 21.54 |

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| | | | | | |
|---|---|---|---|---|---|
| | 36RB Middle (19) | 1907.5 | 23.41 | 22.49 | 21.58 |
| | | 1882.5 | 23.39 | 22.43 | 21.61 |
| | | 1857.5 | 23.40 | 22.46 | 21.40 |
| | 36RB Low (0) | 1907.5 | 23.33 | 22.45 | 21.45 |
| | | 1882.5 | 23.38 | 22.44 | 21.50 |
| | | 1857.5 | 23.12 | 22.26 | 20.56 |
| | 75RB (0) | 1907.5 | 23.39 | 22.40 | 21.51 |
| | | 1882.5 | 23.41 | 22.46 | 21.52 |
| | | 1857.5 | 23.37 | 22.44 | 21.44 |
| 20 MHz | 1RB High (99) | 1905 | 24.17 | 23.70 | 22.24 |
| | | 1882.5 | 24.27 | 23.65 | 22.67 |
| | | 1860 | 24.25 | 23.91 | 22.42 |
| | 1RB Middle (50) | 1905 | 24.31 | 23.64 | 22.65 |
| | | 1882.5 | 24.18 | 23.65 | 22.67 |
| | | 1860 | 24.20 | 23.72 | 22.75 |
| | 1RB Low (0) | 1905 | 24.27 | 23.78 | 22.48 |
| | | 1882.5 | 24.24 | 23.76 | 22.46 |
| | | 1860 | 24.30 | 23.91 | 22.28 |
| | 50RB High (50) | 1905 | 23.41 | 22.54 | 21.47 |
| | | 1882.5 | 23.49 | 22.49 | 21.54 |
| | | 1860 | 23.45 | 22.42 | 21.46 |
| | 50RB Middle (25) | 1905 | 23.49 | 22.47 | 21.58 |
| | | 1882.5 | 23.40 | 22.48 | 21.43 |
| | | 1860 | 23.51 | 22.48 | 21.53 |
| | 50RB Low (0) | 1905 | 23.46 | 22.40 | 21.54 |
| | | 1882.5 | 23.36 | 22.43 | 21.45 |
| | | 1860 | 23.48 | 22.55 | 21.53 |
| | 100RB (0) | 1905 | 23.36 | 22.47 | 21.51 |
| | | 1882.5 | 23.37 | 22.41 | 21.43 |
| | | 1860 | 23.51 | 22.50 | 21.50 |

**LTE Band25(Low Power)**

| Band 25 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation RB offset (Start RB) | Frequency (MHz) | QPSK Actual output power (dBm) | 16QAM Actual output power (dBm) | 64QAM Actual output power (dBm) |
| 1.4 MHz | 1RB High (5) | 1914.3 | 16.21 | 15.37 | 14.89 |
| | | 1882.5 | 16.24 | 15.51 | 15.00 |
| | | 1850.7 | 16.23 | 15.51 | 14.67 |
| | 1RB Middle (3) | 1914.3 | 16.16 | 15.56 | 14.77 |
| | | 1882.5 | 16.40 | 15.53 | 14.89 |
| | | 1850.7 | 16.38 | 15.61 | 14.82 |
| | 1RB Low (0) | 1914.3 | 16.07 | 15.39 | 14.67 |
| | | 1882.5 | 16.18 | 15.48 | 14.80 |
| | | 1850.7 | 16.16 | 15.58 | 14.92 |
| | 3RB High (3) | 1914.3 | 16.17 | 15.09 | 14.54 |
| | | 1882.5 | 16.22 | 15.29 | 14.65 |
| | | 1850.7 | 16.23 | 15.24 | 14.65 |

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| | | | | | |
|---|---|---|---|---|---|
| | 3RB Middle (1) | 1914.3 | 16.21 | 15.21 | 14.60 |
| | | 1882.5 | 16.21 | 14.93 | 14.57 |
| | | 1850.7 | 16.28 | 14.86 | 14.48 |
| | 3RB Low (0) | 1914.3 | 16.13 | 15.29 | 14.56 |
| | | 1882.5 | 16.17 | 15.36 | 14.54 |
| | | 1850.7 | 16.22 | 15.48 | 14.64 |
| | 6RB (0) | 1914.3 | 15.29 | 14.29 | 13.59 |
| | | 1882.5 | 15.28 | 14.46 | 13.68 |
| | | 1850.7 | 15.42 | 14.39 | 13.65 |
| 3 MHz | 1RB High (14) | 1913.5 | 16.16 | 15.45 | 14.92 |
| | | 1882.5 | 16.38 | 15.53 | 14.78 |
| | | 1851.5 | 16.39 | 15.58 | 14.79 |
| | 1RB Middle (7) | 1913.5 | 16.16 | 15.40 | 14.62 |
| | | 1882.5 | 16.14 | 15.54 | 14.65 |
| | | 1851.5 | 16.23 | 15.55 | 14.92 |
| | 1RB Low (0) | 1913.5 | 16.32 | 15.61 | 14.86 |
| | | 1882.5 | 16.23 | 15.40 | 14.88 |
| | | 1851.5 | 16.39 | 15.66 | 14.85 |
| | 8RB High (7) | 1913.5 | 15.41 | 14.46 | 13.81 |
| | | 1882.5 | 15.44 | 14.37 | 13.84 |
| | | 1851.5 | 15.51 | 14.50 | 13.79 |
| | 8RB Middle (4) | 1913.5 | 15.37 | 14.50 | 13.55 |
| | | 1882.5 | 15.46 | 14.50 | 13.78 |
| | | 1851.5 | 15.40 | 14.53 | 13.76 |
| | 8RB Low (0) | 1913.5 | 15.37 | 14.42 | 13.69 |
| | | 1882.5 | 15.38 | 14.46 | 13.71 |
| | | 1851.5 | 15.43 | 14.50 | 13.78 |
| | 15RB (0) | 1913.5 | 15.44 | 14.58 | 13.66 |
| | | 1882.5 | 15.45 | 14.45 | 13.74 |
| | | 1851.5 | 15.49 | 14.50 | 13.87 |
| 5 MHz | 1RB High (24) | 1912.5 | 16.29 | 15.60 | 14.74 |
| | | 1882.5 | 16.23 | 15.57 | 15.24 |
| | | 1852.5 | 16.38 | 15.62 | 14.81 |
| | 1RB Middle (12) | 1912.5 | 16.16 | 15.58 | 14.49 |
| | | 1882.5 | 16.15 | 15.71 | 14.50 |
| | | 1852.5 | 16.23 | 15.60 | 14.97 |
| | 1RB Low (0) | 1912.5 | 16.21 | 15.57 | 14.78 |
| | | 1882.5 | 16.37 | 15.65 | 14.96 |
| | | 1852.5 | 16.40 | 15.68 | 14.88 |
| | 12RB High (13) | 1912.5 | 15.36 | 14.32 | 13.67 |
| | | 1882.5 | 15.47 | 14.52 | 13.63 |
| | | 1852.5 | 15.47 | 14.47 | 13.75 |
| | 12RB Middle (6) | 1912.5 | 15.42 | 14.42 | 13.69 |
| | | 1882.5 | 15.40 | 14.40 | 13.71 |
| | | 1852.5 | 15.47 | 14.47 | 13.74 |
| | 12RB Low (0) | 1912.5 | 15.44 | 14.46 | 13.64 |
| | | 1882.5 | 15.42 | 14.21 | 13.79 |
| | | 1852.5 | 15.42 | 14.53 | 13.75 |

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| | | | | | |
|---|---|---|---|---|---|
| | 25RB (0) | 1912.5 | 15.40 | 14.45 | 13.69 |
| | | 1882.5 | 15.46 | 14.57 | 13.75 |
| | | 1852.5 | 15.50 | 14.48 | 13.79 |
| 10 MHz | 1RB High (49) | 1910 | 16.27 | 15.57 | 14.92 |
| | | 1882.5 | 16.27 | 15.42 | 14.62 |
| | | 1855 | 16.27 | 15.51 | 14.80 |
| | 1RB Middle (24) | 1910 | 16.16 | 15.39 | 14.73 |
| | | 1882.5 | 16.21 | 15.63 | 14.84 |
| | | 1855 | 16.23 | 15.73 | 14.86 |
| | 1RB Low (0) | 1910 | 16.34 | 15.47 | 14.69 |
| | | 1882.5 | 16.25 | 15.50 | 14.74 |
| | | 1855 | 16.35 | 15.65 | 14.66 |
| | 25RB High (25) | 1910 | 15.48 | 14.48 | 13.76 |
| | | 1882.5 | 15.42 | 14.55 | 13.73 |
| | | 1855 | 15.47 | 14.47 | 13.77 |
| | 25RB Middle (12) | 1910 | 15.45 | 14.41 | 13.72 |
| | | 1882.5 | 15.43 | 14.49 | 13.78 |
| | | 1855 | 15.53 | 14.54 | 13.72 |
| | 25RB Low (0) | 1910 | 15.34 | 14.43 | 13.69 |
| | | 1882.5 | 15.30 | 14.41 | 13.70 |
| | | 1855 | 15.58 | 14.58 | 13.88 |
| | 50RB (0) | 1910 | 15.43 | 14.45 | 13.62 |
| | | 1882.5 | 15.51 | 14.51 | 13.78 |
| | | 1855 | 15.53 | 14.55 | 13.75 |
| 15 MHz | 1RB High (74) | 1907.5 | 16.12 | 15.42 | 14.50 |
| | | 1882.5 | 16.18 | 15.45 | 14.60 |
| | | 1857.5 | 16.10 | 15.28 | 14.52 |
| | 1RB Middle (37) | 1907.5 | 16.12 | 15.55 | 14.47 |
| | | 1882.5 | 16.12 | 15.54 | 14.55 |
| | | 1857.5 | 16.13 | 15.49 | 14.54 |
| | 1RB Low (0) | 1907.5 | 16.12 | 15.44 | 14.58 |
| | | 1882.5 | 16.17 | 15.53 | 14.56 |
| | | 1857.5 | 16.20 | 15.40 | 14.63 |
| | 36RB High (38) | 1907.5 | 15.39 | 14.38 | 13.67 |
| | | 1882.5 | 15.39 | 14.35 | 13.73 |
| | | 1857.5 | 15.36 | 14.35 | 13.71 |
| | 36RB Middle (19) | 1907.5 | 15.31 | 14.39 | 13.56 |
| | | 1882.5 | 15.35 | 14.42 | 13.58 |
| | | 1857.5 | 15.39 | 14.38 | 13.67 |
| | 36RB Low (0) | 1907.5 | 15.33 | 14.30 | 13.58 |
| | | 1882.5 | 15.31 | 14.38 | 13.64 |
| | | 1857.5 | 15.44 | 14.41 | 13.61 |
| | 75RB (0) | 1907.5 | 15.32 | 14.37 | 13.56 |
| | | 1882.5 | 15.38 | 14.42 | 13.66 |
| | | 1857.5 | 15.40 | 14.43 | 13.67 |
| 20 MHz | 1RB High (99) | 1905 | 16.03 | 15.31 | 14.46 |
| | | 1882.5 | 15.96 | 15.27 | 14.48 |
| | | 1860 | 16.03 | 15.36 | 14.43 |

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| | | | | | |
|---|---|---|---|---|---|
| | 1RB Middle (50) | 1905 | 16.03 | 15.33 | 14.57 |
| | | 1882.5 | 16.04 | 15.28 | 14.49 |
| | | 1860 | 15.98 | 15.26 | 14.53 |
| | 1RB Low (0) | 1905 | 16.48 | 15.33 | 14.47 |
| | | 1882.5 | 16.04 | 15.48 | 14.42 |
| | | 1860 | 16.00 | 15.46 | 14.56 |
| | 50RB High (50) | 1905 | 15.26 | 14.29 | 13.66 |
| | | 1882.5 | 15.28 | 14.30 | 13.6 |
| | | 1860 | 15.33 | 14.35 | 13.6 |
| | 50RB Middle (25) | 1905 | 15.22 | 14.30 | 13.55 |
| | | 1882.5 | 15.35 | 14.27 | 13.58 |
| | | 1860 | 15.34 | 14.34 | 13.61 |
| | 50RB Low (0) | 1905 | 15.21 | 14.28 | 13.57 |
| | | 1882.5 | 15.25 | 14.23 | 13.55 |
| | | 1860 | 15.31 | 14.33 | 13.61 |
| | 100RB (0) | 1905 | 15.29 | 14.30 | 13.52 |
| | | 1882.5 | 15.30 | 14.27 | 13.6 |
| | | 1860 | 15.25 | 14.23 | 13.54 |

**LTE Band26**

| Band 26 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset (Start RB) | Frequency (MHz) | QPSK<br>Actual output power (dBm) | 16QAM<br>Actual output power (dBm) | 64QAM<br>Actual output power (dBm) |
| 1.4 MHz | 1RB High (5) | 848.3 | 23.24 | 22.53 | 22.57 |
| | | 831.5 | 23.40 | 22.69 | 22.62 |
| | | 814.7 | 23.36 | 22.63 | 22.59 |
| | 1RB Middle (3) | 848.3 | 23.33 | 22.64 | 22.66 |
| | | 831.5 | 23.31 | 22.75 | 22.57 |
| | | 814.7 | 23.55 | 22.76 | 22.64 |
| | 1RB Low (0) | 848.3 | 23.23 | 22.40 | 22.47 |
| | | 831.5 | 23.29 | 22.61 | 22.61 |
| | | 814.7 | 23.33 | 22.59 | 22.65 |
| | 3RB High (3) | 848.3 | 23.35 | 22.36 | 22.33 |
| | | 831.5 | 23.37 | 22.41 | 22.47 |
| | | 814.7 | 23.43 | 22.56 | 22.64 |
| | 3RB Middle (1) | 848.3 | 23.26 | 22.33 | 22.46 |
| | | 831.5 | 23.43 | 22.53 | 22.48 |
| | | 814.7 | 23.51 | 22.51 | 22.54 |
| | 3RB Low (0) | 848.3 | 23.25 | 22.28 | 22.46 |
| | | 831.5 | 23.36 | 22.45 | 22.49 |
| | | 814.7 | 23.45 | 22.62 | 22.62 |
| | 6RB (0) | 848.3 | 22.29 | 21.47 | 21.25 |
| | | 831.5 | 22.41 | 21.52 | 21.27 |
| | | 814.7 | 22.44 | 21.63 | 21.50 |
| 3 MHz | 1RB High (14) | 847.5 | 23.33 | 22.61 | 21.56 |
| | | 831.5 | 23.48 | 22.75 | 21.63 |
| | | 815.5 | 23.46 | 22.72 | 22.49 |

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| | | | | | |
|---|---|---|---|---|---|
| | 1RB Middle (7) | 847.5 | 23.29 | 22.91 | 21.53 |
| | | 831.5 | 23.35 | 23.02 | 21.54 |
| | | 815.5 | 23.45 | 22.42 | 22.51 |
| | 1RB Low (0) | 847.5 | 23.44 | 22.77 | 21.62 |
| | | 831.5 | 23.39 | 22.79 | 21.47 |
| | | 815.5 | 23.47 | 22.54 | 22.47 |
| | 8RB High (7) | 847.5 | 22.44 | 21.58 | 20.48 |
| | | 831.5 | 22.47 | 21.42 | 20.58 |
| | | 815.5 | 22.46 | 21.51 | 20.60 |
| | 8RB Middle (4) | 847.5 | 22.46 | 21.52 | 20.59 |
| | | 831.5 | 22.48 | 21.65 | 20.64 |
| | | 815.5 | 22.53 | 21.49 | 20.68 |
| | 8RB Low (0) | 847.5 | 22.44 | 21.53 | 20.49 |
| | | 831.5 | 22.40 | 21.45 | 20.59 |
| | | 815.5 | 22.32 | 21.53 | 20.67 |
| | 15RB (0) | 847.5 | 22.50 | 21.57 | 20.55 |
| | | 831.5 | 22.49 | 21.49 | 20.44 |
| | | 815.5 | 22.40 | 21.50 | 20.41 |
| 5 MHz | 1RB High (24) | 846.5 | 23.45 | 22.64 | 22.42 |
| | | 831.5 | 23.45 | 22.84 | 22.64 |
| | | 816.5 | 23.45 | 22.76 | 22.74 |
| | 1RB Middle (12) | 846.5 | 23.39 | 22.80 | 22.57 |
| | | 831.5 | 23.41 | 22.82 | 22.61 |
| | | 816.5 | 23.40 | 23.25 | 22.69 |
| | 1RB Low (0) | 846.5 | 23.39 | 22.80 | 22.58 |
| | | 831.5 | 23.51 | 22.78 | 22.64 |
| | | 816.5 | 23.58 | 22.86 | 22.58 |
| | 12RB High (13) | 846.5 | 22.44 | 21.56 | 21.53 |
| | | 831.5 | 22.52 | 21.60 | 21.53 |
| | | 816.5 | 22.52 | 21.55 | 21.62 |
| | 12RB Middle (6) | 846.5 | 22.44 | 21.55 | 21.56 |
| | | 831.5 | 22.49 | 21.55 | 21.53 |
| | | 816.5 | 22.62 | 21.59 | 21.60 |
| | 12RB Low (0) | 846.5 | 22.52 | 21.56 | 21.48 |
| | | 831.5 | 22.45 | 21.50 | 21.51 |
| | | 816.5 | 22.60 | 21.65 | 21.64 |
| | 25RB (0) | 846.5 | 22.47 | 21.54 | 21.54 |
| | | 831.5 | 22.47 | 21.54 | 21.53 |
| | | 816.5 | 22.61 | 21.53 | 21.54 |
| 10 MHz | 1RB High (49) | 844 | 23.38 | 22.80 | 21.39 |
| | | 831.5 | 23.38 | 22.71 | 21.70 |
| | | 820 | 23.36 | 22.89 | 21.62 |
| | 1RB Middle (24) | 844 | 23.37 | 22.57 | 21.72 |
| | | 831.5 | 23.37 | 22.58 | 21.55 |
| | | 820 | 23.38 | 22.68 | 21.70 |
| | 1RB Low (0) | 844 | 23.49 | 22.95 | 21.56 |
| | | 831.5 | 23.44 | 22.85 | 21.77 |
| | | 820 | 23.42 | 23.10 | 21.54 |

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| | | | | | |
|---|---|---|---|---|---|
| | 25RB High (25) | 844 | 22.54 | 21.58 | 20.57 |
| | | 831.5 | 22.53 | 21.46 | 20.51 |
| | | 820 | 22.57 | 21.59 | 20.54 |
| | 25RB Middle (12) | 844 | 22.55 | 21.50 | 20.55 |
| | | 831.5 | 22.40 | 21.50 | 20.50 |
| | | 820 | 22.59 | 21.64 | 20.59 |
| | 25RB Low (0) | 844 | 22.45 | 21.53 | 20.59 |
| | | 831.5 | 22.54 | 21.53 | 20.53 |
| | | 820 | 22.56 | 21.55 | 20.59 |
| | 50RB (0) | 844 | 22.51 | 21.45 | 20.54 |
| | | 831.5 | 22.44 | 21.48 | 20.48 |
| | | 820 | 22.54 | 21.62 | 20.66 |
| 15 MHz | 1RB High (74) | 841.5 | 23.12 | 22.53 | 21.29 |
| | | 831.5 | 23.24 | 22.54 | 21.41 |
| | | 822.5 | 23.26 | 22.59 | 21.48 |
| | 1RB Middle (37) | 841.5 | 23.20 | 22.59 | 21.44 |
| | | 831.5 | 23.14 | 22.55 | 21.40 |
| | | 822.5 | 23.31 | 22.69 | 21.51 |
| | 1RB Low (0) | 841.5 | 23.34 | 22.74 | 21.47 |
| | | 831.5 | 23.34 | 22.71 | 21.47 |
| | | 822.5 | 23.36 | 22.92 | 21.58 |
| | 36RB High (38) | 841.5 | 22.36 | 21.40 | 20.37 |
| | | 831.5 | 22.39 | 21.41 | 20.44 |
| | | 822.5 | 22.34 | 21.39 | 20.41 |
| | 36RB Middle (19) | 841.5 | 22.29 | 21.33 | 20.36 |
| | | 831.5 | 22.31 | 21.30 | 20.34 |
| | | 822.5 | 22.37 | 21.34 | 20.44 |
| | 36RB Low (0) | 841.5 | 22.39 | 21.26 | 20.32 |
| | | 831.5 | 22.33 | 21.34 | 20.38 |
| | | 822.5 | 22.40 | 21.34 | 20.45 |
| | 75RB (0) | 841.5 | 22.34 | 21.43 | 20.42 |
| | | 831.5 | 22.33 | 21.35 | 20.35 |
| | | 822.5 | 22.41 | 21.38 | 20.48 |

**LTE Band41PC3(Normal Power)**

| Band 41 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Actual output power (dBm) | | |
| | RB offset | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High | 2687.5 | 24.02 | 23.23 | 22.63 |
| | | 2640.3 | 24.04 | 23.27 | 22.56 |
| | | 2593 | 23.84 | 23.04 | 22.33 |
| | | 2545.8 | 23.86 | 23.14 | 22.35 |
| | | 2498.5 | 23.68 | 22.91 | 22.24 |
| | 1RB-Middle | 2687.5 | 24.22 | 23.17 | 22.55 |
| | | 2640.3 | 24.19 | 23.22 | 22.33 |
| | | 2593 | 23.88 | 23.00 | 22.30 |
| | | 2545.8 | 23.85 | 23.03 | 22.13 |
| | | 2498.5 | 23.69 | 22.85 | 22.02 |
| | 1RB-Low | 2687.5 | 24.03 | 23.25 | 22.57 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2640.3 | 24.02 | 23.17 | 22.59 |
| | | 2593 | 23.79 | 22.99 | 22.37 |
| | | 2545.8 | 23.81 | 22.97 | 22.37 |
| | | 2498.5 | 23.68 | 22.84 | 22.18 |
| | 12RB-High | 2687.5 | 23.14 | 22.20 | 21.70 |
| | | 2640.3 | 23.15 | 22.20 | 21.70 |
| | | 2593 | 22.98 | 22.01 | 21.53 |
| | | 2545.8 | 22.93 | 22.02 | 21.52 |
| | | 2498.5 | 22.79 | 21.90 | 21.38 |
| | 12RB-Middle | 2687.5 | 23.18 | 22.20 | 21.72 |
| | | 2640.3 | 23.09 | 22.12 | 21.68 |
| | | 2593 | 23.00 | 22.04 | 21.54 |
| | | 2545.8 | 23.00 | 22.05 | 21.59 |
| | | 2498.5 | 22.79 | 21.93 | 21.43 |
| | 12RB-Low | 2687.5 | 23.16 | 22.16 | 21.74 |
| | | 2640.3 | 23.08 | 22.16 | 21.64 |
| | | 2593 | 22.95 | 22.01 | 21.54 |
| | | 2545.8 | 22.96 | 22.01 | 21.54 |
| | | 2498.5 | 22.74 | 21.83 | 21.40 |
| | 25RB | 2687.5 | 23.09 | 22.24 | 21.69 |
| | | 2640.3 | 23.05 | 22.13 | 21.62 |
| | | 2593 | 22.99 | 22.02 | 21.54 |
| | | 2545.8 | 22.98 | 22.09 | 21.52 |
| | | 2498.5 | 22.80 | 21.89 | 21.36 |
| 10MHz | 1RB-High | 2685 | 23.94 | 23.09 | 22.51 |
| | | 2639 | 23.92 | 23.14 | 22.45 |
| | | 2593 | 23.77 | 22.97 | 22.30 |
| | | 2547 | 23.75 | 22.93 | 22.26 |
| | | 2501 | 23.70 | 22.85 | 22.17 |
| | 1RB-Middle | 2685 | 24.01 | 23.18 | 22.52 |
| | | 2639 | 23.96 | 23.17 | 22.48 |
| | | 2593 | 23.79 | 23.00 | 22.26 |
| | | 2547 | 23.78 | 22.93 | 22.27 |
| | | 2501 | 23.68 | 22.81 | 22.17 |
| | 1RB-Low | 2685 | 24.08 | 23.25 | 22.61 |
| | | 2639 | 24.05 | 23.26 | 22.61 |
| | | 2593 | 23.85 | 23.03 | 22.38 |
| | | 2547 | 23.86 | 23.06 | 22.38 |
| | | 2501 | 23.66 | 22.87 | 22.14 |
| | 25RB-High | 2685 | 23.15 | 22.28 | 21.74 |
| | | 2639 | 23.13 | 22.22 | 21.70 |
| | | 2593 | 22.96 | 22.09 | 21.54 |
| | | 2547 | 22.95 | 22.04 | 21.52 |
| | | 2501 | 22.80 | 21.89 | 21.35 |
| | 25RB-Middle | 2685 | 23.11 | 22.27 | 21.66 |
| | | 2639 | 23.11 | 22.20 | 21.66 |
| | | 2593 | 23.02 | 22.15 | 21.56 |
| | | 2547 | 22.98 | 22.10 | 21.52 |
| | | 2501 | 22.82 | 21.92 | 21.36 |
| | 25RB-Low | 2685 | 23.06 | 22.20 | 21.66 |
| | | 2639 | 23.09 | 22.22 | 21.65 |
| | | 2593 | 22.93 | 22.07 | 21.51 |
| | | 2547 | 22.96 | 22.09 | 21.54 |
| | | 2501 | 22.80 | 21.87 | 21.32 |
| | 50RB | 2685 | 23.13 | 22.27 | 21.70 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2639 | 23.08 | 22.21 | 21.64 |
| | | 2593 | 22.99 | 22.13 | 21.53 |
| | | 2547 | 22.99 | 22.13 | 21.55 |
| | | 2501 | 22.83 | 21.97 | 21.37 |
| 15MHz | 1RB-High | 2682.5 | 23.86 | 23.03 | 22.37 |
| | | 2637.8 | 23.71 | 23.06 | 22.30 |
| | | 2593 | 23.72 | 22.87 | 22.18 |
| | | 2548.3 | 23.68 | 22.86 | 22.12 |
| | | 2503.5 | 23.62 | 22.81 | 22.03 |
| | 1RB-Middle | 2682.5 | 23.88 | 23.08 | 22.40 |
| | | 2637.8 | 23.85 | 23.00 | 22.30 |
| | | 2593 | 23.63 | 22.86 | 22.18 |
| | | 2548.3 | 23.65 | 22.85 | 22.11 |
| | | 2503.5 | 23.52 | 22.73 | 22.01 |
| | 1RB-Low | 2682.5 | 23.95 | 23.18 | 22.48 |
| | | 2637.8 | 23.92 | 23.15 | 22.42 |
| | | 2593 | 23.75 | 22.97 | 22.24 |
| | | 2548.3 | 23.74 | 22.95 | 22.23 |
| | | 2503.5 | 23.43 | 22.66 | 21.88 |
| | 36RB-High | 2682.5 | 23.05 | 22.09 | 21.60 |
| | | 2637.8 | 22.96 | 22.10 | 21.58 |
| | | 2593 | 22.86 | 21.97 | 21.44 |
| | | 2548.3 | 22.84 | 21.88 | 21.42 |
| | | 2503.5 | 22.72 | 21.79 | 21.31 |
| | 36RB-Middle | 2682.5 | 23.07 | 22.09 | 21.61 |
| | | 2637.8 | 23.05 | 22.08 | 21.63 |
| | | 2593 | 22.87 | 21.96 | 21.47 |
| | | 2548.3 | 22.85 | 21.93 | 21.44 |
| | | 2503.5 | 22.67 | 21.77 | 21.27 |
| | 36RB-Low | 2682.5 | 23.03 | 22.07 | 21.60 |
| | | 2637.8 | 22.99 | 22.07 | 21.58 |
| | | 2593 | 22.87 | 21.95 | 21.48 |
| | | 2548.3 | 22.90 | 21.95 | 21.49 |
| | | 2503.5 | 22.61 | 21.71 | 21.25 |
| | 75RB | 2682.5 | 22.94 | 22.07 | 21.59 |
| | | 2637.8 | 23.05 | 22.16 | 21.65 |
| | | 2593 | 22.88 | 21.98 | 21.47 |
| | | 2548.3 | 22.88 | 21.98 | 21.48 |
| | | 2503.5 | 22.68 | 21.85 | 21.33 |
| 20MHz | 1RB-High | 2680 | 24.20 | 23.39 | 22.53 |
| | | 2636.5 | 24.35 | 23.48 | 22.62 |
| | | 2593 | 24.34 | 23.49 | 22.67 |
| | | 2549.5 | 24.15 | 23.30 | 22.49 |
| | | 2506 | 24.20 | 23.37 | 22.48 |
| | 1RB-Middle | 2680 | 24.25 | 23.39 | 22.55 |
| | | 2636.5 | 24.38 | 23.54 | 22.69 |
| | | 2593 | 24.31 | 23.37 | 22.59 |
| | | 2549.5 | 24.23 | 23.34 | 22.54 |
| | | 2506 | 24.06 | 23.21 | 22.39 |
| | 1RB-Low | 2680 | 24.38 | 23.58 | 22.73 |
| | | 2636.5 | 24.54 | 23.73 | 22.93 |
| | | 2593 | 24.38 | 23.57 | 22.74 |
| | | 2549.5 | 24.28 | 23.41 | 22.64 |
| | | 2506 | 23.96 | 23.09 | 22.32 |
| | 50RB-High | 2680 | 23.35 | 22.41 | 21.83 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2636.5 | 23.47 | 22.51 | 21.94 |
| | | 2593 | 23.43 | 22.52 | 21.95 |
| | | 2549.5 | 23.34 | 22.37 | 21.79 |
| | | 2506 | 23.31 | 22.34 | 21.77 |
| | 50RB-Middle | 2680 | 23.36 | 22.38 | 21.85 |
| | | 2636.5 | 23.46 | 22.51 | 21.94 |
| | | 2593 | 23.45 | 22.50 | 21.91 |
| | | 2549.5 | 23.36 | 22.41 | 21.86 |
| | | 2506 | 23.23 | 22.22 | 21.74 |
| | 50RB-Low | 2680 | 23.38 | 22.41 | 21.90 |
| | | 2636.5 | 23.54 | 22.57 | 21.80 |
| | | 2593 | 23.38 | 22.45 | 21.87 |
| | | 2549.5 | 23.39 | 22.42 | 21.87 |
| | | 2506 | 23.16 | 22.18 | 21.68 |
| | 100RB | 2680 | 23.36 | 22.40 | 21.99 |
| | | 2636.5 | 23.44 | 22.51 | 21.91 |
| | | 2593 | 23.47 | 22.47 | 21.84 |
| | | 2549.5 | 23.40 | 22.42 | 21.97 |
| | | 2506 | 23.23 | 22.25 | 21.79 |

**LTE Band41PC3(Low Power)**

| Band 41 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High | 2687.5 | 14.44 | 13.57 | 12.69 |
| | | 2640.3 | 14.56 | 13.66 | 12.93 |
| | | 2593 | 14.44 | 13.59 | 12.79 |
| | | 2545.8 | 14.44 | 13.57 | 12.88 |
| | | 2498.5 | 14.13 | 13.39 | 12.50 |
| | 1RB-Middle | 2687.5 | 14.49 | 13.62 | 12.58 |
| | | 2640.3 | 14.56 | 13.62 | 12.78 |
| | | 2593 | 14.49 | 13.54 | 12.72 |
| | | 2545.8 | 14.46 | 13.58 | 12.67 |
| | | 2498.5 | 14.41 | 13.26 | 12.49 |
| | 1RB-Low | 2687.5 | 14.41 | 13.53 | 12.75 |
| | | 2640.3 | 14.47 | 13.62 | 12.85 |
| | | 2593 | 14.39 | 13.52 | 12.80 |
| | | 2545.8 | 14.40 | 13.56 | 12.68 |
| | | 2498.5 | 14.14 | 13.31 | 12.52 |
| | 12RB-High | 2687.5 | 13.45 | 12.42 | 11.96 |
| | | 2640.3 | 13.55 | 12.57 | 12.06 |
| | | 2593 | 13.51 | 12.47 | 11.95 |
| | | 2545.8 | 13.48 | 12.46 | 11.91 |
| | | 2498.5 | 13.25 | 12.25 | 11.70 |
| | 12RB-Middle | 2687.5 | 13.50 | 12.47 | 11.97 |
| | | 2640.3 | 13.53 | 12.53 | 12.08 |
| | | 2593 | 13.49 | 12.50 | 11.92 |
| | | 2545.8 | 13.50 | 12.48 | 11.95 |
| | | 2498.5 | 13.23 | 12.23 | 11.73 |
| | 12RB-Low | 2687.5 | 13.55 | 12.47 | 11.96 |
| | | 2640.3 | 13.57 | 12.54 | 12.01 |
| | | 2593 | 13.49 | 12.43 | 11.96 |
| | | 2545.8 | 13.51 | 12.48 | 12.00 |
| | | 2498.5 | 13.28 | 12.24 | 11.74 |

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| | | | | | |
|---|---|---|---|---|---|
| | 25RB | 2687.5 | 13.48 | 12.46 | 11.87 |
| | | 2640.3 | 13.52 | 12.51 | 11.94 |
| | | 2593 | 13.50 | 12.49 | 11.91 |
| | | 2545.8 | 13.46 | 12.48 | 11.97 |
| | | 2498.5 | 13.25 | 12.19 | 11.66 |
| 10MHz | 1RB-High | 2685 | 14.45 | 13.50 | 12.65 |
| | | 2639 | 14.43 | 13.61 | 12.77 |
| | | 2593 | 14.38 | 13.58 | 12.74 |
| | | 2547 | 14.35 | 13.54 | 12.72 |
| | | 2501 | 14.20 | 13.37 | 12.59 |
| | 1RB-Middle | 2685 | 14.40 | 13.56 | 12.75 |
| | | 2639 | 14.47 | 13.64 | 12.86 |
| | | 2593 | 14.42 | 13.54 | 12.80 |
| | | 2547 | 14.32 | 13.53 | 12.71 |
| | | 2501 | 14.03 | 13.29 | 12.61 |
| | 1RB-Low | 2685 | 14.47 | 13.65 | 12.82 |
| | | 2639 | 14.62 | 13.74 | 12.98 |
| | | 2593 | 14.45 | 13.61 | 12.83 |
| | | 2547 | 14.43 | 13.66 | 12.83 |
| | | 2501 | 14.14 | 13.35 | 12.51 |
| | 25RB-High | 2685 | 13.50 | 12.56 | 11.96 |
| | | 2639 | 13.61 | 12.67 | 12.10 |
| | | 2593 | 13.52 | 12.54 | 11.97 |
| | | 2547 | 13.52 | 12.47 | 11.99 |
| | | 2501 | 13.30 | 12.28 | 11.77 |
| | 25RB-Middle | 2685 | 13.50 | 12.48 | 11.94 |
| | | 2639 | 13.60 | 12.56 | 12.05 |
| | | 2593 | 13.54 | 12.51 | 11.97 |
| | | 2547 | 13.53 | 12.54 | 12.01 |
| | | 2501 | 13.29 | 12.28 | 11.74 |
| | 25RB-Low | 2685 | 13.43 | 12.49 | 11.85 |
| | | 2639 | 13.57 | 12.63 | 12.07 |
| | | 2593 | 13.44 | 12.47 | 11.90 |
| | | 2547 | 13.49 | 12.54 | 11.98 |
| | | 2501 | 13.22 | 12.29 | 11.75 |
| | 50RB | 2685 | 13.44 | 12.44 | 11.92 |
| | | 2639 | 13.50 | 12.59 | 12.00 |
| | | 2593 | 13.52 | 12.55 | 11.96 |
| | | 2547 | 13.48 | 12.54 | 11.97 |
| | | 2501 | 13.32 | 12.32 | 11.70 |
| 15MHz | 1RB-High | 2682.5 | 14.20 | 13.32 | 12.38 |
| | | 2637.8 | 14.27 | 13.42 | 12.58 |
| | | 2593 | 14.28 | 13.43 | 12.54 |
| | | 2548.3 | 14.24 | 13.38 | 12.47 |
| | | 2503.5 | 14.11 | 13.19 | 12.28 |
| | 1RB-Middle | 2682.5 | 14.25 | 13.33 | 12.44 |
| | | 2637.8 | 14.37 | 13.45 | 12.61 |
| | | 2593 | 14.18 | 13.30 | 12.42 |
| | | 2548.3 | 14.23 | 13.31 | 12.44 |
| | | 2503.5 | 13.97 | 13.10 | 12.25 |
| | 1RB-Low | 2682.5 | 14.42 | 13.49 | 12.56 |
| | | 2637.8 | 14.51 | 13.65 | 12.81 |
| | | 2593 | 14.35 | 13.47 | 12.59 |
| | | 2548.3 | 14.30 | 13.48 | 12.58 |
| | | 2503.5 | 13.98 | 13.09 | 12.19 |

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| | | | | | |
|---|---|---|---|---|---|
| | 36RB-High | 2682.5 | 13.31 | 12.33 | 11.83 |
| | | 2637.8 | 13.45 | 12.38 | 11.90 |
| | | 2593 | 13.33 | 12.32 | 11.87 |
| | | 2548.3 | 13.35 | 12.30 | 11.85 |
| | | 2503.5 | 13.13 | 12.09 | 11.63 |
| | 36RB-Middle | 2682.5 | 13.36 | 12.35 | 11.85 |
| | | 2637.8 | 13.42 | 12.44 | 11.97 |
| | | 2593 | 13.34 | 12.32 | 11.80 |
| | | 2548.3 | 13.37 | 12.30 | 11.83 |
| | | 2503.5 | 13.13 | 12.09 | 11.59 |
| | 36RB-Low | 2682.5 | 13.37 | 12.29 | 11.82 |
| | | 2637.8 | 13.45 | 12.42 | 11.94 |
| | | 2593 | 13.32 | 12.31 | 11.78 |
| | | 2548.3 | 13.39 | 12.38 | 11.87 |
| | | 2503.5 | 13.04 | 12.07 | 11.59 |
| | 75RB | 2682.5 | 13.30 | 12.36 | 11.81 |
| | | 2637.8 | 13.47 | 12.49 | 12.00 |
| | | 2593 | 13.37 | 12.38 | 11.89 |
| | | 2548.3 | 13.39 | 12.37 | 11.89 |
| | | 2503.5 | 13.14 | 12.11 | 11.64 |
| 20MHz | 1RB-High | 2680 | 14.59 | 13.63 | 12.68 |
| | | 2636.5 | 14.65 | 13.72 | 12.77 |
| | | 2593 | 14.47 | 13.55 | 12.62 |
| | | 2549.5 | 14.34 | 13.44 | 12.51 |
| | | 2506 | 14.22 | 13.36 | 12.35 |
| | 1RB-Middle | 2680 | 14.60 | 13.66 | 12.74 |
| | | 2636.5 | 14.71 | 13.73 | 12.85 |
| | | 2593 | 14.43 | 13.47 | 12.56 |
| | | 2549.5 | 14.36 | 13.49 | 12.52 |
| | | 2506 | 14.13 | 13.22 | 12.36 |
| | 1RB-Low | 2680 | 14.78 | 13.84 | 12.88 |
| | | 2636.5 | 14.86 | 13.94 | 13.01 |
| | | 2593 | 14.54 | 13.62 | 12.68 |
| | | 2549.5 | 14.46 | 13.52 | 12.55 |
| | | 2506 | 14.00 | 13.14 | 12.14 |
| | 50RB-High | 2680 | 13.75 | 12.66 | 12.06 |
| | | 2636.5 | 13.75 | 12.73 | 12.13 |
| | | 2593 | 13.54 | 12.51 | 11.91 |
| | | 2549.5 | 13.52 | 12.50 | 11.9 |
| | | 2506 | 13.32 | 12.34 | 11.77 |
| | 50RB-Middle | 2680 | 13.71 | 12.66 | 12.08 |
| | | 2636.5 | 13.85 | 12.81 | 12.2 |
| | | 2593 | 13.58 | 12.51 | 11.95 |
| | | 2549.5 | 13.55 | 12.53 | 11.94 |
| | | 2506 | 13.28 | 12.26 | 11.72 |
| | 50RB-Low | 2680 | 13.77 | 12.71 | 12.11 |
| | | 2636.5 | 13.82 | 12.75 | 12.17 |
| | | 2593 | 13.53 | 12.43 | 11.9 |
| | | 2549.5 | 13.56 | 12.56 | 11.94 |
| | | 2506 | 13.28 | 12.24 | 11.65 |
| | 100RB | 2680 | 13.65 | 12.61 | 12.15 |
| | | 2636.5 | 13.83 | 12.80 | 12.23 |
| | | 2593 | 13.59 | 12.49 | 12 |
| | | 2549.5 | 13.52 | 12.51 | 12.02 |
| | | 2506 | 13.27 | 12.29 | 11.72 |

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**LTE Band41PC2(Normal Power)**

| Band 41 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High | 2687.5 | 26.28 | 25.30 | 24.64 |
| | | 2640.3 | 26.63 | 25.64 | 24.95 |
| | | 2593 | 26.44 | 25.58 | 24.86 |
| | | 2545.8 | 26.43 | 25.52 | 24.91 |
| | | 2498.5 | 26.34 | 25.54 | 24.91 |
| | 1RB-Middle | 2687.5 | 26.26 | 25.47 | 24.77 |
| | | 2640.3 | 26.50 | 25.61 | 24.90 |
| | | 2593 | 26.54 | 25.37 | 24.90 |
| | | 2545.8 | 26.56 | 25.45 | 24.90 |
| | | 2498.5 | 26.39 | 25.32 | 24.73 |
| | 1RB-Low | 2687.5 | 26.59 | 25.58 | 24.90 |
| | | 2640.3 | 26.56 | 25.67 | 24.81 |
| | | 2593 | 26.36 | 25.53 | 24.75 |
| | | 2545.8 | 26.39 | 25.60 | 24.97 |
| | | 2498.5 | 26.29 | 25.44 | 24.88 |
| | 12RB-High | 2687.5 | 25.35 | 24.44 | 23.79 |
| | | 2640.3 | 25.65 | 24.57 | 24.02 |
| | | 2593 | 25.43 | 24.38 | 23.77 |
| | | 2545.8 | 25.46 | 24.55 | 23.83 |
| | | 2498.5 | 25.38 | 24.30 | 23.64 |
| | 12RB-Middle | 2687.5 | 25.51 | 24.62 | 23.97 |
| | | 2640.3 | 25.59 | 24.71 | 23.94 |
| | | 2593 | 25.41 | 24.55 | 23.83 |
| | | 2545.8 | 25.48 | 24.49 | 23.84 |
| | | 2498.5 | 25.34 | 24.33 | 23.65 |
| | 12RB-Low | 2687.5 | 25.67 | 24.73 | 24.04 |
| | | 2640.3 | 25.57 | 24.66 | 23.94 |
| | | 2593 | 25.47 | 24.48 | 23.76 |
| | | 2545.8 | 25.46 | 24.39 | 23.82 |
| | | 2498.5 | 25.35 | 24.27 | 23.69 |
| | 25RB | 2687.5 | 25.48 | 24.64 | 23.92 |
| | | 2640.3 | 25.56 | 24.60 | 23.83 |
| | | 2593 | 25.40 | 24.49 | 23.75 |
| | | 2545.8 | 25.47 | 24.50 | 23.76 |
| | | 2498.5 | 25.33 | 24.39 | 23.62 |
| 10MHz | 1RB-High | 2685 | 26.39 | 25.44 | 24.70 |
| | | 2639 | 26.49 | 25.81 | 24.91 |
| | | 2593 | 26.27 | 25.60 | 24.83 |
| | | 2547 | 26.27 | 25.61 | 24.84 |
| | | 2501 | 26.31 | 25.57 | 24.84 |
| | 1RB-Middle | 2685 | 26.60 | 25.84 | 24.95 |
| | | 2639 | 26.48 | 25.80 | 24.91 |
| | | 2593 | 26.39 | 25.61 | 24.89 |
| | | 2547 | 26.34 | 25.62 | 24.90 |
| | | 2501 | 26.27 | 25.50 | 24.82 |
| | 1RB-Low | 2685 | 26.69 | 26.00 | 24.95 |
| | | 2639 | 26.65 | 25.97 | 24.85 |
| | | 2593 | 26.42 | 25.67 | 24.96 |
| | | 2547 | 26.43 | 25.79 | 24.97 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2501 | 26.18 | 25.58 | 24.78 |
| | 25RB-High | 2685 | 25.66 | 24.76 | 24.01 |
| | | 2639 | 25.61 | 24.68 | 23.95 |
| | | 2593 | 25.47 | 24.50 | 23.75 |
| | | 2547 | 25.46 | 24.54 | 23.81 |
| | | 2501 | 25.37 | 24.44 | 23.69 |
| | 25RB-Middle | 2685 | 25.64 | 24.72 | 23.98 |
| | | 2639 | 25.59 | 24.68 | 23.94 |
| | | 2593 | 25.45 | 24.53 | 23.79 |
| | | 2547 | 25.43 | 24.57 | 23.84 |
| | | 2501 | 25.36 | 24.43 | 23.67 |
| | 25RB-Low | 2685 | 25.61 | 24.70 | 23.93 |
| | | 2639 | 25.56 | 24.67 | 23.90 |
| | | 2593 | 25.42 | 24.48 | 23.75 |
| | | 2547 | 25.45 | 24.55 | 23.82 |
| | | 2501 | 25.26 | 24.38 | 23.63 |
| | 50RB | 2685 | 25.64 | 24.71 | 23.95 |
| | | 2639 | 25.58 | 24.65 | 23.88 |
| | | 2593 | 25.46 | 24.55 | 23.78 |
| | | 2547 | 25.49 | 24.56 | 23.80 |
| | | 2501 | 25.35 | 24.47 | 23.65 |
| 15MHz | 1RB-High | 2682.5 | 25.89 | 25.02 | 23.24 |
| | | 2637.8 | 26.30 | 25.14 | 24.39 |
| | | 2593 | 26.41 | 24.78 | 24.00 |
| | | 2548.3 | 26.13 | 25.54 | 24.81 |
| | | 2503.5 | 26.10 | 25.49 | 24.78 |
| | 1RB-Middle | 2682.5 | 26.31 | 25.83 | 24.85 |
| | | 2637.8 | 26.40 | 25.77 | 24.81 |
| | | 2593 | 26.06 | 25.54 | 24.86 |
| | | 2548.3 | 26.11 | 25.55 | 24.82 |
| | | 2503.5 | 26.01 | 25.41 | 24.69 |
| | 1RB-Low | 2682.5 | 26.46 | 25.45 | 24.69 |
| | | 2637.8 | 25.67 | 25.00 | 24.18 |
| | | 2593 | 26.20 | 24.99 | 24.21 |
| | | 2548.3 | 26.22 | 25.66 | 24.93 |
| | | 2503.5 | 25.96 | 25.38 | 24.67 |
| | 36RB-High | 2682.5 | 25.57 | 24.60 | 23.88 |
| | | 2637.8 | 25.50 | 24.54 | 23.86 |
| | | 2593 | 25.33 | 24.38 | 23.70 |
| | | 2548.3 | 25.32 | 24.38 | 23.66 |
| | | 2503.5 | 25.28 | 24.27 | 23.61 |
| | 36RB-Middle | 2682.5 | 25.63 | 24.64 | 23.92 |
| | | 2637.8 | 25.57 | 24.56 | 23.87 |
| | | 2593 | 25.34 | 24.33 | 23.68 |
| | | 2548.3 | 25.36 | 24.38 | 23.68 |
| | | 2503.5 | 25.23 | 24.27 | 23.56 |
| | 36RB-Low | 2682.5 | 25.53 | 24.58 | 23.87 |
| | | 2637.8 | 25.55 | 24.56 | 23.87 |
| | | 2593 | 25.35 | 24.37 | 23.72 |
| | | 2548.3 | 25.37 | 24.39 | 23.75 |
| | | 2503.5 | 25.17 | 24.23 | 23.53 |
| | 75RB | 2682.5 | 25.50 | 24.55 | 23.87 |
| | | 2637.8 | 25.55 | 24.63 | 23.91 |
| | | 2593 | 25.32 | 24.38 | 23.70 |
| | | 2548.3 | 25.34 | 24.40 | 23.72 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2503.5 | 25.25 | 24.30 | 23.58 |
| 20MHz | 1RB-High | 2680 | 26.32 | 25.75 | 24.48 |
| | | 2636.5 | 26.41 | 25.76 | 24.52 |
| | | 2593 | 26.40 | 25.80 | 24.61 |
| | | 2549.5 | 26.31 | 25.66 | 24.48 |
| | | 2506 | 26.34 | 25.73 | 24.47 |
| | 1RB-Middle | 2680 | 26.35 | 25.71 | 24.50 |
| | | 2636.5 | 26.42 | 25.79 | 24.53 |
| | | 2593 | 26.35 | 25.70 | 24.52 |
| | | 2549.5 | 26.36 | 25.70 | 24.47 |
| | | 2506 | 26.24 | 25.58 | 24.30 |
| | 1RB-Low | 2680 | 26.52 | 25.89 | 24.60 |
| | | 2636.5 | 26.59 | 26.02 | 24.70 |
| | | 2593 | 26.47 | 25.84 | 24.59 |
| | | 2549.5 | 26.43 | 25.80 | 24.53 |
| | | 2506 | 26.14 | 25.53 | 24.27 |
| | 50RB-High | 2680 | 25.55 | 24.63 | 23.61 |
| | | 2636.5 | 25.62 | 24.68 | 23.68 |
| | | 2593 | 25.58 | 24.65 | 23.72 |
| | | 2549.5 | 25.60 | 24.66 | 23.67 |
| | | 2506 | 25.55 | 24.60 | 23.61 |
| | 50RB-Middle | 2680 | 25.52 | 24.55 | 23.62 |
| | | 2636.5 | 25.61 | 24.69 | 23.68 |
| | | 2593 | 25.63 | 24.70 | 23.71 |
| | | 2549.5 | 25.64 | 24.72 | 23.67 |
| | | 2506 | 25.53 | 24.54 | 23.60 |
| | 50RB-Low | 2680 | 25.56 | 24.59 | 23.61 |
| | | 2636.5 | 25.69 | 24.73 | 23.75 |
| | | 2593 | 25.63 | 24.67 | 23.64 |
| | | 2549.5 | 25.63 | 24.69 | 23.70 |
| | | 2506 | 25.46 | 24.49 | 23.48 |
| | 100RB | 2680 | 25.54 | 24.63 | 23.57 |
| | | 2636.5 | 25.59 | 24.68 | 23.68 |
| | | 2593 | 25.63 | 24.71 | 23.71 |
| | | 2549.5 | 25.60 | 24.64 | 23.65 |
| | | 2506 | 25.55 | 24.54 | 23.58 |

**LTE Band41PC2(Low Power)**

| Band 41 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High | 2687.5 | 16.81 | 15.66 | 14.87 |
| | | 2640.3 | 16.98 | 15.80 | 14.96 |
| | | 2593 | 16.87 | 15.68 | 14.92 |
| | | 2545.8 | 16.95 | 15.74 | 15.04 |
| | | 2498.5 | 16.75 | 15.49 | 14.72 |
| | 1RB-Middle | 2687.5 | 16.78 | 15.56 | 14.78 |
| | | 2640.3 | 16.91 | 15.78 | 15.00 |
| | | 2593 | 16.98 | 15.64 | 14.80 |
| | | 2545.8 | 16.84 | 15.66 | 14.89 |
| | | 2498.5 | 16.69 | 15.42 | 14.69 |
| | 1RB-Low | 2687.5 | 16.81 | 15.68 | 14.85 |
| | | 2640.3 | 16.96 | 15.80 | 15.00 |
| | | 2593 | 16.90 | 15.68 | 14.94 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2545.8 | 16.87 | 15.75 | 14.98 |
| | | 2498.5 | 16.67 | 15.45 | 14.71 |
| | 12RB-High | 2687.5 | 15.91 | 14.35 | 13.87 |
| | | 2640.3 | 16.02 | 14.50 | 13.91 |
| | | 2593 | 16.02 | 14.53 | 13.86 |
| | | 2545.8 | 16.01 | 14.46 | 13.94 |
| | | 2498.5 | 15.79 | 14.33 | 13.68 |
| | 12RB-Middle | 2687.5 | 15.93 | 14.41 | 13.79 |
| | | 2640.3 | 16.02 | 14.60 | 13.93 |
| | | 2593 | 16.00 | 14.51 | 13.97 |
| | | 2545.8 | 16.04 | 14.54 | 13.96 |
| | | 2498.5 | 15.78 | 14.31 | 13.70 |
| | 12RB-Low | 2687.5 | 15.98 | 14.40 | 13.82 |
| | | 2640.3 | 16.03 | 14.56 | 13.96 |
| | | 2593 | 15.96 | 14.54 | 13.95 |
| | | 2545.8 | 16.01 | 14.56 | 13.94 |
| | | 2498.5 | 15.74 | 14.31 | 13.66 |
| | 25RB | 2687.5 | 15.85 | 14.47 | 13.76 |
| | | 2640.3 | 15.99 | 14.53 | 13.86 |
| | | 2593 | 15.97 | 14.53 | 13.88 |
| | | 2545.8 | 15.98 | 14.54 | 13.86 |
| | | 2498.5 | 15.76 | 14.32 | 13.64 |
| 10MHz | 1RB-High | 2685 | 16.84 | 15.56 | 14.82 |
| | | 2639 | 16.87 | 15.68 | 14.97 |
| | | 2593 | 16.80 | 15.72 | 14.93 |
| | | 2547 | 16.90 | 15.74 | 14.92 |
| | | 2501 | 16.72 | 15.61 | 14.83 |
| | 1RB-Middle | 2685 | 16.90 | 15.57 | 14.91 |
| | | 2639 | 17.03 | 15.67 | 15.04 |
| | | 2593 | 16.98 | 15.60 | 14.97 |
| | | 2547 | 16.97 | 15.68 | 14.97 |
| | | 2501 | 16.74 | 15.44 | 14.75 |
| | 1RB-Low | 2685 | 16.97 | 15.64 | 15.00 |
| | | 2639 | 17.11 | 15.85 | 15.13 |
| | | 2593 | 17.03 | 15.75 | 15.06 |
| | | 2547 | 17.03 | 15.83 | 15.02 |
| | | 2501 | 16.76 | 15.44 | 14.76 |
| | 25RB-High | 2685 | 15.96 | 14.48 | 13.81 |
| | | 2639 | 16.06 | 14.61 | 13.96 |
| | | 2593 | 16.04 | 14.52 | 13.89 |
| | | 2547 | 16.05 | 14.56 | 13.88 |
| | | 2501 | 15.84 | 14.37 | 13.70 |
| | 25RB-Middle | 2685 | 15.87 | 14.42 | 13.76 |
| | | 2639 | 16.06 | 14.56 | 13.92 |
| | | 2593 | 16.00 | 14.53 | 13.86 |
| | | 2547 | 16.04 | 14.58 | 13.94 |
| | | 2501 | 15.81 | 14.33 | 13.67 |
| | 25RB-Low | 2685 | 15.90 | 14.39 | 13.74 |
| | | 2639 | 16.03 | 14.56 | 13.89 |
| | | 2593 | 15.99 | 14.51 | 13.89 |
| | | 2547 | 16.04 | 14.57 | 13.86 |
| | | 2501 | 15.81 | 14.28 | 13.65 |
| | 50RB | 2685 | 15.91 | 14.36 | 13.72 |
| | | 2639 | 16.01 | 14.63 | 13.91 |
| | | 2593 | 16.03 | 14.51 | 13.91 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2547 | 16.06 | 14.62 | 13.88 |
| | | 2501 | 15.82 | 14.28 | 13.64 |
| 15MHz | 1RB-High | 2682.5 | 16.66 | 15.45 | 14.64 |
| | | 2637.8 | 16.82 | 15.61 | 14.75 |
| | | 2593 | 16.76 | 15.57 | 14.78 |
| | | 2548.3 | 16.77 | 15.58 | 14.81 |
| | | 2503.5 | 16.61 | 15.36 | 14.59 |
| | 1RB-Middle | 2682.5 | 16.65 | 15.39 | 14.60 |
| | | 2637.8 | 16.78 | 15.58 | 14.82 |
| | | 2593 | 16.66 | 15.52 | 14.69 |
| | | 2548.3 | 16.74 | 15.56 | 14.74 |
| | | 2503.5 | 16.51 | 15.26 | 14.54 |
| | 1RB-Low | 2682.5 | 16.74 | 15.58 | 14.80 |
| | | 2637.8 | 16.98 | 15.82 | 14.98 |
| | | 2593 | 16.82 | 15.63 | 14.83 |
| | | 2548.3 | 16.81 | 15.61 | 14.83 |
| | | 2503.5 | 16.47 | 15.29 | 14.48 |
| | 36RB-High | 2682.5 | 15.77 | 14.27 | 13.68 |
| | | 2637.8 | 15.92 | 14.38 | 13.81 |
| | | 2593 | 15.86 | 14.34 | 13.75 |
| | | 2548.3 | 15.89 | 14.34 | 13.78 |
| | | 2503.5 | 15.68 | 14.18 | 13.58 |
| | 36RB-Middle | 2682.5 | 15.73 | 14.22 | 13.60 |
| | | 2637.8 | 15.97 | 14.45 | 13.86 |
| | | 2593 | 15.84 | 14.35 | 13.75 |
| | | 2548.3 | 15.91 | 14.36 | 13.76 |
| | | 2503.5 | 15.67 | 14.15 | 13.55 |
| | 36RB-Low | 2682.5 | 15.78 | 14.27 | 13.66 |
| | | 2637.8 | 15.98 | 14.44 | 13.87 |
| | | 2593 | 15.94 | 14.39 | 13.78 |
| | | 2548.3 | 15.92 | 14.42 | 13.82 |
| | | 2503.5 | 15.63 | 14.11 | 13.52 |
| | 75RB | 2682.5 | 15.79 | 14.27 | 13.65 |
| | | 2637.8 | 15.97 | 14.48 | 13.93 |
| | | 2593 | 15.91 | 14.43 | 13.81 |
| | | 2548.3 | 15.89 | 14.42 | 13.84 |
| | | 2503.5 | 15.65 | 14.21 | 13.59 |
| 20MHz | 1RB-High | 2680 | 16.71 | 16.03 | 14.72 |
| | | 2636.5 | 16.83 | 16.14 | 14.89 |
| | | 2593 | 16.76 | 16.09 | 14.77 |
| | | 2549.5 | 16.70 | 15.95 | 14.68 |
| | | 2506 | 16.54 | 15.93 | 14.62 |
| | 1RB-Middle | 2680 | 16.73 | 16.04 | 14.73 |
| | | 2636.5 | 16.86 | 16.17 | 14.89 |
| | | 2593 | 16.65 | 15.97 | 14.69 |
| | | 2549.5 | 16.67 | 15.98 | 14.71 |
| | | 2506 | 16.44 | 15.75 | 14.46 |
| | 1RB-Low | 2680 | 16.86 | 16.24 | 14.94 |
| | | 2636.5 | 17.08 | 16.36 | 15.13 |
| | | 2593 | 16.85 | 16.12 | 14.86 |
| | | 2549.5 | 16.72 | 16.04 | 14.72 |
| | | 2506 | 16.38 | 15.72 | 14.45 |
| | 50RB-High | 2680 | 15.88 | 14.90 | 13.75 |
| | | 2636.5 | 16.02 | 15.00 | 13.86 |
| | | 2593 | 15.84 | 14.86 | 13.74 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 2549.5 | 15.87 | 14.89 | 13.72 |
| | | 2506 | 15.66 | 14.72 | 13.6 |
| | 50RB-Middle | 2680 | 15.95 | 14.99 | 13.79 |
| | | 2636.5 | 16.10 | 15.09 | 13.95 |
| | | 2593 | 15.85 | 14.92 | 13.72 |
| | | 2549.5 | 15.90 | 14.91 | 13.74 |
| | | 2506 | 15.67 | 14.71 | 13.55 |
| | 50RB-Low | 2680 | 15.85 | 14.91 | 13.77 |
| | | 2636.5 | 16.01 | 15.06 | 13.95 |
| | | 2593 | 15.87 | 14.89 | 13.74 |
| | | 2549.5 | 15.90 | 14.93 | 13.8 |
| | | 2506 | 15.61 | 14.66 | 13.5 |
| | 100RB | 2680 | 15.85 | 14.88 | 13.87 |
| | | 2636.5 | 16.04 | 15.10 | 14.01 |
| | | 2593 | 15.86 | 14.91 | 13.78 |
| | | 2549.5 | 15.88 | 14.91 | 13.84 |
| | | 2506 | 15.65 | 14.72 | 13.62 |

