



TEST REPORT

No.I22N01500-SAR

For

BLU Products, Inc.

Smart Phone

Model Name: B1550VL

With

Hardware Version: V1.0

Software Version: BLU_B1550VL_V12.0.02.05.02.17_FSec

FCC ID: YHLBLUB1550VL

Issued Date: 2022-10-01

Designation Number: CN1210

Note:

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

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No.I22N01500-SAR

REPORT HISTORY

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I22N01500-SAR	Rev.0	1st edition	2022-10-01



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1. Summary of Test Report

1.1. Test Items

Description: Smart Phone
Model Name: B1550VL
Applicant's Name: BLU Products, Inc.
Manufacturer's Name: BLU Products, Inc.

1.2. Test Standards

ANSI C95.1:1992, IEEE 1528:2013

1.3. Test Result

Pass. Please refer to "13. Summary of Test Results"

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project Data

Testing Start Date: 2022-08-28

Testing End Date: 2022-09-18

1.6. Signature

Li Yongfu
(Prepared this test report)

Zhang Yunzhan
(Reviewed this test report)

Cao Junfei
(Approved this test report)



2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for BLU Products, Inc. Smart Phone B1550VL are as follows:

Table 2.1: Highest Reported SAR (1g)

Equipment Class	Frequency Bands	1g SAR (W/kg)		
		Head (Separation Distance 0mm)	Hotspot (Separation Distance 10mm)	Body-worn (Separation Distance 10/15mm)
PCE	WCDMA Band 2	0.16	1.10	0.45
	WCDMA Band 4	0.13	1.27	0.73
	WCDMA Band 5	0.36	0.45	0.45
	LTE Band 2	0.19	1.01	0.41
	LTE Band 4	0.18	1.21	0.66
	LTE Band 5	0.42	0.42	0.42
	LTE Band 12	0.15	0.29	0.29
	LTE Band 13	0.32	0.36	0.36
	LTE Band 66	0.20	0.79	0.63
	NR n2(NSA)	0.15	0.72	0.42
	NR n5(NSA)	0.48	0.57	0.51
	NR n66(NSA)	0.19	0.74	0.40
	NR n77(NSA)	0.69	0.69	0.55
DSS	Bluetooth	0.03	0.04	0.04
DTS	WLAN 2.4GHz	0.99	0.38	0.32
NII	WLAN 5GHz	1.00	1.16	0.58

Table 2.2: Highest Reported SAR (10g)

Equipment Class	Frequency Bands	Extremity 10g SAR (W/kg) (Separation Distance 0mm)
PCE	WCDMA Band 2	2.82
	WCDMA Band 4	3.20
	LTE Band 2	2.82
	LTE Band 4	2.91
	LTE Band 66	3.12
NII	WLAN 5GHz	2.64

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.

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 & 2.2**), Head value is **1.00 W/kg (1g)**, Hotspot value is **1.27 W/kg (1g)**, Body-worn value is **0.73 W/kg (1g)** and Extremity SAR value is **3.20 W/kg (10g)**.

Table 2.3: Maximum Simultaneous Transmission SAR

<i>/</i>	Position	Sum (W/kg)
Highest reported SAR value for Head	Right Cheek (DC_66A_n77A + WLAN 5GHz + Bluetooth)	1.58
Highest reported SAR value for Hotspot	Rear Side (DC_13A_n77A + WLAN 2.4GHz)	1.59
Highest reported SAR value for Body-worn	Rear Side (DC_66A_n77A + WLAN 5GHz + Bluetooth)	1.49
Highest reported SAR value for Extremity	Bottom Side (WCDMA Band 4 + WLAN 5GHz)	3.20

Note: the test positions of above tables are for the worse case that has been evaluated.

According to the above tables, the highest sum of reported SAR values is **1.59 W/kg (1g)** and **3.20 W/kg (10g)**.

The detail for simultaneous transmission consideration is described in chapter 12.



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3. Client Information

3.1. Applicant Information

Company Name:	BLU Products,Inc.
Address:	10814 NW 33rd St # 100 Doral, FL 33172,USA
City:	/
Country:	USA
Telephone:	305.715.7171

3.2. Manufacturer Information

Company Name:	BLU Products,Inc.
Address:	10814 NW 33rd St # 100 Doral, FL 33172,USA
City:	/
Country:	USA
Telephone:	305.715.7171



4. Equipment under Test (EUT) and Ancillary Equipment (AE)

4.1. About EUT

Description:	Smart Phone
Model Name:	B1550VL
Condition of EUT as received:	No obvious damage in appearance
Frequency Bands:	WCDMA Band 2/4/5, LTE Band 2/4/5/12/13/66, NR n2/n5/n66/n77, Bluetooth, WLAN 2.4GHz, WLAN 5GHz
Tested Tx Frequency:	1850 – 1910MHz (WCDMA Band 2)
	1710 – 1755MHz (WCDMA Band 4)
	824 – 849MHz (WCDMA Band 5)
	1850 – 1910MHz (LTE Band 2)
	1700 – 1755MHz (LTE Band 4)
	824 – 849MHz (LTE Band 5)
	699 – 716MHz (LTE Band 12)
	777 – 787MHz (LTE Band 13)
	1710 – 1780MHz (LTE Band 66)
	1850 – 1910MHz (NR n2)
	824 – 849MHz (NR n5)
	1710 – 1780MHz (NR n66)
	3450 – 3550MHz, 3700 – 3980MHz (NR n77)
	2402 – 2480MHz (Bluetooth)
	2412 – 2462MHz (WLAN 2.4GHz)
	5150 – 5850MHz (WLAN 5GHz)
Test device Production information:	Production unit
Device type:	Portable device
Antenna type:	Embedded antenna
Hotspot mode:	Support
Product Dimensions:	Long 168.08mm;Wide 76.91mm;Overall Diagonal 184.84mm
Remark: This device WLAN 5GHz U-NII-2A and U-NII-2C don't support hotspot operation.	



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4.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Receipt Date
UT03aa	350547790004408	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT14aa	350547790009282	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT15aa	350547790009357	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT16aa	350547790010009	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT17aa	350547790008599	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT18aa	350547790009597	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT19aa	350547790010223	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT22aa	350547790009266	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT25aa	350547790014217	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28
UT26aa	350547790013367	V1.0	BLU_B1550VL_V12.0.02.05.02.17_FSec	2022-07-28

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

Note: It is performed to test SAR with the UT14aa & UT15aa & UT16aa & UT17aa & UT18aa & UT19aa & UT22aa & UT26aa, and conducted power with the UT03aa & UT25aa.

4.3. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery	TN-BP4000N1	Guangdong Fenghua New Energy 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: Experimental Techniques.

KDB 447498 D01 General RF Exposure Guidance v06 RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices

KDB 648474 D04 Handset SAR v01r03 SAR Evaluation Considerations for Wireless Handsets.

KDB 941225 D01 SAR test for 3G devices v03r01 SAR Measurement Procedures for 3G Devices

KDB 941225 D05 SAR for LTE Devices v02r05 SAR Evaluation Considerations for LTE Devices

KDB 941225 D06 Hot Spot SAR v02r01 SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

KDB 248227 D01 802.11 Wi-Fi SAR v02r02 SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters.

KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04 SAR Measurement Requirements for 100 MHz to 6 GHz

KDB 865664 D02 RF Exposure Reporting v01r02 RF Exposure Compliance Reporting and Documentation Considerations

KDB 941225 D07 UMPC Mini Tablet v01r02 SAR Evaluation Procedures for UMPC Mini-Tablet Devices

KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02: REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES

TCB workshop May 2017: RF Exposure Procedures

TCB workshop October 2018: RF Exposure Procedures

TCB workshop April 2019: RF Exposure Procedures

TCB workshop November 2019: RF Exposure Policy Updates

TCB workshop April 2020: RF Exposure Policies and Procedures - Status

TCB workshop October 2020: RF Exposure Procedures



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TCB workshop April 2022: RF Exposure Procedures

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 heat 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)	$\pm 5\%$ Range	Permittivity (ϵ)	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.9	39.8~44.0
835	Head	0.90	0.86~0.95	41.5	39.4~43.6
1750	Head	1.37	1.30~1.44	40.1	38.1~42.1
1900	Head	1.40	1.33~1.47	40.0	38.0~42.0
2450	Head	1.80	1.71~1.89	39.2	37.2~41.2
3500	Head	2.91	2.77~3.05	37.9	36.0~39.7
3900	Head	3.32	3.16~3.48	37.5	35.7~39.3
5250	Head	4.71	4.47~4.95	35.9	34.1~37.7
5600	Head	5.07	4.82~5.32	35.5	33.8~37.3
5750	Head	5.22	4.96~5.48	35.4	33.6~37.1

7.2. Dielectric Performance

Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency (MHz)	Conductivity σ (S/m)	Drift (%)	Permittivity ϵ	Drift (%)
2022-09-02	750	Head	0.881	-1.01	42.57	1.60
2022-09-05	835	Head	0.922	2.44	40.96	-1.30
2022-09-18	1750	Head	1.386	1.17	39.24	-2.14
2022-08-28	1900	Head	1.428	2.00	38.92	-2.70
2022-09-11	2450	Head	1.835	1.94	38.73	-1.20
2022-08-30	3500	Head	2.863	-1.62	38.49	1.56
2022-09-07	3900	Head	3.406	2.59	36.98	-1.39
2022-09-10	5250	Head	4.655	-1.17	36.41	1.42
2022-09-10	5600	Head	5.173	2.03	34.85	-1.83
2022-09-10	5750	Head	5.311	1.74	34.59	-2.29

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 (835MHz)



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



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



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



Picture 7-6: Liquid depth in the Head Phantom (3700MHz)



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

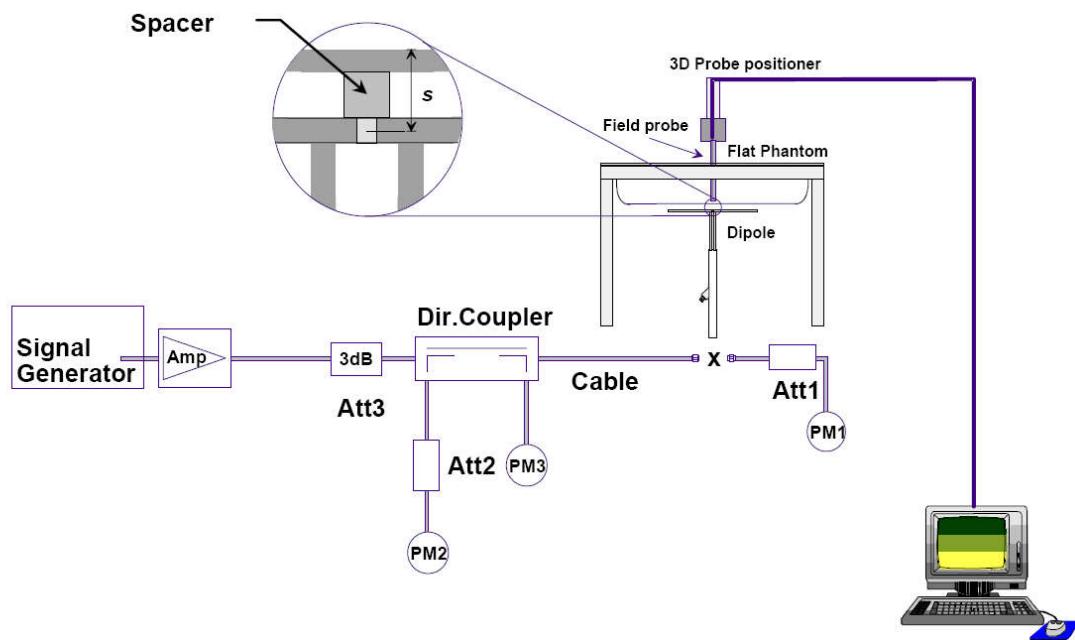


Picture 7-8: Liquid depth in the Head Phantom (5GHz)

8. System verification

8.1. System Setup

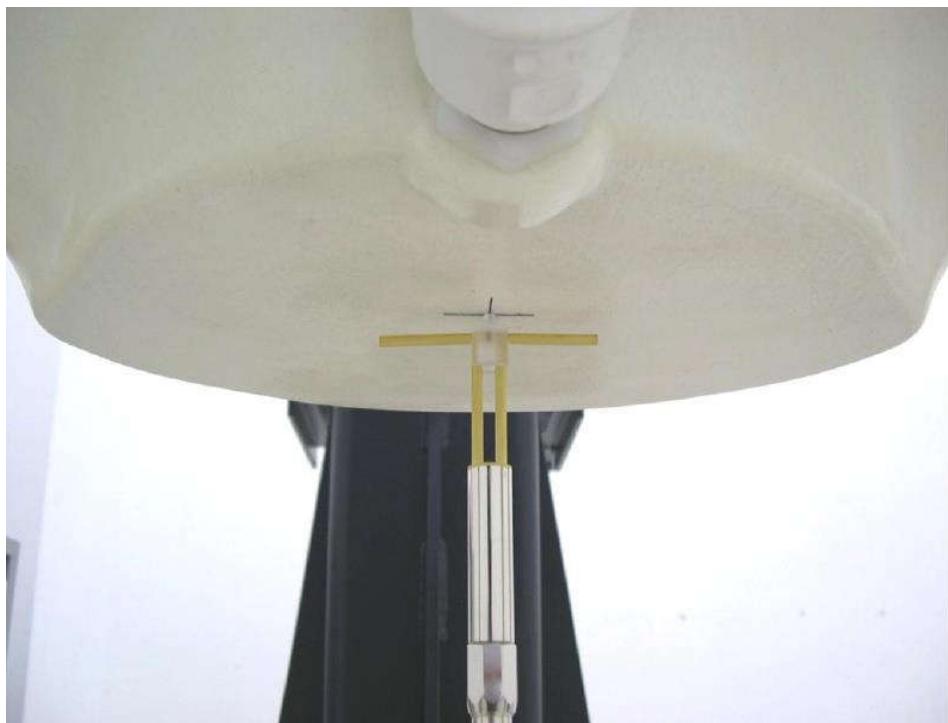
In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. 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

For the dipole below 3GHz, the output power on dipole port must be calibrated to 24 dBm (250mW) before dipole is connected.

For the dipole above 3GHz, the output power on dipole port must be calibrated to 20 dBm (100mW) before dipole is connected.



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.

Table 8.1: System Verification of Head

Measurement Date	Frequency (MHz)	Target value (W/kg)		Measured value (W/kg)				Deviation (%)	
				/	Normalize to 1W				
		10 g	1 g	10 g	1 g	10 g	1 g	10 g	1 g
2022-09-02	750	5.62	8.48	1.38	2.04	5.52	8.16	-1.78	-3.77
2022-09-05	835	6.29	9.64	1.61	2.49	6.44	9.96	2.38	3.32
2022-09-18	1750	19.60	36.30	4.99	9.43	19.96	37.72	1.84	3.91
2022-08-28	1900	20.50	40.20	5.28	10.5	21.12	42.00	3.02	4.48
2022-09-11	2450	24.20	53.20	6.17	13.8	24.68	55.20	1.98	3.76
2022-08-30	3500	25.20	66.80	2.49	6.51	24.90	65.10	-1.19	-2.54
2022-09-07	3900	24.80	71.30	2.55	7.47	25.50	74.70	2.82	4.77
2022-09-10	5250	22.80	79.70	2.24	7.72	22.40	77.20	-1.75	-3.14
2022-09-10	5600	23.60	82.60	2.40	8.56	24.00	85.60	1.69	3.63
2022-09-10	5750	22.10	78.50	2.26	8.18	22.60	81.80	2.26	4.20



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.

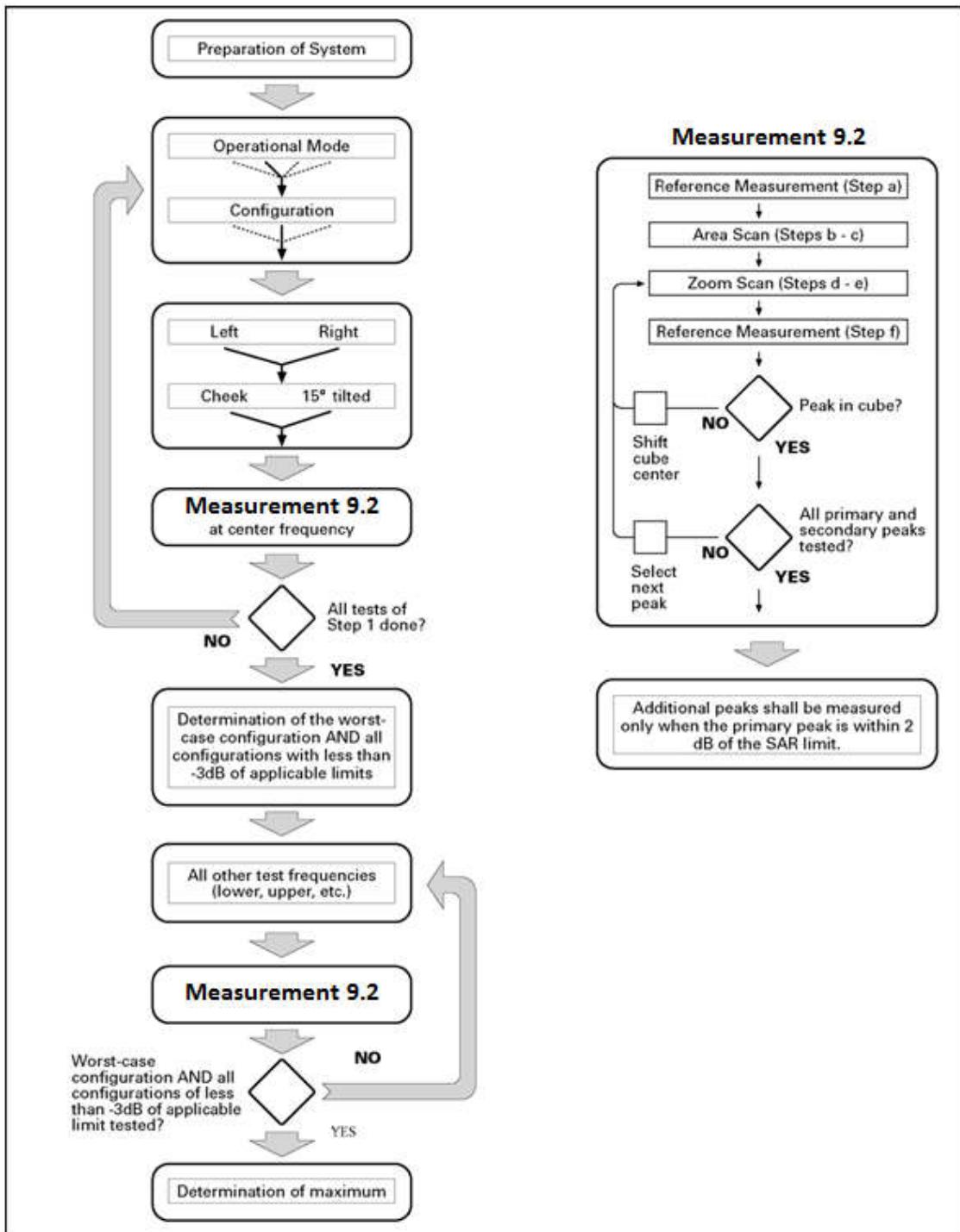
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the center of the transmit frequency band (f_c) for:

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

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

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

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



Picture 9.1 Block diagram of the tests to be performed



9.2. General Measurement Procedure

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

		≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	$\frac{1}{2} \cdot 5 \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
		≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}		≤ 2 GHz: ≤ 8 mm $2 - 3$ GHz: ≤ 5 mm*	$3 - 4$ GHz: ≤ 5 mm* $4 - 6$ GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$	≤ 5 mm	$3 - 4$ GHz: ≤ 4 mm $4 - 5$ GHz: ≤ 3 mm $5 - 6$ GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$3 - 4$ GHz: ≤ 3 mm $4 - 5$ GHz: ≤ 2.5 mm $5 - 6$ GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$
Minimum zoom scan volume	x, y, z	≥ 30 mm	$3 - 4$ GHz: ≥ 28 mm $4 - 5$ GHz: ≥ 25 mm $5 - 6$ GHz: ≥ 22 mm
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 <i>J-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.			



9.3. 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	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	3.0	2.0	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.0	0.0	21	81



9.4. SAR Measurement for LTE

SAR tests for LTE are performed with a base station simulator, Anristu MT8820C. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the Anristu MT8820C. It is performed for conducted power and SAR based on the KDB941225 D05.

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

- 1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is $\leq 0.8 \text{ W/kg}$, 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 $> 1.45 \text{ W/kg}$, SAR is required for all three RB offset configurations for that required test channel.

- 2) QPSK with 50% RB allocation

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

- 3) QPSK with 100% RB allocation

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

9.5. Bluetooth & WLAN Measurement Procedures for SAR

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

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



9.6. Power Drift

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



10. Conducted Output Power

Table 10.1: Summary of power level - WWAN antenna

Receiver on (Head)	Receiver off + Hotspot on (Hotspot)	Receiver off + Hotspot off (Body-Worn/ Extremity)
Power Level A1	Power Level B1	Power Level C1
(For UL CA & ENDC mode)		
Receiver on (Head)	Receiver off + Hotspot on (Hotspot)	Receiver off + Hotspot off (Body-Worn/ Extremity)
Power Level A2	Power Level B2	Power Level C2

Table 10.2: Summary of power level - WLAN antenna

Receiver on (Head)	Receiver off + Hotspot on (Hotspot)	Receiver off + Hotspot off (Body-Worn/ Extremity)
Power Level D1	Power Level E1	Power Level F1
(WLAN + WWAN simultaneous transmission)		
Receiver on (Head)	Receiver off + Hotspot on (Hotspot)	Receiver off + Hotspot off (Body-Worn/ Extremity)
Power Level D2	Power Level E2	Power Level F2

10.1. WCDMA Measurement result

Table 10.3: The conducted power measurement results WCDMA

Power Level A1					
Item	band	WCDMA Band 2			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	24.0	23.10	23.10	23.10
HSUPA	1	21.5	20.20	20.60	20.50
	2	21.0	20.10	20.20	20.20
	3	22.0	21.00	21.10	21.10
	4	20.5	19.70	19.70	19.70
	5	22.0	21.00	21.00	21.00
HSDPA	1	23.0	22.10	22.10	22.10
	2	23.0	22.10	22.10	22.10
	3	22.5	21.60	21.60	21.60
	4	22.5	21.60	21.60	21.60
DC-HSDPA	1	23.0	22.00	22.00	22.10
	2	23.0	21.90	22.00	22.10
	3	22.5	21.50	21.50	21.60
	4	22.5	21.50	21.50	21.60
Power Level B1					
Item	band	WCDMA Band 2			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	21.0	20.10	20.10	20.10
HSUPA	1	18.5	17.60	17.50	17.50
	2	18.0	17.10	17.10	17.10
	3	19.0	18.10	18.00	18.10
	4	17.5	16.60	16.60	16.70
	5	19.0	18.10	18.00	18.00
HSDPA	1	20.0	19.10	19.20	19.10
	2	20.0	19.10	19.10	19.10
	3	19.5	18.60	18.60	18.60
	4	19.5	18.60	18.60	18.60
DC-HSDPA	1	20.0	19.10	19.10	19.10
	2	20.0	19.00	19.00	19.00
	3	19.5	18.50	18.60	18.60
	4	19.5	18.40	18.50	18.60



Power Level C1					
Item	band	WCDMA Band 2			
	ARFCN	Tune up	Ch.9538 (1907.6MHz)	Ch.9400 (1880MHz)	Ch.9262 (1852.4MHz)
WCDMA	\	22.0	21.00	21.00	21.00
HSUPA	1	19.5	18.60	18.70	18.60
	2	19.0	18.10	18.20	18.10
	3	20.0	19.10	19.20	19.10
	4	18.5	17.60	17.70	17.70
	5	20.0	19.10	19.10	19.10
HSDPA	1	21.0	20.10	20.20	20.10
	2	21.0	20.10	20.20	20.20
	3	20.5	19.60	19.70	19.70
	4	20.5	19.60	19.60	19.70
DC-HSDPA	1	21.0	20.00	20.20	20.10
	2	21.0	20.00	20.10	20.10
	3	20.5	19.60	19.60	19.70
	4	20.5	19.50	19.60	19.70
Power Level A1					
Item	band	WCDMA Band 4			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	24.0	23.00	23.10	23.20
HSUPA	1	21.5	20.10	20.50	20.70
	2	21.0	20.00	20.20	20.30
	3	22.0	20.80	21.10	21.20
	4	20.5	19.50	19.80	19.90
	5	22.0	21.10	21.10	21.10
HSDPA	1	23.0	22.00	22.10	22.20
	2	23.0	22.00	22.00	22.10
	3	22.5	21.50	21.60	21.70
	4	22.5	21.40	21.50	21.60
DC-HSDPA	1	23.0	22.00	22.00	22.10
	2	23.0	22.00	22.00	22.00
	3	22.5	21.50	21.50	21.50
	4	22.5	21.40	21.50	21.50



Power Level B1					
Item	band	WCDMA Band 4			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	21.0	20.00	20.10	20.20
HSUPA	1	18.5	17.50	17.50	17.80
	2	18.0	17.00	17.10	17.30
	3	19.0	18.10	18.00	18.20
	4	17.5	16.60	16.60	16.80
	5	19.0	17.90	18.10	18.20
HSDPA	1	20.0	18.50	18.60	18.40
	2	20.0	18.50	18.60	18.50
	3	19.5	18.10	18.10	18.10
	4	19.5	18.00	18.10	18.20
DC-HSDPA	1	20.0	18.60	18.60	18.60
	2	20.0	18.40	18.50	18.60
	3	19.5	18.00	18.10	18.20
	4	19.5	18.10	18.10	18.10
Power Level C1					
Item	band	WCDMA Band 4			
	ARFCN	Tune up	Ch.1513 (1752.6MHz)	Ch.1413 (1732.6MHz)	Ch.1312 (1712.4MHz)
WCDMA	\	22.5	21.50	21.50	21.60
HSUPA	1	20.0	19.10	19.20	19.30
	2	19.5	18.60	18.60	18.80
	3	20.5	19.60	19.70	19.80
	4	19.0	18.10	18.20	18.30
	5	20.5	19.50	19.70	19.70
HSDPA	1	21.5	20.40	20.50	20.70
	2	21.5	20.40	20.50	20.60
	3	21.0	20.10	20.20	20.30
	4	21.0	20.10	20.20	20.30
DC-HSDPA	1	21.5	20.50	20.50	20.50
	2	21.5	20.40	20.50	20.50
	3	21.0	20.00	20.10	20.20
	4	21.0	20.00	20.10	20.10



Power Level A1/B1/C1					
Item	band	WCDMA Band 5			
	ARFCN	Tune up	Ch.4233 (846.6MHz)	Ch.4183 (836.6MHz)	Ch.4132 (826.4MHz)
WCDMA	\	24.0	23.30	23.30	23.30
HSUPA	1	21.5	20.30	20.80	20.90
	2	21.0	20.30	20.30	20.30
	3	22.0	21.30	21.30	21.30
	4	20.5	19.80	19.90	19.80
	5	22.0	21.30	21.30	21.30
HSDPA	1	23.0	22.30	22.30	22.30
	2	23.0	22.30	22.30	22.30
	3	22.5	21.80	21.80	21.90
	4	22.5	21.80	21.80	21.80
DC-HSDPA	1	23.0	22.10	22.20	22.30
	2	23.0	22.20	22.20	22.20
	3	22.5	21.70	21.80	21.90
	4	22.5	21.70	21.70	21.80



10.2. LTE Measurement result

Table 10.4: The conducted Power for LTE

LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	22.97	22.23	21.11	24.5	23.5	22.5
		1880.0	22.98	22.18	20.99			
		1850.7	22.99	22.20	21.04			
	1RB_3	1909.3	22.99	22.27	21.08			
		1880.0	23.02	22.22	21.06			
		1850.7	22.99	22.26	21.07			
	1RB_0	1909.3	22.98	22.23	21.10			
		1880.0	23.02	22.20	21.06			
		1850.7	23.00	22.29	21.07			
	3RB_3	1909.3	23.05	22.05	20.95			
		1880.0	23.03	22.04	20.97			
		1850.7	23.02	21.96	21.01			
	3RB_1	1909.3	23.06	22.09	21.01			
		1880.0	23.06	22.07	21.05			
		1850.7	22.99	21.98	21.03			
	3RB_0	1909.3	23.05	22.06	20.94			
		1880.0	23.10	22.04	21.03			
		1850.7	23.01	21.98	21.01			
	6RB_0	1909.3	22.05	21.14	20.07	23.5	22.5	21.5
		1880.0	22.02	21.11	20.11			
		1850.7	22.04	21.05	20.03			



Ant.5 - Power Level A1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	23.05	22.18	21.03	24.5	23.5	22.5
		1880.0	23.04	22.16	21.05			
		1851.5	22.99	22.15	21.04			
	1RB_7	1908.5	23.09	22.19	21.09			
		1880.0	23.05	22.20	21.12			
		1851.5	23.02	22.23	21.10			
	1RB_0	1908.5	23.13	22.19	21.09			
		1880.0	23.02	22.10	21.08			
		1851.5	22.98	22.20	21.08			
	8RB_7	1908.5	21.99	21.06	20.08			
		1880.0	21.97	21.01	20.05			
		1851.5	21.98	21.00	20.09			
	8RB_4	1908.5	21.98	21.11	20.10			
		1880.0	21.98	21.02	20.03			
		1851.5	21.98	21.02	20.17			
	8RB_0	1908.5	22.03	21.12	20.11			
		1880.0	22.02	21.07	20.09			
		1851.5	21.98	21.02	20.11			
	15RB_0	1908.5	22.00	21.02	20.11			
		1880.0	21.95	20.95	20.02			
		1851.5	21.98	21.01	20.05			



Ant.5 - Power Level A1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	23.00	22.29	20.97	24.5	23.5	22.5
		1880.0	23.00	22.23	21.07			
		1852.5	23.00	22.18	21.14			
	1RB_12	1907.5	23.14	22.38	21.14			
		1880.0	23.09	22.28	21.17			
		1852.5	23.06	22.24	21.23			
	1RB_0	1907.5	23.11	22.38	21.12			
		1880.0	23.02	22.25	21.10			
		1852.5	23.05	22.26	21.15			
	12RB_13	1907.5	21.96	20.92	20.06			
		1880.0	21.99	20.95	20.11			
		1852.5	21.99	20.96	20.12			
	12RB_6	1907.5	22.04	21.01	20.18			
		1880.0	22.01	21.02	20.20			
		1852.5	22.04	20.99	20.18			
	12RB_0	1907.5	22.13	21.08	20.24			
		1880.0	22.05	21.04	20.19			
		1852.5	22.03	20.98	20.21			
	25RB_0	1907.5	22.02	21.05	20.10			
		1880.0	22.02	21.02	20.10			
		1852.5	21.99	21.02	20.10			



Ant.5 - Power Level A1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	23.00	22.16	21.13	24.5	23.5	22.5
		1880.0	22.97	22.20	21.14			
		1855.0	22.99	22.18	21.05			
	1RB_24	1905.0	23.08	22.26	21.23			
		1880.0	22.98	22.24	21.14			
		1855.0	23.04	22.21	21.09			
	1RB_0	1905.0	23.01	22.24	21.20			
		1880.0	22.99	22.20	21.11			
		1855.0	23.02	22.19	20.97			
	25RB_25	1905.0	21.97	20.96	20.03		23.5	22.5
		1880.0	21.99	20.98	20.03			
		1855.0	22.00	20.97	20.09			
	25RB_12	1905.0	22.03	21.02	20.10			
		1880.0	22.00	21.02	20.07			
		1855.0	22.03	21.01	20.11			
	25RB_0	1905.0	22.02	21.04	20.11			
		1880.0	22.07	21.06	20.15			
		1855.0	21.97	20.99	20.09			
	50RB_0	1905.0	21.98	20.99	20.07			
		1880.0	22.00	20.97	20.07			
		1855.0	22.02	20.97	20.06			



Ant.5 - Power Level A1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	22.98	22.21	21.00	24.5	23.5	22.5
		1880.0	23.02	22.19	21.12			
		1857.5	22.99	22.06	21.07			
	1RB_37	1902.5	23.02	22.24	21.04			
		1880.0	23.12	22.23	21.17			
		1857.5	23.07	22.22	21.17			
	1RB_0	1902.5	22.93	22.19	21.01			
		1880.0	23.09	22.18	21.11			
		1857.5	23.04	22.14	21.11			
	36RB_38	1902.5	21.92	20.96	20.05	23.5	22.5	21.5
		1880.0	21.91	20.95	20.02			
		1857.5	21.94	20.94	20.08			
	36RB_19	1902.5	21.96	21.00	20.12			
		1880.0	22.01	21.03	20.08			
		1857.5	21.98	20.98	20.10			
	36RB_0	1902.5	22.00	20.99	20.10			
		1880.0	22.04	21.01	20.07			
		1857.5	21.92	20.93	20.04			
	75RB_0	1902.5	21.99	20.96	20.06			
		1880.0	21.98	20.96	20.08			
		1857.5	22.02	20.97	20.05			



Ant.5 - Power Level A1									
LTE Band 2			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
20 MHz	1RB_99	1900.0	22.99	22.11	21.02	24.5	23.5	22.5	
		1880.0	22.97	22.20	20.96				
		1860.0	23.01	22.11	20.84				
	1RB_50	1900.0	23.07	22.29	21.14				
		1880.0	23.09	22.29	21.04				
		1860.0	23.07	22.18	20.93				
	1RB_0	1900.0	22.95	22.20	21.02				
		1880.0	22.97	22.20	20.98				
		1860.0	23.06	22.14	20.92				
	50RB_50	1900.0	21.88	20.92	20.06		23.5	22.5	21.5
		1880.0	21.94	20.91	20.00				
		1860.0	21.94	20.93	20.02				
	50RB_25	1900.0	21.98	21.00	20.13				
		1880.0	21.99	20.97	20.13				
		1860.0	22.99	20.97	20.11				
	50RB_0	1900.0	21.99	20.95	20.07				
		1880.0	22.03	21.00	20.16				
		1860.0	22.00	20.95	20.05				
	100RB_0	1900.0	21.98	20.93	20.06				
		1880.0	21.96	20.93	20.03				
		1860.0	21.99	20.95	20.08				



Ant.5 - Power Level B1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	19.11	18.39	17.28	20.5	19.5	18.5
		1880.0	19.11	18.41	17.15			
		1850.7	19.10	18.42	17.18			
	1RB_3	1909.3	19.11	18.39	17.22			
		1880.0	19.11	18.41	17.16			
		1850.7	19.08	18.45	17.18			
	1RB_0	1909.3	19.12	18.40	17.22			
		1880.0	19.11	18.43	17.16			
		1850.7	19.08	18.39	17.16			
	3RB_3	1909.3	19.15	18.13	17.22			
		1880.0	19.10	18.08	17.19			
		1850.7	19.11	18.13	17.16			
	3RB_1	1909.3	19.15	18.15	17.23			
		1880.0	19.13	18.11	17.21			
		1850.7	19.11	18.13	17.16			
	3RB_0	1909.3	19.15	18.15	17.24			
		1880.0	19.15	18.14	17.24			
		1850.7	19.13	18.15	17.18			
	6RB_0	1909.3	18.12	17.19	16.07	19.5	18.5	17.5
		1880.0	18.14	17.21	16.05			
		1850.7	18.12	17.17	16.03			



Ant.5 - Power Level B1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	19.10	18.38	17.30	20.5	19.5	18.5
		1880.0	19.08	18.43	17.26			
		1851.5	19.07	18.46	17.27			
	1RB_7	1908.5	19.14	18.42	17.28			
		1880.0	19.13	18.46	17.31			
		1851.5	19.12	18.48	17.32			
	1RB_0	1908.5	19.18	18.49	17.32			
		1880.0	19.10	18.45	17.29			
		1851.5	19.09	18.45	17.30			
	8RB_7	1908.5	18.12	17.17	16.09			
		1880.0	18.06	17.12	16.07			
		1851.5	18.11	17.15	16.12			
	8RB_4	1908.5	18.14	17.21	16.12			
		1880.0	18.09	17.14	16.09			
		1851.5	18.12	17.17	16.10			
	8RB_0	1908.5	18.13	17.19	16.12			
		1880.0	18.15	17.16	16.13			
		1851.5	18.10	17.15	16.06			
	15RB_0	1908.5	18.11	17.13	16.08			
		1880.0	18.08	17.10	16.05			
		1851.5	18.12	17.15	16.08			



Ant.5 - Power Level B1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	19.13	18.35	17.25	20.5	19.5	18.5
		1880.0	19.13	18.41	17.27			
		1852.5	19.11	18.39	17.26			
	1RB_12	1907.5	19.24	18.48	17.31			
		1880.0	19.14	18.43	17.32			
		1852.5	19.13	18.45	17.33			
	1RB_0	1907.5	19.17	18.44	17.26			
		1880.0	19.12	18.43	17.28			
		1852.5	19.15	18.44	17.32			
	12RB_13	1907.5	18.08	17.05	16.04			
		1880.0	18.12	17.07	16.05			
		1852.5	18.11	17.11	16.09			
	12RB_6	1907.5	18.14	17.13	16.11			
		1880.0	18.15	17.11	16.10			
		1852.5	18.14	17.09	16.11			
	12RB_0	1907.5	18.25	17.21	16.18			
		1880.0	18.18	17.15	16.16			
		1852.5	18.18	17.12	16.13			
	25RB_0	1907.5	18.15	17.13	16.09			
		1880.0	18.15	17.14	16.12			
		1852.5	18.12	17.08	16.06			



Ant.5 - Power Level B1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	19.14	18.44	17.23	20.5	19.5	18.5
		1880.0	19.13	18.40	17.22			
		1855.0	19.10	18.33	17.21			
	1RB_24	1905.0	19.23	18.51	17.31			
		1880.0	19.15	18.46	17.26			
		1855.0	19.18	18.47	17.25			
	1RB_0	1905.0	19.19	18.46	17.27			
		1880.0	19.14	18.43	17.22			
		1855.0	19.16	18.44	17.26			
	25RB_25	1905.0	18.09	17.10	16.07		19.5	18.5
		1880.0	18.09	17.08	16.05			
		1855.0	18.12	17.09	16.07			
	25RB_12	1905.0	18.15	17.16	16.11			
		1880.0	18.11	17.12	16.08			
		1855.0	18.15	17.15	16.10			
	25RB_0	1905.0	18.15	17.11	16.08			
		1880.0	18.18	17.14	16.13			
		1855.0	18.10	17.11	16.04			
	50RB_0	1905.0	18.15	17.13	16.07			
		1880.0	18.13	17.13	16.09			
		1855.0	18.11	17.12	16.08			



Ant.5 - Power Level B1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	19.07	18.39	17.23	20.5	19.5	18.5
		1880.0	19.07	18.37	17.23			
		1857.5	19.07	18.32	17.11			
	1RB_37	1902.5	19.13	18.41	17.30			
		1880.0	19.13	18.40	17.20			
		1857.5	19.14	18.44	17.21			
	1RB_0	1902.5	19.01	18.34	17.19			
		1880.0	19.11	18.35	17.22			
		1857.5	19.11	18.36	17.24			
	36RB_38	1902.5	18.02	17.07	16.06			
		1880.0	18.01	17.06	16.04			
		1857.5	18.08	17.06	16.08			
	36RB_19	1902.5	18.13	17.08	16.09			
		1880.0	18.15	17.10	16.10			
		1857.5	18.10	17.06	16.06			
	36RB_0	1902.5	18.10	17.04	16.06			
		1880.0	18.08	17.12	16.11			
		1857.5	18.05	17.10	16.08			
	75RB_0	1902.5	18.13	17.10	16.04			
		1880.0	18.09	17.06	16.06			
		1857.5	18.09	17.08	16.06			



Ant.5 - Power Level B1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	19.06	18.34	17.17	20.5	19.5	18.5
		1880.0	19.06	18.30	17.20			
		1860.0	19.02	18.28	17.16			
	1RB_50	1900.0	19.15	18.47	17.28			
		1880.0	19.17	18.42	17.29			
		1860.0	19.13	18.43	17.29			
	1RB_0	1900.0	19.08	18.36	17.20			
		1880.0	19.06	18.33	17.23			
		1860.0	19.10	18.39	17.26			
	50RB_50	1900.0	18.13	17.10	16.08			
		1880.0	18.07	17.07	16.03			
		1860.0	18.12	17.09	16.08			
	50RB_25	1900.0	18.12	17.14	16.12			
		1880.0	18.13	17.15	16.12			
		1860.0	18.12	17.12	16.09			
	50RB_0	1900.0	18.15	17.09	16.06			
		1880.0	18.17	17.14	16.07			
		1860.0	18.15	17.10	16.05			
	100RB_0	1900.0	18.09	17.08	16.07			
		1880.0	18.07	17.02	16.06			
		1860.0	18.11	17.06	16.05			



Ant.5 - Power Level C1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	20.13	19.40	18.25	22.0	21.0	20.0
		1880.0	20.12	19.42	18.33			
		1850.7	20.14	19.41	18.29			
	1RB_3	1909.3	20.14	19.41	18.31			
		1880.0	20.14	19.41	18.33			
		1850.7	20.14	19.43	18.35			
	1RB_0	1909.3	20.15	19.42	18.30			
		1880.0	20.14	19.40	18.34			
		1850.7	20.15	19.42	18.33			
	3RB_3	1909.3	20.17	19.15	18.28			
		1880.0	20.12	19.06	18.21			
		1850.7	20.12	19.10	18.22			
	3RB_1	1909.3	20.17	19.17	18.29			
		1880.0	20.14	19.13	18.27			
		1850.7	20.13	19.10	18.24			
	3RB_0	1909.3	20.18	19.18	18.27			
		1880.0	20.16	19.13	18.27			
		1850.7	20.13	19.11	18.24			
	6RB_0	1909.3	19.13	18.19	17.12	21.0	20.0	19.0
		1880.0	19.16	18.22	17.11			
		1850.7	19.11	18.16	17.09			



Ant.5 - Power Level C1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	20.13	19.43	18.28	22.0	21.0	20.0
		1880.0	20.11	19.44	18.31			
		1851.5	20.14	19.45	18.33			
	1RB_7	1908.5	20.14	19.42	18.29			
		1880.0	20.14	19.43	18.34			
		1851.5	20.13	19.47	18.40			
	1RB_0	1908.5	20.19	19.46	18.33			
		1880.0	20.13	19.45	18.33			
		1851.5	20.14	19.47	18.36			
	8RB_7	1908.5	19.11	18.17	17.15			
		1880.0	19.10	18.15	17.12			
		1851.5	19.12	18.19	17.16			
	8RB_4	1908.5	19.13	18.20	17.15			
		1880.0	19.12	18.16	17.14			
		1851.5	19.12	18.17	17.16			
	8RB_0	1908.5	19.16	18.23	17.18			
		1880.0	19.13	18.17	17.16			
		1851.5	19.13	18.18	17.14			
	15RB_0	1908.5	19.13	18.16	17.13			
		1880.0	19.09	18.11	17.10			
		1851.5	19.13	18.15	17.13			



Ant.5 - Power Level C1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	20.18	19.42	18.30	22.0	21.0	20.0
		1880.0	20.14	19.39	18.26			
		1852.5	20.16	19.44	18.26			
	1RB_12	1907.5	20.25	19.49	18.39			
		1880.0	20.17	19.40	18.32			
		1852.5	20.17	19.47	18.29			
	1RB_0	1907.5	20.24	19.47	18.36			
		1880.0	20.18	19.40	18.29			
		1852.5	20.15	19.45	18.30			
	12RB_13	1907.5	19.11	18.08	17.10		20.0	19.0
		1880.0	19.11	18.09	17.14			
		1852.5	19.13	18.10	17.12			
	12RB_6	1907.5	19.17	18.17	17.20			
		1880.0	19.18	18.15	17.16			
		1852.5	19.18	18.13	17.17			
	12RB_0	1907.5	19.24	18.24	17.25			
		1880.0	19.19	18.20	17.18			
		1852.5	19.17	18.19	17.18			
	25RB_0	1907.5	19.16	18.17	17.14			
		1880.0	19.18	18.16	17.13			
		1852.5	19.17	18.12	17.12			



Ant.5 - Power Level C1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	20.13	19.46	18.27	22.0	21.0	20.0
		1880.0	20.15	19.44	18.31			
		1855.0	20.14	19.41	18.26			
	1RB_24	1905.0	20.22	19.55	18.39			
		1880.0	20.18	19.51	18.34			
		1855.0	20.17	19.48	18.28			
	1RB_0	1905.0	20.22	19.52	18.39			
		1880.0	20.16	19.45	18.30			
		1855.0	20.19	19.45	18.33			
	25RB_25	1905.0	19.12	18.09	17.07			
		1880.0	19.11	18.12	17.07			
		1855.0	19.15	18.11	17.11			
	25RB_12	1905.0	19.17	18.20	17.15			
		1880.0	19.13	18.14	17.13			
		1855.0	19.16	18.15	17.15			
	25RB_0	1905.0	19.14	18.17	17.13			
		1880.0	19.19	18.21	17.17			
		1855.0	19.14	18.16	17.13			
	50RB_0	1905.0	19.19	18.15	17.12			
		1880.0	19.18	18.15	17.10			
		1855.0	19.13	18.12	17.13			



Ant.5 - Power Level C1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	20.10	19.43	18.27	22.0	21.0	20.0
		1880.0	20.08	19.45	18.26			
		1857.5	20.09	19.40	18.21			
	1RB_37	1902.5	20.13	19.50	18.31			
		1880.0	20.14	19.52	18.34			
		1857.5	20.17	19.52	18.33			
	1RB_0	1902.5	20.09	19.44	18.28			
		1880.0	20.11	19.46	18.32			
		1857.5	20.13	19.50	18.28			
	36RB_38	1902.5	19.13	18.10	17.09		20.0	19.0
		1880.0	19.07	18.06	17.05			
		1857.5	19.08	18.13	17.08			
	36RB_19	1902.5	19.14	18.13	17.17			
		1880.0	19.16	18.15	17.14			
		1857.5	19.11	18.10	17.14			
	36RB_0	1902.5	19.11	18.08	17.13			
		1880.0	19.13	18.16	17.14			
		1857.5	19.09	18.11	17.13			
	75RB_0	1902.5	19.11	18.14	17.09			
		1880.0	19.16	18.09	17.10			
		1857.5	19.11	18.11	17.11			



Ant.5 - Power Level C1								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	20.07	19.38	18.08	22.0	21.0	20.0
		1880.0	20.08	19.33	18.16			
		1860.0	20.05	19.32	18.20			
	1RB_50	1900.0	20.18	19.50	18.20			
		1880.0	20.19	19.42	18.21			
		1860.0	20.15	19.44	18.31			
	1RB_0	1900.0	20.12	19.39	18.11			
		1880.0	20.08	19.38	18.17			
		1860.0	20.12	19.40	18.29			
	50RB_50	1900.0	19.11	18.12	17.11			
		1880.0	19.07	18.09	17.07			
		1860.0	19.11	18.13	17.08			
	50RB_25	1900.0	19.16	18.14	17.12			
		1880.0	19.18	18.18	17.14			
		1860.0	19.16	18.14	17.14			
	50RB_0	1900.0	19.17	18.14	17.09			
		1880.0	19.19	18.18	17.14			
		1860.0	19.18	18.15	17.13			
	100RB_0	1900.0	19.12	18.12	17.08			
		1880.0	19.12	18.10	17.05			
		1860.0	19.14	18.06	17.08			



Ant.1 - Power Level A2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	13.13	13.29	13.27	14.0	14.0	14.0
		1880.0	13.14	13.19	13.24			
		1850.7	13.17	13.25	13.21			
	1RB_3	1909.3	13.33	13.41	13.42			
		1880.0	13.33	13.42	13.31			
		1850.7	13.26	13.34	13.34			
	1RB_0	1909.3	13.21	13.28	13.15			
		1880.0	13.21	13.26	13.25			
		1850.7	13.27	13.23	13.32			
	3RB_3	1909.3	13.14	13.12	13.25			
		1880.0	13.15	13.13	13.27			
		1850.7	13.19	13.26	13.21			
	3RB_1	1909.3	13.18	13.28	13.29			
		1880.0	13.23	13.34	13.30			
		1850.7	13.22	13.30	13.29			
	3RB_0	1909.3	13.17	13.27	13.18			
		1880.0	13.22	13.25	13.32			
		1850.7	13.15	13.24	13.24			
	6RB_0	1909.3	13.18	13.14	13.21	14.0	14.0	14.0
		1880.0	13.15	13.19	13.25			
		1850.7	13.18	13.23	13.23			



Ant.1 - Power Level A2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	13.16	13.28	13.26	14.0	14.0	14.0
		1880.0	13.17	13.21	13.24			
		1851.5	13.18	13.24	13.24			
	1RB_7	1908.5	13.36	13.39	13.40			
		1880.0	13.35	13.45	13.33			
		1851.5	13.29	13.35	13.34			
	1RB_0	1908.5	13.18	13.25	13.18			
		1880.0	13.24	13.27	13.27			
		1851.5	13.25	13.25	13.33			
	8RB_7	1908.5	13.13	13.16	13.21			
		1880.0	13.12	13.17	13.24			
		1851.5	13.19	13.26	13.19			
	8RB_4	1908.5	13.16	13.26	13.27			
		1880.0	13.21	13.36	13.30			
		1851.5	13.18	13.31	13.27			
	8RB_0	1908.5	13.15	13.27	13.22			
		1880.0	13.20	13.24	13.32			
		1851.5	13.16	13.27	13.21			
	15RB_0	1908.5	13.15	13.18	13.22			
		1880.0	13.12	13.22	13.23			
		1851.5	13.17	13.26	13.24			



Ant.1 - Power Level A2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	13.21	13.38	13.33	14.0	14.0	14.0
		1880.0	13.29	13.31	13.28			
		1852.5	13.20	13.30	13.41			
	1RB_12	1907.5	13.38	13.44	13.43			
		1880.0	13.41	13.44	13.44			
		1852.5	13.34	13.45	13.42			
	1RB_0	1907.5	13.26	13.24	13.26			
		1880.0	13.35	13.32	13.36			
		1852.5	13.31	13.37	13.39			
	12RB_13	1907.5	13.07	13.23	13.24			
		1880.0	13.17	13.22	13.23			
		1852.5	13.26	13.38	13.23			
	12RB_6	1907.5	13.17	13.20	13.28			
		1880.0	13.33	13.34	13.35			
		1852.5	13.24	13.34	13.28			
	12RB_0	1907.5	13.28	13.27	13.34			
		1880.0	13.30	13.37	13.33			
		1852.5	13.31	13.35	13.28			
	25RB_0	1907.5	13.11	13.30	13.27			
		1880.0	13.16	13.26	13.22			
		1852.5	13.24	13.38	13.39			



Ant.1 - Power Level A2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	13.22	13.35	13.31	14.0	14.0	14.0
		1880.0	13.28	13.29	13.24			
		1855.0	13.22	13.31	13.39			
	1RB_24	1905.0	13.34	13.47	13.45			
		1880.0	13.42	13.46	13.44			
		1855.0	13.33	13.44	13.39			
	1RB_0	1905.0	13.26	13.23	13.26			
		1880.0	13.32	13.30	13.33			
		1855.0	13.30	13.34	13.38			
	25RB_25	1905.0	13.08	13.23	13.24			
		1880.0	13.16	13.22	13.25			
		1855.0	13.28	13.39	13.23			
	25RB_12	1905.0	13.20	13.24	13.30			
		1880.0	13.32	13.33	13.35			
		1855.0	13.27	13.36	13.30			
	25RB_0	1905.0	13.25	13.30	13.31			
		1880.0	13.27	13.36	13.32			
		1855.0	13.27	13.35	13.30			
	50RB_0	1905.0	13.14	13.28	13.27			
		1880.0	13.20	13.28	13.25			
		1855.0	13.22	13.37	13.36			



Ant.1 - Power Level A2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	13.19	13.25	13.26	14.0	14.0	14.0
		1880.0	13.19	13.22	13.18			
		1857.5	13.19	13.23	13.29			
	1RB_37	1902.5	13.29	13.39	13.37			
		1880.0	13.32	13.39	13.36			
		1857.5	13.26	13.36	13.34			
	1RB_0	1902.5	13.17	13.20	13.18			
		1880.0	13.25	13.25	13.27			
		1857.5	13.22	13.30	13.29			
	36RB_38	1902.5	13.06	13.20	13.15			
		1880.0	13.12	13.18	13.23			
		1857.5	13.21	13.30	13.19			
	36RB_19	1902.5	13.16	13.21	13.27			
		1880.0	13.25	13.29	13.28			
		1857.5	13.18	13.30	13.25			
	36RB_0	1902.5	13.18	13.24	13.22			
		1880.0	13.22	13.30	13.28			
		1857.5	13.17	13.27	13.22			
	75RB_0	1902.5	13.11	13.18	13.22			
		1880.0	13.11	13.19	13.18			
		1857.5	13.17	13.31	13.27			



Ant.1 - Power Level A2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	13.18	13.26	13.26	14.0	14.0	14.0
		1880.0	13.18	13.22	13.21			
		1860.0	13.20	13.23	13.27			
	1RB_50	1900.0	13.32	13.37	13.37			
		1880.0	13.33	13.41	13.36			
		1860.0	13.29	13.33	13.34			
	1RB_0	1900.0	13.15	13.24	13.21			
		1880.0	13.23	13.28	13.30			
		1860.0	13.22	13.28	13.29			
	50RB_50	1900.0	13.09	13.18	13.17		14.0	14.0
		1880.0	13.15	13.17	13.22			
		1860.0	13.19	13.28	13.22			
	50RB_25	1900.0	13.19	13.25	13.23			
		1880.0	13.25	13.33	13.32			
		1860.0	13.22	13.31	13.27			
	50RB_0	1900.0	13.15	13.24	13.22			
		1880.0	13.21	13.26	13.28			
		1860.0	13.20	13.25	13.23			
	100RB_0	1900.0	13.12	13.15	13.19			
		1880.0	13.11	13.20	13.20			
		1860.0	13.20	13.28	13.25			



Ant.1 - Power Level B2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	18.17	18.19	18.18	19.0	19.0	19.0
		1880.0	18.15	18.13	18.18			
		1850.7	18.19	18.18	18.25			
	1RB_3	1909.3	18.35	18.34	18.25			
		1880.0	18.29	18.29	18.29			
		1850.7	18.30	18.32	18.27			
	1RB_0	1909.3	18.13	18.22	18.18			
		1880.0	18.20	18.27	18.24			
		1850.7	18.25	18.22	18.18			
	3RB_3	1909.3	18.09	18.15	18.18			
		1880.0	18.16	18.15	18.15			
		1850.7	18.25	18.19	18.19			
	3RB_1	1909.3	18.22	18.18	18.25			
		1880.0	18.31	18.37	18.29			
		1850.7	18.25	18.30	18.25			
	3RB_0	1909.3	18.16	18.19	18.21			
		1880.0	18.30	18.27	18.26			
		1850.7	18.25	18.20	18.22			
	6RB_0	1909.3	18.19	18.13	18.19	19.0	19.0	19.0
		1880.0	18.17	18.19	18.14			
		1850.7	18.21	18.17	18.20			



