TESTING
NVLAP LAB CODE 600118-0

SAR TEST REPORT

No. I22Z70343-SEM01

For

SAMSUNG Electronics Co., Ltd.

Multi-band GSM/WCDMA/LTE/5GNR Phone with Bluetooth, WLAN

Model Name: SM-A146P/DSN,SM-A146P/N

with

Hardware Version: REV1.0

Software Version: A146P.001

FCC ID: ZCASMA146PN

Issued Date: 2022-11-30

Note:

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Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Issue Date	Description
I22Z70343-SEM01	Rev.0	2022-11-14	Initial creation of test report
I22Z70343-SEM01	Rev.1	2022-11-30	1. Revise the frequency range of WCDMA B2 and WCDMA B4 on page9. 2. Revise the distance for body SAR in the file of test setup.

TABLE OF CONTENT

1 Test Laboratory

1.1 Testing Location

Company Name:	CTTL
Address:	No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

1.2 Testing Environment

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

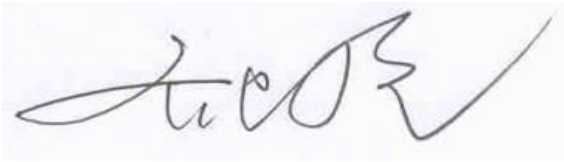
1.3 Project Data

Project Leader:	Qi Dianyuan
Test Engineer:	Yao Juming
Testing Start Date:	September 11, 2022
Testing End Date:	October 17, 2022

1.4 Signature

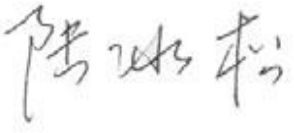
Yao Juming

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Samsung Electronics Co., Ltd. Multi-band GSM/WCDMA/LTE/5GNR Phone with Bluetooth, WLAN SM-A146P/DSN, SM-A146P/N is as follows:

Table 2.1: Highest Reported SAR (1g)

Mode	Band	Antenna	Head (Separation Distance 0mm)	Hotspot (Separation Distance 10mm)	Body-Worn (Separation Distance 15mm)	Equipment Class
GSM	GSM850	0	**0.42**	**0.71**	**0.71**	PCE
	GSM1900	1	**0.24**	**0.89**	**0.70**	
WCDMA	WCDMA1900	1	**0.18**	**1.08**	**1.08**	
	WCDMA1700	1	**0.40**	**0.75**	**0.63**	
	WCDMA 850	0	**0.32**	**0.50**	**0.50**	
LTE	LTE Band2	1	**0.22**	**0.78**	**0.78**	
	LTE Band4	1	**0.30**	**0.72**	**0.72**	
	LTE Band5	0	**0.35**	**0.52**	**0.52**	
	LTE Band7	4	**0.89**	**0.94**	**0.68**	
	LTE Band7	0	**0.02**	**0.77**	**0.99**	
	LTE Band12	0	**0.22**	**0.31**	**0.31**	
	LTE Band26	0	**0.28**	**0.50**	**0.50**	
	LTE Band38	4	**0.75**	**0.98**	**0.66**	
	LTE Band38	0	**0.02**	**0.98**	**0.60**	
	LTE Band41	0	**0.05**	**0.77**	**0.64**	
	LTE Band41	4	**0.30**	**0.56**	**0.42**	
	LTE Band66	1	**0.31**	**1.07**	**1.07**	
NR FR1	n5	0	**0.25**	**0.34**	**0.18**	
	n7	4	**0.99**	**0.87**	**0.58**	
	n7	0	**0.05**	**0.87**	**0.70**	
	n38	4	**0.99**	**0.85**	**0.67**	
	n38	0	**0.03**	**0.81**	**0.65**	
	n41	4	**0.95**	**0.88**	**0.50**	
	n77	5	**0.71**	**0.75**	**0.72**	
	n78	5	**0.70**	**0.86**	**0.97**	
WIFI/BT	WLAN 2.4GHz	6	**0.25**	**0.28**	**0.28**	DTS
	WLAN 5GHz	6	**0.45**	**0.44**	**0.48**	NII
	BT	6	**0.11**	**0.04**	**0.04**	DSS

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

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

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

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of **(Table 2.1),** and the values are**:**
Head: 0.99 W/kg(1g)
Body: 1.08 W/kg(1g) (10mm)

Remark：
This device supports both LTE B17 and LTE B12.Since the supported frequency span for LTE B17 falls completely within the supports frequency span for LTE B12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B12.

Table 2.2: The sum of SAR values for Main antenna + Wifi +BT

	Position	**Main antenna**	**WiFi-5G**	**BT**	**Sum**
Highest SAR value for Head	Left head, Tilt (n77)	0.71	0.45	0.11	**1.27**
	Left head, Tilt (n7/n38)	0.99	0.24	0.04	**1.27**
Highest SAR value for Body	Rear 10mm (WCDMA1900)	1.08	0.44	0.04	**1.56**

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

According to the above tables, the highest sum of reported SAR values is **1.56 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

Table 2.3: The SAR sensor trigger diagram

Position	ANT0	ANT1	ANT4	ANT5	ANT6
Front Side	14	14	14	19	19
Back Side	20	20	20	26	26
Right Side	/	/	/	15	15
Top Side	/	/	19	20	20
Bottom Side	23	23		/	/

3 Client Information

3.1 Applicant Information

Company Name:	SAMSUNG Electronics Co., Ltd.
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Contact Person:	Jenni Chun
Contact Email:	j1.chun@samsung.com
Telephone:	+1-201-937-4203

3.2 Manufacturer Information

Company Name:	Samsung Electronics Co., Ltd.
Address/Post:	Samsung R5, Maetan dong 129, Samsung ro Youngtong gu, Suwon city 443 742, Korea
Contact Person:	Sunghoon Cho
Contact Email:	ggobi.cho@samsung.com
Telephone:	+82-10-2722-4159

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

4.1 About EUT

Description:	Multi-band GSM/WCDMA/LTE/5GNR Phone with Bluetooth, WLAN
Model name:	SM-A146P/DSN, SM-A146P/N
Operating mode(s):	GSM 850/900/1800/1900, WCDMA B1/B2/B4/B5/B8 LTE Band 1/2/3/4/5/7/8/12/17/20/26/28/38/40/41/66 NR n1/3/5/7/8/20/25/28/38/40/41/77/78, 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)
	1850 – 1910 MHz (WCDMA1900 Band II)
	1710-1755 MHz (WCDMA1700 Band IV)
	1850.7 – 1909.3 MHz (LTE Band 2)
	1710.7 – 1754.3 MHz (LTE Band 4)
	824.7 – 848.3 MHz (LTE Band 5)
	2502.5 – 2567.5 MHz (LTE Band 7)
	699.7 – 715.3 MHz (LTE Band 12)
	814.7–848.3 MHz (LTE Band 26)
	2570-2620 MHz(LTE Band 38)
	2498.5 – 2687.5 MHz (LTE Band41)
	1710.7 –1779.3 MHz (LTE Band 66)
	2412 – 2462 MHz (Wi-Fi 2.4G)
	5180 – 5240 MHz (Wi-Fi 5.2G)
	5260 – 5320 MHz (Wi-Fi 5.3G)
	5500 – 5720 MHz (Wi-Fi 5.5G)
	5745 – 5825 MHz (Wi-Fi 5.8G)
	2400 – 2483.5 MHz (Bluetooth)
	824 – 849 MHz(n5)
	2500–2570 MHz(n7)
	2570 – 2620 MHz (n38)
	2496 – 2690 MHz(n41)
	3450– 3550 MHz ,3700– 3980 MHz (n77)
	3450– 3550 MHz ,3700– 3800 MHz (n78)
GPRS/EGPRS Multislot Class:	12
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	I22Z70343UT19a	REV1.0	A146P.001
EUT2	I22Z70343UT21a	REV1.0	A146P.001
EUT3	I22Z70343UT35a	REV1.0	A146P.001
EUT4	I22Z70343UT01a	REV1.0	A146P.001
EUT5	I22Z70343UT04a	REV1.0	A146P.001
EUT6	I22Z70343UT05a	REV1.0	A146P.001
EUT7	I22Z70343UT07a	REV1.0	A146P.001
EUT8	I22Z70343UT09a	REV1.0	A146P.001

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

Note: It is performed to test SAR with the EUT1-3 and conducted power with the EUT4-8.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	WT-S-W1	/	SCUD (Fujian) Electronics CO.,LTD
AE2	Battery	SCUD-WT-W1	/	SCUD (Fujian) Electronics CO.,LTD
AE3	Headset	EHS61ASFWE	/	Shenzhen Grandsound Electronics Co.,Ltd

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

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

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

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

5.2 Applicable Measurement Standards

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

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

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

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

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

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

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

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

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

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

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

6 Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ) . 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, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

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

Where: σ is the conductivity of the tissue, ρ is the mass density of tissue and E is the RMS electrical field strength.

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

7 Tissue Simulating Liquids

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

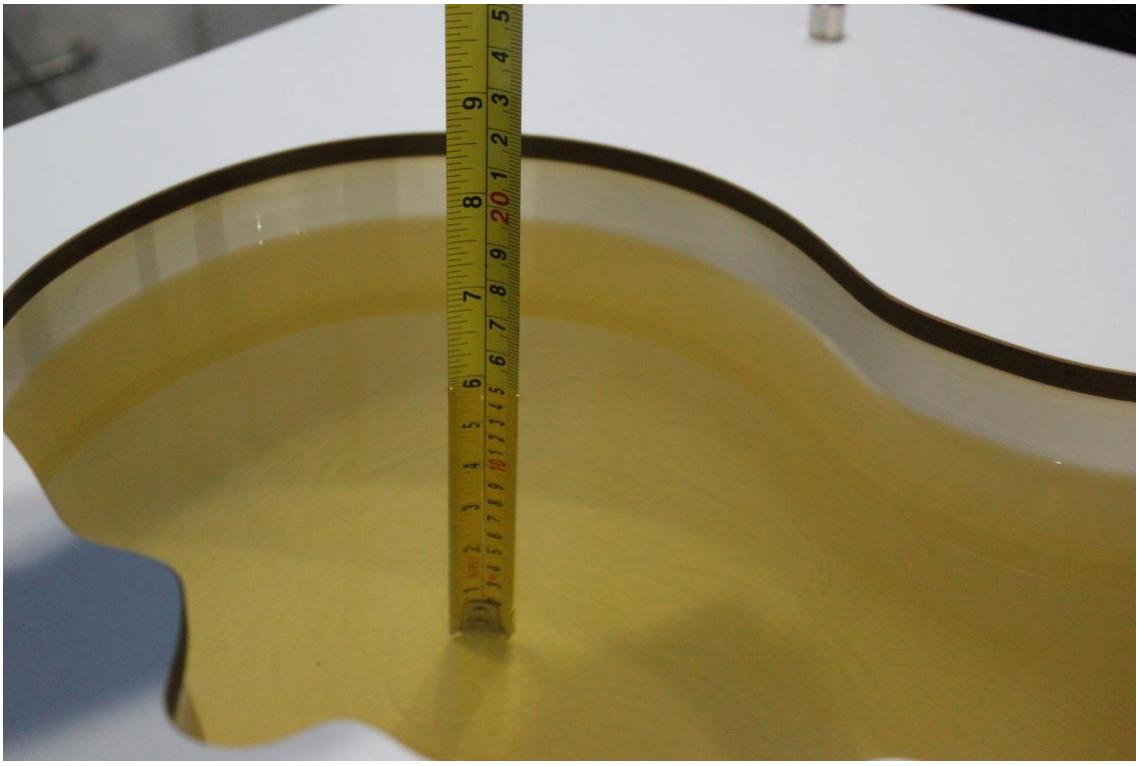
Frequency(MHz)	Liquid Type	Conductivity(σ)	± 5% Range	Permittivity(ε)	± 5% Range
750	Head	0.89	0.85～0.93	41.94	39.8～44.0
900	Head	0.97	0.92～1.02	41.50	39.40～43.60
1800	Head	1.40	1.33～1.47	40.00	38.00～42.00
1900	Head	1.40	1.33～1.47	40.00	38.00～42.00
2300	Head	1.67	1.50～1.84	39.47	37.5～41.4
2450	Head	1.80	1.71～1.89	39.20	37.30～41.10
2600	Head	1.96	1.86～2.06	39.01	37.06～40.96
3300	Head	2.71	2.57～2.85	38.2	36.29～40.11
3500	Head	2.91	2.76～3.06	37.93	36.03～39.83
3700	Head	3.22	3.06~3.38	37.6	35.72~39.48
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

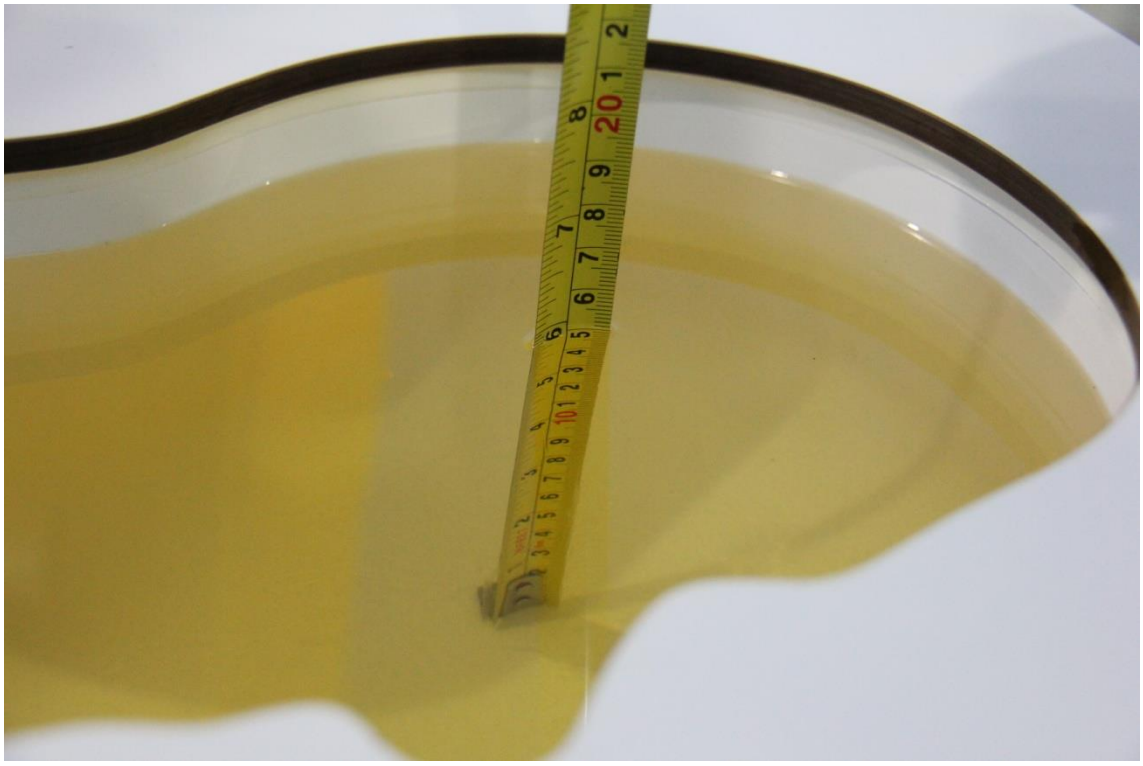
Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ε	Drift (%)	Conductivity σ (S/m)	Drift (%)
2022-9-11	Head	750MHz	40.74	-2.86	0.9	1.12
2022-9-13	Head	900MHz	40.32	-2.84	0.964	-0.62
2022-9-15	Head	1800MHz	40.41	1.02	1.391	-0.64
2022-9-16	Head	1800MHz	39.48	-1.30	1.41	0.71
2022-9-22	Head	1900 MHz	40.46	1.15	1.374	-1.86
2022-9-23	Head	1900 MHz	39.37	-1.58	1.385	-1.07
2022-9-29	Head	2450 MHz	40.17	2.47	1.77	-1.67
2022-10-8	Head	2600 MHz	38.14	-2.23	1.993	1.68
2022-10-10	Head	2600 MHz	40.11	2.82	2.002	2.14
2022-10-18	Head	3300MHz	37.75	-1.07	2.733	0.85
2022-10-20	Head	3500 MHz	37.45	-1.27	2.845	-2.23
2022-10-21	Head	3700 MHz	37.34	-0.95	3.078	-1.35
2022-10-23	Head	3900 MHz	37.29	-0.48	3.245	-2.26
2022-10-25	Head	4100 MHz	37.16	-0.21	3.426	-2.95
2022-10-15	Head	5250 MHz	35.7	-0.64	4.768	1.23
2022-10-16	Head	5600 MHz	36.53	2.81	4.954	-2.29
2022-10-17	Head	5750 MHz	35.81	1.27	5.08	-2.68

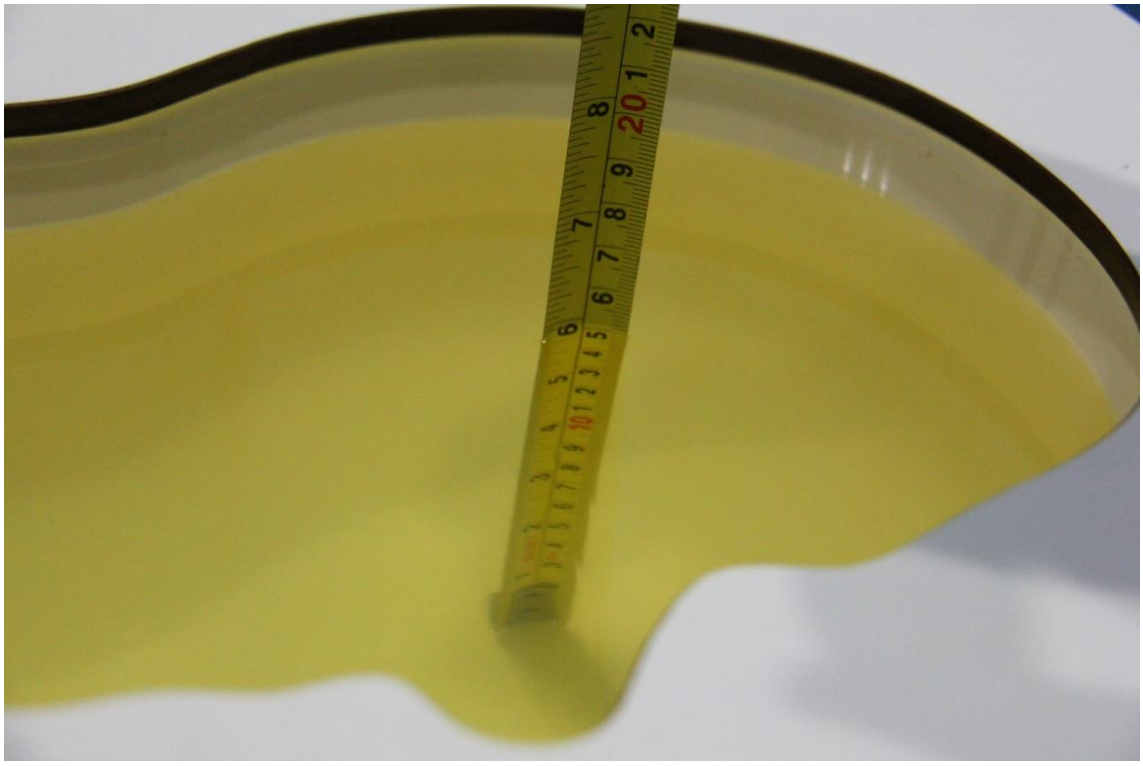
Note: The liquid temperature is 22.0°C



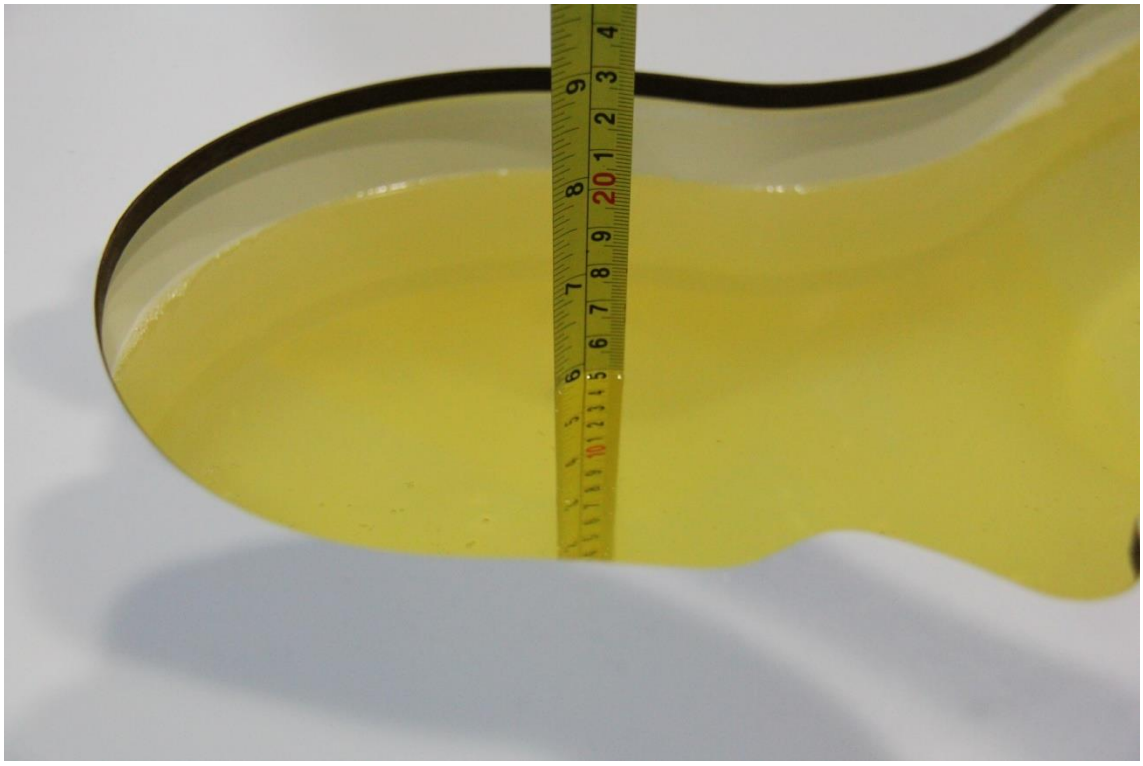
Picture 7-1 Liquid depth in the Head Phantom (750MHz)



Picture 7-2 Liquid depth in the Head Phantom (900 MHz)

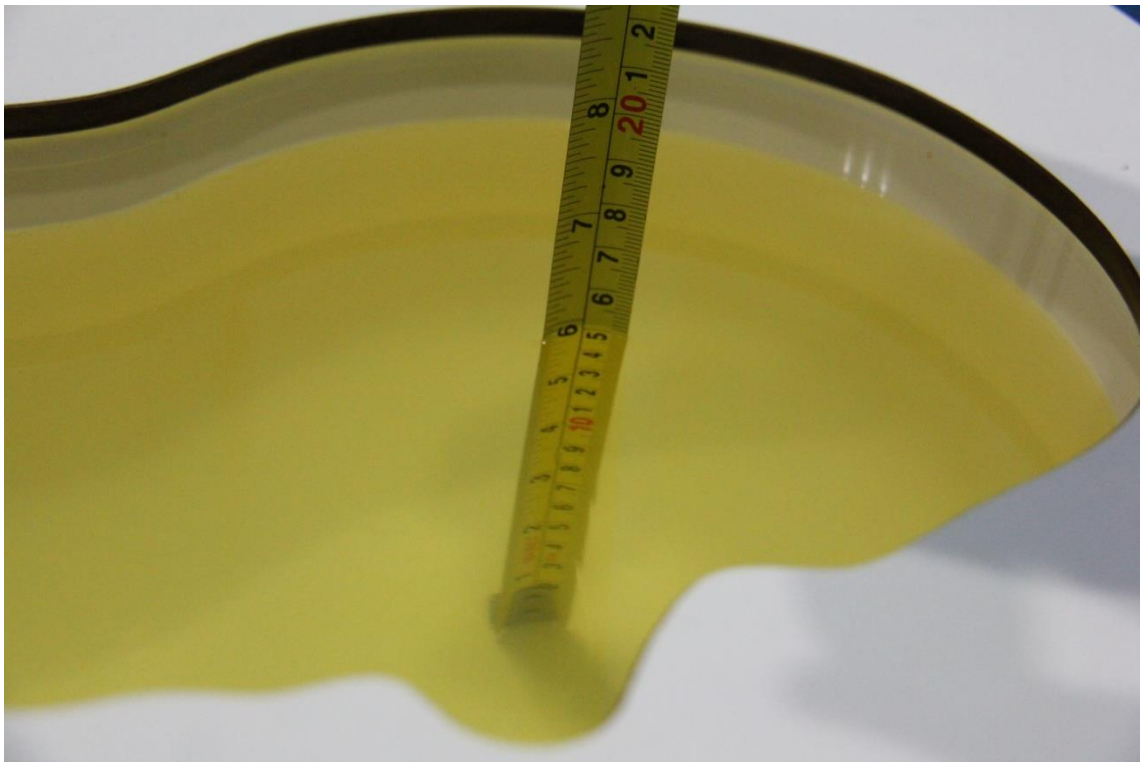


Picture 7-3 Liquid depth in the Head Phantom (1900 MHz)

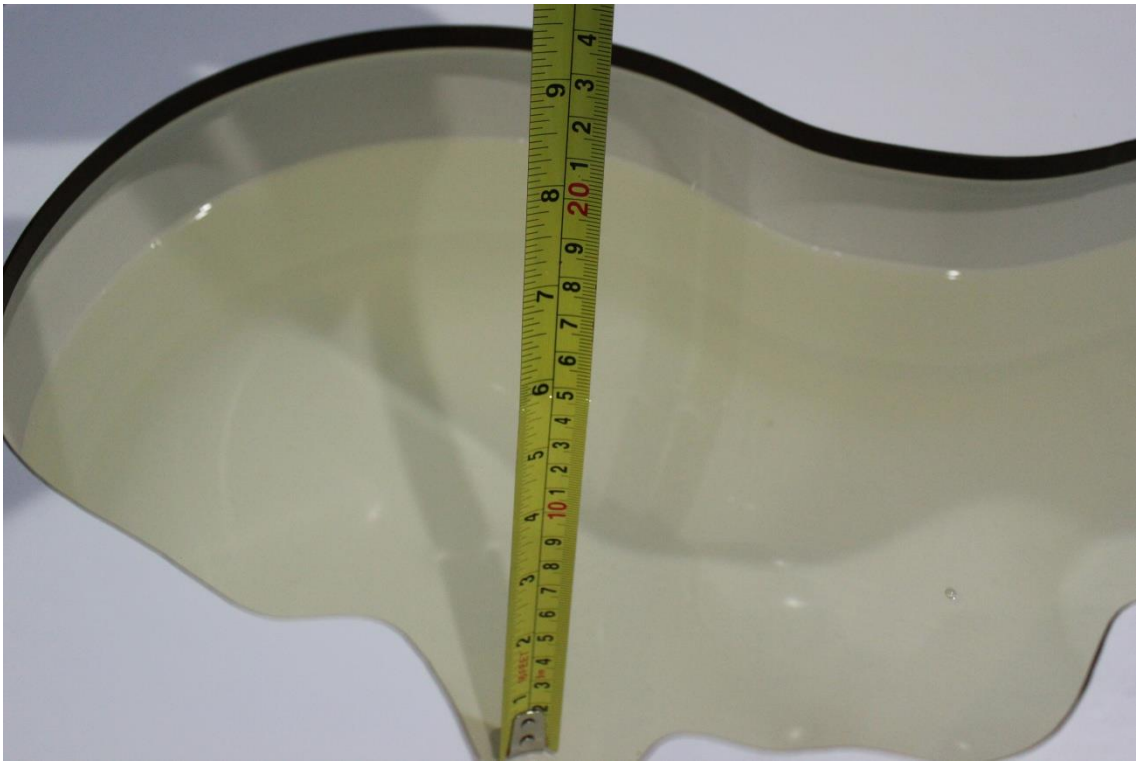


Picture 7-4 Liquid depth in the Head Phantom (2450MHz)

Picture 7-5 Liquid depth in the Head Phantom (2600 MHz)



Picture 7-6 Liquid depth in the Head Phantom (3GHz)

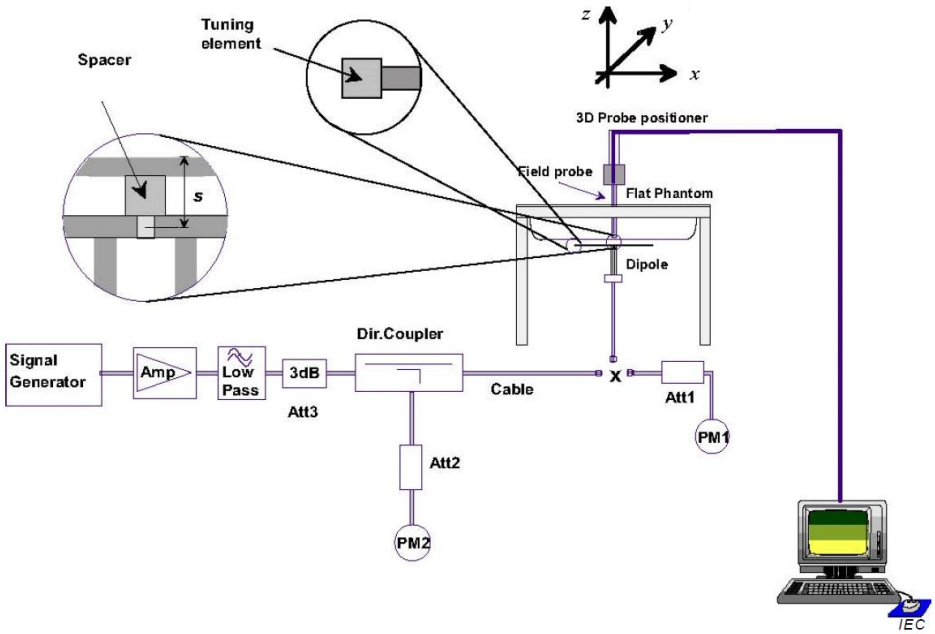


Picture 7-7 Liquid depth in the Head Phantom (5GHz)

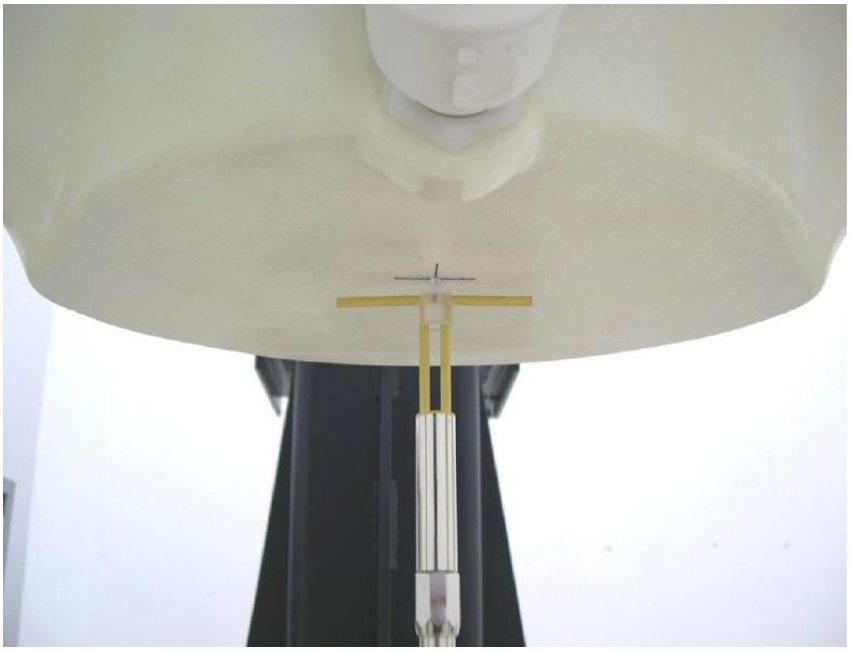
8 System verification

8.1 System Setup

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



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

8.2 System Verification

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

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

Table 8.1: System Verification of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2022-9-11	750MHz	5.64	8.63	5.56	8.60	-1.42%	-0.35%
2022-9-13	900MHz	7.05	11.00	6.84	11.00	-2.98%	0.00%
2022-9-15	1800MHz	20.20	38.80	20.04	38.72	-0.79%	-0.21%
2022-9-16	1800MHz	20.20	38.80	20.32	38.88	0.59%	0.21%
2022-9-22	1900 MHz	20.70	39.70	20.48	39.16	-1.06%	-1.36%
2022-9-23	1900 MHz	20.70	39.70	20.6	39.3	-0.48%	-0.96%
2022-9-29	2450 MHz	24.9	52.7	25.4	54.3	1.85%	3.07%
2022-10-8	2600 MHz	25.2	55.8	25.8	57.3	2.38%	2.72%
2022-10-10	2600 MHz	25.2	55.8	25.3	57.1	0.48%	2.29%
2022-10-18	3300 MHz	25.0	65.3	25.5	67.3	2.00%	3.06%
2022-10-20	3500 MHz	25.3	67.5	24.8	67.1	-1.98%	-0.59%
2022-10-21	3700 MHz	24.4	67.3	24.3	66.4	-0.41%	-1.34%
2022-10-23	3900 MHz	24.1	69.6	23.7	68.8	-1.66%	-1.15%
2022-10-25	4100 MHz	23.6	68.3	23.1	67.2	-2.12%	-1.61%
2022-10-15	5250 MHz	22.3	78.1	22.2	78.0	-0.45%	-0.13%
2022-10-16	5600 MHz	23.7	83.2	24.3	84.4	2.53%	1.44%
2022-10-17	5750 MHz	22.8	80.4	22.7	80.4	-0.44%	0.00%

9 Measurement Procedures

9.1 Tests to be performed

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

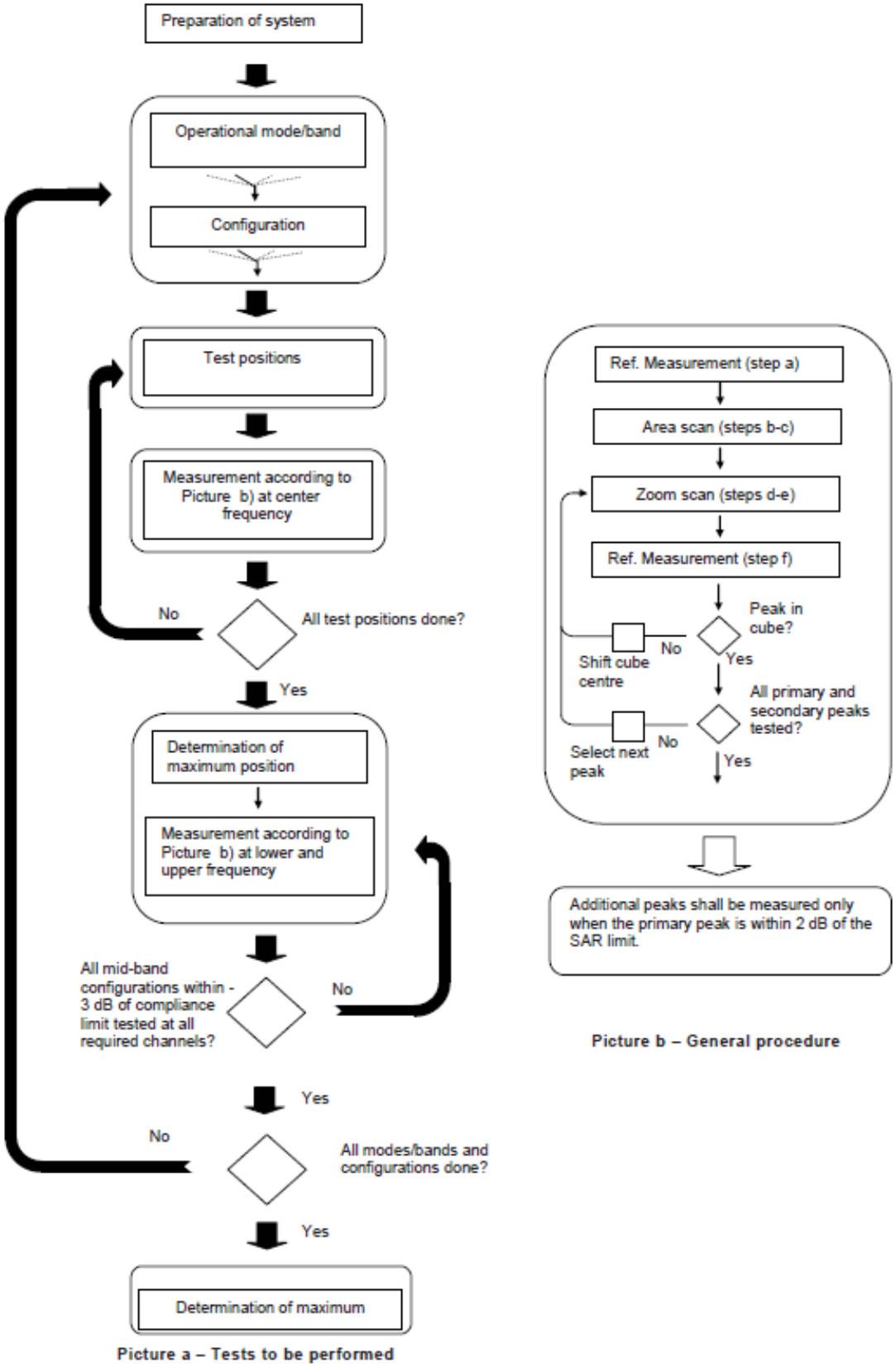
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

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

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

Step 2: For the condition providing highest peak spatial-average SAR determined in Step 1,perform all tests described in 9.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

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



Picture 9.1Block diagram of the tests to be performed

9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2003. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 ± 1 mm</td><td>½·δ·ln(2) ± 0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}</td><td>≤ 2 GHz: ≤ 8 mm
2 – 3 GHz: ≤ 5 mm*</td><td>3 – 4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">uniform grid: $\Delta z_{Zoom}(n)$</td><td>≤ 5 mm</td><td>3 – 4 GHz: ≤ 4 mm
4 – 5 GHz: ≤ 3 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤ 4 mm</td><td>3 – 4 GHz: ≤ 3 mm
4 – 5 GHz: ≤ 2.5 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td>$\Delta z_{Zoom}(n>1)$: between subsequent points</td><td colspan="2">≤ 1.5·$\Delta z_{Zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3 – 4 GHz: ≥ 28 mm
4 – 5 GHz: ≥ 25 mm
5 – 6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">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 <u>reported</u> 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.</td></tr>
</table>

9.3 WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & $DPDCH_n$), 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	β_c	β_d	β_d （SF）	β_c/β_d	β_{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	β_c	β_d	β_d （SF）	β_c/β_d	β_{hs}	β_{ec}	β_{ed}	β_{ed} （SF）	β_{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	β_{ed1}:47/15 β_{ed2}:47/15	4	2	1.5	1.5	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	1.5	1.5	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.5	1.5	21	81

Rel.8 DC-HSDPA (Cat 24)

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

9.4 SAR Measurement for LTE

SAR tests for LTE are performed with a base station simulator, Rohde & Rchwarz CMW500. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the CMW 500.
It is performed for conducted power and SAR based on the KDB941225 D05.
SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

1) QPSK with 1 RB allocation
   Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 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 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

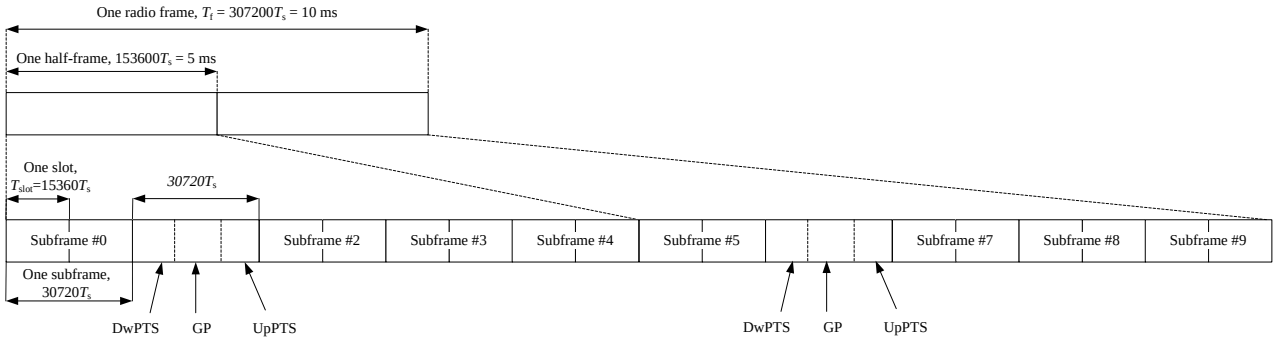


Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)

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

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
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 9.2: Uplink-downlink configurations

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

Duty factor is calculated by:

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

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

= 0.633

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

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

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

9.6 Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10 Area Scan Based 1-g SAR

10.1 Requirement of KDB

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

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

10.2 Fast SAR Algorithms

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

In the initial study, an approximation algorithm based on Linear fit was developed. The accuracy of the algorithm has been demonstrated across a broad frequency range (136-2450 MHz)and for both 1- and 10-g averaged SAR using a sample of 264 SAR measurements from 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.

11 Conducted Output Power

Table 11.1: Summary of Receiver detection mechanism-Main antenna

Antenna	Receiver off+ Sar senser off	Receiver on	Receiver off+SAR sensor on	Receiver on (ENDC)	Receiver off+SAR sensor on(ENDC)
Main Antenna	**DSI0**	**DSI1**	**DSI2**	**DSI3**	**DSI4**

11.1 GSM Measurement result

Table 11.1-1: The conducted power measurement results –GSM850 (DSI0/1/2)

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
1 Txslot	32.98	32.04	32.95	34.00	/	/	/	/
GSM 850 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	33.02	33.04	32.92	34.00	-9.03	23.99	24.01	23.89
2 Txslots	32.15	32.23	31.94	33.00	-6.02	26.13	26.21	25.92
3 Txslots	29.74	29.90	29.66	31.00	-4.26	25.48	25.64	25.40
4 Txslots	28.50	28.68	28.36	30.00	-3.01	25.49	25.67	25.35
GSM 850 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	33.02	33.06	32.93	34.00	-9.03	23.99	24.03	23.90
2 Txslots	32.16	32.24	31.95	33.00	-6.02	26.14	26.22	25.93
3 Txslots	29.74	29.90	29.66	31.00	-4.26	25.48	25.64	25.40
4 Txslots	28.50	28.68	28.36	30.00	-3.01	25.49	25.67	25.35
GSM 850 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	27.19	27.18	27.25	27.50	-9.03	18.16	18.15	18.22
2 Txslots	26.03	26.06	26.09	26.50	-6.02	20.01	20.04	20.07
3Txslots	24.00	24.01	24.01	25.50	-4.26	19.74	19.75	19.75
4 Txslots	22.77	22.51	22.50	24.50	-3.01	19.76	19.50	19.49

NOTES:

1) Division Factors

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

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

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

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

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

According to the conducted power as above, the body measurements are performed with 2Txslots for GSM850.

Table 11.1-2: The conducted power measurement results-GSM1900 (DSI0/1/2)

PCS1900 Speech (GMSK)	Measured timeslot-averaged output power (dBm)			Tune up	calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	30.18	30.24	30.07	31.50	/	/	/	/
PCS1900 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	30.21	30.27	30.04	31.50	-9.03	21.18	21.24	21.01
2 Txslots	28.91	29.11	28.84	30.50	-6.02	22.89	23.09	22.82
3 Txslots	26.57	26.68	26.53	28.50	-4.26	22.31	22.42	22.27
4 Txslots	25.52	25.51	25.53	27.50	-3.01	22.51	22.50	22.52
PCS1900 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	30.04	30.21	30.00	31.50	-9.03	21.01	21.18	20.97
2 Txslots	28.81	29.06	28.80	30.50	-6.02	22.79	23.04	22.78
3 Txslots	26.54	26.63	26.53	28.50	-4.26	22.28	22.37	22.27
4 Txslots	25.56	25.62	25.53	27.50	-3.01	22.55	22.61	22.52
PCS1900 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.54	25.71	26.09	26.50	-9.03	16.51	16.68	17.06
2 Txslots	24.43	24.60	24.87	25.50	-6.02	18.41	18.58	18.85
3Txslots	22.52	23.58	22.79	24.50	-4.26	18.26	19.32	18.53
4 Txslots	21.57	21.57	21.54	23.50	-3.01	18.56	18.56	18.53

NOTES:

1) Division Factors

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

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

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

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

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

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

11.2 WCDMA Measurement result

Table 11.2-1: The conducted Power for WCDMA B2/B5 –DSI 0/1/2

WCDMA1900	FDDII result (dBm)			Tune up
	9538/9938	9400/9800	9262/9662	
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	23.99	24.02	23.97	25.00
HSUPA	22.41	22.45	21.96	23.00
	22.12	22.19	22.04	23.00
	22.17	22.23	22.07	23.00
	21.68	21.71	21.69	22.50
	22.95	23.00	22.88	24.00
DC-HSDPA	22.68	22.65	22.41	24.00
	23.17	23.14	22.66	24.00
	23.12	23.01	22.92	24.00
	22.58	22.63	22.47	23.50

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	23.94	24.06	24.18	25.00
HSUPA	21.86	21.99	21.59	23.00
	21.34	21.42	21.52	23.00
	21.31	21.42	22.54	23.00
	20.77	20.91	21.01	22.50
	22.25	22.35	22.46	24.00
DC-HSDPA	22.64	22.85	22.92	24.00
	23.15	23.24	23.26	24.00
	22.98	23.13	23.24	24.00
	22.57	22.69	22.79	23.50

Table 11.2-2: The conducted Power for WCDMA B4 –DSI 0/1

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	23.83	23.78	23.86	25.00
HSUPA	21.16	21.14	21.37	23.00
	21.01	21.06	21.20	23.00
	21.05	21.10	21.17	23.00
	20.51	20.52	20.74	22.00
	22.05	22.03	22.15	24.00
DC-HSDPA	21.78	21.75	21.90	23.00
	22.05	22.15	22.23	24.00
	22.09	22.11	22.21	24.00
	21.59	21.70	21.88	23.00

Table 11.2-3: The conducted Power for WCDMA B4 –DSI 2

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	23.45	23.51	23.64	24.50
HSUPA	20.38	20.53	20.67	22.30
	20.35	20.55	20.67	22.30
	20.46	20.53	20.55	22.30
	19.90	20.01	20.16	21.80
	21.48	21.52	21.57	23.30
DC-HSDPA	20.95	21.06	20.99	22.90
	21.35	21.33	21.43	23.30
	21.38	21.36	21.41	23.30
	20.81	20.85	20.89	22.80

11.3 LTE Measurement result

Maximum Target Power for Production Unit

Band	Tune up (dBm)				
	DSI0 Receiver off+ Sar senser off	DSI1 Receiver on	DSI2 Receiver off+SAR sensor on	DSI3 Receiver on (ENDC)	DSI4 Receiver off+SAR sensor on(ENDC)
Band 2-ANT1	24.5	24.5	24.5	/	/
Band 4-ANT1	24.5	24.5	24.5	24.5	23.5
Band 5-ANT0	25.5	25.5	25.5	25.5	25.5
Band 7-ANT4	25.5	16	20	13	17
Band 7-ANT0	25.5	25.5	20	25.5	17
Band 12-ANT0	25	25	25	25	25
Band 26-ANT0	25	25	25	25	25
Band 38-ANT4	25.5	18	22	/	/
Band 38-ANT0	25.5	25.5	22.5	25.5	19.5
Band 41-ANT0	24.5	24.5	21	24.5	18
Band 41-ANT4	24.5	/	/	13.5	15.5
Band 66-ANT1	24.5	24.5	24.5	24.5	22

LTE Band2- (ANT1 DSI0/1/2)

LTE B2					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	1909.3 (19193)	23.11	22.52	21.46
		1880 (18900)	23.21	22.54	21.57
		1850.7 (18607)	23.15	22.57	21.47
	1RB-Middle (3)	1909.3 (19193)	23.14	22.58	21.42
		1880 (18900)	23.28	22.69	21.49
		1850.7 (18607)	23.17	22.65	21.48
	1RB-Low (0)	1909.3 (19193)	23.12	22.61	21.52
		1880 (18900)	23.24	22.59	21.56
		1850.7 (18607)	23.23	22.57	21.45
	3RB-High (3)	1909.3 (19193)	23.21	22.32	21.41
		1880 (18900)	23.19	22.38	21.41
		1850.7 (18607)	23.21	22.39	21.46
	3RB-Middle (1)	1909.3 (19193)	23.19	22.32	21.38
		1880 (18900)	23.21	22.35	21.49
		1850.7 (18607)	23.23	22.31	21.39
	3RB-Low (0)	1909.3 (19193)	23.20	22.39	21.38
		1880 (18900)	23.22	22.40	21.43
		1850.7 (18607)	23.19	22.38	21.43
	6RB (0)	1909.3 (19193)	22.37	21.39	20.32
		1880 (18900)	22.41	21.48	20.32
		1850.7 (18607)	22.40	21.42	20.21
3MHz	1RB-High (14)	1908.5 (19185)	23.12	22.55	21.39
		1880 (18900)	23.17	22.64	21.51
		1851.5 (18615)	23.12	22.59	21.49
	1RB-Middle (7)	1908.5 (19185)	23.19	22.57	21.46
		1880 (18900)	23.25	22.55	21.56
		1851.5 (18615)	23.18	22.62	21.53
	1RB-Low (0)	1908.5 (19185)	23.21	22.64	21.52
		1880 (18900)	23.19	22.75	21.43
		1851.5 (18615)	23.15	22.48	21.50
	8RB-High (7)	1908.5 (19185)	22.30	21.39	20.28
		1880 (18900)	22.31	21.39	20.38
		1851.5 (18615)	22.24	21.39	20.22
	8RB-Middle (4)	1908.5 (19185)	22.31	21.31	20.27
		1880 (18900)	22.36	21.39	20.37
		1851.5 (18615)	22.23	21.39	20.26

	8RB-Low (0)	1908.5 (19185)	22.29	21.37	20.37
		1880 (18900)	22.26	21.33	20.36
		1851.5 (18615)	22.34	21.42	20.27
	15RB (0)	1908.5 (19185)	22.31	21.30	20.24
		1880 (18900)	22.30	21.35	20.33
		1851.5 (18615)	22.29	21.32	20.28
5MHz	1RB-High (24)	1907.5 (19175)	23.18	22.59	21.47
		1880 (18900)	23.25	22.60	21.58
		1852.5 (18625)	23.23	22.61	21.45
	1RB-Middle (12)	1907.5 (19175)	23.31	22.61	21.50
		1880 (18900)	23.24	22.55	21.57
		1852.5 (18625)	23.18	22.64	21.45
	1RB-Low (0)	1907.5 (19175)	23.21	22.60	21.43
		1880 (18900)	23.30	22.65	21.55
		1852.5 (18625)	23.21	22.54	21.49
	12RB-High (13)	1907.5 (19175)	22.30	21.24	20.31
		1880 (18900)	22.37	21.32	20.41
		1852.5 (18625)	22.29	21.24	20.23
	12RB-Middle (6)	1907.5 (19175)	22.29	21.36	20.37
		1880 (18900)	22.40	21.39	20.42
		1852.5 (18625)	22.38	21.34	20.32
	12RB-Low (0)	1907.5 (19175)	22.41	21.35	20.35
		1880 (18900)	22.34	21.32	20.34
		1852.5 (18625)	22.37	21.35	20.36
	25RB (0)	1907.5 (19175)	22.35	21.36	20.34
		1880 (18900)	22.41	21.34	20.42
		1852.5 (18625)	22.30	21.31	20.28
10MHz	1RB-High (49)	1905 (19150)	23.17	22.52	21.42
		1880 (18900)	23.32	22.56	21.58
		1855 (18650)	23.14	22.41	21.38
	1RB-Middle (24)	1905 (19150)	23.25	22.52	21.51
		1880 (18900)	23.30	22.71	21.61
		1855 (18650)	23.23	22.62	21.52
	1RB-Low (0)	1905 (19150)	23.23	22.70	21.55
		1880 (18900)	23.24	22.64	21.50
		1855 (18650)	23.22	22.63	21.45
	25RB-High (25)	1905 (19150)	22.33	21.39	20.37
		1880 (18900)	22.40	21.49	20.41
		1855 (18650)	22.21	21.18	20.24
	25RB-Middle (12)	1905 (19150)	22.34	21.38	20.30

		1880 (18900)	22.34	21.43	20.41
		1855 (18650)	22.32	21.34	20.29
	25RB-Low (0)	1905 (19150)	22.40	21.43	20.42
		1880 (18900)	22.38	21.39	20.35
		1855 (18650)	22.39	21.32	20.37
	50RB (0)	1905 (19150)	22.44	21.43	20.39
		1880 (18900)	22.50	21.39	20.39
		1855 (18650)	22.24	21.28	20.24
15MHz	1RB-High (74)	1902.5 (19125)	23.08	22.51	21.36
		1880 (18900)	23.14	22.67	21.55
		1857.5 (18675)	23.05	22.47	21.38
	1RB-Middle (37)	1902.5 (19125)	23.22	22.63	21.45
		1880 (18900)	23.25	22.62	21.47
		1857.5 (18675)	23.07	22.63	21.43
	1RB-Low (0)	1902.5 (19125)	23.24	22.76	21.57
		1880 (18900)	23.11	22.59	21.46
		1857.5 (18675)	23.09	22.57	21.49
	36RB-High (38)	1902.5 (19125)	22.30	21.30	20.32
		1880 (18900)	22.39	21.43	20.41
		1857.5 (18675)	22.24	21.17	20.19
	36RB-Middle (19)	1902.5 (19125)	22.32	21.33	20.31
		1880 (18900)	22.35	21.34	20.40
		1857.5 (18675)	22.27	21.27	20.27
	36RB-Low (0)	1902.5 (19125)	22.45	21.46	20.38
		1880 (18900)	22.33	21.35	20.30
		1857.5 (18675)	22.36	21.36	20.35
	75RB (0)	1902.5 (19125)	22.41	21.42	20.36
		1880 (18900)	22.41	21.33	20.35
		1857.5 (18675)	22.32	21.35	20.25
20MHz	1RB-High (99)	1900 (19100)	23.02	22.51	21.40
		1880 (18900)	23.20	22.52	21.51
		1860 (18700)	23.12	22.50	21.29
	1RB-Middle (50)	1900 (19100)	23.22	22.69	21.57
		1880 (18900)	23.48	22.71	21.59
		1860 (18700)	23.23	22.63	21.55
	1RB-Low (0)	1900 (19100)	23.21	22.64	21.54
		1880 (18900)	23.15	22.50	21.46
		1860 (18700)	23.11	22.54	21.44
	50RB-High (50)	1900 (19100)	22.22	21.31	20.26
		1880 (18900)	22.45	21.42	20.43

		1860 (18700)	22.24	21.26	20.26
	50RB-Middle (25)	1900 (19100)	22.42	21.48	20.45
		1880 (18900)	22.57	21.43	20.41
		1860 (18700)	22.31	21.33	20.34
	50RB-Low (0)	1900 (19100)	22.45	21.68	20.67
		1880 (18900)	22.28	21.29	20.29
		1860 (18700)	22.46	21.50	20.46
	100RB (0)	1900 (19100)	22.48	21.46	20.42
		1880 (18900)	22.37	21.34	20.30
		1860 (18700)	22.43	21.40	20.36

LTE Band4- (ANT1 DSI0/1/2/3)

LTE B4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	1754.3 (20393)	23.36	22.61	21.68
		1732.5 (20175)	23.51	22.88	21.85
		1710.7 (19957)	23.48	22.67	21.79
	1RB-Middle (3)	1754.3 (20393)	23.41	22.70	21.73
		1732.5 (20175)	23.55	22.79	21.91
		1710.7 (19957)	23.52	22.85	21.79
	1RB-Low (0)	1754.3 (20393)	23.36	22.67	21.77
		1732.5 (20175)	23.50	22.78	21.82
		1710.7 (19957)	23.49	22.83	21.83
	3RB-High (3)	1754.3 (20393)	23.45	22.40	21.65
		1732.5 (20175)	23.53	22.56	21.73
		1710.7 (19957)	23.53	22.44	21.79
	3RB-Middle (1)	1754.3 (20393)	23.41	22.36	21.62
		1732.5 (20175)	23.54	22.47	21.76
		1710.7 (19957)	23.56	22.52	21.74
	3RB-Low (0)	1754.3 (20393)	23.39	22.47	21.65
		1732.5 (20175)	23.52	22.45	21.69
		1710.7 (19957)	23.54	22.43	21.78
	6RB (0)	1754.3 (20393)	22.37	21.58	20.46
		1732.5 (20175)	22.50	21.69	20.60
		1710.7 (19957)	22.49	21.78	20.59
3MHz	1RB-High (14)	1753.5 (20385)	23.34	22.69	21.79
		1732.5 (20175)	23.53	22.85	21.79
		1711.5 (19965)	23.57	22.88	21.83
	1RB-Middle (7)	1753.5 (20385)	23.43	22.71	21.73

		1732.5 (20175)	23.56	22.93	21.93
		1711.5 (19965)	23.54	22.84	21.84
	1RB-Low (0)	1753.5 (20385)	23.36	22.65	21.66
		1732.5 (20175)	23.51	22.88	21.74
		1711.5 (19965)	23.51	22.84	21.83
	8RB-High (7)	1753.5 (20385)	22.40	21.62	20.58
		1732.5 (20175)	22.53	21.74	20.65
		1711.5 (19965)	22.49	21.73	20.69
	8RB-Middle (4)	1753.5 (20385)	22.38	21.58	20.60
		1732.5 (20175)	22.51	21.70	20.70
		1711.5 (19965)	22.51	21.73	20.63
	8RB-Low (0)	1753.5 (20385)	22.38	21.61	20.54
		1732.5 (20175)	22.55	21.76	20.71
		1711.5 (19965)	22.51	21.77	20.69
	15RB (0)	1753.5 (20385)	22.38	21.58	20.52
		1732.5 (20175)	22.47	21.69	20.67
		1711.5 (19965)	22.52	21.70	20.61
5MHz	1RB-High (24)	1752.5 (20375)	23.43	22.70	21.79
		1732.5 (20175)	23.60	22.91	21.85
		1712.5 (19975)	23.64	22.88	21.94
	1RB-Middle (12)	1752.5 (20375)	23.43	22.58	21.62
		1732.5 (20175)	23.60	22.87	21.96
		1712.5 (19975)	23.66	22.92	21.91
	1RB-Low (0)	1752.5 (20375)	23.44	22.71	21.76
		1732.5 (20175)	23.60	22.91	21.87
		1712.5 (19975)	23.58	22.78	21.81
	12RB-High (13)	1752.5 (20375)	22.40	21.52	20.54
		1732.5 (20175)	22.56	21.66	20.70
		1712.5 (19975)	22.66	21.79	20.78
	12RB-Middle (6)	1752.5 (20375)	22.37	21.54	20.57
		1732.5 (20175)	22.55	21.67	20.66
		1712.5 (19975)	22.59	21.69	20.67
	12RB-Low (0)	1752.5 (20375)	22.43	21.59	20.58
		1732.5 (20175)	22.63	21.76	20.78
		1712.5 (19975)	22.51	21.70	20.64
	25RB (0)	1752.5 (20375)	22.44	21.58	20.56
		1732.5 (20175)	22.57	21.73	20.72
		1712.5 (19975)	22.60	21.72	20.76
10MHz	1RB-High (49)	1750 (20350)	23.52	22.76	21.80
		1732.5 (20175)	23.60	22.85	21.80

		1715 (20000)	23.65	22.82	21.84
	1RB-Middle (24)	1750 (20350)	23.47	22.69	21.70
		1732.5 (20175)	23.63	22.98	21.99
		1715 (20000)	23.67	22.79	21.91
	1RB-Low (0)	1750 (20350)	23.49	22.77	21.73
		1732.5 (20175)	23.63	22.92	21.93
		1715 (20000)	23.59	22.91	21.85
	25RB-High (25)	1750 (20350)	22.45	21.62	20.59
		1732.5 (20175)	22.57	21.72	20.73
		1715 (20000)	22.73	21.87	20.85
	25RB-Middle (12)	1750 (20350)	22.40	21.61	20.57
		1732.5 (20175)	22.65	21.75	20.73
		1715 (20000)	22.62	21.76	20.76
	25RB-Low (0)	1750 (20350)	22.40	21.54	20.57
		1732.5 (20175)	22.70	21.84	20.83
		1715 (20000)	22.54	21.71	20.66
	50RB (0)	1750 (20350)	22.44	21.61	20.56
		1732.5 (20175)	22.70	21.84	20.76
		1715 (20000)	22.64	21.73	20.73
15MHz	1RB-High (74)	1747.5 (20325)	23.47	22.74	21.85
		1732.5 (20175)	23.52	22.81	21.82
		1717.5 (20025)	23.61	22.98	21.82
	1RB-Middle (37)	1747.5 (20325)	23.46	22.79	21.76
		1732.5 (20175)	23.61	22.90	21.96
		1717.5 (20025)	23.69	22.97	21.89
	1RB-Low (0)	1747.5 (20325)	23.48	22.77	21.88
		1732.5 (20175)	23.61	22.90	21.89
		1717.5 (20025)	23.58	22.89	21.88
	36RB-High (38)	1747.5 (20325)	22.40	21.58	20.60
		1732.5 (20175)	22.61	21.68	20.69
		1717.5 (20025)	22.65	21.71	20.75
	36RB-Middle (19)	1747.5 (20325)	22.45	21.59	20.61
		1732.5 (20175)	22.68	21.79	20.75
		1717.5 (20025)	22.61	21.78	20.76
	36RB-Low (0)	1747.5 (20325)	22.41	21.56	20.59
		1732.5 (20175)	22.72	21.84	20.81
		1717.5 (20025)	22.55	21.70	20.63
	75RB (0)	1747.5 (20325)	22.45	21.57	20.55
		1732.5 (20175)	22.67	21.76	20.74
		1717.5 (20025)	22.61	21.70	20.69

20MHz	1RB-High (99)	1745 (20300)	23.41	22.63	21.68
		1732.5 (20175)	23.43	22.67	21.74
		1720 (20050)	23.51	22.86	21.77
	1RB-Middle (50)	1745 (20300)	23.47	22.80	21.72
		1732.5 (20175)	23.68	22.86	21.88
		1720 (20050)	23.66	22.78	21.88
	1RB-Low (0)	1745 (20300)	23.55	22.76	21.88
		1732.5 (20175)	23.62	22.85	21.79
		1720 (20050)	23.49	22.75	21.72
	50RB-High (50)	1745 (20300)	22.52	21.64	20.61
		1732.5 (20175)	22.61	21.66	20.70
		1720 (20050)	22.48	21.60	20.58
	50RB-Middle (25)	1745 (20300)	22.53	21.63	20.62
		1732.5 (20175)	22.64	21.84	20.74
		1720 (20050)	22.59	21.72	20.75
	50RB-Low (0)	1745 (20300)	22.42	21.56	20.54
		1732.5 (20175)	22.77	21.95	20.93
		1720 (20050)	22.47	21.58	20.52
	100RB (0)	1745 (20300)	22.48	21.58	20.59
		1732.5 (20175)	22.67	21.78	20.77
		1720 (20050)	22.45	21.56	20.53

LTE Band4- (ANT1 DSI4)

LTE B4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	1754.3 (20393)	22.38	22.57	22.05
		1732.5 (20175)	22.47	22.86	22.16
		1710.7 (19957)	22.59	22.84	22.40
	1RB-Middle (3)	1754.3 (20393)	22.32	22.81	22.12
		1732.5 (20175)	22.51	23.03	22.30
		1710.7 (19957)	22.62	23.05	22.22
	1RB-Low (0)	1754.3 (20393)	22.31	22.63	22.04
		1732.5 (20175)	22.54	22.97	22.19
		1710.7 (19957)	22.48	22.83	22.39
	3RB-High (3)	1754.3 (20393)	22.51	22.33	22.10
		1732.5 (20175)	22.54	22.64	22.03
		1710.7 (19957)	22.72	22.74	22.10
	3RB-Middle (1)	1754.3 (20393)	22.39	22.36	21.98

		1732.5 (20175)	22.65	22.56	22.09
		1710.7 (19957)	22.61	22.58	22.16
	3RB-Low (0)	1754.3 (20393)	22.36	22.50	21.92
		1732.5 (20175)	22.60	22.65	22.11
		1710.7 (19957)	22.49	22.65	22.27
	6RB (0)	1754.3 (20393)	22.49	21.91	21.01
		1732.5 (20175)	22.64	22.07	20.96
		1710.7 (19957)	22.62	22.13	21.14
3MHz	1RB-High (14)	1753.5 (20385)	22.40	22.78	21.96
		1732.5 (20175)	22.55	22.98	22.31
		1711.5 (19965)	22.56	22.84	22.25
	1RB-Middle (7)	1753.5 (20385)	22.27	22.82	22.21
		1732.5 (20175)	22.41	22.90	22.33
		1711.5 (19965)	22.70	22.96	22.32
	1RB-Low (0)	1753.5 (20385)	22.37	22.62	22.08
		1732.5 (20175)	22.53	22.90	22.19
		1711.5 (19965)	22.56	22.80	22.22
	8RB-High (7)	1753.5 (20385)	22.33	21.90	20.94
		1732.5 (20175)	22.51	22.12	21.06
		1711.5 (19965)	22.68	22.23	21.26
	8RB-Middle (4)	1753.5 (20385)	22.37	21.97	20.84
		1732.5 (20175)	22.66	22.24	21.05
		1711.5 (19965)	22.59	22.28	21.15
	8RB-Low (0)	1753.5 (20385)	22.39	21.95	20.99
		1732.5 (20175)	22.56	22.28	21.10
		1711.5 (19965)	22.56	22.29	21.11
	15RB (0)	1753.5 (20385)	22.39	22.01	20.93
		1732.5 (20175)	22.50	22.18	21.11
		1711.5 (19965)	22.67	22.24	21.25
5MHz	1RB-High (24)	1752.5 (20375)	22.40	22.71	22.02
		1732.5 (20175)	22.53	22.74	22.12
		1712.5 (19975)	22.67	22.78	22.26
	1RB-Middle (12)	1752.5 (20375)	22.45	22.66	21.98
		1732.5 (20175)	22.62	23.02	22.35
		1712.5 (19975)	22.65	22.85	22.46
	1RB-Low (0)	1752.5 (20375)	22.23	22.66	22.07
		1732.5 (20175)	22.62	22.97	22.18