**LTE Band66(Normal Power) ANT2**

| Band 66 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 1.4MHz | 1RB-High | 1779.3 | 23.00 | 22.22 | 22.21 |
| | | 1745 | 23.02 | 22.37 | 22.30 |
| | | 1710.7 | 23.05 | 22.36 | 22.41 |
| | 1RB-Middle | 1779.3 | 23.11 | 22.30 | 22.38 |
| | | 1745 | 23.01 | 22.45 | 22.26 |
| | | 1710.7 | 23.15 | 22.58 | 22.46 |
| | 1RB-Low | 1779.3 | 23.04 | 22.23 | 22.16 |
| | | 1745 | 23.05 | 22.39 | 22.33 |
| | | 1710.7 | 23.02 | 22.39 | 22.34 |
| | 3RB-High | 1779.3 | 23.03 | 22.20 | 22.34 |
| | | 1745 | 23.16 | 22.20 | 22.24 |
| | | 1710.7 | 23.15 | 22.21 | 22.29 |
| | 3RB-Middle | 1779.3 | 23.04 | 22.19 | 22.19 |
| | | 1745 | 23.33 | 22.01 | 22.18 |
| | | 1710.7 | 23.19 | 22.07 | 22.10 |
| | 3RB-Low | 1779.3 | 23.09 | 22.29 | 22.21 |
| | | 1745 | 23.13 | 22.31 | 22.21 |
| | | 1710.7 | 23.12 | 22.17 | 22.29 |
| | 6RB | 1779.3 | 22.11 | 21.38 | 21.24 |
| | | 1745 | 22.20 | 21.36 | 21.15 |
| | | 1710.7 | 22.22 | 21.16 | 21.24 |
| 3MHz | 1RB-High | 1778.5 | 23.13 | 22.54 | 22.21 |
| | | 1745 | 23.18 | 22.52 | 22.35 |
| | | 1711.5 | 23.29 | 22.64 | 22.35 |
| | 1RB-Middle | 1778.5 | 23.05 | 22.75 | 22.18 |
| | | 1745 | 23.11 | 22.86 | 22.13 |
| | | 1711.5 | 23.08 | 22.61 | 22.40 |
| | 1RB-Low | 1778.5 | 23.14 | 22.45 | 22.34 |
| | | 1745 | 23.20 | 22.44 | 22.39 |
| | | 1711.5 | 23.16 | 22.54 | 22.39 |
| | 8RB-High | 1778.5 | 22.25 | 21.36 | 21.38 |
| | | 1745 | 22.29 | 21.25 | 21.44 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 1711.5 | 22.30 | 21.40 | 21.43 |
| | 8RB-Middle | 1778.5 | 22.31 | 21.33 | 21.23 |
| | | 1745 | 22.31 | 21.41 | 21.36 |
| | | 1711.5 | 22.39 | 21.43 | 21.37 |
| | 8RB-Low | 1778.5 | 22.22 | 21.36 | 21.36 |
| | | 1745 | 22.21 | 21.37 | 21.31 |
| | | 1711.5 | 22.27 | 21.37 | 21.41 |
| | 15RB | 1778.5 | 22.28 | 21.31 | 21.29 |
| | | 1745 | 22.26 | 21.18 | 21.27 |
| | | 1711.5 | 22.31 | 21.38 | 21.35 |
| 5MHz | 1RB-High | 1777.5 | 23.11 | 22.51 | 22.17 |
| | | 1745 | 23.12 | 22.58 | 21.33 |
| | | 1712.5 | 23.11 | 22.57 | 21.41 |
| | 1RB-Middle | 1777.5 | 23.11 | 22.54 | 22.21 |
| | | 1745 | 23.15 | 22.14 | 21.37 |
| | | 1712.5 | 23.22 | 22.54 | 21.49 |
| | 1RB-Low | 1777.5 | 23.14 | 22.58 | 22.39 |
| | | 1745 | 23.22 | 22.61 | 21.40 |
| | | 1712.5 | 23.17 | 22.59 | 21.49 |
| | 12RB-High | 1777.5 | 22.28 | 21.30 | 21.36 |
| | | 1745 | 22.31 | 21.31 | 20.49 |
| | | 1712.5 | 22.29 | 21.39 | 20.46 |
| | 12RB-Middle | 1777.5 | 22.29 | 21.39 | 21.36 |
| | | 1745 | 22.31 | 21.32 | 20.29 |
| | | 1712.5 | 22.38 | 21.44 | 20.47 |
| | 12RB-Low | 1777.5 | 22.22 | 21.18 | 21.31 |
| | | 1745 | 22.29 | 21.39 | 20.32 |
| | | 1712.5 | 22.31 | 21.38 | 20.43 |
| | 25RB | 1777.5 | 22.23 | 21.36 | 21.33 |
| | | 1745 | 22.21 | 21.32 | 20.37 |
| | | 1712.5 | 22.31 | 21.36 | 20.45 |
| 10MHz | 1RB-High | 1775 | 23.07 | 22.67 | 22.39 |
| | | 1745 | 23.13 | 22.72 | 22.27 |
| | | 1715 | 23.09 | 22.52 | 22.36 |
| | 1RB-Middle | 1775 | 23.13 | 22.48 | 22.37 |
| | | 1745 | 23.06 | 22.44 | 22.45 |
| | | 1715 | 23.12 | 22.39 | 22.40 |
| | 1RB-Low | 1775 | 23.11 | 22.53 | 22.40 |
| | | 1745 | 23.10 | 22.40 | 22.43 |
| | | 1715 | 23.19 | 22.68 | 22.45 |
| | 25RB-High | 1775 | 22.36 | 21.34 | 21.38 |
| | | 1745 | 22.29 | 21.37 | 21.35 |
| | | 1715 | 22.35 | 21.41 | 21.28 |
| | 25RB-Middle | 1775 | 22.23 | 21.38 | 21.39 |
| | | 1745 | 22.24 | 21.32 | 21.40 |
| | | 1715 | 22.33 | 21.47 | 21.34 |
| | 25RB-Low | 1775 | 22.18 | 21.34 | 21.33 |
| | | 1745 | 22.29 | 21.30 | 21.36 |
| | | 1715 | 22.30 | 21.43 | 21.49 |
| | 50RB | 1775 | 22.24 | 21.39 | 21.18 |
| | | 1745 | 22.26 | 21.27 | 21.23 |
| | | 1715 | 22.34 | 21.45 | 21.33 |
| 15MHz | 1RB-High | 1772.5 | 23.05 | 22.41 | 22.48 |
| | | 1745 | 23.04 | 22.35 | 22.41 |
| | | 1717.5 | 23.02 | 22.39 | 22.29 |

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| | | | | | |
|---|---|---|---|---|---|
| | 1RB-Middle | 1772.5 | 23.07 | 22.50 | 22.28 |
| | | 1745 | 23.11 | 22.41 | 22.46 |
| | | 1717.5 | 23.04 | 22.39 | 22.40 |
| | 1RB-Low | 1772.5 | 23.09 | 22.50 | 22.41 |
| | | 1745 | 23.06 | 22.43 | 22.33 |
| | | 1717.5 | 23.07 | 22.56 | 22.40 |
| | 36RB-High | 1772.5 | 22.10 | 21.19 | 21.26 |
| | | 1745 | 22.18 | 21.26 | 21.24 |
| | | 1717.5 | 22.19 | 21.27 | 21.18 |
| | 36RB-Middle | 1772.5 | 22.09 | 21.09 | 21.16 |
| | | 1745 | 22.11 | 21.23 | 21.20 |
| | | 1717.5 | 22.21 | 21.30 | 21.27 |
| | 36RB-Low | 1772.5 | 22.12 | 21.13 | 21.13 |
| | | 1745 | 22.14 | 21.11 | 21.17 |
| | | 1717.5 | 22.22 | 21.28 | 21.25 |
| | 75RB | 1772.5 | 22.06 | 21.13 | 21.25 |
| | | 1745 | 22.21 | 21.13 | 21.20 |
| | | 1717.5 | 22.25 | 21.24 | 21.22 |
| 20MHz | 1RB-High | 1770 | 23.19 | 22.31 | 22.26 |
| | | 1745 | 23.09 | 22.39 | 22.25 |
| | | 1720 | 23.07 | 22.44 | 21.12 |
| | 1RB-Middle | 1770 | 23.09 | 22.32 | 22.16 |
| | | 1745 | 23.07 | 22.40 | 22.24 |
| | | 1720 | 23.00 | 22.30 | 21.03 |
| | 1RB-Low | 1770 | 23.03 | 22.36 | 22.25 |
| | | 1745 | 23.09 | 22.44 | 22.30 |
| | | 1720 | 23.21 | 22.40 | 21.11 |
| | 50RB-High | 1770 | 22.06 | 21.13 | 21.06 |
| | | 1745 | 22.20 | 21.26 | 21.17 |
| | | 1720 | 22.12 | 21.17 | 20.18 |
| | 50RB-Middle | 1770 | 22.04 | 21.12 | 21.04 |
| | | 1745 | 22.24 | 21.26 | 21.17 |
| | | 1720 | 22.15 | 21.19 | 20.21 |
| | 50RB-Low | 1770 | 22.08 | 21.12 | 21.06 |
| | | 1745 | 22.18 | 21.22 | 21.15 |
| | | 1720 | 22.15 | 21.19 | 20.19 |
| | 100RB | 1770 | 22.08 | 21.08 | 21.14 |
| | | 1745 | 22.23 | 21.24 | 20.27 |
| | | 1720 | 22.16 | 21.17 | 20.22 |

**LTE Band66(Low Power) ANT2**

| Band 66 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation<br>RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 1.4MHz | 1RB-High | 1779.3 | 15.07 | 15.32 | 13.92 |
| | | 1745 | 16.07 | 15.50 | 13.91 |
| | | 1710.7 | 16.10 | 15.47 | 13.91 |
| | 1RB-Middle | 1779.3 | 15.23 | 15.33 | 13.90 |
| | | 1745 | 16.38 | 15.58 | 13.96 |
| | | 1710.7 | 16.39 | 15.56 | 14.03 |
| | 1RB-Low | 1779.3 | 15.21 | 15.37 | 13.91 |
| | | 1745 | 16.07 | 15.36 | 13.94 |
| | | 1710.7 | 16.19 | 15.42 | 13.90 |
| | 3RB-High | 1779.3 | 16.07 | 15.14 | 13.93 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 1745 | 16.09 | 15.23 | 13.69 |
| | | 1710.7 | 16.14 | 15.24 | 13.78 |
| | 3RB-Middle | 1779.3 | 16.09 | 15.22 | 13.89 |
| | | 1745 | 16.14 | 14.78 | 13.73 |
| | | 1710.7 | 16.18 | 15.28 | 13.79 |
| | 3RB-Low | 1779.3 | 16.06 | 15.30 | 13.82 |
| | | 1745 | 16.14 | 15.28 | 13.53 |
| | | 1710.7 | 16.16 | 15.31 | 13.77 |
| | 6RB | 1779.3 | 15.18 | 14.26 | 12.75 |
| | | 1745 | 15.28 | 14.31 | 12.70 |
| | | 1710.7 | 15.28 | 14.44 | 12.80 |
| 3MHz | 1RB-High | 1778.5 | 16.08 | 15.53 | 14.94 |
| | | 1745 | 16.22 | 15.48 | 14.83 |
| | | 1711.5 | 16.20 | 15.47 | 15.03 |
| | 1RB-Middle | 1778.5 | 16.06 | 15.35 | 14.58 |
| | | 1745 | 16.08 | 15.42 | 14.70 |
| | | 1711.5 | 16.12 | 15.50 | 14.78 |
| | 1RB-Low | 1778.5 | 16.19 | 15.57 | 15.00 |
| | | 1745 | 16.12 | 15.58 | 14.91 |
| | | 1711.5 | 16.24 | 15.65 | 15.05 |
| | 8RB-High | 1778.5 | 15.24 | 14.37 | 13.91 |
| | | 1745 | 15.33 | 14.47 | 13.83 |
| | | 1711.5 | 15.34 | 14.45 | 14.04 |
| | 8RB-Middle | 1778.5 | 15.39 | 14.43 | 13.77 |
| | | 1745 | 15.40 | 14.41 | 13.88 |
| | | 1711.5 | 15.48 | 14.53 | 13.89 |
| | 8RB-Low | 1778.5 | 15.33 | 14.39 | 13.82 |
| | | 1745 | 15.31 | 14.38 | 13.89 |
| | | 1711.5 | 15.45 | 14.42 | 13.93 |
| | 15RB | 1778.5 | 15.34 | 14.27 | 13.75 |
| | | 1745 | 15.30 | 14.29 | 13.78 |
| | | 1711.5 | 15.38 | 14.39 | 13.96 |
| 5MHz | 1RB-High | 1777.5 | 16.23 | 15.53 | 14.85 |
| | | 1745 | 16.22 | 15.44 | 14.95 |
| | | 1712.5 | 16.23 | 15.59 | 15.15 |
| | 1RB-Middle | 1777.5 | 16.11 | 15.35 | 14.83 |
| | | 1745 | 15.97 | 15.44 | 14.71 |
| | | 1712.5 | 16.14 | 15.33 | 14.86 |
| | 1RB-Low | 1777.5 | 16.25 | 15.55 | 14.96 |
| | | 1745 | 16.15 | 15.43 | 14.80 |
| | | 1712.5 | 16.22 | 15.61 | 15.08 |
| | 12RB-High | 1777.5 | 15.33 | 14.35 | 13.83 |
| | | 1745 | 15.30 | 14.38 | 13.72 |
| | | 1712.5 | 15.38 | 14.35 | 13.84 |
| | 12RB-Middle | 1777.5 | 15.35 | 14.40 | 13.88 |
| | | 1745 | 15.43 | 14.44 | 13.69 |
| | | 1712.5 | 15.47 | 14.47 | 13.96 |
| | 12RB-Low | 1777.5 | 15.34 | 14.31 | 13.82 |
| | | 1745 | 15.25 | 14.25 | 13.81 |
| | | 1712.5 | 15.39 | 14.49 | 13.85 |
| | 25RB | 1777.5 | 15.32 | 14.27 | 13.97 |
| | | 1745 | 15.35 | 14.35 | 13.92 |
| | | 1712.5 | 15.39 | 14.38 | 13.97 |
| 10MHz | 1RB-High | 1775 | 16.00 | 15.37 | 14.82 |
| | | 1745 | 16.15 | 15.33 | 14.54 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 1715 | 16.14 | 15.45 | 14.66 |
| | 1RB-Middle | 1775 | 16.24 | 15.39 | 14.93 |
| | | 1745 | 16.13 | 15.42 | 14.92 |
| | | 1715 | 16.10 | 15.47 | 14.99 |
| | 1RB-Low | 1775 | 16.21 | 15.36 | 14.71 |
| | | 1745 | 16.13 | 15.48 | 14.82 |
| | | 1715 | 16.29 | 15.60 | 14.92 |
| | 25RB-High | 1775 | 15.35 | 14.35 | 13.78 |
| | | 1745 | 15.35 | 14.41 | 13.81 |
| | | 1715 | 15.40 | 14.36 | 13.96 |
| | 25RB-Middle | 1775 | 15.26 | 14.35 | 13.84 |
| | | 1745 | 15.41 | 14.39 | 13.88 |
| | | 1715 | 15.43 | 14.51 | 14.02 |
| | 25RB-Low | 1775 | 15.25 | 14.33 | 13.83 |
| | | 1745 | 15.25 | 14.30 | 13.83 |
| | | 1715 | 15.36 | 14.49 | 14.05 |
| | 50RB | 1775 | 15.26 | 14.34 | 13.73 |
| | | 1745 | 15.35 | 14.42 | 13.80 |
| | | 1715 | 15.41 | 14.41 | 13.99 |
| 15MHz | 1RB-High | 1772.5 | 16.01 | 15.33 | 13.76 |
| | | 1745 | 16.01 | 15.31 | 13.62 |
| | | 1717.5 | 16.03 | 15.25 | 13.92 |
| | 1RB-Middle | 1772.5 | 15.93 | 15.41 | 13.82 |
| | | 1745 | 16.01 | 15.38 | 13.77 |
| | | 1717.5 | 16.04 | 15.51 | 13.79 |
| | 1RB-Low | 1772.5 | 15.98 | 15.34 | 13.84 |
| | | 1745 | 16.02 | 15.34 | 13.72 |
| | | 1717.5 | 16.05 | 15.36 | 13.89 |
| | 36RB-High | 1772.5 | 15.22 | 14.14 | 12.76 |
| | | 1745 | 15.18 | 14.24 | 12.74 |
| | | 1717.5 | 15.24 | 14.16 | 12.74 |
| | 36RB-Middle | 1772.5 | 15.23 | 14.16 | 12.76 |
| | | 1745 | 15.23 | 14.19 | 12.70 |
| | | 1717.5 | 15.27 | 14.22 | 12.80 |
| | 36RB-Low | 1772.5 | 15.18 | 14.10 | 12.72 |
| | | 1745 | 15.12 | 14.07 | 12.67 |
| | | 1717.5 | 15.33 | 14.27 | 12.83 |
| | 75RB | 1772.5 | 15.25 | 14.19 | 12.67 |
| | | 1745 | 15.23 | 14.19 | 12.71 |
| | | 1717.5 | 15.32 | 14.28 | 12.69 |
| 20MHz | 1RB-High | 1770 | 16.06 | 15.37 | 14.84 |
| | | 1745 | 15.98 | 15.40 | 14.62 |
| | | 1720 | 16.05 | 15.40 | 14.73 |
| | 1RB-Middle | 1770 | 16.05 | 15.45 | 14.76 |
| | | 1745 | 16.06 | 15.40 | 14.72 |
| | | 1720 | 16.38 | 15.35 | 14.66 |
| | 1RB-Low | 1770 | 16.05 | 15.43 | 14.71 |
| | | 1745 | 16.05 | 15.36 | 14.70 |
| | | 1720 | 16.07 | 15.45 | 14.86 |
| | 50RB-High | 1770 | 15.29 | 14.23 | 13.70 |
| | | 1745 | 15.24 | 14.19 | 13.76 |
| | | 1720 | 15.30 | 14.26 | 13.73 |
| | 50RB-Middle | 1770 | 15.12 | 14.15 | 13.71 |
| | | 1745 | 15.31 | 14.27 | 13.71 |
| | | 1720 | 15.28 | 14.32 | 13.79 |

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| | | | | | |
|---|---|---|---|---|---|
| | 50RB-Low | 1770 | 15.25 | 14.19 | 13.64 |
| | | 1745 | 15.15 | 14.19 | 13.65 |
| | | 1720 | 15.23 | 14.27 | 13.75 |
| | 100RB | 1770 | 15.22 | 14.13 | 13.64 |
| | | 1745 | 15.26 | 14.20 | 13.76 |
| | | 1720 | 15.28 | 14.30 | 13.78 |

**LTE Band66 ANT0**

| Band 66 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Actual output power (dBm) | | |
| | RB offset | | QPSK | 16QAM | 64QAM |
| 1.4MHz | 1RB-High | 1779.3 | 24.48 | 23.77 | 23.67 |
| | | 1745 | 24.36 | 23.59 | 23.54 |
| | | 1710.7 | 24.42 | 23.66 | 23.65 |
| | 1RB-Middle | 1779.3 | 24.52 | 23.93 | 23.65 |
| | | 1745 | 24.44 | 23.64 | 23.65 |
| | | 1710.7 | 24.46 | 23.75 | 23.79 |
| | 1RB-Low | 1779.3 | 24.40 | 23.66 | 23.82 |
| | | 1745 | 24.41 | 23.72 | 23.72 |
| | | 1710.7 | 24.38 | 23.75 | 23.83 |
| | 3RB-High | 1779.3 | 24.44 | 23.53 | 23.57 |
| | | 1745 | 24.38 | 23.52 | 23.58 |
| | | 1710.7 | 24.47 | 23.51 | 23.56 |
| | 3RB-Middle | 1779.3 | 24.45 | 23.57 | 23.58 |
| | | 1745 | 24.53 | 23.52 | 23.55 |
| | | 1710.7 | 24.48 | 23.61 | 23.59 |
| | 3RB-Low | 1779.3 | 24.46 | 23.46 | 23.61 |
| | | 1745 | 24.42 | 23.56 | 23.62 |
| | | 1710.7 | 24.46 | 23.48 | 23.59 |
| | 6RB | 1779.3 | 23.65 | 22.65 | 22.37 |
| | | 1745 | 23.47 | 22.48 | 22.39 |
| | | 1710.7 | 23.55 | 22.57 | 22.50 |
| 3MHz | 1RB-High | 1778.5 | 24.55 | 23.86 | 23.77 |
| | | 1745 | 24.59 | 23.93 | 23.70 |
| | | 1711.5 | 24.50 | 23.96 | 23.82 |
| | 1RB-Middle | 1778.5 | 24.52 | 23.87 | 23.62 |
| | | 1745 | 24.49 | 24.16 | 23.68 |
| | | 1711.5 | 24.49 | 24.19 | 23.74 |
| | 1RB-Low | 1778.5 | 24.61 | 23.96 | 23.68 |
| | | 1745 | 24.52 | 23.93 | 23.71 |
| | | 1711.5 | 24.62 | 23.95 | 23.77 |
| | 8RB-High | 1778.5 | 23.73 | 22.63 | 22.65 |
| | | 1745 | 23.62 | 22.60 | 22.64 |
| | | 1711.5 | 23.64 | 22.76 | 22.73 |
| | 8RB-Middle | 1778.5 | 23.63 | 22.65 | 22.64 |
| | | 1745 | 23.67 | 22.70 | 22.74 |
| | | 1711.5 | 23.65 | 22.70 | 22.67 |
| | 8RB-Low | 1778.5 | 23.63 | 22.74 | 22.79 |
| | | 1745 | 23.62 | 22.63 | 22.65 |
| | | 1711.5 | 23.66 | 22.71 | 22.77 |
| | 15RB | 1778.5 | 23.71 | 22.70 | 22.68 |
| | | 1745 | 23.58 | 22.67 | 22.55 |
| | | 1711.5 | 23.61 | 22.66 | 22.63 |
| 5MHz | 1RB-High | 1777.5 | 24.67 | 24.03 | 23.83 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 1745 | 24.70 | 23.89 | 23.88 |
| | | 1712.5 | 24.79 | 23.84 | 23.84 |
| | 1RB-Middle | 1777.5 | 24.47 | 24.16 | 23.58 |
| | | 1745 | 24.58 | 23.50 | 23.78 |
| | | 1712.5 | 24.63 | 24.19 | 23.84 |
| | 1RB-Low | 1777.5 | 24.75 | 24.07 | 23.83 |
| | | 1745 | 24.75 | 24.05 | 24.06 |
| | | 1712.5 | 24.70 | 23.95 | 23.76 |
| | 12RB-High | 1777.5 | 23.73 | 22.57 | 22.61 |
| | | 1745 | 23.68 | 22.72 | 22.58 |
| | | 1712.5 | 23.77 | 22.80 | 22.61 |
| | 12RB-Middle | 1777.5 | 23.77 | 22.75 | 22.73 |
| | | 1745 | 23.82 | 22.80 | 22.79 |
| | | 1712.5 | 23.82 | 22.77 | 22.55 |
| | 12RB-Low | 1777.5 | 23.74 | 22.86 | 22.73 |
| | | 1745 | 23.73 | 22.72 | 22.71 |
| | | 1712.5 | 23.76 | 22.71 | 22.74 |
| | 25RB | 1777.5 | 23.72 | 22.72 | 22.74 |
| | | 1745 | 23.74 | 22.73 | 22.67 |
| | | 1712.5 | 23.77 | 22.69 | 22.62 |
| 10MHz | 1RB-High | 1775 | 24.35 | 23.95 | 23.78 |
| | | 1745 | 24.43 | 23.88 | 23.75 |
| | | 1715 | 24.49 | 23.95 | 23.83 |
| | 1RB-Middle | 1775 | 24.47 | 23.81 | 23.73 |
| | | 1745 | 24.44 | 23.81 | 23.67 |
| | | 1715 | 24.43 | 23.81 | 23.64 |
| | 1RB-Low | 1775 | 24.48 | 23.95 | 23.63 |
| | | 1745 | 24.50 | 23.84 | 23.71 |
| | | 1715 | 24.49 | 23.85 | 23.74 |
| | 25RB-High | 1775 | 23.65 | 22.60 | 22.75 |
| | | 1745 | 23.68 | 22.56 | 22.60 |
| | | 1715 | 23.66 | 22.71 | 22.66 |
| | 25RB-Middle | 1775 | 23.68 | 22.73 | 22.64 |
| | | 1745 | 23.61 | 22.71 | 22.66 |
| | | 1715 | 23.61 | 22.70 | 22.69 |
| | 25RB-Low | 1775 | 23.57 | 22.67 | 22.75 |
| | | 1745 | 23.59 | 22.60 | 22.65 |
| | | 1715 | 23.67 | 22.71 | 22.67 |
| | 50RB | 1775 | 23.64 | 22.73 | 22.65 |
| | | 1745 | 23.64 | 22.63 | 22.57 |
| | | 1715 | 23.70 | 22.65 | 22.67 |
| 15MHz | 1RB-High | 1772.5 | 24.34 | 23.76 | 23.80 |
| | | 1745 | 24.41 | 23.67 | 23.51 |
| | | 1717.5 | 24.32 | 23.79 | 23.70 |
| | 1RB-Middle | 1772.5 | 24.31 | 23.82 | 23.67 |
| | | 1745 | 24.46 | 23.59 | 23.74 |
| | | 1717.5 | 24.44 | 23.71 | 23.74 |
| | 1RB-Low | 1772.5 | 24.37 | 23.92 | 23.86 |
| | | 1745 | 24.44 | 23.78 | 23.81 |
| | | 1717.5 | 24.38 | 23.83 | 23.64 |
| | 36RB-High | 1772.5 | 23.50 | 22.59 | 22.54 |
| | | 1745 | 23.48 | 22.49 | 22.49 |
| | | 1717.5 | 23.41 | 22.39 | 22.41 |
| | 36RB-Middle | 1772.5 | 23.56 | 22.58 | 22.63 |
| | | 1745 | 23.57 | 22.52 | 22.56 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 1717.5 | 23.58 | 22.46 | 22.55 |
| | 36RB-Low | 1772.5 | 23.46 | 22.49 | 22.44 |
| | | 1745 | 23.50 | 22.46 | 22.44 |
| | | 1717.5 | 23.52 | 22.53 | 22.50 |
| | 75RB | 1772.5 | 23.51 | 22.55 | 22.52 |
| | | 1745 | 23.50 | 22.56 | 22.44 |
| | | 1717.5 | 23.41 | 22.50 | 22.42 |
| 20MHz | 1RB-High | 1770 | 24.46 | 23.93 | 22.70 |
| | | 1745 | 24.39 | 23.65 | 22.72 |
| | | 1720 | 24.31 | 23.67 | 22.59 |
| | 1RB-Middle | 1770 | 24.39 | 23.85 | 22.75 |
| | | 1745 | 24.40 | 23.82 | 22.58 |
| | | 1720 | 24.40 | 23.67 | 22.54 |
| | 1RB-Low | 1770 | 24.38 | 23.83 | 22.66 |
| | | 1745 | 24.39 | 23.87 | 22.70 |
| | | 1720 | 24.49 | 23.74 | 22.57 |
| | 50RB-High | 1770 | 23.60 | 22.59 | 21.59 |
| | | 1745 | 23.45 | 22.46 | 21.52 |
| | | 1720 | 23.46 | 22.34 | 21.45 |
| | 50RB-Middle | 1770 | 23.62 | 22.62 | 21.65 |
| | | 1745 | 23.57 | 22.52 | 21.59 |
| | | 1720 | 23.43 | 22.46 | 21.51 |
| | 50RB-Low | 1770 | 23.60 | 22.62 | 21.67 |
| | | 1745 | 23.49 | 22.54 | 21.56 |
| | | 1720 | 23.56 | 22.55 | 21.57 |
| | 100RB | 1770 | 23.59 | 22.59 | 21.49 |
| | | 1745 | 23.53 | 22.55 | 21.46 |
| | | 1720 | 23.53 | 22.45 | 21.52 |

**LTE Band71(Normal Power)**

| Band 71 | | | | | |
|---|---|---|---|---|---|
| Bandwidth (MHz) | RB allocation / RB offset | Frequency (MHz) | Actual output power (dBm) | | |
| | | | QPSK | 16QAM | 64QAM |
| 5MHz | 1RB-High (24) | 695.5 (133447) | 23.62 | 22.23 | 22.17 |
| | | 680.5 (133297) | 23.61 | 22.32 | 21.86 |
| | | 665.5 (133147) | 23.91 | 22.20 | 22.04 |
| | 1RB-Middle (12) | 695.5 (133447) | 23.51 | 22.77 | 22.63 |
| | | 680.5 (133297) | 23.61 | 23.11 | 22.43 |
| | | 665.5 (133147) | 23.34 | 22.62 | 22.48 |
| | 1RB-Low (0) | 695.5 (133447) | 23.61 | 23.65 | 22.43 |
| | | 680.5 (133297) | 23.55 | 23.91 | 24.17 |
| | | 665.5 (133147) | 23.55 | 22.86 | 22.64 |
| | 12RB-High (13) | 695.5 (133447) | 23.95 | 22.90 | 23.10 |
| | | 680.5 (133297) | 23.91 | 22.43 | 22.43 |
| | | 665.5 (133147) | 22.76 | 21.79 | 21.82 |
| | 12RB-Middle (6) | 695.5 (133447) | 23.91 | 22.94 | 22.43 |
| | | 680.5 (133297) | 23.91 | 21.67 | 22.65 |
| | | 665.5 (133147) | 22.41 | 21.44 | 21.41 |
| | 12RB-Low (0) | 695.5 (133447) | 23.94 | 22.88 | 22.85 |

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| | | | | | |
|---|---|---|---|---|---|
| | | 680.5 (133297) | 23.99 | 22.27 | 22.65 |
| | | 665.5 (133147) | 23.04 | 22.08 | 22.04 |
| | 25RB (0) | 695.5 (133447) | 23.83 | 22.96 | 21.94 |
| | | 680.5 (133297) | 23.99 | 22.94 | 21.94 |
| | | 665.5 (133147) | 22.39 | 21.44 | 21.42 |
| 10MHz | 1RB-High (49) | 693 (132422) | 23.04 | 22.36 | 22.19 |
| | | 680.5 (133297) | 23.04 | 22.04 | 21.79 |
| | | 668 (133172) | 23.54 | 22.54 | 23.85 |
| | 1RB-Middle (24) | 693 (132422) | 23.54 | 22.43 | 24.00 |
| | | 680.5 (133297) | 23.16 | 22.12 | 24.17 |
| | | 668 (133172) | 23.04 | 22.33 | 22.23 |
| | 1RB-Low (0) | 693 (132422) | 23.04 | 22.33 | 24.29 |
| | | 680.5 (133297) | 23.04 | 22.43 | 24.31 |
| | | 668 (133172) | 23.80 | 23.10 | 22.92 |
| | 25RB-High (25) | 693 (132422) | 23.97 | 22.11 | 21.86 |
| | | 680.5 (133297) | 24.00 | 22.43 | 21.90 |
| | | 668 (133172) | 23.03 | 22.26 | 21.04 |
| | 25RB-Middle (12) | 693 (132422) | 23.92 | 23.00 | 21.86 |
| | | 680.5 (133297) | 23.43 | 22.94 | 21.91 |
| | | 668 (133172) | 22.12 | 21.11 | 21.01 |
| | 25RB-Low (0) | 693 (132422) | 23.99 | 22.84 | 21.86 |
| | | 680.5 (133297) | 23.54 | 22.01 | 21.79 |
| | | 668 (133172) | 22.65 | 21.66 | 20.42 |
| | 50RB (0) | 693 (132422) | 23.93 | 22.94 | 21.73 |
| | | 680.5 (133297) | 23.11 | 22.90 | 21.80 |
| | | 668 (133172) | 22.88 | 21.91 | 21.26 |
| 15MHz | 1RB-High (74) | 690.5 (133397) | 23.51 | 24.56 | 22.29 |
| | | 680.5 (133297) | 23.62 | 24.46 | 23.23 |
| | | 670.5 (133197) | 23.51 | 24.36 | 22.25 |
| | 1RB-Middle (37) | 690.5 (133397) | 23.55 | 24.37 | 22.20 |
| | | 680.5 (133297) | 23.55 | 24.29 | 20.43 |
| | | 670.5 (133197) | 23.59 | 24.30 | 22.71 |
| | 1RB-Low (0) | 690.5 (133397) | 23.51 | 24.59 | 21.53 |
| | | 680.5 (133297) | 23.55 | 24.52 | 21.55 |
| | | 670.5 (133197) | 23.52 | 23.35 | 20.96 |
| | 36RB-High (38) | 690.5 (133397) | 23.12 | 22.10 | 21.58 |
| | | 680.5 (133297) | 23.08 | 22.06 | 21.58 |
| | | 670.5 (133197) | 23.09 | 22.08 | 21.00 |
| | 36RB-Middle (19) | 690.5 (133397) | 23.16 | 22.16 | 21.55 |
| | | 680.5 (133297) | 23.14 | 22.16 | 21.51 |
| | | 670.5 (133197) | 23.10 | 22.18 | 20.03 |
| | 36RB-Low (0) | 690.5 (133397) | 23.15 | 22.20 | 20.45 |
| | | 680.5 (133297) | 23.16 | 22.10 | 21.47 |
| | | 670.5 (133197) | 23.06 | 22.01 | 20.00 |

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| | | | | | |
|---|---|---|---|---|---|
| | 75RB (0) | 690.5 (133397) | 23.18 | 22.19 | 21.03 |
| | | 680.5 (133297) | 23.10 | 22.16 | 21.94 |
| | | 670.5 (133197) | 23.14 | 22.11 | 20.60 |
| 20MHz | 1RB-High (99) | 688 (133372) | 24.02 | 23.44 | 22.14 |
| | | 683 (133322) | 23.98 | 23.63 | 22.31 |
| | | 673 (133222) | 24.08 | 23.59 | 22.36 |
| | 1RB-Middle (50) | 688 (133372) | 24.07 | 23.46 | 22.31 |
| | | 683 (133322) | 24.05 | 23.61 | 22.4 |
| | | 673 (133222) | 24.01 | 23.62 | 21.97 |
| | 1RB-Low (0) | 688 (133372) | 24.21 | 23.65 | 22.32 |
| | | 683 (133322) | 24.13 | 23.63 | 22.01 |
| | | 673 (133222) | 23.64 | 22.89 | 20.94 |
| | 50RB-High (50) | 688 (133372) | 23.06 | 22.19 | 21.23 |
| | | 683 (133322) | 23.05 | 22.12 | 21.17 |
| | | 673 (133222) | 23.24 | 22.19 | 21.06 |
| | 50RB-Middle (25) | 688 (133372) | 23.28 | 22.26 | 21.16 |
| | | 683 (133322) | 23.25 | 22.28 | 21.37 |
| | | 673 (133222) | 23.27 | 22.30 | 20.9 |
| | 50RB-Low (0) | 688 (133372) | 23.20 | 22.24 | 21.26 |
| | | 683 (133322) | 23.22 | 22.25 | 21.23 |
| | | 673 (133222) | 23.26 | 22.23 | 20.69 |
| | 100RB (0) | 688 (133372) | 23.28 | 22.32 | 21.09 |
| | | 683 (133322) | 23.20 | 22.27 | 21.22 |
| | | 673 (133222) | 23.23 | 22.25 | 20.64 |

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## LTE Carrier Aggregation Conducted Power (Downlink)

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 in 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.

| Normal Power | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DL LTE CA Class | CC1 | | | | | CC2 | | | | Power | |
| | PCC Bandwidth | UL channel | DL channel | UL RB | UL RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | tune up | conducted power（dBm） |
| CA_12A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 66536 | 1 | 0 | 25.00 | 23.83 |
| CA_25A-25A | 20M | 26140 | 1860 | 1 | 0 | 20M | 8590 | 1 | 0 | 25.00 | 24.12 |
| CA_25A-26A | 20M | 26140 | 1860 | 1 | 0 | 15M | 8865 | 1 | 0 | 25.00 | 24.20 |
| CA_25A-41APC2 | 20M | 26140 | 1860 | 1 | 0 | 20M | 40620 | 1 | 0 | 25.00 | 24.19 |
| CA_25A-41APC3 | 20M | 26140 | 1860 | 1 | 0 | 20M | 40620 | 1 | 0 | 25.00 | 24.22 |
| CA_2A-2A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 25.00 | 24.07 |
| CA_2A-4A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 25.00 | 24.00 |
| CA_2A-5A | 20M | 18700 | 1860 | 1 | 0 | 15M | 8865 | 1 | 0 | 25.00 | 24.07 |
| CA_2A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.07 |
| CA_2A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.06 |
| CA_2C | 20M | 18700 | 1860 | 1 | 0 | 20M | 898 | 1 | 0 | 25.00 | 24.07 |
| CA_4A-12A | 20M | 132072 | 1720 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.10 |
| CA_4A-4A | 20M | 20050 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.02 |
| CA_4A-5A | 20M | 132072 | 1720 | 1 | 0 | 15M | 8865 | 1 | 0 | 25.00 | 23.04 |
| CA_4A-71A | 20M | 132072 | 1720 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 23.03 |
| CA_5A-66A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 66536 | 1 | 0 | 25.00 | 24.10 |
| CA_66A-66A | 20M | 20050 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.08 |
| CA_66A-71A | 20M | 20050 | 1720 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 23.10 |
| CA_66B | 10M | 132022 | 1715 | 1 | 0 | 10M | 66585 | 1 | 0 | 25.00 | 22.91 |
| CA_66C | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 25.00 | 23.02 |
| CA_66A-12A | 20M | 20050 | 1720 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.04 |
| CA_26A-25A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 8590 | 1 | 0 | 25.00 | 24.17 |
| CA_41APC2-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 8590 | 1 | 0 | 27.50 | 26.04 |
| CA_41APC3-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 8590 | 1 | 0 | 25.00 | 24.02 |
| CA_12A-2A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 25.00 | 23.84 |
| CA_4A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 25.00 | 23.09 |
| CA_5A-2A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 1100 | 1 | 0 | 25.00 | 24.13 |
| CA_66A-2A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 25.00 | 23.02 |
| CA_71A-2A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 25.00 | 24.02 |
| CA_12A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 67036 | 1 | 0 | 25.00 | 23.87 |
| CA_5A-4A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 67036 | 1 | 0 | 25.00 | 24.17 |
| CA_71A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 67036 | 1 | 0 | 25.00 | 24.01 |
| CA_66A-5A | 20M | 20050 | 1720 | 1 | 0 | 15M | 8865 | 1 | 0 | 25.00 | 23.05 |
| CA_71A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.00 |

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| Low Power | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DL LTE CA Class | CC1 | | | | | CC2 | | | | Power | |
| | PCC Bandwidth | UL channel | DL channel | UL RB | UL RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | tune up | conducted power（dBm） |
| CA_12A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 66536 | 1 | 0 | 22 | 21.36 |
| CA_25A-25A | 20M | 26140 | 1860 | 1 | 0 | 20M | 8590 | 1 | 0 | 17 | 15.81 |
| CA_25A-26A | 20M | 26140 | 1860 | 1 | 0 | 15M | 8865 | 1 | 0 | 17 | 15.83 |
| CA_25A-41APC2 | 20M | 26140 | 1860 | 1 | 0 | 20M | 40620 | 1 | 0 | 17 | 15.82 |
| CA_25A-41APC3 | 20M | 26140 | 1860 | 1 | 0 | 20M | 40620 | 1 | 0 | 17 | 15.9 |
| CA_2A-12A | 20M | 18900 | 1880 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.45 |
| CA_2A-2A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 16.41 |
| CA_2A-4A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 17 | 16.4 |
| CA_2A-5A | 20M | 18700 | 1860 | 1 | 0 | 15M | 8865 | 1 | 0 | 17 | 16.48 |
| CA_2A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.48 |
| CA_2A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.49 |
| CA_2C | 20M | 18700 | 1860 | 1 | 0 | 20M | 898 | 1 | 0 | 17 | 16.39 |
| CA_4A-12A | 20M | 132072 | 1720 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 15.93 |
| CA_4A-4A | 20M | 132072 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 17 | 15.9 |
| CA_4A-5A | 20M | 132072 | 1720 | 1 | 0 | 15M | 8865 | 1 | 0 | 17 | 15.95 |
| CA_4A-71A | 20M | 132072 | 1720 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 15.97 |
| CA_5A-66A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 66536 | 1 | 0 | 25 | 22.98 |
| CA_66A-66A | 20M | 132072 | 1720 | 1 | 50 | 20M | 2300 | 1 | 0 | 17 | 16.26 |
| CA_66A-71A | 20M | 132072 | 1720 | 1 | 50 | 20M | 68836 | 1 | 0 | 17 | 16.21 |
| CA_66B | 10M | 132022 | 1715 | 1 | 0 | 10M | 66585 | 1 | 0 | 17 | 16.19 |
| CA_66C | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 17 | 15.87 |
| CA_66A-12A | 20M | 132072 | 1720 | 1 | 50 | 5M | 5155 | 1 | 12 | 17 | 16.24 |
| CA_26A-25A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 8590 | 1 | 0 | 25 | 22.97 |
| CA_41APC2-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 8590 | 1 | 0 | 17.5 | 16.4 |
| CA_41APC3-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 8590 | 1 | 0 | 15.00 | 14.66 |
| CA_12A-2A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 22 | 21.28 |
| CA_4A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 15.97 |
| CA_5A-2A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 1100 | 1 | 0 | 25 | 23.02 |
| CA_66A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 16.23 |
| CA_71A-2A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 22 | 21.01 |
| CA_12A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 67036 | 1 | 0 | 22 | 21.26 |
| CA_5A-4A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 67036 | 1 | 0 | 25 | 22.98 |
| CA_71A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 67036 | 1 | 0 | 22 | 21.08 |
| CA_66A-5A | 20M | 132072 | 1720 | 1 | 0 | 15M | 8865 | 1 | 0 | 17 | 16.22 |
| CA_71A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 66536 | 1 | 0 | 22 | 21.03 |

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| Normal Power | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DL LTE CA Class | CC1 | | | | | CC2 | | | | CC3 | | | | Power | |
| | PCC Bandwidth | UL channel | DL channel | UL RB | UL RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | tune up | conducted power（dBm） |
| CA_12A-66A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 23.77 |
| CA_12A-66C | 10M | 23130 | 5130 | 1 | 49 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 23.79 |
| CA_2A-12A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.06 |
| CA_2A-2A-12A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 24.03 |
| CA_2A-2A-4A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 25.00 | 24.11 |
| CA_2A-2A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.10 |
| CA_2A-2A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.01 |
| CA_2A-4A-12A | 20M | 18700 | 1860 | 1 | 0 | 20M | 67036 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 24.06 |
| CA_2A-4A-4A | 20M | 18700 | 1860 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.10 |
| CA_2A-4A-5A | 20M | 18700 | 1860 | 1 | 0 | 20M | 67036 | 1 | 0 | 15M | 8865 | 1 | 0 | 25.00 | 24.03 |
| CA_2A-4A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.08 |
| CA_2A-5A-66A | 20M | 18700 | 1860 | 1 | 0 | 15M | 8865 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.06 |
| CA_2A-66A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.07 |
| CA_2A-66A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.10 |
| CA_2A-66C | 20M | 18700 | 1860 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.01 |
| CA_2C-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.10 |
| CA_41APC3-41CPC3 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 25.00 | 24.02 |
| CA_41APC2-41CPC2 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 27.50 | 26.12 |
| CA_41DPC3 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 25.00 | 24.10 |
| CA_41DPC2 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 27.50 | 25.66 |
| CA_4A-4A-12A | 20M | 20050 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.08 |
| CA_4A-4A-71A | 20M | 20050 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 23.04 |
| CA_66A-66A-71A | 20M | 20050 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 23.03 |
| CA_66A-66C | 20M | 20050 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 67234 | 1 | 99 | 25.00 | 23.06 |
| CA_66C-71A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 68836 | 1 | 0 | 25.00 | 23.07 |
| CA_66A-12A-66A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 23.11 |
| CA_66C-12A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 5M | 5155 | 1 | 12 | 25.00 | 22.99 |
| CA_66A-2A-12A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.04 |
| CA_12A-2A-2A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.83 |
| CA_4A-2A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.11 |
| CA_66A-2A-2A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.11 |
| CA_71A-2A-2A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.94 |
| CA_12A-2A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.78 |
| CA_4A-2A-4A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.11 |
| CA_5A-2A-4A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.09 |
| CA71A- 2A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.96 |
| CA_66A-2A-5A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 15M | 8865 | 1 | 0 | 25.00 | 23.11 |
| CA_66A-2A-66A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.08 |
| CA_71A-2A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.98 |
| CA_66C-2A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 5M | 5155 | 1 | 12 | 25.00 | 23.01 |
| CA_66A-2C | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.01 |
| CA_41CPC3-41APC3 | 20M | 39750 | 2506 | 1 | 0 | 20M | 39948 | 1 | 0 | 20M | 41490 | 1 | 99 | 25.00 | 23.86 |
| CA_41CPC2-41APC2 | 20M | 39750 | 2506 | 1 | 0 | 20M | 39948 | 1 | 0 | 20M | 41490 | 1 | 99 | 27.50 | 27.01 |
| CA_12A-4A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.83 |
| CA_71A-4A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.01 |
| CA_71A-66A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.97 |
| CA_66C-66A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 2300 | 1 | 0 | 25.00 | 23.09 |
| CA_71A-66C | 20M | 133322 | 683 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.97 |

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| Low Power | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DL LTE CA Class | CC1 | | | | | CC2 | | | | CC3 | | | | Power | |
| | PCC Bandwidth | UL channel | DL channel | UL RB | UL RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | tune up | conducted power（dBm） |
| CA_12A-66A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 66536 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.3 |
| CA_12A-66C | 10M | 23130 | 5130 | 1 | 49 | 20M | 132572 | 1 | 99 | 20M | 67234 | 1 | 99 | 22 | 21.36 |
| CA_2A-12A-66A | 20M | 18900 | 1880 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 2300 | 1 | 0 | 17 | 16.35 |
| CA_2A-2A-12A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.48 |
| CA_2A-2A-4A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 17 | 16.41 |
| CA_2A-2A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.41 |
| CA_2A-2A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.45 |
| CA_2A-4A-12A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.43 |
| CA_2A-4A-4A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 67036 | 1 | 0 | 17 | 16.4 |
| CA_2A-4A-5A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 15M | 8865 | 1 | 0 | 17 | 16.44 |
| CA_2A-4A-71A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.4 |
| CA_2A-5A-66A | 20M | 18700 | 1860 | 1 | 0 | 15M | 8865 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.42 |
| CA_2A-66A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.4 |
| CA_2A-66A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.47 |
| CA_2A-66C | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.43 |
| CA_2C-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.4 |
| CA_41APC3-41CPC3 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 15 | 14.11 |
| CA_41APC3-41CPC3 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 15 | 14.11 |
| CA_41DPC3 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 15 | 14.08 |
| CA_41DPC2 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 17.5 | 15.84 |
| CA_4A-4A-12A | 20M | 132072 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 15.93 |
| CA_4A-4A-71A | 20M | 132072 | 1720 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 15.94 |
| CA_66A-66A-71A | 20M | 132072 | 1720 | 1 | 50 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.25 |
| CA_66A-66C | 20M | 132072 | 1720 | 1 | 50 | 20M | 2300 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.22 |
| CA_66C-71A | 20M | 132072 | 1720 | 1 | 50 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.24 |
| CA_66A-12A-66A | 20M | 132072 | 1720 | 1 | 50 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 17 | 16.21 |
| CA_66C-12A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 5M | 5155 | 1 | 12 | 17 | 15.9 |
| CA_66A-2A-12A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.25 |
| CA_12A-2A-2A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 22 | 21.33 |
| CA_4A-2A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 15.93 |
| CA_66A-2A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 16.27 |
| CA_71A-2A-2A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 22 | 21.08 |
| CA_12A-2A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.26 |
| CA_4A-2A-4A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 17 | 15.93 |
| CA_5A-2A-4A | 15M | 26865 | 831.5 | 1 | 37 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25 | 23.01 |
| CA71A-_2A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21 |
| CA_66A-2A-5A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 15M | 8865 | 1 | 0 | 17 | 16.24 |
| CA_66A-2A-66A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.21 |
| CA_71A-2A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 22 | 21.05 |
| CA_66C-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 16.25 |
| CA_66A-2C | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 16.2 |
| CA_12A-4A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 67036 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.33 |
| CA_71A-4A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21 |
| CA_71A-66A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 22 | 21.07 |
| CA_66C-66A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 66536 | 1 | 0 | 17 | 15.95 |
| CA_71A-66C | 20M | 133322 | 683 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 22 | 21 |

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| Normal Power | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DL LTE CA Class | CC1 | | | | | CC2 | | | | CC3 | | | | CC4 | | | | Power | |
| | PCC Bandwidth | UL channel | DL channel | UL RB | UL RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | tune up | conducted power（dBm） |
| CA_25A-41DPC3 | 20M | 26140 | 1860 | 1 | 0 | 20M | 39948 | 1 | 0 | 20M | 41490 | 1 | 99 | 20M | 41490 | 1 | 99 | 25.00 | 24.14 |
| CA_25A-41DPC2 | 20M | 26140 | 1860 | 1 | 0 | 20M | 39948 | 1 | 0 | 20M | 41490 | 1 | 99 | 20M | 41490 | 1 | 99 | 25.00 | 24.13 |
| CA_2A-12A-66A-66A | 20M | 18900 | 1880 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.05 |
| CA_2A-12A-66C | 20M | 18900 | 1880 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.08 |
| CA_2A-2A-12A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 25.00 | 24.08 |
| CA_2A-2A-4A-12A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 24.09 |
| CA_2A-2A-4A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.07 |
| CA_2A-2A-66A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.05 |
| CA_2A-2A-66A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.07 |
| CA_2A-2A-66C | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.03 |
| CA_2A-4A-4A-12A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 67036 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 24.10 |
| CA_2A-66A-66A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.04 |
| CA_2A-66C-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 68836 | 1 | 0 | 25.00 | 24.02 |
| CA_2C-66A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 24.03 |
| CA_41CPC3-41CPC3 | 20M | 39750 | 2506 | 1 | 0 | 20M | 39948 | 1 | 0 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 25.00 | 24.10 |
| CA_41CPC2-41CPC2 | 20M | 39750 | 2506 | 1 | 0 | 20M | 39948 | 1 | 0 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 27.50 | 26.01 |
| CA_41DPC3-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 20M | 8590 | 1 | 0 | 25.00 | 24.00 |
| CA_41DPC2-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 20M | 8590 | 1 | 0 | 27.50 | 26.62 |
| CA_66A-2A-12A-66A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 2300 | 1 | 0 | 25.00 | 23.04 |
| CA_66C-2A-12A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.07 |
| CA_12A-2A-2A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 2300 | 1 | 0 | 25.00 | 23.84 |
| CA_4A-2A-2A-12A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 5M | 5155 | 1 | 12 | 25.00 | 23.03 |
| CA_71A-2A-2A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.94 |
| CA_66A-2A-2A-66A | 20M | 20050 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.08 |
| CA_71A-2A-2A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.97 |
| CA_66C-2A-2A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 25.00 | 23.07 |
| CA_12A-2A-4A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.82 |
| CA_71A-2A-66A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.95 |
| CA_71A-2A-66C | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 67234 | 1 | 99 | 25.00 | 24.00 |
| CA_66A-2C-66A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.05 |
| CA_2A-2A-13A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 10M | 5230 | 1 | 24 | 20M | 2300 | 1 | 0 | 25.00 | 24.11 |
| CA_13A-2A-2A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 25.00 | 23.33 |
| CA_66A-2A-2A-13A | 20M | 132572 | 1770 | 1 | 99 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 898 | 1 | 0 | 25.00 | 24.01 |

| Low Power | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DL LTE CA Class | CC1 | | | | | CC2 | | | | CC3 | | | | CC4 | | | | Power | |
| | PCC Bandwidth | UL channel | DL channel | UL RB | UL RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | SCC Bandwidth | DL channel | RB | RB OFFSET | tune up | conducted power（dBm） |
| CA_25A-41DPC3 | 20M | 26140 | 1860 | 1 | 0 | 20M | 8590 | 1 | 0 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 17 | 15.83 |
| CA_25A-41DPC2 | 20M | 26140 | 1860 | 1 | 0 | 20M | 8590 | 1 | 0 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 17.5 | 16.01 |
| CA_2A-12A-66A-66A | 20M | 18900 | 1880 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.37 |
| CA_2A-12A-66C | 20M | 18900 | 1880 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.4 |
| CA_2A-2A-12A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 17 | 16.49 |
| CA_2A-2A-4A-12A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.43 |
| CA_2A-2A-4A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.49 |
| CA_2A-2A-66A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.49 |
| CA_2A-2A-66A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.44 |
| CA_2A-2A-66C | 20M | 18700 | 1860 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 132572 | 1 | 99 | 20M | 67234 | 1 | 99 | 17 | 16.49 |
| CA_2A-4A-4A-12A | 20M | 18900 | 1880 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 67036 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.44 |
| CA_2A-66A-66A-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.42 |
| CA_2A-66C-71A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 68836 | 1 | 0 | 17 | 16.39 |
| CA_2C-66A-66A | 20M | 18700 | 1860 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 17 | 16.39 |
| CA_41CPC3-41CPC3 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 20M | 39948 | 1 | 0 | 15 | 14.11 |
| CA_41CPC2-41CPC2 | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 20M | 39948 | 1 | 0 | 17.5 | 16.11 |
| CA_41DPC3-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 20M | 8590 | 1 | 0 | 15 | 14.05 |
| CA_41DPC2-25A | 20M | 39750 | 2506 | 1 | 99 | 20M | 41490 | 1 | 99 | 20M | 39948 | 1 | 0 | 20M | 8590 | 1 | 0 | 17.5 | 16.12 |
| CA_66A-2A-12A-66A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 20M | 66536 | 1 | 0 | 17 | 16.2 |
| CA_66C-2A-12A | 20M | 132572 | 1770 | 1 | 99 | 20M | 67234 | 1 | 99 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.25 |
| CA_12A-2A-2A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 22 | 21.33 |
| CA_4A-2A-2A-12A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 15.98 |
| CA_71A-2A-2A-4A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 22 | 21.01 |
| CA_66A-2A-2A-66A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 17 | 16.28 |
| CA_71A-2A-2A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.06 |
| CA_66C-2A-2A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 17 | 16.21 |
| CA_12A-2A-4A-4A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.32 |
| CA_71A-2A-66A-66A | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 67036 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.04 |
| CA_71A-2A-66C | 20M | 133322 | 683 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 66536 | 1 | 0 | 20M | 66536 | 1 | 0 | 22 | 20.99 |
| CA_66A-2C-66A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 17 | 16.23 |
| CA_2A-2A-13A-66A | 20M | 18900 | 1880 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 898 | 1 | 0 | 20M | 2300 | 1 | 0 | 17 | 16.11 |
| CA_13A-2A-2A-66A | 10M | 23130 | 5130 | 1 | 49 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 2300 | 1 | 0 | 22 | 21.30 |
| CA_66A-2A-2A-13A | 20M | 132072 | 1720 | 1 | 0 | 20M | 1100 | 1 | 0 | 20M | 1100 | 1 | 0 | 5M | 5155 | 1 | 12 | 17 | 16.22 |

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### 11.4 NR 5G Measurement result

According to April 2015 TCB workshop, SAR test exclusion can be applied for testing overlapping 5G NR(FR1) bands as follows:

a) The maximum output power, including tolerance, for the smaller band must be ≤ the larger band to qualify for the SAR test exclusion.

b) The channel bandwidth and other operating parameters for the smaller band must be fully supported by the larger band.

Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission.

Uplink RB allocations were used to Table 6.1-1 of the 3GPP TS 138.521-1:

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| Channel Bandwidth | SCS(kHz) | OFDM | RB allocation | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Edge_Full_Left | Edge_Full_Right | Edge_1RB_Left | Edge_1RB_Right | Outer_Full | Inner_Full | Inner_1RB_Left | Inner_1RB_Right |
| 5MHz | 15 | DFT-s | 2@0 | 2@23 | 1@0 | 1@24 | 25@0 | 12@6 | 1@1 | 1@23 |
| | | CP | 2@0 | 2@23 | 1@0 | 1@24 | 25@0 | 13@6 | 1@1 | 1@23 |
| | 30 | DFT-s | 2@0 | 2@9 | 1@0 | 1@10 | 10@0 | 5@2[1] | 1@1 | 1@9 |
| | | CP | 2@0 | 2@9 | 1@0 | 1@10 | 11@0 | 5@2[1] | 1@1 | 1@9 |
| | 60 | DFT-s | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | CP | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 10MHz | 15 | DFT-s | 2@0 | 2@50 | 1@0 | 1@51 | 50@0 | 25@12 | 1@1 | 1@50 |
| | | CP | 2@0 | 2@50 | 1@0 | 1@51 | 52@0 | 26@13 | 1@1 | 1@50 |
| | 30 | DFT-s | 2@0 | 2@22 | 1@0 | 1@23 | 24@0 | 12@6 | 1@1 | 1@22 |
| | | CP | 2@0 | 2@22 | 1@0 | 1@23 | 24@0 | 12@6 | 1@1 | 1@22 |
| | 60 | DFT-s | 2@0 | 2@9 | 1@0 | 1@10 | 10@0 | 5@2[1] | 1@1 | 1@9 |
| | | CP | 2@0 | 2@9 | 1@0 | 1@10 | 11@0 | 5@2[1] | 1@1 | 1@9 |
| 15MHz | 15 | DFT-s | 2@0 | 2@77 | 1@0 | 1@78 | 75@0 | 36@18 | 1@1 | 1@77 |
| | | CP | 2@0 | 2@77 | 1@0 | 1@78 | 79@0 | 39@19[1] | 1@1 | 1@77 |
| | 30 | DFT-s | 2@0 | 2@36 | 1@0 | 1@37 | 36@0 | 18@9 | 1@1 | 1@36 |
| | | CP | 2@0 | 2@36 | 1@0 | 1@37 | 38@0 | 19@9 | 1@1 | 1@36 |
| | 60 | DFT-s | 2@0 | 2@16 | 1@0 | 1@17 | 18@0 | 9@4 | 1@1 | 1@16 |
| | | CP | 2@0 | 2@16 | 1@0 | 1@17 | 18@0 | 9@4 | 1@1 | 1@16 |
| 20MHz | 15 | DFT-s | 2@0 | 2@104 | 1@0 | 1@105 | 100@0 | 50@25 | 1@1 | 1@104 |
| | | CP | 2@0 | 2@104 | 1@0 | 1@105 | 106@0 | 53@26 | 1@1 | 1@104 |
| | 30 | DFT-s | 2@0 | 2@49 | 1@0 | 1@50 | 50@0 | 25@12 | 1@1 | 1@49 |
| | | CP | 2@0 | 2@49 | 1@0 | 1@50 | 51@0 | 25@12[1] | 1@1 | 1@49 |
| | 60 | DFT-s | 2@0 | 2@22 | 1@0 | 1@23 | 24@0 | 12@6 | 1@1 | 1@22 |
| | | CP | 2@0 | 2@22 | 1@0 | 1@23 | 24@0 | 12@6 | 1@1 | 1@22 |
| 25MHz | 15 | DFT-s | 2@0 | 2@131 | 1@0 | 1@132 | 128@0 | 64@32 | 1@1 | 1@131 |
| | | CP | 2@0 | 2@131 | 1@0 | 1@132 | 133@0 | 67@33 | 1@1 | 1@131 |
| | 30 | DFT-s | 2@0 | 2@63 | 1@0 | 1@64 | 64@0 | 32@16 | 1@1 | 1@63 |
| | | CP | 2@0 | 2@63 | 1@0 | 1@64 | 65@0 | 33@16 | 1@1 | 1@63 |
| | 60 | DFT-s | 2@0 | 2@29 | 1@0 | 1@30 | 30@0 | 15@7[1] | 1@1 | 1@29 |
| | | CP | 2@0 | 2@29 | 1@0 | 1@30 | 31@0 | 15@7[1] | 1@1 | 1@29 |
| 30MHz | 15 | DFT-s | 2@0 | 2@158 | 1@0 | 1@159 | 160@0 | 80@40 | 1@1 | 1@158 |
| | | CP | 2@0 | 2@158 | 1@0 | 1@159 | 160@0 | 80@40 | 1@1 | 1@158 |
| | 30 | DFT-s | 2@0 | 2@76 | 1@0 | 1@77 | 75@0 | 36@18 | 1@1 | 1@76 |
| | | CP | 2@0 | 2@76 | 1@0 | 1@77 | 78@0 | 39@19 | 1@1 | 1@76 |
| | 60 | DFT-s | 2@0 | 2@36 | 1@0 | 1@37 | 36@0 | 18@9 | 1@1 | 1@36 |
| | | CP | 2@0 | 2@36 | 1@0 | 1@37 | 38@0 | 19@9 | 1@1 | 1@36 |
| 40MHz | 15 | DFT-s | 2@0 | 2@214 | 1@0 | 1@215 | 216@0 | 108@54 | 1@1 | 1@214 |
| | | CP | 2@0 | 2@214 | 1@0 | 1@215 | 216@0 | 108@54 | 1@1 | 1@214 |
| | 30 | DFT-s | 2@0 | 2@104 | 1@0 | 1@105 | 100@0 | 50@25 | 1@1 | 1@104 |
| | | CP | 2@0 | 2@104 | 1@0 | 1@105 | 106@0 | 53@26 | 1@1 | 1@104 |
| | 60 | DFT-s | 2@0 | 2@49 | 1@0 | 1@50 | 50@0 | 25@12 | 1@1 | 1@49 |
| | | CP | 2@0 | 2@49 | 1@0 | 1@50 | 51@0 | 25@12[1] | 1@1 | 1@49 |
| 50MHz | 15 | DFT-s | 2@0 | 2@268 | 1@0 | 1@269 | 270@0 | 135@67 | 1@1 | 1@268 |
| | | CP | 2@0 | 2@268 | 1@0 | 1@269 | 270@0 | 135@67 | 1@1 | 1@268 |
| | 30 | DFT-s | 2@0 | 2@131 | 1@0 | 1@132 | 128@0 | 64@32 | 1@1 | 1@131 |
| | | CP | 2@0 | 2@131 | 1@0 | 1@132 | 133@0 | 67@33 | 1@1 | 1@131 |
| | 60 | DFT-s | 2@0 | 2@63 | 1@0 | 1@64 | 64@0 | 32@16 | 1@1 | 1@63 |
| | | CP | 2@0 | 2@63 | 1@0 | 1@64 | 65@0 | 33@16 | 1@1 | 1@63 |
| 60MHz | 15 | DFT-s | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | CP | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | 30 | DFT-s | 2@0 | 2@160 | 1@0 | 1@161 | 162@0 | 81@40 | 1@1 | 1@160 |
| | | CP | 2@0 | 2@160 | 1@0 | 1@161 | 162@0 | 81@40 | 1@1 | 1@160 |
| | 60 | DFT-s | 2@0 | 2@77 | 1@0 | 1@78 | 75@0 | 36@18 | 1@1 | 1@77 |
| | | CP | 2@0 | 2@77 | 1@0 | 1@78 | 79@0 | 39@19[1] | 1@1 | 1@77 |
| 80MHz | 15 | DFT-s | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | CP | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

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| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 30 | DFT-s | 2@0 | 2@215 | 1@0 | 1@216 | 216@0 | 108@54 | 1@1 | 1@215 |
| | | CP | 2@0 | 2@215 | 1@0 | 1@216 | 217@0 | 109@54 | 1@1 | 1@215 |
| | 60 | DFT-s | 2@0 | 2@105 | 1@0 | 1@106 | 100@0 | 50@25 | 1@1 | 1@105 |
| | | CP | 2@0 | 2@105 | 1@0 | 1@106 | 107@0 | 53@26[1] | 1@1 | 1@105 |
| 90MHz | 15 | DFT-s | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | CP | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | 30 | DFT-s | 2@0 | 2@243 | 1@0 | 1@244 | 240@0 | 120@60 | 1@1 | 1@243 |
| | | CP | 2@0 | 2@243 | 1@0 | 1@244 | 245@0 | 123@61 | 1@1 | 1@243 |
| | 60 | DFT-s | 2@0 | 2@119 | 1@0 | 1@120 | 120@0 | 60@30 | 1@1 | 1@119 |
| | | CP | 2@0 | 2@119 | 1@0 | 1@120 | 121@0 | 61@30 | 1@1 | 1@119 |
| 100MHz | 15 | DFT-s | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | CP | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | 30 | DFT-s | 2@0 | 2@271 | 1@0 | 1@272 | 270@0 | 135@67 | 1@1 | 1@271 |
| | | CP | 2@0 | 2@271 | 1@0 | 1@272 | 273@0 | 137@68 | 1@1 | 1@271 |
| | 60 | DFT-s | 2@0 | 2@133 | 1@0 | 1@134 | 135@0 | 64@32 | 1@1 | 1@133 |
| | | CP | 2@0 | 2@133 | 1@0 | 1@134 | 135@0 | 67@33[1] | 1@1 | 1@133 |

Note 1: The allocated RB number $L_{CRB}$ is ceil($N_{RB}$/2) -1 in order to meet Inner RB allocation definition ($RB_{Start,Low} \le RB_{Start} \le RB_{Start,High}$) described in subclause 6.2.2 of TS 38.101-1 [2].