Ant.1 - Power Level B2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	18.14	18.18	18.23	19.0	19.0	19.0
		1880.0	18.15	18.14	18.17			
		1851.5	18.20	18.18	18.22			
	1RB_7	1908.5	18.33	18.35	18.30			
		1880.0	18.30	18.34	18.33			
		1851.5	18.28	18.30	18.23			
	1RB_0	1908.5	18.19	18.15	18.17			
		1880.0	18.19	18.27	18.24			
		1851.5	18.21	18.19	18.19			
	8RB_7	1908.5	18.09	18.13	18.10			
		1880.0	18.16	18.18	18.16			
		1851.5	18.26	18.20	18.23			
	8RB_4	1908.5	18.24	18.16	18.26			
		1880.0	18.33	18.37	18.30			
		1851.5	18.29	18.28	18.18			
	8RB_0	1908.5	18.21	18.14	18.21			
		1880.0	18.29	18.26	18.30			
		1851.5	18.21	18.22	18.28			
	15RB_0	1908.5	18.14	18.17	18.13			
		1880.0	18.11	18.13	18.21			
		1851.5	18.24	18.19	18.25			



Ant.1 - Power Level B2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	18.15	18.19	18.18	19.0	19.0	19.0
		1880.0	18.17	18.19	18.21			
		1852.5	18.18	18.17	18.24			
	1RB_12	1907.5	18.35	18.36	18.26			
		1880.0	18.33	18.28	18.33			
		1852.5	18.25	18.35	18.26			
	1RB_0	1907.5	18.15	18.14	18.20			
		1880.0	18.21	18.26	18.22			
		1852.5	18.23	18.24	18.16			
	12RB_13	1907.5	18.12	18.19	18.12			
		1880.0	18.18	18.16	18.18			
		1852.5	18.22	18.21	18.22			
	12RB_6	1907.5	18.20	18.22	18.22			
		1880.0	18.27	18.36	18.30			
		1852.5	18.27	18.28	18.26			
	12RB_0	1907.5	18.22	18.20	18.20			
		1880.0	18.25	18.23	18.27			
		1852.5	18.22	18.22	18.26			
	25RB_0	1907.5	18.19	18.11	18.17			
		1880.0	18.18	18.14	18.18			
		1852.5	18.28	18.21	18.19			



Ant.1 - Power Level B2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	18.17	18.15	18.22	19.0	19.0	19.0
		1880.0	18.18	18.17	18.19			
		1855.0	18.19	18.22	18.24			
	1RB_24	1905.0	18.30	18.33	18.31			
		1880.0	18.29	18.28	18.30			
		1855.0	18.28	18.34	18.26			
	1RB_0	1905.0	18.16	18.21	18.13			
		1880.0	18.26	18.27	18.23			
		1855.0	18.24	18.19	18.19			
	25RB_25	1905.0	18.13	18.13	18.18			
		1880.0	18.16	18.18	18.16			
		1855.0	18.19	18.19	18.18			
	25RB_12	1905.0	18.24	18.18	18.27			
		1880.0	18.34	18.39	18.29			
		1855.0	18.22	18.25	18.25			
	25RB_0	1905.0	18.15	18.20	18.20			
		1880.0	18.23	18.26	18.28			
		1855.0	18.26	18.25	18.25			
	50RB_0	1905.0	18.18	18.15	18.20			
		1880.0	18.17	18.17	18.19			
		1855.0	18.22	18.18	18.18			



Ant.1 - Power Level B2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	18.18	18.13	18.20	19.0	19.0	19.0
		1880.0	18.17	18.18	18.20			
		1857.5	18.18	18.22	18.23			
	1RB_37	1902.5	18.32	18.34	18.26			
		1880.0	18.32	18.30	18.29			
		1857.5	18.25	18.30	18.30			
	1RB_0	1902.5	18.12	18.16	18.19			
		1880.0	18.24	18.25	18.24			
		1857.5	18.21	18.26	18.16			
	36RB_38	1902.5	18.11	18.15	18.11			
		1880.0	18.17	18.21	18.20			
		1857.5	18.25	18.18	18.21			
	36RB_19	1902.5	18.21	18.22	18.23			
		1880.0	18.28	18.38	18.30			
		1857.5	18.24	18.31	18.20			
	36RB_0	1902.5	18.19	18.21	18.24			
		1880.0	18.29	18.23	18.34			
		1857.5	18.27	18.22	18.24			
	75RB_0	1902.5	18.15	18.11	18.19			
		1880.0	18.13	18.17	18.15			
		1857.5	18.23	18.18	18.25			



Ant.1 - Power Level B2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	18.18	18.14	18.21	19.0	19.0	19.0
		1880.0	18.18	18.16	18.20			
		1860.0	18.20	18.21	18.21			
	1RB_50	1900.0	18.32	18.33	18.28			
		1880.0	18.32	18.31	18.33			
		1860.0	18.29	18.33	18.26			
	1RB_0	1900.0	18.15	18.18	18.16			
		1880.0	18.23	18.25	18.20			
		1860.0	18.22	18.22	18.19			
	50RB_50	1900.0	18.13	18.16	18.14			
		1880.0	18.19	18.18	18.18			
		1860.0	18.23	18.19	18.20			
	50RB_25	1900.0	18.23	18.20	18.25			
		1880.0	18.31	18.35	18.32			
		1860.0	18.26	18.29	18.22			
	50RB_0	1900.0	18.19	18.18	18.21			
		1880.0	18.27	18.24	18.30			
		1860.0	18.24	18.22	18.26			
	100RB_0	1900.0	18.16	18.13	18.16			
		1880.0	18.15	18.15	18.17			
		1860.0	18.24	18.20	18.22			



Ant.1 - Power Level C2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1909.3	20.15	20.24	20.34	21.0	21.0	21.0
		1880.0	20.25	20.15	20.22			
		1850.7	20.24	20.20	20.09			
	1RB_3	1909.3	20.37	20.24	20.31			
		1880.0	20.43	20.39	20.31			
		1850.7	20.41	20.35	20.36			
	1RB_0	1909.3	20.21	20.13	20.21			
		1880.0	20.29	20.24	20.33			
		1850.7	20.29	20.28	20.20			
	3RB_3	1909.3	20.29	20.11	20.19			
		1880.0	20.28	20.13	20.18			
		1850.7	20.19	20.33	20.24			
	3RB_1	1909.3	20.21	20.25	20.28			
		1880.0	20.41	20.38	20.35			
		1850.7	20.28	20.41	20.28			
	3RB_0	1909.3	20.22	20.19	20.17			
		1880.0	20.27	20.33	20.26			
		1850.7	20.19	20.28	20.21			
	6RB_0	1909.3	20.15	20.14	20.11	21.0	21.0	21.0
		1880.0	20.28	20.12	20.10			
		1850.7	20.37	20.23	20.30			



Ant.1 - Power Level C2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1908.5	20.18	20.21	20.33	21.0	21.0	21.0
		1880.0	20.28	20.18	20.21			
		1851.5	20.25	20.23	20.11			
	1RB_7	1908.5	20.38	20.25	20.33			
		1880.0	20.40	20.42	20.31			
		1851.5	20.38	20.31	20.35			
	1RB_0	1908.5	20.21	20.15	20.23			
		1880.0	20.26	20.21	20.34			
		1851.5	20.27	20.26	20.20			
	8RB_7	1908.5	20.28	20.12	20.21			
		1880.0	20.30	20.15	20.21			
		1851.5	20.18	20.30	20.27			
	8RB_4	1908.5	20.25	20.22	20.31			
		1880.0	20.39	20.38	20.33			
		1851.5	20.26	20.39	20.30			
	8RB_0	1908.5	20.22	20.18	20.20			
		1880.0	20.24	20.32	20.26			
		1851.5	20.22	20.27	20.25			
	15RB_0	1908.5	20.19	20.18	20.13			
		1880.0	20.27	20.16	20.14			
		1851.5	20.35	20.25	20.31			



Ant.1 - Power Level C2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1907.5	20.15	20.21	20.30	21.0	21.0	21.0
		1880.0	20.29	20.22	20.18			
		1852.5	20.25	20.26	20.14			
	1RB_12	1907.5	20.36	20.27	20.34			
		1880.0	20.37	20.40	20.35			
		1852.5	20.37	20.34	20.37			
	1RB_0	1907.5	20.20	20.14	20.23			
		1880.0	20.29	20.20	20.33			
		1852.5	20.24	20.22	20.16			
	12RB_13	1907.5	20.24	20.14	20.22			
		1880.0	20.28	20.16	20.22			
		1852.5	20.17	20.27	20.28			
	12RB_6	1907.5	20.26	20.24	20.32			
		1880.0	20.36	20.37	20.35			
		1852.5	20.30	20.36	20.30			
	12RB_0	1907.5	20.25	20.20	20.23			
		1880.0	20.26	20.34	20.27			
		1852.5	20.22	20.27	20.25			
	25RB_0	1907.5	20.19	20.20	20.16			
		1880.0	20.23	20.13	20.18			
		1852.5	20.34	20.23	20.31			



Ant.1 - Power Level C2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1905.0	20.13	20.22	20.28	21.0	21.0	21.0
		1880.0	20.26	20.25	20.21			
		1855.0	20.27	20.25	20.16			
	1RB_24	1905.0	20.33	20.30	20.32			
		1880.0	20.36	20.39	20.35			
		1855.0	20.35	20.32	20.34			
	1RB_0	1905.0	20.23	20.16	20.23			
		1880.0	20.30	20.22	20.29			
		1855.0	20.27	20.23	20.20			
	25RB_25	1905.0	20.22	20.16	20.19			
		1880.0	20.26	20.20	20.23			
		1855.0	20.21	20.29	20.27			
	25RB_12	1905.0	20.26	20.25	20.30			
		1880.0	20.33	20.34	20.36			
		1855.0	20.32	20.38	20.33			
	25RB_0	1905.0	20.29	20.24	20.24			
		1880.0	20.26	20.33	20.30			
		1855.0	20.25	20.30	20.27			
	50RB_0	1905.0	20.18	20.21	20.20			
		1880.0	20.19	20.11	20.21			
		1855.0	20.32	20.26	20.30			



Ant.1 - Power Level C2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1902.5	20.17	20.21	20.26	21.0	21.0	21.0
		1880.0	20.24	20.22	20.20			
		1857.5	20.27	20.23	20.18			
	1RB_37	1902.5	20.37	20.34	20.34			
		1880.0	20.39	20.42	20.34			
		1857.5	20.31	20.31	20.31			
	1RB_0	1902.5	20.20	20.13	20.19			
		1880.0	20.27	20.21	20.32			
		1857.5	20.26	20.22	20.23			
	36RB_38	1902.5	20.22	20.16	20.20			
		1880.0	20.26	20.24	20.22			
		1857.5	20.24	20.26	20.27			
	36RB_19	1902.5	20.26	20.24	20.31			
		1880.0	20.33	20.34	20.32			
		1857.5	20.33	20.37	20.33			
	36RB_0	1902.5	20.27	20.24	20.23			
		1880.0	20.30	20.36	20.29			
		1857.5	20.27	20.31	20.28			
	75RB_0	1902.5	20.19	20.20	20.21			
		1880.0	20.23	20.14	20.23			
		1857.5	20.31	20.28	20.29			



Ant.1 - Power Level C2								
LTE Band 2			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1900.0	20.21	20.22	20.24	21.0	21.0	21.0
		1880.0	20.21	20.22	20.20			
		1860.0	20.23	20.21	20.19			
	1RB_50	1900.0	20.35	20.36	20.36			
		1880.0	20.36	20.41	20.36			
		1860.0	20.32	20.34	20.31			
	1RB_0	1900.0	20.18	20.16	20.17			
		1880.0	20.26	20.24	20.29			
		1860.0	20.25	20.24	20.25			
	50RB_50	1900.0	20.18	20.15	20.18			
		1880.0	20.24	20.23	20.23			
		1860.0	20.28	20.24	20.27			
	50RB_25	1900.0	20.28	20.26	20.32			
		1880.0	20.34	20.33	20.32			
		1860.0	20.31	20.34	20.32			
	50RB_0	1900.0	20.24	20.28	20.25			
		1880.0	20.32	20.35	20.28			
		1860.0	20.29	20.33	20.28			
	100RB_0	1900.0	20.21	20.18	20.23			
		1880.0	20.20	20.17	20.23			
		1860.0	20.29	20.25	20.28			



Ant.5 - Power Level A1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	22.94	22.15	21.00	24.5	23.5	22.5
		1732.5	22.96	22.22	20.91			
		1710.7	22.94	22.26	21.00			
	1RB_3	1754.3	22.97	22.18	21.08			
		1732.5	22.97	22.22	20.93			
		1710.7	22.94	22.32	21.02			
	1RB_0	1754.3	22.94	22.16	21.08			
		1732.5	22.95	22.28	20.95			
		1710.7	22.94	22.28	21.02			
	3RB_3	1754.3	22.99	21.99	20.90			
		1732.5	22.98	21.94	20.92			
		1710.7	23.02	21.98	20.97			
	3RB_1	1754.3	22.96	22.01	20.90			
		1732.5	22.99	21.99	20.92			
		1710.7	22.99	22.03	21.01			
	3RB_0	1754.3	22.96	22.00	20.92			
		1732.5	23.01	21.97	20.97			
		1710.7	23.01	22.02	21.00			
	6RB_0	1754.3	22.02	21.02	20.01	23.5	22.5	21.5
		1732.5	22.01	21.02	20.03			
		1710.7	22.03	21.05	20.01			



Ant.5 - Power Level A1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	22.95	22.14	21.03	24.5	23.5	22.5
		1732.5	22.97	22.22	21.00			
		1711.5	23.03	22.19	21.01			
	1RB_7	1753.5	23.04	22.24	21.09			
		1732.5	23.01	22.25	21.07			
		1711.5	23.09	22.23	21.06			
	1RB_0	1753.5	22.99	22.14	20.99			
		1732.5	23.02	22.25	21.00			
		1711.5	23.05	22.17	21.02			
	8RB_7	1753.5	21.95	20.97	20.04			
		1732.5	21.90	20.96	19.95			
		1711.5	21.96	21.05	20.03			
	8RB_4	1753.5	21.97	21.01	20.03			
		1732.5	21.93	20.97	19.98			
		1711.5	21.97	21.04	20.02			
	8RB_0	1753.5	21.97	21.00	20.05			
		1732.5	21.96	21.02	20.02			
		1711.5	21.97	21.08	20.09			
	15RB_0	1753.5	21.94	20.98	19.99			
		1732.5	21.94	20.95	20.01			
		1711.5	21.96	21.01	20.01			



Ant.5 - Power Level A1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	22.93	22.18	20.88	24.5	23.5	22.5
		1732.5	22.93	22.14	20.93			
		1712.5	22.99	22.14	20.93			
	1RB_12	1752.5	22.99	22.17	21.00			
		1732.5	23.00	22.26	21.06			
		1712.5	23.06	22.22	21.04			
	1RB_0	1752.5	22.94	22.15	20.95			
		1732.5	22.98	22.18	-41.18			
		1712.5	23.01	22.22	20.98			
	12RB_13	1752.5	21.94	20.92	19.98		23.5	22.5
		1732.5	21.95	20.93	19.98			
		1712.5	21.98	20.98	20.05			
	12RB_6	1752.5	21.97	20.96	20.02			
		1732.5	22.00	20.98	20.04			
		1712.5	22.00	21.00	20.03			
	12RB_0	1752.5	21.99	20.98	20.04			
		1732.5	22.02	21.01	20.08			
		1712.5	22.00	20.97	20.09			
	25RB_0	1752.5	22.00	21.00	20.05			
		1732.5	21.99	20.99	20.00			
		1712.5	22.02	20.99	20.05			



Ant.5 - Power Level A1									
LTE Band 4			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
10 MHz	1RB_49	1750.0	22.93	22.10	21.01	24.5	23.5	22.5	
		1732.5	22.99	22.08	21.02				
		1715.0	22.95	22.12	20.95				
	1RB_24	1750.0	23.00	22.13	21.11				
		1732.5	23.08	22.13	21.05				
		1715.0	23.02	22.22	21.03				
	1RB_0	1750.0	23.05	22.08	21.05				
		1732.5	23.06	22.09	21.07				
		1715.0	22.99	22.19	20.98				
	25RB_25	1750.0	22.00	20.99	20.06		23.5	22.5	21.5
		1732.5	21.96	20.91	20.00				
		1715.0	22.01	20.99	20.09				
	25RB_12	1750.0	21.95	20.96	20.04				
		1732.5	21.95	20.99	20.06				
		1715.0	22.02	21.00	20.12				
	25RB_0	1750.0	21.95	20.96	20.02				
		1732.5	22.03	21.01	20.11				
		1715.0	21.99	20.99	20.08				
	50RB_0	1750.0	21.96	20.95	20.02				
		1732.5	21.97	20.96	20.03				
		1715.0	22.02	20.97	20.09				



Ant.5 - Power Level A1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	22.97	22.09	20.83	24.5	23.5	22.5
		1732.5	22.95	22.16	20.91			
		1717.5	22.94	22.17	20.96			
	1RB_37	1747.5	23.09	22.18	20.94			
		1732.5	23.07	22.25	21.03			
		1717.5	23.06	22.25	21.02			
	1RB_0	1747.5	23.06	22.17	20.93			
		1732.5	23.01	22.22	21.01			
		1717.5	23.02	22.23	21.01			
	36RB_38	1747.5	21.93	20.99	20.07			
		1732.5	21.92	20.91	19.98			
		1717.5	21.92	20.94	19.99			
	36RB_19	1747.5	21.99	20.98	20.08			
		1732.5	21.98	20.97	20.07			
		1717.5	21.99	20.96	20.01			
	36RB_0	1747.5	21.96	20.95	20.00			
		1732.5	21.96	20.98	20.05			
		1717.5	21.96	20.95	20.04			
	75RB_0	1747.5	21.97	20.93	20.07			
		1732.5	21.96	20.92	20.05			
		1717.5	21.98	20.94	20.02			



Ant.5 - Power Level A1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	22.92	21.98	20.96	24.5	23.5	22.5
		1732.5	22.90	22.08	20.91			
		1720.0	22.91	22.10	20.79			
	1RB_50	1745.0	23.05	22.22	21.10			
		1732.5	23.01	22.20	21.06			
		1720.0	23.03	22.25	20.97			
	1RB_0	1745.0	23.00	22.18	21.06			
		1732.5	23.01	22.15	21.00			
		1720.0	22.97	22.18	20.93			
	50RB_50	1745.0	21.98	20.96	20.01			
		1732.5	21.88	20.91	19.93			
		1720.0	21.96	20.91	20.05			
	50RB_25	1745.0	22.02	20.98	20.00			
		1732.5	21.98	20.95	20.05			
		1720.0	22.02	21.00	20.08			
	50RB_0	1745.0	22.01	20.99	20.05			
		1732.5	21.96	20.98	20.10			
		1720.0	21.96	20.93	20.06			
	100RB_0	1745.0	21.98	20.95	19.99			
		1732.5	21.97	20.94	19.98			
		1720.0	21.97	20.93	20.03			



Ant.5 - Power Level B1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	19.57	18.83	17.72	21.0	20.0	19.0
		1732.5	19.61	18.83	17.63			
		1710.7	19.60	18.92	17.68			
	1RB_3	1754.3	19.57	18.89	17.67			
		1732.5	19.59	18.86	17.66			
		1710.7	19.60	18.87	17.72			
	1RB_0	1754.3	19.56	18.84	17.63			
		1732.5	19.62	18.91	17.70			
		1710.7	19.59	18.86	17.76			
	3RB_3	1754.3	19.62	18.57	17.68			
		1732.5	19.58	18.55	17.65			
		1710.7	19.65	18.65	17.67			
	3RB_1	1754.3	19.57	18.57	17.67			
		1732.5	19.61	18.58	17.67			
		1710.7	19.65	18.65	17.67			
	3RB_0	1754.3	19.60	18.56	17.69			
		1732.5	19.61	18.65	17.67			
		1710.7	19.64	18.65	17.67			
	6RB_0	1754.3	18.60	17.62	16.52	20.0	19.0	18.0
		1732.5	18.61	17.65	16.52			
		1710.7	18.61	17.70	16.53			



Ant.5 - Power Level B1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	19.52	18.85	17.64	21.0	20.0	19.0
		1732.5	19.57	18.89	17.69			
		1711.5	19.59	18.92	17.77			
	1RB_7	1753.5	19.58	18.90	17.70			
		1732.5	19.61	18.96	17.73			
		1711.5	19.65	18.93	17.82			
	1RB_0	1753.5	19.58	18.86	17.65			
		1732.5	19.58	18.87	17.73			
		1711.5	19.63	18.94	17.77			
	8RB_7	1753.5	18.56	17.61	16.59			
		1732.5	18.54	17.61	16.56			
		1711.5	18.61	17.70	16.62			
	8RB_4	1753.5	18.57	17.64	16.56			
		1732.5	18.56	17.59	16.54			
		1711.5	18.62	17.70	16.62			
	8RB_0	1753.5	18.58	17.65	16.60			
		1732.5	18.62	17.66	16.59			
		1711.5	18.64	17.68	16.63			
	15RB_0	1753.5	18.60	17.61	16.56			
		1732.5	18.57	17.62	16.56			
		1711.5	18.63	17.63	16.59			



Ant.5 - Power Level B1									
LTE Band 4			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
5 MHz	1RB_24	1752.5	19.57	18.90	17.73	21.0	20.0	19.0	
		1732.5	19.60	18.90	17.73				
		1712.5	19.62	18.94	17.78				
	1RB_12	1752.5	19.60	18.88	17.79				
		1732.5	19.65	18.93	17.77				
		1712.5	19.65	18.99	17.82				
	1RB_0	1752.5	19.61	18.90	17.74				
		1732.5	19.62	18.91	17.75				
		1712.5	19.63	19.01	17.77				
	12RB_13	1752.5	18.56	17.59	16.60		20.0	19.0	18.0
		1732.5	18.57	17.53	16.59				
		1712.5	18.64	17.58	16.59				
	12RB_6	1752.5	18.62	17.57	16.60				
		1732.5	18.63	17.60	16.62				
		1712.5	18.64	17.61	16.62				
	12RB_0	1752.5	18.64	17.62	16.62				
		1732.5	18.64	17.66	16.64				
		1712.5	18.65	17.60	16.62				
	25RB_0	1752.5	18.61	17.63	16.57				
		1732.5	18.64	17.62	16.60				
		1712.5	18.66	17.65	16.60				



Ant.5 - Power Level B1									
LTE Band 4			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
10 MHz	1RB_49	1750.0	19.57	18.83	17.67	21.0	20.0	19.0	
		1732.5	19.58	18.88	17.66				
		1715.0	19.60	18.87	17.73				
	1RB_24	1750.0	19.63	18.91	17.71				
		1732.5	19.64	18.92	17.71				
		1715.0	19.64	18.92	17.78				
	1RB_0	1750.0	19.62	18.93	17.72				
		1732.5	19.62	18.94	17.71				
		1715.0	19.66	18.91	17.77				
	25RB_25	1750.0	18.64	17.66	16.60		20.0	19.0	18.0
		1732.5	18.61	17.57	16.53				
		1715.0	18.64	17.64	16.62				
	25RB_12	1750.0	18.62	17.61	16.58				
		1732.5	18.63	17.61	16.56				
		1715.0	18.64	17.64	16.60				
	25RB_0	1750.0	18.59	17.59	16.55				
		1732.5	18.67	17.62	16.63				
		1715.0	18.65	17.62	16.56				
	50RB_0	1750.0	18.65	17.62	16.58				
		1732.5	18.64	17.58	16.58				
		1715.0	18.64	17.64	16.61				



Ant.5 - Power Level B1									
LTE Band 4			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
15 MHz	1RB_74	1747.5	19.46	18.82	17.68	21.0	20.0	19.0	
		1732.5	19.49	18.83	17.66				
		1717.5	19.55	18.86	17.62				
	1RB_37	1747.5	19.61	18.94	17.79				
		1732.5	19.62	18.90	17.78				
		1717.5	19.62	18.89	17.70				
	1RB_0	1747.5	19.57	18.93	17.76				
		1732.5	19.61	18.90	17.75				
		1717.5	19.63	18.92	17.66				
	36RB_38	1747.5	18.58	17.65	16.60		20.0	19.0	18.0
		1732.5	18.57	17.51	16.48				
		1717.5	18.54	17.57	16.53				
	36RB_19	1747.5	18.62	17.61	16.56				
		1732.5	18.60	17.57	16.57				
		1717.5	18.61	17.64	16.58				
	36RB_0	1747.5	18.57	17.57	16.53				
		1732.5	18.59	17.60	16.61				
		1717.5	18.54	17.58	16.55				
	75RB_0	1747.5	18.61	17.56	16.54				
		1732.5	18.57	17.54	16.56				
		1717.5	18.59	17.60	16.57				



Ant.5 - Power Level B1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	19.49	18.81	17.53	21.0	20.0	19.0
		1732.5	19.48	18.80	17.66			
		1720.0	19.50	18.81	17.65			
	1RB_50	1745.0	19.65	18.93	17.63			
		1732.5	19.61	18.91	17.70			
		1720.0	19.59	18.91	17.78			
	1RB_0	1745.0	19.58	18.90	17.61			
		1732.5	19.57	18.90	17.71			
		1720.0	19.56	18.89	17.72			
	50RB_50	1745.0	18.62	17.60	16.58			
		1732.5	18.51	17.53	16.47			
		1720.0	18.60	17.57	16.52			
	50RB_25	1745.0	18.69	17.58	16.58			
		1732.5	18.64	17.63	16.54			
		1720.0	18.68	17.58	16.56			
	50RB_0	1745.0	18.66	17.60	16.59			
		1732.5	18.60	17.59	16.55			
		1720.0	18.56	17.59	16.55			
	100RB_0	1745.0	18.63	17.59	16.56			
		1732.5	18.59	17.53	16.53			
		1720.0	18.58	17.56	16.53			



Ant.5 - Power Level C1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	20.58	19.81	18.72	22.0	21.0	20.0
		1732.5	20.59	19.85	18.74			
		1710.7	20.58	19.88	18.77			
	1RB_3	1754.3	20.60	19.86	18.77			
		1732.5	20.61	19.91	18.77			
		1710.7	20.61	19.92	18.79			
	1RB_0	1754.3	20.61	19.87	18.82			
		1732.5	20.62	19.91	18.78			
		1710.7	20.61	19.91	18.80			
	3RB_3	1754.3	20.62	19.63	18.71			
		1732.5	20.60	19.56	18.70			
		1710.7	20.66	19.65	18.76			
	3RB_1	1754.3	20.62	19.63	18.69			
		1732.5	20.63	19.62	18.72			
		1710.7	20.67	19.65	18.74			
	3RB_0	1754.3	20.61	19.64	18.70			
		1732.5	20.63	19.63	18.74			
		1710.7	20.66	19.68	18.74			
	6RB_0	1754.3	19.62	18.65	17.59	21.0	20.0	19.0
		1732.5	19.62	18.66	17.59			
		1710.7	19.64	18.71	17.58			



Ant.5 - Power Level C1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	20.58	19.89	18.76	22.0	21.0	20.0
		1732.5	20.57	19.89	18.74			
		1711.5	20.61	19.91	18.78			
	1RB_7	1753.5	20.59	19.91	18.79			
		1732.5	20.59	19.95	18.75			
		1711.5	20.63	19.96	18.83			
	1RB_0	1753.5	20.60	19.93	18.76			
		1732.5	20.61	19.92	18.75			
		1711.5	20.62	19.94	18.80			
	8RB_7	1753.5	19.60	18.66	17.64			
		1732.5	19.57	18.64	17.61			
		1711.5	19.61	18.70	17.68			
	8RB_4	1753.5	19.60	18.64	17.63			
		1732.5	19.60	18.64	17.62			
		1711.5	19.64	18.69	17.68			
	8RB_0	1753.5	19.59	18.67	17.61			
		1732.5	19.62	18.69	17.64			
		1711.5	19.65	18.73	17.67			
	15RB_0	1753.5	19.60	18.64	17.61			
		1732.5	19.57	18.59	17.60			
		1711.5	19.63	18.67	17.63			



Ant.5 - Power Level C1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	20.59	19.87	18.75	22.0	21.0	20.0
		1732.5	20.62	19.86	18.78			
		1712.5	20.66	19.90	18.80			
	1RB_12	1752.5	20.64	19.94	18.82			
		1732.5	20.66	19.88	18.84			
		1712.5	20.67	19.87	18.87			
	1RB_0	1752.5	20.62	19.92	18.78			
		1732.5	20.64	19.90	18.82			
		1712.5	20.67	19.91	18.81			
	12RB_13	1752.5	19.64	18.60	17.59			
		1732.5	19.59	18.56	17.59			
		1712.5	19.66	18.59	17.62			
	12RB_6	1752.5	19.63	18.61	17.63			
		1732.5	19.65	18.64	17.67			
		1712.5	19.66	18.64	17.66			
	12RB_0	1752.5	19.62	18.65	17.68			
		1732.5	19.65	18.64	17.66			
		1712.5	19.63	18.64	17.69			
	25RB_0	1752.5	19.64	18.64	17.64			
		1732.5	19.67	18.63	17.63			
		1712.5	19.67	18.66	17.65			



Ant.5 - Power Level C1									
LTE Band 4			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
10 MHz	1RB_49	1750.0	20.60	19.94	18.74	22.0	21.0	20.0	
		1732.5	20.63	19.89	18.76				
		1715.0	20.63	19.92	18.73				
	1RB_24	1750.0	20.65	19.98	18.78				
		1732.5	20.65	19.97	18.84				
		1715.0	20.66	19.97	18.82				
	1RB_0	1750.0	20.65	19.97	18.84				
		1732.5	20.66	19.98	18.80				
		1715.0	20.67	19.99	18.81				
	25RB_25	1750.0	19.63	18.65	17.60		21.0	20.0	19.0
		1732.5	19.60	18.57	17.57				
		1715.0	19.65	18.67	17.63				
	25RB_12	1750.0	19.61	18.63	17.59				
		1732.5	19.61	18.60	17.63				
		1715.0	19.64	18.65	17.65				
	25RB_0	1750.0	19.58	18.61	17.60				
		1732.5	19.67	18.67	17.68				
		1715.0	19.64	18.63	17.65				
	50RB_0	1750.0	19.66	18.63	17.62				
		1732.5	19.62	18.59	17.62				
		1715.0	19.73	18.65	17.62				



Ant.5 - Power Level C1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	20.52	19.81	18.68	22.0	21.0	20.0
		1732.5	20.52	19.86	18.68			
		1717.5	20.53	19.81	18.76			
	1RB_37	1747.5	20.63	19.88	18.78			
		1732.5	20.62	19.96	18.74			
		1717.5	20.63	19.92	18.86			
	1RB_0	1747.5	20.64	19.90	18.76			
		1732.5	20.60	19.90	18.77			
		1717.5	20.61	19.87	18.83			
	36RB_38	1747.5	19.64	18.62	17.61			
		1732.5	19.53	18.57	17.61			
		1717.5	19.62	18.58	17.61			
	36RB_19	1747.5	19.62	18.64	17.61			
		1732.5	19.62	18.59	17.63			
		1717.5	19.64	18.59	17.63			
	36RB_0	1747.5	19.63	18.60	17.60			
		1732.5	19.65	18.65	17.63			
		1717.5	19.62	18.61	17.64			
	75RB_0	1747.5	19.63	18.57	17.56			
		1732.5	19.62	18.58	17.58			
		1717.5	19.63	18.64	17.63			



Ant.5 - Power Level C1								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	20.49	19.75	18.70	22.0	21.0	20.0
		1732.5	20.50	19.72	18.59			
		1720.0	20.49	19.79	18.57			
	1RB_50	1745.0	20.63	19.89	18.84			
		1732.5	20.60	19.86	18.72			
		1720.0	20.61	19.92	18.70			
	1RB_0	1745.0	20.62	19.82	18.79			
		1732.5	20.58	19.84	18.68			
		1720.0	20.57	19.88	18.64			
	50RB_50	1745.0	19.62	18.62	17.58			
		1732.5	19.58	18.56	17.58			
		1720.0	19.60	18.60	17.59			
	50RB_25	1745.0	19.72	18.63	17.63			
		1732.5	19.64	18.61	17.63			
		1720.0	19.71	18.65	17.67			
	50RB_0	1745.0	19.67	18.64	17.66			
		1732.5	19.61	18.63	17.63			
		1720.0	19.59	18.58	17.61			
	100RB_0	1745.0	19.68	18.60	17.57			
		1732.5	19.61	18.59	17.56			
		1720.0	19.66	18.57	17.60			



Ant.1 - Power Level A2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	14.06	14.04	14.05	15.0	15.0	15.0
		1732.5	14.05	14.11	14.16			
		1710.7	13.96	14.04	14.01			
	1RB_3	1754.3	14.18	14.18	14.18			
		1732.5	14.24	14.19	14.10			
		1710.7	14.17	14.12	14.21			
	1RB_0	1754.3	14.01	14.14	14.02			
		1732.5	14.09	14.09	14.05			
		1710.7	14.06	14.12	14.06			
	3RB_3	1754.3	14.08	14.03	14.15			
		1732.5	14.03	14.15	14.25			
		1710.7	14.00	14.02	14.14			
	3RB_1	1754.3	14.16	14.17	14.10			
		1732.5	14.20	14.19	14.11			
		1710.7	14.20	14.10	14.08			
	3RB_0	1754.3	14.11	14.07	14.03			
		1732.5	14.11	14.12	14.11			
		1710.7	13.98	14.08	14.10			
	6RB_0	1754.3	14.09	14.10	14.18	15.0	15.0	15.0
		1732.5	14.14	14.05	14.06			
		1710.7	13.99	14.10	13.90			



Ant.1 - Power Level A2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	14.07	14.05	14.07	15.0	15.0	15.0
		1732.5	14.03	14.07	14.14			
		1711.5	13.99	14.05	13.99			
	1RB_7	1753.5	14.20	14.17	14.17			
		1732.5	14.25	14.22	14.12			
		1711.5	14.19	14.15	14.20			
	1RB_0	1753.5	14.02	14.11	14.00			
		1732.5	14.07	14.07	14.03			
		1711.5	14.04	14.12	14.08			
	8RB_7	1753.5	14.12	14.04	14.16			
		1732.5	14.06	14.17	14.22			
		1711.5	14.04	14.02	14.11			
	8RB_4	1753.5	14.16	14.17	14.08			
		1732.5	14.17	14.16	14.11			
		1711.5	14.21	14.08	14.08			
	8RB_0	1753.5	14.11	14.06	13.99			
		1732.5	14.11	14.14	14.11			
		1711.5	13.95	14.07	14.09			
	15RB_0	1753.5	14.08	14.12	14.15			
		1732.5	14.16	14.04	14.09			
		1711.5	14.00	14.10	13.93			



Ant.1 - Power Level A2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	14.07	14.09	14.04	15.0	15.0	15.0
		1732.5	14.04	14.09	14.11			
		1712.5	14.00	14.05	14.02			
	1RB_12	1752.5	14.22	14.15	14.18			
		1732.5	14.22	14.20	14.14			
		1712.5	14.18	14.16	14.16			
	1RB_0	1752.5	14.06	14.08	14.00			
		1732.5	14.03	14.05	14.02			
		1712.5	14.06	14.11	14.05			
	12RB_13	1752.5	14.09	14.08	14.18			
		1732.5	14.09	14.14	14.22			
		1712.5	14.07	14.03	14.08			
	12RB_6	1752.5	14.14	14.21	14.09			
		1732.5	14.19	14.15	14.14			
		1712.5	14.17	14.07	14.08			
	12RB_0	1752.5	14.08	14.05	14.03			
		1732.5	14.13	14.18	14.12			
		1712.5	13.96	14.06	14.09			
	25RB_0	1752.5	14.09	14.10	14.17			
		1732.5	14.14	14.06	14.09			
		1712.5	14.00	14.07	13.94			



Ant.1 - Power Level A2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	14.07	14.07	14.02	15.0	15.0	15.0
		1732.5	14.05	14.06	14.08			
		1715.0	14.02	14.09	14.05			
	1RB_24	1750.0	14.22	14.13	14.21			
		1732.5	14.21	14.19	14.16			
		1715.0	14.16	14.12	14.20			
	1RB_0	1750.0	14.08	14.08	14.03			
		1732.5	14.05	14.03	14.03			
		1715.0	14.06	14.08	14.07			
	25RB_25	1750.0	14.10	14.06	14.16		15.0	15.0
		1732.5	14.12	14.11	14.22			
		1715.0	14.08	14.05	14.08			
	25RB_12	1750.0	14.12	14.20	14.12			
		1732.5	14.19	14.13	14.10			
		1715.0	14.13	14.11	14.05			
	25RB_0	1750.0	14.08	14.04	14.01			
		1732.5	14.11	14.16	14.10			
		1715.0	13.99	14.04	14.07			
	50RB_0	1750.0	14.11	14.14	14.16			
		1732.5	14.17	14.07	14.06			
		1715.0	14.03	14.09	13.94			



Ant.1 - Power Level A2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	14.07	14.06	14.03	15.0	15.0	15.0
		1732.5	14.06	14.05	14.08			
		1717.5	14.01	14.06	14.05			
	1RB_37	1747.5	14.20	14.12	14.17			
		1732.5	14.22	14.19	14.12			
		1717.5	14.17	14.13	14.20			
	1RB_0	1747.5	14.09	14.06	14.04			
		1732.5	14.07	14.06	14.05			
		1717.5	14.03	14.06	14.10			
	36RB_38	1747.5	14.08	14.04	14.14			
		1732.5	14.12	14.14	14.18			
		1717.5	14.04	14.06	14.05			
	36RB_19	1747.5	14.13	14.20	14.10			
		1732.5	14.16	14.10	14.10			
		1717.5	14.12	14.12	14.09			
	36RB_0	1747.5	14.09	14.06	14.04			
		1732.5	14.11	14.13	14.07			
		1717.5	14.03	14.07	14.04			
	75RB_0	1747.5	14.12	14.12	14.13			
		1732.5	14.14	14.07	14.09			
		1717.5	14.06	14.09	13.98			



Ant.1 - Power Level A2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	14.07	14.10	14.04	24.5	23.5	22.5
		1732.5	14.07	14.07	14.05			
		1720.0	14.05	14.05	14.07			
	1RB_50	1745.0	14.18	14.15	14.15			
		1732.5	14.21	14.21	14.15			
		1720.0	14.18	14.17	14.18			
	1RB_0	1745.0	14.07	14.07	14.05			
		1732.5	14.08	14.07	14.05			
		1720.0	14.04	14.08	14.06			
	50RB_50	1745.0	14.11	14.08	14.15			
		1732.5	14.13	14.14	14.15			
		1720.0	14.07	14.04	14.08			
	50RB_25	1745.0	14.12	14.16	14.12			
		1732.5	14.15	14.12	14.13			
		1720.0	14.13	14.16	14.11			
	50RB_0	1745.0	14.07	14.08	14.06			
		1732.5	14.12	14.15	14.09			
		1720.0	14.06	14.06	14.05			
	100RB_0	1745.0	14.10	14.09	14.11			
		1732.5	14.11	14.11	14.13			
		1720.0	14.05	14.05	14.01			



Ant.1 - Power Level B2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	19.60	19.74	19.62	20.5	20.5	20.5
		1732.5	19.58	19.57	19.55			
		1710.7	19.50	19.54	19.62			
	1RB_3	1754.3	19.71	19.66	19.76			
		1732.5	19.71	19.85	19.71			
		1710.7	19.87	19.73	19.74			
	1RB_0	1754.3	19.51	19.58	19.58			
		1732.5	19.57	19.67	19.54			
		1710.7	19.58	19.55	19.59			
	3RB_3	1754.3	19.73	19.56	19.73			
		1732.5	19.69	19.66	19.62			
		1710.7	19.56	19.61	19.73			
	3RB_1	1754.3	19.71	19.73	19.64			
		1732.5	19.70	19.60	19.75			
		1710.7	19.69	19.72	19.79			
	3RB_0	1754.3	19.55	19.63	19.69			
		1732.5	19.73	19.76	19.73			
		1710.7	19.62	19.68	19.74			
	6RB_0	1754.3	19.73	19.73	19.68			
		1732.5	19.60	19.67	19.74			
		1710.7	19.65	19.63	19.56			



Ant.1 - Power Level B2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	19.57	19.72	19.65	20.5	20.5	20.5
		1732.5	19.62	19.58	19.57			
		1711.5	19.53	19.53	19.63			
	1RB_7	1753.5	19.73	19.69	19.75			
		1732.5	19.69	19.82	19.71			
		1711.5	19.83	19.77	19.72			
	1RB_0	1753.5	19.55	19.57	19.60			
		1732.5	19.55	19.64	19.56			
		1711.5	19.59	19.55	19.58			
	8RB_7	1753.5	19.72	19.59	19.73			
		1732.5	19.73	19.69	19.63			
		1711.5	19.58	19.61	19.73			
	8RB_4	1753.5	19.70	19.70	19.64			
		1732.5	19.71	19.63	19.74			
		1711.5	19.67	19.74	19.77			
	8RB_0	1753.5	19.54	19.63	19.65			
		1732.5	19.71	19.78	19.77			
		1711.5	19.61	19.67	19.73			
	15RB_0	1753.5	19.72	19.72	19.66			
		1732.5	19.62	19.70	19.75			
		1711.5	19.65	19.67	19.60			



Ant.1 - Power Level B2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	19.61	19.69	19.63	20.5	20.5	20.5
		1732.5	19.63	19.54	19.57			
		1712.5	19.51	19.55	19.64			
	1RB_12	1752.5	19.72	19.69	19.71			
		1732.5	19.72	19.81	19.72			
		1712.5	19.79	19.73	19.70			
	1RB_0	1752.5	19.56	19.57	19.62			
		1732.5	19.58	19.64	19.56			
		1712.5	19.57	19.57	19.60			
	12RB_13	1752.5	19.72	19.62	19.71			
		1732.5	19.71	19.73	19.63			
		1712.5	19.58	19.63	19.69			
	12RB_6	1752.5	19.73	19.74	19.62			
		1732.5	19.70	19.66	19.71			
		1712.5	19.64	19.75	19.80			
	12RB_0	1752.5	19.57	19.65	19.66			
		1732.5	19.72	19.75	19.74			
		1712.5	19.61	19.67	19.71			
	25RB_0	1752.5	19.72	19.69	19.69			
		1732.5	19.64	19.72	19.74			
		1712.5	19.61	19.69	19.60			



Ant.1 - Power Level B2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	19.58	19.65	19.61	20.5	20.5	20.5
		1732.5	19.62	19.57	19.54			
		1715.0	19.55	19.58	19.62			
	1RB_24	1750.0	19.74	19.70	19.73			
		1732.5	19.75	19.78	19.74			
		1715.0	19.75	19.76	19.66			
	1RB_0	1750.0	19.60	19.57	19.63			
		1732.5	19.62	19.63	19.56			
		1715.0	19.59	19.58	19.59			
	25RB_25	1750.0	19.68	19.61	19.74			
		1732.5	19.68	19.72	19.64			
		1715.0	19.59	19.67	19.67			
	25RB_12	1750.0	19.72	19.71	19.62			
		1732.5	19.71	19.67	19.75			
		1715.0	19.67	19.72	19.78			
	25RB_0	1750.0	19.61	19.65	19.65			
		1732.5	19.73	19.72	19.77			
		1715.0	19.59	19.66	19.71			
	50RB_0	1750.0	19.75	19.71	19.69			
		1732.5	19.67	19.73	19.75			
		1715.0	19.59	19.67	19.57			



Ant.1 - Power Level B2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	19.57	19.63	19.63	20.5	20.5	20.5
		1732.5	19.58	19.56	19.58			
		1717.5	19.58	19.54	19.59			
	1RB_37	1747.5	19.72	19.74	19.74			
		1732.5	19.77	19.79	19.77			
		1717.5	19.72	19.72	19.65			
	1RB_0	1747.5	19.61	19.59	19.60			
		1732.5	19.64	19.60	19.59			
		1717.5	19.61	19.61	19.57			
	36RB_38	1747.5	19.66	19.65	19.71			
		1732.5	19.69	19.74	19.67			
		1717.5	19.63	19.65	19.68			
	36RB_19	1747.5	19.73	19.75	19.66			
		1732.5	19.73	19.66	19.73			
		1717.5	19.68	19.71	19.74			
	36RB_0	1747.5	19.63	19.63	19.65			
		1732.5	19.72	19.69	19.73			
		1717.5	19.60	19.69	19.70			
	75RB_0	1747.5	19.72	19.70	19.68			
		1732.5	19.68	19.70	19.74			
		1717.5	19.63	19.65	19.59			



Ant.1 - Power Level B2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	19.61	19.61	19.63	20.5	20.5	20.5
		1732.5	19.61	19.58	19.58			
		1720.0	19.59	19.58	19.62			
	1RB_50	1745.0	19.72	19.72	19.74			
		1732.5	19.75	19.81	19.74			
		1720.0	19.72	19.71	19.69			
	1RB_0	1745.0	19.61	19.60	19.60			
		1732.5	19.62	19.64	19.58			
		1720.0	19.58	19.57	19.61			
	50RB_50	1745.0	19.69	19.65	19.72			
		1732.5	19.71	19.70	19.70			
		1720.0	19.65	19.64	19.67			
	50RB_25	1745.0	19.70	19.72	19.66			
		1732.5	19.73	19.67	19.72			
		1720.0	19.71	19.69	19.75			
	50RB_0	1745.0	19.65	19.65	19.65			
		1732.5	19.70	19.69	19.69			
		1720.0	19.64	19.68	19.68			
	100RB_0	1745.0	19.68	19.70	19.70			
		1732.5	19.69	19.66	19.72			
		1720.0	19.63	19.64	19.62			



Ant.1 - Power Level C2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1754.3	21.59	21.51	21.54	22.5	22.5	22.5
		1732.5	21.51	21.54	21.58			
		1710.7	21.58	21.47	21.52			
	1RB_3	1754.3	21.68	21.64	21.60			
		1732.5	21.71	21.80	21.71			
		1710.7	21.59	21.69	21.65			
	1RB_0	1754.3	21.51	21.51	21.43			
		1732.5	21.52	21.54	21.60			
		1710.7	21.52	21.45	21.62			
	3RB_3	1754.3	21.52	21.62	21.53			
		1732.5	21.52	21.60	21.58			
		1710.7	21.60	21.52	21.72			
	3RB_1	1754.3	21.58	21.62	21.64			
		1732.5	21.61	21.61	21.80			
		1710.7	21.53	21.60	21.57			
	3RB_0	1754.3	21.52	21.57	21.51			
		1732.5	21.58	21.75	21.56			
		1710.7	21.50	21.57	21.45			
	6RB_0	1754.3	21.59	21.61	20.49	22.5	22.5	21.5
		1732.5	21.58	21.53	20.66			
		1710.7	21.56	21.58	20.50			



Ant.1 - Power Level C2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1753.5	21.61	21.49	21.51	22.5	22.5	22.5
		1732.5	21.53	21.53	21.55			
		1711.5	21.56	21.47	21.50			
	1RB_7	1753.5	21.66	21.66	21.57			
		1732.5	21.69	21.79	21.70			
		1711.5	21.63	21.67	21.62			
	1RB_0	1753.5	21.53	21.53	21.46			
		1732.5	21.55	21.54	21.59			
		1711.5	21.50	21.46	21.62			
	8RB_7	1753.5	21.50	21.65	20.56			
		1732.5	21.54	21.62	20.59			
		1711.5	21.57	21.49	20.68			
	8RB_4	1753.5	21.60	21.62	20.61			
		1732.5	21.63	21.65	20.78			
		1711.5	21.53	21.58	20.57			
	8RB_0	1753.5	21.52	21.53	20.52			
		1732.5	21.60	21.74	20.60			
		1711.5	21.52	21.57	20.46			
	15RB_0	1753.5	21.58	21.57	20.51			
		1732.5	21.55	21.53	20.66			
		1711.5	21.53	21.61	20.49			



Ant.1 - Power Level C2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1752.5	21.58	21.50	21.49	22.5	22.5	22.5
		1732.5	21.51	21.51	21.57			
		1712.5	21.53	21.49	21.51			
	1RB_12	1752.5	21.65	21.65	21.60			
		1732.5	21.70	21.77	21.66			
		1712.5	21.63	21.68	21.59			
	1RB_0	1752.5	21.52	21.51	21.48			
		1732.5	21.51	21.58	21.60			
		1712.5	21.51	21.49	21.58			
	12RB_13	1752.5	21.53	21.62	20.54		22.5	22.5
		1732.5	21.57	21.63	20.60			
		1712.5	21.57	21.52	20.65			
	12RB_6	1752.5	21.58	21.61	20.64			
		1732.5	21.62	21.63	20.76			
		1712.5	21.57	21.56	20.60			
	12RB_0	1752.5	21.53	21.52	20.55			
		1732.5	21.62	21.71	20.62			
		1712.5	21.52	21.55	20.44			
	25RB_0	1752.5	21.62	21.58	20.50			
		1732.5	21.53	21.54	20.63			
		1712.5	21.50	21.58	20.48			



Ant.1 - Power Level C2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1750.0	21.56	21.48	21.52	22.5	22.5	22.5
		1732.5	21.52	21.51	21.56			
		1715.0	21.57	21.52	21.54			
	1RB_24	1750.0	21.64	21.63	21.56			
		1732.5	21.67	21.74	21.65			
		1715.0	21.66	21.67	21.56			
	1RB_0	1750.0	21.54	21.54	21.49			
		1732.5	21.52	21.56	21.59			
		1715.0	21.48	21.49	21.54			
	25RB_25	1750.0	21.56	21.60	20.56		22.5	22.5
		1732.5	21.59	21.60	20.59			
		1715.0	21.59	21.55	20.62			
	25RB_12	1750.0	21.59	21.57	20.65			
		1732.5	21.62	21.62	20.75			
		1715.0	21.57	21.56	20.63			
	25RB_0	1750.0	21.56	21.49	20.51			
		1732.5	21.60	21.67	20.58			
		1715.0	21.49	21.51	20.45			
	50RB_0	1750.0	21.60	21.56	20.47			
		1732.5	21.54	21.52	20.60			
		1715.0	21.47	21.59	20.49			



Ant.1 - Power Level C2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1747.5	21.56	21.49	21.50	22.5	22.5	22.5
		1732.5	21.54	21.53	21.57			
		1717.5	21.55	21.52	21.54			
	1RB_37	1747.5	21.63	21.60	21.60			
		1732.5	21.64	21.74	21.64			
		1717.5	21.65	21.66	21.60			
	1RB_0	1747.5	21.54	21.53	21.48			
		1732.5	21.56	21.53	21.55			
		1717.5	21.47	21.46	21.54			
	36RB_38	1747.5	21.57	21.56	20.55			
		1732.5	21.60	21.57	20.58			
		1717.5	21.57	21.56	20.61			
	36RB_19	1747.5	21.58	21.54	20.64			
		1732.5	21.63	21.66	20.78			
		1717.5	21.59	21.54	20.61			
	36RB_0	1747.5	21.55	21.48	20.53			
		1732.5	21.61	21.63	20.57			
		1717.5	21.53	21.47	20.47			
	75RB_0	1747.5	21.58	21.54	20.48			
		1732.5	21.55	21.56	20.59			
		1717.5	21.47	21.56	20.51			



Ant.1 - Power Level C2								
LTE Band 4			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1745.0	21.53	21.51	21.52	22.5	22.5	22.5
		1732.5	21.53	21.50	21.55			
		1720.0	21.51	21.50	21.51			
	1RB_50	1745.0	21.64	21.63	21.63			
		1732.5	21.65	21.71	21.64			
		1720.0	21.64	21.62	21.61			
	1RB_0	1745.0	21.53	21.54	21.49			
		1732.5	21.54	21.52	21.56			
		1720.0	21.50	21.47	21.53			
	50RB_50	1745.0	21.57	21.54	20.58			
		1732.5	21.59	21.59	20.57			
		1720.0	21.53	21.55	20.57			
	50RB_25	1745.0	21.58	21.57	20.61			
		1732.5	21.60	21.63	20.76			
		1720.0	21.59	21.57	20.58			
	50RB_0	1745.0	21.53	21.52	20.55			
		1732.5	21.58	21.62	20.56			
		1720.0	21.52	21.50	20.49			
	100RB_0	1745.0	21.56	21.55	20.52			
		1732.5	21.57	21.55	20.59			
		1720.0	21.51	21.55	20.54			



Ant.5 - Power Level A1/B1/C1/A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3	23.76	22.97	21.70	25.0	24.0	23.0
		836.5	23.82	23.02	21.83			
		824.7	23.79	23.01	21.86			
	1RB_3	848.3	23.80	22.93	21.72			
		836.5	23.83	23.04	21.84			
		824.7	23.76	23.03	21.86			
	1RB_0	848.3	23.78	22.90	21.77			
		836.5	23.81	23.01	21.88			
		824.7	23.80	23.06	21.91			
	3RB_3	848.3	23.81	22.83	21.87			
		836.5	23.85	22.85	21.85			
		824.7	23.85	22.83	21.80			
	3RB_1	848.3	23.81	22.85	21.88			
		836.5	23.84	22.81	21.84			
		824.7	23.88	22.86	21.86			
	3RB_0	848.3	23.82	22.86	21.88			
		836.5	23.85	22.81	21.85			
		824.7	23.84	22.85	21.86			
	6RB_0	848.3	22.80	21.88	20.68	24.0	23.0	22.0
		836.5	22.85	21.86	20.74			
		824.7	22.84	21.89	20.76			



Ant.5 - Power Level A1/B1/C1/A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	847.5	23.81	22.89	21.88	25.0	24.0	23.0
		836.5	23.84	23.02	21.99			
		825.5	23.85	22.97	21.92			
	1RB_7	847.5	23.78	22.89	21.89			
		836.5	23.88	23.01	22.05			
		825.5	23.85	22.92	21.86			
	1RB_0	847.5	23.82	22.92	21.89			
		836.5	23.75	22.98	21.93			
		825.5	23.81	22.89	21.76			
	8RB_7	847.5	22.77	21.85	20.78	24.0	23.0	22.0
		836.5	22.84	21.88	20.80			
		825.5	22.81	21.87	20.81			
	8RB_4	847.5	22.77	21.87	20.75			
		836.5	22.81	21.89	20.81			
		825.5	22.81	21.90	20.80			
	8RB_0	847.5	22.79	21.87	20.74			
		836.5	22.77	21.82	20.75			
		825.5	22.81	21.88	20.70			
	15RB_0	847.5	22.77	21.80	20.77			
		836.5	22.78	21.82	20.79			
		825.5	22.80	21.84	20.74			



Ant.5 - Power Level A1/B1/C1/A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5	23.90	23.03	21.85	25.0	24.0	23.0
		836.5	23.96	23.09	21.97			
		826.5	23.94	23.06	21.89			
	1RB_12	846.5	23.93	23.04	21.84			
		836.5	23.99	23.13	22.00			
		826.5	23.93	23.03	21.95			
	1RB_0	846.5	23.88	23.00	21.82			
		836.5	23.91	23.01	21.94			
		826.5	23.88	23.05	21.86			
	12RB_13	846.5	22.80	21.79	20.74	24.0	23.0	22.0
		836.5	22.81	21.81	20.83			
		826.5	22.85	21.81	20.84			
	12RB_6	846.5	22.81	21.81	20.76			
		836.5	22.87	21.84	20.83			
		826.5	22.86	21.83	20.87			
	12RB_0	846.5	22.88	21.85	20.86			
		836.5	22.84	21.79	20.81			
		826.5	22.83	21.80	20.86			
	25RB_0	846.5	22.80	21.81	20.81			
		836.5	22.86	21.86	20.80			
		826.5	22.86	21.84	20.81			