		1712.5 (19975)	22.56	22.96	22.31
	12RB-High (13)	1752.5 (20375)	22.29	21.96	20.98
		1732.5 (20175)	22.50	21.98	21.11
		1712.5 (19975)	22.71	22.08	21.10
	12RB-Middle (6)	1752.5 (20375)	22.49	21.94	20.89
		1732.5 (20175)	22.59	22.02	21.11
		1712.5 (19975)	22.69	22.15	21.03
	12RB-Low (0)	1752.5 (20375)	22.41	21.93	20.96
		1732.5 (20175)	22.69	22.13	21.24
		1712.5 (19975)	22.72	22.15	21.13
	25RB (0)	1752.5 (20375)	22.47	22.01	20.98
		1732.5 (20175)	22.68	22.12	20.98
		1712.5 (19975)	22.71	22.14	21.05
10MHz	1RB-High (49)	1750 (20350)	22.41	22.69	22.00
		1732.5 (20175)	22.60	22.86	22.09
		1715 (20000)	22.61	22.82	22.18
	1RB-Middle (24)	1750 (20350)	22.27	22.70	22.09
		1732.5 (20175)	22.65	22.90	22.27
		1715 (20000)	22.72	23.04	22.40
	1RB-Low (0)	1750 (20350)	22.43	22.67	21.98
		1732.5 (20175)	22.58	22.87	22.27
		1715 (20000)	22.73	23.02	22.22
	25RB-High (25)	1750 (20350)	22.31	21.92	20.91
		1732.5 (20175)	22.50	21.97	21.10
		1715 (20000)	22.77	22.26	21.13
	25RB-Middle (12)	1750 (20350)	22.34	21.87	20.89
		1732.5 (20175)	22.52	22.13	21.19
		1715 (20000)	22.54	22.15	21.01
	25RB-Low (0)	1750 (20350)	22.27	21.98	20.74
		1732.5 (20175)	22.66	22.14	21.18
		1715 (20000)	22.53	22.05	21.13
	50RB (0)	1750 (20350)	22.30	21.87	20.78
		1732.5 (20175)	22.53	22.08	21.05
		1715 (20000)	22.70	22.14	21.09
15MHz	1RB-High (74)	1747.5 (20325)	22.23	22.75	21.98
		1732.5 (20175)	22.33	22.63	22.02
		1717.5 (20025)	22.49	22.83	22.12

	1RB-Middle (37)	1747.5 (20325)	22.24	22.76	22.01
		1732.5 (20175)	22.50	22.75	22.24
		1717.5 (20025)	22.59	22.94	22.18
	1RB-Low (0)	1747.5 (20325)	22.51	22.78	22.26
		1732.5 (20175)	22.52	23.00	22.29
		1717.5 (20025)	22.61	22.90	22.40
	36RB-High (38)	1747.5 (20325)	22.32	21.81	20.84
		1732.5 (20175)	22.62	22.00	21.02
		1717.5 (20025)	22.59	22.14	21.06
	36RB-Middle (19)	1747.5 (20325)	22.39	21.80	20.80
		1732.5 (20175)	22.48	21.95	21.13
		1717.5 (20025)	22.54	22.11	21.10
	36RB-Low (0)	1747.5 (20325)	22.43	21.78	20.89
		1732.5 (20175)	22.52	22.12	21.23
		1717.5 (20025)	22.61	22.04	21.07
	75RB (0)	1747.5 (20325)	22.40	21.90	20.91
		1732.5 (20175)	22.61	22.07	21.03
		1717.5 (20025)	22.65	22.16	21.06
20MHz	1RB-High (99)	1745 (20300)	22.36	22.59	22.04
		1732.5 (20175)	22.47	22.77	22.08
		1720 (20050)	22.52	22.74	22.20
	1RB-Middle (50)	1745 (20300)	22.47	22.75	22.01
		1732.5 (20175)	22.72	22.97	22.13
		1720 (20050)	22.68	22.84	22.21
	1RB-Low (0)	1745 (20300)	22.55	22.83	22.11
		1732.5 (20175)	22.58	22.88	22.16
		1720 (20050)	22.58	22.79	22.23
	50RB-High (50)	1745 (20300)	22.55	21.98	21.15
		1732.5 (20175)	22.52	22.04	21.15
		1720 (20050)	22.49	22.00	21.11
	50RB-Middle (25)	1745 (20300)	22.53	21.96	21.12
		1732.5 (20175)	22.63	22.13	21.23
		1720 (20050)	22.65	22.10	21.19
	50RB-Low (0)	1745 (20300)	22.45	21.96	21.03
		1732.5 (20175)	22.79	22.28	21.42
		1720 (20050)	22.45	21.88	20.98
	100RB (0)	1745 (20300)	22.51	21.95	21.07

		1732.5 (20175)	22.66	22.15	21.26
		1720 (20050)	22.45	21.89	21.06

LTE Band5- (ANT0 DSI0/1/2/3/4)

LTE B5					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	848.3 (20643)	24.03	23.24	22.36
		836.5 (20525)	24.10	23.29	22.40
		824.7 (20407)	24.11	23.29	22.42
	1RB-Middle (3)	848.3 (20643)	24.04	23.22	22.35
		836.5 (20525)	24.10	23.19	22.39
		824.7 (20407)	24.12	23.30	22.36
	1RB-Low (0)	848.3 (20643)	24.03	23.21	22.35
		836.5 (20525)	24.10	23.30	22.32
		824.7 (20407)	24.09	23.36	22.38
	3RB-High (3)	848.3 (20643)	24.06	23.02	22.28
		836.5 (20525)	24.08	23.09	22.30
		824.7 (20407)	24.16	23.14	22.30
	3RB-Middle (1)	848.3 (20643)	24.10	23.11	22.28
		836.5 (20525)	24.09	23.14	22.36
		824.7 (20407)	24.09	23.12	22.31
	3RB-Low (0)	848.3 (20643)	24.06	23.12	22.35
		836.5 (20525)	24.12	23.14	22.28
		824.7 (20407)	24.10	23.16	22.29
	6RB (0)	848.3 (20643)	23.07	22.29	21.20
		836.5 (20525)	23.08	22.34	21.16
		824.7 (20407)	23.10	22.28	21.15
3MHz	1RB-High (14)	847.5 (20635)	24.07	23.18	22.37
		836.5 (20525)	24.08	23.28	22.35
		825.5 (20415)	24.16	23.28	22.38
	1RB-Middle (7)	847.5 (20635)	24.15	23.20	22.38
		836.5 (20525)	24.13	23.23	22.42
		825.5 (20415)	24.16	23.37	22.44
	1RB-Low (0)	847.5 (20635)	24.10	23.33	22.35
		836.5 (20525)	24.09	23.26	22.31
		825.5 (20415)	24.03	23.28	22.37
	8RB-High (7)	847.5 (20635)	23.06	22.29	21.23
		836.5 (20525)	23.12	22.29	21.26

		825.5 (20415)	23.09	22.36	21.32
	8RB-Middle (4)	847.5 (20635)	23.09	22.32	21.24
		836.5 (20525)	23.10	22.30	21.22
		825.5 (20415)	23.08	22.29	21.32
	8RB-Low (0)	847.5 (20635)	23.09	22.31	21.27
		836.5 (20525)	23.07	22.28	21.23
		825.5 (20415)	23.10	22.32	21.32
	15RB (0)	847.5 (20635)	23.07	22.28	21.20
		836.5 (20525)	23.05	22.22	21.19
		825.5 (20415)	23.09	22.30	21.27
5MHz	1RB-High (24)	846.5 (20625)	24.05	23.32	22.36
		836.5 (20525)	24.10	23.25	22.35
		826.5 (20425)	24.20	23.24	22.44
	1RB-Middle (12)	846.5 (20625)	24.11	23.26	22.39
		836.5 (20525)	24.15	23.28	22.38
		826.5 (20425)	24.18	23.39	22.47
	1RB-Low (0)	846.5 (20625)	24.14	23.25	22.40
		836.5 (20525)	24.18	23.37	22.42
		826.5 (20425)	24.17	23.31	22.42
	12RB-High (13)	846.5 (20625)	22.99	22.15	21.20
		836.5 (20525)	22.97	22.13	21.18
		826.5 (20425)	23.12	22.30	21.33
	12RB-Middle (6)	846.5 (20625)	23.08	22.17	21.26
		836.5 (20525)	23.05	22.24	21.24
		826.5 (20425)	23.15	22.30	21.31
	12RB-Low (0)	846.5 (20625)	23.11	22.26	21.24
		836.5 (20525)	23.11	22.27	21.26
		826.5 (20425)	23.16	22.29	21.31
	25RB (0)	846.5 (20625)	23.06	22.23	21.22
		836.5 (20525)	23.11	22.20	21.24
		826.5 (20425)	23.13	22.34	21.30
10MHz	1RB-High (49)	844 (20600)	24.16	23.33	22.42
		836.5 (20525)	24.18	23.31	22.32
		829 (20450)	24.16	23.32	22.33
	1RB-Middle (24)	844 (20600)	24.19	23.32	22.33
		836.5 (20525)	24.21	23.37	22.32
		829 (20450)	24.23	23.36	22.30
	1RB-Low (0)	844 (20600)	24.22	23.38	22.43
		836.5 (20525)	24.25	23.30	22.38
		829 (20450)	24.24	23.38	22.38
	25RB-High (25)	844 (20600)	23.03	22.25	21.20
		836.5 (20525)	23.13	22.28	21.23

		829 (20450)	23.14	22.30	21.17
	25RB-Middle (12)	844 (20600)	23.14	22.34	21.22
		836.5 (20525)	23.14	22.30	21.18
		829 (20450)	23.16	22.35	21.16
	25RB-Low (0)	844 (20600)	23.18	22.31	21.26
		836.5 (20525)	23.21	22.29	21.27
		829 (20450)	23.18	22.36	21.19
	50RB (0)	844 (20600)	23.12	22.32	21.25
		836.5 (20525)	23.18	22.30	21.27
		829 (20450)	23.17	22.31	21.18

LTE Band7- (ANT4 DSI0)

LTE B7 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	23.76	23.16	22.03
		2535 (21100)	23.90	23.24	22.15
		2502.5 (20775)	23.53	23.22	22.29
	1RB-Middle (12)	2567.5 (21425)	23.83	23.14	22.09
		2535 (21100)	23.91	23.24	22.66
		2502.5 (20775)	24.05	23.20	22.32
	1RB-Low (0)	2567.5 (21425)	23.75	23.19	22.07
		2535 (21100)	23.82	23.13	22.61
		2502.5 (20775)	24.07	23.00	21.86
	12RB-High (13)	2567.5 (21425)	23.23	22.40	21.41
		2535 (21100)	23.31	22.43	21.49
		2502.5 (20775)	23.01	22.13	21.19
	12RB-Middle (6)	2567.5 (21425)	23.22	22.41	21.37
		2535 (21100)	23.33	22.50	21.52
		2502.5 (20775)	23.02	22.20	21.22
	12RB-Low (0)	2567.5 (21425)	23.26	22.40	21.49
		2535 (21100)	23.34	22.52	21.51
		2502.5 (20775)	23.04	22.18	21.21
	25RB (0)	2567.5 (21425)	23.22	22.43	21.41
		2535 (21100)	23.28	22.49	21.48
		2502.5 (20775)	23.03	22.20	21.24
10MHz	1RB-High (49)	2565 (21400)	24.18	23.33	22.50
		2535 (21100)	24.34	23.54	22.65
		2505 (20800)	24.03	23.24	22.34
	1RB-Middle (24)	2565 (21400)	24.23	23.42	22.50
		2535 (21100)	24.33	23.54	22.56
		2505 (20800)	24.05	23.24	22.31

	1RB-Low (0)	2565 (21400)	24.21	23.51	22.60
		2535 (21100)	24.29	23.45	22.56
		2505 (20800)	24.11	23.33	22.37
	25RB-High (25)	2565 (21400)	23.14	22.36	21.32
		2535 (21100)	23.32	22.52	21.48
		2505 (20800)	22.99	22.19	21.20
	25RB-Middle (12)	2565 (21400)	23.16	22.39	21.39
		2535 (21100)	23.28	22.47	21.51
		2505 (20800)	23.01	22.17	21.14
	25RB-Low (0)	2565 (21400)	23.25	22.51	21.50
		2535 (21100)	23.29	22.48	21.49
		2505 (20800)	22.99	22.20	21.16
	50RB (0)	2565 (21400)	23.23	22.47	21.43
		2535 (21100)	23.32	22.48	21.46
		2505 (20800)	22.99	22.24	21.16
15MHz	1RB-High (74)	2562.5 (21375)	23.70	23.32	22.52
		2535 (21100)	23.84	23.50	22.59
		2507.5 (20825)	24.05	23.19	22.30
	1RB-Middle (37)	2562.5 (21375)	23.80	23.54	22.52
		2535 (21100)	24.28	23.51	22.56
		2507.5 (20825)	23.98	23.23	22.25
	1RB-Low (0)	2562.5 (21375)	23.80	23.49	22.56
		2535 (21100)	23.90	23.36	22.51
		2507.5 (20825)	24.02	23.20	22.32
	36RB-High (38)	2562.5 (21375)	23.18	22.32	21.30
		2535 (21100)	23.32	22.51	21.50
		2507.5 (20825)	23.01	22.21	21.23
	36RB-Middle (19)	2562.5 (21375)	23.27	22.45	21.41
		2535 (21100)	23.30	22.45	21.52
		2507.5 (20825)	23.01	22.12	21.18
	36RB-Low (0)	2562.5 (21375)	23.32	22.48	21.45
		2535 (21100)	23.30	22.43	21.41
		2507.5 (20825)	22.98	22.16	21.17
	75RB (0)	2562.5 (21375)	23.26	22.44	21.39
		2535 (21100)	23.31	22.46	21.47
		2507.5 (20825)	22.97	22.19	21.12
20MHz	1RB-High (99)	2560 (21350)	24.09	23.28	22.40
		2535 (21100)	24.31	23.49	22.55
		2510 (20850)	23.99	23.20	22.31
	1RB-Middle (50)	2560 (21350)	24.20	23.43	22.57
		2535 (21100)	24.29	23.48	22.51
		2510 (20850)	24.01	23.12	22.23

	1RB-Low (0)	2560 (21350)	24.28	23.53	22.55
		2535 (21100)	24.12	23.31	22.39
		2510 (20850)	23.98	23.06	22.28
	50RB-High (50)	2560 (21350)	23.05	22.33	21.27
		2535 (21100)	23.29	22.45	21.47
		2510 (20850)	23.02	22.20	21.15
	50RB-Middle (25)	2560 (21350)	23.25	22.41	21.44
		2535 (21100)	23.32	22.44	21.44
		2510 (20850)	23.10	22.18	21.17
	50RB-Low (0)	2560 (21350)	23.23	22.57	21.53
		2535 (21100)	23.25	22.43	21.39
		2510 (20850)	22.92	22.10	21.07
	100RB (0)	2560 (21350)	23.17	22.37	21.38
		2535 (21100)	23.27	22.41	21.41
		2510 (20850)	22.99	22.11	21.08

LTE Band7- (ANT4 DSI1)

LTE B7 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	14.21	14.47	14.31
		2535 (21100)	14.32	14.57	14.55
		2502.5 (20775)	13.95	14.17	14.04
	1RB-Middle (12)	2567.5 (21425)	14.28	14.40	14.32
		2535 (21100)	14.38	14.63	14.51
		2502.5 (20775)	14.01	14.25	14.17
	1RB-Low (0)	2567.5 (21425)	14.21	14.37	14.38
		2535 (21100)	14.26	14.52	14.43
		2502.5 (20775)	13.98	14.16	14.13
	12RB-High (13)	2567.5 (21425)	14.23	14.19	14.24
		2535 (21100)	14.30	14.30	14.33
		2502.5 (20775)	13.98	13.97	14.00
	12RB-Middle (6)	2567.5 (21425)	14.20	14.19	14.24
		2535 (21100)	14.30	14.34	14.34
		2502.5 (20775)	13.97	13.95	13.99
	12RB-Low (0)	2567.5 (21425)	14.30	14.29	14.31
		2535 (21100)	14.34	14.38	14.40
		2502.5 (20775)	14.01	14.01	14.01
	25RB (0)	2567.5 (21425)	14.21	14.27	14.21
		2535 (21100)	14.27	14.33	14.37
		2502.5 (20775)	13.96	13.97	13.98
10MHz	1RB-High (49)	2565 (21400)	14.21	14.37	14.32

		2535 (21100)	14.34	14.58	14.50
		2505 (20800)	13.99	14.29	14.15
	1RB-Middle (24)	2565 (21400)	14.31	14.42	14.34
		2535 (21100)	14.38	14.54	14.51
		2505 (20800)	13.97	14.27	14.14
	1RB-Low (0)	2565 (21400)	14.27	14.46	14.31
		2535 (21100)	14.22	14.49	14.46
		2505 (20800)	13.98	14.26	14.15
	25RB-High (25)	2565 (21400)	14.21	14.20	14.20
		2535 (21100)	14.35	14.39	14.39
		2505 (20800)	14.02	14.08	14.08
	25RB-Middle (12)	2565 (21400)	14.23	14.26	14.29
		2535 (21100)	14.31	14.44	14.39
		2505 (20800)	13.99	14.00	14.00
	25RB-Low (0)	2565 (21400)	14.30	14.29	14.30
		2535 (21100)	14.30	14.36	14.36
		2505 (20800)	13.96	13.98	13.98
	50RB (0)	2565 (21400)	14.28	14.24	14.28
		2535 (21100)	14.34	14.39	14.41
		2505 (20800)	14.02	14.02	14.02
15MHz	1RB-High (74)	2562.5 (21375)	14.13	14.43	14.31
		2535 (21100)	14.24	14.43	14.47
		2507.5 (20825)	13.99	14.24	14.12
	1RB-Middle (37)	2562.5 (21375)	14.22	14.47	14.37
		2535 (21100)	14.29	14.52	14.42
		2507.5 (20825)	13.97	14.22	14.12
	1RB-Low (0)	2562.5 (21375)	14.25	14.49	14.41
		2535 (21100)	14.19	14.38	14.38
		2507.5 (20825)	13.90	14.12	14.03
	36RB-High (38)	2562.5 (21375)	14.13	14.18	14.18
		2535 (21100)	14.26	14.31	14.37
		2507.5 (20825)	14.08	14.10	14.06
	36RB-Middle (19)	2562.5 (21375)	14.22	14.19	14.24
		2535 (21100)	14.30	14.34	14.36
		2507.5 (20825)	13.99	13.98	13.98
	36RB-Low (0)	2562.5 (21375)	14.31	14.30	14.32
		2535 (21100)	14.29	14.31	14.36
		2507.5 (20825)	13.93	13.92	13.97
	75RB (0)	2562.5 (21375)	14.21	14.23	14.27
		2535 (21100)	14.29	14.32	14.33
		2507.5 (20825)	13.98	13.98	14.02
20MHz	1RB-High (99)	2560 (21350)	14.07	14.15	14.12

		2535 (21100)	14.16	14.47	14.30
		2510 (20850)	13.93	14.23	14.06
	1RB-Middle (50)	2560 (21350)	14.29	14.32	14.25
		2535 (21100)	14.27	14.43	14.44
		2510 (20850)	14.05	14.10	14.07
	1RB-Low (0)	2560 (21350)	14.24	14.45	14.39
		2535 (21100)	14.10	14.30	14.26
		2510 (20850)	13.86	14.06	13.95
	50RB-High (50)	2560 (21350)	14.09	14.04	14.06
		2535 (21100)	14.29	14.26	14.28
		2510 (20850)	13.97	14.03	13.97
	50RB-Middle (25)	2560 (21350)	14.21	14.19	14.24
		2535 (21100)	14.25	14.29	14.32
		2510 (20850)	14.00	13.94	13.95
	50RB-Low (0)	2560 (21350)	14.33	14.33	14.33
		2535 (21100)	14.28	14.31	14.30
		2510 (20850)	13.84	13.89	13.87
	100RB (0)	2560 (21350)	14.22	14.20	14.22
		2535 (21100)	14.20	14.21	14.23
		2510 (20850)	13.94	13.91	13.95

LTE Band7- (ANT4 DSI2)

LTE B7 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	18.45	18.76	18.58
		2535 (21100)	18.68	18.93	18.76
		2502.5 (20775)	18.27	18.55	18.42
	1RB-Middle (12)	2567.5 (21425)	18.49	18.82	18.74
		2535 (21100)	18.66	18.98	18.84
		2502.5 (20775)	18.30	18.47	18.47
	1RB-Low (0)	2567.5 (21425)	18.49	18.73	18.68
		2535 (21100)	18.65	18.89	18.74
		2502.5 (20775)	18.26	18.51	18.43
	12RB-High (13)	2567.5 (21425)	18.44	18.49	18.49
		2535 (21100)	18.62	18.62	18.65
		2502.5 (20775)	18.24	18.28	18.28
	12RB-Middle (6)	2567.5 (21425)	18.47	18.45	18.52
		2535 (21100)	18.65	18.67	18.73
		2502.5 (20775)	18.21	18.27	18.34
	12RB-Low (0)	2567.5 (21425)	18.50	18.53	18.56
		2535 (21100)	18.65	18.71	18.73

		2502.5 (20775)	18.28	18.30	18.36
	25RB (0)	2567.5 (21425)	18.48	18.55	18.50
		2535 (21100)	18.63	18.68	18.66
		2502.5 (20775)	18.24	18.29	18.31
10MHz	1RB-High (49)	2565 (21400)	18.50	18.61	18.58
		2535 (21100)	18.70	18.89	18.82
		2505 (20800)	18.37	18.47	18.47
	1RB-Middle (24)	2565 (21400)	18.53	18.78	18.67
		2535 (21100)	18.69	18.81	18.78
		2505 (20800)	18.25	18.50	18.45
	1RB-Low (0)	2565 (21400)	18.51	18.81	18.69
		2535 (21100)	18.63	18.76	18.84
		2505 (20800)	18.24	18.39	18.49
	25RB-High (25)	2565 (21400)	18.43	18.45	18.48
		2535 (21100)	18.66	18.67	18.70
		2505 (20800)	18.32	18.34	18.34
	25RB-Middle (12)	2565 (21400)	18.48	18.52	18.54
		2535 (21100)	18.63	18.69	18.72
		2505 (20800)	18.26	18.28	18.27
	25RB-Low (0)	2565 (21400)	18.57	18.59	18.58
		2535 (21100)	18.66	18.69	18.71
		2505 (20800)	18.26	18.25	18.28
	50RB (0)	2565 (21400)	18.51	18.51	18.53
		2535 (21100)	18.67	18.69	18.71
		2505 (20800)	18.29	18.31	18.32
15MHz	1RB-High (74)	2562.5 (21375)	18.39	18.68	18.50
		2535 (21100)	18.55	18.80	18.70
		2507.5 (20825)	18.30	18.60	18.43
	1RB-Middle (37)	2562.5 (21375)	18.42	18.63	18.66
		2535 (21100)	18.60	18.85	18.75
		2507.5 (20825)	18.26	18.55	18.41
	1RB-Low (0)	2562.5 (21375)	18.51	18.66	18.65
		2535 (21100)	18.52	18.78	18.60
		2507.5 (20825)	18.20	18.48	18.30
	36RB-High (38)	2562.5 (21375)	18.37	18.37	18.45
		2535 (21100)	18.64	18.60	18.65
		2507.5 (20825)	18.29	18.34	18.38
	36RB-Middle (19)	2562.5 (21375)	18.46	18.44	18.52
		2535 (21100)	18.65	18.65	18.67
		2507.5 (20825)	18.28	18.25	18.30
	36RB-Low (0)	2562.5 (21375)	18.55	18.54	18.59
		2535 (21100)	18.58	18.62	18.62

		2507.5 (20825)	18.22	18.22	18.25
	75RB (0)	2562.5 (21375)	18.46	18.52	18.52
		2535 (21100)	18.62	18.59	18.63
		2507.5 (20825)	18.31	18.30	18.31
20MHz	1RB-High (99)	2560 (21350)	18.40	18.70	18.50
		2535 (21100)	18.55	18.75	18.67
		2510 (20850)	18.32	18.56	18.41
	1RB-Middle (50)	2560 (21350)	18.55	18.75	18.61
		2535 (21100)	18.61	18.90	18.72
		2510 (20850)	18.49	18.55	18.40
	1RB-Low (0)	2560 (21350)	18.58	18.74	18.64
		2535 (21100)	18.53	18.72	18.55
		2510 (20850)	18.21	18.41	18.29
	50RB-High (50)	2560 (21350)	18.38	18.39	18.40
		2535 (21100)	18.64	18.64	18.61
		2510 (20850)	18.37	18.38	18.36
	50RB-Middle (25)	2560 (21350)	18.50	18.53	18.55
		2535 (21100)	18.67	18.65	18.68
		2510 (20850)	18.55	18.31	18.32
	50RB-Low (0)	2560 (21350)	18.63	18.68	18.65
		2535 (21100)	18.61	18.62	18.61
		2510 (20850)	18.25	18.24	18.26
	100RB (0)	2560 (21350)	18.52	18.50	18.53
		2535 (21100)	18.63	18.61	18.60
		2510 (20850)	18.54	18.30	18.32

LTE Band7- (ANT4 DSI3)

LTE B7 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	11.54	11.15	11.10
		2535 (21100)	11.47	11.28	11.12
		2502.5 (20775)	11.44	11.02	10.91
	1RB-Middle (12)	2567.5 (21425)	11.62	11.26	11.17
		2535 (21100)	11.46	11.32	11.20
		2502.5 (20775)	11.45	11.13	10.96
	1RB-Low (0)	2567.5 (21425)	11.57	11.33	11.09
		2535 (21100)	11.43	11.25	11.22
		2502.5 (20775)	11.45	11.12	11.03
	12RB-High (13)	2567.5 (21425)	11.57	11.00	11.06
		2535 (21100)	11.42	11.04	11.09
		2502.5 (20775)	11.45	10.82	10.89

	12RB-Middle (6)	2567.5 (21425)	11.60	11.04	11.06
		2535 (21100)	11.46	11.09	11.14
		2502.5 (20775)	11.47	10.85	10.84
	12RB-Low (0)	2567.5 (21425)	11.60	11.09	11.11
		2535 (21100)	11.48	11.08	11.11
		2502.5 (20775)	11.45	10.84	10.91
	25RB (0)	2567.5 (21425)	11.61	11.05	11.03
		2535 (21100)	11.43	11.10	11.07
		2502.5 (20775)	11.47	10.84	10.85
10MHz	1RB-High (49)	2565 (21400)	11.55	11.20	11.18
		2535 (21100)	11.49	11.41	11.30
		2505 (20800)	11.37	11.02	10.98
	1RB-Middle (24)	2565 (21400)	11.61	11.40	11.23
		2535 (21100)	11.52	11.24	11.28
		2505 (20800)	11.48	11.17	10.98
	1RB-Low (0)	2565 (21400)	11.60	11.18	11.10
		2535 (21100)	11.42	11.25	11.20
		2505 (20800)	11.43	11.11	11.01
	25RB-High (25)	2565 (21400)	11.55	11.03	11.00
		2535 (21100)	11.52	11.13	11.15
		2505 (20800)	11.49	10.92	10.91
	25RB-Middle (12)	2565 (21400)	11.62	11.10	11.08
		2535 (21100)	11.47	11.12	11.13
		2505 (20800)	11.43	10.87	10.86
	25RB-Low (0)	2565 (21400)	11.64	11.11	11.08
		2535 (21100)	11.49	11.14	11.11
		2505 (20800)	11.43	10.83	10.85
	50RB (0)	2565 (21400)	11.59	11.05	11.04
		2535 (21100)	11.50	11.11	11.12
		2505 (20800)	11.48	10.83	10.87
15MHz	1RB-High (74)	2562.5 (21375)	11.52	11.23	11.10
		2535 (21100)	11.42	11.22	11.21
		2507.5 (20825)	11.32	11.15	11.05
	1RB-Middle (37)	2562.5 (21375)	11.55	11.27	11.21
		2535 (21100)	11.45	11.37	11.26
		2507.5 (20825)	11.38	11.15	11.03
	1RB-Low (0)	2562.5 (21375)	11.53	11.34	11.27
		2535 (21100)	11.36	11.27	11.19
		2507.5 (20825)	11.41	11.00	10.92
	36RB-High (38)	2562.5 (21375)	11.55	11.01	11.04
		2535 (21100)	11.48	11.13	11.13
		2507.5 (20825)	11.44	10.93	10.95

	36RB-Middle (19)	2562.5 (21375)	11.54	11.03	11.07
		2535 (21100)	11.45	11.11	11.11
		2507.5 (20825)	11.39	10.89	10.85
	36RB-Low (0)	2562.5 (21375)	11.61	11.10	11.14
		2535 (21100)	11.44	11.09	11.15
		2507.5 (20825)	11.37	10.80	10.83
	75RB (0)	2562.5 (21375)	11.60	11.03	11.09
		2535 (21100)	11.44	11.10	11.07
		2507.5 (20825)	11.42	10.88	10.90
20MHz	1RB-High (99)	2560 (21350)	11.51	11.25	11.18
		2535 (21100)	11.44	11.33	11.30
		2510 (20850)	11.33	11.13	10.94
	1RB-Middle (50)	2560 (21350)	11.69	11.35	11.23
		2535 (21100)	11.57	11.31	11.29
		2510 (20850)	11.40	11.03	10.92
	1RB-Low (0)	2560 (21350)	11.63	11.34	11.30
		2535 (21100)	11.38	11.23	11.16
		2510 (20850)	11.33	10.98	10.89
	50RB-High (50)	2560 (21350)	11.62	11.01	11.07
		2535 (21100)	11.56	11.19	11.23
		2510 (20850)	11.45	10.95	10.94
	50RB-Middle (25)	2560 (21350)	11.69	11.16	11.19
		2535 (21100)	11.62	11.22	11.26
		2510 (20850)	11.43	10.89	10.90
	50RB-Low (0)	2560 (21350)	11.80	11.27	11.30
		2535 (21100)	11.59	11.21	11.20
		2510 (20850)	11.40	10.78	10.83
	100RB (0)	2560 (21350)	11.70	11.14	11.13
		2535 (21100)	11.57	11.15	11.13
		2510 (20850)	11.39	10.86	10.89

LTE Band7- (ANT4 DSI4)

LTE B7 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	15.18	15.43	15.38
		2535 (21100)	15.36	15.57	15.49
		2502.5 (20775)	14.99	15.24	15.13
	1RB-Middle (12)	2567.5 (21425)	15.24	15.39	15.37
		2535 (21100)	15.38	15.62	15.52
		2502.5 (20775)	15.00	15.16	15.15
	1RB-Low (0)	2567.5 (21425)	15.19	15.35	15.39

		2535 (21100)	15.34	15.47	15.50
		2502.5 (20775)	14.98	15.27	15.12
	12RB-High (13)	2567.5 (21425)	15.19	15.21	15.25
		2535 (21100)	15.38	15.32	15.39
		2502.5 (20775)	15.02	15.00	15.00
	12RB-Middle (6)	2567.5 (21425)	15.23	15.20	15.26
		2535 (21100)	15.38	15.39	15.42
		2502.5 (20775)	14.95	15.00	15.00
	12RB-Low (0)	2567.5 (21425)	15.26	15.25	15.32
		2535 (21100)	15.38	15.40	15.43
		2502.5 (20775)	15.06	15.04	15.08
	25RB (0)	2567.5 (21425)	15.24	15.25	15.26
		2535 (21100)	15.34	15.42	15.39
		2502.5 (20775)	14.98	15.02	15.03
10MHz	1RB-High (49)	2565 (21400)	15.19	15.36	15.34
		2535 (21100)	15.40	15.60	15.54
		2505 (20800)	15.05	15.19	15.13
	1RB-Middle (24)	2565 (21400)	15.27	15.51	15.36
		2535 (21100)	15.38	15.63	15.51
		2505 (20800)	14.98	15.15	15.13
	1RB-Low (0)	2565 (21400)	15.24	15.38	15.39
		2535 (21100)	15.33	15.48	15.49
		2505 (20800)	14.99	15.19	15.11
	25RB-High (25)	2565 (21400)	15.21	15.18	15.21
		2535 (21100)	15.37	15.39	15.43
		2505 (20800)	15.08	15.06	15.11
	25RB-Middle (12)	2565 (21400)	15.26	15.25	15.28
		2535 (21100)	15.38	15.41	15.41
		2505 (20800)	15.00	15.01	15.06
	25RB-Low (0)	2565 (21400)	15.32	15.30	15.35
		2535 (21100)	15.38	15.37	15.38
		2505 (20800)	14.99	15.00	14.99
	50RB (0)	2565 (21400)	15.28	15.26	15.29
		2535 (21100)	15.42	15.44	15.42
		2505 (20800)	15.01	15.03	15.08
15MHz	1RB-High (74)	2562.5 (21375)	15.08	15.39	15.29
		2535 (21100)	15.28	15.49	15.44
		2507.5 (20825)	15.02	15.24	15.18
	1RB-Middle (37)	2562.5 (21375)	15.20	15.46	15.37
		2535 (21100)	15.31	15.52	15.44
		2507.5 (20825)	15.01	15.26	15.16
	1RB-Low (0)	2562.5 (21375)	15.24	15.51	15.42

		2535 (21100)	15.24	15.47	15.37
		2507.5 (20825)	14.92	15.07	15.05
	36RB-High (38)	2562.5 (21375)	15.18	15.18	15.18
		2535 (21100)	15.38	15.39	15.37
		2507.5 (20825)	15.04	15.12	15.09
	36RB-Middle (19)	2562.5 (21375)	15.22	15.20	15.26
		2535 (21100)	15.30	15.38	15.40
		2507.5 (20825)	15.03	15.03	15.03
	36RB-Low (0)	2562.5 (21375)	15.34	15.29	15.30
		2535 (21100)	15.31	15.40	15.41
		2507.5 (20825)	14.89	14.96	15.00
	75RB (0)	2562.5 (21375)	15.27	15.27	15.25
		2535 (21100)	15.37	15.34	15.39
		2507.5 (20825)	14.99	15.02	15.06
20MHz	1RB-High (99)	2560 (21350)	15.10	15.36	15.18
		2535 (21100)	15.24	15.44	15.39
		2510 (20850)	15.03	15.28	15.17
	1RB-Middle (50)	2560 (21350)	15.21	15.37	15.40
		2535 (21100)	15.38	15.54	15.48
		2510 (20850)	15.03	15.19	15.12
	1RB-Low (0)	2560 (21350)	15.30	15.55	15.44
		2535 (21100)	15.18	15.35	15.32
		2510 (20850)	14.88	15.06	14.99
	50RB-High (50)	2560 (21350)	15.13	15.13	15.17
		2535 (21100)	15.39	15.32	15.38
		2510 (20850)	15.11	15.08	15.13
	50RB-Middle (25)	2560 (21350)	15.29	15.25	15.31
		2535 (21100)	15.37	15.42	15.45
		2510 (20850)	15.12	15.03	15.10
	50RB-Low (0)	2560 (21350)	15.43	15.40	15.42
		2535 (21100)	15.45	15.38	15.39
		2510 (20850)	15.26	14.97	15.00
	100RB (0)	2560 (21350)	15.25	15.25	15.28
		2535 (21100)	15.35	15.31	15.36
		2510 (20850)	15.03	15.00	15.02

LTE Band7- (ANT0 DSI0/1/3)

LTE B7 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	24.39	23.52	22.49
		2535 (21100)	24.27	23.73	22.39

		2502.5 (20775)	24.32	23.51	22.46
	1RB-Middle (12)	2567.5 (21425)	24.37	23.89	22.59
		2535 (21100)	24.41	23.81	22.45
		2502.5 (20775)	24.16	23.92	22.77
	1RB-Low (0)	2567.5 (21425)	24.26	23.77	22.46
		2535 (21100)	24.19	23.56	22.76
		2502.5 (20775)	24.17	23.61	22.48
	12RB-High (13)	2567.5 (21425)	23.51	22.47	21.59
		2535 (21100)	23.48	22.45	21.45
		2502.5 (20775)	23.82	22.63	21.70
	12RB-Middle (6)	2567.5 (21425)	23.59	22.75	21.64
		2535 (21100)	23.81	22.73	21.66
		2502.5 (20775)	23.80	22.88	21.56
	12RB-Low (0)	2567.5 (21425)	23.57	22.56	21.60
		2535 (21100)	23.90	22.79	21.82
		2502.5 (20775)	23.84	22.49	21.55
	25RB (0)	2567.5 (21425)	23.68	22.62	21.49
		2535 (21100)	23.74	22.48	21.46
		2502.5 (20775)	23.56	22.57	21.76
10MHz	1RB-High (49)	2565 (21400)	24.43	23.68	22.38
		2535 (21100)	24.05	23.70	22.65
		2505 (20800)	24.11	23.66	22.51
	1RB-Middle (24)	2565 (21400)	24.25	23.66	22.74
		2535 (21100)	24.51	23.69	22.79
		2505 (20800)	24.46	23.71	22.83
	1RB-Low (0)	2565 (21400)	24.18	23.59	22.57
		2535 (21100)	24.38	23.75	22.67
		2505 (20800)	24.14	23.56	22.77
	25RB-High (25)	2565 (21400)	23.46	22.61	21.55
		2535 (21100)	23.63	22.65	21.58
		2505 (20800)	23.68	22.69	21.79
	25RB-Middle (12)	2565 (21400)	23.64	22.82	21.60
		2535 (21100)	23.66	22.65	21.61
		2505 (20800)	23.76	22.80	21.61
	25RB-Low (0)	2565 (21400)	23.66	22.76	21.69
		2535 (21100)	23.55	22.53	21.76
		2505 (20800)	23.69	22.73	21.65
	50RB (0)	2565 (21400)	23.73	22.65	21.63
		2535 (21100)	23.66	22.74	21.60
		2505 (20800)	23.58	22.64	21.59
15MHz	1RB-High (74)	2562.5 (21375)	24.10	23.77	22.75
		2535 (21100)	24.40	23.70	22.62

		2507.5 (20825)	24.16	23.71	22.52
	1RB-Middle (37)	2562.5 (21375)	24.15	23.65	22.69
		2535 (21100)	24.23	23.70	22.83
		2507.5 (20825)	24.33	23.73	22.82
	1RB-Low (0)	2562.5 (21375)	24.21	23.81	22.42
		2535 (21100)	24.14	23.53	22.56
		2507.5 (20825)	24.44	23.62	22.59
	36RB-High (38)	2562.5 (21375)	23.61	22.68	21.66
		2535 (21100)	23.69	22.74	21.47
		2507.5 (20825)	23.67	22.73	21.47
	36RB-Middle (19)	2562.5 (21375)	23.58	22.69	21.50
		2535 (21100)	23.60	22.73	21.66
		2507.5 (20825)	23.63	22.76	21.69
	36RB-Low (0)	2562.5 (21375)	23.71	22.69	21.42
		2535 (21100)	23.78	22.78	21.85
		2507.5 (20825)	23.65	22.79	21.74
	75RB (0)	2562.5 (21375)	23.54	22.70	21.58
		2535 (21100)	23.58	22.60	21.44
		2507.5 (20825)	23.47	22.51	21.65
20MHz	1RB-High (99)	2560 (21350)	24.23	23.63	22.55
		2535 (21100)	24.25	23.67	22.56
		2510 (20850)	24.24	23.64	22.53
	1RB-Middle (50)	2560 (21350)	24.31	23.71	22.62
		2535 (21100)	24.33	23.72	22.65
		2510 (20850)	24.36	23.77	22.69
	1RB-Low (0)	2560 (21350)	24.26	23.61	22.51
		2535 (21100)	24.27	23.65	22.57
		2510 (20850)	24.29	23.68	22.58
	50RB-High (50)	2560 (21350)	23.63	22.57	21.52
		2535 (21100)	23.62	22.61	21.57
		2510 (20850)	23.64	22.63	21.61
	50RB-Middle (25)	2560 (21350)	23.61	22.62	21.64
		2535 (21100)	23.67	22.62	21.59
		2510 (20850)	23.75	22.72	21.69
	50RB-Low (0)	2560 (21350)	23.72	22.65	21.61
		2535 (21100)	23.74	22.71	21.68
		2510 (20850)	23.66	22.63	21.58
	100RB (0)	2560 (21350)	23.63	22.61	21.57
		2535 (21100)	23.62	22.66	21.62
		2510 (20850)	23.64	22.62	21.56

LTE Band7- (ANT0 DSI2)

LTE B7 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	19.80	19.70	19.83
		2535 (21100)	19.44	19.45	19.55
		2502.5 (20775)	19.34	19.31	19.50
	1RB-Middle (12)	2567.5 (21425)	19.69	19.74	19.69
		2535 (21100)	19.58	19.71	19.62
		2502.5 (20775)	19.69	19.52	19.66
	1RB-Low (0)	2567.5 (21425)	19.62	19.46	19.66
		2535 (21100)	19.33	19.31	19.58
		2502.5 (20775)	19.46	19.56	19.76
	12RB-High (13)	2567.5 (21425)	19.68	19.61	19.74
		2535 (21100)	19.55	19.57	19.66
		2502.5 (20775)	19.43	19.52	19.66
	12RB-Middle (6)	2567.5 (21425)	19.82	19.67	19.91
		2535 (21100)	19.55	19.65	19.57
		2502.5 (20775)	19.59	19.54	19.54
	12RB-Low (0)	2567.5 (21425)	19.76	19.76	19.71
		2535 (21100)	19.49	19.63	19.60
		2502.5 (20775)	19.51	19.62	19.55
	25RB (0)	2567.5 (21425)	19.72	19.69	19.62
		2535 (21100)	19.42	19.42	19.60
		2502.5 (20775)	19.60	19.58	19.53
10MHz	1RB-High (49)	2565 (21400)	19.75	19.58	19.79
		2535 (21100)	19.50	19.55	19.43
		2505 (20800)	19.50	19.39	19.56
	1RB-Middle (24)	2565 (21400)	19.66	19.81	19.70
		2535 (21100)	19.62	19.63	19.66
		2505 (20800)	19.58	19.57	19.49
	1RB-Low (0)	2565 (21400)	19.57	19.61	19.64
		2535 (21100)	19.43	19.31	19.49
		2505 (20800)	19.47	19.47	19.60
	25RB-High (25)	2565 (21400)	19.72	19.61	19.61
		2535 (21100)	19.52	19.65	19.69
		2505 (20800)	19.38	19.59	19.67
	25RB-Middle (12)	2565 (21400)	19.77	19.74	19.76
		2535 (21100)	19.51	19.61	19.70
		2505 (20800)	19.58	19.54	19.59
	25RB-Low (0)	2565 (21400)	19.73	19.68	19.64
		2535 (21100)	19.48	19.63	19.52

		2505 (20800)	19.48	19.75	19.61
	50RB (0)	2565 (21400)	19.60	19.81	19.59
		2535 (21100)	19.46	19.39	19.63
		2505 (20800)	19.56	19.68	19.41
15MHz	1RB-High (74)	2562.5 (21375)	19.77	19.62	19.75
		2535 (21100)	19.46	19.42	19.37
		2507.5 (20825)	19.39	19.24	19.50
	1RB-Middle (37)	2562.5 (21375)	19.80	19.73	19.80
		2535 (21100)	19.62	19.54	19.55
		2507.5 (20825)	19.51	19.63	19.62
	1RB-Low (0)	2562.5 (21375)	19.48	19.59	19.68
		2535 (21100)	19.34	19.48	19.62
		2507.5 (20825)	19.64	19.46	19.64
	36RB-High (38)	2562.5 (21375)	19.62	19.53	19.77
		2535 (21100)	19.44	19.71	19.73
		2507.5 (20825)	19.47	19.56	19.67
	36RB-Middle (19)	2562.5 (21375)	19.74	19.85	19.75
		2535 (21100)	19.57	19.63	19.62
		2507.5 (20825)	19.73	19.48	19.68
	36RB-Low (0)	2562.5 (21375)	19.70	19.74	19.68
		2535 (21100)	19.60	19.48	19.49
		2507.5 (20825)	19.61	19.71	19.65
	75RB (0)	2562.5 (21375)	19.72	19.77	19.77
		2535 (21100)	19.60	19.51	19.60
		2507.5 (20825)	19.64	19.63	19.46
20MHz	1RB-High (99)	2560 (21350)	19.71	19.65	19.85
		2535 (21100)	19.52	19.49	19.47
		2510 (20850)	19.41	19.34	19.48
	1RB-Middle (50)	2560 (21350)	19.76	19.82	19.73
		2535 (21100)	19.55	19.61	19.56
		2510 (20850)	19.61	19.58	19.57
	1RB-Low (0)	2560 (21350)	19.56	19.52	19.61
		2535 (21100)	19.39	19.39	19.52
		2510 (20850)	19.56	19.53	19.66
	50RB-High (50)	2560 (21350)	19.67	19.59	19.71
		2535 (21100)	19.54	19.62	19.65
		2510 (20850)	19.48	19.52	19.63
	50RB-Middle (25)	2560 (21350)	19.72	19.75	19.82
		2535 (21100)	19.52	19.59	19.61
		2510 (20850)	19.64	19.58	19.62
	50RB-Low (0)	2560 (21350)	19.74	19.71	19.72
		2535 (21100)	19.53	19.55	19.55

		2510 (20850)	19.56	19.68	19.59
	100RB (0)	2560 (21350)	19.69	19.75	19.69
		2535 (21100)	19.52	19.42	19.58
		2510 (20850)	19.54	19.63	19.48

LTE Band7- (ANT0 DSI4)

LTE B7 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2567.5 (21425)	16.43	16.64	16.62
		2535 (21100)	16.31	16.55	16.35
		2502.5 (20775)	16.27	16.17	16.44
	1RB-Middle (12)	2567.5 (21425)	16.57	16.46	16.48
		2535 (21100)	16.44	16.71	16.51
		2502.5 (20775)	16.39	16.61	16.37
	1RB-Low (0)	2567.5 (21425)	16.48	16.45	16.34
		2535 (21100)	16.46	16.34	16.21
		2502.5 (20775)	16.32	16.40	16.28
	12RB-High (13)	2567.5 (21425)	16.35	16.55	16.66
		2535 (21100)	16.56	16.57	16.22
		2502.5 (20775)	16.30	16.38	16.22
	12RB-Middle (6)	2567.5 (21425)	16.51	16.62	16.39
		2535 (21100)	16.38	16.57	16.39
		2502.5 (20775)	16.29	16.57	16.20
	12RB-Low (0)	2567.5 (21425)	16.39	16.67	16.35
		2535 (21100)	16.73	16.61	16.48
		2502.5 (20775)	16.27	16.42	16.16
	25RB (0)	2567.5 (21425)	16.40	16.65	16.45
		2535 (21100)	16.29	16.60	16.27
		2502.5 (20775)	16.26	16.45	16.49
10MHz	1RB-High (49)	2565 (21400)	16.55	16.68	16.33
		2535 (21100)	16.35	16.41	16.50
		2505 (20800)	16.19	16.19	16.41
	1RB-Middle (24)	2565 (21400)	16.73	16.44	16.54
		2535 (21100)	16.44	16.34	16.41
		2505 (20800)	16.48	16.38	16.47
	1RB-Low (0)	2565 (21400)	16.26	16.38	16.35
		2535 (21100)	16.46	16.59	16.38
		2505 (20800)	16.28	16.30	16.23
	25RB-High (25)	2565 (21400)	16.67	16.68	16.62
		2535 (21100)	16.46	16.42	16.28
		2505 (20800)	16.36	16.30	16.45

	25RB-Middle (12)	2565 (21400)	16.64	16.60	16.60
		2535 (21100)	16.45	16.31	16.62
		2505 (20800)	16.58	16.38	16.54
	25RB-Low (0)	2565 (21400)	16.67	16.59	16.57
		2535 (21100)	16.58	16.30	16.50
		2505 (20800)	16.15	16.30	16.13
	50RB (0)	2565 (21400)	16.66	16.38	16.62
		2535 (21100)	16.58	16.37	16.60
		2505 (20800)	16.38	16.24	16.37
15MHz	1RB-High (74)	2562.5 (21375)	16.61	16.67	16.50
		2535 (21100)	16.29	16.48	16.51
		2507.5 (20825)	16.09	16.31	16.18
	1RB-Middle (37)	2562.5 (21375)	16.65	16.66	16.45
		2535 (21100)	16.34	16.47	16.50
		2507.5 (20825)	16.60	16.39	16.25
	1RB-Low (0)	2562.5 (21375)	16.35	16.21	16.30
		2535 (21100)	16.29	16.22	16.49
		2507.5 (20825)	16.16	16.22	16.40
	36RB-High (38)	2562.5 (21375)	16.36	16.52	16.35
		2535 (21100)	16.35	16.52	16.32
		2507.5 (20825)	16.55	16.27	16.20
	36RB-Middle (19)	2562.5 (21375)	16.60	16.71	16.42
		2535 (21100)	16.63	16.45	16.33
		2507.5 (20825)	16.43	16.56	16.56
	36RB-Low (0)	2562.5 (21375)	16.38	16.62	16.47
		2535 (21100)	16.43	16.57	16.36
		2507.5 (20825)	16.41	16.40	16.20
	75RB (0)	2562.5 (21375)	16.31	16.70	16.60
		2535 (21100)	16.62	16.50	16.44
		2507.5 (20825)	16.41	16.44	16.37
20MHz	1RB-High (99)	2560 (21350)	16.55	16.59	16.51
		2535 (21100)	16.39	16.45	16.38
		2510 (20850)	16.29	16.31	16.26
	1RB-Middle (50)	2560 (21350)	16.54	16.58	16.53
		2535 (21100)	16.44	16.51	16.47
		2510 (20850)	16.41	16.47	16.42
	1RB-Low (0)	2560 (21350)	16.32	16.41	16.33
		2535 (21100)	16.35	16.39	16.33
		2510 (20850)	16.27	16.35	16.27
	50RB-High (50)	2560 (21350)	16.53	16.51	16.52
		2535 (21100)	16.43	16.38	16.39
		2510 (20850)	16.37	16.38	16.36

	50RB-Middle (25)	2560 (21350)	16.51	16.52	16.54
		2535 (21100)	16.45	16.39	16.44
		2510 (20850)	16.41	16.42	16.38
	50RB-Low (0)	2560 (21350)	16.54	16.48	16.52
		2535 (21100)	16.53	16.46	16.51
		2510 (20850)	16.32	16.33	16.29
	100RB (0)	2560 (21350)	16.48	16.51	16.49
		2535 (21100)	16.45	16.47	16.46
		2510 (20850)	16.34	16.36	16.33

LTE Band12- (ANT0 DSI0/1/2/3/4)

LTE B12					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	715.3	23.74	22.98	21.81
		707.5	23.70	22.83	21.78
		699.7	23.66	22.82	21.68
	1RB-Middle (3)	715.3	23.77	22.90	21.85
		707.5	23.72	22.86	21.82
		699.7	23.68	22.87	21.77
	1RB-Low (0)	715.3	23.74	22.86	21.86
		707.5	23.67	22.92	21.87
		699.7	23.65	22.74	21.81
	3RB-High (3)	715.3	23.77	22.73	21.81
		707.5	23.70	22.69	21.76
		699.7	23.71	22.70	21.69
	3RB-Middle (1)	715.3	23.76	22.72	21.77
		707.5	23.70	22.66	21.80
		699.7	23.65	22.66	21.75
	3RB-Low (0)	715.3	23.76	22.79	21.80
		707.5	23.71	22.65	21.72
		699.7	23.68	22.60	21.67
	6RB (0)	715.3	22.74	21.79	20.66
		707.5	22.70	21.70	20.61
		699.7	22.68	21.74	20.62
3MHz	1RB-High (14)	714.5	23.76	22.97	21.88
		707.5	23.70	22.92	21.81
		700.5	23.74	22.76	21.83
	1RB-Middle (7)	714.5	23.83	23.05	21.96
		707.5	23.73	23.02	21.91

		700.5	23.74	22.91	21.84
	1RB-Low (0)	714.5	23.82	22.97	21.83
		707.5	23.74	22.85	21.92
		700.5	23.70	22.98	21.85
	8RB-High (7)	714.5	22.74	21.76	20.75
		707.5	22.70	21.74	20.71
		700.5	22.70	21.79	20.75
	8RB-Middle (4)	714.5	22.74	21.77	20.77
		707.5	22.74	21.78	20.72
		700.5	22.70	21.78	20.74
	8RB-Low (0)	714.5	22.78	21.86	20.80
		707.5	22.70	21.78	20.74
		700.5	22.71	21.75	20.72
	15RB (0)	714.5	22.71	21.76	20.71
		707.5	22.69	21.73	20.72
		700.5	22.72	21.74	20.70
5MHz	1RB-High (24)	713.5	23.79	22.86	21.87
		707.5	23.78	22.96	21.87
		701.5	23.80	22.97	21.83
	1RB-Middle (12)	713.5	23.83	23.02	21.93
		707.5	23.77	23.02	21.90
		701.5	23.81	22.98	21.88
	1RB-Low (0)	713.5	23.82	23.01	21.92
		707.5	23.78	22.91	21.89
		701.5	23.76	22.87	21.83
	12RB-High (13)	713.5	22.70	21.66	20.69
		707.5	22.70	21.73	20.70
		701.5	22.70	21.70	20.70
	12RB-Middle (6)	713.5	22.81	21.76	20.80
		707.5	22.74	21.73	20.76
		701.5	22.70	21.71	20.70
	12RB-Low (0)	713.5	22.80	21.83	20.83
		707.5	22.78	21.76	20.80
		701.5	22.72	21.68	20.73
	25RB (0)	713.5	22.78	21.76	20.75
		707.5	22.75	21.77	20.72
		701.5	22.69	21.74	20.67
10MHz	1RB-High (49)	711	23.74	22.83	21.81
		707.5	23.71	22.90	21.73
		704	23.72	22.97	21.81

	1RB-Middle (24)	711	23.85	23.02	21.95
		707.5	23.78	22.96	21.79
		704	23.80	23.01	21.84
	1RB-Low (0)	711	23.76	22.88	21.84
		707.5	23.74	22.92	21.82
		704	23.77	22.90	21.84
	25RB-High (25)	711	22.69	21.67	20.67
		707.5	22.75	21.73	20.71
		704	22.65	21.60	20.57
	25RB-Middle (12)	711	22.77	21.77	20.74
		707.5	22.73	21.75	20.73
		704	22.74	21.74	20.72
	25RB-Low (0)	711	22.84	21.81	20.75
		707.5	22.80	21.76	20.77
		704	22.69	21.68	20.66
	50RB (0)	711	22.74	21.72	20.74
		707.5	22.74	21.72	20.75
		704	22.67	21.67	20.66

LTE Band26- (ANT0 DSI0/1/2/3/4)

LTE B26					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	848.3 (27033)	24.01	23.39	22.32
		831.5 (26865)	23.99	23.28	22.29
		814.7 (26697)	23.98	23.34	22.29
	1RB-Middle (3)	848.3 (27033)	23.99	23.40	22.20
		831.5 (26865)	24.01	23.27	22.34
		814.7 (26697)	24.02	23.33	22.24
	1RB-Low (0)	848.3 (27033)	24.01	23.29	22.23
		831.5 (26865)	23.98	23.36	22.28
		814.7 (26697)	24.03	23.45	22.24
	3RB-High (3)	848.3 (27033)	24.00	23.12	22.16
		831.5 (26865)	23.97	23.16	22.21
		814.7 (26697)	24.00	23.10	22.21
	3RB-Middle (1)	848.3 (27033)	24.00	23.13	22.20
		831.5 (26865)	24.00	23.19	22.19
		814.7 (26697)	24.01	23.08	22.21
	3RB-Low (0)	848.3 (27033)	24.00	23.11	22.16
		831.5 (26865)	24.02	23.12	22.23

		814.7 (26697)	24.01	23.21	22.21
	6RB (0)	848.3 (27033)	23.17	22.23	21.09
		831.5 (26865)	23.18	22.20	21.08
		814.7 (26697)	23.19	22.25	21.13
3MHz	1RB-High (14)	847.5 (27025)	23.42	23.23	22.35
		831.5 (26865)	23.40	23.24	22.41
		815.5 (26705)	23.98	23.34	22.31
	1RB-Middle (7)	847.5 (27025)	23.40	23.35	22.40
		831.5 (26865)	23.43	23.31	22.34
		815.5 (26705)	24.00	23.40	22.37
	1RB-Low (0)	847.5 (27025)	23.41	23.28	22.31
		831.5 (26865)	23.45	23.31	22.36
		815.5 (26705)	24.00	23.44	22.36
	8RB-High (7)	847.5 (27025)	23.04	22.14	21.16
		831.5 (26865)	23.11	22.12	21.24
		815.5 (26705)	23.11	22.14	21.21
	8RB-Middle (4)	847.5 (27025)	23.06	22.11	21.16
		831.5 (26865)	23.07	22.14	21.18
		815.5 (26705)	23.10	22.15	21.13
	8RB-Low (0)	847.5 (27025)	23.09	22.16	21.21
		831.5 (26865)	23.09	22.14	21.21
		815.5 (26705)	23.10	22.19	21.17
	15RB (0)	847.5 (27025)	23.09	22.13	21.14
		831.5 (26865)	23.07	22.14	21.16
		815.5 (26705)	23.11	22.11	21.13
5MHz	1RB-High (24)	846.5 (27015)	23.46	22.83	21.73
		831.5 (26865)	23.48	22.74	21.77
		816.5 (26715)	23.48	22.78	21.78
	1RB-Middle (12)	846.5 (27015)	23.47	22.70	21.78
		831.5 (26865)	23.54	22.83	21.78
		816.5 (26715)	23.52	22.86	21.75
	1RB-Low (0)	846.5 (27015)	23.43	22.79	21.71
		831.5 (26865)	23.52	22.94	21.84
		816.5 (26715)	23.52	22.81	21.86
	12RB-High (13)	846.5 (27015)	23.04	22.00	21.04
		831.5 (26865)	23.10	22.04	21.04
		816.5 (26715)	23.08	22.11	21.11
	12RB-Middle (6)	846.5 (27015)	23.08	22.11	21.08
		831.5 (26865)	23.12	22.09	21.13
		816.5 (26715)	23.08	22.08	21.11

	12RB-Low (0)	846.5 (27015)	23.13	22.10	21.14
		831.5 (26865)	23.12	22.10	21.15
		816.5 (26715)	23.11	22.06	21.14
	25RB (0)	846.5 (27015)	23.09	22.12	21.10
		831.5 (26865)	23.12	22.16	21.06
		816.5 (26715)	23.11	22.09	21.11
10MHz	1RB-High (49)	844 (26990)	23.44	22.76	21.59
		831.5 (26865)	23.44	22.74	21.73
		820 (26750)	23.45	22.68	21.77
	1RB-Middle (24)	844 (26990)	23.47	22.89	21.76
		831.5 (26865)	23.52	22.90	21.78
		820 (26750)	23.47	22.92	21.74
	1RB-Low (0)	844 (26990)	23.47	22.77	21.74
		831.5 (26865)	23.45	22.81	21.73
		820 (26750)	23.50	22.80	21.77
	25RB-High (25)	844 (26990)	23.03	22.05	20.98
		831.5 (26865)	23.09	22.11	21.06
		820 (26750)	23.11	22.12	21.10
	25RB-Middle (12)	844 (26990)	23.12	22.08	21.10
		831.5 (26865)	23.09	22.14	21.10
		820 (26750)	23.12	22.15	21.14
	25RB-Low (0)	844 (26990)	23.16	22.18	21.17
		831.5 (26865)	23.12	22.13	21.10
		820 (26750)	23.14	22.11	21.16
	50RB (0)	844 (26990)	23.11	22.09	21.10
		831.5 (26865)	23.06	22.10	21.08
		820 (26750)	23.14	22.09	21.08
15MHz	1RB-High (74)	841.5 (26965)	23.91	23.29	21.61
		831.5 (26865)	23.88	23.28	21.58
		822.5 (26775)	23.95	22.86	21.69
	1RB-Middle (37)	841.5 (26965)	23.97	23.27	21.75
		831.5 (26865)	23.99	23.34	21.74
		822.5 (26775)	23.96	22.78	21.71
	1RB-Low (0)	841.5 (26965)	23.96	23.34	21.78
		831.5 (26865)	23.92	23.32	21.78
		822.5 (26775)	23.93	22.88	21.73
	36RB-High (38)	841.5 (26965)	23.04	22.03	21.01
		831.5 (26865)	23.02	22.02	21.01
		822.5 (26775)	23.07	22.08	21.03
	36RB-Middle (19)	841.5 (26965)	23.10	22.11	21.07

		831.5 (26865)	23.11	22.08	21.08
		822.5 (26775)	23.11	22.11	21.12
	36RB-Low (0)	841.5 (26965)	23.12	22.11	21.07
		831.5 (26865)	23.16	22.08	21.03
		822.5 (26775)	23.14	22.08	21.11
	75RB (0)	841.5 (26965)	23.12	22.10	21.06
		831.5 (26865)	23.11	22.03	21.06
		822.5 (26775)	23.08	22.13	21.13

LTE Band38- (ANT4 DSI0)

LTE B38 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2617.5 (38225)	24.43	23.42	22.25
		2595 (38000)	24.31	23.29	22.11
		2572.5 (37775)	24.21	23.37	22.01
	1RB-Middle (12)	2617.5 (38225)	24.47	23.44	22.26
		2595 (38000)	24.37	23.31	22.14
		2572.5 (37775)	24.25	23.35	22.02
	1RB-Low (0)	2617.5 (38225)	24.45	23.38	22.26
		2595 (38000)	24.38	23.32	22.15
		2572.5 (37775)	24.28	23.37	22.05
	12RB-High (13)	2617.5 (38225)	23.33	22.47	21.56
		2595 (38000)	23.20	22.34	21.39
		2572.5 (37775)	23.28	22.22	21.27
	12RB-Middle (6)	2617.5 (38225)	23.38	22.52	21.58
		2595 (38000)	23.23	22.36	21.45
		2572.5 (37775)	23.29	22.25	21.30
	12RB-Low (0)	2617.5 (38225)	23.39	22.52	21.61
		2595 (38000)	23.28	22.38	21.48
		2572.5 (37775)	23.34	22.25	21.33
	25RB (0)	2617.5 (38225)	23.38	22.59	21.60
		2595 (38000)	23.26	22.46	21.45
		2572.5 (37775)	23.29	22.34	21.35
10MHz	1RB-High (49)	2615 (38200)	24.39	23.36	22.21
		2595 (38000)	24.26	23.23	22.04
		2575 (37800)	24.25	23.20	22.01
	1RB-Middle (24)	2615 (38200)	24.41	23.39	22.22
		2595 (38000)	24.32	23.30	22.13
		2575 (37800)	24.23	23.38	22.05
	1RB-Low (0)	2615 (38200)	24.36	23.34	22.18
		2595 (38000)	24.36	23.34	22.14

		2575 (37800)	24.27	23.38	22.04
	25RB-High (25)	2615 (38200)	23.31	22.55	21.58
		2595 (38000)	23.20	22.43	21.46
		2575 (37800)	23.16	22.38	21.42
	25RB-Middle (12)	2615 (38200)	23.30	22.54	21.56
		2595 (38000)	23.19	22.40	21.43
		2575 (37800)	23.31	22.35	21.40
	25RB-Low (0)	2615 (38200)	23.31	22.58	21.56
		2595 (38000)	23.25	22.44	21.49
		2575 (37800)	23.30	22.34	21.37
	50RB (0)	2615 (38200)	23.33	22.57	21.56
		2595 (38000)	23.28	22.46	21.45
		2575 (37800)	23.32	22.40	21.34
15MHz	1RB-High (74)	2612.5 (38175)	24.31	23.31	22.16
		2595 (38000)	24.19	23.18	22.02
		2577.5 (37825)	24.17	23.17	21.98
	1RB-Middle (37)	2612.5 (38175)	24.33	23.31	22.17
		2595 (38000)	24.29	23.25	22.11
		2577.5 (37825)	24.22	23.20	22.03
	1RB-Low (0)	2612.5 (38175)	24.29	23.27	22.12
		2595 (38000)	24.26	23.23	22.09
		2577.5 (37825)	24.21	23.36	22.02
	36RB-High (38)	2612.5 (38175)	23.26	22.43	21.44
		2595 (38000)	23.16	22.36	21.31
		2577.5 (37825)	23.13	22.30	21.31
	36RB-Middle (19)	2612.5 (38175)	23.27	22.46	21.46
		2595 (38000)	23.21	22.36	21.35
		2577.5 (37825)	23.13	22.28	21.30
	36RB-Low (0)	2612.5 (38175)	23.27	22.44	21.46
		2595 (38000)	23.22	22.44	21.41
		2577.5 (37825)	23.29	22.30	21.36
	75RB (0)	2612.5 (38175)	23.34	22.50	21.50
		2595 (38000)	23.22	22.42	21.44
		2577.5 (37825)	23.13	22.38	21.36
20MHz	1RB-High (99)	2610 (38150)	24.27	23.23	22.08
		2595 (38000)	24.17	23.13	21.93
		2580 (37850)	24.11	23.08	21.91
	1RB-Middle (50)	2610 (38150)	24.31	23.26	22.09
		2595 (38000)	24.29	23.22	22.02
		2580 (37850)	24.24	23.20	22.00
	1RB-Low (0)	2610 (38150)	24.25	23.20	22.02
		2595 (38000)	24.20	23.15	21.99

		2580 (37850)	24.15	23.30	21.95
	50RB-High (50)	2610 (38150)	23.23	22.44	21.39
		2595 (38000)	23.16	22.34	21.34
		2580 (37850)	23.14	22.34	21.34
	50RB-Middle (25)	2610 (38150)	23.31	22.48	21.43
		2595 (38000)	23.25	22.46	21.37
		2580 (37850)	23.14	22.39	21.32
	50RB-Low (0)	2610 (38150)	23.37	22.52	21.46
		2595 (38000)	23.27	22.44	21.39
		2580 (37850)	23.35	22.30	21.34
	100RB (0)	2610 (38150)	23.28	22.47	21.44
		2595 (38000)	23.18	22.38	21.38
		2580 (37850)	23.11	22.32	21.31

LTE Band38- (ANT4 DSI1)

LTE B38 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2617.5 (38225)	16.26	16.44	15.83
		2595 (38000)	16.01	15.99	15.94
		2572.5 (37775)	16.24	16.21	15.61
	1RB-Middle (12)	2617.5 (38225)	16.11	16.24	16.08
		2595 (38000)	16.11	16.35	16.04
		2572.5 (37775)	16.28	15.94	15.78
	1RB-Low (0)	2617.5 (38225)	16.30	16.39	16.03
		2595 (38000)	16.20	16.18	15.72
		2572.5 (37775)	16.16	16.04	15.89
	12RB-High (13)	2617.5 (38225)	16.38	16.13	16.31
		2595 (38000)	16.24	16.03	16.00
		2572.5 (37775)	16.32	16.01	16.20
	12RB-Middle (6)	2617.5 (38225)	16.39	16.36	16.29
		2595 (38000)	16.28	16.28	16.35
		2572.5 (37775)	16.36	16.08	15.99
	12RB-Low (0)	2617.5 (38225)	16.26	16.49	16.49
		2595 (38000)	16.29	16.04	16.38
		2572.5 (37775)	16.22	16.11	16.16
	25RB (0)	2617.5 (38225)	16.16	16.46	16.30
		2595 (38000)	16.06	16.13	16.20
		2572.5 (37775)	16.11	15.99	16.04
10MHz	1RB-High (49)	2615 (38200)	16.35	16.42	15.90
		2595 (38000)	16.23	16.14	15.59
		2575 (37800)	16.25	16.07	15.69

