

SAR TEST REPORT

No. I21Z60426-SEM07

For

Wingtech Group (Hong Kong) Limited

5G Mobile Phone

Model name: WTRVL5G

With

Hardware Version: V1.3

Software Version: WTRVL5G_0.01.10

FCC ID: 2APXW-WTRVL5G

Issued Date: 2021-5-7

Note:

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No.I21Z60426-SEM07

REPORT HISTORY

Report Number	Revision	Issue Date	Description
I21Z60426-SEM07	Rev.0	2021-5-7	Initial creation of test report

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1 Test Laboratory

1.1 Testing Location

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

1.2 Testing Environment

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

1.3 Project Data

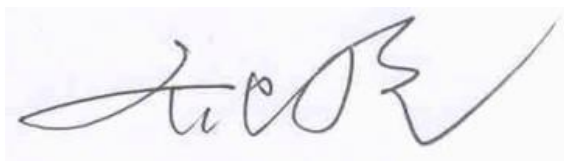
Project Leader:	Qi Dianyuan
Test Engineer:	Lin Xiaojun
Testing Start Date:	April 2, 2021
Testing End Date:	April 18, 2021

1.4 Signature



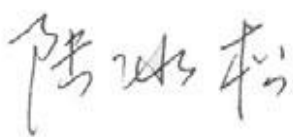
Lin Xiaojun

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Wingtech Group (Hong Kong) Limited 5G Mobile Phone (e.g. GSM dual band mobile phone, etc) WTRVL5G are as follows:

Table 2.1: Highest Reported SAR (1g)

Mode		Antenna	Highest Reported SAR (1g)			
			1g SAR Head	1g SAR Body-worn 15mm	1g SAR Hotspot 10mm	Product Specific 10-g SAR 0mm
GSM	GSM 850	ANT0	0.25	/	0.90	/
	PCS 1900	ANT1	0.18	/	0.75	/
WCDMA	UMTS FDD 2	ANT1	0.30	/	0.83	/
	UMTS FDD 4	ANT1	0.23	/	0.65	/
	UMTS FDD 5	ANT0	0.35	/	0.52	/
LTE	LTE Band 2	ANT1	0.24	0.44	0.41	1.84
	LTE Band 4	ANT1	0.21	/	0.87	/
	LTE Band 5	ANT0	0.36	/	0.89	/
	LTE Band 7	ANT0	0.18	0.51	0.56	/
	LTE Band 12	ANT0	0.20	/	0.29	1.47
	LTE Band 13	ANT0	0.09	/	0.24	/
	LTE Band 25	ANT1	0.22	/	0.97	/
	LTE Band 26	ANT0	0.29	/	0.50	/
	LTE Band 38	ANT0	0.04	/	0.56	/
	LTE Band 41-PC2	ANT0	0.17	/	1.33	2.27
	LTE Band 41-PC3	ANT0	0.12	/	1.00	/
	LTE Band 66	ANT1	0.34	0.43	0.37	2.22
	LTE Band 71	ANT0	0.21	/	0.33	/
NR	N25(EN-DC)	ANT3	0.73	0.79	0.52	1.53
	N41(EN-DC)	ANT3	0.53	0.55	0.27	2.05
	N66(EN-DC)	ANT3	0.57	0.67	0.60	1.63
	n71(SA&EN-DC)	ANT0	0.22	/	0.37	/
	N25(SA)	ANT1	0.20	0.67	0.51	2.08
	n41(SA)	ANT0	0.24	0.60	1.20	2.59
	N66(SA)	ANT1	0.32	0.60	0.82	3.16
WLAN 2.4 GHz		ANT4	0.71	/	0.71	0.65
WLAN 5 GHz			0.58	/	0.66	0.63
BT			<0.01	<0.01	<0.01	/

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

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

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

power output.

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of **(Table 2.1)**, and the values are: **1.33 W/kg(1g)**.

Table 2.2: The sum of reported SAR values for Main antenna and WiFi-5G+BT

	Position	Cellular antenna	WiFi	BT	Sum
Highest reported SAR value for Head	Right hand, Tilt	0.90	0.55	<0.01	1.45
Maximum reported SAR value for Body	Rear 15mm	1.23	0.35	<0.01	1.58

Note1: we have evaluated and chose the highest value of body 10mm and 15mm in the above table.

Table 2.3: The sum of reported SAR values for Main antenna and WiFi-2.4G

	Band	Cellular antenna	WiFi	Sum
Highest reported SAR value for Head	Left hand, Cheek	0.65	0.71	1.36
Maximum reported SAR value for Body	Front 15mm	0.93	0.62	1.55

Note1: we have evaluated and chose the highest value of body 10mm and 15mm in the above table.

According to the above tables, the highest sum of reported SAR values is **1.58 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

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

Table 2.4: The sum of reported SAR values for Main antenna and WiFi-5G+BT

	Position	Cellular antenna	WiFi	BT	Sum
Maximum reported SAR value for Body	Left 0mm	3.87	/	<0.01	3.87

Table 2.5: The sum of reported SAR values for Main antenna and WiFi-2.4G

	Band	Cellular antenna	WiFi	Sum
Maximum reported SAR value for Body	Left 0mm	3.87	/	3.87

3 Client Information

3.1 Applicant Information

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

3.2 Manufacturer Information

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

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

4.1 About EUT

Description:	5G Mobile Phone (e.g. GSM dual band mobile phone, etc)
Model name:	WTRVL5G
Operating mode(s):	GSM850/1900, WCDMA850/1700/1900, BT, Wi-Fi (2.4G/5G), n25/n66/n41/ n71, LTE Band 1/2/3/4/5/7/8/12/13/20/25/26/28/38/39/40/41/66/71
Tested Tx Frequency:	824 – 849 MHz (GSM 850)
	1850 – 1910 MHz (GSM 1900)
	824–849 MHz (WCDMA 850 Band V)
	1710 – 1755 MHz (WCDMA 1700 Band IV)
	1850–1910 MHz (WCDMA1900 Band II)
	1850 – 1910 MHz(LTE Band 2)
	1710 – 1755 MHz (LTE Band 4)
	824 – 849 MHz (LTE Band 5)
	2500 – 2570 MHz(LTE Band 7)
	699 – 716 MHz (LTE Band 12)
	779.5 –784.5 MHz (LTE Band 13)
	1850.7 – 1914.3 MHz (LTE Band 25)
	814 – 849 MHz (LTE Band 26)
	2570 – 2620 MHz (LTE Band 38)
	2496 – 2690 MHz (LTE Band 41)
	1710 – 1780 MHz (LTE Band 66)
	665.5 – 695.5 MHz (LTE Band 71)
	2412 – 2462 MHz (Wi-Fi 2.4G)
	5150-5825 MHz (Wi-Fi 5G)
	1852.5 – 1912.5 MHz (n25)
	2506.02 – 2679.99 MHz (n41)
	1712.5 – 1777.5 MHz (n66)
	665.5 – 695.5 MHz n71)
GPRS/EGPRS Multislot Class:	12
GPRS capability Class:	B
Test device Production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW	SW Version
EUT1	357492490017975	V1.3	WTRVL5G_0.01.10
EUT2	357492490018213	V1.3	WTRVL5G_0.01.10
EUT3	357492490018171	V1.3	WTRVL5G_0.01.10
EUT4	357492490017884	V1.3	WTRVL5G_0.01.10
EUT5	357492490018056	V1.3	WTRVL5G_0.01.10
EUT6	357492490018288	V1.3	WTRVL5G_0.01.10
EUT7	357492490018304	V1.3	WTRVL5G_0.01.10
EUT8	357492490011663	V1.3	WTRVL5G_0.01.10
EUT9	357492490011341	V1.3	WTRVL5G_0.01.10

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

Note: It is performed to test SAR with the EUT1-6 and conducted power with the EUT7-9.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	TM001	/	Jiade Energy Technology (Zhuhai) Co.,Ltd.

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

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

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

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

5.2 Applicable Measurement Standards

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

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

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

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

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

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

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

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

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

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

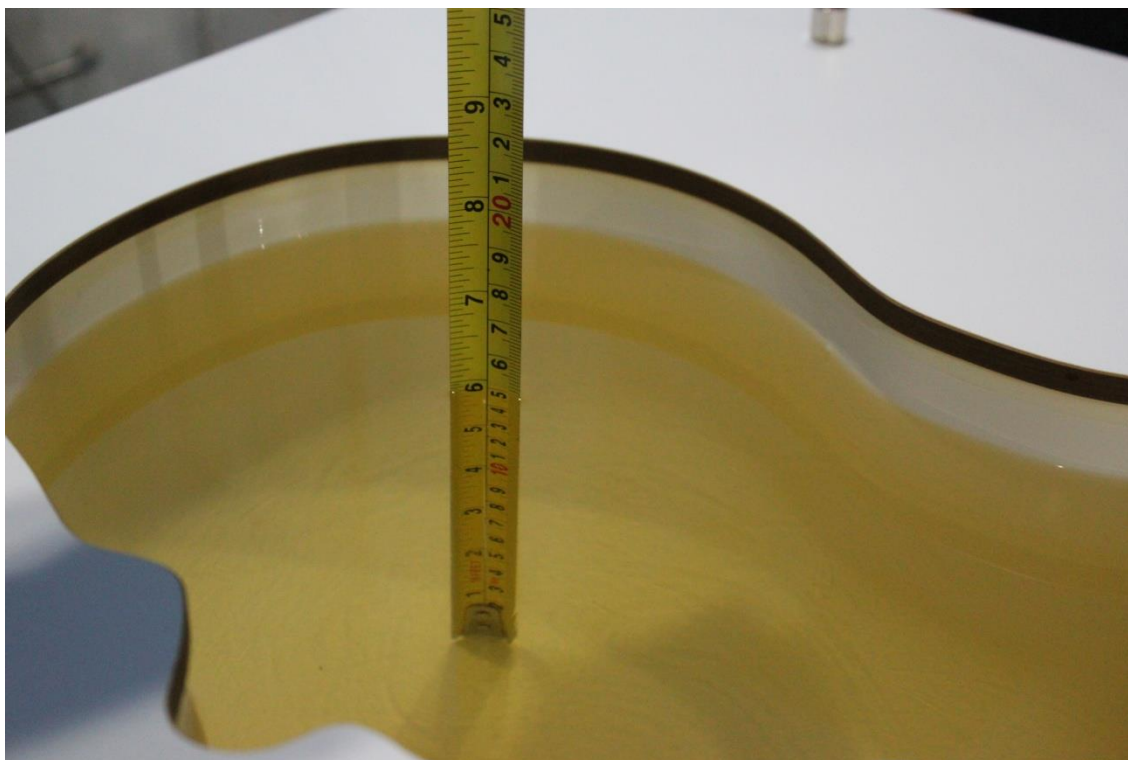
Frequency(MHz)	Liquid Type	Conductivity(σ)	$\pm 5\%$ Range	Permittivity(ϵ)	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.94	39.8~44.0
835	Head	0.90	0.86~0.95	41.5	39.4~43.6
1750	Head	1.37	1.30~1.44	40.08	38.1~42.1
1900	Head	1.40	1.33~1.47	40.0	38.0~42.0
2450	Head	1.80	1.71~1.89	39.2	37.2~41.2
2600	Head	1.96	1.86~2.06	39.01	37.1~41.0
5250	Head	4.71	4.47~4.95	35.93	34.13~37.73
5600	Head	5.07	4.82~5.32	35.53	33.8~37.3
5750	Head	5.22	4.96~5.48	35.36	33.59~37.13

7.2 Dielectric Performance

Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ϵ	Drift (%)	Conductivity σ (S/m)	Drift (%)
2021-4-2	Head	750 MHz	41.28	-1.57	0.89	0.00
2021-4-3	Head	750 MHz	41.47	-1.12	0.884	-0.67
2021-4-4	Head	835 MHz	40.92	-1.40	0.898	-0.22
2021-4-5	Head	835 MHz	41.34	-0.39	0.892	-0.89
2021-4-6	Head	1750 MHz	39.69	-0.97	1.358	-0.88
2021-4-7	Head	1750 MHz	40.66	1.45	1.374	0.29
2021-4-8	Head	1750 MHz	39.45	-1.57	1.381	0.80
2021-4-9	Head	1900 MHz	40.74	1.85	1.408	0.57
2021-4-10	Head	1900 MHz	40.54	1.35	1.4	0.00
2021-4-11	Head	1900 MHz	40.65	1.63	1.414	1.00
2021-4-12	Head	2450 MHz	39.2	0.00	1.796	-0.22
2021-4-13	Head	2600 MHz	39	-0.03	1.999	1.99
2021-4-14	Head	2600 MHz	38.25	-1.95	1.935	-1.28
2021-4-15	Head	2600 MHz	39.16	0.38	1.968	0.41
2021-4-16	Head	5250 MHz	36.15	0.61	4.787	1.63
2021-4-17	Head	5600 MHz	35.9	1.04	5.051	-0.37
2021-4-18	Head	5750 MHz	35.59	0.65	5.169	-0.98

Note: The liquid temperature is 22.0°C



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



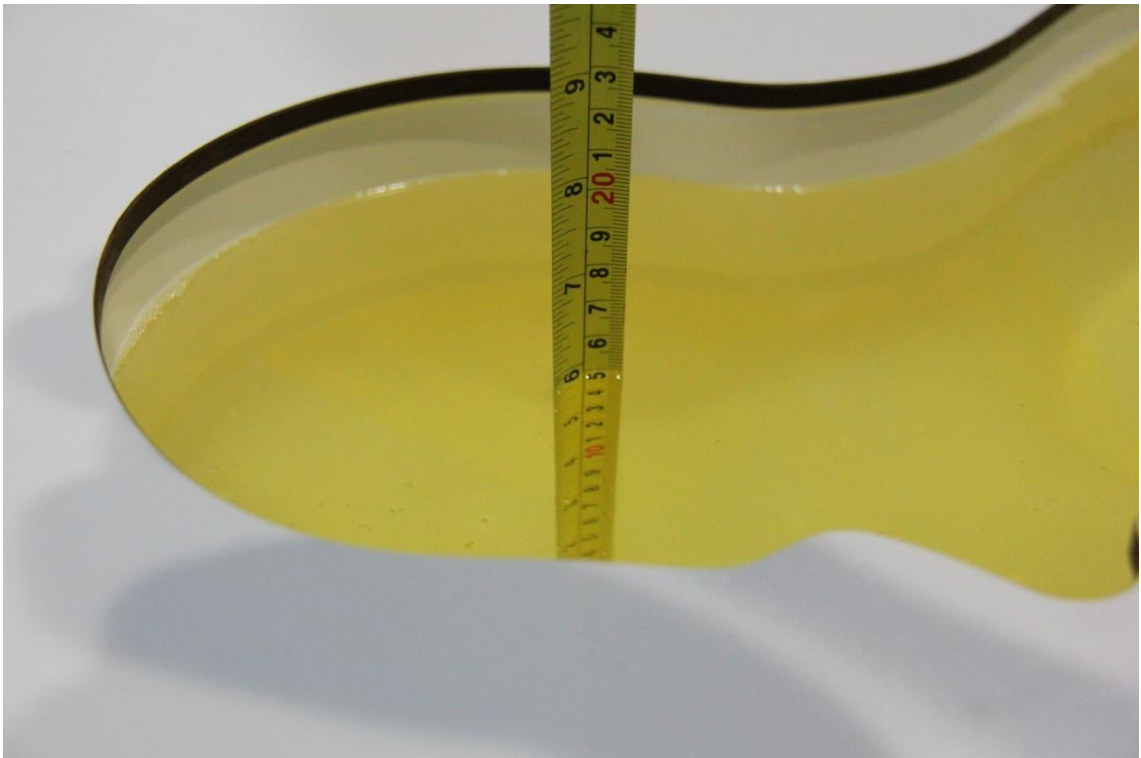
Picture 7-2 Liquid depth in the Head Phantom (835 MHz)



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



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



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



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

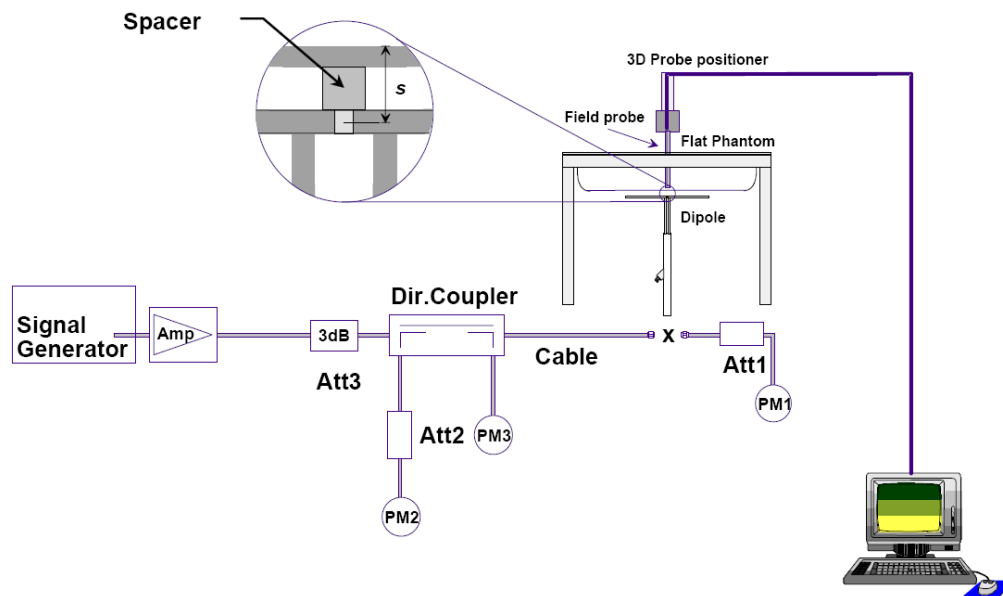


Picture 7-7 Liquid depth in the Head Phantom (5GHz)

8 System verification

8.1 System Setup

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



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

8.2 System Verification

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

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

Table 8.1: System Verification of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2021-4-2	750 MHz	5.53	8.47	5.56	8.32	0.54%	-1.77%
2021-4-3	750 MHz	5.53	8.47	5.48	8.6	-0.90%	1.53%
2021-4-4	835 MHz	6.25	9.60	6.36	9.64	1.76%	0.42%
2021-4-5	835 MHz	6.25	9.60	6.36	9.76	1.76%	1.67%
2021-4-6	1750 MHz	19.1	36.5	19.16	36.08	0.31%	-1.15%
2021-4-7	1750 MHz	19.1	36.5	19.2	37.08	0.52%	1.59%
2021-4-8	1750 MHz	19.1	36.5	19.04	36.84	-0.31%	0.93%
2021-4-9	1900 MHz	20.6	39.6	20.64	39.68	0.19%	0.20%
2021-4-10	1900 MHz	20.6	39.6	20.2	40.36	-1.94%	1.92%
2021-4-11	1900 MHz	20.6	39.6	20.84	39.24	1.17%	-0.91%
2021-4-12	2450 MHz	24.5	52.5	24.56	52.32	0.24%	-0.34%
2021-4-13	2600 MHz	25.3	57.0	25.68	56.96	1.50%	-0.07%
2021-4-14	2600 MHz	25.3	57.0	25.12	57.64	-0.71%	1.12%
2021-4-15	2600 MHz	25.3	57.0	25.6	56.64	1.19%	-0.63%
2021-4-16	5250 MHz	22.9	80.5	22.8	80.7	-0.44%	0.27%
2021-4-17	5600 MHz	23.6	83.3	23.9	82.5	1.36%	-0.98%
2021-4-18	5750 MHz	22.7	80.4	22.4	80.6	-1.50%	0.30%

9 Measurement Procedures

9.1 Tests to be performed

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

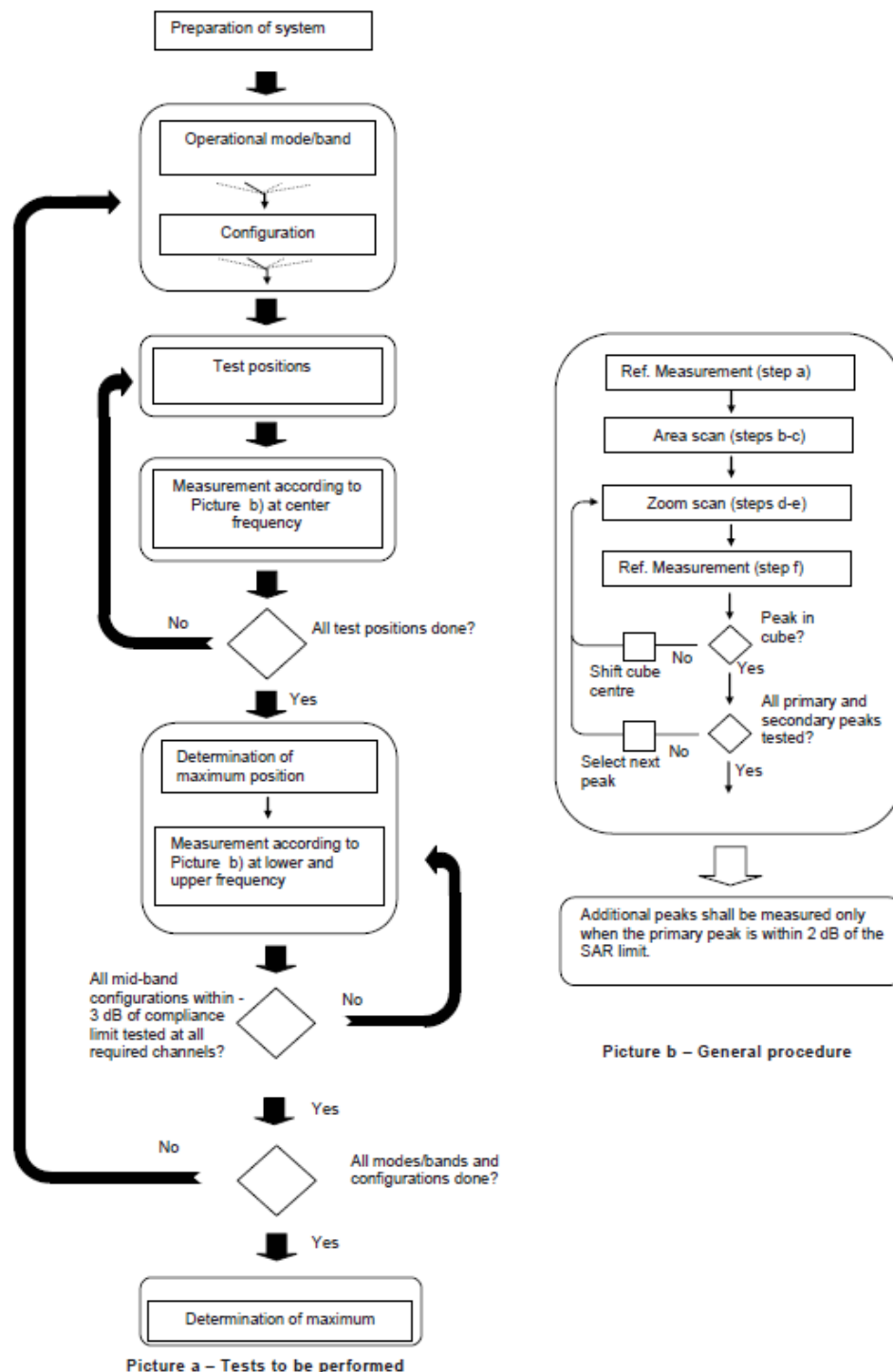
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

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

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

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

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



Picture 9.1Block diagram of the tests to be performed

9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the

higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013. 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	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ 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: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 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 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

9.3 WCDMA Measurement Procedures for SAR

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

For Release 5 HSDPA Data Devices:

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

For Release 6 HSPA Data Devices

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

Rel.8 DC-HSDPA (Cat 24)

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

9.4 SAR Measurement for LTE

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

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

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

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05 v02r05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

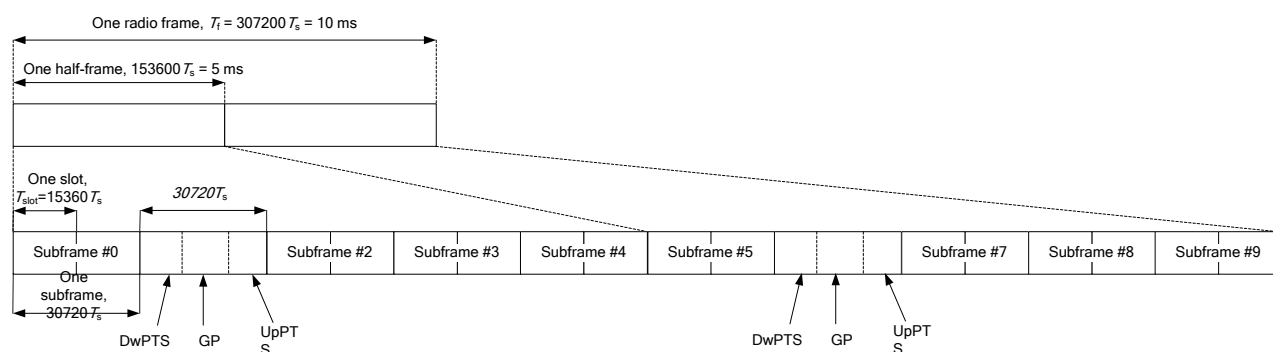


Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)

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

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

Table 9.2: Uplink-downlink configurations

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

Duty factor is calculated by:

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

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

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

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

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

9.6 Power Drift

To control the output power stability during the SAR test, DASY4 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10 Area Scan Based 1-g SAR

10.1 Requirement of KDB

According to the KDB447498 D01 v06, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-gSAR is ≤ 1.2 W/kg, a zoom scan measurement is not required provided it is also not needed for any other purpose; for example, if the peak SAR location required for simultaneous transmission SAR test exclusion can be determined accurately by the SAR system or manually to discriminate between distinctive peaks and scattered noisy SAR distributions from area scans.