**3GPP MPR for NR:**

**Table 6.2.2.3-1: Maximum Power Reduction (MPR) for Power 3**

| Modulation | MPR (dB) | | |
|---|---|---|---|
| | Edge RB allocations | Outer RB allocations | Inner RB allocations |
| DFT-s-OFDM PI/2 BPSK | ≤ 3.5[1] | ≤ 1.2[1] | ≤ 0.2[1] |
| | ≤ 0.5[2] | | 0[2] |
| DFT-s-OFDM QPSK | ≤ 1 | | 0 |
| DFT-s-OFDM 16 QAM | ≤ 2 | | ≤ 1 |
| DFT-s-OFDM 64 QAM | ≤ 2.5 | | |
| DFT-s-OFDM 256 QAM | ≤ 4.5 | | |
| CP-OFDM QPSK | ≤ 3 | | ≤ 1.5 |
| CP-OFDM 16 QAM | ≤ 3 | | ≤ 2 |
| CP-OFDM 64 QAM | ≤ 3.5 | | |
| CP-OFDM 256 QAM | ≤ 6.5 | | |

NOTE 1: Applicable for UE operating in TDD mode with PI/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

**Table 6.2.2-2 Maximum power reduction (MPR) for power class 2**

| Modulation | | MPR (dB) | | |
|---|---|---|---|---|
| | | Edge RB allocations | Outer RB allocations | Inner RB allocations |
| DFT-s-OFDM | Pi/2 BPSK | ≤ 3.5 | ≤ 0.5 | 0 |
| | QPSK | ≤ 3.5 | ≤ 1 | 0 |
| | 16 QAM | ≤ 3.5 | ≤ 2 | ≤ 1 |
| | 64 QAM | ≤ 3.5 | ≤ 2.5 | |
| | 256 QAM | ≤ 4.5 | | |
| CP-OFDM | QPSK | ≤ 3.5 | ≤ 3 | ≤ 1.5 |
| | 16 QAM | ≤ 3.5 | ≤ 3 | ≤ 2 |
| | 64 QAM | ≤ 3.5 | | |
| | 256 QAM | ≤ 6.5 | | |

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| No. | Test Freq Description | 5G-n25 Normal Power | | | | | | | Tune up | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | | n25 |
| 1 | High | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1912.5 | 382500 | 25.50 | 24.71 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1882.5 | 376500 | 25.50 | 24.79 |
| 3 | Low | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1852.5 | 370500 | 25.50 | 24.77 |
| 4 | High | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1905 | 381000 | 25.50 | 24.66 |
| 5 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 24.78 |
| 6 | Low | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1860 | 372000 | 25.50 | 24.82 |
| 7 | Middle | 15 | 20 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 25.23 |
| 8 | Middle | 15 | 20 | DFT-s-OFDM 16QAM | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 24.12 |
| 9 | Middle | 15 | 20 | DFT-s-OFDM 64QAM | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 23.60 |
| 10 | Middle | 15 | 20 | DFT-s-OFDM 256QAM | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 23.57 |
| 11 | Middle | 15 | 20 | CP-OFDM QPSK | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 23.55 |
| 12 | Middle | 15 | 20 | CP-OFDM 16QAM | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 23.57 |
| 13 | Middle | 15 | 20 | CP-OFDM 64QAM | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 23.64 |
| 14 | Middle | 15 | 20 | CP-OFDM 256QAM | Inner_Full | 50_25 | 1882.5 | 376500 | 25.50 | 23.62 |
| 15 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_23 | 1882.5 | 376500 | 25.50 | 24.23 |
| 16 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 1882.5 | 376500 | 25.50 | 24.32 |
| 17 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_24 | 1882.5 | 376500 | 25.50 | 24.39 |
| 18 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 1882.5 | 376500 | 25.50 | 24.33 |
| 19 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_23 | 1882.5 | 376500 | 25.50 | 25.34 |
| 20 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 1882.5 | 376500 | 25.50 | 25.36 |
| 21 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 1882.5 | 376500 | 25.50 | 24.27 |
| 22 | High | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1910 | 382000 | 25.50 | 25.12 |
| 23 | Middle | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1882.5 | 376500 | 25.50 | 25.31 |
| 24 | Low | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1855 | 371000 | 25.50 | 25.26 |
| 25 | High | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1907.5 | 381500 | 25.50 | 24.99 |
| 26 | Middle | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1882.5 | 376500 | 25.50 | 25.18 |
| 27 | Low | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1857.5 | 371500 | 25.50 | 25.24 |

| No. | Test Freq Description | 5G-n25 Low Power | | | | | | | Tune up | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | | n25 |
| 1 | High | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1912.5 | 382500 | 17.50 | 16.63 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.72 |
| 3 | Low | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1852.5 | 370500 | 17.50 | 16.67 |
| 4 | High | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1905 | 381000 | 17.50 | 16.59 |
| 5 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1882.5 | 376500 | 17.50 | 16.70 |
| 6 | Low | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1860 | 372000 | 17.50 | 16.71 |
| 7 | Middle | 15 | 5 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.75 |
| 8 | Middle | 15 | 5 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.77 |
| 9 | Middle | 15 | 5 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.79 |
| 10 | Middle | 15 | 5 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.67 |
| 11 | Middle | 15 | 5 | CP-OFDM QPSK | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.67 |
| 12 | Middle | 15 | 5 | CP-OFDM 16QAM | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.64 |
| 13 | Middle | 15 | 5 | CP-OFDM 64QAM | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.61 |
| 14 | Middle | 15 | 5 | CP-OFDM 256QAM | Inner_Full | 12_6 | 1882.5 | 376500 | 17.50 | 16.70 |
| 15 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_23 | 1882.5 | 376500 | 17.50 | 16.74 |
| 16 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 1882.5 | 376500 | 17.50 | 16.69 |
| 17 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_24 | 1882.5 | 376500 | 17.50 | 16.84 |
| 18 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 1882.5 | 376500 | 17.50 | 16.80 |
| 19 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_23 | 1882.5 | 376500 | 17.50 | 16.88 |
| 20 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 1882.5 | 376500 | 17.50 | 16.79 |
| 21 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 1882.5 | 376500 | 17.50 | 16.72 |
| 22 | High | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1910 | 382000 | 17.50 | 16.71 |
| 23 | Middle | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1882.5 | 376500 | 17.50 | 16.80 |
| 24 | Low | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1855 | 371000 | 17.50 | 16.65 |
| 25 | High | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1907.5 | 381500 | 17.50 | 16.59 |
| 26 | Middle | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1882.5 | 376500 | 17.50 | 16.69 |
| 27 | Low | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1857.5 | 371500 | 17.50 | 16.64 |

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| No. | Test Freq Description | 5G-n66 Normal Power | | | | | | | Tune up | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | | n66 |
| 1 | High | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1777.5 | 355500 | 25.50 | 24.77 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 24.78 |
| 3 | Low | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1712.5 | 342500 | 25.50 | 24.48 |
| 4 | High | 15 | 40 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 1760 | 352000 | 25.50 | 25.06 |
| 5 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 1745 | 349000 | 25.50 | 25.02 |
| 6 | Low | 15 | 40 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 1730 | 346000 | 25.50 | 25.00 |
| 7 | Middle | 15 | 40 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 25.03 |
| 8 | Middle | 15 | 40 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.99 |
| 9 | Middle | 15 | 40 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.53 |
| 10 | Middle | 15 | 40 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.61 |
| 11 | Middle | 15 | 40 | CP-OFDM QPSK | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.63 |
| 12 | Middle | 15 | 40 | CP-OFDM 16QAM | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.58 |
| 13 | Middle | 15 | 40 | CP-OFDM 64QAM | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.52 |
| 14 | Middle | 15 | 40 | CP-OFDM 256QAM | Inner_Full | 12_6 | 1745 | 349000 | 25.50 | 23.57 |
| 15 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_23 | 1745 | 349000 | 25.50 | 24.03 |
| 16 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 1745 | 349000 | 25.50 | 24.06 |
| 17 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_24 | 1745 | 349000 | 25.50 | 24.13 |
| 18 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 1745 | 349000 | 25.50 | 24.10 |
| 19 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_23 | 1745 | 349000 | 25.50 | 25.23 |
| 20 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 1745 | 349000 | 25.50 | 25.21 |
| 21 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 1745 | 349000 | 25.50 | 24.07 |
| 22 | High | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1775 | 355000 | 25.50 | 25.11 |
| 23 | Middle | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1745 | 349000 | 25.50 | 25.08 |
| 24 | Low | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1715 | 343000 | 25.50 | 24.21 |
| 25 | High | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1772.5 | 354500 | 25.50 | 24.43 |
| 26 | Middle | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1745 | 349000 | 25.50 | 24.97 |
| 27 | Low | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1717.5 | 343500 | 25.50 | 24.32 |
| 28 | High | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1770 | 354000 | 25.50 | 24.93 |
| 29 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1745 | 349000 | 25.50 | 25.09 |
| 30 | Low | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1720 | 344000 | 25.50 | 24.30 |
| 31 | High | 15 | 25 | DFT-s-OFDM QPSK | Inner_Full | 64-32 | 1767.5 | 353500 | 25.50 | 25.01 |
| 32 | Middle | 15 | 25 | DFT-s-OFDM QPSK | Inner_Full | 64-32 | 1745 | 349000 | 25.50 | 24.97 |
| 33 | Low | 15 | 25 | DFT-s-OFDM QPSK | Inner_Full | 64-32 | 1722.5 | 344500 | 25.50 | 25.00 |
| 34 | High | 15 | 30 | DFT-s-OFDM QPSK | Inner_Full | 80_40 | 1765 | 35300 | 25.50 | 25.05 |
| 35 | Middle | 15 | 30 | DFT-s-OFDM QPSK | Inner_Full | 80_40 | 1745 | 349000 | 25.50 | 25.06 |
| 36 | Low | 15 | 30 | DFT-s-OFDM QPSK | Inner_Full | 80_40 | 1725 | 345000 | 25.50 | 25.02 |

| No. | Test Freq Description | 5G-n66 Low Power | | | | | | | Tune up | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | | n66 |
| 1 | High | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1777.5 | 355500 | 17.50 | 16.41 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.38 |
| 3 | Low | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 1712.5 | 342500 | 17.50 | 16.48 |
| 4 | High | 15 | 40 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 1760 | 352000 | 17.50 | 16.33 |
| 5 | Middle | 15 | 40 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 1745 | 349000 | 17.50 | 16.32 |
| 6 | Low | 15 | 40 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 1730 | 346000 | 17.50 | 16.27 |
| 7 | Middle | 15 | 5 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.37 |
| 8 | Middle | 15 | 5 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.38 |
| 9 | Middle | 15 | 5 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.36 |
| 10 | Middle | 15 | 5 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.45 |
| 11 | Middle | 15 | 5 | CP-OFDM QPSK | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.47 |
| 12 | Middle | 15 | 5 | CP-OFDM 16QAM | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.44 |
| 13 | Middle | 15 | 5 | CP-OFDM 64QAM | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.30 |
| 14 | Middle | 15 | 5 | CP-OFDM 256QAM | Inner_Full | 12_6 | 1745 | 349000 | 17.50 | 16.41 |
| 15 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_23 | 1745 | 349000 | 17.50 | 16.47 |
| 16 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 1745 | 349000 | 17.50 | 16.41 |
| 17 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_24 | 1745 | 349000 | 17.50 | 16.42 |
| 18 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 1745 | 349000 | 17.50 | 16.45 |
| 19 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_23 | 1745 | 349000 | 17.50 | 16.46 |
| 20 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 1745 | 349000 | 17.50 | 16.43 |
| 21 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 1745 | 349000 | 17.50 | 16.40 |
| 22 | High | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1775 | 355000 | 17.50 | 16.44 |
| 23 | Middle | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1745 | 349000 | 17.50 | 16.40 |
| 24 | Low | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 1715 | 343000 | 17.50 | 16.44 |
| 25 | High | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1772.5 | 354500 | 17.50 | 16.31 |
| 26 | Middle | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1745 | 349000 | 17.50 | 16.35 |
| 27 | Low | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 1717.5 | 343500 | 17.50 | 16.42 |
| 28 | High | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1770 | 354000 | 17.50 | 16.72 |
| 29 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1745 | 349000 | 17.50 | 16.85 |
| 30 | Low | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 1720 | 344000 | 17.50 | 17.05 |
| 31 | High | 15 | 25 | DFT-s-OFDM QPSK | Inner_Full | 64-32 | 1767.5 | 353500 | 17.50 | 16.16 |
| 32 | Middle | 15 | 25 | DFT-s-OFDM QPSK | Inner_Full | 64-32 | 1745 | 349000 | 17.50 | 16.39 |
| 33 | Low | 15 | 25 | DFT-s-OFDM QPSK | Inner_Full | 64-32 | 1722.5 | 344500 | 17.50 | 16.50 |
| 34 | High | 15 | 30 | DFT-s-OFDM QPSK | Inner_Full | 80_40 | 1765 | 35300 | 17.50 | 16.47 |
| 35 | Middle | 15 | 30 | DFT-s-OFDM QPSK | Inner_Full | 80_40 | 1745 | 349000 | 17.50 | 16.80 |
| 36 | Low | 15 | 30 | DFT-s-OFDM QPSK | Inner_Full | 80_40 | 1725 | 345000 | 17.50 | 16.91 |

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| No. | Test Freq Description | 5G-n71 Normal Power | | | | | | | Tune up | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | | n71 |
| 1 | High | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 695.5 | 139100 | 25.50 | 24.96 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 24.89 |
| 3 | Low | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 665.5 | 133100 | 25.50 | 25.04 |
| 4 | High | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 688 | 137600 | 25.50 | 24.74 |
| 5 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 680.5 | 136100 | 25.50 | 24.69 |
| 6 | Low | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 673 | 134600 | 25.50 | 24.88 |
| 1 | Middle | 15 | 5 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 25.09 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.70 |
| 3 | Middle | 15 | 5 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.56 |
| 4 | Middle | 15 | 5 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.59 |
| 5 | Middle | 15 | 5 | CP-OFDM QPSK | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.50 |
| 6 | Middle | 15 | 5 | CP-OFDM 16QAM | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.63 |
| 7 | Middle | 15 | 5 | CP-OFDM 64QAM | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.61 |
| 8 | Middle | 15 | 5 | CP-OFDM 256QAM | Inner_Full | 12_6 | 680.5 | 136100 | 25.50 | 23.51 |
| 9 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_23 | 680.5 | 136100 | 25.50 | 23.70 |
| 10 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 680.5 | 136100 | 25.50 | 23.69 |
| 11 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_24 | 680.5 | 136100 | 25.50 | 23.72 |
| 12 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 680.5 | 136100 | 25.50 | 23.67 |
| 13 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_23 | 680.5 | 136100 | 25.50 | 24.51 |
| 14 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 680.5 | 136100 | 25.50 | 24.51 |
| 15 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 680.5 | 136100 | 25.50 | 23.64 |
| 14 | High | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 693 | 138600 | 25.50 | 24.85 |
| 15 | Middle | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 680.5 | 136100 | 25.50 | 24.49 |
| 16 | Low | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 668 | 133600 | 25.50 | 24.89 |
| 17 | High | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 690.5 | 138100 | 25.50 | 24.69 |
| 18 | Middle | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 680.5 | 136100 | 25.50 | 24.37 |
| 19 | Low | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 670.5 | 134100 | 25.50 | 24.74 |

| No. | Test Freq Description | 5G-n71 Low Power | | | | | | | Tune up | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | | n71 |
| 1 | High | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 695.5 | 139100 | 22.50 | 21.82 |
| 2 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 22.02 |
| 3 | Low | 15 | 5 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 665.5 | 133100 | 22.50 | 22.13 |
| 4 | High | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 688 | 137600 | 22.50 | 21.82 |
| 5 | Middle | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 680.5 | 136100 | 22.50 | 21.93 |
| 6 | Low | 15 | 20 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 673 | 134600 | 22.50 | 21.95 |
| 7 | Middle | 15 | 5 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 22.02 |
| 8 | Middle | 15 | 5 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 21.93 |
| 9 | Middle | 15 | 5 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 22.01 |
| 10 | Middle | 15 | 5 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 20.60 |
| 11 | Middle | 15 | 5 | CP-OFDM QPSK | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 22.03 |
| 12 | Middle | 15 | 5 | CP-OFDM 16QAM | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 22.06 |
| 13 | Middle | 15 | 5 | CP-OFDM 64QAM | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 21.48 |
| 14 | Middle | 15 | 5 | CP-OFDM 256QAM | Inner_Full | 12_6 | 680.5 | 136100 | 22.50 | 20.57 |
| 15 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_23 | 680.5 | 136100 | 22.50 | 21.91 |
| 16 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 680.5 | 136100 | 22.50 | 21.87 |
| 17 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_24 | 680.5 | 136100 | 22.50 | 22.07 |
| 18 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 680.5 | 136100 | 22.50 | 22.03 |
| 19 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_23 | 680.5 | 136100 | 22.50 | 22.07 |
| 20 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 680.5 | 136100 | 22.50 | 22.02 |
| 21 | Middle | 15 | 5 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 680.5 | 136100 | 22.50 | 21.98 |
| 22 | High | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 693 | 138600 | 22.50 | 21.90 |
| 23 | Middle | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 680.5 | 136100 | 22.50 | 21.99 |
| 24 | Low | 15 | 10 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 668 | 133600 | 22.50 | 22.05 |
| 25 | High | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 690.5 | 138100 | 22.50 | 21.76 |
| 26 | Middle | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 680.5 | 136100 | 22.50 | 21.96 |
| 27 | Low | 15 | 15 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 670.5 | 134100 | 22.50 | 21.95 |

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| No. | Test Freq Description | 5G-n41PC2 Normal Power | | | | | | | Power Results (dBm) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | Tune up | n41 |
| 1 | High | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2685 | 537000 | 27.50 | 25.85 |
| 2 | Middle1 | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2639 | 527799 | 27.50 | 26.27 |
| 3 | Middle2 | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 26.75 |
| 4 | Middle3 | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2455.02 | 509406 | 27.50 | 26.23 |
| 5 | Low | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2501.01 | 500205 | 27.50 | 26.21 |
| 6 | High | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2640 | 528000 | 27.50 | 26.30 |
| 7 | Middle1 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2616.495 | 523299 | 27.50 | 26.36 |
| 8 | Middle2 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2592.99 | 518598 | 27.50 | 26.56 |
| 9 | Middle3 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2569.5 | 513900 | 27.50 | 26.51 |
| 10 | Low | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2546.01 | 509202 | 27.50 | 26.18 |
| 11 | Middle2 | 30 | 10 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 27.15 |
| 12 | Middle2 | 30 | 10 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.98 |
| 13 | Middle2 | 30 | 10 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.53 |
| 14 | Middle2 | 30 | 10 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.52 |
| 15 | Middle2 | 30 | 10 | CP-OFDM QPSK | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.62 |
| 16 | Middle2 | 30 | 10 | CP-OFDM 16QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.51 |
| 17 | Middle2 | 30 | 10 | CP-OFDM 64QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.54 |
| 18 | Middle2 | 30 | 10 | CP-OFDM 256QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 27.50 | 25.50 |
| 19 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_22 | 2592.99 | 518598 | 27.50 | 25.51 |
| 20 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 2592.99 | 518598 | 27.50 | 25.51 |
| 21 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_23 | 2592.99 | 518598 | 27.50 | 25.55 |
| 22 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 2592.99 | 518598 | 27.50 | 25.57 |
| 23 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_22 | 2592.99 | 518598 | 27.50 | 25.62 |
| 24 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 2592.99 | 518598 | 27.50 | 25.61 |
| 25 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 2592.99 | 518598 | 27.50 | 25.54 |
| 26 | Middle2 | 30 | 15 | DFT-s-OFDM QPSK | Inner_Full | 18_9 | 2592.99 | 518598 | 27.50 | 26.93 |
| 27 | Middle2 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 2592.99 | 518598 | 27.50 | 26.90 |
| 28 | Middle2 | 30 | 30 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 2592.99 | 518598 | 27.50 | 26.83 |
| 29 | Middle2 | 30 | 40 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 2592.99 | 518598 | 27.50 | 26.80 |
| 30 | Middle2 | 30 | 50 | DFT-s-OFDM QPSK | Inner_Full | 64_32 | 2592.99 | 518598 | 27.50 | 26.78 |
| 31 | Middle2 | 30 | 60 | DFT-s-OFDM QPSK | Inner_Full | 81_40 | 2592.99 | 518598 | 27.50 | 25.59 |
| 32 | Middle2 | 30 | 70 | DFT-s-OFDM QPSK | Inner_Full | 90_45 | 2592.99 | 518598 | 27.50 | 25.60 |
| 33 | Middle2 | 30 | 80 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 2592.99 | 518598 | 27.50 | 26.65 |
| 34 | Middle2 | 30 | 90 | DFT-s-OFDM QPSK | Inner_Full | 120_60 | 2592.99 | 518598 | 27.50 | 26.68 |

| No. | Test Freq Description | 5G-n41 LowPC2 Power | | | | | | | Power Results (dBm) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | Tune up | n41 |
| 1 | High | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2685 | 537000 | 17.50 | 16.91 |
| 2 | Middle1 | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2639 | 527799 | 17.50 | 16.83 |
| 3 | Middle2 | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.92 |
| 4 | Middle3 | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2455.02 | 509406 | 17.50 | 16.84 |
| 5 | Low | 30 | 10 | DFT-s-OFDM QPSK | Inner_Full | 12_6 | 2501.01 | 500205 | 17.50 | 16.87 |
| 6 | High | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2640 | 528000 | 17.50 | 16.62 |
| 7 | Middle1 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2616.495 | 523299 | 17.50 | 16.63 |
| 8 | Middle2 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2592.99 | 518598 | 17.50 | 16.55 |
| 9 | Middle3 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2569.5 | 513900 | 17.50 | 16.59 |
| 10 | Low | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135_67 | 2546.01 | 509202 | 17.50 | 16.61 |
| 11 | Middle2 | 30 | 10 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.83 |
| 12 | Middle2 | 30 | 10 | DFT-s-OFDM 16QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.76 |
| 13 | Middle2 | 30 | 10 | DFT-s-OFDM 64QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.83 |
| 14 | Middle2 | 30 | 10 | DFT-s-OFDM 256QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.91 |
| 15 | Middle2 | 30 | 10 | CP-OFDM QPSK | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.80 |
| 16 | Middle2 | 30 | 10 | CP-OFDM 16QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.82 |
| 17 | Middle2 | 30 | 10 | CP-OFDM 64QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.88 |
| 18 | Middle2 | 30 | 10 | CP-OFDM 256QAM | Inner_Full | 12_6 | 2592.99 | 518598 | 17.50 | 16.88 |
| 19 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_Full_Right | 2_22 | 2592.99 | 518598 | 17.50 | 16.81 |
| 20 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_Full_Left | 2_0 | 2592.99 | 518598 | 17.50 | 16.86 |
| 21 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_1RB_Right | 1_23 | 2592.99 | 518598 | 17.50 | 16.92 |
| 22 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Edge_1RB_Left | 1_0 | 2592.99 | 518598 | 17.50 | 16.94 |
| 23 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Inner_1RB_Right | 1_22 | 2592.99 | 518598 | 17.50 | 16.91 |
| 24 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1_1 | 2592.99 | 518598 | 17.50 | 16.93 |
| 25 | Middle | 30 | 10 | DFT-s-OFDM QPSK | Outer_Full | 25_0 | 2592.99 | 518598 | 17.50 | 16.85 |
| 26 | Middle2 | 30 | 15 | DFT-s-OFDM QPSK | Inner_Full | 18_9 | 2592.99 | 518598 | 17.50 | 16.72 |
| 27 | Middle2 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25_12 | 2592.99 | 518598 | 17.50 | 16.81 |
| 28 | Middle2 | 30 | 30 | DFT-s-OFDM QPSK | Inner_Full | 36_18 | 2592.99 | 518598 | 17.50 | 16.74 |
| 29 | Middle2 | 30 | 40 | DFT-s-OFDM QPSK | Inner_Full | 50_25 | 2592.99 | 518598 | 17.50 | 16.82 |
| 30 | Middle2 | 30 | 50 | DFT-s-OFDM QPSK | Inner_Full | 64_32 | 2592.99 | 518598 | 17.50 | 16.75 |
| 31 | Middle2 | 30 | 60 | DFT-s-OFDM QPSK | Inner_Full | 81_40 | 2592.99 | 518598 | 17.50 | 16.75 |
| 32 | Middle2 | 30 | 70 | DFT-s-OFDM QPSK | Inner_Full | 90_45 | 2592.99 | 518598 | 17.50 | 16.20 |
| 33 | Middle2 | 30 | 80 | DFT-s-OFDM QPSK | Inner_Full | 108_54 | 2592.99 | 518598 | 17.50 | 16.57 |
| 34 | Middle2 | 30 | 90 | DFT-s-OFDM QPSK | Inner_Full | 120_60 | 2592.99 | 518598 | 17.50 | 16.58 |

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| No. | Test Freq Description | 5G-n77 PC2 L3450_3550 Normal Power | | | | | | | Power Results | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | Tune up | n77 |
| 1 | High | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3540 | 636000 | 28.00 | 27.75 |
| 2 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3500.01 | 633334 | 28.00 | 27.78 |
| 3 | Low | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3460.02 | 630668 | 28.00 | 27.71 |
| 4 | High | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3499.98 | 633332 | 28.00 | 27.54 |
| 5 | Middle | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 27.50 |
| 6 | Middle | 30 | 20 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 27.49 |
| 7 | Middle | 30 | 20 | DFT-s-OFDM 16QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.51 |
| 8 | Middle | 30 | 20 | DFT-s-OFDM 64QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.01 |
| 9 | Middle | 30 | 20 | DFT-s-OFDM 256QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.03 |
| 10 | Middle | 30 | 20 | CP-OFDM QPSK | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.01 |
| 11 | Middle | 30 | 20 | CP-OFDM 16QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.05 |
| 12 | Middle | 30 | 20 | CP-OFDM 64QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.01 |
| 13 | Middle | 30 | 20 | CP-OFDM 256QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 28.00 | 26.04 |
| 14 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_1RB_Right | 2@271 | 3500.01 | 633334 | 28.00 | 26.03 |
| 15 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_1RB_Left | 2@0 | 3500.01 | 633334 | 28.00 | 26.01 |
| 16 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_Full_Right | 1@271 | 3500.01 | 633334 | 28.00 | 27.60 |
| 17 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_Full_Left | 1@1 | 3500.01 | 633334 | 28.00 | 27.40 |
| 18 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Right | 270@0 | 3500.01 | 633334 | 28.00 | 26.40 |
| 19 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1@0 | 3500.01 | 633334 | 28.00 | 26.02 |
| 20 | Middle | 30 | 100 | DFT-s-OFDM QPSK | Outer_Full | 1@272 | 3500.01 | 633334 | 28.00 | 26.05 |
| 23 | Middle-5 | 30 | 40 | DFT-s-OFDM QPSK | Inner_Full | 50@25 | 3500.01 | 633334 | 28.00 | 27.60 |
| 24 | Middle-5 | 30 | 50 | DFT-s-OFDM QPSK | Inner_Full | 64@32 | 3500.01 | 633334 | 28.00 | 27.61 |
| 25 | Middle-5 | 30 | 60 | DFT-s-OFDM QPSK | Inner_Full | 81@40 | 3500.01 | 633334 | 28.00 | 27.66 |
| 26 | Middle-5 | 30 | 80 | DFT-s-OFDM QPSK | Inner_Full | 108@54 | 3500.01 | 633334 | 28.00 | 27.51 |
| 27 | Middle-5 | 30 | 90 | DFT-s-OFDM QPSK | Inner_Full | 120@60 | 3500.01 | 633334 | 28.00 | 27.48 |

| No. | Test Freq Description | 5G-n77 LPC2 L3450_3550 Low Power | | | | | | | Power Results (dBm) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | Tune up | n77 |
| 1 | High | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3540 | 636000 | 18.00 | 17.70 |
| 2 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3500.01 | 633334 | 18.00 | 17.63 |
| 3 | Low | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3460.02 | 630668 | 18.00 | 17.66 |
| 4 | High | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3499.98 | 633332 | 18.00 | 17.33 |
| 5 | Middle | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.31 |
| 6 | Middle | 30 | 20 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.33 |
| 7 | Middle | 30 | 20 | DFT-s-OFDM 16QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.34 |
| 8 | Middle | 30 | 20 | DFT-s-OFDM 64QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.32 |
| 9 | Middle | 30 | 20 | DFT-s-OFDM 256QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.34 |
| 10 | Middle | 30 | 20 | CP-OFDM QPSK | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.36 |
| 11 | Middle | 30 | 20 | CP-OFDM 16QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.36 |
| 12 | Middle | 30 | 20 | CP-OFDM 64QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.37 |
| 13 | Middle | 30 | 20 | CP-OFDM 256QAM | Inner_Full | 135@67 | 3500.01 | 633334 | 18.00 | 17.33 |
| 14 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_1RB_Right | 2@271 | 3500.01 | 633334 | 18.00 | 17.37 |
| 15 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_1RB_Left | 2@0 | 3500.01 | 633334 | 18.00 | 17.15 |
| 16 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_Full_Right | 1@271 | 3500.01 | 633334 | 18.00 | 17.43 |
| 17 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Edge_Full_Left | 1@1 | 3500.01 | 633334 | 18.00 | 17.26 |
| 18 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Right | 270@0 | 3500.01 | 633334 | 18.00 | 17.34 |
| 19 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1@0 | 3500.01 | 633334 | 18.00 | 17.27 |
| 20 | Middle | 30 | 20 | DFT-s-OFDM QPSK | Outer_Full | 1@272 | 3500.01 | 633334 | 18.00 | 17.47 |
| 21 | Middle-5 | 30 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1@1 | 3500.01 | 633334 | 18.00 | 17.15 |
| 22 | Middle-5 | 30 | 20 | DFT-s-OFDM QPSK | Inner_1RB_Left | 1@1 | 3500.01 | 633334 | 18.00 | 17.14 |
| 23 | Middle-5 | 30 | 40 | DFT-s-OFDM QPSK | Inner_Full | 50@25 | 3500.01 | 633334 | 18.00 | 17.63 |
| 24 | Middle-5 | 30 | 50 | DFT-s-OFDM QPSK | Inner_Full | 64@32 | 3500.01 | 633334 | 18.00 | 17.46 |
| 25 | Middle-5 | 30 | 60 | DFT-s-OFDM QPSK | Inner_Full | 81@40 | 3500.01 | 633334 | 18.00 | 17.51 |
| 26 | Middle-5 | 30 | 80 | DFT-s-OFDM QPSK | Inner_Full | 108@54 | 3500.01 | 633334 | 18.00 | 17.32 |
| 27 | Middle-5 | 30 | 90 | DFT-s-OFDM QPSK | Inner_Full | 120@60 | 3500.01 | 633334 | 18.00 | 17.29 |

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| No. | Test Freq Description | 5G-n77 PC2 L3700_3980 Normal Power | | | | | | | | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | Tune up | n77 |
| 1 | High | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3969.990 | 664666 | 28 | 27.72 |
| 2 | Middle-1 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3918.000 | 661200 | 28 | 27.27 |
| 3 | Middle-2 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3866.000 | 657733 | 28 | 27.64 |
| 4 | Middle-3 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3814.000 | 654267 | 28 | 27.71 |
| 5 | Middle-5 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3762.000 | 650800 | 28 | 27.94 |
| 6 | Low | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3710.010 | 647334 | 28 | 27.83 |
| 7 | High | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3930.000 | 662000 | 28 | 27.09 |
| 8 | Middle-1 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3894.000 | 659600 | 28 | 27.29 |
| 9 | Middle-2 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3858.000 | 657200 | 28 | 27.33 |
| 10 | Middle-3 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 27.44 |
| 11 | Middle-4 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3786.000 | 652400 | 28 | 27.43 |
| 12 | Low | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3750.000 | 650000 | 28 | 27.64 |
| 13 | Middle-3 | 30 | 20 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 27.78 |
| 14 | Middle-3 | 30 | 20 | DFT-s-OFDM 16QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.73 |
| 15 | Middle-3 | 30 | 20 | DFT-s-OFDM 64QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.11 |
| 16 | Middle-3 | 30 | 20 | DFT-s-OFDM 256QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.16 |
| 17 | Middle-3 | 30 | 20 | CP-OFDM QPSK | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.11 |
| 18 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.07 |
| 19 | Middle-3 | 30 | 20 | CP-OFDM 64QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.01 |
| 20 | Middle-3 | 30 | 20 | CP-OFDM 256QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 28 | 26.02 |
| 21 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_Full_Right | 2@271 | 3822.000 | 654800 | 28 | 26.04 |
| 22 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_Full_Left | 2@0 | 3822.000 | 654800 | 28 | 26.01 |
| 23 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Inner_1RB_Right | 1@271 | 3822.000 | 654800 | 28 | 26.25 |
| 24 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Inner_1RB_Left | 1@1 | 3822.000 | 654800 | 28 | 26.17 |
| 25 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Outer_Full | 270@0 | 3822.000 | 654800 | 28 | 26.81 |
| 26 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_1RB_Left | 1@0 | 3822.000 | 654800 | 28 | 26.10 |
| 27 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_1RB_Right | 1@272 | 3822.000 | 654800 | 28 | 26.05 |
| 28 | Middle-1 | 30 | 40 | CP-OFDM 16QAM | Inner_Full | 50@25 | 3918.000 | 661200 | 28 | 26.95 |
| 29 | Middle-1 | 30 | 50 | CP-OFDM 16QAM | Inner_Full | 64@32 | 3918.000 | 661200 | 28 | 26.81 |
| 30 | Middle-1 | 30 | 60 | CP-OFDM 16QAM | Inner_Full | 81@40 | 3918.000 | 661200 | 28 | 26.72 |
| 31 | Middle-1 | 30 | 80 | CP-OFDM 16QAM | Inner_Full | 108@54 | 3918.000 | 661200 | 28 | 26.63 |
| 20 | Middle-1 | 30 | 90 | CP-OFDM 16QAM | Inner_Full | 120@60 | 3918.000 | 661200 | 28 | 26.71 |

| No. | Test Freq Description | 5G-n77 PC2 H3700_3980 Lower Power | | | | | | | | Power Results (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SCS (kHz) | NR BW (MHz) | Modulation | RB allocation | | NR Test Freq. (MHz) | NR Test CH. | Tune up | n77 |
| 1 | High | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3969.990 | 664666 | 18 | 17.66 |
| 2 | Middle-1 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3918.000 | 661200 | 18 | 17.75 |
| 3 | Middle-2 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3866.000 | 657733 | 18 | 17.90 |
| 4 | Middle-3 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3814.000 | 654267 | 18 | 17.93 |
| 5 | Middle-5 | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3762.000 | 650800 | 18 | 17.79 |
| 6 | Low | 30 | 20 | DFT-s-OFDM QPSK | Inner_Full | 25@12 | 3710.010 | 647334 | 18 | 17.65 |
| 7 | High | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3930.000 | 662000 | 18 | 17.31 |
| 8 | Middle-1 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3894.000 | 659600 | 18 | 17.51 |
| 9 | Middle-2 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3858.000 | 657200 | 18 | 17.69 |
| 10 | Middle-3 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.57 |
| 11 | Middle-4 | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3786.000 | 652400 | 18 | 17.59 |
| 12 | Low | 30 | 100 | DFT-s-OFDM QPSK | Inner_Full | 135@67 | 3750.000 | 650000 | 18 | 17.50 |
| 13 | Middle-3 | 30 | 20 | DFT-s-OFDM PI/2 BPSK1 | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.60 |
| 14 | Middle-3 | 30 | 20 | DFT-s-OFDM 16QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.60 |
| 15 | Middle-3 | 30 | 20 | DFT-s-OFDM 64QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.59 |
| 16 | Middle-3 | 30 | 20 | DFT-s-OFDM 256QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.64 |
| 17 | Middle-3 | 30 | 20 | CP-OFDM QPSK | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.65 |
| 18 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.67 |
| 19 | Middle-3 | 30 | 20 | CP-OFDM 64QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.67 |
| 20 | Middle-3 | 30 | 20 | CP-OFDM 256QAM | Inner_Full | 135@67 | 3822.000 | 654800 | 18 | 17.63 |
| 21 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_Full_Right | 2@271 | 3822.000 | 654800 | 18 | 17.58 |
| 22 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_Full_Left | 2@0 | 3822.000 | 654800 | 18 | 17.42 |
| 23 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Inner_1RB_Right | 1@271 | 3822.000 | 654800 | 18 | 17.39 |
| 24 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Inner_1RB_Left | 1@1 | 3822.000 | 654800 | 18 | 17.33 |
| 25 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Outer_Full | 270@0 | 3822.000 | 654800 | 18 | 17.58 |
| 26 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_1RB_Left | 1@0 | 3822.000 | 654800 | 18 | 17.30 |
| 27 | Middle-3 | 30 | 20 | CP-OFDM 16QAM | Edge_1RB_Right | 1@272 | 3822.000 | 654800 | 18 | 17.52 |
| 28 | Middle-1 | 30 | 40 | CP-OFDM 16QAM | Inner_Full | 50@25 | 3918.000 | 661200 | 18 | 17.74 |
| 29 | Middle-1 | 30 | 50 | CP-OFDM 16QAM | Inner_Full | 64@32 | 3918.000 | 661200 | 18 | 17.55 |
| 30 | Middle-1 | 30 | 60 | CP-OFDM 16QAM | Inner_Full | 81@40 | 3918.000 | 661200 | 18 | 17.51 |
| 31 | Middle-1 | 30 | 80 | CP-OFDM 16QAM | Inner_Full | 108@54 | 3918.000 | 661200 | 18 | 17.39 |
| 32 | Middle-1 | 30 | 90 | CP-OFDM 16QAM | Inner_Full | 120@60 | 3918.000 | 661200 | 18 | 17.37 |

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### 11.5 Wi-Fi and BT Measurement result

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, n, ac then ax) is selected. Therefore the SAR measurements performed for the 802.11n/ac modes, as the lowest order modulation, cover 802.11ax modes.

When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.

According to KDB 248227 D01, simultaneous SAR provisions in KDB 447498 D01 apply to determine simultaneous transmission SAR test exclusion for Wi-Fi MIMO. If the sum of 1-g single transmission chain SAR measurements is<1.6W/kg and/or the MIMO output power is equal or less than a single chain, then no additional SAR measurements for simultaneously at the specified maximum output power of MIMO operation.

When antennas are spatially separated to the extent that SAR distributions do not overlap and can be treated independently, SAR compliance for simultaneous transmission is determined separately for each individual antenna.

**The maximum output power for WiFi 2.4G – Head(receiver on)**

| 802.11b | Channel\data rate | 1Mbps |
|---|---|---|
| WLAN2450 | 11(2462MHz) | 11.95 |
| | 6(2437(MHz) | 11.98 |
| | 1(2412MHz) | 11.75 |
| 802.11g | Channel\data rate | 6Mbps |
| WLAN2450 | 11(2462MHz) | 11.52 |
| | 6(2437(MHz) | 11.81 |
| | 1(2412MHz) | 11.47 |
| 802.11n-20MHz | Channel\data rate | MCS0 |
| WLAN2450 | 11(2462MHz) | 11.41 |
| | 6(2437(MHz) | 11.63 |
| | 1(2412MHz) | 11.28 |
| 802.11n-40MHz | Channel\data rate | MCS0 |
| WLAN2450 | 9(2452MHz) | 11.96 |
| | 6(2437MHz) | 11.97 |
| | 3(2422MHz) | 11.82 |
| tuneup | | 12.00 |

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**The maximum output power for WiFi 2.4G - Body(receiver off)**

| | | |
|---|---|---|
| 802.11b | Channel\data rate | 1Mbps |
| WLAN2450 | 11(2462MHz) | 16.34 |
| | 6(2437(MHz) | 16.48 |
| | 1(2412MHz) | 16.21 |
| | tuneup | 16.50 |
| 802.11g | Channel\data rate | 6Mbps |
| WLAN2450 | 11(2462MHz) | 15.01 |
| | 6(2437(MHz) | 15.20 |
| | 1(2412MHz) | 14.96 |
| | tuneup | 15.50 |
| 802.11n-20MHz | Channel\data rate | MCS0 |
| WLAN2450 | 11(2462MHz) | 14.84 |
| | 6(2437(MHz) | 15.02 |
| | 1(2412MHz) | 14.78 |
| | tuneup | 15.50 |
| 802.11n-40MHz | Channel\data rate | MCS0 |
| WLAN2450 | 9(2452MHz) | 12.53 |
| | 6(2437MHz) | 12.98 |
| | 3(2422MHz) | 12.95 |
| tuneup | | 13.00 |

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**The maximum output power for WiFi 5G- Head(receiver on)**

| 802.11ac(dBm)-80MHz | |
|---|---|
| Channel\data rate | MCS0 |
| 42(5210 MHz) | 9.01 |
| 58(5290 MHz) | 9.15 |
| 106(5530 MHz) | 9.34 |
| 122(5610 MHz) | 9.54 |
| 138(5690 MHz) | 9.84 |
| 155(5775 MHz) | 9.98 |
| tuneup | 11 |

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**The maximum output power for WiFi 5G- Body(receiver off)**

| 802.11a(dBm) | |
|---|---|
| Channel\data rate | 6Mbps |
| 36(5180 MHz) | 14.71 |
| 40(5200 MHz) | 14.61 |
| 44(5220 MHz) | 14.51 |
| 48(5240 MHz) | 14.57 |
| 52(5260 MHz) | 14.59 |
| 56(5280 MHz) | 14.85 |
| 60(5300 MHz) | 15.44 |
| 64(5320 MHz) | 15.84 |
| 100(5500 MHz) | 15.42 |
| 104(5520 MHz) | 15.47 |
| 108(5540 MHz) | 15.34 |
| 112(5560 MHz) | 15.17 |
| 116(5580 MHz) | 15.11 |
| 120(5600 MHz) | 15.10 |
| 124(5620 MHz) | 15.43 |
| 128(5640 MHz) | 15.88 |
| 132(5660 MHz) | 16.08 |
| 136(5680 MHz) | 16.14 |
| 140(5700 MHz) | 15.76 |
| 144(5720 MHz) | 15.41 |
| 149(5745 MHz) | 15.06 |
| 153(5765 MHz) | 15.36 |
| 157(5785 MHz) | 15.70 |
| 161(5805 MHz) | 16.10 |
| 165(5825 MHz) | 16.47 |
| tuneup | 16.5 |

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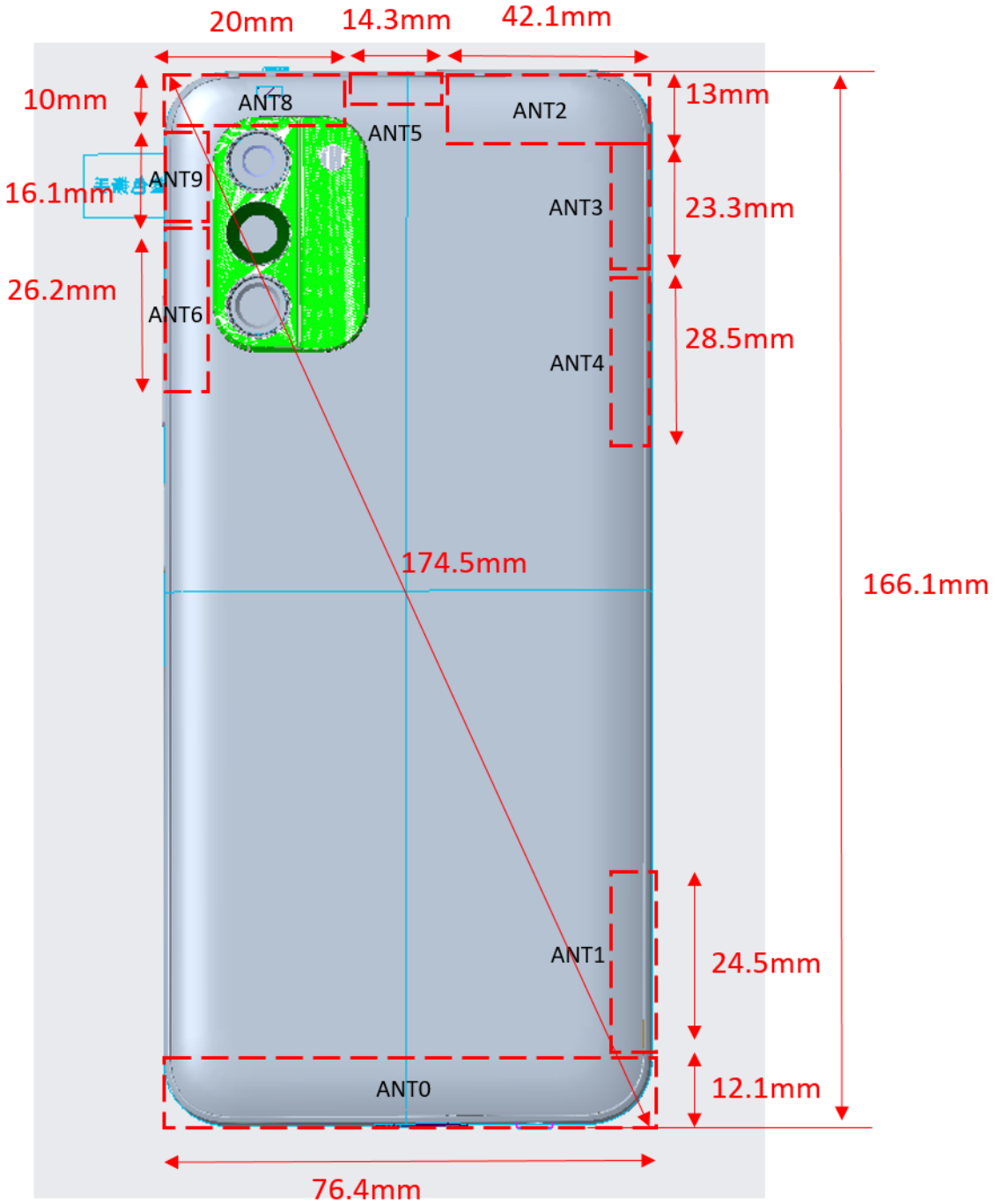
## 12 Antenna Location

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| Ref. | Antenna | Band |
|---|---|---|
| ANT0 | LB TX+MDRX/ENDC | 2G:GSM850/900<br>3G:W5<br>4G:B5/8/12/13/14/17/20/26/71 TX/PRX +<br>B1/3/39/40 DRX+B2/4/25/66DRX/ENDC_TX+<br>B7/38/41DRX<br>5G:N5/26/71 TX/PRX+N29 PRX+N2/25/66/70 DRX+N41 DRX |
| ANT1 | MH DRX | 4G:B7/38/41(ATT B30) DRX2+<br>B2/4/66 DRX2<br>5G:N41 DRX2+N25/66 DRX2 |
| ANT2 | LB DRX+MHTX/PRX | 2G:GSM1800/1900<br>3G:W1/2/4<br>4G:B1/2/3/4/25/39/40/66TX/PRX+<br>B5/8/12/13/14/17/20/26/71DRX<br>5G:N2/25/66/70 TX/PRX+<br>N5/25/29/71 DRX |
| ANT3 | UHB MIMO+GPSL5 | GPS L5<br>5G:N77 DRX |
| ANT4 | HB TX/PRX+UHBMIMO | 4G:B7/38/41(ATT B30) TX/TRX<br>5G:N41TX/PRX+N77 DRX2 |
| ANT5 | UHB TX/PRX | N77 TX/PRX |
| ANT6 | UHB MIMO+HBPRX2 | 4G:B41(ATT B30) /B2/4/66 PRX2<br>5G:N77 PRX2+N25/66/41 PRX2 |
| ANT8 | GPS L1+2.4G WiFi | GPS L1+WIFI 2.4G 11b/g/n |
| ANT9 | 5G WiFi | WIFI 5G11n/a |

## 12.1 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR v01, 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 |
| ANT2 | Yes | Yes | Yes | No | Yes | No |
| ANT4 | Yes | Yes | Yes | No | No | No |
| ANT5 | Yes | Yes | No | Yes | Yes | No |
| ANT8 | Yes | Yes | No | Yes | Yes | No |
| ANT9 | Yes | Yes | No | Yes | Yes | No |

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## 12.2 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≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, where

- f(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

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**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 | 10 | 10 | No |
| | | Body | 19.20 | 10 | 10 | No |
| 2.4GHz WLAN | 2.45 | Head | 9.58 | 12 | 16 | No |
| | | Body | 19.17 | 16.5 | 45 | No |
| 5GHz WLAN | 5.2 | Head | 6.58 | 11 | 13 | No |
| | | Body | 13.16 | 16.5 | 45 | No |
| | 5.3 | Head | 6.52 | 11 | 13 | No |
| | | Body | 13.03 | 16.5 | 45 | No |
| | 5.6 | Head | 6.34 | 11 | 13 | No |
| | | Body | 12.68 | 16.5 | 45 | No |
| | 5.8 | Head | 6.23 | 11 | 13 | No |
| | | Body | 12.46 | 16.5 | 45 | No |

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# 13 SAR Test Result

**Note:**

**KDB 447498 D01 General RF Exposure Guidance:**

For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor

For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz

≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

**KDB 648474 D04 Handset SAR:**

With headset attached, when the reported SAR for body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

**KDB 941225 D01 SAR test for 3G devices:**

When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

**KDB 941225 D05 SAR for LTE Devices:**

SAR test reduction is applied using the following criteria:

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% 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 > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.

Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low,Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.

Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.

Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is <1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the

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group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

**KDB 248227 D01 SAR meas for 802.11:**

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s).

When the reported SAR for the initial test position is:

≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.

> 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions are tested.

- For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
- When it is unclear, all equivalent conditions must be tested.

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

- The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.