	1RB-Middle (24)	2615 (38200)	16.37	16.29	15.80
		2595 (38000)	16.16	16.39	15.82
		2575 (37800)	16.17	15.97	15.70
	1RB-Low (0)	2615 (38200)	16.16	16.11	15.94
		2595 (38000)	16.08	16.32	15.83
		2575 (37800)	16.24	16.13	15.73
	25RB-High (25)	2615 (38200)	16.07	16.21	16.28
		2595 (38000)	16.01	16.24	16.06
		2575 (37800)	16.08	16.26	16.20
	25RB-Middle (12)	2615 (38200)	16.46	16.19	16.15
		2595 (38000)	16.27	16.03	16.13
		2575 (37800)	16.16	16.25	16.07
	25RB-Low (0)	2615 (38200)	16.18	16.50	16.17
		2595 (38000)	16.40	16.01	16.33
		2575 (37800)	16.21	16.09	16.31
	50RB (0)	2615 (38200)	16.50	16.34	16.42
		2595 (38000)	16.30	16.06	16.09
		2575 (37800)	15.97	16.05	16.31
15MHz	1RB-High (74)	2612.5 (38175)	16.44	16.32	15.89
		2595 (38000)	15.94	16.02	15.57
		2577.5 (37825)	15.94	16.04	15.55
	1RB-Middle (37)	2612.5 (38175)	16.18	16.39	15.88
		2595 (38000)	16.35	16.33	15.88
		2577.5 (37825)	15.97	16.23	15.98
	1RB-Low (0)	2612.5 (38175)	16.22	16.37	15.93
		2595 (38000)	16.24	16.13	15.91
		2577.5 (37825)	16.02	15.90	15.95
	36RB-High (38)	2612.5 (38175)	16.40	16.31	16.41
		2595 (38000)	16.01	16.02	16.07
		2577.5 (37825)	16.05	16.18	16.32
	36RB-Middle (19)	2612.5 (38175)	16.46	16.17	16.24
		2595 (38000)	16.04	16.10	16.02
		2577.5 (37825)	16.30	16.08	16.17
	36RB-Low (0)	2612.5 (38175)	16.37	16.38	16.30
		2595 (38000)	16.38	16.04	16.11
		2577.5 (37825)	16.07	15.97	16.13
	75RB (0)	2612.5 (38175)	16.33	16.18	16.35
		2595 (38000)	16.16	16.30	16.40
		2577.5 (37825)	16.08	16.03	16.14
20MHz	1RB-High (99)	2610 (38150)	16.26	16.26	15.92
		2595 (38000)	16.11	16.10	15.76
		2580 (37850)	16.08	16.08	15.74

	1RB-Middle (50)	2610 (38150)	16.30	16.28	15.94
		2595 (38000)	16.24	16.21	15.88
		2580 (37850)	16.17	16.14	15.81
	1RB-Low (0)	2610 (38150)	16.21	16.20	15.84
		2595 (38000)	16.18	16.14	15.81
		2580 (37850)	16.12	16.09	15.77
	50RB-High (50)	2610 (38150)	16.25	16.25	16.22
		2595 (38000)	16.19	16.15	16.16
		2580 (37850)	16.16	16.13	16.16
	50RB-Middle (25)	2610 (38150)	16.32	16.32	16.29
		2595 (38000)	16.16	16.18	16.16
		2580 (37850)	16.16	16.17	16.12
	50RB-Low (0)	2610 (38150)	16.33	16.35	16.32
		2595 (38000)	16.24	16.21	16.21
		2580 (37850)	16.16	16.15	16.11
	100RB (0)	2610 (38150)	16.32	16.27	16.30
		2595 (38000)	16.16	16.16	16.20
		2580 (37850)	16.15	16.15	16.15

LTE Band38- (ANT4 DSI2)

LTE B38 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2617.5 (38225)	20.46	20.42	20.08
		2595 (38000)	20.08	20.19	20.00
		2572.5 (37775)	20.15	20.03	19.73
	1RB-Middle (12)	2617.5 (38225)	20.42	20.62	20.05
		2595 (38000)	20.31	20.51	20.00
		2572.5 (37775)	20.44	20.41	20.04
	1RB-Low (0)	2617.5 (38225)	20.24	20.53	19.90
		2595 (38000)	20.35	20.21	19.81
		2572.5 (37775)	20.16	20.19	20.05
	12RB-High (13)	2617.5 (38225)	20.20	20.64	20.30
		2595 (38000)	20.15	20.48	20.37
		2572.5 (37775)	20.38	20.43	20.47
	12RB-Middle (6)	2617.5 (38225)	20.38	20.40	20.68
		2595 (38000)	20.20	20.44	20.48
		2572.5 (37775)	20.38	20.30	20.38
	12RB-Low (0)	2617.5 (38225)	20.27	20.60	20.45
		2595 (38000)	20.53	20.61	20.29
		2572.5 (37775)	20.10	20.29	20.34
	25RB (0)	2617.5 (38225)	20.29	20.39	20.35

		2595 (38000)	20.53	20.27	20.24
		2572.5 (37775)	20.19	20.14	20.31
10MHz	1RB-High (49)	2615 (38200)	20.61	20.24	20.21
		2595 (38000)	20.32	20.19	19.73
		2575 (37800)	20.38	20.09	19.77
	1RB-Middle (24)	2615 (38200)	20.44	20.37	19.96
		2595 (38000)	20.53	20.24	19.92
		2575 (37800)	20.27	20.37	20.02
	1RB-Low (0)	2615 (38200)	20.30	20.46	20.21
		2595 (38000)	20.14	20.26	19.82
		2575 (37800)	20.46	20.39	19.93
	25RB-High (25)	2615 (38200)	20.51	20.49	20.55
		2595 (38000)	20.48	20.29	20.44
		2575 (37800)	20.22	20.31	20.29
	25RB-Middle (12)	2615 (38200)	20.51	20.45	20.38
		2595 (38000)	20.45	20.44	20.29
		2575 (37800)	20.33	20.37	20.34
	25RB-Low (0)	2615 (38200)	20.52	20.57	20.25
		2595 (38000)	20.35	20.50	20.23
		2575 (37800)	20.08	20.37	20.45
	50RB (0)	2615 (38200)	20.20	20.43	20.61
		2595 (38000)	20.41	20.26	20.50
		2575 (37800)	20.26	20.52	20.44
15MHz	1RB-High (74)	2612.5 (38175)	20.51	20.27	20.17
		2595 (38000)	20.22	20.19	19.99
		2577.5 (37825)	20.15	20.04	19.70
	1RB-Middle (37)	2612.5 (38175)	20.49	20.36	20.08
		2595 (38000)	20.32	20.30	20.21
		2577.5 (37825)	20.28	20.18	19.92
	1RB-Low (0)	2612.5 (38175)	20.32	20.34	20.18
		2595 (38000)	20.16	20.39	20.15
		2577.5 (37825)	20.16	20.40	19.90
	36RB-High (38)	2612.5 (38175)	20.59	20.31	20.53
		2595 (38000)	20.54	20.19	20.36
		2577.5 (37825)	20.47	20.14	20.32
	36RB-Middle (19)	2612.5 (38175)	20.47	20.55	20.41
		2595 (38000)	20.45	20.29	20.28
		2577.5 (37825)	20.35	20.13	20.16
	36RB-Low (0)	2612.5 (38175)	20.52	20.43	20.30
		2595 (38000)	20.21	20.40	20.53
		2577.5 (37825)	20.40	20.14	20.50
	75RB (0)	2612.5 (38175)	20.24	20.57	20.37

		2595 (38000)	20.18	20.47	20.25
		2577.5 (37825)	20.31	20.31	20.26
20MHz	1RB-High (99)	2610 (38150)	20.42	20.43	20.09
		2595 (38000)	20.27	20.30	19.93
		2580 (37850)	20.24	20.22	19.90
	1RB-Middle (50)	2610 (38150)	20.45	20.45	20.11
		2595 (38000)	20.41	20.41	20.04
		2580 (37850)	20.32	20.34	19.98
	1RB-Low (0)	2610 (38150)	20.38	20.37	20.01
		2595 (38000)	20.32	20.35	19.99
		2580 (37850)	20.32	20.28	19.93
	50RB-High (50)	2610 (38150)	20.40	20.45	20.40
		2595 (38000)	20.35	20.36	20.34
		2580 (37850)	20.32	20.34	20.34
	50RB-Middle (25)	2610 (38150)	20.47	20.45	20.49
		2595 (38000)	20.33	20.37	20.34
		2580 (37850)	20.32	20.32	20.32
	50RB-Low (0)	2610 (38150)	20.46	20.45	20.45
		2595 (38000)	20.35	20.43	20.38
		2580 (37850)	20.25	20.34	20.31
	100RB (0)	2610 (38150)	20.39	20.47	20.45
		2595 (38000)	20.34	20.36	20.37
		2580 (37850)	20.30	20.32	20.28

LTE Band38- (ANT0 DSI0/1/3)

LTE B38 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2617.5 (38225)	23.89	22.69	21.75
		2595 (38000)	24.03	22.69	21.99
		2572.5 (37775)	23.81	22.85	21.86
	1RB-Middle (12)	2617.5 (38225)	24.02	23.02	22.04
		2595 (38000)	23.85	23.12	21.91
		2572.5 (37775)	24.05	22.80	22.06
	1RB-Low (0)	2617.5 (38225)	23.67	22.57	22.16
		2595 (38000)	23.76	23.01	21.90
		2572.5 (37775)	23.64	22.89	21.93
	12RB-High (13)	2617.5 (38225)	22.92	21.79	20.89
		2595 (38000)	22.82	21.83	21.06
		2572.5 (37775)	23.04	21.76	20.94
	12RB-Middle (6)	2617.5 (38225)	22.96	22.03	20.98
		2595 (38000)	23.03	22.09	21.13

		2572.5 (37775)	23.17	22.35	21.27
	12RB-Low (0)	2617.5 (38225)	23.13	21.83	20.98
		2595 (38000)	23.18	22.12	21.34
		2572.5 (37775)	23.10	22.05	21.25
	25RB (0)	2617.5 (38225)	22.89	21.87	21.04
		2595 (38000)	23.19	22.23	21.23
		2572.5 (37775)	22.86	22.15	20.92
10MHz	1RB-High (49)	2615 (38200)	23.97	22.71	21.79
		2595 (38000)	23.89	22.83	21.91
		2575 (37800)	23.60	22.70	21.80
	1RB-Middle (24)	2615 (38200)	23.74	22.80	21.84
		2595 (38000)	23.93	22.86	21.99
		2575 (37800)	23.76	23.20	21.97
	1RB-Low (0)	2615 (38200)	23.65	22.87	21.79
		2595 (38000)	23.84	23.01	21.97
		2575 (37800)	23.86	22.61	21.96
	25RB-High (25)	2615 (38200)	22.87	21.86	20.95
		2595 (38000)	22.94	21.88	21.13
		2575 (37800)	22.81	21.91	20.84
	25RB-Middle (12)	2615 (38200)	23.20	21.96	20.91
		2595 (38000)	22.97	22.19	21.08
		2575 (37800)	22.87	22.17	21.20
	25RB-Low (0)	2615 (38200)	22.98	21.98	21.16
		2595 (38000)	23.06	22.18	21.16
		2575 (37800)	23.20	22.17	21.13
	50RB (0)	2615 (38200)	22.90	21.90	21.23
		2595 (38000)	22.98	22.22	21.44
		2575 (37800)	22.99	21.87	20.98
15MHz	1RB-High (74)	2612.5 (38175)	23.98	22.72	21.84
		2595 (38000)	23.99	22.68	21.94
		2577.5 (37825)	23.76	22.86	21.84
	1RB-Middle (37)	2612.5 (38175)	23.91	23.00	21.81
		2595 (38000)	23.89	23.24	22.15
		2577.5 (37825)	24.04	22.85	22.13
	1RB-Low (0)	2612.5 (38175)	23.73	22.63	22.11
		2595 (38000)	23.88	22.89	21.71
		2577.5 (37825)	23.75	22.61	21.85
	36RB-High (38)	2612.5 (38175)	23.16	22.00	21.08
		2595 (38000)	22.77	22.21	20.94
		2577.5 (37825)	22.78	21.68	20.75
	36RB-Middle (19)	2612.5 (38175)	22.82	22.04	21.26
		2595 (38000)	22.92	22.07	21.05

		2577.5 (37825)	23.18	22.33	21.13
	36RB-Low (0)	2612.5 (38175)	23.04	22.16	20.80
		2595 (38000)	23.08	22.17	21.25
		2577.5 (37825)	23.06	22.14	21.14
	75RB (0)	2612.5 (38175)	23.11	22.10	21.27
		2595 (38000)	23.25	22.16	21.42
		2577.5 (37825)	23.17	22.00	21.12
20MHz	1RB-High (99)	2610 (38150)	23.79	22.72	21.75
		2595 (38000)	23.83	22.76	21.94
		2580 (37850)	23.78	22.89	21.69
	1RB-Middle (50)	2610 (38150)	23.88	22.89	21.97
		2595 (38000)	23.92	23.05	22.07
		2580 (37850)	23.89	23.00	21.95
	1RB-Low (0)	2610 (38150)	23.80	22.77	21.96
		2595 (38000)	23.83	22.83	21.84
		2580 (37850)	23.78	22.76	21.96
	50RB-High (50)	2610 (38150)	23.00	21.95	21.06
		2595 (38000)	22.97	22.02	21.04
		2580 (37850)	22.96	21.87	20.93
	50RB-Middle (25)	2610 (38150)	23.00	21.96	21.09
		2595 (38000)	23.07	22.04	20.99
		2580 (37850)	23.06	22.15	21.12
	50RB-Low (0)	2610 (38150)	22.97	22.01	20.99
		2595 (38000)	23.03	22.01	21.22
		2580 (37850)	23.06	22.06	21.22
	100RB (0)	2610 (38150)	22.98	22.02	21.08
		2595 (38000)	23.12	22.09	21.29
		2580 (37850)	23.02	22.05	21.09

LTE Band38- (ANT0 DSI2)

LTE B38 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2617.5 (38225)	21.96	21.92	21.92
		2595 (38000)	21.93	21.92	22.16
		2572.5 (37775)	22.22	22.18	22.33
	1RB-Middle (12)	2617.5 (38225)	22.20	22.03	21.96
		2595 (38000)	22.21	22.01	22.21
		2572.5 (37775)	22.07	22.27	22.30
	1RB-Low (0)	2617.5 (38225)	22.00	22.02	22.02
		2595 (38000)	22.03	22.21	21.97
		2572.5 (37775)	22.08	22.37	22.30

	12RB-High (13)	2617.5 (38225)	21.98	22.16	21.17
		2595 (38000)	22.06	22.00	20.90
		2572.5 (37775)	22.25	22.14	21.22
	12RB-Middle (6)	2617.5 (38225)	22.06	22.23	20.97
		2595 (38000)	22.27	22.11	21.02
		2572.5 (37775)	22.22	22.17	21.29
	12RB-Low (0)	2617.5 (38225)	22.15	22.16	21.23
		2595 (38000)	22.00	22.37	21.07
		2572.5 (37775)	22.11	22.31	21.30
	25RB (0)	2617.5 (38225)	22.17	22.14	21.04
		2595 (38000)	22.00	22.21	21.16
		2572.5 (37775)	21.99	22.16	21.16
10MHz	1RB-High (49)	2615 (38200)	22.02	21.86	21.81
		2595 (38000)	21.92	22.05	22.27
		2575 (37800)	22.03	21.96	22.17
	1RB-Middle (24)	2615 (38200)	22.09	22.03	21.98
		2595 (38000)	22.23	21.94	22.42
		2575 (37800)	22.22	22.21	22.12
	1RB-Low (0)	2615 (38200)	22.19	22.06	22.06
		2595 (38000)	22.06	22.23	22.13
		2575 (37800)	22.00	22.36	22.24
	25RB-High (25)	2615 (38200)	22.11	22.14	20.98
		2595 (38000)	22.09	22.15	21.00
		2575 (37800)	22.07	22.25	21.32
	25RB-Middle (12)	2615 (38200)	22.03	22.25	20.99
		2595 (38000)	22.19	22.26	21.00
		2575 (37800)	22.11	22.26	21.23
	25RB-Low (0)	2615 (38200)	22.34	22.04	21.01
		2595 (38000)	22.09	22.29	21.05
		2575 (37800)	22.33	22.24	21.19
	50RB (0)	2615 (38200)	22.13	22.11	20.96
		2595 (38000)	22.13	22.30	21.05
		2575 (37800)	22.12	22.14	21.03
15MHz	1RB-High (74)	2612.5 (38175)	22.01	21.97	21.86
		2595 (38000)	22.00	21.87	22.23
		2577.5 (37825)	22.05	22.18	22.30
	1RB-Middle (37)	2612.5 (38175)	22.14	22.16	22.07
		2595 (38000)	22.22	22.01	22.36
		2577.5 (37825)	22.30	22.17	22.26
	1RB-Low (0)	2612.5 (38175)	22.04	22.10	22.11

		2595 (38000)	21.95	22.10	21.94
		2577.5 (37825)	22.00	22.28	22.25
	36RB-High (38)	2612.5 (38175)	22.02	22.11	21.19
		2595 (38000)	22.19	22.05	21.05
		2577.5 (37825)	22.26	22.25	21.27
	36RB-Middle (19)	2612.5 (38175)	22.21	22.18	21.07
		2595 (38000)	22.06	22.27	21.00
		2577.5 (37825)	22.10	22.16	21.29
	36RB-Low (0)	2612.5 (38175)	22.30	21.99	21.13
		2595 (38000)	22.21	22.22	21.02
		2577.5 (37825)	22.13	22.31	21.20
	75RB (0)	2612.5 (38175)	22.21	22.19	21.13
		2595 (38000)	22.04	22.18	21.00
		2577.5 (37825)	22.11	22.07	21.07
20MHz	1RB-High (99)	2610 (38150)	22.05	21.98	21.95
		2595 (38000)	22.05	21.97	22.18
		2580 (37850)	22.12	22.09	22.23
	1RB-Middle (50)	2610 (38150)	22.24	22.09	22.10
		2595 (38000)	22.18	22.08	22.35
		2580 (37850)	22.20	22.24	22.23
	1RB-Low (0)	2610 (38150)	22.10	22.05	22.17
		2595 (38000)	22.10	22.17	22.09
		2580 (37850)	22.14	22.29	22.20
	50RB-High (50)	2610 (38150)	22.05	22.06	21.12
		2595 (38000)	22.10	22.10	21.04
		2580 (37850)	22.16	22.23	21.27
	50RB-Middle (25)	2610 (38150)	22.12	22.29	21.03
		2595 (38000)	22.18	22.26	21.15
		2580 (37850)	22.23	22.17	21.28
	50RB-Low (0)	2610 (38150)	22.25	22.10	21.14
		2595 (38000)	22.14	22.33	21.10
		2580 (37850)	22.24	22.26	21.22
	100RB (0)	2610 (38150)	22.13	22.22	21.10
		2595 (38000)	22.14	22.32	21.06
		2580 (37850)	22.14	22.07	21.14

LTE Band38- (ANT0 DSI4)

LTE B38 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**

5MHz	1RB-High (24)	2617.5 (38225)	19.31	19.48	19.22
		2595 (38000)	19.18	19.06	19.29
		2572.5 (37775)	19.09	19.33	18.93
	1RB-Middle (12)	2617.5 (38225)	19.42	19.50	19.20
		2595 (38000)	19.07	19.45	19.41
		2572.5 (37775)	19.05	19.15	19.21
	1RB-Low (0)	2617.5 (38225)	19.16	19.41	19.04
		2595 (38000)	18.92	19.21	19.07
		2572.5 (37775)	19.21	19.12	19.17
	12RB-High (13)	2617.5 (38225)	19.44	19.20	19.30
		2595 (38000)	19.24	19.16	19.17
		2572.5 (37775)	19.25	19.27	19.12
	12RB-Middle (6)	2617.5 (38225)	19.15	19.46	19.14
		2595 (38000)	19.29	19.23	19.12
		2572.5 (37775)	19.30	18.90	19.00
	12RB-Low (0)	2617.5 (38225)	19.10	19.05	19.33
		2595 (38000)	19.14	19.22	19.31
		2572.5 (37775)	19.06	19.15	19.01
	25RB (0)	2617.5 (38225)	19.47	19.36	19.25
		2595 (38000)	19.17	19.23	19.24
		2572.5 (37775)	19.09	19.21	19.03
10MHz	1RB-High (49)	2615 (38200)	19.35	19.56	19.44
		2595 (38000)	19.13	19.41	19.26
		2575 (37800)	19.00	19.25	18.94
	1RB-Middle (24)	2615 (38200)	19.13	19.21	19.07
		2595 (38000)	19.29	19.46	19.10
		2575 (37800)	19.00	19.27	18.89
	1RB-Low (0)	2615 (38200)	19.32	19.12	19.07
		2595 (38000)	19.20	19.09	18.94
		2575 (37800)	18.99	19.21	19.12
	25RB-High (25)	2615 (38200)	19.49	19.16	19.40
		2595 (38000)	19.38	19.19	19.11
		2575 (37800)	19.30	19.27	18.91
	25RB-Middle (12)	2615 (38200)	19.31	19.26	19.26
		2595 (38000)	19.39	19.42	19.46
		2575 (37800)	18.99	18.92	19.23
	25RB-Low (0)	2615 (38200)	19.08	19.27	19.22
		2595 (38000)	19.35	19.30	19.08
		2575 (37800)	18.95	18.95	19.15
	50RB (0)	2615 (38200)	19.29	19.51	19.08
		2595 (38000)	19.26	19.27	19.33
		2575 (37800)	19.14	19.24	19.14

15MHz	1RB-High (74)	2612.5 (38175)	19.50	19.34	19.45
		2595 (38000)	19.37	19.45	19.30
		2577.5 (37825)	19.04	19.37	18.87
	1RB-Middle (37)	2612.5 (38175)	19.43	19.25	19.35
		2595 (38000)	19.39	19.50	19.09
		2577.5 (37825)	19.10	19.32	19.26
	1RB-Low (0)	2612.5 (38175)	19.01	19.17	18.96
		2595 (38000)	18.95	19.23	19.10
		2577.5 (37825)	19.15	19.04	18.94
	36RB-High (38)	2612.5 (38175)	19.16	19.42	19.52
		2595 (38000)	19.31	19.02	19.30
		2577.5 (37825)	19.17	19.18	19.29
	36RB-Middle (19)	2612.5 (38175)	19.45	19.32	19.46
		2595 (38000)	19.36	19.34	19.46
		2577.5 (37825)	19.22	19.15	19.18
	36RB-Low (0)	2612.5 (38175)	19.17	19.07	19.27
		2595 (38000)	19.05	19.29	19.17
		2577.5 (37825)	19.02	19.05	19.06
	75RB (0)	2612.5 (38175)	19.44	19.20	19.32
		2595 (38000)	19.07	19.42	19.27
		2577.5 (37825)	19.22	18.95	19.24
20MHz	1RB-High (99)	2610 (38150)	19.33	19.39	19.28
		2595 (38000)	19.19	19.26	19.18
		2580 (37850)	19.12	19.18	19.07
	1RB-Middle (50)	2610 (38150)	19.31	19.35	19.27
		2595 (38000)	19.27	19.34	19.25
		2580 (37850)	19.13	19.18	19.09
	1RB-Low (0)	2610 (38150)	19.16	19.22	19.15
		2595 (38000)	19.09	19.12	19.05
		2580 (37850)	19.09	19.01	18.97
	50RB-High (50)	2610 (38150)	19.33	19.31	19.36
		2595 (38000)	19.22	19.21	19.23
		2580 (37850)	19.10	19.13	19.09
	50RB-Middle (25)	2610 (38150)	19.28	19.31	19.33
		2595 (38000)	19.23	19.22	19.26
		2580 (37850)	19.11	19.07	19.09
	50RB-Low (0)	2610 (38150)	19.23	19.24	19.27
		2595 (38000)	19.19	19.21	19.23
		2580 (37850)	19.11	19.06	19.07
	100RB (0)	2610 (38150)	19.32	19.31	19.28
		2595 (38000)	19.21	19.23	19.21
		2580 (37850)	19.12	19.15	19.08

LTE Band41- (ANT0 DSI0/1/3)

LTE B41 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2687.5 (41565)	23.30	22.31	21.00
		2640.3(41093)	23.19	22.19	20.79
		2593 (40620)	23.20	22.20	20.77
		2545.8(40148)	23.17	22.17	20.76
		2498.5 (39675)	23.26	22.36	20.98
	1RB-Middle (12)	2687.5 (41565)	23.37	22.37	21.08
		2640.3(41093)	23.30	22.26	20.86
		2593 (40620)	23.23	22.21	20.81
		2545.8(40148)	23.27	22.25	20.84
		2498.5 (39675)	23.25	22.35	20.96
	1RB-Low (0)	2687.5 (41565)	23.40	22.41	21.11
		2640.3(41093)	23.19	22.30	20.91
		2593 (40620)	23.24	22.20	20.81
		2545.8(40148)	23.29	22.27	20.86
		2498.5 (39675)	23.18	22.29	20.91
	12RB-High (13)	2687.5 (41565)	22.32	21.23	20.31
		2640.3(41093)	22.17	21.07	20.14
		2593 (40620)	22.09	21.03	20.04
		2545.8(40148)	22.11	20.99	20.12
		2498.5 (39675)	22.32	21.21	20.26
	12RB-Middle (6)	2687.5 (41565)	22.40	21.31	20.39
		2640.3(41093)	22.19	21.13	20.18
		2593 (40620)	22.15	21.06	20.13
		2545.8(40148)	22.14	21.09	20.11
		2498.5 (39675)	22.27	21.23	20.28
	12RB-Low (0)	2687.5 (41565)	22.45	21.35	20.45
		2640.3(41093)	22.23	21.13	20.22
		2593 (40620)	22.18	21.12	20.17
		2545.8(40148)	22.18	21.13	20.13
		2498.5 (39675)	22.31	21.20	20.30
	25RB (0)	2687.5 (41565)	22.38	21.37	20.38
		2640.3(41093)	22.18	21.16	20.19
		2593 (40620)	22.13	21.13	20.14
		2545.8(40148)	22.19	21.17	20.16
		2498.5 (39675)	22.30	21.31	20.31
10MHz	1RB-High (49)	2685 (41540)	23.19	22.27	20.96
		2639(41080)	23.10	22.12	20.72

		2593 (40620)	23.17	22.14	20.75
		2547(40160)	23.09	22.09	20.68
		2501 (39700)	23.28	22.39	21.00
	1RB-Middle (24)	2685 (41540)	23.32	22.43	21.12
		2639(41080)	23.08	22.26	20.86
		2593 (40620)	23.17	22.19	20.78
		2547(40160)	23.21	22.20	20.81
		2501 (39700)	23.20	22.35	20.94
	1RB-Low (0)	2685 (41540)	23.43	22.52	21.18
		2639(41080)	23.20	22.37	20.95
		2593 (40620)	23.21	22.20	20.80
		2547(40160)	23.32	22.30	20.90
		2501 (39700)	23.15	22.28	20.87
	25RB-High (25)	2685 (41540)	22.32	21.35	20.37
		2639(41080)	22.12	21.13	20.18
		2593 (40620)	22.12	21.10	20.13
		2547(40160)	22.08	21.08	20.12
		2501 (39700)	22.34	21.37	20.37
	25RB-Middle (12)	2685 (41540)	22.41	21.43	20.43
		2639(41080)	22.22	21.18	20.20
		2593 (40620)	22.14	21.13	20.15
		2547(40160)	22.17	21.12	20.16
		2501 (39700)	22.29	21.35	20.34
	25RB-Low (0)	2685 (41540)	22.50	21.51	20.53
		2639(41080)	22.20	21.24	20.23
		2593 (40620)	22.16	21.16	20.17
		2547(40160)	22.17	21.16	20.20
		2501 (39700)	22.22	21.28	20.26
	50RB (0)	2685 (41540)	22.43	21.47	20.44
		2639(41080)	22.19	21.22	20.18
		2593 (40620)	22.13	21.16	20.13
		2547(40160)	22.16	21.16	20.15
		2501 (39700)	22.35	21.33	20.29
15MHz	1RB-High (74)	2682.5 (41515)	23.11	22.24	20.90
		2637.8(41068)	22.99	22.04	20.66
		2593 (40620)	23.09	22.09	20.70
		2548.3(40173)	23.05	22.06	20.64
		2503.5 (39725)	23.28	22.44	21.03
	1RB-Middle (37)	2682.5 (41515)	23.31	22.45	21.12
		2637.8(41068)	23.09	22.28	20.84
		2593 (40620)	23.16	22.18	20.78
		2548.3(40173)	23.14	22.15	20.74

		2503.5 (39725)	23.21	22.38	20.98
	1RB-Low (0)	2682.5 (41515)	23.44	22.58	21.22
		2637.8(41068)	23.12	22.31	20.89
		2593 (40620)	23.15	22.16	20.78
		2548.3(40173)	23.27	22.28	20.88
		2503.5 (39725)	23.04	22.21	20.82
	36RB-High (38)	2682.5 (41515)	22.27	21.27	20.26
		2637.8(41068)	22.08	21.05	20.02
		2593 (40620)	22.06	21.06	20.06
		2548.3(40173)	21.98	20.95	19.93
		2503.5 (39725)	22.35	21.35	20.37
	36RB-Middle (19)	2682.5 (41515)	22.40	21.39	20.40
		2637.8(41068)	22.16	21.18	20.17
		2593 (40620)	22.06	21.06	20.05
		2548.3(40173)	22.03	21.02	20.01
		2503.5 (39725)	22.34	21.27	20.30
	36RB-Low (0)	2682.5 (41515)	22.53	21.50	20.53
		2637.8(41068)	22.26	21.22	20.17
		2593 (40620)	22.10	21.05	20.09
		2548.3(40173)	22.10	21.03	20.14
		2503.5 (39725)	22.22	21.18	20.23
	75RB (0)	2682.5 (41515)	22.44	21.45	20.46
		2637.8(41068)	22.21	21.22	20.19
		2593 (40620)	22.12	21.11	20.08
		2548.3(40173)	22.09	21.11	20.08
		2503.5 (39725)	22.33	21.36	20.29
20MHz	1RB-High (99)	2680 (41490)	23.15	22.23	20.90
		2636.5(41055)	22.97	22.01	20.59
		2593 (40620)	23.08	22.06	20.65
		2549.5(40185)	23.01	22.04	20.61
		2506 (39750)	23.34	22.47	21.05
	1RB-Middle (50)	2680 (41490)	23.40	22.51	21.16
		2636.5(41055)	23.12	22.30	20.89
		2593 (40620)	23.17	22.19	20.77
		2549.5(40185)	23.15	22.17	20.73
		2506 (39750)	23.26	22.43	20.99
	1RB-Low (0)	2680 (41490)	23.42	22.55	21.20
		2636.5(41055)	23.26	22.24	20.85
		2593 (40620)	23.16	22.16	20.74
		2549.5(40185)	23.26	22.26	20.84
		2506 (39750)	23.08	22.20	20.80
	50RB-High (50)	2680 (41490)	22.32	21.36	20.30

		2636.5(41055)	22.19	21.14	20.08
		2593 (40620)	22.12	21.14	20.06
		2549.5(40185)	21.98	21.02	19.96
		2506 (39750)	22.44	21.49	20.38
	50RB-Middle (25)	2680 (41490)	22.51	21.53	20.51
		2636.5(41055)	22.24	21.31	20.24
		2593 (40620)	22.17	21.20	20.12
		2549.5(40185)	22.12	21.11	20.08
		2506 (39750)	22.38	21.43	20.33
	50RB-Low (0)	2680 (41490)	22.66	21.66	20.66
		2636.5(41055)	22.32	21.33	20.26
		2593 (40620)	22.17	21.22	20.14
		2549.5(40185)	22.23	21.23	20.17
		2506 (39750)	22.31	21.28	20.21
	100RB (0)	2680 (41490)	22.53	21.52	20.52
		2636.5(41055)	22.20	21.22	20.18
		2593 (40620)	22.13	21.16	20.11
		2549.5(40185)	22.09	21.11	20.09
		2506 (39750)	22.36	21.41	20.30

LTE Band41- (ANT0 DSI2)

LTE B41 ANT0					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2687.5 (41565)	18.97	19.12	19.02
		2640.3(41093)	19.35	19.38	19.28
		2593 (40620)	19.12	19.55	19.11
		2545.8(40148)	19.39	19.27	19.13
		2498.5 (39675)	19.33	19.47	19.33
	1RB-Middle (12)	2687.5 (41565)	19.04	19.21	19.09
		2640.3(41093)	19.23	19.54	19.31
		2593 (40620)	19.11	19.44	19.07
		2545.8(40148)	19.56	19.66	19.29
		2498.5 (39675)	19.23	19.48	19.22
	1RB-Low (0)	2687.5 (41565)	19.28	19.37	19.18
		2640.3(41093)	19.50	19.39	19.19
		2593 (40620)	19.26	19.54	19.09
		2545.8(40148)	19.50	19.71	19.66
		2498.5 (39675)	19.38	19.34	19.14
	12RB-High (13)	2687.5 (41565)	18.99	19.23	19.10
		2640.3(41093)	19.45	19.50	19.15
		2593 (40620)	19.08	19.41	19.08

		2545.8(40148)	19.11	19.04	19.35
		2498.5 (39675)	19.16	19.34	19.40
	12RB-Middle (6)	2687.5 (41565)	19.06	19.05	19.35
		2640.3(41093)	19.37	19.27	19.15
		2593 (40620)	19.42	19.36	19.43
		2545.8(40148)	19.48	19.45	19.62
		2498.5 (39675)	19.36	19.20	19.03
	12RB-Low (0)	2687.5 (41565)	19.09	19.25	19.10
		2640.3(41093)	19.14	19.39	19.24
		2593 (40620)	19.21	19.21	19.57
		2545.8(40148)	19.40	19.58	19.48
		2498.5 (39675)	19.03	19.02	19.37
	25RB (0)	2687.5 (41565)	19.20	19.17	19.32
		2640.3(41093)	19.28	19.32	19.36
		2593 (40620)	19.32	19.31	19.41
		2545.8(40148)	19.44	19.28	19.28
		2498.5 (39675)	18.98	19.43	19.15
10MHz	1RB-High (49)	2685 (41540)	19.27	19.22	18.86
		2639(41080)	19.26	19.41	19.11
		2593 (40620)	19.09	19.45	19.32
		2547(40160)	19.34	19.47	18.98
		2501 (39700)	19.46	19.62	19.08
	1RB-Middle (24)	2685 (41540)	18.95	19.18	18.98
		2639(41080)	19.49	19.48	19.06
		2593 (40620)	19.20	19.61	19.19
		2547(40160)	19.54	19.44	19.33
		2501 (39700)	19.35	19.31	19.14
	1RB-Low (0)	2685 (41540)	19.08	19.20	19.16
		2639(41080)	19.23	19.34	19.16
		2593 (40620)	19.50	19.72	19.22
		2547(40160)	19.71	19.94	19.67
		2501 (39700)	19.30	19.48	18.95
	25RB-High (25)	2685 (41540)	19.05	19.13	19.04
		2639(41080)	19.36	19.31	19.20
		2593 (40620)	19.09	19.26	19.12
		2547(40160)	19.28	19.10	19.24
		2501 (39700)	19.30	19.21	19.39
	25RB-Middle (12)	2685 (41540)	19.29	19.34	19.02
		2639(41080)	19.15	19.38	19.47
		2593 (40620)	19.20	19.18	19.22
		2547(40160)	19.34	19.18	19.42
		2501 (39700)	19.08	19.13	19.19

	25RB-Low (0)	2685 (41540)	19.34	19.25	19.36
		2639(41080)	19.29	19.50	19.52
		2593 (40620)	19.19	19.39	19.53
		2547(40160)	19.33	19.59	19.46
		2501 (39700)	18.98	19.15	19.18
	50RB (0)	2685 (41540)	19.18	19.18	19.10
		2639(41080)	19.28	19.28	19.35
		2593 (40620)	19.31	19.28	19.15
		2547(40160)	19.34	19.39	19.32
		2501 (39700)	19.29	19.37	19.26
15MHz	1RB-High (74)	2682.5 (41515)	19.07	19.32	19.07
		2637.8(41068)	19.20	19.28	18.99
		2593 (40620)	19.31	19.21	18.99
		2548.3(40173)	19.05	19.42	19.26
		2503.5 (39725)	19.35	19.51	19.20
	1RB-Middle (37)	2682.5 (41515)	19.00	19.37	18.86
		2637.8(41068)	19.32	19.64	19.32
		2593 (40620)	19.32	19.60	19.33
		2548.3(40173)	19.23	19.65	19.51
		2503.5 (39725)	19.30	19.54	18.93
	1RB-Low (0)	2682.5 (41515)	19.17	19.54	19.25
		2637.8(41068)	19.20	19.47	19.08
		2593 (40620)	19.39	19.61	19.13
		2548.3(40173)	19.59	19.76	19.39
		2503.5 (39725)	19.60	19.23	18.99
	36RB-High (38)	2682.5 (41515)	18.99	19.09	19.25
		2637.8(41068)	19.46	19.29	19.48
		2593 (40620)	19.04	19.20	19.25
		2548.3(40173)	19.25	19.36	19.29
		2503.5 (39725)	19.32	19.23	19.41
	36RB-Middle (19)	2682.5 (41515)	19.30	19.03	19.27
		2637.8(41068)	19.45	19.25	19.20
		2593 (40620)	19.36	19.23	19.15
		2548.3(40173)	19.15	19.13	19.35
		2503.5 (39725)	19.14	19.17	19.13
	36RB-Low (0)	2682.5 (41515)	19.13	19.34	19.09
		2637.8(41068)	19.21	19.54	19.23
		2593 (40620)	19.53	19.35	19.24
		2548.3(40173)	19.61	19.77	19.66
		2503.5 (39725)	19.15	19.20	19.19
	75RB (0)	2682.5 (41515)	18.97	19.11	19.21
		2637.8(41068)	19.34	19.39	19.14

		2593 (40620)	19.27	19.30	19.38
		2548.3(40173)	19.35	19.40	19.41
		2503.5 (39725)	19.15	19.28	19.18
20MHz	1RB-High (99)	2680 (41490)	19.07	19.26	18.99
		2636.5(41055)	19.23	19.43	19.17
		2593 (40620)	19.23	19.41	19.17
		2549.5(40185)	19.19	19.41	19.13
		2506 (39750)	19.34	19.54	19.28
	1RB-Middle (50)	2680 (41490)	19.13	19.29	19.02
		2636.5(41055)	19.32	19.52	19.24
		2593 (40620)	19.29	19.47	19.20
		2549.5(40185)	19.37	19.60	19.35
		2506 (39750)	19.19	19.39	19.13
	1RB-Low (0)	2680 (41490)	19.20	19.39	19.10
		2636.5(41055)	19.30	19.52	19.25
		2593 (40620)	19.37	19.56	19.24
		2549.5(40185)	19.58	19.79	19.53
		2506 (39750)	19.44	19.38	18.95
	50RB-High (50)	2680 (41490)	19.04	19.11	19.10
		2636.5(41055)	19.26	19.36	19.33
		2593 (40620)	19.24	19.28	19.27
		2549.5(40185)	19.24	19.23	19.22
		2506 (39750)	19.21	19.31	19.30
	50RB-Middle (25)	2680 (41490)	19.11	19.19	19.15
		2636.5(41055)	19.27	19.36	19.35
		2593 (40620)	19.24	19.34	19.32
		2549.5(40185)	19.34	19.32	19.44
		2506 (39750)	19.16	19.27	19.18
	50RB-Low (0)	2680 (41490)	19.24	19.28	19.26
		2636.5(41055)	19.31	19.38	19.34
		2593 (40620)	19.34	19.38	19.37
		2549.5(40185)	19.53	19.59	19.52
		2506 (39750)	19.12	19.17	19.19
	100RB (0)	2680 (41490)	19.13	19.14	19.17
		2636.5(41055)	19.26	19.34	19.32
		2593 (40620)	19.23	19.27	19.30
		2549.5(40185)	19.39	19.36	19.31
		2506 (39750)	19.18	19.24	19.22

LTE Band41- (ANT0 DSI4)

LTE B41 ANT0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	16.19	16.39	16.12
		2640.3(41093)	16.27	16.28	16.01
		2593 (40620)	16.38	16.44	16.29
		2545.8(40148)	16.10	16.27	16.12
		2498.5 (39675)	16.42	16.66	16.22
	1RB-Middle (12)	2687.5 (41565)	15.97	16.42	16.14
		2640.3(41093)	16.10	16.54	16.13
		2593 (40620)	16.14	16.57	16.21
		2545.8(40148)	16.17	16.33	16.44
		2498.5 (39675)	16.12	16.35	15.97
	1RB-Low (0)	2687.5 (41565)	16.14	16.39	15.88
		2640.3(41093)	16.28	16.27	16.18
		2593 (40620)	16.51	16.43	16.06
		2545.8(40148)	16.71	16.55	16.43
		2498.5 (39675)	15.93	16.11	16.08
	12RB-High (13)	2687.5 (41565)	16.12	15.96	16.16
		2640.3(41093)	16.16	16.19	16.41
		2593 (40620)	16.24	16.26	16.15
		2545.8(40148)	16.45	16.25	16.15
		2498.5 (39675)	16.14	16.14	16.33
	12RB-Middle (6)	2687.5 (41565)	15.98	15.93	15.99
		2640.3(41093)	16.33	16.17	16.26
		2593 (40620)	16.29	16.50	16.27
		2545.8(40148)	16.32	16.41	16.30
		2498.5 (39675)	16.25	16.29	16.18
	12RB-Low (0)	2687.5 (41565)	16.12	16.53	16.21
		2640.3(41093)	16.15	16.34	16.50
		2593 (40620)	16.61	16.51	16.38
		2545.8(40148)	16.47	16.53	16.43
		2498.5 (39675)	16.49	16.32	16.24
	25RB (0)	2687.5 (41565)	16.30	16.22	15.97
		2640.3(41093)	16.36	16.29	16.17
		2593 (40620)	16.07	16.41	16.31
		2545.8(40148)	16.53	16.40	16.60
		2498.5 (39675)	16.19	16.12	16.02
10MHz	1RB-High (49)	2685 (41540)	15.89	16.00	16.00
		2639(41080)	16.28	16.44	16.06
		2593 (40620)	16.25	16.25	16.12
		2547(40160)	16.06	16.50	16.02
		2501 (39700)	16.43	16.39	16.28

	1RB-Middle (24)	2685 (41540)	15.99	16.35	16.00
		2639(41080)	16.17	16.35	16.29
		2593 (40620)	16.14	16.57	16.11
		2547(40160)	16.20	16.48	16.18
		2501 (39700)	16.03	16.56	16.20
	1RB-Low (0)	2685 (41540)	16.00	16.16	16.09
		2639(41080)	16.35	16.64	16.40
		2593 (40620)	16.33	16.70	16.37
		2547(40160)	16.57	16.88	16.61
		2501 (39700)	16.02	16.09	16.20
	25RB-High (25)	2685 (41540)	16.05	15.90	16.13
		2639(41080)	16.08	16.52	16.31
		2593 (40620)	16.33	16.36	16.30
		2547(40160)	16.31	16.32	16.19
		2501 (39700)	16.19	16.26	16.16
	25RB-Middle (12)	2685 (41540)	16.11	16.00	15.95
		2639(41080)	16.15	16.25	16.44
		2593 (40620)	16.21	16.40	16.38
		2547(40160)	16.53	16.23	16.49
		2501 (39700)	16.13	16.25	16.17
	25RB-Low (0)	2685 (41540)	16.00	16.57	16.29
		2639(41080)	16.31	16.53	16.40
		2593 (40620)	16.55	16.21	16.23
		2547(40160)	16.69	16.66	16.40
		2501 (39700)	16.17	16.11	15.93
	50RB (0)	2685 (41540)	15.99	16.08	15.91
		2639(41080)	16.17	16.31	16.30
		2593 (40620)	16.30	16.47	16.30
		2547(40160)	16.44	16.28	16.59
		2501 (39700)	16.30	16.26	16.36
15MHz	1RB-High (74)	2682.5 (41515)	15.97	16.14	15.87
		2637.8(41068)	16.33	16.32	16.18
		2593 (40620)	16.14	16.33	15.95
		2548.3(40173)	15.90	16.40	15.96
		2503.5 (39725)	16.14	16.54	16.19
	1RB-Middle (37)	2682.5 (41515)	15.89	16.27	15.86
		2637.8(41068)	16.19	16.43	16.06
		2593 (40620)	16.15	16.27	16.36
		2548.3(40173)	16.48	16.34	16.15
		2503.5 (39725)	16.08	16.53	16.16
	1RB-Low (0)	2682.5 (41515)	16.08	16.35	16.05
		2637.8(41068)	16.28	16.32	16.06

		2593 (40620)	16.39	16.53	16.44
		2548.3(40173)	16.63	16.91	16.58
		2503.5 (39725)	16.02	16.10	16.00
	36RB-High (38)	2682.5 (41515)	16.08	16.14	16.23
		2637.8(41068)	16.03	16.43	16.48
		2593 (40620)	16.29	16.17	16.31
		2548.3(40173)	16.36	16.38	16.09
		2503.5 (39725)	16.23	16.25	16.15
	36RB-Middle (19)	2682.5 (41515)	16.15	16.10	16.19
		2637.8(41068)	16.35	16.30	16.40
		2593 (40620)	16.39	16.23	16.34
		2548.3(40173)	16.52	16.47	16.42
		2503.5 (39725)	16.05	16.29	16.26
	36RB-Low (0)	2682.5 (41515)	16.12	16.30	16.04
		2637.8(41068)	16.43	16.56	16.38
		2593 (40620)	16.53	16.19	16.16
		2548.3(40173)	16.68	16.64	16.66
		2503.5 (39725)	16.31	16.21	16.20
	75RB (0)	2682.5 (41515)	16.31	16.26	16.30
		2637.8(41068)	16.07	16.21	16.44
		2593 (40620)	16.29	16.25	16.33
		2548.3(40173)	16.32	16.21	16.49
		2503.5 (39725)	16.09	16.11	16.30
20MHz	1RB-High (99)	2680 (41490)	16.02	16.20	15.96
		2636.5(41055)	16.15	16.35	16.14
		2593 (40620)	16.23	16.37	16.12
		2549.5(40185)	16.09	16.38	16.09
		2506 (39750)	16.29	16.50	16.25
	1RB-Middle (50)	2680 (41490)	16.07	16.27	16.00
		2636.5(41055)	16.26	16.48	16.20
		2593 (40620)	16.26	16.47	16.19
		2549.5(40185)	16.34	16.53	16.30
		2506 (39750)	16.14	16.36	16.08
	1RB-Low (0)	2680 (41490)	16.11	16.29	16.04
		2636.5(41055)	16.34	16.45	16.20
		2593 (40620)	16.33	16.50	16.24
		2549.5(40185)	16.53	16.72	16.45
		2506 (39750)	16.06	16.29	16.04
	50RB-High (50)	2680 (41490)	16.06	16.10	16.04
		2636.5(41055)	16.09	16.33	16.29
		2593 (40620)	16.24	16.26	16.23
		2549.5(40185)	16.28	16.30	16.24

		2506 (39750)	16.24	16.22	16.29
	50RB-Middle (25)	2680 (41490)	16.06	16.12	16.09
		2636.5(41055)	16.24	16.30	16.30
		2593 (40620)	16.28	16.31	16.30
		2549.5(40185)	16.36	16.37	16.41
		2506 (39750)	16.20	16.24	16.18
	50RB-Low (0)	2680 (41490)	16.14	16.42	16.14
		2636.5(41055)	16.26	16.37	16.30
		2593 (40620)	16.45	16.33	16.36
		2549.5(40185)	16.54	16.60	16.59
		2506 (39750)	16.34	16.20	16.13
	100RB (0)	2680 (41490)	16.13	16.15	16.11
		2636.5(41055)	16.21	16.31	16.30
		2593 (40620)	16.18	16.32	16.31
		2549.5(40185)	16.39	16.40	16.45
		2506 (39750)	16.11	16.20	16.20

LTE Band41- (ANT4 DSI0)

LTE B41 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2687.5 (41565)	23.95	22.77	21.80
		2640.3(41093)	24.11	23.07	21.82
		2593 (40620)	23.99	23.18	22.13
		2545.8(40148)	23.99	22.83	21.55
		2498.5 (39675)	23.59	22.71	21.66
	1RB-Middle (12)	2687.5 (41565)	23.96	23.23	22.06
		2640.3(41093)	24.00	22.82	21.72
		2593 (40620)	24.13	22.97	22.16
		2545.8(40148)	23.71	22.60	21.86
		2498.5 (39675)	23.95	22.89	22.09
	1RB-Low (0)	2687.5 (41565)	24.02	22.97	22.12
		2640.3(41093)	23.80	22.74	22.06
		2593 (40620)	23.64	22.90	21.73
		2545.8(40148)	23.49	22.52	21.48
		2498.5 (39675)	23.92	23.03	21.82
	12RB-High (13)	2687.5 (41565)	22.86	21.84	20.51
		2640.3(41093)	22.81	22.07	20.98
		2593 (40620)	23.04	22.12	20.85
		2545.8(40148)	22.90	21.73	20.97
		2498.5 (39675)	23.15	22.05	20.79

	12RB-Middle (6)	2687.5 (41565)	23.07	22.26	21.03
		2640.3(41093)	22.73	22.08	21.13
		2593 (40620)	23.09	22.04	21.17
		2545.8(40148)	22.57	21.77	20.51
		2498.5 (39675)	23.03	22.20	21.42
	12RB-Low (0)	2687.5 (41565)	22.95	22.31	21.35
		2640.3(41093)	22.91	21.75	20.86
		2593 (40620)	22.97	22.07	20.75
		2545.8(40148)	22.78	21.50	20.74
		2498.5 (39675)	22.97	22.30	21.29
	25RB (0)	2687.5 (41565)	22.84	22.04	21.00
		2640.3(41093)	23.11	21.91	20.78
		2593 (40620)	23.07	21.71	20.66
		2545.8(40148)	22.72	21.43	20.51
		2498.5 (39675)	23.18	21.96	20.81
10MHz	1RB-High (49)	2685 (41540)	23.98	22.84	21.80
		2639(41080)	24.06	22.90	21.76
		2593 (40620)	23.95	23.19	22.19
		2547(40160)	23.73	22.59	21.57
		2501 (39700)	23.85	22.76	21.88
	1RB-Middle (24)	2685 (41540)	24.19	23.19	21.98
		2639(41080)	23.78	22.94	22.02
		2593 (40620)	24.02	23.06	22.26
		2547(40160)	23.66	22.77	21.86
		2501 (39700)	24.11	23.01	22.07
	1RB-Low (0)	2685 (41540)	24.04	22.99	21.98
		2639(41080)	23.97	22.78	22.18
		2593 (40620)	23.62	22.92	21.91
		2547(40160)	23.43	22.56	21.38
		2501 (39700)	23.98	23.34	22.00
	25RB-High (25)	2685 (41540)	22.99	21.94	20.62
		2639(41080)	22.89	22.10	20.99
		2593 (40620)	22.92	22.04	21.01
		2547(40160)	22.73	21.88	20.90
		2501 (39700)	23.14	21.87	20.67
	25RB-Middle (12)	2685 (41540)	23.09	22.32	21.02
		2639(41080)	22.94	21.94	21.07
		2593 (40620)	23.05	21.85	20.85
		2547(40160)	22.83	21.60	20.77
		2501 (39700)	22.91	22.36	21.18

	25RB-Low (0)	2685 (41540)	23.23	22.18	21.31
		2639(41080)	22.79	21.90	21.02
		2593 (40620)	22.69	21.80	20.93
		2547(40160)	22.61	21.81	20.61
		2501 (39700)	23.03	22.21	21.09
	50RB (0)	2685 (41540)	22.95	22.08	20.71
		2639(41080)	22.87	21.70	21.03
		2593 (40620)	22.71	21.97	20.70
		2547(40160)	22.55	21.58	20.67
		2501 (39700)	23.06	22.12	20.97
15MHz	1RB-High (74)	2682.5 (41515)	23.89	22.81	21.73
		2637.8(41068)	23.80	23.00	21.96
		2593 (40620)	24.06	22.89	21.93
		2548.3(40173)	23.94	22.64	21.91
		2503.5 (39725)	23.68	22.80	21.65
	1RB-Middle (37)	2682.5 (41515)	23.94	23.15	22.13
		2637.8(41068)	23.91	22.96	21.87
		2593 (40620)	23.85	22.96	22.17
		2548.3(40173)	23.70	22.82	21.58
		2503.5 (39725)	23.92	23.10	22.17
	1RB-Low (0)	2682.5 (41515)	23.85	22.78	21.96
		2637.8(41068)	24.03	23.01	22.16
		2593 (40620)	23.76	22.59	21.59
		2548.3(40173)	23.57	22.46	21.63
		2503.5 (39725)	23.90	23.03	22.07
	36RB-High (38)	2682.5 (41515)	22.68	21.63	20.87
		2637.8(41068)	23.08	22.02	20.76
		2593 (40620)	22.86	21.98	21.23
		2548.3(40173)	22.75	21.75	20.93
		2503.5 (39725)	22.87	22.02	20.98
	36RB-Middle (19)	2682.5 (41515)	23.13	22.08	21.00
		2637.8(41068)	22.88	21.97	20.88
		2593 (40620)	22.84	21.81	20.82
		2548.3(40173)	22.76	21.80	20.46
		2503.5 (39725)	23.18	22.25	21.23
	36RB-Low (0)	2682.5 (41515)	22.99	22.42	21.27
		2637.8(41068)	22.85	21.93	20.93
		2593 (40620)	22.74	21.80	20.96
		2548.3(40173)	22.88	21.64	20.64
		2503.5 (39725)	23.11	22.22	21.03

	75RB (0)	2682.5 (41515)	23.17	21.91	20.83
		2637.8(41068)	22.82	21.85	21.15
		2593 (40620)	23.02	22.05	20.66
		2548.3(40173)	22.64	21.59	20.79
		2503.5 (39725)	23.11	22.27	21.08
20MHz	1RB-High (99)	2680 (41490)	23.81	22.79	21.91
		2636.5(41055)	23.95	22.97	21.84
		2593 (40620)	24.08	23.05	22.09
		2549.5(40185)	23.81	22.75	21.75
		2506 (39750)	23.78	22.86	21.72
	1RB-Middle (50)	2680 (41490)	24.12	23.04	22.17
		2636.5(41055)	23.97	22.99	21.88
		2593 (40620)	23.98	23.08	22.06
		2549.5(40185)	23.73	22.77	21.69
		2506 (39750)	24.09	22.99	22.01
	1RB-Low (0)	2680 (41490)	24.05	22.98	22.04
		2636.5(41055)	23.89	22.85	21.99
		2593 (40620)	23.72	22.74	21.78
		2549.5(40185)	23.45	22.47	21.43
		2506 (39750)	24.03	23.14	21.94
	50RB-High (50)	2680 (41490)	22.82	21.79	20.71
		2636.5(41055)	22.89	21.92	20.88
		2593 (40620)	22.99	21.96	21.05
		2549.5(40185)	22.72	21.77	20.78
		2506 (39750)	22.96	21.97	20.87
	50RB-Middle (25)	2680 (41490)	23.06	22.13	21.14
		2636.5(41055)	22.93	22.03	20.97
		2593 (40620)	22.94	21.99	21.02
		2549.5(40185)	22.66	21.61	20.57
		2506 (39750)	23.11	22.21	21.22
	50RB-Low (0)	2680 (41490)	23.12	22.28	21.25
		2636.5(41055)	22.95	21.91	21.02
		2593 (40620)	22.86	21.90	20.76
		2549.5(40185)	22.74	21.68	20.70
		2506 (39750)	23.11	22.14	21.16
	100RB (0)	2680 (41490)	22.98	21.98	20.89
		2636.5(41055)	22.94	21.86	20.97
		2593 (40620)	22.91	21.87	20.85
		2549.5(40185)	22.64	21.62	20.61
		2506 (39750)	23.02	22.08	20.99

LTE Band41- (ANT4 DSI3)

LTE B41 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2687.5 (41565)	12.35	12.67	12.73
		2640.3(41093)	12.79	12.50	12.65
		2593 (40620)	12.55	13.02	12.72
		2545.8(40148)	12.45	12.43	12.57
		2498.5 (39675)	12.30	12.54	12.66
	1RB-Middle (12)	2687.5 (41565)	12.64	12.89	12.89
		2640.3(41093)	12.76	12.77	12.86
		2593 (40620)	12.58	12.67	12.64
		2545.8(40148)	12.49	12.27	12.30
		2498.5 (39675)	12.67	12.49	12.57
	1RB-Low (0)	2687.5 (41565)	12.93	12.88	12.62
		2640.3(41093)	12.53	12.61	12.51
		2593 (40620)	12.31	12.35	12.17
		2545.8(40148)	12.09	12.32	12.27
		2498.5 (39675)	12.59	12.60	12.69
	12RB-High (13)	2687.5 (41565)	12.49	12.69	12.55
		2640.3(41093)	12.61	12.73	12.84
		2593 (40620)	12.44	12.79	12.82
		2545.8(40148)	12.37	12.58	12.29
		2498.5 (39675)	12.56	12.59	12.78
	12RB-Middle (6)	2687.5 (41565)	12.75	12.65	12.89
		2640.3(41093)	12.78	12.84	12.75
		2593 (40620)	12.85	12.63	12.55
		2545.8(40148)	12.37	12.41	12.11
		2498.5 (39675)	12.82	12.71	12.55
	12RB-Low (0)	2687.5 (41565)	12.87	12.98	12.69
		2640.3(41093)	12.68	12.90	12.75
		2593 (40620)	12.51	12.34	12.72
		2545.8(40148)	12.27	12.34	12.11
		2498.5 (39675)	12.85	12.61	12.66
	25RB (0)	2687.5 (41565)	12.78	12.73	12.92
		2640.3(41093)	12.74	12.41	12.50
		2593 (40620)	12.75	12.37	12.82
		2545.8(40148)	12.34	12.54	12.33
		2498.5 (39675)	12.68	12.97	12.61

10MHz	1RB-High (49)	2685 (41540)	12.43	12.47	12.41
		2639(41080)	12.51	12.51	12.40
		2593 (40620)	12.79	12.63	12.70
		2547(40160)	12.59	12.65	12.74
		2501 (39700)	12.30	12.65	12.47
	1RB-Middle (24)	2685 (41540)	12.77	12.87	12.74
		2639(41080)	12.49	12.73	12.84
		2593 (40620)	12.56	12.41	12.56
		2547(40160)	12.23	12.47	12.50
		2501 (39700)	12.54	12.46	12.91
	1RB-Low (0)	2685 (41540)	12.59	12.88	12.67
		2639(41080)	12.36	12.57	12.50
		2593 (40620)	12.23	12.22	12.45
		2547(40160)	12.22	12.06	12.12
		2501 (39700)	12.55	12.66	12.70
	25RB-High (25)	2685 (41540)	12.41	12.57	12.43
		2639(41080)	12.74	12.76	12.74
		2593 (40620)	12.63	12.75	12.72
		2547(40160)	12.53	12.53	12.15
		2501 (39700)	12.69	12.86	12.44
	25RB-Middle (12)	2685 (41540)	12.76	12.62	12.77
		2639(41080)	12.74	12.58	12.49
		2593 (40620)	12.87	12.81	12.71
		2547(40160)	12.26	12.17	12.26
		2501 (39700)	12.59	12.79	12.88
	25RB-Low (0)	2685 (41540)	12.80	13.08	13.02
		2639(41080)	12.61	12.71	12.73
		2593 (40620)	12.41	12.60	12.63
		2547(40160)	12.43	12.29	12.32
		2501 (39700)	12.90	12.74	12.86
	50RB (0)	2685 (41540)	12.86	12.87	12.80
		2639(41080)	12.80	12.69	12.59
		2593 (40620)	12.50	12.44	12.82
		2547(40160)	12.36	12.35	12.36
		2501 (39700)	12.64	12.97	12.63
15MHz	1RB-High (74)	2682.5 (41515)	12.50	12.48	12.50
		2637.8(41068)	12.50	12.64	12.68
		2593 (40620)	12.58	12.64	12.63
		2548.3(40173)	12.63	12.66	12.69
		2503.5 (39725)	12.66	12.54	12.62

	1RB-Middle (37)	2682.5 (41515)	12.95	12.78	12.82
		2637.8(41068)	12.42	12.76	12.56
		2593 (40620)	12.46	12.69	12.53
		2548.3(40173)	12.33	12.59	12.34
		2503.5 (39725)	12.56	12.55	12.87
	1RB-Low (0)	2682.5 (41515)	12.81	12.85	12.73
		2637.8(41068)	12.49	12.26	12.50
		2593 (40620)	12.45	12.15	12.37
		2548.3(40173)	11.95	12.31	12.03
		2503.5 (39725)	12.55	12.80	12.86
	36RB-High (38)	2682.5 (41515)	12.43	12.71	12.52
		2637.8(41068)	12.55	12.68	12.67
		2593 (40620)	12.44	12.61	13.00
		2548.3(40173)	12.58	12.49	12.24
		2503.5 (39725)	12.60	12.54	12.58
	36RB-Middle (19)	2682.5 (41515)	12.91	12.59	12.90
		2637.8(41068)	12.44	12.83	12.49
		2593 (40620)	12.53	12.85	12.42
		2548.3(40173)	12.24	12.49	12.19
		2503.5 (39725)	12.94	12.83	12.54
	36RB-Low (0)	2682.5 (41515)	12.97	13.01	13.01
		2637.8(41068)	12.63	12.70	12.72
		2593 (40620)	12.72	12.70	12.58
		2548.3(40173)	12.21	12.26	12.19
		2503.5 (39725)	12.79	12.81	12.66
	75RB (0)	2682.5 (41515)	12.87	13.09	12.93
		2637.8(41068)	12.48	12.46	12.83
		2593 (40620)	12.41	12.51	12.83
		2548.3(40173)	12.16	12.56	12.44
		2503.5 (39725)	12.92	12.97	12.85
20MHz	1RB-High (99)	2680 (41490)	12.54	12.54	12.55
		2636.5(41055)	12.59	12.58	12.55
		2593 (40620)	12.74	12.82	12.76
		2549.5(40185)	12.47	12.56	12.55
		2506 (39750)	12.48	12.48	12.49
	1RB-Middle (50)	2680 (41490)	12.79	12.96	12.94
		2636.5(41055)	12.62	12.75	12.72
		2593 (40620)	12.58	12.58	12.69
		2549.5(40185)	12.42	12.46	12.49
		2506 (39750)	12.62	12.53	12.76

	1RB-Low (0)	2680 (41490)	12.75	12.89	12.73
		2636.5(41055)	12.51	12.44	12.52
		2593 (40620)	12.39	12.33	12.32
		2549.5(40185)	12.15	12.15	12.14
		2506 (39750)	12.69	12.74	12.86
	50RB-High (50)	2680 (41490)	12.60	12.69	12.61
		2636.5(41055)	12.64	12.63	12.75
		2593 (40620)	12.64	12.76	12.82
		2549.5(40185)	12.45	12.64	12.35
		2506 (39750)	12.64	12.74	12.59
	50RB-Middle (25)	2680 (41490)	12.75	12.71	12.82
		2636.5(41055)	12.63	12.69	12.66
		2593 (40620)	12.67	12.78	12.59
		2549.5(40185)	12.37	12.31	12.31
		2506 (39750)	12.76	12.89	12.72
	50RB-Low (0)	2680 (41490)	12.86	12.89	12.88
		2636.5(41055)	12.65	12.72	12.69
		2593 (40620)	12.58	12.54	12.68
		2549.5(40185)	12.28	12.21	12.24
		2506 (39750)	12.78	12.68	12.79
	100RB (0)	2680 (41490)	12.73	12.89	12.88
		2636.5(41055)	12.64	12.58	12.66
		2593 (40620)	12.58	12.48	12.68
		2549.5(40185)	12.36	12.55	12.26
		2506 (39750)	12.73	12.83	12.75

LTE Band41- (ANT4 DSI4)

LTE B41 ANT4					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
5MHz	1RB-High (24)	2687.5 (41565)	14.34	14.73	14.49
		2640.3(41093)	14.71	14.90	14.86
		2593 (40620)	14.78	14.92	14.60
		2545.8(40148)	14.35	14.40	14.68
		2498.5 (39675)	14.37	14.24	14.69
	1RB-Middle (12)	2687.5 (41565)	15.03	14.68	14.59
		2640.3(41093)	14.80	14.72	14.47
		2593 (40620)	14.48	14.68	14.81
		2545.8(40148)	14.71	14.53	14.46
		2498.5 (39675)	14.69	15.02	14.83

	1RB-Low (0)	2687.5 (41565)	14.77	14.70	14.74
		2640.3(41093)	14.51	14.68	14.58
		2593 (40620)	14.37	14.39	14.67
		2545.8(40148)	14.29	14.31	14.17
		2498.5 (39675)	14.80	14.55	14.76
	12RB-High (13)	2687.5 (41565)	14.54	14.39	14.73
		2640.3(41093)	14.48	14.80	14.63
		2593 (40620)	14.55	14.56	14.81
		2545.8(40148)	14.66	14.43	14.50
		2498.5 (39675)	14.88	14.84	14.86
	12RB-Middle (6)	2687.5 (41565)	14.71	15.08	14.87
		2640.3(41093)	14.80	14.75	14.85
		2593 (40620)	14.88	14.51	14.96
		2545.8(40148)	14.49	14.40	14.55
		2498.5 (39675)	14.69	14.65	14.99
	12RB-Low (0)	2687.5 (41565)	14.73	14.92	14.96
		2640.3(41093)	14.69	14.52	14.68
		2593 (40620)	14.72	14.64	14.69
		2545.8(40148)	14.75	14.40	14.12
		2498.5 (39675)	14.70	15.00	14.84
	25RB (0)	2687.5 (41565)	14.77	14.68	14.56
		2640.3(41093)	14.84	14.85	14.45
		2593 (40620)	14.58	14.91	14.56
		2545.8(40148)	14.59	14.46	14.57
		2498.5 (39675)	14.67	14.89	14.62
10MHz	1RB-High (49)	2685 (41540)	14.55	14.39	14.38
		2639(41080)	14.84	14.97	14.53
		2593 (40620)	14.92	14.81	14.72
		2547(40160)	14.47	14.33	14.54
		2501 (39700)	14.61	14.49	14.77
	1RB-Middle (24)	2685 (41540)	15.03	14.85	14.82
		2639(41080)	14.81	14.69	14.84
		2593 (40620)	14.88	14.76	14.75
		2547(40160)	14.67	14.33	14.23
		2501 (39700)	14.99	14.71	14.86
	1RB-Low (0)	2685 (41540)	14.59	14.85	14.70
		2639(41080)	14.48	14.69	14.84
		2593 (40620)	14.38	14.61	14.73
		2547(40160)	14.28	14.32	13.96
		2501 (39700)	14.70	14.82	14.77

	25RB-High (25)	2685 (41540)	14.80	14.68	14.71
		2639(41080)	14.64	14.76	14.97
		2593 (40620)	14.58	14.78	14.67
		2547(40160)	14.63	14.71	14.34
		2501 (39700)	14.79	14.65	14.80
	25RB-Middle (12)	2685 (41540)	14.91	14.89	14.84
		2639(41080)	14.85	14.80	14.81
		2593 (40620)	14.71	14.62	14.68
		2547(40160)	14.61	14.58	14.27
		2501 (39700)	14.78	14.62	14.79
	25RB-Low (0)	2685 (41540)	14.69	15.02	15.00
		2639(41080)	14.71	14.64	14.87
		2593 (40620)	14.53	14.92	14.56
		2547(40160)	14.46	14.23	14.20
		2501 (39700)	14.79	14.97	14.96
	50RB (0)	2685 (41540)	14.55	14.73	14.70
		2639(41080)	14.69	14.84	14.56
		2593 (40620)	14.53	14.94	14.93
		2547(40160)	14.52	14.69	14.34
		2501 (39700)	14.90	14.72	14.76
15MHz	1RB-High (74)	2682.5 (41515)	14.55	14.61	14.68
		2637.8(41068)	14.82	14.84	14.67
		2593 (40620)	15.00	14.98	14.83
		2548.3(40173)	14.60	14.52	14.56
		2503.5 (39725)	14.57	14.59	14.61
	1RB-Middle (37)	2682.5 (41515)	14.66	14.77	14.83
		2637.8(41068)	14.65	14.63	14.84
		2593 (40620)	14.53	14.81	14.65
		2548.3(40173)	14.73	14.38	14.42
		2503.5 (39725)	14.76	14.79	14.77
	1RB-Low (0)	2682.5 (41515)	14.65	14.97	14.62
		2637.8(41068)	14.72	14.64	14.58
		2593 (40620)	14.34	14.74	14.54
		2548.3(40173)	14.13	14.24	14.08
		2503.5 (39725)	14.69	14.63	14.92
	36RB-High (38)	2682.5 (41515)	14.80	14.43	14.61
		2637.8(41068)	14.50	14.71	14.72
		2593 (40620)	14.84	14.67	14.92
		2548.3(40173)	14.31	14.48	14.69
		2503.5 (39725)	14.52	14.75	14.78