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

10.2 Fast SAR Algorithms

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

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

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

Both algorithms are implemented in DASY software.

11 Conducted Output Power

Table1: Summary of Receiver detection mechanism

Antenna	Receiver on+ sensor on (head scenario)	Receiver off + Hotspot on /sensor on (Body/other scenario)	Receiver off (Body/other scenario)
ANT0/1	Power Level A1	Power Level B1	Power Level C1
ANT3	Power Level A2	Power Level B2	Power Level C2

11.1 GSM Measurement result

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

Table 11.1-1: The conducted power measurement results for GSM, GPRS and EGPRS- Level A1/B1/C1

GSM 850 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.51	32.60	32.53	33.50	/	/	/	/
GSM 850 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.52	32.57	32.51	33.50	-9.03	23.49	23.54	23.48
2 Txslots	31.56	31.62	31.54	32.50	-6.02	25.54	25.60	25.52
3Txslots	29.50	29.54	29.46	30.50	-4.26	25.24	25.28	25.20
4 Txslots	28.40	28.42	28.34	29.50	-3.01	25.39	25.41	25.33
GSM 850 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.42	32.51	32.44	33.50	-9.03	23.39	23.48	23.41
2 Txslots	31.47	31.56	31.48	32.50	-6.02	25.45	25.54	25.46
3Txslots	29.41	29.48	29.39	30.50	-4.26	25.15	25.22	25.13
4 Txslots	28.31	28.36	28.27	29.50	-3.01	25.30	25.35	25.26
GSM 850 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	26.53	26.50	26.61	27.00	-9.03	17.50	17.47	17.58
2 Txslots	25.56	25.58	25.66	26.00	-6.02	19.54	19.56	19.64
3Txslots	23.27	23.31	23.41	24.00	-4.26	19.01	19.05	19.15
4 Txslots	21.94	21.98	22.10	23.00	-3.01	18.93	18.97	19.09

NOTES:

1) Division Factors

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

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

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

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

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

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

Table 11.1-2: The conducted power measurement results for GSM, GPRS and EGPRS Level A1/B1/C1

PCS1900 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.24	29.44	29.72	30.50	/	/	/	/
PCS1900 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.20	29.31	29.63	30.50	-9.03	20.17	20.28	20.60
2 Txslots	28.20	28.39	28.69	29.50	-6.02	22.18	22.37	22.67
3Txslots	26.23	26.36	26.59	27.50	-4.26	21.97	22.10	22.33
4 Txslots	25.08	25.21	25.39	26.50	-3.01	22.07	22.20	22.38
PCS1900 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.12	29.23	29.53	30.50	-9.03	20.09	20.20	20.50
2 Txslots	28.11	28.31	28.59	29.50	-6.02	22.09	22.29	22.57
3Txslots	26.12	26.28	26.50	27.50	-4.26	21.86	22.02	22.24
4 Txslots	24.99	25.13	25.30	26.50	-3.01	21.98	22.12	22.29
PCS1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.05	25.06	25.45	26.00	-9.03	16.02	16.03	16.42
2 Txslots	24.07	24.11	24.50	25.00	-6.02	18.05	18.09	18.48
3Txslots	21.93	21.95	22.32	23.00	-4.26	17.67	17.69	18.06
4 Txslots	20.78	20.83	21.19	22.00	-3.01	17.77	17.82	18.18

NOTES:

1) Division Factors

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

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

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

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

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

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

11.2 WCDMA Measurement result

Table 11.2-1: The conducted Power for WCDMA Level A1/B1/C1

Item	band	FDDV result			
	ARFCN	4132 (826.4MHz)	4182 (836.4MHz)	4233 (846.6MHz)	Tune up
WCDMA	1	23.68	23.68	23.78	25.50
HSUPA	1	20.94	20.56	20.59	21.50
	2	20.06	20.54	20.60	21.50
	3	21.59	21.60	21.66	22.50
	4	20.1	20.08	20.15	21.00
	5	21.54	21.57	21.60	22.50
DC-HSDPA	1	22.42	22.45	22.46	22.50
	2	22.38	22.40	22.40	22.50
	3	21.88	21.90	22.92	22.50
	4	21.86	21.88	21.90	22.50
Item	band	FDDIV result			
	ARFCN	1312 (1712.4MHz)	1412 (1732.4MHz)	1513 (1752.6MHz)	
WCDMA	1	22.88	22.88	22.93	24.50
HSUPA	1	20.67	20.11	20.10	21.00
	2	20.27	20.23	20.21	21.00
	3	21.34	21.25	21.24	22.00
	4	19.81	19.74	19.73	20.50
	5	21.28	21.23	21.19	22.00
DC-HSDPA	1	22.02	22.22	22.27	22.50
	2	22.01	22.16	22.20	22.50
	3	21.77	21.78	21.80	22.00
	4	21.76	21.76	21.78	22.00
Item	band	FDDII result			
	ARFCN	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)	
WCDMA	1	22.83	22.83	22.81	24.50
HSUPA	1	20.46	20.04	20.04	21.00
	2	20.07	20.13	20.12	21.00
	3	21.14	21.21	21.21	22.00
	4	19.64	19.69	19.69	20.50
	5	21.08	21.15	21.15	22.00
DC-HSDPA	1	21.92	21.97	21.97	22.00
	2	21.88	21.91	21.87	22.00
	3	21.5	21.53	21.55	22.00
	4	21.48	21.50	21.52	22.00

11.3 LTE Measurement result

Table 11.3-1: The tune up for LTE– Power Level A1/B1/C1

Band	Tune up
LTE Band 4	25
LTE Band 5	25.5
LTE Band 12	25
LTE Band 13	24
LTE Band 25	24.5
LTE Band 26	25
LTE Band 38	23.5
LTE Band 41 PC2	27
LTE Band 41 PC3	24
LTE Band 71	25

Table 11.3-2: Maximum Power Reduction (MPR) for LTE- Power Level A1/B1/C1

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

Table 11.3-3: The tune up for LTE– Power Level A1/C1

Band	Tune up
LTE Band 2	25
LTE Band 7	24
LTE Band 66	24.5

Table 11.3-4: Maximum Power Reduction (MPR) for LTE- Power Level A1/C1

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

Table 11.3-5: The tune up for LTE– Power Level B1

Band	Tune up
LTE Band 2	21.5
LTE Band 7	21.5
LTE Band 66	22.6

Table 11.3-6: Maximum Power Reduction (MPR) for LTE- Power Level B1

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	0
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	0
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	0

Table 11.3-7: The tune up for LTE– Power Level A2

Band	Tune up
LTE Band 2	13.5
LTE Band 66	14.5

Table 11.3-8: The tune up for LTE– Power Level B2

Band	Tune up
LTE Band 2	20
LTE Band 66	21

Table 11.3-9: Maximum Power Reduction (MPR) for LTE- Power Level A1/B1

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	0
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	0
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	0

Table 11.3-10: The tune up for LTE– Power Level C1

Band	Tune up
LTE Band 2	24
LTE Band 66	24.5

Table 11.3-6: Maximum Power Reduction (MPR) for LTE- Power Level C1

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

Power Level A1/C1

Band 2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1909.3	23.47	22.69	21.78
		1880	23.58	22.82	21.82
		1850.7	23.59	22.85	21.89
	1RB Middle (3)	1909.3	23.50	22.85	21.81
		1880	23.59	22.82	21.85
		1850.7	23.62	22.79	21.82
	1RB Low (0)	1909.3	23.53	22.80	21.87
		1880	23.55	22.76	21.93
		1850.7	23.58	22.83	21.83
	3RB High (3)	1909.3	23.52	22.63	21.75
		1880	23.58	22.55	21.73
		1850.7	23.62	22.62	21.76
	3RB Middle (1)	1909.3	23.54	22.61	21.83
		1880	23.55	22.59	21.78
		1850.7	23.61	22.61	21.84
	3RB Low (0)	1909.3	23.57	22.63	21.79
		1880	23.54	22.59	21.77
		1850.7	23.65	22.60	21.78
	6RB (0)	1909.3	22.54	21.78	20.64
		1880	22.57	21.73	20.61
		1850.7	22.62	21.85	20.64
3 MHz	1RB High (14)	1908.5	23.48	22.69	21.80
		1880	23.55	22.75	21.89
		1851.5	23.62	22.92	21.86
	1RB Middle (7)	1908.5	23.49	22.75	21.91
		1880	23.56	22.73	21.87
		1851.5	23.66	22.84	21.91
	1RB Low (0)	1908.5	23.50	22.82	21.84
		1880	23.57	22.78	21.86
		1851.5	23.60	22.79	21.84
	8RB High (7)	1908.5	22.49	21.76	20.76
		1880	22.54	21.71	20.70
		1851.5	22.58	21.81	20.75
	8RB Middle (4)	1908.5	22.47	21.75	20.74
		1880	22.54	21.72	20.67
		1851.5	22.58	21.78	20.72
	8RB Low (0)	1908.5	22.55	21.82	20.77
		1880	22.54	21.71	20.71
		1851.5	22.60	21.85	20.73
	15RB (0)	1908.5	22.53	21.76	20.68
		1880	22.50	21.68	20.67
		1851.5	22.57	21.75	20.74

5 MHz	1RB High (24)	1907.5	23.52	22.77	21.78
		1880	23.55	22.78	21.82
		1852.5	23.42	22.84	21.85
	1RB Middle (12)	1907.5	23.52	22.66	21.93
		1880	23.56	22.64	21.77
		1852.5	23.50	22.75	21.90
	1RB Low (0)	1907.5	23.51	22.70	21.77
		1880	23.58	22.83	21.89
		1852.5	23.54	22.71	21.85
	12RB High (13)	1907.5	22.45	21.62	20.62
		1880	22.50	21.58	20.67
		1852.5	22.55	21.64	20.68
	12RB Middle (6)	1907.5	22.48	21.66	20.72
		1880	22.49	21.59	20.64
		1852.5	22.53	21.64	20.67
	12RB Low (0)	1907.5	22.52	21.66	20.75
		1880	22.54	21.61	20.73
		1852.5	22.57	21.65	20.69
	25RB (0)	1907.5	22.51	21.73	20.68
		1880	22.54	21.66	20.67
		1852.5	22.57	21.70	20.69
10 MHz	1RB High (49)	1905	23.42	22.74	21.83
		1880	23.53	22.70	21.81
		1855	23.53	22.72	21.75
	1RB Middle (24)	1905	23.44	22.71	21.77
		1880	23.59	22.74	21.82
		1855	23.60	22.75	21.87
	1RB Low (0)	1905	23.46	22.67	21.79
		1880	23.53	22.68	21.80
		1855	23.57	22.77	21.84
	25RB High (25)	1905	22.43	21.67	20.64
		1880	22.47	21.64	20.64
		1855	22.57	21.68	20.73
	25RB Middle (12)	1905	22.51	21.70	20.68
		1880	22.47	21.65	20.68
		1855	22.56	21.72	20.74
	25RB Low (0)	1905	22.49	21.72	20.71
		1880	22.51	21.63	20.64
		1855	22.58	21.63	20.72
	50RB (0)	1905	22.47	21.67	20.65
		1880	22.49	21.61	20.60
		1855	22.58	21.67	20.68
15 MHz	1RB High (74)	1902.5	23.44	22.62	21.82
		1880	23.44	22.66	21.71
		1857.5	23.45	22.76	21.68
	1RB Middle (37)	1902.5	23.46	22.79	21.75
		1880	23.55	22.77	21.79
		1857.5	23.62	22.89	21.85

	1RB Low (0)	1902.5	23.45	22.62	21.80
		1880	23.42	22.58	21.70
		1857.5	23.53	22.72	21.83
	36RB High (38)	1902.5	22.46	21.60	20.61
		1880	22.43	21.54	20.58
		1857.5	22.47	21.64	20.72
	36RB Middle (19)	1902.5	22.48	21.61	20.61
		1880	22.50	21.63	20.62
		1857.5	22.51	21.64	20.67
	36RB Low (0)	1902.5	22.48	21.61	20.65
		1880	22.51	21.62	20.64
		1857.5	22.52	21.61	20.69
	75RB (0)	1902.5	22.50	21.58	20.57
		1880	22.49	21.62	20.57
		1857.5	22.55	21.67	20.63
20 MHz	1RB High (99)	1900	23.47	22.67	21.68
		1880	23.45	22.72	21.70
		1860	23.50	22.60	21.66
	1RB Middle (50)	1900	23.52	22.77	21.83
		1880	23.60	22.86	21.81
		1860	23.58	22.85	21.80
	1RB Low (0)	1900	23.46	22.71	21.68
		1880	23.50	22.77	21.66
		1860	23.53	22.73	21.76
	50RB High (50)	1900	22.46	21.65	20.62
		1880	22.51	21.60	20.62
		1860	22.59	21.66	20.62
	50RB Middle (25)	1900	22.57	21.66	20.68
		1880	22.52	21.64	20.64
		1860	22.58	21.67	20.65
	50RB Low (0)	1900	22.50	21.62	20.60
		1880	22.55	21.69	20.70
		1860	22.55	21.66	20.69
	100RB (0)	1900	22.49	21.61	20.59
		1880	22.52	21.64	20.61
		1860	22.57	21.63	20.62

Power Level B1

Band 2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1909.3	20.58	20.37	20.29
		1880	20.64	20.44	20.25
		1850.7	20.65	20.50	20.30
	1RB Middle (3)	1909.3	20.56	20.29	20.19
		1880	20.63	20.47	20.23
		1850.7	20.60	20.34	20.31
	1RB Low (0)	1909.3	20.59	20.30	20.26
		1880	20.62	20.42	20.37
		1850.7	20.64	20.45	20.31
	3RB High (3)	1909.3	20.62	20.03	20.15
		1880	20.64	20.06	20.20
		1850.7	20.66	20.21	20.28
	3RB Middle (1)	1909.3	20.56	20.09	20.21
		1880	20.60	20.06	20.25
		1850.7	20.67	20.13	20.20
	3RB Low (0)	1909.3	20.61	20.14	20.18
		1880	20.60	20.14	20.17
		1850.7	20.68	20.17	20.29
	6RB (0)	1909.3	20.08	20.16	20.07
		1880	20.12	20.24	20.10
		1850.7	20.12	20.28	20.19
3 MHz	1RB High (14)	1908.5	20.56	20.41	20.22
		1880	20.59	20.44	20.34
		1851.5	20.69	20.50	20.34
	1RB Middle (7)	1908.5	20.59	20.34	20.25
		1880	20.62	20.47	20.40
		1851.5	20.70	20.57	20.40
	1RB Low (0)	1908.5	20.61	20.38	20.29
		1880	20.64	20.41	20.34
		1851.5	20.62	20.39	20.35
	8RB High (7)	1908.5	20.05	20.16	20.12
		1880	20.07	20.20	20.14
		1851.5	20.18	20.22	20.21
	8RB Middle (4)	1908.5	20.10	20.15	20.15
		1880	20.10	20.18	20.17
		1851.5	20.17	20.24	20.23
	8RB Low (0)	1908.5	20.11	20.15	20.15
		1880	20.13	20.20	20.16
		1851.5	20.19	20.21	20.20
	15RB (0)	1908.5	20.10	20.11	20.09
		1880	20.13	20.13	20.14
		1851.5	20.19	20.17	20.17

5 MHz	1RB High (24)	1907.5	20.60	20.33	20.27
		1880	20.65	20.46	20.31
		1852.5	20.68	20.48	20.38
	1RB Middle (12)	1907.5	20.63	20.34	20.30
		1880	20.66	20.45	20.26
		1852.5	20.81	20.59	20.41
	1RB Low (0)	1907.5	20.59	20.29	20.27
		1880	20.69	20.39	20.34
		1852.5	20.68	20.47	20.36
	12RB High (13)	1907.5	20.04	20.06	20.06
		1880	20.12	20.13	20.10
		1852.5	20.17	20.10	20.19
	12RB Middle (6)	1907.5	20.11	20.12	20.13
		1880	20.12	20.13	20.16
		1852.5	20.20	20.19	20.21
	12RB Low (0)	1907.5	20.17	20.09	20.10
		1880	20.20	20.13	20.18
		1852.5	20.15	20.19	20.25
	25RB (0)	1907.5	20.12	20.10	20.12
		1880	20.18	20.19	20.19
		1852.5	20.19	20.20	20.17
10 MHz	1RB High (49)	1905	20.55	20.42	20.28
		1880	20.61	20.48	20.21
		1855	20.67	20.49	20.28
	1RB Middle (24)	1905	20.60	20.48	20.23
		1880	20.67	20.50	20.32
		1855	20.71	20.47	20.44
	1RB Low (0)	1905	20.60	20.38	20.23
		1880	20.62	20.45	20.23
		1855	20.65	20.52	20.28
	25RB High (25)	1905	20.04	20.06	20.05
		1880	20.08	20.09	20.08
		1855	20.20	20.16	20.22
	25RB Middle (12)	1905	20.08	20.11	20.12
		1880	20.13	20.14	20.17
		1855	20.21	20.20	20.21
	25RB Low (0)	1905	20.09	20.08	20.15
		1880	20.15	20.16	20.15
		1855	20.15	20.15	20.21
	50RB (0)	1905	20.05	20.06	20.09
		1880	20.07	20.10	20.08
		1855	20.20	20.19	20.21
15 MHz	1RB High (74)	1902.5	20.48	20.22	20.12
		1880	20.48	20.31	20.11
		1857.5	20.56	20.45	20.18
	1RB Middle (37)	1902.5	20.51	20.39	20.27
		1880	20.65	20.35	20.26
		1857.5	20.65	20.39	20.40

	1RB Low (0)	1902.5	20.48	20.34	20.18
		1880	20.48	20.32	20.22
		1857.5	20.59	20.46	20.33
	36RB High (38)	1902.5	19.94	20.01	20.05
		1880	19.96	20.09	20.10
		1857.5	20.12	20.16	20.17
	36RB Middle (19)	1902.5	20.01	20.06	20.09
		1880	20.11	20.09	20.12
		1857.5	20.15	20.15	20.22
	36RB Low (0)	1902.5	19.99	20.06	20.05
		1880	20.12	20.11	20.16
		1857.5	20.16	20.14	20.15
	75RB (0)	1902.5	20.00	20.03	20.00
		1880	20.09	20.06	20.11
		1857.5	20.18	20.16	20.14
20 MHz	1RB High (99)	1900	20.52	20.24	20.11
		1880	20.47	20.24	20.09
		1860	20.53	20.39	20.09
	1RB Middle (50)	1900	20.58	20.29	20.29
		1880	20.66	20.48	20.25
		1860	20.65	20.48	20.34
	1RB Low (0)	1900	20.50	20.37	20.09
		1880	20.53	20.22	20.18
		1860	20.59	20.34	20.29
	50RB High (50)	1900	20.05	20.06	20.03
		1880	20.06	20.06	20.03
		1860	20.25	20.17	20.17
	50RB Middle (25)	1900	20.09	20.07	20.09
		1880	20.08	20.03	20.12
		1860	20.17	20.22	20.18
	50RB Low (0)	1900	20.05	20.10	20.06
		1880	20.15	20.12	20.11
		1860	20.23	20.23	20.21
	100RB (0)	1900	20.01	20.04	20.04
		1880	20.10	20.07	20.03
		1860	20.25	20.21	20.19

Power Level A1/B1/C1

Band 4					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Actual output power (dBm)		
	RB offset		QPSK	16QAM	64QAM
1.4 MHz	1RB_High	1754.3	23.39	22.74	21.64
		1732.5	23.29	22.69	21.61
		1710.7	23.44	22.78	21.64
	1RB_Middle	1754.3	23.44	22.69	21.60
		1732.5	23.34	22.76	21.63
		1710.7	23.43	22.70	21.77
	1RB_Low	1754.3	23.46	22.60	21.59
		1732.5	23.30	22.72	21.68
		1710.7	23.41	22.77	21.70
	3RB_High	1754.3	23.32	22.55	21.55
		1732.5	23.31	22.49	21.55
		1710.7	23.38	22.58	21.56
	3RB_Middle	1754.3	23.29	22.46	21.63
		1732.5	23.36	22.51	21.55
		1710.7	23.40	22.56	21.65
	3RB_Low	1754.3	23.30	22.44	21.55
		1732.5	23.35	22.56	21.53
		1710.7	23.39	22.58	21.61
	6RB	1754.3	22.45	21.53	20.39
		1732.5	22.45	21.50	20.48
		1710.7	22.54	21.60	20.43
3 MHz	1RB_High	1753.5	23.47	22.66	21.61
		1732.5	23.31	22.76	21.61
		1711.5	23.42	22.67	21.61
	1RB_Middle	1753.5	23.47	22.76	21.67
		1732.5	23.36	22.73	21.63
		1711.5	23.48	22.73	21.72
	1RB_Low	1753.5	23.50	22.62	21.56
		1732.5	23.32	22.76	21.59
		1711.5	23.42	22.70	21.67
	8RB_High	1753.5	22.50	21.49	20.45
		1732.5	22.43	21.50	20.47
		1711.5	22.51	21.61	20.55
	8RB_Middle	1753.5	22.46	21.56	20.48
		1732.5	22.44	21.51	20.46
		1711.5	22.55	21.63	20.56
	8RB_Low	1753.5	22.49	21.58	20.53
		1732.5	22.49	21.55	20.46
		1711.5	22.55	21.61	20.56
	15RB	1753.5	22.48	21.51	20.46
		1732.5	22.47	21.50	20.44