Ant.5 - Power Level A1/B1/C1/A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0	23.97	23.02	22.03	25.0	24.0	23.0
		836.5	23.97	23.08	22.03			
		829.0	23.93	23.08	21.93			
	1RB_24	844.0	23.97	23.03	22.00			
		836.5	24.01	23.21	22.06			
		829.0	23.97	23.18	22.04			
	1RB_0	844.0	23.93	23.04	22.01			
		836.5	23.96	23.15	21.95			
		829.0	23.92	23.08	21.81			
	25RB_25	844.0	22.84	21.82	20.76		24.0	23.0
		836.5	22.84	21.86	20.80			
		829.0	22.89	21.91	20.87			
	25RB_12	844.0	22.88	21.84	20.79			
		836.5	22.91	21.87	20.80			
		829.0	22.90	21.86	20.83			
	25RB_0	844.0	22.87	21.85	20.77			
		836.5	22.83	21.85	20.80			
		829.0	22.87	21.86	20.78			
	50RB_0	844.0	22.88	21.83	20.80			
		836.5	22.86	21.86	20.79			
		829.0	22.89	21.84	20.84			



Ant.1 - Power Level A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	848.3	23.24	22.24	21.12	25.0	24.0	23.0
		836.5	23.25	22.22	21.21			
		824.7	23.08	22.17	21.09			
	1RB_3	848.3	23.13	22.21	21.14			
		836.5	23.28	22.33	21.21			
		824.7	23.24	22.26	21.16			
	1RB_0	848.3	23.14	22.12	21.20			
		836.5	23.13	22.10	21.20			
		824.7	23.15	22.23	21.21			
	3RB_3	848.3	23.11	22.09	21.20			
		836.5	23.14	22.11	21.15			
		824.7	23.12	22.23	21.06			
	3RB_1	848.3	23.03	22.07	21.12			
		836.5	23.17	22.25	21.12			
		824.7	23.18	22.15	21.11			
	3RB_0	848.3	23.13	22.21	21.15			
		836.5	23.10	22.24	21.10			
		824.7	23.17	22.19	21.14			
	6RB_0	848.3	22.09	21.14	20.07	24.0	23.0	22.0
		836.5	22.18	21.25	20.22			
		824.7	22.15	21.12	20.18			



Ant.1 - Power Level A2/B2/C2									
LTE Band 5			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
3 MHz	1RB_14	847.5	23.21	22.23	21.12	25.0	24.0	23.0	
		836.5	23.22	22.22	21.19				
		825.5	23.11	22.16	21.12				
	1RB_7	847.5	23.11	22.20	21.16				
		836.5	23.26	22.33	21.18				
		825.5	23.24	22.27	21.14				
	1RB_0	847.5	23.11	22.15	21.18				
		836.5	23.14	22.12	21.17				
		825.5	23.18	22.22	21.22				
	8RB_7	847.5	22.14	21.05	20.17		24.0	23.0	22.0
		836.5	22.14	21.10	20.18				
		825.5	22.14	21.24	20.06				
	8RB_4	847.5	22.07	21.08	20.14				
		836.5	22.17	21.21	20.10				
		825.5	22.18	21.16	20.13				
	8RB_0	847.5	22.14	21.19	20.13				
		836.5	22.13	21.23	20.26				
		825.5	22.15	21.18	20.17				
	15RB_0	847.5	22.10	21.10	20.11				
		836.5	22.17	21.22	20.19				
		825.5	22.13	21.13	20.24				



Ant.1 - Power Level A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	846.5	23.20	22.23	21.16	25.0	24.0	23.0
		836.5	23.22	22.21	21.21			
		826.5	23.12	22.18	21.15			
	1RB_12	846.5	23.15	22.17	21.18			
		836.5	23.29	22.32	21.17			
		826.5	23.23	22.29	21.13			
	1RB_0	846.5	23.14	22.16	21.19			
		836.5	23.16	22.14	21.18			
		826.5	23.19	22.21	21.18			
	12RB_13	846.5	22.14	21.09	20.13		23.0	22.0
		836.5	22.12	21.09	20.15			
		826.5	22.16	21.20	20.10			
	12RB_6	846.5	22.11	21.05	20.17			
		836.5	22.16	21.20	20.12			
		826.5	22.17	21.14	20.09			
	12RB_0	846.5	22.15	21.15	20.12			
		836.5	22.16	21.21	20.22			
		826.5	22.14	21.18	20.19			
	25RB_0	846.5	22.12	21.11	20.08			
		836.5	22.17	21.21	20.19			
		826.5	22.14	21.16	20.22			



Ant.1 - Power Level A2/B2/C2								
LTE Band 5			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	844.0	23.18	22.20	21.15	25.0	24.0	23.0
		836.5	23.19	22.19	21.20			
		829.0	23.15	22.16	21.17			
	1RB_24	844.0	23.18	22.19	21.16			
		836.5	23.28	22.28	21.19			
		829.0	23.26	22.29	21.17			
	1RB_0	844.0	23.17	22.14	21.15			
		836.5	23.20	22.18	21.21			
		829.0	23.18	22.20	21.18			
	25RB_25	844.0	22.13	21.12	20.15		23.0	22.0
		836.5	22.16	21.12	20.13			
		829.0	22.15	21.17	20.13			
	25RB_12	844.0	22.13	21.09	20.13			
		836.5	22.15	21.16	20.13			
		829.0	22.14	21.14	20.11			
	25RB_0	844.0	22.14	21.17	20.15			
		836.5	22.16	21.19	20.19			
		829.0	22.15	21.14	20.16			
	50RB_0	844.0	22.11	21.11	20.10			
		836.5	22.19	21.18	20.21			
		829.0	22.17	21.17	20.21			



Power Level A1/B1/C1								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	715.3	23.74	22.91	21.92	25.0	24.0	23.0
		707.5	23.86	23.00	22.00			
		699.7	23.84	23.04	21.84			
	1RB_3	715.3	23.79	23.03	21.89			
		707.5	23.86	23.02	22.02			
		699.7	23.85	23.04	21.86			
	1RB_0	715.3	23.77	22.97	21.92			
		707.5	23.85	23.01	22.06			
		699.7	23.88	23.06	21.87			
	3RB_3	715.3	23.84	22.80	21.82			
		707.5	23.85	22.83	21.83			
		699.7	23.86	22.86	21.83			
	3RB_1	715.3	23.82	22.84	21.84			
		707.5	23.87	22.84	21.84			
		699.7	23.88	22.90	21.89			
	3RB_0	715.3	23.75	22.78	21.81			
		707.5	23.85	22.86	21.85			
		699.7	23.86	22.86	21.92			
	6RB_0	715.3	22.79	21.85	20.72	24.0	23.0	22.0
		707.5	22.80	21.84	20.71			
		699.7	22.84	21.84	20.80			



Power Level A1/B1/C1								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	714.5	23.72	22.93	21.98	25.0	24.0	23.0
		707.5	23.83	23.01	21.97			
		700.5	23.79	22.99	21.91			
	1RB_7	714.5	23.79	22.98	21.98			
		707.5	23.82	23.07	22.02			
		700.5	23.88	23.03	21.99			
	1RB_0	714.5	23.75	22.90	21.96			
		707.5	23.72	22.99	21.86			
		700.5	23.83	22.97	21.93			
	8RB_7	714.5	22.77	21.82	20.73			
		707.5	22.79	21.87	20.80			
		700.5	22.82	21.91	20.80			
	8RB_4	714.5	22.73	21.77	20.73			
		707.5	22.84	21.90	20.86			
		700.5	22.81	21.89	20.81			
	8RB_0	714.5	22.82	21.84	20.77			
		707.5	22.78	21.85	20.80			
		700.5	22.75	21.87	20.75			
	15RB_0	714.5	22.78	21.81	20.74			
		707.5	22.79	21.86	20.79			
		700.5	22.79	21.83	20.77			



Power Level A1/B1/C1								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	713.5	23.84	22.94	21.90	25.0	24.0	23.0
		707.5	23.88	22.98	21.83			
		701.5	23.97	23.05	22.03			
	1RB_12	713.5	23.86	22.97	21.95			
		707.5	23.94	23.01	21.91			
		701.5	23.86	23.04	21.95			
	1RB_0	713.5	23.80	22.92	21.88			
		707.5	23.87	22.97	21.93			
		701.5	23.85	22.93	21.88			
	12RB_13	713.5	22.70	21.67	20.65			
		707.5	22.86	21.87	20.83			
		701.5	22.82	21.82	20.85			
	12RB_6	713.5	22.82	21.77	20.75			
		707.5	22.85	21.82	20.84			
		701.5	22.82	21.79	20.83			
	12RB_0	713.5	22.84	21.81	20.80			
		707.5	22.83	21.84	20.80			
		701.5	22.74	21.73	20.76			
	25RB_0	713.5	22.75	21.74	20.72			
		707.5	22.87	21.85	20.82			
		701.5	22.79	21.79	20.73			



Power Level A1/B1/C1								
LTE Band 12			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	711.0	23.88	23.02	21.96	25.0	24.0	23.0
		707.5	23.95	23.02	21.99			
		704.0	23.97	23.10	21.99			
	1RB_24	711.0	23.92	23.06	22.02			
		707.5	23.98	23.02	22.07			
		704.0	23.94	23.11	22.02			
	1RB_0	711.0	23.80	23.00	21.90			
		707.5	23.87	23.00	21.95			
		704.0	23.84	23.02	21.88			
	25RB_25	711.0	22.75	21.77	20.73		24.0	23.0
		707.5	22.93	21.89	20.89			
		704.0	22.78	21.81	20.77			
	25RB_12	711.0	22.83	21.83	20.80			
		707.5	22.85	21.80	20.83			
		704.0	22.87	21.84	20.83			
	25RB_0	711.0	22.78	21.78	20.74			
		707.5	22.89	21.89	20.89			
		704.0	22.78	21.77	20.73			
	50RB_0	711.0	22.77	21.76	20.74			
		707.5	22.92	21.92	20.89			
		704.0	22.79	21.81	20.77			



Ant.5 - Power Level A1/B1/C1/A2/B2/C2								
LTE Band 13			Actual output Power (dBm)			Tune up		
Band-width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	784.5	23.87	22.97	21.89	25.0	24.0	23.0
		782.0	23.84	22.98	21.90			
		779.5	23.89	22.95	21.94			
	1RB_12	784.5	23.87	23.02	21.96			
		782.0	23.90	23.05	21.95			
		779.5	23.91	23.00	22.06			
	1RB_0	784.5	23.84	22.99	21.88			
		782.0	23.85	22.92	21.87			
		779.5	23.85	22.98	21.89			
	12RB_13	784.5	22.75	21.72	20.74			
		782.0	22.77	21.73	20.76			
		779.5	22.85	21.82	20.83			
	12RB_6	784.5	22.79	21.78	20.79			
		782.0	22.76	21.76	20.77			
		779.5	22.74	21.75	20.76			
	12RB_0	784.5	22.76	21.74	20.79			
		782.0	22.74	21.73	20.70			
		779.5	22.67	21.66	20.65			
	25RB_0	784.5	22.77	21.77	20.74			
		782.0	22.73	21.75	20.69			
		779.5	22.74	21.78	20.70			

Ant.5 - Power Level A1/B1/C1/A2/B2/C2								
LTE Band 13			Actual output Power (dBm)			Tune up		
Band-width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	782.0	23.85	23.05	21.94	25.0	24.0	23.0
	1RB_24	782.0	23.89	23.12	21.97			
	1RB_0	782.0	23.88	23.01	21.94			
	25RB_25	782.0	22.81	21.83	20.81	24.0	23.0	22.0
	25RB_12	782.0	22.78	21.78	20.74			
	25RB_0	782.0	22.64	21.65	20.61			
	50RB_0	782.0	22.75	21.74	20.70			



Ant.1 - Power Level A2								
LTE Band 13			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	784.5	18.23	18.29	18.19	19.5	19.5	19.5
		782.0	18.25	18.32	18.25			
		779.5	18.28	18.30	18.20			
	1RB_12	784.5	18.18	18.23	18.25			
		782.0	18.19	18.23	18.25			
		779.5	18.14	18.13	18.13			
	1RB_0	784.5	18.17	18.21	18.18			
		782.0	18.25	18.31	18.18			
		779.5	18.24	18.37	18.30			
	12RB_13	784.5	18.24	18.30	18.22	19.5	19.5	19.5
		782.0	18.20	18.23	18.21			
		779.5	18.20	18.23	18.25			
	12RB_6	784.5	18.16	18.17	18.14			
		782.0	18.20	18.22	18.20			
		779.5	18.26	18.28	18.21			
	12RB_0	784.5	18.28	18.38	18.32			
		782.0	18.23	18.33	18.25			
		779.5	18.18	18.19	18.20			
	25RB_0	784.5	18.19	18.27	18.25			
		782.0	18.14	18.20	18.14			
		779.5	18.18	18.21	18.23			

Ant.1 - Power Level A2								
LTE Band 13			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	782.0	18.24	18.27	18.21	19.5	19.5	19.5
	1RB_24	782.0	18.28	18.34	18.29			
	1RB_0	782.0	18.26	18.31	18.24			
	25RB_25	782.0	18.20	18.21	18.22	19.5	19.5	19.5
	25RB_12	782.0	18.16	18.24	18.24			
	25RB_0	782.0	18.13	18.17	18.12			
	50RB_0	782.0	18.17	18.23	18.19			



Ant.1 - Power Level B2/C2								
LTE Band 13			Actual output Power (dBm)			Tune up		
Band-width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	784.5	23.19	22.15	21.15	24.5	23.5	22.5
		782.0	23.25	22.37	21.25			
		779.5	23.27	22.21	21.17			
	1RB_12	784.5	23.23	22.13	21.21			
		782.0	23.25	22.29	21.24			
		779.5	23.23	22.17	21.13			
	1RB_0	784.5	23.24	22.15	21.20			
		782.0	23.27	22.29	21.17			
		779.5	23.28	22.20	21.11			
	12RB_13	784.5	22.17	21.14	20.15			
		782.0	22.13	21.16	20.12			
		779.5	22.16	21.08	20.15			
	12RB_6	784.5	22.19	21.10	20.17			
		782.0	22.18	21.21	20.21			
		779.5	22.16	21.18	20.19			
	12RB_0	784.5	22.10	21.07	20.13			
		782.0	22.19	21.05	20.20			
		779.5	22.18	21.18	20.18			
	25RB_0	784.5	22.16	21.14	20.14			
		782.0	22.14	21.05	20.10			
		779.5	22.15	21.06	20.21			

Ant.1 - Power Level B2/C2								
LTE Band 13			Actual output Power (dBm)			Tune up		
Band-width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	782.0	23.22	22.15	21.17	24.5	23.5	22.5
	1RB_24	782.0	23.26	22.33	21.21			
	1RB_0	782.0	23.24	22.19	21.15			
	25RB_25	782.0	22.20	21.17	20.18	23.5	22.5	21.5
	25RB_12	782.0	22.16	21.14	20.15			
	25RB_0	782.0	22.13	21.06	20.13			
	50RB_0	782.0	22.17	21.07	20.17			



Ant.5 - Power Level A1/A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	22.91	22.15	21.04	24.5	23.5	22.5
		1745.0	22.91	22.20	20.89			
		1710.7	22.95	22.16	20.91			
	1RB_3	1779.3	22.94	22.18	20.98			
		1745.0	22.92	22.19	20.97			
		1710.7	22.95	22.17	20.96			
	1RB_0	1779.3	22.93	22.14	20.98			
		1745.0	22.93	22.21	20.96			
		1710.7	22.98	22.16	21.01			
	3RB_3	1779.3	22.95	21.90	20.96			
		1745.0	22.96	21.96	21.00			
		1710.7	22.97	21.99	20.93			
	3RB_1	1779.3	22.95	21.93	20.95			
		1745.0	23.00	21.98	21.05			
		1710.7	23.00	22.04	20.95			
	3RB_0	1779.3	22.95	21.93	20.93			
		1745.0	22.99	22.02	20.99			
		1710.7	22.99	21.96	20.87			
	6RB_0	1779.3	21.95	21.00	19.95	23.5	22.5	21.5
		1745.0	21.98	21.03	19.99			
		1710.7	21.94	21.04	20.03			



Ant.5 - Power Level A1/A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	22.92	22.04	21.01	24.5	23.5	22.5
		1745.0	22.96	22.10	21.03			
		1711.5	22.97	22.11	21.09			
	1RB_7	1778.5	22.92	22.17	21.08			
		1745.0	22.96	22.15	21.10			
		1711.5	22.98	22.13	21.16			
	1RB_0	1778.5	22.95	22.15	20.98			
		1745.0	22.98	22.10	21.01			
		1711.5	22.95	22.08	21.05			
	8RB_7	1778.5	21.89	20.98	20.01			
		1745.0	21.90	21.00	20.01			
		1711.5	21.95	21.02	20.07			
	8RB_4	1778.5	21.91	20.99	20.03			
		1745.0	21.93	21.02	20.02			
		1711.5	21.93	21.02	20.03			
	8RB_0	1778.5	21.95	21.04	20.06			
		1745.0	21.97	21.02	20.10			
		1711.5	21.92	21.00	20.04			
	15RB_0	1778.5	21.93	20.94	20.01			
		1745.0	21.93	20.93	20.04			
		1711.5	21.95	20.96	20.08			



Ant.5 - Power Level A1/A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	23.01	22.13	21.01	24.5	23.5	22.5
		1745.0	23.01	22.14	20.99			
		1712.5	23.02	22.20	21.09			
	1RB_12	1777.5	23.07	22.23	20.98			
		1745.0	23.08	22.23	21.13			
		1712.5	23.04	22.23	21.17			
	1RB_0	1777.5	22.99	22.20	20.96			
		1745.0	23.04	22.19	21.03			
		1712.5	23.05	22.24	21.10			
	12RB_13	1777.5	21.88	20.87	20.01			
		1745.0	21.91	20.88	20.01			
		1712.5	21.96	20.92	20.10			
	12RB_6	1777.5	21.98	20.94	20.10			
		1745.0	21.96	20.99	20.12			
		1712.5	21.99	20.97	20.13			
	12RB_0	1777.5	21.99	20.97	20.14			
		1745.0	22.01	20.98	20.15			
		1712.5	21.95	20.90	20.10			
	25RB_0	1777.5	21.94	20.92	20.06			
		1745.0	21.96	20.95	20.03			
		1712.5	21.99	21.01	20.05			



Ant.5 - Power Level A1/A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	22.94	22.11	20.98	24.5	23.5	22.5
		1745.0	22.96	22.13	21.00			
		1715.0	23.00	22.15	21.05			
	1RB_24	1775.0	23.04	22.24	21.07			
		1745.0	23.03	22.26	21.08			
		1715.0	23.07	22.26	21.05			
	1RB_0	1775.0	23.04	22.26	21.06			
		1745.0	23.05	22.20	21.05			
		1715.0	23.04	22.25	21.03			
	25RB_25	1775.0	21.95	20.95	20.01		22.5	21.5
		1745.0	22.01	21.00	20.05			
		1715.0	21.98	20.99	20.08			
	25RB_12	1775.0	21.95	20.98	20.03			
		1745.0	21.95	20.98	20.04			
		1715.0	21.97	20.99	20.08			
	25RB_0	1775.0	22.02	21.05	20.10			
		1745.0	21.98	20.97	20.02			
		1715.0	21.94	20.94	20.02			
	50RB_0	1775.0	21.99	20.97	20.03			
		1745.0	22.01	21.00	20.07			
		1715.0	21.96	20.94	20.07			



Ant.5 - Power Level A1/A2									
LTE Band 66			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
15 MHz	1RB_74	1772.5	22.87	22.04	20.99	24.5	23.5	22.5	
		1745.0	22.83	22.13	20.98				
		1717.5	22.83	22.14	20.94				
	1RB_37	1772.5	22.91	22.16	21.12				
		1745.0	22.94	22.22	21.08				
		1717.5	22.92	22.23	21.02				
	1RB_0	1772.5	22.91	22.11	21.05				
		1745.0	22.90	22.21	21.08				
		1717.5	22.89	22.24	21.02				
	36RB_38	1772.5	21.93	20.87	20.03		23.5	22.5	21.5
		1745.0	21.90	20.85	19.97				
		1717.5	21.92	20.92	20.07				
	36RB_19	1772.5	21.98	20.93	20.04				
		1745.0	21.93	20.90	20.04				
		1717.5	21.95	20.96	20.09				
	36RB_0	1772.5	21.97	20.96	20.08				
		1745.0	21.87	20.93	20.06				
		1717.5	21.91	20.90	20.03				
	75RB_0	1772.5	21.99	20.94	20.04				
		1745.0	21.94	20.91	20.01				
		1717.5	21.97	20.92	20.00				



Ant.5 - Power Level A1/A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1770.0	22.81	21.96	20.73	24.5	23.5	22.5
		1745.0	22.79	21.97	20.75			
		1720.0	22.79	21.96	20.91			
	1RB_50	1770.0	22.95	22.14	21.02			
		1745.0	22.92	22.15	20.95			
		1720.0	22.93	22.03	21.00			
	1RB_0	1770.0	22.88	22.04	20.80			
		1745.0	22.85	22.08	20.91			
		1720.0	22.87	22.03	21.00			
	50RB_50	1770.0	21.94	20.94	19.99			
		1745.0	21.92	20.86	20.00			
		1720.0	21.90	20.87	19.95			
	50RB_25	1770.0	22.00	20.96	20.09			
		1745.0	21.95	20.97	20.05			
		1720.0	21.96	20.90	20.05			
	50RB_0	1770.0	22.07	21.03	20.16			
		1745.0	21.97	20.95	20.08			
		1720.0	21.97	20.88	20.01			
	100RB_0	1770.0	21.99	20.98	20.07			
		1745.0	21.92	20.89	19.98			
		1720.0	21.92	20.90	19.95			



Ant.5 - Power Level B1/B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	18.17	17.47	16.40	19.5	18.5	17.5
		1745.0	18.18	17.49	16.34			
		1710.7	18.16	17.48	16.28			
	1RB_3	1779.3	18.21	17.52	16.40			
		1745.0	18.17	17.59	16.33			
		1710.7	18.22	17.46	16.31			
	1RB_0	1779.3	18.19	17.48	16.37			
		1745.0	18.19	17.56	16.33			
		1710.7	18.14	17.44	16.33			
	3RB_3	1779.3	18.19	17.20	16.29			
		1745.0	18.21	17.16	16.21			
		1710.7	18.24	17.20	16.30			
	3RB_1	1779.3	18.20	17.20	16.27			
		1745.0	18.23	17.21	16.24			
		1710.7	18.21	17.21	16.30			
	3RB_0	1779.3	18.21	17.17	16.25			
		1745.0	18.23	17.18	16.26			
		1710.7	18.20	17.21	16.32			
	6RB_0	1779.3	17.18	16.20	15.10	18.5	17.5	16.5
		1745.0	17.22	16.22	15.15			
		1710.7	17.19	16.23	15.12			



Ant.5 - Power Level B1/B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	18.15	17.51	16.34	19.5	18.5	17.5
		1745.0	18.16	17.47	16.37			
		1711.5	18.21	17.53	16.40			
	1RB_7	1778.5	18.22	17.61	16.38			
		1745.0	18.22	17.46	16.46			
		1711.5	18.23	17.48	16.49			
	1RB_0	1778.5	18.19	17.51	16.31			
		1745.0	18.19	17.46	16.41			
		1711.5	18.19	17.46	16.40			
	8RB_7	1778.5	17.16	16.20	15.18			
		1745.0	17.11	16.22	15.16			
		1711.5	17.21	16.31	15.21			
	8RB_4	1778.5	17.14	16.19	15.18			
		1745.0	17.15	16.22	15.16			
		1711.5	17.19	16.26	15.18			
	8RB_0	1778.5	17.19	16.22	15.19			
		1745.0	17.19	16.25	15.17			
		1711.5	17.20	16.24	15.16			
	15RB_0	1778.5	17.16	16.16	15.14			
		1745.0	17.14	16.20	15.19			
		1711.5	17.19	16.25	15.20			



Ant.5 - Power Level B1/B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	18.20	17.47	16.26	19.5	18.5	17.5
		1745.0	18.22	17.49	16.22			
		1712.5	18.23	17.51	16.35			
	1RB_12	1777.5	18.28	17.55	16.34			
		1745.0	18.25	17.57	16.32			
		1712.5	18.27	17.55	16.40			
	1RB_0	1777.5	18.19	17.64	16.24			
		1745.0	18.11	17.49	16.27			
		1712.5	18.22	17.53	16.37			
	12RB_13	1777.5	17.13	16.11	15.10		17.5	16.5
		1745.0	17.18	16.15	15.17			
		1712.5	17.25	16.19	15.24			
	12RB_6	1777.5	17.22	16.19	15.18			
		1745.0	17.22	16.19	15.22			
		1712.5	17.25	16.24	15.22			
	12RB_0	1777.5	17.19	16.19	15.21			
		1745.0	17.20	16.20	15.22			
		1712.5	17.21	16.18	15.17			
	25RB_0	1777.5	17.19	16.23	15.17			
		1745.0	17.20	16.21	15.17			
		1712.5	17.26	16.22	15.23			



Ant.5 - Power Level B1/B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	18.17	17.38	16.26	19.5	18.5	17.5
		1745.0	18.15	17.46	16.37			
		1715.0	18.18	17.50	16.32			
	1RB_24	1775.0	18.21	17.47	16.38			
		1745.0	18.23	17.51	16.40			
		1715.0	18.25	17.62	16.36			
	1RB_0	1775.0	18.26	17.49	16.41			
		1745.0	18.24	17.50	16.40			
		1715.0	18.24	17.53	16.34			
	25RB_25	1775.0	17.18	16.18	15.20	18.5	17.5	16.5
		1745.0	17.24	16.23	15.21			
		1715.0	17.25	16.24	15.27			
	25RB_12	1775.0	17.25	16.23	15.19			
		1745.0	17.24	16.22	15.21			
		1715.0	17.22	16.21	15.23			
	25RB_0	1775.0	17.23	16.27	15.24			
		1745.0	17.23	16.20	15.17			
		1715.0	17.22	16.18	15.21			
	50RB_0	1775.0	17.25	16.21	15.19			
		1745.0	17.29	16.21	15.22			
		1715.0	17.29	16.21	15.20			



Ant.5 - Power Level B1/B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	18.10	17.39	16.19	19.5	18.5	17.5
		1745.0	18.10	17.27	16.14			
		1717.5	18.09	17.26	16.26			
	1RB_37	1772.5	18.16	17.46	16.25			
		1745.0	18.19	17.41	16.25			
		1717.5	18.22	17.33	16.33			
	1RB_0	1772.5	18.16	17.46	16.26			
		1745.0	18.14	17.39	16.22			
		1717.5	18.14	17.34	16.35			
	36RB_38	1772.5	17.17	16.17	15.18		17.5	16.5
		1745.0	17.17	16.16	15.19			
		1717.5	17.17	16.19	15.16			
	36RB_19	1772.5	17.22	16.23	15.26			
		1745.0	17.19	16.19	15.22			
		1717.5	17.20	16.16	15.19			
	36RB_0	1772.5	17.21	16.21	15.27			
		1745.0	17.17	16.17	15.21			
		1717.5	17.18	16.18	15.18			
	75RB_0	1772.5	17.22	16.25	15.21			
		1745.0	17.20	16.17	15.15			
		1717.5	17.19	16.17	15.18			



Ant.5 - Power Level B1/B2									
LTE Band 66			Actual output Power (dBm)			Tune up			
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation			
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	
20 MHz	1RB_99	1770.0	17.99	17.42	16.32	19.5	18.5	17.5	
		1745.0	17.98	17.30	16.24				
		1720.0	17.98	17.39	16.23				
	1RB_50	1770.0	18.39	17.49	16.44				
		1745.0	18.23	17.47	16.33				
		1720.0	18.22	17.54	16.24				
	1RB_0	1770.0	18.03	17.47	16.33				
		1745.0	18.08	17.43	16.28				
		1720.0	18.04	17.51	16.19				
	50RB_50	1770.0	17.10	16.20	15.19		18.5	17.5	16.5
		1745.0	17.12	16.17	15.14				
		1720.0	17.07	16.15	15.15				
	50RB_25	1770.0	17.22	16.27	15.26				
		1745.0	17.14	16.23	15.20				
		1720.0	17.10	16.23	15.21				
	50RB_0	1770.0	17.25	16.32	15.28				
		1745.0	17.15	16.24	15.19				
		1720.0	17.11	16.16	15.14				
	100RB_0	1770.0	17.19	16.25	15.21				
		1745.0	17.07	16.17	15.15				
		1720.0	17.09	16.14	15.15				



Ant.5 - Power Level C1/C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	20.64	19.95	18.85	22.0	21.0	20.0
		1745.0	20.65	19.99	18.80			
		1710.7	20.63	20.00	18.73			
	1RB_3	1779.3	20.66	19.97	18.84			
		1745.0	20.66	20.01	18.77			
		1710.7	20.66	20.00	18.80			
	1RB_0	1779.3	20.65	19.99	18.86			
		1745.0	20.64	19.95	18.81			
		1710.7	20.65	20.00	18.79			
	3RB_3	1779.3	20.64	19.65	18.73			
		1745.0	20.66	19.60	18.74			
		1710.7	20.65	19.63	18.79			
	3RB_1	1779.3	20.64	19.62	18.74			
		1745.0	20.67	19.65	18.78			
		1710.7	20.67	19.64	18.81			
	3RB_0	1779.3	20.65	19.64	18.74			
		1745.0	20.68	19.67	18.79			
		1710.7	20.66	19.66	18.82			
	6RB_0	1779.3	19.65	18.69	17.61	21.0	20.0	19.0
		1745.0	19.68	18.74	17.63			
		1710.7	19.65	18.70	17.60			



Ant.5 - Power Level C1/C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	20.64	19.97	18.80	22.0	21.0	20.0
		1745.0	20.62	19.92	18.76			
		1711.5	20.65	19.93	18.83			
	1RB_7	1778.5	20.66	20.04	18.85			
		1745.0	20.66	19.94	18.84			
		1711.5	20.68	19.96	18.88			
	1RB_0	1778.5	20.64	20.00	18.84			
		1745.0	20.66	19.93	18.83			
		1711.5	20.68	19.95	18.82			
	8RB_7	1778.5	19.61	18.65	17.65			
		1745.0	19.61	18.67	17.67			
		1711.5	19.67	18.74	17.72			
	8RB_4	1778.5	19.59	18.68	17.65			
		1745.0	19.63	18.68	17.63			
		1711.5	19.62	18.68	17.69			
	8RB_0	1778.5	19.66	18.73	17.71			
		1745.0	19.66	18.74	17.68			
		1711.5	19.65	18.70	17.68			
	15RB_0	1778.5	19.65	18.66	17.64			
		1745.0	19.62	18.65	17.64			
		1711.5	19.67	18.70	17.68			



Ant.5 - Power Level C1/C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	20.68	19.91	18.80	22.0	21.0	20.0
		1745.0	20.67	19.88	18.81			
		1712.5	20.68	19.95	18.84			
	1RB_12	1777.5	20.68	19.92	18.83			
		1745.0	20.69	19.91	18.88			
		1712.5	20.70	19.93	18.86			
	1RB_0	1777.5	20.68	19.93	18.80			
		1745.0	20.69	19.96	18.89			
		1712.5	20.69	19.96	18.83			
	12RB_13	1777.5	19.62	18.57	17.63		20.0	19.0
		1745.0	19.61	18.58	17.62			
		1712.5	19.71	18.64	17.67			
	12RB_6	1777.5	19.69	18.65	17.69			
		1745.0	19.68	18.69	17.69			
		1712.5	19.67	18.69	17.71			
	12RB_0	1777.5	19.68	18.69	17.71			
		1745.0	19.73	18.72	17.72			
		1712.5	19.68	18.63	17.70			
	25RB_0	1777.5	19.67	18.69	17.67			
		1745.0	19.68	18.67	17.65			
		1712.5	19.70	18.71	17.71			



Ant.5 - Power Level C1/C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	20.64	19.93	18.81	22.0	21.0	20.0
		1745.0	20.64	19.94	18.81			
		1715.0	20.65	19.99	18.82			
	1RB_24	1775.0	20.68	19.98	18.83			
		1745.0	20.69	19.96	18.83			
		1715.0	20.69	20.00	18.87			
	1RB_0	1775.0	20.54	20.03	18.90			
		1745.0	20.69	19.99	18.85			
		1715.0	20.71	20.01	18.86			
	25RB_25	1775.0	19.67	18.66	17.67		21.0	20.0
		1745.0	19.70	18.65	17.69			
		1715.0	19.70	18.70	17.70			
	25RB_12	1775.0	19.66	18.70	17.67			
		1745.0	19.68	18.68	17.69			
		1715.0	19.71	18.67	17.70			
	25RB_0	1775.0	19.74	18.70	17.75			
		1745.0	19.70	18.64	17.69			
		1715.0	19.67	18.67	17.68			
	50RB_0	1775.0	19.69	18.71	17.73			
		1745.0	19.76	18.70	17.71			
		1715.0	19.71	18.66	17.68			



Ant.5 - Power Level C1/C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	20.59	19.88	18.73	22.0	21.0	20.0
		1745.0	20.59	19.85	18.66			
		1717.5	20.57	19.82	18.67			
	1RB_37	1772.5	20.71	19.97	18.82			
		1745.0	20.67	19.91	18.80			
		1717.5	20.66	19.92	18.81			
	1RB_0	1772.5	20.65	19.99	18.80			
		1745.0	20.65	19.94	18.78			
		1717.5	20.64	19.90	18.78			
	36RB_38	1772.5	19.61	18.68	17.65		20.0	19.0
		1745.0	19.65	18.61	17.63			
		1717.5	19.66	18.68	17.65			
	36RB_19	1772.5	19.70	18.73	17.70			
		1745.0	19.69	18.66	17.69			
		1717.5	19.67	18.67	17.64			
	36RB_0	1772.5	19.72	18.70	17.70			
		1745.0	19.63	18.67	17.65			
		1717.5	19.65	18.65	17.67			
	75RB_0	1772.5	19.69	18.70	17.71			
		1745.0	19.62	18.61	17.64			
		1717.5	19.69	18.64	17.63			



Ant.5 - Power Level C1/C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1770.0	20.56	19.90	18.82	22.0	21.0	20.0
		1745.0	20.56	19.85	18.76			
		1720.0	20.56	19.83	18.73			
	1RB_50	1770.0	20.68	20.06	18.95			
		1745.0	20.66	19.95	18.91			
		1720.0	20.66	19.93	18.84			
	1RB_0	1770.0	20.66	19.99	18.90			
		1745.0	20.65	19.96	18.81			
		1720.0	20.64	19.90	18.83			
	50RB_50	1770.0	19.69	18.70	17.68			
		1745.0	19.68	18.66	17.66			
		1720.0	19.63	18.62	17.62			
	50RB_25	1770.0	19.74	18.72	17.71			
		1745.0	19.68	18.66	17.66			
		1720.0	19.67	18.67	17.65			
	50RB_0	1770.0	19.81	18.83	17.85			
		1745.0	19.71	18.72	17.67			
		1720.0	19.68	18.62	17.61			
	100RB_0	1770.0	19.80	18.75	17.75			
		1745.0	19.64	18.62	17.65			
		1720.0	19.63	18.62	17.64			



Ant.1 - Power Level A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	14.13	14.15	14.11	15.0	15.0	15.0
		1745.0	14.07	14.09	14.17			
		1710.7	14.17	14.08	14.14			
	1RB_3	1779.3	14.17	14.22	14.21			
		1745.0	14.24	14.25	14.21			
		1710.7	14.22	14.21	14.24			
	1RB_0	1779.3	14.05	14.08	14.03			
		1745.0	14.20	14.03	14.06			
		1710.7	14.05	13.95	13.96			
	3RB_3	1779.3	14.19	14.15	14.14			
		1745.0	14.17	14.24	14.13			
		1710.7	14.06	14.10	14.12			
	3RB_1	1779.3	14.24	14.06	14.15			
		1745.0	14.25	14.25	14.13			
		1710.7	14.18	14.16	14.13			
	3RB_0	1779.3	14.19	14.20	14.27			
		1745.0	14.13	14.10	14.16			
		1710.7	14.05	14.10	14.06			
	6RB_0	1779.3	14.23	14.19	14.18	15.0	15.0	15.0
		1745.0	14.15	14.03	14.15			
		1710.7	14.12	14.01	14.08			



Ant.1 - Power Level A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	14.15	14.17	14.10	15.0	15.0	15.0
		1745.0	14.11	14.09	14.18			
		1711.5	14.15	14.09	14.13			
	1RB_7	1778.5	14.21	14.21	14.19			
		1745.0	14.22	14.29	14.23			
		1711.5	14.20	14.20	14.21			
	1RB_0	1778.5	14.07	14.10	14.06			
		1745.0	14.18	14.05	14.05			
		1711.5	14.08	13.99	13.95			
	8RB_7	1778.5	14.16	14.16	14.11			
		1745.0	14.20	14.22	14.17			
		1711.5	14.05	14.10	14.13			
	8RB_4	1778.5	14.21	14.04	14.13			
		1745.0	14.28	14.21	14.10			
		1711.5	14.16	14.14	14.10			
	8RB_0	1778.5	14.18	14.20	14.26			
		1745.0	14.15	14.12	14.15			
		1711.5	14.05	14.12	14.09			
	15RB_0	1778.5	14.25	14.15	14.19			
		1745.0	14.16	14.06	14.16			
		1711.5	14.09	14.01	14.07			



Ant.1 - Power Level A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	14.17	14.16	14.09	15.0	15.0	15.0
		1745.0	14.11	14.10	14.16			
		1712.5	14.12	14.09	14.15			
	1RB_12	1777.5	14.24	14.23	14.21			
		1745.0	14.25	14.32	14.26			
		1712.5	14.20	14.20	14.19			
	1RB_0	1777.5	14.08	14.09	14.03			
		1745.0	14.17	14.07	14.06			
		1712.5	14.08	13.99	13.98			
	12RB_13	1777.5	14.18	14.13	14.07		15.0	15.0
		1745.0	14.21	14.20	14.19			
		1712.5	14.06	14.07	14.12			
	12RB_6	1777.5	14.17	14.08	14.16			
		1745.0	14.24	14.23	14.11			
		1712.5	14.15	14.17	14.07			
	12RB_0	1777.5	14.16	14.22	14.22			
		1745.0	14.12	14.15	14.18			
		1712.5	14.03	14.12	14.10			
	25RB_0	1777.5	14.25	14.18	14.21			
		1745.0	14.16	14.08	14.12			
		1712.5	14.08	14.01	14.08			



Ant.1 - Power Level A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	14.17	14.12	14.10	15.0	15.0	15.0
		1745.0	14.07	14.10	14.12			
		1715.0	14.10	14.07	14.18			
	1RB_24	1775.0	14.22	14.22	14.19			
		1745.0	14.22	14.28	14.26			
		1715.0	14.20	14.21	14.21			
	1RB_0	1775.0	14.05	14.06	14.03			
		1745.0	14.14	14.09	14.07			
		1715.0	14.06	13.96	13.95			
	25RB_25	1775.0	14.16	14.11	14.07		15.0	15.0
		1745.0	14.20	14.18	14.22			
		1715.0	14.09	14.04	14.08			
	25RB_12	1775.0	14.15	14.11	14.14			
		1745.0	14.25	14.26	14.14			
		1715.0	14.14	14.15	14.09			
	25RB_0	1775.0	14.15	14.23	14.24			
		1745.0	14.13	14.18	14.17			
		1715.0	14.05	14.12	14.14			
	50RB_0	1775.0	14.23	14.18	14.23			
		1745.0	14.15	14.12	14.12			
		1715.0	14.09	14.04	14.12			



Ant.1 - Power Level A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	14.14	14.09	14.12	15.0	15.0	15.0
		1745.0	14.10	14.13	14.13			
		1717.5	14.13	14.06	14.14			
	1RB_37	1772.5	14.23	14.19	14.21			
		1745.0	14.24	14.30	14.25			
		1717.5	14.22	14.20	14.21			
	1RB_0	1772.5	14.08	14.03	14.04			
		1745.0	14.13	14.11	14.06			
		1717.5	14.07	13.97	13.97			
	36RB_38	1772.5	14.12	14.12	14.08			
		1745.0	14.18	14.16	14.21			
		1717.5	14.10	14.07	14.08			
	36RB_19	1772.5	14.16	14.14	14.16			
		1745.0	14.24	14.22	14.17			
		1717.5	14.18	14.14	14.12			
	36RB_0	1772.5	14.16	14.19	14.26			
		1745.0	14.16	14.20	14.19			
		1717.5	14.08	14.12	14.12			
	75RB_0	1772.5	14.21	14.16	14.23			
		1745.0	14.18	14.11	14.14			
		1717.5	14.11	14.06	14.09			



Ant.1 - Power Level A2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1770.0	14.12	14.09	14.13	15.0	15.0	15.0
		1745.0	14.13	14.16	14.15			
		1720.0	14.11	14.09	14.11			
	1RB_50	1770.0	14.23	14.21	14.24			
		1745.0	14.25	14.29	14.23			
		1720.0	14.24	14.22	14.22			
	1RB_0	1770.0	14.07	14.05	14.04			
		1745.0	14.12	14.09	14.09			
		1720.0	14.03	13.99	14.00			
	50RB_50	1770.0	14.14	14.11	14.12			
		1745.0	14.18	14.14	14.20			
		1720.0	14.11	14.09	14.08			
	50RB_25	1770.0	14.17	14.17	14.18			
		1745.0	14.22	14.22	14.20			
		1720.0	14.15	14.12	14.14			
	50RB_0	1770.0	14.19	14.16	14.22			
		1745.0	14.17	14.19	14.20			
		1720.0	14.09	14.09	14.10			
	100RB_0	1770.0	14.21	14.19	14.22			
		1745.0	14.15	14.13	14.12			
		1720.0	14.08	14.06	14.05			



Ant.1 - Power Level B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	19.18	19.30	19.18	20.0	20.0	20.0
		1745.0	19.14	19.11	19.15			
		1710.7	19.23	19.14	19.17			
	1RB_3	1779.3	19.26	19.30	19.38			
		1745.0	19.37	19.35	19.31			
		1710.7	19.27	19.18	19.31			
	1RB_0	1779.3	19.20	19.05	19.06			
		1745.0	19.16	19.11	19.12			
		1710.7	19.03	19.05	19.20			
	3RB_3	1779.3	19.19	19.13	19.24			
		1745.0	19.10	19.26	19.19			
		1710.7	19.18	19.18	19.20			
	3RB_1	1779.3	19.26	19.22	19.19			
		1745.0	19.29	19.26	19.20			
		1710.7	19.19	19.17	19.29			
	3RB_0	1779.3	19.22	19.13	19.23			
		1745.0	19.12	19.26	19.22			
		1710.7	19.16	19.14	19.06			
	6RB_0	1779.3	19.18	19.31	19.26	20.0	20.0	20.0
		1745.0	19.17	19.25	19.13			
		1710.7	19.14	19.15	19.10			



Ant.1 - Power Level B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	19.21	19.28	19.19	20.0	20.0	20.0
		1745.0	19.18	19.14	19.14			
		1711.5	19.25	19.10	19.16			
	1RB_7	1778.5	19.30	19.27	19.35			
		1745.0	19.33	19.33	19.29			
		1711.5	19.27	19.20	19.33			
	1RB_0	1778.5	19.16	19.03	19.04			
		1745.0	19.18	19.14	19.13			
		1711.5	19.06	19.08	19.21			
	8RB_7	1778.5	19.21	19.17	19.26			
		1745.0	19.13	19.30	19.20			
		1711.5	19.18	19.18	19.22			
	8RB_4	1778.5	19.27	19.24	19.17			
		1745.0	19.26	19.28	19.23			
		1711.5	19.18	19.20	19.30			
	8RB_0	1778.5	19.26	19.12	19.26			
		1745.0	19.16	19.23	19.25			
		1711.5	19.16	19.14	19.08			
	15RB_0	1778.5	19.21	19.32	19.25			
		1745.0	19.20	19.25	19.17			
		1711.5	19.16	19.16	19.09			



Ant.1 - Power Level B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	19.18	19.24	19.21	20.0	20.0	20.0
		1745.0	19.17	19.17	19.13			
		1712.5	19.23	19.13	19.18			
	1RB_12	1777.5	19.29	19.27	19.33			
		1745.0	19.32	19.31	19.30			
		1712.5	19.29	19.22	19.33			
	1RB_0	1777.5	19.13	19.05	19.01			
		1745.0	19.16	19.13	19.15			
		1712.5	19.04	19.06	19.19			
	12RB_13	1777.5	19.23	19.18	19.29			
		1745.0	19.17	19.30	19.20			
		1712.5	19.17	19.18	19.19			
	12RB_6	1777.5	19.27	19.20	19.17			
		1745.0	19.29	19.28	19.26			
		1712.5	19.21	19.22	19.27			
	12RB_0	1777.5	19.24	19.15	19.24			
		1745.0	19.20	19.24	19.25			
		1712.5	19.15	19.14	19.09			
	25RB_0	1777.5	19.21	19.33	19.27			
		1745.0	19.23	19.22	19.19			
		1712.5	19.16	19.17	19.11			



Ant.1 - Power Level B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	19.17	19.22	19.20	20.0	20.0	20.0
		1745.0	19.16	19.17	19.12			
		1715.0	19.20	19.12	19.17			
	1RB_24	1775.0	19.25	19.25	19.31			
		1745.0	19.32	19.34	19.29			
		1715.0	19.27	19.23	19.30			
	1RB_0	1775.0	19.14	19.08	19.04			
		1745.0	19.20	19.14	19.18			
		1715.0	19.02	19.05	19.15			
	25RB_25	1775.0	19.23	19.21	19.28		20.0	20.0
		1745.0	19.15	19.28	19.17			
		1715.0	19.15	19.18	19.19			
	25RB_12	1775.0	19.24	19.22	19.17			
		1745.0	19.27	19.26	19.28			
		1715.0	19.21	19.20	19.24			
	25RB_0	1775.0	19.28	19.15	19.26			
		1745.0	19.22	19.22	19.27			
		1715.0	19.13	19.10	19.11			
	50RB_0	1775.0	19.24	19.34	19.24			
		1745.0	19.21	19.18	19.19			
		1715.0	19.12	19.20	19.13			



Ant.1 - Power Level B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	19.18	19.20	19.18	20.0	20.0	20.0
		1745.0	19.15	19.14	19.15			
		1717.5	19.17	19.15	19.19			
	1RB_37	1772.5	19.27	19.28	19.30			
		1745.0	19.29	19.32	19.29			
		1717.5	19.26	19.27	19.32			
	1RB_0	1772.5	19.10	19.08	19.05			
		1745.0	19.18	19.11	19.16			
		1717.5	19.05	19.06	19.12			
	36RB_38	1772.5	19.22	19.19	19.25			
		1745.0	19.19	19.24	19.21			
		1717.5	19.16	19.15	19.15			
	36RB_19	1772.5	19.20	19.21	19.16			
		1745.0	19.28	19.25	19.25			
		1717.5	19.22	19.18	19.23			
	36RB_0	1772.5	19.27	19.19	19.22			
		1745.0	19.20	19.26	19.26			
		1717.5	19.11	19.08	19.07			
	75RB_0	1772.5	19.23	19.31	19.24			
		1745.0	19.20	19.21	19.15			
		1717.5	19.11	19.16	19.15			



Ant.1 - Power Level B2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1770.0	19.16	19.17	19.20	20.0	20.0	20.0
		1745.0	19.17	19.16	19.16			
		1720.0	19.15	19.16	19.18			
	1RB_50	1770.0	19.27	19.25	19.28			
		1745.0	19.29	19.34	19.29			
		1720.0	19.28	19.29	19.31			
	1RB_0	1770.0	19.11	19.08	19.07			
		1745.0	19.16	19.15	19.16			
		1720.0	19.07	19.08	19.09			
	50RB_50	1770.0	19.18	19.19	19.21			
		1745.0	19.22	19.24	19.21			
		1720.0	19.15	19.12	19.16			
	50RB_25	1770.0	19.21	19.20	19.19			
		1745.0	19.26	19.25	19.28			
		1720.0	19.19	19.16	19.23			
	50RB_0	1770.0	19.23	19.20	19.24			
		1745.0	19.21	19.22	19.22			
		1720.0	19.13	19.11	19.09			
	100RB_0	1770.0	19.25	19.28	19.24			
		1745.0	19.19	19.21	19.16			
		1720.0	19.12	19.12	19.16			



Ant.1 - Power Level C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1.4 MHz	1RB_5	1779.3	21.03	20.99	20.98	22.0	22.0	22.0
		1745.0	21.06	21.07	21.02			
		1710.7	21.04	21.03	21.01			
	1RB_3	1779.3	21.11	21.10	21.20			
		1745.0	21.11	21.17	21.15			
		1710.7	21.06	21.14	21.20			
	1RB_0	1779.3	21.11	21.04	21.05			
		1745.0	21.00	21.10	21.09			
		1710.7	21.02	21.02	21.02			
	3RB_3	1779.3	21.06	21.08	21.06			
		1745.0	21.03	21.06	21.09			
		1710.7	21.01	21.04	21.05			
	3RB_1	1779.3	21.10	21.06	21.90			
		1745.0	21.17	21.09	21.13			
		1710.7	21.05	21.12	21.10			
	3RB_0	1779.3	21.08	21.11	21.02			
		1745.0	21.09	21.07	21.07			
		1710.7	21.08	21.02	21.06			
	6RB_0	1779.3	21.14	21.13	20.77			
		1745.0	21.01	21.03	20.72			
		1710.7	21.00	21.03	20.61			



Ant.1 - Power Level C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3 MHz	1RB_14	1778.5	21.10	21.01	21.14	22.0	22.0	22.0
		1745.0	21.08	21.07	21.02			
		1711.5	21.02	21.00	21.04			
	1RB_7	1778.5	21.13	21.17	21.16			
		1745.0	21.13	21.20	21.19			
		1711.5	21.11	21.07	21.15			
	1RB_0	1778.5	21.07	21.04	21.06			
		1745.0	21.09	21.05	21.06			
		1711.5	21.14	21.07	21.02			
	8RB_7	1778.5	21.05	21.09	20.77			
		1745.0	21.14	21.06	20.73			
		1711.5	21.03	21.06	20.66			
	8RB_4	1778.5	21.08	21.12	20.68			
		1745.0	21.13	21.19	20.70			
		1711.5	21.05	21.11	20.66			
	8RB_0	1778.5	21.06	21.12	20.65			
		1745.0	21.02	21.00	20.70			
		1711.5	21.01	21.06	20.68			
	15RB_0	1778.5	21.13	21.12	20.81			
		1745.0	21.05	21.15	20.77			
		1711.5	21.15	21.02	20.60			



Ant.1 - Power Level C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
5 MHz	1RB_24	1777.5	21.10	21.01	21.14	22.0	22.0	22.0
		1745.0	21.08	21.07	21.02			
		1712.5	21.02	21.00	21.04			
	1RB_12	1777.5	21.13	21.17	21.16			
		1745.0	21.13	21.20	21.19			
		1712.5	21.11	21.07	21.15			
	1RB_0	1777.5	21.07	21.04	21.06			
		1745.0	21.09	21.05	21.06			
		1712.5	21.14	21.07	21.02			
	12RB_13	1777.5	21.05	21.09	20.77			
		1745.0	21.14	21.06	20.73			
		1712.5	21.03	21.06	20.66			
	12RB_6	1777.5	21.08	21.12	20.68			
		1745.0	21.13	21.19	20.70			
		1712.5	21.05	21.11	20.66			
	12RB_0	1777.5	21.06	21.12	20.65			
		1745.0	21.02	21.00	20.70			
		1712.5	21.01	21.06	20.68			
	25RB_0	1777.5	21.13	21.12	20.81			
		1745.0	21.05	21.15	20.77			
		1712.5	21.15	21.02	20.60			



Ant.1 - Power Level C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10 MHz	1RB_49	1775.0	21.06	21.00	21.13	22.0	22.0	22.0
		1745.0	21.06	21.04	21.03			
		1715.0	21.05	21.02	21.05			
	1RB_24	1775.0	21.15	21.14	21.20			
		1745.0	21.12	21.19	21.18			
		1715.0	21.14	21.10	21.19			
	1RB_0	1775.0	21.09	21.07	21.05			
		1745.0	21.05	21.09	21.02			
		1715.0	21.12	21.03	21.05			
	25RB_25	1775.0	21.02	21.06	20.76			
		1745.0	21.12	21.04	20.76			
		1715.0	21.07	21.03	20.68			
	25RB_12	1775.0	21.08	21.12	20.69			
		1745.0	21.16	21.17	20.72			
		1715.0	21.01	21.09	20.66			
	25RB_0	1775.0	21.08	21.09	20.69			
		1745.0	21.05	21.04	20.70			
		1715.0	21.01	21.09	20.64			
	50RB_0	1775.0	21.13	21.11	20.78			
		1745.0	21.07	21.11	20.73			
		1715.0	21.14	21.03	20.57			



Ant.1 - Power Level C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15 MHz	1RB_74	1772.5	21.07	21.05	21.09	22.0	22.0	22.0
		1745.0	21.05	21.06	21.03			
		1717.5	21.03	21.00	21.02			
	1RB_37	1772.5	21.12	21.13	21.19			
		1745.0	21.16	21.19	21.20			
		1717.5	21.17	21.13	21.19			
	1RB_0	1772.5	21.07	21.09	21.04			
		1745.0	21.08	21.09	21.08			
		1717.5	21.08	21.06	21.01			
	36RB_38	1772.5	21.02	21.05	20.74		22.0	22.0
		1745.0	21.12	21.04	20.73			
		1717.5	21.03	21.01	20.66			
	36RB_19	1772.5	21.07	21.09	20.67			
		1745.0	21.13	21.15	20.73			
		1717.5	21.03	21.06	20.65			
	36RB_0	1772.5	21.06	21.13	20.69			
		1745.0	21.06	21.03	20.71			
		1717.5	21.01	21.05	20.62			
	75RB_0	1772.5	21.13	21.14	20.79			
		1745.0	21.07	21.10	20.72			
		1717.5	21.10	21.00	20.60			



Ant.1 - Power Level C2								
LTE Band 66			Actual output Power (dBm)			Tune up		
Band -width	RB No. / RB offset	Frequency (MHz)	Modulation			Modulation		
			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20 MHz	1RB_99	1770.0	21.04	21.03	21.08	22.0	22.0	22.0
		1745.0	21.05	21.02	21.01			
		1720.0	21.03	21.02	21.05			
	1RB_50	1770.0	21.15	21.11	21.17			
		1745.0	21.17	21.17	21.18			
		1720.0	21.16	21.15	21.19			
	1RB_0	1770.0	21.07	21.10	21.06			
		1745.0	21.04	21.05	21.02			
		1720.0	21.05	21.02	21.05			
	50RB_50	1770.0	21.04	21.04	20.70			
		1745.0	21.08	21.04	20.72			
		1720.0	21.01	21.02	20.69			
	50RB_25	1770.0	21.07	21.07	20.68			
		1745.0	21.12	21.12	20.77			
		1720.0	21.05	21.06	20.68			
	50RB_0	1770.0	21.09	21.09	20.72			
		1745.0	21.07	21.06	20.75			
		1720.0	21.02	21.03	20.60			
	100RB_0	1770.0	21.11	21.11	20.75			
		1745.0	21.05	21.07	20.71			
		1720.0	21.08	21.03	20.60			



LTE UP-Link Carrier Aggregation

The device supports Inter-band and Intra-band uplink LTE Carrier Aggregation, and the detail for CA list is described in chapter 11.2. The conducted power measurement results of Intra-band uplink CA are provided as follow.