	36RB-Middle (19)	2682.5 (41515)	14.70	14.80	15.04
		2637.8(41068)	14.54	14.74	14.75
		2593 (40620)	14.78	14.54	14.75
		2548.3(40173)	14.38	14.64	14.22
		2503.5 (39725)	14.97	14.62	15.02
	36RB-Low (0)	2682.5 (41515)	14.72	14.82	14.75
		2637.8(41068)	14.82	14.88	14.83
		2593 (40620)	14.68	14.77	14.84
		2548.3(40173)	14.38	14.19	14.40
		2503.5 (39725)	14.60	14.82	14.99
	75RB (0)	2682.5 (41515)	14.58	14.86	14.84
		2637.8(41068)	14.80	14.76	14.51
		2593 (40620)	14.67	14.72	14.73
		2548.3(40173)	14.60	14.72	14.44
		2503.5 (39725)	14.83	14.64	14.97
20MHz	1RB-High (99)	2680 (41490)	14.53	14.54	14.56
		2636.5(41055)	14.66	14.82	14.73
		2593 (40620)	14.83	14.95	14.76
		2549.5(40185)	14.48	14.39	14.49
		2506 (39750)	14.51	14.43	14.62
	1RB-Middle (50)	2680 (41490)	14.85	14.75	14.76
		2636.5(41055)	14.67	14.71	14.64
		2593 (40620)	14.68	14.72	14.73
		2549.5(40185)	14.62	14.37	14.39
		2506 (39750)	14.83	14.85	14.97
	1RB-Low (0)	2680 (41490)	14.77	14.81	14.81
		2636.5(41055)	14.57	14.73	14.67
		2593 (40620)	14.47	14.58	14.54
		2549.5(40185)	14.17	14.24	14.08
		2506 (39750)	14.73	14.74	14.73
	50RB-High (50)	2680 (41490)	14.65	14.55	14.66
		2636.5(41055)	14.67	14.73	14.83
		2593 (40620)	14.74	14.66	14.75
		2549.5(40185)	14.49	14.57	14.51
		2506 (39750)	14.68	14.84	14.87
	50RB-Middle (25)	2680 (41490)	14.84	14.96	14.87
		2636.5(41055)	14.67	14.75	14.77
		2593 (40620)	14.68	14.61	14.79
		2549.5(40185)	14.41	14.51	14.39
		2506 (39750)	14.83	14.73	14.85

	50RB-Low (0)	2680 (41490)	14.87	14.91	14.86
		2636.5(41055)	14.72	14.72	14.79
		2593 (40620)	14.65	14.83	14.64
		2549.5(40185)	14.58	14.24	14.29
		2506 (39750)	14.78	14.88	15.02
	100RB (0)	2680 (41490)	14.75	14.71	14.69
		2636.5(41055)	14.68	14.71	14.65
		2593 (40620)	14.68	14.79	14.73
		2549.5(40185)	14.43	14.53	14.48
		2506 (39750)	14.77	14.72	14.78

LTE Band66- (ANT1 DSI0/1/2/3)

LTE B66					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	1779.3 (132665)	22.94	22.33	21.26
		1745 (132322)	22.93	22.25	21.14
		1710.7 (131979)	22.90	22.23	21.24
	1RB-Middle (3)	1779.3 (132665)	23.00	22.30	21.22
		1745 (132322)	23.00	22.28	21.25
		1710.7 (131979)	22.93	22.29	21.18
	1RB-Low (0)	1779.3 (132665)	22.92	22.28	21.30
		1745 (132322)	22.94	22.13	21.19
		1710.7 (131979)	22.93	22.07	21.18
	3RB-High (3)	1779.3 (132665)	23.01	21.96	21.23
		1745 (132322)	22.91	21.93	21.11
		1710.7 (131979)	22.96	21.92	21.22
	3RB-Middle (1)	1779.3 (132665)	22.98	21.94	21.24
		1745 (132322)	22.94	21.97	21.15
		1710.7 (131979)	22.96	21.97	21.15
	3RB-Low (0)	1779.3 (132665)	23.00	21.94	21.25
		1745 (132322)	22.96	21.91	21.17
		1710.7 (131979)	22.98	21.92	21.21
	6RB (0)	1779.3 (132665)	21.99	21.21	20.09
		1745 (132322)	21.94	21.19	20.04
		1710.7 (131979)	21.98	21.19	20.07
3MHz	1RB-High (14)	1778.5 (132657)	22.95	22.23	21.28
		1745 (132322)	22.90	22.16	21.22
		1711.5 (131987)	22.93	22.29	21.27
	1RB-Middle (7)	1778.5 (132657)	22.95	22.14	21.31

		1745 (132322)	22.97	22.18	21.23
		1711.5 (131987)	22.93	22.20	21.28
	1RB-Low (0)	1778.5 (132657)	22.92	22.17	21.18
		1745 (132322)	22.94	22.24	21.20
		1711.5 (131987)	22.91	22.25	21.25
	8RB-High (7)	1778.5 (132657)	21.93	21.11	20.12
		1745 (132322)	21.88	21.13	20.09
		1711.5 (131987)	21.90	21.14	20.10
	8RB-Middle (4)	1778.5 (132657)	21.99	21.13	20.14
		1745 (132322)	21.89	21.12	20.07
		1711.5 (131987)	21.92	21.16	20.06
	8RB-Low (0)	1778.5 (132657)	21.95	21.18	20.09
		1745 (132322)	21.91	21.16	20.09
		1711.5 (131987)	21.92	21.15	20.10
	15RB (0)	1778.5 (132657)	21.92	21.07	20.06
		1745 (132322)	21.88	21.07	20.02
		1711.5 (131987)	21.92	21.10	20.08
5MHz	1RB-High (24)	1777.5 (132647)	22.99	22.30	21.22
		1745 (132322)	22.98	22.27	21.26
		1712.5 (131997)	22.97	22.27	21.24
	1RB-Middle (12)	1777.5 (132647)	23.03	22.25	21.23
		1745 (132322)	22.98	22.17	21.23
		1712.5 (131997)	23.05	22.24	21.33
	1RB-Low (0)	1777.5 (132647)	22.95	22.23	21.31
		1745 (132322)	22.97	22.27	21.29
		1712.5 (131997)	22.98	22.27	21.26
	12RB-High (13)	1777.5 (132647)	21.91	21.05	20.08
		1745 (132322)	21.93	21.08	20.10
		1712.5 (131997)	21.92	21.12	20.08
	12RB-Middle (6)	1777.5 (132647)	21.92	21.10	20.08
		1745 (132322)	21.99	21.11	20.05
		1712.5 (131997)	21.95	21.09	20.06
	12RB-Low (0)	1777.5 (132647)	21.94	21.14	20.15
		1745 (132322)	21.93	21.09	20.07
		1712.5 (131997)	21.94	21.03	20.09
	25RB (0)	1777.5 (132647)	21.93	21.11	20.07
		1745 (132322)	21.93	21.09	20.04
		1712.5 (131997)	22.00	21.11	20.12
10MHz	1RB-High (49)	1775 (132622)	23.00	22.20	21.26
		1745 (132322)	22.91	22.24	21.18

		1715 (132022)	22.96	22.20	21.26
	1RB-Middle (24)	1775 (132622)	22.96	22.30	21.24
		1745 (132322)	22.98	22.40	21.34
		1715 (132022)	23.00	22.30	21.24
	1RB-Low (0)	1775 (132622)	22.95	22.25	21.26
		1745 (132322)	23.00	22.27	21.24
		1715 (132022)	22.96	22.32	21.19
	25RB-High (25)	1775 (132622)	21.89	21.09	20.05
		1745 (132322)	22.00	21.13	20.12
		1715 (132022)	22.04	21.23	20.18
	25RB-Middle (12)	1775 (132622)	21.94	21.08	20.10
		1745 (132322)	21.93	21.12	20.08
		1715 (132022)	21.92	21.07	20.06
	25RB-Low (0)	1775 (132622)	21.89	21.05	20.05
		1745 (132322)	21.87	21.03	20.02
		1715 (132022)	21.86	21.03	20.05
	50RB (0)	1775 (132622)	21.94	21.07	20.08
		1745 (132322)	21.94	21.07	20.04
		1715 (132022)	21.98	21.14	20.11
15MHz	1RB-High (74)	1772.5 (132597)	22.90	22.16	21.19
		1745 (132322)	22.84	22.07	21.15
		1717.5 (132047)	22.90	22.17	21.10
	1RB-Middle (37)	1772.5 (132597)	22.92	22.13	21.13
		1745 (132322)	22.94	22.14	21.18
		1717.5 (132047)	22.95	22.13	21.21
	1RB-Low (0)	1772.5 (132597)	22.86	22.11	21.25
		1745 (132322)	22.89	22.14	21.20
		1717.5 (132047)	22.87	22.19	21.23
	36RB-High (38)	1772.5 (132597)	21.95	21.10	20.10
		1745 (132322)	21.92	21.08	20.06
		1717.5 (132047)	21.96	21.05	20.05
	36RB-Middle (19)	1772.5 (132597)	21.92	21.07	20.05
		1745 (132322)	21.87	21.03	20.02
		1717.5 (132047)	21.88	21.03	20.04
	36RB-Low (0)	1772.5 (132597)	21.96	21.08	20.11
		1745 (132322)	21.86	21.01	20.01
		1717.5 (132047)	21.83	21.04	20.01
	75RB (0)	1772.5 (132597)	21.97	21.08	20.05
		1745 (132322)	21.91	21.03	20.03
		1717.5 (132047)	21.94	21.03	20.03

20MHz	1RB-High (99)	1770 (132572)	22.91	22.16	21.15
		1745 (132322)	22.93	22.22	21.22
		1720 (132072)	22.88	22.20	21.12
	1RB-Middle (50)	1770 (132572)	23.05	22.19	21.28
		1745 (132322)	22.98	22.24	21.27
		1720 (132072)	23.00	22.12	21.22
	1RB-Low (0)	1770 (132572)	22.94	22.21	21.27
		1745 (132322)	22.88	22.23	21.22
		1720 (132072)	22.90	22.09	21.20
	50RB-High (50)	1770 (132572)	22.05	21.19	20.15
		1745 (132322)	21.98	21.14	20.14
		1720 (132072)	21.79	20.97	19.95
	50RB-Middle (25)	1770 (132572)	22.02	21.15	20.13
		1745 (132322)	21.91	21.08	20.05
		1720 (132072)	21.99	21.10	20.07
	50RB-Low (0)	1770 (132572)	22.06	21.21	20.19
		1745 (132322)	21.90	21.01	19.98
		1720 (132072)	21.80	20.93	19.89
	100RB (0)	1770 (132572)	22.05	21.13	20.17
		1745 (132322)	21.93	21.09	20.00
		1720 (132072)	21.73	20.87	19.84

LTE Band66- (ANT1 DSI4)

LTE B66					
BANDWIDTH	**Number of RBs**	**Frequency**	**QPSK**	**16QAM**	**64QAM**
1.4MHz	1RB-High (5)	1779.3 (132665)	20.52	20.85	20.66
		1745 (132322)	20.55	20.77	20.64
		1710.7 (131979)	20.69	20.98	20.79
	1RB-Middle (3)	1779.3 (132665)	20.50	20.74	20.76
		1745 (132322)	20.59	20.77	20.71
		1710.7 (131979)	20.71	20.85	20.88
	1RB-Low (0)	1779.3 (132665)	20.50	20.84	20.71
		1745 (132322)	20.56	20.83	20.72
		1710.7 (131979)	20.68	20.98	20.95
	3RB-High (3)	1779.3 (132665)	20.55	20.48	20.62
		1745 (132322)	20.55	20.56	20.62
		1710.7 (131979)	20.71	20.68	20.80
	3RB-Middle (1)	1779.3 (132665)	20.52	20.56	20.64
		1745 (132322)	20.54	20.57	20.61

		1710.7 (131979)	20.72	20.75	20.86
	3RB-Low (0)	1779.3 (132665)	20.52	20.47	20.65
		1745 (132322)	20.50	20.55	20.62
		1710.7 (131979)	20.72	20.66	20.82
	6RB (0)	1779.3 (132665)	20.55	20.61	20.54
		1745 (132322)	20.55	20.64	20.52
		1710.7 (131979)	20.76	20.83	20.70
3MHz	1RB-High (14)	1778.5 (132657)	20.51	20.83	20.76
		1745 (132322)	20.55	20.80	20.77
		1711.5 (131987)	20.75	20.92	20.95
	1RB-Middle (7)	1778.5 (132657)	20.54	20.83	20.73
		1745 (132322)	20.55	20.94	20.70
		1711.5 (131987)	20.72	20.76	20.95
	1RB-Low (0)	1778.5 (132657)	20.49	20.76	20.72
		1745 (132322)	20.54	20.78	20.67
		1711.5 (131987)	20.67	20.69	20.90
	8RB-High (7)	1778.5 (132657)	20.51	20.61	20.53
		1745 (132322)	20.53	20.58	20.60
		1711.5 (131987)	20.73	20.83	20.81
	8RB-Middle (4)	1778.5 (132657)	20.51	20.60	20.57
		1745 (132322)	20.50	20.57	20.57
		1711.5 (131987)	20.69	20.80	20.77
	8RB-Low (0)	1778.5 (132657)	20.54	20.63	20.55
		1745 (132322)	20.57	20.63	20.66
		1711.5 (131987)	20.71	20.81	20.80
	15RB (0)	1778.5 (132657)	20.50	20.56	20.54
		1745 (132322)	20.55	20.59	20.53
		1711.5 (131987)	20.75	20.80	20.78
5MHz	1RB-High (24)	1777.5 (132647)	20.53	20.89	20.67
		1745 (132322)	20.63	20.80	20.75
		1712.5 (131997)	20.76	20.99	20.92
	1RB-Middle (12)	1777.5 (132647)	20.52	20.87	20.73
		1745 (132322)	20.60	20.85	20.74
		1712.5 (131997)	20.80	20.76	20.92
	1RB-Low (0)	1777.5 (132647)	20.54	20.94	20.72
		1745 (132322)	20.60	20.91	20.75
		1712.5 (131997)	20.75	20.87	20.88
	12RB-High (13)	1777.5 (132647)	20.50	20.43	20.52
		1745 (132322)	20.58	20.58	20.62
		1712.5 (131997)	20.75	20.81	20.77

	12RB-Middle (6)	1777.5 (132647)	20.56	20.56	20.60
		1745 (132322)	20.56	20.50	20.59
		1712.5 (131997)	20.78	20.80	20.78
	12RB-Low (0)	1777.5 (132647)	20.57	20.59	20.60
		1745 (132322)	20.53	20.55	20.54
		1712.5 (131997)	20.69	20.72	20.78
	25RB (0)	1777.5 (132647)	20.54	20.57	20.57
		1745 (132322)	20.56	20.62	20.60
		1712.5 (131997)	20.80	20.77	20.82
10MHz	1RB-High (49)	1775 (132622)	20.52	20.70	20.69
		1745 (132322)	20.56	20.84	20.70
		1715 (132022)	20.69	20.90	20.90
	1RB-Middle (24)	1775 (132622)	20.57	20.74	20.71
		1745 (132322)	20.57	20.97	20.72
		1715 (132022)	20.75	20.92	20.89
	1RB-Low (0)	1775 (132622)	20.58	20.81	20.66
		1745 (132322)	20.62	20.94	20.78
		1715 (132022)	20.73	20.77	20.86
	25RB-High (25)	1775 (132622)	20.49	20.50	20.48
		1745 (132322)	20.62	20.70	20.69
		1715 (132022)	20.80	20.86	20.83
	25RB-Middle (12)	1775 (132622)	20.56	20.59	20.59
		1745 (132322)	20.58	20.58	20.61
		1715 (132022)	20.74	20.78	20.76
	25RB-Low (0)	1775 (132622)	20.53	20.55	20.55
		1745 (132322)	20.48	20.50	20.50
		1715 (132022)	20.69	20.70	20.71
	50RB (0)	1775 (132622)	20.46	20.45	20.46
		1745 (132322)	20.63	20.57	20.58
		1715 (132022)	20.78	20.71	20.76
15MHz	1RB-High (74)	1772.5 (132597)	20.49	20.64	20.61
		1745 (132322)	20.50	20.77	20.68
		1717.5 (132047)	20.55	20.88	20.73
	1RB-Middle (37)	1772.5 (132597)	20.53	20.78	20.76
		1745 (132322)	20.56	20.93	20.76
		1717.5 (132047)	20.69	20.75	20.86
	1RB-Low (0)	1772.5 (132597)	20.49	20.83	20.66
		1745 (132322)	20.59	20.90	20.78
		1717.5 (132047)	20.65	20.84	20.77
	36RB-High (38)	1772.5 (132597)	20.45	20.45	20.48

		1745 (132322)	20.56	20.57	20.61
		1717.5 (132047)	20.67	20.67	20.64
	36RB-Middle (19)	1772.5 (132597)	20.53	20.52	20.57
		1745 (132322)	20.59	20.57	20.62
		1717.5 (132047)	20.72	20.71	20.76
	36RB-Low (0)	1772.5 (132597)	20.54	20.52	20.55
		1745 (132322)	20.50	20.50	20.53
		1717.5 (132047)	20.63	20.64	20.69
	75RB (0)	1772.5 (132597)	20.52	20.54	20.52
		1745 (132322)	20.60	20.59	20.57
		1717.5 (132047)	20.71	20.66	20.67
20MHz	1RB-High (99)	1770 (132572)	20.44	20.73	20.64
		1745 (132322)	20.43	20.77	20.60
		1720 (132072)	20.57	20.82	20.75
	1RB-Middle (50)	1770 (132572)	20.57	20.79	20.72
		1745 (132322)	20.58	20.94	20.81
		1720 (132072)	20.68	20.75	20.85
	1RB-Low (0)	1770 (132572)	20.49	20.81	20.56
		1745 (132322)	20.53	20.90	20.69
		1720 (132072)	20.65	20.91	20.79
	50RB-High (50)	1770 (132572)	20.54	20.51	20.56
		1745 (132322)	20.56	20.55	20.58
		1720 (132072)	20.54	20.57	20.55
	50RB-Middle (25)	1770 (132572)	20.60	20.63	20.59
		1745 (132322)	20.61	20.58	20.57
		1720 (132072)	20.72	20.68	20.71
	50RB-Low (0)	1770 (132572)	20.54	20.55	20.59
		1745 (132322)	20.50	20.50	20.49
		1720 (132072)	20.61	20.56	20.54
	100RB (0)	1770 (132572)	20.52	20.51	20.47
		1745 (132322)	20.52	20.54	20.51
		1720 (132072)	20.56	20.52	20.58

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

The device supports Intra-band uplink LTE Carrier Aggregation (CA) CA_B41C. The conducted power measurement results of LTE CA are provided as follow.
All other uplink communications are identical to the release 8 specifications. Other LTE Rel.10 or higher features are not supported, including Enhanced SC-FDMA or Uplink MIMO etc.

The conducted power measurement results of LTE downlink CA are as below:

DL LTE CA Class	PCC								SCC			Power		
	PCC Band	PCC Band width (MHz)	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Band width (MHz)	SCC DL Channel	Rel 8 LTETx Power (dBm)	Rel 10 DL LTE CA Tx Power(dBm)	Tune-up
2A-2A	2	20	1	50	1	50	18700	700	2	5	1175	23.48	23.26	24.5
2A-5A	2	20	1	50	1	50	18900	900	5	10	2525	23.48	23.13	24.5
2A-5A	5	10	1	20	1	50	20600	2600	2	5	1175	24.25	24.05	25.5
2A-12A	2	20	1	50	1	50	18900	900	12	10	5095	23.48	23.26	24.5
2A-12A	12	10	1	0	1	0	23060	5060	2	5	1175	23.85	23.77	25
4A-4A	4	20	1	50	1	50	20300	2300	4	20	2175	23.68	23.63	24.5
4A-5A	4	20	1	50	1	50	20300	2300	5	10	2525	23.68	23.45	24.5
4A-5A	5	10	1	20	1	50	20600	2600	4	20	2175	24.25	24.11	25.5
4A-12A	4	20	1	50	1	50	20300	2300	12	10	5095	23.68	23.52	24.5
4A-12A	12	10	1	0	1	0	23060	5060	4	20	2175	23.85	23.77	25
5A-7A	5	10	1	20	1	50	20600	2600	7	20	3100	24.25	24.12	25.5
5A-7A	7	20	1	99	1	0	21100	2535	5	10	2525	24.31	24.33	25.5
7A-7A	7	10	1	0	50	0	20800	2800	7	20	3350	24.11	24.16	25.5
12A-66A	12	10	1	0	1	0	23060	5060	66	20	66786	23.85	23.58	25
12A-66A	66	20	1	50	1	50	132072	66536	12	10	5095	23.05	22.77	24.5
41A-41A	41	20	1	50	1	50	39750	39750	41	5	41565	23.42	23.26	24.5
66A-66A	66	20	1	50	1	50	132072	66536	66	5	67311	23.05	22.85	24.5

Note: Testing is not required in bands or modes not intended/allowed for US operation.

The conducted power measurement results of LTE uplink CA are as below :

7C DSI 0:

Normal Power										
UL LTE CA Class	PCC					SCC				
	PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	conducted power（dBm）
CA_7C	20M	21350	3350	1	99	20M	3152	1	0	13.67
CA_7C	20M	21350	3350	1	99	15M	3179	1	0	13.84
CA_7C	20M	21350	3350	1	99	10M	3206	1	0	13.94
CA_7C	20M	20850	2850	1	99	20M	3048	1	0	23.59
CA_7C	20M	20850	2850	1	99	15M	3021	1	0	23.58
CA_7C	20M	20850	2850	1	99	10M	2994	1	0	23.53
CA_7C	15M	21375	3375	1	74	15M	3225	1	0	14.14
CA_7C	15M	20825	2825	1	74	15M	2975	1	0	23.69
CA_7C	15M	20825	2825	1	74	10M	2945	1	0	23.64
CA_7C	20M	21350	3350	1	0	20M	3152	1	99	23.78
CA_7C	20M	21350	3350	1	0	15M	3179	1	74	23.83
CA_7C	20M	21350	3350	1	0	10M	3206	1	49	23.76
CA_7C	20M	20850	2850	1	0	20M	3048	1	99	13.51
CA_7C	20M	20850	2850	1	0	15M	3021	1	74	13.64
CA_7C	20M	20850	2850	1	0	10M	2994	1	49	13.72
CA_7C	15M	21375	3375	1	0	15M	3225	1	74	22.92
CA_7C	15M	20825	2825	1	0	15M	2975	1	74	13.89
CA_7C	15M	20825	2825	1	0	10M	2945	1	49	13.95

7C DSI 1:

Low Power										
UL LTE CA Class	PCC					SCC				
	PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	conducted power（dBm）
CA_7C	20M	21350	3350	1	99	20M	3152	1	0	13.65
CA_7C	20M	21350	3350	1	99	15M	3179	1	0	13.82
CA_7C	20M	21350	3350	1	99	10M	3206	1	0	13.88
CA_7C	20M	20850	2850	1	99	20M	3048	1	0	14.01
CA_7C	20M	20850	2850	1	99	15M	3021	1	0	13.98
CA_7C	20M	20850	2850	1	99	10M	2994	1	0	13.91
CA_7C	15M	21375	3375	1	74	15M	3225	1	0	14.04
CA_7C	15M	20825	2825	1	74	15M	2975	1	0	14.08
CA_7C	15M	20825	2825	1	74	10M	2945	1	0	14.09
CA_7C	20M	21350	3350	1	0	20M	3152	1	99	14.17
CA_7C	20M	21350	3350	1	0	15M	3179	1	74	14.29
CA_7C	20M	21350	3350	1	0	10M	3206	1	49	14.13
CA_7C	20M	20850	2850	1	0	20M	3048	1	99	13.41
CA_7C	20M	20850	2850	1	0	15M	3021	1	74	13.53
CA_7C	20M	20850	2850	1	0	10M	2994	1	49	13.59
CA_7C	15M	21375	3375	1	0	15M	3225	1	74	14.28
CA_7C	15M	20825	2825	1	0	15M	2975	1	74	13.77
CA_7C	15M	20825	2825	1	0	10M	2945	1	49	13.88

7C DSI 2:

Low Power										
UL LTE CA Class	PCC					SCC				
	PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	conducted power（dBm）
CA_7C	20M	21350	3350	1	99	20M	3152	1	0	15.18
CA_7C	20M	21350	3350	1	99	15M	3179	1	0	15.35
CA_7C	20M	21350	3350	1	99	10M	3206	1	0	15.41
CA_7C	20M	20850	2850	1	99	20M	3048	1	0	18.02
CA_7C	20M	20850	2850	1	99	15M	3021	1	0	18.08
CA_7C	20M	20850	2850	1	99	10M	2994	1	0	17.98
CA_7C	15M	21375	3375	1	74	15M	3225	1	0	15.57
CA_7C	15M	20825	2825	1	74	15M	2975	1	0	18.13
CA_7C	15M	20825	2825	1	74	10M	2945	1	0	18.12
CA_7C	20M	21350	3350	1	0	20M	3152	1	99	18.23
CA_7C	20M	21350	3350	1	0	15M	3179	1	74	18.21
CA_7C	20M	21350	3350	1	0	10M	3206	1	49	18.17
CA_7C	20M	20850	2850	1	0	20M	3048	1	99	14.88
CA_7C	20M	20850	2850	1	0	15M	3021	1	74	15.06
CA_7C	20M	20850	2850	1	0	10M	2994	1	49	15.08
CA_7C	15M	21375	3375	1	0	15M	3225	1	74	18.22
CA_7C	15M	20825	2825	1	0	15M	2975	1	74	15.25
CA_7C	15M	20825	2825	1	0	10M	2945	1	49	15.37

7C DSI 3:

Low Power										
UL LTE CA Class	PCC					SCC				
	PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	conducted power（dBm）
CA_7C	20M	21350	3350	1	99	20M	3152	1	0	11.59
CA_7C	20M	21350	3350	1	99	15M	3179	1	0	11.29
CA_7C	20M	21350	3350	1	99	10M	3206	1	0	11.35
CA_7C	20M	20850	2850	1	99	20M	3048	1	0	11.54
CA_7C	20M	20850	2850	1	99	15M	3021	1	0	11.51
CA_7C	20M	20850	2850	1	99	10M	2994	1	0	11.35
CA_7C	15M	21375	3375	1	74	15M	3225	1	0	11.60
CA_7C	15M	20825	2825	1	74	15M	2975	1	0	11.32
CA_7C	15M	20825	2825	1	74	10M	2945	1	0	11.37
CA_7C	20M	21350	3350	1	0	20M	3152	1	99	11.63
CA_7C	20M	21350	3350	1	0	15M	3179	1	74	11.58
CA_7C	20M	21350	3350	1	0	10M	3206	1	49	11.71
CA_7C	20M	20850	2850	1	0	20M	3048	1	99	11.51
CA_7C	20M	20850	2850	1	0	15M	3021	1	74	11.45
CA_7C	20M	20850	2850	1	0	10M	2994	1	49	11.63
CA_7C	15M	21375	3375	1	0	15M	3225	1	74	11.68
CA_7C	15M	20825	2825	1	0	15M	2975	1	74	11.31
CA_7C	15M	20825	2825	1	0	10M	2945	1	49	11.38

7C DSI 4:

Low Power										
UL LTE CA Class	PCC					SCC				
	PCC Bandwidth	UL channel	DL channel	UL RB	UL RB OFFSET	SCC Bandwidth	DL channel	UL RB	UL RB OFFSET	conducted power（dBm）
CA_7C	20M	21350	3350	1	99	20M	3152	1	0	13.58
CA_7C	20M	21350	3350	1	99	15M	3179	1	0	14.24
CA_7C	20M	21350	3350	1	99	10M	3206	1	0	13.54
CA_7C	20M	20850	2850	1	99	20M	3048	1	0	15.37
CA_7C	20M	20850	2850	1	99	15M	3021	1	0	15.41
CA_7C	20M	20850	2850	1	99	10M	2994	1	0	15.27
CA_7C	15M	21375	3375	1	74	15M	3225	1	0	14.25
CA_7C	15M	20825	2825	1	74	15M	2975	1	0	15.60
CA_7C	15M	20825	2825	1	74	10M	2945	1	0	15.48
CA_7C	20M	21350	3350	1	0	20M	3152	1	99	15.38
CA_7C	20M	21350	3350	1	0	15M	3179	1	74	15.65
CA_7C	20M	21350	3350	1	0	10M	3206	1	49	15.42
CA_7C	20M	20850	2850	1	0	20M	3048	1	99	13.47
CA_7C	20M	20850	2850	1	0	15M	3021	1	74	13.43
CA_7C	20M	20850	2850	1	0	10M	2994	1	49	13.45
CA_7C	15M	21375	3375	1	0	15M	3225	1	74	15.84
CA_7C	15M	20825	2825	1	0	15M	2975	1	74	13.62
CA_7C	15M	20825	2825	1	0	10M	2945	1	49	13.50

38C DSI 0:

Normal Power									
UL LTE CA Class	PCC				SCC				
	PCC Bandw	channel	RB	RB OFFSET	SCC Bandw	channel	RB	RB OFFSET	conducted power（dBm）
CA_38C	20M	38150	1	99	20M	37952	1	0	14.84
CA_38C	20M	37850	1	99	20M	38048	1	0	23.59
CA_38C	15M	38175	1	74	15M	38025	1	0	15.18
CA_38C	15M	37825	1	74	15M	37975	1	0	23.74
CA_38C	20M	38150	1	0	20M	37952	1	99	23.69
CA_38C	20M	37850	1	0	20M	38048	1	99	14.58
CA_38C	15M	38175	1	0	15M	38025	1	74	23.84
CA_38C	15M	37825	1	0	15M	37975	1	74	14.98

38C DSI 1:

Low Power									
UL LTE CA Class	PCC				SCC				
	PCC Bandw	channel	RB	RB OFFSET	SCC Bandw	channel	RB	RB OFFSET	conducted power（dBm）
CA_38C	20M	38150	1	99	20M	37952	1	0	15.15
CA_38C	20M	37850	1	99	20M	38048	1	0	15.97
CA_38C	15M	38175	1	74	15M	38025	1	0	15.56
CA_38C	15M	37825	1	74	15M	37975	1	0	16.15
CA_38C	20M	38150	1	0	20M	37952	1	99	16.04
CA_38C	20M	37850	1	0	20M	38048	1	99	14.95
CA_38C	15M	38175	1	0	15M	38025	1	74	16.23
CA_38C	15M	37825	1	0	15M	37975	1	74	15.33

38C DSI 2:

Low Power									
UL LTE CA Class	PCC				SCC				
	PCC Bandw	channel	RB	RB OFFSET	SCC Bandw	channel	RB	RB OFFSET	conducted power（dBm）
CA_38C	20M	38150	1	99	20M	37952	1	0	15.41
CA_38C	20M	37850	1	99	20M	38048	1	0	18.45
CA_38C	15M	38175	1	74	15M	38025	1	0	15.61
CA_38C	15M	37825	1	74	15M	37975	1	0	20.25
CA_38C	20M	38150	1	0	20M	37952	1	99	20.31
CA_38C	20M	37850	1	0	20M	38048	1	99	15.19
CA_38C	15M	38175	1	0	15M	38025	1	74	16.01
CA_38C	15M	37825	1	0	15M	37975	1	74	15.64

11.4 5G NR Measurement result

Maximum Target Power for Production Unit –DSI 0/1/2/3/4

Band	Tune up (dBm)				
	DSI0 Receiver off+ Sar senser off	DSI1 Receiver on	DSI2 Receiver off+SAR sensor on	DSI3 Receiver on (ENDC)	DSI4 Receiver off+SAR sensor on(ENDC)
N5-ANT0	24.5	24.5	24	24.5	24
N7-ANT4	24	17	19.5	14	16.5
N7-ANT0	24	24	18.5	/	/
N38-ANT4	24	17.5	19.5	14.5	16.5
N38-ANT0	24	24	19.5	/	/
N41-ANT4	24	16.8	19	14.5	16
N77-ANT5	24	16.5	19.8	13.5	16.2
N78-ANT5	25	16.5	19.8	13.5	16.2

N5- (ANT0 DSI0/1/3)

5G-n5								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	846.5	169300	24	23.31
15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	836.5	167300	24	23.39
15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	826.5	165300	24	23.38
15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	839	167800	24	23.33
15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	836.5	167300	24	23.35
15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	834	166800	24	23.37
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	836.5	167300	24	23.31
15	5	DFT-s-OFDM 16QAM	Inner_Full	12_6	836.5	167300	23	22.39
15	5	DFT-s-OFDM 64QAM	Inner_Full	12_6	836.5	167300	21.5	20.87
15	5	DFT-s-OFDM 256QAM	Inner_Full	12_6	836.5	167300	19.5	18.86
15	5	CP-OFDM QPSK	Inner_Full	12_6	836.5	167300	22.5	21.89
15	5	CP-OFDM 16QAM	Inner_Full	12_6	836.5	167300	22	21.45
15	5	CP-OFDM 64QAM	Inner_Full	12_6	836.5	167300	20.5	19.88
15	5	CP-OFDM 256QAM	Inner_Full	12_6	836.5	167300	17.5	16.80
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	836.5	167300	23	22.36
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	836.5	167300	23	22.35
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	836.5	167300	23	22.32
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	836.5	167300	23	22.34
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	836.5	167300	24	23.36
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	836.5	167300	24	23.29
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	836.5	167300	23	22.31
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	836.5	167300	24	23.18
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	836.5	167300	24	23.35

N5- (ANT0 DSI2/4)

5G-n5							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	846.5	169300	22.35
15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	836.5	167300	22.49
15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	826.5	165300	22.46
15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	839	167800	22.45
15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	836.5	167300	22.42
15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	834	166800	22.42
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	836.5	167300	21.57
15	5	DFT-s-OFDM 16QAM	Inner_Full	12_6	836.5	167300	22.46
15	5	DFT-s-OFDM 64QAM	Inner_Full	12_6	836.5	167300	20.95
15	5	DFT-s-OFDM 256QAM	Inner_Full	12_6	836.5	167300	18.95
15	5	CP-OFDM QPSK	Inner_Full	12_6	836.5	167300	21.97
15	5	CP-OFDM 16QAM	Inner_Full	12_6	836.5	167300	21.53
15	5	CP-OFDM 64QAM	Inner_Full	12_6	836.5	167300	19.95
15	5	CP-OFDM 256QAM	Inner_Full	12_6	836.5	167300	16.89
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	836.5	167300	22.41
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	836.5	167300	22.43
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	836.5	167300	22.41
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	836.5	167300	22.39
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	836.5	167300	22.35
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	836.5	167300	22.42
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	836.5	167300	22.43
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	836.5	167300	22.23
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	836.5	167300	22.44

N7- (ANT4 DSI0)

5G-n7								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	24	23.35
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	24	23.39
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	24	23.36
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	24	23.28
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	24	23.32
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	24	23.35
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	24	23.35
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	23	22.48
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	21.5	20.95
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	19.5	18.91
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	22.5	21.94
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	22	21.55
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	20.5	19.97
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	17.5	16.89
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	23	22.42
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	23	22.44
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	23	22.49
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	23	22.46
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	24	23.33
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	24	23.31
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	23	22.52
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	24	23.14
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	24	23.32

N7- (ANT4 DSI1)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	15.95
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	16.09
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	16.05
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	15.82
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	15.88
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	16.02
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	15.95
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	15.88
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	15.81
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	15.84
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	15.81
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	15.82
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	15.83
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	15.81
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	15.86
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	15.84
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	15.88
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	15.87
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	15.91
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	15.88
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	15.84
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	15.66
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	15.87

N7- (ANT4 DSI2)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	18.46
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	18.65
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	18.55
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	18.37
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	18.42
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	18.53
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	18.52
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	18.42
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	18.37
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	18.38
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	18.35
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	18.47
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	18.37
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	16.92
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	18.42
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	18.43
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	18.46
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	18.45
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	18.44
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	18.42
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	18.38
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	18.22
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	18.41

N7- (ANT4 DSI3)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	12.91
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	13.06
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	13.00
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	12.84
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	12.82
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	13.03
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	12.94
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	12.90
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	12.85
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	12.77
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	12.73
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	12.84
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	12.82
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	12.76
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	12.83
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	12.81
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	12.93
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	12.79
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	12.88
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	12.87
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	12.79
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	12.60
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	12.78

N7- (ANT4 DSI4)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	15.41
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	15.54
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	15.53
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	15.30
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	15.36
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	15.50
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	15.46
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	15.42
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	15.27
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	15.30
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	15.36
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	15.31
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	15.38
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	15.31
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	15.40
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	15.33
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	15.42
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	15.40
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	15.46
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	15.34
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	15.33
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	15.20
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	15.33

N7- (ANT0 DSI0/1)

5G-n7								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	24	23.51
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	24	23.52
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	24	23.44
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	24	23.49
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	24	23.39
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	24	23.43
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	24	23.46
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	23	22.36
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	21.5	20.78
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	19.5	18.77
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	22.5	21.79
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	22	21.38
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	20.5	19.81
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	17.5	16.77
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	23	22.33
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	23	22.32
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	23	22.38
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	23	22.33
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	24	23.42
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	24	23.33
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	23	22.37
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	24	23.16
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	24	23.38

N7- (ANT0 DSI2)

5G-n7							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2567.5	513500	17.23
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2535	507000	17.31
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	2502.5	500500	17.12
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2560	512000	17.23
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2535	507000	17.24
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	2510	502000	17.01
15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2535	507000	17.28
15	5	DFT-s-OFDM 16QAM	Inner_Full	12@6	2535	507000	17.19
15	5	DFT-s-OFDM 64QAM	Inner_Full	12@6	2535	507000	17.21
15	5	DFT-s-OFDM 256QAM	Inner_Full	12@6	2535	507000	17.25
15	5	CP-OFDM QPSK	Inner_Full	12@6	2535	507000	17.18
15	5	CP-OFDM 16QAM	Inner_Full	12@6	2535	507000	17.28
15	5	CP-OFDM 64QAM	Inner_Full	12@6	2535	507000	17.19
15	5	CP-OFDM 256QAM	Inner_Full	12@6	2535	507000	16.71
15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	2535	507000	17.16
15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2535	507000	17.07
15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	2535	507000	17.23
15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2535	507000	17.06
15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	2535	507000	17.23
15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2535	507000	17.18
15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	2535	507000	17.24
15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	2535	507000	17.02
15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	2535	507000	17.18

N38- (ANT4 DSI0)

5G-n38								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	24	23.34
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	24	23.38
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	24	23.36
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	24	23.34
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	24	23.30
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	24	23.33
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	24	23.32
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	23	22.49
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	21.5	20.97
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	19.5	18.93
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	22.5	21.88
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	22	21.53
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	20.5	19.89
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	17.5	16.84
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	23	21.86
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	23	21.85
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	23	21.88
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	23	21.82
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	24	22.87
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	24	22.81
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	23	22.42
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	24	23.29

N38- (ANT4 DSI1)

5G-n38							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	16.52
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	16.53
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	16.50
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	16.26
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	16.28
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	16.23
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	16.41
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	16.32
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	16.27
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	16.29
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	16.22
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	16.42
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	16.27
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	16.17
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	16.29
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	16.33
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	16.31
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	16.34
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	16.32
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	16.33
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	16.25
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	16.35

N38- (ANT4 DSI2)

5G-n38							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	18.39
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	18.52
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	18.49
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	18.33
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	18.40
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	18.41
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	18.44
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	18.31
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	18.32
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	18.29
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	18.24
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	18.43
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	18.32
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	17.85
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	18.35
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	18.42
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	18.34
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	18.29
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	18.23
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	18.27
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	18.25
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	18.45

N38- (ANT4 DSI3)

5G-n38							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	13.44
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	13.48
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	13.35
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	13.31
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	13.26
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	13.29
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	13.42
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	13.38
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	13.27
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	13.33
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	13.19
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	13.37
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	13.27
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	13.16
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	13.32
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	13.36
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	13.28
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	13.36
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	13.28
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	13.29
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	13.31
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	13.42

N38- (ANT4 DSI4)

5G-n38							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	15.36
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	15.49
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	15.45
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	15.32
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	15.27
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	15.32
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	15.43
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	15.35
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	15.27
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	15.33
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	15.24
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	15.44
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	15.31
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	15.21
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	15.29
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	15.32
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	15.37
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	15.31
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	15.35
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	15.28
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	15.25
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	15.35

N38- (ANT0 DSI0/1)

5G-n38								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	24	23.15
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	24	23.19
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	24	23.13
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	24	23.06
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	24	23.07
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	24	23.09
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	24	23.16
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	23	22.12
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	21.5	20.63
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	19.5	18.64
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	22.5	21.69
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	22	21.21
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	20.5	19.52
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	17.5	16.64
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	23	22.07
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	23	22.05
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	23	22.03
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	23	22.02
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	24	23.13
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	24	23.07
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	23	22.95
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	24	23.04

N38- (ANT0 DSI2)

5G-n38							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2615	523000	18.29
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2595	519000	18.35
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	2575	515000	18.18
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2610	522000	18.08
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2595	519000	18.03
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	2580	516000	18.01
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12@6	2595	519000	18.26
30	10	DFT-s-OFDM 16QAM	Inner_Full	12@6	2595	519000	18.19
30	10	DFT-s-OFDM 64QAM	Inner_Full	12@6	2595	519000	18.13
30	10	DFT-s-OFDM 256QAM	Inner_Full	12@6	2595	519000	18.14
30	10	CP-OFDM QPSK	Inner_Full	12@6	2595	519000	18.08
30	10	CP-OFDM 16QAM	Inner_Full	12@6	2595	519000	18.16
30	10	CP-OFDM 64QAM	Inner_Full	12@6	2595	519000	16.64
30	10	CP-OFDM 256QAM	Inner_Full	12@6	2595	519000	16.64
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2@22	2595	519000	18.08
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2595	519000	18.11
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1@23	2595	519000	18.17
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	2595	519000	18.13
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1@22	2595	519000	18.14
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2595	519000	18.08
30	10	DFT-s-OFDM QPSK	Outer_Full	24@0	2595	519000	18.11
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2595	519000	18.17

N41- (ANT4 DSI0)

5G-n41								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2685	537000	24	23.34
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2639	527799	24	23.26
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2592.99	518598	24	23.36
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2455.02	509406	24	23.28
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2501.01	500205	24	23.33
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2640	528000	24	23.31
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2616.495	523299	24	23.27
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2592.99	518598	24	23.35
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2569.5	513900	24	23.24
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2546.01	509202	24	23.31
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	2592.99	518598	24	23.32
30	10	DFT-s-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	23	22.32
30	10	DFT-s-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	21.5	20.85
30	10	DFT-s-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	19.5	18.87
30	10	CP-OFDM QPSK	Inner_Full	12_6	2592.99	518598	22.5	21.86
30	10	CP-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	22	21.39
30	10	CP-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	20.5	19.73
30	10	CP-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	17.5	16.81
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2_22	2592.99	518598	23	22.28
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2592.99	518598	23	22.35
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1_23	2592.99	518598	23	22.29
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2592.99	518598	23	22.32
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1_22	2592.99	518598	24	23.31
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2592.99	518598	24	23.35
30	10	DFT-s-OFDM QPSK	Outer_Full	24_0	2592.99	518598	23	22.35
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2592.99	518598	24	23.32
30	20	DFT-s-OFDM QPSK	Inner_Full	25_12	2592.99	518598	24	23.35
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	24	23.24
30	40	DFT-s-OFDM QPSK	Inner_Full	50_25	2592.99	518598	24	23.32
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	24	23.23
30	60	DFT-s-OFDM QPSK	Inner_Full	81_40	2592.99	518598	24	23.27
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	24	23.31
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	24	23.19
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	24	23.18

N41- (ANT4 DSI1)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2685	537000	15.88
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2639	527799	15.73
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2592.99	518598	15.96
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2455.02	509406	15.58
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2501.01	500205	15.82
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2640	528000	15.78
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2616.495	523299	15.69
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2592.99	518598	15.61
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2569.5	513900	15.61
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2546.01	509202	15.75
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	2592.99	518598	15.61
30	10	DFT-s-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	15.52
30	10	DFT-s-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	15.49
30	10	DFT-s-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	15.48
30	10	CP-OFDM QPSK	Inner_Full	12_6	2592.99	518598	15.42
30	10	CP-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	15.68
30	10	CP-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	15.48
30	10	CP-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	15.42
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2_22	2592.99	518598	15.48
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2592.99	518598	15.54
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1_23	2592.99	518598	15.56
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2592.99	518598	15.56
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1_22	2592.99	518598	15.54
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2592.99	518598	15.53
30	10	DFT-s-OFDM QPSK	Outer_Full	24_0	2592.99	518598	15.45
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2592.99	518598	15.62
30	20	DFT-s-OFDM QPSK	Inner_Full	25_12	2592.99	518598	15.58
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	15.56
30	40	DFT-s-OFDM QPSK	Inner_Full	50_25	2592.99	518598	15.58
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	15.66
30	60	DFT-s-OFDM QPSK	Inner_Full	81_40	2592.99	518598	15.61
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	15.57
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	15.57
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	15.58

N41- (ANT4 DSI2)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2685	537000	17.79
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2639	527799	18.03
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2592.99	518598	18.21
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2547.02	509406	17.78
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2501.01	500205	18.12
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2640	528000	18.06
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2616.495	523299	17.96
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2592.99	518598	17.81
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2569.5	513900	17.86
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2546.01	509202	17.93
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	2592.99	518598	17.82
30	10	DFT-s-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	17.74
30	10	DFT-s-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	17.71
30	10	DFT-s-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	17.78
30	10	CP-OFDM QPSK	Inner_Full	12_6	2592.99	518598	17.64
30	10	CP-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	17.88
30	10	CP-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	17.69
30	10	CP-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	16.52
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2_22	2592.99	518598	17.66
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2592.99	518598	17.73
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1_23	2592.99	518598	17.74
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2592.99	518598	17.73
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1_22	2592.99	518598	17.72
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2592.99	518598	17.72
30	10	DFT-s-OFDM QPSK	Outer_Full	24_0	2592.99	518598	17.67
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2592.99	518598	17.82
30	20	DFT-s-OFDM QPSK	Inner_Full	25_12	2592.99	518598	17.71
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	17.73
30	40	DFT-s-OFDM QPSK	Inner_Full	50_25	2592.99	518598	17.76
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	17.72
30	60	DFT-s-OFDM QPSK	Inner_Full	81_40	2592.99	518598	17.78
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	17.72
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	17.71
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	17.75

N41- (ANT4 DSI3)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2685	537000	13.52
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2639	527799	13.38
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2592.99	518598	13.55
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2455.02	509406	13.43
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2501.01	500205	13.52
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2640	528000	13.43
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2616.495	523299	13.32
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2592.99	518598	13.25
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2569.5	513900	13.26
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2546.01	509202	13.42
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	2592.99	518598	13.22
30	10	DFT-s-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	13.13
30	10	DFT-s-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	13.09
30	10	DFT-s-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	13.11
30	10	CP-OFDM QPSK	Inner_Full	12_6	2592.99	518598	13.05
30	10	CP-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	13.29
30	10	CP-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	13.09
30	10	CP-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	13.01
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2_22	2592.99	518598	13.08
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2592.99	518598	13.13
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1_23	2592.99	518598	13.12
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2592.99	518598	13.13
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1_22	2592.99	518598	13.11
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2592.99	518598	13.08
30	10	DFT-s-OFDM QPSK	Outer_Full	24_0	2592.99	518598	13.06
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2592.99	518598	13.21
30	20	DFT-s-OFDM QPSK	Inner_Full	25_12	2592.99	518598	13.18
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	13.18
30	40	DFT-s-OFDM QPSK	Inner_Full	50_25	2592.99	518598	13.15
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	13.19
30	60	DFT-s-OFDM QPSK	Inner_Full	81_40	2592.99	518598	13.17
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	13.16
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	13.18
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	13.16

N41- (ANT4 DSI4)

5G-n41							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2685	537000	15.06
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2639	527799	15.03
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2592.99	518598	15.25
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2547.02	509406	15.01
30	10	DFT-s-OFDM QPSK	Inner_Full	12_6	2501.01	500205	15.24
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2640	528000	15.18
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2616.495	523299	14.95
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2592.99	518598	14.88
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2569.5	513900	14.87
30	100	DFT-s-OFDM QPSK	Inner_Full	135_67	2546.01	509202	15.01
30	10	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	2592.99	518598	14.94
30	10	DFT-s-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	14.77
30	10	DFT-s-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	14.73
30	10	DFT-s-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	14.77
30	10	CP-OFDM QPSK	Inner_Full	12_6	2592.99	518598	14.64
30	10	CP-OFDM 16QAM	Inner_Full	12_6	2592.99	518598	14.95
30	10	CP-OFDM 64QAM	Inner_Full	12_6	2592.99	518598	14.73
30	10	CP-OFDM 256QAM	Inner_Full	12_6	2592.99	518598	14.65
30	10	DFT-s-OFDM QPSK	Edge_Full_Right	2_22	2592.99	518598	14.71
30	10	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	2592.99	518598	14.75
30	10	DFT-s-OFDM QPSK	Edge_1RB_Right	1_23	2592.99	518598	14.83
30	10	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	2592.99	518598	14.76
30	10	DFT-s-OFDM QPSK	Inner_1RB_Right	1_22	2592.99	518598	14.77
30	10	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	2592.99	518598	14.83
30	10	DFT-s-OFDM QPSK	Outer_Full	24_0	2592.99	518598	14.63
30	15	DFT-s-OFDM QPSK	Inner_Full	18_9	2592.99	518598	14.86
30	20	DFT-s-OFDM QPSK	Inner_Full	25_12	2592.99	518598	14.85
30	30	DFT-s-OFDM QPSK	Inner_Full	36_18	2592.99	518598	14.83
30	40	DFT-s-OFDM QPSK	Inner_Full	50_25	2592.99	518598	14.82
30	50	DFT-s-OFDM QPSK	Inner_Full	64_32	2592.99	518598	14.80
30	60	DFT-s-OFDM QPSK	Inner_Full	81_40	2592.99	518598	14.84
30	70	DFT-s-OFDM QPSK	Inner_Full	90_45	2592.99	518598	14.81
30	80	DFT-s-OFDM QPSK	Inner_Full	108_54	2592.99	518598	14.83
30	90	DFT-s-OFDM QPSK	Inner_Full	120_60	2592.99	518598	14.82

N77- (ANT5 DSI0)

5G-n77(3450-3550MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	24	23.13
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	24	23.18
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	24	23.05
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	24	23.15
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	24	23.16
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	24	23.12
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	23	22.13
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	21.5	20.73
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	19.5	18.94
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	22.5	21.75
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	22	21.12
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	20.5	19.82
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	17.5	16.86
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	23	22.11
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	23	22.13
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	23	22.06
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	23	21.59
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	24	22.61
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	24	22.65
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	23	22.22
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	24	23.12
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	24	23.14
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	24	23.09
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	24	23.08
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	24	23.06
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	24	23.07
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	24	23.11

5G-n77(3700-3980MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	24	23.21
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	24	22.80
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	24	22.79
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	24	22.98
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	24	23.15
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	24	23.09
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	24	22.93
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	24	22.74
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	24	22.87
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	24	23.22
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	24	23.12
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	24	23.17
30	100	DFT-s-OFDM PI/2 BPSK1	Inner_Full	135@67	3822.000	654800	24	23.12
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	23	22.03
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	21.5	20.48
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	19.5	18.65
30	100	CP-OFDM QPSK	Inner_Full	135@67	3822.000	654800	22.5	21.48
30	100	CP-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	22	20.97
30	100	CP-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	20.5	19.61
30	100	CP-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	17.5	16.63
30	100	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3822.000	654800	23	21.21
30	100	DFT-s-OFDM QPSK	Edge_1RB_Right	1@272	3822.000	654800	23	21.12
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3822.000	654800	23	21.38
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3822.000	654800	23	21.26
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3822.000	654800	24	22.05
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3822.000	654800	24	22.21
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3822.000	654800	23	21.82
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3822.000	661200	24	23.01
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3822.000	661200	24	23.04
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3822.000	661200	24	22.88
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3822.000	661200	24	22.93
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3822.000	661200	24	22.89
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3822.000	661200	24	22.98
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3822.000	661200	24	23.01

N77- (ANT5 DSI1)

5G-n77(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	15.20
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	15.23
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	15.19
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	15.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	15.22
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	15.22
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	15.18
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	15.19
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	15.20
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	15.21
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	15.22
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	15.18
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	15.17
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	15.16
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	15.19
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	15.18
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	15.17
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	15.21
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	15.20
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	15.21
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	15.21
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	15.16
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	15.15
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	15.18
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	15.19
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	15.20
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	15.21

5G-n77(3700-3980MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	15.11
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	15.13
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	15.15
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	15.12
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	15.14
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	15.15
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	15.13
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	15.09
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	15.12
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	15.18
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	15.10
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	15.16
30	100	DFT-s-OFDM PI/2 BPSK1	Inner_Full	135@67	3822.000	654800	15.15
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	15.13
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	15.11
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	15.14
30	100	CP-OFDM QPSK	Inner_Full	135@67	3822.000	654800	15.12
30	100	CP-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	15.08
30	100	CP-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	15.09
30	100	CP-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	15.10
30	100	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3822.000	654800	15.11
30	100	DFT-s-OFDM QPSK	Edge_1RB_Right	1@272	3822.000	654800	15.05
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3822.000	654800	15.08
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3822.000	654800	15.06
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3822.000	654800	15.07
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3822.000	654800	15.12
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3822.000	654800	15.14
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3822.000	654800	15.15
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3822.000	654800	15.13
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3822.000	654800	15.11
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3822.000	654800	15.12
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3822.000	654800	15.09
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3822.000	654800	15.08
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3822.000	654800	15.10

N77- (ANT5 DSI2)

5G-n77(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	18.11
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	18.13
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	18.10
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	17.85
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	17.99
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	18.02
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	17.90
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	18.01
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	17.90
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	17.98
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	17.99
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	18.08
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	17.46
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	17.86
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	17.76
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	17.86
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	17.80
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	17.65
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	17.81
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	17.91
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	17.98
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	18.09
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	17.97
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	18.07
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	17.93
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	18.10
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	17.87

5G-n77(3700-3980MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	17.66
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	17.41
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	17.25
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	17.53
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	17.94
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	17.95
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	17.55
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	17.14
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	17.17
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	18.02
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	17.76
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	17.74
30	100	DFT-s-OFDM PI/2 BPSK1	Inner_Full	135@67	3822.000	654800	17.69
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	17.51
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	17.52
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	17.58
30	100	CP-OFDM QPSK	Inner_Full	135@67	3822.000	654800	17.54
30	100	CP-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	17.55
30	100	CP-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	17.41
30	100	CP-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	16.95
30	100	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3822.000	654800	17.11
30	100	DFT-s-OFDM QPSK	Edge_1RB_Right	1@272	3822.000	654800	16.55
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3822.000	654800	16.60
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3822.000	654800	17.02
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3822.000	654800	16.49
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3822.000	654800	17.07
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3822.000	654800	17.34
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3822.000	661200	17.50
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3822.000	661200	17.52
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3822.000	661200	17.62
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3822.000	661200	17.50
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3822.000	661200	17.54
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3822.000	661200	17.46
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3822.000	661200	17.47

N77- (ANT5 DSI3)

5G-n77(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	12.24
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	12.26
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	12.22
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	12.23
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	12.20
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	12.25
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	12.23
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	12.21
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	12.22
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	12.20
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	12.19
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	12.18
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	12.15
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	12.21
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	12.24
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	12.23
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	12.22
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	12.21
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	12.20
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	12.19
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	12.18
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	12.18
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	12.19
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	12.22
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	12.24
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	12.21
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	12.20

5G-n77(3700-3980MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	12.10
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	12.09
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	12.11
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	12.07
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	12.09
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	12.10
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	12.06
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	12.05
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	12.07
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	12.15
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	12.11
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	12.13
30	100	DFT-s-OFDM PI/2 BPSK1	Inner_Full	135@67	3822.000	654800	12.12
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	12.11
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	12.09
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	12.07
30	100	CP-OFDM QPSK	Inner_Full	135@67	3822.000	654800	12.10
30	100	CP-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	12.11
30	100	CP-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	12.09
30	100	CP-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	12.06
30	100	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3822.000	654800	12.08
30	100	DFT-s-OFDM QPSK	Edge_1RB_Right	1@272	3822.000	654800	12.09
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3822.000	654800	12.06
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3822.000	654800	12.05
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3822.000	654800	12.09
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3822.000	654800	12.08
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3822.000	654800	12.04
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3822.000	654800	12.11
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3822.000	654800	12.10
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3822.000	654800	12.12
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3822.000	654800	12.11
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3822.000	654800	12.10
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3822.000	654800	12.09
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3822.000	654800	12.08

N77- (ANT5 DSI4)

5G-n77(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	14.89
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	14.95
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	14.70
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	14.89
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	14.79
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	14.84
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	14.78
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	14.88
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	14.84
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	14.82
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	14.91
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	14.93
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	14.90
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	14.84
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	14.75
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	14.80
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	14.77
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	14.71
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	14.72
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	14.90
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	14.78
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	14.77
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	14.89
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	14.93
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	14.82
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	14.75
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	14.87

5G-n77(3700-3980MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3969.990	664666	14.93
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3918.000	661200	14.41
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3866.000	657733	14.31
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3814.000	654267	14.55
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3762.000	650800	14.90
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.010	647334	14.86
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.000	662000	14.62
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3894.000	659600	14.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3858.000	657200	14.23
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3822.000	654800	14.94
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3786.000	652400	14.82
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.000	650000	14.78
30	100	DFT-s-OFDM PI/2 BPSK1	Inner_Full	135@67	3822.000	654800	14.63
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	14.52
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	14.47
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	14.52
30	100	CP-OFDM QPSK	Inner_Full	135@67	3822.000	654800	14.51
30	100	CP-OFDM 16QAM	Inner_Full	135@67	3822.000	654800	14.63
30	100	CP-OFDM 64QAM	Inner_Full	135@67	3822.000	654800	14.51
30	100	CP-OFDM 256QAM	Inner_Full	135@67	3822.000	654800	14.51
30	100	DFT-s-OFDM QPSK	Edge_1RB_Left	1@0	3822.000	654800	14.20
30	100	DFT-s-OFDM QPSK	Edge_1RB_Right	1@272	3822.000	654800	13.68
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3822.000	654800	13.88
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3822.000	654800	14.18
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3822.000	654800	13.70
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3822.000	654800	14.16
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3822.000	654800	14.34
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3822.000	661200	14.53
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3822.000	661200	14.46
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3822.000	661200	14.49
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3822.000	661200	14.43
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3822.000	661200	14.51
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3822.000	661200	14.55
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3822.000	661200	14.57

N78- (ANT5 DSI0)

5G-n78(3450-3550MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	25	24.38
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	25	24.49
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	25	24.42
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	25	24.45
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	25	24.43
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	25	24.45
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	24	23.39
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	22.5	21.84
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	20.5	20.10
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	23.5	22.93
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	23	22.34
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	21.5	20.85
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	18.5	18.04
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	24	23.26
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	24	22.72
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	24	22.75
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	24	23.21
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	25	24.38
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	25	23.82
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	24	23.38
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	25	24.41
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	25	24.43
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	25	24.39
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	25	24.38
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	25	24.46
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	25	24.47
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	25	24.48

5G-n78(3700-3800MHz)								
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3787.5	652500	25	24.06
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3750	650000	25	24.33
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3712.5	647500	25	24.28
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	25	24.19
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3750	650000	25	24.29
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3750	650000	24	23.18
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3750	650000	22.5	21.68
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3750	650000	20.5	19.79
30	20	CP-OFDM QPSK	Inner_Full	25@12	3750	650000	23.5	22.65
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3750	650000	23	22.31
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3750	650000	21.5	20.82
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3750	650000	18.5	17.77
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@49	3750	650000	24	23.07
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@0	3750	650000	24	22.52
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3750	650000	24	22.56
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3750	650000	24	22.65
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3750	650000	25	23.55
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	25	23.58
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3750	650000	24	23.17
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	25	24.32
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	25	24.31
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	25	24.18
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	25	24.22
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	25	24.15
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	25	24.12
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	25	24.11

N78- (ANT5 DSI1)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	16.22
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	16.24
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	16.23
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	16.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	16.20
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	16.23
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	16.18
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	16.19
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	16.17
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	16.19
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	16.15
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	16.14
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	16.13
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	16.20
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	16.21
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	16.22
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	16.19
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	16.21
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	16.22
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	16.21
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	16.20
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	16.18
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	16.16
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	16.17
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	16.15
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	16.13
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	16.18

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3787.5	652500	15.81
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3750	650000	15.89
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3712.5	647500	15.84
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	15.85
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3750	650000	15.86
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3750	650000	15.84
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3750	650000	15.86
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3750	650000	15.83
30	20	CP-OFDM QPSK	Inner_Full	25@12	3750	650000	15.82
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3750	650000	15.81
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3750	650000	15.80
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3750	650000	15.84
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@49	3750	650000	15.85
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@0	3750	650000	15.83
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3750	650000	15.82
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3750	650000	15.79
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3750	650000	15.78
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	15.81
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3750	650000	15.82
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	15.83
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	15.85
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	15.86
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	15.84
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	15.83
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	15.82
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	15.79

N78- (ANT5 DSI2)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	18.71
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	18.78
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	18.47
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	18.68
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	18.75
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	18.73
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	18.63
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	18.47
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	18.56
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	18.63
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	18.74
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	18.70
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	18.22
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	18.60
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	18.68
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	18.66
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	18.69
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	18.66
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	18.65
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	18.73
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	18.76
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	18.69
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	18.76
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	18.66
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	18.73
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	18.73
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	18.71

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3787.5	652500	18.47
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3750	650000	18.69
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3712.5	647500	18.60
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	18.63
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3750	650000	18.64
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3750	650000	18.56
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3750	650000	18.44
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3750	650000	18.56
30	20	CP-OFDM QPSK	Inner_Full	25@12	3750	650000	18.50
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3750	650000	18.64
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3750	650000	18.53
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3750	650000	18.05
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@49	3750	650000	18.52
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@0	3750	650000	18.52
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3750	650000	18.52
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3750	650000	18.54
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3750	650000	18.46
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	18.56
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3750	650000	18.61
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	18.65
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	18.67
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	18.61
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	18.65
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	18.63
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	18.64
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	18.48

N78- (ANT5 DSI3)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	13.23
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	13.28
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	13.22
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	13.23
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	13.24
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	13.26
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	13.24
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	13.23
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	13.22
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	13.25
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	13.22
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	13.21
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	13.20
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	13.23
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	13.24
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	13.25
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	13.23
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	13.19
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	13.21
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	13.18
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	13.17
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	13.16
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	13.15
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	13.20
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	13.19
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	13.21
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	13.22

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	12@6	3795	653000	12.88
30	20	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	12.92
30	20	DFT-s-OFDM QPSK	Inner_Full	12@6	3705	647000	12.85
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	12.85
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3750	650000	12.89
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3750	650000	12.87
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3750	650000	12.83
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3750	650000	12.88
30	20	CP-OFDM QPSK	Inner_Full	25@12	3750	650000	12.87
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3750	650000	12.86
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3750	650000	12.84
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3750	650000	12.86
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@49	3750	650000	12.83
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@0	3750	650000	12.89
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3750	650000	12.88
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3750	650000	12.84
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3750	650000	12.85
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	12.82
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3750	650000	12.81
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	12.79
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	12.78
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	12.87
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	12.86
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	12.84
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	12.85
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	12.84

N78- (ANT5 DSI4)

5G-n78(3450-3550MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540	636000	15.74
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	15.86
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	15.70
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3499.98	633332	15.70
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	15.80
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3500.01	633334	15.81
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	15.78
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	15.69
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	15.75
30	20	CP-OFDM QPSK	Inner_Full	25@12	3500.01	633334	15.80
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3500.01	633334	15.81
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3500.01	633334	15.84
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3500.01	633334	15.79
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@49	3500.01	633334	15.68
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@0	3500.01	633334	15.73
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3500.01	633334	15.63
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3500.01	633334	15.64
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3500.01	633334	15.66
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	15.64
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3500.01	633334	15.70
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3500.01	633334	15.77
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3500.01	633334	15.77
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	15.74
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	15.74
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	15.73
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	15.68
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	15.72

5G-n78(3700-3800MHz)							
SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Power Results (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3787.5	652500	15.36
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3750	650000	15.56
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3712.5	647500	15.49
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750	650000	15.42
30	20	DFT-s-OFDM PI/2 BPSK1	Inner_Full	25@12	3750	650000	15.47
30	20	DFT-s-OFDM 16QAM	Inner_Full	25@12	3750	650000	15.48
30	20	DFT-s-OFDM 64QAM	Inner_Full	25@12	3750	650000	15.42
30	20	DFT-s-OFDM 256QAM	Inner_Full	25@12	3750	650000	15.48
30	20	CP-OFDM QPSK	Inner_Full	25@12	3750	650000	15.41
30	20	CP-OFDM 16QAM	Inner_Full	25@12	3750	650000	15.42
30	20	CP-OFDM 64QAM	Inner_Full	25@12	3750	650000	15.52
30	20	CP-OFDM 256QAM	Inner_Full	25@12	3750	650000	15.42
30	20	DFT-s-OFDM QPSK	Edge_1RB_Left	2@49	3750	650000	15.46
30	20	DFT-s-OFDM QPSK	Edge_1RB_Right	2@0	3750	650000	15.40
30	20	DFT-s-OFDM QPSK	Edge_Full_Right	1@50	3750	650000	15.48
30	20	DFT-s-OFDM QPSK	Edge_Full_Left	1@0	3750	650000	15.44
30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	3750	650000	15.36
30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3750	650000	15.37
30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	3750	650000	15.44
30	10	DFT-s-OFDM QPSK	Inner_Full	12@6	3750	650000	15.50
30	15	DFT-s-OFDM QPSK	Inner_Full	18@9	3750	650000	15.44
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3750	650000	15.46
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3750	650000	15.44
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3750	650000	15.47
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3750	650000	15.51
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3750	650000	15.41

11.5 Wi-Fi and BT Measurement result

The maximum output power of BT antenna is 9.81dBm.
The maximum tune up of BT antenna is 10dBm.