		1711.5	22.56	21.59	20.51
5 MHz	1RB_High	1752.5	23.52	22.80	21.59
		1732.5	23.37	22.78	21.69
		1712.5	23.45	22.79	21.72
		1712.5	23.45	22.79	21.72
	1RB_Middle	1752.5	23.54	22.73	21.64
		1732.5	23.38	22.81	21.60
		1712.5	23.51	22.69	21.73
		1712.5	23.51	22.69	21.73
	1RB_Low	1752.5	23.51	22.70	21.57
		1732.5	23.42	22.80	21.68
		1712.5	23.45	22.85	21.69
		1712.5	23.45	22.85	21.69
	12RB_High	1752.5	22.46	21.43	20.51
		1732.5	22.46	21.48	20.50
		1712.5	22.56	21.54	20.54
		1712.5	22.56	21.54	20.54
	12RB_Middle	1752.5	22.50	21.49	20.54
		1732.5	22.49	21.50	20.50
		1712.5	22.54	21.55	20.55
		1712.5	22.54	21.55	20.55
	12RB_Low	1752.5	22.53	21.48	20.49
		1732.5	22.56	21.48	20.52
		1712.5	22.57	21.58	20.58
		1712.5	22.57	21.58	20.58
	25RB	1752.5	22.55	21.51	20.49
		1732.5	22.51	21.49	20.48
		1712.5	22.50	21.55	20.54
		1712.5	22.50	21.55	20.54
10MHz	1RB_High	1750	23.53	22.73	21.60
		1732.5	23.32	22.65	21.59
		1715	23.40	22.67	21.68
		1715	23.40	22.67	21.68
	1RB_Middle	1750	23.49	22.71	21.58
		1732.5	23.42	22.80	21.58
		1715	23.49	22.67	21.70
		1715	23.49	22.67	21.70
	1RB_Low	1750	23.45	22.71	21.53
		1732.5	23.37	22.78	21.68
		1715	23.45	22.74	21.64
		1715	23.45	22.74	21.64
	25RB_High	1750	22.46	21.46	20.48
		1732.5	22.47	21.48	20.47
		1715	22.53	21.56	20.54
		1715	22.53	21.56	20.54
	25RB_Middle	1750	22.47	21.49	20.45
		1732.5	22.43	21.52	20.47
		1715	22.46	21.53	20.51
		1715	22.46	21.53	20.51
	25RB_Low	1750	22.51	21.44	20.46
		1732.5	22.50	21.50	20.51
		1715	22.51	21.53	20.50
		1715	22.51	21.53	20.50
	50RB	1750	22.47	21.44	20.39
		1732.5	22.48	21.48	20.47
		1715	22.45	21.49	20.51
		1715	22.45	21.49	20.51
15MHz	1RB_High	1747.5	23.23	22.65	21.57
		1732.5	23.24	22.57	21.53
		1717.5	23.33	22.64	21.60
	1RB_Middle	1747.5	23.30	22.68	21.57
		1732.5	23.33	22.82	21.61

	1RB_Low	1717.5	23.44	22.82	21.74
		1747.5	23.29	22.73	21.58
		1732.5	23.31	22.69	21.57
		1717.5	23.40	22.64	21.60
	36RB_High	1747.5	22.43	21.36	20.46
		1732.5	22.41	21.47	20.42
		1717.5	22.49	21.48	20.47
	36RB_Middle	1747.5	22.41	21.38	20.37
		1732.5	22.45	21.53	20.45
		1717.5	22.51	21.54	20.51
	36RB_Low	1747.5	22.39	21.38	20.41
		1732.5	22.48	21.50	20.44
		1717.5	22.53	21.46	20.53
	75RB	1747.5	22.43	21.44	20.43
		1732.5	22.44	21.47	20.45
		1717.5	22.49	21.49	20.45
20MHz	1RB_High	1745	23.25	22.61	21.49
		1732.5	23.21	22.56	21.43
		1720	23.30	22.63	21.50
	1RB_Middle	1745	23.34	22.63	21.52
		1732.5	23.41	22.71	21.61
		1720	23.42	22.66	21.66
	1RB_Low	1745	23.28	22.49	21.54
		1732.5	23.32	22.72	21.45
		1720	23.36	22.58	21.55
	50RB_High	1745	22.34	21.36	20.69
		1732.5	22.49	21.46	20.37
		1720	22.52	21.47	20.41
	50RB_Middle	1745	22.42	21.40	20.48
		1732.5	22.51	21.44	20.39
		1720	22.49	21.51	20.43
	50RB_Low	1745	22.38	21.40	20.46
		1732.5	22.46	21.41	20.36
		1720	22.53	21.53	20.51
	100RB	1745	22.37	21.37	20.42
		1732.5	22.44	21.45	20.39
		1720	22.52	21.50	20.46

Power Level A1/B1/C1

Band 5					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	848.3	24.00	23.25	22.15
		836.5	24.05	23.36	22.22
		824.7	24.13	23.38	22.21
	1RB Middle (3)	848.3	23.99	23.17	22.13
		836.5	24.10	23.32	22.22
		824.7	24.06	23.33	22.19
	1RB Low (0)	848.3	23.99	23.14	22.22
		836.5	24.08	23.31	22.21
		824.7	24.10	23.21	22.20
	3RB High (3)	848.3	24.03	22.98	22.05
		836.5	24.05	23.03	22.07
		824.7	24.11	23.05	22.13
	3RB Middle (1)	848.3	24.01	23.01	22.08
		836.5	24.10	23.09	22.10
		824.7	24.10	23.15	22.14
	3RB Low (0)	848.3	24.03	23.08	22.11
		836.5	24.06	23.14	22.16
		824.7	24.09	23.13	22.17
	6RB (0)	848.3	23.02	22.11	20.95
		836.5	23.09	22.15	20.99
		824.7	23.10	22.08	20.99
3 MHz	1RB High (14)	847.5	23.98	23.24	22.13
		836.5	24.01	23.38	22.15
		825.5	24.12	23.23	22.24
	1RB Middle (7)	847.5	24.03	23.26	22.19
		836.5	24.06	23.31	22.20
		825.5	24.13	23.32	22.24
	1RB Low (0)	847.5	24.02	23.21	22.12
		836.5	24.07	23.39	22.25
		825.5	24.11	23.27	22.25
	8RB High (7)	847.5	23.02	22.04	20.99
		836.5	23.04	22.10	21.02
		825.5	23.08	22.13	21.11
	8RB Middle (4)	847.5	23.00	22.10	21.02
		836.5	23.07	22.15	21.08
		825.5	23.13	22.14	21.13
	8RB Low (0)	847.5	23.02	22.06	21.04
		836.5	23.04	22.07	21.09
		825.5	23.08	22.11	21.10
	15RB (0)	847.5	23.00	22.06	21.00
		836.5	23.05	22.08	21.04
		825.5	23.06	22.06	21.06

5 MHz	1RB High (24)	846.5	24.08	23.26	22.09
		836.5	24.06	23.27	22.20
		826.5	24.17	23.34	22.28
	1RB Middle (12)	846.5	24.07	23.23	22.13
		836.5	24.11	23.45	22.24
		826.5	24.15	23.38	22.28
	1RB Low (0)	846.5	24.07	23.20	22.15
		836.5	24.15	23.37	22.29
		826.5	24.13	23.25	22.23
	12RB High (13)	846.5	22.95	21.94	20.96
		836.5	23.06	21.97	21.02
		826.5	23.06	22.00	21.09
	12RB Middle (6)	846.5	23.02	22.02	21.00
		836.5	23.06	22.09	21.06
		826.5	23.08	22.11	21.12
	12RB Low (0)	846.5	23.10	22.08	21.10
		836.5	23.10	22.08	21.07
		826.5	23.14	22.12	21.11
	25RB (0)	846.5	23.04	22.03	21.00
		836.5	23.09	22.06	21.02
		826.5	23.13	22.12	21.10
10 MHz	1RB High (49)	844.0	23.98	23.17	22.07
		836.5	24.05	23.15	22.07
		829.0	24.06	23.31	22.15
	1RB Middle (24)	844.0	24.05	23.30	22.16
		836.5	24.14	23.40	22.20
		829.0	24.17	23.46	22.27
	1RB Low (0)	844.0	24.07	23.27	22.13
		836.5	24.15	23.45	22.29
		829.0	24.11	23.30	22.17
	25RB High (25)	844.0	22.94	21.94	20.94
		836.5	23.06	22.01	21.06
		829.0	23.08	22.14	21.10
	25RB Middle (12)	844.0	23.02	22.04	21.03
		836.5	23.03	22.01	21.05
		829.0	23.11	22.08	21.09
	25RB Low (0)	844.0	23.05	22.07	21.08
		836.5	23.05	22.03	21.07
		829.0	23.16	22.20	21.14
	50RB (0)	844.0	23.04	22.05	21.02
		836.5	23.02	22.02	21.02
		829.0	23.14	22.14	21.10

Power Level A1/ C1

Band 7					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	2567.5	23.13	22.58	21.46
		2535	23.15	22.30	21.25
		2502.5	23.40	22.58	21.47
	1RB Middle (12)	2567.5	23.22	22.66	21.55
		2535	23.15	22.44	21.35
		2502.5	23.36	22.73	21.53
	1RB Low (0)	2567.5	23.14	22.60	21.52
		2535	23.14	22.53	21.40
		2502.5	23.39	22.72	21.60
	12RB High (13)	2567.5	22.08	21.29	20.43
		2535	22.08	21.07	20.23
		2502.5	22.39	21.30	20.50
	12RB Middle (6)	2567.5	22.11	21.26	20.45
		2535	22.13	21.08	20.24
		2502.5	22.37	21.37	20.51
	12RB Low (0)	2567.5	22.12	21.36	20.52
		2535	22.13	21.10	20.26
		2502.5	22.39	21.41	20.51
	25RB (0)	2567.5	22.10	21.30	20.43
		2535	22.14	21.11	20.25
		2502.5	22.38	21.37	20.51
10 MHz	1RB High (49)	2565	23.15	22.65	21.40
		2535	23.11	22.43	21.32
		2505	23.30	22.59	21.45
	1RB Middle (24)	2565	23.15	22.71	21.51
		2535	23.21	22.40	21.32
		2505	23.42	22.65	21.57
	1RB Low (0)	2565	23.16	22.53	21.38
		2535	23.12	22.42	21.24
		2505	23.41	22.68	21.48
	25RB High (25)	2565	22.16	21.31	20.39
		2535	22.08	21.14	20.22
		2505	22.34	21.32	20.47
	25RB Middle (12)	2565	22.17	21.37	20.49
		2535	22.15	21.13	20.24
		2505	22.36	21.36	20.45
	25RB Low (0)	2565	22.15	21.41	20.51
		2535	22.15	21.17	20.29
		2505	22.36	21.34	20.48
	50RB (0)	2565	22.17	21.34	20.44
		2535	22.19	21.14	20.23
		2505	22.40	21.35	20.43

15 MHz	1RB High (74)	2562.5	23.16	22.50	21.42
		2535	23.07	22.44	21.15
		2507.5	23.15	22.38	21.32
	1RB Middle (37)	2562.5	23.15	22.64	21.44
		2535	23.13	22.45	21.36
		2507.5	23.34	22.52	21.37
	1RB Low (0)	2562.5	23.13	22.50	21.37
		2535	23.09	22.41	21.24
		2507.5	23.34	22.55	21.38
	36RB High (38)	2562.5	22.08	21.19	20.40
		2535	22.08	21.07	20.22
		2507.5	22.20	21.28	20.39
	36RB Middle (19)	2562.5	22.10	21.31	20.45
		2535	22.10	21.11	20.25
		2507.5	22.26	21.28	20.42
	36RB Low (0)	2562.5	22.10	21.24	20.39
		2535	22.10	21.05	20.22
		2507.5	22.26	21.31	20.44
	75RB (0)	2562.5	22.14	21.26	20.36
		2535	22.14	21.10	20.21
		2507.5	22.27	21.32	20.38
20 MHz	1RB High (99)	2560	23.27	22.42	21.34
		2535	23.06	22.31	21.21
		2510	23.09	22.30	21.31
	1RB Middle (50)	2560	23.32	22.52	21.39
		2535	23.18	22.48	21.34
		2510	23.33	22.51	21.46
	1RB Low (0)	2560	23.12	22.43	21.25
		2535	23.06	22.36	21.23
		2510	23.32	22.62	21.33
	50RB High (50)	2560	22.24	21.25	20.34
		2535	22.09	21.09	20.20
		2510	22.28	21.27	20.40
	50RB Middle (25)	2560	22.27	21.27	20.38
		2535	22.15	21.15	20.31
		2510	22.32	21.28	20.43
	50RB Low (0)	2560	22.30	21.29	20.43
		2535	22.15	21.12	20.23
		2510	22.29	21.27	20.39
	100RB (0)	2560	22.26	21.24	20.37
		2535	22.13	21.06	20.24
		2510	22.28	21.27	20.38

Power Level B1

Band 7					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	2567.5	20.19	19.94	19.88
		2535	19.95	19.75	19.63
		2502.5	20.22	19.97	19.96
	1RB Middle (12)	2567.5	20.13	20.01	19.81
		2535	19.97	19.77	19.61
		2502.5	20.17	19.96	19.87
	1RB Low (0)	2567.5	20.17	20.04	19.78
		2535	19.99	19.78	19.69
		2502.5	20.18	20.09	19.94
	12RB High (13)	2567.5	19.61	19.59	19.63
		2535	19.60	19.61	19.64
		2502.5	19.91	19.94	19.95
	12RB Middle (6)	2567.5	19.90	19.88	19.93
		2535	19.60	19.69	19.63
		2502.5	19.91	19.87	19.92
	12RB Low (0)	2567.5	19.92	19.91	19.95
		2535	19.69	19.66	19.71
		2502.5	19.90	19.89	19.92
	25RB (0)	2567.5	19.85	19.91	19.91
		2535	19.67	19.66	19.71
		2502.5	19.71	19.72	19.72
10 MHz	1RB High (49)	2565	20.15	20.03	19.79
		2535	19.89	19.73	19.62
		2505	20.10	19.94	19.86
	1RB Middle (24)	2565	20.17	20.03	19.80
		2535	19.96	19.85	19.68
		2505	20.17	19.98	19.91
	1RB Low (0)	2565	20.12	19.84	19.81
		2535	19.94	19.77	19.65
		2505	20.18	20.11	19.95
	25RB High (25)	2565	19.66	19.65	19.68
		2535	19.63	19.65	19.64
		2505	19.84	19.89	19.84
	25RB Middle (12)	2565	19.89	19.88	19.92
		2535	19.67	19.66	19.69
		2505	19.87	19.89	19.89
	25RB Low (0)	2565	19.90	19.94	19.95
		2535	19.62	19.66	19.69
		2505	19.83	19.87	19.91
	50RB (0)	2565	19.90	19.89	19.93
		2535	19.66	19.68	19.65
		2505	19.73	19.66	19.66

15 MHz	1RB High (74)	2562.5	20.06	20.00	19.72
		2535	19.85	19.74	19.56
		2507.5	20.01	19.95	19.79
	1RB Middle (37)	2562.5	20.09	20.04	19.85
		2535	19.94	19.80	19.66
		2507.5	20.07	20.07	19.81
	1RB Low (0)	2562.5	20.00	19.83	19.65
		2535	19.97	19.88	19.64
		2507.5	20.12	20.03	19.81
	36RB High (38)	2562.5	19.62	19.63	19.62
		2535	19.60	19.62	19.62
		2507.5	19.83	19.80	19.83
	36RB Middle (19)	2562.5	19.79	19.86	19.85
		2535	19.57	19.65	19.63
		2507.5	19.78	19.82	19.87
	36RB Low (0)	2562.5	19.77	19.78	19.81
		2535	19.57	19.64	19.65
		2507.5	19.83	19.81	19.88
	75RB (0)	2562.5	19.84	19.85	19.82
		2535	19.61	19.65	19.65
		2507.5	19.61	19.60	19.57
20 MHz	1RB High (99)	2560	20.13	19.98	19.78
		2535	20.11	20.04	19.77
		2510	20.03	19.94	19.64
	1RB Middle (50)	2560	20.24	19.94	19.92
		2535	20.18	20.03	19.83
		2510	20.09	19.92	19.79
	1RB Low (0)	2560	20.17	20.04	19.91
		2535	20.08	20.00	19.80
		2510	20.06	19.98	19.68
	50RB High (50)	2560	19.68	19.68	19.68
		2535	19.73	19.71	19.70
		2510	19.60	19.58	19.63
	50RB Middle (25)	2560	19.82	19.77	19.78
		2535	19.71	19.68	19.71
		2510	19.56	19.57	19.59
	50RB Low (0)	2560	19.80	19.85	19.81
		2535	19.64	19.68	19.68
		2510	19.53	19.59	19.56
	100RB (0)	2560	19.69	19.72	19.69
		2535	19.65	19.65	19.62
		2510	19.54	19.56	19.56

Power Level A1/B1/ C1

Band 12					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	715.3	24.45	23.77	22.70
		707.5	24.51	23.65	22.63
		699.7	24.54	23.72	22.60
	1RB Middle (3)	715.3	24.47	23.82	22.69
		707.5	24.46	23.74	22.62
		699.7	24.58	23.81	22.67
	1RB Low (0)	715.3	24.49	23.77	22.67
		707.5	24.52	23.67	22.59
		699.7	24.52	23.75	22.60
	3RB High (3)	715.3	24.45	23.55	22.57
		707.5	24.47	23.46	22.53
		699.7	24.55	23.55	22.61
	3RB Middle (1)	715.3	24.48	23.57	22.67
		707.5	24.49	23.43	22.54
		699.7	24.52	23.52	22.58
	3RB Low (0)	715.3	24.48	23.53	22.64
		707.5	24.47	23.45	22.55
		699.7	24.49	23.48	22.55
	6RB (0)	715.3	23.46	22.60	21.50
		707.5	23.46	22.55	21.43
		699.7	23.53	22.62	21.48
3 MHz	1RB High (14)	714.5	24.46	23.68	22.63
		707.5	24.46	23.71	22.57
		700.5	24.46	23.69	22.61
	1RB Middle (7)	714.5	24.58	23.69	22.64
		707.5	24.51	23.68	22.63
		700.5	24.56	23.76	22.63
	1RB Low (0)	714.5	24.44	23.75	22.59
		707.5	24.46	23.66	22.60
		700.5	24.53	23.69	22.64
	8RB High (7)	714.5	23.45	22.56	21.50
		707.5	23.46	22.52	21.48
		700.5	23.47	22.55	21.50
	8RB Middle (4)	714.5	23.46	22.55	21.50
		707.5	23.47	22.52	21.50
		700.5	23.46	22.53	21.48
	8RB Low (0)	714.5	23.45	22.54	21.53
		707.5	23.44	22.48	21.44
		700.5	23.49	22.53	21.52
	15RB (0)	714.5	23.43	22.49	21.49
		707.5	23.43	22.50	21.42
		700.5	23.47	22.50	21.50
5 MHz	1RB	713.5	24.51	23.79	22.64

	High (24)	707.5	24.52	23.66	22.61
		701.5	24.53	23.78	22.60
	1RB Middle (12)	713.5	24.55	23.77	22.64
		707.5	24.58	23.82	22.70
		701.5	24.55	23.65	22.70
	1RB Low (0)	713.5	24.53	23.85	22.63
		707.5	24.53	23.67	22.63
		701.5	24.57	23.81	22.61
	12RB High (13)	713.5	23.47	22.43	21.42
		707.5	23.47	22.47	21.49
		701.5	23.49	22.45	21.51
	12RB Middle (6)	713.5	23.46	22.49	21.54
		707.5	23.46	22.46	21.48
		701.5	23.50	22.45	21.43
	12RB Low (0)	713.5	23.50	22.57	21.57
		707.5	23.49	22.48	21.48
		701.5	23.48	22.47	21.46
	25RB (0)	713.5	23.47	22.49	21.47
		707.5	23.46	22.50	21.45
		701.5	23.49	22.43	21.45
10 MHz	1RB High (49)	711	24.55	23.70	22.67
		707.5	24.55	23.72	22.59
		704	24.49	23.66	22.50
	1RB Middle (24)	711	24.59	23.86	22.68
		707.5	24.59	23.82	22.70
		704	24.58	23.71	22.56
	1RB Low (0)	711	24.52	23.65	22.55
		707.5	24.57	23.70	22.63
		704	24.62	23.82	22.68
	25RB High (25)	711	23.53	22.54	21.49
		707.5	23.49	22.50	21.48
		704	23.50	22.49	21.45
	25RB Middle (12)	711	23.59	22.52	21.55
		707.5	23.47	22.48	21.51
		704	23.48	22.52	21.51
	25RB Low (0)	711	23.58	22.59	21.56
		707.5	23.53	22.50	21.46
		704	23.39	22.41	21.42
	50RB (0)	711	23.60	22.55	21.58
		707.5	23.48	22.46	21.44
		704	23.49	22.45	21.41

Power Level A1/B1/ C1

Band 13					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	784.5	22.84	22.21	20.94
		782	22.82	22.14	20.94
		779.5	22.86	22.15	20.97
	1RB Middle (12)	784.5	22.87	22.16	20.98
		782	22.91	22.22	21.05
		779.5	22.86	22.13	20.99
	1RB Low (0)	784.5	22.84	22.15	20.93
		782	22.87	22.11	20.90
		779.5	22.87	22.07	20.92
	12RB High (13)	784.5	21.75	20.77	19.77
		782	21.77	20.76	19.81
		779.5	21.76	20.81	19.79
	12RB Middle (6)	784.5	21.84	20.82	19.83
		782	21.80	20.78	19.84
		779.5	21.77	20.76	19.78
	12RB Low (0)	784.5	21.84	20.83	19.86
		782	21.82	20.80	19.83
		779.5	21.69	20.66	19.68
	25RB (0)	784.5	21.82	20.82	19.78
		782	21.84	20.83	19.78
		779.5	21.75	20.74	19.73
10 MHz	1RB High (49)	782	22.80	22.04	20.90
	1RB Middle (24)	782	22.89	22.26	21.03
	1RB Low (0)	782	22.86	22.11	20.96
	25RB High (25)	782	21.78	20.79	19.74
	25RB Middle (12)	782	21.79	20.84	19.81
	25RB Low (0)	782	21.70	20.71	19.72
	50RB (0)	782	21.79	20.76	19.76