		Power Level A1																
Configure		CA List	PCC						SCC						Power			
			LTE	BW	UL	Mod.	UL#	UL	LTE	BW	UL	Mod.	UL#	UL	With CA	Without CA		
			Band	(MHz)	Freq. (MHz)		RB	RB	Band	(MHz)	Freq. (MHz)		RB	RB	Tx. Power	Tx. Power		
Intra-Band	Contiguous	CA_5B	Band 5	10M	836.5	QPSK	1	0	Band 5	5M	843.7	QPSK	1	0	23.96	24.01		
		CA_66B	Band 66	10M	1715.0	QPSK	1	99	Band 66	10M	1724.9	QPSK	1	0	23.03	23.07		
		CA_66C	Band 66	20M	1770.0	QPSK	1	0	Band 66	20M	1750.2	QPSK	1	0	22.90	22.95		

		Power Level B1																
Configure		CA List	PCC						SCC						Power			
			LTE	BW	UL	Mod.	UL#	UL	LTE	BW	UL	Mod.	UL#	UL	With CA	Without CA		
			Band	(MHz)	Freq. (MHz)		RB	RB	Band	(MHz)	Freq. (MHz)		RB	RB	Tx. Power	Tx. Power		
Intra-Band	Contiguous	CA_5B	Band 5	10M	836.5	QPSK	1	0	Band 5	5M	843.7	QPSK	1	0	23.96	24.01		
		CA_66B	Band 66	10M	1745.0	QPSK	1	0	Band 66	10M	1765.1	QPSK	1	0	19.34	18.39		
		CA_66C	Band 66	20M	1770.0	QPSK	1	0	Band 66	20M	1750.2	QPSK	1	0	19.30	18.39		

		Power Level C1																
Configure		CA List	PCC						SCC						Power			
			LTE	BW	UL	Mod.	UL#	UL	LTE	BW	UL	Mod.	UL#	UL	With CA	Without CA		
			Band	(MHz)	Freq. (MHz)		RB	RB	Band	(MHz)	Freq. (MHz)		RB	RB	Tx. Power	Tx. Power		
Intra-Band	Contiguous	CA_5B	Band 5	10M	836.5	QPSK	1	0	Band 5	5M	843.7	QPSK	1	0	23.96	24.01		
		CA_66B	Band 66	10M	1715.0	QPSK	1	0	Band 66	10M	1724.9	QPSK	1	0	20.66	20.71		
		CA_66C	Band 66	20M	1770.0	QPSK	1	0	Band 66	20M	1750.2	QPSK	1	0	20.62	20.68		



No.I22N01500-SAR

LTE Down-Link Carrier Aggregation

The measurement results of down-link LTE 2CA Conducted Power are as below:

Configure	CA List	PCC								SCC						Power	
		LTE	BW	UL	UL	Mod.	UL#	UL	LTE	BW	DL	DL	With CA	Without CA			
			Band	(MHz)	Freq. (MHz)		RB	RB Offset		Band	(MHz)	Freq. (MHz)	Channel	Tx. Power (dBm)	Tx. Power (dBm)		
Inter-Band	Contiguous	CA_2A-4A	Band 2	20M	1880.0	18900	QPSK	1	50	Band 4	20M	2132.5	2175	23.03	23.09	Power	Power
		CA_2A-5A	Band 2	20M	1880.0	18900	QPSK	1	50	Band 5	10M	881.5	2525	23.05	23.09		
		CA_2A-13A	Band 2	20M	1880.0	18900	QPSK	1	50	Band 13	10M	751.0	5230	22.98	23.09		
		CA_2A-66A	Band 2	20M	1880.0	18900	QPSK	1	50	Band 66	20M	2155.0	66886	23.02	23.09		
		CA_4A-5A	Band 4	20M	1745.0	20300	QPSK	1	50	Band 5	10M	881.5	2525	22.97	23.05		
		CA_4A-13A	Band 4	20M	1745.0	20300	QPSK	1	50	Band 13	10M	751.0	5230	23.00	23.05		
		CA_5A-13A	Band 5	10M	836.5	20525	QPSK	1	24	Band 13	10M	751.0	5230	23.96	24.01		
		CA_5A-66A	Band 5	10M	836.5	20525	QPSK	1	24	Band 66	20M	2155.0	66886	23.93	24.01		
		CA_13A-66A	Band 13	10M	782.0	23230	QPSK	1	24	Band 66	20M	2155.0	66886	23.84	23.89		
Intra-Band	Contiguous	CA_5B	Band 5	10M	836.5	20525	QPSK	1	24	Band 5	10M	891.4	2624	23.95	24.01	Power	Power
		CA_6B	Band 66	15M	1745.0	132322	QPSK	1	37	Band 66	5M	2164.3	66979	22.87	22.94		
		CA_6C	Band 66	20M	1770.0	132572	QPSK	1	50	Band 66	20M	2170.2	67038	22.82	22.95		
	Non-Contiguous	CA_2A-2A	Band 2	20M	1880.0	18900	QPSK	1	50	Band 2	5M	1987.5	1175	23.02	23.09		
		CA_4A-4A	Band 4	20M	1745.0	20300	QPSK	1	50	Band 4	5M	2112.5	1975	22.98	23.05		
		CA_5A-5A	Band 5	10M	836.5	20525	QPSK	1	24	Band 5	5M	891.5	2625	23.95	24.01		
		CA_66A-66A	Band 66	20M	1770.0	132572	QPSK	1	50	Band 66	5M	2112.5	66461	22.89	22.95		



10.3. NR Measurement result

Maximum power reduction (MPR) for power class 3

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

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

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

Note: For this device, NR n77 band support PC3 and PC2 mode with 100% duty cycle, so we choose high power PC2 mode to measure conducted power and SAR testing.



Power Level A2						
NR n2					Tune up: 24.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1907.5	381500
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1880.0	376000
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1900.0	380000
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1880.0	376000
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860.0	372000
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1880.0	376000
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1880.0	376000
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1880.0	376000
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1880.0	376000
15	20	CP-OFDM QPSK	Inner_Full	53@26	1880.0	376000
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1880.0	376000
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1880.0	376000
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1880.0	376000
15	20	DFT-s-OFDM QPSK	Edge_Full _Right	2@104	1880.0	376000
15	20	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	1880.0	376000
15	20	DFT-s-OFDM QPSK	Inner_1RB _Right	1@104	1880.0	376000
15	20	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	1880.0	376000
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	1880.0	376000
15	10	DFT-s-OFDM QPSK	Inner_1RB _Left	25@12	1880.0	376000
15	15	DFT-s-OFDM QPSK	Inner_1RB _Left	36@18	1880.0	376000



Power Level B2/C2							
NR n2						Tune up: 20.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1907.5	381500	18.76
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1880.0	376000	18.77
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1852.5	370500	18.74
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1900.0	380000	18.78
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1880.0	376000	18.81
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1860.0	372000	18.75
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	1880.0	376000	18.76
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	1880.0	376000	18.75
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	1880.0	376000	18.79
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	1880.0	376000	18.80
15	20	CP-OFDM QPSK	Inner_Full	53@26	1880.0	376000	18.77
15	20	CP-OFDM 16QAM	Inner_Full	53@26	1880.0	376000	18.73
15	20	CP-OFDM 64QAM	Inner_Full	53@26	1880.0	376000	18.73
15	20	CP-OFDM 256QAM	Inner_Full	53@26	1880.0	376000	16.74
15	20	DFT-s-OFDM QPSK	Edge_Full _Right	2@104	1880.0	376000	18.68
15	20	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	1880.0	376000	18.67
15	20	DFT-s-OFDM QPSK	Inner_1RB _Right	1@104	1880.0	376000	18.62
15	20	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	1880.0	376000	18.61
15	20	DFT-s-OFDM QPSK	Outer_Full	100@0	1880.0	376000	18.74
15	10	DFT-s-OFDM QPSK	Inner_1RB _Left	25@12	1880.0	376000	18.58
15	15	DFT-s-OFDM QPSK	Inner_1RB _Left	36@18	1880.0	376000	18.55



Power Level A2/B2/C2							
NR n5						Tune up: 25.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	846.5	169300	23.74
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	836.5	167300	23.78
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	826.5	165300	23.75
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	839.0	167800	23.77
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	836.5	167300	23.82
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	834.0	166800	23.74
15	20	DFT-s-OFDM PI/2 BPSK	Inner_Full	50@25	836.5	167300	23.77
15	20	DFT-s-OFDM 16QAM	Inner_Full	50@25	836.5	167300	22.71
15	20	DFT-s-OFDM 64QAM	Inner_Full	50@25	836.5	167300	21.16
15	20	DFT-s-OFDM 256QAM	Inner_Full	50@25	836.5	167300	19.17
15	20	CP-OFDM QPSK	Inner_Full	53@26	836.5	167300	22.14
15	20	CP-OFDM 16QAM	Inner_Full	53@26	836.5	167300	21.64
15	20	CP-OFDM 64QAM	Inner_Full	53@26	836.5	167300	20.04
15	20	CP-OFDM 256QAM	Inner_Full	53@26	836.5	167300	17.23
15	20	DFT-s-OFDM QPSK	Edge_Full _Right	2@23	836.5	167300	22.60
15	20	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	836.5	167300	22.67
15	20	DFT-s-OFDM QPSK	Inner_1RB _Right	1@23	836.5	167300	23.63
15	20	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	836.5	167300	23.64
15	20	DFT-s-OFDM QPSK	Outer_Full	25@0	836.5	167300	22.69
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	836.5	167300	23.52
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	836.5	167300	23.69



Power Level A2							
NR n66						Tune up: 24.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	22.98
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745.0	349000	23.05
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	23.03
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1760.0	352000	23.03
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745.0	349000	23.08
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1730.0	346000	23.04
15	40	DFT-s-OFDM PI/2 BPSK	Inner_Full	108@54	1745.0	349000	23.07
15	40	DFT-s-OFDM 16QAM	Inner_Full	108@54	1745.0	349000	22.03
15	40	DFT-s-OFDM 64QAM	Inner_Full	108@54	1745.0	349000	20.70
15	40	DFT-s-OFDM 256QAM	Inner_Full	108@54	1745.0	349000	18.71
15	40	CP-OFDM QPSK	Inner_Full	108@54	1745.0	349000	21.50
15	40	CP-OFDM 16QAM	Inner_Full	108@54	1745.0	349000	21.06
15	40	CP-OFDM 64QAM	Inner_Full	108@54	1745.0	349000	19.67
15	40	CP-OFDM 256QAM	Inner_Full	108@54	1745.0	349000	16.53
15	40	DFT-s-OFDM QPSK	Edge_Full_Right	2@214	1745.0	349000	21.97
15	40	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745.0	349000	21.94
15	40	DFT-s-OFDM QPSK	Inner_1RB_Right	1@214	1745.0	349000	22.90
15	40	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745.0	349000	22.97
15	40	DFT-s-OFDM QPSK	Outer_Full	216@0	1745.0	349000	22.02
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745.0	349000	22.86
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745.0	349000	23.02
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745.0	349000	23.01
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745.0	349000	22.97



Power Level B2							
NR n66						Tune up: 18.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	17.01
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745.0	349000	17.10
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	17.02
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1760.0	352000	17.09
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745.0	349000	17.11
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1730.0	346000	17.07
15	40	DFT-s-OFDM PI/2 BPSK	Inner_Full	108@54	1745.0	349000	17.05
15	40	DFT-s-OFDM 16QAM	Inner_Full	108@54	1745.0	349000	17.04
15	40	DFT-s-OFDM 64QAM	Inner_Full	108@54	1745.0	349000	17.03
15	40	DFT-s-OFDM 256QAM	Inner_Full	108@54	1745.0	349000	17.00
15	40	CP-OFDM QPSK	Inner_Full	108@54	1745.0	349000	17.00
15	40	CP-OFDM 16QAM	Inner_Full	108@54	1745.0	349000	16.97
15	40	CP-OFDM 64QAM	Inner_Full	108@54	1745.0	349000	17.01
15	40	CP-OFDM 256QAM	Inner_Full	108@54	1745.0	349000	16.51
15	40	DFT-s-OFDM QPSK	Edge_Full_Right	2@214	1745.0	349000	16.47
15	40	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	1745.0	349000	16.46
15	40	DFT-s-OFDM QPSK	Inner_1RB_Right	1@214	1745.0	349000	16.42
15	40	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	1745.0	349000	16.46
15	40	DFT-s-OFDM QPSK	Outer_Full	216@0	1745.0	349000	16.94
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745.0	349000	16.89
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745.0	349000	17.05
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745.0	349000	17.04
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745.0	349000	17.00



Power Level C2							
NR n66						Tune up: 20.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1777.5	355500	18.51
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1745.0	349000	18.60
15	5	DFT-s-OFDM QPSK	Inner_Full	12@6	1712.5	342500	18.56
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1760.0	352000	18.55
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1745.0	349000	18.62
15	40	DFT-s-OFDM QPSK	Inner_Full	108@54	1730.0	346000	18.56
15	40	DFT-s-OFDM PI/2 BPSK	Inner_Full	108@54	1745.0	349000	18.52
15	40	DFT-s-OFDM 16QAM	Inner_Full	108@54	1745.0	349000	18.56
15	40	DFT-s-OFDM 64QAM	Inner_Full	108@54	1745.0	349000	18.56
15	40	DFT-s-OFDM 256QAM	Inner_Full	108@54	1745.0	349000	18.52
15	40	CP-OFDM QPSK	Inner_Full	108@54	1745.0	349000	18.51
15	40	CP-OFDM 16QAM	Inner_Full	108@54	1745.0	349000	18.52
15	40	CP-OFDM 64QAM	Inner_Full	108@54	1745.0	349000	18.52
15	40	CP-OFDM 256QAM	Inner_Full	108@54	1745.0	349000	16.51
15	40	DFT-s-OFDM QPSK	Edge_Full _Right	2@214	1745.0	349000	17.98
15	40	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	1745.0	349000	18.02
15	40	DFT-s-OFDM QPSK	Inner_1RB _Right	1@214	1745.0	349000	17.89
15	40	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	1745.0	349000	17.95
15	40	DFT-s-OFDM QPSK	Outer_Full	216@0	1745.0	349000	18.48
15	10	DFT-s-OFDM QPSK	Inner_Full	25@12	1745.0	349000	18.39
15	15	DFT-s-OFDM QPSK	Inner_Full	36@18	1745.0	349000	18.54
15	20	DFT-s-OFDM QPSK	Inner_Full	50@25	1745.0	349000	18.54
15	30	DFT-s-OFDM QPSK	Inner_Full	80@40	1745.0	349000	18.49



Ant.6 - Power Level A2							
NR n77 PC2 Part 27Q						Tune up: 16.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	14.94
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	14.91
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	14.94
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	15.11
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	14.97
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	14.95
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	14.99
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	14.93
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	14.90
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	14.92
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	14.59
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	14.94
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	14.65
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	14.76
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	14.88
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	14.85
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	14.96
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	14.86
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	14.85
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	14.88
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	14.98
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	14.86



Ant.6 - Power Level B2							
NR n77 PC2 Part 27Q						Tune up: 19.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	18.51
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	18.54
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	18.48
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	18.56
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	18.53
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	18.51
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	18.55
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	18.52
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	18.55
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	18.50
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	18.19
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	18.51
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	18.26
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	18.37
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	18.45
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	18.42
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	18.42
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	18.43
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	18.46
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	18.49
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	18.55
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	18.43



Ant.6 - Power Level C2							
NR n77 PC2 Part 27Q						Tune up: 21.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	19.94
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	19.99
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	19.89
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	20.03
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	19.99
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	19.93
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	19.97
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	19.95
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	19.98
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	19.97
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	19.99
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	19.48
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	19.23
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	19.34
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	19.42
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	19.39
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	19.95
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	19.90
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	19.93
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	19.86
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	19.92
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	19.86



Ant.4 - Power Level A2							
NR n77 PC2 Part 27Q						Tune up: 23.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	22.38
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	22.51
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	22.43
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	22.54
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	22.45
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	22.46
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	22.48
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	21.74
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	22.46
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	22.48
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	22.06
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	19.93
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	22.44
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	22.28
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	22.42
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	21.85
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	22.46
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	22.42
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	22.45
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	22.47
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	22.45
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	22.44



Ant.4 - Power Level B2							
NR n77 PC2 Part 27Q						Tune up: 22.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	21.28
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	21.48
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	21.38
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	21.52
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	21.45
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	21.46
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	21.51
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	21.49
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	21.46
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	21.47
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	21.21
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	19.96
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	21.41
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	21.04
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	21.38
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	21.08
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	21.40
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	21.36
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	21.42
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	21.40
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	21.43
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	21.41



Ant.4 - Power Level C2							
NR n77 PC2 Part 27Q						Tune up: 24.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	23.48
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	23.53
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	23.47
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	23.55
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	23.45
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	23.46
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	23.45
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	21.98
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	23.45
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	23.49
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	22.90
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	19.89
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	23.47
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	23.52
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	23.46
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	22.62
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	23.51
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	23.48
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	23.47
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	23.54
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	23.47
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	23.46



Ant.3 - Power Level A2							
NR n77 PC2 Part 27Q						Tune up: 27.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	25.05
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	25.05
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	25.01
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	25.26
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	25.14
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	24.01
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	24.55
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	22.57
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	25.06
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	25.14
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	23.53
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	20.54
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	24.77
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	24.77
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	24.87
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	24.88
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	24.87
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	24.65
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	24.68
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	24.65
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	24.93
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	24.75



Ant.3 - Power Level B2							
NR n77 PC2 Part 27Q						Tune up: 23.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	22.02
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	22.07
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	22.13
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	22.27
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	22.20
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	22.22
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	22.24
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	21.62
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	22.25
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	22.24
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	22.23
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	21.71
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	21.92
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	21.94
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	22.03
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	21.86
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	22.03
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	21.94
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	21.89
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	22.03
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	21.92
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	21.98



Ant.3 - Power Level C2							
NR n77 PC2 Part 27Q						Tune up: 25.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	24.25
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	24.25
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	24.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	24.35
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	24.34
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	23.21
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	23.75
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	21.77
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	24.26
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	24.34
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	22.73
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	19.74
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	23.97
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	23.97
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	24.07
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	24.08
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	24.07
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	23.85
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	23.88
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	23.85
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	24.13
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	23.95



Ant.2 - Power Level A2/B2							
NR n77 PC2 Part 27Q						Tune up: 21.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	20.53
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	20.64
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	20.61
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	20.78
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	20.77
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	20.67
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	20.77
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	20.74
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	20.74
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	20.73
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	20.73
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	20.25
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	20.35
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	19.93
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	20.32
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	19.92
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	20.64
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	20.72
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	20.62
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	20.72
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	20.72
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	20.75



Ant.2 - Power Level C2							
NR n77 PC2 Part 27Q						Tune up: 24.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3540.00	636000	23.53
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3500.01	633334	23.65
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3460.02	630668	23.68
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3500.01	633334	23.74
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3500.01	633334	23.57
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3500.01	633334	23.67
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3500.01	633334	23.71
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3500.01	633334	22.03
30	100	CP-OFDM QPSK	Inner_Full	137@68	3500.01	633334	23.71
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3500.01	633334	23.61
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3500.01	633334	23.22
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3500.01	633334	20.24
30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	3500.01	633334	23.35
30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	3500.01	633334	22.83
30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	3500.01	633334	23.23
30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	3500.01	633334	22.80
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3500.01	633334	23.56
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3500.01	633334	23.61
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3500.01	633334	23.66
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3500.01	633334	23.62
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3500.01	633334	23.63
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3500.01	633334	23.66



Ant.6 - Power Level A2						
NR n77 PC2 Part 27O					Tune up: 15.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000



Ant.6 - Power Level B2							
NR n77 PC2 Part 27O						Tune up: 19.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	18.48
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	18.55
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	18.47
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	18.62
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	18.63
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	18.59
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	18.51
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	18.53
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	18.46
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	18.56
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	18.45
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	18.54
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	18.43
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	18.46
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	18.00
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	17.66
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	18.06
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	17.69
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	18.33
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	18.32
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	18.37
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	18.37
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	18.35
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	18.42



Ant.6 - Power Level C2							
NR n77 PC2 Part 27O						Tune up: 20.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	19.95
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	19.91
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	19.93
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	20.08
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	20.11
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	20.04
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	19.92
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	19.89
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	19.87
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	19.92
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	19.83
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	19.89
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	19.84
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	19.82
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	19.41
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	19.02
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	19.39
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	18.99
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	19.74
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	19.68
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	19.75
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	19.72
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	19.76
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	19.80



Ant.4 - Power Level A2/B2/C2							
NR n77 PC2 Part 27O						Tune up: 24.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	23.17
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	23.24
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	23.15
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	23.54
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	23.58
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	23.49
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	23.39
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	23.45
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	23.41
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	22.05
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	23.49
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	23.35
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	21.02
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	18.95
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	22.02
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	23.42
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	23.41
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	23.36
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	23.24
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	23.53
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	23.54
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	23.46
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	23.53
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	23.55



Ant.3 - Power Level A2							
NR n77 PC2 Part 27O						Tune up: 26.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	24.70
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	24.80
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	24.74
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	24.93
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	24.99
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	24.94
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	24.91
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	24.65
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	23.19
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	21.18
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	24.15
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	23.70
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	22.17
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	19.24
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	23.87
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	24.02
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	24.90
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	24.73
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	24.50
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	24.81
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	24.83
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	24.91
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	24.88
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	24.91



Ant.3 - Power Level B2							
NR n77 PC2 Part 27O						Tune up: 21.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	20.22
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	20.09
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	20.24
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	20.21
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	20.54
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	20.40
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	20.29
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	20.37
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	20.38
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	20.30
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	20.03
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	19.87
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	20.07
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	18.88
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	20.04
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	19.91
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	19.87
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	19.95
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	19.97
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	20.26
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	20.11
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	20.21
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	20.18
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	20.06



Ant.3 - Power Level C2						
NR n77 PC2 Part 27O					Tune up: 23.5	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000
						22.38



Ant.2 - Power Level A2							
NR n77 PC2 Part 27O						Tune up: 20.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	18.75
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	18.62
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	18.63
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	18.69
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	18.89
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	18.74
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	18.74
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	18.75
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	18.65
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	18.86
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	18.79
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	18.62
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	18.61
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	18.82
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	18.04
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	18.14
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	18.04
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	18.13
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	18.75
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	18.72
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	18.60
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	18.70
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	18.64
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	18.69



Ant.2 - Power Level B2							
NR n77 PC2 Part 27O						Tune up: 18.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel	Conducted Power (dBm)
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668	16.93
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000	16.80
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334	16.81
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000	16.87
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000	17.07
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000	16.92
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000	16.82
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000	16.83
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000	16.73
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000	16.94
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000	16.87
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000	16.70
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000	16.80
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000	16.90
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000	16.72
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000	16.82
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000	16.72
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000	16.81
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000	16.83
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000	16.80
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000	16.68
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000	16.78
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000	16.72
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000	16.77



Ant.2 - Power Level C2						
NR n77 PC2 Part 27O					Tune up: 21.0	
SCS (kHz)	BW (MHz)	Modulation	RB allocation		Frequency (MHz)	Channel
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3970.02	664668
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3840.00	656000
30	20	DFT-s-OFDM QPSK	Inner_Full	25@12	3710.01	647334
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3930.00	662000
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_Full	135@67	3750.00	650000
30	100	DFT-s-OFDM PI/2 BPSK	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 16QAM	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 64QAM	Inner_Full	135@67	3840.00	656000
30	100	DFT-s-OFDM 256QAM	Inner_Full	135@67	3840.00	656000
30	100	CP-OFDM QPSK	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 16QAM	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 64QAM	Inner_Full	137@68	3840.00	656000
30	100	CP-OFDM 256QAM	Inner_Full	137@68	3840.00	656000
30	100	DFT-s-OFDM QPSK	Edge_Full _Right	2@271	3840.00	656000
30	100	DFT-s-OFDM QPSK	Edge_Full _Left	2@0	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_1RB _Right	1@271	3840.00	656000
30	100	DFT-s-OFDM QPSK	Inner_1RB _Left	1@1	3840.00	656000
30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	3840.00	656000
30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	3840.00	656000
30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	3840.00	656000
30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	3840.00	656000
30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	3840.00	656000
30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	3840.00	656000
						19.83

10.4. Bluetooth and WLAN Measurement result

Table 10.5: The conducted Power measurement results for Bluetooth

Averaged Power (dBm)				
Mode	Tune up	Ch.0 (2402MHz)	Ch.39 (2441MHz)	Ch.78 (2480MHz)
GFSK	12.0	10.94	10.67	9.21
EDR2M-4_DQPSK	11.0	9.97	9.72	8.98
EDR3M-8DPSK	11.0	9.80	9.57	8.83
/	/	Ch.0 (2402MHz)	Ch.19 (2440MHz)	Ch.39 (2480MHz)
BLE(1M)	-1.0	-2.48	-1.90	-3.40
BLE(2M)	-1.0	-2.68	-2.08	-3.53

Table 10.6: The conducted Power measurement results for WLAN 2.4GHz

Power Level D1				
Averaged Power (dBm)			Duty Cycle: 100%	
Mode	Tune up	Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	18.0	17.81	17.40	17.28
802.11g	18.0	17.74	17.42	17.29
802.11n(20MHz)	18.0	17.68	17.38	17.24
Power Level E1/F1/E2/F2				
Averaged Power (dBm)			Duty Cycle: 100%	
Mode	Tune up	Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	20.0	19.75	19.34	19.22
802.11g	18.5	18.18	17.86	17.73
802.11n(20MHz)	18.5	18.12	17.82	17.68
Power Level D2				
Averaged Power (dBm)			Duty Cycle: 100%	
Mode	Tune up	Ch.1 (2412MHz)	Ch.6 (2437MHz)	Ch.11 (2462MHz)
802.11b	12.0	11.82	11.41	11.29
802.11g	12.0	11.78	11.46	11.33
802.11n(20MHz)	12.0	11.72	11.42	11.28



Table 10.7: The conducted Power measurement results for WLAN 5GHz

Power Level D1/E1/F1								
Averaged Power (dBm) Duty Cycle: 100%								
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0
<U-NII-1>								
Tune up	18.5	18.5	17.0	/	18.0	17.0	/	17.0
36(5180MHz)	18.13	18.06	16.61	38(5190MHz)	17.65	16.78	42(5210MHz)	16.27
40(5200MHz)	18.17	18.09	16.66	46(5230MHz)	17.67	16.81	/	/
44(5220MHz)	18.14	18.07	16.64	/	/	/	/	/
48(5240MHz)	18.12	18.03	16.62	/	/	/	/	/
<U-NII-2A>								
Tune up	18.5	18.5	17.0	/	18.0	17.0	/	17.0
52(5260MHz)	18.08	18.02	16.61	54(5270MHz)	17.62	16.76	58(5290MHz)	16.25
56(5280MHz)	18.11	18.03	16.65	62(5310MHz)	17.63	16.77	/	/
60(5300MHz)	18.14	18.06	16.62	/	/	/	/	/
64(5320MHz)	18.07	17.95	16.58	/	/	/	/	/
<U-NII-2C>								
Tune up	18.5	18.5	17.0	/	18.0	17.0	/	17.0
100(5500MHz)	18.04	17.97	16.47	102(5510MHz)	16.41	16.57	106(5530MHz)	16.03
116(5580MHz)	18.06	17.96	16.49	110(5550MHz)	17.54	16.66	122(5610MHz)	16.15
124(5620MHz)	18.18	18.04	16.55	126(5630MHz)	17.68	16.72	138(5690MHz)	16.13
132(5660MHz)	18.23	18.14	16.67	134(5670MHz)	17.83	16.64	/	/
140(5700MHz)	13.63	13.52	16.77	142(5710MHz)	17.91	16.55	/	/
144(5720MHz)	18.39	18.26	16.75	/	/	/	/	/
<U-NII-3>								
Tune up	18.5	18.5	17.0	/	18.0	17.0	/	17.0
149(5745MHz)	18.03	17.91	16.38	151(5755MHz)	17.60	16.17	155(5775MHz)	16.07
157(5785MHz)	18.07	17.97	16.45	159(5795MHz)	17.65	16.21	/	/
165(5825MHz)	18.11	18.02	16.51	/	/	/	/	/



Power Level D2									
Averaged Power (dBm) Duty Cycle: 100%									
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz	
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0	
<U-NII-1>									
Tune up	15.5	15.5	15.5	/	15.4	15.4	/	15.4	
36(5180MHz)	15.06	14.99	14.94	38(5190MHz)	14.58	15.11	42(5210MHz)	14.81	
40(5200MHz)	15.10	15.02	14.99	46(5230MHz)	14.60	15.14	/	/	
44(5220MHz)	15.07	15.00	14.97	/	/	/	/	/	
48(5240MHz)	15.05	14.96	14.95	/	/	/	/	/	
<U-NII-2A>									
Tune up	15.5	15.5	15.5	/	15.4	15.4	/	15.4	
52(5260MHz)	15.01	14.95	14.94	54(5270MHz)	14.55	15.09	58(5290MHz)	14.79	
56(5280MHz)	15.04	14.96	14.98	62(5310MHz)	14.56	15.10	/	/	
60(5300MHz)	15.07	14.99	14.95	/	/	/	/	/	
64(5320MHz)	15.00	14.88	14.91	/	/	/	/	/	
<U-NII-2C>									
Tune up	15.5	15.5	15.5	/	15.4	15.4	/	15.4	
100(5500MHz)	14.97	14.90	14.80	102(5510MHz)	14.44	14.90	106(5530MHz)	14.57	
116(5580MHz)	14.99	14.89	14.82	110(5550MHz)	14.47	14.99	122(5610MHz)	14.69	
124(5620MHz)	15.11	14.97	14.88	126(5630MHz)	14.61	15.05	138(5690MHz)	14.67	
132(5660MHz)	15.16	15.07	15.00	134(5670MHz)	14.76	14.97	/	/	
140(5700MHz)	13.63	13.52	15.10	142(5710MHz)	14.84	14.88	/	/	
144(5720MHz)	15.32	15.19	15.08	/	/	/	/	/	
<U-NII-3>									
Tune up	15.5	15.5	15.5	/	15.4	15.4	/	15.4	
149(5745MHz)	14.96	14.84	14.71	151(5755MHz)	14.53	14.50	155(5775MHz)	14.61	
157(5785MHz)	15.00	14.90	14.78	159(5795MHz)	14.58	14.54	/	/	
165(5825MHz)	15.04	14.95	14.84	/	/	/	/	/	



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Power Level E2								
Averaged Power (dBm) Duty Cycle: 100%								
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0
<U-NII-1>								
Tune up	13.0	13.0	13.0	/	12.9	12.9	/	12.9
36(5180MHz)	12.39	12.32	12.32	38(5190MHz)	11.91	12.49	42(5210MHz)	12.16
40(5200MHz)	12.43	12.35	12.37	46(5230MHz)	11.93	12.52	/	/
44(5220MHz)	12.40	12.33	12.35	/	/	/	/	/
48(5240MHz)	12.38	12.29	12.33	/	/	/	/	/
<U-NII-3>								
Tune up	14.5	14.5	14.5	/	14.4	14.4	/	14.4
149(5745MHz)	13.91	13.79	13.72	151(5755MHz)	13.48	13.51	155(5775MHz)	13.57
157(5785MHz)	13.95	13.85	13.79	159(5795MHz)	13.53	13.55	/	/
165(5825MHz)	13.99	13.90	13.85	/	/	/	/	/



Power Level F2									
Averaged Power (dBm) Duty Cycle: 100%									
Mode	802.11a	802.11n -20MHz	802.11ac -20MHz	Mode	802.11n -40MHz	802.11ac -40MHz	Mode	802.11ac -80MHz	
Channel	6Mbps	MCS0	MCS0	Channel	MCS0	MCS0	Channel	MCS0	
<U-NII-1>									
Tune up	16.5	16.5	16.5	/	16.4	16.4	/	16.4	
36(5180MHz)	16.01	15.94	15.95	38(5190MHz)	15.53	16.12	42(5210MHz)	15.77	
40(5200MHz)	16.05	15.97	16.00	46(5230MHz)	15.55	16.15	/	/	
44(5220MHz)	16.02	15.95	15.98	/	/	/	/	/	
48(5240MHz)	16.00	15.91	15.96	/	/	/	/	/	
<U-NII-2A>									
Tune up	16.5	16.5	16.5	/	16.4	16.4	/	16.4	
52(5260MHz)	15.96	15.90	15.95	54(5270MHz)	15.50	16.10	58(5290MHz)	15.75	
56(5280MHz)	15.99	15.91	15.99	62(5310MHz)	15.51	16.11	/	/	
60(5300MHz)	16.02	15.94	15.96	/	/	/	/	/	
64(5320MHz)	15.95	15.83	15.92	/	/	/	/	/	
<U-NII-2C>									
Tune up	16.5	16.5	16.5	/	16.4	16.4	/	16.4	
100(5500MHz)	15.92	15.85	15.81	102(5510MHz)	15.39	15.91	106(5530MHz)	15.53	
116(5580MHz)	15.94	15.84	15.83	110(5550MHz)	15.42	16.00	122(5610MHz)	15.65	
124(5620MHz)	16.06	15.92	15.89	126(5630MHz)	15.56	16.06	138(5690MHz)	15.63	
132(5660MHz)	16.11	16.02	16.01	134(5670MHz)	15.71	15.98	/	/	
140(5700MHz)	13.63	13.52	16.11	142(5710MHz)	15.79	15.89	/	/	
144(5720MHz)	16.27	16.14	16.09	/	/	/	/	/	
<U-NII-3>									
Tune up	16.5	16.5	16.5	/	16.4	16.4	/	16.4	
149(5745MHz)	15.91	15.79	15.72	151(5755MHz)	15.48	15.51	155(5775MHz)	15.57	
157(5785MHz)	15.95	15.85	15.79	159(5795MHz)	15.53	15.55	/	/	
165(5825MHz)	15.99	15.90	15.85	/	/	/	/	/	

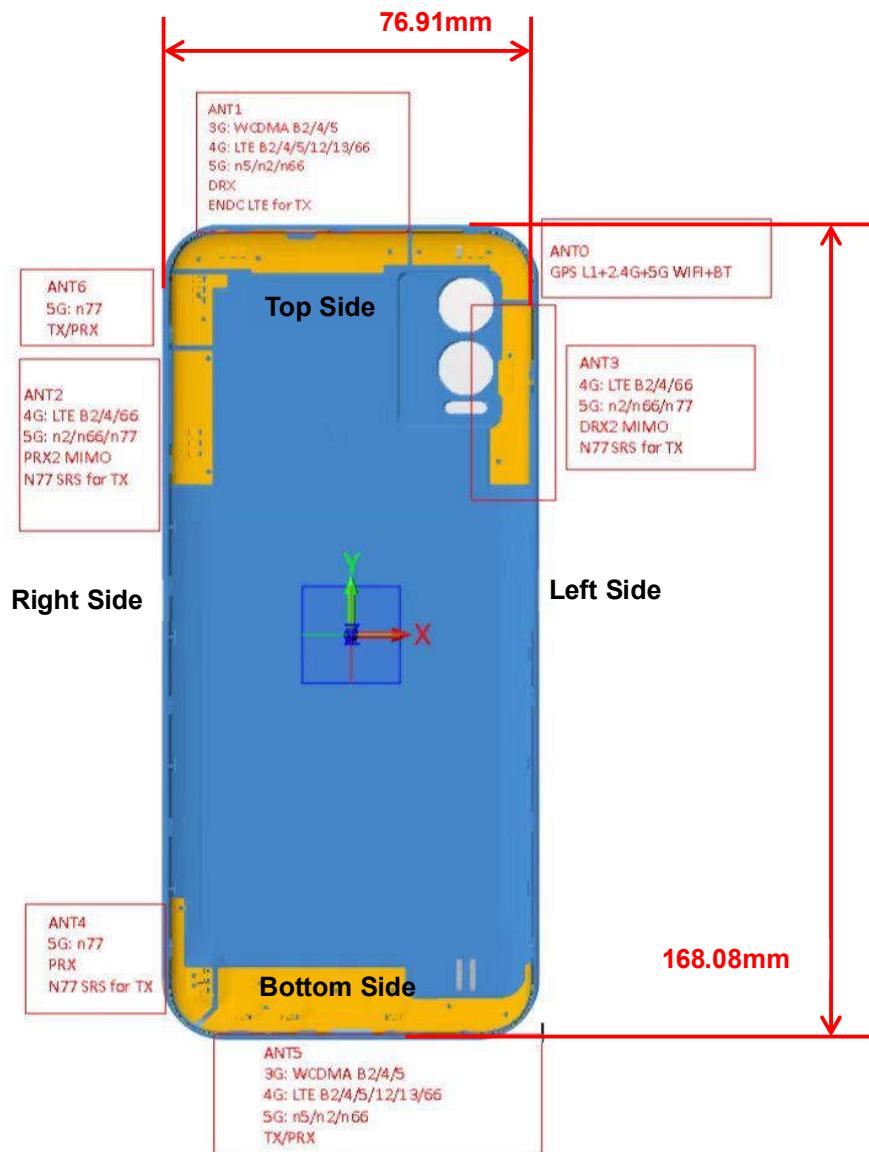
11. Simultaneous TX SAR Considerations

11.1. 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 Bluetooth and WLAN can transmit simultaneous with other transmitters.

11.2. Transmit Antenna Separation Distances



Picture 11.1 Antenna Locations (Back View)

**Note:**

Antenna	Frequency Bands
Ant.0	GPS L1/Bluetooth/WLAN 2.4GHz/WLAN 5GHz TX
Ant.1	UL CA & ENDC: LTE Band 2/4/5/13/66 TX
Ant.2	SRS: NR n77 TX
Ant.3	SRS: NR n77 TX
Ant.4	SRS: NR n77 TX
Ant.5	WCDMA Band 2/4/5/12/13/66 TX, NR n2/n5/n66 TX
Ant.6	NR n77 TX

UL CA list:

Band	LTE TX Band	LTE TX Ant.	LTE TX Band	LTE TX Ant.
CA_4A-13A	Band 4	Ant.1	Band 13	Ant.5
CA_2A-13A	Band 2	Ant.1	Band 13	Ant.5
CA_13A-66A	Band 13	Ant.1	Band 66	Ant.5
CA_2A-5A	Band 2	Ant.1	Band 5	Ant.5
CA_5A-66A	Band 5	Ant.1	Band 66	Ant.5
CA_5B	Band 5	Ant.5	Band 5	Ant.5
CA_66B	Band 66	Ant.5	Band 66	Ant.5
CA_66C	Band 66	Ant.5	Band 66	Ant.5

**ENDC UL Bands list:**

Band	LTE TX Band	LTE TX Ant.	NR TX Band	NR TX Ant.
DC_13A_n2A	Band 13	Ant.1	n2	Ant.5
DC_2A_n2A	Band 2	Ant.1	n2	Ant.5
DC_5A_n2A	Band 5	Ant.1	n2	Ant.5
DC_66A_n2A	Band 66	Ant.1	n2	Ant.5
DC_2A_n5A	Band 2	Ant.1	n5	Ant.5
DC_66A_n5A	Band 66	Ant.1	n5	Ant.5
DC_13A_n66A	Band 13	Ant.1	n66	Ant.5
DC_2A_n66A	Band 2	Ant.1	n66	Ant.5
DC_5A_n66A	Band 5	Ant.1	n66	Ant.5
DC_66A_n66A	Band 66	Ant.1	n66	Ant.5
DC_2A_n77A	Band 2	Ant.1	n77	Ant.6
DC_5A_n77A	Band 5	Ant.1	n77	Ant.6
DC_66A_n77A	Band 66	Ant.1	n77	Ant.6
DC_13A_n77A	Band 13	Ant.1	n77	Ant.6
DC_2A_n77A	Band 2	Ant.1	n77	Ant.2
DC_5A_n77A	Band 5	Ant.1	n77	Ant.2
DC_66A_n77A	Band 66	Ant.1	n77	Ant.2
DC_13A_n77A	Band 13	Ant.1	n77	Ant.2
DC_2A_n77A	Band 2	Ant.1	n77	Ant.3
DC_5A_n77A	Band 5	Ant.1	n77	Ant.3
DC_66A_n77A	Band 66	Ant.1	n77	Ant.3
DC_13A_n77A	Band 13	Ant.1	n77	Ant.3
DC_2A_n77A	Band 2	Ant.1	n77	Ant.4
DC_5A_n77A	Band 5	Ant.1	n77	Ant.4
DC_66A_n77A	Band 66	Ant.1	n77	Ant.4
DC_13A_n77A	Band 13	Ant.1	n77	Ant.4



11.3. SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 25mm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Antenna	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
Ant.0	Yes	Yes	Yes	Yes	Yes	No
Ant.1	Yes	Yes	Yes	Yes	Yes	No
Ant.2	Yes	Yes	Yes	Yes	Yes	No
Ant.3	Yes	Yes	Yes	Yes	Yes	No
Ant.4	Yes	Yes	Yes	Yes	No	Yes
Ant.5	Yes	Yes	Yes	Yes	No	Yes
Ant.6	Yes	Yes	Yes	Yes	No	Yes

12. Evaluation of Simultaneous

No.	Simultaneous Transmission Configuration	Head	Body-worn	Hotspot	Extremity
1	UMTS Voice + Bluetooth + WLAN 5GHz	Yes	Yes	N/A	Yes
2	UMTS Data + Bluetooth + WLAN 5GHz	Yes	Yes	Yes	Yes
3	UMTS Voice + WLAN 2.4GHz	Yes	Yes	N/A	Yes
4	UMTS Data + WLAN 2.4GHz	Yes	Yes	Yes	Yes
5	LTE + Bluetooth + WLAN 5GHz	Yes	Yes	Yes	Yes
6	LTE + WLAN 2.4GHz	Yes	Yes	Yes	Yes
7	ENDC + Bluetooth + WLAN 5GHz	Yes	Yes	Yes	Yes
8	ENDC + WLAN 2.4GHz	Yes	Yes	Yes	Yes
9	CA+ Bluetooth + WLAN 5GHz	Yes	Yes	Yes	Yes
10	CA + WLAN 2.4GHz	Yes	Yes	Yes	Yes

General note: Per TCB workshop April 2022: RF Exposure Procedures page13, we use the sum SAR value of WLAN 5GHz and Bluetooth for SPLSR calculation.

Table 12.1: The sum of SAR values for UL CA

Mode	Position	CA_2A-13A		
		LTE Band 2 - Ant.1 (W/kg)	LTE Band 13 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.26	0.57
	Left Tilt	0.37	0.12	0.49
	Right Cheek	0.68	0.32	1.00
	Right Tilt	0.70	0.14	0.84
Hotspot	Front	0.47	0.24	0.71
	Rear	0.60	0.36	0.96
	Left	0.09	0.17	0.26
	Right	0.05	0.26	0.31
	Top	0.74	0.00	0.74
	Bottom	0.00	0.02	0.02
Body-worn	Front	0.32	0.24	0.56
	Rear	0.41	0.36	0.77
Mode	Position	CA_2A-5A		
		LTE Band 2 - Ant.1 (W/kg)	LTE Band 5 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.38	0.69
	Left Tilt	0.37	0.19	0.56
	Right Cheek	0.68	0.42	1.10
	Right Tilt	0.70	0.21	0.91
Hotspot	Front	0.47	0.31	0.78
	Rear	0.60	0.42	1.02
	Left	0.09	0.25	0.34
	Right	0.05	0.36	0.41
	Top	0.74	0.00	0.74
	Bottom	0.00	0.06	0.06
Body-worn	Front	0.32	0.31	0.63
	Rear	0.41	0.42	0.83

**UL CA**

Mode	Position	CA_4A-13A		
		LTE Band 4 - Ant.1 (W/kg)	LTE Band 13 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.39	0.26	0.65
	Left Tilt	0.44	0.12	0.56
	Right Cheek	0.63	0.32	0.95
	Right Tilt	0.68	0.14	0.82
Hotspot	Front	0.56	0.24	0.80
	Rear	0.57	0.36	0.93
	Left	0.11	0.17	0.28
	Right	0.06	0.26	0.32
	Top	0.73	0.00	0.73
	Bottom	0.00	0.02	0.02
Body-worn	Front	0.49	0.24	0.73
	Rear	0.46	0.36	0.82
Mode	Position	CA_5A-66A		
		LTE Band 5 - Ant.1 (W/kg)	LTE Band 66 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.13	0.58
	Left Tilt	0.39	0.10	0.49
	Right Cheek	0.59	0.20	0.79
	Right Tilt	0.48	0.07	0.55
Hotspot	Front	0.16	0.61	0.77
	Rear	0.17	0.66	0.83
	Left	0.07	0.05	0.12
	Right	0.01	0.12	0.13
	Top	0.02	0.00	0.02
	Bottom	0.00	0.79	0.79
Body-worn	Front	0.16	0.53	0.69
	Rear	0.17	0.66	0.83



No.I22N01500-SAR

UL CA

Mode	Position	CA_13A-66A		
		LTE Band 13 - Ant.1 (W/kg)	LTE Band 66 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.13	0.55
	Left Tilt	0.37	0.10	0.47
	Right Cheek	0.52	0.20	0.72
	Right Tilt	0.41	0.07	0.48
Hotspot	Front	0.51	0.61	1.12
	Rear	0.54	0.66	1.20
	Left	0.33	0.05	0.38
	Right	0.26	0.12	0.38
	Top	0.48	0.00	0.48
	Bottom	0.00	0.79	0.79
Body-worn	Front	0.31	0.53	0.84
	Rear	0.32	0.66	0.98

Table 12.2: The sum of SAR values for ENDC

Mode	Position	DC_13A_n2A		
		LTE Band 13 - Ant.1 (W/kg)	NR n2 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.11	0.53
	Left Tilt	0.37	0.10	0.47
	Right Cheek	0.52	0.15	0.67
	Right Tilt	0.41	0.07	0.48
Hotspot	Front	0.51	0.38	0.89
	Rear	0.54	0.42	0.96
	Left	0.33	0.06	0.39
	Right	0.26	0.05	0.31
	Top	0.48	0.00	0.48
	Bottom	0.00	0.72	0.72
Body-worn	Front	0.31	0.38	0.69
	Rear	0.32	0.42	0.74
Mode	Position	DC_2A_n2A		
		LTE Band 2 - Ant.1 (W/kg)	NR n2 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.11	0.42
	Left Tilt	0.37	0.10	0.47
	Right Cheek	0.68	0.15	0.83
	Right Tilt	0.70	0.07	0.77
Hotspot	Front	0.47	0.38	0.85
	Rear	0.60	0.42	1.02
	Left	0.09	0.06	0.15
	Right	0.05	0.05	0.10
	Top	0.74	0.00	0.74
	Bottom	0.00	0.72	0.72
Body-worn	Front	0.32	0.38	0.70
	Rear	0.41	0.42	0.83



ENDC

Mode	Position	DC_5A_n2A		
		LTE Band 5 - Ant.1 (W/kg)	NR n2 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.11	0.56
	Left Tilt	0.39	0.10	0.49
	Right Cheek	0.59	0.15	0.74
	Right Tilt	0.48	0.07	0.55
Hotspot	Front	0.16	0.38	0.54
	Rear	0.17	0.42	0.59
	Left	0.07	0.06	0.13
	Right	0.01	0.05	0.06
	Top	0.02	0.00	0.02
	Bottom	0.00	0.72	0.72
Body-worn	Front	0.16	0.38	0.54
	Rear	0.17	0.42	0.59
Mode	Position	DC_66A_n2A		
		LTE Band 66 - Ant.1 (W/kg)	NR n2 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.11	0.57
	Left Tilt	0.49	0.10	0.59
	Right Cheek	0.72	0.15	0.87
	Right Tilt	0.78	0.07	0.85
Hotspot	Front	0.50	0.38	0.88
	Rear	0.51	0.42	0.93
	Left	0.11	0.06	0.17
	Right	0.05	0.05	0.10
	Top	0.71	0.00	0.71
	Bottom	0.00	0.72	0.72
Body-worn	Front	0.43	0.38	0.81
	Rear	0.44	0.42	0.86

ENDC

Mode	Position	DC_2A_n5A		
		LTE Band 2 - Ant.1 (W/kg)	NR n5 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.42	0.73
	Left Tilt	0.37	0.21	0.58
	Right Cheek	0.68	0.48	1.16
	Right Tilt	0.70	0.21	0.91
Hotspot	Front	0.47	0.42	0.89
	Rear	0.60	0.57	1.17
	Left	0.09	0.00	0.09
	Right	0.05	0.27	0.32
	Top	0.74	0.00	0.74
	Bottom	0.00	0.11	0.11
Body-worn	Front	0.32	0.41	0.73
	Rear	0.41	0.51	0.92
Mode	Position	DC_66A_n5A		
		LTE Band 66 - Ant.1 (W/kg)	NR n5 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.42	0.88
	Left Tilt	0.49	0.21	0.70
	Right Cheek	0.72	0.48	1.20
	Right Tilt	0.78	0.21	0.99
Hotspot	Front	0.50	0.42	0.92
	Rear	0.51	0.57	1.08
	Left	0.11	0.00	0.11
	Right	0.05	0.27	0.32
	Top	0.71	0.00	0.71
	Bottom	0.00	0.11	0.11
Body-worn	Front	0.43	0.41	0.84
	Rear	0.44	0.51	0.95



ENDC

Mode	Position	DC_13A_n66A		
		LTE Band 13 - Ant.1 (W/kg)	NR n66 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.12	0.54
	Left Tilt	0.37	0.07	0.44
	Right Cheek	0.52	0.19	0.71
	Right Tilt	0.41	0.07	0.48
Hotspot	Front	0.51	0.29	0.80
	Rear	0.54	0.55	1.09
	Left	0.33	0.03	0.36
	Right	0.26	0.04	0.30
	Top	0.48	0.00	0.48
	Bottom	0.00	0.74	0.74
Body-worn	Front	0.31	0.30	0.61
	Rear	0.32	0.40	0.72
Mode	Position	DC_2A_n66A		
		LTE Band 2 - Ant.1 (W/kg)	NR n66 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.12	0.43
	Left Tilt	0.37	0.07	0.44
	Right Cheek	0.68	0.19	0.87
	Right Tilt	0.70	0.07	0.77
Hotspot	Front	0.47	0.29	0.76
	Rear	0.60	0.55	1.15
	Left	0.09	0.03	0.12
	Right	0.05	0.04	0.09
	Top	0.74	0.00	0.74
	Bottom	0.00	0.74	0.74
Body-worn	Front	0.32	0.30	0.62
	Rear	0.41	0.40	0.81



ENDC

Mode	Position	DC_5A_n66A		
		LTE Band 5 - Ant.1 (W/kg)	NR n66 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.12	0.57
	Left Tilt	0.39	0.07	0.46
	Right Cheek	0.59	0.19	0.78
	Right Tilt	0.48	0.07	0.55
Hotspot	Front	0.16	0.29	0.45
	Rear	0.17	0.55	0.72
	Left	0.07	0.03	0.10
	Right	0.01	0.04	0.05
	Top	0.02	0.00	0.02
	Bottom	0.00	0.74	0.74
Body-worn	Front	0.16	0.30	0.46
	Rear	0.17	0.40	0.57
Mode	Position	DC_66A_n66A		
		LTE Band 66 - Ant.1 (W/kg)	NR n66 - Ant.5 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.12	0.58
	Left Tilt	0.49	0.07	0.56
	Right Cheek	0.72	0.19	0.91
	Right Tilt	0.78	0.07	0.85
Hotspot	Front	0.50	0.29	0.79
	Rear	0.51	0.55	1.06
	Left	0.11	0.03	0.14
	Right	0.05	0.04	0.09
	Top	0.71	0.00	0.71
	Bottom	0.00	0.74	0.74
Body-worn	Front	0.43	0.30	0.73
	Rear	0.44	0.40	0.84



ENDC

Mode	Position	DC_2A_n77A		
		LTE Band 2 - Ant.1 (W/kg)	NR n77 - Ant.6 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.27	0.58
	Left Tilt	0.37	0.21	0.58
	Right Cheek	0.68	0.69	1.37
	Right Tilt	0.70	0.43	1.13
Hotspot	Front	0.47	0.30	0.77
	Rear	0.60	0.50	1.10
	Left	0.09	0.36	0.45
	Right	0.05	0.05	0.10
	Top	0.74	0.15	0.89
	Bottom	0.00	0.00	0.00
Body-worn	Front	0.32	0.28	0.60
	Rear	0.41	0.32	0.73
Mode	Position	DC_5A_n77A		
		LTE Band 5 - Ant.1 (W/kg)	NR n77 - Ant.6 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.27	0.72
	Left Tilt	0.39	0.21	0.60
	Right Cheek	0.59	0.69	1.28
	Right Tilt	0.48	0.43	0.91
Hotspot	Front	0.16	0.30	0.46
	Rear	0.17	0.50	0.67
	Left	0.07	0.36	0.43
	Right	0.01	0.05	0.06
	Top	0.02	0.15	0.17
	Bottom	0.00	0.00	0.00
Body-worn	Front	0.16	0.28	0.44
	Rear	0.17	0.32	0.49

ENDC

Mode	Position	DC_66A_n77A		
		LTE Band 66 - Ant.1 (W/kg)	NR n77 - Ant.6 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.27	0.73
	Left Tilt	0.49	0.21	0.70
	Right Cheek	0.72	0.69	1.41
	Right Tilt	0.78	0.43	1.21
Hotspot	Front	0.50	0.30	0.80
	Rear	0.51	0.50	1.01
	Left	0.11	0.36	0.47
	Right	0.05	0.05	0.10
	Top	0.71	0.15	0.86
	Bottom	0.00	0.00	0.00
Body-worn	Front	0.43	0.28	0.71
	Rear	0.44	0.32	0.76
Mode	Position	DC_13A_n77A		
		LTE Band 13 - Ant.1 (W/kg)	NR n77 - Ant.6 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.27	0.69
	Left Tilt	0.37	0.21	0.58
	Right Cheek	0.52	0.69	1.21
	Right Tilt	0.41	0.43	0.84
Hotspot	Front	0.51	0.30	0.81
	Rear	0.54	0.50	1.04
	Left	0.33	0.36	0.69
	Right	0.26	0.05	0.31
	Top	0.48	0.15	0.63
	Bottom	0.00	0.00	0.00
Body-worn	Front	0.31	0.28	0.59
	Rear	0.32	0.32	0.64



ENDC

Mode	Position	DC_2A_n77A		
		LTE Band 2 - Ant.1 (W/kg)	NR n77 - Ant.2 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.34	0.65
	Left Tilt	0.37	0.12	0.49
	Right Cheek	0.68	0.64	1.32
	Right Tilt	0.70	0.18	0.88
Hotspot	Front	0.47	0.15	0.62
	Rear	0.60	0.50	1.10
	Left	0.09	0.44	0.53
	Right	0.05	0.02	0.07
	Top	0.74	0.08	0.82
	Bottom	0.00	0.02	0.02
Body-worn	Front	0.32	0.15	0.47
	Rear	0.41	0.54	0.95
Mode	Position	DC_5A_n77A		
		LTE Band 5 - Ant.1 (W/kg)	NR n77 - Ant.2 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.34	0.79
	Left Tilt	0.39	0.12	0.51
	Right Cheek	0.59	0.64	1.23
	Right Tilt	0.48	0.18	0.66
Hotspot	Front	0.16	0.15	0.31
	Rear	0.17	0.50	0.67
	Left	0.07	0.44	0.51
	Right	0.01	0.02	0.03
	Top	0.02	0.08	0.10
	Bottom	0.00	0.02	0.02
Body-worn	Front	0.16	0.15	0.31
	Rear	0.17	0.54	0.71

ENDC

Mode	Position	DC_66A_n77A		
		LTE Band 66 - Ant.1 (W/kg)	NR n77 - Ant.2 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.34	0.80
	Left Tilt	0.49	0.12	0.61
	Right Cheek	0.72	0.64	1.36
	Right Tilt	0.78	0.18	0.96
Hotspot	Front	0.50	0.15	0.65
	Rear	0.51	0.50	1.01
	Left	0.11	0.44	0.55
	Right	0.05	0.02	0.07
	Top	0.71	0.08	0.79
	Bottom	0.00	0.02	0.02
Body-worn	Front	0.43	0.15	0.58
	Rear	0.44	0.54	0.98
Mode	Position	DC_13A_n77A		
		LTE Band 13 - Ant.1 (W/kg)	NR n77 - Ant.2 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.34	0.76
	Left Tilt	0.37	0.12	0.49
	Right Cheek	0.52	0.64	1.16
	Right Tilt	0.41	0.18	0.59
Hotspot	Front	0.51	0.15	0.66
	Rear	0.54	0.50	1.04
	Left	0.33	0.44	0.77
	Right	0.26	0.02	0.28
	Top	0.48	0.08	0.56
	Bottom	0.00	0.02	0.02
Body-worn	Front	0.31	0.15	0.46
	Rear	0.32	0.54	0.86



ENDC

Mode	Position	DC_2A_n77A		
		LTE Band 2 - Ant.1 (W/kg)	NR n77 - Ant.3 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.33	0.64
	Left Tilt	0.37	0.19	0.56
	Right Cheek	0.68	0.17	0.85
	Right Tilt	0.70	0.11	0.81
Hotspot	Front	0.47	0.11	0.58
	Rear	0.60	0.69	1.29
	Left	0.09	0.03	0.12
	Right	0.05	0.42	0.47
	Top	0.74	0.28	1.02
	Bottom	0.00	0.05	0.05
Body-worn	Front	0.32	0.07	0.39
	Rear	0.41	0.54	0.95
Mode	Position	DC_5A_n77A		
		LTE Band 5 - Ant.1 (W/kg)	NR n77 - Ant.3 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.33	0.78
	Left Tilt	0.39	0.19	0.58
	Right Cheek	0.59	0.17	0.76
	Right Tilt	0.48	0.11	0.59
Hotspot	Front	0.16	0.11	0.27
	Rear	0.17	0.69	0.86
	Left	0.07	0.03	0.10
	Right	0.01	0.42	0.43
	Top	0.02	0.28	0.30
	Bottom	0.00	0.05	0.05
Body-worn	Front	0.16	0.07	0.23
	Rear	0.17	0.54	0.71

ENDC

Mode	Position	DC_66A_n77A		
		LTE Band 66 - Ant.1 (W/kg)	NR n77 - Ant.3 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.33	0.79
	Left Tilt	0.49	0.19	0.68
	Right Cheek	0.72	0.17	0.89
	Right Tilt	0.78	0.11	0.89
Hotspot	Front	0.50	0.11	0.61
	Rear	0.51	0.69	1.20
	Left	0.11	0.03	0.14
	Right	0.05	0.42	0.47
	Top	0.71	0.28	0.99
	Bottom	0.00	0.05	0.05
Body-worn	Front	0.43	0.07	0.50
	Rear	0.44	0.54	0.98
Mode	Position	DC_13A_n77A		
		LTE Band 13 - Ant.1 (W/kg)	NR n77 - Ant.3 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.33	0.75
	Left Tilt	0.37	0.19	0.56
	Right Cheek	0.52	0.17	0.69
	Right Tilt	0.41	0.11	0.52
Hotspot	Front	0.51	0.11	0.62
	Rear	0.54	0.69	1.23
	Left	0.33	0.03	0.36
	Right	0.26	0.42	0.68
	Top	0.48	0.28	0.76
	Bottom	0.00	0.05	0.05
Body-worn	Front	0.31	0.07	0.38
	Rear	0.32	0.54	0.86



ENDC

Mode	Position	DC_2A_n77A		
		LTE Band 2 - Ant.1 (W/kg)	NR n77 - Ant.4 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.31	0.51	0.82
	Left Tilt	0.37	0.27	0.64
	Right Cheek	0.68	0.30	0.98
	Right Tilt	0.70	0.43	1.13
Hotspot	Front	0.47	0.57	1.04
	Rear	0.60	0.67	1.27
	Left	0.09	0.68	0.77
	Right	0.05	0.11	0.16
	Top	0.74	0.09	0.83
	Bottom	0.00	0.46	0.46
Body-worn	Front	0.32	0.40	0.72
	Rear	0.41	0.55	0.96
Mode	Position	DC_5A_n77A		
		LTE Band 5 - Ant.1 (W/kg)	NR n77 - Ant.4 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.45	0.51	0.96
	Left Tilt	0.39	0.27	0.66
	Right Cheek	0.59	0.30	0.89
	Right Tilt	0.48	0.43	0.91
Hotspot	Front	0.16	0.57	0.73
	Rear	0.17	0.67	0.84
	Left	0.07	0.68	0.75
	Right	0.01	0.11	0.12
	Top	0.02	0.09	0.11
	Bottom	0.00	0.46	0.46
Body-worn	Front	0.16	0.40	0.56
	Rear	0.17	0.55	0.72



ENDC

Mode	Position	DC_66A_n77A		
		LTE Band 66 - Ant.1 (W/kg)	NR n77 - Ant.4 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.46	0.51	0.97
	Left Tilt	0.49	0.27	0.76
	Right Cheek	0.72	0.30	1.02
	Right Tilt	0.78	0.43	1.21
Hotspot	Front	0.50	0.57	1.07
	Rear	0.51	0.67	1.18
	Left	0.11	0.68	0.79
	Right	0.05	0.11	0.16
	Top	0.71	0.09	0.80
	Bottom	0.00	0.46	0.46
Body-worn	Front	0.43	0.40	0.83
	Rear	0.44	0.55	0.99
Mode	Position	DC_13A_n77A		
		LTE Band 13 - Ant.1 (W/kg)	NR n77 - Ant.4 (W/kg)	SUM (W/kg)
Head	Left Cheek	0.42	0.51	0.93
	Left Tilt	0.37	0.27	0.64
	Right Cheek	0.52	0.30	0.82
	Right Tilt	0.41	0.43	0.84
Hotspot	Front	0.51	0.57	1.08
	Rear	0.54	0.67	1.21
	Left	0.33	0.68	1.01
	Right	0.26	0.11	0.37
	Top	0.48	0.09	0.57
	Bottom	0.00	0.46	0.46
Body-worn	Front	0.31	0.40	0.71
	Rear	0.32	0.55	0.87



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According to the KDB 447498 D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The ratio is determined by $(\text{SAR1} + \text{SAR2})^{1.5}/R_i$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion. When 10-g SAR applies, the ratio must be ≤ 0.10 .