Table 11.5: Summary of Receiver detection mechanism-WIFI antenna

Antenna	Receiver off+ Sar senser off	Receiver on	Receiver off+SAR sensor on
WIFI Antenna	**DSI0**	**DSI1**	**DSI2**

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

DSI0/2

802.11b				
Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
11(2462MHz)	18.82	/	/	/
6(2437(MHz)	18.94	18.71	18.74	18.63
1(2412MHz)	18.69	/	/	/
Tune up	20.00	20.00	20.00	20.00

802.11g								
Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
11(2462MHz)	16.69	/	/	/	/	/	/	/
6(2437(MHz)	16.83	16.57	16.43	16.45	16.52	16.46	16.61	16.63
1(2412MHz)	16.77	/	/	/	/	/	/	/
Tune up	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00

802.11n-20MHz								
Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
11(2462MHz)	14.68	/	/	/	/	/	/	/
6(2437(MHz)	14.75	/	/	/	/	/	/	/
Tune up	15.00	/	/	/	/	/	/	/
1(2412MHz)	16.66	16.38	16.27	16.29	16.31	16.39	15.91	15.42
Tune up	17.00	17.00	17.00	17.00	17.00	17.00	16.50	16.00

DSI1

802.11b				
Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
11(2462MHz)	12.79	/	/	/
6(2437(MHz)	12.88	12.73	12.76	12.53
1(2412MHz)	12.53	/	/	/
Tune up	14.50	14.50	14.50	14.50

802.11g								
Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
11(2462MHz)	12.48	/	/	/	/	/	/	/
6(2437(MHz)	12.51	12.44	12.42	12.39	12.43	12.33	12.48	12.45
1(2412MHz)	12.42	/	/	/	/	/	/	/
Tune up	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
802.11n-20MHz								
Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
11(2462MHz)	12.28	12.17	12.24	12.09	11.95	12.24	12.23	12.17
6(2437(MHz)	12.26	/	/	/	/	/	/	/
1(2412MHz)	12.23	/	/	/	/	/	/	/
Tune up	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50

The tune up power for Wi-Fi 5G is as following:

Mode	Rate	Channel	Freq.	Output Power Tolerance (dBm)		Reduced Power(dBm)			
						Body		Head	
			(MHz)	Setting Power	Maximum	Target	Maximum	Target	Maximum
802.11a 20M	6Mbps	36-64	5180-5320	17	19	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	17	19	14	16.5	14	16.5
	9Mbps	36-64	5180-5320	16.5	18.5	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16.5	18.5	14	16.5	14	16.5
	12Mbps	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16	14	16
	18Mbps	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16	14	16
	24Mbps	36-64	5180-5320	15.5	17.5	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	36Mbps	36-64	5180-5320	15.5	17.5	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	48Mbps	36-64	5180-5320	15	17	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15	17	14	16	14	16

	54Mbps	36-64	5180-5320	15	17	14	16	14	16
		100-136，144	5500-5680，5720	14	16	14	16	14	16
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15	17	14	16	14	16
802.11n 20M	MCS0	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS1	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS2	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16	14	16
	MCS3	36-64	5180-5320	15.5	17.5	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS4	36-64	5180-5320	15.5	17.5	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS5	36-64	5180-5320	15	17	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15	17	14	16	14	16
	MCS6	36-64	5180-5320	14.5	16.5	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	14.5	16.5	14	16	14	16
	MCS7	36-64	5180-5320	14	16	14	16	14	16

		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	14	16	14	16	14	16
802.11n 40M	MCS0	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS1	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS2	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16	14	16
	MCS3	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS4	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS5	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	15	17	14	16	14	16
	MCS6	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	14.5	16.5	14	16	14	16
	MCS7	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	14	16	14	16	14	16
802.11ac 20M	MCS0	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS1	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS2	36-64	5180-5320	16	18	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15

		140	5700	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16	14	16
	MCS3	36-64	5180-5320	15.5	17.5	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS4	36-64	5180-5320	15.5	17.5	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS5	36-64	5180-5320	15	17	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	15	17	14	16	14	16
	MCS6	36-64	5180-5320	14.5	16.5	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	14.5	16.5	14	16	14	16
	MCS7	36-64	5180-5320	14	16	14	16	14	16
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	14	16	14	16	14	16
	MCS8	36-64	5180-5320	13.5	15.5	13.5	15.5	13.5	15.5
		100-136，144	5500-5680，5720	13	15	13	15	13	15
		140	5700	12	14	12	14	12	14
		149-165	5745-5825	13.5	15.5	13.5	15.5	13.5	15.5
802.11ac 40M	MCS0	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS1	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS2	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	16	18	14	16	14	16

	MCS3	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS4	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS5	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	15	17	14	16	14	16
	MCS6	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	14.5	16.5	14	16	14	16
	MCS7	36-64	5180-5320	14	16	14	16	14	16
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	14	16	14	16	14	16
	MCS8	36-64	5180-5320	13.5	15.5	13.5	15.5	13.5	15.5
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	13.5	15.5	13.5	15.5	13.5	15.5
	MCS9	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	13	15	13	15	13	15
		149-165	5745-5825	13	15	13	15	13	15
802.11ac 80M	MCS0	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS1	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16.5	14	16.5
	MCS2	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	16	18	14	16	14	16
	MCS3	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS4	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	15.5	17.5	14	16	14	16
	MCS5	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	15	17	14	16	14	16
	MCS6	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14

		149-165	5745-5825	14.5	16.5	14	16	14	16
	MCS7	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	14	16	14	16	14	16
	MCS8	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	13.5	15.5	13.5	15.5	13.5	15.5
	MCS9	36-64	5180-5320	13	15	13	15	13	15
		100-144	5500-5720	12	14	12	14	12	14
		149-165	5745-5825	13	15	13	15	13	15

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

DSI0

802.11a(dBm)								
Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
36(5180 MHz)	17.12							
40(5200 MHz)	17.41	17.19	16.79	16.65	16.01	16.15	15.58	15.59
44(5220 MHz)	17.19							
48(5240 MHz)	17.15							
52(5260 MHz)	17.31	/	/	/	/	/	/	/
56(5280 MHz)	17.55	/	/	/	/	/	/	/
60(5300 MHz)	17.77	/	/	/	/	/	/	/
64(5320 MHz)	17.98	17.41	16.95	16.94	16.45	16.28	15.25	15.67
Tune up	19.00	18.50	18.00	18.00	17.50	17.50	17.00	17.00
100(5500 MHz)	14.64	/	/	/	/	/	/	/
104(5520 MHz)	14.59	/	/	/	/	/	/	/
108(5540 MHz)	14.74	/	/	/	/	/	/	/
112(5560 MHz)	14.68	/	/	/	/	/	/	/
116(5580 MHz)	14.66	/	/	/	/	/	/	/
120(5600 MHz)	14.54	/	/	/	/	/	/	/
124(5620 MHz)	14.48	/	/	/	/	/	/	/
128(5640 MHz)	14.45	/	/	/	/	/	/	/
132(5660 MHz)	14.56	/	/	/	/	/	/	/
136(5680 MHz)	14.89	/	/	/	/	/	/	/
140(5700 MHz)	12.97	/	/	/	/	/	/	/
144(5720 MHz)	14.95	14.81	14.82	14.76	14.78	14.67	14.59	14.49
Tune up	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
149(5745 MHz)	18.39	17.96	17.45	17.38	16.95	16.83	16.19	15.98
153(5765 MHz)	18.36	/	/	/	/	/	/	/
157(5785 MHz)	18.35	/	/	/	/	/	/	/
161(5805 MHz)	18.16	/	/	/	/	/	/	/
165(5825 MHz)	18.04	/	/	/	/	/	/	/
Tune up	19.00	18.50	18.00	18.00	17.50	17.50	17.00	17.00

DSI1/2

802.11n(dBm)-40MHz								
Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
38(5190 MHz)	14.36	14.34	13.84	13.74	13.73	13.45	13.14	13.12
46(5230 MHz)	14.28	/	/	/	/	/	/	/
54(5270 MHz)	14.51	/	/	/	/	/	/	/
62(5310 MHz)	14.88	14.42	14.39	14.34	14.03	13.98	13.97	13.56
Tune up	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00

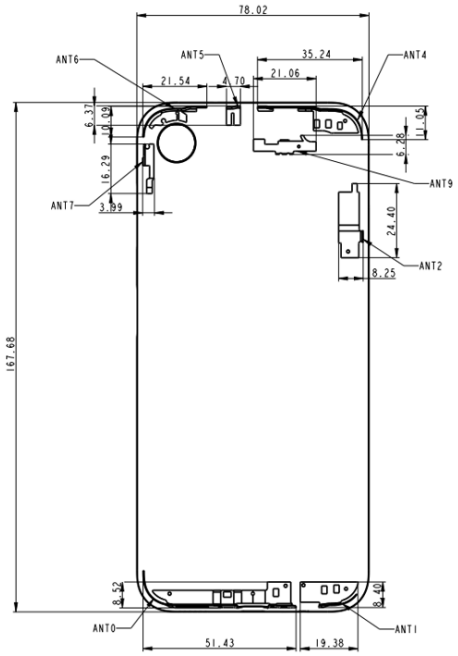
802.11ac(dBm)-80MHz										
Channel\data rate	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
155(5775 MHz)	14.71	14.68	14.39	14.28	14.19	14.22	14.16	14.18	13.66	13.14
Tune up	16.50	16.50	16.00	16.00	16.00	16.00	16.00	16.00	15.50	15.00

12 Simultaneous TX SAR Considerations

12.1 Introduction

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

12.2 Transmit Antenna Separation Distances



2G/3G/4G/5G

ANT		Band
ANT0	TX&RX	GSM 850/900
		WCDMA B5/8
		LTE B5/8/12/17/20/26/28/40/41
		NR 5/8/20/28/40
	RX	LTE B7/38
		NR 7/38/41
ANT1	TX&RX	GSM 1800/1900
		WCDMA B2/4
		LTE B2/4/66
		NR 3
	RX	LTE B1/3
		NR 1
ANT2	RX	WCDMA B1
		LTE B1/3/7/38/41
		NR 1/3/7/38/41/77/78
ANT4	TX&RX	WCDMA B1
		LTE B1/3/7/38
		NR 1/7/38/41
	RX	GSM 850/900/1800/1900
		WCDMA B2/4/5/8
		LTE B2/4/5/8/12/17/20/26/28/40/41/66
		NR 3/5/8/20/28/40
ANT5	TX&RX	NR 77/78
ANT6	TX&RX	WIFI 2.4G/5G
		BT
	RX	GPS
ANT7	RX	LTE B1/3/7/38/41
		NR 1/3/7/38/41/77/78
ANT9	RX	NR 77/78

Picture 12.1 Antenna Locations

12.3 SAR Measurement Positions

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

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
ANT0	Yes	Yes	Yes	Yes	No	Yes
ANT1	Yes	Yes	Yes	No	No	Yes
ANT4	Yes	Yes	Yes	No	Yes	No
ANT5	Yes	Yes	No	Yes	Yes	No
ANT6	Yes	Yes	No	Yes	Yes	No

13 Evaluation of Simultaneous

The sum of reported SAR values for 2/3/4G +WiFi

Reported SAR 1g (W/kg)																					
State		1															3	4	5	1+2	1+3+4
Head		G850 ANT0	G1900 ANT1	W1900 ANT1	W1700 ANT1	W850 ANT0	LTE B2 ANT1	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT4	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT4	LTE B38 ANT0	LTE B41 ANT0	WiFi 2.4G	WiFi 5G	BT		
Cheek	L	0.42	0.24	0.18	0.28	0.31	0.22	0.30	0.35	0.19	0.02	0.22	0.26	0.19	0.02	0.05	0.21	0.35	0.11	0.63	0.88
Tilt	L	0.27	0.20	0.16	0.18	0.18	0.12	0.18	0.18	0.24	0.02	0.17	0.16	0.25	0.00	0.00	0.25	0.45	0.11	0.52	0.83
Cheek	R	0.33	0.21	0.16	0.40	0.32	0.21	0.29	0.33	0.52	0.02	0.15	0.28	0.52	0.00	0.00	0.07	0.19	0.00	0.59	0.71
Tilt	R	0.35	0.12	0.09	0.19	0.23	0.12	0.28	0.25	0.89	0.00	0.12	0.21	0.75	0.00	0.00	0.10	0.24	0.04	0.99	1.17
State		1															3	4	5	1+2	1+3+4
Body		G850 ANT0	G1900 ANT1	W1900 ANT1	W1700 ANT1	W850 ANT0	LTE B2 ANT1	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT4	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT4	LTE B38 ANT0	LTE B41 ANT0	WiFi 2.4G	WiFi 5G	BT		
Front	10mm	0.37	0.49	0.51	0.56	0.25	0.48	0.55	0.34	0.34	0.35	0.30	0.24	0.38	0.37	0.36	0.27	0.09	0.00	0.83	0.65
Rear	10mm	0.71	0.70	1.08	0.64	0.50	0.78	0.72	0.52	0.69	0.77	0.31	0.50	0.77	0.60	0.68	0.28	0.44	0.04	1.36	1.56
Left	10mm	0.14	0.34	0.34	0.38	0.04	0.35	0.31	0.45	0.70	0.07	0.06	0.06	0.48	0.12	0.05				0.70	0.70
Right	10mm	0.16				0.06			0.09		0.38	0.07	0.16		0.22	0.31	0.26	0.24	0.00	0.64	0.62
Bottom	10mm	0.43	0.89	0.79	0.75	0.19	0.68	0.61	0.29		0.74	0.20	0.25			0.77				0.89	0.89
Top	10mm									0.94				0.98	0.98		0.25	0.37	0.00	1.23	1.35

The sum of reported SAR values for 5G NR +WiFi

Reported SAR 1g (W/kg)													
State		1								3	4	5	1+2	1+3+4
Head		N5 ANT0	N7 ANT4	N7 ANT0	N38 ANT4	N38 ANT0	N41 ANT4	N77 ANT5	N78 ANT5	WiFi 2.4G	WiFi 5G	BT		
Cheek	L	0.23	0.26	0.00	0.26	0.03	0.22	0.67	0.70	0.21	0.35	0.11	0.91	1.16
Tilt	L	0.14	0.33	0.00	0.32	0.02	0.27	0.71	0.63	0.25	0.45	0.11	0.96	1.27
Cheek	R	0.25	0.69	0.05	0.74	0.02	0.62	0.42	0.42	0.07	0.19	0.00	0.81	0.93
Tilt	R	0.17	0.99	0.04	0.99	0.00	0.95	0.44	0.47	0.10	0.24	0.04	1.09	1.27
State		1								3	4	5	1+2	1+3+4
Body		N5 ANT0	N7 ANT4	N7 ANT0	N38 ANT5	N38 ANT0	N41 ANT4	N77 ANT5	N78 ANT5	WiFi 2.4G	WiFi 5G	BT		
Front	10mm	0.14	0.30	0.38	0.27	0.37	0.26	0.42	0.44	0.27	0.09	0.00	0.71	0.53
Rear	10mm	0.34	0.58	0.70	0.52	0.65	0.50	0.73	0.86	0.28	0.44	0.04	1.14	1.34
Left	10mm	0.00	0.54	0.05	0.45	0.00	0.39						0.54	0.54
Right	10mm	0.07		0.27		0.10		0.46	0.35	0.26	0.24	0.00	0.72	0.70
Bottom	10mm	0.33		0.87		0.81							0.87	0.87
Top	10mm		0.87		0.67		0.88	0.55	0.59	0.25	0.37	0.00	1.13	1.25

The sum of reported SAR values for ENDC (N5 relative combination) + WiFi

Reported SAR 1g (W/kg)										
State		1	2		3	4	5	6		
Head		N5 ANT0	LTE B7 ANT4	LTE B41 ANT4	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Cheek	L	0.23	0.09	0.06	0.21	0.35	0.11	0.32	0.53	0.78
Tilt	L	0.14	0.12	0.06	0.25	0.45	0.11	0.26	0.51	0.82
Cheek	R	0.25	0.25	0.30	0.07	0.19	0.00	0.55	0.62	0.74
Tilt	R	0.17	0.46	0.20	0.10	0.24	0.04	0.63	0.73	0.91
State		1	2		3	4	5	6		
Body		N5 ANT0	LTE B7 ANT4	LTE B41 ANT4	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Front	10mm	0.14	0.14	0.07	0.27	0.09	0.00	0.28	0.55	0.37
Rear	10mm	0.34	0.36	0.11	0.28	0.44	0.04	0.70	0.98	1.18
Left	10mm	0.00	0.70					0.70	0.70	0.70
Right	10mm	0.07			0.26	0.24	0.00	0.07	0.33	0.31
Bottom	10mm	0.33						0.33	0.33	0.33
Top	10mm		0.49	0.16	0.25	0.37	0.00	0.49	0.74	0.86
State		1	2		3	4	5	6		
Sensor		N5 ANT0	LTE B7 ANT4	LTE B41 ANT4	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Front	13mm	0.14	0.71	0.33	0.27	0.16	0.00	0.85	1.12	1.01
Rear	17/19mm	0.34	0.62	0.42	0.28	0.31	0.04	0.96	1.24	1.31
Right	14mm	0.07				0.44	0.00	0.07	0.07	0.51
Bottom	17/19/22mm	0.33						0.33	0.33	0.33
Top	15/18mm		0.83	0.56	0.25	0.38	0.00	0.83	1.08	1.21

The sum of reported SAR values for ENDC (N7 relative combination) + WiFi

Reported SAR 1g (W/kg)												
State		1	2				3	4	5	6		
Head		N7 ANT4	LTE B5 ANT0	LTE B7 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Cheek	L	0.16	0.35	0.02	0.05	0.26	0.21	0.35	0.11	0.51	0.72	0.97
Tilt	L	0.21	0.18	0.02	0.00	0.29	0.25	0.45	0.11	0.50	0.75	1.06
Cheek	R	0.40	0.33	0.02	0.00	0.31	0.07	0.19	0.00	0.73	0.80	0.92
Tilt	R	0.50	0.25	0.00	0.00	0.13	0.10	0.24	0.04	0.75	0.85	1.03
State		1	2				3	4	5	6		
Body		N7 ANT4	LTE B5 ANT0	LTE B7 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Front	10mm	0.15	0.34	0.22	0.23	0.30	0.27	0.09	0.00	0.49	0.76	0.58
Rear	10mm	0.29	0.52	0.50	0.39	0.32	0.28	0.44	0.04	0.81	1.09	1.29
Left	10mm	0.54	0.45		0.05	0.41				0.99	0.99	0.99
Right	10mm		0.09		0.31	0.22	0.26	0.24	0.00	0.31	0.57	0.55
Bottom	10mm		0.29	0.47	0.44	0.42				0.47	0.47	0.47
Top	10mm	0.43					0.25	0.37	0.00	0.43	0.68	0.80
State		1	2				3	4	5	6		
Sensor		N7 ANT4	LTE B5 ANT0	LTE B7 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Front	13mm	0.48	0.34	0.67	0.48	0.62	0.27	0.16	0.00	1.15	1.42	1.31
Rear	17/19mm	0.44	0.52	0.49	0.64	0.46	0.28	0.31	0.04	1.08	1.36	1.43
Right	14mm							0.44			0.00	0.44
Bottom	17/19/22mm		0.29	0.99	0.62	0.95				0.99	0.99	0.99
Top	15/18mm						0.25	0.38	0.00	0.00	0.25	0.38

The sum of reported SAR values for ENDC (N38 relative combination) + WiFi

Reported SAR 1g (W/kg)													
State		1	2						3	4	5	6		
Head		N38 ANT4	LTE B4 ANT1	LTE B5 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Cheek	L	0.08	0.30	0.35	0.26	0.02	0.05	0.26	0.21	0.35	0.11	0.43	0.64	0.89
Tilt	L	0.10	0.18	0.18	0.16	0.00	0.00	0.29	0.25	0.45	0.11	0.39	0.64	0.95
Cheek	R	0.24	0.29	0.33	0.28	0.00	0.00	0.31	0.07	0.19	0.00	0.57	0.64	0.76
Tilt	R	0.33	0.28	0.25	0.21	0.00	0.00	0.13	0.10	0.24	0.04	0.61	0.71	0.89
State		1	2						3	4	5	6		
Body		N38 ANT4	LTE B4 ANT1	LTE B5 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Front	10mm	0.13	0.35	0.34	0.24	0.18	0.23	0.30	0.27	0.09	0.00	0.48	0.75	0.57
Rear	10mm	0.26	0.50	0.52	0.50	0.29	0.39	0.32	0.28	0.44	0.04	0.78	1.06	1.26
Left	10mm	0.45	0.17	0.45	0.06	0.12	0.05	0.41				0.90	0.90	0.90
Right	10mm			0.09	0.16	0.22	0.31	0.22	0.26	0.24	0.00	0.31	0.57	0.55
Bottom	10mm		0.41	0.29	0.25	0.43	0.44	0.42				0.44	0.44	0.44
Top	10mm	0.34							0.25	0.37	0.00	0.34	0.59	0.71
State		1	2						3	4	5	6		
Sensor		N38 ANT4	LTE B4 ANT1	LTE B5 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2	6+3	6+4+5
Front	13mm	0.57	0.55	0.34	0.24	0.31	0.48	0.62	0.27	0.16	0.00	1.19	1.46	1.35
Rear	17/19mm	0.67	0.43	0.52	0.50	0.26	0.16	0.46	0.28	0.31	0.04	1.19	1.47	1.54
Right	14mm									0.44	0.00	0.00	0.00	0.44
Bottom	17/19/22mm		0.61	0.29	0.25	0.68	0.62	0.95				0.95	0.95	0.95
Top	15/18mm	0.85							0.25	0.38	0.00	0.85	1.10	1.23

The sum of reported SAR values for ENDC (N41 relative combination) + WiFi

Reported SAR 1g (W/kg)											
State		1	2			3	4	5	6	6+3	6+4+5
Head		N41 ANT4	LTE B4 ANT1	LTE B5 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Cheek	L	0.14	0.30	0.35	0.26	0.21	0.35	0.11	0.49	0.70	0.95
Tilt	L	0.17	0.18	0.18	0.29	0.25	0.45	0.11	0.46	0.71	1.02
Cheek	R	0.39	0.29	0.33	0.31	0.07	0.19	0.00	0.72	0.79	0.91
Tilt	R	0.56	0.28	0.25	0.13	0.10	0.24	0.04	0.84	0.94	1.12
State		1	2			3	4	5	6	6+3	6+4+5
Body		N41 ANT4	LTE B4 ANT1	LTE B5 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Front	10mm	0.15	0.35	0.34	0.30	0.27	0.09	0.00	0.50	0.77	0.59
Rear	10mm	0.28	0.50	0.52	0.32	0.28	0.44	0.04	0.80	1.08	1.28
Left	10mm	0.39	0.17	0.45	0.41				0.84	0.84	0.84
Right	10mm			0.09	0.22	0.26	0.24	0.00	0.22	0.48	0.46
Bottom	10mm		0.41	0.29	0.42				0.42	0.42	0.42
Top	10mm	0.34				0.25	0.37	0.00	0.34	0.59	0.71
State		1	2			3	4	5	6	6+3	6+4+5
Sensor		N41 ANT4	LTE B4 ANT1	LTE B5 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Front	13mm	0.42	0.55	0.34	0.62	0.27	0.16	0.00	1.04	1.31	1.20
Rear	17/19mm	0.41	0.43	0.52	0.46	0.28	0.35	0.04	0.93	1.21	1.32
Right	14mm						0.44		0.00	0.00	0.44
Bottom	17/19/22mm		0.61	0.29	0.95				0.95	0.95	0.95
Top	15/18mm	0.57				0.25	0.38	0.00	0.57	0.82	0.95

The sum of reported SAR values for ENDC (N77 relative combination) + WiFi

Reported SAR 1g (W/kg)																
State		1	2								3	4	5	6	6+3	6+4+5
Head		N77 ANT5	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Cheek	L	0.34	0.30	0.35	0.02	0.22	0.26	0.02	0.05	0.26	0.21	0.35	0.11	0.69	0.90	1.15
Tilt	L	0.35	0.18	0.18	0.02	0.17	0.16	0.00	0.00	0.29	0.25	0.45	0.11	0.64	0.89	1.20
Cheek	R	0.20	0.29	0.33	0.02	0.15	0.28	0.00	0.00	0.31	0.07	0.19	0.00	0.53	0.60	0.72
Tilt	R	0.23	0.28	0.25	0.00	0.12	0.21	0.00	0.00	0.13	0.10	0.24	0.04	0.51	0.61	0.79

State		1	2								3	4	5	6	6+3	6+4+5
Body		N77 ANT5	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Front	10mm	0.15	0.35	0.34	0.22	0.30	0.24	0.18	0.23	0.30	0.27	0.09	0.00	0.50	0.77	0.59
Rear	10mm	0.26	0.50	0.52	0.50	0.31	0.50	0.29	0.39	0.32	0.28	0.44	0.04	0.78	1.06	1.26
Left	10mm		0.17	0.45		0.06	0.06	0.12	0.05	0.41				0.45	0.45	0.45
Right	10mm	0.46		0.09		0.07	0.16	0.22	0.31	0.22	0.26	0.24	0.00	0.77	1.03	1.01
Bottom	10mm		0.41	0.29	0.47	0.20	0.25	0.43	0.44	0.42				0.47	0.47	0.47
Top	10mm	0.23									0.25	0.37	0.00	0.23	0.48	0.60

State		1	2								3	4	5	6	6+3	6+4+5
Sensor		N77 ANT5	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Front	13mm	0.34	0.55	0.34	0.67	0.30	0.24	0.31	0.48	0.62	0.27	0.16	0.00	1.01	1.28	1.17
Rear	17/19mm	0.38	0.43	0.52	0.49	0.31	0.50	0.26	0.16	0.46	0.28	0.31	0.04	0.90	1.18	1.25
Right	14mm	0.44	0.31	0.09		0.07	0.16					0.44	0.00	0.75	0.75	1.19
Bottom	17/19/22mm		0.61	0.29	0.99	0.20	0.25	0.68	0.62	0.95				0.99	0.99	0.99
Top	15/18mm	0.51									0.25	0.38	0.00	0.51	0.76	0.89

The sum of reported SAR values for ENDC (N78 relative combination) + WiFi

Reported SAR 1g (W/kg)																
State		1	2								3	4	5	6	6+3	6+4+5
Head		N78 ANT5	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Cheek	L	0.34	0.30	0.35	0.02	0.22	0.26	0.02	0.05	0.26	0.21	0.35	0.11	0.69	0.90	1.15
Tilt	L	0.33	0.18	0.18	0.02	0.17	0.16	0.00	0.00	0.29	0.25	0.45	0.11	0.62	0.87	1.18
Cheek	R	0.19	0.29	0.33	0.02	0.15	0.28	0.00	0.00	0.31	0.07	0.19	0.00	0.52	0.59	0.71
Tilt	R	0.24	0.28	0.25	0.00	0.12	0.21	0.00	0.00	0.13	0.10	0.24	0.04	0.52	0.62	0.80

State		1	2								3	4	5	6	6+3	6+4+5
Body		N78 ANT5	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Front	10mm	0.21	0.35	0.34	0.22	0.30	0.24	0.18	0.23	0.30	0.27	0.09	0.00	0.56	0.83	0.65
Rear	10mm	0.30	0.50	0.52	0.50	0.31	0.50	0.29	0.39	0.32	0.28	0.44	0.04	0.82	1.10	1.30
Left	10mm		0.17	0.45		0.06	0.06	0.12	0.05	0.41				0.45	0.45	0.45
Right	10mm	0.18		0.09		0.07	0.16	0.22	0.31	0.22	0.26	0.24	0.00	0.49	0.75	0.73
Bottom	10mm		0.41	0.29	0.47	0.20	0.25	0.43	0.44	0.42				0.47	0.47	0.47
Top	10mm	0.27									0.25	0.37	0.00	0.27	0.52	0.64

State		1	2								3	4	5	6	6+3	6+4+5
Sensor		N78 ANT5	LTE B4 ANT1	LTE B5 ANT0	LTE B7 ANT0	LTE B12 ANT0	LTE B26 ANT0	LTE B38 ANT0	LTE B41 ANT0	LTE B66 ANT1	WiFi 2.4G	WiFi 5G	BT	ENDC 1+2		
Front	13/18mm	0.56	0.55	0.34	0.67	0.30	0.24	0.31	0.48	0.62	0.27	0.16	0.00	1.23	1.50	1.39
Rear	17/19/25mm	0.60	0.43	0.52	0.49	0.31	0.50	0.26	0.16	0.46	0.28	0.35	0.04	1.12	1.40	1.51
Right	14mm	0.77										0.44		0.77	0.77	1.21
Bottom	17/19/22mm		0.61	0.29	0.99	0.20	0.25	0.68	0.62	0.95				0.99	0.99	0.99
Top	15/18mm	0.89									0.25	0.38	0.00	0.89	1.14	1.27

Conclusion:

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

14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.
The distance is 10 mm and just applied to the condition of body worn accessory.
It is performed for all SAR measurements with area scan based 1-g SAR estimation (Fast SAR). A zoom scan measurement is added when the estimated 1-g SAR is the highest measured SAR in each exposure configuration, wireless mode and frequency band combination or more than 1.2W/kg.
The calculated SAR is obtained by the following formula:

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

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

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

Table 14.1: Duty Cycle

Mode	Duty Cycle
GSM850/1900	1:4
WCDMA&LTE FDD&5G NR	1:1
LTE TDD	1:1.58

Note

B1: The Battery of WT-S-W1 by SCUD (Fujian) Electronics CO.,LTD

B2: The Battery of SCUD-WT-W1 by SCUD (Fujian) Electronics CO.,LTD

S1: SIM1

S2: SIM2

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

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

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	GSM850	251	848.8	0	GRRS(2)	/	32.15	33	0.304	**0.37**	0.216	**0.26**	0.16
Cheek	L	GSM850	190	836.6	0	GRRS(2)	1	32.23	33	0.349	0.42	0.27	**0.32**	-0.16
Cheek	L	GSM850	128	824.2	0	GRRS(2)	/	31.94	33	0.301	**0.38**	0.211	**0.27**	-0.02
Tilt	L	GSM850	190	836.6	0	GRRS(2)	/	32.23	33	0.228	**0.27**	0.168	**0.20**	0.07
Cheek	R	GSM850	190	836.6	0	GRRS(2)	/	32.23	33	0.276	**0.33**	0.195	**0.23**	0.04
Tilt	R	GSM850	190	836.6	0	GRRS(2)	/	32.23	33	0.293	**0.35**	0.212	**0.25**	0.08
Body	F	GSM850	190	836.6	0	Front GPRS(2) 10mm	/	32.23	33	0.309	**0.37**	0.197	**0.24**	-0.02
Body	F	GSM850	251	848.8	0	Rear GPRS(2) 10mm	2	32.15	33	0.583	0.71	0.346	**0.42**	-0.06
Body	F	GSM850	190	836.6	0	Rear GPRS(2) 10mm	/	32.23	33	0.573	**0.68**	0.349	**0.42**	-0.01
Body	F	GSM850	128	824.2	0	Rear GPRS(2) 10mm	/	31.94	33	0.518	**0.66**	0.319	**0.41**	-0.16
Body	F	GSM850	190	836.6	0	Left GPRS(2) 10mm	/	32.23	33	0.118	**0.14**	0.079	**0.09**	0.01
Body	F	GSM850	190	836.6	0	Right GPRS(2) 10mm	/	32.23	33	0.132	**0.16**	0.084	**0.10**	-0.01
Body	F	GSM850	190	836.6	0	Bottom GPRS(2) 10mm	/	32.23	33	0.364	**0.43**	0.219	**0.26**	-0.07
Body	F	GSM850	251	848.8	0	Rear EGPRS(2) 10mm	/	32.16	33	0.574	**0.70**	0.341	**0.41**	0.17

Table 14.1-2: SAR Values (GSM 1900 MHz Band)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	GSM1900	810	1909.8	1	GRRS(2)	/	28.91	30.5	0.16	**0.23**	0.101	**0.15**	0.02
Cheek	L	GSM1900	661	1880	1	GRRS(2)	3	29.11	30.5	0.174	**0.24**	0.11	**0.15**	-0.01
Cheek	L	GSM1900	512	1850.2	1	GRRS(2)	/	28.84	30.5	0.154	**0.23**	0.095	**0.14**	0.09
Tilt	L	GSM1900	661	1880	1	GRRS(2)	/	29.11	30.5	0.146	**0.20**	0.088	**0.12**	-0.02
Cheek	R	GSM1900	661	1880	1	GRRS(2)	/	29.11	30.5	0.149	**0.21**	0.094	**0.13**	0.05
Tilt	R	GSM1900	661	1880	1	GRRS(2)	/	29.11	30.5	0.09	**0.12**	0.054	**0.07**	-0.07
Body	F	GSM1900	661	1880	1	Front GPRS(2) 10mm	/	29.11	30.5	0.354	**0.49**	0.225	**0.31**	0.06
Body	F	GSM1900	661	1880	1	Rear GPRS(2) 10mm	/	29.11	30.5	0.509	**0.70**	0.317	**0.44**	-0.12
Body	F	GSM1900	661	1880	1	Left GPRS(2) 10mm	/	29.11	30.5	0.247	**0.34**	0.143	**0.20**	0.08
Body	F	GSM1900	810	1909.8	1	Bottom GPRS(2)10mm	/	28.91	30.5	0.484	**0.70**	0.279	**0.40**	0.1
Body	F	GSM1900	661	1880	1	Bottom GPRS(2) 10mm	4	29.11	30.5	0.645	**0.89**	0.374	**0.52**	0.12
Body	F	GSM1900	512	1850.2	1	Bottom GPRS(2) 10mm	/	28.84	30.5	0.425	**0.62**	0.255	**0.37**	0.12
Body	F	GSM1900	661	1880	1	Bottom EGPRS(2) 10mm	/	29.06	30.5	0.474	**0.66**	0.271	**0.38**	0.17

Table 14.1-3: SAR Values (WCDMA 1900 MHz Band)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	WCDMA1900	9538	1907.6	1	RMC	5	23.99	25	0.143	**0.18**	0.091	**0.11**	-0.02
Cheek	L	WCDMA1900	9400	1880	1	RMC	/	23.74	25	0.125	**0.17**	0.079	**0.11**	0.11
Cheek	L	WCDMA1900	9262	1852.4	1	RMC	/	23.64	25	0.061	**0.08**	0.039	**0.05**	-0.16
Tilt	L	WCDMA1900	9400	1880	1	RMC	/	23.74	25	0.122	**0.16**	0.072	**0.10**	-0.13
Cheek	R	WCDMA1900	9400	1880	1	RMC	/	23.74	25	0.118	**0.16**	0.073	**0.10**	-0.09
Tilt	R	WCDMA1900	9400	1880	1	RMC	/	23.74	25	0.068	**0.09**	0.043	**0.06**	0.14
Body	F	WCDMA1900	9400	1880	1	Front 10mm	/	24.02	25	0.406	**0.51**	0.249	**0.31**	0.13
Body	F	WCDMA1900	9538	1907.6	1	Rear 10mm	/	23.99	25	0.677	**0.85**	0.389	**0.49**	0.11
Body	F	WCDMA1900	9400	1880	1	Rear 10mm	/	24.02	25	0.735	**0.92**	0.42	**0.53**	-0.04
Body	F	WCDMA1900	9262	1852.4	1	Rear 10mm	6	23.97	25	0.853	**1.08**	0.484	**0.61**	0.03
Body	F	WCDMA1900	9400	1880	1	Left Edge 10mm	/	24.02	25	0.268	**0.34**	0.154	**0.19**	0.09
Body	F	WCDMA1900	9400	1880	1	Bottom Edge 10mm	/	24.02	25	0.628	**0.79**	0.351	**0.44**	0.11
Body	F	WCDMA1900	9262	1852.4	1	Rear 10mm	S2	23.97	25	0.844	**1.07**	0.476	**0.60**	0.06
Body	F	WCDMA1900	9262	1852.4	1	Rear 10mm	Single SIM	23.97	25	0.832	**1.05**	0.467	**0.59**	0.07
Body	F	WCDMA1900	9262	1852.4	1	Rear 10mm	B2	23.97	25	0.823	**1.04**	0.454	**0.58**	-0.11

Table 14.1-4: SAR Values (WCDMA 1700 MHz Band)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	WCDMA1700	1412	1732.4	1	RMC	/	23.78	25	0.215	**0.28**	0.139	**0.18**	0.12
Tilt	L	WCDMA1700	1412	1732.4	1	RMC	/	23.78	25	0.137	**0.18**	0.084	**0.11**	-0.07
Cheek	R	WCDMA1700	1513	1752.6	1	RMC	/	23.83	25	0.249	**0.33**	0.156	**0.20**	0.09
Cheek	R	WCDMA1700	1412	1732.4	1	RMC	/	23.78	25	0.295	**0.39**	0.182	**0.24**	0.04
Cheek	R	WCDMA1700	1312	1712.4	1	RMC	7	23.86	25	0.307	**0.40**	0.194	**0.25**	0.12
Tilt	R	WCDMA1700	1412	1732.4	1	RMC	/	23.78	25	0.14	**0.19**	0.09	**0.12**	0.16
Body	F	WCDMA1700	1412	1732.5	1	Front 13mm	/	23.78	25	0.408	**0.54**	0.277	**0.37**	-0.03
Body	F	WCDMA1700	1513	1752.6	1	Rear 15mm	/	23.83	25	0.438	**0.57**	0.29	**0.38**	-0.02
Body	F	WCDMA1700	1412	1732.5	1	Rear 15mm	/	23.78	25	0.456	**0.60**	0.307	**0.41**	0.12
Body	F	WCDMA1700	1312	1712.4	1	Rear 15mm	/	23.86	25	0.488	**0.63**	0.321	**0.42**	-0.05
Body	F	WCDMA1700	1412	1732.5	1	Left Edge 10mm	/	23.78	25	0.286	**0.38**	0.174	**0.23**	-0.12
Body	F	WCDMA1700	1412	1732.5	1	Bottom Edge 15mm	/	23.78	25	0.426	**0.56**	0.263	**0.35**	0.12
Body	F	WCDMA1700	1412	1732.5	1	Front 10mm	/	23.51	24.5	0.445	**0.56**	0.305	**0.38**	-0.12
Body	F	WCDMA1700	1412	1732.5	1	Rear 10mm	/	23.51	24.5	0.51	**0.64**	0.337	**0.42**	-0.13
Body	F	WCDMA1700	1513	1752.6	1	Bottom Edge 10mm	/	23.45	24.5	0.582	**0.74**	0.347	**0.44**	-0.02
Body	F	WCDMA1700	1412	1732.5	1	Bottom Edge 10mm	8	23.51	24.5	0.597	**0.75**	0.356	**0.45**	-0.08
Body	F	WCDMA1700	1312	1712.4	1	Bottom Edge 10mm	/	23.64	24.5	0.588	**0.72**	0.349	**0.43**	-0.16

Table 14.1-5: SAR Values (WCDMA 850 MHz Band)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	WCDMA 850	4183	836.6	0		/	24.06	25	0.247	**0.31**	0.192	**0.24**	0.11
Tilt	L	WCDMA 850	4183	836.6	0		/	24.06	25	0.144	**0.18**	0.119	**0.15**	0
Cheek	R	WCDMA 850	4233	846.6	0		/	23.94	25	0.245	**0.31**	0.189	**0.24**	-0.04
Cheek	R	WCDMA 850	4183	836.6	0		/	24.06	25	0.252	**0.31**	0.193	**0.24**	0.09
Cheek	R	WCDMA 850	4132	826.4	0		9	24.18	25	0.262	**0.32**	0.208	**0.25**	0.07
Tilt	R	WCDMA 850	4183	836.6	0		/	24.06	25	0.185	**0.23**	0.148	**0.18**	0.14
ANT0														
Body	F	WCDMA 850	4183	836.6	0	Front 10mm	/	24.06	25	0.203	**0.25**	0.134	**0.17**	0.17
Body	F	WCDMA 850	4233	846.6	0	Rear 10mm	/	23.94	25	0.387	**0.49**	0.237	**0.30**	0.17
Body	F	WCDMA 850	4183	836.6	0	Rear 10mm	10	24.06	25	0.405	**0.50**	0.25	**0.31**	0.02
Body	F	WCDMA 850	4132	826.4	0	Rear 10mm	/	24.18	25	0.393	**0.47**	0.244	**0.29**	-0.05
Body	F	WCDMA 850	4183	836.6	0	Left Edge 10mm	/	24.06	25	0.033	**0.04**	0.023	**0.03**	-0.04
Body	F	WCDMA 850	4183	836.6	0	Right Edge 10mm	/	24.06	25	0.048	**0.06**	0.034	**0.04**	-0.14
Body	F	WCDMA 850	4183	836.6	0	Bottom Edge 10mm	/	24.06	25	0.155	**0.19**	0.097	**0.12**	0.06

Table 14.1-6: SAR Values (LTE Band2 ANT1)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band2	18900	1880	1	1RB-Middle	11	23.48	24.5	0.173	0.22	0.107	**0.14**	0.12
Tilt	L	LTE Band2	18900	1880	1	1RB-Middle	/	23.48	24.5	0.097	**0.12**	0.108	**0.14**	0.05
Cheek	R	LTE Band2	18900	1880	1	1RB-Middle	/	23.48	24.5	0.164	**0.21**	0.094	**0.12**	-0.03
Tilt	R	LTE Band2	18900	1880	1	1RB-Middle	/	23.48	24.5	0.096	**0.12**	0.105	**0.13**	0.09
Cheek	L	LTE Band2	18900	1880	1	50RB-Middle	/	22.57	23.5	0.139	**0.17**	0.088	**0.11**	-0.08
Tilt	L	LTE Band2	18900	1880	1	50RB-Middle	/	22.57	23.5	0.135	**0.17**	0.079	**0.10**	-0.01
Cheek	R	LTE Band2	18900	1880	1	50RB-Middle	/	22.57	23.5	0.126	**0.16**	0.077	**0.10**	-0.13
Tilt	R	LTE Band2	18900	1880	1	50RB-Middle	/	22.57	23.5	0.068	**0.08**	0.417	**0.52**	-0.12
Body	F	LTE Band2	18900	1880	1	1RB-Middle Front 10mm	/	23.48	24.5	0.377	**0.48**	0.226	**0.29**	0.02
Body	F	LTE Band2	18900	1880	1	1RB-Middle Rear 10mm	12	23.48	24.5	0.62	0.78	0.352	**0.45**	0.08
Body	F	LTE Band2	18900	1880	1	1RB-Middle Rear 19mm	/	23.48	24.5	0.219	**0.28**	0.133	**0.17**	-0.04
Body	F	LTE Band2	18900	1880	1	1RB-Middle Left 10mm	/	23.48	24.5	0.276	**0.35**	0.153	**0.19**	0.06
Body	F	LTE Band2	18900	1880	1	1RB-Middle Bottom 10mm	/	23.48	24.5	0.541	**0.68**	0.308	**0.39**	-0.05
Body	F	LTE Band2	18900	1880	1	50RB-Middle Front 10mm	/	22.57	23.5	0.31	**0.38**	0.186	**0.23**	0.13
Body	F	LTE Band2	18900	1880	1	50RB-Middle Rear 10mm	/	22.57	23.5	0.51	**0.63**	0.29	**0.36**	0.09
Body	F	LTE Band2	18900	1880	1	50RB-Middle Left 10mm	/	22.57	23.5	0.227	**0.28**	0.126	**0.16**	0.14
Body	F	LTE Band2	18900	1880	1	50RB-Middle Bottom 10mm	/	22.57	23.5	0.443	**0.55**	0.252	**0.31**	-0.1

Note: The LTE mode is QPSK_20MHz.

Table 14.1-7: SAR Values (LTE Band4 ANT1)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band4	20175	1732.5	1	1RB-Middle	13	23.68	24.5	0.247	0.30	0.158	**0.19**	-0.1
Tilt	L	LTE Band4	20175	1732.5	1	1RB-Middle	/	23.68	24.5	0.151	**0.18**	0.097	**0.12**	0.02
Cheek	R	LTE Band4	20175	1732.5	1	1RB-Middle	/	23.68	24.5	0.236	**0.29**	0.149	**0.18**	-0.12
Tilt	R	LTE Band4	20175	1732.5	1	1RB-Middle	/	23.68	24.5	0.229	**0.28**	0.137	**0.17**	0.08
Cheek	L	LTE Band4	20175	1732.5	1	50RB-Low	/	22.77	23.5	0.222	**0.26**	0.141	**0.17**	0.01
Tilt	L	LTE Band4	20175	1732.5	1	50RB-Low	/	22.77	23.5	0.116	**0.14**	0.234	**0.28**	0.05
Cheek	R	LTE Band4	20175	1732.5	1	50RB-Low	/	22.77	23.5	0.233	**0.28**	0.15	**0.18**	-0.08
Tilt	R	LTE Band4	20175	1732.5	1	50RB-Low	/	22.77	23.5	0.134	**0.16**	0.084	**0.10**	0.13
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Front 10mm	/	23.68	24.5	0.458	**0.55**	0.294	**0.36**	-0.14
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Rear 10mm	14	23.68	24.5	0.596	0.72	0.37	**0.45**	0.12
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Rear 19mm	/	23.68	24.5	0.36	**0.43**	0.235	**0.28**	0.07
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Left 10mm	/	23.68	24.5	0.257	**0.31**	0.151	**0.18**	-0.04
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Bottom 10mm	/	23.68	24.5	0.507	**0.61**	0.291	**0.35**	0.03
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Front 10mm	/	22.77	23.5	0.385	**0.46**	0.247	**0.29**	-0.07
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Rear 10mm	/	22.77	23.5	0.489	**0.58**	0.304	**0.36**	0.09
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Left 10mm	/	22.77	23.5	0.214	**0.25**	0.125	**0.15**	-0.04
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Bottom 10mm	/	22.77	23.5	0.416	**0.49**	0.238	**0.28**	0.05
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Front 10mm	Note1	22.72	23.5	0.284	**0.34**	0.19	**0.23**	0.07
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Rear 10mm	Note1	22.72	23.5	0.413	**0.49**	0.262	**0.31**	-0.18
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Left 10mm	Note1	22.72	23.5	0.14	**0.17**	0.088	**0.11**	0.08
Body	F	LTE Band4	20175	1732.5	1	1RB-Middle Bottom 10mm	Note1	22.72	23.5	0.342	**0.41**	0.208	**0.25**	0.08
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Front 10mm	Note1	22.79	23.5	0.295	**0.35**	0.196	**0.23**	-0.04
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Rear 10mm	Note1	22.79	23.5	0.423	**0.50**	0.275	**0.32**	-0.04
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Left 10mm	Note1	22.79	23.5	0.14	**0.16**	0.088	**0.10**	-0.11
Body	F	LTE Band4	20175	1732.5	1	50RB-Low Bottom 10mm	Note1	22.79	23.5	0.345	**0.41**	0.21	**0.25**	-0.11

Note: The LTE mode is QPSK_20MHz.

Note1: The results are for ENDC only.

Table 14.1-8: SAR Values (LTE Band5 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band5	20600	844	0	1RB-Low	15	24.22	25.5	0.26	0.35	0.203	0.27	-0.13
Cheek	L	LTE Band5	20525	836.5	0	1RB-Low	/	24.25	25.5	0.251	0.33	0.196	0.26	-0.09
Cheek	L	LTE Band5	20450	829	0	1RB-Low	/	24.24	25.5	0.242	0.32	0.19	0.25	-0.05
Tilt	L	LTE Band5	20525	836.5	0	1RB-Low	/	24.25	25.5	0.135	0.18	0.112	0.15	0.03
Cheek	R	LTE Band5	20525	836.5	0	1RB-Low	/	24.25	25.5	0.246	0.33	0.197	0.26	0.06
Tilt	R	LTE Band5	20525	836.5	0	1RB-Low	/	24.25	25.5	0.184	0.25	0.151	0.20	-0.01
Cheek	L	LTE Band5	20525	836.5	0	25RB-Low	/	23.21	24.5	0.208	0.28	0.165	0.22	0.15
Tilt	L	LTE Band5	20525	836.5	0	25RB-Low	/	23.21	24.5	0.106	0.14	0.089	0.12	-0.1
Cheek	R	LTE Band5	20525	836.5	0	25RB-Low	/	23.21	24.5	0.198	0.27	0.158	0.21	0.15
Tilt	R	LTE Band5	20525	836.5	0	25RB-Low	/	23.21	24.5	0.138	0.19	0.112	0.15	0.15
Body	F	LTE Band5	20525	836.5	0	1RB-Low Front 10mm	/	24.25	25.5	0.253	0.34	0.173	0.23	-0.02
Body	F	LTE Band5	20525	836.5	0	1RB-Low Rear 10mm	16	24.25	25.5	0.387	0.52	0.241	0.32	0.07
Body	F	LTE Band5	20525	836.5	0	1RB-Low Left 10mm	/	24.25	25.5	0.339	0.45	0.025	0.03	-0.02
Body	F	LTE Band5	20525	836.5	0	1RB-Low Right 10mm	/	24.25	25.5	0.065	0.09	0.04	0.05	-0.16
Body	F	LTE Band5	20525	836.5	0	1RB-Low Bottom 10mm	/	24.25	25.5	0.218	0.29	0.148	0.20	-0.04
Body	F	LTE Band5	20525	836.5	0	25RB-Low Front 10mm	/	23.21	24.5	0.15	0.20	0.106	0.14	0.04
Body	F	LTE Band5	20525	836.5	0	25RB-Low Rear 10mm	/	23.21	24.5	0.303	0.41	0.191	0.26	-0.1
Body	F	LTE Band5	20525	836.5	0	25RB-Low Left 10mm	/	23.21	24.5	0.042	0.06	0.031	0.04	0.05
Body	F	LTE Band5	20525	836.5	0	25RB-Low Right 10mm	/	23.21	24.5	0.063	0.08	0.047	0.06	-0.18
Body	F	LTE Band5	20525	836.5	0	25RB-Low Bottom 10mm	/	23.21	24.5	0.169	0.23	0.112	0.15	-0.11

Note: The LTE mode is QPSK_10MHz.

Table 14.1-9: SAR Values (LTE Band7 ANT4)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band7	21350	2560	4	1RB-Middle	/	14.29	16	0.13	0.19	0.056	0.08	-0.07
Tilt	L	LTE Band7	21350	2560	4	1RB-Middle	/	14.29	16	0.16	0.24	0.064	0.09	-0.02
Cheek	R	LTE Band7	21350	2560	4	1RB-Middle	/	14.29	16	0.354	0.52	0.162	0.24	-0.11
Tilt	R	LTE Band7	21350	2560	4	1RB-Middle	/	14.29	16	0.479	0.71	0.194	0.29	-0.08
Tilt	R	LTE Band7	21100	2535	4	1RB-Middle	/	14.27	16	0.532	0.79	0.211	0.31	-0.07
Tilt	R	LTE Band7	20850	2510	4	1RB-Middle	17	14.05	16	0.57	0.89	0.222	0.35	0.17
Cheek	L	LTE Band7	21350	2560	4	50RB-Low	/	14.33	16	0.115	0.17	0.051	0.07	-0.04
Tilt	L	LTE Band7	21350	2560	4	50RB-Low	/	14.33	16	0.167	0.25	0.068	0.10	0.13
Cheek	R	LTE Band7	21350	2560	4	50RB-Low	/	14.33	16	0.372	0.55	0.169	0.25	-0.13
Tilt	R	LTE Band7	21350	2560	4	50RB-Low	/	14.33	16	0.459	0.67	0.186	0.27	0.08
Tilt	R	LTE Band7	20850	2510	4	UL CA	/	14.29	16	0.435	0.64	0.203	0.30	0.09
Cheek	L	LTE Band7	21350	2560	4	1RB-Middle	Note1	11.69	13	0.068	0.09	0.031	0.04	0.09
Tilt	L	LTE Band7	21350	2560	4	1RB-Middle	Note1	11.69	13	0.088	0.12	0.037	0.05	-0.11
Cheek	R	LTE Band7	21350	2560	4	1RB-Middle	Note1	11.69	13	0.188	0.25	0.088	0.12	0.07
Tilt	R	LTE Band7	21350	2560	4	1RB-Middle	Note1	11.69	13	0.258	0.35	0.107	0.14	-0.11
Tilt	R	LTE Band7	21100	2535	4	1RB-Middle	Note1	11.57	13	0.299	0.42	0.117	0.16	0.06
Tilt	R	LTE Band7	20850	2510	4	1RB-Middle	Note1	11.4	13	0.32	0.46	0.124	0.18	0.14
Cheek	L	LTE Band7	21350	2560	4	50RB-Low	Note1	11.8	13	0.069	0.09	0.031	0.04	0.07
Tilt	L	LTE Band7	21350	2560	4	50RB-Low	Note1	11.8	13	0.088	0.12	0.038	0.05	-0.15
Cheek	R	LTE Band7	21350	2560	4	50RB-Low	Note1	11.8	13	0.195	0.26	0.09	0.12	0.07
Tilt	R	LTE Band7	21350	2560	4	50RB-Low	Note1	11.8	13	0.252	0.33	0.105	0.14	-0.05
Body	F	LTE Band7	21100	2535	4	1RB-High Front 13mm	/	24.31	25.5	0.538	0.71	0.272	0.36	-0.08
Body	F	LTE Band7	21100	2535	4	1RB-High Rear 19mm	/	24.31	25.5	0.469	0.62	0.237	0.31	0.14
Body	F	LTE Band7	21100	2535	4	1RB-High Left 10mm	/	24.31	25.5	0.533	0.70	0.283	0.37	-0.01
Body	F	LTE Band7	20850	2510	4	1RB-High Top 18mm	/	24.2	25.5	0.584	0.79	0.302	0.41	0.07
Body	F	LTE Band7	21100	2535	4	1RB-Mid Top 18mm	/	24.31	25.5	0.628	0.83	0.316	0.42	-0.01
Body	F	LTE Band7	21350	2560	4	1RB-High Top 18mm	/	24.01	25.5	0.538	0.76	0.27	0.38	-0.08
Body	F	LTE Band7	21100	2535	4	100RB Top 18mm	/	23.27	24.5	0.557	0.74	0.271	0.36	0.05
Body	F	LTE Band7	21100	2535	4	50RB-Middle Front 13mm	/	23.32	24.5	0.454	0.60	0.23	0.30	-0.14
Body	F	LTE Band7	21100	2535	4	50RB-Middle Rear 19mm	/	23.32	24.5	0.408	0.54	0.206	0.27	0.06
Body	F	LTE Band7	21100	2535	4	50RB-Middle Left 10mm	/	23.32	24.5	0.482	0.63	0.248	0.33	0.09
Body	F	LTE Band7	21100	2535	4	50RB-Middle Top 18mm	/	23.32	24.5	0.564	0.74	0.277	0.36	-0.09
Body	F	LTE Band7	21100	2535	4	1RB-Middle Front 10mm	/	18.61	20	0.248	0.34	0.123	0.17	-0.14
Body	F	LTE Band7	21100	2535	4	1RB-Middle Rear 10mm	/	18.61	20	0.494	0.68	0.232	0.32	0.1
Body	F	LTE Band7	20850	2510	4	1RB-Middle Top 10mm	/	18.55	20	0.658	0.92	0.264	0.37	-0.02
Body	F	LTE Band7	21100	2535	4	1RB-Middle Top 10mm	/	18.61	20	0.602	0.83	0.259	0.36	0.14
Body	F	LTE Band7	21350	2560	4	1RB-Middle Top 10mm	/	18.49	20	0.533	0.75	0.232	0.33	-0.04
Body	F	LTE Band7	21100	2535	4	50RB-Mid Front 10mm	/	18.67	20	0.253	0.34	0.126	0.17	0.06
Body	F	LTE Band7	21100	2535	4	50RB-Mid Rear 10mm	/	18.67	20	0.506	0.69	0.237	0.32	-0.09
Body	F	LTE Band7	20850	2510	4	50RB-Low Top Edge 10mm	18	18.63	20	0.689	0.94	0.298	0.41	-0.18
Body	F	LTE Band7	21100	2535	4	50RB-Mid Top Edge 10mm	/	18.67	20	0.636	0.86	0.274	0.37	0.05
Body	F	LTE Band7	21350	2560	4	50RB-Mid Top Edge 10mm	/	18.55	20	0.576	0.80	0.248	0.35	0.11
Body	F	LTE Band7	20850	2510	4	100RB Top Edge 10mm	/	18.54	20	0.654	0.92	0.267	0.37	0.09
Body	F	LTE Band7	20850	2510	4	UL CA Top Edge 10mm	/	18.23	20	0.603	0.91	0.262	0.39	-0.11
Body	F	LTE Band7	21100	2535	4	1RB-Middle Front 10mm	Note1	15.38	17	0.099	0.14	0.048	0.07	0.09
Body	F	LTE Band7	21100	2535	4	1RB-Middle Rear 10mm	Note1	15.38	17	0.242	0.35	0.111	0.16	-0.12
Body	F	LTE Band7	21100	2535	4	1RB-Middle Top 10mm	Note1	15.38	17	0.336	0.49	0.143	0.21	0.14
Body	F	LTE Band7	21100	2535	4	50RB-Low Front 10mm	Note1	15.45	17	0.1	0.14	0.048	0.07	-0.06
Body	F	LTE Band7	21100	2535	4	50RB-Low Rear 10mm	Note1	15.45	17	0.251	0.36	0.116	0.17	-0.12
Body	F	LTE Band7	21100	2535	4	50RB-Low Top 10mm	Note1	15.45	17	0.324	0.46	0.138	0.20	-0.07

Note: The LTE mode is QPSK_20MHz.

Note1: The results are for ENDC only.

Table 14.1-10: SAR Values (LTE Band7 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band7	21350	2560	0	1RB-Middle	19	24.31	25.5	0.019	0.02	0.006	**0.01**	-0.08
Cheek	L	LTE Band7	21100	2535	0	1RB-Middle	/	24.33	25.5	0.013	**0.02**	0.004	**0.01**	-0.06
Cheek	L	LTE Band7	20850	2510	0	1RB-Middle	/	24.36	25.5	0.014	**0.02**	0.005	**0.01**	0.06
Tilt	L	LTE Band7	20850	2510	0	1RB-Middle	/	24.36	25.5	0.013	**0.02**	0.004	**0.01**	-0.07
Cheek	R	LTE Band7	20850	2510	0	1RB-Middle	/	24.36	25.5	0.015	**0.02**	0.004	**0.01**	-0.04
Tilt	R	LTE Band7	20850	2510	0	1RB-Middle	/	24.36	25.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	LTE Band7	20850	2510	0	50RB-Middle	/	23.75	24.5	0.011	**0.01**	0.004	**0.00**	0.1
Tilt	L	LTE Band7	20850	2510	0	50RB-Middle	/	23.75	24.5	0.012	**0.01**	0.004	**0.00**	0.02
Cheek	R	LTE Band7	20850	2510	0	50RB-Middle	/	23.75	24.5	0.013	**0.02**	0.004	**0.00**	-0.05
Tilt	R	LTE Band7	20850	2510	0	50RB-Middle	/	23.75	24.5	<0.01	<0.01	<0.01	<0.01	/
Body	F	LTE Band7	20850	2510	0	1RB-Mid Front 13mm	/	24.46	25.5	0.53	**0.67**	0.272	**0.35**	0.08
Body	F	LTE Band7	20850	2510	0	1RB-Mid Rear 19mm	/	24.46	25.5	0.571	**0.73**	0.289	**0.37**	-0.12
Body	F	LTE Band7	20850	2510	0	1RB-Mid Rear 25mm	/	24.46	25.5	0.382	**0.49**	0.208	**0.26**	0.13
Body	F	LTE Band7	20850	2510	0	1RB-Mid Left 10mm	/	24.46	25.5	0.052	**0.07**	0.028	**0.04**	-0.05
Body	F	LTE Band7	20850	2510	0	1RB-Mid Right 10mm	/	24.46	25.5	0.297	**0.38**	0.16	**0.20**	-0.18
Body	F	LTE Band7	21350	2560	0	1RB-Mid Bottom 22mm	20	24.42	25.5	0.772	0.99	0.417	**0.53**	0.09
Body	F	LTE Band7	21100	2535	0	1RB-Mid Bottom 22mm	/	24.43	25.5	0.736	**0.94**	0.397	**0.51**	0.12
Body	F	LTE Band7	20850	2510	0	1RB-Mid Bottom 22mm	/	24.46	25.5	0.7	**0.89**	0.374	**0.48**	-0.01
Body	F	LTE Band7	21350	2560	0	1RB-Mid Bottom 22mm	/	23.63	24.5	0.732	**0.89**	0.385	**0.47**	0.02
Body	F	LTE Band7	20850	2510	0	50RB-Mid Front 13mm	/	23.75	24.5	0.487	**0.58**	0.236	**0.28**	-0.03
Body	F	LTE Band7	20850	2510	0	50RB-Mid Rear 19mm	/	23.75	24.5	0.515	**0.61**	0.247	**0.29**	-0.07
Body	F	LTE Band7	20850	2510	0	50RB-Mid Left 19mm	/	23.75	24.5	0.042	**0.05**	0.021	**0.02**	0.12
Body	F	LTE Band7	20850	2510	0	50RB-Mid Right 19mm	/	23.75	24.5	0.255	**0.30**	0.132	**0.16**	0.11
Body	F	LTE Band7	20850	2510	0	50RB-Mid Bottom 22mm	/	23.75	24.5	0.658	**0.78**	0.357	**0.42**	-0.02
Body	F	LTE Band7	21350	2560	0	1RB-Middle Front 10mm	Note1	19.76	20	0.331	**0.35**	0.159	**0.17**	-0.09
Body	F	LTE Band7	21350	2560	0	1RB-Middle Rear 10mm	Note1	19.76	20	0.731	**0.77**	0.355	**0.38**	-0.15
Body	F	LTE Band7	21350	2560	0	1RB-Middle Bottom 10mm	Note1	19.76	20	0.700	**0.74**	0.345	**0.36**	-0.18
Body	F	LTE Band7	21350	2560	0	50RB-Low Front 10mm	Note1	19.74	20	0.352	**0.37**	0.168	**0.18**	0.18
Body	F	LTE Band7	21350	2560	0	50RB-Low Rear 10mm	Note1	19.74	20	0.780	**0.83**	0.369	**0.39**	0.06
Body	F	LTE Band7	21100	2535	0	50RB-Low Rear 10mm	Note1	19.53	20	0.737	**0.82**	0.345	**0.38**	0.07
Body	F	LTE Band7	20850	2510	0	50RB-Low Rear 10mm	Note1	19.64	20	0.757	**0.82**	0.354	**0.38**	0.16
Body	F	LTE Band7	21350	2560	0	50RB-Low Bottom 10mm	Note1	19.74	20	0.739	**0.78**	0.355	**0.38**	0.09
Body	F	LTE Band7	21350	2560	0	1RB-Middle Front 10mm	Note2	16.55	17	0.19	**0.21**	0.089	**0.10**	0.12
Body	F	LTE Band7	21350	2560	0	1RB-Middle Rear 10mm	Note2	16.55	17	0.42	**0.47**	0.199	**0.22**	-0.18
Body	F	LTE Band7	21350	2560	0	1RB-Middle Bottom 10mm	Note2	16.55	17	0.402	**0.45**	0.194	**0.22**	-0.1
Body	F	LTE Band7	21350	2560	0	50RB-Low Front 10mm	Note2	16.54	17	0.202	**0.22**	0.094	**0.10**	0.09
Body	F	LTE Band7	21350	2560	0	50RB-Low Rear 10mm	Note2	16.54	17	0.448	**0.50**	0.207	**0.23**	0.16
Body	F	LTE Band7	21350	2560	0	50RB-Low Bottom 10mm	Note2	16.54	17	0.425	**0.47**	0.199	**0.22**	-0.14

Note: The LTE mode is QPSK_20MHz.

Note1: The results are for DL CA only.

Note2: The results are for ENDC only.

Table 14.1-11: SAR Values (LTE Band12 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band12	23130	711	0	1RB-Middle	21	23.85	25	0.165	0.22	0.131	**0.17**	0.09
Tilt	L	LTE Band12	23130	711	0	1RB-Middle	/	23.85	25	0.13	**0.17**	0.102	**0.13**	0.08
Cheek	R	LTE Band12	23130	711	0	1RB-Middle	/	23.85	25	0.114	**0.15**	0.087	**0.11**	0.05
Tilt	R	LTE Band12	23130	711	0	1RB-Middle	/	23.85	25	0.091	**0.12**	0.067	**0.09**	-0.09
Cheek	L	LTE Band12	23130	711	0	25RB-Low	/	22.84	24	0.137	**0.18**	0.103	**0.13**	-0.06
Tilt	L	LTE Band12	23130	711	0	25RB-Low	/	22.84	24	0.105	**0.14**	0.082	**0.11**	0.14
Cheek	R	LTE Band12	23130	711	0	25RB-Low	/	22.84	24	0.074	**0.10**	0.055	**0.07**	-0.01
Tilt	R	LTE Band12	23130	711	0	25RB-Low	/	22.84	24	0.074	**0.10**	0.053	**0.07**	0.12
Body	F	LTE Band12	23130	711	0	1RB-Middle Front 10mm	/	23.85	25	0.234	**0.30**	0.183	**0.24**	0.11
Body	F	LTE Band12	23130	711	0	1RB-Middle Rear 10mm	22	23.85	25	0.24	0.31	0.19	**0.25**	0.18
Body	F	LTE Band12	23130	711	0	1RB-Middle Left 10mm	/	23.85	25	0.044	**0.06**	0.032	**0.04**	0.03
Body	F	LTE Band12	23130	711	0	1RB-Middle Right 10mm	/	23.85	25	0.052	**0.07**	0.037	**0.05**	-0.06
Body	F	LTE Band12	23130	711	0	1RB-Middle Bottom 10mm	/	23.85	25	0.156	**0.20**	0.086	**0.11**	-0.09
Body	F	LTE Band12	23130	711	0	25RB-Low Front 10mm	/	22.84	24	0.173	**0.23**	0.135	**0.18**	-0.05
Body	F	LTE Band12	23130	711	0	25RB-Low Rear 10mm	/	22.84	24	0.193	**0.25**	0.152	**0.20**	0.17
Body	F	LTE Band12	23130	711	0	25RB-Low Left 10mm	/	22.84	24	<0.01	<0.01	<0.01	<0.01	/
Body	F	LTE Band12	23130	711	0	25RB-Low Right 10mm	/	22.84	24	0.125	**0.16**	0.08	**0.10**	0.14
Body	F	LTE Band12	23130	711	0	25RB-Low Bottom 10mm	/	22.84	24	0.115	**0.15**	0.064	**0.08**	0.18

Note: The LTE mode is QPSK_10MHz.

Table 14.1-12: SAR Values (LTE Band26 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band26	26865	831.5	0	1RB-Middle	/	23.99	25	0.208	**0.26**	0.161	**0.20**	0.16
Tilt	L	LTE Band26	26865	831.5	0	1RB-Middle	/	23.99	25	0.123	**0.16**	0.1	**0.13**	0.01
Cheek	R	LTE Band26	26865	831.5	0	1RB-Middle	23	23.99	25	0.218	**0.28**	0.17	**0.21**	0.14
Tilt	R	LTE Band26	26865	831.5	0	1RB-Middle	/	23.99	25	0.166	**0.21**	0.131	**0.17**	-0.09
Cheek	L	LTE Band26	26865	831.5	0	36RB-Low	/	23.16	24	0.168	**0.20**	0.129	**0.16**	-0.02
Tilt	L	LTE Band26	26865	831.5	0	36RB-Low	/	23.16	24	0.089	**0.11**	0.073	**0.09**	0.15
Cheek	R	LTE Band26	26865	831.5	0	36RB-Low	/	23.16	24	0.19	**0.23**	0.148	**0.18**	0.16
Tilt	R	LTE Band26	26865	831.5	0	36RB-Low	/	23.16	24	0.135	**0.16**	0.106	**0.13**	-0.13
Body	F	LTE Band26	26865	831.5	0	1RB-Middle Front 10mm	/	23.99	25	0.189	**0.24**	0.123	**0.16**	-0.14
Body	F	LTE Band26	26865	831.5	0	1RB-Middle Rear 10mm	24	23.99	25	0.399	**0.50**	0.24	**0.30**	0.12
Body	F	LTE Band26	26865	831.5	0	1RB-Middle Left 10mm	/	23.99	25	0.048	**0.06**	0.032	**0.04**	-0.06
Body	F	LTE Band26	26865	831.5	0	1RB-Middle Right 10mm	/	23.99	25	0.123	**0.16**	0.086	**0.11**	0.12
Body	F	LTE Band26	26865	831.5	0	1RB-Middle Bottom 10mm	/	23.99	25	0.198	**0.25**	0.09	**0.11**	0.08
Body	F	LTE Band26	26865	831.5	0	36RB-Low Front 10mm	/	23.16	24	0.144	**0.17**	0.094	**0.11**	0.07
Body	F	LTE Band26	26865	831.5	0	36RB-Low Rear 10mm	/	23.16	24	0.308	**0.37**	0.189	**0.23**	-0.09
Body	F	LTE Band26	26865	831.5	0	36RB-Low Left 10mm	/	23.16	24	<0.01	<0.01	<0.01	<0.01	/
Body	F	LTE Band26	26865	831.5	0	36RB-Low Right 10mm	/	23.16	24	0.125	**0.15**	0.087	**0.11**	-0.18
Body	F	LTE Band26	26865	831.5	0	36RB-Low Bottom 10mm	/	23.16	24	0.137	**0.17**	0.084	**0.10**	-0.1

Note: The LTE mode is QPSK_15MHz.