When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR

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with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

**Duty Cycle**

| **Mode** | **Duty Cycle** |
|---|---|
| Speech for GSM | 1:8.3 |
| GPRS&EGPRS 1 Slot | 1:8.3 |
| GPRS&EGPRS 2 Slot | 1:4 |
| GPRS&EGPRS 3 Slot | 1:2.67 |
| GPRS&EGPRS 4 Slot | 1:2 |
| WCDMA&LTE FDD | 1:1 |
| TDD PC3 | 1:1.58 |

**Ambient Temperature: 21.5-23.5 ℃ Liquid Temperature: 21.5-23.5 ℃**

**Note**

**EUT2:**

Article 1: Difference description:

Only supplier different. Detail as the below table:

| | First source | Second source | note |
|---|---|---|---|
| LCD | LCE | TXD | Same spec |
| Camera | Front camra 16M:<br>Holitech<br>Main camera 48M:<br>TXD<br>Ultrawide camera<br>5M：KingCome<br>Depth camera 2M:<br>C&T | Front camra 16M:<br>DDHL<br>Main camera 48M:<br>HongShi<br>Ultrawide camera 5M:<br>LCE<br>Depth camera 2M:<br>NewSeasons | Same spec |
| Charge Circuit | SGM | 南芯 | Same spec |
| Memory | Longsys | Samsung | Same spec |
| MIC | AAC | 共达 | Same spec |

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## 13.1 SAR results

| ENDC | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Front 10mm | Rear 10mm | Left Edge 10mm | Right Edge 10mm | Bottom Edge 10mm | Top Edge 10mm |
|---|---|---|---|---|---|---|---|---|---|---|
| DC_66A_N41A | 0.43 | 0.19 | 0.98 | 0.29 | 0.29 | 0.28 | 0.3 | 0.22 | 0.06 | 0 |
| DC_12A_N41A | 0.3 | 0.11 | 0.82 | 0.22 | 0.49 | 0.52 | 0.42 | 0.51 | 0.06 | 0 |
| DC_12A-66A_n66A | 0.42 | 0.42 | 0.57 | 0.53 | 0.63 | 0.57 | 0.34 | 0.51 | 0.06 | 0.24 |
| DC_2A-(n)71AA | 0.33 | 0.18 | 0.36 | 0.19 | 0.42 | 0.51 | 0.32 | 0.488 | 0.36 | 0 |
| DC_2A-12A_n66A | 0.44 | 0.45 | 0.61 | 0.54 | 0.41 | 0.31 | 0.21 | 0.018 | 0.06 | 0.24 |
| DC_12A-2A_n66A | 0.42 | 0.42 | 0.57 | 0.53 | 0.63 | 0.57 | 0.34 | 0.51 | 0.06 | 0.24 |
| DC_2A-13A_n66A | 0.44 | 0.45 | 0.61 | 0.54 | 0.41 | 0.31 | 0.21 | 0.018 | 0.06 | 0.24 |
| DC_2A-2A_n41A | 0.32 | 0.14 | 0.86 | 0.23 | 0.27 | 0.26 | 0.29 | 0.018 | 0.06 | 0 |
| DC_2A-2A_n66A | 0.44 | 0.45 | 0.61 | 0.54 | 0.41 | 0.31 | 0.21 | 0.018 | 0.06 | 0.24 |
| DC_2A-2A_n71A | 0.33 | 0.18 | 0.36 | 0.19 | 0.42 | 0.51 | 0.32 | 0.488 | 0.36 | 0 |
| DC_2A-5A_n66A | 0.44 | 0.45 | 0.61 | 0.54 | 0.41 | 0.31 | 0.21 | 0.018 | 0.06 | 0.24 |
| DC_66A-2A_n25A | 0.73 | 0.7 | 0.89 | 0.8 | 0.53 | 0.44 | 0.25 | 0.22 | 0.06 | 0.33 |
| DC_2A-66A_n25A | 0.62 | 0.65 | 0.77 | 0.74 | 0.51 | 0.42 | 0.24 | 0.018 | 0.06 | 0.33 |
| DC_2A-66A_n66A | 0.44 | 0.45 | 0.61 | 0.54 | 0.41 | 0.31 | 0.21 | 0.018 | 0.06 | 0.24 |
| DC_66A-2A_n71A | 0.44 | 0.23 | 0.48 | 0.25 | 0.44 | 0.53 | 0.33 | 0.69 | 0.36 | 0 |
| DC_2A-66A_n71A | 0.33 | 0.18 | 0.36 | 0.19 | 0.42 | 0.51 | 0.32 | 0.488 | 0.36 | 0 |
| DC_2C_n41A | 0.32 | 0.14 | 0.86 | 0.23 | 0.27 | 0.28 | 0.29 | 0.018 | 0.06 | 0 |
| DC_2C_n71A | 0.33 | 0.18 | 0.36 | 0.19 | 0.42 | 0.51 | 0.32 | 0.488 | 0.36 | 0 |
| DC_66A-(n)71AA | 0.44 | 0.23 | 0.48 | 0.25 | 0.44 | 0.53 | 0.33 | 0.69 | 0.36 | 0 |
| DC_66A-66A_n71A | 0.44 | 0.23 | 0.48 | 0.25 | 0.44 | 0.53 | 0.33 | 0.69 | 0.36 | 0 |
| DC_66A-66A_n77A | 0.44 | 0.23 | 0.48 | 0.25 | 0.44 | 0.53 | 0.33 | 0.69 | 0.36 | 0 |
| DC_66C_n71A | 0.44 | 0.23 | 0.48 | 0.25 | 0.44 | 0.53 | 0.33 | 0.69 | 0.36 | 0 |
| DC_2A-71A_n71A | 0.33 | 0.18 | 0.36 | 0.19 | 0.42 | 0.51 | 0.32 | 0.488 | 0.36 | 0 |
| DC_66A-12A_n25A | 0.73 | 0.7 | 0.89 | 0.8 | 0.53 | 0.44 | 0.25 | 0.22 | 0.06 | 0.33 |
| DC_12A-66A_n25A | 0.6 | 0.62 | 0.73 | 0.73 | 0.73 | 0.68 | 0.37 | 0.51 | 0.06 | 0.33 |
| DC_66A-71A_n71A | 0.44 | 0.23 | 0.48 | 0.25 | 0.44 | 0.53 | 0.33 | 0.69 | 0.36 | 0 |

| ENDC+WiFi 2.4G | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Front 10mm | Rear 10mm | Left Edge 10mm | Right Edge 10mm | Bottom Edge 10mm | Top Edge 10mm |
|---|---|---|---|---|---|---|---|---|---|---|
| DC_66A_N41A | 0.63 | 0.37 | 1.09 | 0.36 | 0.42 | 0.42 | 0.30 | 0.34 | 0.06 | 0.25 |
| DC_12A_N41A | 0.50 | 0.29 | 0.93 | 0.29 | 0.62 | 0.66 | 0.42 | 0.63 | 0.06 | 0.25 |
| DC_12A-66A_n66A | 0.62 | 0.60 | 0.68 | 0.60 | 0.76 | 0.71 | 0.34 | 0.63 | 0.06 | 0.49 |
| DC_2A-(n)71AA | 0.53 | 0.36 | 0.47 | 0.26 | 0.55 | 0.65 | 0.32 | 0.61 | 0.36 | 0.25 |
| DC_2A-12A_n66A | 0.64 | 0.63 | 0.72 | 0.61 | 0.54 | 0.45 | 0.21 | 0.14 | 0.06 | 0.49 |
| DC_12A-2A_n66A | 0.62 | 0.60 | 0.68 | 0.60 | 0.76 | 0.71 | 0.34 | 0.63 | 0.06 | 0.49 |
| DC_2A-13A_n66A | 0.64 | 0.63 | 0.72 | 0.61 | 0.54 | 0.45 | 0.21 | 0.14 | 0.06 | 0.49 |
| DC_2A-2A_n41A | 0.52 | 0.32 | 0.97 | 0.30 | 0.40 | 0.40 | 0.29 | 0.14 | 0.06 | 0.25 |
| DC_2A-2A_n66A | 0.64 | 0.63 | 0.72 | 0.61 | 0.54 | 0.45 | 0.21 | 0.14 | 0.06 | 0.49 |
| DC_2A-2A_n71A | 0.53 | 0.36 | 0.47 | 0.26 | 0.55 | 0.65 | 0.32 | 0.61 | 0.36 | 0.25 |
| DC_2A-5A_n66A | 0.64 | 0.63 | 0.72 | 0.61 | 0.54 | 0.45 | 0.21 | 0.14 | 0.06 | 0.49 |
| DC_66A-2A_n25A | 0.93 | 0.88 | 1.00 | 0.87 | 0.66 | 0.58 | 0.25 | 0.34 | 0.06 | 0.58 |
| DC_2A-66A_n25A | 0.82 | 0.83 | 0.88 | 0.81 | 0.64 | 0.56 | 0.24 | 0.14 | 0.06 | 0.58 |
| DC_2A-66A_n66A | 0.64 | 0.63 | 0.72 | 0.61 | 0.54 | 0.45 | 0.21 | 0.14 | 0.06 | 0.49 |
| DC_66A-2A_n71A | 0.64 | 0.41 | 0.59 | 0.32 | 0.57 | 0.67 | 0.33 | 0.81 | 0.36 | 0.25 |
| DC_2A-66A_n71A | 0.53 | 0.36 | 0.47 | 0.26 | 0.55 | 0.65 | 0.32 | 0.61 | 0.36 | 0.25 |
| DC_2C_n41A | 0.52 | 0.32 | 0.97 | 0.30 | 0.40 | 0.42 | 0.29 | 0.14 | 0.06 | 0.25 |
| DC_2C_n71A | 0.53 | 0.36 | 0.47 | 0.26 | 0.55 | 0.65 | 0.32 | 0.61 | 0.36 | 0.25 |
| DC_66A-(n)71AA | 0.64 | 0.41 | 0.59 | 0.32 | 0.57 | 0.67 | 0.33 | 0.81 | 0.36 | 0.25 |
| DC_66A-66A_n71A | 0.64 | 0.41 | 0.59 | 0.32 | 0.57 | 0.67 | 0.33 | 0.81 | 0.36 | 0.25 |
| DC_66A-66A_n77A | 0.64 | 0.41 | 0.59 | 0.32 | 0.57 | 0.67 | 0.33 | 0.81 | 0.36 | 0.25 |
| DC_66C_n71A | 0.64 | 0.41 | 0.59 | 0.32 | 0.57 | 0.67 | 0.33 | 0.81 | 0.36 | 0.25 |
| DC_2A-71A_n71A | 0.53 | 0.36 | 0.47 | 0.26 | 0.55 | 0.65 | 0.32 | 0.61 | 0.36 | 0.25 |
| DC_66A-12A_n25A | 0.93 | 0.88 | 1.00 | 0.87 | 0.66 | 0.58 | 0.25 | 0.34 | 0.06 | 0.58 |
| DC_12A-66A_n25A | 0.80 | 0.80 | 0.84 | 0.80 | 0.86 | 0.82 | 0.37 | 0.63 | 0.06 | 0.58 |
| DC_66A-71A_n71A | 0.64 | 0.41 | 0.59 | 0.32 | 0.57 | 0.67 | 0.33 | 0.81 | 0.36 | 0.25 |

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| ENDC+WiFi 5G | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Front 10mm | Rear 10mm | Left Edge 10mm | Right Edge 10mm | Bottom Edge 10mm | Top Edge 10mm |
|---|---|---|---|---|---|---|---|---|---|---|
| DC_66A_N41A | 0.60 | 0.32 | 1.03 | 0.34 | 0.41 | 0.59 | 0.30 | 0.66 | 0.06 | 0.10 |
| DC_12A_N41A | 0.47 | 0.24 | 0.87 | 0.27 | 0.61 | 0.83 | 0.42 | 0.95 | 0.06 | 0.10 |
| DC_12A-66A_n66A | 0.59 | 0.69 | 0.62 | 0.58 | 0.75 | 0.88 | 0.34 | 0.95 | 0.06 | 0.34 |
| DC_2A-(n)71AA | 0.50 | 0.45 | 0.41 | 0.24 | 0.54 | 0.82 | 0.32 | 0.93 | 0.36 | 0.10 |
| DC_2A-12A_n66A | 0.61 | 0.72 | 0.66 | 0.59 | 0.53 | 0.62 | 0.21 | 0.46 | 0.06 | 0.34 |
| DC_12A-2A_n66A | 0.59 | 0.69 | 0.62 | 0.58 | 0.75 | 0.88 | 0.34 | 0.95 | 0.06 | 0.34 |
| DC_2A-13A_n66A | 0.61 | 0.72 | 0.66 | 0.59 | 0.53 | 0.62 | 0.21 | 0.46 | 0.06 | 0.34 |
| DC_2A-2A_n41A | 0.49 | 0.41 | 0.91 | 0.28 | 0.39 | 0.57 | 0.29 | 0.46 | 0.06 | 0.10 |
| DC_2A-2A_n66A | 0.61 | 0.72 | 0.66 | 0.59 | 0.53 | 0.62 | 0.21 | 0.46 | 0.06 | 0.34 |
| DC_2A-2A_n71A | 0.50 | 0.45 | 0.41 | 0.24 | 0.54 | 0.82 | 0.32 | 0.93 | 0.36 | 0.10 |
| DC_2A-5A_n66A | 0.61 | 0.72 | 0.66 | 0.59 | 0.53 | 0.62 | 0.21 | 0.46 | 0.06 | 0.34 |
| DC_66A-2A_n25A | 0.90 | 0.97 | 0.94 | 0.85 | 0.65 | 0.75 | 0.25 | 0.66 | 0.06 | 0.43 |
| DC_2A-66A_n25A | 0.79 | 0.92 | 0.82 | 0.79 | 0.63 | 0.73 | 0.24 | 0.46 | 0.06 | 0.43 |
| DC_2A-66A_n66A | 0.61 | 0.72 | 0.66 | 0.59 | 0.53 | 0.62 | 0.21 | 0.46 | 0.06 | 0.34 |
| DC_66A-2A_n71A | 0.61 | 0.50 | 0.53 | 0.30 | 0.56 | 0.84 | 0.33 | 1.13 | 0.36 | 0.10 |
| DC_2A-66A_n71A | 0.50 | 0.45 | 0.41 | 0.24 | 0.54 | 0.82 | 0.32 | 0.93 | 0.36 | 0.10 |
| DC_2C_n41A | 0.49 | 0.41 | 0.91 | 0.28 | 0.39 | 0.59 | 0.29 | 0.46 | 0.06 | 0.10 |
| DC_2C_n71A | 0.50 | 0.45 | 0.41 | 0.24 | 0.54 | 0.82 | 0.32 | 0.93 | 0.36 | 0.10 |
| DC_66A-(n)71AA | 0.61 | 0.50 | 0.53 | 0.30 | 0.56 | 0.84 | 0.33 | 1.13 | 0.36 | 0.10 |
| DC_66A-66A_n71A | 0.61 | 0.50 | 0.53 | 0.30 | 0.56 | 0.84 | 0.33 | 1.13 | 0.36 | 0.10 |
| DC_66A-66A_n77A | 0.61 | 0.50 | 0.53 | 0.30 | 0.56 | 0.84 | 0.33 | 1.13 | 0.36 | 0.10 |
| DC_66C_n71A | 0.61 | 0.50 | 0.53 | 0.30 | 0.56 | 0.84 | 0.33 | 1.13 | 0.36 | 0.10 |
| DC_2A-71A_n71A | 0.50 | 0.45 | 0.41 | 0.24 | 0.54 | 0.82 | 0.32 | 0.93 | 0.36 | 0.10 |
| DC_66A-12A_n25A | 0.90 | 0.97 | 0.94 | 0.85 | 0.65 | 0.75 | 0.25 | 0.66 | 0.06 | 0.43 |
| DC_12A-66A_n25A | 0.77 | 0.89 | 0.78 | 0.78 | 0.85 | 0.99 | 0.37 | 0.95 | 0.06 | 0.43 |
| DC_66A-71A_n71A | 0.61 | 0.50 | 0.53 | 0.30 | 0.56 | 0.84 | 0.33 | 1.13 | 0.36 | 0.10 |

| Cellular+WiFi 2.4G | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Front 10mm | Rear 10mm | Left Edge 10mm | Right Edge 10mm | Bottom Edge 10mm | Top Edge 10mm |
|---|---|---|---|---|---|---|---|---|---|---|
| WCDMA1900 | 0.80 | 0.92 | 1.05 | 1.03 | 0.71 | / | / | / | / | / |
| WCDMA 850 | / | / | / | / | / | 0.76 | 1.09 | / | / | / |
| LTE Band71 | / | / | / | / | / | / | / | 0.67 | / | / |
| GSM850 | / | / | / | / | / | / | / | / | 0.38 | / |
| WCDMA1900 | / | / | / | / | / | / | / | / | / | 0.80 |

| Cellular+WiFi 5G | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Front 10mm | Rear 10mm | Left Edge 10mm | Right Edge 10mm | Bottom Edge 10mm | Top Edge 10mm |
|---|---|---|---|---|---|---|---|---|---|---|
| WCDMA1900 | 0.77 | 0.87 | 0.99 | 1.01 | 0.70 | / | / | / | / | / |
| WCDMA 850 | / | / | / | / | / | 0.93 | 1.09 | / | / | / |
| LTE Band71 | / | / | / | / | / | / | / | 0.99 | / | / |
| GSM850 | / | / | / | / | / | / | / | / | 0.38 | / |
| WCDMA1900 | / | / | / | / | / | / | / | / | / | 0.90 |

| ULCA | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Front 10mm | Rear 10mm | Left Edge 10mm | Right Edge 10mm | Bottom Edge 10mm | Top Edge 10mm |
|---|---|---|---|---|---|---|---|---|---|---|
| CA_2A-12A | 0.68 | 0.76 | 0.8 | 0.85 | 0.9 | 0.84 | 0.48 | 0.51 | 0.06 | 0.49 |
| CA_2A-5A | 0.74 | 0.8 | 0.87 | 0.88 | 0.75 | 0.65 | 0.38 | 0.28 | 0.07 | 0.49 |
| CA_4A-12A | 0.44 | 0.46 | 0.55 | 0.58 | 0.75 | 0.66 | 0.38 | 0.51 | 0.06 | 0.33 |
| CA_4A-5A | 0.5 | 0.5 | 0.62 | 0.61 | 0.6 | 0.47 | 0.28 | 0.28 | 0.07 | 0.33 |
| CA_5A-66A | 0.5 | 0.5 | 0.62 | 0.61 | 0.6 | 0.47 | 0.28 | 0.28 | 0.07 | 0.33 |
| CA_12A-66A | 0.44 | 0.46 | 0.55 | 0.58 | 0.75 | 0.66 | 0.38 | 0.51 | 0.06 | 0.33 |
| CA_2A-4A | 0.92 | 1.14 | 1.17 | 1.31 | 0.93 | 0.72 | 0.48 | 0 | 0 | 0.82 |
| CA_2A-66A | 0.92 | 1.14 | 1.17 | 1.31 | 0.93 | 0.72 | 0.48 | 0 | 0 | 0.82 |
| CA_66B | 0.68 | 0.84 | 0.92 | 1.04 | 0.78 | 0.54 | 0.38 | 0 | 0 | 0.66 |
| CA_66C | 0.68 | 0.84 | 0.92 | 1.04 | 0.78 | 0.54 | 0.38 | 0 | 0 | 0.66 |
| CA_41C PC2 | 0.22 | 0.1 | 0.62 | 0.1 | 0.48 | 0.44 | 0.9 | 0 | 0 | 0 |
| CA_41C PC3 | 0.25 | 0.1 | 0.69 | 0.12 | 0.54 | 0.52 | 0.99 | 0 | 0 | 0 |

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| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | GSM850 | 190 | 836.6 | / | Left Cheek | 0mm | \ | 32.96 | 33.50 | 0.173 | 0.20 | 0.126 | 0.14 | -0.20 |
| Head | GSM850 | 190 | 836.6 | / | Left Tilt | 0mm | \ | 32.96 | 33.50 | 0.109 | 0.12 | 0.085 | 0.10 | -0.07 |
| Head | GSM850 | 190 | 836.6 | / | Right Cheek | 0mm | \ | 32.96 | 33.50 | 0.202 | 0.23 | 0.155 | 0.18 | 0.19 |
| Head | GSM850 | 128 | 824.2 | / | Right Cheek | 0mm | \ | 32.83 | 33.50 | 0.182 | 0.21 | 0.140 | 0.16 | -0.20 |
| Head | GSM850 | 251 | 848.8 | / | Right Cheek | 0mm | Fig.A1 | 32.73 | 33.50 | 0.266 | 0.32 | 0.204 | 0.24 | -0.07 |
| Head | GSM850 | 190 | 836.6 | / | Right Tilt | 0mm | \ | 32.96 | 33.50 | 0.141 | 0.16 | 0.107 | 0.12 | 0.10 |
| Head | GSM850 | 251 | 848.8 | / | Right Cheek | 0mm | EUT2 | 32.73 | 33.50 | 0.258 | 0.31 | 0.184 | 0.22 | 0.01 |
| Body | GSM850 | 190 | 836.6 | GPRS(2TX) | Front | 10mm | \ | 31.14 | 32.00 | 0.371 | 0.45 | 0.225 | 0.27 | 0.03 |
| Body | GSM850 | 251 | 848.8 | GPRS(2TX) | Rear | 10mm | Fig.A2 | 31.20 | 32.00 | 0.586 | 0.71 | 0.333 | 0.40 | 0.02 |
| Body | GSM850 | 190 | 836.6 | GPRS(2TX) | Rear | 10mm | \ | 31.14 | 32.00 | 0.541 | 0.66 | 0.312 | 0.38 | -0.11 |
| Body | GSM850 | 128 | 824.2 | GPRS(2TX) | Rear | 10mm | \ | 31.04 | 32.00 | 0.419 | 0.52 | 0.240 | 0.30 | 0.09 |
| Body | GSM850 | 190 | 836.6 | GPRS(2TX) | Left Edge | 10mm | \ | 31.14 | 32.00 | 0.104 | 0.13 | 0.070 | 0.08 | -0.11 |
| Body | GSM850 | 190 | 836.6 | GPRS(2TX) | Right Edge | 10mm | \ | 31.14 | 32.00 | 0.242 | 0.29 | 0.162 | 0.20 | 0.09 |
| Body | GSM850 | 190 | 836.6 | GPRS(2TX) | Bottom Edge | 10mm | \ | 31.14 | 32.00 | 0.310 | 0.38 | 0.158 | 0.19 | 0.02 |
| Body | GSM850 | 251 | 848.8 | EGPRS(2TX) | Rear | 10mm | \ | 31.13 | 32.00 | 0.560 | 0.68 | 0.301 | 0.37 | 0.11 |
| Body | GSM850 | 251 | 848.8 | GPRS(2TX) | Rear | 10mm | EUT2 | 31.20 | 32.00 | 0.568 | 0.68 | 0.301 | 0.36 | -0.07 |
| Head | GSM1900 | 661 | 1880 | / | Left Cheek | 0mm | \ | 21.89 | 22.50 | 0.162 | 0.19 | 0.099 | 0.11 | -0.06 |
| Head | GSM1900 | 661 | 1880 | / | Left Tilt | 0mm | \ | 21.89 | 22.50 | 0.196 | 0.23 | 0.113 | 0.13 | -0.04 |
| Head | GSM1900 | 661 | 1880 | / | Right Cheek | 0mm | \ | 21.89 | 22.50 | 0.213 | 0.25 | 0.127 | 0.15 | -0.10 |
| Head | GSM1900 | 661 | 1880 | / | Right Tilt | 0mm | \ | 21.89 | 22.50 | 0.247 | 0.28 | 0.131 | 0.15 | -0.01 |
| Head | GSM1900 | 810 | 1909.8 | / | Right Tilt | 0mm | Fig.A3 | 21.91 | 22.50 | 0.294 | 0.34 | 0.150 | 0.17 | 0.01 |
| Head | GSM1900 | 512 | 1850.2 | / | Right Tilt | 0mm | \ | 21.87 | 22.50 | 0.268 | 0.31 | 0.141 | 0.16 | 0.18 |
| Head | GSM1900 | 810 | 1909.8 | / | Right Tilt | 0mm | EUT2 | 21.91 | 22.50 | 0.277 | 0.32 | 0.143 | 0.16 | 0.19 |
| Body | GSM1900 | 661 | 1880 | GPRS(1TX) | Front | 10mm | \ | 21.92 | 22.50 | 0.066 | 0.08 | 0.039 | 0.04 | -0.02 |
| Body | GSM1900 | 661 | 1880 | GPRS(1TX) | Rear | 10mm | \ | 21.92 | 22.50 | 0.075 | 0.09 | 0.043 | 0.05 | -0.13 |
| Body | GSM1900 | 661 | 1880 | GPRS(1TX) | Left Edge | 10mm | \ | 21.92 | 22.50 | 0.033 | 0.04 | 0.019 | 0.02 | 0.14 |
| Body | GSM1900 | 810 | 1909.8 | GPRS(1TX) | Top Edge | 10mm | \ | 21.92 | 22.50 | 0.111 | 0.13 | 0.058 | 0.07 | -0.18 |
| Body | GSM1900 | 661 | 1880 | GPRS(1TX) | Top Edge | 10mm | \ | 21.92 | 22.50 | 0.097 | 0.11 | 0.051 | 0.06 | -0.02 |
| Body | GSM1900 | 512 | 1850.2 | GPRS(1TX) | Top Edge | 10mm | \ | 21.91 | 22.50 | 0.102 | 0.12 | 0.055 | 0.06 | 0.02 |
| Body | GSM1900 | 810 | 1909.8 | EGPRS(1TX) | Top Edge | 10mm | \ | 21.85 | 22.50 | 0.106 | 0.12 | 0.058 | 0.07 | -0.08 |
| Body | GSM1900 | 661 | 1880 | GPRS(2TX) | Front | 17mm | \ | 28.00 | 29.00 | 0.246 | 0.31 | 0.142 | 0.18 | -0.07 |
| Body | GSM1900 | 810 | 1909.8 | GPRS(2TX) | Front | 17mm | Fig.A4 | 28.05 | 29.00 | 0.320 | 0.40 | 0.188 | 0.23 | -0.08 |
| Body | GSM1900 | 512 | 1850.2 | GPRS(2TX) | Front | 17mm | \ | 27.89 | 29.00 | 0.238 | 0.31 | 0.138 | 0.18 | 0.14 |
| Body | GSM1900 | 661 | 1880 | GPRS(2TX) | Rear | 21mm | \ | 28.00 | 29.00 | 0.199 | 0.25 | 0.115 | 0.14 | 0.20 |
| Body | GSM1900 | 661 | 1880 | GPRS(2TX) | Left Edge | 17mm | \ | 28.00 | 29.00 | 0.137 | 0.17 | 0.082 | 0.10 | 0.16 |
| Body | GSM1900 | 661 | 1880 | GPRS(2TX) | Top Edge | 21mm | \ | 28.00 | 29.00 | 0.222 | 0.28 | 0.128 | 0.16 | 0.08 |
| Body | GSM1900 | 810 | 1909.8 | EGPRS(2TX) | Front | 17mm | \ | 28.05 | 29.00 | 0.317 | 0.39 | 0.186 | 0.23 | 0.20 |
| Body | GSM1900 | 810 | 1909.8 | GPRS(2TX) | Front | 17mm | EUT2 | 28.05 | 29.00 | 0.320 | 0.40 | 0.188 | 0.23 | 0.09 |

| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | WCDMA1900 | 9400 | 1880 | RMC | Left Cheek | 0mm | \ | 16.26 | 17.00 | 0.510 | 0.60 | 0.281 | 0.33 | -0.02 |
| Head | WCDMA1900 | 9400 | 1880 | RMC | Left Tilt | 0mm | \ | 16.26 | 17.00 | 0.625 | 0.74 | 0.330 | 0.39 | -0.12 |
| Head | WCDMA1900 | 9400 | 1880 | RMC | Right Cheek | 0mm | \ | 16.26 | 17.00 | 0.607 | 0.72 | 0.348 | 0.41 | 0.02 |
| Head | WCDMA1900 | 9400 | 1880 | RMC | Right Tilt | 0mm | \ | 16.26 | 17.00 | 0.792 | 0.94 | 0.381 | 0.45 | -0.02 |
| Head | WCDMA1900 | 9262 | 1852.4 | RMC | Right Tilt | 0mm | \ | 16.21 | 17.00 | 0.729 | 0.87 | 0.350 | 0.42 | -0.09 |
| Head | WCDMA1900 | 9538 | 1907.6 | RMC | Right Tilt | 0mm | Fig.A5 | 16.22 | 17.00 | 0.803 | 0.96 | 0.381 | 0.46 | -0.02 |
| Head | WCDMA1900 | 9538 | 1907.6 | RMC | Right Tilt | 0mm | EUT2 | 16.22 | 17.00 | 0.800 | 0.96 | 0.374 | 0.45 | -0.18 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Front | 10mm | \ | 16.26 | 17.00 | 0.170 | 0.20 | 0.102 | 0.12 | -0.07 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Rear | 10mm | \ | 16.26 | 17.00 | 0.210 | 0.25 | 0.121 | 0.14 | -0.09 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Left Edge | 10mm | \ | 16.26 | 17.00 | 0.078 | 0.09 | 0.048 | 0.06 | 0.10 |
| Body | WCDMA1900 | 9538 | 1907.6 | RMC | Top Edge | 10mm | \ | 16.22 | 17.00 | 0.316 | 0.38 | 0.166 | 0.20 | 0.08 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Top Edge | 10mm | \ | 16.26 | 17.00 | 0.286 | 0.34 | 0.152 | 0.18 | 0.13 |
| Body | WCDMA1900 | 9262 | 1852.4 | RMC | Top Edge | 10mm | | 16.21 | 17.00 | 0.271 | 0.32 | 0.144 | 0.17 | -0.04 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Front | 17mm | Fig.A6 | 24.22 | 25.00 | 0.487 | 0.58 | 0.298 | 0.36 | -0.03 |
| Body | WCDMA1900 | 9538 | 1907.6 | RMC | Front | 17mm | | 24.29 | 25.00 | 0.474 | 0.56 | 0.291 | 0.34 | 0.04 |
| Body | WCDMA1900 | 9262 | 1852.4 | RMC | Front | 17mm | | 24.15 | 25.00 | 0.451 | 0.55 | 0.272 | 0.33 | 0.09 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Rear | 21mm | \ | 24.22 | 25.00 | 0.389 | 0.47 | 0.235 | 0.28 | 0.08 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Left Edge | 17mm | \ | 24.22 | 25.00 | 0.264 | 0.32 | 0.166 | 0.20 | 0.04 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Top Edge | 21mm | \ | 24.22 | 25.00 | 0.461 | 0.55 | 0.278 | 0.33 | 0.14 |
| Body | WCDMA1900 | 9400 | 1880 | RMC | Front | 17mm | EUT2 | 24.22 | 25.00 | 0.475 | 0.57 | 0.280 | 0.34 | -0.11 |
| Head | WCDMA1700 | 1412 | 1732.4 | RMC | Left Cheek | 0mm | \ | 16.15 | 17.00 | 0.389 | 0.47 | 0.203 | 0.25 | 0.12 |
| Head | WCDMA1700 | 1412 | 1732.4 | RMC | Left Tilt | 0mm | \ | 16.15 | 17.00 | 0.457 | 0.56 | 0.227 | 0.28 | 0.09 |
| Head | WCDMA1700 | 1412 | 1732.4 | RMC | Right Cheek | 0mm | \ | 16.15 | 17.00 | 0.559 | 0.68 | 0.299 | 0.36 | -0.10 |
| Head | WCDMA1700 | 1312 | 1712.4 | RMC | Right Cheek | 0mm | \ | 16.04 | 17.00 | 0.505 | 0.63 | 0.272 | 0.34 | -0.06 |
| Head | WCDMA1700 | 1513 | 1752.6 | RMC | Right Cheek | 0mm | Fig.A7 | 16.09 | 17.00 | 0.572 | 0.71 | 0.308 | 0.38 | -0.18 |
| Head | WCDMA1700 | 1412 | 1732.4 | RMC | Right Tilt | 0mm | \ | 16.15 | 17.00 | 0.518 | 0.63 | 0.247 | 0.30 | -0.09 |
| Head | WCDMA1700 | 1513 | 1752.6 | RMC | Right Cheek | 0mm | EUT2 | 16.09 | 17.00 | 0.572 | 0.71 | 0.308 | 0.38 | 0.06 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Front | 10mm | \ | 16.15 | 17.00 | 0.135 | 0.16 | 0.083 | 0.10 | -0.05 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Rear | 10mm | \ | 16.15 | 17.00 | 0.137 | 0.17 | 0.082 | 0.10 | 0.19 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Left Edge | 10mm | \ | 16.15 | 17.00 | 0.058 | 0.07 | 0.035 | 0.04 | 0.04 |
| Body | WCDMA1700 | 1513 | 1752.6 | RMC | Top Edge | 10mm | \ | 16.09 | 17.00 | 0.169 | 0.21 | 0.092 | 0.11 | -0.14 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Top Edge | 10mm | | 16.15 | 17.00 | 0.172 | 0.21 | 0.094 | 0.11 | -0.09 |
| Body | WCDMA1700 | 1312 | 1712.4 | RMC | Top Edge | 10mm | \ | 16.04 | 17.00 | 0.151 | 0.19 | 0.083 | 0.10 | 0.12 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Front | 17mm | Fig.A8 | 24.02 | 25.00 | 0.311 | 0.39 | 0.199 | 0.25 | -0.17 |
| Body | WCDMA1700 | 1513 | 1752.6 | RMC | Rear | 21mm | \ | 24.06 | 25.00 | 0.263 | 0.33 | 0.151 | 0.19 | 0.03 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Rear | 21mm | \ | 24.02 | 25.00 | 0.241 | 0.30 | 0.140 | 0.17 | -0.08 |
| Body | WCDMA1700 | 1312 | 1712.4 | RMC | Rear | 21mm | \ | 24.12 | 25.00 | 0.209 | 0.26 | 0.122 | 0.15 | 0.20 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Left Edge | 17mm | \ | 24.02 | 25.00 | 0.204 | 0.26 | 0.117 | 0.15 | 0.00 |
| Body | WCDMA1700 | 1513 | 1752.6 | RMC | Top Edge | 21mm | \ | 24.06 | 25.00 | 0.296 | 0.37 | 0.175 | 0.22 | -0.14 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Top Edge | 21mm | | 24.02 | 25.00 | 0.284 | 0.36 | 0.167 | 0.21 | -0.03 |
| Body | WCDMA1700 | 1312 | 1712.4 | RMC | Top Edge | 21mm | \ | 24.12 | 25.00 | 0.249 | 0.30 | 0.145 | 0.18 | 0.09 |
| Body | WCDMA1700 | 1412 | 1732.5 | RMC | Front | 17mm | EUT2 | 24.02 | 25.00 | 0.278 | 0.35 | 0.171 | 0.21 | -0.16 |
| Head | WCDMA 850 | 4183 | 836.6 | RMC | Left Cheek | 0mm | \ | 24.58 | 25.00 | 0.369 | 0.41 | 0.257 | 0.28 | -0.09 |
| Head | WCDMA 850 | 4183 | 836.6 | RMC | Left Tilt | 0mm | \ | 24.58 | 25.00 | 0.205 | 0.23 | 0.157 | 0.17 | 0.20 |
| Head | WCDMA 850 | 4183 | 836.6 | RMC | Right Cheek | 0mm | | 24.58 | 25.00 | 0.371 | 0.41 | 0.284 | 0.31 | -0.16 |
| Head | WCDMA 850 | 4132 | 826.4 | RMC | Right Cheek | 0mm | \ | 24.46 | 25.00 | 0.288 | 0.33 | 0.222 | 0.25 | 0.03 |
| Head | WCDMA 850 | 4233 | 846.6 | RMC | Right Cheek | 0mm | Fig.A9 | 24.57 | 25.00 | 0.384 | 0.42 | 0.294 | 0.32 | 0.08 |
| Head | WCDMA 850 | 4183 | 836.6 | RMC | Right Tilt | 0mm | \ | 24.58 | 25.00 | 0.261 | 0.29 | 0.204 | 0.22 | 0.14 |
| Head | WCDMA 850 | 4233 | 846.6 | RMC | Right Cheek | 0mm | EUT2 | 24.57 | 25.00 | 0.365 | 0.40 | 0.290 | 0.32 | -0.01 |
| Body | WCDMA 850 | 4183 | 836.6 | RMC | Front | 10mm | \ | 24.58 | 25.00 | 0.331 | 0.37 | 0.193 | 0.21 | 0.17 |
| Body | WCDMA 850 | 4233 | 846.6 | RMC | Rear | 10mm | Fig.A10 | 24.57 | 25.00 | 0.563 | 0.62 | 0.317 | 0.35 | -0.03 |
| Body | WCDMA 850 | 4183 | 836.6 | RMC | Rear | 10mm | | 24.58 | 25.00 | 0.489 | 0.54 | 0.280 | 0.31 | 0.07 |
| Body | WCDMA 850 | 4132 | 826.4 | RMC | Rear | 10mm | \ | 24.46 | 25.00 | 0.404 | 0.46 | 0.232 | 0.26 | 0.09 |
| Body | WCDMA 850 | 4183 | 836.6 | RMC | Left Edge | 10mm | \ | 24.58 | 25.00 | 0.142 | 0.16 | 0.094 | 0.10 | 0.10 |
| Body | WCDMA 850 | 4183 | 836.6 | RMC | Right Edge | 10mm | \ | 24.58 | 25.00 | 0.290 | 0.32 | 0.191 | 0.21 | -0.01 |
| Body | WCDMA 850 | 4183 | 836.6 | RMC | Bottom Edge | 10mm | \ | 24.58 | 25.00 | 0.319 | 0.35 | 0.165 | 0.18 | -0.17 |
| Body | WCDMA 850 | 4233 | 846.6 | RMC | Rear | 10mm | EUT2 | 24.57 | 25.00 | 0.540 | 0.60 | 0.271 | 0.30 | -0.04 |

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| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | LTE Band7 | 21350 | 2560 | 1RB-High | Left Cheek | 0mm | \ | 14.28 | 15.00 | 0.224 | 0.26 | 0.112 | 0.13 | 0.14 |
| Head | LTE Band7 | 21350 | 2560 | 1RB-High | Left Tilt | 0mm | \ | 14.28 | 15.00 | 0.071 | 0.08 | 0.036 | 0.04 | 0.12 |
| Head | LTE Band7 | 21350 | 2560 | 1RB-High | Right Cheek | 0mm | Fig.A11 | 14.28 | 15.00 | 0.514 | 0.61 | 0.220 | 0.26 | 0.08 |
| Head | LTE Band7 | 21350 | 2560 | 1RB-High | Right Tilt | 0mm | \ | 14.28 | 15.00 | 0.137 | 0.16 | 0.066 | 0.08 | 0.10 |
| Head | LTE Band7 | 21350 | 2560 | 50RB-Low | Left Cheek | 0mm | \ | 13.39 | 14.00 | 0.182 | 0.21 | 0.091 | 0.10 | 0.16 |
| Head | LTE Band7 | 21350 | 2560 | 50RB-Low | Left Tilt | 0mm | \ | 13.39 | 14.00 | 0.057 | 0.07 | 0.029 | 0.03 | 0.13 |
| Head | LTE Band7 | 21350 | 2560 | 50RB-Low | Right Cheek | 0mm | \ | 13.39 | 14.00 | 0.471 | 0.54 | 0.198 | 0.23 | 0.11 |
| Head | LTE Band7 | 21350 | 2560 | 50RB-Low | Right Tilt | 0mm | \ | 13.39 | 14.00 | 0.101 | 0.12 | 0.051 | 0.06 | 0.13 |
| Head | LTE Band7 | 21350 | 2560 | 1RB-High | Right Cheek | 0mm | EUT2 | 14.28 | 15.00 | 0.472 | 0.56 | 0.212 | 0.25 | -0.06 |
| Body | LTE Band7 | 21350 | 2560 | 1RB-High | Front | 10mm | \ | 14.28 | 15.00 | 0.138 | 0.16 | 0.067 | 0.08 | 0.20 |
| Body | LTE Band7 | 21350 | 2560 | 1RB-High | Rear | 10mm | \ | 14.28 | 15.00 | 0.210 | 0.25 | 0.098 | 0.12 | 0.00 |
| Body | LTE Band7 | 21350 | 2560 | 1RB-High | Left Edge | 10mm |  | 14.28 | 15.00 | 0.288 | 0.34 | 0.128 | 0.15 | -0.03 |
| Body | LTE Band7 | 21350 | 2560 | 50RB-Low | Front | 10mm | \ | 13.39 | 14.00 | 0.114 | 0.13 | 0.055 | 0.06 | -0.05 |
| Body | LTE Band7 | 21350 | 2560 | 50RB-Low | Rear | 10mm | \ | 13.39 | 14.00 | 0.158 | 0.18 | 0.076 | 0.09 | -0.16 |
| Body | LTE Band7 | 21350 | 2560 | 50RB-Low | Left Edge | 10mm | \ | 13.39 | 14.00 | 0.231 | 0.27 | 0.102 | 0.12 | -0.01 |
| Body | LTE Band7 | 21350 | 2560 | 1RB-Middle | Front | 17mm | \ | 23.09 | 24.00 | 0.429 | 0.53 | 0.241 | 0.30 | -0.15 |
| Body | LTE Band7 | 21100 | 2535 | 1RB-Middle | Rear | 21mm | \ | 23.09 | 24.00 | 0.446 | 0.55 | 0.250 | 0.31 | 0.20 |
| Body | LTE Band7 | 21350 | 2560 | 1RB-Middle | Rear | 21mm | \ | 23.09 | 24.00 | 0.411 | 0.51 | 0.231 | 0.28 | 0.18 |
| Body | LTE Band7 | 20850 | 2510 | 1RB-Middle | Rear | 21mm | \ | 23.09 | 24.00 | 0.408 | 0.50 | 0.226 | 0.28 | -0.19 |
| Body | LTE Band7 | 21350 | 2560 | 1RB-Middle | Left Edge | 17mm | \ | 23.09 | 24.00 | 0.818 | 1.01 | 0.424 | 0.52 | 0.19 |
| Body | LTE Band7 | 20850 | 2510 | 1RB-Middle | Left Edge | 17mm |  | 23.09 | 24.00 | 0.872 | 1.08 | 0.451 | 0.56 | 0.02 |
| Body | LTE Band7 | 21100 | 2535 | 1RB-Middle | Left Edge | 17mm | Fig.A12 | 23.09 | 24.00 | 0.886 | 1.09 | 0.458 | 0.56 | -0.07 |
| Body | LTE Band7 | 21350 | 2560 | 50RB-High | Front | 17mm | \ | 22.24 | 23.00 | 0.341 | 0.41 | 0.193 | 0.23 | -0.07 |
| Body | LTE Band7 | 21350 | 2560 | 50RB-High | Rear | 21mm | \ | 22.24 | 23.00 | 0.335 | 0.40 | 0.184 | 0.22 | 0.12 |
| Body | LTE Band7 | 21350 | 2560 | 50RB-High | Left Edge | 17mm | \ | 22.24 | 23.00 | 0.665 | 0.79 | 0.344 | 0.41 | 0.12 |
| Body | LTE Band7 | 21100 | 2535 | 1RB-Middle | Left Edge | 17mm | EUT2 | 23.09 | 24.00 | 0.865 | 1.07 | 0.449 | 0.55 | -0.19 |
| Head | LTE Band12 | 23130 | 711 | 1RB-Low | Left Cheek | 0mm | Fig.A13 | 21.46 | 22.00 | 0.087 | 0.10 | 0.067 | 0.08 | -0.04 |
| Head | LTE Band12 | 23130 | 711 | 1RB-Low | Left Tilt | 0mm | \ | 21.46 | 22.00 | 0.032 | 0.04 | 0.019 | 0.02 | -0.20 |
| Head | LTE Band12 | 23130 | 711 | 1RB-Low | Right Cheek | 0mm | \ | 21.46 | 22.00 | 0.080 | 0.09 | 0.069 | 0.08 | 0.12 |
| Head | LTE Band12 | 23130 | 711 | 1RB-Low | Right Tilt | 0mm | \ | 21.46 | 22.00 | 0.057 | 0.06 | 0.047 | 0.05 | 0.09 |
| Head | LTE Band12 | 23130 | 711 | 25RB-Low | Left Cheek | 0mm | \ | 20.40 | 21.00 | 0.057 | 0.07 | 0.043 | 0.05 | -0.09 |
| Head | LTE Band12 | 23130 | 711 | 25RB-Low | Left Tilt | 0mm | \ | 20.40 | 21.00 | 0.028 | 0.03 | 0.017 | 0.02 | 0.18 |
| Head | LTE Band12 | 23130 | 711 | 25RB-Low | Right Cheek | 0mm | \ | 20.40 | 21.00 | 0.057 | 0.07 | 0.047 | 0.05 | -0.13 |
| Head | LTE Band12 | 23130 | 711 | 25RB-Low | Right Tilt | 0mm | \ | 20.40 | 21.00 | 0.025 | 0.03 | 0.016 | 0.02 | -0.03 |
| Head | LTE Band12 | 23130 | 711 | 1RB-Low | Left Cheek | 0mm | EUT2 | 21.46 | 22.00 | 0.074 | 0.08 | 0.054 | 0.06 | 0.00 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Front | 10mm | \ | 21.46 | 22.00 | 0.132 | 0.15 | 0.101 | 0.11 | 0.11 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Rear | 10mm | \ | 21.46 | 22.00 | 0.184 | 0.21 | 0.142 | 0.16 | 0.19 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Left Edge | 10mm | \ | 21.46 | 22.00 | 0.115 | 0.13 | 0.081 | 0.09 | -0.15 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Right Edge | 10mm |  | 21.46 | 22.00 | 0.188 | 0.21 | 0.131 | 0.15 | 0.10 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Bottom Edge | 10mm | \ | 21.46 | 22.00 | 0.101 | 0.11 | 0.050 | 0.06 | -0.02 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Front | 10mm | \ | 20.40 | 21.00 | 0.101 | 0.12 | 0.075 | 0.09 | 0.14 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Rear | 10mm | \ | 20.40 | 21.00 | 0.144 | 0.17 | 0.110 | 0.13 | 0.13 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Left Edge | 10mm | \ | 20.40 | 21.00 | 0.090 | 0.10 | 0.062 | 0.07 | -0.13 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Right Edge | 10mm | \ | 20.40 | 21.00 | 0.155 | 0.18 | 0.109 | 0.12 | -0.07 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Bottom Edge | 10mm | \ | 20.40 | 21.00 | 0.088 | 0.10 | 0.046 | 0.05 | 0.20 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Front | 17mm | \ | 24.46 | 25.00 | 0.322 | 0.36 | 0.246 | 0.28 | 0.04 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Rear | 21mm | \ | 24.46 | 25.00 | 0.345 | 0.39 | 0.263 | 0.30 | -0.02 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Left Edge | 17mm | \ | 24.46 | 25.00 | 0.171 | 0.19 | 0.120 | 0.14 | 0.13 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Right Edge | 10mm | Fig.A14 | 24.46 | 25.00 | 0.452 | 0.51 | 0.317 | 0.36 | 0.10 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Bottom Edge | 21mm | \ | 24.46 | 25.00 | 0.055 | 0.06 | 0.035 | 0.04 | -0.15 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Front | 17mm | \ | 23.37 | 24.00 | 0.265 | 0.31 | 0.201 | 0.23 | 0.17 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Rear | 21mm | \ | 23.37 | 24.00 | 0.279 | 0.32 | 0.212 | 0.25 | 0.18 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Left Edge | 17mm | \ | 23.37 | 24.00 | 0.135 | 0.16 | 0.097 | 0.11 | -0.03 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Right Edge | 10mm | \ | 23.37 | 24.00 | 0.370 | 0.43 | 0.259 | 0.30 | -0.12 |
| Body | LTE Band12 | 23130 | 711 | 25RB-Low | Bottom Edge | 21mm | \ | 23.37 | 24.00 | 0.054 | 0.06 | 0.034 | 0.04 | -0.12 |
| Body | LTE Band12 | 23130 | 711 | 1RB-Low | Right Edge | 10mm | EUT2 | 24.46 | 25.00 | 0.430 | 0.49 | 0.301 | 0.34 | -0.19 |

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| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | LTE Band13 | 23230 | 782 | 1RB-Middle | Left Cheek | 0mm | Fig.A15 | 21.34 | 22.00 | 0.109 | 0.13 | 0.083 | 0.10 | 0.13 |
| Head | LTE Band13 | 23230 | 782 | 1RB-Middle | Left Tilt | 0mm | \ | 21.34 | 22.00 | 0.064 | 0.07 | 0.051 | 0.06 | 0.00 |
| Head | LTE Band13 | 23230 | 782 | 1RB-Middle | Right Cheek | 0mm | \ | 21.34 | 22.00 | 0.106 | 0.12 | 0.085 | 0.10 | -0.12 |
| Head | LTE Band13 | 23230 | 782 | 1RB-Middle | Right Tilt | 0mm | \ | 21.34 | 22.00 | 0.071 | 0.08 | 0.058 | 0.07 | 0.14 |
| Head | LTE Band13 | 23230 | 782 | 25RB-Middle | Left Cheek | 0mm | \ | 20.42 | 21.00 | 0.077 | 0.09 | 0.058 | 0.07 | -0.11 |
| Head | LTE Band13 | 23230 | 782 | 25RB-Middle | Left Tilt | 0mm | \ | 20.42 | 21.00 | 0.047 | 0.05 | 0.037 | 0.04 | 0.01 |
| Head | LTE Band13 | 23230 | 782 | 25RB-Middle | Right Cheek | 0mm | \ | 20.42 | 21.00 | 0.082 | 0.09 | 0.066 | 0.08 | 0.17 |
| Head | LTE Band13 | 23230 | 782 | 25RB-Middle | Right Tilt | 0mm | \ | 20.42 | 21.00 | 0.054 | 0.06 | 0.045 | 0.05 | 0.17 |
| Head | LTE Band13 | 23230 | 782 | 1RB-Middle | Left Cheek | 0mm | EUT2 | 21.34 | 22.00 | 0.091 | 0.11 | 0.074 | 0.09 | 0.03 |
| Body | LTE Band13 | 23230 | 782 | 1RB-High | Front | 10mm | \ | 21.34 | 22.00 | 0.106 | 0.12 | 0.083 | 0.10 | -0.14 |
| Body | LTE Band13 | 23230 | 782 | 1RB-High | Rear | 10mm | | 21.34 | 22.00 | 0.159 | 0.19 | 0.120 | 0.14 | 0.16 |
| Body | LTE Band13 | 23230 | 782 | 1RB-High | Left Edge | 10mm | \ | 21.34 | 22.00 | 0.089 | 0.10 | 0.075 | 0.09 | -0.13 |
| Body | LTE Band13 | 23230 | 782 | 1RB-High | Right Edge | 10mm | \ | 21.34 | 22.00 | 0.153 | 0.18 | 0.129 | 0.15 | -0.07 |
| Body | LTE Band13 | 23230 | 782 | 1RB-High | Bottom Edge | 10mm | \ | 21.34 | 22.00 | 0.126 | 0.15 | 0.077 | 0.09 | 0.11 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Front | 10mm | \ | 20.42 | 21.00 | 0.080 | 0.09 | 0.074 | 0.08 | -0.04 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Rear | 10mm | \ | 20.42 | 21.00 | 0.124 | 0.14 | 0.107 | 0.12 | -0.14 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Left Edge | 10mm | \ | 20.42 | 21.00 | 0.068 | 0.08 | 0.057 | 0.07 | 0.19 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Right Edge | 10mm | \ | 20.42 | 21.00 | 0.116 | 0.13 | 0.100 | 0.11 | -0.09 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Bottom Edge | 10mm | \ | 20.42 | 21.00 | 0.090 | 0.10 | 0.055 | 0.06 | -0.05 |
| Body | LTE Band13 | 23230 | 782 | 1RB-Middle | Front | 17mm | \ | 24.37 | 25.00 | 0.276 | 0.32 | 0.214 | 0.25 | -0.09 |
| Body | LTE Band13 | 23230 | 782 | 1RB-Middle | Rear | 21mm | | 24.37 | 25.00 | 0.280 | 0.32 | 0.214 | 0.25 | 0.11 |
| Body | LTE Band13 | 23230 | 782 | 1RB-Middle | Left Edge | 17mm | \ | 24.37 | 25.00 | 0.127 | 0.15 | 0.091 | 0.11 | -0.12 |
| Body | LTE Band13 | 23230 | 782 | 1RB-Middle | Right Edge | 10mm | Fig.A16 | 24.37 | 25.00 | 0.391 | 0.45 | 0.273 | 0.32 | -0.17 |
| Body | LTE Band13 | 23230 | 782 | 1RB-Middle | Bottom Edge | 21mm | \ | 24.37 | 25.00 | 0.075 | 0.09 | 0.048 | 0.06 | 0.00 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Front | 17mm | \ | 23.48 | 24.00 | 0.236 | 0.27 | 0.176 | 0.20 | -0.20 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Rear | 21mm | \ | 23.48 | 24.00 | 0.228 | 0.26 | 0.174 | 0.20 | 0.02 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Left Edge | 17mm | \ | 23.48 | 24.00 | 0.105 | 0.12 | 0.076 | 0.09 | -0.13 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Right Edge | 10mm | \ | 23.48 | 24.00 | 0.312 | 0.35 | 0.219 | 0.25 | 0.19 |
| Body | LTE Band13 | 23230 | 782 | 25RB-Middle | Bottom Edge | 21mm | \ | 23.48 | 24.00 | 0.058 | 0.07 | 0.037 | 0.04 | -0.10 |
| Body | LTE Band13 | 23230 | 782 | 1RB-Middle | Right Edge | 10mm | EUT2 | 24.37 | 25.00 | 0.380 | 0.44 | 0.260 | 0.30 | -0.05 |
| Head | LTE Band25 | 26590 | 1905 | 1RB-Low | Left Cheek | 0mm | | 16.48 | 17.00 | 0.500 | 0.56 | 0.262 | 0.30 | 0.13 |
| Head | LTE Band25 | 26590 | 1905 | 1RB-Low | Left Tilt | 0mm | \ | 16.48 | 17.00 | 0.623 | 0.70 | 0.312 | 0.35 | -0.09 |
| Head | LTE Band25 | 26590 | 1905 | 1RB-Low | Right Cheek | 0mm | \ | 16.48 | 17.00 | 0.616 | 0.69 | 0.321 | 0.36 | -0.19 |
| Head | LTE Band25 | 26590 | 1905 | 1RB-Low | Right Tilt | 0mm | Fig.A17 | 16.48 | 17.00 | 0.685 | 0.77 | 0.349 | 0.39 | -0.20 |
| Head | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Left Cheek | 0mm | \ | 15.35 | 16.00 | 0.386 | 0.45 | 0.205 | 0.24 | -0.12 |
| Head | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Left Tilt | 0mm | \ | 15.35 | 16.00 | 0.465 | 0.54 | 0.234 | 0.27 | -0.13 |
| Head | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Right Cheek | 0mm | \ | 15.35 | 16.00 | 0.461 | 0.54 | 0.258 | 0.30 | 0.00 |
| Head | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Right Tilt | 0mm | \ | 15.35 | 16.00 | 0.623 | 0.72 | 0.286 | 0.33 | 0.15 |
| Head | LTE Band25 | 26590 | 1905 | 1RB-Low | Right Tilt | 0mm | EUT2 | 16.48 | 17.00 | 0.666 | 0.75 | 0.320 | 0.36 | 0.03 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Low | Front | 10mm | \ | 16.48 | 17.00 | 0.165 | 0.19 | 0.096 | 0.11 | -0.20 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Low | Rear | 10mm | | 16.48 | 17.00 | 0.201 | 0.23 | 0.112 | 0.13 | -0.17 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Low | Left Edge | 10mm | \ | 16.48 | 17.00 | 0.068 | 0.08 | 0.040 | 0.05 | -0.17 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Low | Top Edge | 10mm | | 16.48 | 17.00 | 0.278 | 0.31 | 0.147 | 0.17 | -0.18 |
| Body | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Front | 10mm | \ | 15.35 | 16.00 | 0.141 | 0.16 | 0.083 | 0.10 | 0.10 |
| Body | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Rear | 10mm | \ | 15.35 | 16.00 | 0.164 | 0.19 | 0.093 | 0.11 | -0.17 |
| Body | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Left Edge | 10mm | \ | 15.35 | 16.00 | 0.059 | 0.07 | 0.036 | 0.04 | 0.19 |
| Body | LTE Band25 | 26365 | 1882.5 | 50RB-Middle | Top Edge | 10mm | \ | 15.35 | 16.00 | 0.216 | 0.25 | 0.112 | 0.13 | -0.11 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Middle | Front | 17mm | Fig.A18 | 24.31 | 25.00 | 0.462 | 0.54 | 0.282 | 0.33 | -0.19 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Middle | Rear | 21mm | | 24.31 | 25.00 | 0.387 | 0.45 | 0.237 | 0.28 | -0.18 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Middle | Left Edge | 17mm | \ | 24.31 | 25.00 | 0.246 | 0.29 | 0.157 | 0.18 | -0.06 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Middle | Top Edge | 21mm | \ | 24.31 | 25.00 | 0.419 | 0.49 | 0.252 | 0.30 | 0.00 |
| Body | LTE Band25 | 26140 | 1860 | 50RB-Middle | Front | 17mm | \ | 23.51 | 24.00 | 0.387 | 0.43 | 0.234 | 0.26 | 0.04 |
| Body | LTE Band25 | 26140 | 1860 | 50RB-Middle | Rear | 21mm | \ | 23.51 | 24.00 | 0.307 | 0.34 | 0.187 | 0.21 | -0.10 |
| Body | LTE Band25 | 26140 | 1860 | 50RB-Middle | Left Edge | 17mm | \ | 23.51 | 24.00 | 0.198 | 0.22 | 0.124 | 0.14 | -0.06 |
| Body | LTE Band25 | 26140 | 1860 | 50RB-Middle | Top Edge | 21mm | \ | 23.51 | 24.00 | 0.329 | 0.37 | 0.199 | 0.22 | -0.19 |
| Body | LTE Band25 | 26590 | 1905 | 1RB-Middle | Front | 17mm | EUT2 | 24.31 | 25.00 | 0.442 | 0.52 | 0.269 | 0.32 | 0.05 |
| Head | LTE Band26 | 26775 | 822.5 | 1RB-Low | Left Cheek | 0mm | \ | 23.36 | 25.00 | 0.104 | 0.15 | 0.078 | 0.11 | -0.16 |
| Head | LTE Band26 | 26775 | 822.5 | 1RB-Low | Left Tilt | 0mm | \ | 23.36 | 25.00 | 0.055 | 0.08 | 0.043 | 0.06 | 0.20 |
| Head | LTE Band26 | 26775 | 822.5 | 1RB-Low | Right Cheek | 0mm | Fig.A19 | 23.36 | 25.00 | 0.111 | 0.16 | 0.085 | 0.12 | -0.12 |
| Head | LTE Band26 | 26775 | 822.5 | 1RB-Low | Right Tilt | 0mm | \ | 23.36 | 25.00 | 0.059 | 0.09 | 0.046 | 0.07 | 0.19 |
| Head | LTE Band26 | 26775 | 822.5 | 36RB-Low | Left Cheek | 0mm | \ | 22.40 | 24.00 | 0.091 | 0.13 | 0.064 | 0.09 | -0.07 |
| Head | LTE Band26 | 26775 | 822.5 | 36RB-Low | Left Tilt | 0mm | \ | 22.40 | 24.00 | 0.045 | 0.06 | 0.034 | 0.05 | 0.00 |
| Head | LTE Band26 | 26775 | 822.5 | 36RB-Low | Right Cheek | 0mm | \ | 22.40 | 24.00 | 0.076 | 0.11 | 0.059 | 0.09 | 0.20 |
| Head | LTE Band26 | 26775 | 822.5 | 36RB-Low | Right Tilt | 0mm | \ | 22.40 | 24.00 | 0.048 | 0.07 | 0.037 | 0.05 | 0.01 |
| Head | LTE Band26 | 26775 | 822.5 | 1RB-Low | Right Cheek | 0mm | EUT2 | 23.36 | 25.00 | 0.095 | 0.14 | 0.075 | 0.11 | 0.09 |
| Body | LTE Band26 | 26775 | 822.5 | 1RB-Low | Front | 10mm | \ | 23.36 | 25.00 | 0.088 | 0.13 | 0.053 | 0.08 | 0.03 |
| Body | LTE Band26 | 26775 | 822.5 | 1RB-Low | Rear | 10mm | | 23.36 | 25.00 | 0.131 | 0.19 | 0.077 | 0.11 | 0.16 |
| Body | LTE Band26 | 26775 | 822.5 | 1RB-Low | Left Edge | 10mm | \ | 23.36 | 25.00 | 0.055 | 0.08 | 0.036 | 0.05 | -0.14 |
| Body | LTE Band26 | 26965 | 841.5 | 1RB-Low | Right Edge | 10mm | Fig.A20 | 23.36 | 25.00 | 0.240 | 0.35 | 0.166 | 0.24 | -0.16 |
| Body | LTE Band26 | 26775 | 822.5 | 1RB-Low | Bottom Edge | 10mm | \ | 23.36 | 25.00 | 0.081 | 0.12 | 0.039 | 0.06 | -0.16 |
| Body | LTE Band26 | 26775 | 822.5 | 36RB-Low | Front | 10mm | \ | 22.40 | 24.00 | 0.075 | 0.11 | 0.045 | 0.07 | 0.11 |
| Body | LTE Band26 | 26775 | 822.5 | 36RB-Low | Rear | 10mm | \ | 22.40 | 24.00 | 0.110 | 0.16 | 0.065 | 0.09 | -0.08 |
| Body | LTE Band26 | 26775 | 822.5 | 36RB-Low | Left Edge | 10mm | \ | 22.40 | 24.00 | 0.045 | 0.06 | 0.029 | 0.04 | -0.06 |
| Body | LTE Band26 | 26775 | 822.5 | 36RB-Low | Right Edge | 10mm | \ | 22.40 | 24.00 | 0.071 | 0.10 | 0.047 | 0.07 | -0.07 |
| Body | LTE Band26 | 26775 | 822.5 | 36RB-Low | Bottom Edge | 10mm | \ | 22.40 | 24.00 | 0.070 | 0.10 | 0.034 | 0.05 | 0.13 |
| Body | LTE Band26 | 26965 | 841.5 | 1RB-Low | Right Edge | 10mm | EUT2 | 23.36 | 25.00 | 0.221 | 0.32 | 0.149 | 0.22 | 0.01 |