Table 12.3: The sum of SAR values for LTE UL CA and Bluetooth/WLAN Antenna

LTE UL CA + WLAN 2.4GHz					
Position	LTE UL CA (W/kg)		WLAN 2.4GHz (W/kg)	Sum (W/kg)	SPLSR
Rear (10mm)	CA_13A-66A	1.31	0.30	1.61	Yes
LTE UL CA + WLAN 5GHz + Bluetooth					
Position	LTE UL CA (W/kg)		WLAN 5GHz + Bluetooth (W/kg)	Sum (W/kg)	SPLSR
Rear (10mm)	CA_13A-66A	1.31	0.48	1.79	Yes

SAR to Peak Location Separation Ratio (SPLSR)

Band	Position	1g SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance (mm)	Pair SAR sum (W/kg)	SPLSR	Simultaneous SAR
				X	Y	Z				
				X	Y	Z				
CA_13A-66A + WLAN 2.4GHz										
LTE B13	Rear	0.54	10	-0.049	-0.0665	-0.205	48.1	0.84	0.016	Not required
WLAN 2.4GHz		0.30	10	-0.001	-0.064	-0.205				
LTE B66	Rear	0.77	10	-0.0305	0.084	-0.204	150.9	1.07	0.007	Not required
WLAN 2.4GHz		0.30	10	-0.001	-0.064	-0.205				
CA_2A-66A + WLAN 5GHz + Bluetooth										
LTE B13	Rear	0.54	10	-0.049	-0.0665	-0.205	61.5	1.02	0.016	Not required
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205				
LTE B66	Rear	0.77	10	-0.0305	0.084	-0.204	165.5	1.25	0.008	Not required
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205				



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Table 12.4: The sum of SAR values for ENDC and Bluetooth/WLAN Antenna

The sum of SAR values for ENDC and WLAN 5GHz/Bluetooth								
Position	ENDC (W/kg)			WLAN 5GHz + Bluetooth (W/kg)		Sum (W/kg)	SPLSR	
Rear (10mm)	DC_2A_n5A		1.17		0.48		1.65	Yes
	DC_2A_n66A		1.15		0.48		1.63	Yes
	DC_2A(Ant.1)_n77A(Ant.3)		1.29		0.48		1.77	Yes
	DC_66A(Ant.1)_n77A(Ant.3)		1.20		0.48		1.68	Yes
	DC_13A(Ant.1)_n77A(Ant.3)		1.23		0.48		1.71	Yes
	DC_2A(Ant.1)_n77A(Ant.4)		1.27		0.48		1.75	Yes
	DC_66A(Ant.1)_n77A(Ant.4)		1.18		0.48		1.66	Yes
	DC_13A(Ant.1)_n77A(Ant.4)		1.21		0.48		1.69	Yes

SAR to Peak Location Separation Ratio (SPLSR)

Band	Position	1g SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance (mm)	Pair SAR sum (W/kg)	SPLSR	Simultaneous SAR	
				X	Y	Z					
				X	Y	Z					
DC_2A_n5A + WLAN 5GHz + Bluetooth											
LTE B2	Rear	0.60	10	-0.034	-0.084	-0.205	46.5	1.08	0.024	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n5	Rear	0.57	10	-0.005	-0.0135	-0.205	64.7	1.05	0.017		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_2A_n66A + WLAN 5GHz + Bluetooth											
LTE B2	Rear	0.60	10	-0.034	-0.084	-0.205	46.5	1.08	0.024	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n66	Rear	0.55	10	-0.0275	0.0795	-0.204	160.4	1.03	0.007		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_2A(Ant.1)_n77A(Ant.3) + WLAN 5GHz + Bluetooth											
LTE B2	Rear	0.60	10	-0.034	-0.084	-0.205	46.5	1.08	0.024	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n77	Rear	0.69	10	0.0115	-0.0435	-0.205	32.5	1.17	0.039		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_66A(Ant.1)_n77A(Ant.3) + WLAN 5GHz + Bluetooth											



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LTE B66	Rear	0.51	10	-0.032	-0.087	-0.205	45.2	0.99	0.022	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n77	Rear	0.69	10	0.0115	-0.0435	-0.205	32.5	1.17	0.039		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_13A(Ant.1)_n77A(Ant.3) + WLAN 5GHz + Bluetooth											
LTE B13	Rear	0.54	10	-0.049	-0.0665	-0.205	61.5	1.02	0.017	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n77	Rear	0.69	10	0.0115	-0.0435	-0.205	32.5	1.17	0.039		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_2A(Ant.1)_n77A(Ant.4) + WLAN 5GHz + Bluetooth											
LTE B2	Rear	0.60	10	-0.034	-0.084	-0.205	46.5	1.08	0.024	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n77	Rear	0.67	10	-0.044	0.069	-0.205	155.4	1.15	0.008		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_66A(Ant.1)_n77A(Ant.4) + WLAN 5GHz + Bluetooth											
LTE B66	Rear	0.51	10	-0.032	-0.087	-0.205	45.2	0.99	0.022	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n77	Rear	0.67	10	-0.044	0.069	-0.205	155.4	1.15	0.008		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
DC_13A(Ant.1)_n77A(Ant.4) + WLAN 5GHz + Bluetooth											
LTE B13	Rear	0.54	10	-0.049	-0.0665	-0.205	61.5	1.02	0.017	Not required	
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					
NR n77	Rear	0.67	10	-0.044	0.069	-0.205	155.4	1.15	0.008		
WLAN 5GHz + Bluetooth		0.48	10	0.0118	-0.076	-0.205					



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Table 12.5: The sum of SAR values for WWAN and Bluetooth/WLAN Antenna

WWAN + WLAN 5GHz + Bluetooth						
Position	WWAN (W/kg)		WLAN 5GHz + Bluetooth (W/kg)		Sum (W/kg)	SPLSR
Rear (0mm)	WCDMA B4		3.01		1.55	4.56

SAR to peak Location Separation Ratio (SPLSR)

Band	Position	10g SAR (W/kg)	Gap (cm)	SAR peak location (m)			3D distance (mm)	Pair SAR sum (W/kg)	SPLSR	Simultaneous SAR
				X	Y	Z				
WCDMA B4	Rear	3.01	0	-0.0175	0.0775	-0.205	158.7	4.56	0.061	Not required
WLAN 5GHz + Bluetooth		1.55	0	0.0178	-0.0772	-0.205				

Table 12.6: Maximum Simultaneous Transmission SAR

/	Position	Sum (W/kg)
Highest reported SAR value for Head	Right Cheek (DC_66A_n77A + WLAN 5GHz + Bluetooth)	1.58
Highest reported SAR value for Hotspot	Rear Side (DC_13A_n77A + WLAN 2.4GHz)	1.59
Highest reported SAR value for Body-worn	Rear Side (DC_66A_n77A + WLAN 5GHz + Bluetooth)	1.49
Highest reported SAR value for Extremity	Bottom Side (WCDMA Band 4 + WLAN 5GHz)	3.20

Note: the test positions of above tables are for the worse case that has been evaluated.

Conclusion:

According to the above tables, the sum of reported SAR values is less than limit. So the simultaneous transmission SAR with volume scans is not required.



13. Summary of Test Results

According to the client's decision rule in the test registration form, which is "based on the measurement results as the basis of the conformity statement", the test conclusion of this report meets the limit requirements.

The calculated SAR is obtained by the following formula:

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

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

P_{Measured} is the measured power in chapter 10.

General Note:

1. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, 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, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. WLAN5GHz U-NII-2A and U-NII-2C tested the product specific 10g SAR since it has no hotspot mode.
 - b. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.

Duty Cycle

Mode	Duty Cycle
WCDMA	1:1
FDD_LTE	1:1
5G NR	1:1
Bluetooth	1:1
WLAN	1:1

13.1. Testing Environment

Temperature:	18°C~25°C
Relative humidity:	30%~70%
Ambient noise & Reflection:	< 0.012 W/kg



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13.2. SAR results for 3G/4G

Table 13.1: SAR Values (WCDMA Band 2 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1									
9400	1880.0	RMC	Left Cheek	/	23.10	24.0	0.079	0.10	0.03
9400	1880.0	RMC	Left Tilt	/	23.10	24.0	0.081	0.10	0.02
9400	1880.0	RMC	Right Cheek	1	23.10	24.0	0.127	0.16	-0.03
9400	1880.0	RMC	Right Tilt	/	23.10	24.0	0.062	0.08	0.12

Table 13.2: SAR Values (WCDMA Band 2 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1									
9400	1880.0	RMC	Front	/	20.10	21.0	0.446	0.55	-0.12
9400	1880.0	RMC	Rear	/	20.10	21.0	0.587	0.72	0.17
9400	1880.0	RMC	Left	/	20.10	21.0	0.070	0.09	0.08
9400	1880.0	RMC	Right	/	20.10	21.0	0.079	0.10	0.13
9400	1880.0	RMC	Bottom	/	20.10	21.0	0.826	1.02	-0.01
9538	1907.6	RMC	Bottom	/	20.10	21.0	0.684	0.84	0.11
9262	1852.4	RMC	Bottom	2	20.10	21.0	0.895	1.10	0.10
Body-Worn Test Data (15mm) - Power Level C1									
9400	1880.0	RMC	Front	/	21.00	22.0	0.286	0.36	0.02
9400	1880.0	RMC	Rear	/	21.00	22.0	0.354	0.45	0.08



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Table 13.3: SAR Values (WCDMA Band 4 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1									
1413	1732.6	RMC	Left Cheek	/	23.10	24.0	0.065	0.08	0.07
1413	1732.6	RMC	Left Tilt	/	23.10	24.0	0.037	0.05	0.10
1413	1732.6	RMC	Right Cheek	3	23.10	24.0	0.109	0.13	0.05
1413	1732.6	RMC	Right Tilt	/	23.10	24.0	0.024	0.03	0.06

Table 13.4: SAR Values (WCDMA Band 4 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1									
1413	1732.6	RMC	Front	/	20.10	21.0	0.570	0.70	-0.04
1413	1732.6	RMC	Rear	/	20.10	21.0	0.768	0.94	0.16
1413	1732.6	RMC	Left	/	20.10	21.0	0.049	0.06	0.18
1413	1732.6	RMC	Right	/	20.10	21.0	0.122	0.15	0.09
1413	1732.6	RMC	Bottom	/	20.10	21.0	0.955	1.17	0.06
1513	1752.6	RMC	Rear	/	20.00	21.0	0.755	0.95	0.14
1312	1712.4	RMC	Rear	/	20.20	21.0	0.712	0.86	0.03
1513	1752.6	RMC	Bottom	4	20.00	21.0	1.010	1.27	0.14
1312	1712.4	RMC	Bottom	/	20.20	21.0	0.969	1.16	0.03
Body-Worn Test Data (15mm) - Power Level C1									
1413	1732.6	RMC	Front	/	21.50	22.5	0.487	0.61	-0.03
1413	1732.6	RMC	Rear	/	21.50	22.5	0.576	0.73	0.04



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Table 13.5: SAR Values (WCDMA Band 5 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1									
4183	836.6	RMC	Left Cheek	5	23.30	24.0	0.309	0.36	0.02
4183	836.6	RMC	Left Tilt	/	23.30	24.0	0.133	0.16	0.12
4183	836.6	RMC	Right Cheek	/	23.30	24.0	0.305	0.36	0.02
4183	836.6	RMC	Right Tilt	/	23.30	24.0	0.135	0.16	0.04

Table 13.6: SAR Values (WCDMA Band 5 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1									
4183	836.6	RMC	Front	/	23.30	24.0	0.269	0.32	0.13
4183	836.6	RMC	Rear	6	23.30	24.0	0.380	0.45	0.04
4183	836.6	RMC	Left	/	23.30	24.0	0.220	0.26	0.12
4183	836.6	RMC	Right	/	23.30	24.0	0.319	0.37	0.05
4183	836.6	RMC	Bottom	/	23.30	24.0	0.058	0.07	0.01
Body-Worn Test Data (10mm) - Power Level C1									
4183	836.6	RMC	Front	/	23.30	24.0	0.269	0.32	0.13
4183	836.6	RMC	Rear	/	23.30	24.0	0.380	0.45	0.04



Table 13.7: SAR Values (LTE Band 2 - Head) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1									
18900	1880.0	1RB50	Left Cheek	/	23.09	24.5	0.099	0.14	0.05
18900	1880.0	50RB0	Left Cheek	/	22.03	23.5	0.074	0.10	0.13
18900	1880.0	1RB50	Left Tilt	/	23.09	24.5	0.091	0.13	0.03
18900	1880.0	50RB0	Left Tilt	/	22.03	23.5	0.068	0.10	0.04
18900	1880.0	1RB50	Right Cheek	7	23.09	24.5	0.136	0.19	0.03
18900	1880.0	50RB0	Right Cheek	/	22.03	23.5	0.102	0.14	0.07
18900	1880.0	1RB50	Right Tilt	/	23.09	24.5	0.079	0.11	0.02
18900	1880.0	50RB0	Right Tilt	/	22.03	23.5	0.053	0.07	0.03

Table 13.8: SAR Values (LTE Band 2 - Body) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1									
18900	1880.0	1RB50	Front	/	19.17	20.5	0.348	0.47	0.06
18900	1880.0	50RB0	Front	/	18.17	19.5	0.269	0.37	-0.11
18900	1880.0	1RB50	Rear	/	19.17	20.5	0.444	0.60	0.04
18900	1880.0	50RB0	Rear	/	18.17	19.5	0.351	0.48	0.16
18900	1880.0	1RB50	Left	/	19.17	20.5	0.055	0.07	0.09
18900	1880.0	50RB0	Left	/	18.17	19.5	0.040	0.05	-0.19
18900	1880.0	1RB50	Right	/	19.17	20.5	0.061	0.08	0.06
18900	1880.0	50RB0	Right	/	18.17	19.5	0.047	0.06	-0.05
18900	1880.0	1RB50	Bottom	/	19.17	20.5	0.675	0.92	-0.05
18900	1880.0	50RB0	Bottom	/	18.17	19.5	0.547	0.74	0.07
19100	1900.0	1RB50	Bottom	/	19.15	20.5	0.573	0.78	-0.12
18700	1860.0	1RB50	Bottom	8	19.13	20.5	0.740	1.01	0.06
18700	1860.0	100RB	Bottom	/	18.11	19.5	0.522	0.72	-0.11
Body-Worn Test Data (15mm) - Power Level C1									
18900	1880.0	1RB50	Front	/	20.19	22.0	0.221	0.34	0.14
18900	1880.0	50RB0	Front	/	19.19	21.0	0.176	0.27	-0.07
18900	1880.0	1RB50	Rear	/	20.19	22.0	0.272	0.41	0.08
18900	1880.0	50RB0	Rear	/	19.19	21.0	0.216	0.33	0.19



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Table 13.9: SAR Values (LTE Band 2 - Head) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
18900	1880.0	1RB50	Left Cheek	/	13.33	14.0	0.269	0.31	0.01
18900	1880.0	50RB25	Left Cheek	/	13.25	14.0	0.258	0.31	0.03
18900	1880.0	1RB50	Left Tilt	/	13.33	14.0	0.304	0.35	0.05
18900	1880.0	50RB25	Left Tilt	/	13.25	14.0	0.312	0.37	0.10
18900	1880.0	1RB50	Right Cheek	/	13.33	14.0	0.574	0.67	-0.06
18900	1880.0	50RB25	Right Cheek	/	13.25	14.0	0.569	0.68	-0.05
18900	1880.0	1RB50	Right Tilt	/	13.33	14.0	0.542	0.63	0.03
18900	1880.0	50RB25	Right Tilt	/	13.25	14.0	0.592	0.70	-0.16

Table 13.10: SAR Values (LTE Band 2 - Body) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
18900	1880.0	1RB50	Front	/	18.32	19.0	0.386	0.45	0.05
18900	1880.0	50RB25	Front	/	18.31	19.0	0.405	0.47	0.03
18900	1880.0	1RB50	Rear	/	18.32	19.0	0.494	0.58	-0.03
18900	1880.0	50RB25	Rear	/	18.31	19.0	0.515	0.60	0.07
18900	1880.0	1RB50	Left	/	18.32	19.0	0.072	0.08	0.01
18900	1880.0	50RB25	Left	/	18.31	19.0	0.075	0.09	0.14
18900	1880.0	1RB50	Right	/	18.32	19.0	0.036	0.04	0.13
18900	1880.0	50RB25	Right	/	18.31	19.0	0.039	0.05	-0.01
18900	1880.0	1RB50	Top	/	18.32	19.0	0.576	0.67	0.10
18900	1880.0	50RB25	Top	/	18.31	19.0	0.635	0.74	0.02
Body-Worn Test Data (15mm) - Power Level C2									
18900	1880.0	1RB50	Front	/	20.36	21.0	0.273	0.32	0.02
18900	1880.0	50RB25	Front	/	20.34	21.0	0.261	0.30	-0.11
18900	1880.0	1RB50	Rear	/	20.36	21.0	0.352	0.41	0.03
18900	1880.0	50RB25	Rear	/	20.34	21.0	0.353	0.41	-0.12



Table 13.11: SAR Values (LTE Band 4 - Head) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1									
20300	1745.0	1RB50	Left Cheek	/	23.05	24.5	0.088	0.12	0.04
20300	1745.0	50RB25	Left Cheek	/	22.02	23.5	0.063	0.09	0.10
20300	1745.0	1RB50	Left Tilt	/	23.05	24.5	0.049	0.07	0.18
20300	1745.0	50RB25	Left Tilt	/	22.02	23.5	0.039	0.06	0.02
20300	1745.0	1RB50	Right Cheek	9	23.05	24.5	0.129	0.18	0.08
20300	1745.0	50RB25	Right Cheek	/	22.02	23.5	0.099	0.14	0.02
20300	1745.0	1RB50	Right Tilt	/	23.05	24.5	0.036	0.05	0.11
20300	1745.0	50RB25	Right Tilt	/	22.02	23.5	0.028	0.04	0.04

Table 13.12: SAR Values (LTE Band 4 - Body) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1									
20300	1745.0	1RB50	Front	/	19.65	21.0	0.504	0.69	-0.11
20300	1745.0	50RB25	Front	/	18.69	20.0	0.399	0.54	0.17
20300	1745.0	1RB50	Rear	/	19.65	21.0	0.642	0.88	0.07
20300	1745.0	50RB25	Rear	/	18.69	20.0	0.547	0.74	-0.14
20300	1745.0	1RB50	Left	/	19.65	21.0	0.043	0.06	0.14
20300	1745.0	50RB25	Left	/	18.69	20.0	0.035	0.05	0.15
20300	1745.0	1RB50	Right	/	19.65	21.0	0.105	0.14	-0.02
20300	1745.0	50RB25	Right	/	18.69	20.0	0.082	0.11	-0.08
20300	1745.0	1RB50	Bottom	10	19.65	21.0	0.885	1.21	0.12
20300	1745.0	50RB25	Bottom	/	18.69	20.0	0.701	0.95	0.03
20175	1732.5	1RB50	Bottom	/	19.61	21.0	0.847	1.17	0.13
20050	1720.0	1RB50	Bottom	/	19.59	21.0	0.825	1.14	-0.14
20175	1732.5	50RB25	Bottom	/	18.64	20.0	0.676	0.92	0.18
20050	1720.0	50RB25	Bottom	/	18.68	20.0	0.697	0.94	0.10
20300	1745.0	100RB	Bottom	/	18.63	20.0	0.654	0.90	0.03
Body-Worn Test Data (15mm) - Power Level C1									
20300	1745.0	1RB50	Front	/	20.63	22.0	0.381	0.52	0.09
20300	1745.0	50RB25	Front	/	19.72	21.0	0.302	0.41	-0.08
20300	1745.0	1RB50	Rear	/	20.63	22.0	0.483	0.66	0.04
20300	1745.0	50RB25	Rear	/	19.72	21.0	0.427	0.57	-0.03


Table 13.13: SAR Values (LTE Band 4 - Head) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
20175	1732.5	1RB50	Left Cheek	/	14.21	15.0	0.328	0.39	0.02
20175	1732.5	50RB25	Left Cheek	/	14.15	15.0	0.319	0.39	0.03
20175	1732.5	1RB50	Left Tilt	/	14.21	15.0	0.366	0.44	-0.03
20175	1732.5	50RB25	Left Tilt	/	14.15	15.0	0.352	0.43	-0.11
20175	1732.5	1RB50	Right Cheek	/	14.21	15.0	0.527	0.63	0.06
20175	1732.5	50RB25	Right Cheek	/	14.15	15.0	0.520	0.63	-0.01
20175	1732.5	1RB50	Right Tilt	/	14.21	15.0	0.567	0.68	0.07
20175	1732.5	50RB25	Right Tilt	/	14.15	15.0	0.538	0.65	-0.12

Table 13.14: SAR Values (LTE Band 4 - Body) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
20175	1732.5	1RB50	Front	/	19.75	20.5	0.443	0.53	0.02
20175	1732.5	50RB25	Front	/	19.73	20.5	0.472	0.56	-0.03
20175	1732.5	1RB50	Rear	/	19.75	20.5	0.399	0.47	0.05
20175	1732.5	50RB25	Rear	/	19.73	20.5	0.480	0.57	-0.09
20175	1732.5	1RB50	Left	/	19.75	20.5	0.083	0.10	0.02
20175	1732.5	50RB25	Left	/	19.73	20.5	0.092	0.11	0.11
20175	1732.5	1RB50	Right	/	19.75	20.5	0.047	0.06	-0.07
20175	1732.5	50RB25	Right	/	19.73	20.5	0.046	0.06	-0.03
20175	1732.5	1RB50	Top	/	19.75	20.5	0.570	0.68	0.08
20175	1732.5	50RB25	Top	/	19.73	20.5	0.609	0.73	0.02
Body-Worn Test Data (15mm) - Power Level C2									
20175	1732.5	1RB50	Front	/	21.65	22.5	0.380	0.46	0.03
20175	1732.5	50RB25	Front	/	21.60	22.5	0.402	0.49	-0.03
20175	1732.5	1RB50	Rear	/	21.65	22.5	0.375	0.46	0.17
20175	1732.5	50RB25	Rear	/	21.60	22.5	0.377	0.46	0.05



Table 13.15: SAR Values (LTE Band 5 - Head) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1/A2									
20525	836.5	1RB24	Left Cheek	/	24.01	25.0	0.305	0.38	0.07
20525	836.5	25RB12	Left Cheek	/	22.91	24.0	0.239	0.31	0.08
20525	836.5	1RB24	Left Tilt	/	24.01	25.0	0.150	0.19	0.02
20525	836.5	25RB12	Left Tilt	/	22.91	24.0	0.119	0.15	0.03
20525	836.5	1RB24	Right Cheek	11	24.01	25.0	0.332	0.42	0.09
20525	836.5	25RB12	Right Cheek	/	22.91	24.0	0.253	0.33	0.05
20525	836.5	1RB24	Right Tilt	/	24.01	25.0	0.169	0.21	0.03
20525	836.5	25RB12	Right Tilt	/	22.91	24.0	0.133	0.17	0.12
The worst case with CA_5B									
20525	836.5	CA_5B	Right Cheek	/	23.96	25.0	0.324	0.41	0.05

Table 13.16: SAR Values (LTE Band 5 - Body) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1/B2									
20525	836.5	1RB24	Front	/	24.01	25.0	0.244	0.31	-0.16
20525	836.5	25RB12	Front	/	22.91	24.0	0.190	0.24	0.18
20525	836.5	1RB24	Rear	12	24.01	25.0	0.338	0.42	0.03
20525	836.5	25RB12	Rear	/	22.91	24.0	0.266	0.34	-0.03
20525	836.5	1RB24	Left	/	24.01	25.0	0.198	0.25	-0.15
20525	836.5	25RB12	Left	/	22.91	24.0	0.154	0.20	-0.11
20525	836.5	1RB24	Right	/	24.01	25.0	0.285	0.36	0.04
20525	836.5	25RB12	Right	/	22.91	24.0	0.224	0.29	0.03
20525	836.5	1RB24	Bottom	/	24.01	25.0	0.048	0.06	-0.15
20525	836.5	25RB12	Bottom	/	22.91	24.0	0.045	0.06	0.18
Hotspot Test Data (10mm) - The worst case with CA_5B									
20525	836.5	CA_5B	Rear	/	23.96	25.0	0.315	0.40	0.04
Body-Worn Test Data (10mm) - Power Level C1/C2									
20525	836.5	1RB24	Front	/	24.01	25.0	0.244	0.31	-0.16
20525	836.5	25RB12	Front	/	22.91	24.0	0.190	0.24	0.18
20525	836.5	1RB24	Rear	/	24.01	25.0	0.338	0.42	0.03
20525	836.5	25RB12	Rear	/	22.91	24.0	0.266	0.34	-0.03
Body-Worn Test Data (10mm) - The worst case with CA_5B									
20525	836.5	CA_5B	Rear	/	23.96	25.0	0.315	0.40	0.04



Table 13.17: SAR Values (LTE Band 5 - Head) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
20525	836.5	1RB24	Left Cheek	/	23.28	25.0	0.306	0.45	0.05
20525	836.5	25RB25	Left Cheek	/	22.16	24.0	0.232	0.35	0.09
20525	836.5	1RB24	Left Tilt	/	23.28	25.0	0.265	0.39	0.03
20525	836.5	25RB25	Left Tilt	/	22.16	24.0	0.182	0.28	0.03
20525	836.5	1RB24	Right Cheek	/	23.28	25.0	0.395	0.59	-0.03
20525	836.5	25RB25	Right Cheek	/	22.16	24.0	0.343	0.52	0.03
20525	836.5	1RB24	Right Tilt	/	23.28	25.0	0.320	0.48	0.09
20525	836.5	25RB25	Right Tilt	/	22.16	24.0	0.265	0.40	0.14

Table 13.18: SAR Values (LTE Band 5 - Body) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
20525	836.5	1RB24	Front	/	23.28	25.0	0.106	0.16	0.11
20525	836.5	25RB25	Front	/	22.16	24.0	0.082	0.13	-0.04
20525	836.5	1RB24	Rear	/	23.28	25.0	0.114	0.17	0.13
20525	836.5	25RB25	Rear	/	22.16	24.0	0.086	0.13	0.16
20525	836.5	1RB24	Left	/	23.28	25.0	0.049	0.07	-0.05
20525	836.5	25RB25	Left	/	22.16	24.0	0.031	0.05	0.05
20525	836.5	1RB24	Right	/	23.28	25.0	0.005	0.01	0.18
20525	836.5	25RB25	Right	/	22.16	24.0	0.003	0.00	-0.07
20525	836.5	1RB24	Top	/	23.28	25.0	0.010	0.02	0.11
20525	836.5	25RB25	Top	/	22.16	24.0	0.073	0.11	0.05
Body-Worn Test Data (10mm) - Power Level C2									
20525	836.5	1RB24	Front	/	23.28	25.0	0.106	0.16	0.11
20525	836.5	25RB25	Front	/	22.16	24.0	0.082	0.13	-0.04
20525	836.5	1RB24	Rear	/	23.28	25.0	0.114	0.17	0.13
20525	836.5	25RB25	Rear	/	22.16	24.0	0.086	0.13	0.16



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Table 13.19: SAR Values (LTE Band 12 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1									
23095	707.5	1RB24	Left Cheek	/	23.98	25.0	0.089	0.11	0.02
23095	707.5	25RB25	Left Cheek	/	22.93	24.0	0.071	0.09	0.14
23095	707.5	1RB24	Left Tilt	/	23.98	25.0	0.045	0.06	0.03
23095	707.5	25RB25	Left Tilt	/	22.93	24.0	0.036	0.05	0.05
23095	707.5	1RB24	Right Cheek	13	23.98	25.0	0.115	0.15	0.06
23095	707.5	25RB25	Right Cheek	/	22.93	24.0	0.088	0.11	0.13
23095	707.5	1RB24	Right Tilt	/	23.98	25.0	0.065	0.08	0.09
23095	707.5	25RB25	Right Tilt	/	22.93	24.0	0.053	0.07	0.19

Table 13.20: SAR Values (LTE Band 12 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1									
23095	707.5	1RB24	Front	/	23.98	25.0	0.124	0.16	-0.13
23095	707.5	25RB25	Front	/	22.93	24.0	0.102	0.13	-0.14
23095	707.5	1RB24	Rear	14	23.98	25.0	0.230	0.29	0.08
23095	707.5	25RB25	Rear	/	22.93	24.0	0.178	0.23	-0.02
23095	707.5	1RB24	Left	/	23.98	25.0	0.145	0.18	0.08
23095	707.5	25RB25	Left	/	22.93	24.0	0.117	0.15	-0.18
23095	707.5	1RB24	Right	/	23.98	25.0	0.171	0.22	0.04
23095	707.5	25RB25	Right	/	22.93	24.0	0.136	0.17	-0.07
23095	707.5	1RB24	Bottom	/	23.98	25.0	0.025	0.03	-0.07
23095	707.5	25RB25	Bottom	/	22.93	24.0	0.017	0.02	0.03
Body-Worn Test Data (10mm) - Power Level C1									
23095	707.5	1RB24	Front	/	23.98	25.0	0.124	0.16	-0.13
23095	707.5	25RB25	Front	/	22.93	24.0	0.102	0.13	-0.14
23095	707.5	1RB24	Rear	/	23.98	25.0	0.230	0.29	0.08
23095	707.5	25RB25	Rear	/	22.93	24.0	0.178	0.23	-0.02

**Table 13.21: SAR Values (LTE Band 13 - Head) - Ant.5**

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1/A2									
23230	782.0	1RB24	Left Cheek	/	23.89	25.0	0.201	0.26	0.15
23230	782.0	25RB25	Left Cheek	/	22.81	24.0	0.166	0.22	0.03
23230	782.0	1RB24	Left Tilt	/	23.89	25.0	0.097	0.12	0.02
23230	782.0	25RB25	Left Tilt	/	22.81	24.0	0.085	0.11	0.19
23230	782.0	1RB24	Right Cheek	15	23.89	25.0	0.247	0.32	0.04
23230	782.0	25RB25	Right Cheek	/	22.81	24.0	0.194	0.26	0.17
23230	782.0	1RB24	Right Tilt	/	23.89	25.0	0.108	0.14	0.02
23230	782.0	25RB25	Right Tilt	/	22.81	24.0	0.092	0.12	0.09

Table 13.22: SAR Values (LTE Band 13 - Body) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1/B2									
23230	782.0	1RB24	Front	/	23.89	25.0	0.188	0.24	-0.11
23230	782.0	25RB25	Front	/	22.81	24.0	0.153	0.20	0.06
23230	782.0	1RB24	Rear	16	23.89	25.0	0.275	0.36	0.02
23230	782.0	25RB25	Rear	/	22.81	24.0	0.232	0.31	0.04
23230	782.0	1RB24	Left	/	23.89	25.0	0.128	0.17	0.03
23230	782.0	25RB25	Left	/	22.81	24.0	0.124	0.16	-0.18
23230	782.0	1RB24	Right	/	23.89	25.0	0.203	0.26	-0.11
23230	782.0	25RB25	Right	/	22.81	24.0	0.181	0.24	0.19
23230	782.0	1RB24	Bottom	/	23.89	25.0	0.012	0.02	-0.14
23230	782.0	25RB25	Bottom	/	22.81	24.0	0.008	0.01	0.18
Body-Worn Test Data (10mm) - Power Level C1/C2									
23230	782.0	1RB24	Front	/	23.89	25.0	0.188	0.24	-0.11
23230	782.0	25RB25	Front	/	22.81	24.0	0.153	0.20	0.06
23230	782.0	1RB24	Rear	/	23.89	25.0	0.275	0.36	0.02
23230	782.0	25RB25	Rear	/	22.81	24.0	0.232	0.31	0.04

**Table 13.23: SAR Values (LTE Band 13 - Head) - Ant.1**

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
23230	782.0	1RB24	Left Cheek	/	18.28	19.5	0.320	0.42	0.05
23230	782.0	25RB25	Left Cheek	/	18.20	19.5	0.274	0.37	-0.11
23230	782.0	1RB24	Left Tilt	/	18.28	19.5	0.278	0.37	0.03
23230	782.0	25RB25	Left Tilt	/	18.20	19.5	0.245	0.33	0.01
23230	782.0	1RB24	Right Cheek	/	18.28	19.5	0.394	0.52	0.09
23230	782.0	25RB25	Right Cheek	/	18.20	19.5	0.337	0.45	0.07
23230	782.0	1RB24	Right Tilt	/	18.28	19.5	0.308	0.41	0.02
23230	782.0	25RB25	Right Tilt	/	18.20	19.5	0.271	0.37	0.12

Table 13.24: SAR Values (LTE Band 13 - Body) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
23230	782.0	1RB24	Front	/	23.26	24.5	0.382	0.51	0.04
23230	782.0	25RB25	Front	/	22.20	23.5	0.302	0.41	0.12
23230	782.0	1RB24	Rear	/	23.26	24.5	0.407	0.54	0.02
23230	782.0	25RB25	Rear	/	22.20	23.5	0.337	0.45	0.03
23230	782.0	1RB24	Left	/	23.26	24.5	0.248	0.33	0.10
23230	782.0	25RB25	Left	/	22.20	23.5	0.197	0.27	-0.17
23230	782.0	1RB24	Right	/	23.26	24.5	0.193	0.26	-0.12
23230	782.0	25RB25	Right	/	22.20	23.5	0.153	0.21	-0.03
23230	782.0	1RB24	Top	/	23.26	24.5	0.362	0.48	0.05
23230	782.0	25RB25	Top	/	22.20	23.5	0.280	0.38	0.10
Body-Worn Test Data (15mm) - Power Level C2									
23230	782.0	1RB24	Front	/	23.26	24.5	0.234	0.31	0.03
23230	782.0	25RB25	Front	/	22.20	23.5	0.190	0.26	0.12
23230	782.0	1RB24	Rear	/	23.26	24.5	0.239	0.32	0.07
23230	782.0	25RB25	Rear	/	22.20	23.5	0.187	0.25	0.05



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Table 13.25: SAR Values (LTE Band 66 - Head) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A1/A2									
132572	1770.0	1RB50	Left Cheek	/	22.95	24.5	0.092	0.13	0.03
132572	1770.0	50RB0	Left Cheek	/	22.07	23.5	0.070	0.10	0.07
132572	1770.0	1RB50	Left Tilt	/	22.95	24.5	0.069	0.10	0.05
132572	1770.0	50RB0	Left Tilt	/	22.07	23.5	0.052	0.07	0.08
132572	1770.0	1RB50	Right Cheek	17	22.95	24.5	0.138	0.20	0.17
132572	1770.0	50RB0	Right Cheek	/	22.07	23.5	0.106	0.15	0.02
132572	1770.0	1RB50	Right Tilt	/	22.95	24.5	0.051	0.07	0.03
132572	1770.0	50RB0	Right Tilt	/	22.07	23.5	0.040	0.06	0.15
The worst case with CA_66B & CA_66C									
132022	1715.0	CA_66B	Right Cheek	/	23.03	24.5	0.134	0.19	0.06
132572	1770.0	CA_66C	Right Cheek	/	22.90	24.5	0.122	0.18	0.02



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Table 13.26: SAR Values (LTE Band 66 - Body) - Ant.5

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B1/B2									
132572	1770.0	1RB50	Front	/	18.39	19.5	0.469	0.61	-0.11
132572	1770.0	50RB0	Front	/	17.25	18.5	0.373	0.50	0.15
132572	1770.0	1RB50	Rear	/	18.39	19.5	0.515	0.66	0.02
132572	1770.0	50RB0	Rear	/	17.25	18.5	0.429	0.57	0.05
132572	1770.0	1RB50	Left	/	18.39	19.5	0.041	0.05	-0.19
132572	1770.0	50RB0	Left	/	17.25	18.5	0.032	0.04	-0.10
132572	1770.0	1RB50	Right	/	18.39	19.5	0.090	0.12	-0.17
132572	1770.0	50RB0	Right	/	17.25	18.5	0.073	0.10	0.10
132572	1770.0	1RB50	Bottom	18	18.39	19.5	0.611	0.79	0.14
132572	1770.0	50RB0	Bottom	/	17.25	18.5	0.501	0.67	0.10
Hotspot Test Data (10mm) - The worst case with CA_66B & CA_66C									
132322	1745.0	CA_66B	Bottom	/	18.34	19.5	0.595	0.78	-0.03
132572	1770.0	CA_66C	Bottom	/	18.30	19.5	0.584	0.77	-0.05
Body-Worn Test Data (15mm) - Power Level C1/C2									
132572	1770.0	1RB50	Front	/	20.68	22.0	0.374	0.51	-0.19
132572	1770.0	50RB0	Front	/	19.81	21.0	0.293	0.39	0.06
132572	1770.0	1RB50	Rear	/	20.68	22.0	0.464	0.63	0.03
132572	1770.0	50RB0	Rear	/	19.81	21.0	0.403	0.53	-0.18
Body-Worn Test Data (15mm) - The worst case with CA_66B & CA_66C									
132022	1715.0	CA_66B	Rear	/	20.66	22.0	0.449	0.61	-0.05
132572	1770.0	CA_66C	Rear	/	20.62	22.0	0.428	0.59	0.07

**Table 13.27: SAR Values (LTE Band 66 - Head) - Ant.1**

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
132322	1745.0	1RB50	Left Cheek	/	14.25	15.0	0.384	0.46	0.02
132322	1745.0	50RB25	Left Cheek	/	14.22	15.0	0.386	0.46	0.03
132322	1745.0	1RB50	Left Tilt	/	14.25	15.0	0.411	0.49	0.19
132322	1745.0	50RB25	Left Tilt	/	14.22	15.0	0.413	0.49	0.17
132322	1745.0	1RB50	Right Cheek	/	14.25	15.0	0.606	0.72	-0.08
132322	1745.0	50RB25	Right Cheek	/	14.22	15.0	0.603	0.72	-0.04
132322	1745.0	1RB50	Right Tilt	/	14.25	15.0	0.614	0.73	0.06
132322	1745.0	50RB25	Right Tilt	/	14.22	15.0	0.648	0.78	-0.12

Table 13.28: SAR Values (LTE Band 66 - Body) - Ant.1

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
132322	1745.0	1RB50	Front	/	19.29	20.0	0.412	0.49	-0.18
132322	1745.0	50RB25	Front	/	19.26	20.0	0.421	0.50	-0.11
132322	1745.0	1RB50	Rear	/	19.29	20.0	0.423	0.50	0.12
132322	1745.0	50RB25	Rear	/	19.26	20.0	0.427	0.51	0.07
132322	1745.0	1RB50	Left	/	19.29	20.0	0.089	0.10	-0.07
132322	1745.0	50RB25	Left	/	19.26	20.0	0.089	0.11	0.13
132322	1745.0	1RB50	Right	/	19.29	20.0	0.044	0.05	-0.05
132322	1745.0	50RB25	Right	/	19.26	20.0	0.046	0.05	0.13
132322	1745.0	1RB50	Top	/	19.29	20.0	0.583	0.69	0.09
132322	1745.0	50RB25	Top	/	19.26	20.0	0.601	0.71	-0.02
Body-Worn Test Data (15mm) - Power Level C2									
132322	1745.0	1RB50	Front	/	21.17	22.0	0.338	0.41	-0.03
132322	1745.0	50RB25	Front	/	21.12	22.0	0.355	0.43	-0.04
132322	1745.0	1RB50	Rear	/	21.17	22.0	0.311	0.38	0.19
132322	1745.0	50RB25	Rear	/	21.12	22.0	0.356	0.44	0.06



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13.3. Test Results for SUB 6G

Note: For this device, NR n77 band support PC3 and PC2 with same 100% duty cycle, so we choose PC2 for SAR test.

Table 13.29: SAR Values (NR n2 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
376000	1880.0	50@25	Left Cheek	/	23.28	24.5	0.084	0.11	0.05
376000	1880.0	50@25	Left Tilt	/	23.28	24.5	0.072	0.10	0.06
376000	1880.0	50@25	Right Cheek	19	23.28	24.5	0.112	0.15	0.09
376000	1880.0	50@25	Right Tilt	/	23.28	24.5	0.051	0.07	0.08

Table 13.30: SAR Values (NR n2 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
376000	1880.0	50@25	Front	/	18.81	20.0	0.291	0.38	0.12
376000	1880.0	50@25	Rear	/	18.81	20.0	0.320	0.42	0.02
376000	1880.0	50@25	Left	/	18.81	20.0	0.046	0.06	0.04
376000	1880.0	50@25	Right	/	18.81	20.0	0.039	0.05	-0.19
376000	1880.0	50@25	Bottom	20	18.81	20.0	0.548	0.72	-0.09
Body-Worn Test Data (10mm) - Power Level C2									
376000	1880.0	50@25	Front	/	18.81	20.0	0.291	0.38	0.12
376000	1880.0	50@25	Rear	/	18.81	20.0	0.320	0.42	0.02



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Table 13.31: SAR Values (NR n5 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
167300	836.5	50@25	Left Cheek	/	23.82	25.0	0.321	0.42	0.05
167300	836.5	50@25	Left Tilt	/	23.82	25.0	0.157	0.21	-0.11
167300	836.5	50@25	Right Cheek	21	23.82	25.0	0.369	0.48	0.03
167300	836.5	50@25	Right Tilt	/	23.82	25.0	0.163	0.21	0.03

Table 13.32: SAR Values (NR n5 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
167300	836.5	50@25	Front	/	23.82	25.0	0.320	0.42	0.14
167300	836.5	50@25	Rear	22	23.82	25.0	0.434	0.57	-0.07
167300	836.5	50@25	Left	/	23.82	25.0	0.004	0.00	0.05
167300	836.5	50@25	Right	/	23.82	25.0	0.209	0.27	0.11
167300	836.5	50@25	Bottom	/	23.82	25.0	0.082	0.11	-0.03
Body-Worn Test Data (15mm) - Power Level C2									
167300	836.5	50@25	Front	/	23.82	25.0	0.316	0.41	0.04
167300	836.5	50@25	Rear	/	23.82	25.0	0.391	0.51	0.01



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Table 13.33: SAR Values (NR n66 - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
349000	1745.0	108@54	Left Cheek	/	23.08	24.5	0.086	0.12	0.02
349000	1745.0	108@54	Left Tilt	/	23.08	24.5	0.054	0.07	-0.18
349000	1745.0	108@54	Right Cheek	23	23.08	24.5	0.137	0.19	0.11
349000	1745.0	108@54	Right Tilt	/	23.08	24.5	0.049	0.07	0.08

Table 13.34: SAR Values (NR n66 - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
349000	1745.0	108@54	Front	/	17.11	18.5	0.298	0.41	-0.10
349000	1745.0	108@54	Rear	/	17.11	18.5	0.398	0.55	0.06
349000	1745.0	108@54	Left	/	17.11	18.5	0.021	0.03	0.12
349000	1745.0	108@54	Right	/	17.11	18.5	0.028	0.04	-0.15
349000	1745.0	108@54	Bottom	24	17.11	18.5	0.534	0.74	0.12
Body-Worn Test Data (15mm) - Power Level C2									
349000	1745.0	108@54	Front	/	18.62	20.0	0.217	0.30	0.04
349000	1745.0	108@54	Rear	/	18.62	20.0	0.290	0.40	-0.07



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Table 13.35: SAR Values (NR n77 PC2 Part 27Q - Head) - Ant.6

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
633334	3500.0	135@67	Left Cheek	/	15.11	16.0	0.219	0.27	0.03
633334	3500.0	135@67	Left Tilt	/	15.11	16.0	0.169	0.21	0.19
633334	3500.0	135@67	Right Cheek	25	15.11	16.0	0.563	0.69	0.02
633334	3500.0	135@67	Right Tilt	/	15.11	16.0	0.349	0.43	-0.01

Table 13.36: SAR Values (NR n77 PC2 Part 27Q - Head) - Ant.4

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
633334	3500.0	135@67	Left Cheek	/	22.54	23.5	0.409	0.51	0.09
633334	3500.0	135@67	Left Tilt	/	22.54	23.5	0.218	0.27	-0.06
633334	3500.0	135@67	Right Cheek	/	22.54	23.5	0.243	0.30	-0.01
633334	3500.0	135@67	Right Tilt	/	22.54	23.5	0.348	0.43	0.09

Table 13.37: SAR Values (NR n77 PC2 Part 27Q - Head) - Ant.3

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
633334	3500.0	135@67	Left Cheek	/	25.26	27.0	0.212	0.32	0.19
633334	3500.0	135@67	Left Tilt	/	25.26	27.0	0.124	0.19	0.02
633334	3500.0	135@67	Right Cheek	/	25.26	27.0	0.116	0.17	0.04
633334	3500.0	135@67	Right Tilt	/	25.26	27.0	0.076	0.11	-0.11

Table 13.38: SAR Values (NR n77 PC2 Part 27Q - Head) - Ant.2

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
633334	3500.0	135@67	Left Cheek	/	20.78	21.5	0.290	0.34	-0.09
633334	3500.0	135@67	Left Tilt	/	20.78	21.5	0.102	0.12	0.01
633334	3500.0	135@67	Right Cheek	/	20.78	21.5	0.476	0.56	0.18
633334	3500.0	135@67	Right Tilt	/	20.78	21.5	0.156	0.18	0.00

**Table 13.39: SAR Values (NR n77 PC2 Part 27Q - Body) - Ant.6**

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
633334	3500.0	135@67	Front	/	18.56	19.5	0.244	0.30	-0.15
633334	3500.0	135@67	Rear	/	18.56	19.5	0.401	0.50	-0.09
633334	3500.0	135@67	Left	/	18.56	19.5	0.234	0.29	-0.01
633334	3500.0	135@67	Right	/	18.56	19.5	0.025	0.03	0.18
633334	3500.0	135@67	Top	/	18.56	19.5	0.123	0.15	-0.12
Body-Worn Test Data (15mm) - Power Level C2									
633334	3500.0	135@67	Front	/	20.03	21.0	0.227	0.28	0.08
633334	3500.0	135@67	Rear	/	20.03	21.0	0.254	0.32	0.06

Table 13.40: SAR Values (NR n77 PC2 Part 27Q - Body) - Ant.4

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
633334	3500.0	135@67	Front	/	21.52	22.5	0.452	0.57	0.11
633334	3500.0	135@67	Rear	/	21.52	22.5	0.533	0.67	0.12
633334	3500.0	135@67	Left	26	21.52	22.5	0.545	0.68	0.19
633334	3500.0	135@67	Right	/	21.52	22.5	0.064	0.08	-0.12
633334	3500.0	135@67	Top	/	21.52	22.5	0.073	0.09	0.12
633334	3500.0	135@67	Bottom	/	21.52	22.5	0.309	0.39	0.02
Body-Worn Test Data (15mm) - Power Level C2									
633334	3500.0	135@67	Front	/	23.55	24.5	0.323	0.40	0.04
633334	3500.0	135@67	Rear	/	23.55	24.5	0.440	0.55	-0.08



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Table 13.41: SAR Values (NR n77 PC2 Part 27Q - Body) - Ant.3

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
633334	3500.0	135@67	Front	/	22.27	23.5	0.050	0.07	-0.14
633334	3500.0	135@67	Rear	/	22.27	23.5	0.521	0.69	0.18
633334	3500.0	135@67	Left	/	22.27	23.5	0.021	0.03	0.05
633334	3500.0	135@67	Right	/	22.27	23.5	0.317	0.42	0.07
633334	3500.0	135@67	Top	/	22.27	23.5	0.212	0.28	-0.03
633334	3500.0	135@67	Bottom	/	22.27	23.5	0.036	0.05	-0.06
Body-Worn Test Data (15mm) - Power Level C2									
633334	3500.0	135@67	Front	/	24.35	25.5	0.045	0.06	0.09
633334	3500.0	135@67	Rear	/	24.35	25.5	0.325	0.42	0.03