Power Level A1/B1/ C1

Band 25					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1914.3	23.84	22.86	22.01
		1882.5	23.97	23.15	22.19
		1850.7	24.00	23.16	22.21
	1RB Middle (3)	1914.3	23.88	23.03	22.13
		1882.5	23.97	23.13	22.19
		1850.7	24.03	23.13	22.22
	1RB Low (0)	1914.3	23.87	22.94	22.11
		1882.5	23.97	23.09	22.24
		1850.7	23.98	23.09	22.14
	3RB High (3)	1914.3	23.88	22.97	22.03
		1882.5	23.94	22.98	22.09
		1850.7	24.02	22.99	22.13
	3RB Middle (1)	1914.3	23.92	22.92	22.04
		1882.5	23.94	22.99	22.12
		1850.7	23.97	22.98	22.11
	3RB Low (0)	1914.3	23.93	23.04	22.08
		1882.5	23.95	22.99	22.12
		1850.7	24.00	22.98	22.17
	6RB (0)	1914.3	22.93	22.11	20.96
		1882.5	22.98	22.11	20.91
		1850.7	22.97	22.17	21.05
3 MHz	1RB High (14)	1913.5	23.90	22.92	22.15
		1882.5	23.96	23.18	22.28
		1851.5	24.02	23.11	22.26
	1RB Middle (7)	1913.5	23.95	23.04	22.22
		1882.5	24.01	23.15	22.27
		1851.5	24.06	23.11	22.24
	1RB Low (0)	1913.5	23.91	23.07	22.09
		1882.5	23.99	23.18	22.23
		1851.5	24.00	23.22	22.14
	8RB High (7)	1913.5	22.91	22.08	21.00
		1882.5	22.94	22.11	21.04
		1851.5	22.92	22.14	21.09
	8RB Middle (4)	1913.5	22.97	22.09	21.05
		1882.5	22.96	22.08	21.06
		1851.5	22.94	22.16	21.07
	8RB Low (0)	1913.5	22.93	22.10	21.08
		1882.5	22.96	22.14	21.07
		1851.5	22.94	22.16	21.09
	15RB (0)	1913.5	22.91	22.08	21.01
		1882.5	22.92	22.06	21.01
		1851.5	22.96	22.07	21.05
5 MHz	1RB	1912.5	23.98	23.11	22.16

	High (24)	1882.5	24.05	23.25	22.18
		1852.5	24.08	23.19	22.19
	1RB Middle (12)	1912.5	24.04	23.25	22.23
		1882.5	24.14	23.31	22.27
		1852.5	24.15	23.23	22.25
	1RB Low (0)	1912.5	24.04	23.13	22.18
		1882.5	24.10	23.23	22.23
		1852.5	24.09	23.29	22.20
	12RB High (13)	1912.5	22.89	22.02	21.02
		1882.5	22.98	22.12	21.09
		1852.5	23.02	22.10	21.13
	12RB Middle (6)	1912.5	23.06	22.10	21.10
		1882.5	23.02	22.13	21.14
		1852.5	23.01	22.15	21.16
	12RB Low (0)	1912.5	23.09	22.11	21.12
		1882.5	23.04	22.17	21.12
		1852.5	23.07	22.14	21.15
	25RB (0)	1912.5	22.99	22.14	21.06
		1882.5	23.04	22.15	21.11
		1852.5	23.02	22.15	21.11
10 MHz	1RB High (49)	1910	24.13	23.17	22.30
		1882.5	24.18	23.28	22.30
		1855	24.18	23.25	22.29
	1RB Middle (24)	1910	24.17	23.34	22.26
		1882.5	24.25	23.40	22.42
		1855	24.28	23.29	22.34
	1RB Low (0)	1910	24.23	23.26	22.28
		1882.5	24.17	23.25	22.28
		1855	24.20	23.31	22.30
	25RB High (25)	1910	23.04	22.12	21.07
		1882.5	23.14	22.25	21.13
		1855	23.15	22.27	21.18
	25RB Middle (12)	1910	23.17	22.23	21.15
		1882.5	23.15	22.20	21.17
		1855	23.16	22.22	21.16
	25RB Low (0)	1910	23.20	22.30	21.24
		1882.5	23.13	22.21	21.18
		1855	23.14	22.26	21.20
	50RB (0)	1910	23.14	22.20	21.12
		1882.5	23.09	22.24	21.13
		1855	23.16	22.22	21.13
15 MHz	1RB High (74)	1907.5	23.82	22.92	22.11
		1882.5	23.85	23.09	22.16
		1857.5	23.86	23.00	22.15
	1RB Middle (37)	1907.5	23.91	23.18	22.23
		1882.5	24.00	23.22	22.19
		1857.5	24.01	23.29	22.29
	1RB	1907.5	23.88	23.16	22.21

	Low (0)	1882.5	23.87	23.13	22.12
		1857.5	23.94	23.14	22.22
	36RB High (38)	1907.5	22.76	21.94	20.95
		1882.5	22.85	22.01	20.94
		1857.5	22.93	22.04	21.08
	36RB Middle (19)	1907.5	22.88	22.06	21.05
		1882.5	22.93	22.04	21.02
		1857.5	22.95	22.06	21.07
	36RB Low (0)	1907.5	22.93	22.02	21.03
		1882.5	22.92	22.02	21.03
		1857.5	22.90	22.02	21.04
	75RB (0)	1907.5	22.85	22.02	20.95
		1882.5	22.89	22.01	21.16
		1857.5	22.94	22.02	21.05
20 MHz	1RB High (99)	1905	23.85	22.94	22.03
		1882.5	23.85	23.03	22.03
		1860	23.86	23.09	22.08
	1RB Middle (50)	1905	24.01	23.19	22.18
		1882.5	24.03	23.17	22.15
		1860	24.01	23.17	22.21
	1RB Low (0)	1905	23.83	23.12	22.10
		1882.5	23.87	23.07	22.07
		1860	23.92	23.13	22.16
	50RB High (50)	1905	22.75	21.89	20.90
		1882.5	22.84	21.98	20.99
		1860	22.96	22.06	21.04
	50RB Middle (25)	1905	22.96	22.08	21.04
		1882.5	22.96	22.06	21.07
		1860	22.96	22.06	21.06
	50RB Low (0)	1905	22.92	22.04	21.04
		1882.5	22.96	22.13	21.08
		1860	22.97	22.05	21.10
	100RB (0)	1905	22.83	21.95	20.95
		1882.5	22.88	22.02	20.98
		1860	22.97	22.03	21.06

Power Level A1/B1/ C1

Band 26					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	848.3	24.38	23.54	22.34
		831.5	24.37	23.68	22.51
		814.7	24.41	23.60	22.61
	1RB Middle (3)	848.3	24.42	23.46	22.36
		831.5	24.40	23.63	22.58
		814.7	24.43	23.60	22.51
	1RB Low (0)	848.3	24.42	23.49	22.44
		831.5	24.39	23.63	22.58
		814.7	24.45	23.59	22.49
	3RB High (3)	848.3	24.38	23.32	22.33
		831.5	24.38	23.41	22.45
		814.7	24.43	23.49	22.48
	3RB Middle (1)	848.3	24.42	23.31	22.34
		831.5	24.40	23.47	22.48
		814.7	24.46	23.47	22.41
	3RB Low (0)	848.3	24.41	23.25	22.35
		831.5	24.41	23.45	22.45
		814.7	24.46	23.48	22.48
	6RB (0)	848.3	23.41	22.38	21.20
		831.5	23.41	22.43	21.32
		814.7	23.46	22.50	21.40
3 MHz	1RB High (14)	847.5	24.37	23.42	22.37
		831.5	24.39	23.69	22.54
		815.5	24.39	23.53	22.53
	1RB Middle (7)	847.5	24.42	23.50	22.40
		831.5	24.46	23.66	22.55
		815.5	24.42	23.59	22.52
	1RB Low (0)	847.5	24.42	23.50	22.37
		831.5	24.42	23.65	22.50
		815.5	24.44	23.71	22.55
	8RB High (7)	847.5	23.39	22.34	21.28
		831.5	23.43	22.47	21.38
		815.5	23.38	22.47	21.37
	8RB Middle (4)	847.5	23.37	22.35	21.32
		831.5	23.37	22.42	21.39
		815.5	23.38	22.41	21.37
	8RB Low (0)	847.5	23.40	22.38	21.31
		831.5	23.41	22.50	21.40
		815.5	23.40	22.47	21.40
	15RB (0)	847.5	23.39	22.31	21.29
		831.5	23.44	22.43	21.38

5 MHz	1RB High (24)	815.5	23.42	22.42	21.39
		846.5	24.43	23.36	22.40
		831.5	24.43	23.65	22.49
		816.5	24.52	23.62	22.61
	1RB Middle (12)	846.5	24.44	23.58	22.43
		831.5	24.46	23.64	22.66
		816.5	24.49	23.62	22.66
	1RB Low (0)	846.5	24.48	23.53	22.44
		831.5	24.51	23.66	22.60
		816.5	24.50	23.68	22.60
	12RB High (13)	846.5	23.41	22.17	21.20
		831.5	23.43	22.37	21.38
		816.5	23.45	22.45	21.48
	12RB Middle (6)	846.5	23.42	22.30	21.33
		831.5	23.43	22.46	21.41
		816.5	23.43	22.42	21.45
	12RB Low (0)	846.5	23.45	22.39	21.37
		831.5	23.44	22.43	21.44
		816.5	23.44	22.41	21.41
	25RB (0)	846.5	23.43	22.33	21.28
		831.5	23.46	22.42	21.42
		816.5	23.46	22.42	21.43
10 MHz	1RB High (49)	844	24.28	23.46	22.38
		831.5	24.40	23.54	22.53
		820	24.44	23.66	22.47
	1RB Middle (24)	844	24.40	23.63	22.49
		831.5	24.49	23.71	22.54
		820	24.54	23.77	22.63
	1RB Low (0)	844	24.36	23.59	22.51
		831.5	24.52	23.72	22.61
		820	24.52	23.75	22.57
	25RB High (25)	844	23.22	22.27	21.21
		831.5	23.40	22.44	21.39
		820	23.46	22.40	21.40
	25RB Middle (12)	844	23.37	22.37	21.35
		831.5	23.40	22.44	21.42
		820	23.50	22.50	21.47
	25RB Low (0)	844	23.39	22.38	21.40
		831.5	23.51	22.49	21.48
		820	23.49	22.45	21.48
	50RB (0)	844	23.32	22.30	21.33
		831.5	23.48	22.42	21.39
		820	23.48	22.45	21.45
15 MHz	1RB High (74)	841.5	24.25	23.50	22.35
		831.5	24.36	23.62	22.43
		822.5	24.42	23.58	22.51
	1RB Middle	1907.5	24.40	23.56	22.54
		1882.5	24.48	23.76	22.57

	(37)	1857.5	24.52	23.69	22.55
	1RB Low (0)	1907.5	24.37	23.61	22.54
		1882.5	24.44	23.64	22.56
		1857.5	24.50	23.64	22.52
	36RB High (38)	1907.5	23.32	22.33	21.27
		1882.5	23.40	22.40	21.39
		1857.5	23.37	22.39	21.40
	36RB Middle (19)	1907.5	23.38	22.37	21.37
		1882.5	23.41	22.41	21.39
		1857.5	23.45	22.50	21.49
	36RB Low (0)	1907.5	23.36	22.38	21.33
		1882.5	23.41	22.45	21.44
		1857.5	23.47	22.47	21.44
	75RB (0)	1907.5	23.39	22.37	21.34
		1882.5	23.45	22.38	21.38
		1857.5	23.45	22.42	21.39

Power Level A1/B1/ C1

Band 38					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	2617.5	22.92	22.00	20.44
		2595	22.98	22.04	20.49
		2572.5	23.01	22.08	20.54
	1RB Middle (12)	2617.5	22.99	22.00	20.46
		2595	23.09	22.13	20.58
		2572.5	23.08	22.13	20.63
	1RB Low (0)	2617.5	22.94	21.99	20.46
		2595	23.07	22.10	20.59
		2572.5	23.07	22.12	20.63
	12RB High (13)	2617.5	21.86	20.77	19.96
		2595	21.95	20.84	20.02
		2572.5	21.93	20.87	20.11
	12RB Middle (6)	2617.5	21.89	20.81	20.04
		2595	21.96	20.91	20.08
		2572.5	21.95	20.90	20.11
	12RB Low (0)	2617.5	21.91	20.82	20.03
		2595	21.99	20.93	20.12
		2572.5	22.03	20.93	20.13
	25RB (0)	2617.5	21.93	20.88	20.08
		2595	21.97	20.95	20.16
		2572.5	22.01	20.99	20.17
10 MHz	1RB High (49)	2615	22.87	21.93	20.40
		2595	22.89	21.95	20.43
		2575	23.05	22.12	20.58
	1RB Middle (24)	2615	22.91	22.00	20.48
		2595	23.04	22.11	20.59
		2575	23.06	22.16	20.65
	1RB Low (0)	2615	22.90	21.96	20.44
		2595	23.06	22.12	20.59
		2575	23.05	22.12	20.60
	25RB High (25)	2615	21.91	20.85	20.05
		2595	21.90	20.87	20.06
		2575	22.01	20.99	20.14
	25RB Middle (12)	2615	21.85	20.85	19.98
		2595	21.93	20.90	20.13
		2575	22.01	20.98	20.18
	25RB Low (0)	2615	21.85	20.84	20.02
		2595	22.01	20.98	20.17
		2575	22.00	20.97	20.17
	50RB (0)	2615	21.91	20.90	19.99
		2595	21.94	20.95	20.07

		2575	22.02	21.01	20.12
15 MHz	1RB High (74)	2612.5	22.83	21.89	20.36
		2595	22.82	21.90	20.39
		2577.5	22.95	22.03	20.53
	1RB Middle (37)	2612.5	23.00	21.94	20.42
		2595	22.99	22.06	20.54
		2577.5	23.02	22.10	20.60
	1RB Low (0)	2612.5	23.02	21.96	20.46
		2595	23.01	22.11	20.60
		2577.5	23.00	22.09	20.59
	36RB High (38)	2612.5	21.81	20.75	19.92
		2595	21.84	20.79	19.97
		2577.5	21.96	20.93	20.09
	36RB Middle (19)	2612.5	21.95	20.76	19.92
		2595	21.92	20.87	20.05
		2577.5	21.93	20.93	20.07
	36RB Low (0)	2612.5	21.95	20.79	19.98
		2595	21.99	20.94	20.08
		2577.5	21.94	20.90	20.05
	75RB (0)	2612.5	21.94	20.81	19.97
		2595	21.90	20.91	20.04
		2577.5	22.01	21.00	20.08
20 MHz	1RB High (99)	2610	22.78	21.84	20.34
		2595	22.76	21.85	20.35
		2580	22.93	22.01	20.49
	1RB Middle (50)	2610	22.91	21.97	20.46
		2595	23.01	22.08	20.58
		2580	23.14	22.18	20.66
	1RB Low (0)	2610	22.90	21.96	20.46
		2595	23.05	22.11	20.59
		2580	23.03	22.12	20.57
	50RB High (50)	2610	21.84	20.84	19.97
		2595	21.83	20.84	20.00
		2580	21.96	20.99	20.13
	50RB Middle (25)	2610	21.90	20.88	19.99
		2595	21.97	20.97	20.05
		2580	21.99	21.02	20.13
	50RB Low (0)	2610	21.91	20.94	20.01
		2595	22.02	21.00	20.13
		2580	22.03	21.05	20.15
	100RB (0)	2610	21.85	20.84	20.00
		2595	21.91	20.92	20.07
		2580	22.02	21.01	20.17

Power Level A1/B1/ C1

Band 41 PC2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	2687.5	26.49	25.53	24.32
		2640.3	26.38	25.54	24.30
		2593	26.45	25.62	24.39
		2545.8	26.39	25.58	24.33
		2498.5	26.62	25.79	24.58
	1RB Middle (12)	2687.5	26.47	25.53	24.32
		2640.3	26.41	25.53	24.30
		2593	26.53	25.68	24.44
		2545.8	26.44	25.61	24.36
		2498.5	26.68	25.82	24.55
	1RB Low (0)	2687.5	26.47	25.53	24.35
		2640.3	26.41	25.51	24.32
		2593	26.54	25.68	24.47
		2545.8	26.39	25.54	24.32
		2498.5	26.67	25.79	24.58
	12RB High (13)	2687.5	25.38	24.38	23.42
		2640.3	25.31	24.33	23.35
		2593	25.36	24.40	23.40
		2545.8	25.32	24.36	23.39
		2498.5	25.58	24.59	23.59
	12RB Middle (6)	2687.5	25.40	24.41	23.47
		2640.3	25.31	24.33	23.35
		2593	25.45	24.45	23.47
		2545.8	25.36	24.37	23.39
		2498.5	25.57	24.56	23.61
	12RB Low (0)	2687.5	25.41	24.43	23.47
		2640.3	25.35	24.38	23.41
		2593	25.47	24.47	23.52
		2545.8	25.35	24.35	23.39
		2498.5	25.59	24.59	23.63
	25RB (0)	2687.5	25.40	24.46	23.51
		2640.3	25.38	24.39	23.42
		2593	25.43	24.47	23.50
		2545.8	25.34	24.34	23.40
		2498.5	25.59	24.63	23.61

10 MHz	1RB High (49)	2685	26.45	25.52	24.30
		2639	26.34	25.48	24.25
		2593	26.40	25.60	24.31
		2547	26.35	25.56	24.27
		2501	26.56	25.75	24.49
	1RB Middle (24)	2685	26.50	25.60	24.39
		2639	26.42	25.60	24.33
		2593	26.52	25.73	24.45
		2547	26.45	25.67	24.40
		2501	26.62	25.81	24.57
	1RB Low (0)	2685	26.44	25.54	24.34
		2639	26.36	25.55	24.30
		2593	26.55	25.75	24.47
		2547	26.39	25.59	24.31
		2501	26.63	25.79	24.53
	25RB High (25)	2685	25.43	24.46	23.50
		2639	25.34	24.37	23.43
		2593	25.42	24.44	23.49
		2547	25.36	24.38	23.44
		2501	25.55	24.59	23.65
	25RB Middle (12)	2685	25.44	24.45	23.51
		2639	25.35	24.38	23.43
		2593	25.48	24.49	23.55
		2547	25.38	24.42	23.47
		2501	25.56	24.59	23.65
	25RB Low (0)	2685	25.41	24.45	23.49
		2639	25.38	24.41	23.45
		2593	25.52	24.54	23.60
		2547	25.37	24.39	23.43
		2501	25.55	24.60	23.60
	50RB (0)	2685	25.45	24.48	23.44
		2639	25.38	24.39	23.35
		2593	25.50	24.52	23.47
		2547	25.36	24.40	23.37
		2501	25.58	24.60	23.57
15 MHz	1RB High (74)	2682.5	26.36	25.52	24.25
		2637.8	26.30	25.45	24.22
		2593	26.33	25.53	24.26
		2548.3	26.35	25.56	24.31
		2503.5	26.43	25.62	24.36
	1RB	2682.5	26.45	25.59	24.34

	Middle (37)	2637.8	26.39	25.55	24.33
		2593	26.49	25.69	24.46
		2548.3	26.41	25.60	24.36
		2503.5	26.60	25.79	24.54
	1RB Low (0)	2682.5	26.40	25.57	24.33
		2637.8	26.36	25.53	24.31
		2593	26.51	25.72	24.47
		2548.3	26.34	25.55	24.29
		2503.5	26.57	25.74	24.50
	36RB High (38)	2682.5	25.38	24.37	23.36
		2637.8	25.32	24.30	23.32
		2593	25.36	24.36	23.38
		2548.3	25.31	24.30	23.29
		2503.5	25.46	24.44	23.47
	36RB Middle (19)	2682.5	25.40	24.40	23.42
		2637.8	25.34	24.33	23.32
		2593	25.43	24.44	23.45
		2548.3	25.31	24.31	23.29
		2503.5	25.48	24.50	23.49
	36RB Low (0)	2682.5	25.41	24.41	23.43
		2637.8	25.33	24.37	23.30
		2593	25.49	24.45	23.51
		2548.3	25.32	24.35	23.33
		2503.5	25.50	24.51	23.48
	75RB (0)	2682.5	25.39	24.42	23.42
		2637.8	25.36	24.35	23.34
		2593	25.47	24.47	23.48
		2548.3	25.34	24.33	23.33
		2503.5	25.50	24.55	23.50
20 MHz	1RB High (99)	2680	26.32	25.46	24.23
		2636.5	26.26	25.41	24.17
		2593	26.29	25.47	24.20
		2549.5	26.34	25.54	24.27
		2506	26.37	25.56	24.28
	1RB Middle (50)	2680	26.44	25.54	24.34
		2636.5	26.38	25.52	24.30
		2593	26.51	25.68	24.45
		2549.5	26.42	25.59	24.35
		2506	26.58	25.76	24.51
	1RB Low (0)	2680	26.38	25.52	24.27
		2636.5	26.33	25.51	24.26
		2593	26.50	25.69	24.43

		2549.5	26.31	25.50	24.24
		2506	26.55	25.73	24.49
	50RB High (50)	2680	25.43	24.46	23.42
		2636.5	25.31	24.33	23.29
		2593	25.38	24.42	23.41
		2549.5	25.35	24.38	23.33
		2506	25.49	24.48	23.46
	50RB Middle (25)	2680	25.45	24.47	23.42
		2636.5	25.38	24.43	23.37
		2593	25.50	24.49	23.48
		2549.5	25.36	24.40	23.34
		2506	25.52	24.54	23.52
	50RB Low (0)	2680	25.44	24.49	23.45
		2636.5	25.39	24.45	23.38
		2593	25.53	24.54	23.52
		2549.5	25.34	24.40	23.33
		2506	25.54	24.55	23.47
	100RB (0)	2680	25.41	24.43	23.42
		2636.5	25.36	24.41	23.35
		2593	25.44	24.47	23.47
		2549.5	25.35	24.39	23.34
		2506	25.53	24.51	23.46

Power Level A1/B1/ C1

Band 41 PC3					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	2687.5	23.60	22.60	21.02
		2640.3	23.50	22.52	20.94
		2593	23.55	22.60	21.00
		2545.8	23.47	22.53	20.94
		2498.5	23.64	22.72	21.15
	1RB Middle (12)	2687.5	23.62	22.60	21.07
		2640.3	23.51	22.56	20.96
		2593	23.60	22.66	21.08
		2545.8	23.50	22.55	21.01
		2498.5	23.74	22.77	21.19
	1RB Low (0)	2687.5	23.63	22.59	21.07
		2640.3	23.52	22.54	20.97
		2593	23.61	22.63	21.10
		2545.8	23.44	22.47	20.94
		2498.5	23.70	22.74	21.19
	12RB High (13)	2687.5	22.49	21.39	20.40
		2640.3	22.40	21.28	20.44
		2593	22.46	21.34	20.52
		2545.8	22.40	21.30	20.47
		2498.5	22.57	21.48	20.70
	12RB Middle (6)	2687.5	22.54	21.42	20.46
		2640.3	22.40	21.30	20.47
		2593	22.53	21.44	20.59
		2545.8	22.40	21.32	20.48
		2498.5	22.60	21.53	20.71
	12RB Low (0)	2687.5	22.55	21.41	20.43
		2640.3	22.44	21.34	20.52
		2593	22.53	21.44	20.67
		2545.8	22.37	21.29	20.50
		2498.5	22.63	21.53	20.68
	25RB (0)	2687.5	22.54	21.47	20.50
		2640.3	22.46	21.42	20.53
		2593	22.53	21.47	20.60
		2545.8	22.40	21.36	20.53
		2498.5	22.67	21.58	20.75