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| RF Exposure Conditions | Frequency Band | 41099 | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | LTE Band66 | 41100 | 1720 | 1RB-Middle | Left Cheek | 0mm | \ | 16.38 | 17.00 | 0.278 | 0.32 | 0.174 | 0.20 | -0.18 |
| Head | LTE Band66 | 41101 | 1720 | 1RB-Middle | Left Tilt | 0mm | \ | 16.38 | 17.00 | 0.344 | 0.40 | 0.206 | 0.24 | 0.08 |
| Head | LTE Band66 | 41102 | 1720 | 1RB-Middle | Right Cheek | 0mm | | 16.38 | 17.00 | 0.374 | 0.43 | 0.233 | 0.27 | -0.12 |
| Head | LTE Band66 | 41103 | 1720 | 1RB-Middle | Right Tilt | 0mm | Fig.A25 | 16.38 | 17.00 | 0.419 | 0.48 | 0.214 | 0.25 | 0.11 |
| Head | LTE Band66 | 41104 | 1745 | 50RB-Middle | Left Cheek | 0mm | \ | 15.31 | 16.00 | 0.252 | 0.30 | 0.151 | 0.18 | -0.19 |
| Head | LTE Band66 | 41105 | 1745 | 50RB-Middle | Left Tilt | 0mm | \ | 15.31 | 16.00 | 0.321 | 0.38 | 0.184 | 0.22 | 0.00 |
| Head | LTE Band66 | 41106 | 1745 | 50RB-Middle | Right Cheek | 0mm | \ | 15.31 | 16.00 | 0.333 | 0.39 | 0.206 | 0.24 | -0.15 |
| Head | LTE Band66 | 41107 | 1745 | 50RB-Middle | Right Tilt | 0mm | \ | 15.31 | 16.00 | 0.368 | 0.43 | 0.183 | 0.21 | 0.18 |
| Head | LTE Band66 | 41108 | 1720 | 1RB-Middle | Right Tilt | 0mm | EUT2 | 16.38 | 17.00 | 0.402 | 0.46 | 0.194 | 0.22 | 0.08 |
| Body | LTE Band66 | 41109 | 1720 | 1RB-Middle | Front | 10mm | \ | 16.38 | 17.00 | 0.118 | 0.14 | 0.074 | 0.08 | -0.09 |
| Body | LTE Band66 | 41110 | 1720 | 1RB-Middle | Rear | 10mm | \ | 16.38 | 17.00 | 0.132 | 0.15 | 0.077 | 0.09 | -0.06 |
| Body | LTE Band66 | 41111 | 1720 | 1RB-Middle | Left Edge | 10mm | \ | 16.38 | 17.00 | 0.052 | 0.06 | 0.031 | 0.04 | 0.07 |
| Body | LTE Band66 | 41112 | 1720 | 1RB-Middle | Top Edge | 10mm | | 16.38 | 17.00 | 0.157 | 0.18 | 0.086 | 0.10 | -0.11 |
| Body | LTE Band66 | 41113 | 1745 | 50RB-Middle | Front | 10mm | \ | 15.31 | 16.00 | 0.110 | 0.13 | 0.068 | 0.08 | -0.14 |
| Body | LTE Band66 | 41114 | 1745 | 50RB-Middle | Rear | 10mm | \ | 15.31 | 16.00 | 0.122 | 0.14 | 0.070 | 0.08 | -0.10 |
| Body | LTE Band66 | 41115 | 1745 | 50RB-Middle | Left Edge | 10mm | \ | 15.31 | 16.00 | 0.047 | 0.05 | 0.027 | 0.03 | 0.01 |
| Body | LTE Band66 | 41116 | 1745 | 50RB-Middle | Top Edge | 10mm | \ | 15.31 | 16.00 | 0.144 | 0.17 | 0.078 | 0.09 | 0.04 |
| Body | LTE Band66 | 41117 | 1720 | 1RB-Low | Front | 17mm | Fig.A26 | 23.21 | 25.00 | 0.256 | 0.39 | 0.164 | 0.25 | 0.04 |
| Body | LTE Band66 | 41118 | 1720 | 1RB-Low | Rear | 21mm | \ | 23.21 | 25.00 | 0.177 | 0.27 | 0.113 | 0.17 | 0.13 |
| Body | LTE Band66 | 41119 | 1720 | 1RB-Low | Left Edge | 17mm | \ | 23.21 | 25.00 | 0.092 | 0.14 | 0.057 | 0.09 | 0.20 |
| Body | LTE Band66 | 41120 | 1720 | 1RB-Low | Top Edge | 21mm | \ | 23.21 | 25.00 | 0.216 | 0.33 | 0.124 | 0.19 | 0.09 |
| Body | LTE Band66 | 41121 | 1745 | 50RB-Middle | Front | 17mm | \ | 22.24 | 24.00 | 0.228 | 0.34 | 0.134 | 0.20 | -0.14 |
| Body | LTE Band66 | 41122 | 1745 | 50RB-Middle | Rear | 21mm | \ | 22.24 | 24.00 | 0.160 | 0.24 | 0.092 | 0.14 | -0.01 |
| Body | LTE Band66 | 41123 | 1745 | 50RB-Middle | Left Edge | 17mm | \ | 22.24 | 24.00 | 0.126 | 0.19 | 0.074 | 0.11 | 0.03 |
| Body | LTE Band66 | 41124 | 1745 | 50RB-Middle | Top Edge | 21mm | \ | 22.24 | 24.00 | 0.189 | 0.28 | 0.109 | 0.16 | 0.11 |
| Body | LTE Band66 | 41125 | 1720 | 1RB-Low | Front | 17mm | EUT2 | 23.21 | 25.00 | 0.251 | 0.38 | 0.157 | 0.24 | 0.03 |
| Head | LTE Band71 | 41126 | 673 | 1RB-Low | Left Cheek | 0mm | Fig.A27 | 21.19 | 22.00 | 0.089 | 0.11 | 0.069 | 0.08 | -0.11 |
| Head | LTE Band71 | 41127 | 673 | 1RB-Low | Left Tilt | 0mm | \ | 21.19 | 22.00 | 0.048 | 0.06 | 0.039 | 0.05 | 0.13 |
| Head | LTE Band71 | 41128 | 673 | 1RB-Low | Right Cheek | 0mm | \ | 21.19 | 22.00 | 0.083 | 0.10 | 0.068 | 0.08 | 0.16 |
| Head | LTE Band71 | 41129 | 673 | 1RB-Low | Right Tilt | 0mm | \ | 21.19 | 22.00 | 0.056 | 0.07 | 0.045 | 0.05 | 0.12 |
| Head | LTE Band71 | 41130 | 688 | 50RB-Middle | Left Cheek | 0mm | \ | 20.30 | 21.00 | 0.085 | 0.10 | 0.066 | 0.08 | 0.20 |
| Head | LTE Band71 | 41131 | 688 | 50RB-Middle | Left Tilt | 0mm | \ | 20.30 | 21.00 | 0.000 | 0.00 | 0.000 | 0.00 | -0.18 |
| Head | LTE Band71 | 41132 | 688 | 50RB-Middle | Right Cheek | 0mm | \ | 20.30 | 21.00 | 0.075 | 0.09 | 0.061 | 0.07 | -0.19 |
| Head | LTE Band71 | 41133 | 688 | 50RB-Middle | Right Tilt | 0mm | \ | 20.30 | 21.00 | 0.045 | 0.05 | 0.037 | 0.04 | -0.19 |
| Head | LTE Band71 | 41134 | 673 | 1RB-Low | Left Cheek | 0mm | EUT2 | 21.19 | 22.00 | 0.081 | 0.10 | 0.066 | 0.08 | 0.11 |
| Body | LTE Band71 | 41135 | 673 | 1RB-Low | Front | 10mm | \ | 21.19 | 22.00 | 0.114 | 0.14 | 0.087 | 0.10 | 0.09 |
| Body | LTE Band71 | 41136 | 673 | 1RB-Low | Rear | 10mm | | 21.19 | 22.00 | 0.158 | 0.19 | 0.122 | 0.15 | 0.00 |
| Body | LTE Band71 | 41137 | 673 | 1RB-Low | Left Edge | 10mm | \ | 21.19 | 22.00 | 0.119 | 0.14 | 0.084 | 0.10 | 0.14 |
| Body | LTE Band71 | 41138 | 673 | 1RB-Low | Right Edge | 10mm | | 21.19 | 22.00 | 0.201 | 0.24 | 0.141 | 0.17 | -0.12 |
| Body | LTE Band71 | 41139 | 673 | 1RB-Low | Bottom Edge | 10mm | \ | 21.19 | 22.00 | 0.072 | 0.09 | 0.039 | 0.05 | 0.03 |
| Body | LTE Band71 | 41140 | 688 | 50RB-Middle | Front | 10mm | \ | 20.30 | 21.00 | 0.108 | 0.13 | 0.083 | 0.10 | 0.10 |
| Body | LTE Band71 | 41141 | 688 | 50RB-Middle | Rear | 10mm | \ | 20.30 | 21.00 | 0.144 | 0.17 | 0.111 | 0.13 | 0.16 |
| Body | LTE Band71 | 41142 | 688 | 50RB-Middle | Left Edge | 10mm | \ | 20.30 | 21.00 | 0.101 | 0.12 | 0.071 | 0.08 | -0.07 |
| Body | LTE Band71 | 41143 | 688 | 50RB-Middle | Right Edge | 10mm | \ | 20.30 | 21.00 | 0.180 | 0.21 | 0.128 | 0.15 | -0.10 |
| Body | LTE Band71 | 41144 | 688 | 50RB-Middle | Bottom Edge | 10mm | \ | 20.30 | 21.00 | 0.094 | 0.11 | 0.049 | 0.06 | 0.14 |
| Body | LTE Band71 | 41145 | 688 | 1RB-Low | Front | 17mm | \ | 24.21 | 25.00 | 0.295 | 0.35 | 0.225 | 0.27 | 0.20 |
| Body | LTE Band71 | 41146 | 688 | 1RB-Low | Rear | 21mm | | 24.21 | 25.00 | 0.304 | 0.36 | 0.233 | 0.28 | -0.14 |
| Body | LTE Band71 | 41147 | 688 | 1RB-Low | Left Edge | 17mm | \ | 24.21 | 25.00 | 0.138 | 0.17 | 0.100 | 0.12 | 0.17 |
| Body | LTE Band71 | 41148 | 688 | 1RB-Low | Right Edge | 10mm | Fig.A28 | 24.21 | 25.00 | 0.462 | 0.55 | 0.325 | 0.39 | 0.09 |
| Body | LTE Band71 | 41149 | 688 | 1RB-Low | Bottom Edge | 21mm | \ | 24.21 | 25.00 | 0.062 | 0.07 | 0.038 | 0.05 | 0.10 |
| Body | LTE Band71 | 41150 | 688 | 50RB-Middle | Front | 17mm | \ | 23.28 | 24.00 | 0.230 | 0.27 | 0.176 | 0.21 | 0.13 |
| Body | LTE Band71 | 41151 | 688 | 50RB-Middle | Rear | 21mm | \ | 23.28 | 24.00 | 0.242 | 0.29 | 0.183 | 0.22 | -0.07 |
| Body | LTE Band71 | 41152 | 688 | 50RB-Middle | Left Edge | 17mm | \ | 23.28 | 24.00 | 0.138 | 0.16 | 0.099 | 0.12 | -0.17 |
| Body | LTE Band71 | 41153 | 688 | 50RB-Middle | Right Edge | 10mm | \ | 23.28 | 24.00 | 0.364 | 0.43 | 0.257 | 0.30 | 0.19 |
| Body | LTE Band71 | 41154 | 688 | 50RB-Middle | Bottom Edge | 21mm | \ | 23.28 | 24.00 | 0.056 | 0.07 | 0.034 | 0.04 | 0.11 |
| Body | LTE Band71 | 41155 | 688 | 1RB-Low | Right Edge | 10mm | EUT2 | 24.21 | 25.00 | 0.460 | 0.55 | 0.312 | 0.37 | 0.10 |

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| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Left Cheek | 0mm | \ | 24.50 | 25.00 | 0.110 | 0.12 | 0.061 | 0.07 | -0.18 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Left Tilt | 0mm | \ | 24.50 | 25.00 | 0.058 | 0.07 | 0.033 | 0.04 | 0.04 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Right Cheek | 0mm | Fig.A45 | 24.50 | 25.00 | 0.117 | 0.13 | 0.066 | 0.07 | -0.13 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Right Tilt | 0mm | \ | 24.50 | 25.00 | 0.062 | 0.07 | 0.036 | 0.04 | -0.06 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 36RB-Low | Left Cheek | 0mm | \ | 23.48 | 24.00 | 0.096 | 0.11 | 0.050 | 0.06 | 0.09 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 36RB-Low | Left Tilt | 0mm | \ | 23.48 | 24.00 | 0.047 | 0.05 | 0.026 | 0.03 | 0.19 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 36RB-Low | Right Cheek | 0mm | \ | 23.48 | 24.00 | 0.081 | 0.09 | 0.046 | 0.05 | -0.07 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 36RB-Low | Right Tilt | 0mm | \ | 23.48 | 24.00 | 0.050 | 0.06 | 0.029 | 0.03 | 0.17 |
| Head | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Right Cheek | 0mm | EUT2 | 24.50 | 25.00 | 0.100 | 0.11 | 0.058 | 0.07 | 0.16 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Front | 10mm | \ | 24.50 | 25.00 | 0.120 | 0.14 | 0.087 | 0.10 | -0.09 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Rear | 10mm |  | 24.50 | 25.00 | 0.113 | 0.13 | 0.081 | 0.09 | 0.11 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Left Edge | 10mm | \ | 24.50 | 25.00 | 0.050 | 0.06 | 0.034 | 0.04 | 0.19 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Right Edge | 10mm | Fig.A46 | 24.50 | 25.00 | 0.159 | 0.18 | 0.107 | 0.12 | -0.01 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Bottom Edge | 10mm | \ | 24.50 | 25.00 | 0.042 | 0.05 | 0.025 | 0.03 | -0.05 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 50RB-Low | Front | 10mm | \ | 23.48 | 24.00 | 0.080 | 0.09 | 0.059 | 0.07 | 0.08 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 50RB-Low | Rear | 10mm | \ | 23.48 | 24.00 | 0.074 | 0.08 | 0.055 | 0.06 | 0.04 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 50RB-Low | Left Edge | 10mm | \ | 23.48 | 24.00 | 0.035 | 0.04 | 0.025 | 0.03 | -0.10 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 50RB-Low | Right Edge | 10mm | \ | 23.48 | 24.00 | 0.106 | 0.12 | 0.071 | 0.08 | 0.18 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 50RB-Low | Bottom Edge | 10mm | \ | 23.48 | 24.00 | 0.056 | 0.06 | 0.028 | 0.03 | 0.03 |
| Body | LTE Band2 ANT0 | 18700 | 1860 | 1RB-Low | Right Edge | 10mm | EUT2 | 24.50 | 25.00 | 0.147 | 0.16 | 0.096 | 0.11 | 0.16 |
| Head | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Left Cheek | 0mm | \ | 24.49 | 25.00 | 0.205 | 0.23 | 0.101 | 0.11 | -0.06 |
| Head | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Left Tilt | 0mm | \ | 24.49 | 25.00 | 0.108 | 0.12 | 0.055 | 0.06 | -0.19 |
| Head | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Right Cheek | 0mm | Fig.A47 | 24.49 | 25.00 | 0.219 | 0.25 | 0.109 | 0.12 | -0.08 |
| Head | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Right Tilt | 0mm | \ | 24.49 | 25.00 | 0.117 | 0.13 | 0.059 | 0.07 | 0.10 |
| Head | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Left Cheek | 0mm | \ | 23.62 | 24.00 | 0.179 | 0.20 | 0.082 | 0.09 | 0.07 |
| Head | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Left Tilt | 0mm | \ | 23.62 | 24.00 | 0.088 | 0.10 | 0.043 | 0.05 | 0.14 |
| Head | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Right Cheek | 0mm | \ | 23.62 | 24.00 | 0.151 | 0.16 | 0.075 | 0.08 | -0.08 |
| Head | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Right Tilt | 0mm | \ | 23.62 | 24.00 | 0.094 | 0.10 | 0.048 | 0.05 | -0.01 |
| Head | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Right Cheek | 0mm | EUT2 | 24.49 | 25.00 | 0.187 | 0.21 | 0.096 | 0.11 | 0.05 |
| Body | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Front | 10mm | \ | 24.49 | 25.00 | 0.146 | 0.16 | 0.096 | 0.11 | -0.12 |
| Body | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Rear | 10mm |  | 24.49 | 25.00 | 0.137 | 0.15 | 0.090 | 0.10 | 0.16 |
| Body | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Left Edge | 10mm | \ | 24.49 | 25.00 | 0.060 | 0.07 | 0.038 | 0.04 | -0.11 |
| Body | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Right Edge | 10mm | Fig.A48 | 24.49 | 25.00 | 0.193 | 0.22 | 0.118 | 0.13 | -0.20 |
| Body | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Bottom Edge | 10mm | \ | 24.49 | 25.00 | 0.051 | 0.06 | 0.028 | 0.03 | -0.14 |
| Body | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Front | 10mm | \ | 23.62 | 24.00 | 0.097 | 0.11 | 0.065 | 0.07 | 0.15 |
| Body | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Rear | 10mm | \ | 23.62 | 24.00 | 0.090 | 0.10 | 0.060 | 0.07 | -0.10 |
| Body | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Left Edge | 10mm | \ | 23.62 | 24.00 | 0.043 | 0.05 | 0.028 | 0.03 | 0.02 |
| Body | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Right Edge | 10mm | \ | 23.62 | 24.00 | 0.128 | 0.14 | 0.078 | 0.09 | -0.01 |
| Body | LTE Band66 ANT0 | 26775 | 1770 | 50RB-Middle | Bottom Edge | 10mm | \ | 23.62 | 24.00 | 0.068 | 0.07 | 0.031 | 0.03 | -0.10 |
| Body | LTE Band66 ANT0 | 132072 | 1720 | 1RB-Low | Right Edge | 10mm | EUT2 | 24.49 | 25.00 | 0.178 | 0.20 | 0.106 | 0.12 | -0.15 |

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## 13.2 SAR results for 5G NR

| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Left Cheek | 0mm | \ | 16.88 | 17.50 | 0.430 | 0.50 | 0.240 | 0.28 | 0.14 |
| Head | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Left Tilt | 0mm | \ | 16.88 | 17.50 | 0.504 | 0.58 | 0.263 | 0.30 | -0.11 |
| Head | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Right Cheek | 0mm | \ | 16.88 | 17.50 | 0.558 | 0.64 | 0.334 | 0.39 | 0.13 |
| Head | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Right Tilt | 0mm | Fig.A33 | 16.88 | 17.50 | 0.584 | 0.67 | 0.323 | 0.37 | 0.16 |
| Head | n25 | 376500 | 1882.5 | EUT2 | Right Tilt | 0mm | \ | 16.88 | 17.50 | 0.566 | 0.65 | 0.309 | 0.36 | -0.03 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Front | 10mm | \ | 16.88 | 17.50 | 0.124 | 0.14 | 0.071 | 0.08 | 0.18 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Rear | 10mm | \ | 16.88 | 17.50 | 0.143 | 0.16 | 0.078 | 0.09 | -0.18 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Left Edge | 10mm | \ | 16.88 | 17.50 | 0.060 | 0.07 | 0.035 | 0.04 | -0.06 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Top Edge | 10mm | \ | 16.88 | 17.50 | 0.157 | 0.18 | 0.083 | 0.10 | 0.09 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Front | 17mm | Fig.A34 | 25.36 | 25.50 | 0.355 | 0.37 | 0.214 | 0.22 | 0.05 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Rear | 21mm | \ | 25.36 | 25.50 | 0.284 | 0.29 | 0.171 | 0.18 | -0.01 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Left Edge | 17mm | \ | 25.36 | 25.50 | 0.174 | 0.18 | 0.106 | 0.11 | 0.05 |
| Body | n25 | 376500 | 1882.5 | DFT-s-OFDM QPSK | Top Edge | 21mm | \ | 25.36 | 25.50 | 0.317 | 0.33 | 0.188 | 0.19 | -0.03 |
| Body | n25 | 376500 | 1882.5 | EUT2 | Front | 17mm | \ | 25.36 | 25.50 | 0.350 | 0.36 | 0.204 | 0.21 | 0.02 |
| Head | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Left Cheek | 0mm | \ | 17.05 | 17.50 | 0.293 | 0.32 | 0.167 | 0.18 | -0.19 |
| Head | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Left Tilt | 0mm | \ | 17.05 | 17.50 | 0.345 | 0.38 | 0.183 | 0.20 | 0.14 |
| Head | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Right Cheek | 0mm | Fig.A35 | 17.05 | 17.50 | 0.432 | 0.48 | 0.237 | 0.26 | 0.13 |
| Head | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Right Tilt | 0mm | \ | 17.05 | 17.50 | 0.425 | 0.47 | 0.199 | 0.22 | -0.15 |
| Head | n66 | 344000 | 1720 | EUT2 | Right Cheek | 0mm | \ | 17.05 | 17.50 | 0.421 | 0.47 | 0.222 | 0.25 | -0.13 |
| Body | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Front | 10mm | \ | 17.05 | 17.50 | 0.105 | 0.12 | 0.064 | 0.07 | -0.04 |
| Body | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Rear | 10mm | \ | 17.05 | 17.50 | 0.108 | 0.12 | 0.063 | 0.07 | 0.16 |
| Body | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Left Edge | 10mm | \ | 17.05 | 17.50 | 0.046 | 0.05 | 0.029 | 0.03 | 0.20 |
| Body | n66 | 344000 | 1720 | DFT-s-OFDM QPSK | Top Edge | 10mm | \ | 17.05 | 17.50 | 0.125 | 0.14 | 0.068 | 0.08 | -0.04 |
| Body | n66 | 349000 | 1745 | DFT-s-OFDM QPSK | Front | 17mm | Fig.A36 | 25.23 | 25.50 | 0.254 | 0.27 | 0.159 | 0.17 | 0.16 |
| Body | n66 | 349000 | 1745 | DFT-s-OFDM QPSK | Rear | 21mm | \ | 25.23 | 25.50 | 0.169 | 0.18 | 0.113 | 0.12 | 0.06 |
| Body | n66 | 349000 | 1745 | DFT-s-OFDM QPSK | Left Edge | 17mm | \ | 25.23 | 25.50 | 0.145 | 0.15 | 0.092 | 0.10 | 0.02 |
| Body | n66 | 349000 | 1745 | DFT-s-OFDM QPSK | Top Edge | 21mm | \ | 25.23 | 25.50 | 0.229 | 0.24 | 0.138 | 0.15 | 0.04 |
| Body | n66 | 349000 | 1745 | EUT2 | Front | 17mm | \ | 25.23 | 25.50 | 0.245 | 0.26 | 0.151 | 0.16 | 0.07 |
| Head | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Left Cheek | 0mm | \ | 16.94 | 17.50 | 0.180 | 0.20 | 0.096 | 0.11 | 0.08 |
| Head | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Left Tilt | 0mm | \ | 16.94 | 17.50 | 0.062 | 0.07 | 0.033 | 0.04 | 0.07 |
| Head | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Right Cheek | 0mm | Fig.A37 | 16.94 | 17.50 | 0.640 | 0.73 | 0.292 | 0.33 | 0.08 |
| Head | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Right Tilt | 0mm | \ | 16.94 | 17.50 | 0.142 | 0.16 | 0.073 | 0.08 | 0.17 |
| Head | n41 pc2 | 518598 | 2592.99 | EUT2 | Right Cheek | 0mm | \ | 16.94 | 17.50 | 0.630 | 0.72 | 0.281 | 0.32 | -0.19 |
| Body | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Front | 10mm | \ | 16.94 | 17.50 | 0.085 | 0.10 | 0.043 | 0.05 | 0.08 |
| Body | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Rear | 10mm | \ | 16.94 | 17.50 | 0.132 | 0.15 | 0.063 | 0.07 | 0.15 |
| Body | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM QPSK | Left Edge | 10mm | \ | 16.94 | 17.50 | 0.191 | 0.22 | 0.082 | 0.09 | 0.05 |
| Body | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM PI/2 BPSK1 | Front | 17mm | \ | 27.15 | 27.50 | 0.122 | 0.13 | 0.066 | 0.07 | -0.06 |
| Body | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM PI/2 BPSK1 | Rear | 21mm | \ | 27.15 | 27.50 | 0.118 | 0.13 | 0.064 | 0.07 | 0.00 |
| Body | n41 pc2 | 518598 | 2592.99 | DFT-s-OFDM PI/2 BPSK1 | Left Edge | 17mm | Fig.A38 | 27.15 | 27.50 | 0.211 | 0.23 | 0.107 | 0.12 | 0.18 |
| Body | n41 pc2 | 518598 | 2592.99 | EUT2 | Left Edge | 17mm | \ | 27.15 | 27.50 | 0.211 | 0.23 | 0.107 | 0.12 | 0.16 |
| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
| Head | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Left Cheek | 0mm | \ | 17.70 | 18.00 | 0.397 | 0.43 | 0.151 | 0.16 | -0.16 |
| Head | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Left Tilt | 0mm | Fig.A39 | 17.70 | 18.00 | 0.565 | 0.61 | 0.204 | 0.22 | -0.11 |
| Head | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Right Cheek | 0mm | \ | 17.70 | 18.00 | 0.151 | 0.16 | 0.065 | 0.07 | -0.13 |
| Head | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Right Tilt | 0mm | \ | 17.70 | 18.00 | 0.206 | 0.22 | 0.081 | 0.09 | 0.10 |
| Head | n77 pc2 | 636000 | 3540 | EUT2 | Left Tilt | 0mm | \ | 17.70 | 18.00 | 0.549 | 0.59 | 0.183 | 0.20 | -0.18 |
| Body | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Front | 10mm | \ | 17.70 | 18.00 | 0.080 | 0.09 | 0.036 | 0.04 | -0.06 |
| Body | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Rear | 10mm | \ | 17.70 | 18.00 | 0.140 | 0.15 | 0.063 | 0.07 | 0.10 |
| Body | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Right Edge | 10mm | \ | 17.70 | 18.00 | 0.038 | 0.04 | 0.019 | 0.02 | -0.03 |
| Body | n77 pc2 | 636000 | 3540 | DFT-s-OFDM QPSK | Top Edge | 10mm | \ | 17.70 | 18.00 | 0.205 | 0.22 | 0.091 | 0.10 | 0.10 |
| Body | n77 pc2 | 633334 | 3500.01 | DFT-s-OFDM QPSK | Front | 17mm | \ | 27.78 | 28.00 | 0.284 | 0.30 | 0.143 | 0.15 | 0.00 |
| Body | n77 pc2 | 633334 | 3500.01 | DFT-s-OFDM QPSK | Rear | 21mm | \ | 27.78 | 28.00 | 0.398 | 0.42 | 0.204 | 0.21 | -0.14 |
| Body | n77 pc2 | 633334 | 3500.01 | DFT-s-OFDM QPSK | Right Edge | 17mm | \ | 27.78 | 28.00 | 0.159 | 0.17 | 0.087 | 0.09 | -0.11 |
| Body | n77 pc2 | 633334 | 3500.01 | DFT-s-OFDM QPSK | Top Edge | 21mm | Fig.A40 | 27.78 | 28.00 | 0.569 | 0.60 | 0.285 | 0.30 | -0.01 |
| Body | n77 pc2 | 633334 | 3500.01 | EUT2 | Top Edge | 21mm | \ | 27.78 | 28.00 | 0.554 | 0.58 | 0.270 | 0.28 | -0.11 |
| Head | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Left Cheek | 0mm | \ | 17.93 | 18 | 0.831 | 0.84 | 0.315 | 0.32 | -0.03 |
| Head | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Left Tilt | 0mm | Fig.A41 | 17.93 | 18 | 1.030 | 1.05 | 0.368 | 0.37 | 0.00 |
| Head | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Right Cheek | 0mm | \ | 17.93 | 18 | 0.382 | 0.39 | 0.143 | 0.14 | 0.10 |
| Head | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Right Tilt | 0mm | \ | 17.93 | 18 | 0.508 | 0.52 | 0.186 | 0.19 | -0.07 |
| Head | n77 pc2 | 654267 | 3814.000 | EUT2 | Left Tilt | 0mm | \ | 17.93 | 18 | 0.983 | 1.00 | 0.350 | 0.36 | 0.16 |
| Body | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Front | 10mm | \ | 17.93 | 18 | 0.152 | 0.15 | 0.065 | 0.07 | -0.17 |
| Body | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Rear | 10mm | \ | 17.93 | 18 | 0.187 | 0.19 | 0.080 | 0.08 | -0.08 |
| Body | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Right Edge | 10mm | \ | 17.93 | 18 | 0.045 | 0.05 | 0.024 | 0.02 | 0.11 |
| Body | n77 pc2 | 654267 | 3814.000 | DFT-s-OFDM QPSK | Top Edge | 10mm | \ | 17.93 | 18 | 0.295 | 0.30 | 0.122 | 0.12 | -0.05 |
| Body | n77 pc2 | 650800 | 3762.000 | DFT-s-OFDM QPSK | Front | 17mm | \ | 27.94 | 28 | 0.565 | 0.57 | 0.265 | 0.27 | 0.15 |
| Body | n77 pc2 | 650800 | 3762.000 | DFT-s-OFDM QPSK | Rear | 21mm | \ | 27.94 | 28 | 0.558 | 0.57 | 0.279 | 0.28 | 0.15 |
| Body | n77 pc2 | 650800 | 3762.000 | DFT-s-OFDM QPSK | Right Edge | 17mm | \ | 27.94 | 28 | 0.232 | 0.24 | 0.125 | 0.13 | 0.08 |
| Body | n77 pc2 | 650800 | 3762.000 | DFT-s-OFDM QPSK | Top Edge | 21mm | Fig.A42 | 27.94 | 28 | 0.868 | 0.88 | 0.425 | 0.43 | 0.04 |
| Body | n77 pc2 | 650800 | 3762.000 | EUT2 | Top Edge | 21mm | \ | 27.94 | 28 | 0.850 | 0.86 | 0.417 | 0.42 | -0.19 |
| Head | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Left Cheek | 0mm | \ | 25.09 | 25.50 | 0.193 | 0.21 | 0.143 | 0.16 | 0.07 |
| Head | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Left Tilt | 0mm | \ | 25.09 | 25.50 | 0.101 | 0.11 | 0.079 | 0.09 | -0.03 |
| Head | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Right Cheek | 0mm | Fig.A43 | 25.09 | 25.50 | 0.210 | 0.23 | 0.161 | 0.18 | -0.09 |
| Head | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Right Tilt | 0mm | \ | 25.09 | 25.50 | 0.112 | 0.12 | 0.088 | 0.10 | -0.02 |
| Head | n71 | 136100 | 680.5 | EUT2 | Right Cheek | 0mm | \ | 25.09 | 25.50 | 0.200 | 0.22 | 0.148 | 0.16 | 0.02 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Front | 10mm | \ | 25.09 | 25.50 | 0.131 | 0.14 | 0.074 | 0.08 | 0.13 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Rear | 10mm | \ | 25.09 | 25.50 | 0.176 | 0.19 | 0.084 | 0.09 | 0.12 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Left Edge | 10mm | \ | 25.09 | 25.50 | 0.122 | 0.13 | 0.063 | 0.07 | 0.08 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Right Edge | 10mm |  | 25.09 | 25.50 | 0.218 | 0.24 | 0.114 | 0.13 | -0.06 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Bottom Edge | 10mm | \ | 25.09 | 25.50 | 0.140 | 0.15 | 0.051 | 0.06 | 0.12 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Front | 16mm | \ | 25.09 | 25.50 | 0.257 | 0.28 | 0.195 | 0.21 | 0.05 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Rear | 21mm | \ | 25.09 | 25.50 | 0.345 | 0.38 | 0.222 | 0.24 | 0.12 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Left Edge | 17mm | \ | 25.09 | 25.50 | 0.239 | 0.26 | 0.167 | 0.18 | -0.11 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Right Edge | 10mm | Fig.A44 | 25.09 | 25.50 | 0.427 | 0.47 | 0.300 | 0.33 | -0.06 |
| Body | n71 | 136100 | 680.5 | DFT-s-OFDM PI/2 BPSK1 | Bottom Edge | 21mm | \ | 25.09 | 25.50 | 0.274 | 0.30 | 0.133 | 0.15 | -0.08 |
| Body | n71 | 136100 | 680.5 | EUT2 | Right Edge | 10mm | \ | 25.09 | 25.50 | 0.401 | 0.44 | 0.274 | 0.30 | 0.15 |

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### 13.3 SAR results for WLAN

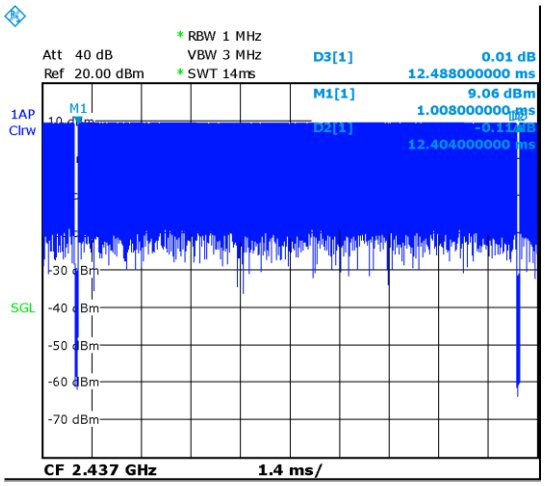
The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.

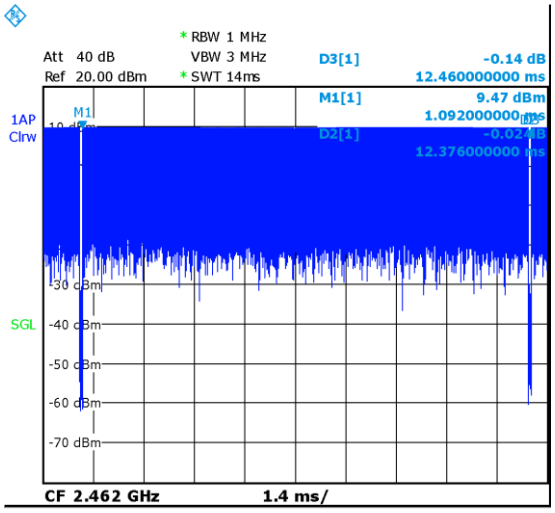
SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

### Duty factor plot

**CH6**




**CH11**

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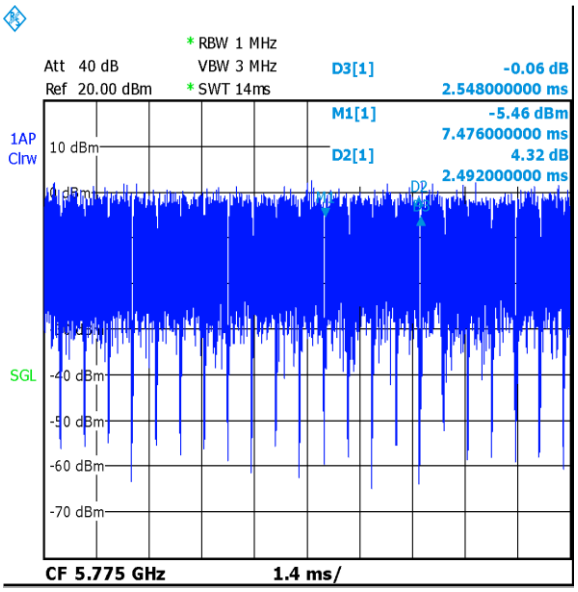
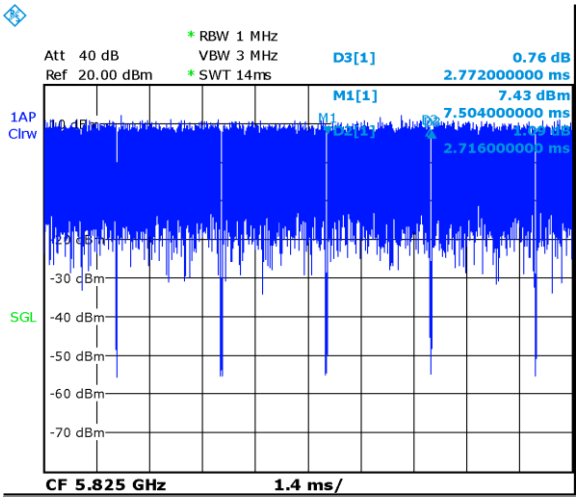
**CH155**




**CH165**

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## WLAN 2.4G

| Test Position | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test setup | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | WLAN 2.4G | 6 | 2437 | 11b | Cheek Left | Fig.29 | 11.98 | 12.00 | 0.197 | 0.20 | 0.102 | 0.10 | -0.07 |
| Head | WLAN 2.4G | 6 | 2437 | 11b | Tilt Left | \ | 11.98 | 12.00 | 0.181 | 0.18 | 0.092 | 0.09 | 0.03 |
| Head | WLAN 2.4G | 6 | 2437 | 11b | Cheek Right | \ | 11.98 | 12.00 | 0.110 | 0.11 | 0.062 | 0.06 | -0.12 |
| Head | WLAN 2.4G | 6 | 2437 | 11b | Tilt Right | \ | 11.98 | 12.00 | 0.136 | 0.14 | 0.070 | 0.07 | 0.14 |
| Head | WLAN 2.4G | 6 | 2437 | 11b | Cheek Left | EUT2 | 11.98 | 12.00 | 0.181 | 0.18 | 0.095 | 0.10 | 0.12 |
| Body | WLAN 2.4G | 6 | 2437 | 11b | Front 10mm | \ | 16.48 | 16.50 | 0.125 | 0.13 | 0.073 | 0.07 | 0.03 |
| Body | WLAN 2.4G | 6 | 2437 | 11b | Rear 10mm | \ | 16.48 | 16.50 | 0.141 | 0.14 | 0.079 | 0.08 | 0.13 |
| Body | WLAN 2.4G | 6 | 2437 | 11b | Right Edge 10mm | \ | 16.48 | 16.50 | 0.121 | 0.12 | 0.067 | 0.07 | 0.13 |
| Body | WLAN 2.4G | 6 | 2437 | 11b | Top Edge 10mm | Fig.30 | 16.48 | 16.50 | 0.244 | 0.25 | 0.127 | 0.13 | -0.17 |
| Body | WLAN 2.4G | 6 | 2437 | 11b | Top Edge 10mm | EUT2 | 16.48 | 16.50 | 0.213 | 0.21 | 0.116 | 0.12 | 0.18 |

### 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 | Cheek | 99.3% | 100% | **0.20** | **0.20** |

### SAR Values (WLAN - Body) – 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 | 99.3% | 100% | **0.25** | **0.25** |

## WLAN 5G

| Test Position | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test setup | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | WLAN 5G | 58 | 5290 | 802.11ac 80M | Right Cheek | \ | 9.15 | 11 | 0.030 | 0.05 | 0.006 | 0.01 | 0.11 |
| Head | WLAN 5G | 58 | 5290 | 802.11ac 80M | Right TIlt | \ | 9.15 | 11 | 0.021 | 0.03 | 0.005 | 0.01 | 0.04 |
| Head | WLAN 5G | 58 | 5290 | 802.11ac 80M | Left Cheek | \ | 9.15 | 11 | 0.099 | 0.15 | 0.030 | 0.05 | 0.00 |
| Head | WLAN 5G | 58 | 5290 | 802.11ac 80M | Left TIlt | \ | 9.15 | 11 | 0.071 | 0.11 | 0.024 | 0.04 | 0.20 |
| Head | WLAN 5G | 138 | 5690 | 802.11ac 80M | Right Cheek | \ | 9.84 | 11 | 0.038 | 0.05 | 0.011 | 0.01 | 0.03 |
| Head | WLAN 5G | 138 | 5690 | 802.11ac 80M | Right TIlt | \ | 9.84 | 11 | 0.034 | 0.05 | 0.008 | 0.01 | -0.16 |
| Head | WLAN 5G | 138 | 5690 | 802.11ac 80M | Left Cheek | \ | 9.84 | 11 | 0.094 | 0.12 | 0.041 | 0.05 | -0.06 |
| Head | WLAN 5G | 138 | 5690 | 802.11ac 80M | Left TIlt | \ | 9.84 | 11 | 0.095 | 0.12 | 0.031 | 0.04 | -0.01 |
| Head | WLAN 5G | 155 | 5775 | 802.11ac 80M | Right Cheek | \ | 9.98 | 11 | 0.038 | 0.05 | 0.012 | 0.02 | -0.09 |
| Head | WLAN 5G | 155 | 5775 | 802.11ac 80M | Right TIlt | \ | 9.98 | 11 | 0.035 | 0.04 | 0.010 | 0.01 | 0.13 |
| Head | WLAN 5G | 155 | 5775 | 802.11ac 80M | Left Cheek | Fig.31 | 9.98 | 11 | 0.133 | 0.17 | 0.041 | 0.05 | 0.19 |
| Head | WLAN 5G | 155 | 5775 | 802.11ac 80M | Left TIlt | \ | 9.98 | 11 | 0.100 | 0.13 | 0.033 | 0.04 | -0.02 |
| Head | WLAN 5G | 155 | 5775 | 802.11ac 80M | Left TIlt | EUT2 | 9.98 | 11 | 0.091 | 0.12 | 0.028 | 0.04 | 0.18 |
| Test Position | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test setup | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
| Body | WLAN 5G | 64 | 5320 | 802.11a 20M | Front 10mm | \ | 15.84 | 16.5 | 0.046 | 0.05 | 0.021 | 0.02 | 0.04 |
| Body | WLAN 5G | 64 | 5320 | 802.11a 20M | Rear 10mm | \ | 15.84 | 16.5 | 0.167 | 0.19 | 0.072 | 0.08 | 0.05 |
| Body | WLAN 5G | 64 | 5320 | 802.11a 20M | Right Edge 10mm | \ | 15.84 | 16.5 | 0.170 | 0.20 | 0.075 | 0.09 | -0.09 |
| Body | WLAN 5G | 64 | 5320 | 802.11a 20M | Top Edge 10mm | \ | 15.84 | 16.5 | 0.161 | 0.19 | 0.071 | 0.08 | -0.20 |
| Body | WLAN 5G | 136 | 5680 | 802.11a 20M | Front 10mm | \ | 16.14 | 16.5 | 0.108 | 0.12 | 0.049 | 0.05 | -0.07 |
| Body | WLAN 5G | 136 | 5680 | 802.11a 20M | Rear 10mm | \ | 16.14 | 16.5 | 0.195 | 0.21 | 0.086 | 0.09 | 0.04 |
| Body | WLAN 5G | 136 | 5680 | 802.11a 20M | Right Edge 10mm | \ | 16.14 | 16.5 | 0.337 | 0.37 | 0.133 | 0.14 | -0.16 |
| Body | WLAN 5G | 136 | 5680 | 802.11a 20M | Top Edge 10mm | \ | 16.14 | 16.5 | 0.091 | 0.10 | 0.044 | 0.05 | -0.14 |
| Body | WLAN 5G | 165 | 5825 | 802.11a 20M | Front 10mm | \ | 16.47 | 16.5 | 0.116 | 0.12 | 0.050 | 0.05 | 0.11 |
| Body | WLAN 5G | 165 | 5825 | 802.11a 20M | Rear 10mm | \ | 16.47 | 16.5 | 0.303 | 0.30 | 0.119 | 0.12 | 0.15 |
| Body | WLAN 5G | 165 | 5825 | 802.11a 20M | Right Edge 10mm | Fig.32 | 16.47 | 16.5 | 0.425 | 0.43 | 0.160 | 0.16 | 0.14 |
| Body | WLAN 5G | 165 | 5825 | 802.11a 20M | Top Edge 10mm | \ | 16.47 | 16.5 | 0.103 | 0.10 | 0.041 | 0.04 | 0.02 |
| Body | WLAN 5G | 165 | 5825 | 802.11a 20M | Right Edge 10mm | EUT2 | 16.47 | 16.5 | 0.401 | 0.40 | 0.157 | 0.16 | 0.19 |

### SAR Values (WLAN - Head) – 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) |
|---|---|---|---|---|---|---|
| MHz | Ch. | | | | | |
| 5775 | 155 | Left Cheek | 98% | 100% | 0.17 | 0.17 |

### 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) |
|---|---|---|---|---|---|---|
| MHz | Ch. | | | | | |
| 5775 | 155 | Left Cheek | 98% | 100% | 0.43 | 0.44 |

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## 13.4 SAR results for BT

| RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test Position | Distance | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Head | BT | 78 | 2480 | EDR | Left Cheek | 0mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Head | BT | 78 | 2480 | EDR | Left Tilt | 0mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Head | BT | 78 | 2480 | EDR | Right Cheek | 0mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Head | BT | 78 | 2480 | EDR | Right Cheek | 0mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Body | BT | 78 | 2480 | EDR | Front | 10mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Body | BT | 78 | 2480 | EDR | Rear | 10mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Body | BT | 78 | 2480 | EDR | Right Edge | 10mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |
| Body | BT | 78 | 2480 | EDR | Top Edge | 10mm | 9.63 | 10.00 | <0.01 | <0.01 | <0.01 | <0.01 | / |

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# 14 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; steps2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 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 ≥ 1.45W/kg (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

**Table 14.1: SAR Measurement Variability**

| Frequency Band | Channel Number | Frequency (MHz) | Test Position | Distance | Original SAR 1g (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| WCDMA1900 | 9400 | 1880 | Right Tilt | 0mm | 0.792 | 0.773 | 1.02 | / |
| WCDMA1900 | 9262 | 1852.4 | Right Tilt | 0mm | 0.729 | 0.712 | 1.02 | / |
| WCDMA1900 | 9538 | 1907.6 | Right Tilt | 0mm | 0.803 | 0.791 | 1.02 | / |
| LTE Band7 | 21350 | 2560 | Left Edge | 17mm | 0.818 | 0.799 | 1.02 | / |
| LTE Band7 | 20850 | 2510 | Left Edge | 17mm | 0.872 | 0.853 | 1.02 | / |
| LTE Band7 | 21100 | 2535 | Left Edge | 17mm | 0.886 | 0.876 | 1.01 | / |
| n77 pc2 | 654267 | 3814.000 | Left Cheek | 0mm | 0.831 | 0.818 | 1.02 | / |
| n77 pc2 | 664666 | 3969.990 | Left Cheek | 0mm | 0.732 | 0.722 | 1.01 | / |
| n77 pc2 | 647334 | 3710.010 | Left Cheek | 0mm | 0.712 | 0.697 | 1.02 | / |
| n77 pc2 | 654267 | 3814.000 | Left Tilt | 0mm | 1.030 | 1.014 | 1.02 | / |
| n77 pc2 | 664666 | 3969.990 | Left Tilt | 0mm | 0.943 | 0.930 | 1.01 | / |
| n77 pc2 | 647334 | 3710.010 | Left Tilt | 0mm | 0.912 | 0.899 | 1.01 | / |
| n77 pc2 | 650800 | 3762.000 | Top Edge | 21mm | 0.868 | 0.857 | 1.01 | / |
| n77 pc2 | 664666 | 3969.990 | Top Edge | 21mm | 0.801 | 0.784 | 1.02 | / |
| n77 pc2 | 647334 | 3710.010 | Top Edge | 21mm | 0.832 | 0.813 | 1.02 | / |

# 15 Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be ≤ 30%, for a confidence interval of k = 2. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

Therefore, the measurement uncertainty is not required.

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# 16 MAIN TEST INSTRUMENTS

| No. | Name | Type | Serial Number | Calibration Date | Valid Period |
|---|---|---|---|---|---|
| 01 | Network analyzer | E5071C | MY46900484 | September 1, 2021 | One year |
| 02 | Power meter | NRP8S | 109691 | October 20, 2021 | One year |
| 03 | Power sensor | NRX | 102283 | | |
| 04 | Signal Generator | SMC100A | 182249 | January 15, 2022 | One Year |
| 05 | Amplifier | 60S1G4 | 0331848 | No Calibration Requested | |
| 06 | BTS | CMW500 | 166370 | June 25, 2021 | One year |
| 07 | E-field Probe | SPEAG EX3DV4 | 7464 | January 26,2022 | One year |
| 08 | DAE | SPEAG DAE4 | 549 | January 07, 2022 | One year |
| 09 | Dipole Validation Kit | SPEAG D750V3 | 1017 | July 12,,2021 | One year |
| 10 | Dipole Validation Kit | SPEAG D835V2 | 4d069 | July 12,,2021 | One year |
| 11 | Dipole Validation Kit | SPEAG D1750V2 | 1003 | July 12, 2021 | One year |
| 12 | Dipole Validation Kit | SPEAG D1900V2 | 5d101 | July 15,2021 | One year |
| 13 | Dipole Validation Kit | SPEAG D2450V2 | 853 | July 26,2021 | One year |
| 14 | Dipole Validation Kit | SPEAG D3500V2 | 1016 | June 21,2021 | One year |
| 15 | Dipole Validation Kit | SPEAG D3700V2 | 1004 | June 21,2021 | One year |
| 16 | Dipole Validation Kit | SPEAG D2600V2 | 1012 | July 26,2021 | One year |
| 17 | Dipole Validation Kit | SPEAG D5GHzV2 | 1060 | June 22,2021 | One year |

***END OF REPORT BODY***

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# Appendixes

**Refer to separated files for the following appendixes**

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**ANNEX J Accreditation Certificate**

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# ANNEX A Graph Results

**GSM850_CH251 Right Cheek**
Date: 5/7/2022
Electronics: DAE4 Sn549
Medium: head 835 MHz
Medium parameters used: f =848.8 MHz; $\sigma$ =0.916 mho/m; $\varepsilon r$ =40.82; $\rho$ =1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: GSM850 848.8 MHz Duty Cycle: 1:8.3
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.326 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.077 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.335 W/kg
**SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.204 W/kg**
Maximum value of SAR (measured) = 0.276 W/kg

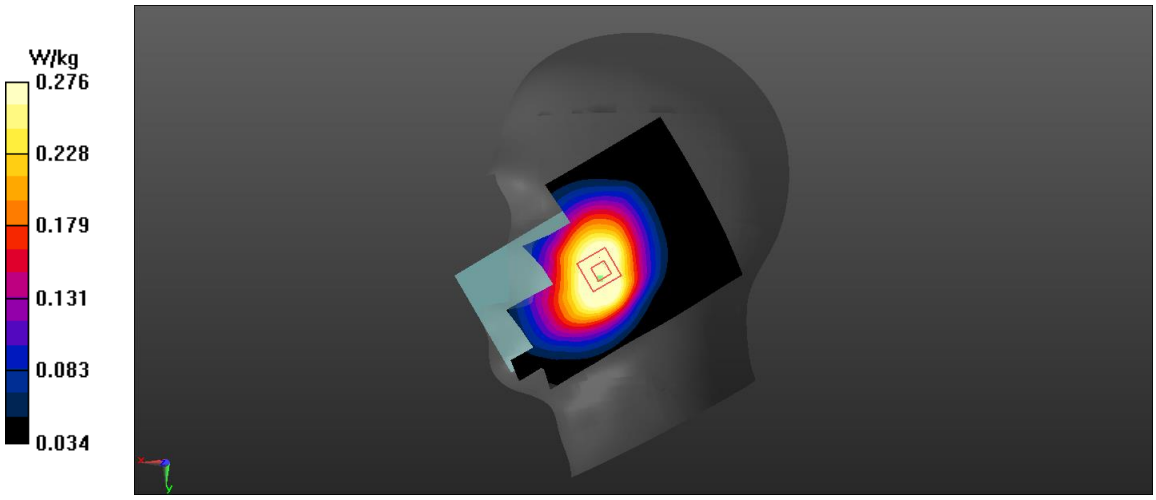


**Fig A.1**

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**GSM850_CH251 GPRS(2TX) Rear 10mm**
Date: 5/7/2022
Electronics: DAE4 Sn549
Medium: head 835 MHz
Medium parameters used: f =848.8 MHz; $\sigma$ =0.899 mho/m; $\varepsilon r$ =41.98; $\rho$ =1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: GSM850 848.8 MHz Duty Cycle: 1:4
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.842 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.08 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.08 W/kg
**SAR(1 g) = 0.586 W/kg; SAR(10 g) = 0.333 W/kg**
Maximum value of SAR (measured) = 0.844 W/kg

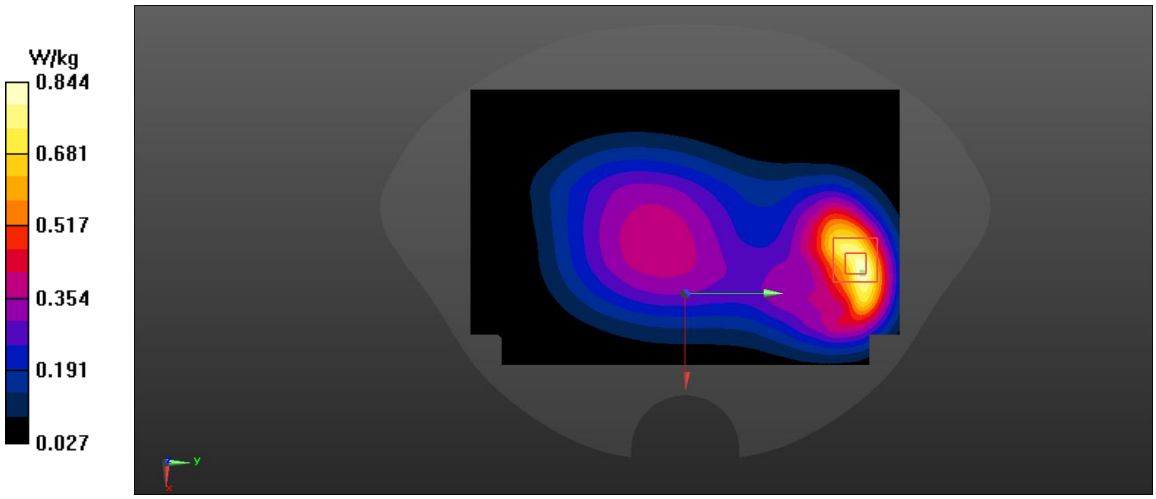


**Fig A.2**

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**PCS1900_CH810 Right Tilt**
Date: 5/11/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f =1909.8 MHz; $\sigma$ =1.406 mho/m; $\varepsilon r$ =39.43; $\rho$ =1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: PCS1900 1909.8 MHz Duty Cycle: 1:8.3
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.54 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.21 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.582 W/kg
**SAR(1 g) = 0.294 W/kg; SAR(10 g) = 0.15 W/kg**
Maximum value of SAR (measured) = 0.320 W/kg

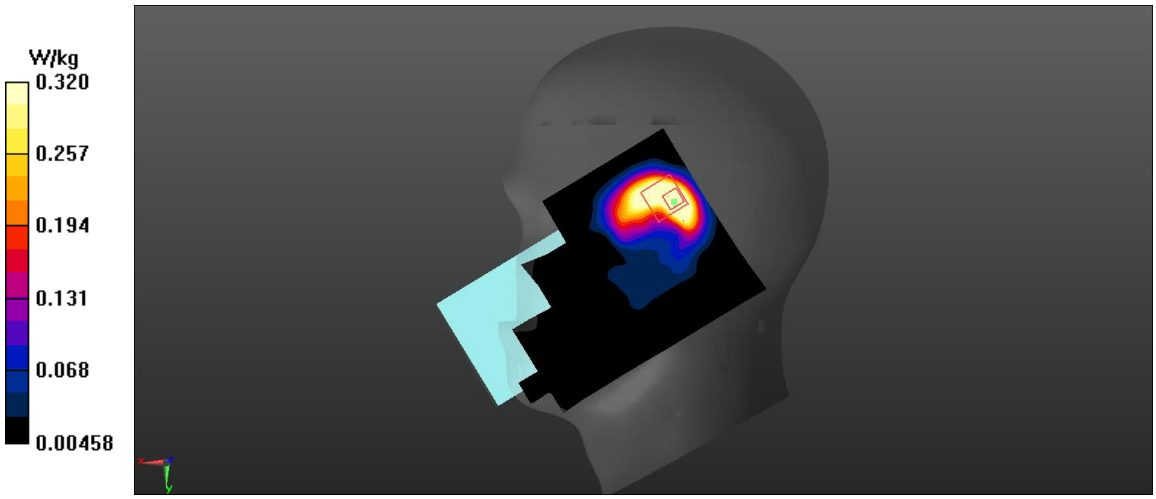


**Fig A.3**

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**PCS1900_CH810 GPRS(2TX) Front 17mm**
Date: 5/11/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f =1909.8 MHz; $\sigma$ =1.402 mho/m; $\varepsilon r$ =40.32; $\rho$ =1000 kg/$m^3$
Ambient Temperature: 22.5ºC,  Liquid Temperature: 22.3ºC
Communication System: PCS1900 1909.8 MHz Duty Cycle: 1:4
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.411 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.61 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.59 W/kg
**SAR(1 g) = 0.32 W/kg; SAR(10 g) = 0.188 W/kg**
Maximum value of SAR (measured) = 0.515 W/kg

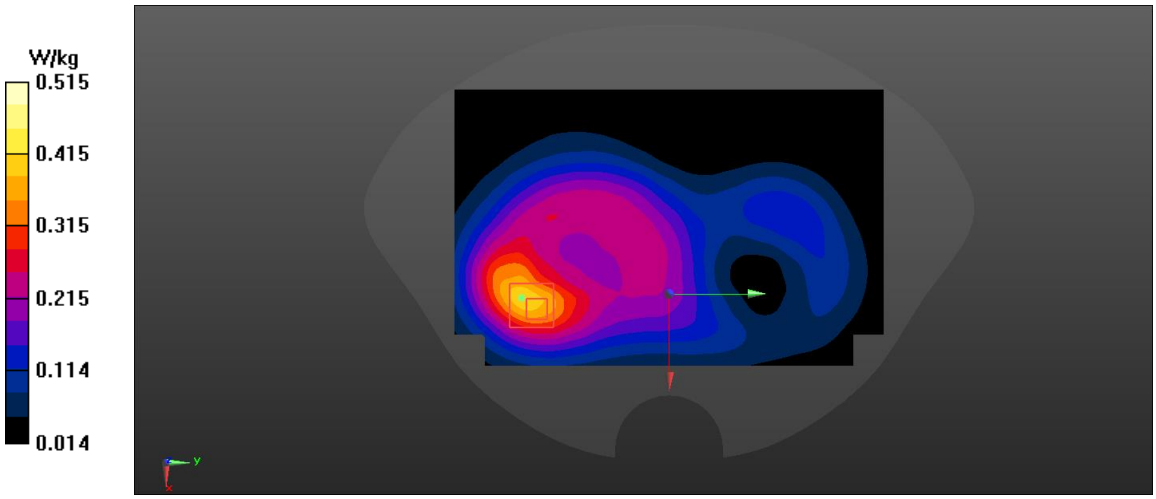


**Fig A.4**

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**WCDMA1900-BII_CH9538 RMC Right Tilt**
Date: 5/11/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f =1907.6 MHz; $\sigma$ =1.405 mho/m; $\varepsilon r$ =39.43; $\rho$ =1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: WCDMA1900-BII 1907.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.46 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.44 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.62 W/kg
**SAR(1 g) = 0.803 W/kg; SAR(10 g) = 0.381 W/kg**
Maximum value of SAR (measured) = 0.888 W/kg

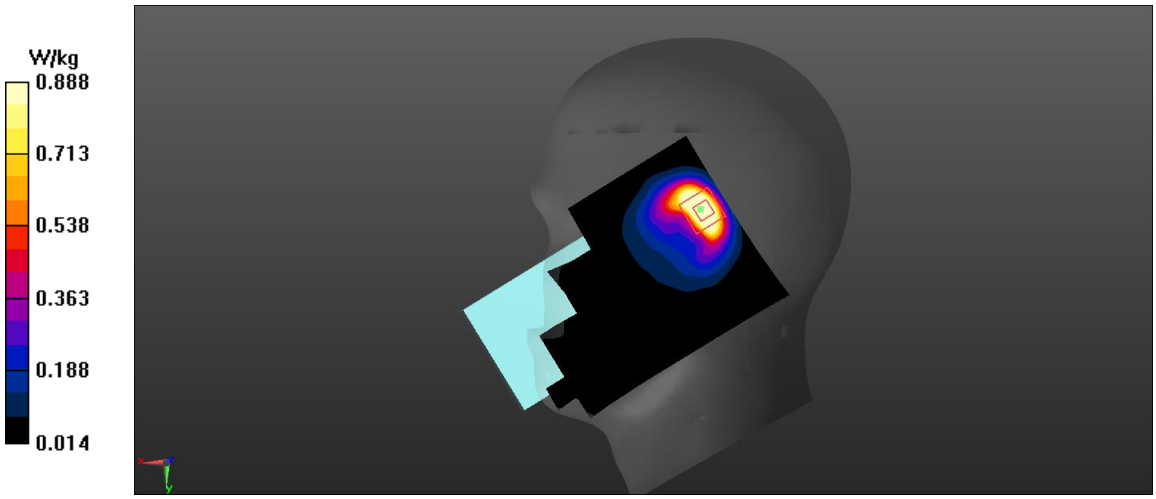


**Fig A.5**

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**WCDMA1900-BII_CH9400 RMC Front 17mm**
Date: 5/11/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.373 mho/m; $\varepsilon r$ = 40.35; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: WCDMA1900-BII 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.705 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.98 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.804 W/kg
**SAR(1 g) = 0.487 W/kg; SAR(10 g) = 0.298 W/kg**
Maximum value of SAR (measured) = 0.687 W/kg

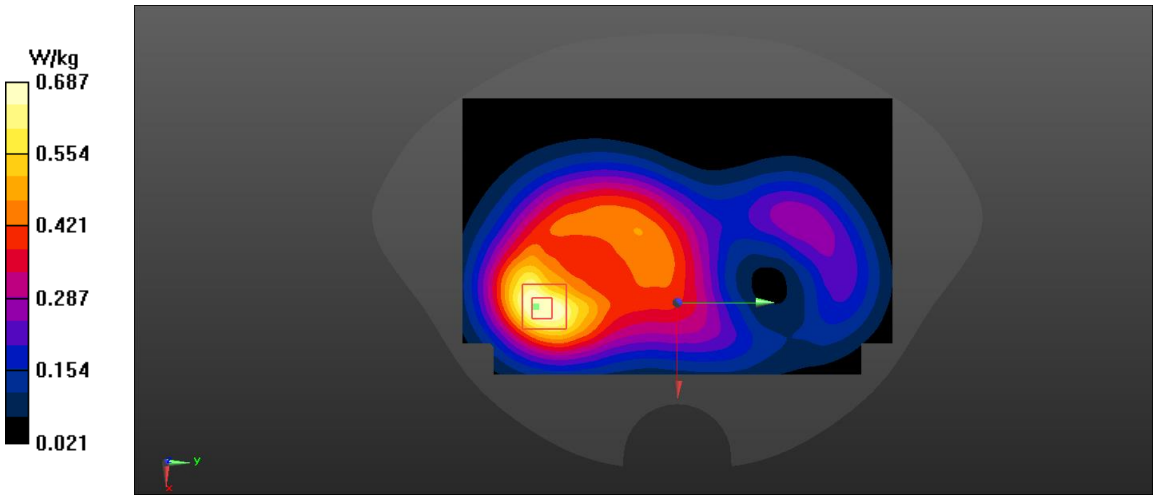


**Fig A.6**

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**WCDMA1700-BIV_CH1513 RMC Right Cheek**
Date: 5/9/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1752.6 MHz; $\sigma$ = 1.383 mho/m; $\varepsilon r$ = 40.1; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: WCDMA1700-BIV 1752.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.933 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.91 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.07 W/kg
**SAR(1 g) = 0.572 W/kg; SAR(10 g) = 0.308 W/kg**
Maximum value of SAR (measured) = 0.608 W/kg