Table 13.42: SAR Values (NR n77 PC2 Part 27Q - Body) - Ant.2

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
633334	3500.0	135@67	Front	/	20.78	21.5	0.130	0.15	0.05
633334	3500.0	135@67	Rear	/	20.78	21.5	0.426	0.50	-0.13
633334	3500.0	135@67	Left	/	20.78	21.5	0.342	0.40	0.09
633334	3500.0	135@67	Right	/	20.78	21.5	0.021	0.02	0.12
633334	3500.0	135@67	Top	/	20.78	21.5	0.065	0.08	0.02
633334	3500.0	135@67	Bottom	/	20.78	21.5	0.019	0.02	0.04
Body-Worn Test Data (15mm) - Power Level C2									
633334	3500.0	135@67	Front	/	23.74	24.5	0.127	0.15	-0.03
633334	3500.0	135@67	Rear	/	23.74	24.5	0.454	0.54	0.07

**Table 13.43: SAR Values (NR n77 PC2 Part 27O - Head) - Ant.6**

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
656000	3840.0	135@67	Left Cheek	/	14.46	15.0	0.174	0.20	-0.02
656000	3840.0	135@67	Left Tilt	/	14.46	15.0	0.138	0.16	0.08
656000	3840.0	135@67	Right Cheek	27	14.46	15.0	0.513	0.58	-0.02
656000	3840.0	135@67	Right Tilt	/	14.46	15.0	0.333	0.38	-0.03

Table 13.44: SAR Values (NR n77 PC2 Part 27O - Head) - Ant.4

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
656000	3840.0	135@67	Left Cheek	/	23.58	24.5	0.189	0.23	0.03
656000	3840.0	135@67	Left Tilt	/	23.58	24.5	0.093	0.11	-0.05
656000	3840.0	135@67	Right Cheek	/	23.58	24.5	0.139	0.17	0.07
656000	3840.0	135@67	Right Tilt	/	23.58	24.5	0.136	0.17	0.12

Table 13.45: SAR Values (NR n77 PC2 Part 27O - Head) - Ant.3

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
656000	3840.0	135@67	Left Cheek	/	24.99	26.0	0.262	0.33	0.03
656000	3840.0	135@67	Left Tilt	/	24.99	26.0	0.086	0.11	-0.01
656000	3840.0	135@67	Right Cheek	/	24.99	26.0	0.128	0.16	0.11
656000	3840.0	135@67	Right Tilt	/	24.99	26.0	0.049	0.06	0.05

Table 13.46: SAR Values (NR n77 PC2 Part 27O - Head) - Ant.2

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level A2									
656000	3840.0	135@67	Left Cheek	/	18.89	20.0	0.187	0.23	0.03
656000	3840.0	135@67	Left Tilt	/	18.89	20.0	0.063	0.08	0.07
656000	3840.0	135@67	Right Cheek	/	18.89	20.0	0.497	0.64	0.06
656000	3840.0	135@67	Right Tilt	/	18.89	20.0	0.131	0.17	0.08



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Table 13.47: SAR Values (NR n77 PC2 Part 27O - Body) - Ant.6

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
656000	3840.0	135@67	Front	/	18.63	19.0	0.229	0.25	-0.17
656000	3840.0	135@67	Rear	/	18.63	19.0	0.372	0.41	0.19
656000	3840.0	135@67	Left	/	18.63	19.0	0.334	0.36	0.04
656000	3840.0	135@67	Right	/	18.63	19.0	0.042	0.05	0.17
656000	3840.0	135@67	Top	/	18.63	19.0	0.128	0.14	0.08
Body-Worn Test Data (15mm) - Power Level C2									
656000	3840.0	135@67	Front	/	20.11	20.5	0.236	0.26	0.19
656000	3840.0	135@67	Rear	/	20.11	20.5	0.284	0.31	0.08

Table 13.48: SAR Values (NR n77 PC2 Part 27O - Body) - Ant.4

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
656000	3840.0	135@67	Front	/	23.58	24.5	0.338	0.42	0.02
656000	3840.0	135@67	Rear	/	23.58	24.5	0.418	0.52	0.03
656000	3840.0	135@67	Left	/	23.58	24.5	0.424	0.52	-0.03
656000	3840.0	135@67	Right	/	23.58	24.5	0.093	0.11	-0.11
656000	3840.0	135@67	Top	/	23.58	24.5	0.071	0.09	0.04
656000	3840.0	135@67	Bottom	/	23.58	24.5	0.376	0.46	0.13
Body-Worn Test Data (15mm) - Power Level C2									
656000	3840.0	135@67	Front	/	23.58	24.5	0.167	0.21	0.02
656000	3840.0	135@67	Rear	/	23.58	24.5	0.230	0.28	-0.01



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Table 13.49: SAR Values (NR n77 PC2 Part 27O - Body) - Ant.3

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
656000	3840.0	135@67	Front	/	20.54	21.5	0.083	0.10	0.17
656000	3840.0	135@67	Rear	28	20.54	21.5	0.557	0.69	-0.02
656000	3840.0	135@67	Left	/	20.54	21.5	0.021	0.03	-0.01
656000	3840.0	135@67	Right	/	20.54	21.5	0.305	0.38	-0.12
656000	3840.0	135@67	Top	/	20.54	21.5	0.081	0.10	0.08
656000	3840.0	135@67	Bottom	/	20.54	21.5	0.011	0.01	0.04
Body-Worn Test Data (15mm) - Power Level C2									
656000	3840.0	135@67	Front	/	22.46	23.5	0.058	0.07	0.09
656000	3840.0	135@67	Rear	/	22.46	23.5	0.425	0.54	0.06

Table 13.50: SAR Values (NR n77 PC2 Part 27O - Body) - Ant.2

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level B2									
656000	3840.0	135@67	Front	/	17.07	18.0	0.083	0.10	0.16
656000	3840.0	135@67	Rear	/	17.07	18.0	0.403	0.50	0.01
656000	3840.0	135@67	Left	/	17.07	18.0	0.352	0.44	0.05
656000	3840.0	135@67	Right	/	17.07	18.0	0.010	0.01	0.15
656000	3840.0	135@67	Top	/	17.07	18.0	0.041	0.05	0.04
656000	3840.0	135@67	Bottom	/	17.07	18.0	0.007	0.01	0.15
Body-Worn Test Data (15mm) - Power Level C2									
656000	3840.0	135@67	Front	/	19.99	21.0	0.083	0.11	0.05
656000	3840.0	135@67	Rear	/	19.99	21.0	0.421	0.53	0.19



13.4. Test Results for Bluetooth

Table 13.51: SAR Values (Bluetooth - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
0	2402.0	GFSK	Left Cheek	29	10.94	12.0	0.021	0.03	0.04
0	2402.0	GFSK	Left Tilt	/	10.94	12.0	0.021	0.03	0.03
0	2402.0	GFSK	Right Cheek	/	10.94	12.0	0.009	0.01	0.04
0	2402.0	GFSK	Right Tilt	/	10.94	12.0	0.001	<0.01	0.12

Table 13.52: SAR Values (Bluetooth - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Test Data (10mm)									
0	2402.0	GFSK	Front	/	10.94	12.0	<0.01	<0.01	0.00
0	2402.0	GFSK	Rear	30	10.94	12.0	0.028	0.04	0.07
0	2402.0	GFSK	Left	/	10.94	12.0	<0.01	<0.01	0.00
0	2402.0	GFSK	Right	/	10.94	12.0	<0.01	<0.01	0.00
0	2402.0	GFSK	Top	/	10.94	12.0	0.023	0.03	0.03



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13.5. WLAN Evaluation for 2.4GHz

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

Table 13.53: SAR Values (WLAN 2.4GHz - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Power Level D1									
1	2412.0	802.11b	Left Cheek	31	17.81	18.0	0.947	0.99	0.12
1	2412.0	802.11b	Left Tilt	/	17.81	18.0	0.858	0.90	0.10
1	2412.0	802.11b	Right Cheek	/	17.81	18.0	0.392	0.41	-0.15
1	2412.0	802.11b	Right Tilt	/	17.81	18.0	0.415	0.43	0.06
6	2437.0	802.11b	Left Cheek	/	17.40	18.0	0.682	0.78	0.11
Power Level D2									
1	2412.0	802.11b	Left Cheek	/	11.82	12.0	0.267	0.28	-0.11
1	2412.0	802.11b	Left Tilt	/	11.82	12.0	0.242	0.25	0.18
1	2412.0	802.11b	Right Cheek	/	11.82	12.0	0.128	0.13	0.03
1	2412.0	802.11b	Right Tilt	/	11.82	12.0	0.117	0.12	0.19

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

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

Table 13.54: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
1	2412.0	Left Cheek	100%	100%	0.99	0.99

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



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Table 13.55: SAR Values (WLAN 2.4GHz - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Hotspot Test Data (10mm) - Power Level E1/E2									
1	2412.0	802.11b	Front	/	19.75	20.0	0.298	0.32	-0.12
1	2412.0	802.11b	Rear	/	19.75	20.0	0.286	0.30	-0.14
1	2412.0	802.11b	Left	/	19.75	20.0	0.053	0.06	-0.14
1	2412.0	802.11b	Right	/	19.75	20.0	0.123	0.13	0.16
1	2412.0	802.11b	Top	32	19.75	20.0	0.356	0.38	0.01
Body-Worn Test Data (10mm) - Power Level F1/F2									
1	2412.0	802.11b	Front	/	19.75	20.0	0.298	0.32	-0.12
1	2412.0	802.11b	Rear	/	19.75	20.0	0.286	0.30	-0.14

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

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

Table 13.56: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
1	2412.0	Top	100%	100%	0.38	0.38

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



13.6. WLAN Evaluation for 5GHz

Table 13.57: SAR Values (WLAN 5GHz - Head)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
<U-NII-2A> - Power Level D1									
60	5300.0	802.11a	Left Cheek	/	18.14	18.5	0.673	0.73	0.07
60	5300.0	802.11a	Left Tilt	/	18.14	18.5	0.575	0.62	0.02
60	5300.0	802.11a	Right Cheek	/	18.14	18.5	0.333	0.36	0.12
60	5300.0	802.11a	Right Tilt	/	18.14	18.5	0.332	0.36	0.06
<U-NII-2C> - Power Level D1									
144	5720.0	802.11a	Left Cheek	/	18.39	18.5	0.711	0.73	0.02
144	5720.0	802.11a	Left Tilt	/	18.39	18.5	0.570	0.58	0.05
144	5720.0	802.11a	Right Cheek	/	18.39	18.5	0.221	0.23	-0.09
144	5720.0	802.11a	Right Tilt	/	18.39	18.5	0.175	0.18	0.02
<U-NII-3> - Power Level D1									
165	5825.0	802.11a	Left Cheek	33	18.11	18.5	0.914	1.00	0.03
165	5825.0	802.11a	Left Tilt	/	18.11	18.5	0.855	0.94	0.02
165	5825.0	802.11a	Right Cheek	/	18.11	18.5	0.268	0.29	-0.11
165	5825.0	802.11a	Right Tilt	/	18.11	18.5	0.269	0.29	-0.05
157	5785.0	802.11a	Left Cheek	/	18.07	18.5	0.666	0.74	0.05
<U-NII-2A> - Power Level D2									
60	5300.0	802.11a	Left Cheek	/	15.07	15.5	0.399	0.44	0.09
60	5300.0	802.11a	Left Tilt	/	15.07	15.5	0.341	0.38	0.02
60	5300.0	802.11a	Right Cheek	/	15.07	15.5	0.147	0.16	0.04
60	5300.0	802.11a	Right Tilt	/	15.07	15.5	0.146	0.16	-0.12
<U-NII-2C> - Power Level D2									
144	5720.0	802.11a	Left Cheek	/	15.32	15.5	0.422	0.44	0.09
144	5720.0	802.11a	Left Tilt	/	15.32	15.5	0.338	0.35	0.12
144	5720.0	802.11a	Right Cheek	/	15.32	15.5	0.131	0.14	-0.15
144	5720.0	802.11a	Right Tilt	/	15.32	15.5	0.104	0.11	0.13
<U-NII-3> - Power Level D2									
165	5825.0	802.11a	Left Cheek	/	15.04	15.5	0.498	0.55	-0.14
165	5825.0	802.11a	Left Tilt	/	15.04	15.5	0.466	0.52	0.06
165	5825.0	802.11a	Right Cheek	/	15.04	15.5	0.146	0.16	0.13
165	5825.0	802.11a	Right Tilt	/	15.04	15.5	0.147	0.16	0.05

Note:

1. U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is $\leq 1.2\text{ W/kg}$, SAR is not required for U-NII-1 band.
2. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is $> 0.8\text{ W/kg}$, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is $\leq 1.2\text{ W/kg}$



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or all required channels are tested.

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

Table 13.58: SAR Values (WLAN - Head) - 802.11a (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
165	5825.0	Left Cheek	100%	100%	1.00	1.00



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Table 13.59: SAR Values (WLAN 5GHz - Body)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
Ch.	MHz								
<U-NII-1> - Hotspot Test Data (10mm) - Power Level E1									
40	5200.0	802.11a	Front	/	18.17	18.5	0.157	0.17	0.03
40	5200.0	802.11a	Rear	/	18.17	18.5	1.030	1.11	0.05
40	5200.0	802.11a	Left	/	18.17	18.5	0.036	0.04	-0.14
40	5200.0	802.11a	Right	/	18.17	18.5	0.564	0.61	0.18
40	5200.0	802.11a	Top	/	18.17	18.5	0.609	0.66	0.04
44	5220.0	802.11a	Rear	34	18.14	18.5	1.070	1.16	0.03
<U-NII-3> - Hotspot Test Data (10mm) - Power Level E1									
165	5825.0	802.11a	Front	/	18.11	18.5	0.176	0.19	0.12
165	5825.0	802.11a	Rear	/	18.11	18.5	0.852	0.93	0.09
165	5825.0	802.11a	Left	/	18.11	18.5	0.098	0.11	0.08
165	5825.0	802.11a	Right	/	18.11	18.5	0.751	0.82	0.04
165	5825.0	802.11a	Top	/	18.11	18.5	0.436	0.48	0.04
157	5785.0	802.11a	Rear	/	18.07	18.5	0.739	0.82	-0.16
157	5785.0	802.11a	Right	/	18.07	18.5	0.706	0.78	0.03
<U-NII-1> - Hotspot Test Data (10mm) - Power Level E2									
40	5200.0	802.11a	Front	/	12.43	13.0	0.059	0.07	-0.04
40	5200.0	802.11a	Rear	/	12.43	13.0	0.385	0.44	0.14
40	5200.0	802.11a	Left	/	12.43	13.0	0.013	0.01	-0.14
40	5200.0	802.11a	Right	/	12.43	13.0	0.196	0.22	-0.06
40	5200.0	802.11a	Top	/	12.43	13.0	0.193	0.22	0.02
<U-NII-3> - Hotspot Test Data (10mm) - Power Level E2									
165	5825.0	802.11a	Front	/	13.99	14.5	0.081	0.09	0.11
165	5825.0	802.11a	Rear	/	13.99	14.5	0.390	0.44	0.13
165	5825.0	802.11a	Left	/	13.99	14.5	0.045	0.05	0.10
165	5825.0	802.11a	Right	/	13.99	14.5	0.344	0.39	0.10
165	5825.0	802.11a	Top	/	13.99	14.5	0.199	0.22	-0.02
< U-NII-2A> - Body-Worn Test Data (15mm) - Power Level F1									
60	5300.0	802.11a	Front	/	18.14	18.5	0.107	0.12	0.09
60	5300.0	802.11a	Rear	/	18.14	18.5	0.507	0.55	0.06
< U-NII-2C> - Body-Worn Test Data (15mm) - Power Level F1									
144	5720.0	802.11a	Front	/	18.39	18.5	0.120	0.12	0.03
144	5720.0	802.11a	Rear	/	18.39	18.5	0.560	0.57	0.09
< U-NII-3> - Body-Worn Test Data (15mm) - Power Level F1									
165	5825.0	802.11a	Front	/	18.11	18.5	0.105	0.11	0.00
165	5825.0	802.11a	Rear	/	18.11	18.5	0.534	0.58	0.09
< U-NII-2A> - Body-Worn Test Data (15mm) - Power Level F2									
60	5300.0	802.11a	Front	/	16.02	16.5	0.083	0.09	-0.02
60	5300.0	802.11a	Rear	/	16.02	16.5	0.387	0.43	0.05



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< U-NII-2C> - Body-Worn Test Data (15mm) - Power Level F2									
144	5720.0	802.11a	Front	/	16.27	16.5	0.069	0.07	-0.03
144	5720.0	802.11a	Rear	/	16.27	16.5	0.324	0.34	-0.03
< U-NII-3> - Body-Worn Test Data (15mm) - Power Level F2									
165	5825.0	802.11a	Front	/	15.99	16.5	0.080	0.09	0.08
165	5825.0	802.11a	Rear	/	15.99	16.5	0.409	0.46	-0.06

Note:

1. U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is $\leq 1.2\text{W/kg}$, SAR is not required for U-NII-1 band.
2. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is $> 0.8 \text{ W/kg}$, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is $\leq 1.2 \text{ W/kg}$ or all required channels are tested.

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

Table 13.60: SAR Values (WLAN - Body) - 802.11a (Scaled Reported SAR)

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
44	5220.0	Rear	100%	100%	1.16	1.16



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13.7. Product specific 10g SAR

Table 13.61: SAR Values (WCDMA Band 2 - Extremity)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Test Data (0mm) - Power Level C1									
9400	1880.0	RMC	Bottom	/	21.00	22.0	2.210	2.78	0.07
9538	1907.6	RMC	Bottom	/	21.00	22.0	2.180	2.74	0.02
9262	1852.4	RMC	Bottom	35	21.00	22.0	2.240	2.82	0.07

Table 13.62: SAR Values (WCDMA Band 4 - Extremity)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Test Data (0mm) - Power Level C1									
1413	1732.6	RMC	Rear	/	21.50	22.5	2.360	2.97	-0.03
1513	1752.6	RMC	Rear	/	21.50	22.5	2.390	3.01	0.06
1312	1712.4	RMC	Rear	/	21.60	22.5	2.340	2.88	0.05
1413	1732.6	RMC	Bottom	/	21.50	22.5	2.520	3.17	0.06
1513	1752.6	RMC	Bottom	36	21.50	22.5	2.540	3.20	0.04
1312	1712.4	RMC	Bottom	/	21.60	22.5	2.470	3.04	0.02

Table 13.63: SAR Values (LTE Band 2 - Extremity)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Test Data (0mm) - Power Level C1									
18900	1880.0	1RB50	Bottom	/	20.19	22.0	1.770	2.69	0.02
19100	1900.0	1RB50	Bottom	/	20.18	22.0	1.770	2.69	0.09
18700	1860.0	1RB50	Bottom	37	20.15	22.0	1.840	2.82	0.05
18700	1860.0	100RB	Bottom	/	19.14	21.0	1.380	2.12	0.08

Table 13.64: SAR Values (LTE Band 4 - Extremity)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Test Data (0mm) - Power Level C1									
20300	1745.0	1RB50	Bottom	38	20.63	22.0	2.120	2.91	0.03
20175	1732.5	1RB50	Bottom	/	20.60	21.0	2.080	2.28	0.12
20050	1720.0	1RB50	Bottom	/	20.61	21.0	2.030	2.22	0.04
20300	1745.0	100RB	Bottom	/	19.68	21.0	1.760	2.39	0.05



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Table 13.65: SAR Values (LTE Band 66 - Extremity)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)
Ch.	MHz								
Test Data (0mm) - Power Level C1									
132572	1770.0	1RB50	Bottom	/	20.68	22.0	2.210	2.99	0.02
132322	1745.0	1RB50	Bottom	39	20.66	22.0	2.290	3.12	-0.02
132072	1720.0	1RB50	Bottom	/	20.66	22.0	2.190	2.98	0.01
132572	1770.0	100RB	Bottom	/	19.80	21.0	1.190	1.57	0.01

Table 13.66: SAR Values (WLAN 5GHz - Extremity)

Frequency		Test Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Power Drift(dB)
Ch.	MHz								
<U-NII-2A> - Test Data (0mm) - Power Level F1									
60	5300.0	802.11a	Front	/	18.14	18.5	0.384	0.42	-0.03
60	5300.0	802.11a	Rear	40	18.14	18.5	2.430	2.64	0.09
60	5300.0	802.11a	Left	/	18.14	18.5	0.017	0.02	0.06
60	5300.0	802.11a	Right	/	18.14	18.5	1.174	1.28	0.08
60	5300.0	802.11a	Top	/	18.14	18.5	1.760	1.91	0.14
64	5320.0	802.11a	Rear	/	18.07	18.5	1.980	2.19	0.09
<U-NII-2C> - Test Data (0mm) - Power Level F1									
144	5720.0	802.11a	Front	/	18.39	18.5	0.352	0.36	0.04
144	5720.0	802.11a	Rear	/	18.39	18.5	1.380	1.42	0.01
144	5720.0	802.11a	Left	/	18.39	18.5	0.014	0.01	-0.16
144	5720.0	802.11a	Right	/	18.39	18.5	0.862	0.88	0.06
144	5720.0	802.11a	Top	/	18.39	18.5	1.110	1.14	0.03
<U-NII-2A> - Test Data (0mm) - Power Level F2									
60	5300.0	802.11a	Front	/	16.02	16.5	0.220	0.25	0.01
60	5300.0	802.11a	Rear	/	16.02	16.5	1.390	1.55	-0.10
60	5300.0	802.11a	Left	/	16.02	16.5	0.010	0.01	-0.02
60	5300.0	802.11a	Right	/	16.02	16.5	0.672	0.75	-0.12
60	5300.0	802.11a	Top	/	16.02	16.5	1.010	1.13	-0.12
<U-NII-2C> - Test Data (0mm) - Power Level F2									
144	5720.0	802.11a	Front	/	16.27	16.5	0.288	0.30	0.02
144	5720.0	802.11a	Rear	/	16.27	16.5	1.130	1.19	0.11
144	5720.0	802.11a	Left	/	16.27	16.5	0.011	0.01	-0.15
144	5720.0	802.11a	Right	/	16.27	16.5	0.706	0.74	-0.01
144	5720.0	802.11a	Top	/	16.27	16.5	0.909	0.96	-0.09

14. SAR Measurement Variability

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

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

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) 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 ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Table 14.1: SAR Measurement Variability for Body - WCDMA Band 2

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
9262	1852.4	Bottom	0.895	0.883	1.01	/

Table 14.2: SAR Measurement Variability for Body - WCDMA Band 4

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1513	1752.6	Bottom	1.010	0.995	1.02	/

Table 14.3: SAR Measurement Variability for Body - LTE Band 4

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
20300	1745.0	Bottom	0.885	0.870	1.02	/

Table 14.4: SAR Measurement Variability for Head - WLAN 2.4GHz

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1	2412.0	Left Cheek	0.947	0.933	1.02	/

Table 14.5: SAR Measurement Variability for Head - WLAN 5GHz

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
165	5825.0	Left Cheek	0.914	0.905	1.01	/

**Table 14.6: SAR Measurement Variability for Body - WLAN 5GHz**

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
44	5220.0	Rear	1.070	1.050	1.02	/

Table 14.7: SAR Measurement Variability for Extremity - WCDMA Band 2

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
9262	1852.4	Bottom	2.240	2.190	1.02	/

Table 14.8: SAR Measurement Variability for Extremity - WCDMA Band 4

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
1513	1752.6	Bottom	2.540	2.460	1.03	/

Table 14.9: SAR Measurement Variability for Extremity - LTE Band 4

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
20300	1745.0	Bottom	2.120	2.070	1.02	/

Table 14.10: SAR Measurement Variability for Extremity - LTE Band 66

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
132322	1745.0	Bottom	2.290	2.210	1.04	/

Table 14.11: SAR Measurement Variability for Extremity - WLAN 5GHz

Frequency		Test Position	Original	1 st Repeated	Ratio	2 nd Repeated
Ch.	MHz		SAR (W/kg)	SAR (W/kg)		SAR (W/kg)
60	5300.0	Rear	2.430	2.380	1.02	/

15. Measurement Uncertainty

15.1. 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	12	N	2	1	1	6.0	6.0	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	Modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
19	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
20	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
21	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	9
22	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
23	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	9
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{23} c_i^2 u_i^2}$						11.3	11.2	95.5
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						22.6	22.4	



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15.2. Measurement Uncertainty for Normal SAR Tests (3GHz~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	13.1	N	2	1	1	6.65	6.65	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.0	R	$\sqrt{3}$	1	1	0.0	0.0	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. Restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
19	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
20	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
21	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	43
22	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
23	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						11.6	11.5	257
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						23.2	23.0	



16. Main Test Instruments

Table 16.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46103759	2021-11-15	One year
02	Dielectric probe	85070E	MY44300317	/	/
03	Power meter	E4418B	MY50000366	2021-12-12	One year
04	Power sensor	E9304A	MY50000188	2021-12-12	One year
05	Power meter	NRP	101260	2021-12-30	One year
06	Power sensor	NRP-Z91	102211	2021-12-30	One year
07	Signal Generator	E8257D	MY47461211	2022-01-14	One year
08	Amplifier	VTL5400	0404	/	/
09	DAE	DAE4	1527	2022-06-21	One year
10	E-field Probe	EX3DV4	7621	2022-05-06	One year
11	Dipole Validation Kit	D750V3	1163	2022-08-22	Three years
12	Dipole Validation Kit	D835V2	4d057	2021-10-18	Three years
13	Dipole Validation Kit	D1750V2	1152	2022-08-22	Three years
14	Dipole Validation Kit	D1900V2	5d088	2021-10-18	Three years
15	Dipole Validation Kit	D2450V2	873	2021-10-21	Three years
16	Dipole Validation Kit	D3500V2	1084	2019-09-20	Three years
17	Dipole Validation Kit	D3900V2	1028	2019-09-20	Three years
18	Dipole Validation Kit	D5GHzV2	1238	2022-08-17	Three years
19	BTS	MT8820C	6201341853	2022-01-14	One year
20	BTS	CMW500	152499	2022-07-15	One year
21	Software	DASY5	/	/	/

ANNEX A: Graph Results

WCDMA Band 2 Head

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ S/m}$; $\epsilon_r = 39.002$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WCDMA (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Right Cheek Middle/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.157 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.292 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.193 W/kg

SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.150 W/kg

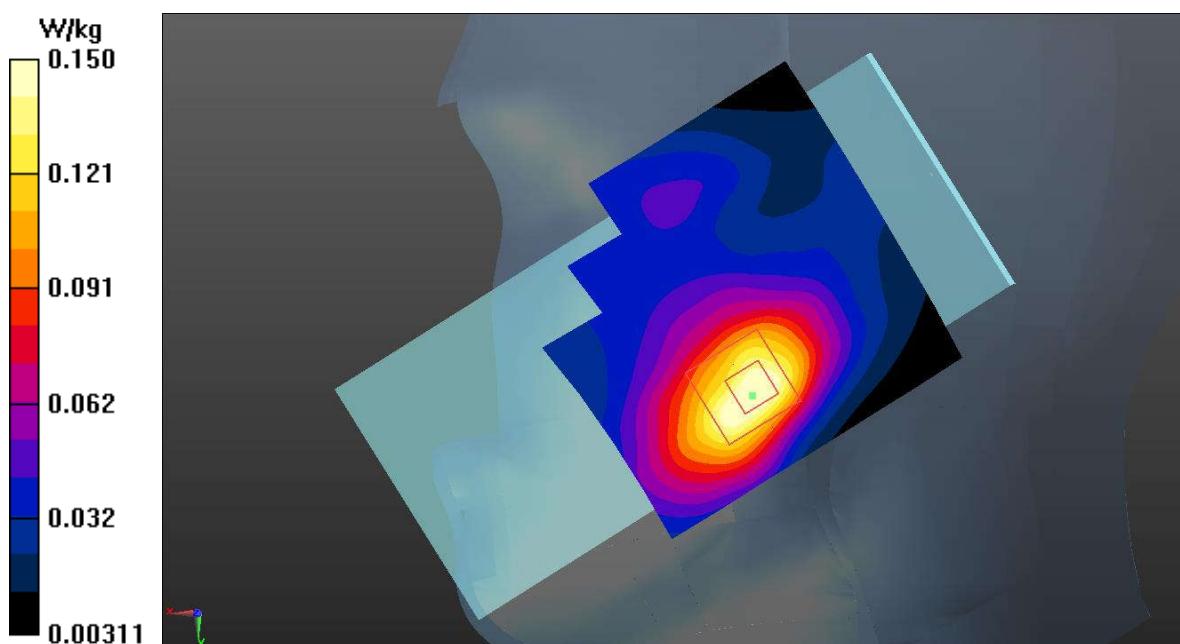


Fig.1 WCDMA Band 2 Head

WCDMA Band 2 Body

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.386$ S/m; $\epsilon_r = 39.11$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Bottom Side Low/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.25 W/kg

Bottom Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.48 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.895 W/kg; SAR(10 g) = 0.467 W/kg

Maximum value of SAR (measured) = 1.24 W/kg

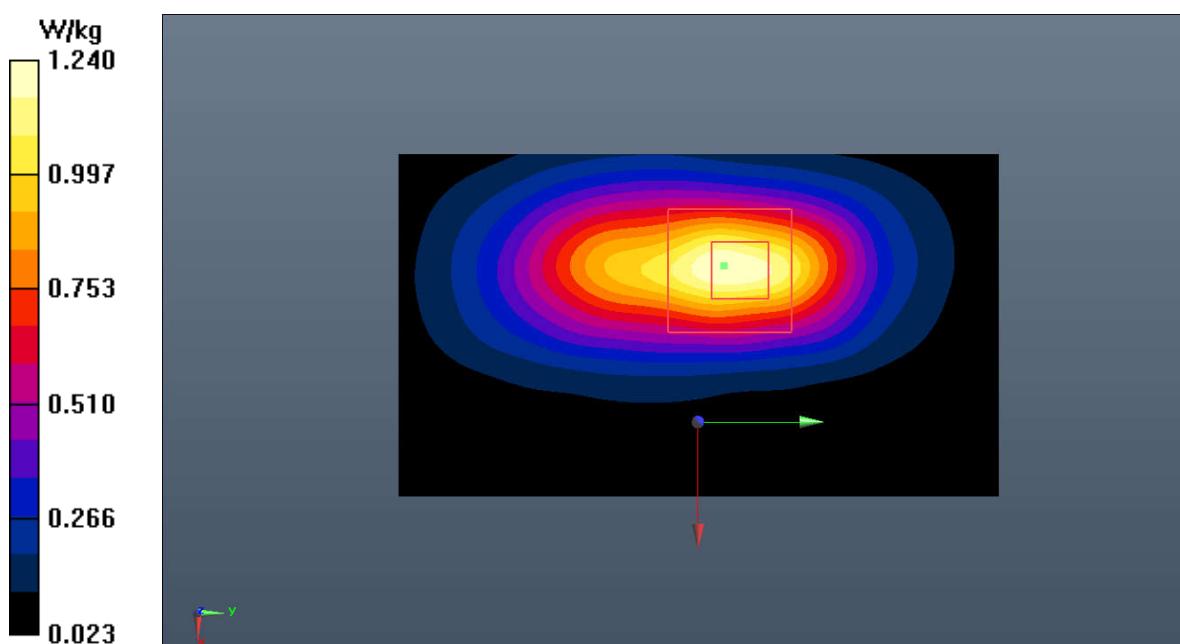


Fig.2 WCDMA Band 2 Body

WCDMA Band 4 Head

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 39.304$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1732.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Right Cheek Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.136 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.7170 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.163 W/kg

SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.069 W/kg

Maximum value of SAR (measured) = 0.126 W/kg

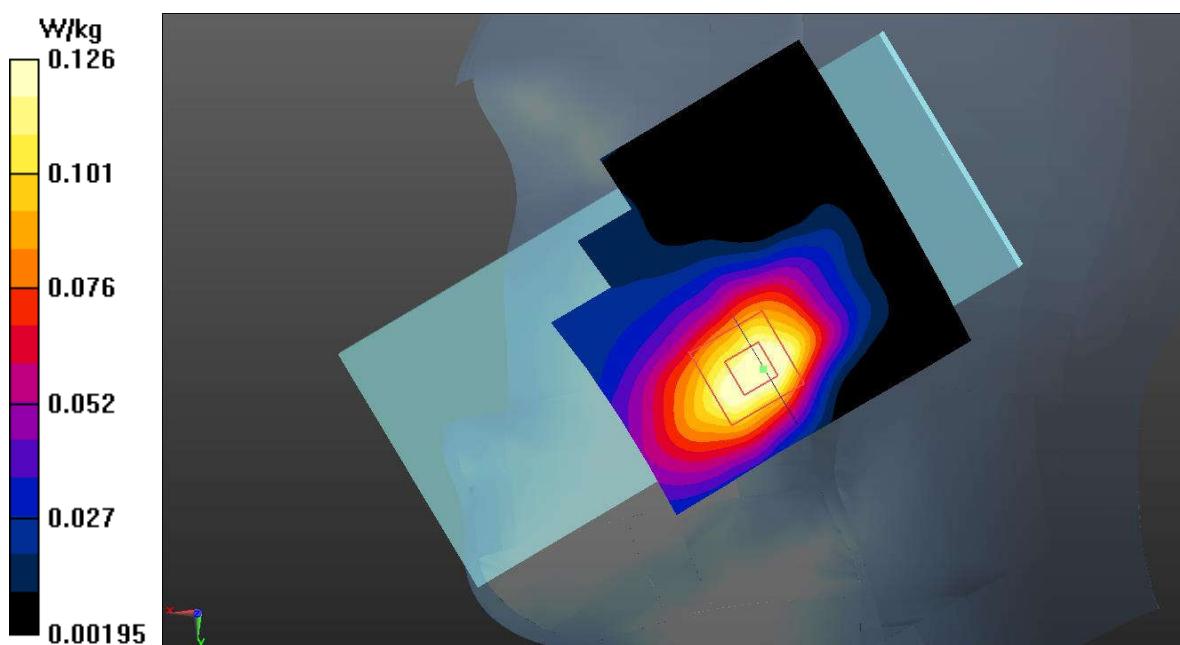


Fig.3 WCDMA Band 4 Head

WCDMA Band 4 Body

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.389$ S/m; $\epsilon_r = 39.226$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Bottom Side High/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.43 W/kg

Bottom Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.75 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.546 W/kg

Maximum value of SAR (measured) = 1.39 W/kg

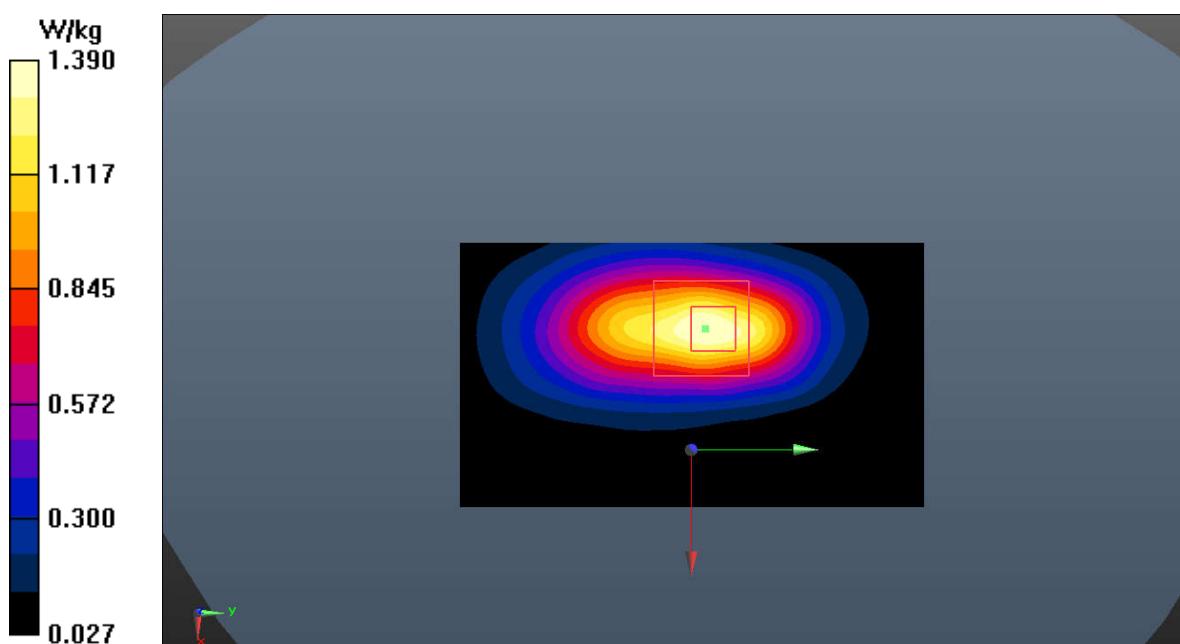


Fig.4 WCDMA Band 4 Body

WCDMA Band 5 Head

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 40.945$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WCDMA (0) Frequency: 836.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Left Cheek Middle/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.341 W/kg

Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.794 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.234 W/kg

Maximum value of SAR (measured) = 0.335 W/kg

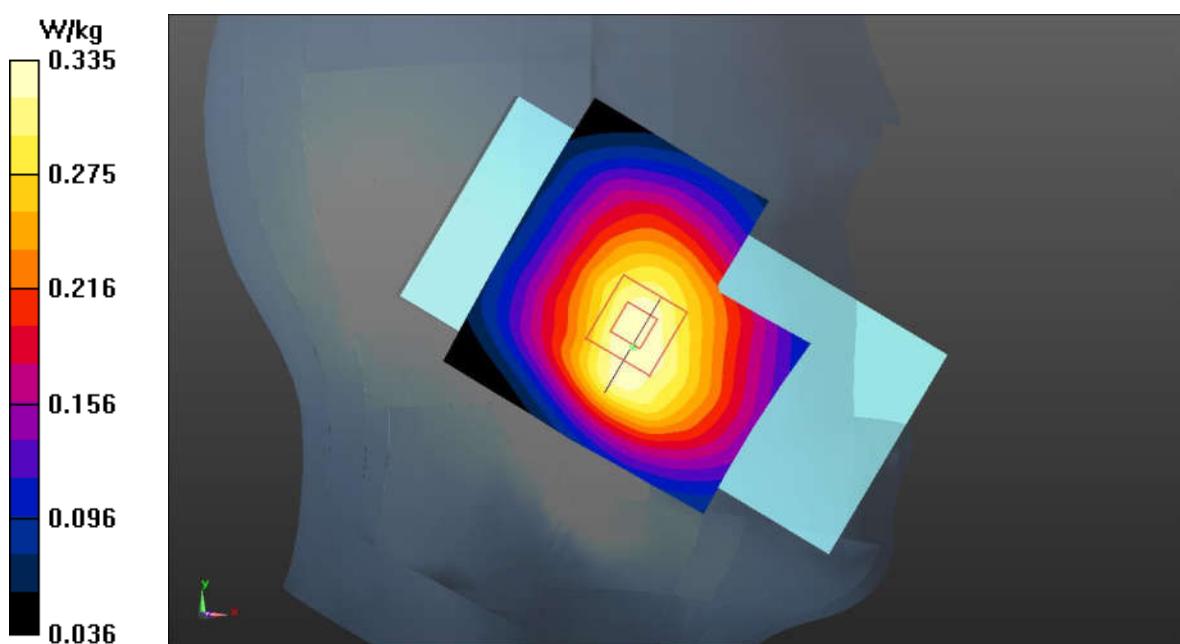


Fig.5 WCDMA Band 5 Head

WCDMA Band 5 Body

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 40.945$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 836.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Rear Side Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.414 W/kg

Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.26 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.483 W/kg

SAR(1 g) = 0.380 W/kg; SAR(10 g) = 0.290 W/kg

Maximum value of SAR (measured) = 0.438 W/kg

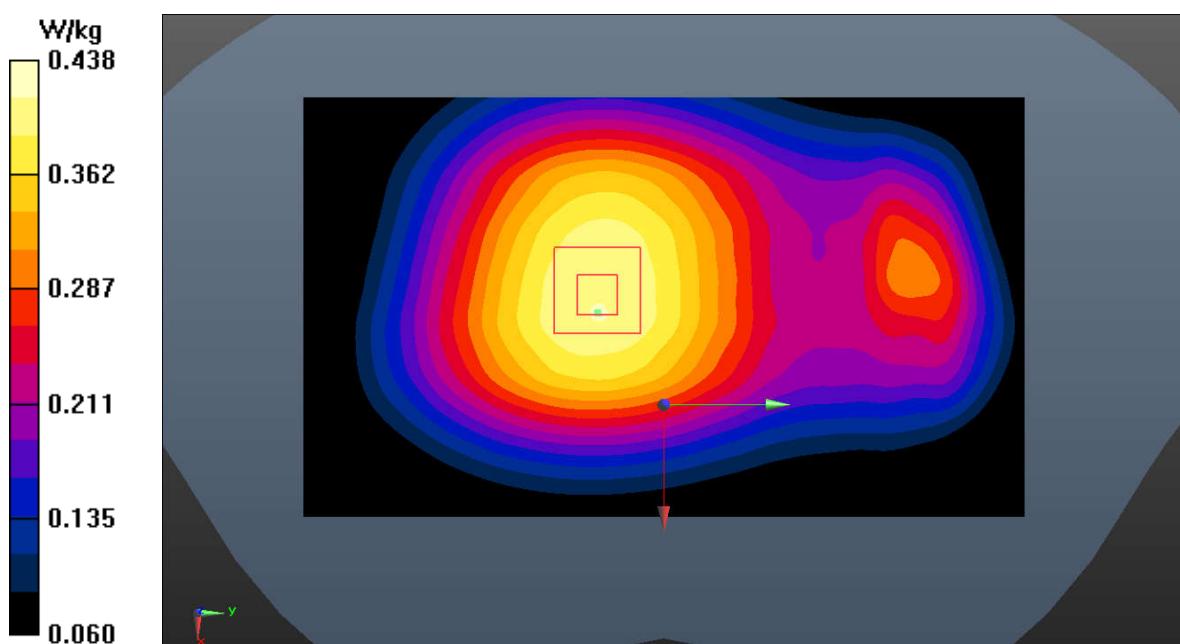


Fig.6 WCDMA Band 5 Body

LTE Band 2 Head

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ S/m}$; $\epsilon_r = 39.002$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Right Cheek Middle 1RB50/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.171 W/kg

Right Cheek Middle 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.106 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.160 W/kg

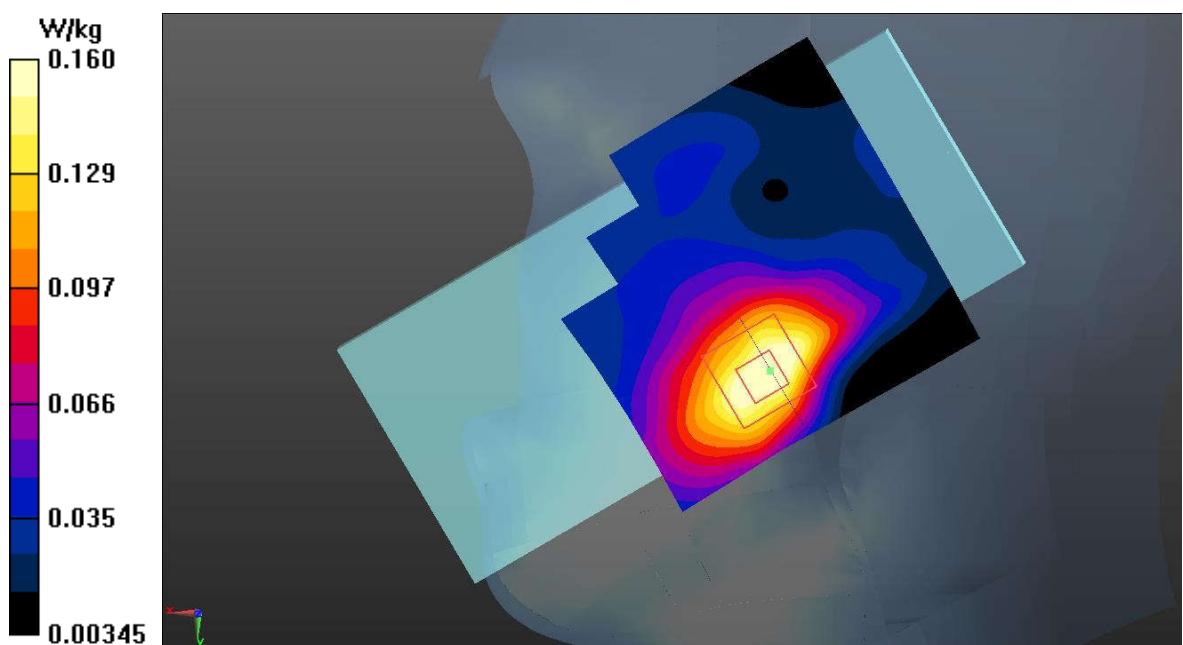


Fig.7 LTE Band 2 Head

LTE Band 2 Body

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1860 \text{ MHz}$; $\sigma = 1.393 \text{ S/m}$; $\epsilon_r = 39.08$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Bottom Side Low 1RB50/Area Scan (41x71x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

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

Bottom Side Low 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.38 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.740 W/kg; SAR(10 g) = 0.391 W/kg

Maximum value of SAR (measured) = 0.929 W/kg

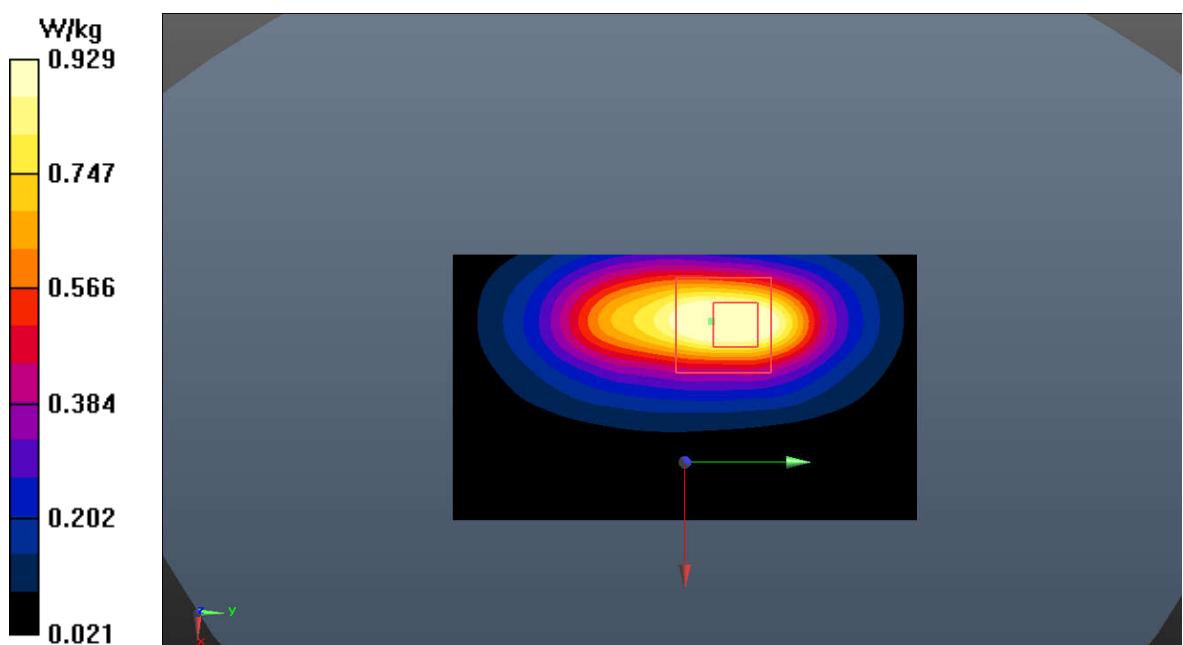


Fig.8 LTE Band 2 Body

LTE Band 4 Head

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 39.258$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Right Cheek High 1RB50/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.161 W/kg

Right Cheek High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.6920 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.191 W/kg

SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.150 W/kg

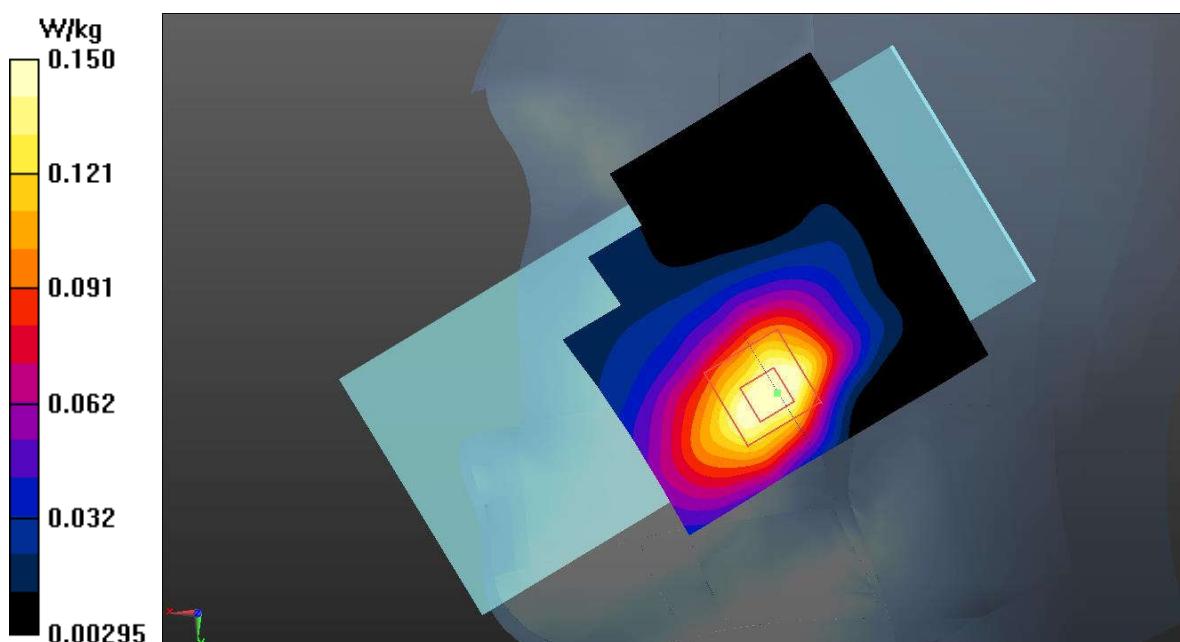


Fig.9 LTE Band 4 Head

LTE Band 4 Body

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 39.258$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Bottom Side High 1RB50/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.23 W/kg

Bottom Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.74 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.885 W/kg; SAR(10 g) = 0.484 W/kg

Maximum value of SAR (measured) = 1.09 W/kg

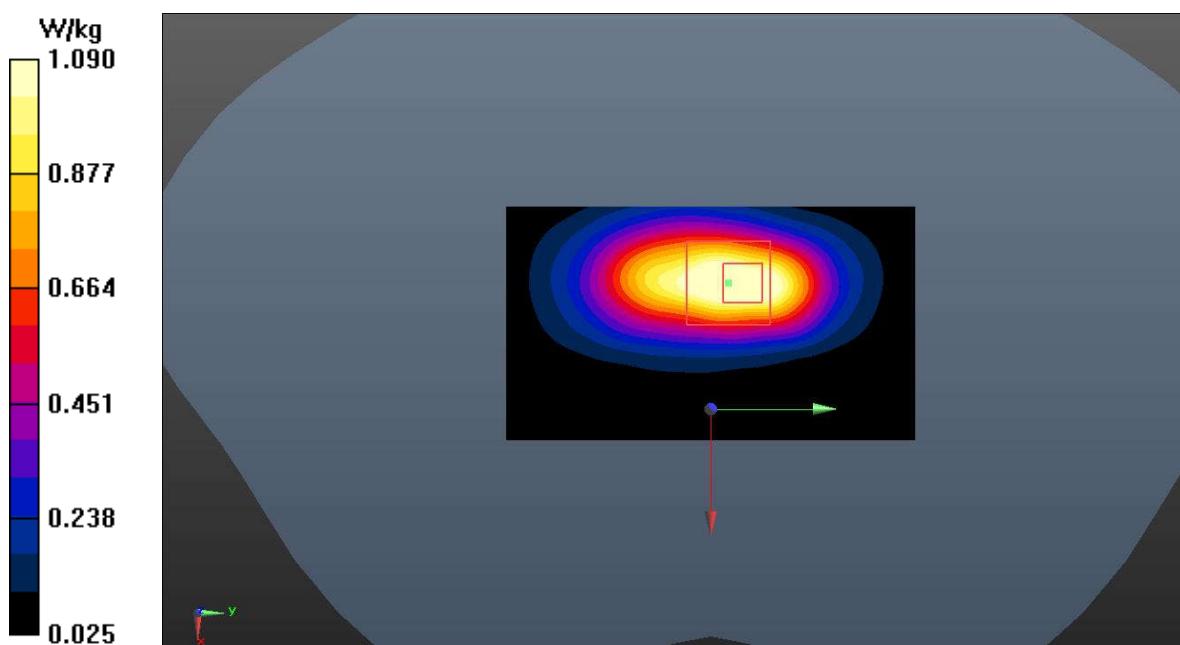


Fig.10 LTE Band 4 Body

LTE Band 5 Head

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 40.946$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

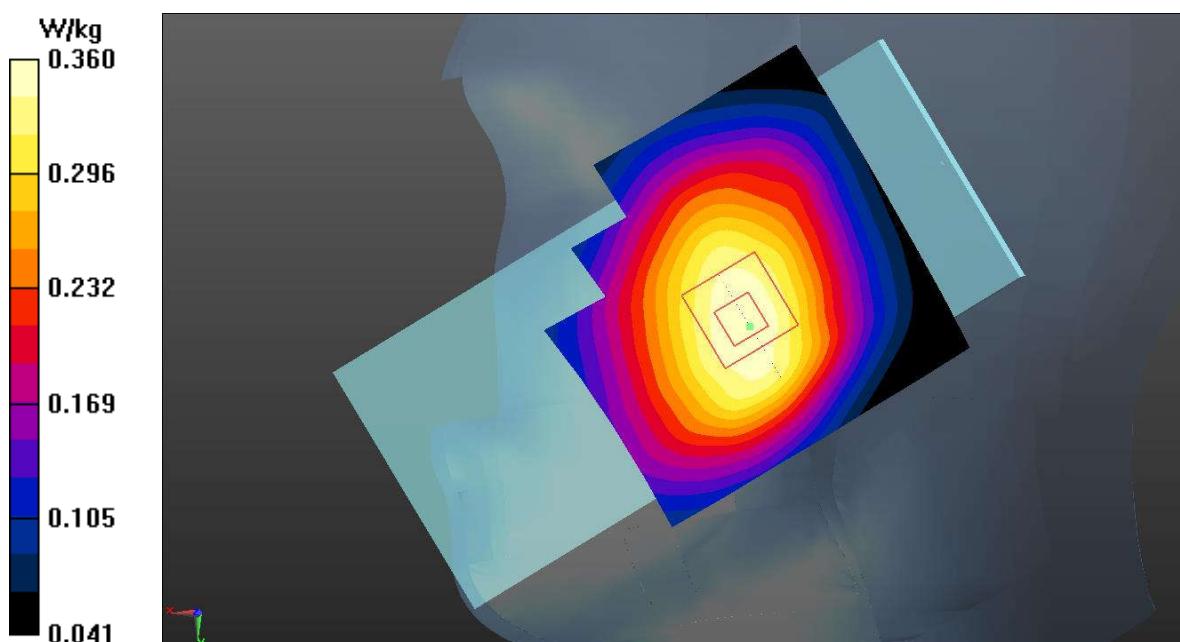
Right Cheek Middle 1RB24/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.367 W/kg**Right Cheek Middle 1RB24/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.195 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.410 W/kg

SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.259 W/kg

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

**Fig.11 LTE Band 5 Head**

LTE Band 5 Body

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 40.946$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Rear Side Middle 1RB24/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.372 W/kg

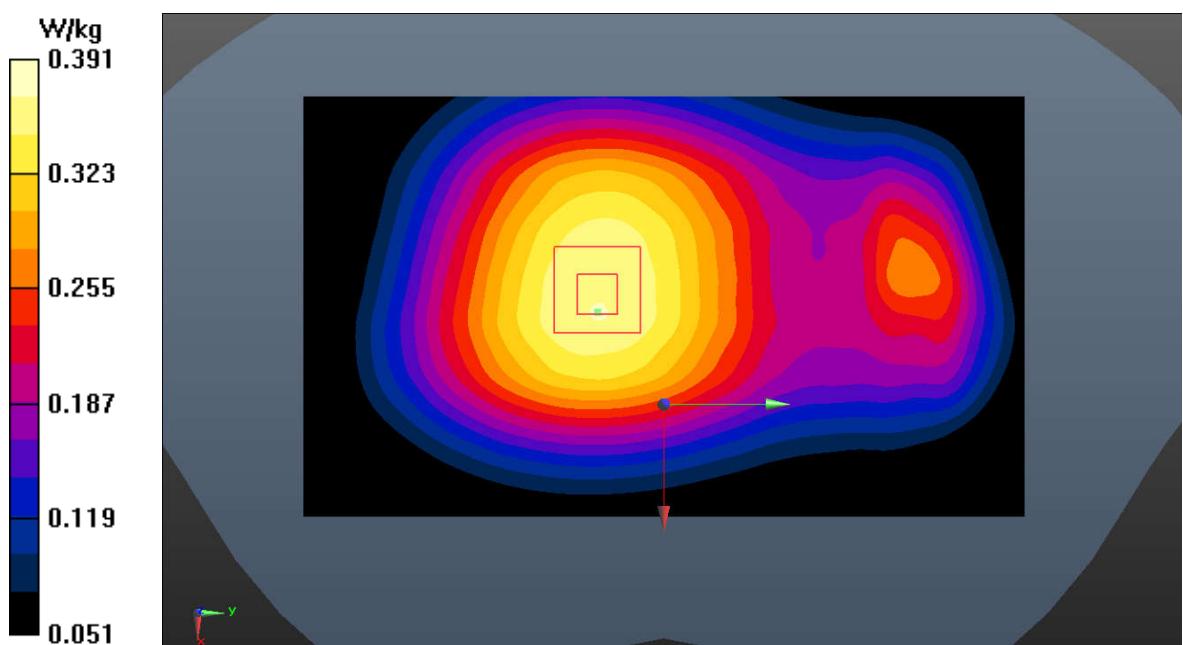
Rear Side Middle 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.27 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.338 W/kg; SAR(10 g) = 0.257 W/kg

Maximum value of SAR (measured) = 0.391 W/kg

**Fig.12 LTE Band 5 Body**

LTE Band 12 Head

Date: 2022-9-2

Electronics: DAE4 Sn1527

Medium: Head 750MHz

Medium parameters used: $f = 708 \text{ MHz}$; $\sigma = 0.854 \text{ S/m}$; $\epsilon_r = 43.071$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 707.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Right Cheek Middle 1RB24/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.124 W/kg

Right Cheek Middle 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.751 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.115 W/kg; SAR(10 g) = 0.090 W/kg

Maximum value of SAR (measured) = 0.124 W/kg

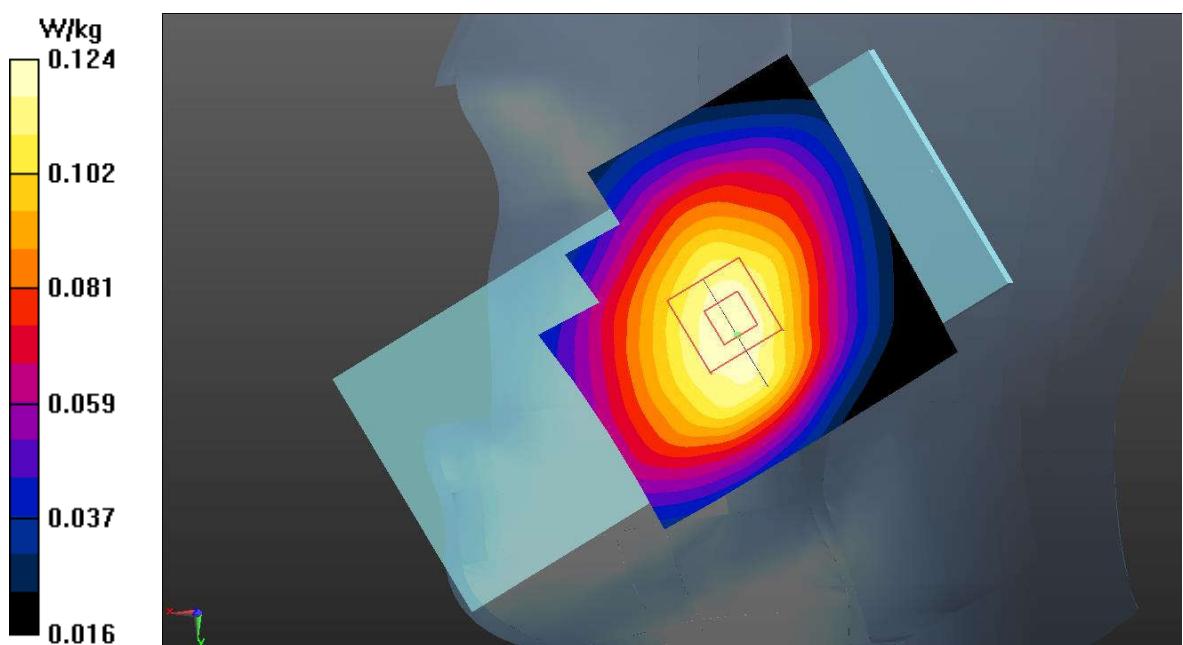


Fig.13 LTE Band 12 Head

LTE Band 12 Body

Date: 2022-9-2

Electronics: DAE4 Sn1527

Medium: Head 750MHz

Medium parameters used: $f = 708 \text{ MHz}$; $\sigma = 0.854 \text{ S/m}$; $\epsilon_r = 43.071$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 707.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Rear Side Middle 1RB24/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.349 W/kg

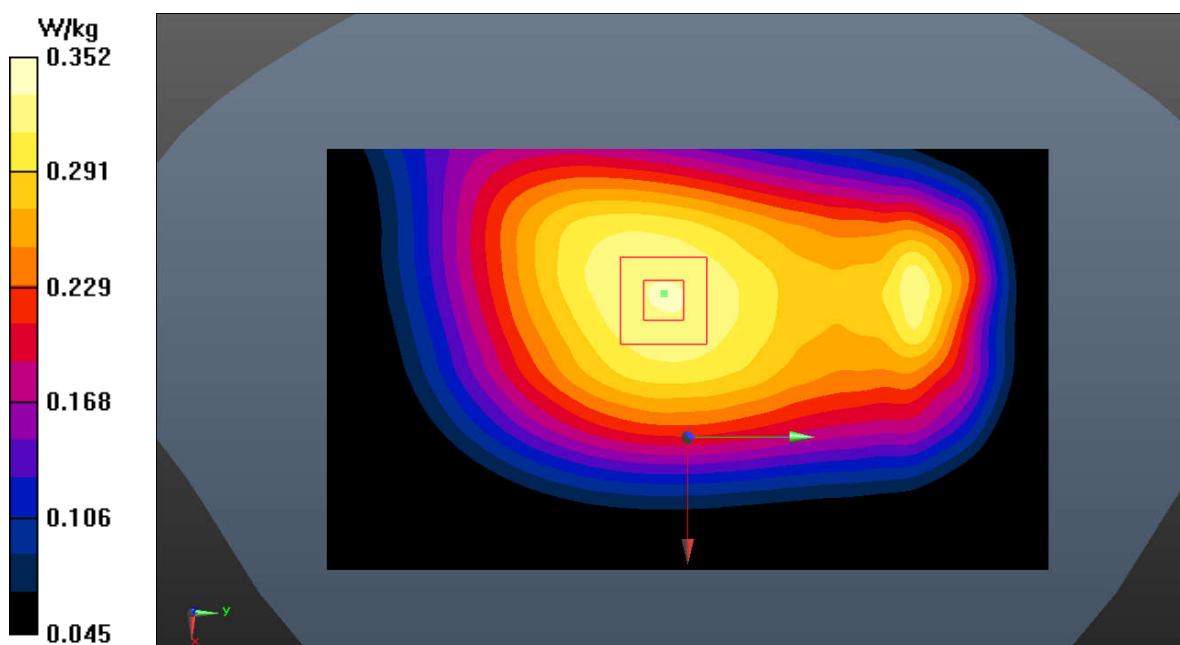
Rear Side Middle 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.01 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.394 W/kg

SAR(1 g) = 0.230 W/kg; SAR(10 g) = 0.166 W/kg

Maximum value of SAR (measured) = 0.355 W/kg

**Fig.14 LTE Band 12 Body**

LTE Band 13 Head

Date: 2022-9-2

Electronics: DAE4 Sn1527

Medium: Head 750MHz

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.901 \text{ S/m}$; $\epsilon_r = 42.183$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Right Cheek Middle 1RB24/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.267 W/kg

Right Cheek Middle 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.240 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.304 W/kg

SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.193 W/kg

Maximum value of SAR (measured) = 0.269 W/kg

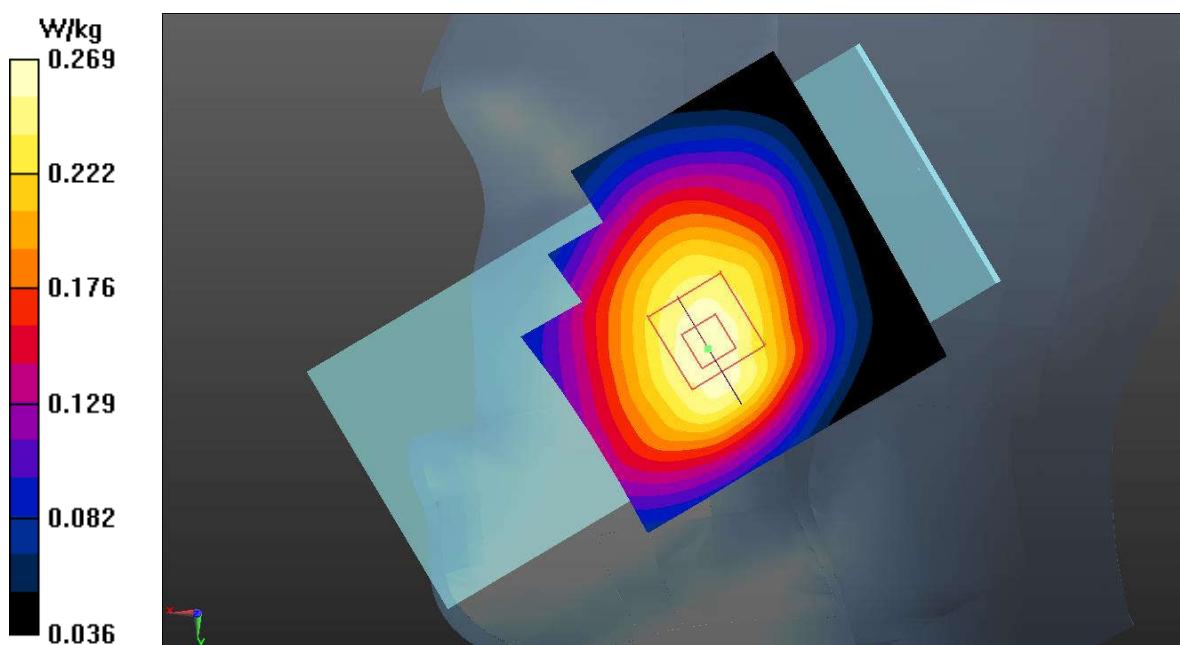


Fig.15 LTE Band 13 Head

LTE Band 13 Body

Date: 2022-9-2

Electronics: DAE4 Sn1527

Medium: Head 750MHz

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.901 \text{ S/m}$; $\epsilon_r = 42.183$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Rear Side Middle 1RB24/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.327 W/kg

Rear Side Middle 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.421 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 0.345 W/kg

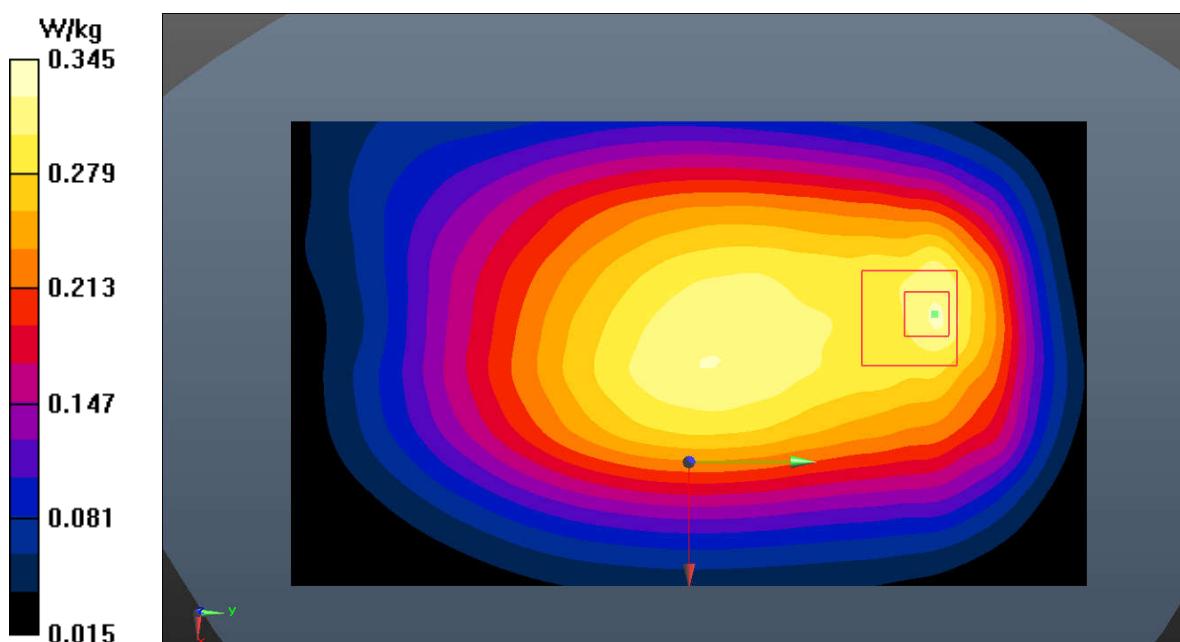


Fig.16 LTE Band 13 Body

LTE Band 66 Head

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.404$ S/m; $\epsilon_r = 39.16$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1770 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Right Cheek High 1RB50/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.166 W/kg

Right Cheek High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.121 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.204 W/kg

SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.162 W/kg

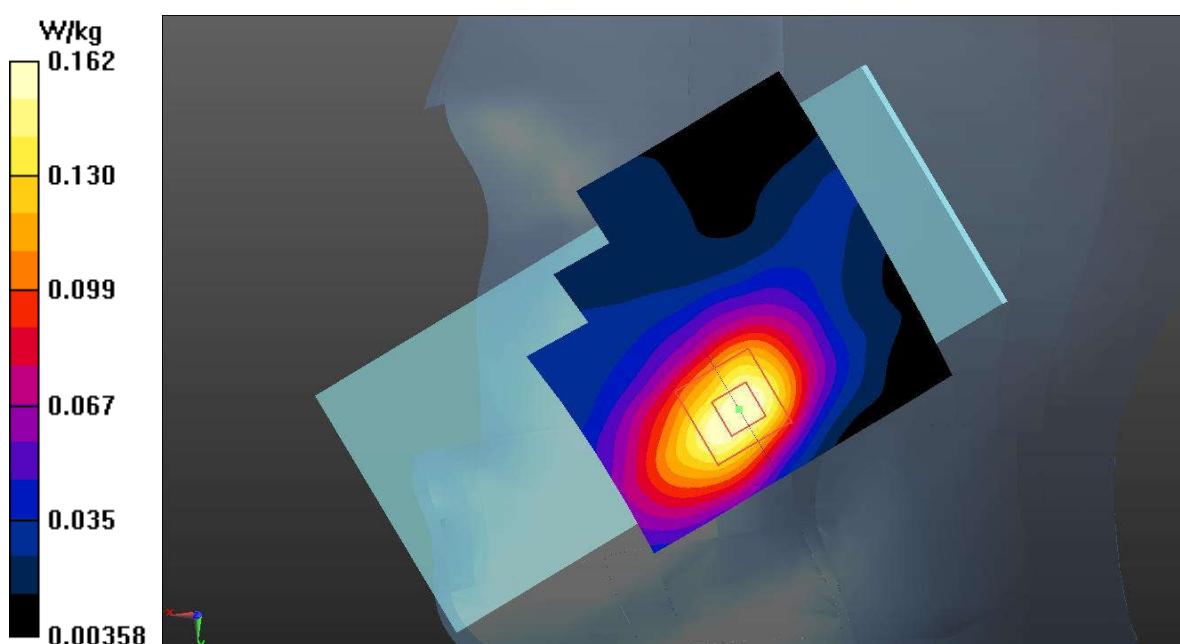


Fig.17 LTE Band 66 Head

LTE Band 66 Body

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1770 \text{ MHz}$; $\sigma = 1.404 \text{ S/m}$; $\epsilon_r = 39.16$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 1770 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Bottom Side High 1RB50/Area Scan (41x71x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

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

Bottom Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.30 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.351 W/kg

Maximum value of SAR (measured) = 0.896 W/kg

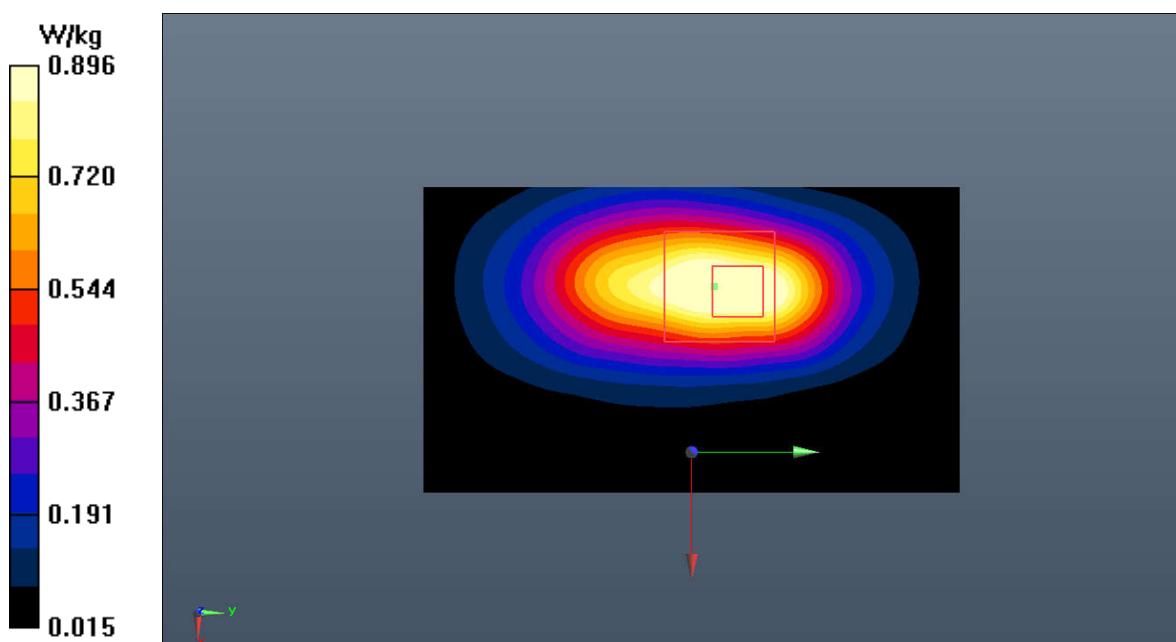


Fig.18 LTE Band 66 Body

NR n2 Head

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ S/m; $\epsilon_r = 39.002$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Right Cheek Middle 50@25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.136 W/kg

Right Cheek Middle 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.603 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.174 W/kg

SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.069 W/kg

Maximum value of SAR (measured) = 0.132 W/kg

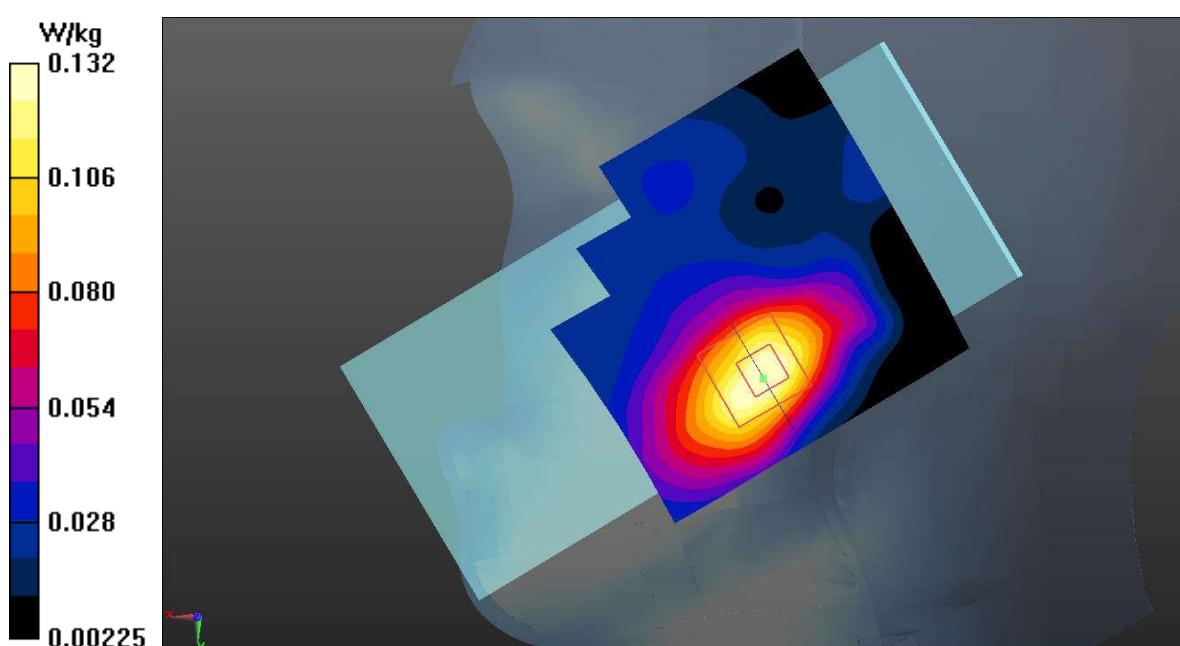


Fig.19 NR n2 Head

NR n2 Body

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ S/m}$; $\epsilon_r = 39.002$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, NR (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Bottom Side Middle 50@25/Area Scan (41x71x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.781 W/kg

Bottom Side Middle 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.85 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.292 W/kg

Maximum value of SAR (measured) = 0.792 W/kg

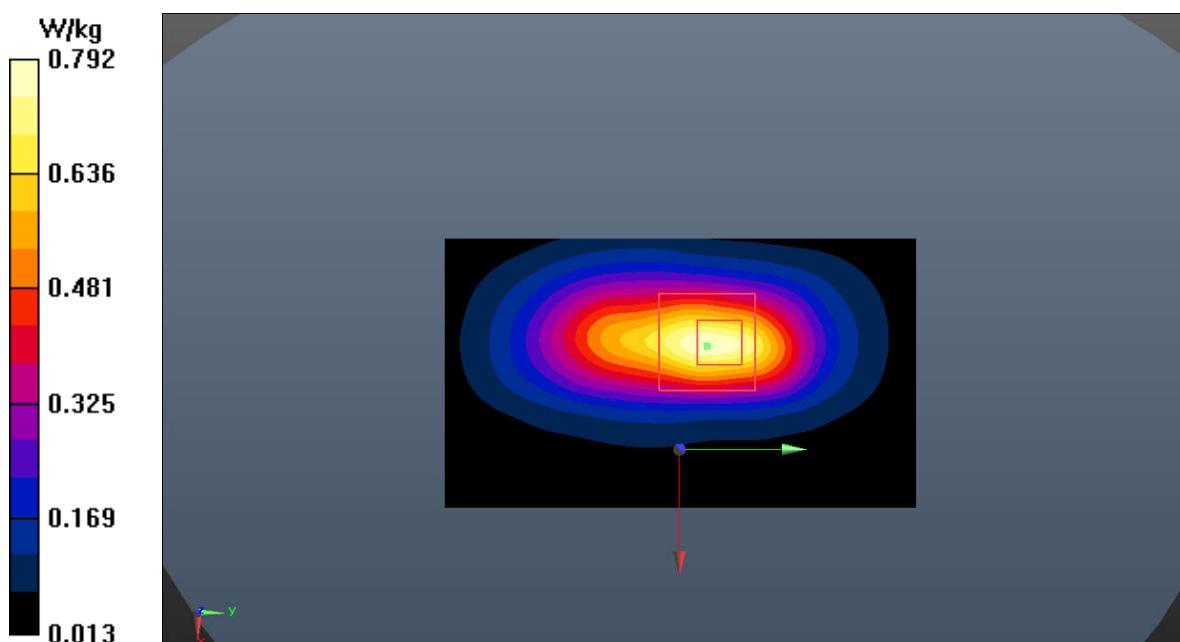


Fig.20 NR n2 Body

NR n5 Head

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 40.946$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Right Cheek Middle 50@25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.420 W/kg

Right Cheek Middle 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.128 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.281 W/kg

Maximum value of SAR (measured) = 0.422 W/kg

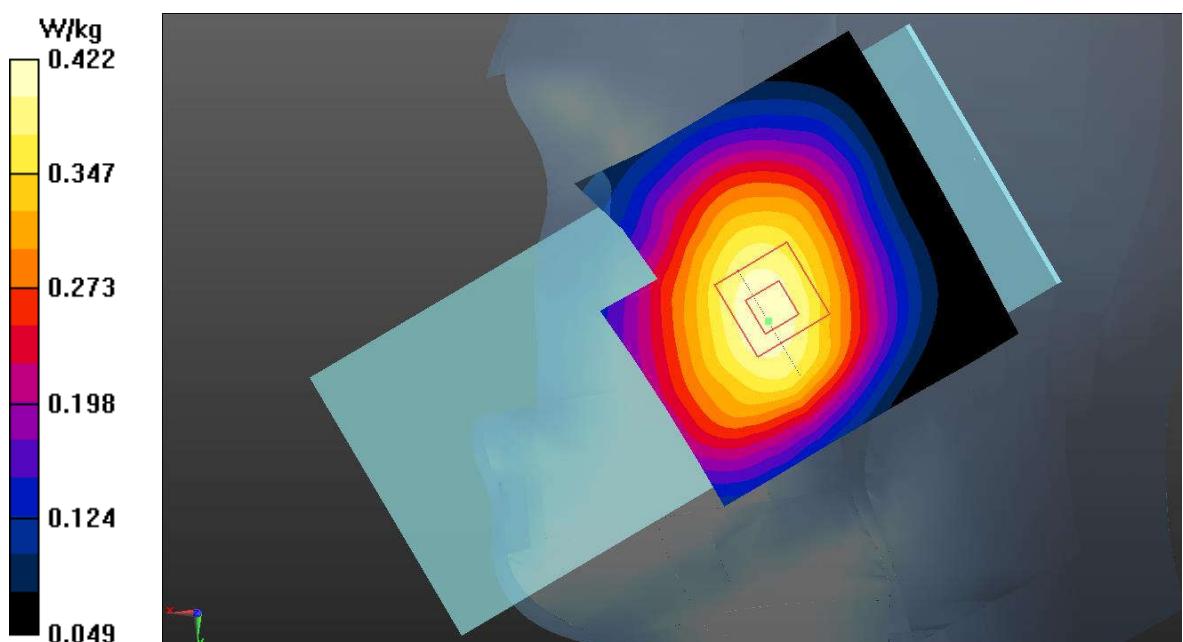


Fig.21 NR n5 Head

NR n5 Body

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 40.946$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Rear Side Middle 50@25/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

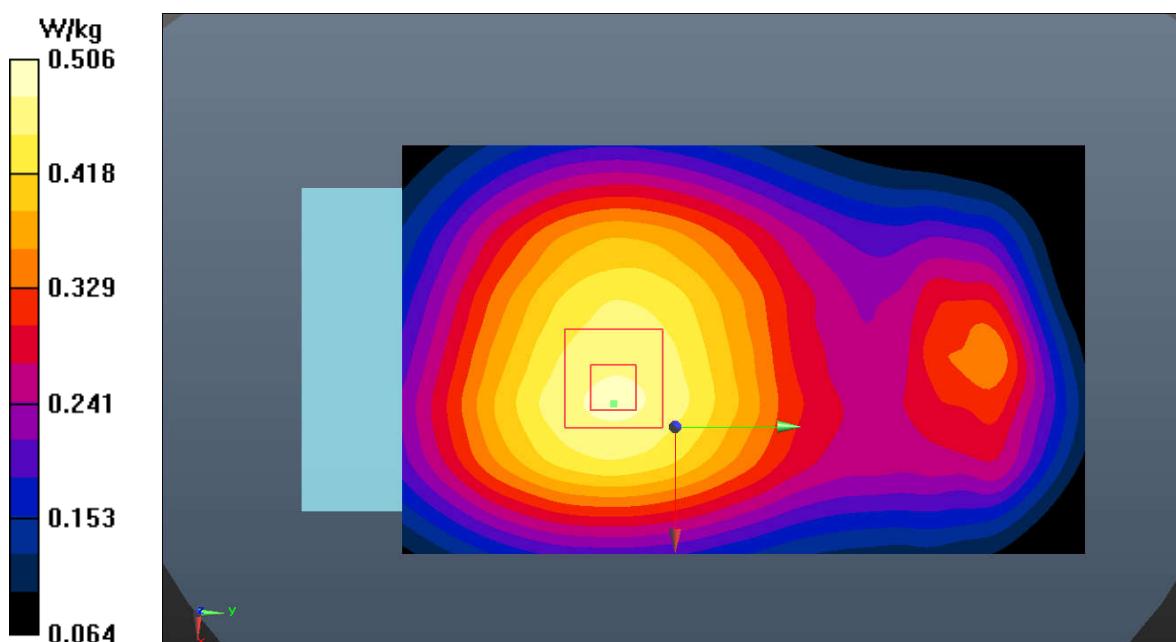
Rear Side Middle 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.35 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.560 W/kg

SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.329 W/kg

Maximum value of SAR (measured) = 0.506 W/kg

**Fig.22 NR n5 Body**

NR n66 Head

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 39.258$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Right Cheek Middle 108@54/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.172 W/kg

Right Cheek Middle 108@54/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.702 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.137 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.175 W/kg

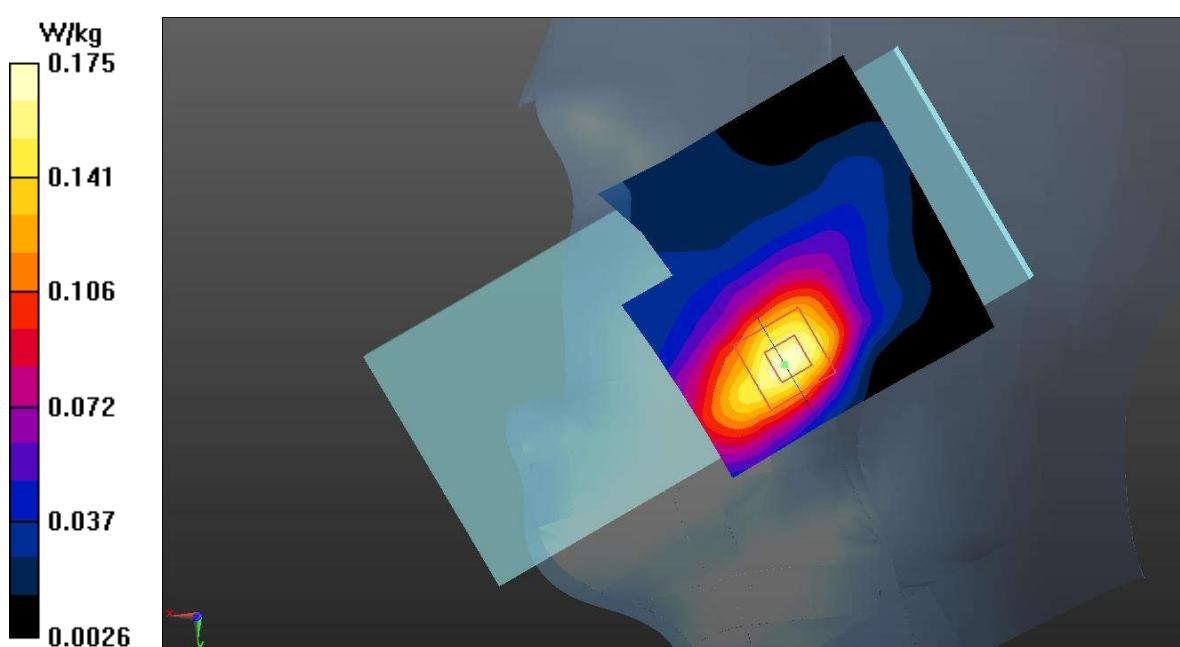


Fig.23 NR n66 Head

NR n66 Body

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 39.258$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Bottom Side Middle 108@54/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.756 W/kg

Bottom Side Middle 108@54/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.30 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.932 W/kg

SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.290 W/kg

Maximum value of SAR (measured) = 0.738 W/kg

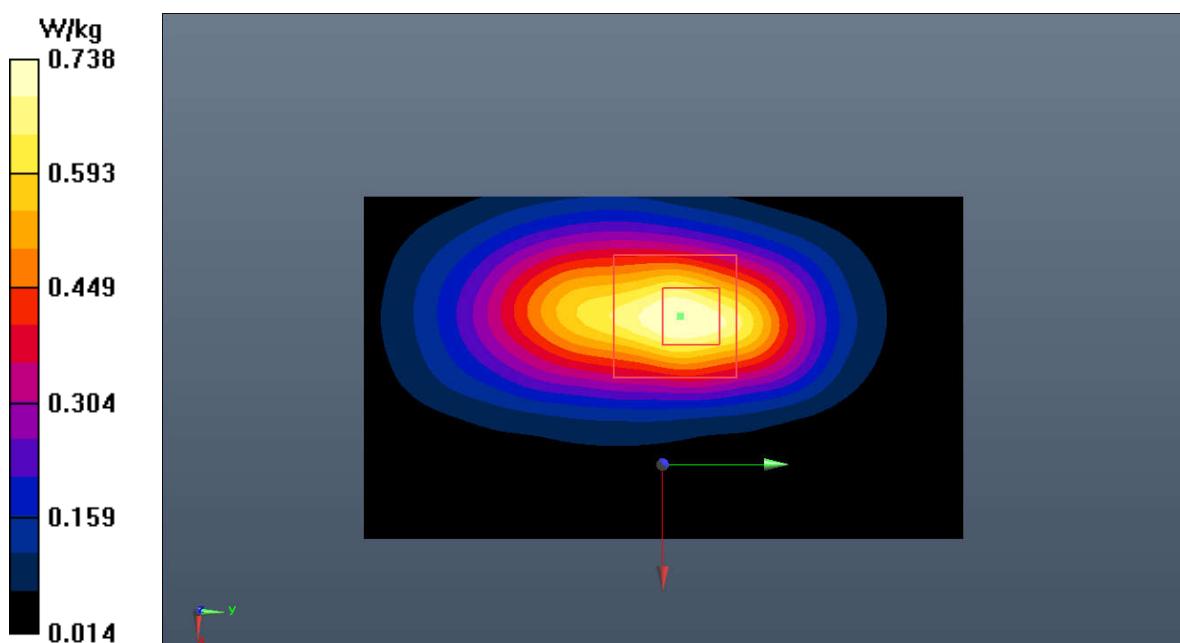


Fig.24 NR n66 Body

NR n77 Part 27Q (PC2) Head

Date: 2022-8-30

Electronics: DAE4 Sn1527

Medium: Head 3500MHz

Medium parameters used (interpolated): $f = 3500.01$ MHz; $\sigma = 2.863$ S/m; $\epsilon_r = 38.485$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 3500.01 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (7.56, 7.56, 7.56)

Right Cheek Middle 135@67/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.795 W/kg

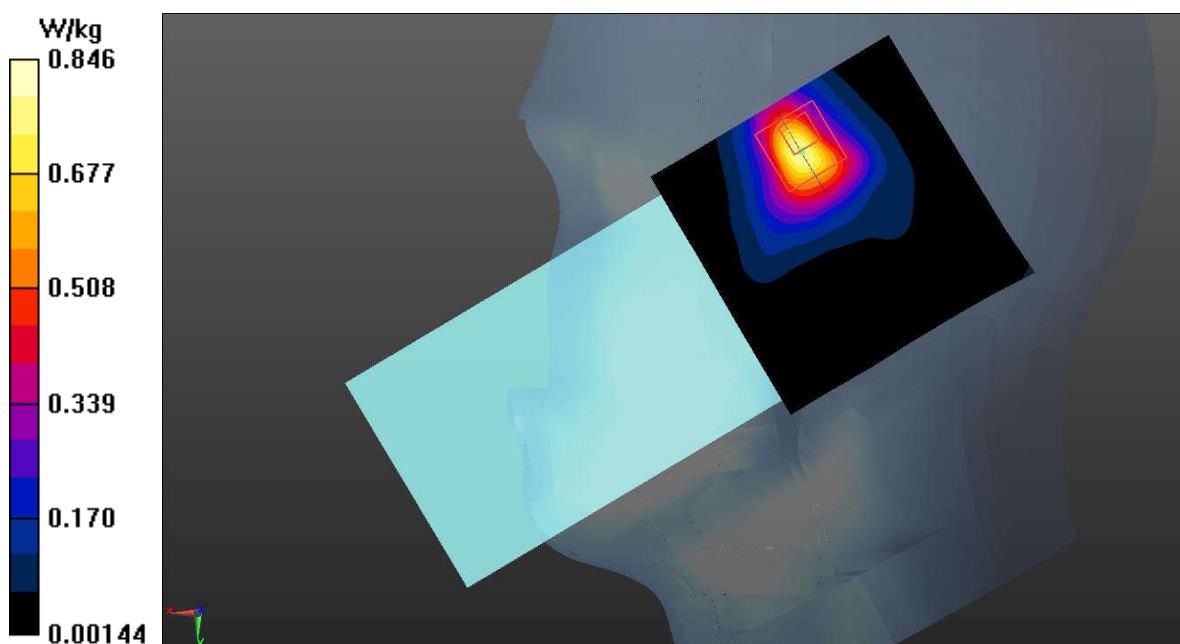
Right Cheek Middle 135@67/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.529 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.846 W/kg

**Fig.25 NR n77 Part 27Q Head**

NR n77 Part 27Q (PC2) Body

Date: 2022-8-30

Electronics: DAE4 Sn1527

Medium: Head 3500MHz

Medium parameters used (interpolated): $f = 3500.01$ MHz; $\sigma = 2.863$ S/m; $\epsilon_r = 38.485$; $\rho = 1000$ kg/m³

Communication System: UID 0, NR (0) Frequency: 3500.01 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (7.56, 7.56, 7.56)

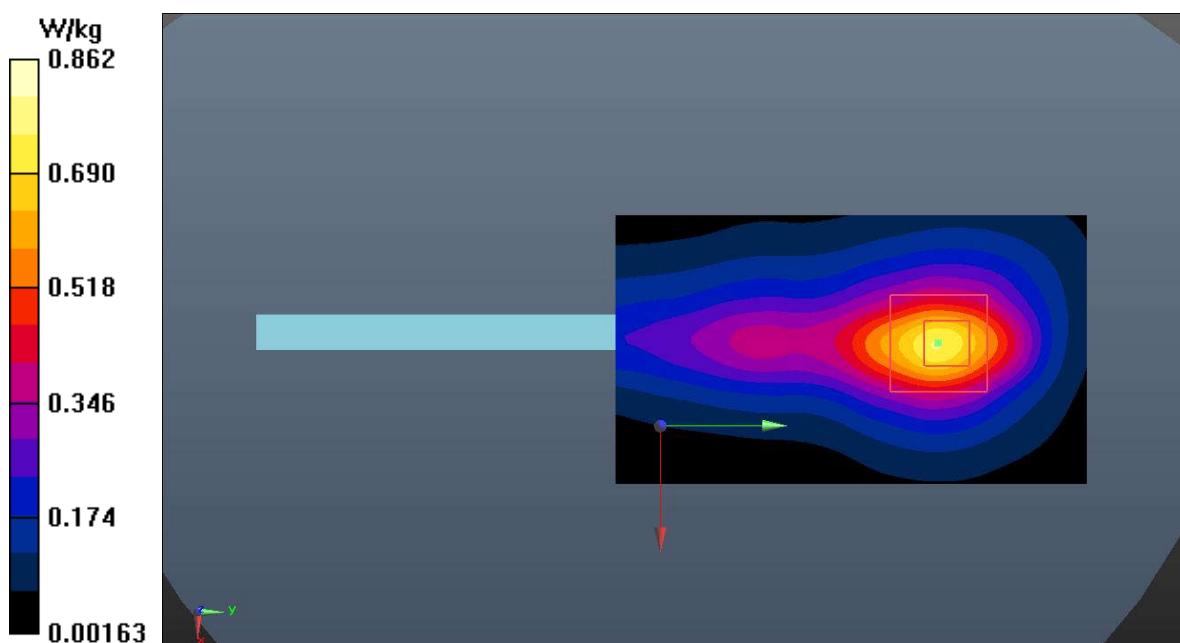
Left side Middle 135@67/Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.754 W/kg**Left side Middle 135@67/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.449 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.545 W/kg; SAR(10 g) = 0.248 W/kg

Maximum value of SAR (measured) = 0.862 W/kg

**Fig.26 NR n77 Part 27Q Body**

NR n77 Part 27O (PC2) Head

Date: 2022-9-7

Electronics: DAE4 Sn1527

Medium: Head 3900MHz

Medium parameters used: $f = 3840 \text{ MHz}$; $\sigma = 3.335 \text{ S/m}$; $\epsilon_r = 37.176$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, NR (0) Frequency: 3840 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (7.26, 7.26, 7.26)

Right Cheek Middle 135@67/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.706 W/kg

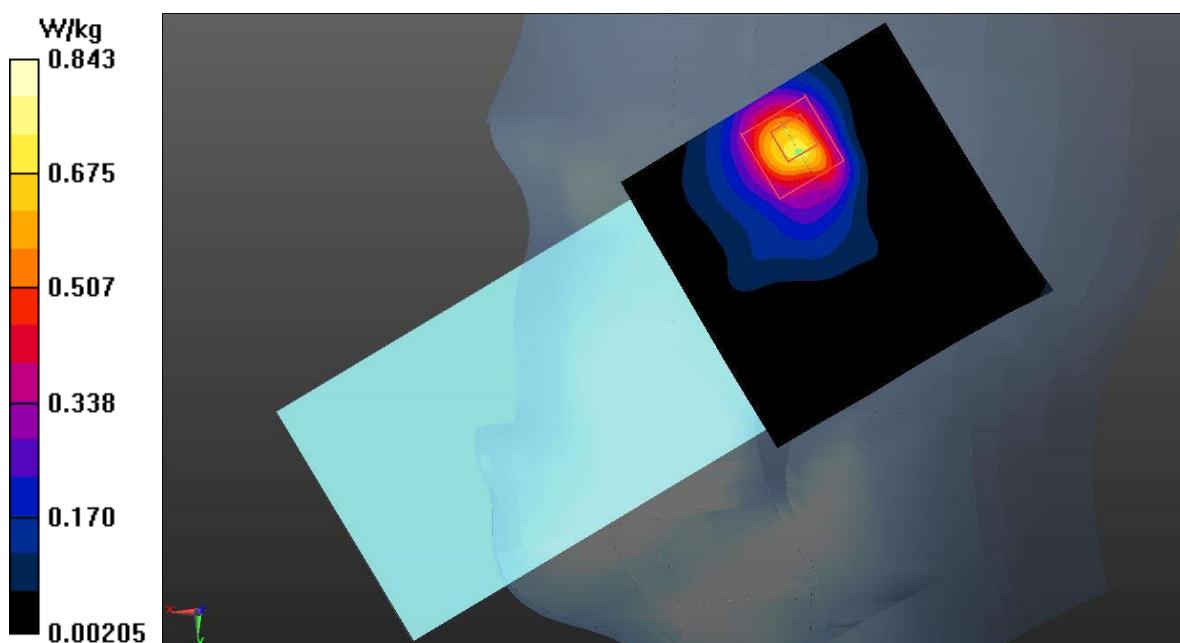
Right Cheek Middle 135@67/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.256 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.189 W/kg

Maximum value of SAR (measured) = 0.843 W/kg

**Fig.27 NR n77 Part 27O Head**

NR n77 Part 27O (PC2) Body

Date: 2022-9-7

Electronics: DAE4 Sn1527

Medium: Head 3900MHz

Medium parameters used: $f = 3840 \text{ MHz}$; $\sigma = 3.335 \text{ S/m}$; $\epsilon_r = 37.176$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, NR (0) Frequency: 3840 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (7.26, 7.26, 7.26)

Rear Side Middle 135@67/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

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

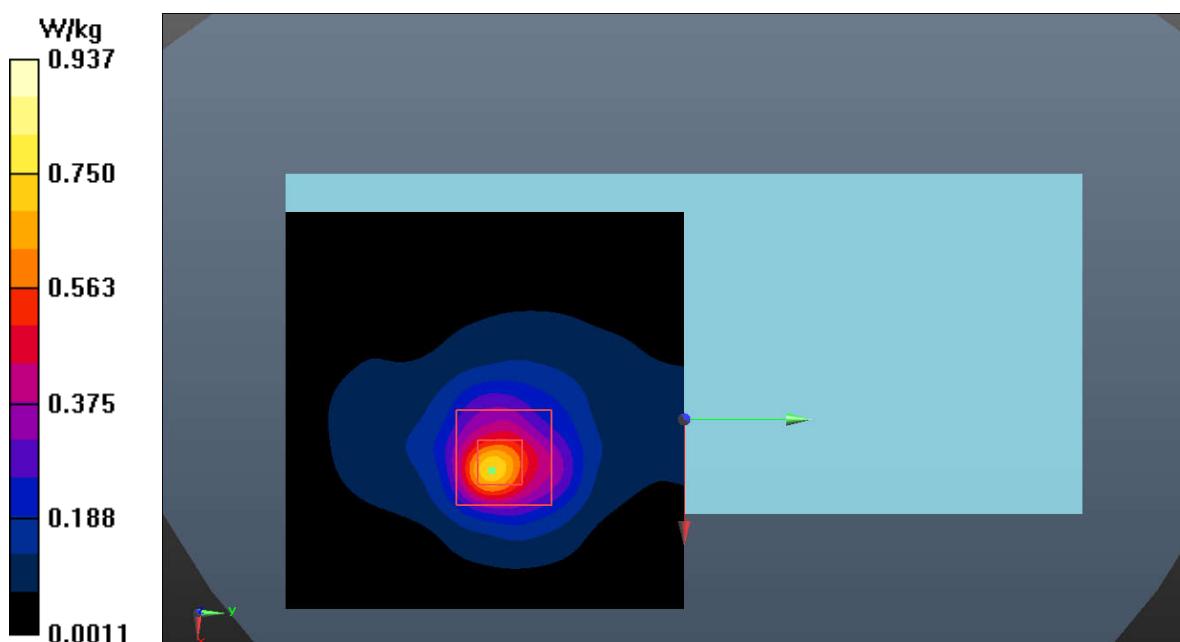
Rear Side Middle 135@67/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.069 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.557 W/kg; SAR(10 g) = 0.209 W/kg

Maximum value of SAR (measured) = 0.937 W/kg

**Fig.28 NR n77 Part 27O Body**

Bluetooth Head

Date: 2022-9-11

Electronics: DAE4 Sn1527

Medium: Head 2450MHz

Medium parameters used: $f = 2402 \text{ MHz}$; $\sigma = 1.778 \text{ S/m}$; $\epsilon_r = 38.891$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, BT (0) Frequency: 2402 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.17, 8.17, 8.17)

Left Cheek Ch.0/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0415 W/kg

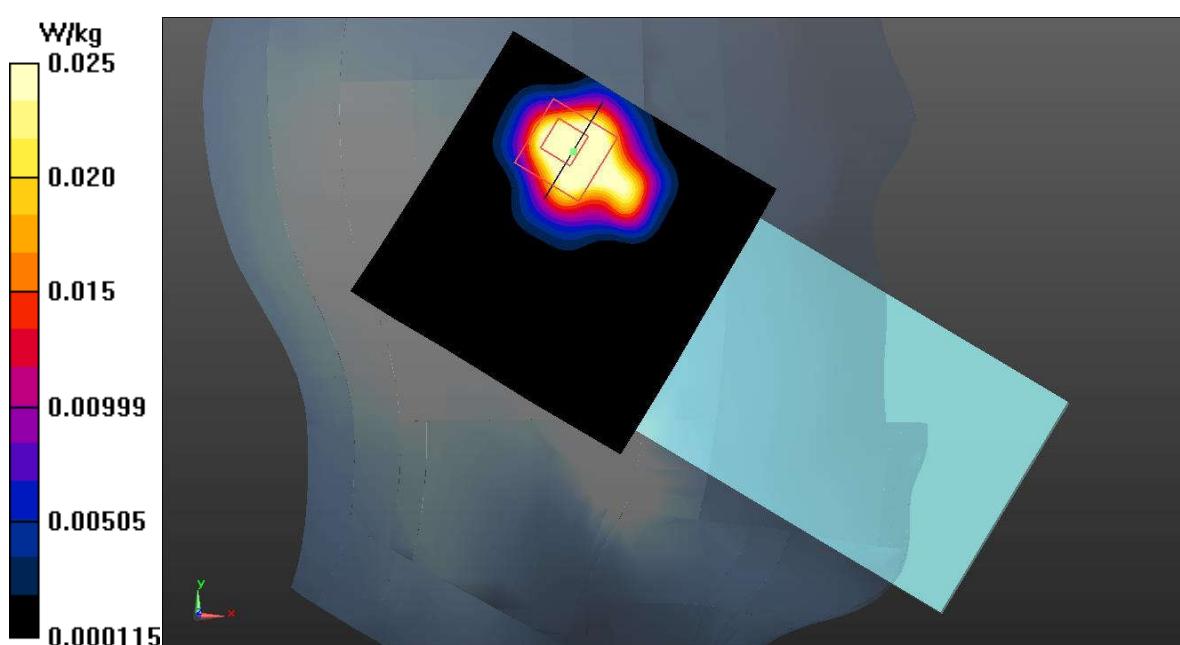
Left Cheek Ch.0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 0.4250 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.0410 W/kg

SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.010 W/kg

Maximum value of SAR (measured) = 0.0248 W/kg

**Fig.29 Bluetooth Head**

Bluetooth Body

Date: 2022-9-11

Electronics: DAE4 Sn1527

Medium: Head 2450MHz

Medium parameters used: $f = 2402 \text{ MHz}$; $\sigma = 1.778 \text{ S/m}$; $\epsilon_r = 38.891$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, BT (0) Frequency: 2402 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.17, 8.17, 8.17)

Rear Side Ch.0/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0415 W/kg

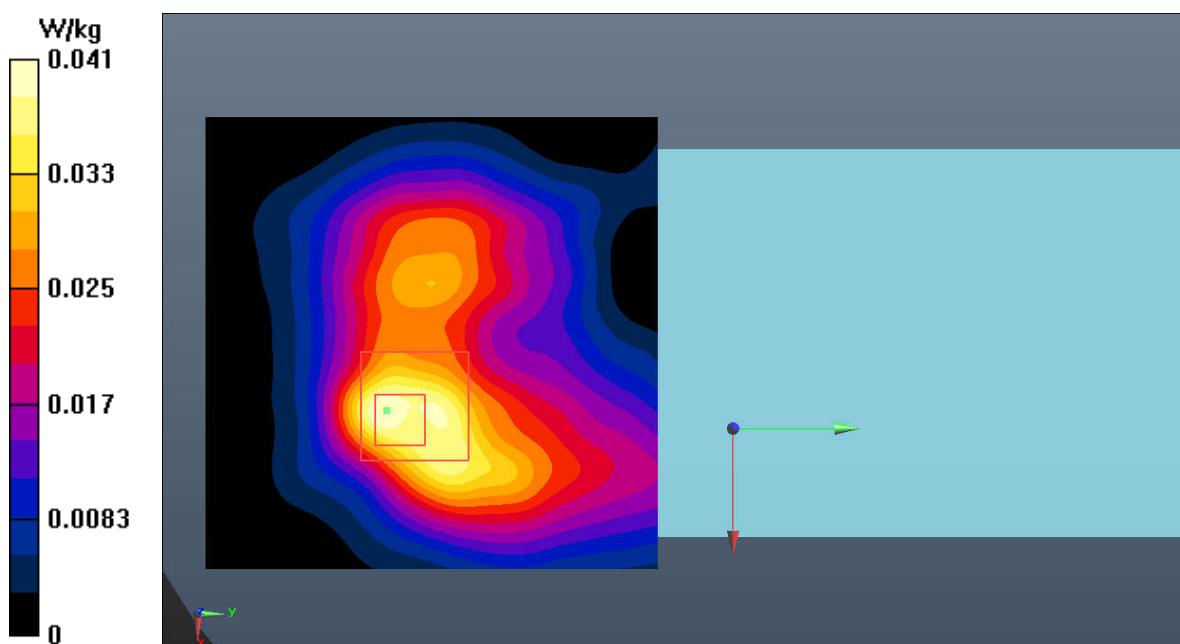
Rear Side Ch.0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 0.8870 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.0580 W/kg

SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.014 W/kg

Maximum value of SAR (measured) = 0.0415 W/kg

**Fig.30 Bluetooth Body**

WLAN 2.4GHz Head

Date: 2022-9-11

Electronics: DAE4 Sn1527

Medium: Head 2450MHz

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.79 \text{ S/m}$; $\epsilon_r = 38.858$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WLAN (0) Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.17, 8.17, 8.17)

Left Cheek Ch.1/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.37 W/kg

Left Cheek Ch.1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.66 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.30 W/kg