10 MHz	1RB High (49)	2685	23.59	22.60	21.07
		2639	23.48	22.54	20.98
		2593	23.52	22.60	21.04
		2547	23.43	22.52	20.97
		2501	23.60	22.74	21.18
	1RB Middle (24)	2685	23.68	22.70	21.19
		2639	23.54	22.62	21.10
		2593	23.64	22.77	21.22
		2547	23.54	22.64	21.14
		2501	23.71	22.84	21.32
	1RB Low (0)	2685	23.62	22.63	21.10
		2639	23.50	22.56	21.03
		2593	23.66	22.72	21.19
		2547	23.48	22.57	21.03
		2501	23.73	22.78	21.26
	25RB High (25)	2685	22.56	21.52	20.55
		2639	22.44	21.42	20.62
		2593	22.55	21.50	20.67
		2547	22.45	21.42	20.61
		2501	22.66	21.65	20.84
	25RB Middle (12)	2685	22.58	21.52	20.59
		2639	22.46	21.43	20.59
		2593	22.61	21.54	20.78
		2547	22.51	21.48	20.63
		2501	22.66	21.66	20.78
	25RB Low (0)	2685	22.55	21.49	20.57
		2639	22.50	21.45	20.62
		2593	22.61	21.60	20.77
		2547	22.45	21.44	20.66
		2501	22.63	21.63	20.80
	50RB (0)	2685	22.60	21.57	20.52
		2639	22.47	21.47	20.56
		2593	22.61	21.59	20.70
		2547	22.50	21.48	20.56
		2501	22.68	21.66	20.78
15 MHz	1RB High (74)	2682.5	23.49	22.54	21.01
		2637.8	23.39	22.48	20.93
		2593	23.44	22.49	20.98
		2548.3	23.42	22.51	20.97
		2503.5	23.48	22.58	21.05
	1RB	2682.5	23.60	22.64	21.13

	Middle (37)	2637.8	23.49	22.57	21.03
		2593	23.60	22.70	21.17
		2548.3	23.49	22.58	21.05
		2503.5	23.66	22.76	21.26
	1RB Low (0)	2682.5	23.56	22.60	21.07
		2637.8	23.46	22.55	21.01
		2593	23.61	22.70	21.17
		2548.3	23.38	22.49	20.98
		2503.5	23.64	22.71	21.20
	36RB High (38)	2682.5	22.47	21.42	20.41
		2637.8	22.38	21.37	20.48
		2593	22.44	21.43	20.57
		2548.3	22.37	21.32	20.46
		2503.5	22.53	21.49	20.64
	36RB Middle (19)	2682.5	22.48	21.44	20.45
		2637.8	22.42	21.38	20.52
		2593	22.53	21.50	20.62
		2548.3	22.41	21.36	20.51
		2503.5	22.59	21.55	20.67
	36RB Low (0)	2682.5	22.52	21.43	20.42
		2637.8	22.43	21.38	20.52
		2593	22.59	21.56	20.70
		2548.3	22.38	21.36	20.51
		2503.5	22.55	21.53	20.70
	75RB (0)	2682.5	22.54	21.50	20.47
		2637.8	22.41	21.43	20.48
		2593	22.55	21.51	20.62
		2548.3	22.43	21.40	20.57
		2503.5	22.58	21.59	20.69
20 MHz	1RB High (99)	2680	23.43	22.46	20.96
		2636.5	23.34	22.42	20.86
		2593	23.34	22.45	20.89
		2549.5	23.40	22.48	20.96
		2506	23.39	22.51	20.98
	1RB Middle (50)	2680	23.59	22.60	21.09
		2636.5	23.48	22.53	20.98
		2593	23.59	22.67	21.13
		2549.5	23.48	22.56	21.05
		2506	23.62	22.70	21.18
	1RB Low (0)	2680	23.48	22.51	21.02
		2636.5	23.39	22.48	20.94
		2593	23.58	22.66	21.12

		2549.5	23.36	22.43	20.92
		2506	23.60	22.67	21.16
	50RB High (50)	2680	22.49	21.51	20.46
		2636.5	22.35	21.36	20.47
		2593	22.48	21.48	20.57
		2549.5	22.40	21.40	20.50
		2506	22.56	21.56	20.63
	50RB Middle (25)	2680	22.52	21.52	20.47
		2636.5	22.45	21.44	20.55
		2593	22.57	21.55	20.63
		2549.5	22.43	21.45	20.53
		2506	22.58	21.60	20.64
	50RB Low (0)	2680	22.52	21.53	20.50
		2636.5	22.47	21.48	20.58
		2593	22.57	21.60	20.72
		2549.5	22.44	21.39	20.53
		2506	22.55	21.59	20.70
	100RB (0)	2680	22.51	21.52	20.47
		2636.5	22.46	21.43	20.53
		2593	22.55	21.52	20.62
		2549.5	22.40	21.44	20.53
		2506	22.56	21.56	20.64

Power Level A1/ C1

Band 66					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1779.3	23.80	23.04	22.12
		1745	23.83	23.23	22.09
		1710.7	23.82	23.10	22.06
	1RB Middle (3)	1779.3	23.83	23.06	22.04
		1745	23.83	23.26	22.04
		1710.7	23.85	23.16	22.08
	1RB Low (0)	1779.3	23.81	23.00	22.07
		1745	23.82	23.21	22.12
		1710.7	23.79	23.10	22.10
	3RB High (3)	1779.3	23.82	22.76	22.03
		1745	23.83	22.97	21.98
		1710.7	23.82	23.00	22.00
	3RB Middle (1)	1779.3	23.84	22.86	22.03
		1745	23.80	22.92	22.01
		1710.7	23.87	23.00	22.01
	3RB Low (0)	1779.3	23.83	22.84	22.04
		1745	23.81	22.86	22.00
		1710.7	23.86	22.97	21.98
	6RB (0)	1779.3	22.82	21.99	20.90
		1745	22.95	21.94	20.90
		1710.7	22.97	22.05	20.91
3 MHz	1RB High (14)	1778.5	23.79	23.02	22.11
		1745	23.77	23.09	22.10
		1711.5	23.82	23.19	22.11
	1RB Middle (7)	1778.5	23.80	23.04	22.01
		1745	23.89	23.27	22.08
		1711.5	23.76	23.22	22.10
	1RB Low (0)	1778.5	23.76	23.08	22.03
		1745	23.84	23.11	22.10
		1711.5	23.78	23.18	22.08
	8RB High (7)	1778.5	22.76	21.99	20.94
		1745	22.92	21.94	20.96
		1711.5	22.94	22.01	20.96
	8RB Middle (4)	1778.5	22.79	21.95	20.97
		1745	22.91	22.00	20.91
		1711.5	22.94	22.01	20.91
	8RB Low (0)	1778.5	22.80	21.96	20.90
		1745	22.92	21.98	20.89
		1711.5	22.92	22.02	20.93
	15RB	1778.5	22.81	21.98	20.93

	(0)	1745	22.91	21.92	20.92
		1711.5	22.92	21.96	20.92
5 MHz	1RB High (24)	1777.5	23.83	23.00	21.99
		1745	23.84	23.16	22.04
		1712.5	23.90	23.26	22.18
	1RB Middle (12)	1777.5	23.85	22.99	22.12
		1745	23.89	23.26	22.12
		1712.5	23.92	23.22	22.18
	1RB Low (0)	1777.5	23.81	23.07	22.01
		1745	23.86	23.18	22.08
		1712.5	23.85	23.18	22.03
	12RB High (13)	1777.5	22.78	21.86	20.89
		1745	22.87	21.92	20.90
		1712.5	22.97	21.88	20.94
	12RB Middle (6)	1777.5	22.77	21.89	20.93
		1745	22.94	21.94	20.94
		1712.5	22.95	21.90	20.97
	12RB Low (0)	1777.5	22.83	21.92	20.96
		1745	22.93	21.94	20.97
		1712.5	22.98	21.97	20.96
	25RB (0)	1777.5	22.82	21.96	20.89
		1745	22.95	21.95	20.91
		1712.5	22.94	21.96	20.93
10 MHz	1RB High (49)	1775	23.80	23.07	22.02
		1745	23.80	23.08	22.06
		1715	23.90	23.29	22.08
	1RB Middle (24)	1775	23.79	23.07	21.99
		1745	23.87	23.33	22.08
		1715	23.91	23.16	22.06
	1RB Low (0)	1775	23.81	23.10	21.97
		1745	23.80	23.14	22.12
		1715	23.85	23.22	22.07
	25RB High (25)	1775	22.72	21.86	20.89
		1745	22.93	21.98	20.89
		1715	22.99	21.93	20.94
	25RB Middle (12)	1775	22.80	21.93	20.89
		1745	22.91	21.96	20.93
		1715	22.97	21.97	20.98
	25RB Low (0)	1775	22.80	21.93	20.92
		1745	22.96	21.92	20.92
		1715	22.97	21.96	20.88
	50RB (0)	1775	22.80	21.92	20.91
		1745	22.93	21.90	20.90
		1715	22.98	21.98	20.90
15 MHz	1RB High (74)	1772.5	23.78	22.95	22.05
		1745	23.72	23.03	21.90
		1717.5	23.80	23.28	22.00
	1RB	1772.5	23.83	23.05	22.11

	Middle (37)	1745	23.85	23.22	22.07
		1717.5	23.85	23.07	22.03
	1RB Low (0)	1772.5	23.72	22.96	22.00
		1745	23.79	23.22	22.09
		1717.5	23.77	23.14	22.03
	36RB High (38)	1772.5	22.75	21.88	20.92
		1745	22.87	21.92	20.88
		1717.5	22.94	21.95	20.91
	36RB Middle (19)	1772.5	22.75	21.91	20.91
		1745	22.94	21.92	20.90
		1717.5	22.94	21.94	20.92
	36RB Low (0)	1772.5	22.78	21.88	20.88
		1745	22.90	21.88	20.89
		1717.5	22.89	21.87	20.86
	75RB (0)	1772.5	22.78	21.86	20.87
		1745	22.95	21.91	20.84
		1717.5	22.95	21.91	20.90
20 MHz	1RB High (99)	1770	23.73	22.96	21.90
		1745	23.75	22.91	22.04
		1720	23.79	23.07	22.05
	1RB Middle (50)	1770	23.85	22.99	22.13
		1745	23.90	23.31	22.00
		1720	23.88	23.18	22.08
	1RB Low (0)	1770	23.73	23.01	21.94
		1745	23.74	23.05	21.98
		1720	23.77	23.05	21.92
	50RB High (50)	1770	22.77	21.87	20.86
		1745	22.91	21.84	20.85
		1720	22.99	21.97	20.94
	50RB Middle (25)	1770	22.83	21.94	20.93
		1745	22.98	21.93	20.92
		1720	23.04	21.95	20.93
	50RB Low (0)	1770	22.87	21.98	20.94
		1745	22.97	21.94	20.84
		1720	23.02	21.99	20.93
	100RB (0)	1770	22.82	21.94	20.92
		1745	22.93	21.86	20.86
		1720	22.99	21.94	20.93

Power Level B1

Band 66					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1779.3	22.44	22.21	22.13
		1745	22.46	22.17	22.23
		1710.7	22.45	22.10	22.12
	1RB Middle (3)	1779.3	22.51	22.34	22.17
		1745	22.48	22.32	22.22
		1710.7	22.51	22.18	22.16
	1RB Low (0)	1779.3	22.46	22.22	22.20
		1745	22.48	22.18	22.17
		1710.7	22.45	22.27	22.09
	3RB High (3)	1779.3	22.55	22.03	22.11
		1745	22.49	21.99	22.07
		1710.7	22.50	22.03	22.04
	3RB Middle (1)	1779.3	22.54	22.06	22.09
		1745	22.52	22.07	22.05
		1710.7	22.50	22.02	22.09
	3RB Low (0)	1779.3	22.54	22.07	22.13
		1745	22.53	22.05	22.09
		1710.7	22.48	21.96	22.04
	6RB (0)	1779.3	22.05	22.11	22.04
		1745	22.00	22.10	21.98
		1710.7	22.02	22.09	21.96
3 MHz	1RB High (14)	1778.5	22.50	22.28	22.25
		1745	22.47	22.17	22.17
		1711.5	22.49	22.24	22.09
	1RB Middle (7)	1778.5	22.54	22.31	22.18
		1745	22.50	22.25	22.16
		1711.5	22.50	22.23	22.20
	1RB Low (0)	1778.5	22.50	22.29	22.18
		1745	22.48	22.21	22.12
		1711.5	22.51	22.24	22.05
	8RB High (7)	1778.5	22.06	22.09	22.07
		1745	21.94	22.01	22.02
		1711.5	21.97	22.06	22.06
	8RB Middle (4)	1778.5	22.05	22.12	22.08
		1745	21.97	22.04	22.05
		1711.5	21.96	22.08	22.07
	8RB Low (0)	1778.5	22.05	22.09	22.09
		1745	21.99	22.08	22.02
		1711.5	21.98	22.05	22.06
	15RB	1778.5	22.01	22.08	22.00

	(0)	1745	21.96	22.01	21.92
		1711.5	22.00	22.04	22.03
5 MHz	1RB High (24)	1777.5	22.53	22.33	22.20
		1745	22.50	22.22	22.15
		1712.5	22.54	22.15	22.15
	1RB Middle (12)	1777.5	22.57	22.33	22.21
		1745	22.56	22.30	22.20
		1712.5	22.56	22.14	22.17
	1RB Low (0)	1777.5	22.52	22.28	22.18
		1745	22.51	22.33	22.18
		1712.5	22.50	22.14	22.13
	12RB High (13)	1777.5	21.97	21.96	22.05
		1745	21.95	21.91	21.99
		1712.5	22.00	22.01	22.03
	12RB Middle (6)	1777.5	22.02	22.02	22.10
		1745	22.03	22.01	22.05
		1712.5	21.96	21.97	22.04
	12RB Low (0)	1777.5	22.05	22.10	22.13
		1745	22.04	22.03	22.11
		1712.5	21.99	22.02	22.03
	25RB (0)	1777.5	22.05	22.08	22.07
		1745	21.99	22.00	22.01
		1712.5	21.99	22.02	22.03
10 MHz	1RB High (49)	1775	22.54	22.20	22.18
		1745	22.49	22.21	22.07
		1715	22.58	22.26	22.19
	1RB Middle (24)	1775	22.54	22.33	22.17
		1745	22.54	22.19	22.17
		1715	22.56	22.20	22.18
	1RB Low (0)	1775	22.55	22.37	22.10
		1745	22.55	22.26	22.21
		1715	22.51	22.24	22.06
	25RB High (25)	1775	22.00	22.05	22.05
		1745	22.01	22.01	22.02
		1715	22.00	22.05	22.03
	25RB Middle (12)	1775	22.04	22.07	22.04
		1745	21.98	22.04	22.05
		1715	21.99	22.07	22.06
	25RB Low (0)	1775	22.06	22.08	22.05
		1745	21.99	22.02	22.05
		1715	21.99	22.02	21.98
	50RB (0)	1775	22.04	22.04	22.04
		1745	22.02	22.05	22.05
		1715	22.03	22.05	21.99
15 MHz	1RB High (74)	1772.5	22.49	22.27	22.23
		1745	22.44	22.15	22.10
		1717.5	22.53	22.33	22.17
	1RB	1772.5	22.55	22.35	22.20

	Middle (37)	1745	22.52	22.19	22.10
		1717.5	22.53	22.21	22.16
	1RB Low (0)	1772.5	22.48	22.34	22.10
		1745	22.52	22.22	22.19
		1717.5	22.46	22.13	22.10
	36RB High (38)	1772.5	22.05	22.04	22.02
		1745	21.99	21.97	22.00
		1717.5	22.00	21.99	22.05
	36RB Middle (19)	1772.5	22.01	22.01	22.10
		1745	22.01	22.03	22.04
		1717.5	22.05	22.01	22.06
	36RB Low (0)	1772.5	22.05	22.09	22.08
		1745	21.98	22.02	22.01
		1717.5	21.99	21.98	21.99
	75RB (0)	1772.5	22.05	22.05	22.06
		1745	22.03	22.05	22.05
		1717.5	22.05	22.03	22.03
20 MHz	1RB High (99)	1770	22.37	22.10	21.95
		1745	22.35	22.10	21.99
		1720	22.44	22.18	22.08
	1RB Middle (50)	1770	22.43	22.12	22.04
		1745	22.42	22.21	22.10
		1720	22.47	22.23	22.17
	1RB Low (0)	1770	22.38	22.12	22.07
		1745	22.40	22.18	22.06
		1720	22.41	22.14	22.05
	50RB High (50)	1770	21.95	21.96	21.94
		1745	21.87	21.90	21.88
		1720	22.01	21.98	22.00
	50RB Middle (25)	1770	21.98	21.98	22.00
		1745	21.97	21.98	22.02
		1720	22.01	22.00	22.04
	50RB Low (0)	1770	22.01	22.04	22.00
		1745	21.94	21.96	21.94
		1720	22.02	22.03	22.04
	100RB (0)	1770	21.97	22.00	21.98
		1745	21.87	21.90	21.91
		1720	22.01	21.97	21.97

Power Level A1/B1/C1

Band 71					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
5 MHz	1RB High (24)	695.5	24.46	23.69	22.65
		680.5	24.44	23.52	22.45
		665.5	24.44	23.66	22.56
	1RB Middle (12)	695.5	24.53	23.71	22.60
		680.5	24.54	23.71	22.56
		665.5	24.52	23.60	22.59
	1RB Low (0)	695.5	24.54	23.66	22.58
		680.5	24.51	23.74	22.56
		665.5	24.53	23.66	22.55
	12RB High (13)	695.5	23.43	22.38	21.40
		680.5	23.45	22.44	21.39
		665.5	23.46	22.42	21.41
	12RB Middle (6)	695.5	23.45	22.43	21.45
		680.5	23.46	22.45	21.45
		665.5	23.44	22.38	21.37
	12RB Low (0)	695.5	23.47	22.50	21.50
		680.5	23.45	22.45	21.41
		665.5	23.44	22.32	21.37
	25RB (0)	695.5	23.47	22.49	21.42
		680.5	23.44	22.42	21.36
		665.5	23.40	22.42	21.37
10 MHz	1RB High (49)	693	23.46	23.68	22.53
		680.5	24.47	23.68	22.51
		668	24.48	23.66	22.46
	1RB Middle (24)	693	23.47	23.57	22.61
		680.5	24.55	23.67	22.58
		668	24.53	23.63	22.54
	1RB Low (0)	693	23.48	23.61	22.39
		680.5	24.55	23.69	22.51
		668	24.65	23.63	22.58
	25RB High (25)	693	23.45	22.38	21.34
		680.5	23.47	22.44	21.37
		668	23.44	22.41	21.37
	25RB Middle (12)	693	23.48	22.47	21.46
		680.5	23.46	22.41	21.40
		668	23.41	22.42	21.40
	25RB Low (0)	693	23.45	22.46	21.44
		680.5	23.46	22.42	21.43
		668	23.39	22.31	21.33
	50RB (0)	693	23.48	22.42	21.39
		680.5	23.50	22.41	21.41
		668	23.45	22.39	21.35
15 MHz	1RB	690.5	24.53	23.69	22.59

	High (74)	680.5	24.43	23.60	22.47
		670.5	24.48	23.61	22.50
	1RB Middle (37)	690.5	24.55	23.65	22.59
		680.5	24.60	23.80	22.63
		670.5	24.54	23.71	22.49
	1RB Low (0)	690.5	24.47	23.75	22.52
		680.5	24.55	23.71	22.62
		670.5	24.55	23.71	22.59
	36RB High (38)	690.5	23.53	22.47	21.50
		680.5	23.48	22.47	21.45
		670.5	23.47	22.47	21.43
	36RB Middle (19)	690.5	23.48	22.48	21.44
		680.5	23.51	22.47	21.48
		670.5	23.50	22.42	21.45
	36RB Low (0)	690.5	23.46	22.43	21.41
		680.5	23.51	22.48	21.47
		670.5	23.46	22.40	21.39
	75RB (0)	690.5	23.52	22.49	21.40
		680.5	23.52	22.46	21.42
		670.5	23.45	22.40	21.40
20 MHz	1RB High (99)	688	24.26	23.34	22.35
		683	24.26	23.48	22.27
		673	24.26	23.46	22.45
	1RB Middle (50)	688	24.40	23.68	22.49
		683	24.38	23.55	22.55
		673	24.41	23.54	22.45
	1RB Low (0)	688	24.31	23.54	22.43
		683	24.30	23.42	22.41
		673	24.29	23.54	22.34
	50RB High (50)	688	23.37	22.36	21.32
		683	23.38	22.36	21.33
		673	23.35	22.36	21.32
	50RB Middle (25)	688	23.38	22.37	21.31
		683	23.39	22.37	21.37
		673	23.36	22.39	21.31
	50RB Low (0)	688	23.37	22.37	21.35
		683	23.38	22.36	21.29
		673	23.36	22.35	21.29
	100RB (0)	688	23.37	22.32	21.31
		683	23.33	22.32	21.27
		673	23.34	22.31	21.30

Power Level A2

Band 2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1909.3	12.58	12.37	12.29
		1880	12.64	12.44	12.25
		1850.7	12.65	12.50	12.30
	1RB Middle (3)	1909.3	12.56	12.29	12.19
		1880	12.63	12.47	12.23
		1850.7	12.60	12.34	12.31
	1RB Low (0)	1909.3	12.59	12.30	12.26
		1880	12.62	12.42	12.37
		1850.7	12.64	12.45	12.31
	3RB High (3)	1909.3	12.62	12.03	12.15
		1880	12.64	12.06	12.20
		1850.7	12.66	12.21	12.28
	3RB Middle (1)	1909.3	12.56	12.09	12.21
		1880	12.60	12.06	12.25
		1850.7	12.67	12.13	12.20
	3RB Low (0)	1909.3	12.61	12.14	12.18
		1880	12.60	12.14	12.17
		1850.7	12.68	12.17	12.29
	6RB (0)	1909.3	12.08	12.16	12.07
		1880	12.12	12.24	12.10
		1850.7	12.12	12.28	12.19
3 MHz	1RB High (14)	1908.5	12.56	12.41	12.22
		1880	12.59	12.44	12.34
		1851.5	12.69	12.50	12.34
	1RB Middle (7)	1908.5	12.59	12.34	12.25
		1880	12.62	12.47	12.40
		1851.5	12.70	12.57	12.40
	1RB Low (0)	1908.5	12.61	12.38	12.29
		1880	12.64	12.41	12.34
		1851.5	12.62	12.39	12.35
	8RB High (7)	1908.5	12.05	12.16	12.12
		1880	12.07	12.20	12.14
		1851.5	12.18	12.22	12.21
	8RB Middle (4)	1908.5	12.10	12.15	12.15
		1880	12.10	12.18	12.17
		1851.5	12.17	12.24	12.23
	8RB Low (0)	1908.5	12.11	12.15	12.15
		1880	12.13	12.20	12.16
		1851.5	12.19	12.21	12.20
	15RB (0)	1908.5	12.10	12.11	12.09
		1880	12.13	12.13	12.14
		1851.5	12.19	12.17	12.17