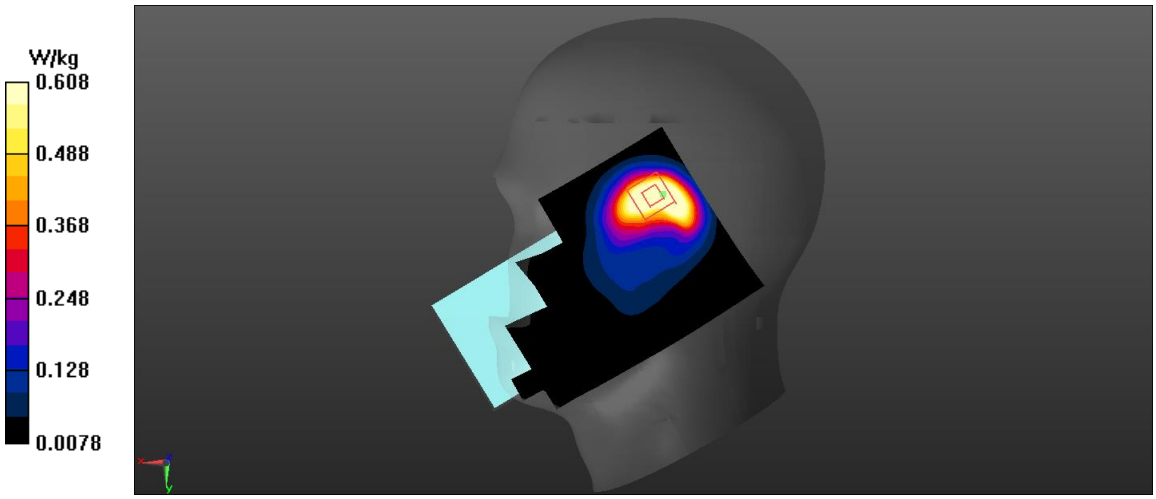


**Fig A.7**

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**WCDMA1700-BIV_CH1412 RMC Front 17mm**
Date: 5/9/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1732.5 MHz; $\sigma$ = 1.353 mho/m; $\varepsilon r$ = 40.04; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: WCDMA1700-BIV 1732.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.457 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.502 W/kg
**SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.199 W/kg**
Maximum value of SAR (measured) = 0.433 W/kg

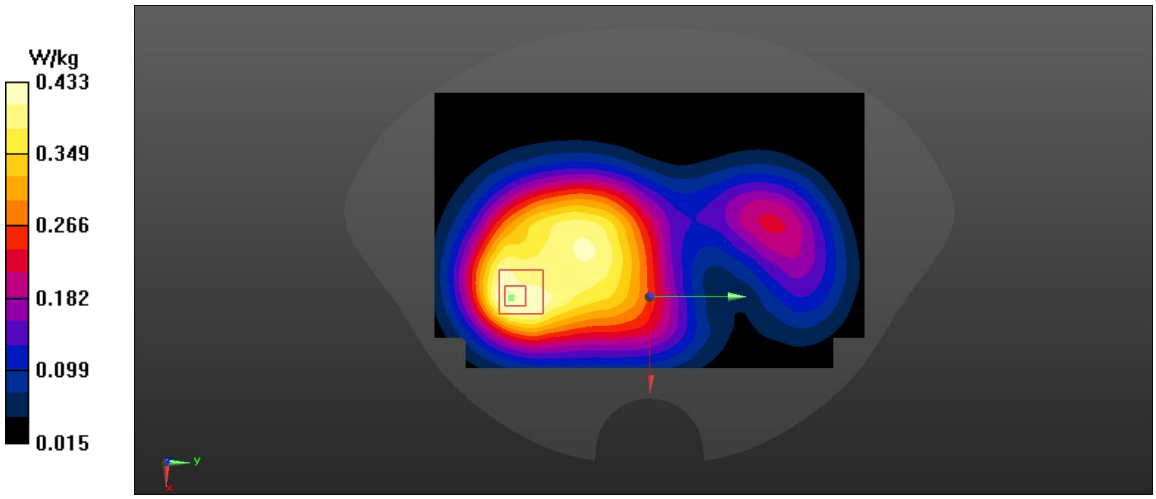


**Fig A.8**

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**WCDMA850-BV_CH4233 RMC Right Cheek**
Date: 5/7/2022
Electronics: DAE4 Sn549
Medium: head 835 MHz
Medium parameters used: f = 846.6 MHz; $\sigma$ = 0.914 mho/m; $\varepsilon r$ = 40.83; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: WCDMA850-BV 846.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.469 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.17 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.482 W/kg
**SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.294 W/kg**
Maximum value of SAR (measured) = 0.400 W/kg

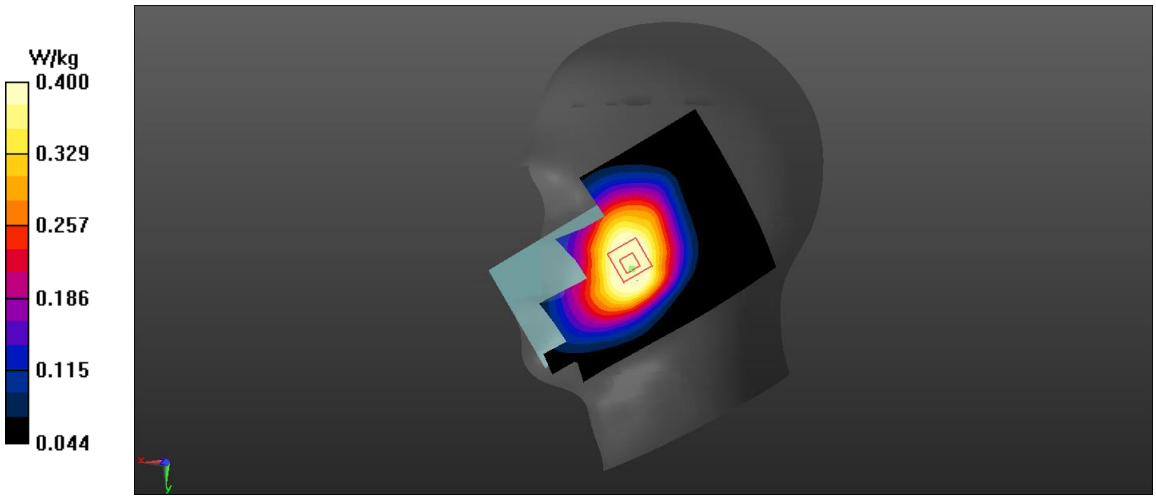


**Fig A.9**

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**WCDMA850-BV_CH4233 RMC Rear 10mm**
Date: 5/7/2022
Electronics: DAE4 Sn549
Medium: head 835 MHz
Medium parameters used: f = 846.6 MHz; $\sigma$ = 0.897 mho/m; $\varepsilon r$ = 41.99; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: WCDMA850-BV 846.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.8 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.75 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.05 W/kg
**SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.317 W/kg**
Maximum value of SAR (measured) = 0.829 W/kg

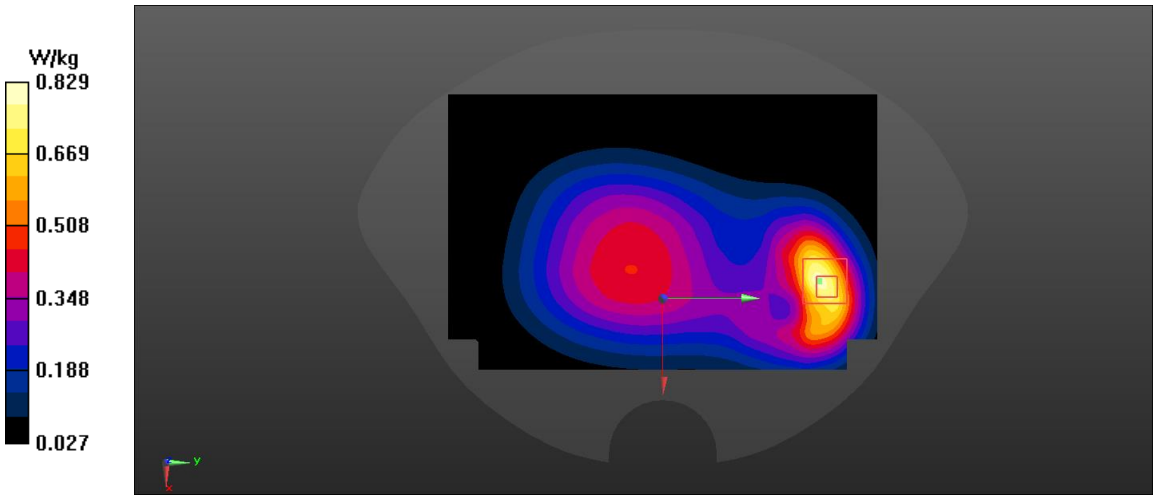


**Fig A.10**

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**LTE2500-FDD7_CH21350 1RB-High Right Cheek**
Date: 5/13/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2560 MHz; $\sigma$ = 1.933 mho/m; $\varepsilon r$ = 39.78; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.43 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.55 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.68 W/kg
**SAR(1 g) = 0.514 W/kg; SAR(10 g) = 0.22 W/kg**
Maximum value of SAR (measured) = 0.576 W/kg

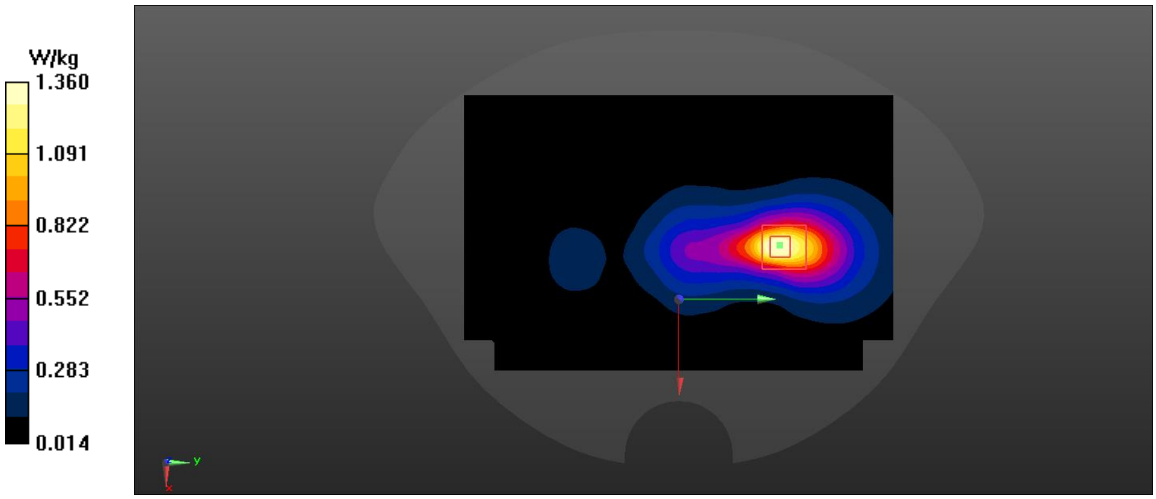


**Fig A.11**

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**LTE2500-FDD7_CH21100 1RB-Middle Left Edge 17mm**
Date: 5/13/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2535 MHz; $\sigma$ = 1.891 mho/m; $\varepsilon r$ = 38.49; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE2500-FDD7 2535 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.43 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.55 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.68 W/kg
**SAR(1 g) = 0.886 W/kg; SAR(10 g) = 0.458 W/kg**
Maximum value of SAR (measured) = 1.36 W/kg

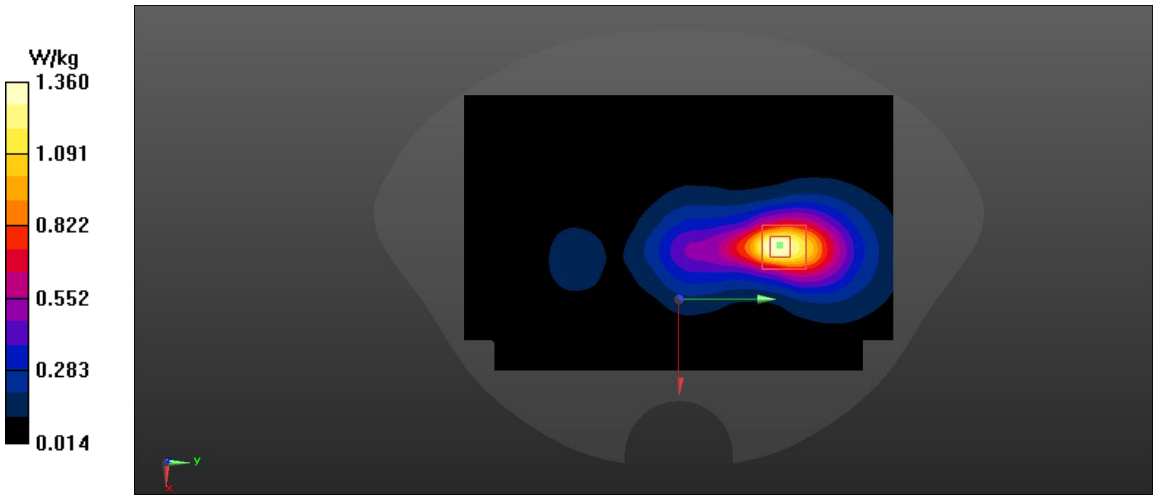


**Fig A.12**

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**LTE700-FDD12_CH23130 1RB-Low Left Cheek**
Date: 5/5/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 711 MHz; $\sigma$ = 0.86 mho/m; $\varepsilon r$ = 42.12; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE700-FDD12 711 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.104 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.608 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.115 W/kg
**SAR(1 g) = 0.087 W/kg; SAR(10 g) = 0.067 W/kg**
Maximum value of SAR (measured) = 0.106 W/kg

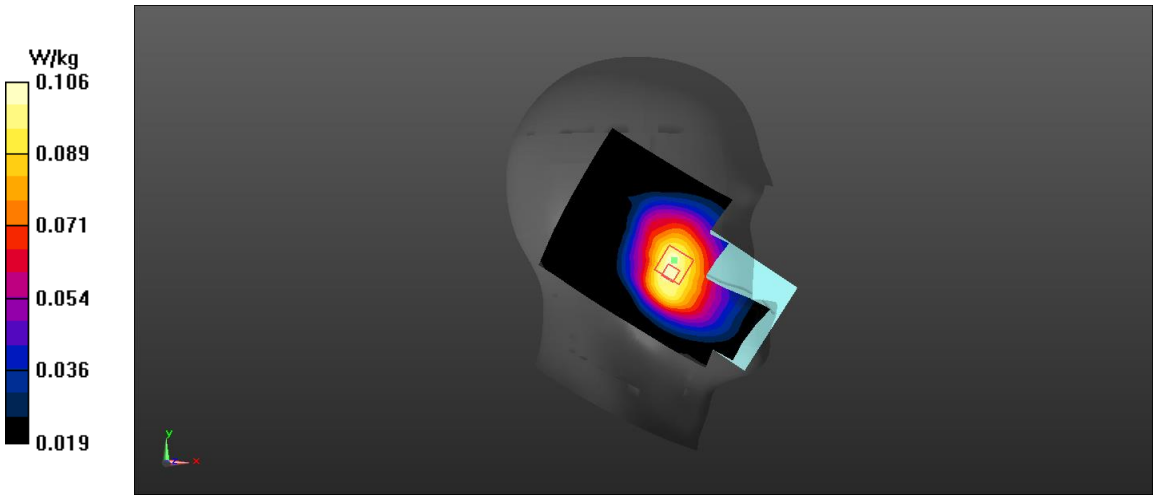


**Fig A.13**

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**LTE700-FDD12_CH23130 1RB-Low Right Edge 10mm**
Date: 5/5/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 711 MHz; $\sigma$ = 0.854 mho/m; $\varepsilon r$ = 41.64; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE700-FDD12 711 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.243 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.56 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 0.276 W/kg
**SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.317 W/kg**
Maximum value of SAR (measured) = 0.245 W/kg

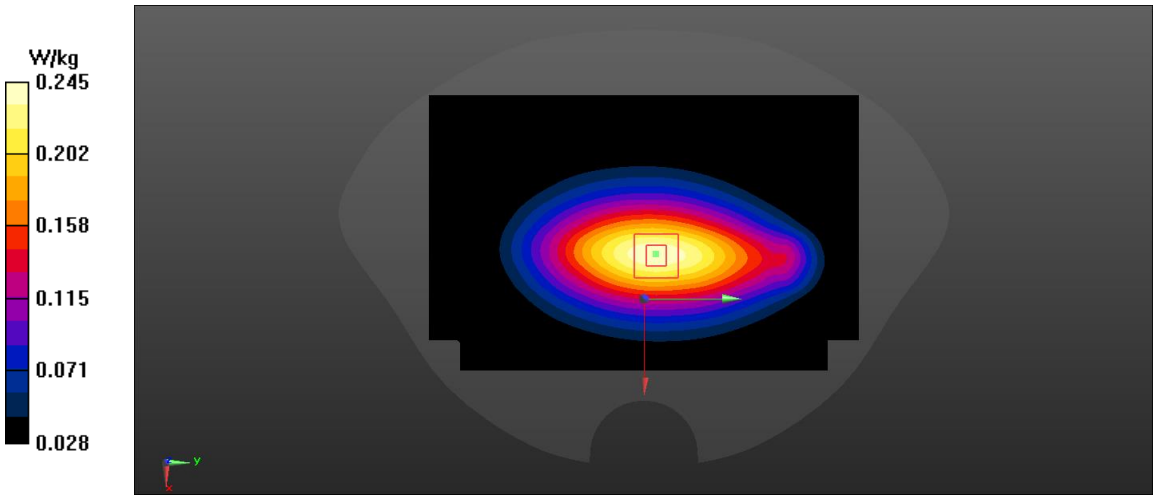


**Fig A.14**

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**LTE750-FDD13_CH23230 1RB-Middle Left Cheek**
Date: 5/5/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 782 MHz; $\sigma$ = 0.927 mho/m; $\varepsilon r$ = 42.03; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.129 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.725 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.142 W/kg
**SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.083 W/kg**
Maximum value of SAR (measured) = 0.131 W/kg

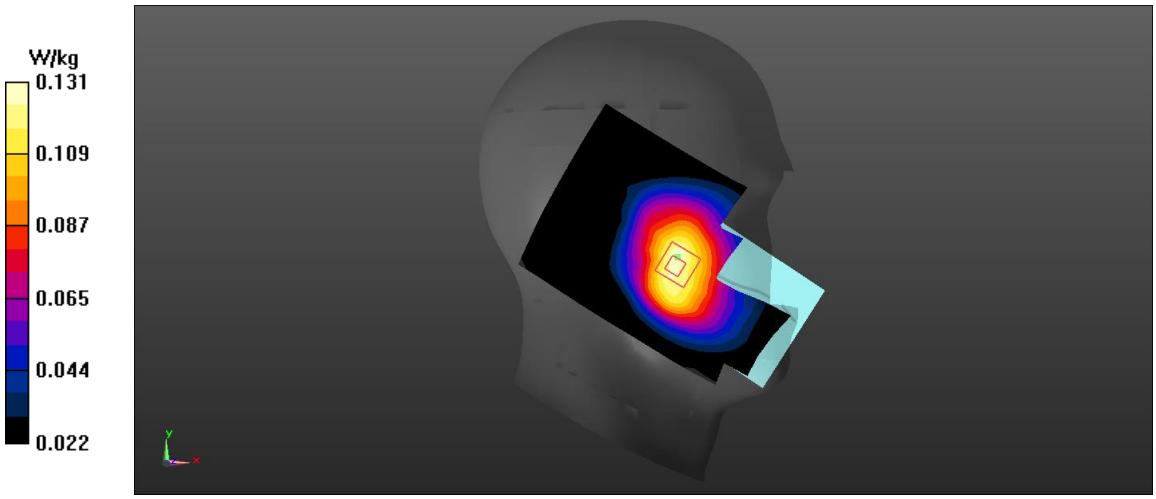


**Fig A.15**

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**LTE750-FDD13_CH23230 1RB-Middle Right Edge 10mm**
Date: 5/5/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 782 MHz; $\sigma$ = 0.921 mho/m; $\varepsilon r$ = 41.55; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.502 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.7 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.564 W/kg
**SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.273 W/kg**
Maximum value of SAR (measured) = 0.502 W/kg

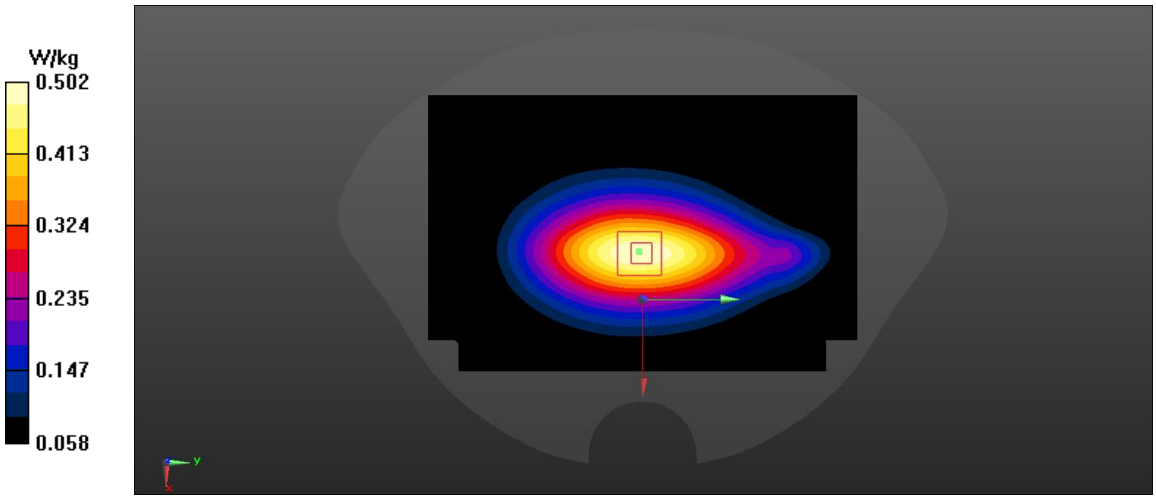


**Fig A.16**

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**LTE1900-FDD25_CH26590 1RB-Low Right Tilt**
Date: 5/12/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f = 1905 MHz; $\sigma$ = 1.402 mho/m; $\varepsilon r$ = 39.43; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE1900-FDD25 1905 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.33 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.42 V/m; Power Drift = -0.2 dB
Peak SAR (extrapolated) = 1.45 W/kg
**SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.349 W/kg**
Maximum value of SAR (measured) = 0.807 W/kg

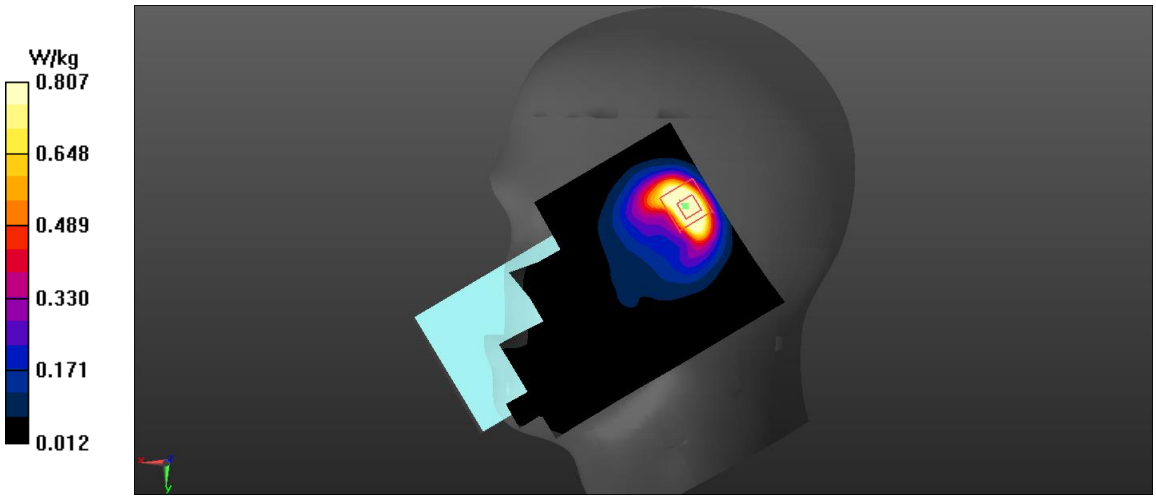


**Fig A.17**

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**LTE1900-FDD25_CH26590 1RB-Middle Front 17mm**
Date: 5/12/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f = 1905 MHz; $\sigma$ = 1.397 mho/m; $\varepsilon r$ = 40.32; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE1900-FDD25 1905 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.669 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.91 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.764 W/kg
**SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.282 W/kg**
Maximum value of SAR (measured) = 0.656 W/kg

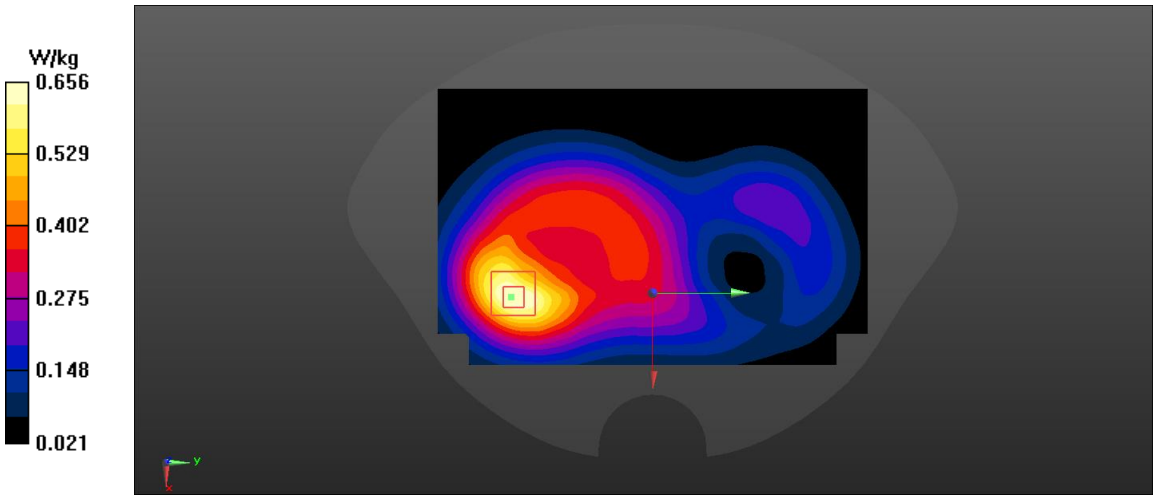


**Fig A.18**

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**LTE850-FDD26_CH26775 1RB-Low Right Cheek**
Date: 5/8/2022
Electronics: DAE4 Sn549
Medium: head 835 MHz
Medium parameters used: f = 822.5 MHz; $\sigma$ = 0.891 mho/m; $\varepsilon r$ = 40.86; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.134 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.393 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.138 W/kg
**SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.085 W/kg**
Maximum value of SAR (measured) = 0.115 W/kg

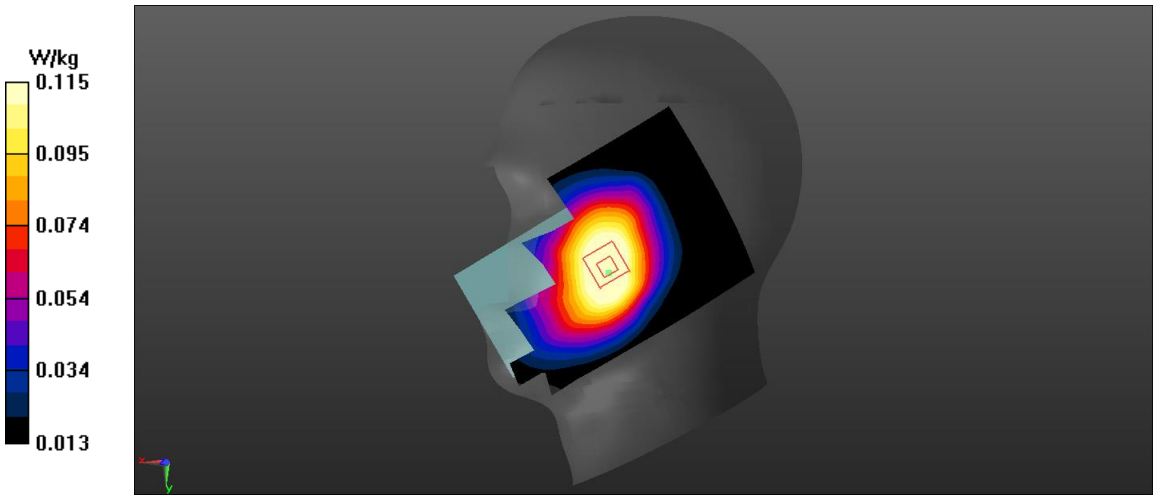


**Fig A.19**

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**LTE850-FDD26_CH26965 1RB-Low Right Edge 10mm**
Date: 5/8/2022
Electronics: DAE4 Sn549
Medium: head 835 MHz
Medium parameters used: f = 841.5 MHz; $\sigma$ = 0.893 mho/m; $\varepsilon r$ = 41.99; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE850-FDD26 841.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.312 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.88 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.352 W/kg
**SAR(1 g) = 0.24 W/kg; SAR(10 g) = 0.166 W/kg**
Maximum value of SAR (measured) = 0.312 W/kg

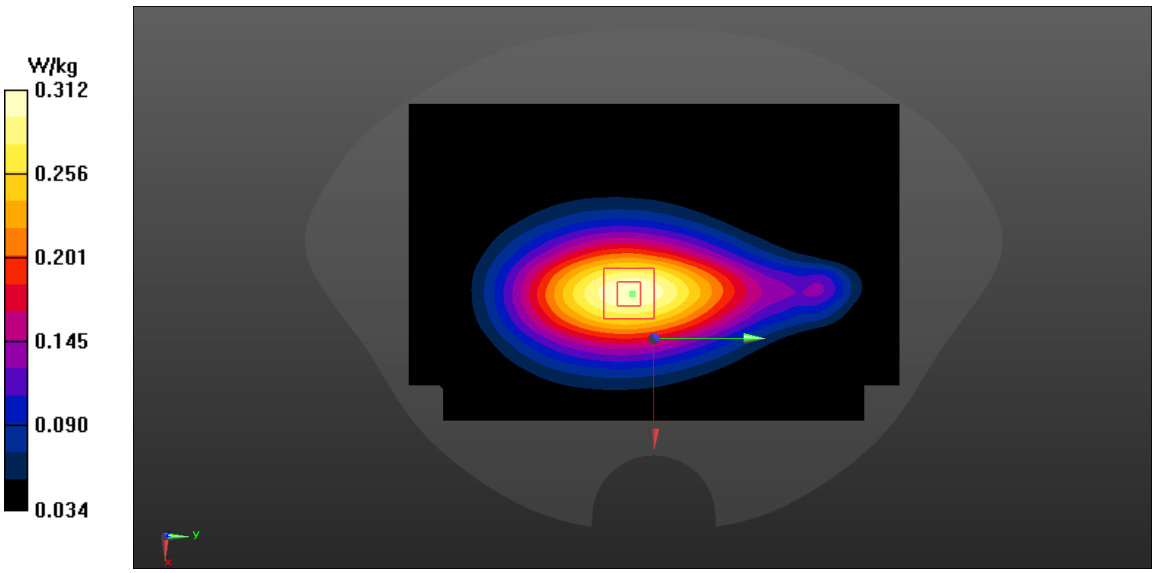


**Fig A.20**

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**LTE2600-TDD41 PC3_CH41055 1RB-Low Right Cheek**
Date: 5/14/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2636.5 MHz; $\sigma$ = 0.301 mho/m; $\varepsilon r$ = 41.84; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE2600-TDD41 2636.5 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.736 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.675 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.921 W/kg
**SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.151 W/kg**
Maximum value of SAR (measured) = 0.404 W/kg

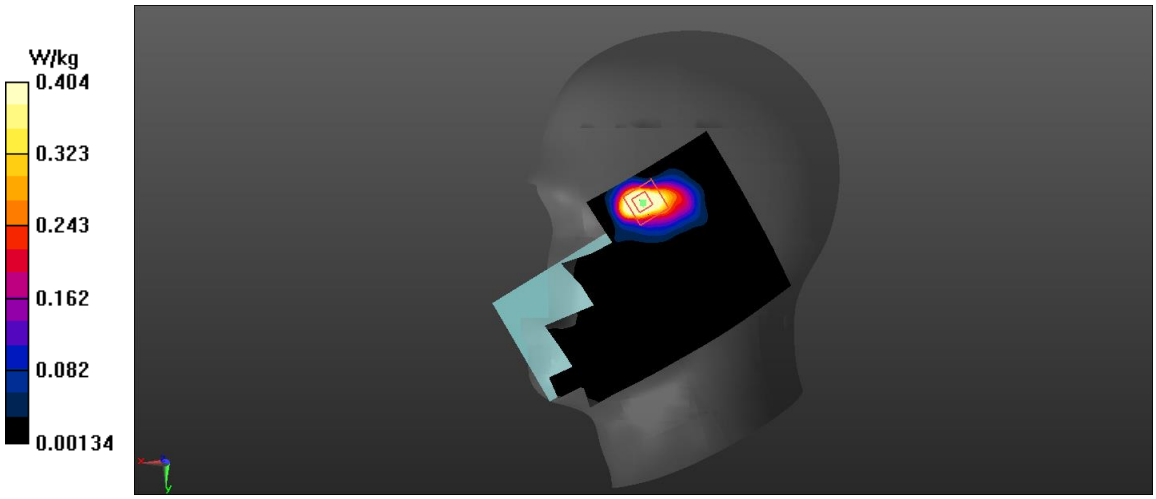


**Fig A.21**

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**LTE2600-TDD41 PC3_CH40185 1RB-Middle Left Edge 17mm**
Date: 5/14/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2549.5 MHz; $\sigma$ = 0.283 mho/m; $\varepsilon r$ = 40.52; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE2600-TDD41 2549.5 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.765 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.299 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.916 W/kg
**SAR(1 g) = 0.484 W/kg; SAR(10 g) = 0.253 W/kg**
Maximum value of SAR (measured) = 0.734 W/kg

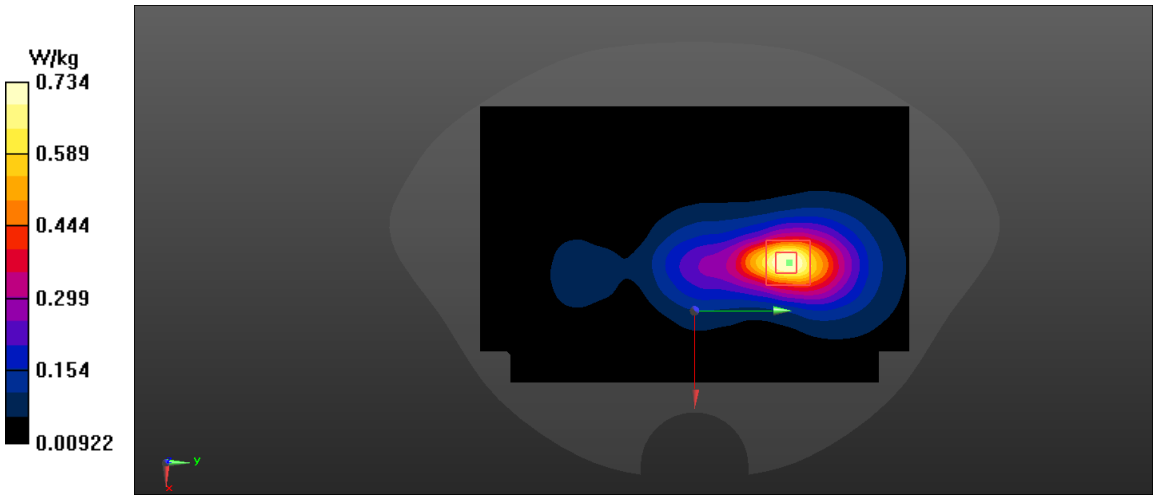


**Fig A.22**

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**LTE2600-TDD41 PC2_CH41055 50RB-Middle Right Cheek**
Date: 5/14/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2636.5 MHz; $\sigma$ = 0.301 mho/m; $\varepsilon r$ = 41.84; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE2600-TDD41 2636.5 MHz Duty Cycle: 1:2.309
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.559 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.566 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.702 W/kg
**SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.116 W/kg**
Maximum value of SAR (measured) = 0.310 W/kg

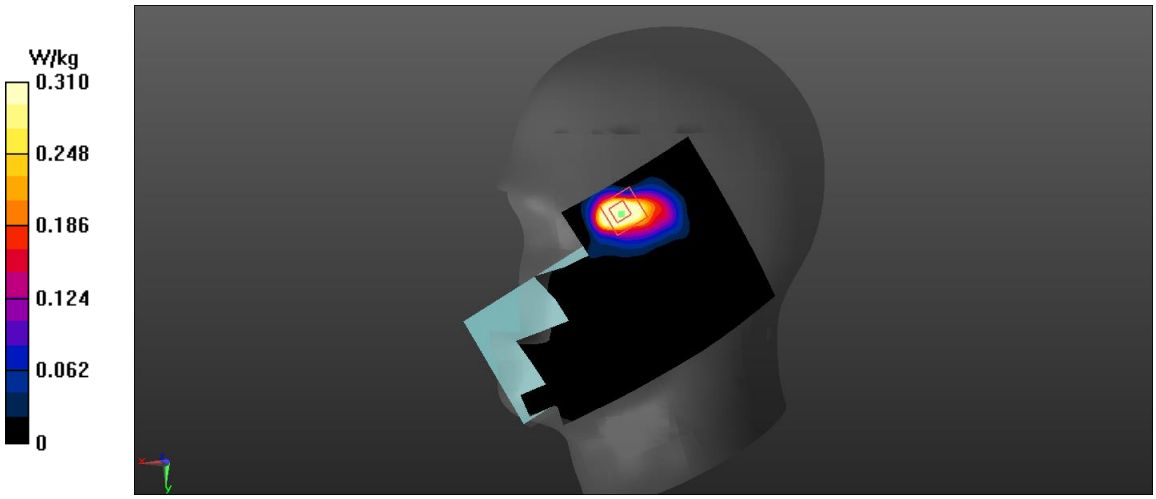


**Fig A.23**

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**LTE2600-TDD41 PC2_CH41055 50RB-Low Left Edge 17mm**
Date: 5/14/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2636.5 MHz; $\sigma$ = 0.283 mho/m; $\varepsilon r$ = 40.52; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE2600-TDD41 2636.5 MHz Duty Cycle: 1:2.309
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.611 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.704 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.724 W/kg
**SAR(1 g) = 0.373 W/kg; SAR(10 g) = 0.191 W/kg**
Maximum value of SAR (measured) = 0.572 W/kg

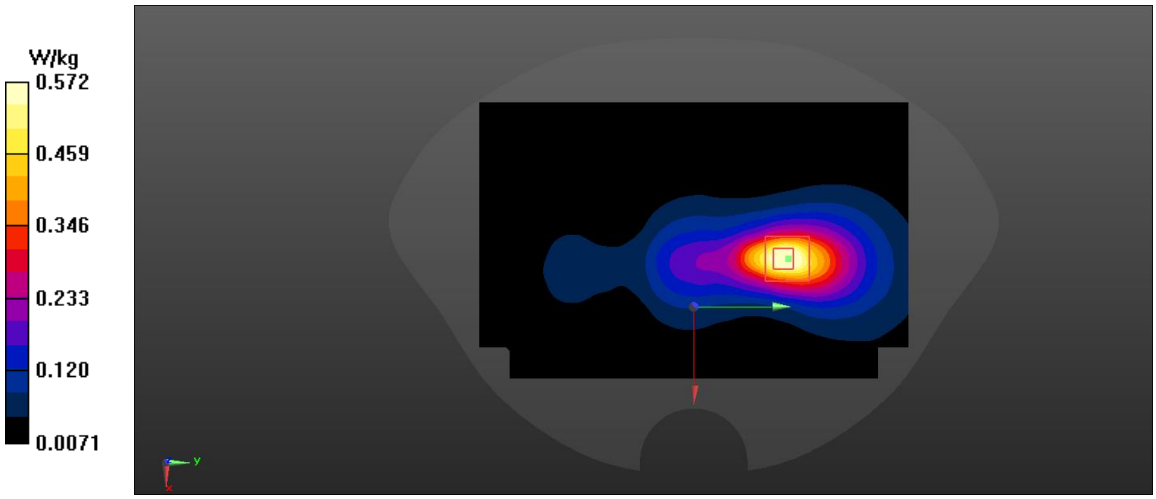


**Fig A.24**

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**LTE1700-FDD66_CH132072 1RB-Middle Right Tilt**
Date: 5/10/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1720 MHz; $\sigma$ = 0.517 mho/m; $\varepsilon r$ = 41.19; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.77 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.87 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.822 W/kg
**SAR(1 g) = 0.419 W/kg; SAR(10 g) = 0.214 W/kg**
Maximum value of SAR (measured) = 0.462 W/kg

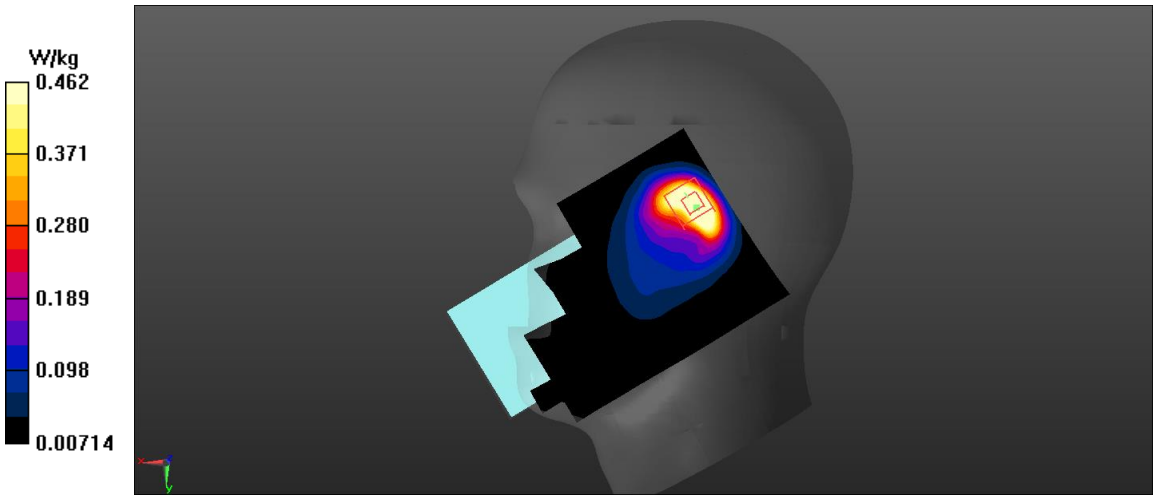


**Fig A.25**

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**LTE1700-FDD66_CH132072 1RB-Low Front 17mm**
Date: 5/10/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1720 MHz; $\sigma$ = 0.507 mho/m; $\varepsilon r$ = 41.11; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.365 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.32 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.414 W/kg
**SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.164 W/kg**
Maximum value of SAR (measured) = 0.357 W/kg

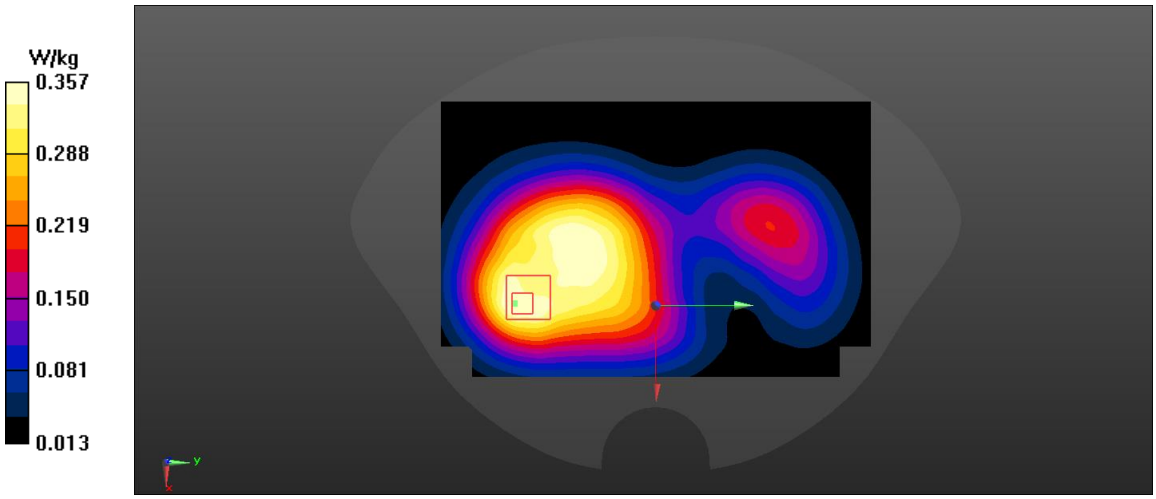


**Fig A.26**

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**LTE700-FDD71_CH133222 1RB-Low Left Cheek**
Date: 5/6/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 673 MHz; $\sigma$ = 0.984 mho/m; $\varepsilon r$ = 41.96; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE700-FDD71 673 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.106 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.893 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.117 W/kg
**SAR(1 g) = 0.089 W/kg; SAR(10 g) = 0.069 W/kg**
Maximum value of SAR (measured) = 0.107 W/kg

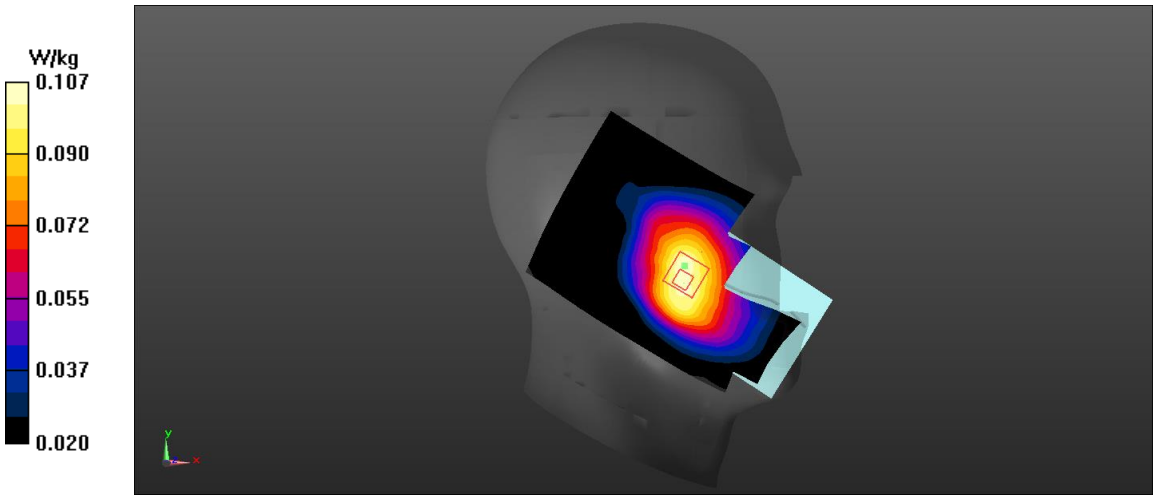


**Fig A.27**

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**LTE700-FDD71_CH133372 1RB-Low Right Edge 10mm**
Date: 5/6/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 688 MHz; $\sigma$ = 0.978 mho/m; $\varepsilon r$ = 41.48; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE700-FDD71 688 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.591 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.37 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.665 W/kg
**SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.325 W/kg**
Maximum value of SAR (measured) = 0.593 W/kg

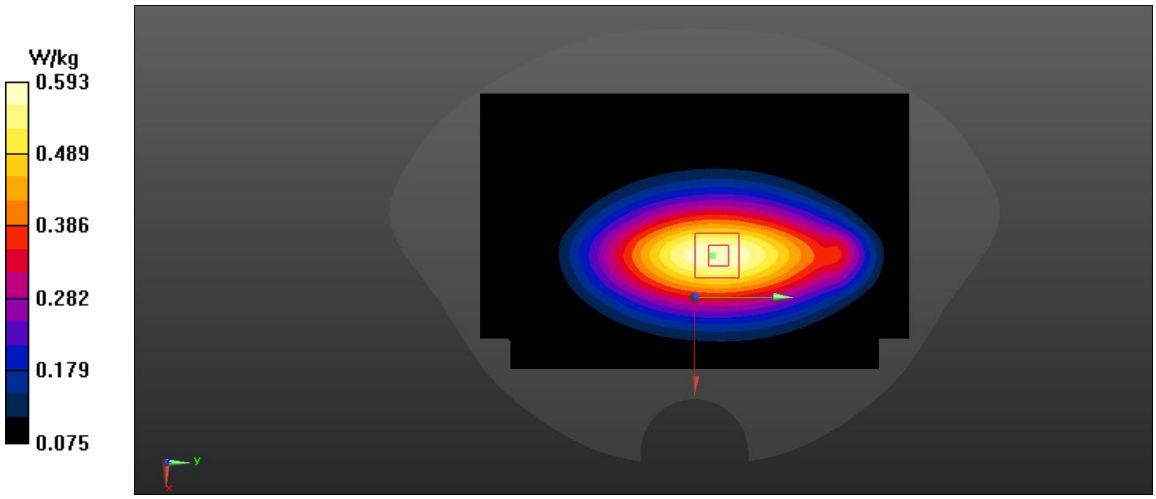


**Fig A.28**

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**WLAN2450_CH6 Left Cheek**
Date: 5/15/2022
Electronics: DAE4 Sn549
Medium: head 2450 MHz
Medium parameters used: f = 2437 MHz; $\sigma$ = 1.803 mho/m; $\varepsilon r$ = 39.34; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: WLAN2450 2437 Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.77,7.77,7.77)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.347 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.203 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.407 W/kg
**SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.102 W/kg**
Maximum value of SAR (measured) = 0.314 W/kg

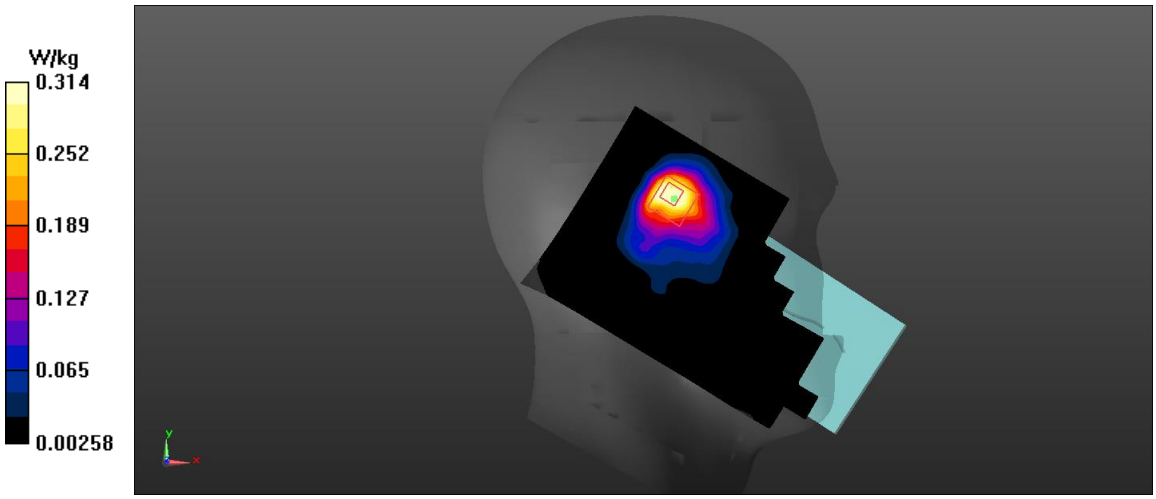


**Fig A.29**

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**WLAN2450_CH11 Top Edge 10mm**
Date: 5/15/2022
Electronics: DAE4 Sn549
Medium: head 2450 MHz
Medium parameters used: f = 2462 MHz; $\sigma$ = 1.813 mho/m; $\varepsilon r$ = 38.86; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: WLAN2450 2462 Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.77,7.77,7.77)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.398 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.35 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.469 W/kg
**SAR(1 g) = 0.244 W/kg; SAR(10 g) = 0.127 W/kg**
Maximum value of SAR (measured) = 0.384 W/kg

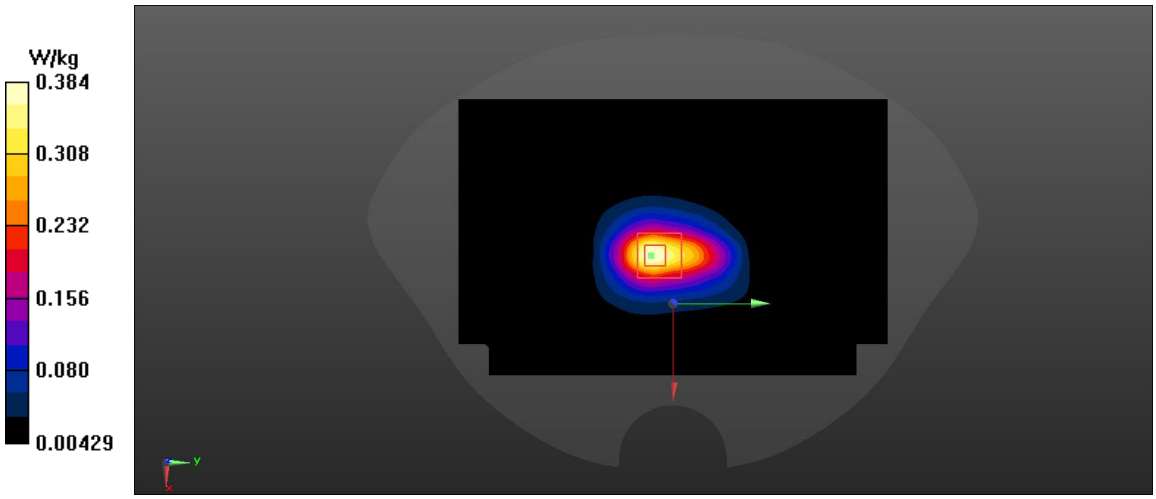


**Fig A.30**

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**UNII-3_CH155 Left Cheek**
Date: 5/18/2022
Electronics: DAE4 Sn549
Medium: head 5750 MHz
Medium parameters used: f = 5775 MHz; $\sigma$ = 5.178 mho/m; $\varepsilon r$ = 34.74; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: UNII-3 5775 Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(4.85,4.85,4.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.555 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.157 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.528 W/kg
**SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.041 W/kg**
Maximum value of SAR (measured) = 0.326 W/kg

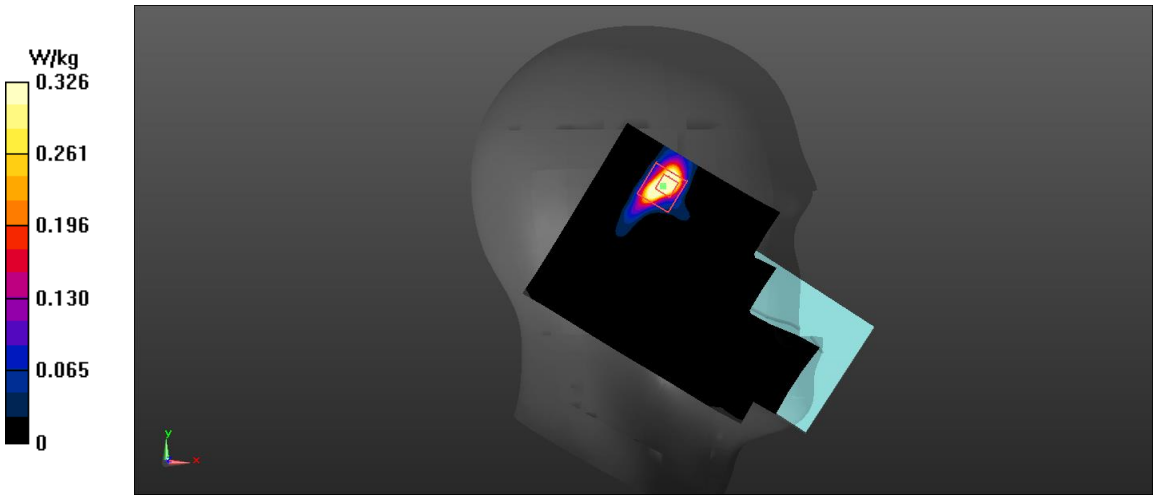


**Fig A.31**

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**UNII-3_CH165 Right Edge 10mm**
Date: 5/18/2022
Electronics: DAE4 Sn549
Medium: head 5750 MHz
Medium parameters used: f = 5825 MHz; $\sigma$ = 5.308 mho/m; $\varepsilon r$ = 35.21; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: UNII-3 5825 Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(4.85,4.85,4.85)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.743 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.22 W/kg
**SAR(1 g) = 0.425 W/kg; SAR(10 g) = 0.16 W/kg**
Maximum value of SAR (measured) = 0.525 W/kg

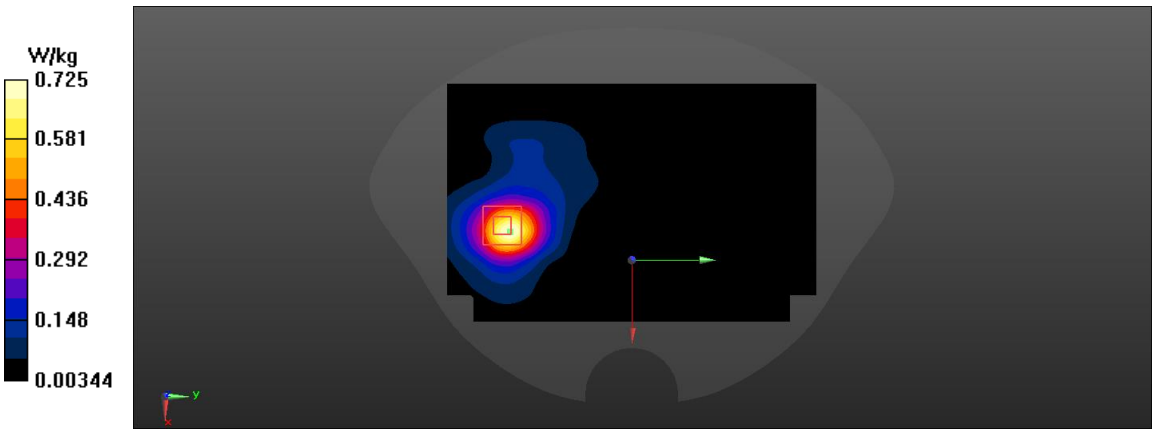


**Fig A.32**

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**n25_CH376500 Right Tilt**
Date: 5/20/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f = 1882.5; $\sigma$ = 1.387 mho/m; $\varepsilon r$ = 39.383; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n25 1882.5 MHz Duty Cycle:1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (81x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.189 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.141 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.25 W/kg
**SAR(1 g) = 0.584 W/kg; SAR(10 g) = 0.3231 W/kg**
Maximum value of SAR (measured) = 0.707 W/kg

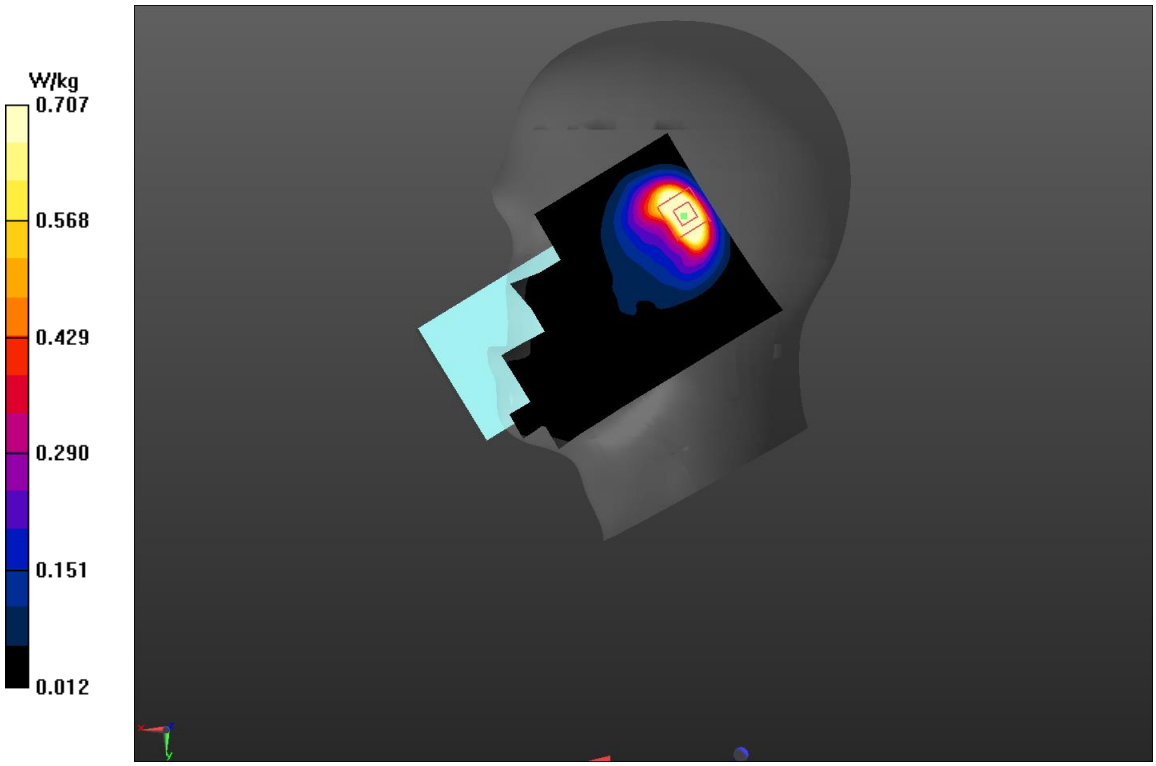


**Fig A.33**

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**n25_CH376500 Front 17mm**
Date: 5/20/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f = 1882.5; $\sigma$ = 1.361 mho/m; $\varepsilon r$ = 40.5; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n25 1882.5 Duty Cycle:1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (91x141x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.515 W/kg