Table 14.1-13: SAR Values (LTE Band38 ANT4)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band38	38150	2610	4	1RB-Middle	/	16.3	18	0.127	**0.19**	0.057	**0.08**	0.11
Tilt	L	LTE Band38	38150	2610	4	1RB-Middle	/	16.3	18	0.167	**0.25**	0.071	**0.11**	0.12
Cheek	R	LTE Band38	38150	2610	4	1RB-Middle	/	16.3	18	0.349	**0.52**	0.167	**0.25**	-0.07
Tilt	R	LTE Band38	38150	2610	4	1RB-Middle	/	16.3	18	0.448	**0.66**	0.188	**0.28**	0.08
Tilt	R	LTE Band38	38000	2595	4	1RB-Middle	/	16.24	18	0.464	**0.70**	0.192	**0.29**	0.04
Tilt	R	LTE Band38	37850	2580	4	1RB-Middle	25	16.17	18	0.489	**0.75**	0.201	**0.31**	0.01
Cheek	L	LTE Band38	38150	2610	4	50RB-Middle	/	16.33	18	0.118	**0.17**	0.054	**0.08**	0.04
Tilt	L	LTE Band38	38150	2610	4	50RB-Middle	/	16.33	18	0.166	**0.24**	0.071	**0.10**	0.09
Cheek	R	LTE Band38	38150	2610	4	50RB-Middle	/	16.33	18	0.349	**0.51**	0.167	**0.25**	0.09
Tilt	R	LTE Band38	38150	2610	4	50RB-Middle	/	16.33	18	0.445	**0.65**	0.187	**0.27**	-0.12
Tilt	R	LTE Band38	37850	2580	4	UL CA	/	16.23	18	0.473	**0.71**	0.185	**0.28**	0.09
Body	F	LTE Band38	38150	2610	4	1RB-Mid Front 13mm	/	24.31	25.5	0.361	**0.47**	0.187	**0.25**	-0.05
Body	F	LTE Band38	38150	2610	4	1RB-Mid Rear 15mm	/	24.31	25.5	0.500	**0.66**	0.242	**0.32**	0.02
Body	F	LTE Band38	38150	2610	4	1RB-Mid Left Edge 10mm	/	24.31	25.5	0.365	**0.48**	0.192	**0.25**	0.16
Body	F	LTE Band38	38150	2610	4	1RB-Mid Top Edge 15mm	/	24.31	25.5	0.668	**0.88**	0.315	**0.41**	0
Body	F	LTE Band38	38000	2595	4	1RB-Mid Top Edge 15mm	/	24.29	25.5	0.691	**0.91**	0.326	**0.43**	0.11
Body	F	LTE Band38	37850	2580	4	1RB-Mid Top Edge 15mm	/	24.24	25.5	0.728	**0.97**	0.344	**0.46**	0.04
Body	F	LTE Band38	37850	2580	4	100RB Top Edge 15mm	/	24.11	24.5	0.511	**0.56**	0.238	**0.26**	0.09
Body	F	LTE Band38	38150	2610	4	50RB-Low Front 13mm	/	23.37	24.5	0.290	**0.38**	0.148	**0.19**	0.14
Body	F	LTE Band38	38150	2610	4	50RB-Low Rear 15mm	/	23.37	24.5	0.466	**0.60**	0.222	**0.29**	-0.07
Body	F	LTE Band38	38150	2610	4	50RB-Low Left Edge 10mm	/	23.37	24.5	0.294	**0.38**	0.158	**0.20**	0.12
Body	F	LTE Band38	38150	2610	4	50RB-Low Top Edge 15mm	/	23.37	24.5	0.507	**0.66**	0.235	**0.30**	-0.15
Body	F	LTE Band38	38150	2610	4	1RB-Mid Front 10mm	/	20.45	22	0.268	**0.38**	0.129	**0.18**	0.02
Body	F	LTE Band38	38150	2610	4	1RB-Mid Rear 10mm	/	20.45	22	0.542	**0.77**	0.238	**0.34**	-0.02
Body	F	LTE Band38	38150	2610	4	1RB-Mid Top Edge 10mm	26	20.45	22	0.689	**0.98**	0.288	**0.41**	0.09
Body	F	LTE Band38	38000	2595	4	1RB-Mid Top Edge 10mm	/	20.41	22	0.644	**0.93**	0.271	**0.39**	-0.02
Body	F	LTE Band38	37850	2580	4	1RB-Mid Top Edge 10mm	/	20.32	22	0.631	**0.93**	0.268	**0.39**	0.16
Body	F	LTE Band38	38150	2610	4	100RB Top Edge 10mm	/	20.39	22	0.663	**0.96**	0.274	**0.40**	-0.11
Body	F	LTE Band38	38150	2610	4	50RB-Mid Front 10mm	/	20.47	22	0.281	**0.40**	0.137	**0.19**	-0.07
Body	F	LTE Band38	38150	2610	4	50RB-Mid Rear 10mm	/	20.47	22	0.613	**0.87**	0.268	**0.38**	0.17
Body	F	LTE Band38	38000	2595	4	50RB-High Rear 10mm	/	20.35	22	0.573	**0.84**	0.252	**0.37**	-0.06
Body	F	LTE Band38	37850	2580	4	50RB-High Rear 10mm	/	20.32	22	0.561	**0.83**	0.249	**0.37**	-0.05
Body	F	LTE Band38	38150	2610	4	100RB-Mid Rear 10mm	/	20.39	22	0.589	**0.85**	0.257	**0.37**	0.09
Body	F	LTE Band38	38150	2610	4	50RB-Mid Top Edge 10mm	/	20.47	22	0.674	**0.96**	0.277	**0.39**	0.04
Body	F	LTE Band38	38000	2595	4	50RB-High Top Edge 10mm	/	20.35	22	0.630	**0.92**	0.261	**0.38**	-0.15
Body	F	LTE Band38	37850	2580	4	50RB-High Top Edge 10mm	/	20.32	22	0.611	**0.90**	0.245	**0.36**	0.02
Body	F	LTE Band38	38150	2610	4	UL CA Top Edge 10mm	/	20.31	22	0.619	**0.91**	0.253	**0.37**	-0.06

Note: The LTE mode is QPSK_20MHz.

Table 14.1-14: SAR Values (LTE Band38 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band38	38150	2610	0	1RB-Middle	27	23.88	25.5	0.013	0.02	0.006	**0.01**	-0.03
Cheek	L	LTE Band38	38000	2595	0	1RB-Middle	/	23.92	25.5	0.01	**0.01**	0.004	**0.01**	0.11
Cheek	L	LTE Band38	37850	2580	0	1RB-Middle	/	23.89	25.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	L	LTE Band38	38000	2595	0	1RB-Middle	/	23.92	25.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	R	LTE Band38	38000	2595	0	1RB-Middle	/	23.92	25.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	R	LTE Band38	38000	2595	0	1RB-Middle	/	23.92	25.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	LTE Band38	38000	2595	0	50RB-Middle	/	23.07	24.5	0.008	**0.01**	0.004	**0.01**	0.06
Tilt	L	LTE Band38	38000	2595	0	50RB-Middle	/	23.07	24.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	R	LTE Band38	38000	2595	0	50RB-Middle	/	23.07	24.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	R	LTE Band38	38000	2595	0	50RB-Middle	/	23.07	24.5	<0.01	<0.01	<0.01	<0.01	/
Body	F	LTE Band38	38000	2595	0	1RB-Mid Front 13mm	/	23.92	25.5	0.213	**0.31**	0.104	**0.15**	-0.1
Body	F	LTE Band38	38000	2595	0	1RB-Mid Rear 19mm	/	23.92	25.5	0.182	**0.26**	0.092	**0.13**	-0.15
Body	F	LTE Band38	38000	2595	0	1RB-Mid Left 10mm	/	23.92	25.5	0.08	**0.12**	0.043	**0.06**	-0.15
Body	F	LTE Band38	38000	2595	0	1RB-Mid Right 10mm	/	23.92	25.5	0.156	**0.22**	0.079	**0.11**	0.15
Body	F	LTE Band38	38000	2595	0	1RB-Mid Bottom 20mm	/	23.92	25.5	0.473	**0.68**	0.242	**0.35**	0.03
Body	F	LTE Band38	38000	2595	0	50RB-Mid Front 13mm	/	23.07	24.5	0.17	**0.24**	0.083	**0.12**	-0.06
Body	F	LTE Band38	38000	2595	0	50RB-Mid Rear 19mm	/	23.07	24.5	0.146	**0.20**	0.074	**0.10**	-0.11
Body	F	LTE Band38	38000	2595	0	50RB-Mid Left 10mm	/	23.07	24.5	0.064	**0.09**	0.034	**0.05**	-0.07
Body	F	LTE Band38	38000	2595	0	50RB-Mid Right 10mm	/	23.07	24.5	0.125	**0.17**	0.063	**0.09**	-0.05
Body	F	LTE Band38	38000	2595	0	50RB-Mid Bottom 20mm	/	23.07	24.5	0.378	**0.53**	0.194	**0.27**	-0.01
Body	F	LTE Band38	38150	2610	0	1RB-High Front 10mm	Note1	22.24	22.5	0.353	**0.37**	0.167	**0.18**	0.12
Body	F	LTE Band38	38150	2610	0	1RB-High Rear 10mm	Note1	22.24	22.5	0.569	**0.60**	0.264	**0.28**	-0.15
Body	F	LTE Band38	38150	2610	0	1RB-High Bottom 10mm	Note1	22.24	22.5	0.768	**0.82**	0.342	**0.36**	-0.08
Body	F	LTE Band38	38000	2595	0	1RB-High Bottom 10mm	Note1	22.18	22.5	0.837	**0.90**	0.388	**0.42**	0.15
Body	F	LTE Band38	37850	2580	0	1RB-High Bottom 10mm	28/Note1	22.2	22.5	0.911	0.98	0.424	**0.45**	0.15
Body	F	LTE Band38	37850	2580	0	100RB Bottom 10mm	Note1	22.14	22.5	0.874	**0.95**	0.402	**0.44**	0.04
Body	F	LTE Band38	38150	2610	0	50RB-High Front 10mm	Note1	22.25	22.5	0.165	**0.17**	0.076	**0.08**	-0.09
Body	F	LTE Band38	38150	2610	0	50RB-High Rear 10mm	Note1	22.25	22.5	0.262	**0.28**	0.125	**0.13**	0.09
Body	F	LTE Band38	38150	2610	0	50RB-High Bottom 10mm	Note1	22.25	22.5	0.738	**0.78**	0.344	**0.36**	-0.11
Body	F	LTE Band38	38150	2610	0	1RB-High Front 10mm	Note2	19.33	19.5	0.173	**0.18**	0.078	**0.08**	-0.14
Body	F	LTE Band38	38150	2610	0	1RB-High Rear 10mm	Note2	19.33	19.5	0.278	**0.29**	0.128	**0.13**	0.06
Body	F	LTE Band38	38150	2610	0	1RB-High Bottom 10mm	Note2	19.33	19.5	0.409	**0.43**	0.187	**0.19**	0.02
Body	F	LTE Band38	38150	2610	0	50RB-High Front 10mm	Note2	19.33	19.5	0.086	**0.09**	0.04	**0.04**	0.02
Body	F	LTE Band38	38150	2610	0	50RB-High Rear 10mm	Note2	19.33	19.5	0.126	**0.13**	0.059	**0.06**	0.03
Body	F	LTE Band38	38150	2610	0	50RB-High Bottom 10mm	Note2	19.33	19.5	0.4	**0.42**	0.181	**0.19**	0.12

Note: The LTE mode is QPSK_20MHz.

Note1: The results are for DL CA only.

Note2: The results are for ENDC only.

Table 14.1-15: SAR Values (LTE Band41 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band41	41490	2680	0	1RB-Middle	29	23.42	24.5	0.038	0.05	0.02	0.03	-0.02
Cheek	L	LTE Band41	41055	2636.5	0	1RB-Middle	/	23.26	24.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	LTE Band41	40620	2593	0	1RB-Middle	/	23.16	24.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	LTE Band41	40185	2549.5	0	1RB-Middle	/	23.26	24.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	LTE Band41	39750	2506	0	1RB-High	/	23.34	24.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	L	LTE Band41	40620	2593	0	1RB-Middle	/	23.42	24.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	R	LTE Band41	40620	2593	0	1RB-Middle	/	23.42	24.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	R	LTE Band41	40620	2593	0	1RB-Middle	/	23.42	24.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	LTE Band41	40620	2593	0	50RB-Low	/	22.66	23.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	L	LTE Band41	40620	2593	0	50RB-Low	/	22.66	23.5	<0.01	<0.01	<0.01	<0.01	/
Cheek	R	LTE Band41	40620	2593	0	50RB-Low	/	22.66	23.5	<0.01	<0.01	<0.01	<0.01	/
Tilt	R	LTE Band41	40620	2593	0	50RB-Low	/	22.66	23.5	<0.01	<0.01	<0.01	<0.01	/
Body	F	LTE Band41	41490	2680	0	1RB-Low Front 13mm	/	23.42	24.5	0.375	0.48	0.188	0.24	0.08
Body	F	LTE Band41	41490	2680	0	1RB-Low Rear 15mm	/	23.42	24.5	0.498	0.64	0.242	0.31	0.12
Body	F	LTE Band41	41490	2680	0	1RB-Low Rear 19mm	/	23.42	24.5	0.121	0.16	0.062	0.08	0.02
Body	F	LTE Band41	41490	2680	0	1RB-Low Left Edge 10mm	/	23.42	24.5	0.04	0.05	0.214	0.27	-0.06
Body	F	LTE Band41	41490	2680	0	1RB-Low Right Edge 10mm	/	23.42	24.5	0.245	0.31	0.131	0.17	0.09
Body	F	LTE Band41	41490	2680	0	1RB-Low Bottom 17mm	/	23.42	24.5	0.482	0.62	0.247	0.32	0.07
Body	F	LTE Band41	41490	2680	0	50RB-Low Front 13mm	/	22.66	23.5	0.325	0.39	0.163	0.20	0.12
Body	F	LTE Band41	41490	2680	0	50RB-Low Rear 15mm	/	22.66	23.5	0.424	0.51	0.207	0.25	0.11
Body	F	LTE Band41	41490	2680	0	50RB-Low Left 10mm	/	22.66	23.5	0.035	0.04	0.018	0.02	0.06
Body	F	LTE Band41	41490	2680	0	50RB-Low Right 10mm	/	22.66	23.5	0.209	0.25	0.111	0.13	-0.02
Body	F	LTE Band41	41490	2680	0	50RB-Low Bottom 17mm	/	22.66	23.5	0.403	0.49	0.208	0.25	0.08
Body	F	LTE Band41	40185	2549.5	0	1RB-Low Front 10mm	/	19.58	21	0.246	0.34	0.108	0.15	-0.09
Body	F	LTE Band41	40185	2549.5	0	1RB-Low Rear 10mm	/	19.58	21	0.468	0.65	0.198	0.27	-0.11
Body	F	LTE Band41	40185	2549.5	0	1RB-Low Bottom 10mm	/	19.58	21	0.53	0.73	0.231	0.32	0.07
Body	F	LTE Band41	40185	2549.5	0	50RB-Low Front 10mm	/	19.53	21	0.259	0.36	0.113	0.16	-0.02
Body	F	LTE Band41	40185	2549.5	0	50RB-Low Rear 10mm	/	19.53	21	0.488	0.68	0.205	0.29	0.06
Body	F	LTE Band41	40185	2549.5	0	50RB-Low Bottom 10mm	30	19.53	21	0.55	0.77	0.24	0.34	-0.02
Body	F	LTE Band41	40185	2549.5	0	1RB-Low Front 10mm	Note1	16.53	18	0.155	0.22	0.072	0.10	-0.05
Body	F	LTE Band41	40185	2549.5	0	1RB-Low Rear 10mm	Note1	16.53	18	0.268	0.38	0.123	0.17	0.07
Body	F	LTE Band41	40185	2549.5	0	1RB-Low Bottom 10mm	Note1	16.53	18	0.299	0.42	0.136	0.19	0.12
Body	F	LTE Band41	40185	2549.5	0	50RB-Low Front 10mm	Note1	16.54	18	0.161	0.23	0.075	0.10	0.07
Body	F	LTE Band41	40185	2549.5	0	50RB-Low Rear 10mm	Note1	16.54	18	0.277	0.39	0.127	0.18	-0.11
Body	F	LTE Band41	40185	2549.5	0	50RB-Low Bottom 10mm	Note1	16.54	18	0.312	0.44	0.142	0.20	0.17

Note: The LTE mode is QPSK_20MHz.

Note1: The results are for ENDC only.

Table 14.1-16: SAR Values (LTE Band41 ANT4)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band41	41490	2680	4	1RB-Mid	/	12.79	13.5	0.049	0.06	0.021	0.02	0.09
Tilt	L	LTE Band41	41490	2680	4	1RB-Mid	/	12.79	13.5	0.049	0.06	0.021	0.02	-0.11
Cheek	R	LTE Band41	41490	2680	4	1RB-Mid	/	12.79	13.5	0.152	0.18	0.067	0.08	-0.14
Cheek	R	LTE Band41	41055	2636.5	4	1RB-Mid	/	12.62	13.5	0.157	0.19	0.067	0.08	0.06
Cheek	R	LTE Band41	40620	2593	4	1RB-High	/	12.74	13.5	0.211	0.25	0.09	0.11	-0.01
Cheek	R	LTE Band41	40185	2549.5	4	1RB-High	/	12.47	13.5	0.2	0.25	0.084	0.11	-0.13
Cheek	R	LTE Band41	39750	2506	4	1RB-Low	31	12.69	13.5	0.247	0.30	0.102	0.12	0.04
Tilt	R	LTE Band41	41490	2680	4	1RB-Mid	/	12.79	13.5	0.172	0.20	0.066	0.08	0.02
Cheek	L	LTE Band41	41490	2680	4	50RB-Low	/	12.86	13.5	0.045	0.05	0.02	0.02	0.11
Tilt	L	LTE Band41	41490	2680	4	50RB-Low	/	12.86	13.5	0.055	0.06	0.023	0.03	0.08
Cheek	R	LTE Band41	41490	2680	4	50RB-Low	/	12.86	13.5	0.148	0.17	0.067	0.08	-0.03
Tilt	R	LTE Band41	41490	2680	4	50RB-Low	/	12.86	13.5	0.173	0.20	0.066	0.08	0.05
Body	F	LTE Band41	41490	2680	4	1RB-Mid Front 13mm	/	24.12	24.5	0.306	0.33	0.162	0.18	0.05
Body	F	LTE Band41	41490	2680	4	1RB-Mid Rear 15mm	/	24.12	24.5	0.386	0.42	0.192	0.21	0.03
Body	F	LTE Band41	41490	2680	4	1RB-Mid Left 10mm	/	24.12	24.5	0.365	0.40	0.184	0.20	-0.15
Body	F	LTE Band41	41490	2680	4	1RB-Mid Top 15mm	32	24.12	24.5	0.515	0.56	0.234	0.26	0.03
Body	F	LTE Band41	41490	2680	4	50RB-Low Front 13mm	/	23.12	23.5	0.226	0.25	0.122	0.13	0.07
Body	F	LTE Band41	41490	2680	4	50RB-Low Rear 15mm	/	23.12	23.5	0.294	0.32	0.144	0.16	0.15
Body	F	LTE Band41	41490	2680	4	50RB-Low Left 10mm	/	23.12	23.5	0.296	0.32	0.149	0.16	0.04
Body	F	LTE Band41	41490	2680	4	50RB-Low Top 15mm	/	23.12	23.5	0.329	0.36	0.152	0.17	-0.08
Body	F	LTE Band41	41490	2680	4	1RB-Middle Front 10mm	/	14.85	15.5	0.062	0.07	0.032	0.04	0.09
Body	F	LTE Band41	41490	2680	4	1RB-Middle Rear 10mm	/	14.85	15.5	0.095	0.11	0.045	0.05	0.12
Body	F	LTE Band41	41490	2680	4	1RB-Middle Top 10mm	/	14.85	15.5	0.136	0.16	0.055	0.06	0.04
Body	F	LTE Band41	41490	2680	4	50RB-Low Front 10mm	/	14.87	15.5	0.060	0.07	0.031	0.04	0.07
Body	F	LTE Band41	41490	2680	4	50RB-Low Rear 10mm	/	14.87	15.5	0.120	0.14	0.054	0.06	0.08
Body	F	LTE Band41	41490	2680	4	50RB-Low Top 10mm	/	14.87	15.5	0.130	0.15	0.054	0.06	0.17

Note: The LTE mode is QPSK_20MHz.

Note2: All the results are for ENDC.

Table 14.1-17: SAR Values (LTE Band66 ANT1)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
Cheek	L	LTE Band66	132572	1770	1	1RB-Middle	/	23.05	24.5	0.186	**0.26**	0.121	**0.17**	-0.01
Tilt	L	LTE Band66	132572	1770	1	1RB-Middle	/	23.05	24.5	0.206	**0.29**	0.13	**0.18**	-0.11
Cheek	R	LTE Band66	132572	1770	1	1RB-Middle	33	23.05	24.5	0.222	**0.31**	0.143	**0.20**	0.05
Tilt	R	LTE Band66	132572	1770	1	1RB-Middle	/	23.05	24.5	0.096	**0.13**	0.061	**0.09**	0.04
Cheek	L	LTE Band66	132572	1770	1	50RB-Low	/	22.06	23.5	0.14	**0.20**	0.092	**0.13**	-0.13
Tilt	L	LTE Band66	132572	1770	1	50RB-Low	/	22.06	23.5	0.088	**0.12**	0.059	**0.08**	-0.08
Cheek	R	LTE Band66	132572	1770	1	50RB-Low	/	22.06	23.5	0.133	**0.19**	0.087	**0.12**	-0.03
Tilt	R	LTE Band66	132572	1770	1	50RB-Low	/	22.06	23.5	0.102	**0.14**	0.064	**0.09**	0.11
Body	F	LTE Band66	132572	1770	1	1RB-Middle Front 10mm	/	23.05	24.5	0.444	**0.62**	0.278	**0.39**	0.12
Body	F	LTE Band66	132072	1720	1	1RB-Middle Rear 10mm	34	23.05	24.5	0.768	**1.07**	0.483	**0.67**	0.1
Body	F	LTE Band66	132322	1745	1	1RB-Middle Rear 10mm	/	22.98	24.5	0.723	**1.03**	0.445	**0.63**	0.15
Body	F	LTE Band66	132572	1770	1	1RB-Middle Rear 10mm	/	23	24.5	0.708	**1.00**	0.439	**0.62**	-0.15
Body	F	LTE Band66	132072	1720	1	100RB Rear 10mm	/	21.73	23.5	0.592	**0.89**	0.368	**0.55**	0.06
Body	F	LTE Band66	132072	1720	1	1RB-Middle Rear 19mm	/	23.05	24.5	0.329	**0.46**	0.215	**0.30**	0.06
Body	F	LTE Band66	132572	1770	1	1RB-Middle Left 10mm	/	23.05	24.5	0.297	**0.41**	0.172	**0.24**	-0.09
Body	F	LTE Band66	132572	1770	1	1RB-Middle Right 10mm	/	23.05	24.5	0.156	**0.22**	0.095	**0.13**	-0.03
Body	F	LTE Band66	132572	1770	1	1RB-Middle Bottom 10mm	/	23.05	24.5	0.682	**0.95**	0.397	**0.55**	-0.13
Body	F	LTE Band66	132572	1770	1	50RB-Low Front 10mm	/	22.06	23.5	0.379	**0.53**	0.238	**0.33**	-0.02
Body	F	LTE Band66	132572	1770	1	50RB-Low Rear 10mm	/	22.06	23.5	0.599	**0.83**	0.373	**0.52**	-0.15
Body	F	LTE Band66	132572	1770	1	50RB-Low Left 10mm	/	22.06	23.5	0.268	**0.37**	0.162	**0.23**	0.13
Body	F	LTE Band66	132572	1770	1	50RB-Low Right 10mm	/	22.06	23.5	0.129	**0.18**	0.079	**0.11**	0.14
Body	F	LTE Band66	132572	1770	1	50RB-Low Bottom 10mm	/	22.06	23.5	0.558	**0.78**	0.326	**0.45**	-0.06
Body	F	LTE Band66	132072	1720	1	1RB-Middle Front 10mm	Note1	20.68	22	0.223	**0.30**	0.144	**0.20**	-0.06
Body	F	LTE Band66	132072	1720	1	1RB-Middle Rear 10mm	Note1	20.68	22	0.238	**0.32**	0.154	**0.21**	-0.11
Body	F	LTE Band66	132072	1720	1	1RB-Middle Bottom 10mm	Note1	20.68	22	0.307	**0.42**	0.183	**0.25**	0.01
Body	F	LTE Band66	132072	1720	1	50RB-Low Front 10mm	Note1	20.72	22	0.215	**0.29**	0.139	**0.19**	0.07
Body	F	LTE Band66	132072	1720	1	50RB-Low Rear 10mm	Note1	20.72	22	0.279	**0.37**	0.182	**0.24**	-0.11
Body	F	LTE Band66	132072	1720	1	50RB-Low Bottom 10mm	Note1	20.72	22	0.249	**0.33**	0.142	**0.19**	-0.07

Note: The LTE mode is QPSK_20MHz.

Note1: The results are for ENDC only.

14.2 SAR results for 5G NR

Table 14.2-1: SAR Values (n5 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N5 DFT-s-OFDM QPSK 15k 5M 12@6 ANT0														
Cheek	L	N5	167300	836.5	0	DFT-s-OFDM QPSK	/	23.39	24	0.203	**0.23**	0.156	**0.18**	-0.09
Tilt	L	N5	167300	836.5	0	DFT-s-OFDM QPSK	/	23.39	24	0.119	**0.14**	0.095	**0.11**	0.09
Cheek	R	N5	169300	846.5	0	DFT-s-OFDM QPSK	/	23.31	24	0.203	**0.24**	0.152	**0.18**	-0.06
Cheek	R	N5	167300	836.5	0	DFT-s-OFDM QPSK	35	23.39	24	0.216	**0.25**	0.169	**0.19**	-0.14
Cheek	R	N5	165300	826.5	0	DFT-s-OFDM QPSK	/	23.38	24	0.203	**0.23**	0.155	**0.18**	0.13
Tilt	R	N5	167300	836.5	0	DFT-s-OFDM QPSK	/	23.39	24	0.152	**0.17**	0.12	**0.14**	0.1
Cheek	R	N5	167300	836.5	0	CP-OFDM QPSK	/	21.89	22.5	0.177	**0.20**	0.134	**0.15**	0.09
N5 DFT-s-OFDM QPSK 15k 5M 12@6 ANT0														
Body	F	N5	167300	836.5	0	Front 13mm	/	23.39	24	0.112	**0.13**	0.075	**0.09**	0.07
Body	F	N5	167300	836.5	0	Rear 15mm	/	23.39	24	0.159	**0.18**	0.1	**0.12**	0.15
Body	F	N5	167300	836.5	0	Left Edge 10mm	/	23.39	24	<0.01	<0.01	<0.01	<0.01	/
Body	F	N5	167300	836.5	0	Right Edge 10mm	/	23.39	24	0.065	**0.07**	0.046	**0.05**	-0.02
Body	F	N5	167300	836.5	0	Bottom Edge 10mm	/	23.39	24	0.269	**0.31**	0.164	**0.19**	0.02
N5 DFT-s-OFDM QPSK 15k 5M 12@6 ANT0														
Body	F	N5	167300	836.5	0	Front 10mm	/	22.49	23.5	0.11	**0.14**	0.07	**0.09**	-0.09
Body	F	N5	167300	836.5	0	Rear 10mm	36	22.49	23.5	0.271	**0.34**	0.164	**0.21**	0.01
Body	F	N5	167300	836.5	0	Bottom Edge 10mm	/	22.49	23.5	0.262	**0.33**	0.154	**0.19**	0.08
Body	F	N5	167300	836.5	0	CP-OFDM QPSK Rear 10mm	/	21.97	22.5	0.247	**0.28**	0.149	**0.17**	0.09

Table 14.2-2: SAR Values (n7 ANT4)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT4														
Cheek	L	N7	507000	2535	4	DFT-s-OFDM QPSK	/	16.41	17	0.226	**0.26**	0.101	**0.12**	-0.03
Tilt	L	N7	507000	2535	4	DFT-s-OFDM QPSK	/	16.41	17	0.287	**0.33**	0.124	**0.14**	-0.07
Cheek	R	N7	507000	2535	4	DFT-s-OFDM QPSK	/	16.41	17	0.603	**0.69**	0.274	**0.31**	0.12
Tilt	R	N7	513500	2567.5	4	DFT-s-OFDM QPSK	/	16.27	17	0.646	**0.76**	0.266	**0.31**	0.07
Tilt	R	N7	507000	2535	4	DFT-s-OFDM QPSK	/	16.41	17	0.736	**0.84**	0.296	**0.34**	0.09
Tilt	R	N7	500500	2502.5	4	DFT-s-OFDM QPSK	37	16.37	17	0.857	**0.99**	0.337	**0.39**	-0.01
Tilt	R	N7	500500	2502.5	4	CP-OFDM 64QAM	/	16.15	17	0.804	**0.98**	0.301	**0.37**	0.07
Tilt	R	N7	500500	2502.5	4	DFT-s-OFDM QPSK	S2	16.37	17	0.836	**0.97**	0.331	**0.38**	-0.07
Tilt	R	N7	500500	2502.5	4	DFT-s-OFDM QPSK	Single SIM	16.37	17	0.823	**0.95**	0.325	**0.38**	0.11
Tilt	R	N7	500500	2502.5	4	DFT-s-OFDM QPSK	B2	16.37	17	0.825	**0.95**	0.323	**0.37**	0.09
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT4														
Cheek	L	N7	507000	2535	4	DFT-s-OFDM QPSK	Note1	13.06	14	0.132	**0.16**	0.06	**0.07**	-0.11
Tilt	L	N7	507000	2535	4	DFT-s-OFDM QPSK	Note1	13.06	14	0.168	**0.21**	0.075	**0.09**	0.09
Cheek	R	N7	507000	2535	4	DFT-s-OFDM QPSK	Note1	13.06	14	0.321	**0.40**	0.132	**0.16**	-0.01
Tilt	R	N7	513500	2567.5	4	DFT-s-OFDM QPSK	Note1	12.91	14	0.293	**0.38**	0.123	**0.16**	0.12
Tilt	R	N7	507000	2535	4	DFT-s-OFDM QPSK	Note1	13.06	14	0.379	**0.47**	0.141	**0.18**	0.09
Tilt	R	N7	500500	2502.5	4	DFT-s-OFDM QPSK	Note1	13	14	0.4	**0.50**	0.157	**0.20**	0.1
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT4														
Body	F	N7	507000	2535	4	Front 13mm	/	23.39	24	0.421	**0.48**	0.224	**0.26**	-0.11
Body	F	N7	507000	2535	4	Rear 19mm	/	23.39	24	0.378	**0.44**	0.195	**0.22**	-0.08
Body	F	N7	513500	2567.5	4	Top 18mm	/	23.35	24	0.491	**0.57**	0.244	**0.28**	0.16
Body	F	N7	507000	2535	4	Top 18mm	/	23.39	24	0.558	**0.64**	0.28	**0.32**	0.01
Body	F	N7	500500	2502.5	4	Top 18mm	/	23.36	24	0.676	**0.78**	0.339	**0.39**	0.02
Body	F	N7	507000	2535	4	Left 10mm	/	23.39	24	0.465	**0.54**	0.252	**0.29**	-0.12
Body	F	N7	500500	2502.5	4	CP-OFDM QPSK Top 18mm	/	21.94	22.5	0.623	**0.71**	0.289	**0.33**	0.11
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT4														
Body	F	N7	507000	2535	4	Front 10mm	/	18.65	19.5	0.248	**0.30**	0.123	**0.15**	-0.15
Body	F	N7	507000	2535	4	Rear 10mm	/	18.65	19.5	0.48	**0.58**	0.214	**0.26**	0.08
Body	F	N7	513500	2567.5	4	Top Edge 10mm	/	18.46	19.5	0.514	**0.65**	0.233	**0.30**	-0.07
Body	F	N7	507000	2535	4	Top Edge 10mm	/	18.65	19.5	0.525	**0.64**	0.232	**0.28**	0.12
Body	F	N7	500500	2502.5	4	Top Edge 10mm	38	18.55	19.5	0.697	**0.87**	0.302	**0.38**	0.02
Body	F	N7	500500	2502.5	4	CP-OFDM 16QAM Top 10mm	/	18.47	19.5	0.663	**0.84**	0.284	**0.36**	-0.06
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT4														
Body	F	N7	507000	2535	4	Front 10mm	Note1	15.54	16.5	0.119	**0.15**	0.061	**0.08**	-0.05
Body	F	N7	507000	2535	4	Rear 10mm	Note1	15.54	16.5	0.233	**0.29**	0.102	**0.13**	-0.12
Body	F	N7	513500	2567.5	4	Top Edge 10mm	Note1	15.41	16.5	0.251	**0.32**	0.107	**0.14**	0.09
Body	F	N7	507000	2535	4	Top Edge 10mm	Note1	15.54	16.5	0.285	**0.36**	0.12	**0.15**	0.12
Body	F	N7	500500	2502.5	4	Top Edge 10mm	Note1	15.53	16.5	0.347	**0.43**	0.15	**0.19**	0.16

Note1: The results are for ENDC only.

Table 14.2-3: SAR Values (n7 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT0														
Cheek	L	N7	507000	2535	0	DFT-s-OFDM QPSK	/	23.52	24	<0.01	<0.01	<0.01	<0.01	/
Tilt	L	N7	507000	2535	0	DFT-s-OFDM QPSK	/	23.52	24	<0.01	<0.01	<0.01	<0.01	/
Cheek	R	N7	513500	2567.5	0	DFT-s-OFDM QPSK	/	23.51	24	0.038	**0.04**	0.014	**0.02**	0.06
Cheek	R	N7	507000	2535	0	DFT-s-OFDM QPSK	/	23.52	24	0.035	**0.04**	0.013	**0.01**	-0.11
Cheek	R	N7	500500	2502.5	0	DFT-s-OFDM QPSK	39	23.44	24	0.04	**0.05**	0.015	**0.02**	0.12
Tilt	R	N7	507000	2535	0	DFT-s-OFDM QPSK	/	23.52	24	0.032	**0.04**	0.012	**0.01**	0.06
Cheek	R	N7	500500	2502.5	0	CP-OFDM QPSK	/	21.79	22.5	<0.01	<0.01	<0.01	<0.01	/
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT0														
Body	F	N7	507000	2535	0	Front 13mm	/	23.52	24	0.520	**0.58**	0.261	**0.29**	0.02
Body	F	N7	507000	2535	0	Rear 19mm	/	23.52	24	0.531	**0.59**	0.275	**0.31**	-0.12
Body	F	N7	507000	2535	0	Left 10mm	/	23.52	24	0.045	**0.05**	0.016	**0.02**	0.13
Body	F	N7	507000	2535	0	Right 10mm	/	23.52	24	0.238	**0.27**	0.122	**0.14**	0.13
Body	F	N7	507000	2535	0	Bottom 22mm	/	23.52	24	0.664	**0.74**	0.358	**0.40**	0.03
N7 DFT-s-OFDM QPSK 15k 5M 12@6 ANT0														
Body	F	N7	507000	2535	0	Front 10mm	/	17.31	18.5	0.288	**0.38**	0.135	**0.18**	-0.11
Body	F	N7	507000	2535	0	Rear 10mm	/	17.31	18.5	0.529	**0.70**	0.242	**0.32**	0.07
Body	F	N7	513500	2567.5	0	Bottom Edge 10mm	/	17.23	18.5	0.585	**0.78**	0.267	**0.36**	-0.03
Body	F	N7	507000	2535	0	Bottom Edge 10mm	40	17.31	18.5	0.665	**0.87**	0.297	**0.39**	-0.05
Body	F	N7	500500	2502.5	0	Bottom Edge 10mm	/	17.12	18.5	0.524	**0.72**	0.237	**0.33**	0.12
Body	F	N7	507000	2535	0	CP-OFDM 16QAM Bottom 10mm	/	17.28	18.5	0.634	**0.84**	0.276	**0.37**	0.09

Note: All the results are for DL CA.

Table 14.2-4: SAR Values (n38 ANT4)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Cheek	L	N38	519000	2595	4	DFT-s-OFDM QPSK	/	16.53	17.5	0.204	**0.26**	0.093	**0.12**	0.09
Tilt	L	N38	519000	2595	4	DFT-s-OFDM QPSK	/	16.53	17.5	0.257	**0.32**	0.111	**0.14**	0.05
Cheek	R	N38	519000	2595	4	DFT-s-OFDM QPSK	/	16.53	17.5	0.593	**0.74**	0.269	**0.34**	-0.06
Tilt	R	N38	523000	2615	4	DFT-s-OFDM QPSK	/	16.52	17.5	0.7	**0.88**	0.283	**0.35**	-0.11
Tilt	R	N38	519000	2595	4	DFT-s-OFDM QPSK	/	16.53	17.5	0.717	**0.90**	0.312	**0.39**	0.06
Tilt	R	N38	515000	2575	4	DFT-s-OFDM QPSK	41	16.5	17.5	0.784	**0.99**	0.318	**0.40**	-0.15
Tilt	R	N38	515000	2575	4	CP-OFDM 16QAM	/	16.42	17.5	0.754	**0.97**	0.304	**0.39**	0.05
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Cheek	L	N38	519000	2595	4	DFT-s-OFDM QPSK	Note1	13.48	14.5	0.067	**0.08**	0.03	**0.04**	0.15
Tilt	L	N38	519000	2595	4	DFT-s-OFDM QPSK	Note1	13.48	14.5	0.082	**0.10**	0.036	**0.05**	-0.02
Cheek	R	N38	519000	2595	4	DFT-s-OFDM QPSK	Note1	13.48	14.5	0.19	**0.24**	0.086	**0.11**	0.08
Tilt	R	N38	523000	2615	4	DFT-s-OFDM QPSK	Note1	13.44	14.5	0.206	**0.26**	0.091	**0.12**	0.13
Tilt	R	N38	519000	2595	4	DFT-s-OFDM QPSK	Note1	13.48	14.5	0.245	**0.31**	0.103	**0.13**	-0.08
Tilt	R	N38	515000	2575	4	DFT-s-OFDM QPSK	Note1	13.35	14.5	0.257	**0.33**	0.102	**0.13**	0.09
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Body	F	N38	519000	2595	4	Front 13mm	/	23.38	24	0.495	**0.57**	0.25	**0.29**	0.14
Body	F	N38	519000	2595	4	Rear 15mm	/	23.38	24	0.577	**0.67**	0.276	**0.32**	-0.02
Body	F	N38	523000	2615	4	Top 15mm	/	23.34	24	0.638	**0.74**	0.299	**0.35**	0.07
Body	F	N38	519000	2595	4	Top 15mm	/	23.38	24	0.681	**0.79**	0.327	**0.38**	-0.07
Body	F	N38	515000	2575	4	Top 15mm	42	23.36	24	0.733	**0.85**	0.347	**0.40**	0.04
Body	F	N38	519000	2595	4	Left 10mm	/	23.38	24	0.389	**0.45**	0.213	**0.25**	-0.06
Body	F	N38	515000	2575	4	CP-OFDM QPSK Top 15mm	/	21.88	22.5	0.524	**0.60**	0.245	**0.28**	0.09
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Body	F	N38	519000	2595	4	Front 10mm	/	18.52	19.5	0.213	**0.27**	0.101	**0.13**	0.1
Body	F	N38	519000	2595	4	Rear 10mm	/	18.52	19.5	0.417	**0.52**	0.182	**0.23**	0.06
Body	F	N38	523000	2615	4	Top 10mm	/	18.39	19.5	0.474	**0.61**	0.195	**0.25**	-0.11
Body	F	N38	519000	2595	4	Top 10mm	/	18.52	19.5	0.524	**0.66**	0.216	**0.27**	0.11
Body	F	N38	515000	2575	4	Top 10mm	/	18.49	19.5	0.531	**0.67**	0.225	**0.28**	0.07
Body	F	N38	515000	2575	4	CP-OFDM 16QAM Top 10mm	/	18.43	19.5	0.51	**0.65**	0.211	**0.27**	0.09
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Body	F	N38	519000	2595	4	Front 10mm	Note1	15.49	16.5	0.105	**0.13**	0.053	**0.07**	-0.11
Body	F	N38	519000	2595	4	Rear 10mm	Note1	15.49	16.5	0.205	**0.26**	0.089	**0.11**	-0.09
Body	F	N38	523000	2615	4	Top Edge 10mm	Note1	15.36	16.5	0.234	**0.30**	0.1	**0.13**	0.12
Body	F	N38	519000	2595	4	Top Edge 10mm	Note1	15.49	16.5	0.259	**0.33**	0.11	**0.14**	0.07
Body	F	N38	515000	2575	4	Top Edge 10mm	Note1	15.45	16.5	0.27	**0.34**	0.114	**0.15**	0.06

Note1: The results are for ENDC only.

Table 14.2-5: SAR Values (n38 ANT0)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT0														
Cheek	L	N38	523000	2615	0	DFT-s-OFDM QPSK	/	23.15	24	0.015	**0.02**	0.007	**0.01**	-0.15
Cheek	L	N38	519000	2595	0	DFT-s-OFDM QPSK	43	23.19	24	0.025	**0.03**	0.012	**0.01**	-0.04
Cheek	L	N38	515000	2575	0	DFT-s-OFDM QPSK	/	23.13	24	0.012	**0.01**	0.006	**0.01**	0.06
Tilt	L	N38	519000	2595	0	DFT-s-OFDM QPSK	/	23.19	24	0.018	**0.02**	0.009	**0.01**	-0.07
Cheek	R	N38	519000	2595	0	DFT-s-OFDM QPSK	/	23.19	24	0.02	**0.02**	0.008	**0.01**	0.07
Tilt	R	N38	519000	2595	0	DFT-s-OFDM QPSK	/	23.19	24	<0.01	<0.01	<0.01	<0.01	/
Cheek	L	N38	519000	2595	0	CP-OFDM QPSK	/	21.69	22.5	0.016	**0.02**	0.007	**0.01**	-0.16
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT0														
Body	F	N38	519000	2595	0	Front 13mm	/	23.19	24	0.284	**0.34**	0.15	**0.18**	0.15
Body	F	N38	519000	2595	0	Rear 19mm	/	23.19	24	0.496	**0.60**	0.42	**0.51**	-0.06
Body	F	N38	519000	2595	0	Left Edge 10mm	/	23.19	24	<0.01	<0.01	<0.01	<0.01	/
Body	F	N38	519000	2595	0	Right Edge 10mm	/	23.19	24	0.081	**0.10**	0.047	**0.06**	0.06
Body	F	N38	519000	2595	0	Bottom 22mm	/	23.19	24	0.457	**0.55**	0.26	**0.31**	-0.11
N38 DFT-s-OFDM QPSK 30k 10M 12@6 ANT0														
Body	F	N38	519000	2595	0	Front 10mm	/	18.35	19.5	0.283	**0.37**	0.134	**0.17**	0.07
Body	F	N38	519000	2595	0	Rear 10mm	/	18.35	19.5	0.501	**0.65**	0.234	**0.30**	0.06
Body	F	N38	523000	2615	0	Bottom 10mm	/	18.29	19.5	0.498	**0.66**	0.233	**0.31**	-0.15
Body	F	N38	519000	2595	0	Bottom 10mm	44	18.35	19.5	0.622	**0.81**	0.285	**0.37**	0.11
Body	F	N38	515000	2575	0	Bottom 10mm	/	18.18	19.5	0.561	**0.76**	0.269	**0.36**	-0.05
Body	F	N38	519000	2595	0	CP-OFDM 16QAM Bottom 10mm	/	18.16	19.5	0.578	**0.79**	0.262	**0.36**	-0.09

Note: All the results are for DL CA.

Table 14.2-6: SAR Values (n41 ANT4)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N41 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Cheek	L	N41	518598	2592.99	4		/	15.96	16.8	0.178	**0.22**	0.074	**0.09**	0.07
Tilt	L	N41	518598	2592.99	4		/	15.96	16.8	0.219	**0.27**	0.087	**0.11**	0.07
Cheek	R	N41	518598	2592.99	4		/	15.96	16.8	0.513	**0.62**	0.215	**0.26**	0.14
Tilt	R	N41	537000	2685	4		/	15.88	16.8	0.378	**0.47**	0.16	**0.20**	0.07
Tilt	R	N41	527799	2639	4		/	15.73	16.8	0.493	**0.63**	0.203	**0.26**	-0.13
Tilt	R	N41	518598	2592.99	4		/	15.96	16.8	0.633	**0.77**	0.235	**0.29**	0.06
Tilt	R	N41	509406	2455.02	4		/	15.58	16.8	0.602	**0.80**	0.24	**0.32**	-0.01
Tilt	R	N41	500205	2501.01	4		45	15.88	16.8	0.767	**0.95**	0.301	**0.37**	0.04
Tilt	R	N41	500205	2501.01	4	CP-OFDM 16QAM	/	15.68	16.8	0.712	**0.92**	0.271	**0.35**	-0.07
N41 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Cheek	L	N41	518598	2592.99	4		Note1	13.55	14.5	0.115	**0.14**	0.051	**0.06**	0.1
Tilt	L	N41	518598	2592.99	4		Note1	13.55	14.5	0.138	**0.17**	0.056	**0.07**	0.13
Cheek	R	N41	518598	2592.99	4		Note1	13.55	14.5	0.312	**0.39**	0.132	**0.16**	0.09
Tilt	R	N41	537000	2685	4		Note1	13.52	14.5	0.224	**0.28**	0.097	**0.12**	-0.05
Tilt	R	N41	527799	2639	4		Note1	13.38	14.5	0.297	**0.38**	0.116	**0.15**	-0.13
Tilt	R	N41	518598	2592.99	4		Note1	13.55	14.5	0.373	**0.46**	0.136	**0.17**	-0.02
Tilt	R	N41	509406	2455.02	4		Note1	13.43	14.5	0.332	**0.42**	0.139	**0.18**	0.06
Tilt	R	N41	500205	2501.01	4		Note1	13.52	14.5	0.45	**0.56**	0.176	**0.22**	0.12
N41 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Body	F	N41	518598	2592.99	4	Front 13mm	/	23.36	24	0.366	**0.42**	0.191	**0.22**	0.15
Body	F	N41	518598	2592.99	4	Rear 19mm	/	23.36	24	0.358	**0.41**	0.186	**0.22**	-0.09
Body	F	N41	518598	2592.99	4	Left 10mm	/	23.36	24	0.338	**0.39**	0.186	**0.22**	0.06
Body	F	N41	518598	2592.99	4	Top 18mm	/	23.36	24	0.491	**0.57**	0.24	**0.28**	0.03
N41 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Body	F	N41	518598	2592.99	4	Front 10mm	/	18.21	19	0.217	**0.26**	0.105	**0.13**	0.01
Body	F	N41	518598	2592.99	4	Rear 10mm	/	18.21	19	0.42	**0.50**	0.184	**0.22**	-0.14
Body	F	N41	537000	2685	4	Top Edge 10mm	/	17.79	19	0.339	**0.45**	0.145	**0.19**	0.06
Body	F	N41	527799	2639	4	Top Edge 10mm	/	18.03	19	0.447	**0.56**	0.19	**0.24**	0.01
Body	F	N41	518598	2592.99	4	Top Edge 10mm	/	18.21	19	0.5	**0.60**	0.215	**0.26**	-0.1
Body	F	N41	509406	2455.02	4	Top Edge 10mm	/	17.78	19	0.535	**0.71**	0.23	**0.30**	-0.1
Body	F	N41	500205	2501.01	4	Top Edge 10mm	46	18.12	19	0.721	**0.88**	0.312	**0.38**	0.08
Body	F	N41	500205	2501.01	4	CP-OFDM 16QAM Top 10mm	/	17.88	19	0.657	**0.85**	0.275	**0.36**	-0.09
N41 DFT-s-OFDM QPSK 30k 10M 12@6 ANT4														
Body	F	N41	518598	2592.99	4	Front 10mm	Note1	15.25	16	0.128	**0.15**	0.06	**0.07**	-0.06
Body	F	N41	518598	2592.99	4	Rear 10mm	Note1	15.25	16	0.237	**0.28**	0.102	**0.12**	0.15
Body	F	N41	518598	2592.99	4	Top Edge 10mm	Note1	15.25	16	0.289	**0.34**	0.121	**0.14**	0.08

Note1: The results are for ENDC only.

Table 14.2-7: SAR Values (n77 ANT5)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N77 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Cheek	L	N77	633334	3500.01	5	DFT-s-OFDM QPSK	/	15.23	16.5	0.499	**0.67**	0.222	**0.30**	0.06
Tilt	L	N77	633334	3500.01	5	DFT-s-OFDM QPSK	47	15.23	16.5	0.533	**0.71**	0.224	**0.30**	0.09
Cheek	R	N77	633334	3500.01	5	DFT-s-OFDM QPSK	/	15.23	16.5	0.31	**0.42**	0.132	**0.18**	0.03
Tilt	R	N77	633334	3500.01	5	DFT-s-OFDM QPSK	/	15.23	16.5	0.329	**0.44**	0.134	**0.18**	-0.12
Cheek	L	N77	654800	3822	5	DFT-s-OFDM QPSK	/	15.18	16.5	0.365	**0.49**	0.157	**0.21**	-0.15
Tilt	L	N77	654800	3822	5	DFT-s-OFDM QPSK	/	15.18	16.5	0.424	**0.57**	0.17	**0.23**	0.09
Cheek	R	N77	654800	3822	5	DFT-s-OFDM QPSK	/	15.18	16.5	0.221	**0.30**	0.091	**0.12**	-0.03
Tilt	R	N77	654800	3822	5	DFT-s-OFDM QPSK	/	15.18	16.5	0.248	**0.34**	0.098	**0.13**	0.11
Tilt	L	N77	633334	3500.01	5	CP-OFDM 16QAM	/	15.22	16.5	0.489	**0.66**	0.203	**0.27**	-0.07
N77 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Cheek	L	N77	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	12.26	13.5	0.254	**0.34**	0.11	**0.15**	-0.08
Tilt	L	N77	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	12.26	13.5	0.263	**0.35**	0.109	**0.15**	0.12
Cheek	R	N77	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	12.26	13.5	0.147	**0.20**	0.063	**0.08**	0.14
Tilt	R	N77	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	12.26	13.5	0.173	**0.23**	0.071	**0.09**	-0.05
Cheek	L	N77	654800	3822	5	DFT-s-OFDM QPSK	Note1	12.15	13.5	0.199	**0.27**	0.085	**0.12**	0.12
Tilt	L	N77	654800	3822	5	DFT-s-OFDM QPSK	Note1	12.15	13.5	0.233	**0.32**	0.094	**0.13**	0.03
Cheek	R	N77	654800	3822	5	DFT-s-OFDM QPSK	Note1	12.15	13.5	0.11	**0.15**	0.045	**0.06**	-0.05
Tilt	R	N77	654800	3822	5	DFT-s-OFDM QPSK	Note1	12.15	13.5	0.144	**0.20**	0.056	**0.08**	-0.09
N77 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N77	633334	3500.01	5	Front 14mm	/	23.18	24	0.562	**0.68**	0.265	**0.32**	-0.12
Body	F	N77	633334	3500.01	5	Rear 18mm	/	23.18	24	0.594	**0.72**	0.286	**0.35**	-0.07
Body	F	N77	636000	3540	5	Right Edge 14mm	48	23.13	24	0.614	**0.75**	0.307	**0.38**	-0.11
Body	F	N77	633334	3500.01	5	Right Edge 14mm	/	23.18	24	0.611	**0.74**	0.304	**0.37**	0.14
Body	F	N77	630668	3460.02	5	Right Edge 14mm	/	23.05	24	0.591	**0.74**	0.295	**0.37**	-0.07
Body	F	N77	633334	3500.01	5	Top 19mm	/	23.18	24	0.607	**0.73**	0.297	**0.36**	0.1
Body	F	N77	636000	3540	5	CP-OFDM QPSK Right 14mm	/	21.75	22.5	0.545	**0.65**	0.284	**0.34**	-0.04
N77 DFT-s-OFDM QPSK 30k 100M 135@67 ANT5														
Body	F	N77	654800	3822	5	Front 14mm	/	23.22	24	0.282	**0.34**	0.135	**0.16**	-0.06
Body	F	N77	654800	3822	5	Rear 18mm	/	23.22	24	0.314	**0.38**	0.155	**0.19**	0.06
Body	F	N77	654800	3822	5	Right Edge 14mm	/	23.22	24	0.365	**0.44**	0.178	**0.21**	-0.15
Body	F	N77	654800	3822	5	Top 19mm	/	23.22	24	0.427	**0.51**	0.208	**0.25**	-0.09
N77 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N77	633334	3500.01	5	Front 10mm	/	18.13	19.8	0.287	**0.42**	0.135	**0.20**	0.03
Body	F	N77	636000	3540	5	Rear 10mm	/	18.11	19.8	0.443	**0.65**	0.201	**0.30**	0.03
Body	F	N77	633334	3500.01	5	Rear 10mm	/	18.13	19.8	0.474	**0.70**	0.214	**0.31**	-0.11
Body	F	N77	630668	3460.02	5	Rear 10mm	/	18.1	19.8	0.492	**0.73**	0.22	**0.33**	-0.07
Body	F	N77	633334	3500.01	5	Right 10mm	/	18.13	19.8	0.315	**0.46**	0.142	**0.21**	-0.09
Body	F	N77	633334	3500.01	5	Top 10mm	/	18.13	19.8	0.376	**0.55**	0.171	**0.25**	-0.11
N77 DFT-s-OFDM QPSK 30k 100M 135@67 ANT5														
Body	F	N77	654800	3822	5	Front 10mm	/	18.02	19.8	0.131	**0.20**	0.064	**0.10**	0.15
Body	F	N77	654800	3822	5	Rear 10mm	/	18.02	19.8	0.224	**0.34**	0.11	**0.17**	0.06
Body	F	N77	654800	3822	5	Right 10mm	/	18.02	19.8	0.185	**0.28**	0.084	**0.13**	-0.09
Body	F	N77	654800	3822	5	Top 10mm	/	18.02	19.8	0.232	**0.35**	0.111	**0.17**	0.14
N77 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N77	633334	3500.01	5	Front 10mm	Note1	14.95	16.2	0.111	**0.15**	0.052	**0.07**	0.09
Body	F	N77	633334	3500.01	5	Rear 10mm	Note1	14.95	16.2	0.198	**0.26**	0.09	**0.12**	-0.11
Body	F	N77	633334	3500.01	5	Right 10mm	Note1	14.95	16.2	0.155	**0.21**	0.064	**0.09**	0.09
Body	F	N77	633334	3500.01	5	Top 10mm	Note1	14.95	16.2	0.173	**0.23**	0.076	**0.10**	0.05
N77 DFT-s-OFDM QPSK 30k 100M 135@67 ANT5														
Body	F	N77	654800	3822	5	Front 10mm	Note1	14.94	16.2	0.081	**0.11**	0.037	**0.05**	-0.04
Body	F	N77	654800	3822	5	Rear 10mm	Note1	14.94	16.2	0.134	**0.18**	0.058	**0.08**	-0.12
Body	F	N77	654800	3822	5	Right 10mm	Note1	14.94	16.2	0.117	**0.16**	0.052	**0.07**	0.04
Body	F	N77	654800	3822	5	Top 10mm	Note1	14.94	16.2	0.134	**0.18**	0.059	**0.08**	0.18

Note1: The results are for ENDC only.

Table 14.2-8: SAR Values (n78 ANT5)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
N78 DFT-s-OFDM QPSK 30k 20M 135@67 ANT5														
Cheek	L	N78	633334	3500.01	5	DFT-s-OFDM QPSK	49	16.24	16.5	0.656	**0.70**	0.286	**0.30**	-0.08
Tilt	L	N78	633334	3500.01	5	DFT-s-OFDM QPSK	/	16.24	16.5	0.598	**0.63**	0.262	**0.28**	0.08
Cheek	R	N78	633334	3500.01	5	DFT-s-OFDM QPSK	/	16.24	16.5	0.395	**0.42**	0.166	**0.18**	0.08
Tilt	R	N78	633334	3500.01	5	DFT-s-OFDM QPSK	/	16.24	16.5	0.446	**0.47**	0.181	**0.19**	0.11
Cheek	L	N78	650000	3750	5	DFT-s-OFDM QPSK	/	15.89	16.5	0.566	**0.65**	0.244	**0.28**	-0.15
Tilt	L	N78	650000	3750	5	DFT-s-OFDM QPSK	/	15.89	16.5	0.593	**0.68**	0.257	**0.30**	-0.03
Cheek	R	N78	650000	3750	5	DFT-s-OFDM QPSK	/	15.89	16.5	0.307	**0.35**	0.131	**0.15**	0.13
Tilt	R	N78	650000	3750	5	DFT-s-OFDM QPSK	/	15.89	16.5	0.36	**0.41**	0.146	**0.17**	-0.03
Cheek	L	N78	633334	3500.01	5	CP-OFDM QPSK	/	16.19	16.5	0.634	**0.68**	0.271	**0.29**	-0.07
N78 DFT-s-OFDM QPSK 30k 100M 135@67 ANT5														
Cheek	L	N78	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	13.28	13.5	0.326	**0.34**	0.136	**0.14**	-0.1
Tilt	L	N78	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	13.28	13.5	0.315	**0.33**	0.127	**0.13**	0.11
Cheek	R	N78	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	13.28	13.5	0.184	**0.19**	0.079	**0.08**	-0.02
Tilt	R	N78	633334	3500.01	5	DFT-s-OFDM QPSK	Note1	13.28	13.5	0.229	**0.24**	0.092	**0.10**	0.1
Cheek	L	N78	650000	3750	5	DFT-s-OFDM QPSK	Note1	12.98	13.5	0.294	**0.33**	0.119	**0.13**	-0.11
Tilt	L	N78	650000	3750	5	DFT-s-OFDM QPSK	Note1	12.98	13.5	0.272	**0.31**	0.105	**0.12**	0.14
Cheek	R	N78	650000	3750	5	DFT-s-OFDM QPSK	Note1	12.98	13.5	0.169	**0.19**	0.063	**0.07**	0.14
Tilt	R	N78	650000	3750	5	DFT-s-OFDM QPSK	Note1	12.98	13.5	0.206	**0.23**	0.084	**0.09**	0.14
N78 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N78	633334	3500.01	5	Front 14mm	/	24.49	25	0.74	**0.83**	0.351	**0.39**	0.18
Body	F	N78	633334	3500.01	5	Front 18mm	/	24.49	25	0.499	**0.56**	0.242	**0.27**	-0.02
Body	F	N78	636000	3540	5	Rear 18mm	/	24.38	25	0.746	**0.86**	0.362	**0.42**	-0.13
Body	F	N78	633334	3500.01	5	Rear 18mm	/	24.49	25	0.69	**0.78**	0.34	**0.38**	-0.11
Body	F	N78	630668	3460.02	5	Rear 18mm	50	24.42	25	0.852	**0.97**	0.402	**0.46**	-0.07
Body	F	N78	630668	3460.02	5	Rear 25mm	/	24.42	25	0.523	**0.60**	0.261	**0.30**	0.05
Body	F	N78	633334	3500.01	5	Right Edge 14mm	/	24.49	25	0.686	**0.77**	0.354	**0.40**	0.01
Body	F	N78	636000	3540	5	Top 19mm	/	24.38	25	0.742	**0.86**	0.368	**0.42**	-0.15
Body	F	N78	633334	3500.01	5	Top 19mm	/	24.49	25	0.789	**0.89**	0.387	**0.44**	-0.06
Body	F	N78	630668	3460.02	5	Top 19mm	/	24.42	25	0.763	**0.87**	0.381	**0.44**	-0.17
N78 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N78	650000	3750	5	Front 14mm	/	24.33	25	0.534	**0.62**	0.263	**0.31**	-0.15
Body	F	N78	650000	3750	5	Rear 18mm	/	24.33	25	0.624	**0.73**	0.299	**0.35**	0.03
Body	F	N78	650000	3750	5	Right Edge 14mm	/	24.33	25	0.546	**0.64**	0.283	**0.33**	0.02
Body	F	N78	652500	3787.5	5	Top 19mm	/	24.06	25	0.567	**0.70**	0.286	**0.36**	-0.17
Body	F	N78	650000	3750	5	Top 19mm	/	24.33	25	0.683	**0.80**	0.342	**0.40**	0.13
Body	F	N78	647500	3712.5	5	Top 19mm	/	24.28	25	0.731	**0.86**	0.366	**0.43**	-0.06
N78 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N78	633334	3500.01	5	Front 10mm	/	18.78	19.8	0.345	**0.44**	0.161	**0.20**	0.06
Body	F	N78	636000	3540	5	Rear 10mm	/	18.71	19.8	0.557	**0.72**	0.253	**0.33**	-0.01
Body	F	N78	633334	3500.01	5	Rear 10mm	/	18.78	19.8	0.6	**0.76**	0.27	**0.34**	0.07
Body	F	N78	630668	3460.02	5	Rear 10mm	/	18.47	19.8	0.633	**0.86**	0.283	**0.38**	-0.07
Body	F	N78	633334	3500.01	5	Right 10mm	/	18.78	19.8	0.277	**0.35**	0.136	**0.17**	0.16
Body	F	N78	633334	3500.01	5	Top 10mm	/	18.78	19.8	0.47	**0.59**	0.211	**0.27**	0.03
Body	F	N78	630668	3460.02	5	CP-OFDM 16QAM Rear 10mm		18.74	19.8	0.611	**0.78**	0.271	**0.35**	-0.08
N78 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N78	650000	3750	5	Front 10mm	/	18.69	19.8	0.302	**0.39**	0.145	**0.19**	0.06
Body	F	N78	650000	3750	5	Rear 10mm	/	18.69	19.8	0.519	**0.67**	0.241	**0.31**	-0.07
Body	F	N78	650000	3750	5	Right 10mm	/	18.69	19.8	0.344	**0.44**	0.165	**0.21**	0.03
Body	F	N78	650000	3750	5	Top 10mm	/	18.69	19.8	0.452	**0.58**	0.215	**0.28**	0.11
N78 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N78	633334	3500.01	5	Front 10mm	Note1	15.86	16.2	0.192	**0.21**	0.091	**0.10**	-0.11
Body	F	N78	633334	3500.01	5	Rear 10mm	Note1	15.86	16.2	0.280	**0.30**	0.128	**0.14**	0.03
Body	F	N78	633334	3500.01	5	Right 10mm	Note1	15.86	16.2	0.171	**0.18**	0.083	**0.09**	-0.01
Body	F	N78	633334	3500.01	5	Top 10mm	Note1	15.86	16.2	0.248	**0.27**	0.115	**0.12**	0.06
N78 DFT-s-OFDM QPSK 30k 20M 25@12 ANT5														
Body	F	N78	650000	3750	5	Front 10mm	Note1	15.56	16.2	0.133	**0.15**	0.061	**0.07**	-0.14
Body	F	N78	650000	3750	5	Rear 10mm	Note1	15.56	16.2	0.208	**0.24**	0.096	**0.11**	-0.12
Body	F	N78	650000	3750	5	Right 10mm	Note1	15.56	16.2	0.152	**0.18**	0.074	**0.09**	0.06
Body	F	N78	650000	3750	5	Top 10mm	Note1	15.56	16.2	0.217	**0.25**	0.098	**0.11**	0.13

Note1: The results are for ENDC only.

14.3 SAR Evaluation for WIFI 2.4G

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.

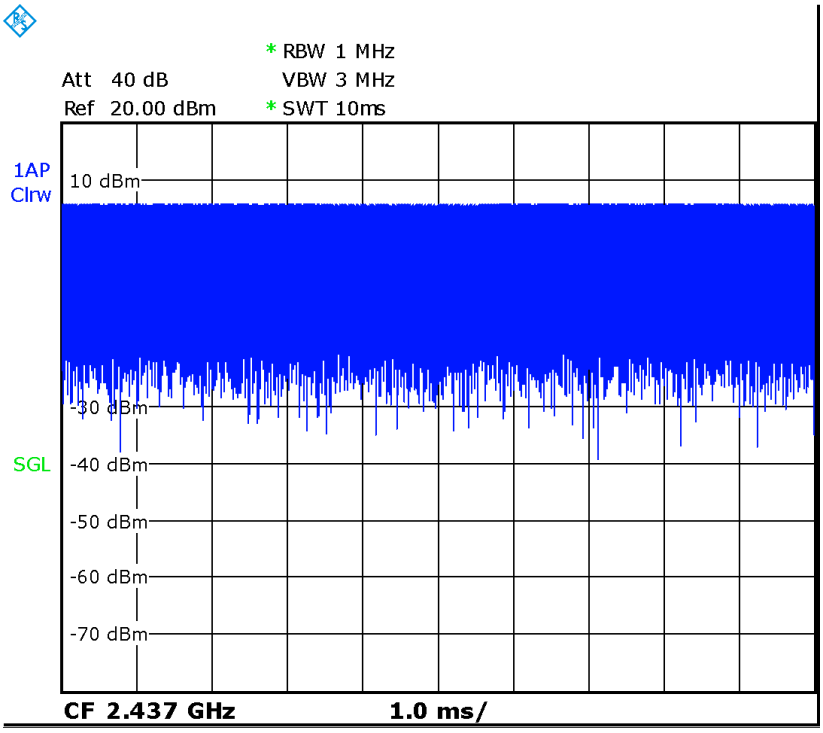
Table 14.3-1: SAR Values (WLAN2.4G ANT6)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
11b 1M														
Cheek	L	WIFI2.4G	6	2437	6		/	12.88	14.5	0.147	**0.21**	0.075	**0.11**	-0.12
Tilt	L	WIFI2.4G	6	2437	6		51	12.88	14.5	0.173	**0.25**	0.078	**0.11**	0.09
Cheek	R	WIFI2.4G	6	2437	6		/	12.88	14.5	0.051	**0.07**	0.026	**0.04**	0.03
Tilt	R	WIFI2.4G	6	2437	6		/	12.88	14.5	0.068	**0.10**	0.031	**0.05**	-0.07
11b 1M														
Body	F	WIFI2.4G	6	2437	6	Front 10mm	/	18.94	20	0.21	**0.27**	0.11	**0.14**	-0.11
Body	F	WIFI2.4G	6	2437	6	Rear 10mm	52	18.94	20	0.219	**0.28**	0.112	**0.14**	0.03
Body	F	WIFI2.4G	6	2437	6	Right 10mm	/	18.94	20	0.205	**0.26**	0.101	**0.13**	0.09
Body	F	WIFI2.4G	6	2437	6	Top 10mm	/	18.94	20	0.194	**0.25**	0.081	**0.10**	-0.11

Table 14.3-2: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C							
Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.						
2437	6	Left	Tilt	100%	100%	**0.25**	**0.25**
2437	6	Rear	10mm	100%	100%	**0.28**	**0.28**

SAR is not required for OFDM because the 802.11g adjusted SAR ≤ 1.2 W/kg.