5 MHz	1RB High (24)	1907.5	12.60	12.33	12.27
		1880	12.65	12.46	12.31
		1852.5	12.68	12.48	12.38
	1RB Middle (12)	1907.5	12.63	12.34	12.30
		1880	12.66	12.45	12.26
		1852.5	12.81	12.59	12.41
	1RB Low (0)	1907.5	12.59	12.29	12.27
		1880	12.69	12.39	12.34
		1852.5	12.68	12.47	12.36
	12RB High (13)	1907.5	12.04	12.06	12.06
		1880	12.12	12.13	12.10
		1852.5	12.17	12.10	12.19
	12RB Middle (6)	1907.5	12.11	12.12	12.13
		1880	12.12	12.13	12.16
		1852.5	12.20	12.19	12.21
	12RB Low (0)	1907.5	12.17	12.09	12.10
		1880	12.20	12.13	12.18
		1852.5	12.15	12.19	12.25
	25RB (0)	1907.5	12.12	12.10	12.12
		1880	12.18	12.19	12.19
		1852.5	12.19	12.20	12.17
10 MHz	1RB High (49)	1905	12.55	12.42	12.28
		1880	12.61	12.48	12.21
		1855	12.67	12.49	12.28
	1RB Middle (24)	1905	12.60	12.48	12.23
		1880	12.67	12.50	12.32
		1855	12.71	12.47	12.44
	1RB Low (0)	1905	12.60	12.38	12.23
		1880	12.62	12.45	12.23
		1855	12.65	12.52	12.28
	25RB High (25)	1905	12.04	12.06	12.05
		1880	12.08	12.09	12.08
		1855	12.20	12.16	12.22
	25RB Middle (12)	1905	12.08	12.11	12.12
		1880	12.13	12.14	12.17
		1855	12.21	12.20	12.21
	25RB Low (0)	1905	12.09	12.08	12.15
		1880	12.15	12.16	12.15
		1855	12.15	12.15	12.21
	50RB (0)	1905	12.05	12.06	12.09
		1880	12.07	12.10	12.08
		1855	12.20	12.19	12.21
15 MHz	1RB High (74)	1902.5	12.48	12.22	12.12
		1880	12.48	12.31	12.11
		1857.5	12.56	12.45	12.18
	1RB Middle (37)	1902.5	12.51	12.39	12.27
		1880	12.65	12.35	12.26
		1857.5	12.65	12.39	12.40

	1RB Low (0)	1902.5	12.48	12.34	12.18
		1880	12.48	12.32	12.22
		1857.5	12.59	12.46	12.33
	36RB High (38)	1902.5	11.94	12.01	12.05
		1880	11.96	12.09	12.10
		1857.5	12.12	12.16	12.17
	36RB Middle (19)	1902.5	12.01	12.06	12.09
		1880	12.11	12.09	12.12
		1857.5	12.15	12.15	12.22
	36RB Low (0)	1902.5	11.99	12.06	12.05
		1880	12.12	12.11	12.16
		1857.5	12.16	12.14	12.15
	75RB (0)	1902.5	12.00	12.03	12.00
		1880	12.09	12.06	12.11
		1857.5	12.18	12.16	12.14
20 MHz	1RB High (99)	1900	12.52	12.24	12.11
		1880	12.47	12.24	12.09
		1860	12.53	12.39	12.09
	1RB Middle (50)	1900	12.58	12.29	12.29
		1880	12.66	12.48	12.25
		1860	12.65	12.79	12.73
	1RB Low (0)	1900	12.49	12.60	12.58
		1880	12.53	12.66	12.59
		1860	12.55	12.72	12.67
	50RB High (50)	1900	12.31	12.34	12.32
		1880	12.51	12.56	12.55
		1860	12.54	12.62	12.63
	50RB Middle (25)	1900	12.46	12.51	12.49
		1880	12.56	12.63	12.61
		1860	12.65	12.67	12.66
	50RB Low (0)	1900	12.37	12.44	12.44
		1880	12.64	12.73	12.72
		1860	12.53	12.58	12.56
	100RB (0)	1900	12.35	12.39	12.39
		1880	12.59	12.65	12.63
		1860	12.52	12.61	12.59

Power Level B2

Band 2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1909.3	18.72	18.51	18.43
		1880	18.78	18.58	18.39
		1850.7	18.79	18.64	18.44
	1RB Middle (3)	1909.3	18.70	18.43	18.33
		1880	18.77	18.61	18.37
		1850.7	18.74	18.48	18.45
	1RB Low (0)	1909.3	18.73	18.44	18.40
		1880	18.76	18.56	18.51
		1850.7	18.78	18.59	18.45
	3RB High (3)	1909.3	18.76	18.17	18.29
		1880	18.78	18.20	18.34
		1850.7	18.80	18.35	18.42
	3RB Middle (1)	1909.3	18.70	18.23	18.35
		1880	18.74	18.20	18.39
		1850.7	18.81	18.27	18.34
	3RB Low (0)	1909.3	18.75	18.28	18.32
		1880	18.74	18.28	18.31
		1850.7	18.82	18.31	18.43
	6RB (0)	1909.3	18.22	18.30	18.21
		1880	18.26	18.38	18.24
		1850.7	18.26	18.42	18.33
3 MHz	1RB High (14)	1908.5	18.70	18.55	18.36
		1880	18.73	18.58	18.48
		1851.5	18.83	18.64	18.48
	1RB Middle (7)	1908.5	18.73	18.48	18.39
		1880	18.76	18.61	18.54
		1851.5	18.84	18.71	18.54
	1RB Low (0)	1908.5	18.75	18.52	18.43
		1880	18.78	18.55	18.48
		1851.5	18.76	18.53	18.49
	8RB High (7)	1908.5	18.19	18.30	18.26
		1880	18.21	18.34	18.28
		1851.5	18.32	18.36	18.35
	8RB Middle (4)	1908.5	18.24	18.29	18.29
		1880	18.24	18.32	18.31
		1851.5	18.31	18.38	18.37
	8RB Low (0)	1908.5	18.25	18.29	18.29
		1880	18.27	18.34	18.30
		1851.5	18.33	18.35	18.34
	15RB (0)	1908.5	18.24	18.25	18.23
		1880	18.27	18.27	18.28
		1851.5	18.33	18.31	18.31

5 MHz	1RB High (24)	1907.5	18.74	18.47	18.41
		1880	18.79	18.60	18.45
		1852.5	18.82	18.62	18.52
	1RB Middle (12)	1907.5	18.77	18.48	18.44
		1880	18.80	18.59	18.40
		1852.5	18.95	18.73	18.55
	1RB Low (0)	1907.5	18.73	18.43	18.41
		1880	18.83	18.53	18.48
		1852.5	18.82	18.61	18.50
	12RB High (13)	1907.5	18.18	18.20	18.20
		1880	18.26	18.27	18.24
		1852.5	18.31	18.24	18.33
	12RB Middle (6)	1907.5	18.25	18.26	18.27
		1880	18.26	18.27	18.30
		1852.5	18.34	18.33	18.35
	12RB Low (0)	1907.5	18.31	18.23	18.24
		1880	18.34	18.27	18.32
		1852.5	18.29	18.33	18.39
	25RB (0)	1907.5	18.26	18.24	18.26
		1880	18.32	18.33	18.33
		1852.5	18.33	18.34	18.31
10 MHz	1RB High (49)	1905	18.69	18.56	18.42
		1880	18.75	18.62	18.35
		1855	18.81	18.63	18.42
	1RB Middle (24)	1905	18.74	18.62	18.37
		1880	18.81	18.64	18.46
		1855	18.85	18.61	18.58
	1RB Low (0)	1905	18.74	18.52	18.37
		1880	18.76	18.59	18.37
		1855	18.79	18.66	18.42
	25RB High (25)	1905	18.18	18.20	18.19
		1880	18.22	18.23	18.22
		1855	18.34	18.30	18.36
	25RB Middle (12)	1905	18.22	18.25	18.26
		1880	18.27	18.28	18.31
		1855	18.35	18.34	18.35
	25RB Low (0)	1905	18.23	18.22	18.29
		1880	18.29	18.30	18.29
		1855	18.29	18.29	18.35
	50RB (0)	1905	18.19	18.20	18.23
		1880	18.21	18.24	18.22
		1855	18.34	18.33	18.35
15 MHz	1RB High (74)	1902.5	18.62	18.36	18.26
		1880	18.62	18.45	18.25
		1857.5	18.70	18.59	18.32
	1RB Middle (37)	1902.5	18.65	18.53	18.41
		1880	18.79	18.49	18.40
		1857.5	18.79	18.53	18.54

	1RB Low (0)	1902.5	18.62	18.48	18.32
		1880	18.62	18.46	18.36
		1857.5	18.73	18.60	18.47
	36RB High (38)	1902.5	18.08	18.15	18.19
		1880	18.10	18.23	18.24
		1857.5	18.26	18.30	18.31
	36RB Middle (19)	1902.5	18.15	18.20	18.23
		1880	18.25	18.23	18.26
		1857.5	18.29	18.29	18.36
	36RB Low (0)	1902.5	18.13	18.20	18.19
		1880	18.26	18.25	18.30
		1857.5	18.30	18.28	18.29
	75RB (0)	1902.5	18.14	18.17	18.14
		1880	18.23	18.20	18.25
		1857.5	18.32	18.30	18.28
20 MHz	1RB High (99)	1900	18.57	18.77	18.73
		1880	18.61	18.85	18.82
		1860	18.68	18.90	18.82
	1RB Middle (50)	1900	18.63	18.85	18.84
		1880	18.74	18.96	18.91
		1860	18.79	19.01	18.95
	1RB Low (0)	1900	18.64	18.86	18.84
		1880	18.67	18.87	18.81
		1860	18.69	18.94	18.87
	50RB High (50)	1900	18.51	18.61	18.61
		1880	18.65	18.82	18.84
		1860	18.69	18.90	18.90
	50RB Middle (25)	1900	18.71	18.91	18.90
		1880	18.67	18.83	18.87
		1860	18.71	18.92	18.91
	50RB Low (0)	1900	18.51	18.71	18.74
		1880	18.77	18.94	18.95
		1860	18.64	18.85	18.84
	100RB (0)	1900	18.56	18.65	18.69
		1880	18.71	18.92	18.87
		1860	18.67	18.89	18.85

Power Level C2

Band 2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1909.3	22.80	22.02	21.11
		1880	22.91	22.15	21.15
		1850.7	22.92	22.18	21.22
	1RB Middle (3)	1909.3	22.83	22.18	21.14
		1880	22.92	22.15	21.18
		1850.7	22.95	22.12	21.15
	1RB Low (0)	1909.3	22.86	22.13	21.20
		1880	22.88	22.09	21.26
		1850.7	22.91	22.16	21.16
	3RB High (3)	1909.3	22.85	21.96	21.08
		1880	22.91	21.88	21.06
		1850.7	22.95	21.95	21.09
	3RB Middle (1)	1909.3	22.87	21.94	21.16
		1880	22.88	21.92	21.11
		1850.7	22.94	21.94	21.17
	3RB Low (0)	1909.3	22.90	21.96	21.12
		1880	22.87	21.92	21.10
		1850.7	22.98	21.93	21.11
	6RB (0)	1909.3	21.87	21.11	19.97
		1880	21.90	21.06	19.94
		1850.7	21.95	21.18	19.97
3 MHz	1RB High (14)	1908.5	22.81	22.02	21.13
		1880	22.88	22.08	21.22
		1851.5	22.95	22.25	21.19
	1RB Middle (7)	1908.5	22.82	22.08	21.24
		1880	22.89	22.06	21.20
		1851.5	22.99	22.17	21.24
	1RB Low (0)	1908.5	22.83	22.15	21.17
		1880	22.90	22.11	21.19
		1851.5	22.93	22.12	21.17
	8RB High (7)	1908.5	21.82	21.09	20.09
		1880	21.87	21.04	20.03
		1851.5	21.91	21.14	20.08
	8RB Middle (4)	1908.5	21.80	21.08	20.07
		1880	21.87	21.05	20.00
		1851.5	21.91	21.11	20.05
	8RB Low (0)	1908.5	21.88	21.15	20.10
		1880	21.87	21.04	20.04
		1851.5	21.93	21.18	20.06
	15RB (0)	1908.5	21.86	21.09	20.01
		1880	21.83	21.01	20.00
		1851.5	21.90	21.08	20.07

5 MHz	1RB High (24)	1907.5	22.85	22.10	21.11
		1880	22.88	22.11	21.15
		1852.5	22.75	22.17	21.18
	1RB Middle (12)	1907.5	22.85	21.99	21.26
		1880	22.89	21.97	21.10
		1852.5	22.83	22.08	21.23
	1RB Low (0)	1907.5	22.84	22.03	21.10
		1880	22.91	22.16	21.22
		1852.5	22.87	22.04	21.18
	12RB High (13)	1907.5	21.78	20.95	19.95
		1880	21.83	20.91	20.00
		1852.5	21.88	20.97	20.01
	12RB Middle (6)	1907.5	21.81	20.99	20.05
		1880	21.82	20.92	19.97
		1852.5	21.86	20.97	20.00
	12RB Low (0)	1907.5	21.85	20.99	20.08
		1880	21.87	20.94	20.06
		1852.5	21.90	20.98	20.02
	25RB (0)	1907.5	21.84	21.06	20.01
		1880	21.87	20.99	20.00
		1852.5	21.90	21.03	20.02
10 MHz	1RB High (49)	1905	22.75	22.07	21.16
		1880	22.86	22.03	21.14
		1855	22.86	22.05	21.08
	1RB Middle (24)	1905	22.77	22.04	21.10
		1880	22.92	22.07	21.15
		1855	22.93	22.08	21.20
	1RB Low (0)	1905	22.79	22.00	21.12
		1880	22.86	22.01	21.13
		1855	22.90	22.10	21.17
	25RB High (25)	1905	21.76	21.00	19.97
		1880	21.80	20.97	19.97
		1855	21.90	21.01	20.06
	25RB Middle (12)	1905	21.84	21.03	20.01
		1880	21.80	20.98	20.01
		1855	21.89	21.05	20.07
	25RB Low (0)	1905	21.82	21.05	20.04
		1880	21.84	20.96	19.97
		1855	21.91	20.96	20.05
	50RB (0)	1905	21.80	21.00	19.98
		1880	21.82	20.94	19.93
		1855	21.91	21.00	20.01
15 MHz	1RB High (74)	1902.5	22.77	21.95	21.15
		1880	22.77	21.99	21.04
		1857.5	22.78	22.09	21.01
	1RB Middle (37)	1902.5	22.79	22.12	21.08
		1880	22.88	22.10	21.12
		1857.5	22.95	22.22	21.18

	1RB Low (0)	1902.5	22.78	21.95	21.13
		1880	22.75	21.91	21.03
		1857.5	22.86	22.05	21.16
	36RB High (38)	1902.5	21.79	20.93	19.94
		1880	21.76	20.87	19.91
		1857.5	21.80	20.97	20.05
	36RB Middle (19)	1902.5	21.81	20.94	19.94
		1880	21.83	20.96	19.95
		1857.5	21.84	20.97	20.00
	36RB Low (0)	1902.5	21.81	20.94	19.98
		1880	21.84	20.95	19.97
		1857.5	21.85	20.94	20.02
	75RB (0)	1902.5	21.83	20.91	19.90
		1880	21.82	20.95	19.90
		1857.5	21.88	21.00	19.96
20 MHz	1RB High (99)	1900	22.80	21.97	20.88
		1880	22.75	22.03	20.93
		1860	22.71	21.98	20.90
	1RB Middle (50)	1900	22.77	22.05	20.94
		1880	22.79	22.08	20.99
		1860	22.79	22.11	21.03
	1RB Low (0)	1900	22.77	22.05	20.93
		1880	22.70	21.96	20.88
		1860	22.73	22.02	20.93
	50RB High (50)	1900	21.59	20.76	19.70
		1880	21.73	20.96	19.89
		1860	21.75	20.94	19.88
	50RB Middle (25)	1900	21.66	20.90	19.84
		1880	21.75	20.97	19.92
		1860	21.77	20.95	19.89
	50RB Low (0)	1900	21.64	20.88	19.81
		1880	21.82	21.05	20.00
		1860	21.67	20.89	19.82
	100RB (0)	1900	21.64	20.82	19.76
		1880	21.81	21.03	19.93
		1860	21.71	20.93	19.85

Power Level A2

Band 66					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1779.3	12.78	13.03	13.01
		1745	12.80	12.99	13.11
		1710.7	12.79	12.92	13.00
	1RB Middle (3)	1779.3	12.85	13.16	13.05
		1745	12.82	13.14	13.10
		1710.7	12.85	13.00	13.04
	1RB Low (0)	1779.3	12.80	13.04	13.08
		1745	12.82	13.00	13.05
		1710.7	12.79	13.09	12.97
	3RB High (3)	1779.3	12.89	12.85	12.99
		1745	12.83	12.81	12.95
		1710.7	12.84	12.85	12.92
	3RB Middle (1)	1779.3	12.88	12.88	12.97
		1745	12.86	12.89	12.93
		1710.7	12.84	12.84	12.97
	3RB Low (0)	1779.3	12.88	12.89	13.01
		1745	12.87	12.87	12.97
		1710.7	12.82	12.78	12.92
	6RB (0)	1779.3	12.59	12.93	12.92
		1745	12.54	12.92	12.86
		1710.7	12.56	12.91	12.84
3 MHz	1RB High (14)	1778.5	12.84	13.10	13.13
		1745	12.81	12.99	13.05
		1711.5	12.83	13.06	12.97
	1RB Middle (7)	1778.5	12.88	13.13	13.06
		1745	12.84	13.07	13.04
		1711.5	12.84	13.05	13.08
	1RB Low (0)	1778.5	12.84	13.11	13.06
		1745	12.82	13.03	13.00
		1711.5	12.85	13.06	12.93
	8RB High (7)	1778.5	12.60	12.91	12.95
		1745	12.56	12.83	12.90
		1711.5	12.51	12.88	12.94
	8RB Middle (4)	1778.5	12.59	12.94	12.96
		1745	12.51	12.86	12.93
		1711.5	12.50	12.90	12.95
	8RB Low (0)	1778.5	12.59	12.91	12.97
		1745	12.53	12.90	12.90
		1711.5	12.52	12.87	12.94
	15RB	1778.5	12.55	12.90	12.88

	(0)	1745	12.50	12.83	12.80
		1711.5	12.54	12.86	12.91
5 MHz	1RB High (24)	1777.5	12.87	13.15	13.08
		1745	12.84	13.04	13.03
		1712.5	12.88	12.97	13.03
	1RB Middle (12)	1777.5	12.91	13.15	13.09
		1745	12.90	13.12	13.08
		1712.5	12.90	12.96	13.05
	1RB Low (0)	1777.5	12.86	13.10	13.06
		1745	12.85	13.15	13.06
		1712.5	12.84	12.96	13.01
	12RB High (13)	1777.5	12.51	12.78	12.93
		1745	12.52	12.73	12.87
		1712.5	12.54	12.83	12.91
	12RB Middle (6)	1777.5	12.56	12.84	12.98
		1745	12.57	12.83	12.93
		1712.5	12.50	12.79	12.92
	12RB Low (0)	1777.5	12.59	12.92	13.01
		1745	12.58	12.85	12.99
		1712.5	12.53	12.84	12.91
	25RB (0)	1777.5	12.59	12.90	12.95
		1745	12.53	12.82	12.89
		1712.5	12.53	12.84	12.91
10 MHz	1RB High (49)	1775	12.88	13.02	13.06
		1745	12.83	13.03	12.95
		1715	12.92	13.08	13.07
	1RB Middle (24)	1775	12.88	13.15	13.05
		1745	12.88	13.01	13.05
		1715	12.90	13.02	13.06
	1RB Low (0)	1775	12.89	13.19	12.98
		1745	12.89	13.08	13.09
		1715	12.85	13.06	12.94
	25RB High (25)	1775	12.54	12.87	12.93
		1745	12.55	12.83	12.90
		1715	12.54	12.87	12.91
	25RB Middle (12)	1775	12.58	12.89	12.92
		1745	12.52	12.86	12.93
		1715	12.53	12.89	12.94
	25RB Low (0)	1775	12.60	12.90	12.93
		1745	12.53	12.84	12.93
		1715	12.53	12.84	12.86
	50RB (0)	1775	12.58	12.86	12.92
		1745	12.56	12.87	12.93
		1715	12.57	12.87	12.87
15 MHz	1RB High (74)	1772.5	12.83	13.09	13.11
		1745	12.78	12.97	12.98
		1717.5	12.87	13.15	13.05
	1RB	1772.5	12.89	13.17	13.08

	Middle (37)	1745	12.86	13.01	12.98
		1717.5	12.87	13.03	13.04
	1RB Low (0)	1772.5	12.82	13.16	12.98
		1745	12.86	13.04	13.07
		1717.5	12.80	12.95	12.98
	36RB High (38)	1772.5	12.60	12.86	12.90
		1745	12.54	12.79	12.88
		1717.5	12.55	12.81	12.93
	36RB Middle (19)	1772.5	12.56	12.83	12.98
		1745	12.56	12.85	12.92
		1717.5	12.60	12.83	12.94
	36RB Low (0)	1772.5	12.60	12.91	12.96
		1745	12.53	12.84	12.89
		1717.5	12.54	12.80	12.87
	75RB (0)	1772.5	12.60	12.87	12.94
		1745	12.58	12.87	12.93
		1717.5	12.60	12.85	12.91
20 MHz	1RB High (99)	1770	12.62	12.78	12.77
		1745	12.65	12.82	12.81
		1720	12.70	12.87	12.87
	1RB Middle (50)	1770	12.77	12.94	12.92
		1745	12.71	12.95	12.94
		1720	12.75	13.02	13.07
	1RB Low (0)	1770	12.65	12.82	12.82
		1745	12.68	12.85	12.84
		1720	12.73	12.89	12.87
	50RB High (50)	1770	12.53	12.62	12.65
		1745	12.58	12.64	12.66
		1720	12.89	12.93	12.98
	50RB Middle (25)	1770	12.76	12.82	12.83
		1745	12.77	12.85	12.86
		1720	12.84	12.93	12.93
	50RB Low (0)	1770	12.62	12.67	12.69
		1745	12.71	12.78	12.81
		1720	12.95	13.04	13.02
	100RB (0)	1770	12.58	12.65	12.64
		1745	12.63	12.71	12.73
		1720	12.83	12.99	12.98

Power Level B2

Band 66					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1779.3	19.79	20.04	20.02
		1745	19.81	20.00	20.12
		1710.7	19.80	19.93	20.01
	1RB Middle (3)	1779.3	19.86	20.17	20.06
		1745	19.83	20.15	20.11
		1710.7	19.86	20.01	20.05
	1RB Low (0)	1779.3	19.81	20.05	20.09
		1745	19.83	20.01	20.06
		1710.7	19.80	20.10	19.98
	3RB High (3)	1779.3	19.90	19.86	20.00
		1745	19.84	19.82	19.96
		1710.7	19.85	19.86	19.93
	3RB Middle (1)	1779.3	19.89	19.89	19.98
		1745	19.87	19.90	19.94
		1710.7	19.85	19.85	19.98
	3RB Low (0)	1779.3	19.89	19.90	20.02
		1745	19.88	19.88	19.98
		1710.7	19.83	19.79	19.93
	6RB (0)	1779.3	19.60	19.94	19.93
		1745	19.55	19.93	19.87
		1710.7	19.57	19.92	19.85
3 MHz	1RB High (14)	1778.5	19.85	20.11	20.14
		1745	19.82	20.00	20.06
		1711.5	19.84	20.07	19.98
	1RB Middle (7)	1778.5	19.89	20.14	20.07
		1745	19.85	20.08	20.05
		1711.5	19.85	20.06	20.09
	1RB Low (0)	1778.5	19.85	20.12	20.07
		1745	19.83	20.04	20.01
		1711.5	19.86	20.07	19.94
	8RB High (7)	1778.5	19.61	19.92	19.96
		1745	19.57	19.84	19.91
		1711.5	19.52	19.89	19.95
	8RB Middle (4)	1778.5	19.60	19.95	19.97
		1745	19.52	19.87	19.94
		1711.5	19.51	19.91	19.96
	8RB Low (0)	1778.5	19.60	19.92	19.98
		1745	19.54	19.91	19.91
		1711.5	19.53	19.88	19.95
	15RB	1778.5	19.56	19.91	19.89