SAR(1 g) = 0.947 W/kg; SAR(10 g) = 0.417 W/kg

Maximum value of SAR (measured) = 1.42 W/kg

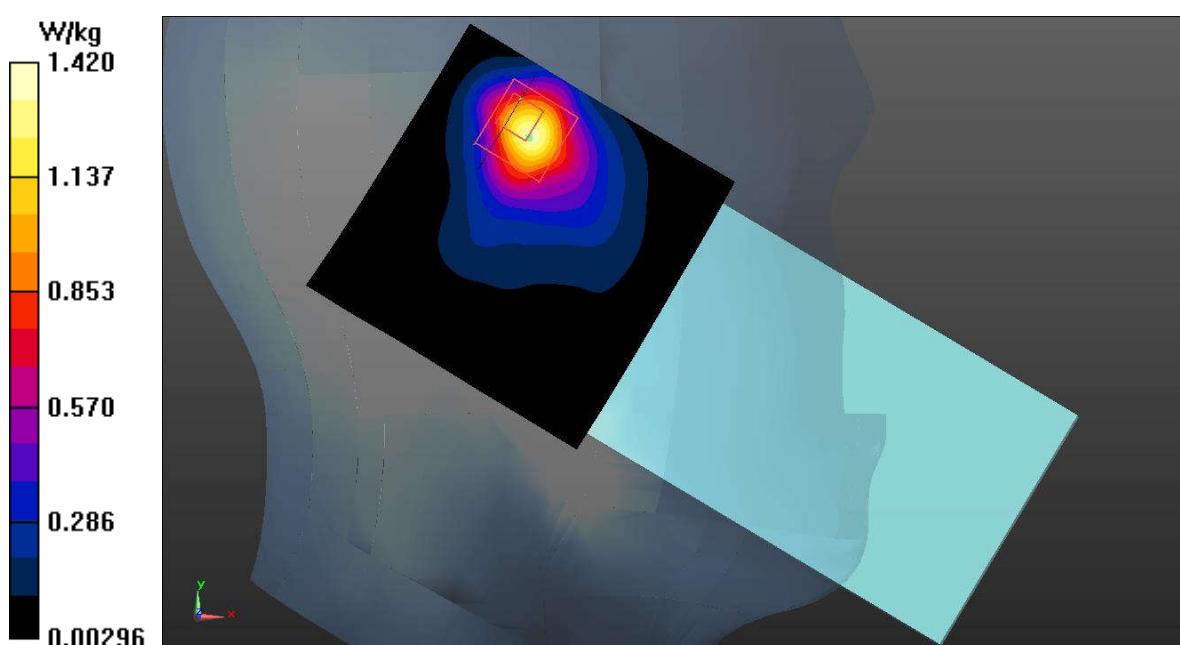


Fig.31 WLAN 2.4GHz Head

WLAN 2.4GHz Body

Date: 2022-9-11

Electronics: DAE4 Sn1527

Medium: Head 2450MHz

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.79 \text{ S/m}$; $\epsilon_r = 38.858$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WLAN (0) Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.17, 8.17, 8.17)

Top Side Ch.1/Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.605 W/kg

Top Side Ch.1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.62 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.759 W/kg

SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0.165 W/kg

Maximum value of SAR (measured) = 0.535 W/kg

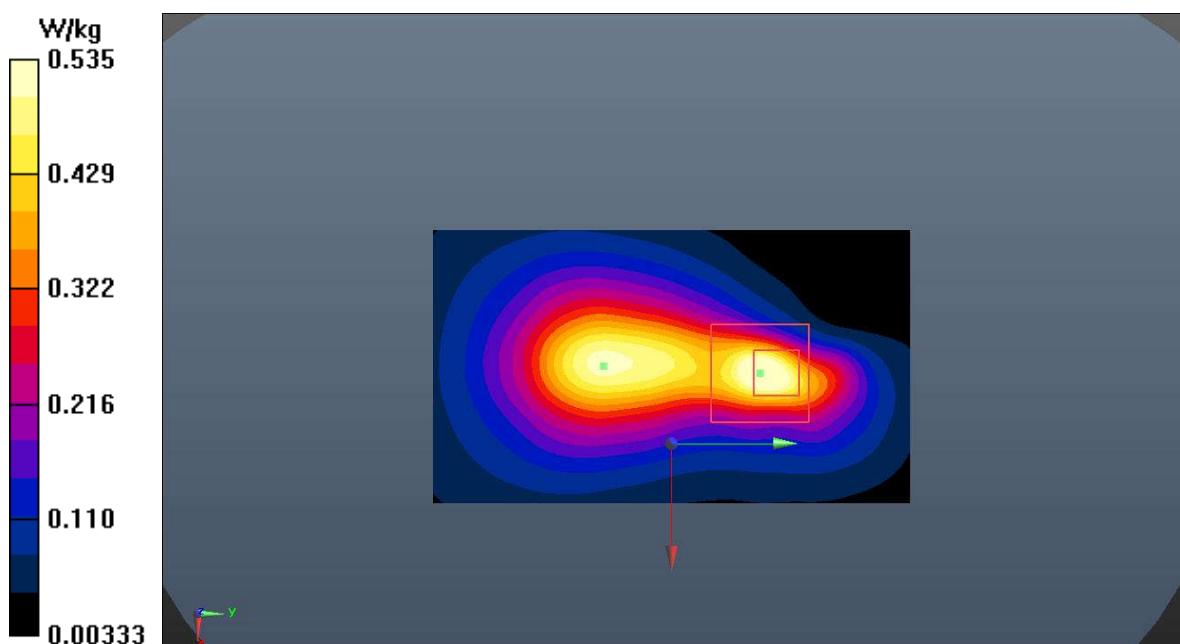


Fig.32 WLAN 2.4GHz Body

WLAN 5GHz Head

Date: 2022-9-10

Electronics: DAE4 Sn1527

Medium: Head 5750MHz

Medium parameters used (interpolated): $f = 5825$ MHz; $\sigma = 5.412$ S/m; $\epsilon_r = 34.389$; $\rho = 1000$ kg/m³

Communication System: UID 0, WLAN 5G (0) Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (5.40, 5.40, 5.40)

Left Cheek Ch.165/Area Scan (111x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.40 W/kg

Left Cheek Ch.165/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.384 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 4.16 W/kg

SAR(1 g) = 0.914 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 1.78 W/kg

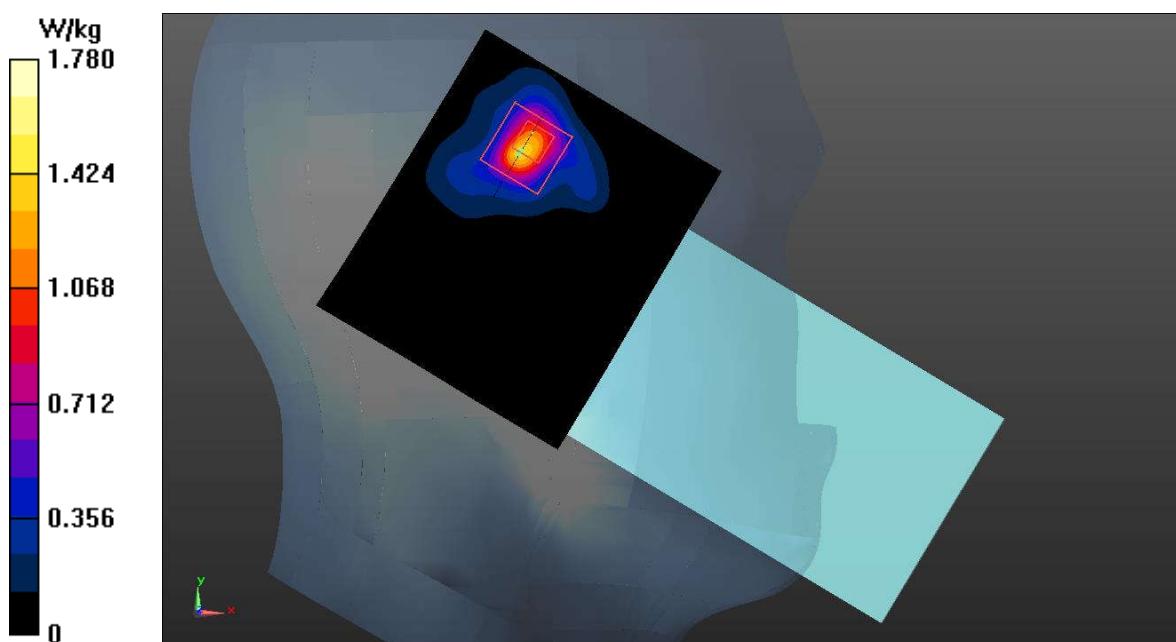


Fig.33 WLAN 5GHz Head

WLAN 5GHz Body

Date: 2022-9-10

Electronics: DAE4 Sn1527

Medium: Head 5250MHz

Medium parameters used: $f = 5220 \text{ MHz}$; $\sigma = 4.615 \text{ S/m}$; $\epsilon_r = 36.492$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, WLAN 5G (0) Frequency: 5220 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (5.98, 5.98, 5.98)

Rear Side Ch.44/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.93 W/kg

Rear Side Ch.44/Zoom Scan (8x8x21)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 0.7840 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.373 W/kg

Maximum value of SAR (measured) = 1.98 W/kg

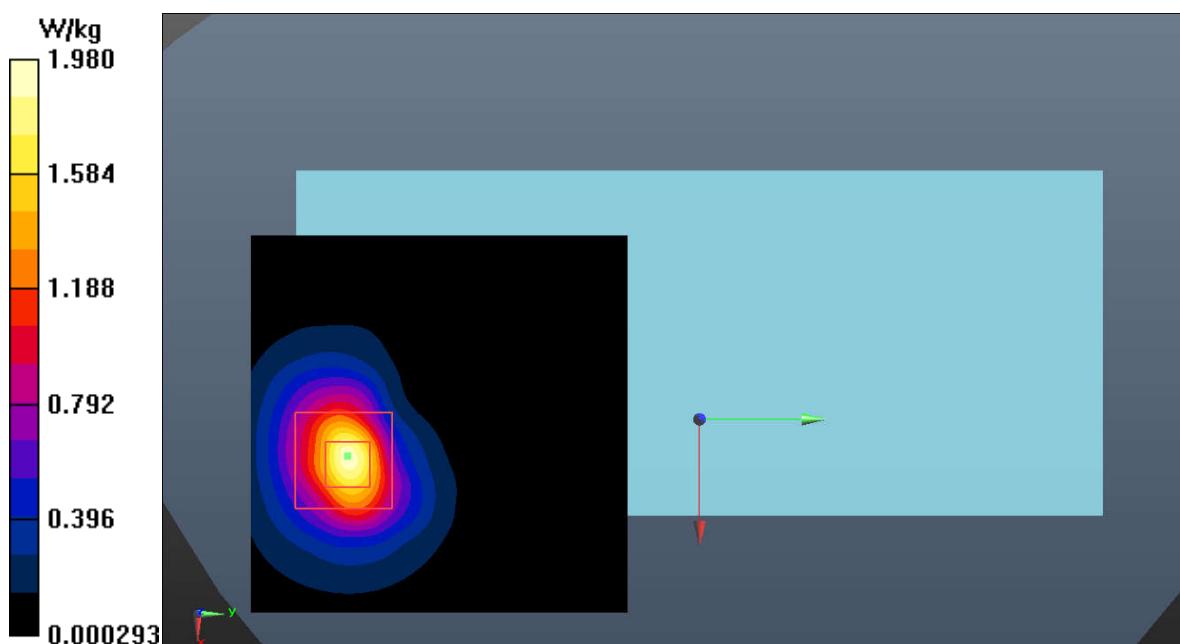


Fig.34 WLAN 5GHz Body

WCDMA Band 2 Extremity

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.386$ S/m; $\epsilon_r = 39.11$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Bottom Side Low/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 7.66 W/kg

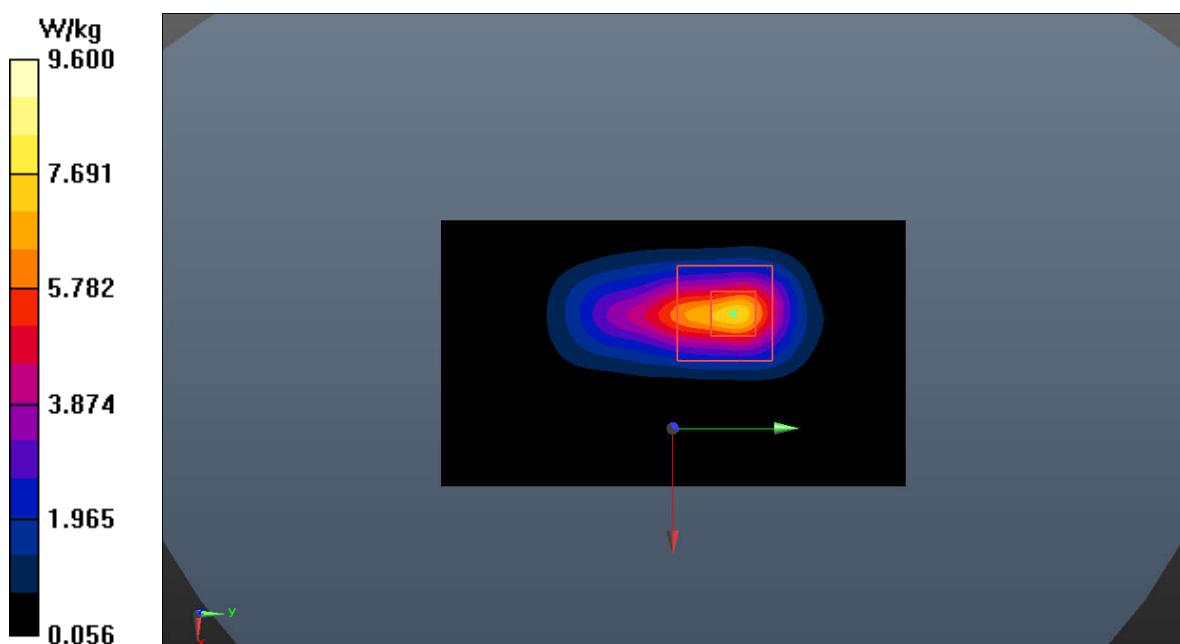
Bottom Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 37.82 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 13.0 W/kg

SAR(1 g) = 5.43 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 9.60 W/kg

**Fig.35 WCDMA Band 2 Extremity**

WCDMA Band 4 Extremity

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.389$ S/m; $\epsilon_r = 39.226$; $\rho = 1000$ kg/m³

Communication System: UID 0, WCDMA (0) Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Bottom Side High/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 8.29 W/kg

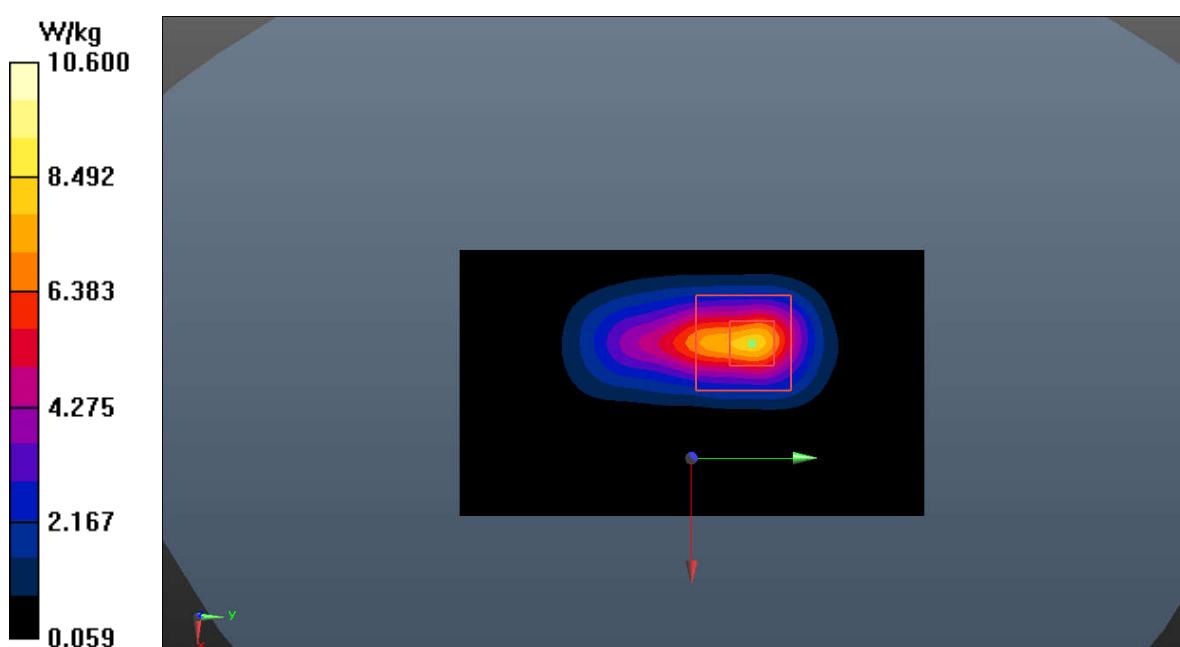
Bottom Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 39.66 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 14.3 W/kg

SAR(1 g) = 6.05 W/kg; SAR(10 g) = 2.54 W/kg

Maximum value of SAR (measured) = 10.6 W/kg

**Fig.36 WCDMA Band 4 Extremity**

LTE Band 2 Extremity

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1860 \text{ MHz}$; $\sigma = 1.393 \text{ S/m}$; $\epsilon_r = 39.08$; $\rho = 1000 \text{ kg/m}^3$

Communication System: UID 0, LTE_FDD (0) Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

Bottom Side Low 1RB50/Area Scan (41x71x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 7.25 W/kg

Bottom Side Low 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.35 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 10.4 W/kg

SAR(1 g) = 4.45 W/kg; SAR(10 g) = 1.84 W/kg

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

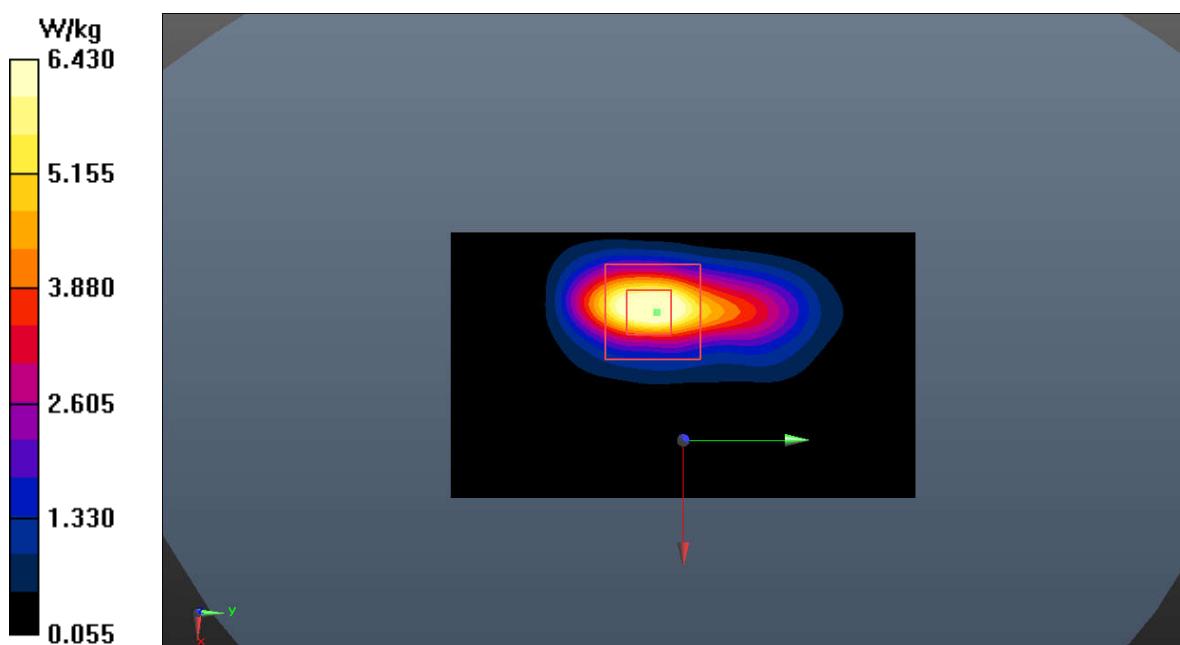


Fig.37 LTE Band 2 Extremity

LTE Band 4 Extremity

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 39.258$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

Bottom Side High 1RB50/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 7.90 W/kg

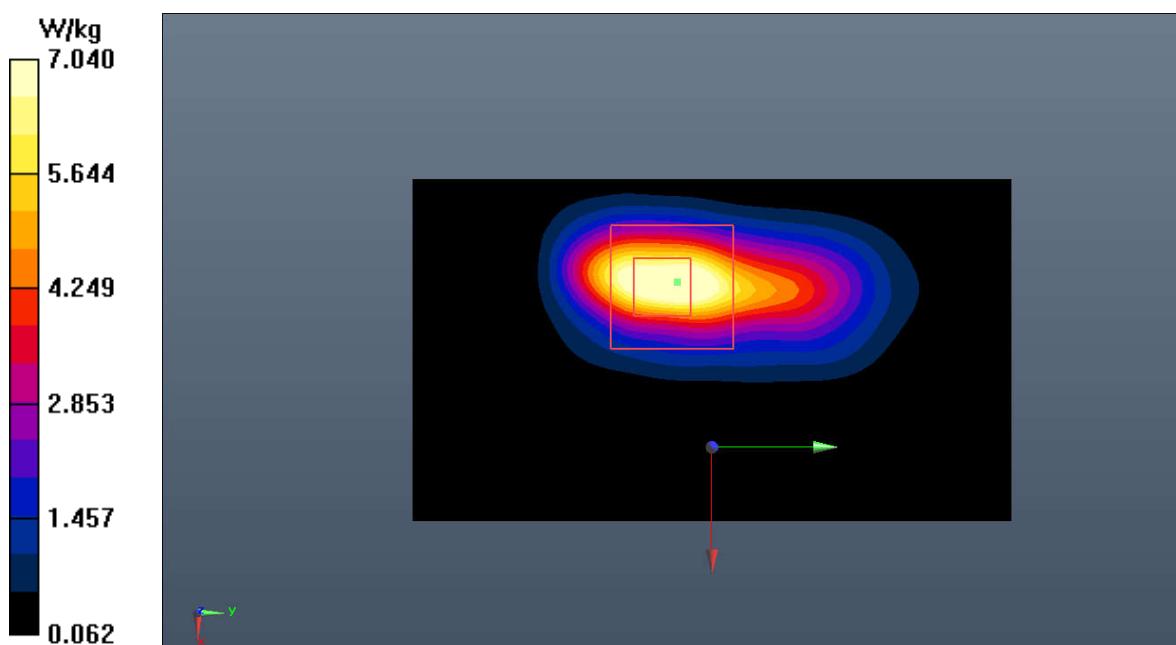
Bottom Side High 1RB50/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.88 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 11.4 W/kg

SAR(1 g) = 5.03 W/kg; SAR(10 g) = 2.12 W/kg

Maximum value of SAR (measured) = 7.04 W/kg

**Fig.38 LTE Band 4 Extremity**

LTE Band 66 Extremity

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.382$ S/m; $\epsilon_r = 39.258$; $\rho = 1000$ kg/m³

Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

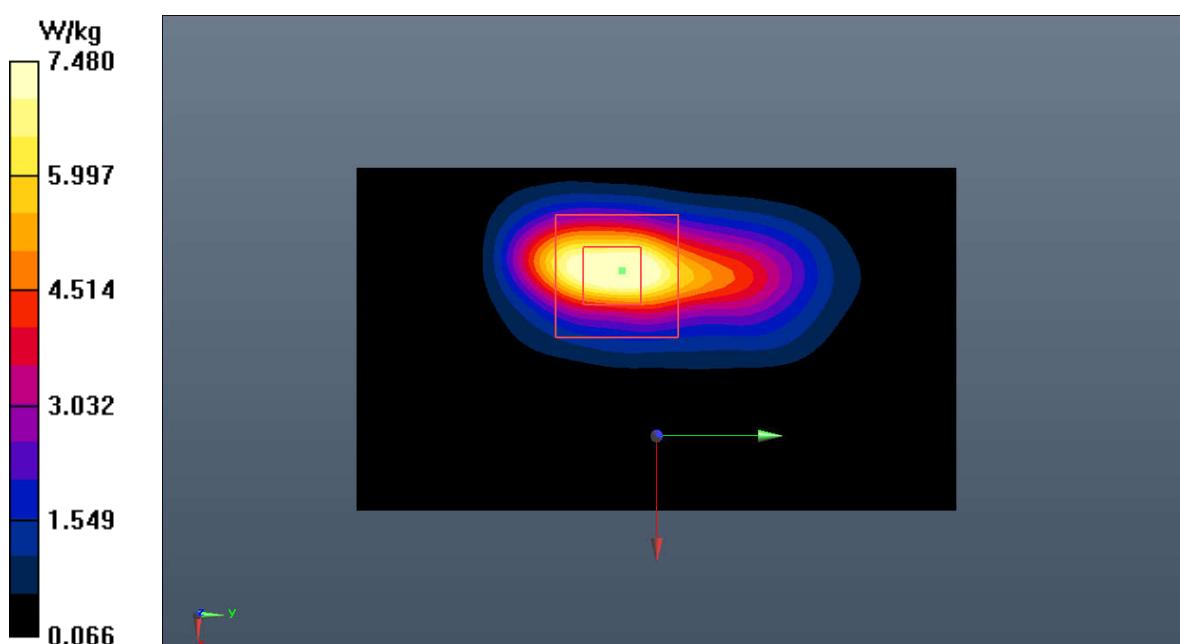
Bottom Side Middle 1RB50/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.33 W/kg**Bottom Side Middle 1RB50/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.99 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 5.40 W/kg; SAR(10 g) = 2.29 W/kg

Maximum value of SAR (measured) = 7.48 W/kg

**Fig.39 LTE Band 66 Extremity**

WLAN 5GHz Extremity

Date: 2022-9-10

Electronics: DAE4 Sn1527

Medium: Head 5250MHz

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.723$ S/m; $\epsilon_r = 36.276$; $\rho = 1000$ kg/m³

Communication System: UID 0, WLAN 5G (0) Frequency: 5300 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (5.98, 5.98, 5.98)

Rear Side Ch.60/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 19.5 W/kg

Rear Side Ch.60/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.005 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 69.7 W/kg

SAR(1 g) = 11.6 W/kg; SAR(10 g) = 2.43 W/kg

Maximum value of SAR (measured) = 26.3 W/kg

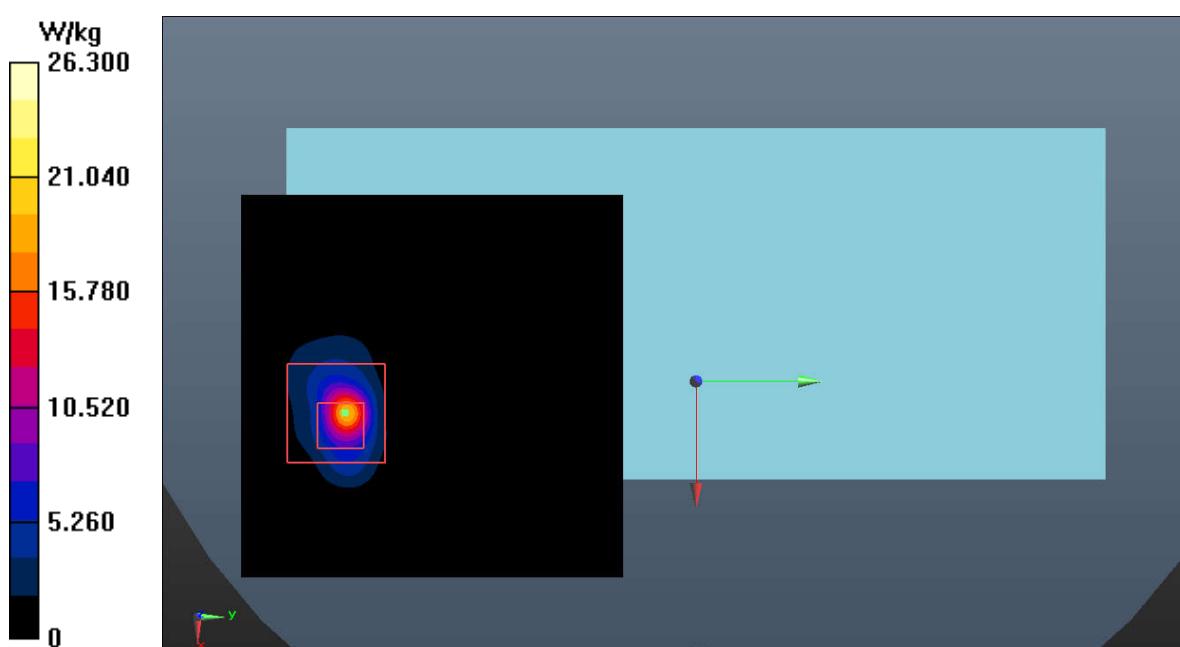


Fig.40 WLAN 5GHz Extremity

ANNEX B: System Verification Results

750MHz

Date: 2022-9-2

Electronics: DAE4 Sn1527

Medium: Head 750MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.881 \text{ S/m}$; $\epsilon_r = 42.567$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

System Validation/Area Scan (81x161x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 59.345 V/m; Power Drift = -0.06 dB

SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.40 W/kg

Maximum value of SAR (interpolated) = 2.66 W/kg

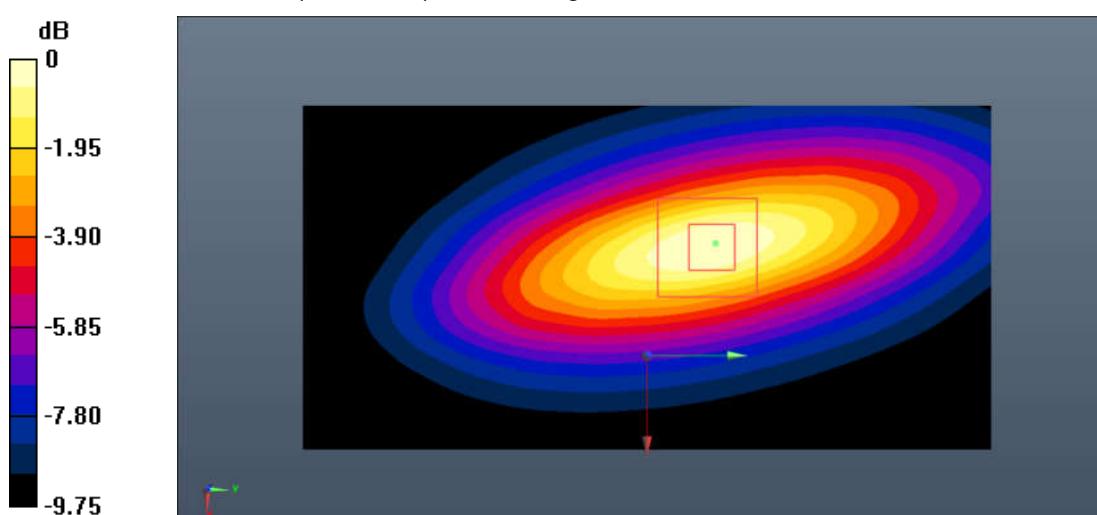
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 59.345 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.07 W/kg

SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.38 W/kg

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



0 dB = 2.63 W/kg = 4.20 dB W/kg

Fig.B.1. Validation 750MHz 250mW

835MHz

Date: 2022-9-5

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.922 \text{ S/m}$; $\epsilon_r = 40.964$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

System Validation/Area Scan (91x161x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 63.158 V/m; Power Drift = 0.12 dB

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.58 W/kg

Maximum value of SAR (interpolated) = 3.59 W/kg

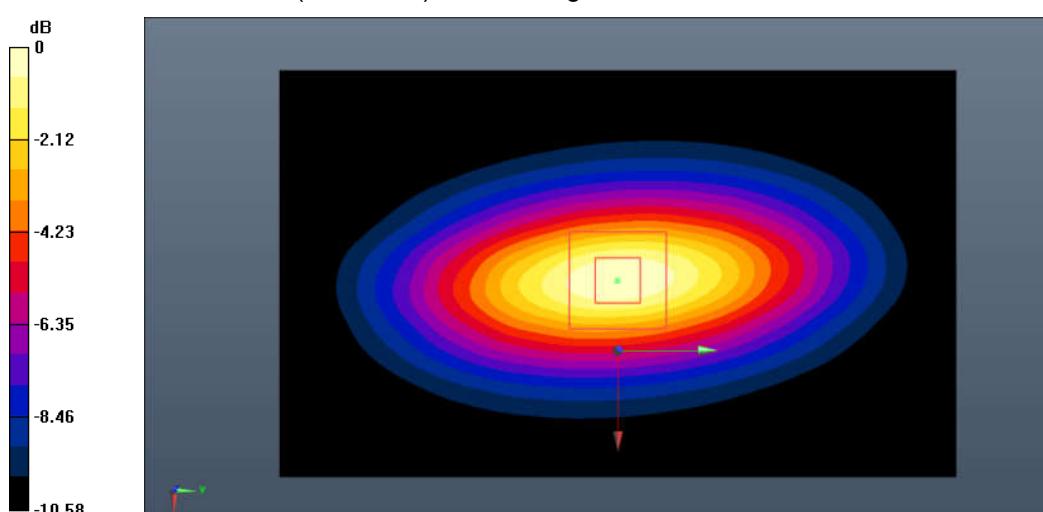
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 63.158 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 4.24 W/kg

SAR(1 g) = 2.49 W/kg; SAR(10 g) = 1.61 W/kg

Maximum value of SAR (measured) = 3.61 W/kg



$$0 \text{ dB} = 3.61 \text{ W/kg} = 5.58 \text{ dB W/kg}$$

Fig.B.2. Validation 835MHz 250mW

1750MHz

Date: 2022-9-18

Electronics: DAE4 Sn1527

Medium: Head 1750MHz

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.386$ S/m; $\epsilon_r = 39.238$; $\rho = 1000$ kg/m³

Communication System: CW_TMC Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (9.22, 9.22, 9.22)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 80.119 V/m; Power Drift = 0.05 dB

SAR(1 g) = 9.22 W/kg; SAR(10 g) = 4.90 W/kg

Maximum value of SAR (interpolated) = 11.1 W/kg

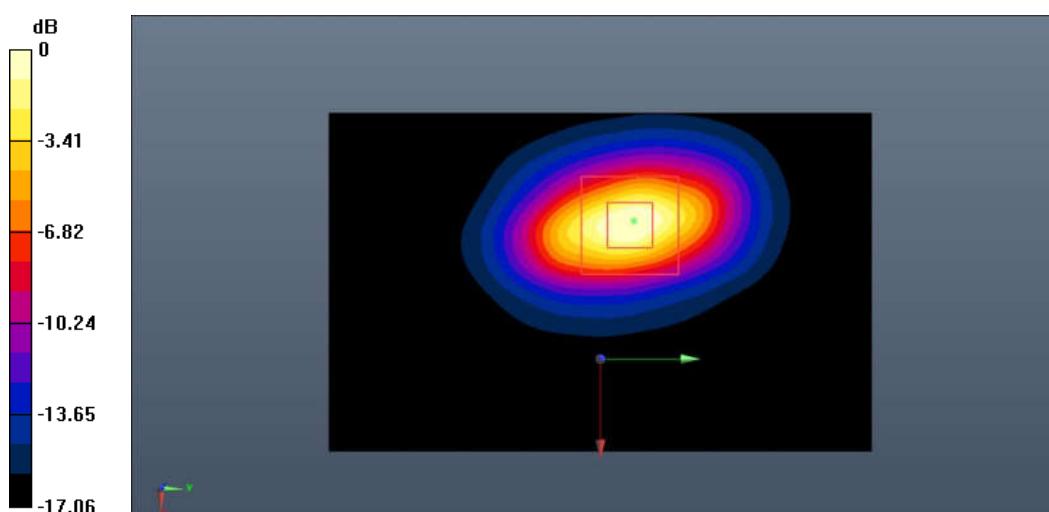
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 80.119 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 22.6 W/kg

SAR(1 g) = 9.43 W/kg; SAR(10 g) = 4.99 W/kg

Maximum value of SAR (measured) = 11.4 W/kg



$$0 \text{ dB} = 11.4 \text{ W/kg} = 10.57 \text{ dB W/kg}$$

Fig.B.3. Validation 1750MHz 250mW

1900MHz

Date: 2022-8-28

Electronics: DAE4 Sn1527

Medium: Head 1900MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.428 \text{ S/m}$; $\epsilon_r = 38.924$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.90, 8.90, 8.90)

System Validation/Area Scan (91x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 82.072 V/m; Power Drift = 0.04 dB

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.19 W/kg

Maximum value of SAR (interpolated) = 12.2 W/kg

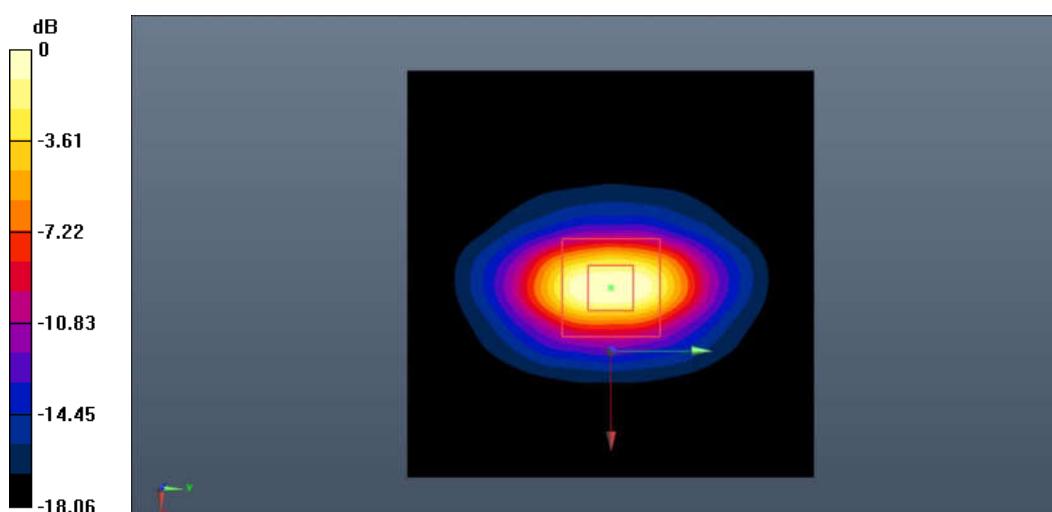
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 82.072 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 10.5 W/kg; SAR(10 g) = 5.28 W/kg

Maximum value of SAR (measured) = 12.5 W/kg



$$0 \text{ dB} = 12.5 \text{ W/kg} = 10.97 \text{ dB W/kg}$$

Fig.B.4. Validation 1900MHz 250mW

2450MHz

Date: 2022-9-11

Electronics: DAE4 Sn1527

Medium: Head 2450MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.835 \text{ S/m}$; $\epsilon_r = 38.733$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (8.17, 8.17, 8.17)

System Validation/Area Scan (81x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 91.783 V/m; Power Drift = 0.10 dB

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.07 W/kg

Maximum value of SAR (interpolated) = 15.5 W/kg

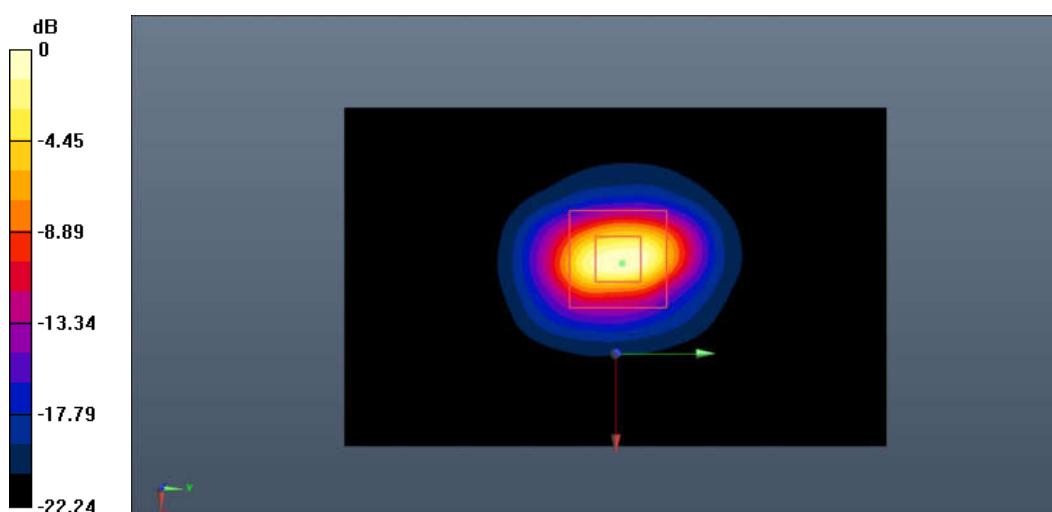
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.783 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 35.9 W/kg

SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.17 W/kg

Maximum value of SAR (measured) = 15.7 W/kg



$$0 \text{ dB} = 15.7 \text{ W/kg} = 11.96 \text{ dB W/kg}$$

Fig.B.5. Validation 2450MHz 250mW

3500MHz

Date: 2022-8-30

Electronics: DAE4 Sn1527

Medium: Head 3500MHz

Medium parameters used: $f = 3500 \text{ MHz}$; $\sigma = 2.863 \text{ S/m}$; $\epsilon_r = 38.485$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 3500 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (7.56, 7.56, 7.56)

System Validation/Area Scan (61x61x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 69.842 V/m; Power Drift = -0.08 dB

SAR(1 g) = 6.68 W/kg; SAR(10 g) = 2.54 W/kg

Maximum value of SAR (interpolated) = 7.68 W/kg

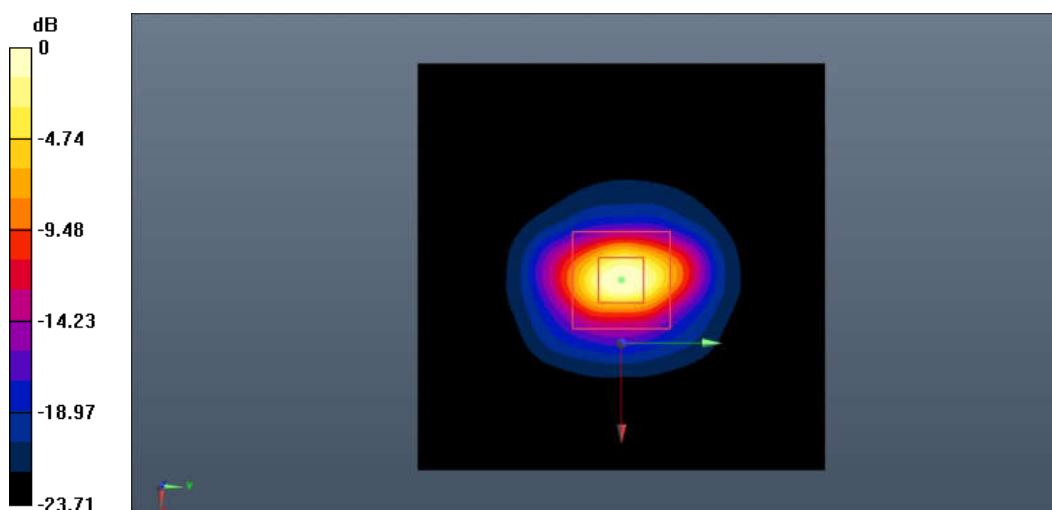
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 69.842 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 6.51 W/kg; SAR(10 g) = 2.49 W/kg

Maximum value of SAR (measured) = 7.63 W/kg



0 dB = 7.63 W/kg = 8.83 dB W/kg

Fig.B.6. Validation 3500MHz 100mW

3900MHz

Date: 2022-9-7

Electronics: DAE4 Sn1527

Medium: Head 3900MHz

Medium parameters used: $f = 3900 \text{ MHz}$; $\sigma = 3.406 \text{ S/m}$; $\epsilon_r = 36.978$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 3900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (7.26, 7.26, 7.26)

System Validation/Area Scan (61x61x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 74.486 V/m; Power Drift = 0.05 dB

SAR(1 g) = 7.33 W/kg; SAR(10 g) = 2.51 W/kg

Maximum value of SAR (interpolated) = 8.21 W/kg

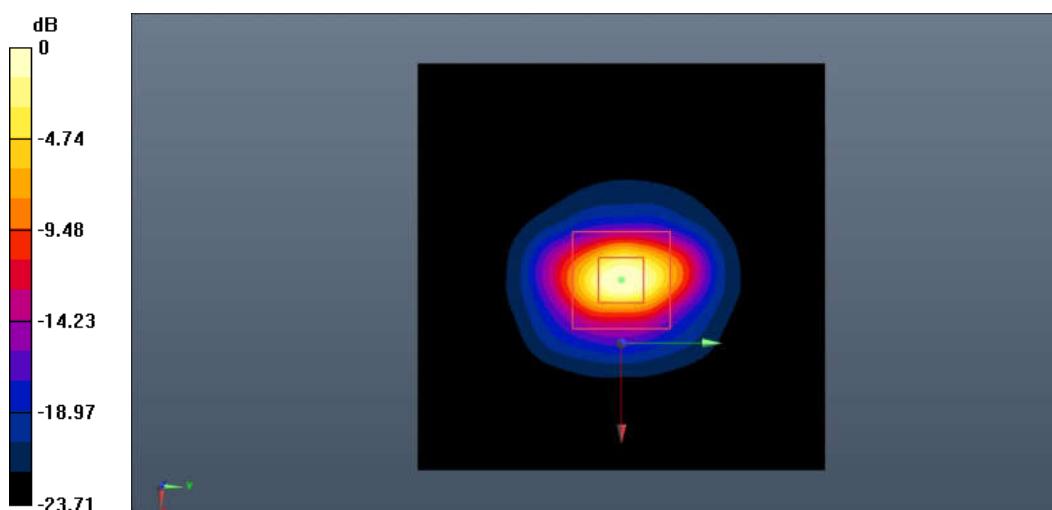
System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 74.486 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 21.9 W/kg

SAR(1 g) = 7.47 W/kg; SAR(10 g) = 2.55 W/kg

Maximum value of SAR (measured) = 8.27 W/kg



0 dB = 8.27 W/kg = 9.18 dB W/kg

Fig.B.7. Validation 3900MHz 100mW

5250MHz

Date: 2022-9-10

Electronics: DAE4 Sn1527

Medium: Head 5250MHz

Medium parameters used: $f = 5250 \text{ MHz}$; $\sigma = 4.655 \text{ S/m}$; $\epsilon_r = 36.411$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 5250 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (5.98, 5.98, 5.98)

System Validation/Area Scan (61x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 65.054 V/m; Power Drift = -0.03 dB

SAR(1 g) = 7.83 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (interpolated) = 9.82 W/kg

System Validation/Zoom Scan (8x8x21)/Cube0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 65.054 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 24.8 W/kg

SAR(1 g) = 7.72 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 9.77 W/kg

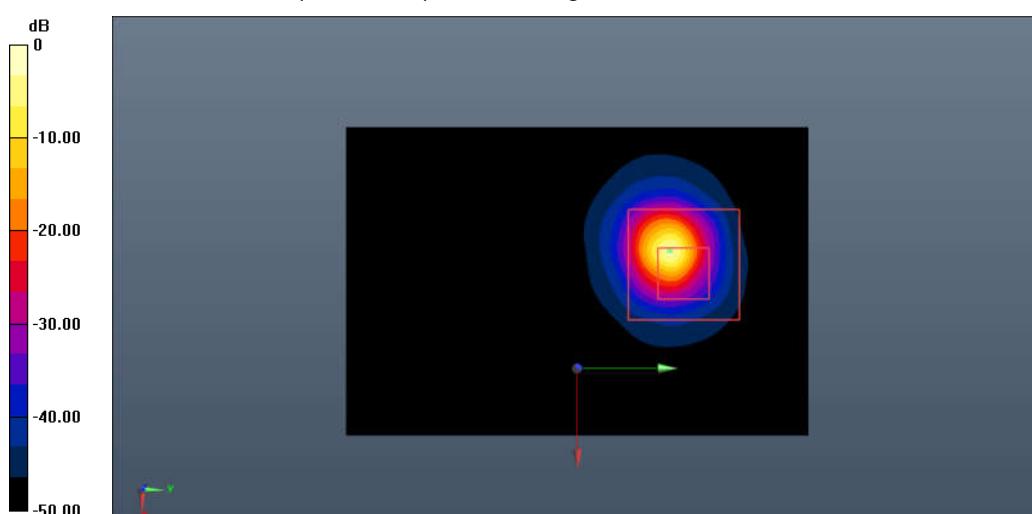


Fig.B.8. Validation 5250MHz 100mW

5600MHz

Date: 2022-9-10

Electronics: DAE4 Sn1527

Medium: Head 5600MHz

Medium parameters used: $f = 5600 \text{ MHz}$; $\sigma = 5.173 \text{ S/m}$; $\epsilon_r = 34.849$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 5600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (5.47, 5.47, 5.47)

System Validation/Area Scan (61x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 68.975 V/m; Power Drift = 0.11 dB

SAR(1 g) = 8.43 W/kg; SAR(10 g) = 2.35 W/kg

Maximum value of SAR (interpolated) = 10.4 W/kg

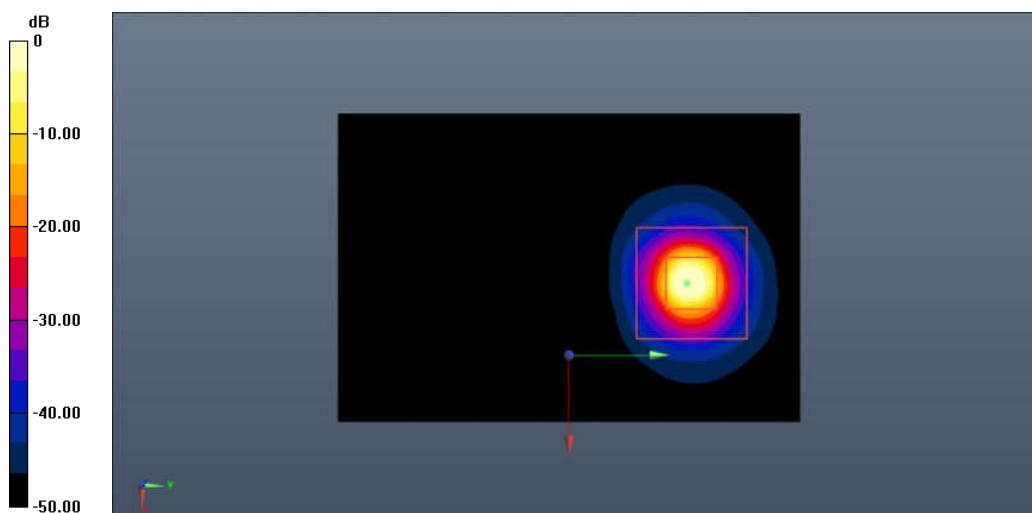
System Validation/Zoom Scan (8x8x21)/Cube0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 68.975 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 28.2 W/kg

SAR(1 g) = 8.56 W/kg; SAR(10 g) = 2.40 W/kg

Maximum value of SAR (measured) = 10.6 W/kg



$0 \text{ dB} = 10.6 \text{ W/kg} = 10.25 \text{ dB W/kg}$

Fig.B.9. Validation 5600MHz 100mW

5750MHz

Date: 2022-9-10

Electronics: DAE4 Sn1527

Medium: Head 5750MHz

Medium parameters used: $f = 5750 \text{ MHz}$; $\sigma = 5.311 \text{ S/m}$; $\epsilon_r = 34.591$; $\rho = 1000 \text{ kg/m}^3$

Communication System: CW_TMC Frequency: 5750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (5.40, 5.40, 5.40)

System Validation/Area Scan (61x91x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 66.542 V/m; Power Drift = 0.13 dB

SAR(1 g) = 7.99 W/kg; SAR(10 g) = 2.21 W/kg

Maximum value of SAR (interpolated) = 10.0 W/kg

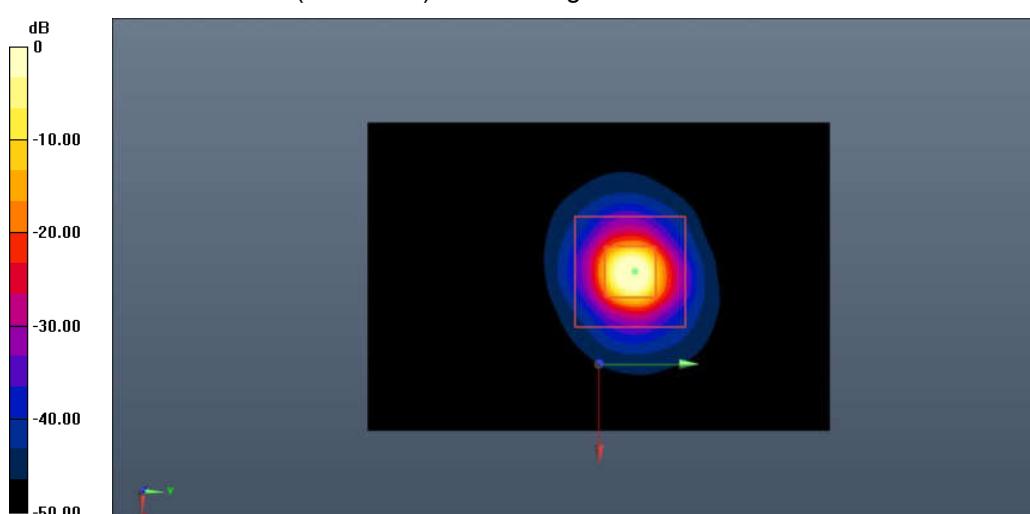
System Validation/Zoom Scan (8x8x21)/Cube0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 66.542 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 26.8 W/kg

SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.26 W/kg

Maximum value of SAR (measured) = 10.3 W/kg



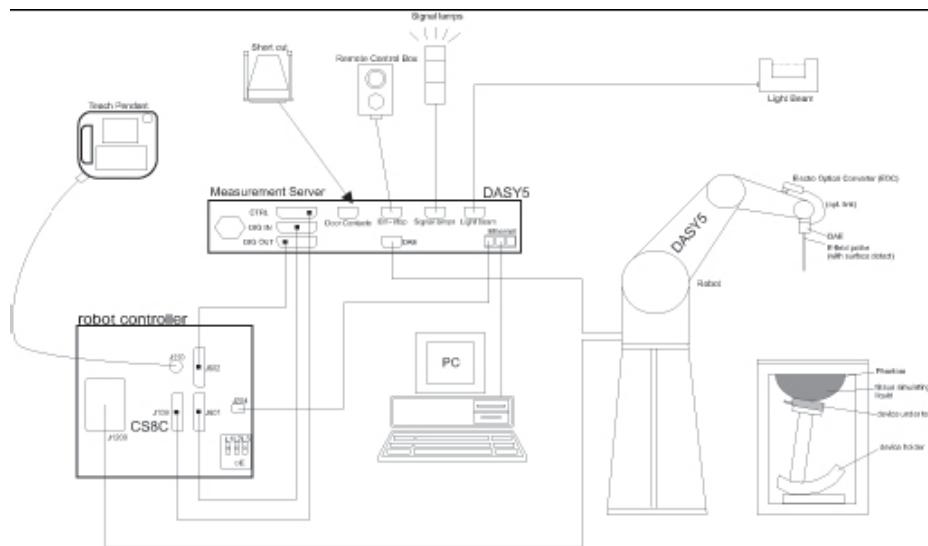
0 dB = 10.3 W/kg = 10.13 dB W/kg

Fig.B.10. Validation 5750MHz 100mW

ANNEX C: SAR Measurement Setup

C.1. Measurement Set-up

DASY5 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



Picture C.1 SAR Lab Test Measurement Set-up

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

C.2. DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 software reads the reflection during a software approach and looks for the maximum using 2nd ord curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications:

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



Picture C.2 Near-field Probe



Picture C.3 E-field Probe



C.3. E-field Probe Calibration

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

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

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

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

Where:

Δt = Exposure time (30 seconds),

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

ΔT = Temperature increase due to RF exposure.

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

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).