Picture 14.3-1 Duty factor plot

14.4 SAR Evaluation For WIFI 5G

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.

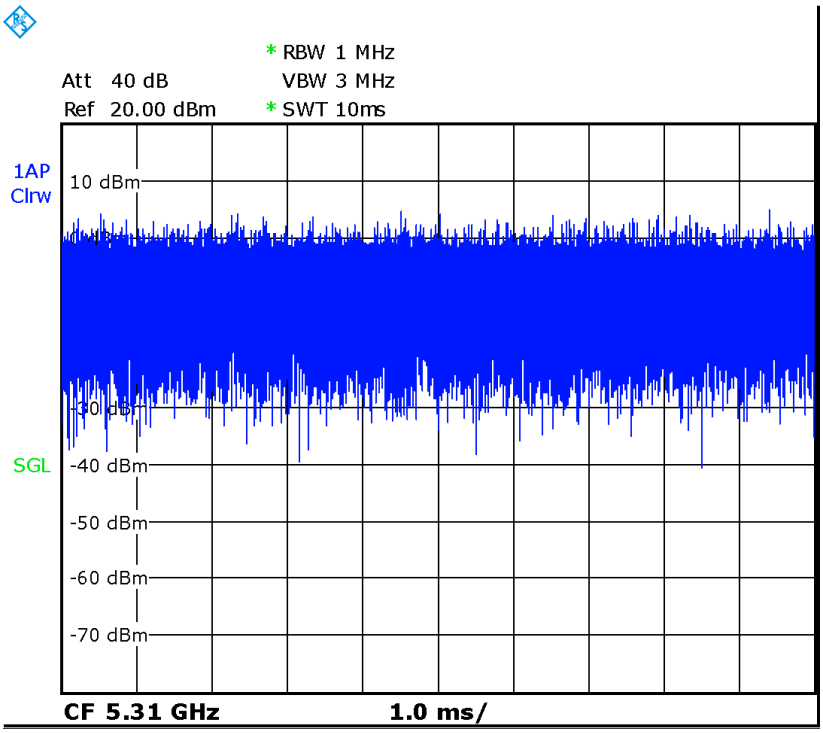
Table 14.4-1: SAR Values (WLAN 5G ANT6)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
11n-40M MCS0														
Cheek	L	WIFI5G	62	5310	6	/	/	14.88	16	0.271	**0.35**	0.086	**0.11**	0.14
Tilt	L	WIFI5G	62	5310	6	/	53	14.88	16	0.347	**0.45**	0.104	**0.13**	-0.07
Cheek	R	WIFI5G	62	5310	6	/	/	14.88	16	0.147	**0.19**	0.048	**0.06**	-0.14
Tilt	R	WIFI5G	62	5310	6	/	/	14.88	16	0.187	**0.24**	0.055	**0.07**	0.09
11n-40M MCS0														
Cheek	L	WIFI5G	159	5795	6	/	/	14.71	16	0.124	**0.17**	0.043	**0.06**	-0.12
Tilt	L	WIFI5G	159	5795	6	/	/	14.71	16	0.131	**0.18**	0.04	**0.05**	-0.04
Cheek	R	WIFI5G	159	5795	6	/	/	14.71	16	0.043	**0.06**	0.009	**0.01**	-0.14
Tilt	R	WIFI5G	159	5795	6	/	/	14.71	16	0.038	**0.05**	0.013	**0.02**	-0.03
11a 6M														
Cheek	L	WIFI5G	144	5720	6	/	/	14.95	16	0.124	**0.16**	0.043	**0.05**	-0.10
Tilt	L	WIFI5G	144	5720	6	/	/	14.95	16	0.133	**0.17**	0.042	**0.05**	0.10
Cheek	R	WIFI5G	144	5720	6	/	/	14.95	16	0.043	**0.05**	0.016	**0.02**	0.14
Tilt	R	WIFI5G	144	5720	6	/	/	14.95	16	0.066	**0.08**	0.022	**0.03**	0.15
11a 6M														
Body	F	WIFI5G	64	5320	6	Front 14mm	/	17.98	19	0.123	**0.16**	0.053	**0.07**	0.06
Body	F	WIFI5G	64	5320	6	Rear 25mm	/	17.98	19	0.275	**0.35**	0.124	**0.16**	0.16
Body	F	WIFI5G	64	5320	6	Right 14mm	/	17.98	19	0.351	**0.44**	0.151	**0.19**	-0.11
Body	F	WIFI5G	64	5320	6	Top 19mm	/	17.98	19	0.304	**0.38**	0.124	**0.16**	0.07
11n-40M MCS0														
Body	F	WIFI5G	62	5310	6	Front 10mm	/	14.88	16	0.067	**0.09**	0.027	**0.03**	-0.15
Body	F	WIFI5G	62	5310	6	Rear 10mm	54	14.88	16	0.341	**0.44**	0.116	**0.15**	0.03
Body	F	WIFI5G	62	5310	6	Rear 19mm	/	14.88	16	0.236	**0.31**	0.093	**0.12**	0.16
Body	F	WIFI5G	62	5310	6	Right 10mm	/	14.88	16	0.186	**0.24**	0.0747	**0.10**	0.04
Body	F	WIFI5G	62	5310	6	Top 10mm	/	14.88	16	0.283	**0.37**	0.095	**0.12**	0.09
11a 6M														
Body	F	WIFI5G	144	5720	6	Front 10mm	/	14.95	16	0.049	**0.06**	0.018	**0.02**	-0.14
Body	F	WIFI5G	144	5720	6	Rear 10mm	/	14.95	16	0.187	**0.24**	0.065	**0.08**	0.04
Body	F	WIFI5G	144	5720	6	Right 10mm	/	14.95	16	0.152	**0.19**	0.056	**0.07**	-0.06
Body	F	WIFI5G	144	5720	6	Top 10mm	/	14.95	16	0.148	**0.19**	0.053	**0.07**	-0.15
11a 6M														
Body	F	WIFI5G	149	5745	6	Front 14mm	/	18.39	19	0.139	**0.16**	0.032	**0.04**	0.02
Body	F	WIFI5G	149	5745	6	Rear 25mm	/	18.39	19	0.158	**0.18**	0.057	**0.07**	0.11
Body	F	WIFI5G	149	5745	6	Right 14mm	/	18.39	19	0.235	**0.27**	0.096	**0.11**	0.03
Body	F	WIFI5G	149	5745	6	Top 18mm	/	18.39	19	0.227	**0.26**	0.091	**0.10**	-0.1
11ac-80M MCS0														
Body	F	WIFI5G	155	5775	6	Front 10mm	/	14.71	16.5	0.052	**0.08**	0.011	**0.02**	-0.07
Body	F	WIFI5G	155	5775	6	Rear 10mm	/	14.71	16.5	0.144	**0.22**	0.055	**0.08**	0.01
Body	F	WIFI5G	155	5775	6	Right 10mm	/	14.71	16.5	0.127	**0.19**	0.048	**0.07**	0.06
Body	F	WIFI5G	155	5775	6	Top 10mm	/	14.71	16.5	0.119	**0.18**	0.043	**0.06**	0.12

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

Table 14.4-2: SAR Values (WLAN 5G - Head) (Scaled Reported SAR)

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
Ch.	MHz						
62	5310	Left	Tilt	100%	100%	**0.45**	**0.45**
62	5310	Rear	10mm	100%	100%	**0.44**	**0.44**



Picture 14.4-1 The plot of duty factor for CH.138

14.5 SAR Evaluation For BT

Table 14.5-1: SAR Values (BT ANT6)

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	ANT	Test setup/Position	Fig.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
1-DH5														
Cheek	L	BT	39	2441	6	/	55	9.81	10	0.109	0.11	0.052	**0.05**	0.1
Tilt	L	BT	39	2441	6	/	/	9.81	10	0.103	**0.11**	0.047	**0.05**	-0.09
Cheek	R	BT	39	2441	6	/	/	9.81	10	<0.01	<0.01	<0.01	<0.01	/
Tilt	R	BT	39	2441	6	/	/	9.81	10	0.041	**0.04**	0.021	**0.02**	-0.11
1-DH5														
Body	F	BT	39	2441	6	Front 10mm	/	9.81	10	<0.01	<0.01	<0.01	<0.01	/
Body	F	BT	39	2441	6	Rear 10mm	56	9.81	10	0.037	0.04	0.0159	**0.02**	-0.04
Body	F	BT	39	2441	6	Right 10mm	/	9.81	10	<0.01	<0.01	<0.01	<0.01	/
Body	F	BT	39	2441	6	Top 10mm	/	9.81	10	<0.01	<0.01	<0.01	<0.01	/

14.6 SAR results for 10-g extremity SAR

According to the KDB648474 D04, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

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

15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

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

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; 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

Mode	CH	Freq	Test Position	Original SAR(W/kg)	First Repeated SAR(W/kg)	The Ratio
WCDMA1900	9262	1852.4	Bottom 10mm	0.853	0.844	1.01
LTE Band38	38000	2595	1RB-High Bottom 10mm	0.911	0.903	1.01

16 Measurement Uncertainty

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

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

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

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

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

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

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

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

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

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

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

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

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 14, 2022	One year
02	Power sensor	NRP110T	101139	January 13, 2022	One year
03	Power sensor	NRP110T	101159	January 13, 2022	One year
04	Signal Generator	E4438C	MY49071430	January 13, 2022	One year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159850	January 24, 2022	One year
07	E-field Probe	SPEAG EX3DV4	7548	August 1, 2022	One year
08	DAE	SPEAG DAE4	1331	September 15, 2022	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 20,,2022	One year
10	Dipole Validation Kit	SPEAG D900V2	1d051	July 26,,2022	One year
11	Dipole Validation Kit	SPEAG D1800V2	2d145	July 18,,2022	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26,2022	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	July 20,2022	One year
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 20,2022	One year
15	Dipole Validation Kit	SPEAG D3300V2	1011	July 1,2022	One year
16	Dipole Validation Kit	SPEAG D3500V2	1016	July 1,2022	One year
17	Dipole Validation Kit	SPEAG D3700V2	1004	July 1,2022	One year
18	Dipole Validation Kit	SPEAG D3900V2	1024	July 1,2022	One year
19	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 5,2022	One year

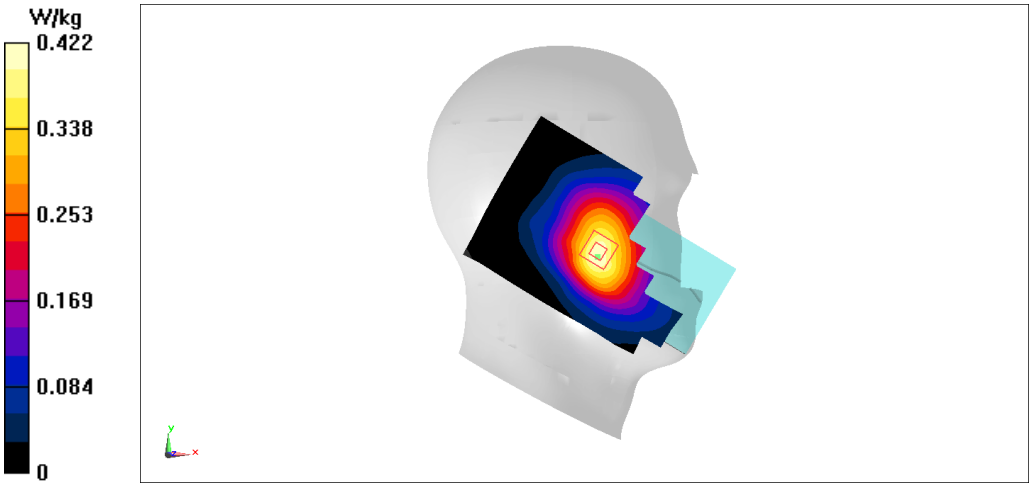
END OF REPORT BODY

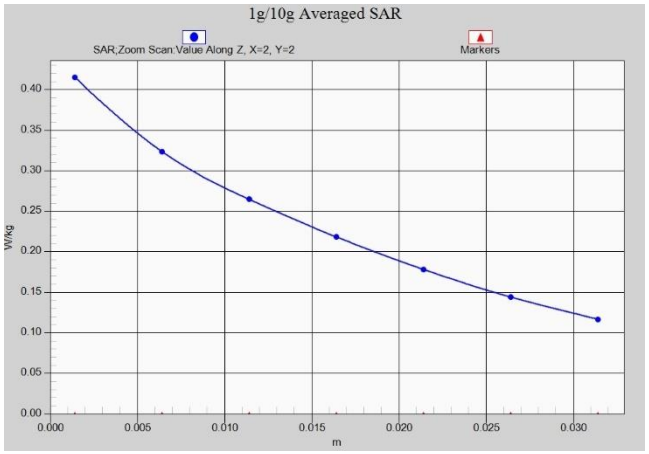
ANNEX A Graph Results

GSM850 Head ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 836.6 MHz; σ = 0.93 S/m; ε_r = 40.467; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: GSM850 2TX 836.6 MHz Duty Cycle: 1:4.00037
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.422 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.865 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.454 W/kg
SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.270 W/kg
Maximum value of SAR (measured) = 0.416 W/kg

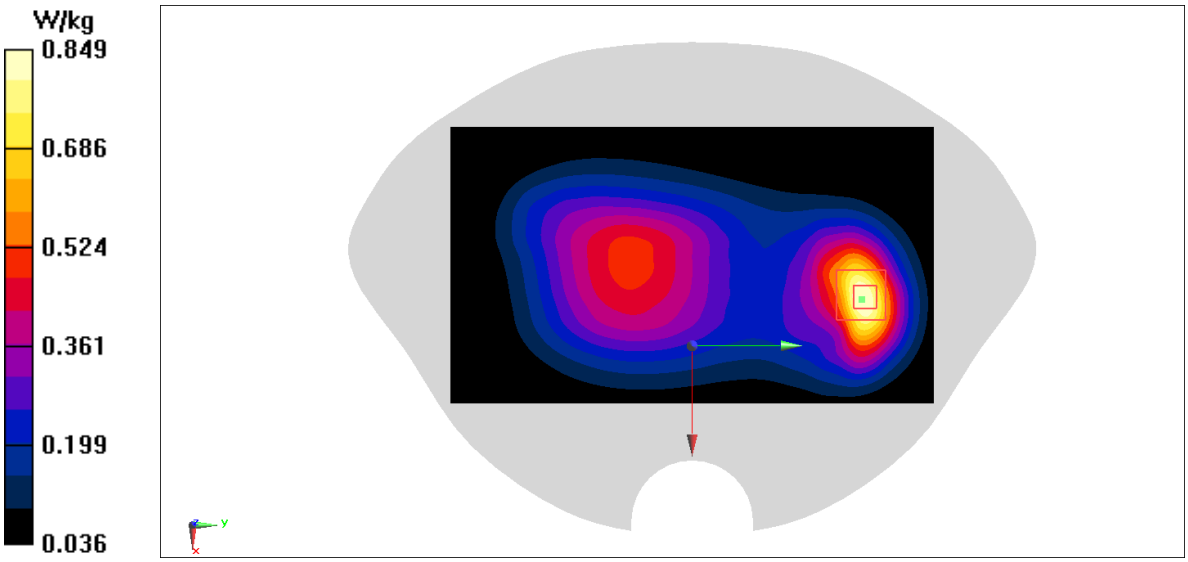


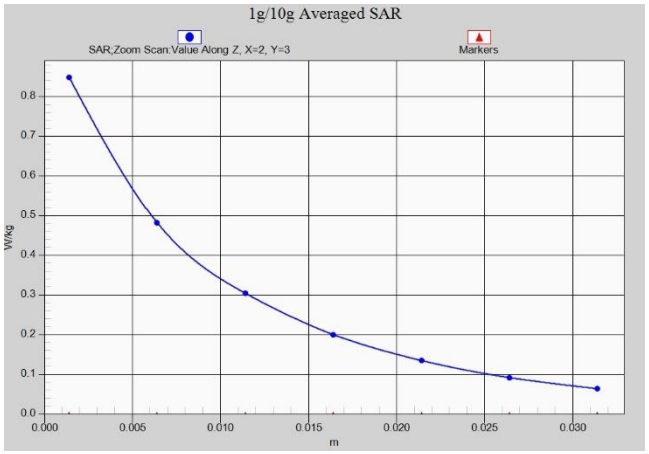


GSM850 Body ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 848.8 MHz; σ = 0.937 S/m; ε_r = 40.476; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: GSM850 2TX 848.8 MHz Duty Cycle: 1:4.00037
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.873 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.52 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.583 W/kg; SAR(10 g) = 0.346 W/kg
Maximum value of SAR (measured) = 0.849 W/kg

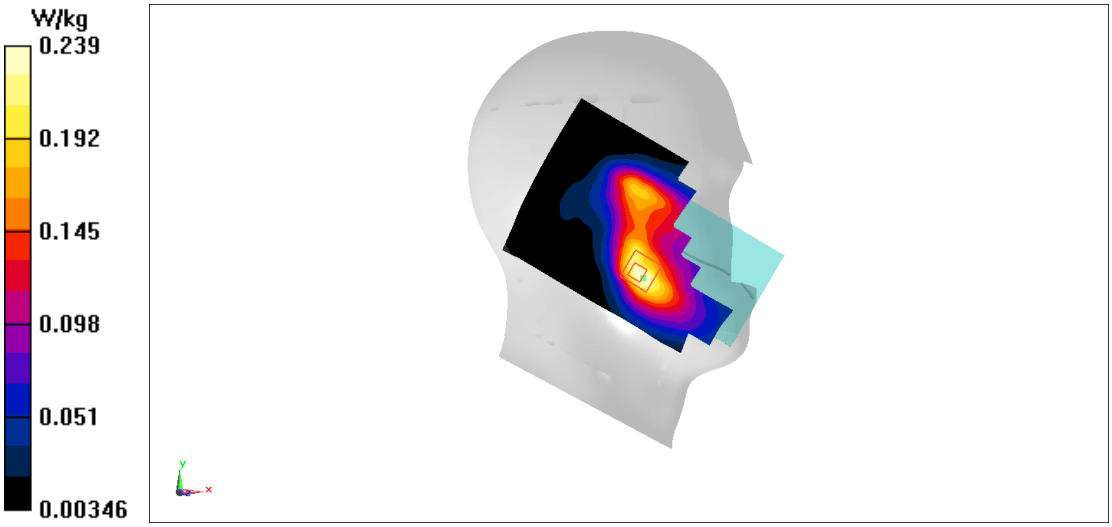


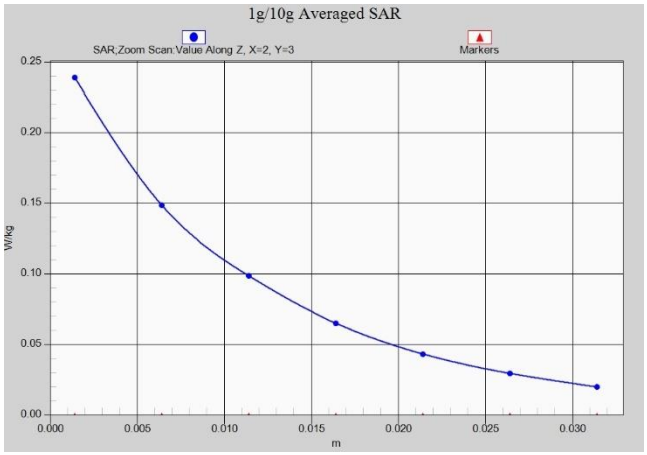


GSM1900 Head ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 1880 MHz; σ = 1.359 S/m; ε_r = 40.522; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: GSM1900 2TX 1880 MHz Duty Cycle: 1:4.00037
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.240 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.640 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.280 W/kg
SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 0.239 W/kg

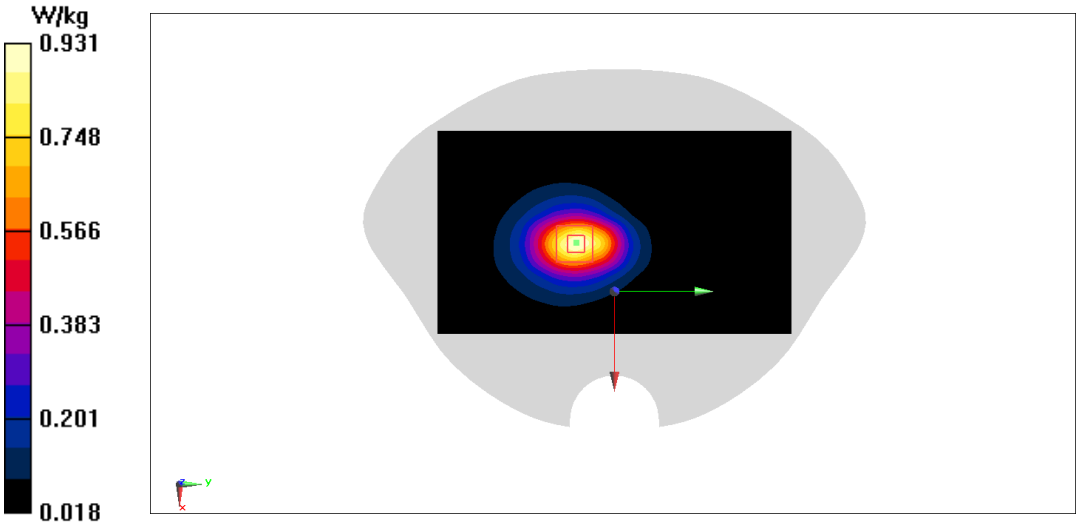


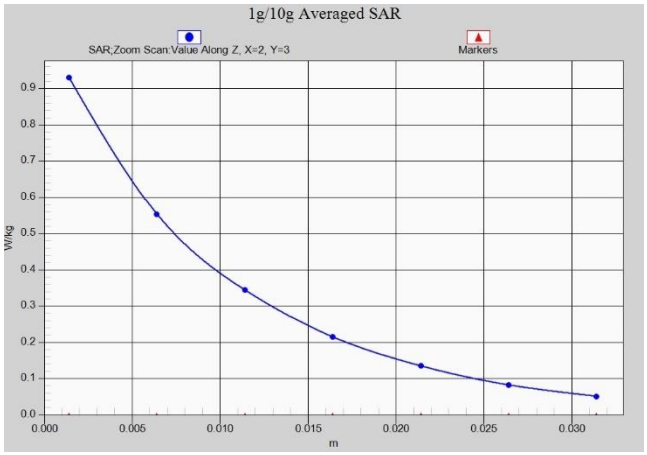


GSM1900 Body ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 1880 MHz; σ = 1.359 S/m; ε_r = 40.522; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: GSM1900 2TX (0) 1880 MHz Duty Cycle: 1:4.00037
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.931 W/kg

Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.72 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.374 W/kg
Maximum value of SAR (measured) = 0.931 W/kg

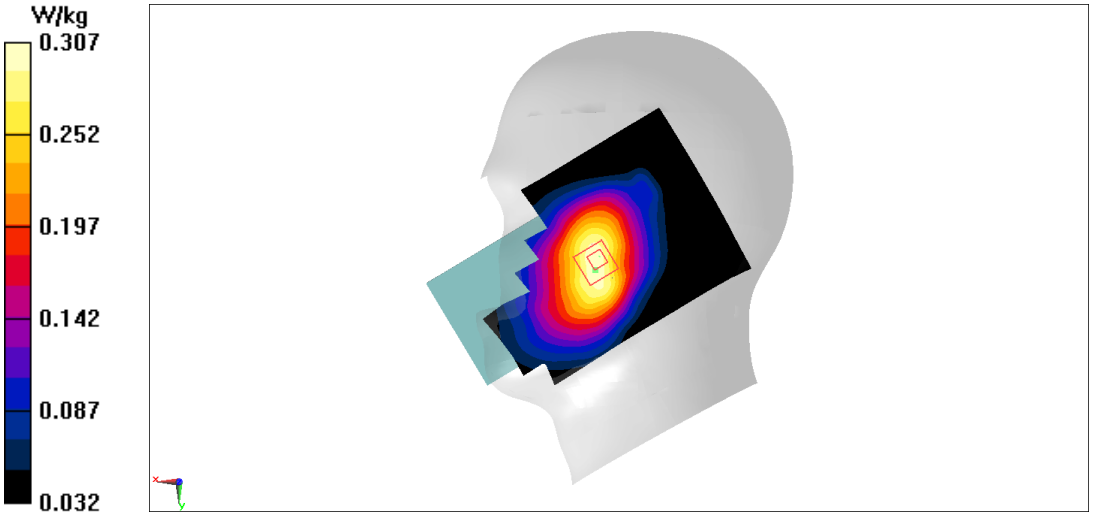


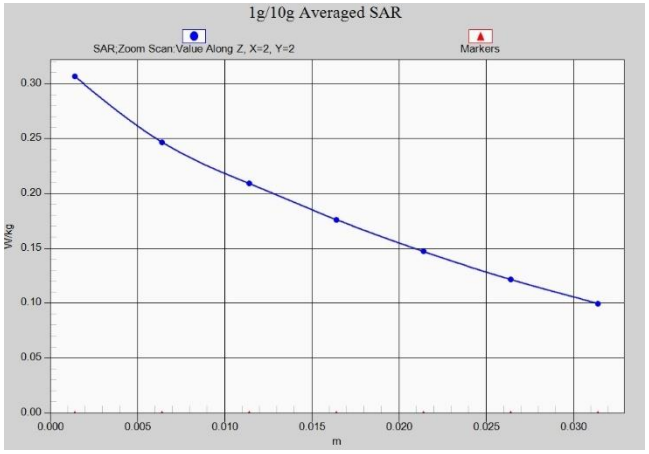


WCDMA850 Head ANT0
Date: 9/13/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used : f = 826.4 MHz; σ = 0.938 S/m; ε_r = 40.489; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: WCDMA850(B5) 826.4 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7548 ConvF(9.81, 9.81, 9.81)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.303 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.258 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.328 W/kg
SAR(1 g) = 0.262 W/kg; SAR(10 g) = 0.208 W/kg
Maximum value of SAR (measured) = 0.307 W/kg

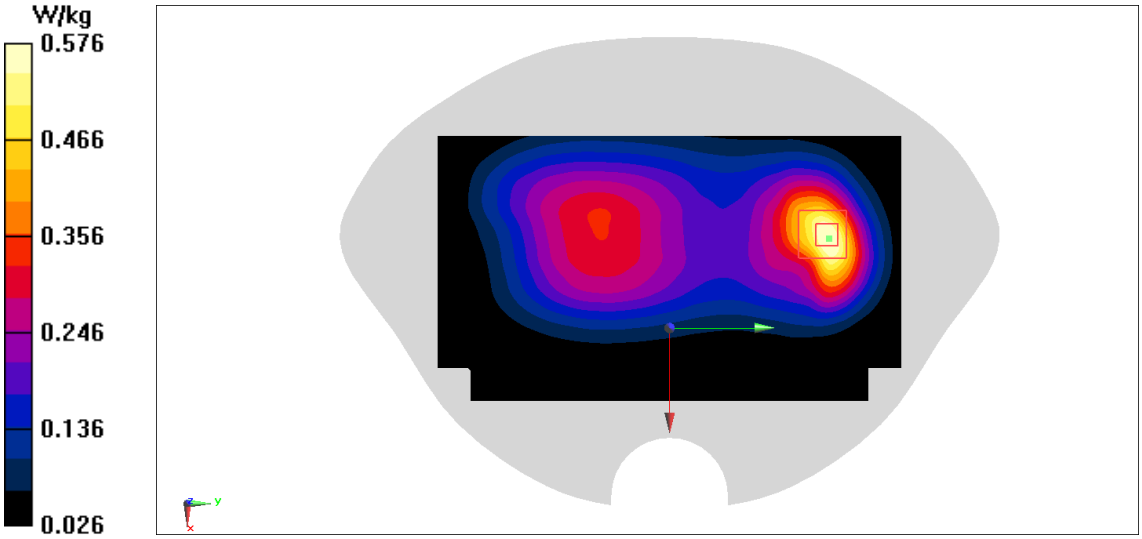


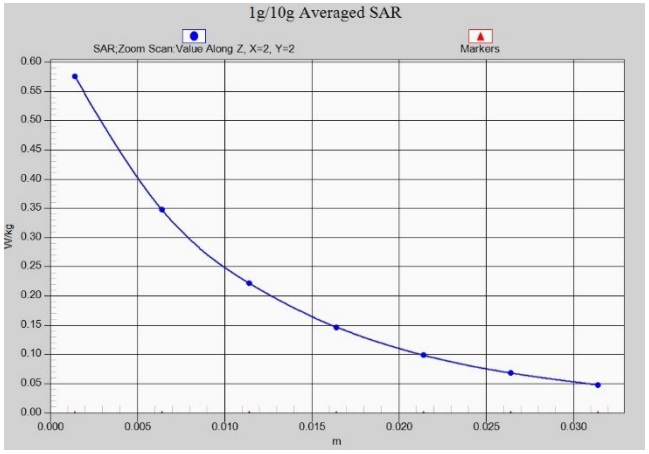


WCDMA850 Body ANT0
Date: 9/13/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 836.6 MHz; σ = 0.943 S/m; ε_r = 40.489; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: WCDMA850(B5) 836.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(9.81, 9.81, 9.81)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.603 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.85 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.672 W/kg
SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.250 W/kg
Maximum value of SAR (measured) = 0.576 W/kg

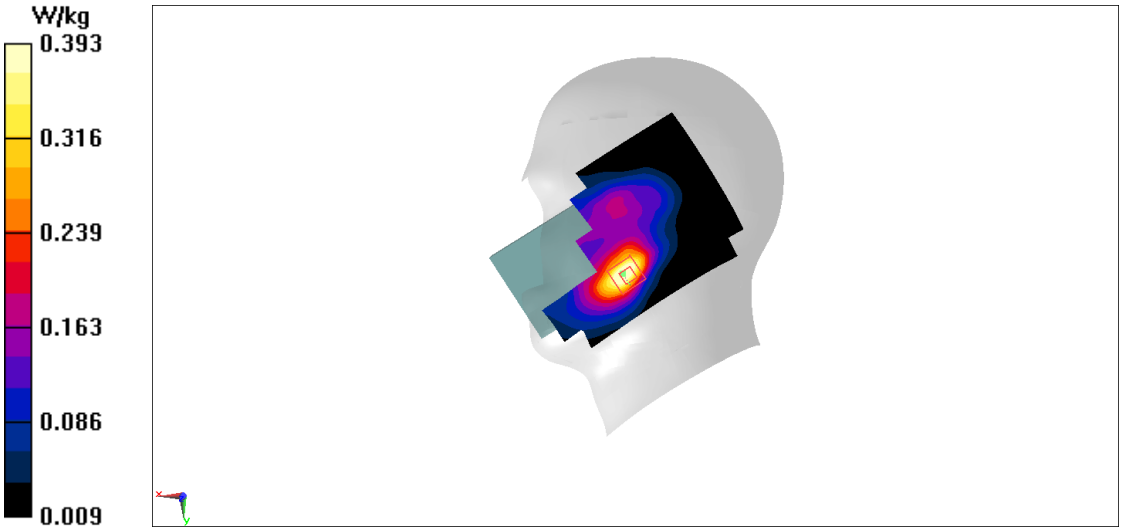


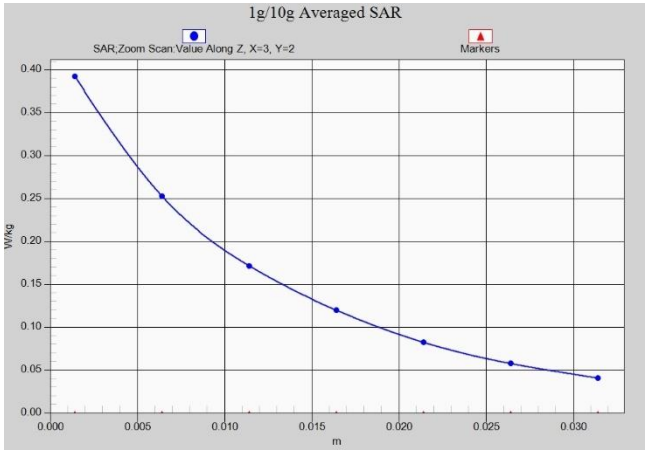


WCDMA1700 Head ANT1
Date: 9/15/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 1712.4 MHz; σ =1.34 S/m; ε_r = 40.493; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: WCDMA1700(B4) 1712.4 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.427 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.351 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.471 W/kg
SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.194 W/kg
Maximum value of SAR (measured) = 0.393 W/kg

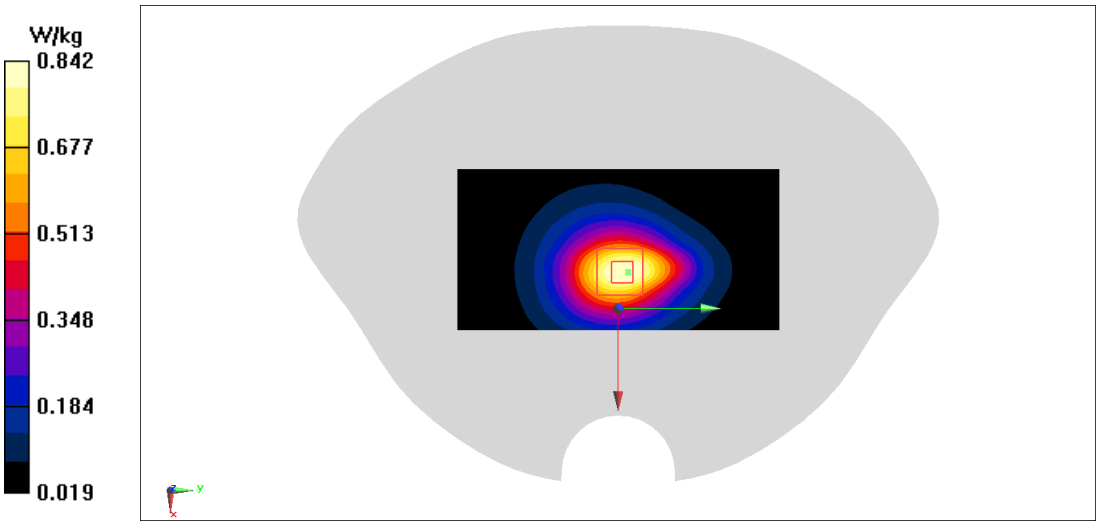


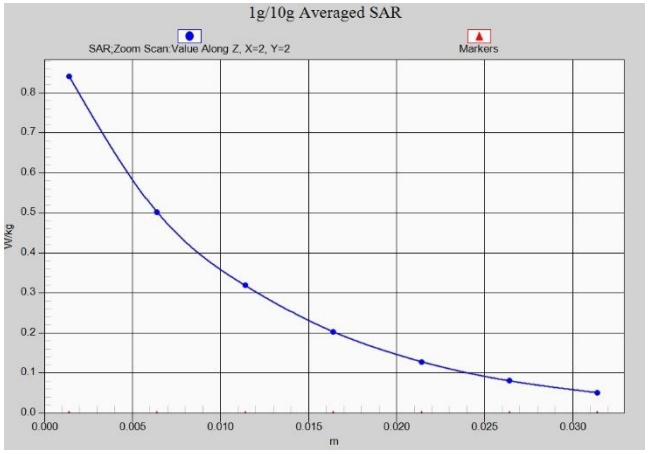


WCDMA1700 Body ANT1
Date: 9/15/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f =1732.5 MHz; σ =1.352 S/m; ε_r = 40.448; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: WCDMA1700(B4) 1732.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (51x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.858 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.04 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.00 W/kg
SAR(1 g) = 0.597 W/kg; SAR(10 g) = 0.356 W/kg
Maximum value of SAR (measured) = 0.842 W/kg

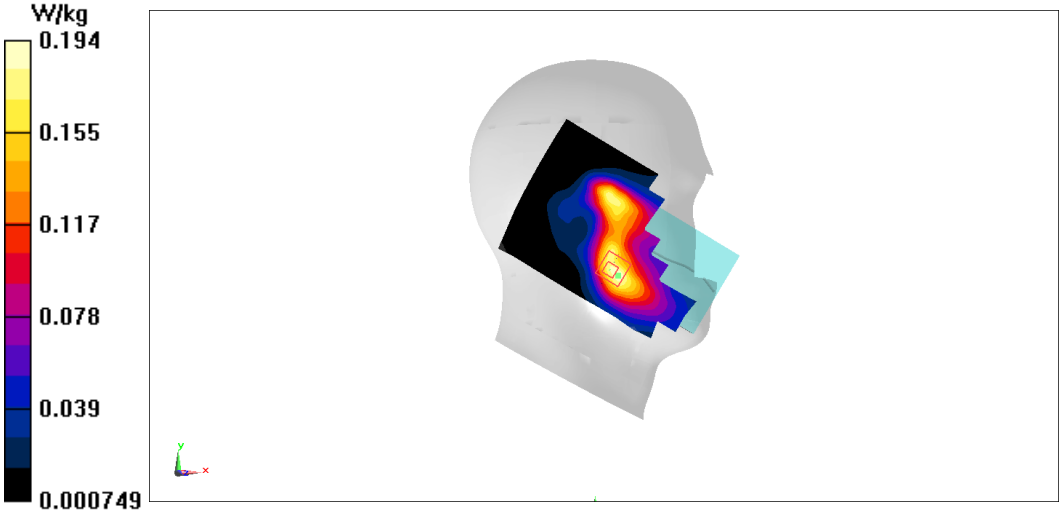


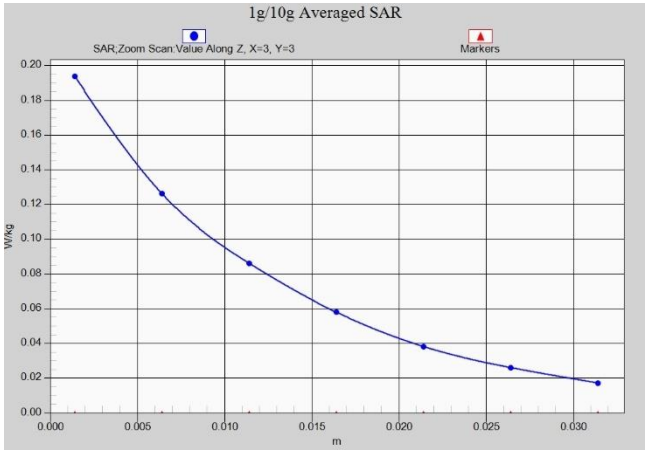


WCDMA1900 Head ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f =1907.6 MHz; σ =1.383 S/m; ε_r = 40.428; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: WCDMA1900(B2) 1907.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.190 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.115 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.223 W/kg
SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.091 W/kg
Maximum value of SAR (measured) = 0.194 W/kg

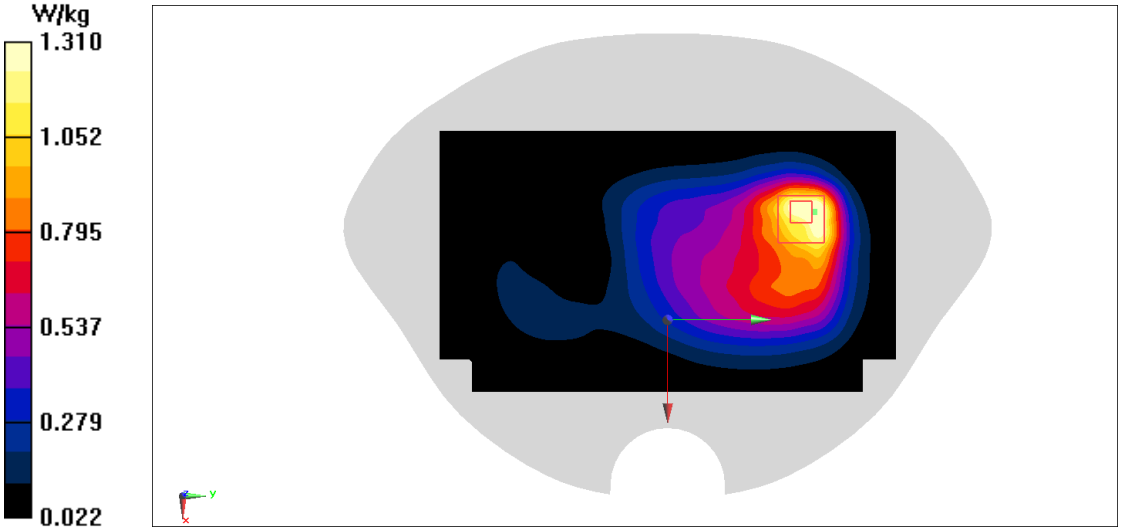


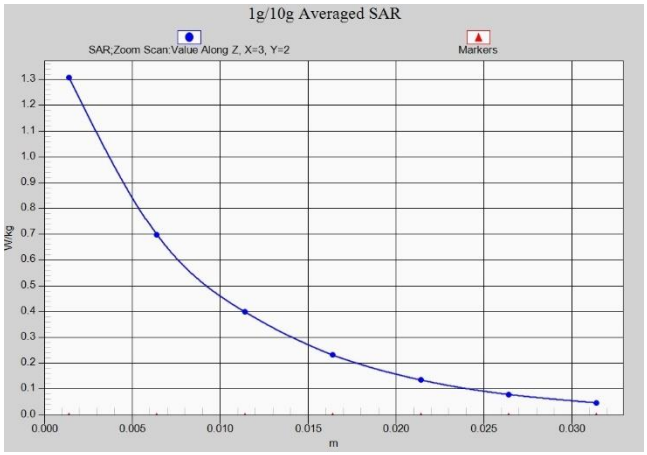


WCDMA1900 Body ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f =1852.4 MHz; σ =1.339 S/m; ε_r = 40.549; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: WCDMA1900(B2) 1852.4 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.46 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.65 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.853 W/kg; SAR(10 g) = 0.484 W/kg
Maximum value of SAR (measured) = 1.31 W/kg

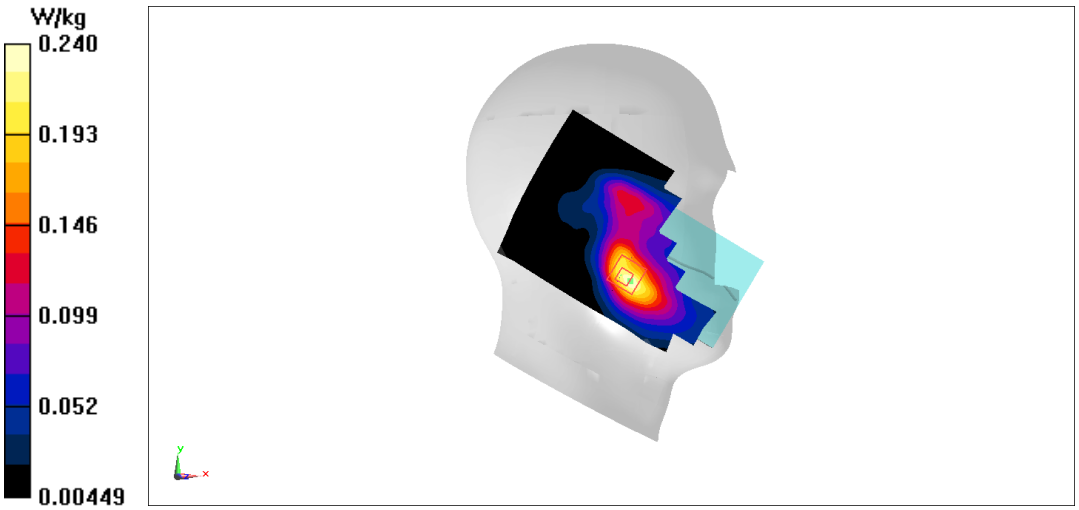


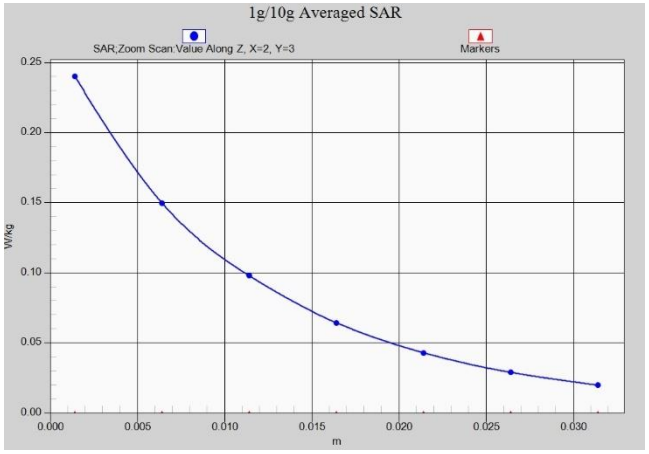


LTE B2 Head ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 1880 MHz; σ = 1.359 S/m; ε_r = 40.522; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band2 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.238 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.264 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.281 W/kg
SAR(1 g) = 0.173 W/kg; SAR(10 g) = 0.107 W/kg
Maximum value of SAR (measured) = 0.240 W/kg

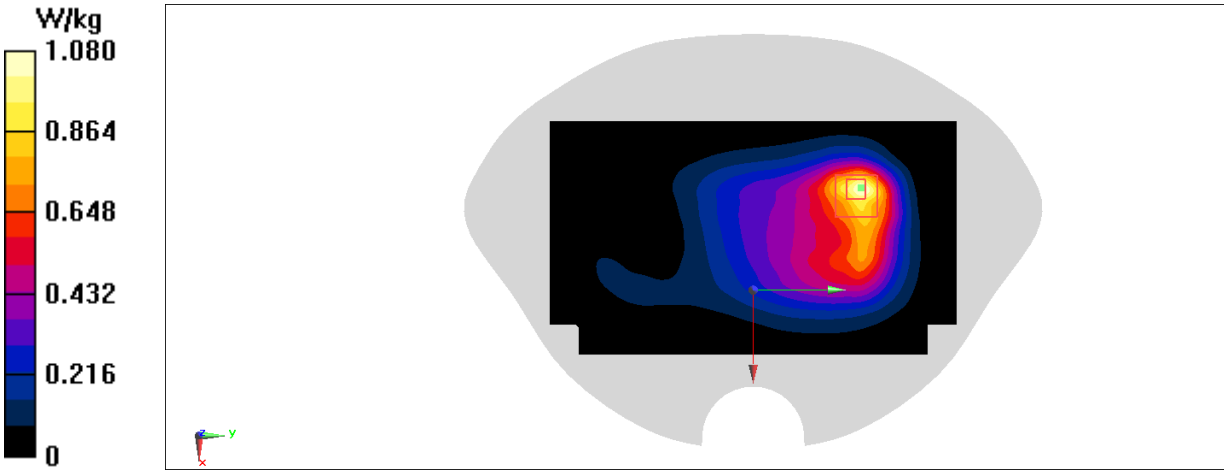


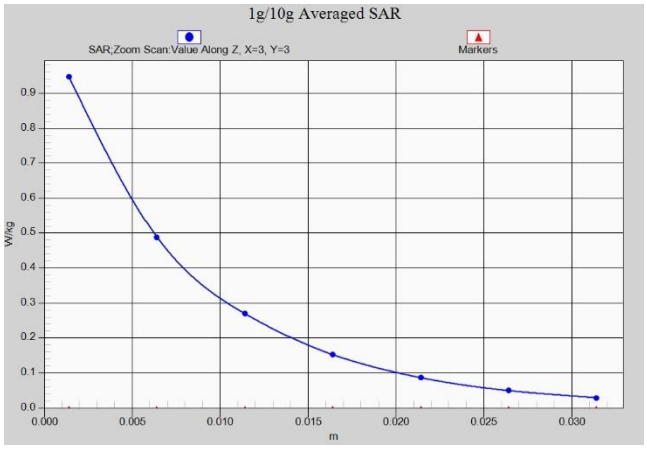


LTE B2 Body ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 1880 MHz; σ = 1.359 S/m; ε_r = 40.522; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band2 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.21 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.620 W/kg; SAR(10 g) = 0.352 W/kg
Maximum value of SAR (measured) = 0.947 W/kg

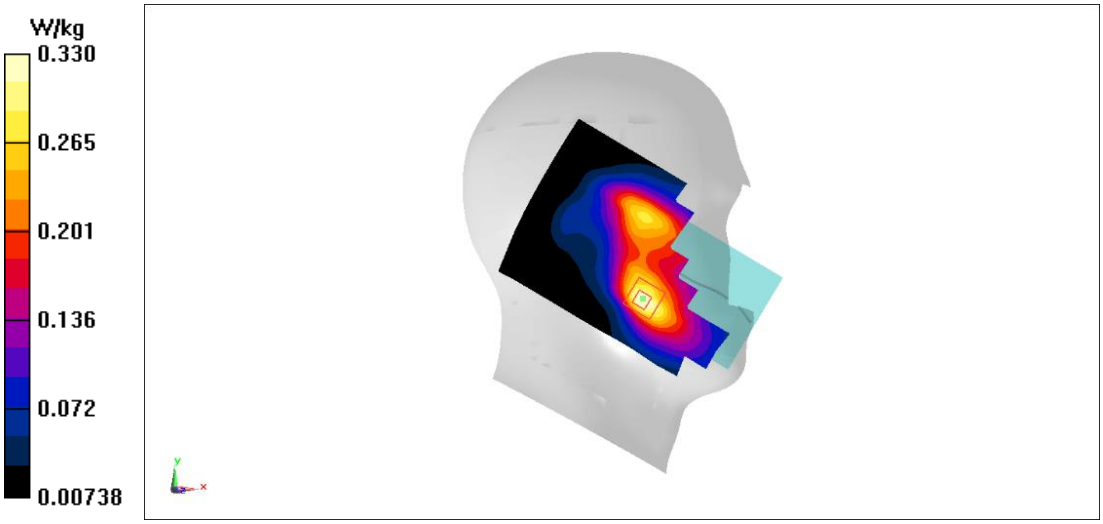


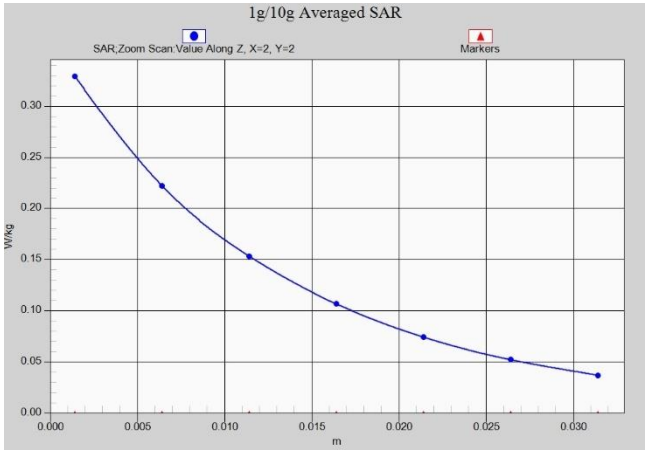


LTE B4 Head ANT1
Date: 9/15/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f =1732.5 MHz; σ =1.352 S/m; ε_r = 40.448; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band4 1732.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.347 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.923 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.381 W/kg
SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.158 W/kg
Maximum value of SAR (measured) = 0.330 W/kg

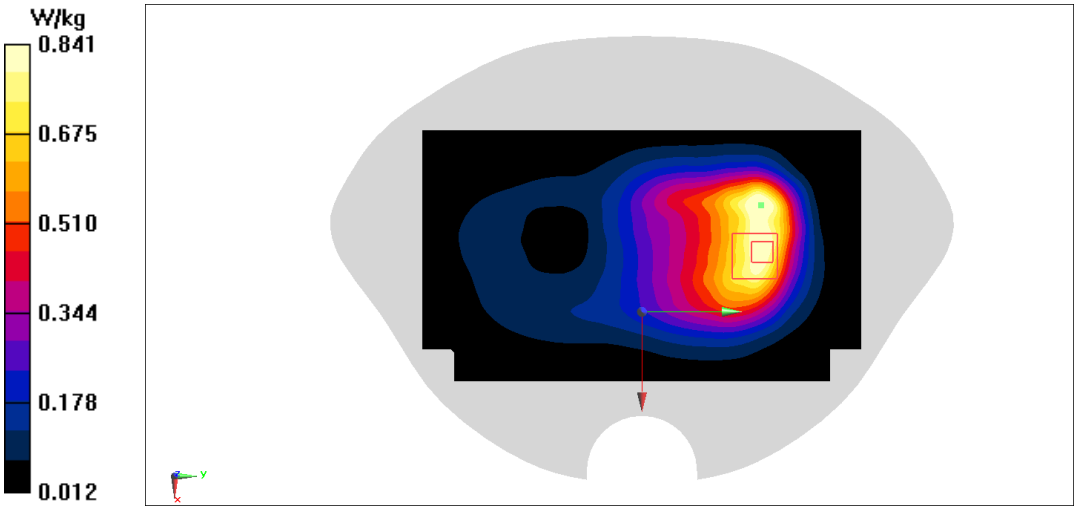


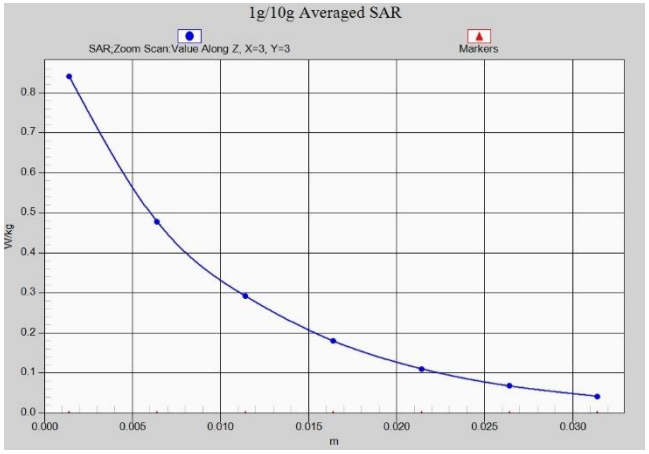


LTE B4 Body ANT1
Date: 9/15/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used : f =1732.5 MHz; σ =1.352 S/m; ε_r = 40.448; ρ =1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band4 1732.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.918 W/kg

Zoom Scan (7x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.89 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.00 W/kg
SAR(1 g) = 0.596 W/kg; SAR(10 g) = 0.370 W/kg
Maximum value of SAR (measured) = 0.841 W/kg

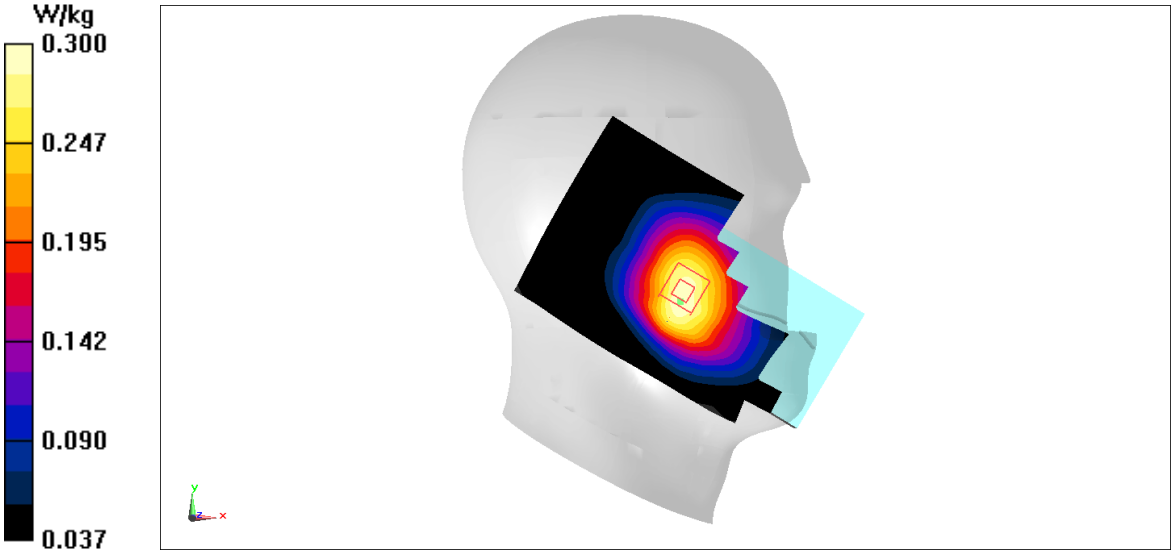


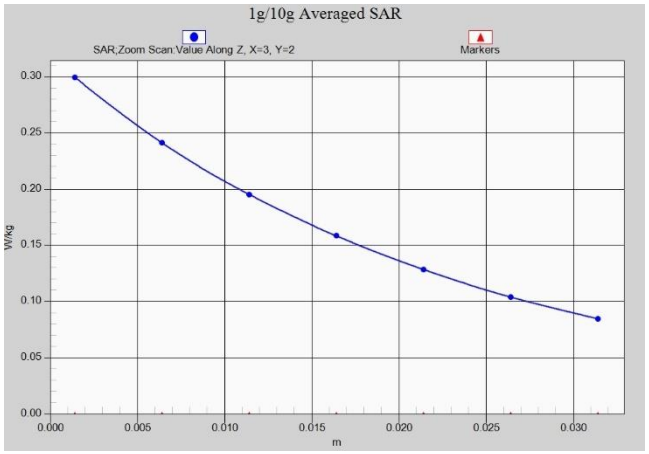


LTE B5 Head ANT0
Date: 9/13/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 844 MHz; σ = 0.948 S/m; ε_r = 40.497; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band5 844 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7548 ConvF(9.81, 9.81, 9.81)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.302 W/kg

Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.637 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.319 W/kg
SAR(1 g) = 0.260 W/kg; SAR(10 g) = 0.203 W/kg
Maximum value of SAR (measured) = 0.300 W/kg

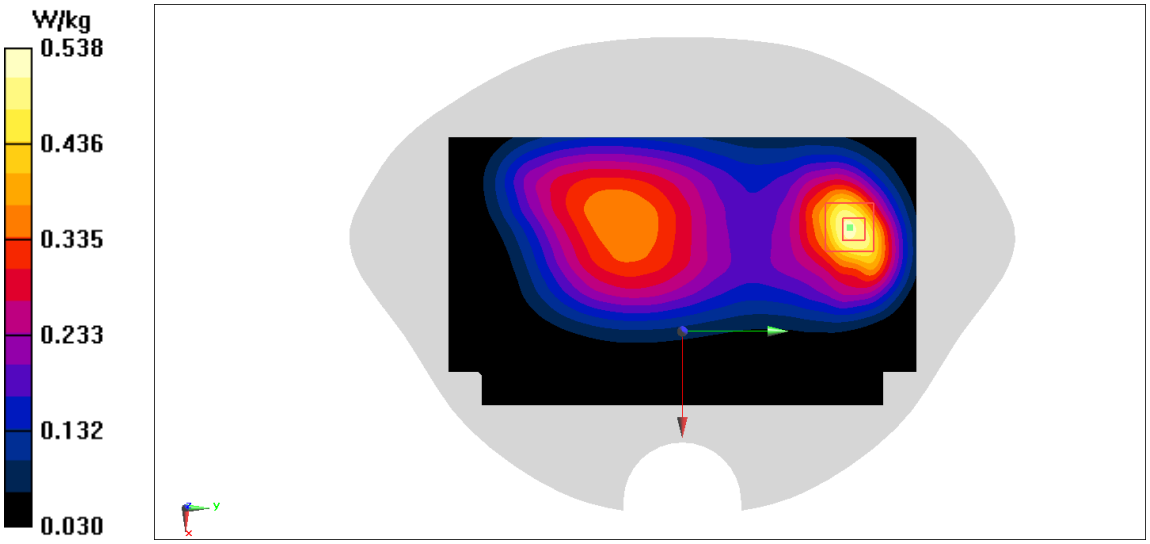


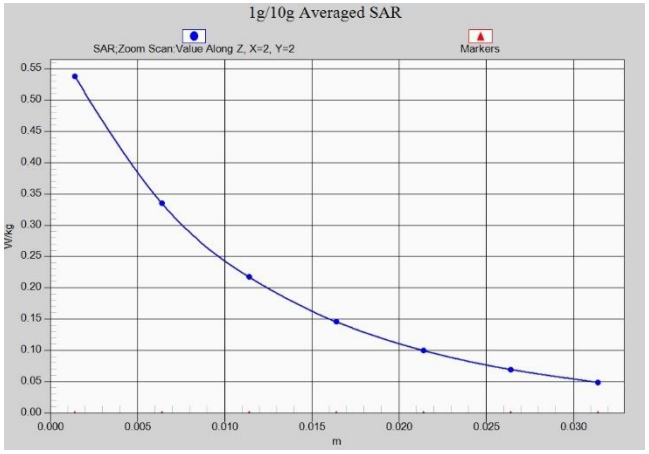


LTE B5 Body ANT0
Date: 9/13/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 836.5 MHz; σ = 0.943 S/m; ε_r = 40.489; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band5 836.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(9.81, 9.81, 9.81)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.512 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.40 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.627 W/kg
SAR(1 g) = 0.387 W/kg; SAR(10 g) = 0.241 W/kg
Maximum value of SAR (measured) = 0.538 W/kg

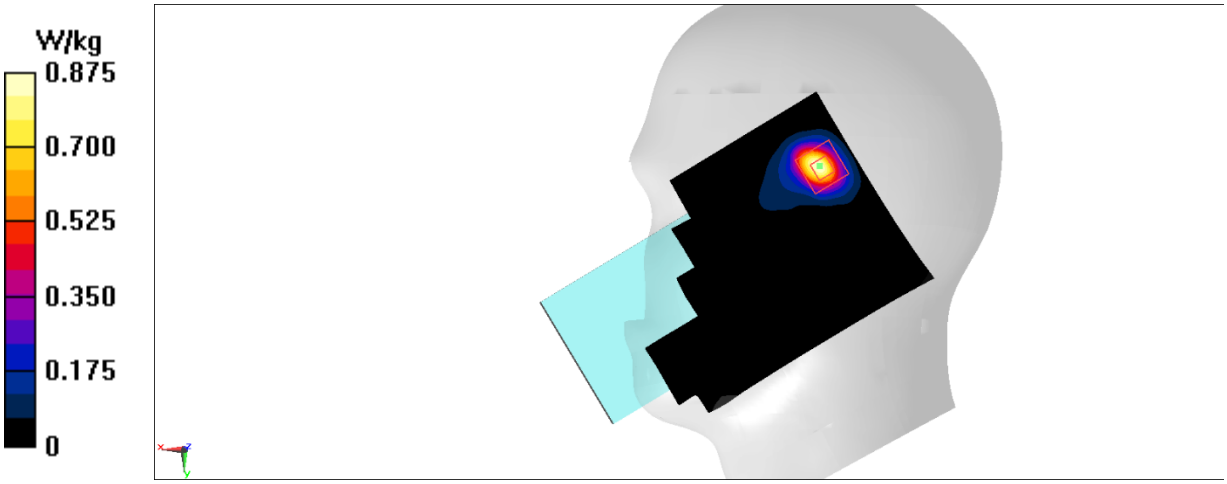


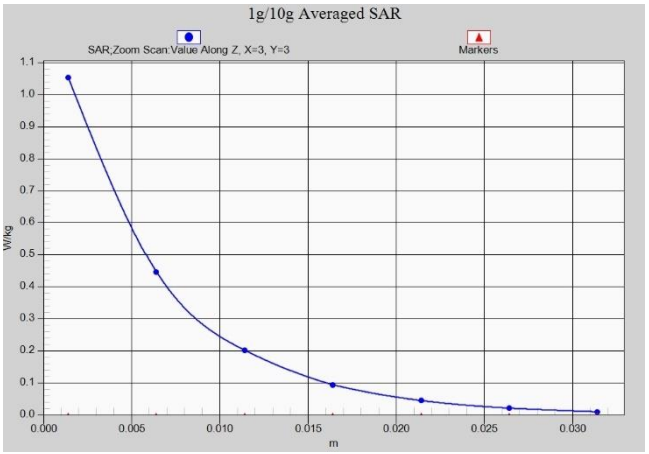


LTE B7 Head ANT4
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 2510 MHz; σ = 1.822 S/m; ε_r = 40.049; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band7 2510 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.875 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.610 V/m; Power Drift = 0.67 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.570 W/kg; SAR(10 g) = 0.222 W/kg
Maximum value of SAR (measured) = 1.05 W/kg

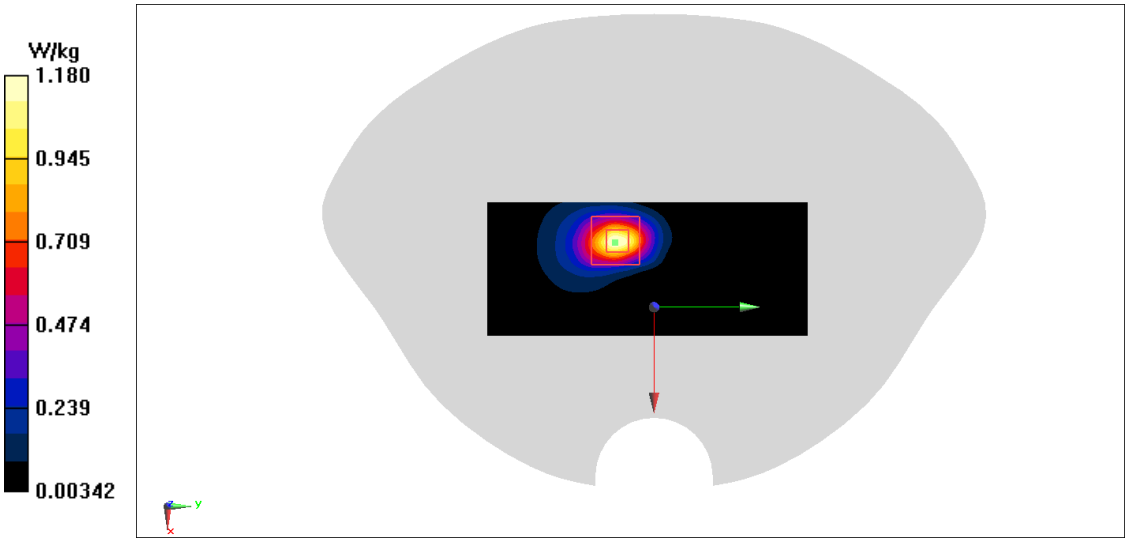


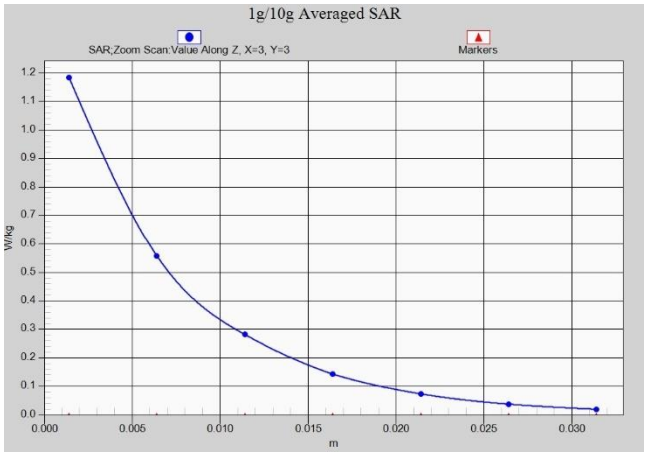


LTE B7 Body ANT4
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2510 MHz; σ = 1.822 S/m; ε_r = 40.049; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band7 2510 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (51x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.293 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 0.689 W/kg; SAR(10 g) = 0.298 W/kg
Maximum value of SAR (measured) = 1.18 W/kg