	(0)	1745	19.51	19.84	19.81
		1711.5	19.55	19.87	19.92
5 MHz	1RB High (24)	1777.5	19.88	20.16	20.09
		1745	19.85	20.05	20.04
		1712.5	19.89	19.98	20.04
	1RB Middle (12)	1777.5	19.92	20.16	20.10
		1745	19.91	20.13	20.09
		1712.5	19.91	19.97	20.06
	1RB Low (0)	1777.5	19.87	20.11	20.07
		1745	19.86	20.16	20.07
		1712.5	19.85	19.97	20.02
	12RB High (13)	1777.5	19.52	19.79	19.94
		1745	19.53	19.74	19.88
		1712.5	19.55	19.84	19.92
	12RB Middle (6)	1777.5	19.57	19.85	19.99
		1745	19.58	19.84	19.94
		1712.5	19.51	19.80	19.93
	12RB Low (0)	1777.5	19.60	19.93	20.02
		1745	19.59	19.86	20.00
		1712.5	19.54	19.85	19.92
	25RB (0)	1777.5	19.60	19.91	19.96
		1745	19.54	19.83	19.90
		1712.5	19.54	19.85	19.92
10 MHz	1RB High (49)	1775	19.89	20.03	20.07
		1745	19.84	20.04	19.96
		1715	19.93	20.09	20.08
	1RB Middle (24)	1775	19.89	20.16	20.06
		1745	19.89	20.02	20.06
		1715	19.91	20.03	20.07
	1RB Low (0)	1775	19.90	20.20	19.99
		1745	19.90	20.09	20.10
		1715	19.86	20.07	19.95
	25RB High (25)	1775	19.55	19.88	19.94
		1745	19.56	19.84	19.91
		1715	19.55	19.88	19.92
	25RB Middle (12)	1775	19.59	19.90	19.93
		1745	19.53	19.87	19.94
		1715	19.54	19.90	19.95
	25RB Low (0)	1775	19.61	19.91	19.94
		1745	19.54	19.85	19.94
		1715	19.54	19.85	19.87
	50RB (0)	1775	19.59	19.87	19.93
		1745	19.57	19.88	19.94
		1715	19.58	19.88	19.88
15 MHz	1RB High (74)	1772.5	19.84	20.10	20.12
		1745	19.79	19.98	19.99
		1717.5	19.88	20.16	20.06
	1RB	1772.5	19.90	20.18	20.09

	Middle (37)	1745	19.87	20.02	19.99
		1717.5	19.88	20.04	20.05
	1RB Low (0)	1772.5	19.83	20.17	19.99
		1745	19.87	20.05	20.08
		1717.5	19.81	19.96	19.99
	36RB High (38)	1772.5	19.61	19.87	19.91
		1745	19.55	19.80	19.89
		1717.5	19.56	19.82	19.94
	36RB Middle (19)	1772.5	19.57	19.84	19.99
		1745	19.57	19.86	19.93
		1717.5	19.61	19.84	19.95
	36RB Low (0)	1772.5	19.61	19.92	19.97
		1745	19.54	19.85	19.90
		1717.5	19.55	19.81	19.88
	75RB (0)	1772.5	19.61	19.88	19.95
		1745	19.59	19.88	19.94
		1717.5	19.61	19.86	19.92
20 MHz	1RB High (99)	1770	19.53	19.81	19.79
		1745	19.56	19.83	19.83
		1720	19.59	19.88	19.87
	1RB Middle (50)	1770	19.62	19.92	19.95
		1745	19.65	19.95	19.95
		1720	19.76	20.00	20.04
	1RB Low (0)	1770	19.55	19.85	19.85
		1745	19.53	19.85	19.85
		1720	19.61	19.93	19.91
	50RB High (50)	1770	19.34	19.59	19.63
		1745	19.45	19.71	19.77
		1720	19.72	20.00	20.05
	50RB Middle (25)	1770	19.56	19.85	19.93
		1745	19.61	19.89	19.93
		1720	19.71	19.97	19.99
	50RB Low (0)	1770	19.45	19.75	19.77
		1745	19.56	19.85	19.86
		1720	19.75	20.04	20.07
	100RB (0)	1770	19.38	19.67	19.66
		1745	19.50	19.75	19.79
		1720	19.74	20.01	20.00

Power Level C2

Band 66					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	64QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	1779.3	23.39	22.63	21.71
		1745	23.42	22.82	21.68
		1710.7	23.41	22.69	21.65
	1RB Middle (3)	1779.3	23.42	22.65	21.63
		1745	23.42	22.85	21.63
		1710.7	23.44	22.75	21.67
	1RB Low (0)	1779.3	23.40	22.59	21.66
		1745	23.41	22.80	21.71
		1710.7	23.38	22.69	21.69
	3RB High (3)	1779.3	23.41	22.35	21.62
		1745	23.42	22.56	21.57
		1710.7	23.41	22.59	21.59
	3RB Middle (1)	1779.3	23.43	22.45	21.62
		1745	23.39	22.51	21.60
		1710.7	23.46	22.59	21.60
	3RB Low (0)	1779.3	23.42	22.43	21.63
		1745	23.40	22.45	21.59
		1710.7	23.45	22.56	21.57
	6RB (0)	1779.3	22.41	21.58	20.49
		1745	22.54	21.53	20.49
		1710.7	22.56	21.64	20.50
3 MHz	1RB High (14)	1778.5	23.38	22.61	21.70
		1745	23.36	22.68	21.69
		1711.5	23.41	22.78	21.70
	1RB Middle (7)	1778.5	23.39	22.63	21.60
		1745	23.48	22.86	21.67
		1711.5	23.35	22.81	21.69
	1RB Low (0)	1778.5	23.35	22.67	21.62
		1745	23.43	22.70	21.69
		1711.5	23.37	22.77	21.67
	8RB High (7)	1778.5	22.35	21.58	20.53
		1745	22.51	21.53	20.55
		1711.5	22.53	21.60	20.55
	8RB Middle (4)	1778.5	22.38	21.54	20.56
		1745	22.50	21.59	20.50
		1711.5	22.53	21.60	20.50
	8RB Low (0)	1778.5	22.39	21.55	20.49
		1745	22.51	21.57	20.48
		1711.5	22.51	21.61	20.52
	15RB	1778.5	22.40	21.57	20.52

	(0)	1745	22.50	21.51	20.51
		1711.5	22.51	21.55	20.51
5 MHz	1RB High (24)	1777.5	23.42	22.59	21.58
		1745	23.43	22.75	21.63
		1712.5	23.49	22.85	21.77
	1RB Middle (12)	1777.5	23.44	22.58	21.71
		1745	23.48	22.85	21.71
		1712.5	23.51	22.81	21.77
	1RB Low (0)	1777.5	23.40	22.66	21.60
		1745	23.45	22.77	21.67
		1712.5	23.44	22.77	21.62
	12RB High (13)	1777.5	22.37	21.45	20.48
		1745	22.46	21.51	20.49
		1712.5	22.56	21.47	20.53
	12RB Middle (6)	1777.5	22.36	21.48	20.52
		1745	22.53	21.53	20.53
		1712.5	22.54	21.49	20.56
	12RB Low (0)	1777.5	22.42	21.51	20.55
		1745	22.52	21.53	20.56
		1712.5	22.57	21.56	20.55
	25RB (0)	1777.5	22.41	21.55	20.48
		1745	22.54	21.54	20.50
		1712.5	22.53	21.55	20.52
10 MHz	1RB High (49)	1775	23.39	22.66	21.61
		1745	23.39	22.67	21.65
		1715	23.49	22.88	21.67
	1RB Middle (24)	1775	23.38	22.66	21.58
		1745	23.46	22.92	21.67
		1715	23.50	22.75	21.65
	1RB Low (0)	1775	23.40	22.69	21.56
		1745	23.39	22.73	21.71
		1715	23.44	22.81	21.66
	25RB High (25)	1775	22.31	21.45	20.48
		1745	22.52	21.57	20.48
		1715	22.58	21.52	20.53
	25RB Middle (12)	1775	22.39	21.52	20.48
		1745	22.50	21.55	20.52
		1715	22.56	21.56	20.57
	25RB Low (0)	1775	22.39	21.52	20.51
		1745	22.55	21.51	20.51
		1715	22.56	21.55	20.47
	50RB (0)	1775	22.39	21.51	20.50
		1745	22.52	21.49	20.49
		1715	22.57	21.57	20.49
15 MHz	1RB High (74)	1772.5	23.37	22.54	21.64
		1745	23.31	22.62	21.49
		1717.5	23.39	22.87	21.59
	1RB	1772.5	23.42	22.64	21.70

	Middle (37)	1745	23.44	22.81	21.66
		1717.5	23.44	22.66	21.62
	1RB Low (0)	1772.5	23.31	22.55	21.59
		1745	23.38	22.81	21.68
		1717.5	23.36	22.73	21.62
	36RB High (38)	1772.5	22.34	21.47	20.51
		1745	22.46	21.51	20.47
		1717.5	22.53	21.54	20.50
	36RB Middle (19)	1772.5	22.34	21.50	20.50
		1745	22.53	21.51	20.49
		1717.5	22.53	21.53	20.51
	36RB Low (0)	1772.5	22.37	21.47	20.47
		1745	22.49	21.47	20.48
		1717.5	22.48	21.46	20.45
	75RB (0)	1772.5	22.37	21.45	20.46
		1745	22.54	21.50	20.43
		1717.5	22.54	21.50	20.49
20 MHz	1RB High (99)	1770	23.30	22.30	21.17
		1745	23.31	22.39	21.22
		1720	23.31	22.37	21.27
	1RB Middle (50)	1770	23.44	22.39	21.26
		1745	23.42	22.45	21.35
		1720	23.35	22.55	21.46
	1RB Low (0)	1770	23.35	22.37	21.23
		1745	23.27	22.33	21.21
		1720	23.33	22.42	21.31
	50RB High (50)	1770	22.01	20.98	19.90
		1745	22.15	21.12	20.02
		1720	22.40	21.40	20.33
	50RB Middle (25)	1770	22.27	21.22	20.19
		1745	22.29	21.31	20.21
		1720	22.39	21.37	20.28
	50RB Low (0)	1770	22.15	21.11	20.02
		1745	22.23	21.24	20.12
		1720	22.41	21.44	20.39
	100RB (0)	1770	22.09	21.06	19.97
		1745	22.17	21.15	20.05
		1720	22.39	21.40	20.32

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

UL LTE CA Class	ULCA								Power	
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	tune up	conducted power (dBm)
CA 41C	20M	39750	1	99	5M	39867	1	0	24	22.72
CA 41C	15M	39725	1	74	10M	39845	1	0	24	22.89
CA 41C	20M	39750	1	99	10M	39894	1	0	24	22.71
CA 41C	20M	39750	1	99	15M	39921	1	0	24	22.75
CA 41C	20M	39750	1	99	20M	39948	1	0	24	22.76
CA 41C	20M	41490	1	0	5M	41373	1	24	24	23.04
CA 41C	15M	41515	1	0	10M	41395	1	49	24	23.13
CA 41C	20M	41490	1	0	10M	41346	1	49	24	23.07
CA 41C	15M	41515	1	0	15M	41365	1	74	24	23.28
CA 41C	20M	41490	1	0	15M	41319	1	74	24	23.19
CA 41C	20M	41490	1	0	20M	41292	1	99	24	23.12

The conducted power measurement results of downlink LTE CA Conducted Power are as below (Normal Power):

DL LTE CA Class	PCC								SCC				Power	
	PC C Band	PCC Bandwidth (MHz)	PCC UL RB size	PC C UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE CA Tx Power (dBm)	Rel 10 DL LTE CA Tx Power (dBm)		
4A-12A	4	5	1	12	25	0	20375	2375	12	10	5095	23.54	21.93	
2A-4A	2	3	1	7	15	0	18615	615	4	20	2175	23.66	21.85	
4A-4A	4	5	1	12	25	0	20375	2375	4	10	2000	23.54	21.87	
4A-5A	4	5	1	12	25	0	20375	2375	5	10	2525	23.54	21.84	
66A-66A	66	5	1	12	25	0	131997	66461	66	20	67036	23.92	22.01	
66B	66	5	1	12	25	0	131997	66461	66	15	66559	23.92	22.03	
66C	66	20	1	50	100	0	132072	66536	66	20	66734	23.88	21.97	
2A-66A	2	3	1	7	15	0	18615	615	66	20	66786	23.66	21.74	
12A-66A	12	10	1	0	50	0	23080	5060	66	20	66786	24.62	22.70	
2A-12A	2	3	1	7	15	0	18615	615	12	10	5095	23.66	21.64	
2A-2A	2	15	1	37	75	0	18675	675	2	20	1100	23.62	21.57	
2C	2	15	1	37	75	0	18675	675	2	10	795	23.62	21.55	
2A-5A	2	3	1	7	15	0	18615	615	5	10	2525	23.66	21.59	
2A-71A	2	3	1	7	15	0	18615	615	71	20	66786	23.66	21.58	
4A-71A	4	5	1	12	25	0	20375	2375	71	20	66786	23.54	21.67	
41A-41A (PC2)	41	5	1	12	25	0	39675	39675	41	20	41490	26.68	22.03	
41A-41A (PC3)	41	5	1	12	25	0	39675	39675	41	20	41490	23.74	21.36	
25A-25A	25	10	1	24	50	0	26090	8090	25	20	8590	24.28	21.52	
25A-26A	25	10	1	24	50	0	26090	8090	26	15	8865	24.28	21.53	
66A-71A	66	5	1	12	25	0	131997	66461	71	20	66786	23.92	21.73	
25A-41A	25	10	1	24	50	0	26090	8090	41	20	40820	24.28	21.45	
5A-66A	5	10	25	0	50	0	20450	2450	66	20	66886	24.17	21.54	
12A-4A	12	10	1	0	50	0	23080	5060	4	20	2175	24.62	22.76	
4A-2A	4	5	1	12	25	0	20375	2375	2	20	900	23.54	21.96	
5A-4A	5	10	25	0	50	0	20450	2450	4	20	2175	24.17	21.54	
66A-2A	66	5	1	12	25	0	131997	66461	2	20	900	23.92	22.31	
66A-12A	66	5	1	12	25	0	131997	66461	12	10	5095	23.92	22.25	
12A-2A	12	10	1	0	50	0	23080	5060	2	20	900	24.62	22.73	
5A-2A	5	10	25	0	50	0	20450	2450	2	20	900	24.17	21.53	
71A-2A	71	10	1	0	50	0	133172	66836	2	20	900	24.65	22.63	
71A-4A	71	10	1	0	50	0	133172	66836	4	20	2175	24.65	22.74	
71A-66A	71	10	1	0	50	0	133172	66836	66	20	66886	24.65	22.14	
41A-25A	41	5	1	12	25	0	39675	39675	25	20	8365	26.68	22.38	
66A-5A	66	5	1	12	25	0	131997	66461	5	10M	2525	23.92	22.74	

The conducted power measurement results of downlink LTE CA Conducted Power are as below (Low Power):

DL LTE CA Class	PCC								SCC			Power	
	PCC Band	PCC Band width (MHz)	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Band width (MHz)	SCC DL Channel	Rel 8 LTE Tx Power(dBm)	Rel 10 DL LTE CA Tx Power(dBm)
2A-4A	2	5	1	12	25	0	18625	625	4	20	2175	20.81	20.14
66A-66A	66	10	1	49	50	0	132022	66488	66	20	67036	22.58	20.36
66B	66	10	1	49	50	0	132022	66488	66	10	66585	22.58	20.41
66C	66	5	1	12	25	0	132647	67111	66	20	67228	22.57	20.39
2A-66A	2	5	1	12	25	0	18625	625	66	20	66786	20.81	20.17
2A-12A	2	5	1	12	25	0	18625	625	12	10	5095	20.81	20.22
2A-2A	2	5	1	12	25	0	18625	625	2	100	1100	20.81	20.13
2C	2	20	1	50	100	0	19100	1100	2	20	902	20.58	20.11
2A-5A	2	5	1	12	25	0	18625	625	5	10	2525	20.81	20.16
2A-71A	2	5	1	12	25	0	18625	625	71	20	66786	20.81	20.03
66A-71A	66	10	1	49	50	0	132022	66488	71	20	66786	22.58	20.17
66A-2A	66	10	1	49	50	0	132022	66488	2	20	900	22.58	20.33
66A-12A	66	10	1	49	50	0	132022	66488	12	10	5095	22.58	20.18
66A-5A	66	10	1	49	50	0	132022	66488	5	10M	2525	22.58	20.31

11.4 Wi-Fi and BT Measurement result

The maximum output power of BT is 9.58dBm.

The maximum tune up of BT is 11dBm.

Table2: Summary of Receiver detection mechanism

Antenna	Receiver on+ sensor on (head scenario)	Receiver off + sensor on (Body/other scenario)	Receiver off + sensor off (Body/other scenario)
ANT0/1	Power Level A3	Power Level B3	Power Level C3

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

The conducted output power for WiFi 2.4G power is as following- Power Level A3

802.11b(dBm)	
Channel\data rate	1Mbps
11(2462MHz)	12.83
6(2437MHz)	13.46
1(2412MHz)	12.81
Tune up	14.00
802.11g(dBm)	
Channel\data rate	6Mbps
11(2462MHz)	12.76
6(2437MHz)	13.29
1(2412MHz)	12.58
Tune up	14.00
802.11n(dBm)-20MHz	
Channel\data rate	MCS0
11(2462MHz)	12.89
6(2437MHz)	13.24
1(2412MHz)	12.59
Tune up	14.00

The conducted output power for WiFi 2.4G power is as following- Power Level B3

802.11b(dBm)	
Channel\data rate	1Mbps
11(2462MHz)	13.47
6(2437MHz)	13.48
1(2412MHz)	13.43
Tune up	14.50
802.11g(dBm)	
Channel\data rate	6Mbps
11(2462MHz)	13.24
6(2437MHz)	13.45
1(2412MHz)	13.37
Tune up	14.50
802.11n(dBm)-20MHz	
Channel\data rate	MCS0
11(2462MHz)	13.05
6(2437MHz)	13.35
1(2412MHz)	13.21
Tune up	14.50

The conducted output power for WiFi 2.4G power is as following- [Power Level C3](#)

802.11b(dBm)	
Channel\data rate	1Mbps
11(2462MHz)	22.64
6(2437MHz)	23.05
1(2412MHz)	22.33
Tune up	24.00
802.11g(dBm)	
Channel\data rate	6Mbps
11(2462MHz)	20.40
6(2437MHz)	20.81
1(2412MHz)	20.32
Tune up	22.00
802.11n(dBm)-20MHz	
Channel\data rate	MCS0
11(2462MHz)	20.23
6(2437MHz)	20.91
1(2412MHz)	20.25
Tune up	22.00

The conducted output power for WiFi 5G power is as following- [Power Level A3](#)

802.11ac(dBm)-80MHz	
Channel\data rate	MCS0
42(5210 MHz)	11.96
58(5290 MHz)	12.45
Tune up	13.00
106(5530 MHz)	12.39
122(5610 MHz)	12.44
138(5690 MHz)	12.81
Tune up	14.00
155(5775 MHz)	13.42
Tune up	15.00

The conducted output power for WiFi 5G power is as following- [Power Level B3](#)

802.11ac(dBm)-80MHz	
Channel\data rate	MCS0
42(5210 MHz)	12.03
58(5290 MHz)	12.89
Tune up	13.50
106(5530 MHz)	12.91
122(5610 MHz)	12.84
138(5690 MHz)	13.24
Tune up	14.00
155(5775 MHz)	13.80
Tune up	15.00

The conducted output power for WiFi 5G power is as following- [Power Level C3](#)

802.11a(dBm)	
Channel\data rate	6Mbps
36(5180 MHz)	18.78
40(5200 MHz)	18.80
44(5220 MHz)	18.73
48(5240 MHz)	18.76
52(5260 MHz)	19.01
56(5280 MHz)	19.55
60(5300 MHz)	20.03
64(5320 MHz)	20.37
Tune up	20.50
100(5500 MHz)	19.93
104(5520 MHz)	19.75
108(5540 MHz)	19.51
112(5560 MHz)	19.37
116(5580 MHz)	19.28
120(5600 MHz)	19.36
124(5620 MHz)	19.63
128(5640 MHz)	19.84
132(5660 MHz)	19.98
136(5680 MHz)	20.05
140(5700 MHz)	19.95
144(5720 MHz)	19.85
Tune up	21.50
149(5745 MHz)	20.01
153(5765 MHz)	20.31
157(5785 MHz)	20.52
161(5805 MHz)	20.72
165(5825 MHz)	20.82
Tune up	22

11.5 NR 5G Measurement result

Table1: Summary of Receiver detection mechanism

Antenna	Receiver on+ sensor on (head scenario)	Receiver off + Hotspot on /sensor on (Body/other scenario)	Receiver off (Body/other scenario)
ANT0/1	Power Level A4	Power Level B4	Power Level C4
ANT3	Power Level A5	Power Level B5	Power Level C5

Maximum Target Power for Production Unit – Level A4/ C4

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right	1@24	1912.5	382500	24.5	23.10
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full	12@6	1882.5	376500	25.5	24.13
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1852.5	370500	24.5	23.13
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right	1@105	1905	381000	24.5	22.91
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full	50@25	1882.5	376500	25.5	24.03
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1860	372000	24.5	22.96
According to the table above, the maximum power configuration is selected as the default test configuration										
No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	15	5	DFT-s-OFDM P1/2 BPSK1	Inner Full	12@6	1882.5	376500	25.5	23.82
2	Low	15	5	DFT-s-OFDM 16QAM	Inner Full	12@6	1882.5	376500	24.5	23.59
3	Low	15	5	DFT-s-OFDM 64QAM	Inner Full	12@6	1882.5	376500	23	21.93
4	Low	15	5	DFT-s-OFDM 256QAM	Inner Full	12@6	1882.5	376500	21	19.62
5	Low	15	5	CP-OFDM QPSK	Inner Full	12@6	1882.5	376500	24	23.71
6	Low	15	5	CP-OFDM 16QAM	Inner Full	12@6	1882.5	376500	23.5	23.20
7	Low	15	5	CP-OFDM 64QAM	Inner Full	12@6	1882.5	376500	22	21.47
8	Low	15	5	CP-OFDM 256QAM	Inner Full	12@6	1882.5	376500	19	17.73
9	Low	15	5	DFT-s-OFDM QPSK	Edge Full Right	2@23	1882.5	376500	24.5	23.11
10	Low	15	5	DFT-s-OFDM QPSK	Edge Full Left	2@0	1882.5	376500	24.5	23.15
11	Low	15	5	DFT-s-OFDM QPSK	Inner 1RB Right	1@23	1882.5	376500	25.5	24.05
12	Low	15	5	DFT-s-OFDM QPSK	Inner 1RB Left	1@1	1882.5	376500	25.5	24.07
13	Low	15	5	DFT-s-OFDM QPSK	Outer Full	25@0	1882.5	376500	24.5	23.17
14	default	15	10	DFT-s-OFDM QPSK	Inner Full	25@12	1882.5	376500	25.5	23.87
15	default	15	15	DFT-s-OFDM QPSK	Inner Full	36@18	1882.5	376500	25.5	23.99