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.78 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.599 W/kg
**SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.214 W/kg**
Maximum value of SAR (measured) = 0.507 W/kg

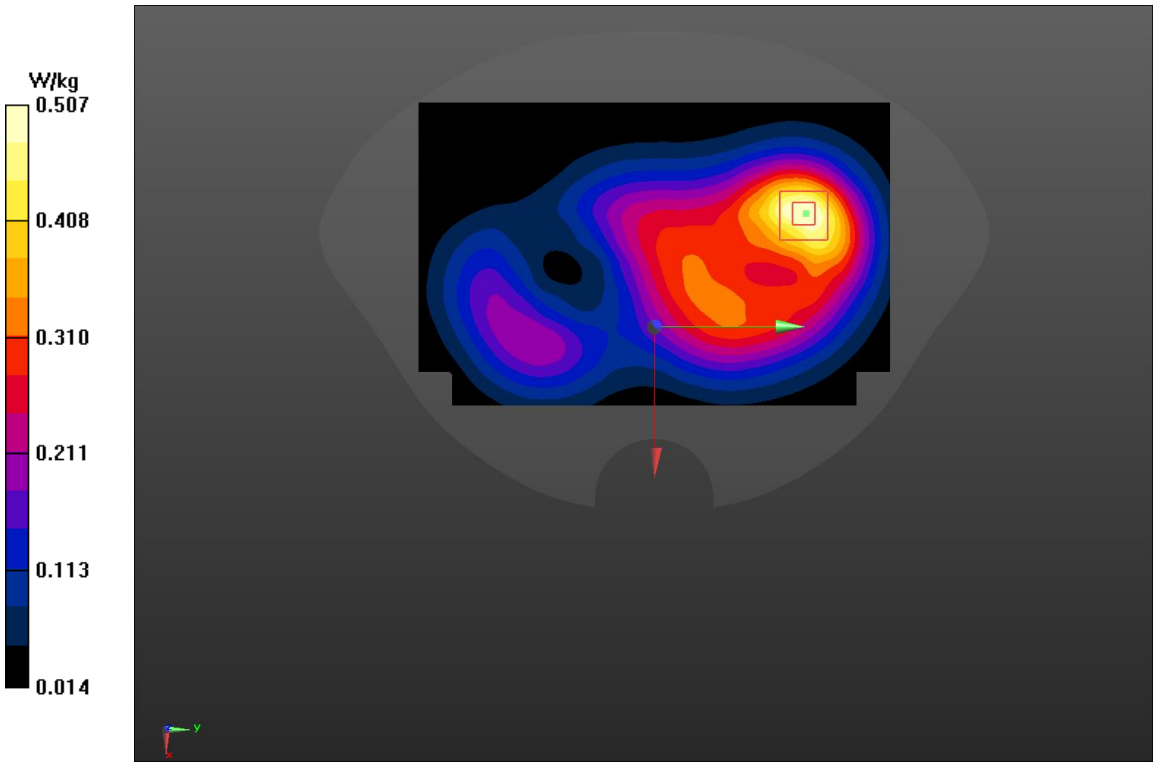


**Fig A.34**

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**n66_CH344000 Right Cheek**
Date: 5/19/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1720; $\sigma$ = 1.318 mho/m; $\varepsilon r$ = 40.07; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n66 1720 Duty Cycle:1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.716 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.80 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.791 W/kg
**SAR(1 g) = 0.432 W/kg; SAR(10 g) = 0.237 W/kg**
Maximum value of SAR (measured) = 0.462 W/kg

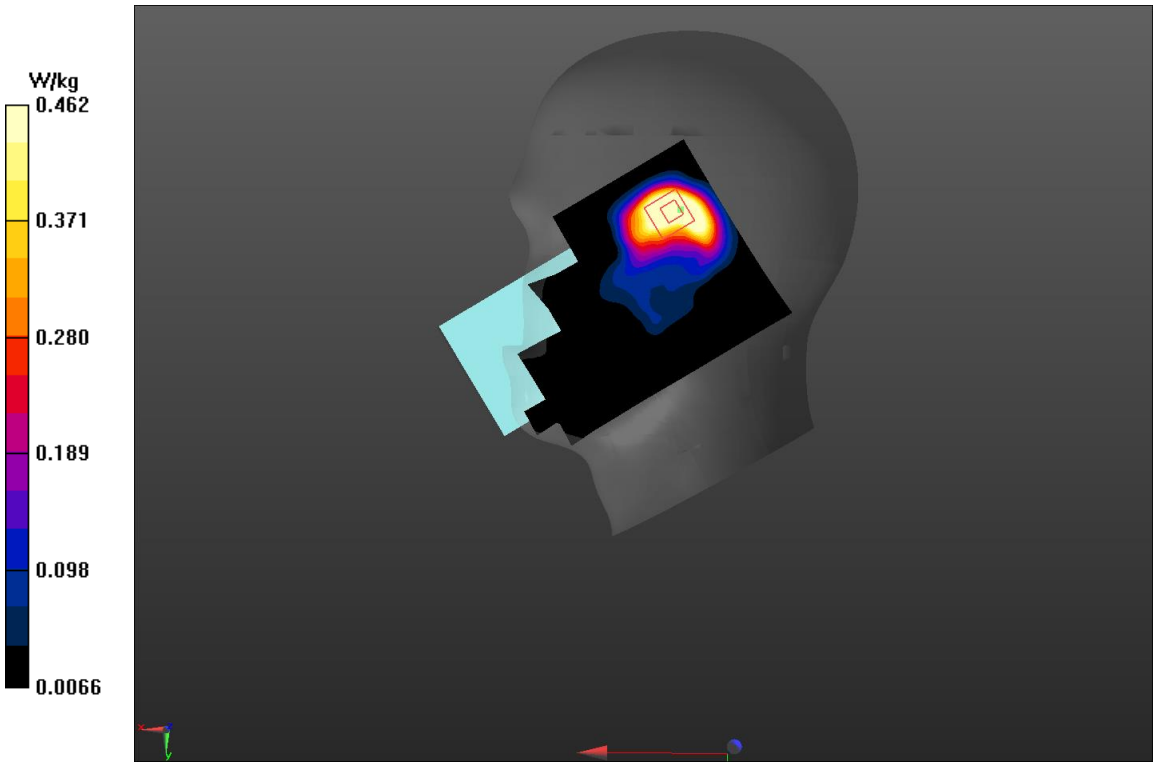


**Fig A.35**

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**n66_CH349000 Front 17mm**
Date: 5/19/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1745; $\sigma$ = 1.371 mho/m; $\varepsilon r$ = 39.773; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.31°C
Communication System: n66 1745 Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.3821 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.314 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.418 W/kg
**SAR(1 g) = 0.254 W/kg; SAR(10 g) = 0.159 W/kg**
Maximum value of SAR (measured) = 0.358 W/kg

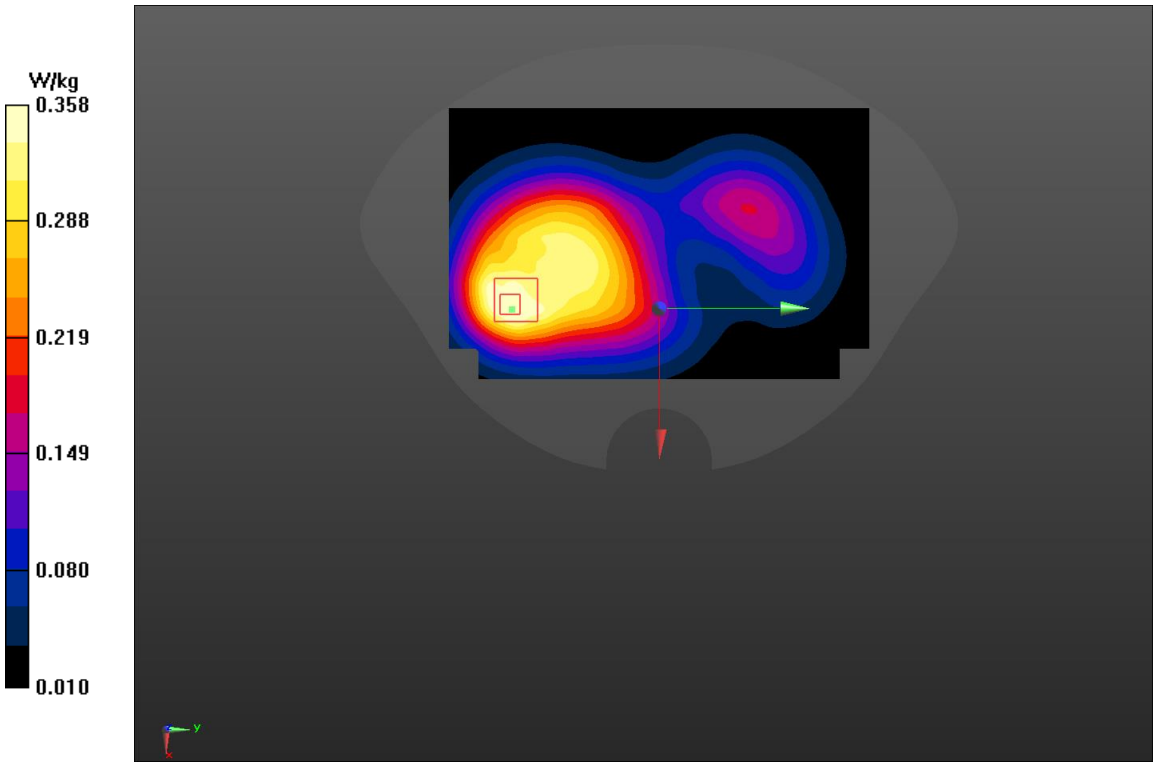


**Fig A.36**

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**n71_CH136100 Right Cheek**
Date: 5/18/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 680.5; $\sigma$ = 11.65 mho/m; $\varepsilon r$ = 28.488; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n71 680.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.2581 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.535 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.264 W/kg
**SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.161 W/kg**
Maximum value of SAR (measured) = 0.358 W/kg

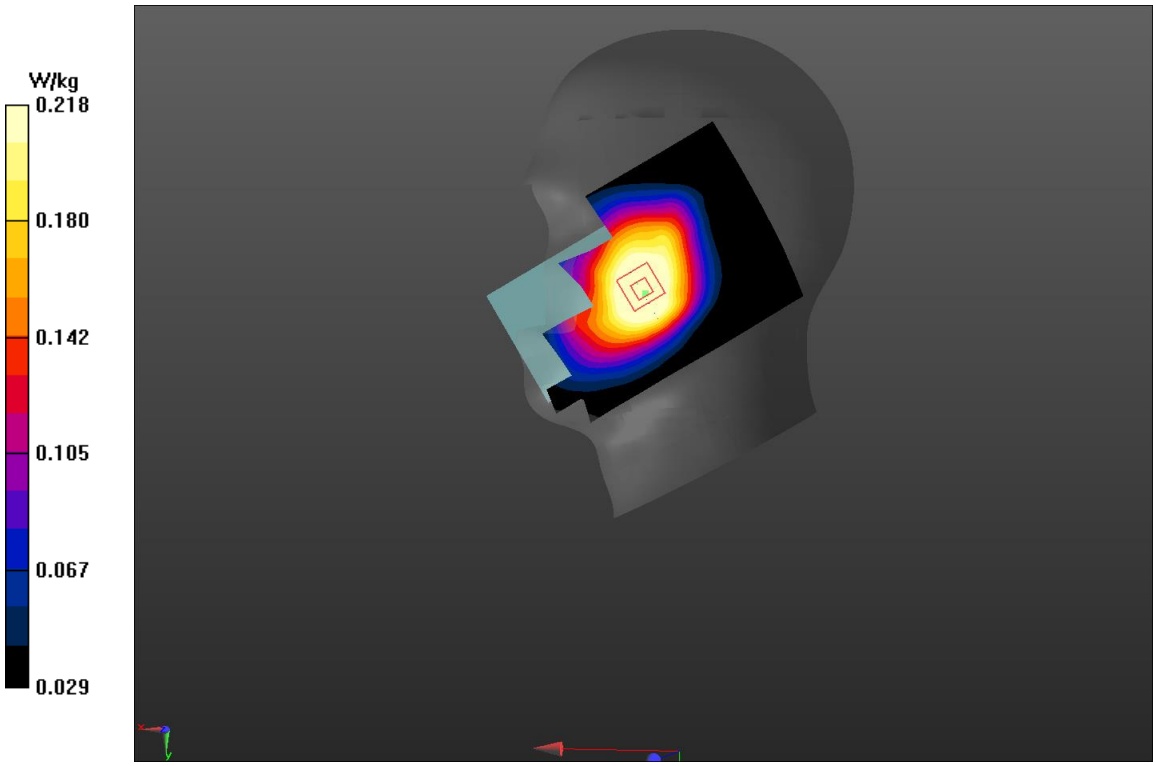


**Fig A.37**

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**n71_CH136100 Right Edge 10mm**
Date: 5/18/2022
Electronics: DAE4 Sn549
Medium: head 750 MHz
Medium parameters used: f = 680.5; $\sigma$ = 11.644 mho/m; $\varepsilon r$ = 28.02; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n71 680.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.548 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.531 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.618 W/kg
**SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.300 W/kg**
Maximum value of SAR (measured) = 0.554 W/kg

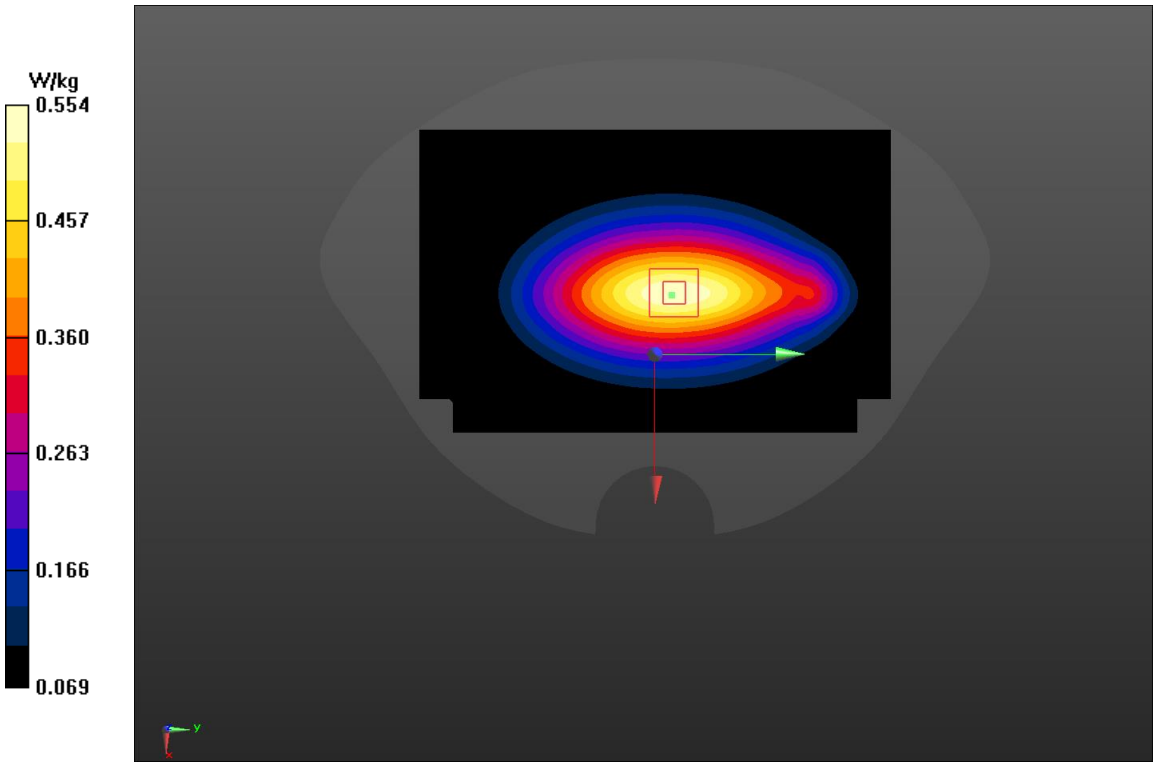


**Fig A.38**

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**n41 pc2_CH518598 Right Cheek**
Date: 5/21/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2592.98; $\sigma$ = 1.958 mho/m; $\varepsilon r$ =37.873 ; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n41 pc2 2592.99 MHz Duty Cycle: 1:2
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.27 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.553 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.611 W/kg
**SAR(1 g) = 0.640 W/kg; SAR(10 g) = 0.292 W/kg**
Maximum value of SAR (measured) = 0.757 W/kg

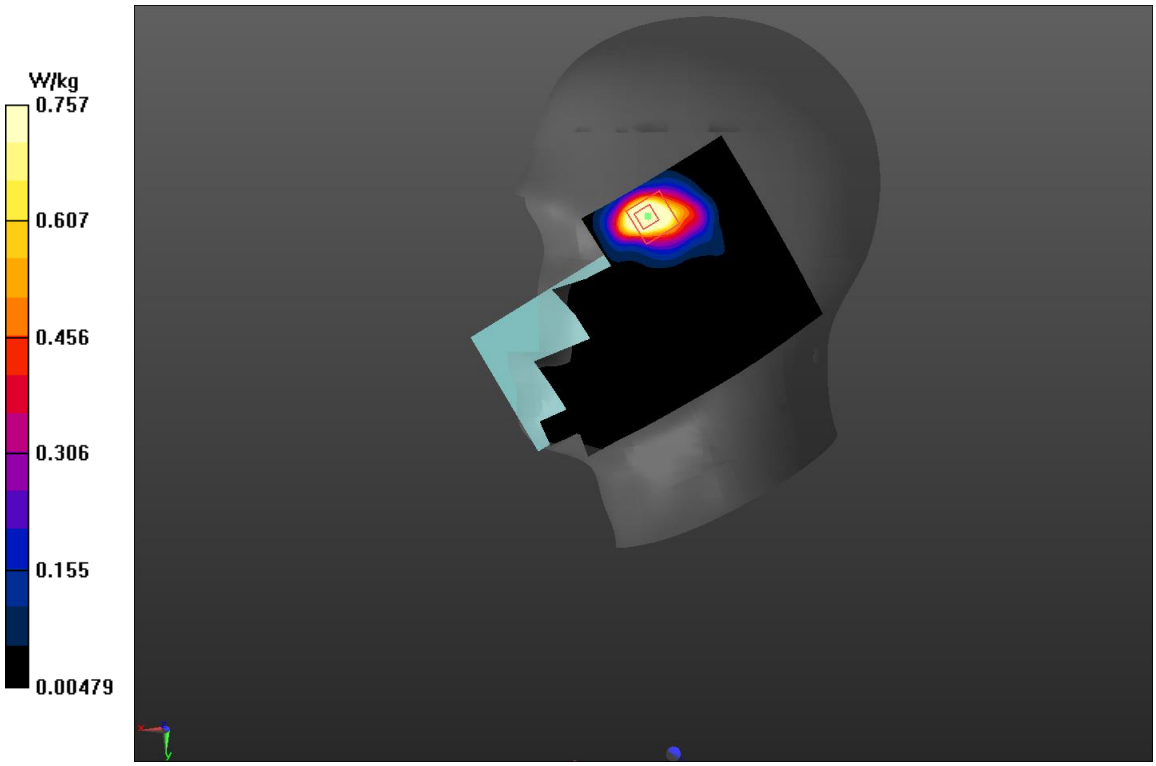


**Fig A.39**

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**n41 pc2_CH518598 Left Edge 17mm**
Date: 5/21/2022
Electronics: DAE4 Sn549
Medium: head 2600 MHz
Medium parameters used: f = 2592.99; $\sigma$ = 0.947 mho/m; $\varepsilon r$ = 41.047; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.31°C
Communication System: n41 pc2 2592.99 MHz Duty Cycle: 1:2
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.3291 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.549 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.404 W/kg
**SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.107 W/kg**
Maximum value of SAR (measured) = 0.329 W/kg

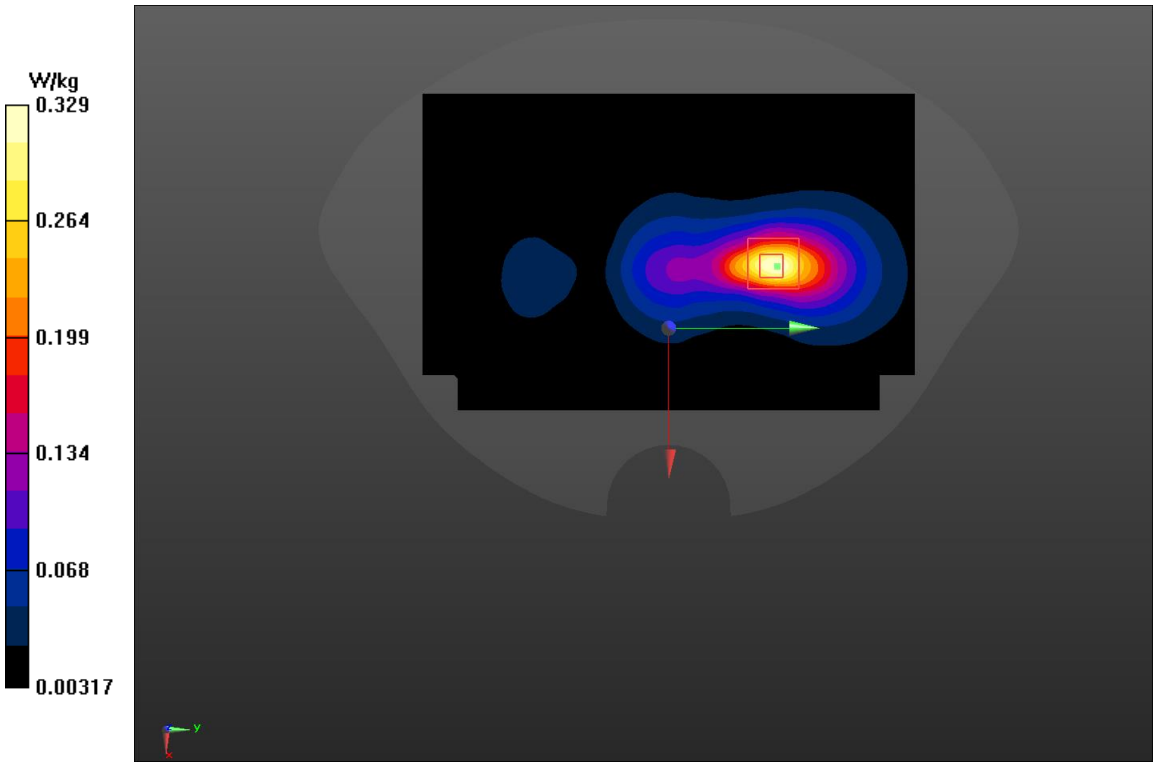


**Fig A.40**

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**n77 pc2_CH636000 Left Tilt**
Date: 5/22/2022
Electronics: DAE4 Sn549
Medium: head 3500 MHz
Medium parameters used: f = 3540; $\sigma$ = 2.991 mho/m; $\varepsilon r$ = 35.809; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n77 pc2 3540 MHz Duty Cycle: 1:2
Probe: EX3DV4 – SN7464 ConvF(7.20,7.20,7.20)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.837 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.924 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.689 W/kg
**SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.204 W/kg**
Maximum value of SAR (measured) = 1.92 W/kg

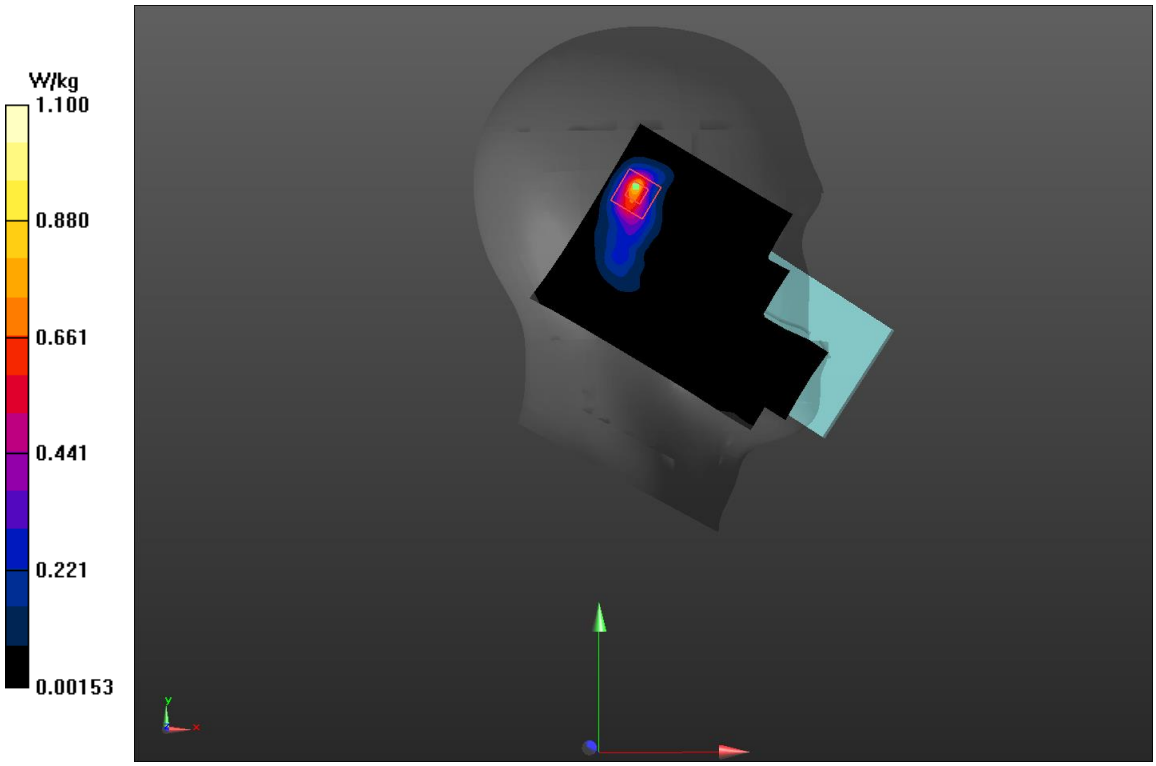


**Fig A.41**

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**n77 pc2_CH633334 Top Edge 21mm**
Date: 5/22/2022
Electronics: DAE4 Sn549
Medium: head 3500 MHz
Medium parameters used: f = 3500; $\sigma$ = 2.723 mho/m; $\varepsilon r$ = 36.121; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.31°C
Communication System: n77 pc2 3500.01 MHz Duty Cycle:1:2
Probe: EX3DV4 – SN7464 ConvF(7.20,7.20,7.20)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.967 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 12.57 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.21 W/kg
**SAR(1 g) = 0.569 W/kg; SAR(10 g) = 0.285 W/kg**
Maximum value of SAR (measured) = 0.941 W/kg

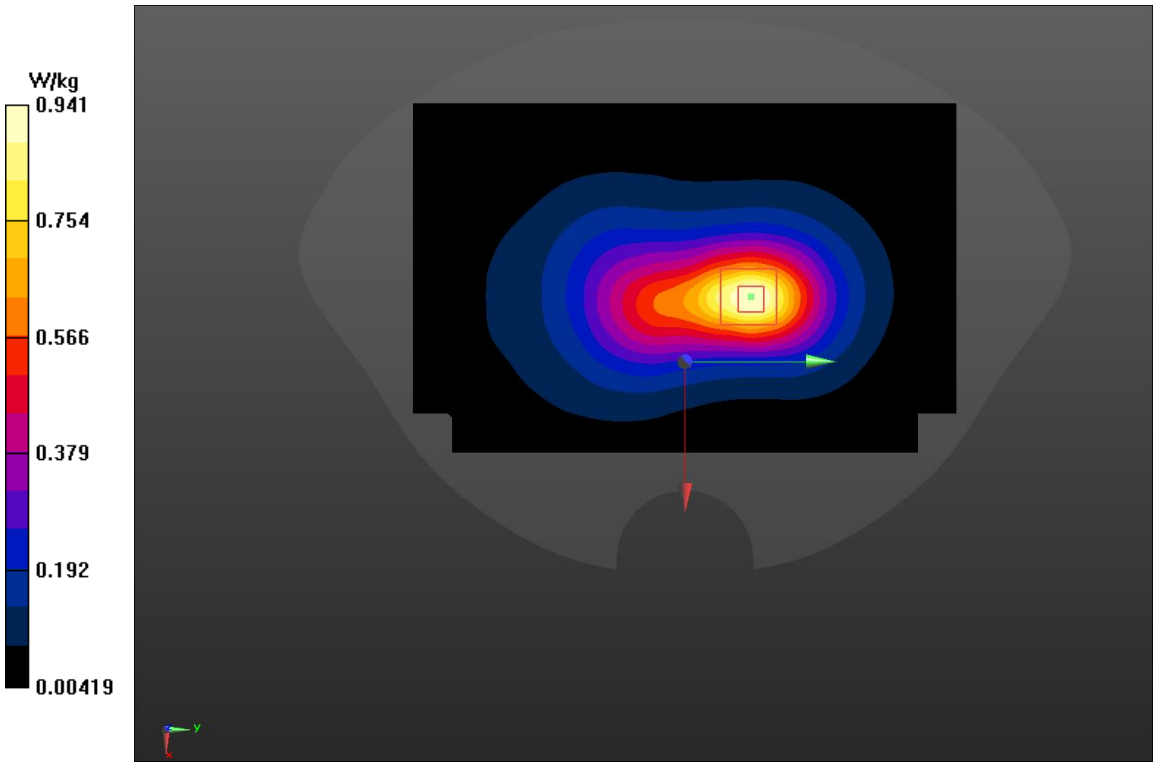


**Fig A.42**

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**n77 pc2_CH654267 Left Tilt**
Date: 5/23/2022
Electronics: DAE4 Sn549
Medium: head 3900 MHz
Medium parameters used: f = 3814; $\sigma$ = 2.991 mho/m; $\varepsilon r$ = 35.809 ; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n77 pc2 3814 MHz Duty Cycle: 1:2
Probe: EX3DV4 – SN7464 ConvF(6.76,6.76,6.76)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.62 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 9.176 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 2.60 W/kg
**SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.368 W/kg**
Maximum value of SAR (measured) = 1.92 W/kg

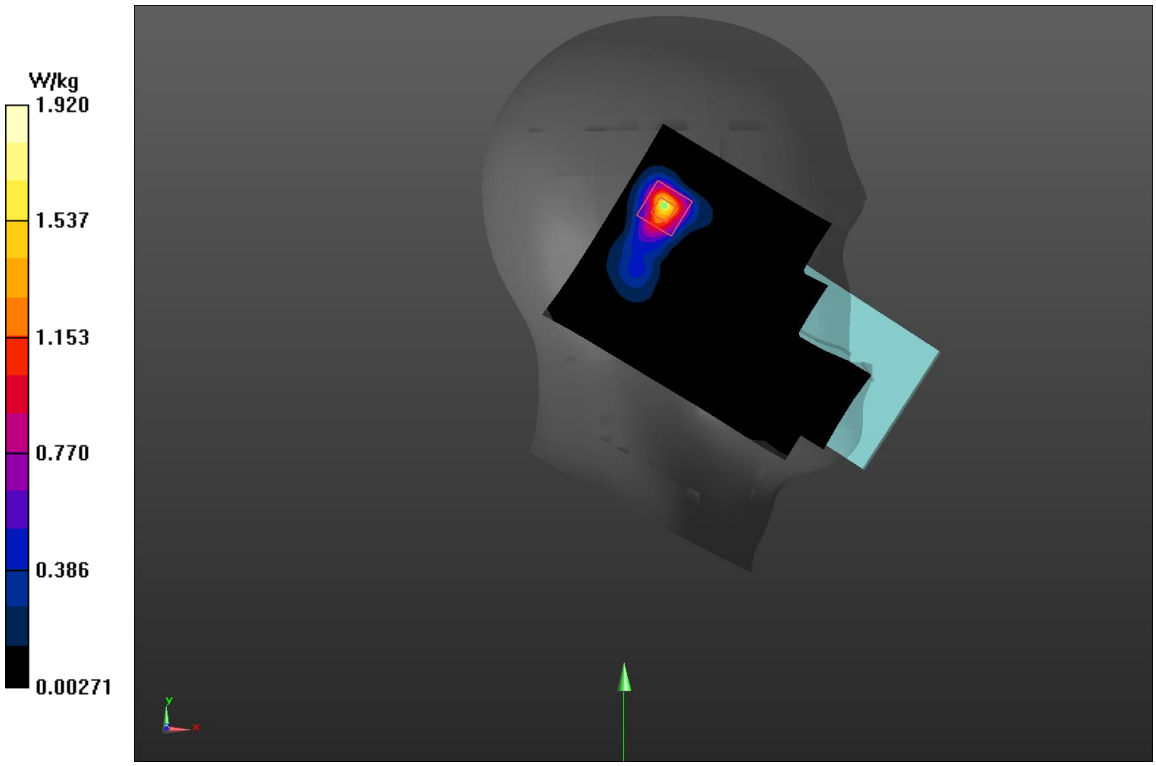


**Fig A.43**

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**n77 pc2_CH650800 Top Edge 21mm**
Date: 5/23/2022
Electronics: DAE4 Sn549
Medium: head 3900 MHz
Medium parameters used: f = 3762; $\sigma$ = 2.943 mho/m; $\varepsilon r$ = 35.791; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.31°C
Communication System: n77 pc2 3762 MHz Duty Cycle: 1:2
Probe: EX3DV4 – SN7464 ConvF(6.76,6.76,6.76)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.46 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 13.74 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.95 W/kg
**SAR(1 g) = 0.868 W/kg; SAR(10 g) = 0.425 W/kg**
Maximum value of SAR (measured) = 1.48 W/kg

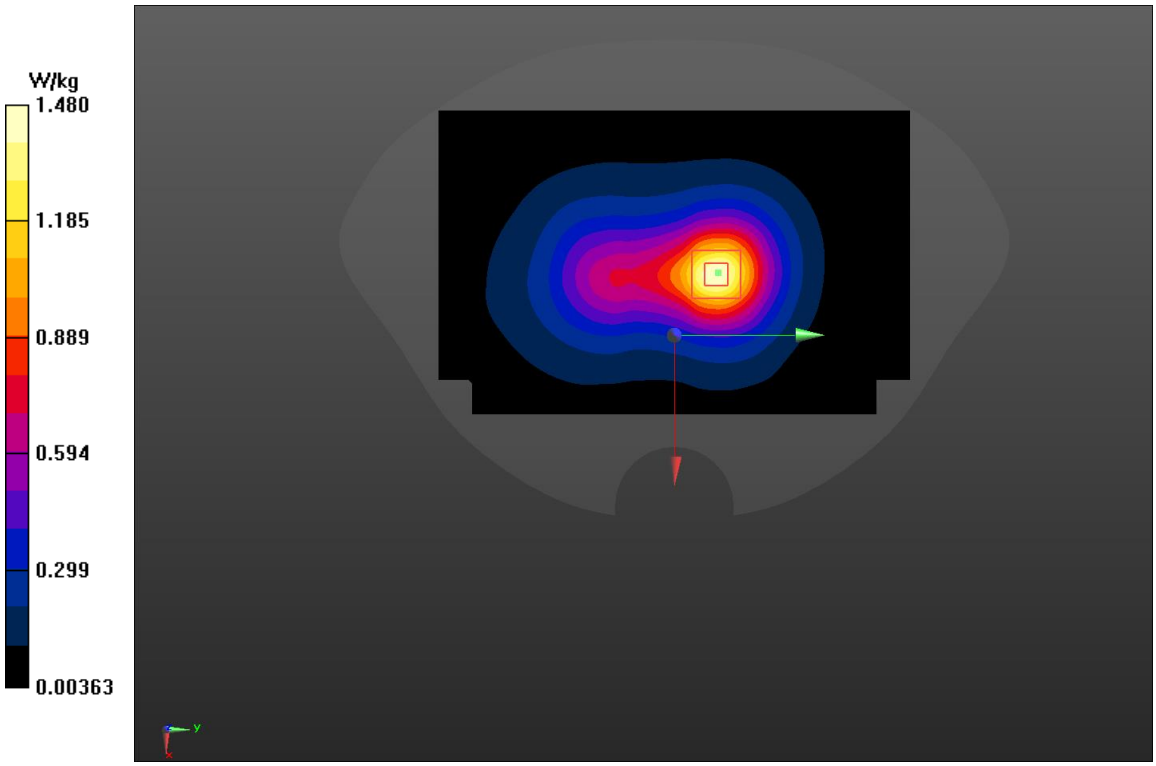


**Fig A.44**

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**LTE1900-FDD2_CH18900 Right Cheek 1RB-Low**
Date: 5/20/2022
Electronics: DAE4 Sn549
Medium: head 1900 MHz
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.356 mho/m; $\varepsilon r$ = 39.97; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C,  Liquid Temperature: 22.3°C
Communication System: LTE1900-FDD2 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.16 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.23 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.34 W/kg
**SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.066 W/kg**
Maximum value of SAR (measured) = 0.261 W/kg

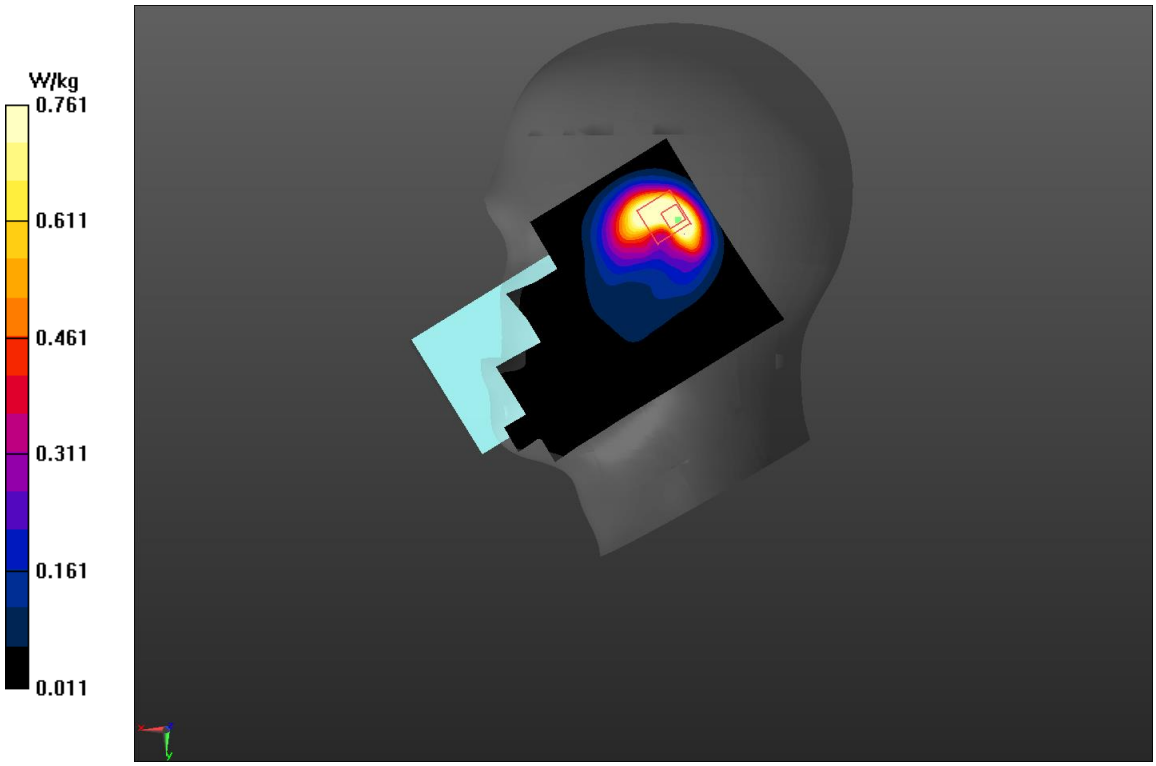


**Fig A.45**

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**LTE1900-FDD2_CH18900 Right Edge 10mm 1RB-Low**
Date: 5/20/2022
Electronics: DAE4 Sn549
Medium: body 1900 MHz
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.507 mho/m; $\varepsilon r$ = 52.89; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC,  Liquid Temperature: 22.3ºC
Communication System: LTE1900-FDD2 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.121 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.576 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.139 W/kg
**SAR(1 g) = 0.159 W/kg; SAR(10 g) = 0.107 W/kg**
Maximum value of SAR (measured) = 0.318 W/kg

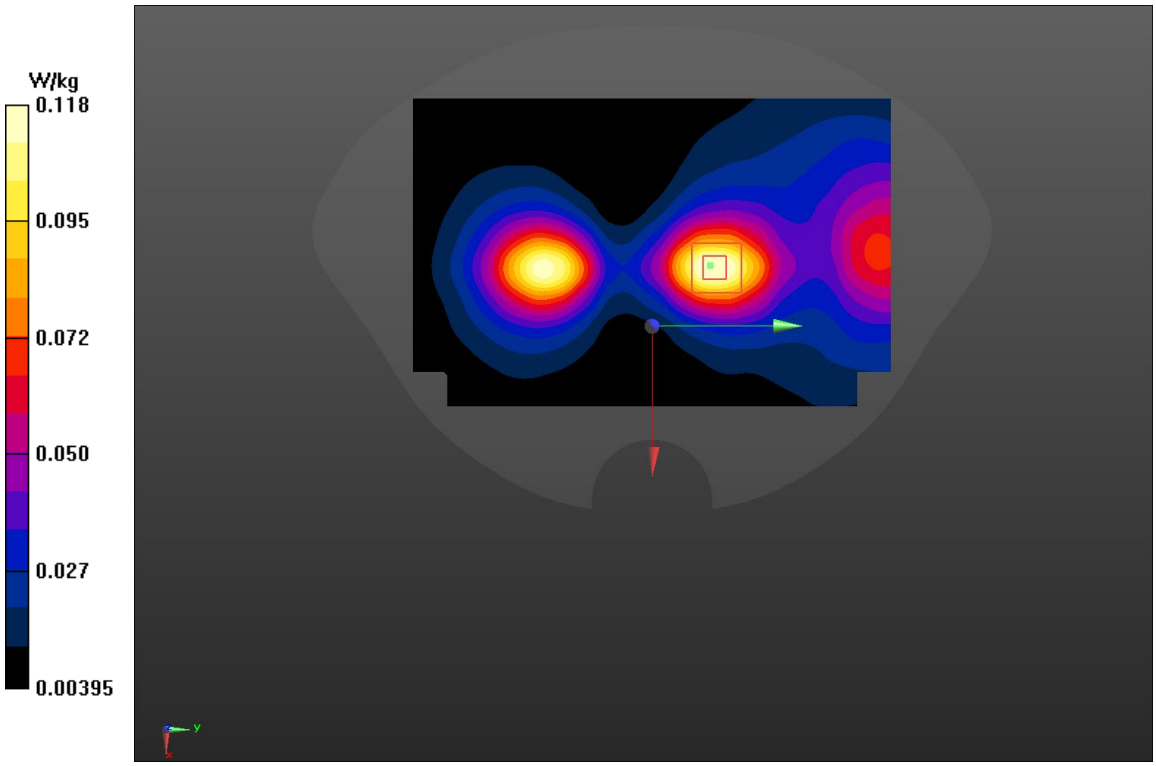


**Fig A.46**

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**LTE1700-FDD66_CH132322 Right Cheek 1RB-Low**
Date: 5/19/2022
Electronics: DAE4 Sn549
Medium: head 1750 MHz
Medium parameters used: f = 1745 MHz; $\sigma$ = 1.504 mho/m; $\varepsilon r$ = 40.05; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5ºC,  Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.754 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.12 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.933 W/kg
**SAR(1 g) = 0.219 W/kg; SAR(10 g) = 0.109 W/kg**
Maximum value of SAR (measured) = 0.232 W/kg

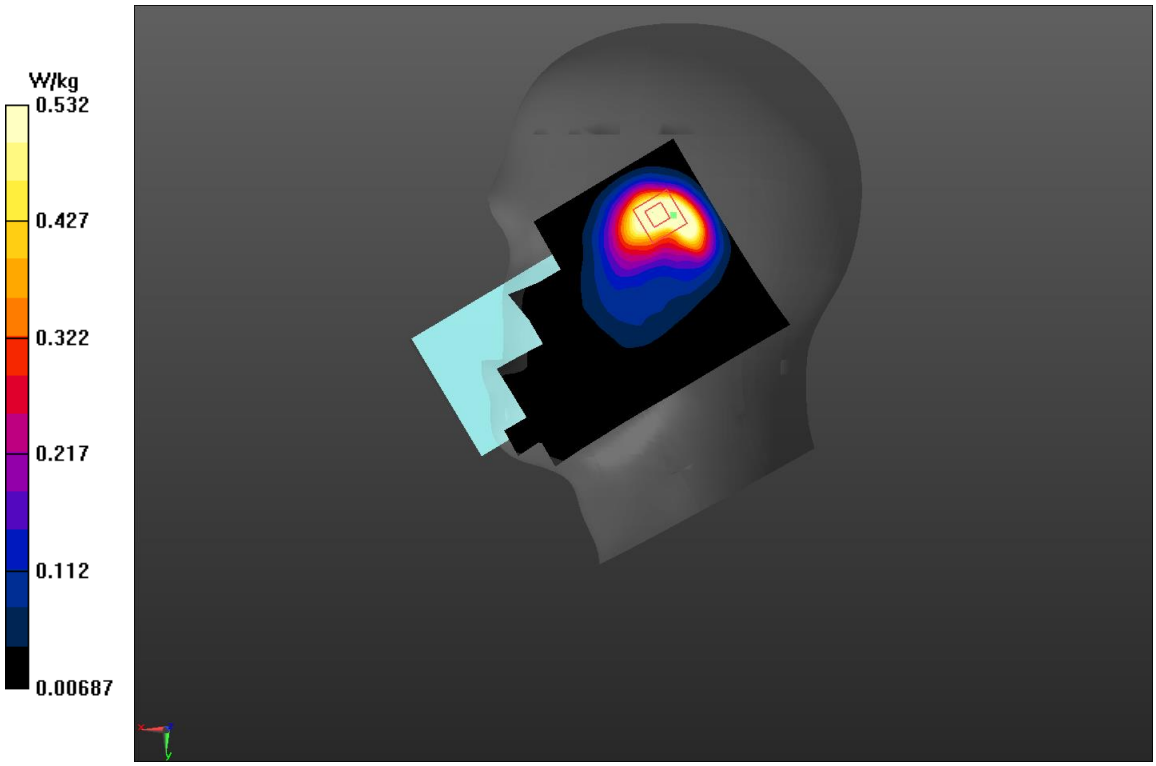


**Fig A.47**

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**LTE1700-FDD66_CH132072 Right Edge 10mm 1RB-Low**
Date: 5/19/2022
Electronics: DAE4 Sn549
Medium: body 1750 MHz
Medium parameters used: f = 1745 MHz; $\sigma$ = 1.616 mho/m; $\varepsilon r$ = 52.79; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: LTE1700-FDD66 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.277 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.945 V/m; Power Drift = -0.2 dB
Peak SAR (extrapolated) = 0.316 W/kg
**SAR(1 g) = 0.193 W/kg; SAR(10 g) = 0.118 W/kg**
Maximum value of SAR (measured) = 0.270 W/kg

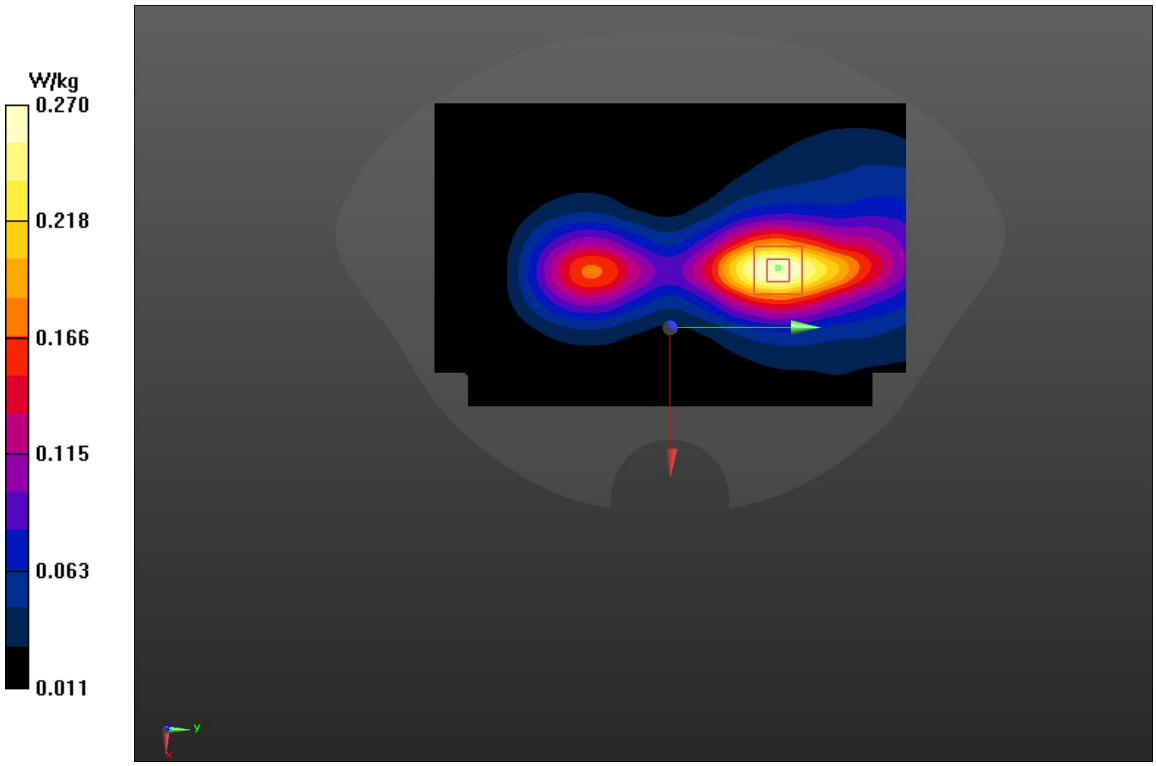


**Fig A.48**

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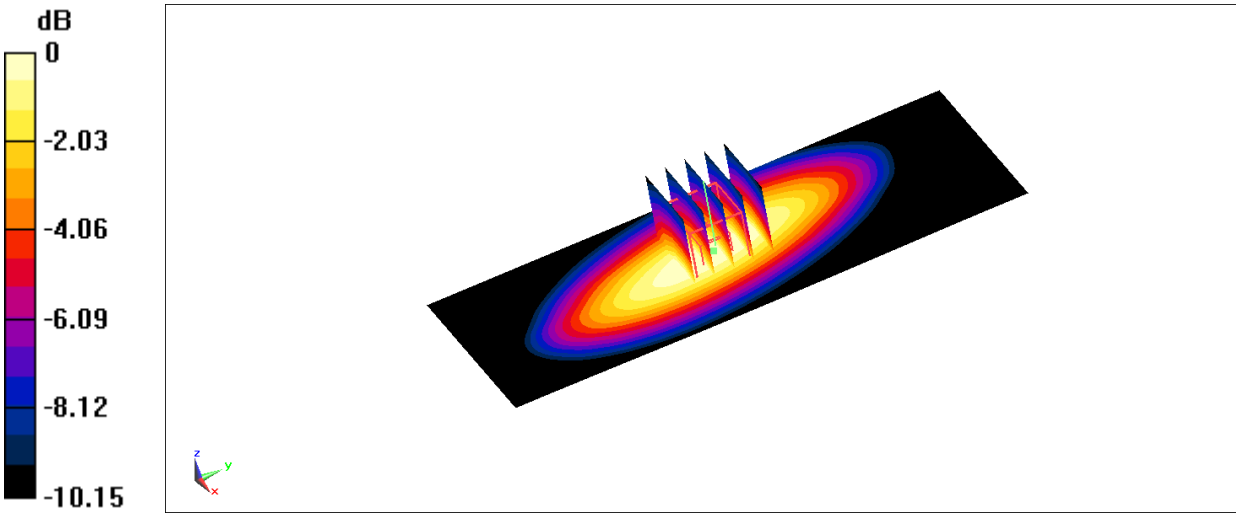
# ANNEX B System Verification Results

## 750 MHz

Date: 5/5/2022
Electronics: DAE4 Sn549
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; $\sigma$ =0.897 mho/m; $\varepsilon_r$ = 42.07; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 58.99 V/m; Power Drift = -0.1
Fast SAR: SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (interpolated) = 2.81 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =58.99 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 3.3 W/kg
SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (measured) = 2.92 W/kg




0 dB = 2.90 W/kg = 4.62 dBW/kg

**Fig.B.1 validation 750 MHz 250mW**

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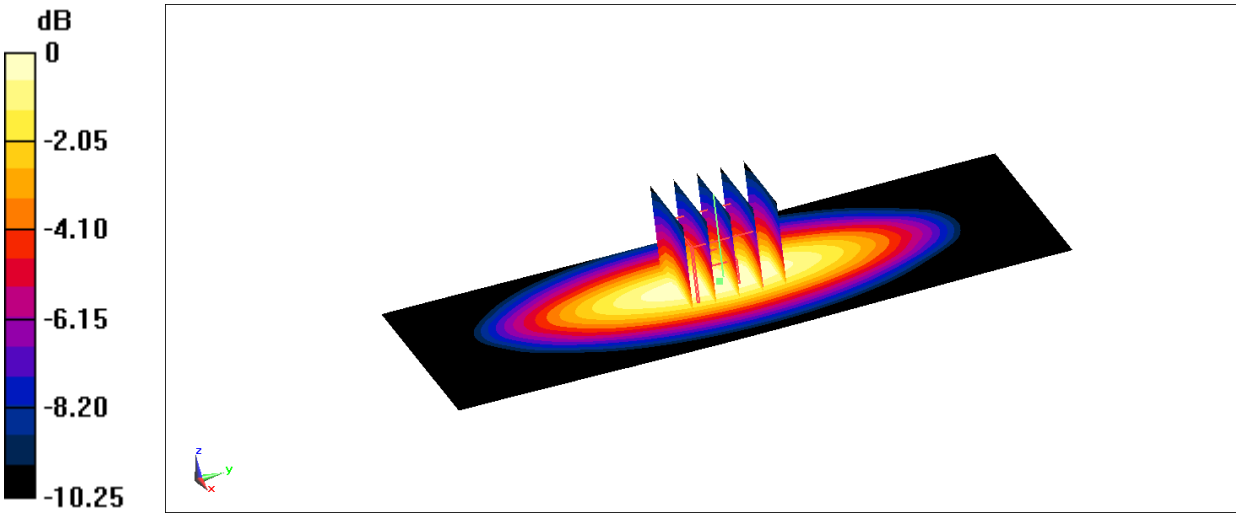
## 750 MHz

Date: 5/6/2022
Electronics: DAE4 Sn549
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; $\sigma$ =0.874 mho/m; $\varepsilon_r$ = 41.89; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 59.75 V/m; Power Drift = -0.05
Fast SAR: SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.41 W/kg
Maximum value of SAR (interpolated) = 2.83 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =59.75 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 3.3 W/kg
SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.44 W/kg
Maximum value of SAR (measured) = 2.90 W/kg




0 dB = 3.07 W/kg = 4.87 dBW/kg

**Fig.B.2 validation 750 MHz 250mW**

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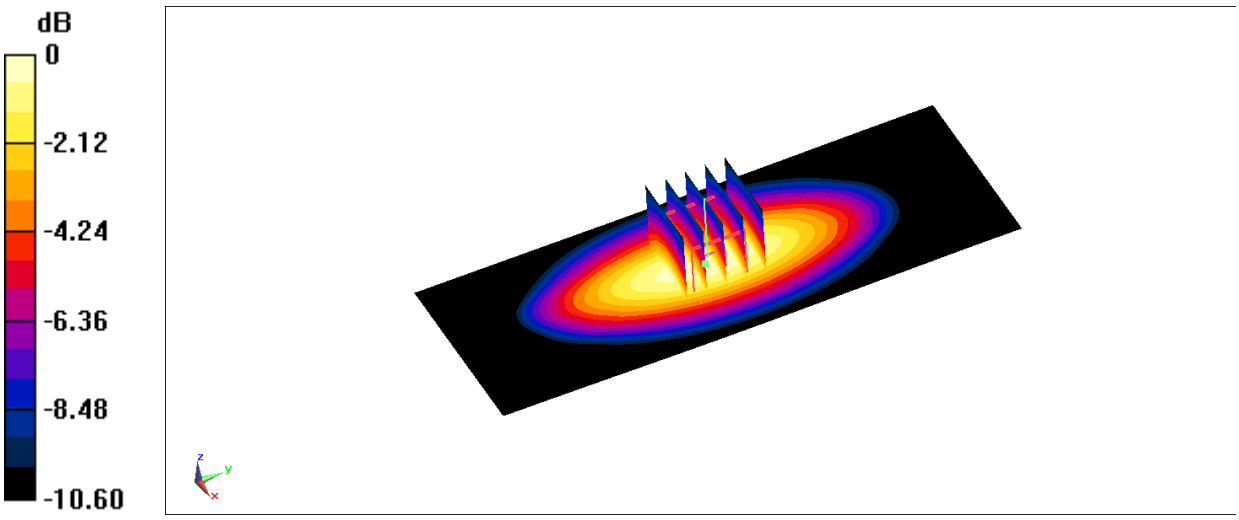
## 835 MHz

Date: 5/7/2022
Electronics: DAE4 Sn549
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; $\sigma$ =0.903 mho/m; $\varepsilon_r$ = 40.84; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 62.6 V/m; Power Drift = -0.04
Fast SAR: SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.55 W/kg
Maximum value of SAR (interpolated) = 3.2 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =62.6 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.62 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.62 W/kg
Maximum value of SAR (measured) = 3.27 W/kg




0 dB = 3.27 W/kg = 5.15 dBW/kg

**Fig.B.3 validation 835 MHz 250mW**

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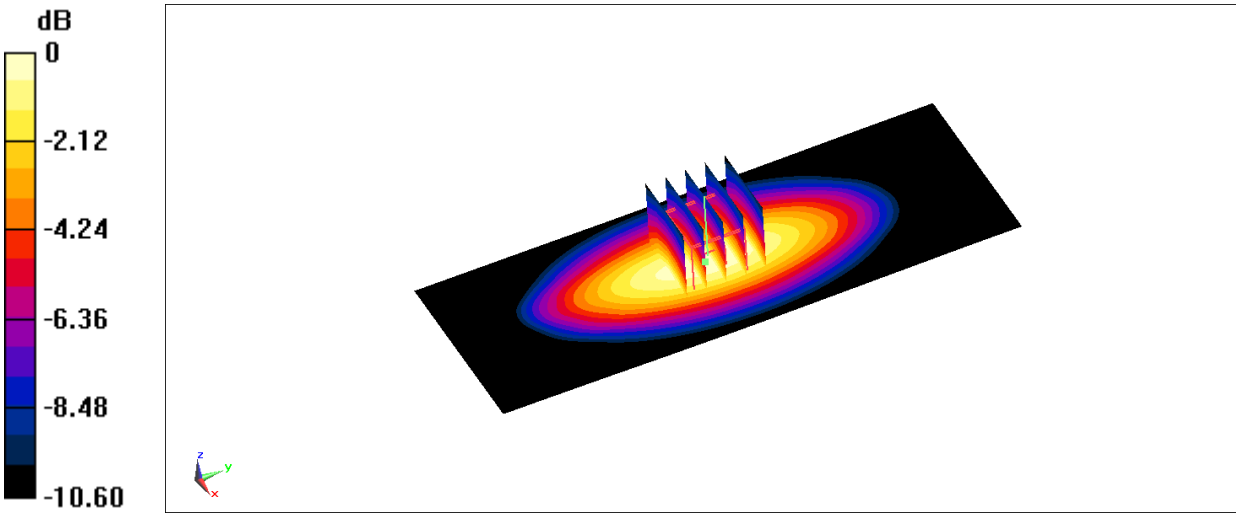
## 835 MHz