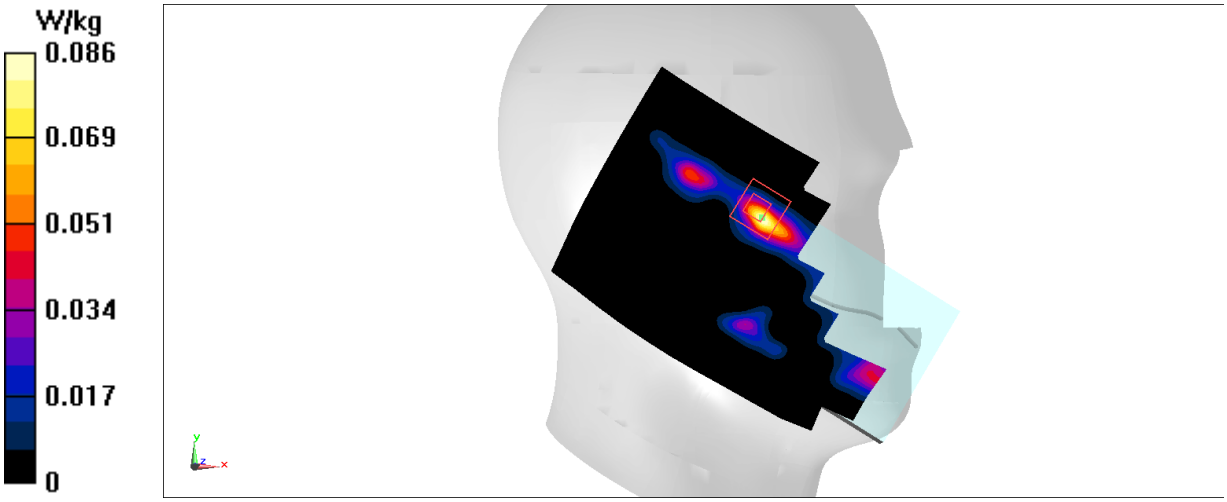


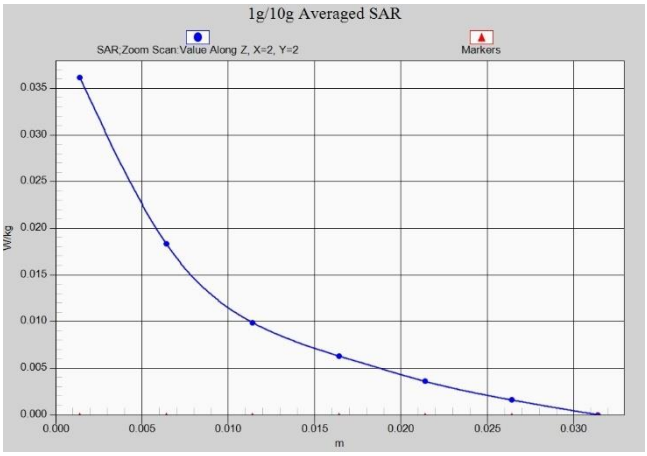


LTE B7 Head ANT0
Date: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2560 MHz; σ = 2.041 S/m; ε_r = 38.266; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band7 2560 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0858 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.8150 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.0570 W/kg
SAR(1 g) = 0.019 W/kg; SAR(10 g) = 0.00633 W/kg
Maximum value of SAR (measured) = 0.0362 W/kg

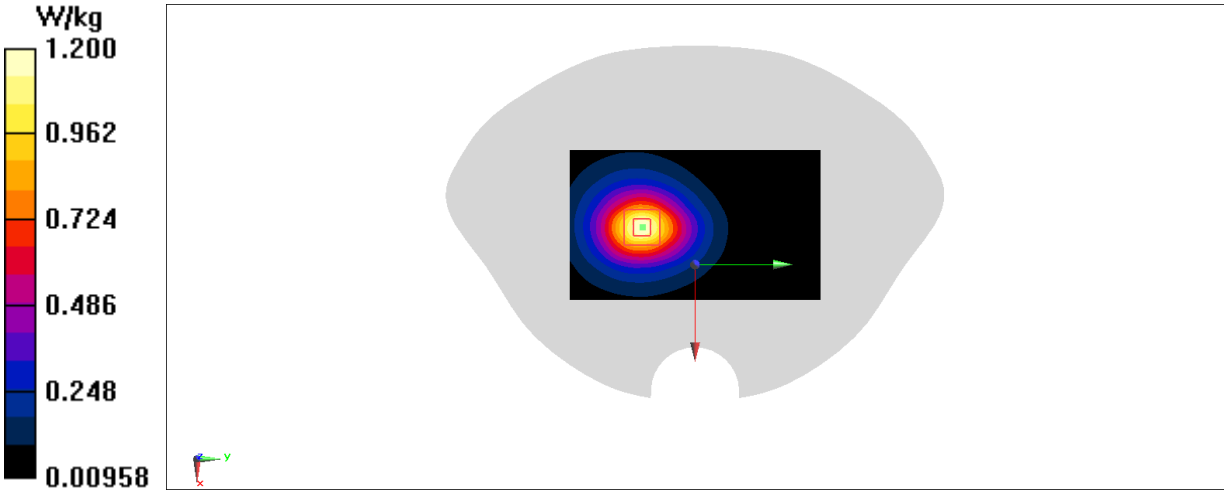


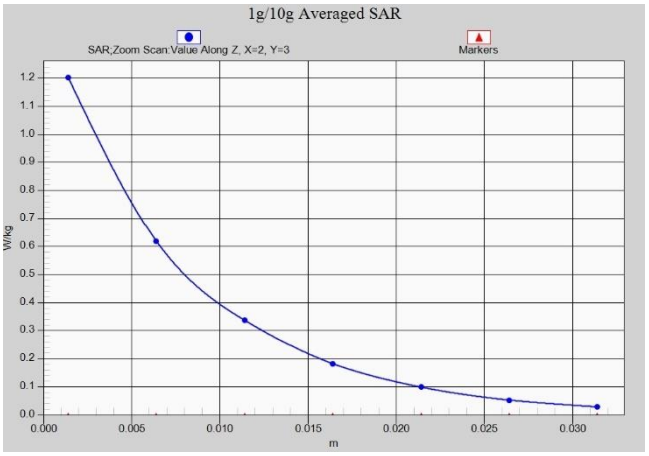


LTE B7 Body ANT0
Date/Time: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2560 MHz; σ = 1.967 S/m; ε_r = 38.266; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band7 (0) 2560 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.66 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.772 W/kg; SAR(10 g) = 0.417 W/kg
Maximum value of SAR (measured) = 1.20 W/kg

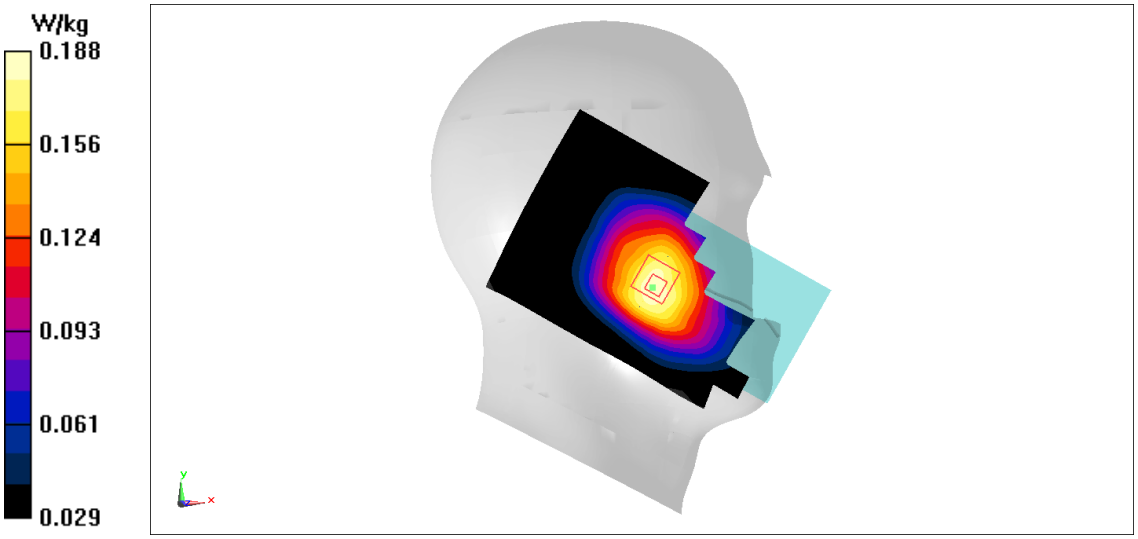


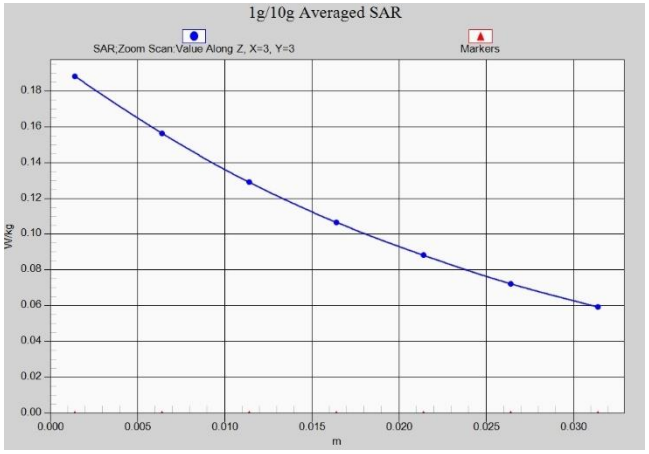


LTE B12 Head ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 711 MHz; σ = 0.881 S/m; ε_r = 40.891; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band12 711 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.187 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.455 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.199 W/kg
SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.131 W/kg
Maximum value of SAR (measured) = 0.188 W/kg

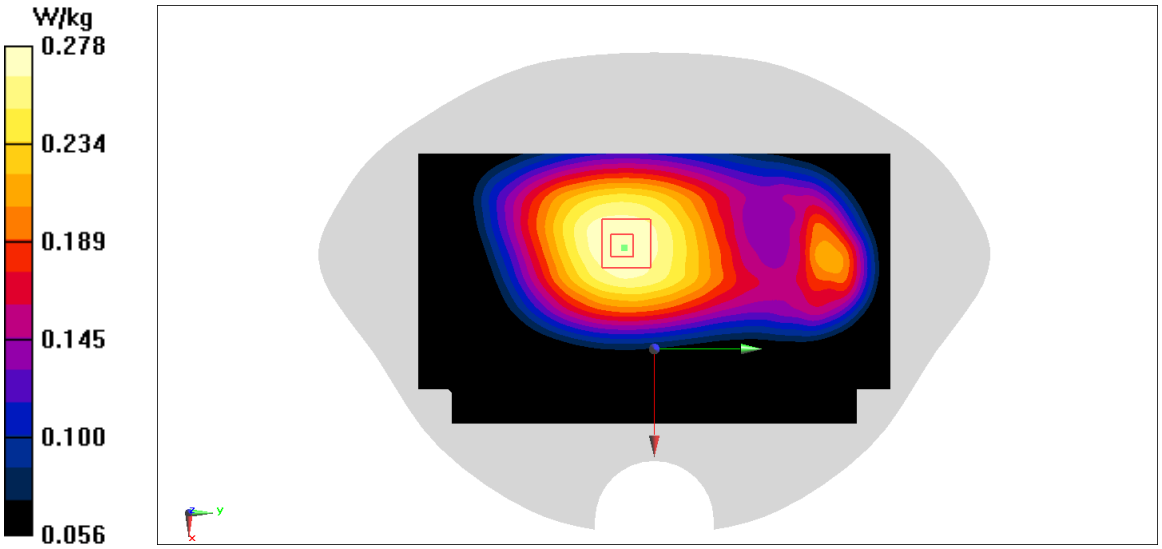


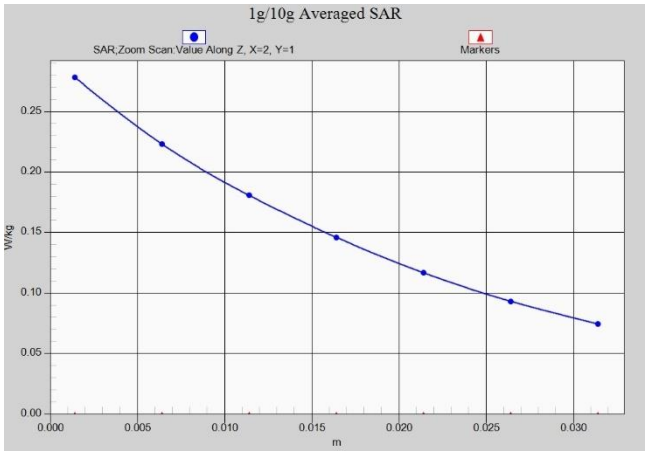


LTE B12 Body ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 711 MHz; σ = 0.881 S/m; ε_r = 40.891; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band12 711 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.279 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.82 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.297 W/kg
SAR(1 g) = 0.240 W/kg; SAR(10 g) = 0.190 W/kg
Maximum value of SAR (measured) = 0.278 W/kg

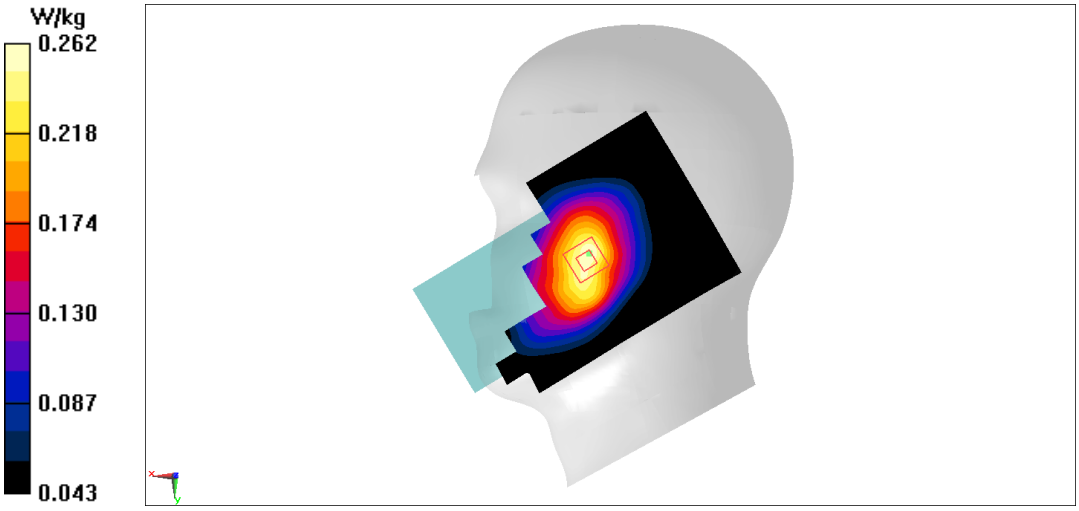


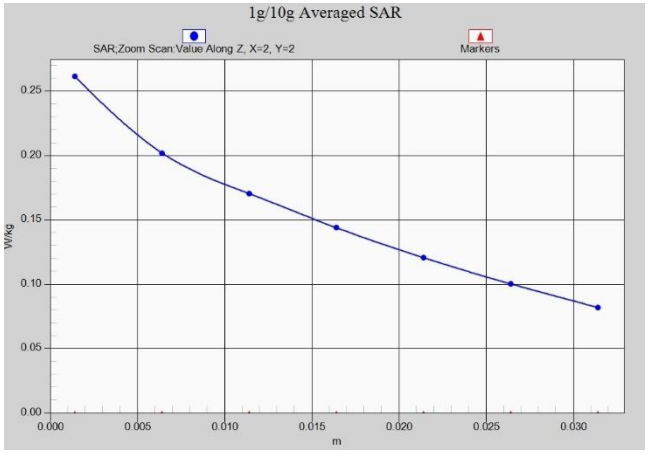


LTE B26 Head ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 831.5 MHz; σ = 0.938 S/m; ε_r = 40.465; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band26 15M 831.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.260 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.995 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.288 W/kg
SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.170 W/kg
Maximum value of SAR (measured) = 0.262 W/kg

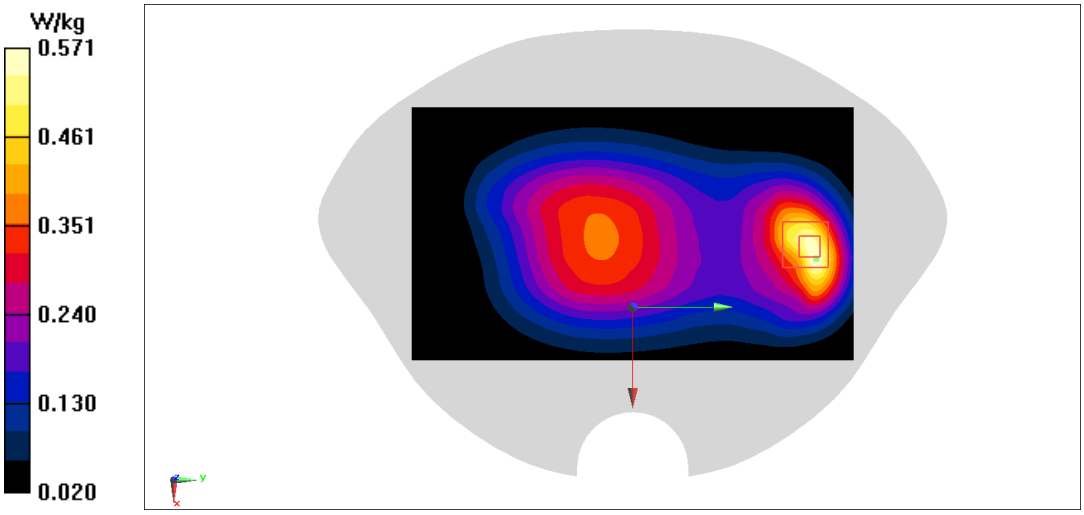


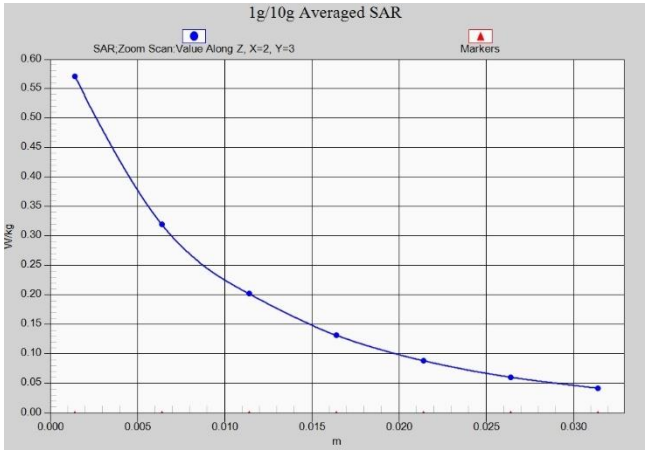


LTE B26 Body ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 831.5 MHz; σ = 0.927 S/m; ε_r = 40.465; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band26 15M 831.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.569 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.89 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.710 W/kg
SAR(1 g) = 0.399 W/kg; SAR(10 g) = 0.240 W/kg
Maximum value of SAR (measured) = 0.571 W/kg

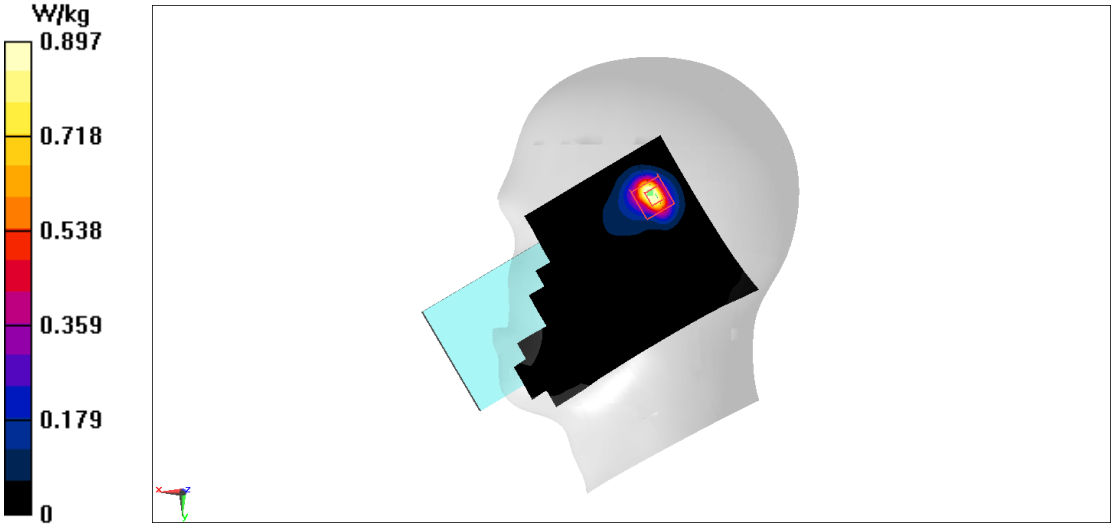


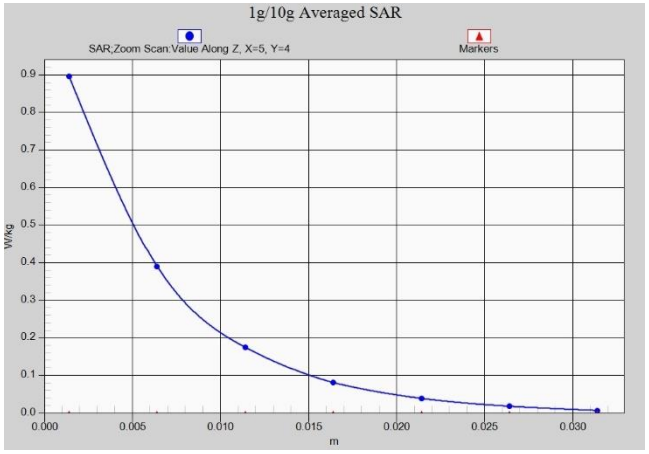


LTE B38 Head ANT4
Date: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2580 MHz; σ = 1.978 S/m; ε_r = 38.234; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band38 20M 2580 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.04 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.776 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.20 W/kg
SAR(1 g) = 0.489 W/kg; SAR(10 g) = 0.201 W/kg
Maximum value of SAR (measured) = 0.897 W/kg

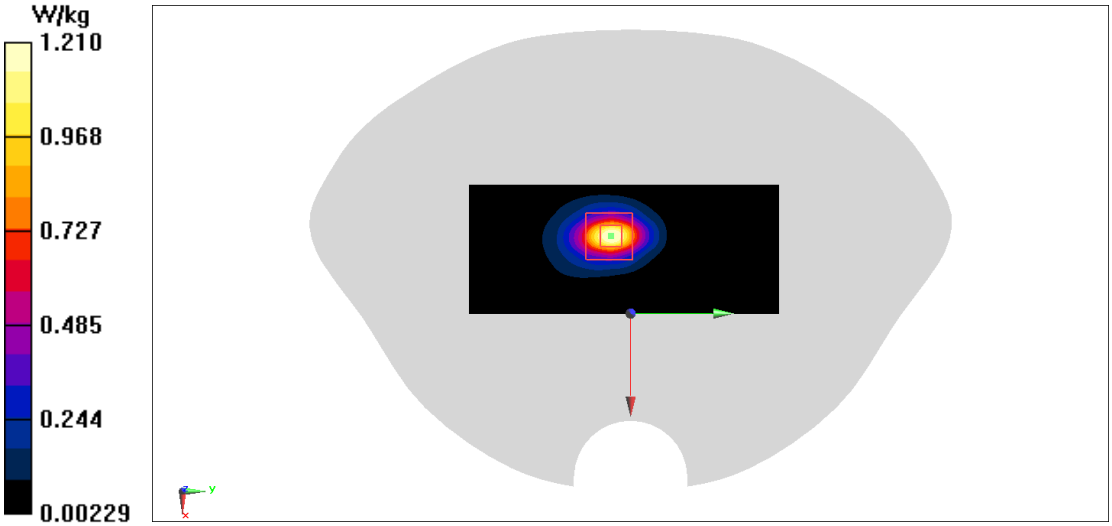


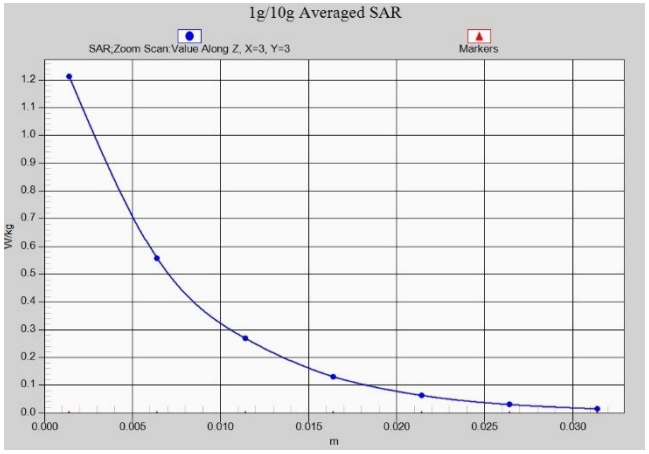


LTE B38 Body ANT4
Date: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2610 MHz; σ = 2.006 S/m; ε_r = 38.104; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band38 2610 MHz Duty Cycle: 1.58
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (51x121x1): 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 = 12.05 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.54 W/kg
SAR(1 g) = 0.689 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 1.21 W/kg

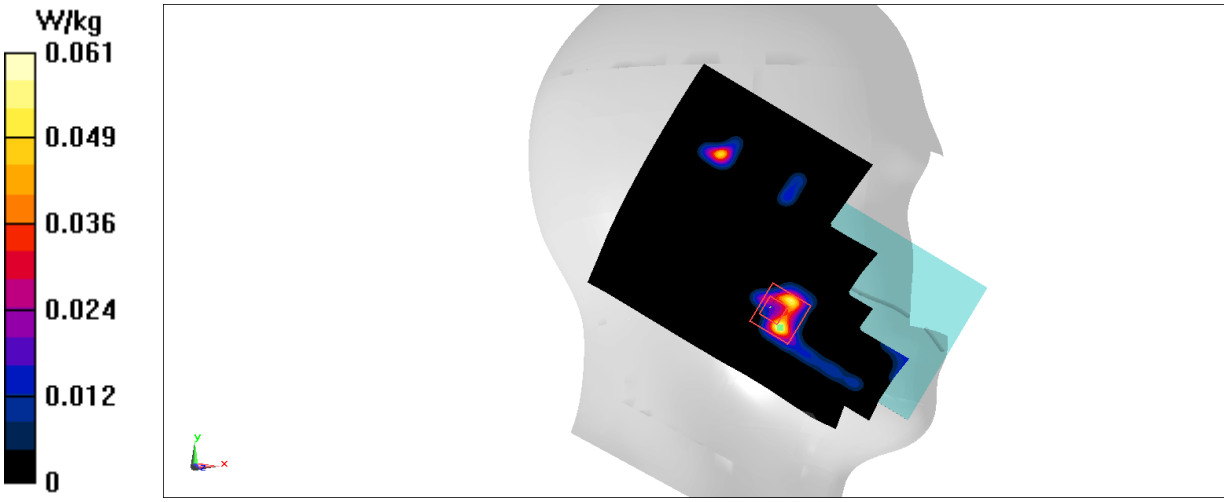


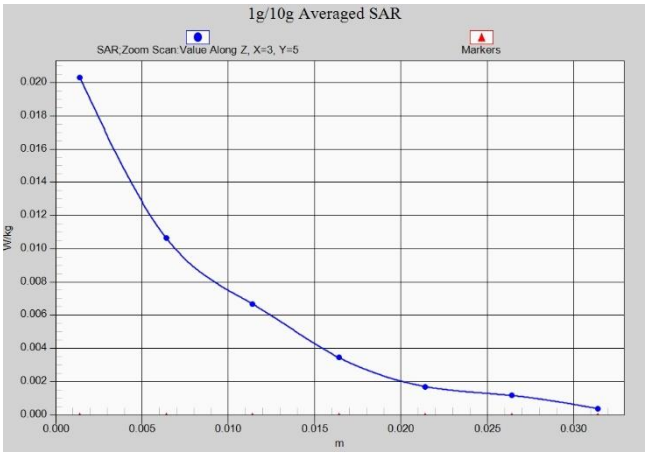


LTE B38 Head ANT0
Date: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2610 MHz; σ = 2.006 S/m; ε_r = 38.104; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band38 2610 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0608 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.407 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.0260 W/kg
SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.006 W/kg
Maximum value of SAR (measured) = 0.0203 W/kg

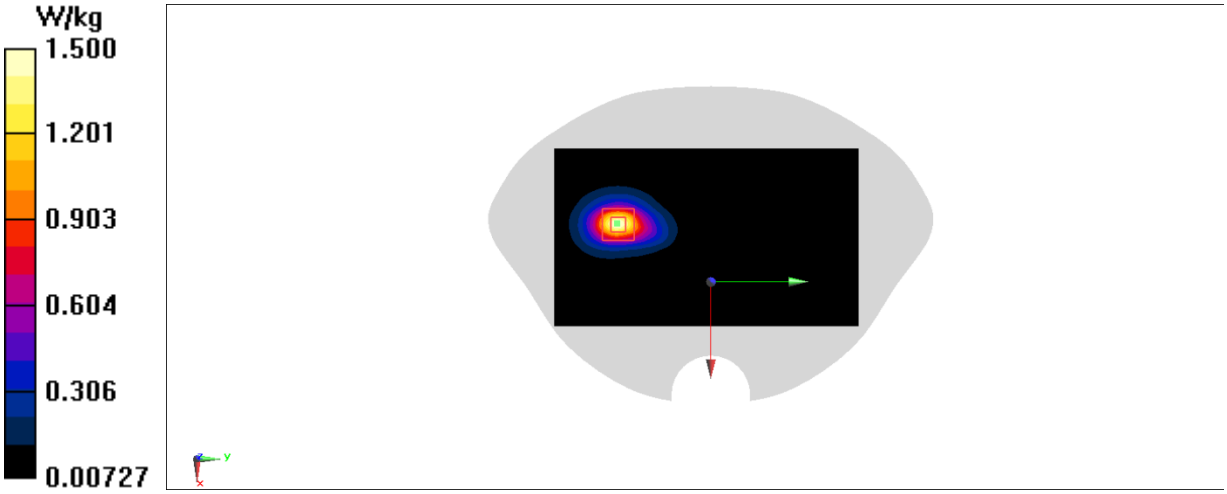


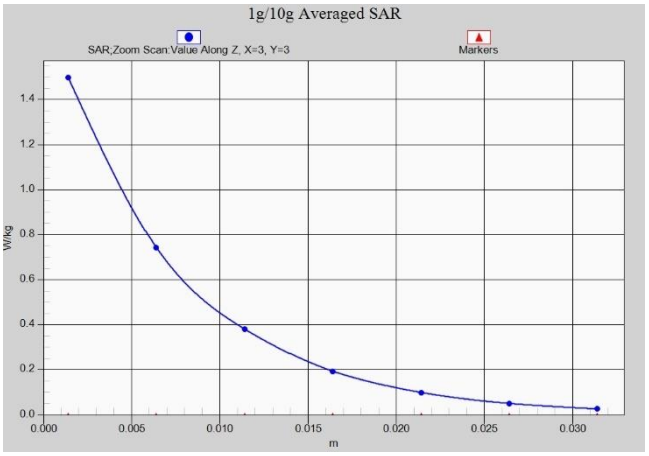


LTE B38 Body ANT0
Date/Time: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2580 MHz; σ = 1.978 S/m; ε_r = 38.234; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band38 (0) 2580 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.325 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 0.911 W/kg; SAR(10 g) = 0.424 W/kg
Maximum value of SAR (measured) = 1.50 W/kg

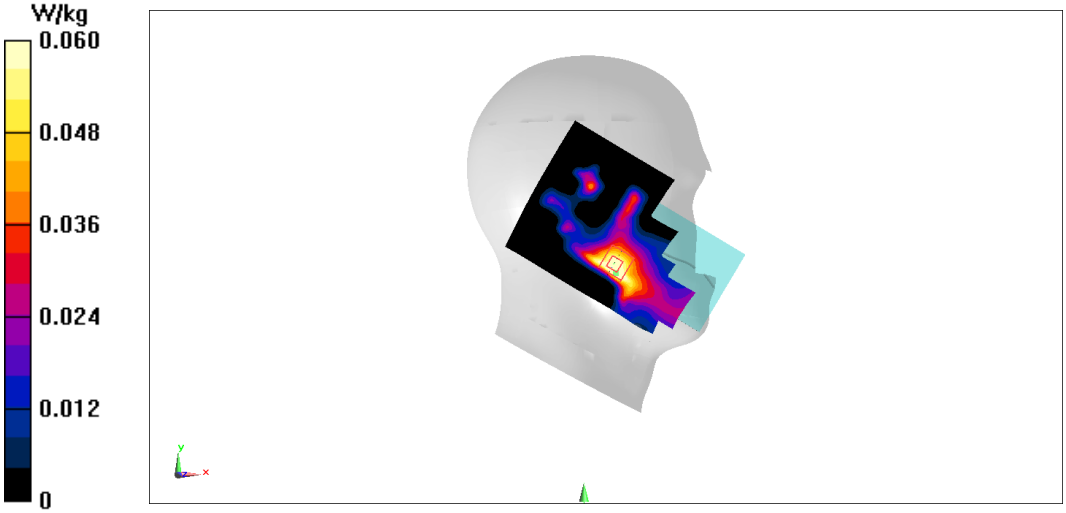


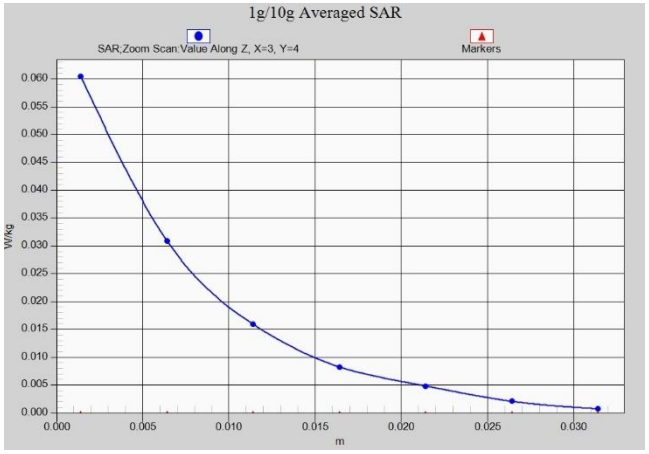


LTE B41 Head ANT0
Date: 10/8/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 2680 MHz; σ = 2.065 S/m; ε_r = 38.086; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band41 2680 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0713 W/kg

Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.296 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.0750 W/kg
SAR(1 g) = 0.038 W/kg; SAR(10 g) = 0.020 W/kg
Maximum value of SAR (measured) = 0.0605 W/kg

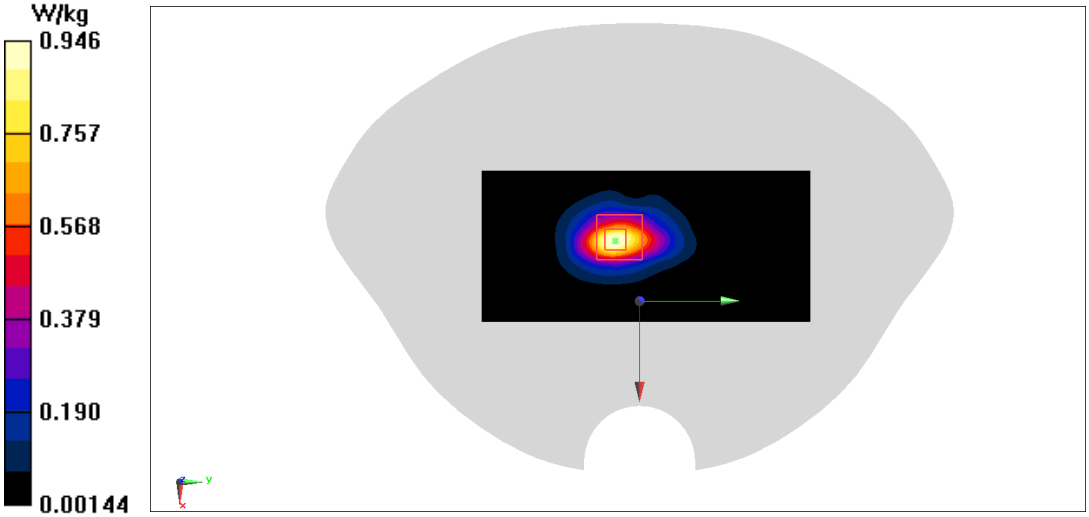


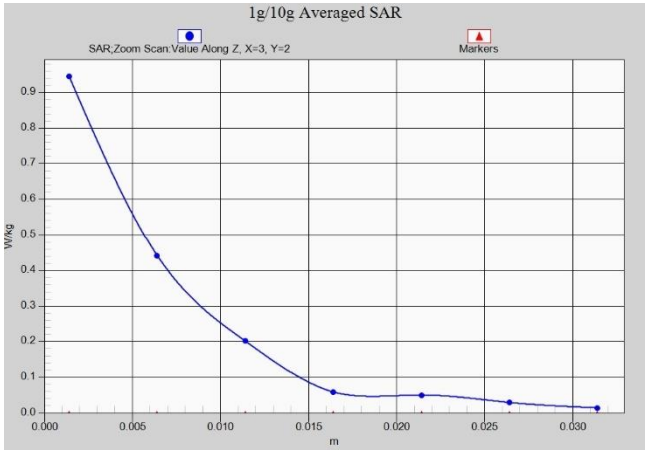


LTE B41 Body ANT0
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2550 MHz; σ = 1.856 S/m; ε_r = 40.048; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band41 2549.5 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (61x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.01 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.11 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.550 W/kg; SAR(10 g) = 0.240 W/kg
Maximum value of SAR (measured) = 0.946 W/kg

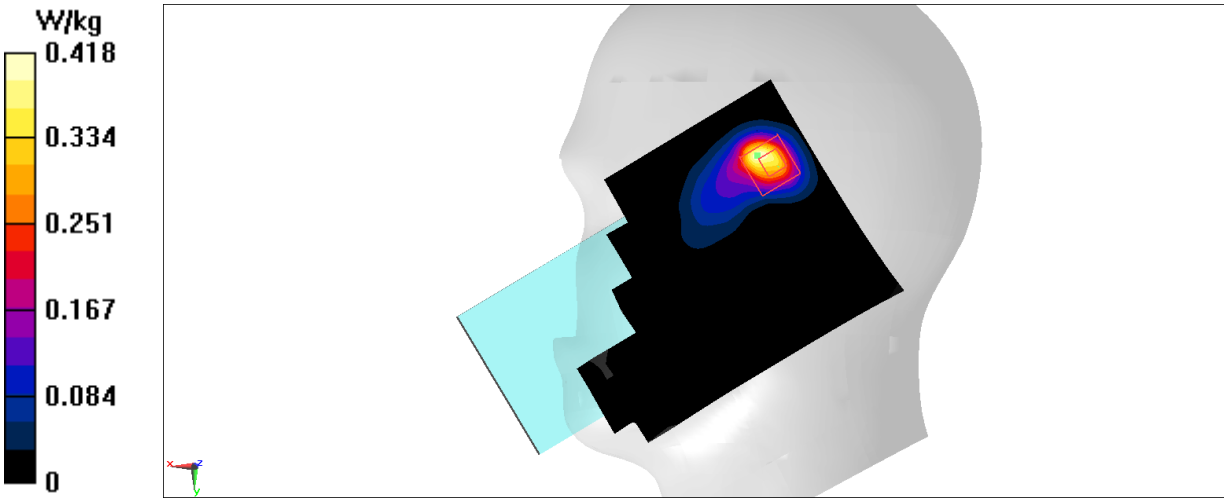


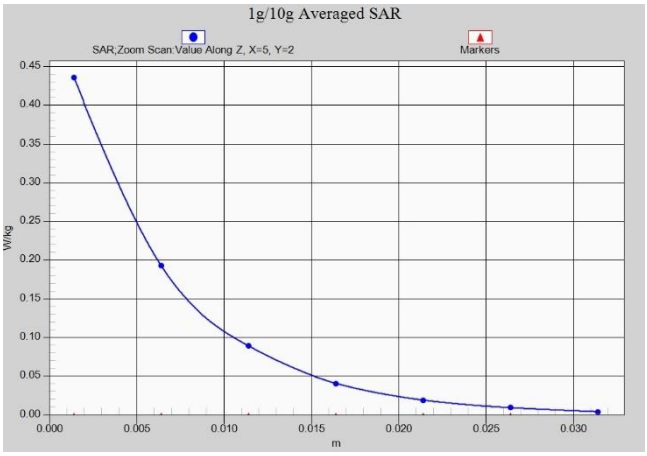


LTE B41 Head ANT4
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2506 MHz; σ = 1.817 S/m; ε_r = 40.063; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band41 2506 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.418 W/kg

Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.188 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.610 W/kg
SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.102 W/kg
Maximum value of SAR (measured) = 0.436 W/kg

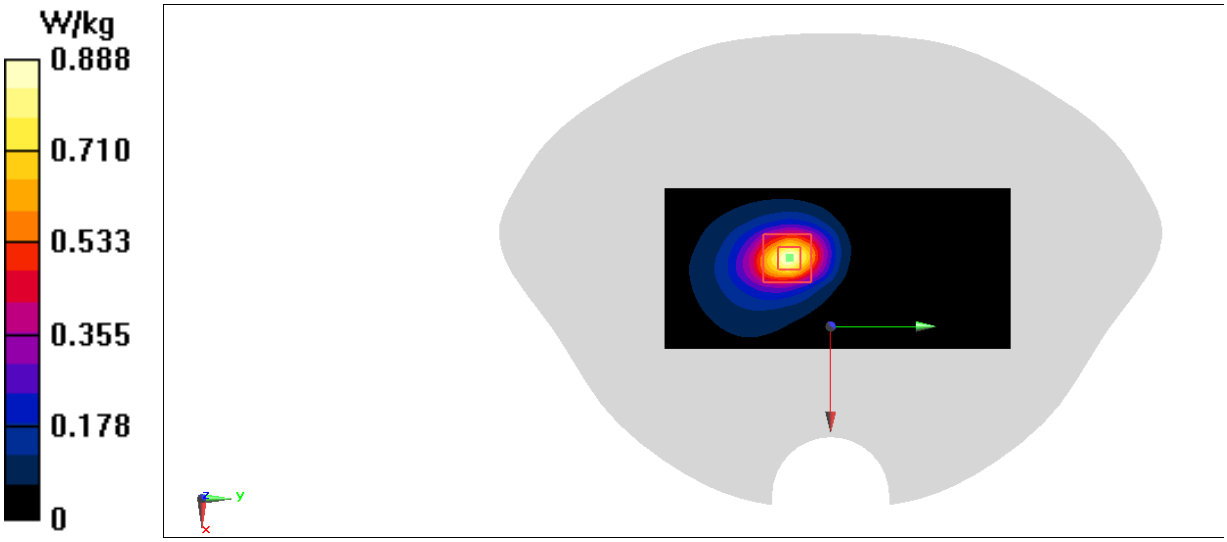


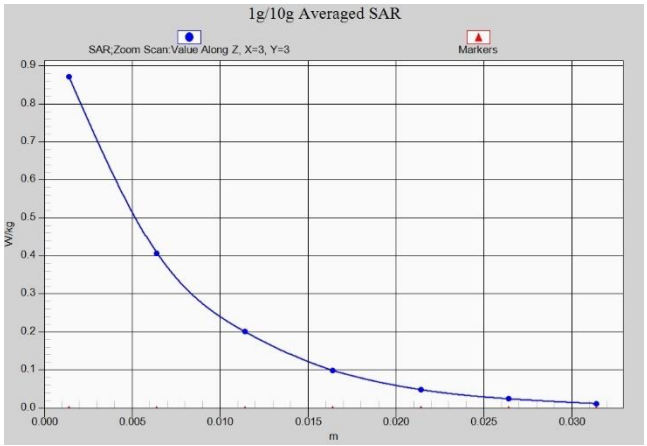


LTE B41 Body ANT4
Date: 10/18/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2680 MHz; σ = 2.121 S/m; ε_r = 38.986; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band41 2680 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (61x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.888 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.929 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.515 W/kg; SAR(10 g) = 0.234 W/kg
Maximum value of SAR (measured) = 0.871 W/kg

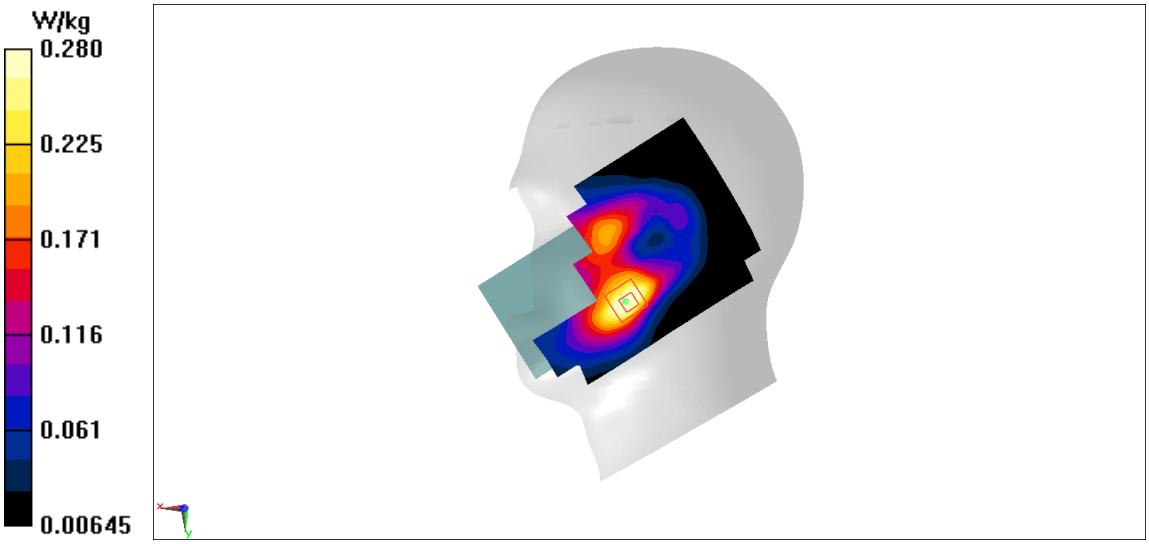


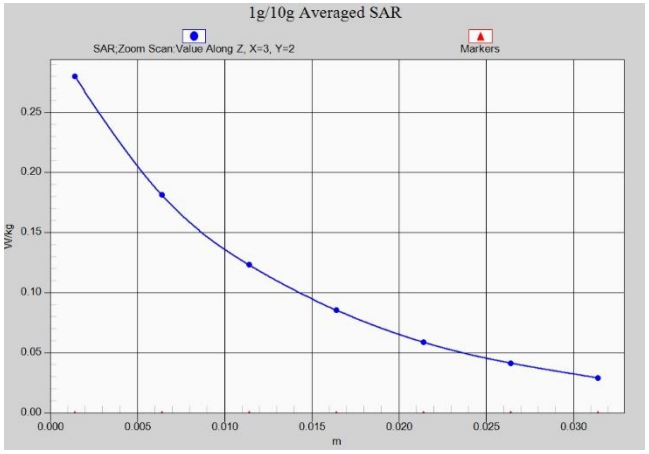


LTE B66 Head ANT1
Date: 9/22/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 1880 MHz; σ = 1.359 S/m; ε_r = 40.522; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band2 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.311 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.518 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.335 W/kg
SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.143 W/kg
Maximum value of SAR (measured) = 0.280 W/kg

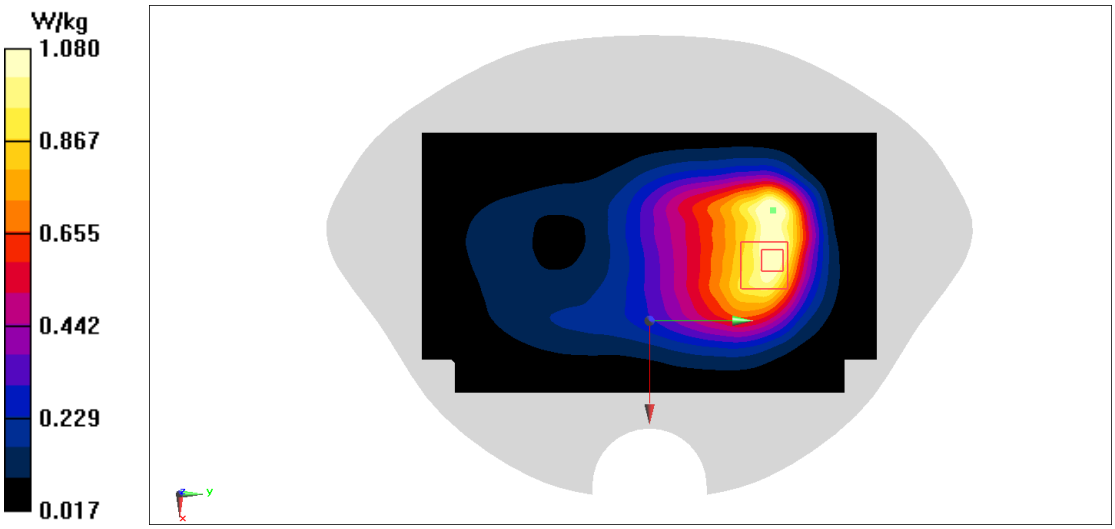


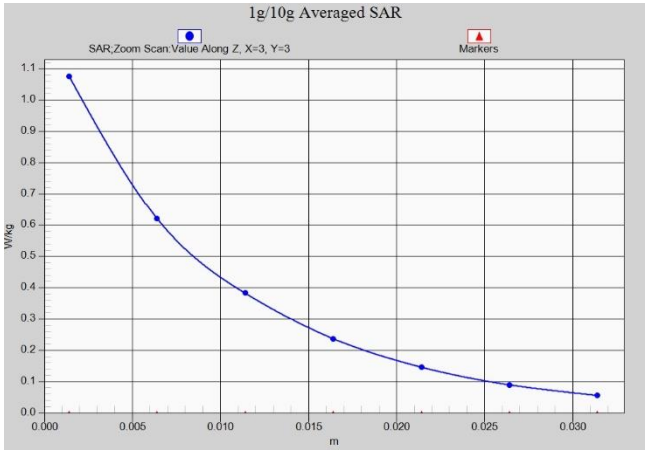


LTE B66 Body ANT1
Date: 9/15/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 1720 MHz; σ = 1.346 S/m; ε_r = 40.467; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: LTE Band66 1720 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.79 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.483 W/kg
Maximum value of SAR (measured) = 1.08 W/kg

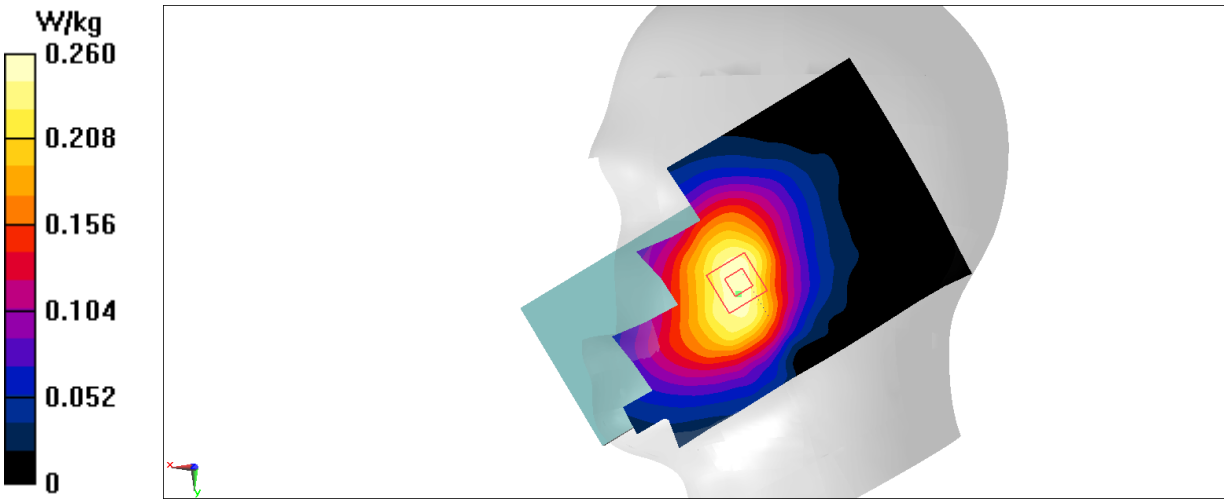


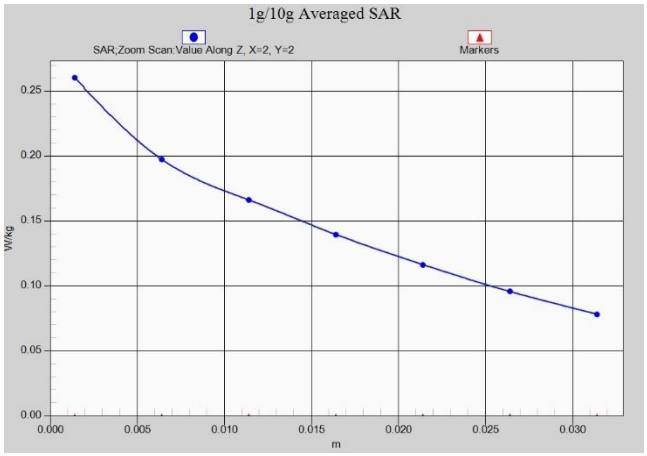


N5 Head ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 836.5 MHz; σ = 0.943 S/m; ε_r = 40.489; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: 5G N5 836.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.260 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.291 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.290 W/kg
SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 0.260 W/kg

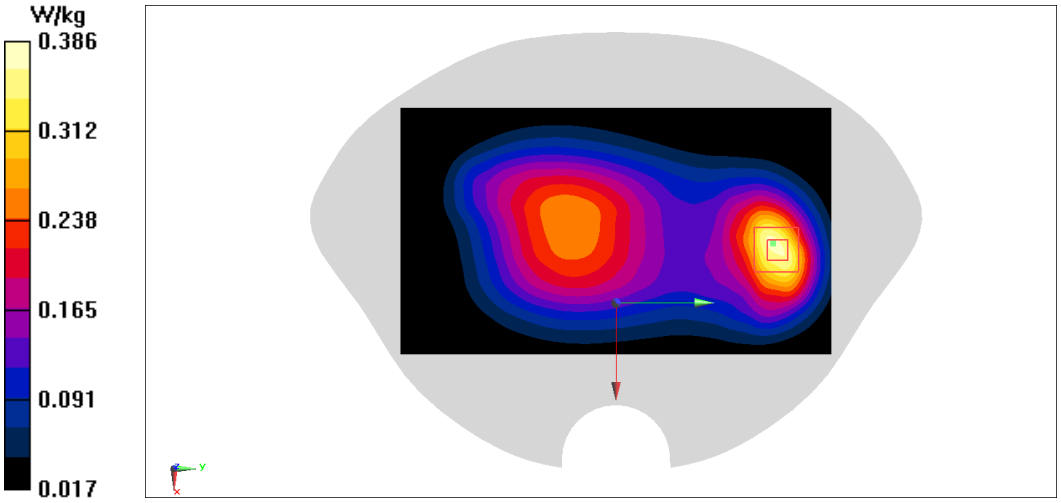


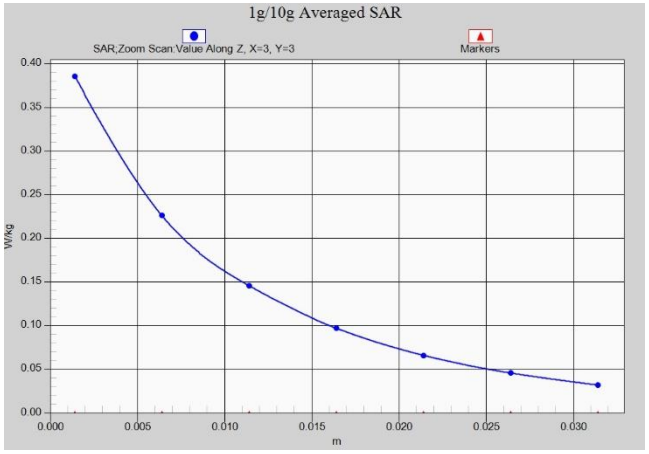


N5 Body ANT0
Date: 9/11/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used : f = 836.5 MHz; σ = 0.943 S/m; ε_r= 40.489; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: 5G NR (0) 836.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.372 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.77 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.472 W/kg
SAR(1 g) = 0.271 W/kg; SAR(10 g) = 0.164 W/kg
Maximum value of SAR (measured) = 0.386 W/kg

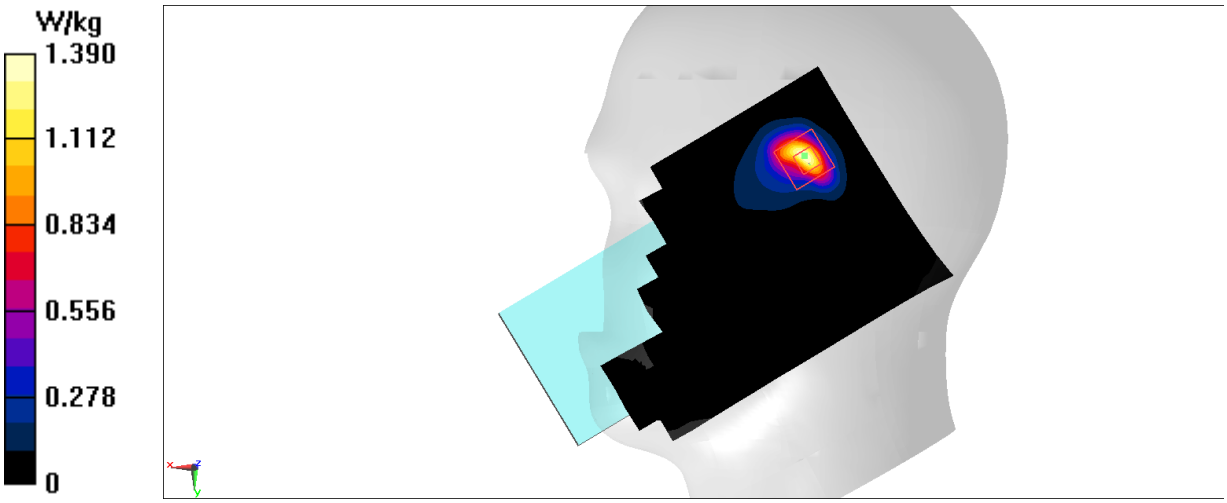


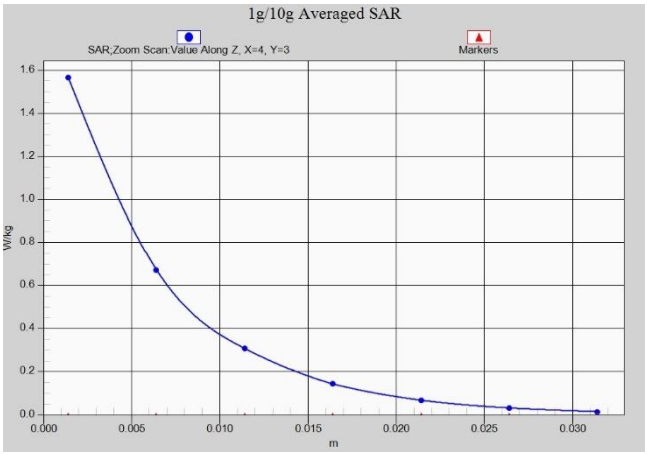


N7 Head ANT4
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 2502.5 MHz; σ = 1.81 S/m; ε_r = 40.08; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: 5G NR 2502.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.39 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.254 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.13 W/kg
SAR(1 g) = 0.857 W/kg; SAR(10 g) = 0.337 W/kg
Maximum value of SAR (measured) = 1.57 W/kg

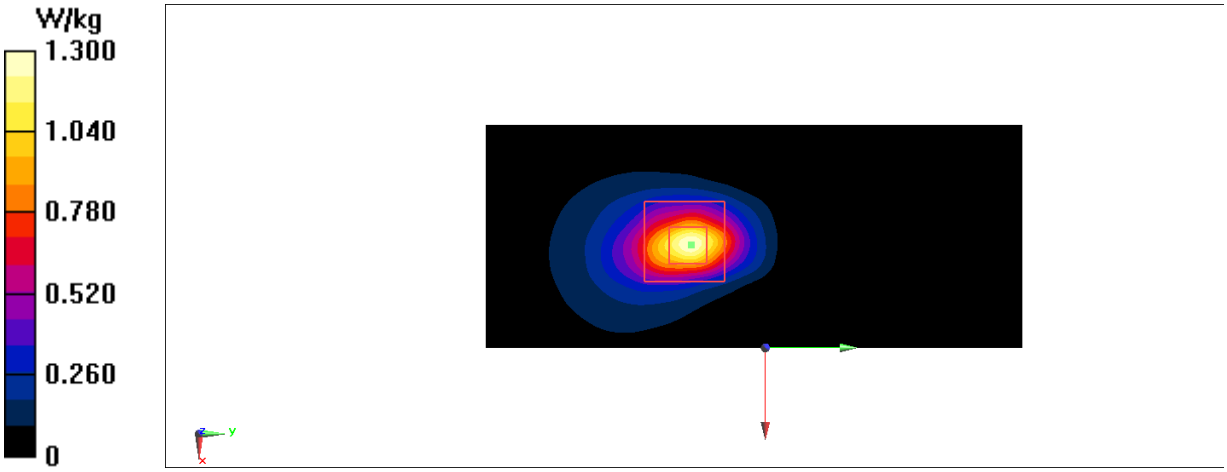


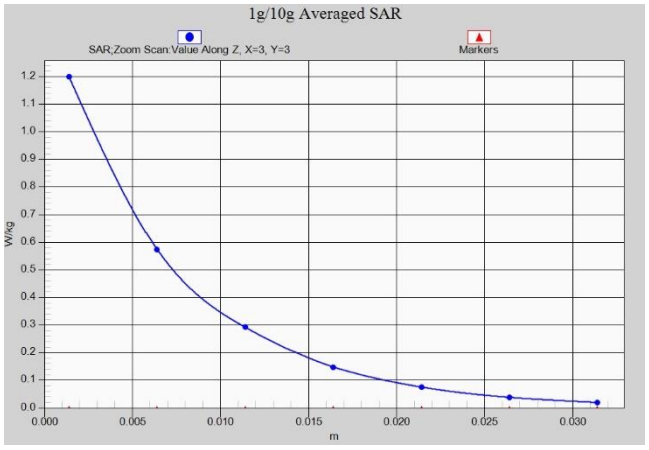


N7 Body ANT4
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H650-7000M
Medium parameters used: f = 2502.5 MHz; σ = 1.81 S/m; ε_r = 40.08; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: 5G NR 2502.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (51x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.30 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.598 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 0.697 W/kg; SAR(10 g) = 0.302 W/kg
Maximum value of SAR (measured) = 1.20 W/kg

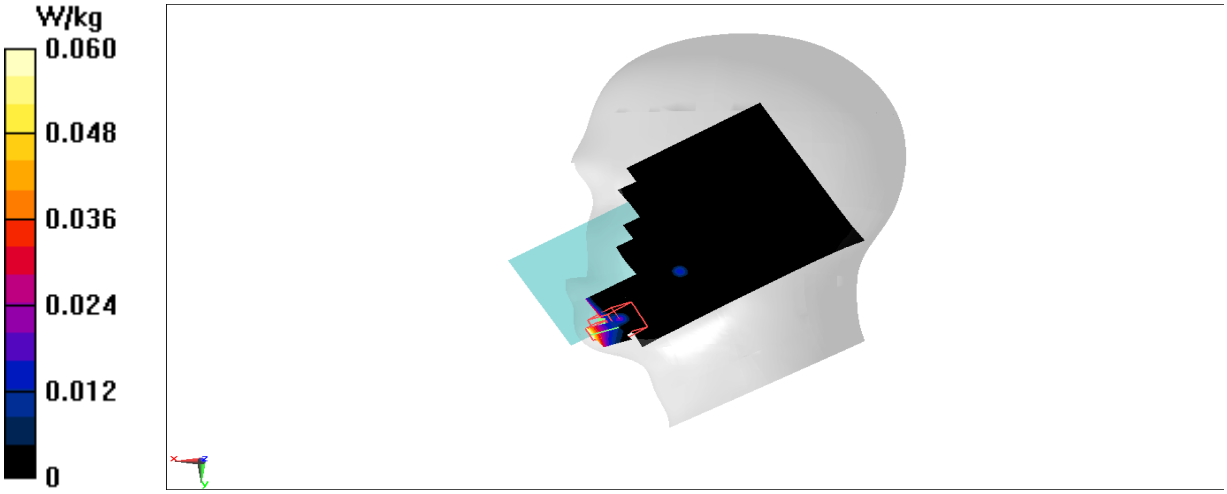


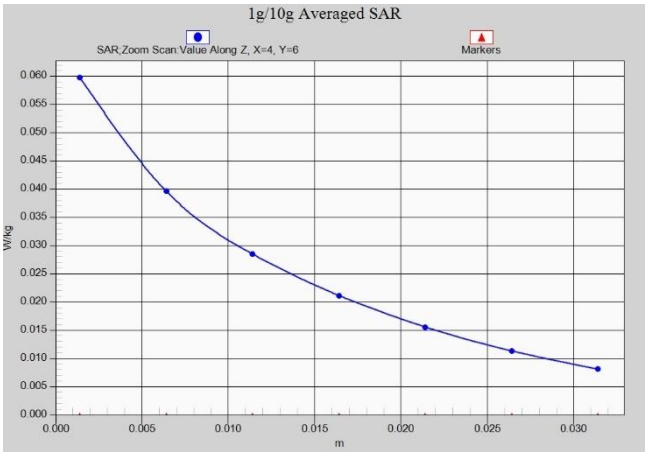


N7 Head ANT0
Date/Time: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2502.5 MHz; σ = 1.81 S/m; ε_r = 40.08; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: 5G NR (0) 2502.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0495 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.0700 W/kg
SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.015 W/kg
Maximum value of SAR (measured) = 0.0598 W/kg





N7 Body ANT0
Date: 9/29/2022
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used: f = 2535 MHz; σ = 1.822 S/m; ε_r = 40.026; ρ = 1000 kg/m^3
Ambient Temperature:23.3ºC Liquid Temperature: 22.5ºC
Communication System: 5G NR 2535 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.13 W/kg

Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.889 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.665 W/kg; SAR(10 g) = 0.297 W/kg
Maximum value of SAR (measured) = 1.12 W/kg