Date: 5/8/2022
Electronics: DAE4 Sn549
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; $\sigma$ =0.886 mho/m; $\varepsilon_r$ = 42; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(9.96,9.96,9.96)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 61.99 V/m; Power Drift = -0.02
Fast SAR: SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.54 W/kg
Maximum value of SAR (interpolated) = 3.14 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =61.99 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.72 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.62 W/kg
Maximum value of SAR (measured) = 3.27 W/kg




0 dB = 3.27 W/kg = 5.15 dBW/kg

**Fig.B.4 validation 835 MHz 250mW**

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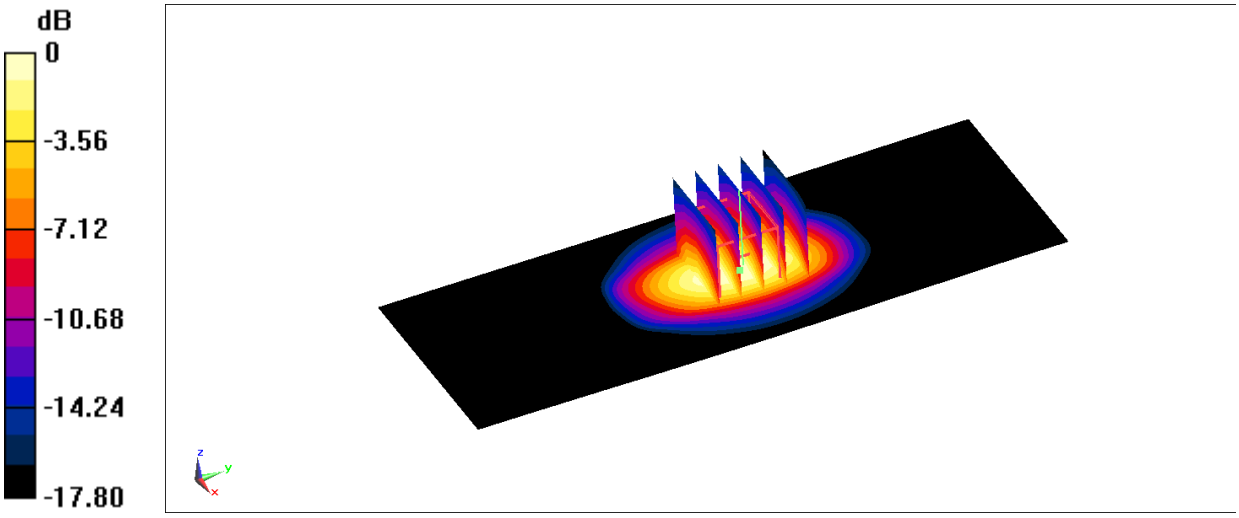
## 1750 MHz

Date: 5/9/2022
Electronics: DAE4 Sn549
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ =1.38 mho/m; $\varepsilon_r$ = 40.1; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 105.48 V/m; Power Drift = -0.05
Fast SAR: SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.75 W/kg
Maximum value of SAR (interpolated) = 14.3 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =105.48 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 16.63 W/kg
SAR(1 g) = 9.94 W/kg; SAR(10 g) = 5.24 W/kg
Maximum value of SAR (measured) = 15.0 W/kg




0 dB = 15.0 W/kg = 11.76 dBW/kg

**Fig.B.5 validation 1750 MHz 250mW**

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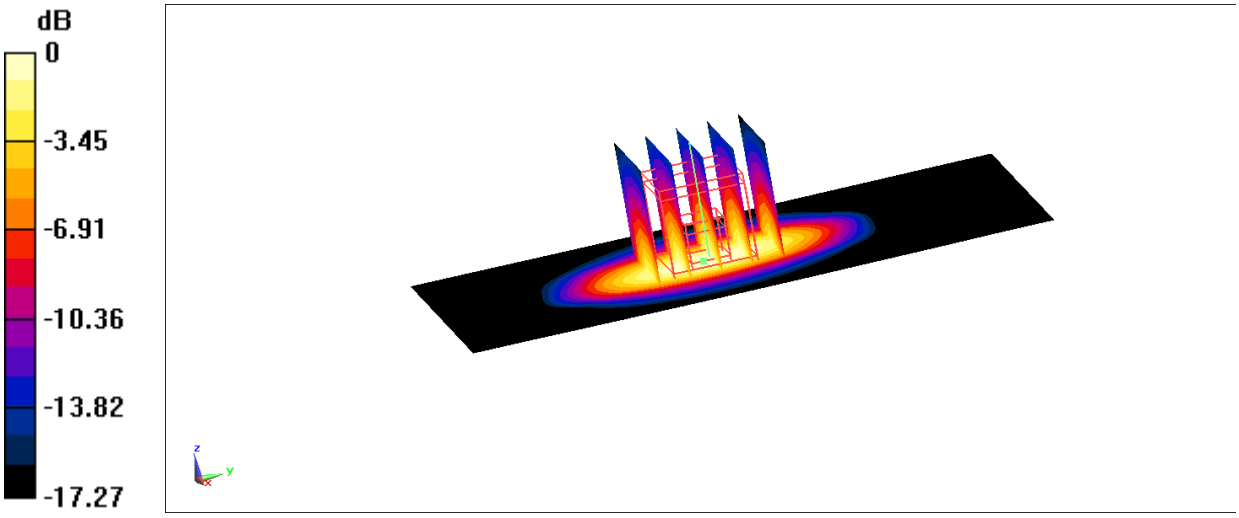
## 1750 MHz

Date: 5/10/2022
Electronics: DAE4 Sn549
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ =1.37 mho/m; $\varepsilon_r$ = 40.02; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 105.7 V/m; Power Drift = -0.09
Fast SAR: SAR(1 g) = 9.08 W/kg; SAR(10 g) = 4.77 W/kg
Maximum value of SAR (interpolated) = 14.14 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =105.7 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 17.12 W/kg
SAR(1 g) = 8.95 W/kg; SAR(10 g) = 4.76 W/kg
Maximum value of SAR (measured) = 13.4 W/kg




0 dB = 13.4 W/kg = 11.27 dBW/kg

**Fig.B.6 validation 1750 MHz 250mW**

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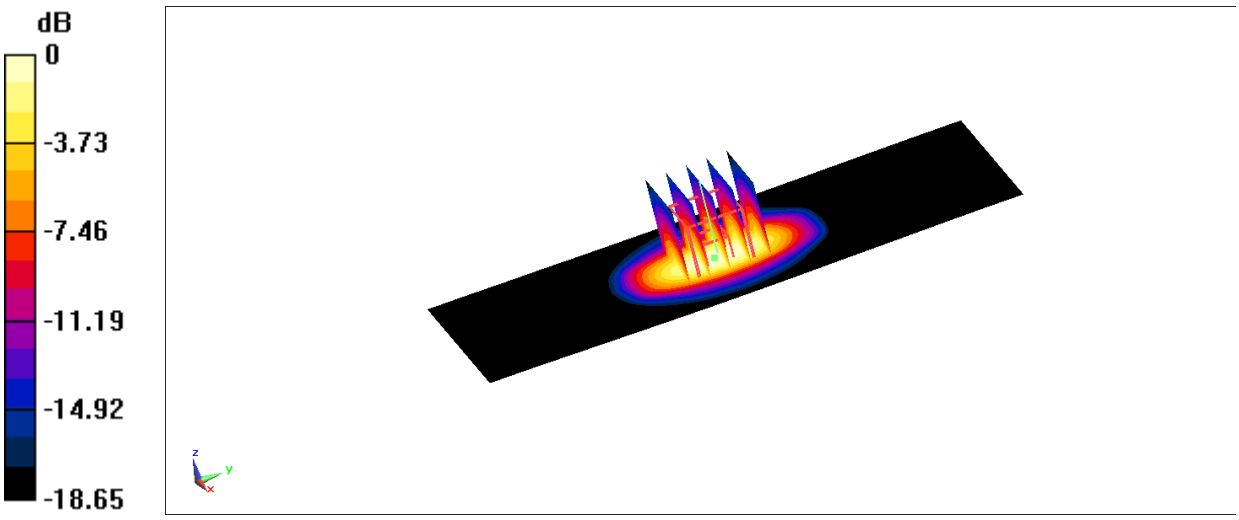
## 1900 MHz

Date: 5/11/2022
Electronics: DAE4 Sn549
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ =1.397 mho/m; $\varepsilon_r$ = 39.44; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 110.77 V/m; Power Drift = -0.08
Fast SAR: SAR(1 g) = 9.9 W/kg; SAR(10 g) = 5.11 W/kg
Maximum value of SAR (interpolated) = 15.39 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =110.77 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 18.13 W/kg
SAR(1 g) = 10.9 W/kg; SAR(10 g) = 5.62 W/kg
Maximum value of SAR (measured) = 16.5 W/kg




0 dB = 16.5 W/kg = 12.17 dBW/kg

**Fig.B.7 validation 1900 MHz 250mW**

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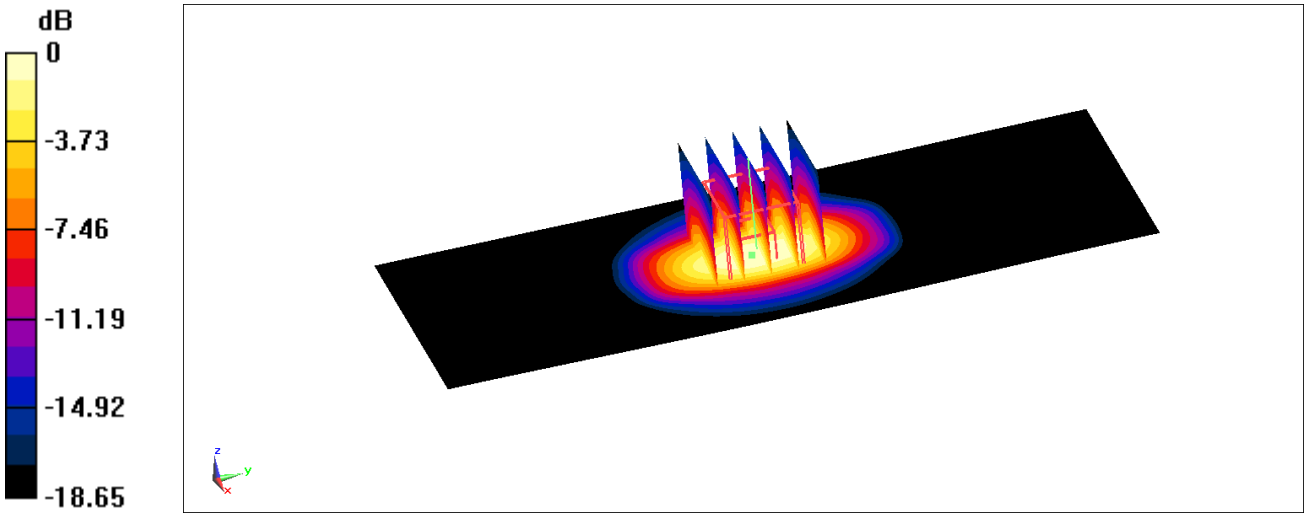
## 1900 MHz

Date: 5/12/2022
Electronics: DAE4 Sn549
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ =1.392 mho/m; $\varepsilon_r$ = 40.33; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 109.03 V/m; Power Drift = 0.05
Fast SAR: SAR(1 g) = 9.78 W/kg; SAR(10 g) = 5.07 W/kg
Maximum value of SAR (interpolated) = 15.31 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =109.03 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 18.17 W/kg
SAR(1 g) = 9.77 W/kg; SAR(10 g) = 5.07 W/kg
Maximum value of SAR (measured) = 15.06 W/kg




0 dB = 15.06 W/kg = 11.78 dB W/kg

**Fig.B.8 validation 1900 MHz 250mW**

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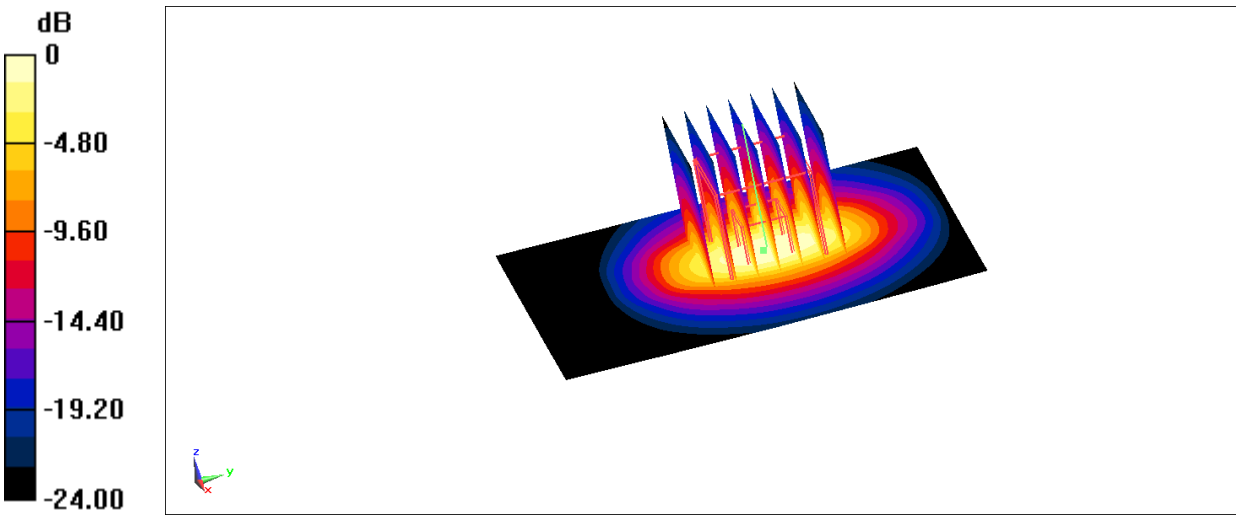
## 2600 MHz

Date: 5/13/2022
Electronics: DAE4 Sn549
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; $\sigma$ =1.971 mho/m; $\varepsilon_r$ = 39.73; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 123.25 V/m; Power Drift = -0.03
Fast SAR: SAR(1 g) = 14.53 W/kg; SAR(10 g) = 6.21 W/kg
Maximum value of SAR (interpolated) = 24.48 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =123.25 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 29.28 W/kg
SAR(1 g) = 14.9 W/kg; SAR(10 g) = 6.59 W/kg
Maximum value of SAR (measured) = 25.8 W/kg




0 dB = 25.8 W/kg = 14.12 dBW/kg

**Fig.B.9 validation 2600 MHz 250mW**

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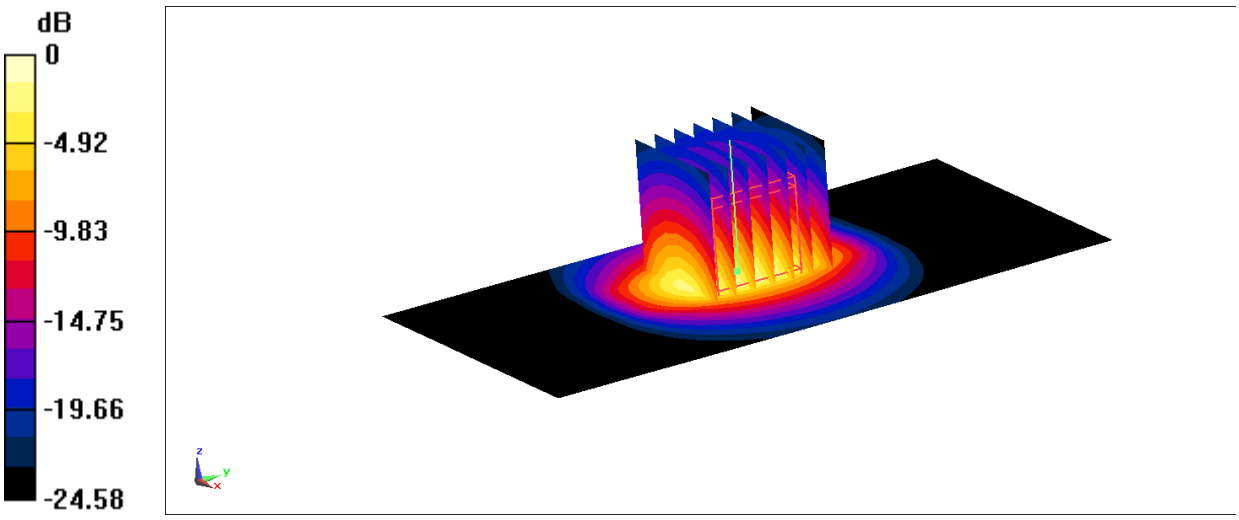
## 2600 MHz

Date: 5/14/2022
Electronics: DAE4 Sn549
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; $\sigma$ =1.953 mho/m; $\varepsilon_r$ = 38.41; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.64,7.64,7.64)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 121.78 V/m; Power Drift = -0.07
Fast SAR: SAR(1 g) = 14.04 W/kg; SAR(10 g) = 6.29 W/kg
Maximum value of SAR (interpolated) = 24.53 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =121.78 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 28.97 W/kg
SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.07 W/kg
Maximum value of SAR (measured) = 23.3 W/kg




0 dB = 23.3 W/kg = 13.67 dBW/kg

**Fig.B.10 validation 2600 MHz 250mW**

## 2450 MHz

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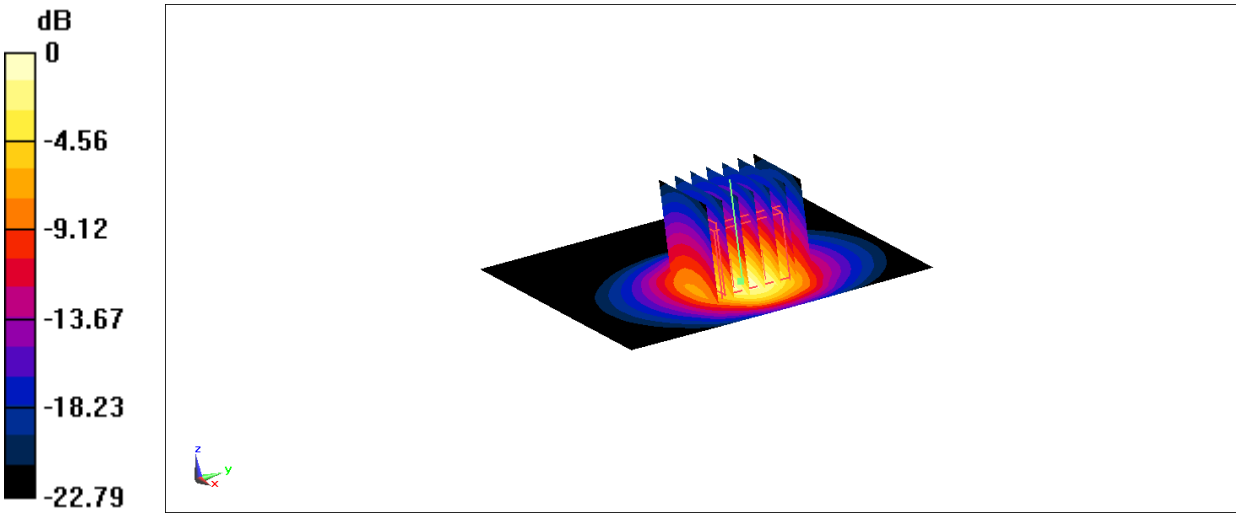
Date: 5/15/2022
Electronics: DAE4 Sn549
Medium: Head 2450 MHz
Medium parameters used: f = 2450 MHz; $\sigma$ =1.815 mho/m; $\varepsilon_r$ = 39.32; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.77,7.77,7.77)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 117.26 V/m; Power Drift = -0.1
Fast SAR: SAR(1 g) = 12.89 W/kg; SAR(10 g) = 6.21 W/kg
Maximum value of SAR (interpolated) = 21.73 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =117.26 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 26.53 W/kg
SAR(1 g) = 13.06 W/kg; SAR(10 g) = 6.22 W/kg
Maximum value of SAR (measured) = 22.19 W/kg




0 dB = 24.1 W/kg = 13.82 dBW/kg

**Fig.B.11 validation 2450 MHz**

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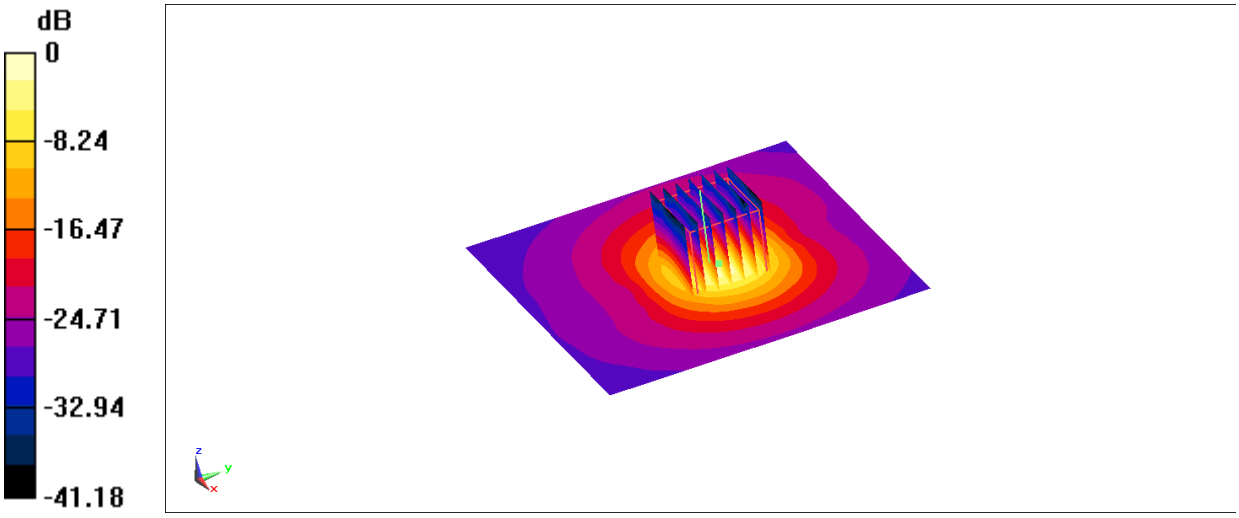
## 5250 MHz

Date: 5/16/2022
Electronics: DAE4 Sn549
Medium: Head 5250 MHz
Medium parameters used: f = 5250 MHz; $\sigma$ =4.626 mho/m; $\varepsilon_r$ = 35.89; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 5250 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(5.43,5.43,5.43)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 18.4 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value =79.46 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 28.57 W/kg
SAR(1 g) = 20.28 W/kg; SAR(10 g) = 5.67 W/kg
Maximum value of SAR (measured) = 18.11 W/kg




0 dB = 17.7 W/kg = 12.48 dBW/kg

**Fig.B.12 validation 5250 MHz 100mW**

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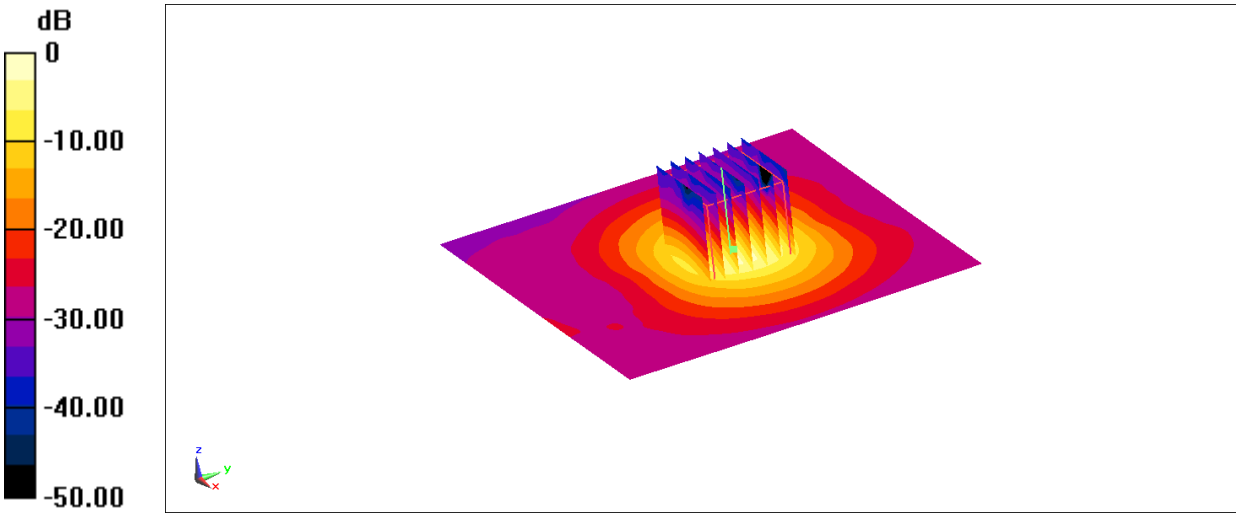
## 5600 MHz

Date: 5/17/2022
Electronics: DAE4 Sn549
Medium: Head 5600 MHz
Medium parameters used: f = 5600 MHz; $\sigma$ =5.085 mho/m; $\varepsilon_r$ = 34.97; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 5600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(5.11,5.11,5.11)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.09 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value =78.21 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 31.35 W/kg
SAR(1 g) = 20.54 W/kg; SAR(10 g) = 5.88 W/kg
Maximum value of SAR (measured) = 20.37 W/kg




0 dB = 18.9 W/kg = 12.76 dBW/kg

**Fig.B.13 validation 5600 MHz 100mW**

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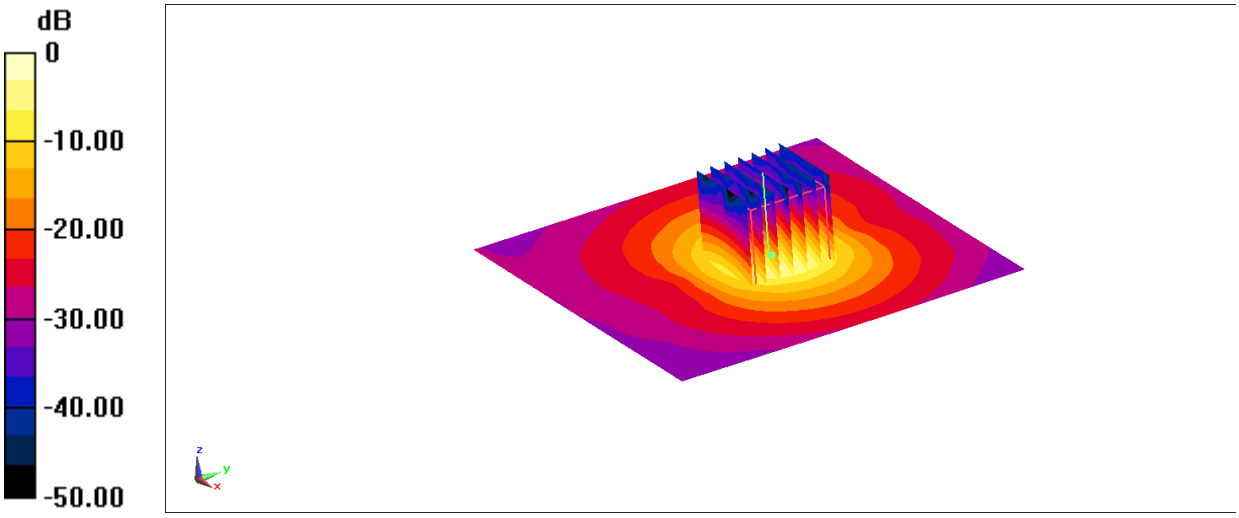
## 5750 MHz

Date: 5/18/2022
Electronics: DAE4 Sn549
Medium: Head 5750 MHz
Medium parameters used: f = 5750 MHz; $\sigma$ =5.154 mho/m; $\varepsilon_r$ = 34.77; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 5750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(4.85,4.85,4.85)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.15 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value =76.92 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 31.83 W/kg
SAR(1 g) = 20.15 W/kg; SAR(10 g) = 5.77 W/kg
Maximum value of SAR (measured) = 19.52 W/kg




0 dB = 18.4 W/kg = 12.65 dBW/kg

**Fig.B.14 validation 5750 MHz 100mW**

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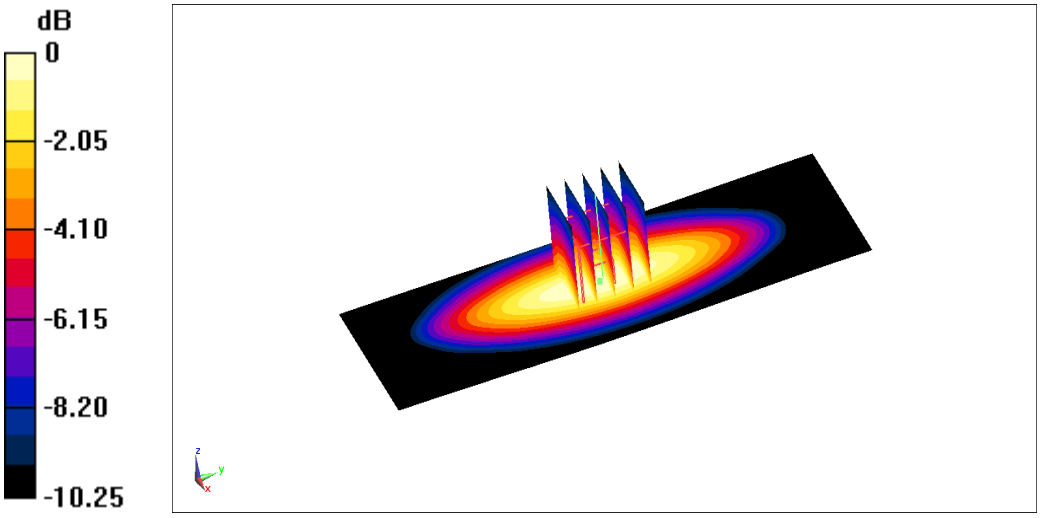
## 750 MHz

Date: 2022/5/18
Electronics: DAE4 Sn549
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; $\sigma$ =0.875 S/m; $\varepsilon r$ = 45.729; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(10.26,10.26,10.26)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 58.99 V/m; Power Drift = -0.1
Fast SAR: SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (interpolated) = 2.81 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =58.99 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 3.3 W/kg
SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (measured) = 2.92 W/kg




0 dB = 2.92 W/kg = 4.65 dB W/kg

**Fig.B.15 validation 750 MHz 250mW**

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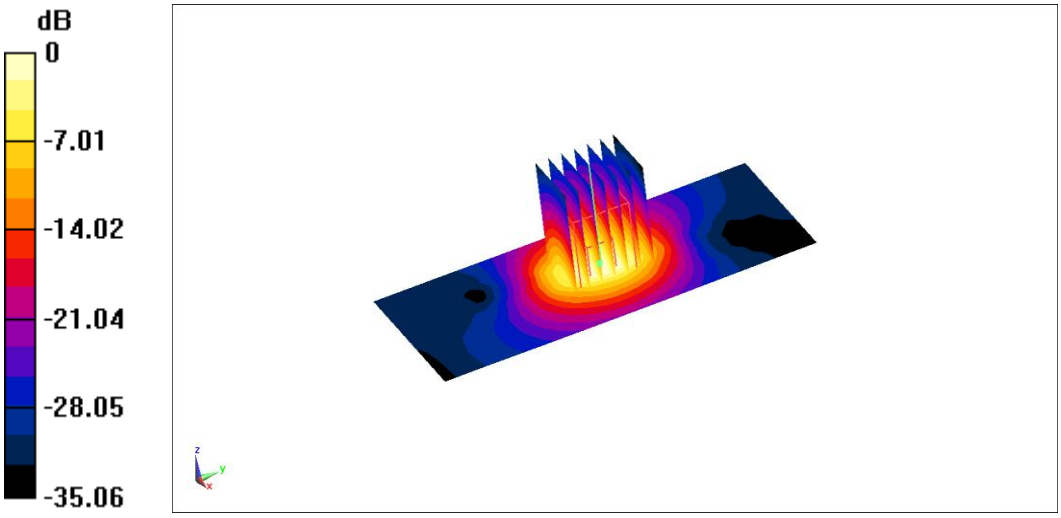
## 3500 MHz

Date: 2022/5/22
Electronics: DAE4 Sn549
Medium: Body 3500 MHz
Medium parameters used: f = 3500 MHz; $\sigma$ =2.963 S/m; $\varepsilon r$ = 38.84; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 3500 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(7.20,7.20,7.20)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 38 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value =106.36 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 50.01 W/kg
SAR(1 g) = 17.14 W/kg; SAR(10 g) = 6.19 W/kg
Maximum value of SAR (measured) = 34.41 W/kg




0 dB = 34.41 W/kg = 15.37 dB W/kg

**Fig.B.16 validation 3500 MHz 250mW**

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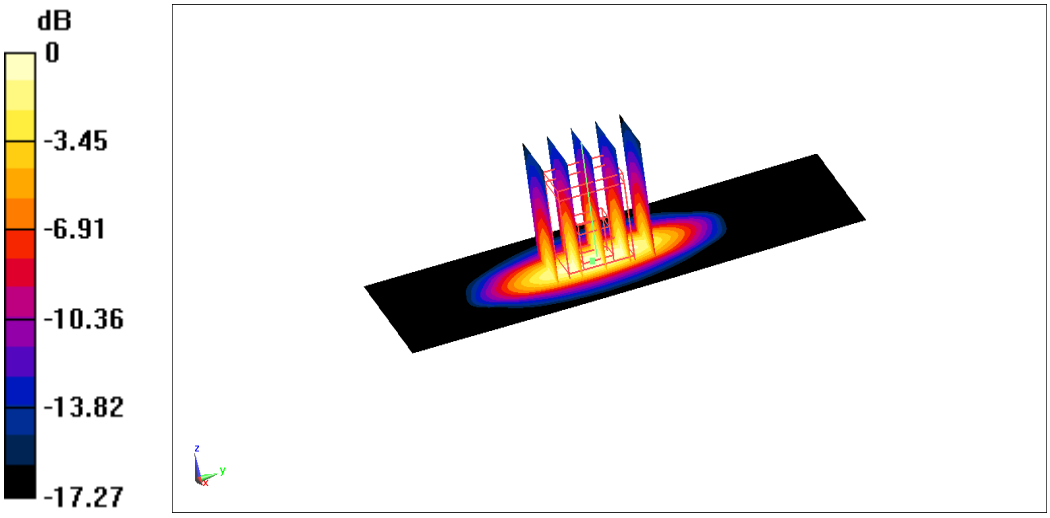
## 1750 MHz

Date: 2022/5/19
Electronics: DAE4 Sn549
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ =1.388 S/m; $\varepsilon r$ = 43.348; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 106.62 V/m; Power Drift = -0.05
Fast SAR: SAR(1 g) = 9.16 W/kg; SAR(10 g) = 4.85 W/kg
Maximum value of SAR (interpolated) = 14.15 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =106.62 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 17.02 W/kg
SAR(1 g) = 9.2 W/kg; SAR(10 g) = 4.73 W/kg
Maximum value of SAR (measured) = 13.88 W/kg




0 dB = 13.88 W/kg = 11.42 dB W/kg

**Fig.B.17 validation 1750 MHz 250mW**

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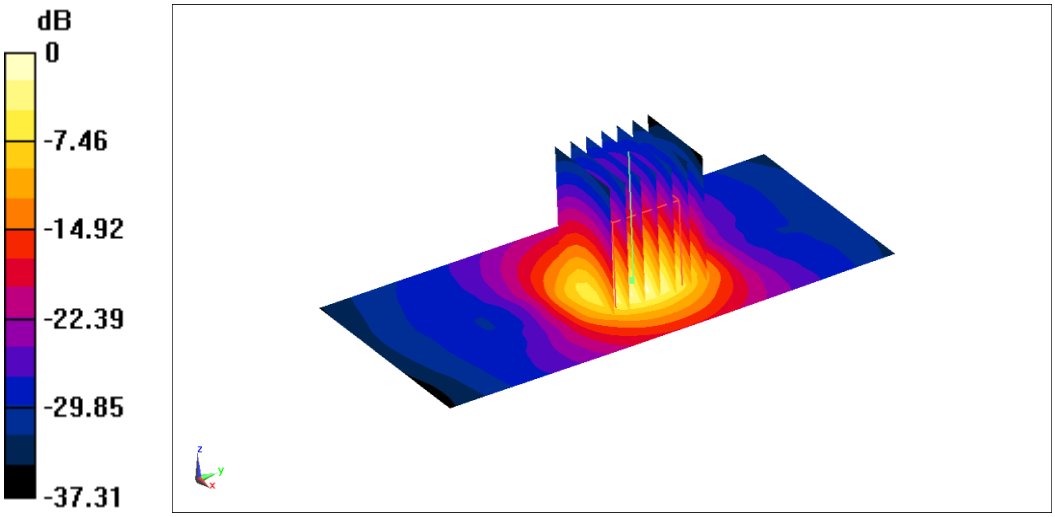
## 3900 MHz

Date: 2022/5/23
Electronics: DAE4 Sn549
Medium: Body 3900 MHz
Medium parameters used: f = 3900 MHz; $\sigma$ =3.358 S/m; $\varepsilon r$ = 38.018; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 3900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(6.76,6.76,6.76)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 35.11 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value =65.22 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 46.39 W/kg
SAR(1 g) = 17.66 W/kg; SAR(10 g) = 6.03 W/kg
Maximum value of SAR (measured) = 32.44 W/kg




0 dB = 32.44 W/kg = 15.11 dB W/kg

**Fig.B.18 validation 3900 MHz 250mW**

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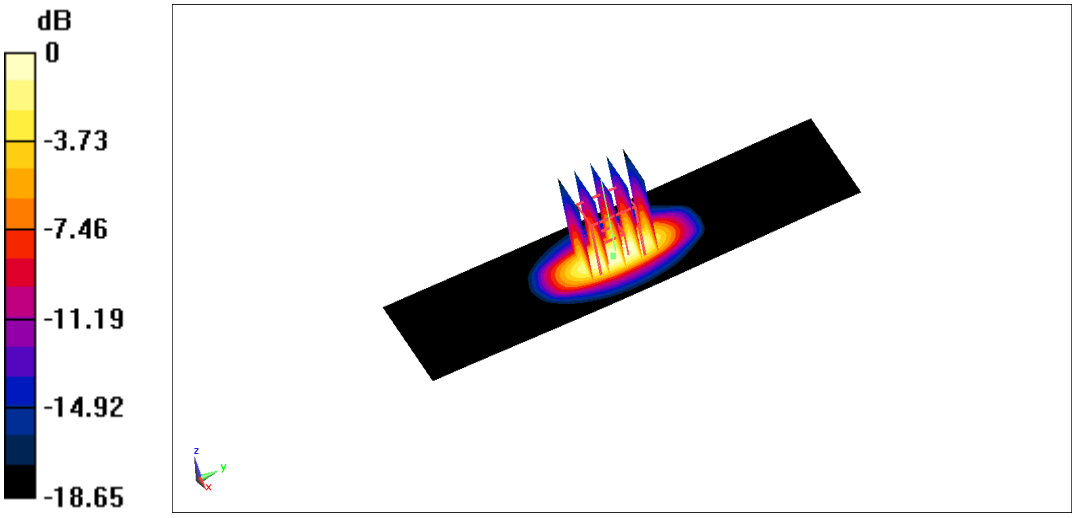
## 1900 MHz

Date: 2022/5/20
Electronics: DAE4 Sn549
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ =1.404 mho/m; $\varepsilon_r$ = 39.36; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.33,8.33,8.33)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 107.96 V/m; Power Drift = -0.04
Fast SAR: SAR(1 g) = 10.09 W/kg; SAR(10 g) = 5.1 W/kg
Maximum value of SAR (interpolated) = 15.24 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =107.96 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 18.06 W/kg
SAR(1 g) = 9.77 W/kg; SAR(10 g) = 5.13 W/kg
Maximum value of SAR (measured) = 15.33 W/kg




0 dB = 15.33 W/kg = 11.86 dB W/kg

**Fig.B.19 validation 1900 MHz 250mW**

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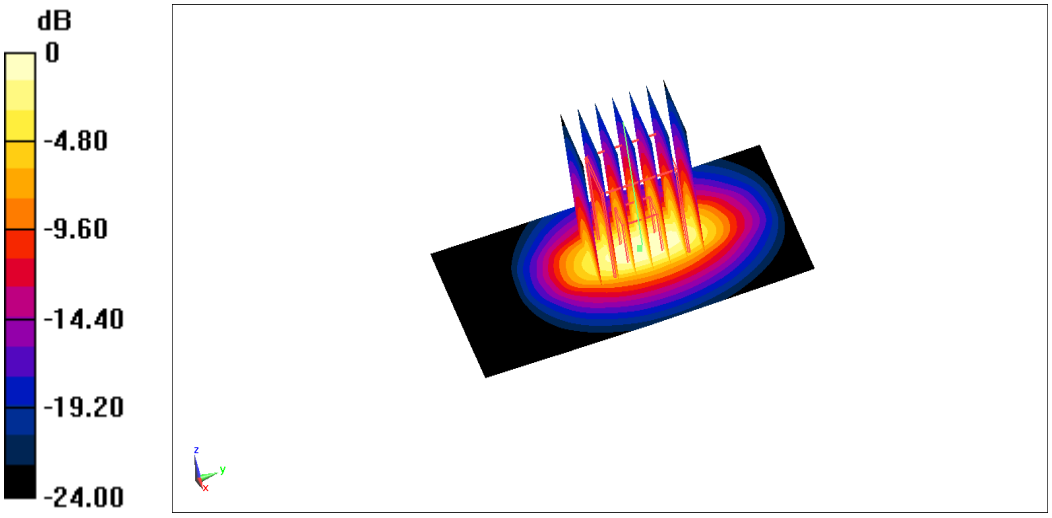
## 2600 MHz

Date: 2022/5/21
Electronics: DAE4 Sn549
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; $\sigma$ =2.041 S/m; $\varepsilon r$ = 39.938; $\rho$ = 1000 kg/$m^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 123.17 V/m; Power Drift = 0.06
Fast SAR: SAR(1 g) = 14.33 W/kg; SAR(10 g) = 6.31 W/kg
Maximum value of SAR (interpolated) = 24.71 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =123.17 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 29.05 W/kg
SAR(1 g) = 14.28 W/kg; SAR(10 g) = 6.43 W/kg
Maximum value of SAR (measured) = 23.93 W/kg




0 dB = 23.93 W/kg = 13.79 dB W/kg

**Fig.B.20 validation 2600 MHz 250mW**

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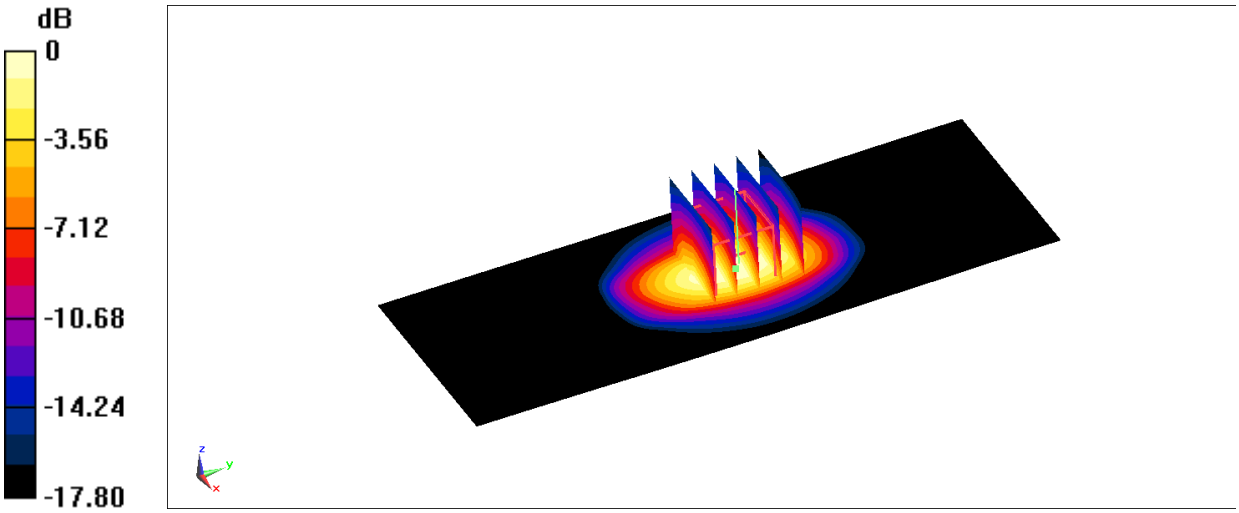
## 1750 MHz

Date: 5/19/2022
Electronics: DAE4 Sn549
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; $\sigma$ =1.381 mho/m; $\varepsilon_r$ = 40.21; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.52,8.52,8.52)

**System Validation /Area Scan (81x191x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 105.26 V/m; Power Drift = -0.1
**Fast SAR: SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.84 W/kg**
Maximum value of SAR (interpolated) = 14.06 W/kg

**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =105.26 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 17.01 W/kg
**SAR(1 g) = 9.08 W/kg; SAR(10 g) = 4.85 W/kg**
Maximum value of SAR (measured) = 14.35 W/kg




0 dB = 14.35 W/kg = 11.57 dB W/kg

**Fig.B.21 validation 1750 MHz 250mW**

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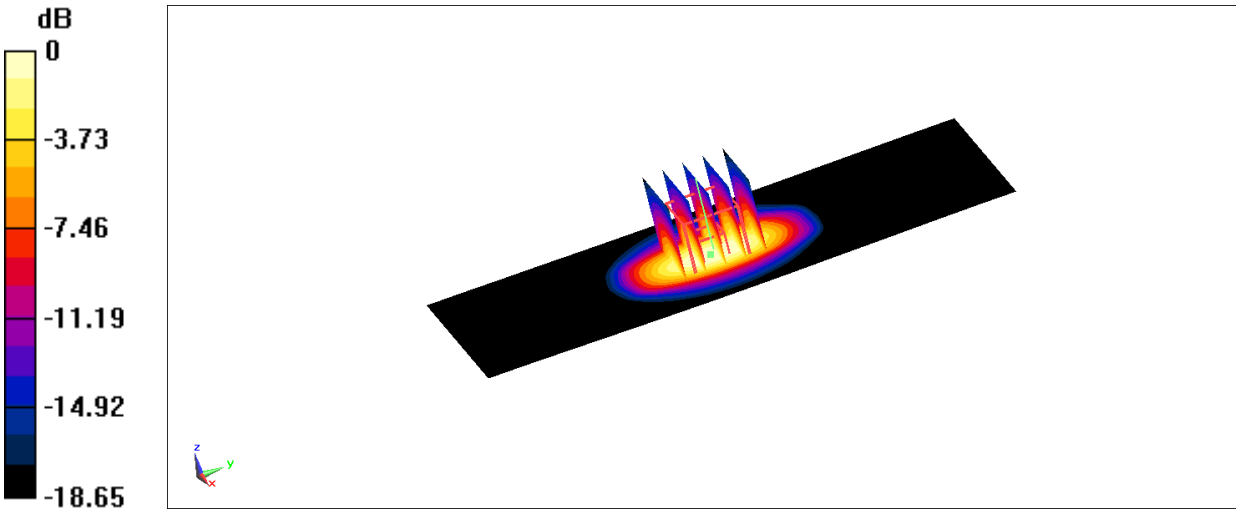
## 1900 MHz

Date: 5/20/2022
Electronics: DAE4 Sn549
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; $\sigma$ =1.375 mho/m; $\varepsilon_r$ = 39.95; $\rho$ = 1000 kg/m$^3$
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7464 ConvF(8.18,8.18,8.18)

**System Validation /Area Scan (81x191x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 109.43 V/m; Power Drift = -0.05
**Fast SAR: SAR(1 g) = 9.94 W/kg; SAR(10 g) = 5.23 W/kg**
Maximum value of SAR (interpolated) = 15.27 W/kg

**System Validation /Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value =109.43 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 18.44 W/kg
**SAR(1 g) = 9.98 W/kg; SAR(10 g) = 5.1 W/kg**
Maximum value of SAR (measured) = 14.96 W/kg




0 dB = 14.96 W/kg = 11.75 dB W/kg

**Fig.B.22 validation 1900 MHz 250mW**

# ANNEX C SAR Measurement Setup

## C.1 Measurement Set-up

The Dasy5 or DASY6 system for performing compliance tests is illustrated above graphically. This

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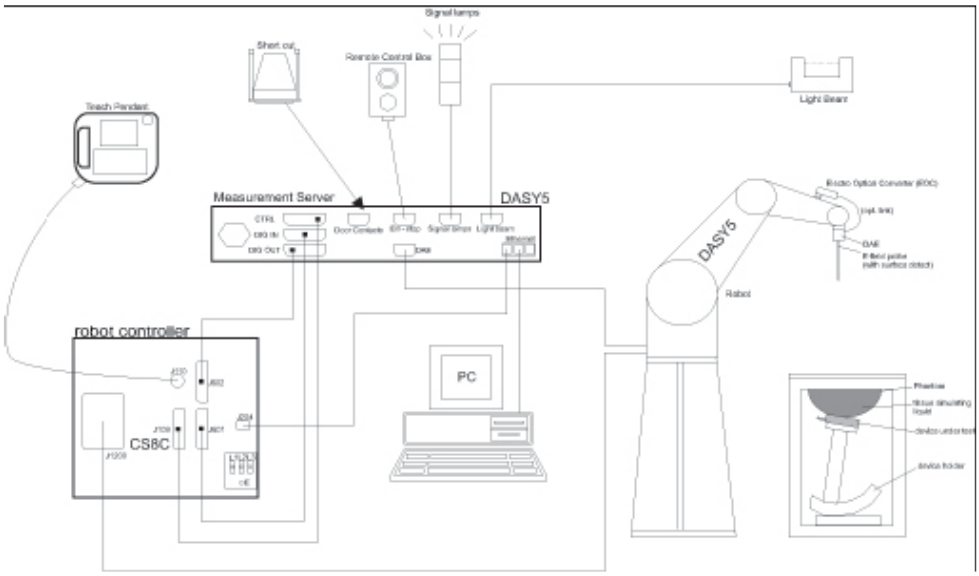
system consists of the following items:




**Picture C.1SAR Lab Test Measurement Set-up**

- A standard high precision 6-axis robot (StäubliTX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY5 or DASY6 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as
- warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

## C.2 Dasy5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the

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robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 or DASY6 software reads the reflection durning a software approach and looks for the maximum using 2nd ord curve fitting. The approach is stopped at reaching the maximum.

**Picture C.2Near-field Probe**

**Probe Specifications:**

**Model:** ES3DV3, EX3DV4
**Frequency** 10MHz — 6.0GHz(EX3DV4)
**Range:** 10MHz — 4GHz(ES3DV3)
**Calibration:** In head and body simulating tissue at Frequencies from 835 up to 5800MHz
**Linearity:** ± 0.2 dB(30 MHz to 6 GHz) for EX3DV4
± 0.2 dB(30 MHz to 4 GHz) for ES3DV3
**DynamicRange:** 10 mW/kg — 100W/kg
**Probe Length:** 330 mm
**Probe Tip**
**Length:** 20 mm
**Body Diameter:** 12 mm
**Tip Diameter:** 2.5 mm (3.9 mm for ES3DV3)
**Tip-Center:** 1 mm (2.0mm for ES3DV3)
**Application:**SAR Dosimetry Testing
Compliance tests ofmobile phones
Dosimetry in strong gradient fields

**Picture C.3E-field Probe**

## C.3 E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm$^2$) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and inn a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm$^2$.·

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the

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dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C\frac{\Delta T}{\Delta t}$$

Where:

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

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

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m$^3$).

## C.4 Other Test Equipment

### C.4.1 Data Acquisition Electronics(DAE)

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

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

**PictureC.4: DAE**

### C.4.2 Robot

The SPEAG DASY system uses the high precision robots (DASY5: RX160L) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability 0.02mm)

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- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchron motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)


**Picture C.5 DASY 5**

## C.4.3 Measurement Server

The Measurement server is based on a PC/104 CPU broad with CPU (DASY5: 400 MHz, Intel Celeron), chipdisk (DASY5: 128MB), RAM DASY5: 128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O broad, which is directly connected to the PC/104 bus of the CPU broad.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.


**Picture C.6 Server for DASY 5**

## C.4.4 Device Holder for Phantom

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of ±0.5mm would produce a SAR uncertainty of ±20%. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be

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measured are defined by the standards.

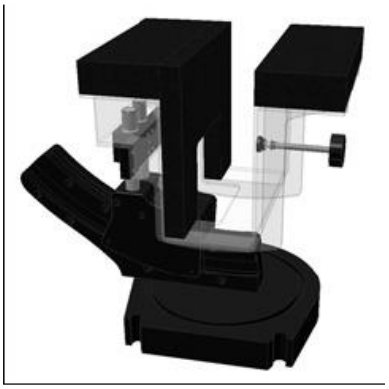
The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity $\varepsilon$=3 and loss tangent $\delta$ =0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

<Laptop Extension Kit>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.

**Picture C7-1: Device Holder**



**Picture C.7-2: Laptop Extension Kit**

## C.4.5 Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a table. The shape of the shell is based on data from an anatomical study designed to

Represent the 90$^{th}$ percentile of the population. The phantom enables the dissymmetric evaluation of SAR for both left and right handed handset usage, as well as body-worn usage using the flat phantom region. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. The shell phantom has a 2mm shell thickness (except the ear region where shell thickness increases to 6 mm).

Shell Thickness: 2±0. 2 mm
Filling Volume: Approx. 25 liters
Dimensions: 810 x l000 x 500 mm (H x L x W)
Available: Special

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**Picture C.8: SAM Twin Phantom**

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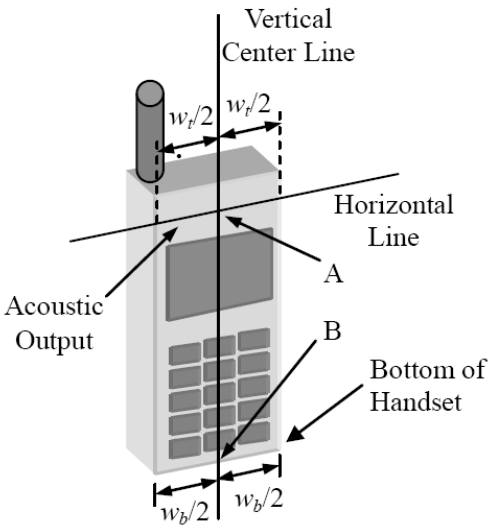
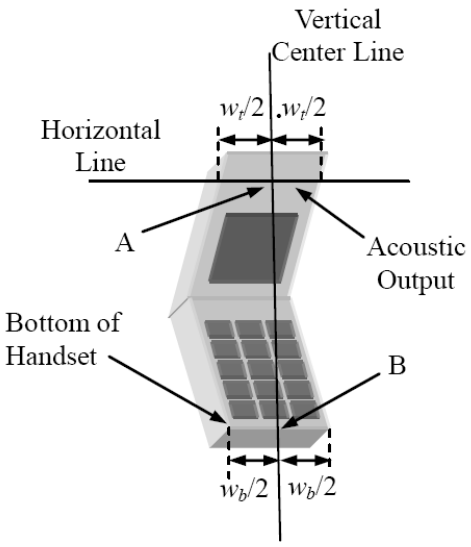
# ANNEX D Position of the wireless device in relation to the phantom

## D.1 General considerations

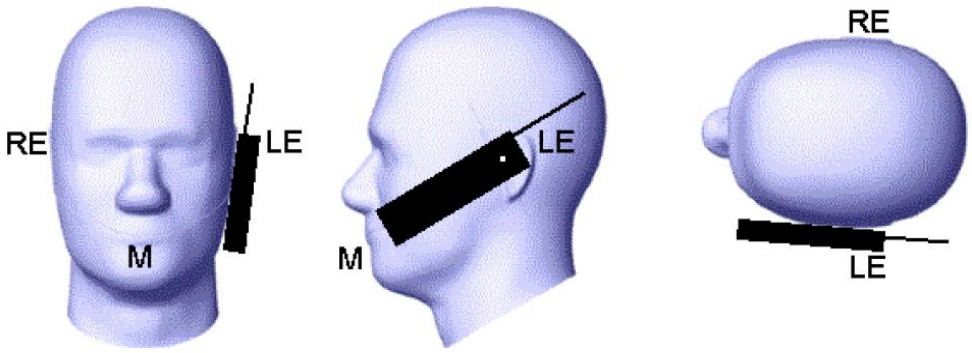
This standard specifies two handset test positions against the head phantom – the “cheek” position and the “tilt” position.




| | |
|---|---|
| $W_t$ | Width of the handset at the level of the acoustic |
| $W_b$ | Width of the bottom of the handset |
| A | Midpoint of the width $W_t$ of the handset at the level of the acoustic output |
| B | Midpoint of the width $W_b$ of the bottom of the handset |

**Picture D.1-a Typical “fixed” case handset** **Picture D.1-b Typical “clam-shell” case handset**




**Picture D.2 Cheek position of the wireless device on the left side of SAM**

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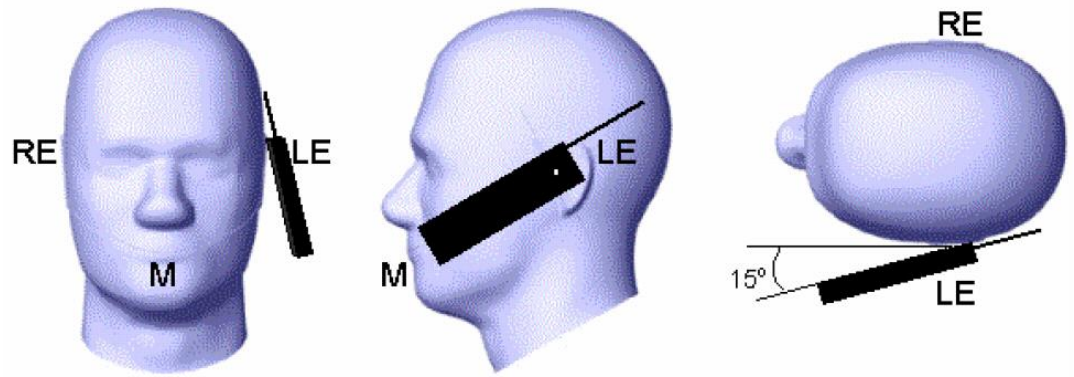
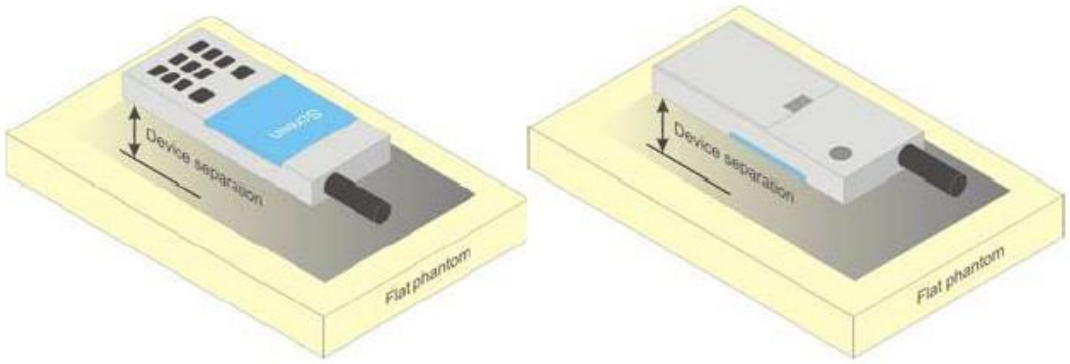



**Picture D.3 Tilt position of the wireless device on the left side of SAM**

## D.2 Body-worn device

A typical example of a body-worn device is a mobile phone, wireless enabled PDA or other battery operated wireless device with the ability to transmit while mounted on a person's body using a carry accessory approved by the wireless device manufacturer.




**Picture D.4Test positions for body-worn devices**

## D.3 Desktop device

A typical example of a desktop device is a wireless enabled desktop computer placed on a table or desk when used.

The DUT shall be positioned at the distance and in the orientation to the phantom that corresponds to the intended use as specified by the manufacturer in the user instructions. For devices that employ an external antenna with variable positions, tests shall be performed for all antenna positions specified. Picture8.5 show positions for desktop device SAR tests. If the intended use is not specified, the device shall be tested directly against the flat phantom.

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