Maximum Target Power for Production Unit – Level B4

No.	Test Freq Description	5G-n25							Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right	1@24	1912.5	382500	21
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full	12@6	1882.5	376500	21
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1852.5	370500	21
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right	1@105	1905	381000	21
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full	50@25	1882.5	376500	21
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1860	372000	21

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n25							Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	
1	Middle	15	5	DFT-s-OFDM P1/2 BPSK1	Inner Full	12@6	1882.5	376500	21
2	Middle	15	5	DFT-s-OFDM 16QAM	Inner Full	12@6	1882.5	376500	21
3	Middle	15	5	DFT-s-OFDM 64QAM	Inner Full	12@6	1882.5	376500	21
4	Middle	15	5	DFT-s-OFDM 256QAM	Inner Full	12@6	1882.5	376500	20.5
5	Middle	15	5	CP-OFDM QPSK	Inner Full	12@6	1882.5	376500	21
6	Middle	15	5	CP-OFDM 16QAM	Inner Full	12@6	1882.5	376500	21
7	Middle	15	5	CP-OFDM 64QAM	Inner Full	12@6	1882.5	376500	21
8	Middle	15	5	CP-OFDM 256QAM	Inner Full	12@6	1882.5	376500	18.5
9	Middle	15	5	CP-OFDM 16QAM	Edge Full Right	2@23	1882.5	376500	21
10	Middle	15	5	CP-OFDM 16QAM	Edge Full Left	2@0	1882.5	376500	21
11	Middle	15	5	CP-OFDM 16QAM	Inner 1RB Right	1@23	1882.5	376500	21
12	Middle	15	5	CP-OFDM 16QAM	Inner 1RB Left	1@1	1882.5	376500	21
13	Middle	15	5	CP-OFDM 16QAM	Outer Full	25@0	1882.5	376500	21
14	default	15	10	CP-OFDM 16QAM	Inner Full	25@12	1882.5	376500	21
15	default	15	15	CP-OFDM 16QAM	Inner Full	36@18	1882.5	376500	21

Maximum Target Power for Production Unit – Level A4/ C4

No.	Test Freq Description	5G-n41							Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	
1	High	30	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@50)	1@50	2679.99	535998	24
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2636.49	527298	27.5
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2592.99	518598	27.5
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2549.51	509902	27.5
5	Low	30	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2506.02	501204	24
6	High	30	100	DFT-s-OFDM QPSK	Edge 1RB Right (1@271)	1@272	2640	528000	24
7	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2616.51	523302	27.5
8	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2592.99	518598	27.5
9	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2569.5	513900	27.5
10	Low	30	100	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2546.01	509202	24

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	
1	Middle-1	30	100	DFT-s-OFDM P1/2 BPSK1	Inner Full (135@67)	135@67	2569.5	513900	27.5
2	Middle-1	30	100	DFT-s-OFDM 16QAM	Inner Full (135@67)	135@67	2569.5	513900	26.5
3	Middle-1	30	100	DFT-s-OFDM 64QAM	Inner Full (135@67)	135@67	2569.5	513900	25.5
4	Middle-1	30	100	DFT-s-OFDM 256QAM	Inner Full (135@67)	135@67	2569.5	513900	23
5	Middle-1	30	100	CP-OFDM QPSK	Inner Full (135@67)	135@67	2569.5	513900	26
6	Middle-1	30	100	CP-OFDM 16QAM	Inner Full (135@67)	135@67	2569.5	513900	25.5
7	Middle-1	30	100	CP-OFDM 64QAM	Inner Full (135@67)	135@67	2569.5	513900	24
8	Middle-1	30	100	CP-OFDM 256QAM	Inner Full (135@67)	135@67	2569.5	513900	21
9	Middle-1	30	100	DFT-s-OFDM QPSK	Edge Full Right	2@49	2569.5	513900	24
10	Middle-1	30	100	DFT-s-OFDM QPSK	Edge Full Left	2@0	2569.5	513900	24
11	Middle-1	30	100	DFT-s-OFDM QPSK	Inner 1RB Right	1@49	2569.5	513900	27.5
12	Middle-1	30	100	DFT-s-OFDM QPSK	Inner 1RB Left	1@1	2569.5	513900	27.5
13	Middle-1	30	100	DFT-s-OFDM QPSK	Outer Full	50@0	2569.5	513900	26.5
14	Middle-1	30	40	DFT-s-OFDM QPSK	Inner Full	50@25	2569.5	513900	27.5
15	Middle-1	30	50	DFT-s-OFDM QPSK	Inner Full	64@32	2569.5	513900	27.5
16	Middle-1	30	60	DFT-s-OFDM QPSK	Inner Full	81@40	2569.5	513900	27.5
17	Middle-1	30	80	DFT-s-OFDM QPSK	Inner Full	108@54	2569.5	513900	27.5
18	Middle-1	30	90	DFT-s-OFDM QPSK	Inner Full	120@60	2569.5	513900	27.5

Maximum Target Power for Production Unit – Level B4

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@50)	1@50	2679.99	535998	23	22.03
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2636.49	527298	23	22.30
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2592.99	518598	23	22.34
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2549.51	509902	23	22.28
5	Low	30	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2506.02	501204	23	22.16
6	High	30	100	DFT-s-OFDM QPSK	Edge 1RB Right (1@271)	1@271	2640	528000	23	21.36
7	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2616.51	523302	23	22.26
8	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2592.99	518598	23	22.29
9	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2569.5	513900	23	22.29
10	Low	30	100	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2546.01	509202	23	21.37

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Middle-2	30	20	DFT-s-OFDM PI/2 BPSK1	Inner Full (25@12)	25@12	2592.99	518598	23	22.39
1	Middle-2	30	20	DFT-s-OFDM 16QAM	Inner Full (25@12)	25@12	2592.99	518598	23	22.45
2	Middle-2	30	20	DFT-s-OFDM 64QAM	Inner Full (25@12)	25@12	2592.99	518598	23	22.38
3	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner Full (25@12)	25@12	2592.99	518598	23	22.48
4	Middle-2	30	20	CP-OFDM QPSK	Inner Full (25@12)	25@12	2592.99	518598	23	22.38
5	Middle-2	30	20	CP-OFDM 16QAM	Inner Full (25@12)	25@12	2592.99	518598	23	22.44
6	Middle-2	30	20	CP-OFDM 64QAM	Inner Full (25@12)	25@12	2592.99	518598	22.5	22.32
7	Middle-2	30	20	CP-OFDM 256QAM	Inner Full (25@12)	25@12	2592.99	518598	21.5	21.02
8	Middle-2	30	20	DFT-s-OFDM 256QAM	Edge Full Right	2@49	2592.99	518598	23	22.15
9	Middle-2	30	20	DFT-s-OFDM 256QAM	Edge Full Left	2@0	2592.99	518598	23	22.14
10	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner 1RB Right	1@49	2592.99	518598	23	22.55
11	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner 1RB Left	1@1	2592.99	518598	23	22.61
12	Middle-2	30	20	DFT-s-OFDM 256QAM	Outer Full	50@0	2592.99	518598	23	22.39
11	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner 1RB Left	1@1	2640	528000	23	22.55
11	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner 1RB Left	1@1	2616.51	523302	23	22.57
11	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner 1RB Left	1@1	2569.5	513900	23	22.54
11	Middle-2	30	20	DFT-s-OFDM 256QAM	Inner 1RB Left	1@1	2546.01	509202	23	22.53
5	Middle-2	30	20	CP-OFDM 16QAM	Inner Full (25@12)	25@12	2640	528000	23	22.39
13	Middle-2	30	40	DFT-s-OFDM 256QAM	Inner Full	50@25	2592.99	518598	23	22.43
14	Middle-2	30	50	DFT-s-OFDM 256QAM	Inner Full	64@32	2592.99	518598	23	22.45
15	Middle-2	30	60	DFT-s-OFDM 256QAM	Inner Full	81@40	2592.99	518598	23	22.38
16	Middle-2	30	80	DFT-s-OFDM 256QAM	Inner Full	108@54	2592.99	518598	23	22.37
17	Middle-2	30	90	DFT-s-OFDM 256QAM	Inner Full	120@60	2592.99	518598	23	22.38

Maximum Target Power for Production Unit – Level A4/ C4

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right (1@24)	1@24	1777.5	355500	24.5	22.73
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	25.5	23.90
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1712.5	342500	24.5	22.74
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@105)	1@105	1770	354000	24.5	22.60
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full (50@25)	50@25	1745	349000	25.5	23.80
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1720	344000	24.5	22.61

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	default	15	5	DFT-s-OFDM PI/2 BPSK1	Inner Full (12@6)	12@6	1745	349000	25.5	23.51
2	default	15	5	DFT-s-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	24.5	23.19
3	default	15	5	DFT-s-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	23	21.49
4	default	15	5	DFT-s-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	21	19.21
5	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	24	23.37
6	default	15	5	CP-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	23.5	22.84
7	default	15	5	CP-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	22	21.03
8	default	15	5	CP-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	19	17.26
9	default	15	5	DFT-s-OFDM QPSK	Edge Full Right (2@23)	(2@23)	1745	349000	24.5	22.71
10	default	15	5	DFT-s-OFDM QPSK	Edge Full Left (2@0)	(2@0)	1745	349000	24.5	22.74
11	default	15	5	DFT-s-OFDM QPSK	Inner 1RB Right (1@23)	(1@23)	1745	349000	25.5	23.64
12	default	15	5	DFT-s-OFDM QPSK	Inner 1RB Left (1@1)	(1@1)	1745	349000	25.5	23.71
13	default	15	5	DFT-s-OFDM QPSK	Outer Full (25@0)	(25@0)	1745	349000	24.5	22.75
14	default	15	10	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	1745	349000	25.5	23.57
15	default	15	15	DFT-s-OFDM QPSK	Inner Full (36@18)	36@18	1745	349000	25.5	23.66

Maximum Target Power for Production Unit – Level B4

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right (1@24)	1@24	1777.5	355500	24	23.11
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	24	23.66
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1712.5	342500	24	23.05
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@105)	1@105	1770	354000	24	22.96
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full (50@25)	50@25	1745	349000	24	23.62
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1720	344000	24	22.93

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	default	15	5	DFT-s-OFDM P1/2 BPSK1	Inner Full (12@6)	12@6	1745	349000	24	23.34
2	default	15	5	DFT-s-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	24	23.52
3	default	15	5	DFT-s-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	22.5	21.83
4	default	15	5	DFT-s-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	20.5	19.52
5	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	24	23.71
6	default	15	5	CP-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	23.5	23.16
7	default	15	5	CP-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	21.5	21.38
8	default	15	5	CP-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	18.5	17.62
9	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1777.5	355500	24	23.64
10	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1712.5	342500	24	23.7
11	default	15	5	CP-OFDM QPSK	Edge Full Right (2@23)	2@23	1745	349000	22	21.75
12	default	15	5	CP-OFDM QPSK	Edge Full Left (2@0)	2@0	1745	349000	22	21.78
13	default	15	5	CP-OFDM QPSK	Inner 1RB Right (1@23)	1@23	1745	349000	24	23.41
14	default	15	5	CP-OFDM QPSK	Inner 1RB Left (1@1)	1@1	1745	349000	24	23.42
15	default	15	5	CP-OFDM QPSK	Outer Full (25@0)	25@0	1745	349000	22	21.95
16	default	15	10	CP-OFDM QPSK	Inner Full (25@12)	25@12	1745	349000	24	23.53
17	default	15	15	CP-OFDM QPSK	Inner Full (36@18)	36@18	1745	349000	24	23.70

Maximum Target Power for Production Unit – Level A4/B4/C4

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right (1@24)	1@24	695.5	139100	24.5	23.36
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full (12@6)	12@6	680.5	136100	25.5	24.50
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	665.5	133100	24.5	23.30
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@105)	1@105	688	137600	24.5	23.15
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full (50@25)	50@25	680.5	136100	25.5	24.39
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	673	134600	24.5	23.17

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	default	15	5	DFT-s-OFDM P1/2 BPSK1	Inner Full (12@6)	12@6	680.5	136100	25.5	23.98
2	default	15	5	DFT-s-OFDM 16QAM	Inner Full (12@6)	12@6	680.5	136100	24.5	23.81
3	default	15	5	DFT-s-OFDM 64QAM	Inner Full (12@6)	12@6	680.5	136100	23	22.12
4	default	15	5	DFT-s-OFDM 256QAM	Inner Full (12@6)	12@6	680.5	136100	21	19.96
5	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	680.5	136100	24	23.97
6	default	15	5	CP-OFDM 16QAM	Inner Full (12@6)	12@6	680.5	136100	23.5	23.45
7	default	15	5	CP-OFDM 64QAM	Inner Full (12@6)	12@6	680.5	136100	22	21.65
8	default	15	5	CP-OFDM 256QAM	Inner Full (12@6)	12@6	680.5	136100	19	18.00
9	default	15	5	DFT-s-OFDM QPSK	Edge Full Right	2@23	680.5	136100	24.5	23.26
10	default	15	5	DFT-s-OFDM QPSK	Edge Full Left	2@0	680.5	136100	24.5	23.27
11	default	15	5	DFT-s-OFDM QPSK	Inner 1RB Right	1@23	680.5	136100	25.5	24.32
12	default	15	5	DFT-s-OFDM QPSK	Inner 1RB Left	1@1	680.5	136100	25.5	24.39
13	default	15	5	DFT-s-OFDM QPSK	Outer Full	25@0	680.5	136100	24.5	23.30
14	default	15	10	DFT-s-OFDM QPSK	Inner Full	25@12	680.5	136100	25.5	24.16
15	default	15	15	DFT-s-OFDM QPSK	Inner Full	36@18	680.5	136100	25.5	24.37

Maximum Target Power for Production Unit – Level A5

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right	1@24	1912.5	382500	15.5	14.06
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full	12@6	1882.5	376500	15.5	14.12
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1852.5	370500	15.5	14.02
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right	1@105	1905	381000	15.5	13.94
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full	50@25	1882.5	376500	15.5	14.09
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1860	372000	15.5	13.91

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	15	5	DFT-s-OFDM PI/2 BPSK1	Inner Full	12@6	1882.5	382500	15.5	14.05
2	Low	15	5	DFT-s-OFDM 16QAM	Inner Full	12@6	1882.5	382500	15.5	14.23
3	Low	15	5	DFT-s-OFDM 64QAM	Inner Full	12@6	1882.5	382500	15.5	14.22
4	Low	15	5	DFT-s-OFDM 256QAM	Inner Full	12@6	1882.5	382500	15.5	14.25
5	Low	15	5	CP-OFDM QPSK	Inner Full	12@6	1882.5	382500	15.5	14.43
6	Low	15	5	CP-OFDM 16QAM	Inner Full	12@6	1882.5	382500	15.5	14.50
7	Low	15	5	CP-OFDM 64QAM	Inner Full	12@6	1882.5	382500	15.5	14.45
8	Low	15	5	CP-OFDM 256QAM	Inner Full	12@6	1882.5	382500	15.5	14.41
9	Low	15	5	CP-OFDM 16QAM	Edge Full Right	2@23	1882.5	382500	15.5	14.22
10	Low	15	5	CP-OFDM 16QAM	Edge Full Left	2@0	1882.5	382500	15.5	14.25
11	Low	15	5	CP-OFDM 16QAM	Inner 1RB Right	1@23	1882.5	382500	15.5	14.66
12	Low	15	5	CP-OFDM 16QAM	Inner 1RB Left	1@1	1882.5	382500	15.5	14.70
13	Low	15	5	CP-OFDM 16QAM	Outer Full	25@0	1882.5	382500	15.5	14.63
14	default	15	10	CP-OFDM 16QAM	Inner 1RB Left	1@1	1882.5	382000	15.5	14.31
15	default	15	15	CP-OFDM 16QAM	Inner 1RB Left	1@1	1882.5	381500	15.5	14.43

Maximum Target Power for Production Unit – Level B5

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right	1@24	1912.5	382500	20	18.96
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full	12@6	1882.5	376500	20	18.98
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1852.5	370500	20	18.90
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right	1@105	1905	381000	20	18.77
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full	50@25	1882.5	376500	20	18.94
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1860	372000	20	18.75

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	15	5	DFT-s-OFDM PI/2 BPSK1	Inner Full	12@6	1882.5	382500	20	18.77
2	Low	15	5	DFT-s-OFDM 16QAM	Inner Full	12@6	1882.5	382500	20	19.27
3	Low	15	5	DFT-s-OFDM 64QAM	Inner Full	12@6	1882.5	382500	20	19.25
4	Low	15	5	DFT-s-OFDM 256QAM	Inner Full	12@6	1882.5	382500	20	19.24
5	Low	15	5	CP-OFDM QPSK	Inner Full	12@6	1882.5	382500	20	19.67
6	Low	15	5	CP-OFDM 16QAM	Inner Full	12@6	1882.5	382500	20	19.73
7	Low	15	5	CP-OFDM 64QAM	Inner Full	12@6	1882.5	382500	20	19.70
8	Low	15	5	CP-OFDM 256QAM	Inner Full	12@6	1882.5	382500	18.5	17.35
9	Low	15	5	CP-OFDM 16QAM	Edge Full Right	2@23	1882.5	382500	20	19.43
10	Low	15	5	CP-OFDM 16QAM	Edge Full Left	2@0	1882.5	382500	20	19.52
11	Low	15	5	CP-OFDM 16QAM	Inner 1RB Right	1@23	1882.5	382500	20	19.72
12	Low	15	5	CP-OFDM 16QAM	Inner 1RB Left	1@1	1882.5	382500	20	19.69
13	Low	15	5	CP-OFDM 16QAM	Outer Full	25@0	1882.5	382500	20	19.63
14	default	15	10	CP-OFDM 16QAM	Inner 1RB Right	1@23	1882.5	382000	20	19.63
15	default	15	15	CP-OFDM 16QAM	Inner 1RB Right	1@23	1882.5	381500	20	19.64

Maximum Target Power for Production Unit – Level C5

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right	1@24	1912.5	382500	23.5	22.61
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full	12@6	1882.5	376500	24.5	23.85
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1852.5	370500	23.5	22.66
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right	1@105	1905	381000	23.5	22.48
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full	50@25	1882.5	376500	24.5	23.70
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left	1@0	1860	372000	23.5	22.46

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	15	5	DFT-s-OFDM PI/2 BPSK1	Inner Full	12@6	1882.5	382500	24.5	23.60
2	Low	15	5	DFT-s-OFDM 16QAM	Inner Full	12@6	1882.5	382500	23.5	23.08
3	Low	15	5	DFT-s-OFDM 64QAM	Inner Full	12@6	1882.5	382500	22	21.45
4	Low	15	5	DFT-s-OFDM 256QAM	Inner Full	12@6	1882.5	382500	20	19.32
5	Low	15	5	CP-OFDM QPSK	Inner Full	12@6	1882.5	382500	23	22.97
6	Low	15	5	CP-OFDM 16QAM	Inner Full	12@6	1882.5	382500	22.5	22.41
7	Low	15	5	CP-OFDM 64QAM	Inner Full	12@6	1882.5	382500	21	20.93
8	Low	15	5	CP-OFDM 256QAM	Inner Full	12@6	1882.5	382500	18	17.38
9	Low	15	5	DFT-s-OFDM QPSK	Edge Full Right	2@23	1882.5	382500	23.5	22.68
10	Low	15	5	DFT-s-OFDM QPSK	Edge Full Left	2@0	1882.5	382500	23.5	22.62
11	Low	15	5	DFT-s-OFDM QPSK	Inner 1RB Right	1@23	1882.5	382500	24.5	23.76
12	Low	15	5	DFT-s-OFDM QPSK	Inner 1RB Left	1@1	1882.5	382500	24.5	23.72
13	Low	15	5	DFT-s-OFDM QPSK	Outer Full	25@0	1882.5	382500	23.5	22.69
14	default	15	10	DFT-s-OFDM QPSK	Inner Full	25@12	1882.5	382000	24.5	23.52
15	default	15	15	DFT-s-OFDM QPSK	Inner Full	36@18	1882.5	381500	24.5	23.71

Maximum Target Power for Production Unit – Level A5

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@50)	1@50	2679.99	535998	15	14.33
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2636.49	527298	15	14.42
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2592.99	518598	15	14.45
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2549.51	509902	15	14.40
5	Low	30	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2506.02	501204	15	14.27
6	High	30	100	DFT-s-OFDM QPSK	Edge 1RB Right (1@271)	1@272	2640	528000	15	13.89
7	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2616.51	523302	15	14.46
8	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2592.99	518598	15	14.48
9	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2569.5	513900	15	14.44
10	Low	30	100	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2546.01	509202	15	13.93

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	30	100	DFT-s-OFDM PI/2 BPSK1	Inner Full (135@67)	135@67	2592.99	518598	15	14.46
1	Middle-1	30	100	DFT-s-OFDM 16QAM	Inner Full (135@67)	135@67	2592.99	518598	15	14.50
2	Middle-1	30	100	DFT-s-OFDM 64QAM	Inner Full (135@67)	135@67	2592.99	518598	15	14.51
3	Middle-1	30	100	DFT-s-OFDM 256QAM	Inner Full (135@67)	135@67	2592.99	518598	15	14.50
4	Middle-1	30	100	CP-OFDM QPSK	Inner Full (135@67)	135@67	2592.99	518598	15	14.48
5	Middle-1	30	100	CP-OFDM 16QAM	Inner Full (135@67)	135@67	2592.99	518598	15	14.52
6	Middle-1	30	100	CP-OFDM 64QAM	Inner Full (135@67)	135@67	2592.99	518598	15	14.48
7	Middle-1	30	100	CP-OFDM 256QAM	Inner Full (135@67)	135@67	2592.99	518598	15	14.49
8	Middle-1	30	100	CP-OFDM 16QAM	Edge Full Right	2@271	2636.49	527298	15	13.72
9	Middle-1	30	100	CP-OFDM 16QAM	Edge Full Left	2@0	2636.49	527298	15	13.80
10	Middle-1	30	100	CP-OFDM 16QAM	Inner 1RB Right	1@127	2636.49	527298	15	14.75
11	Middle-1	30	100	CP-OFDM 16QAM	Inner 1RB Left	1@1	2636.49	527298	15	14.24
12	Middle-1	30	100	CP-OFDM 16QAM	Outer Full	273@0	2636.49	527298	15	14.34
13	Middle-1	30	40	CP-OFDM 16QAM	Inner 1RB Right	1@104	2636.49	527298	15	14.24
14	Middle-1	30	50	CP-OFDM 16QAM	Inner 1RB Right	1@131	2636.49	527298	15	14.51
15	Middle-1	30	60	CP-OFDM 16QAM	Inner 1RB Right	1@160	2636.49	527298	15	14.51
16	Middle-1	30	80	CP-OFDM 16QAM	Inner 1RB Right	1@215	2636.49	527298	15	14.41
17	Middle-1	30	90	CP-OFDM 16QAM	Inner 1RB Right	1@243	2636.49	527298	15	14.28

Maximum Target Power for Production Unit – Level B5

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@50)	1@50	2679.99	535998	17.5	16.83
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2636.49	527298	17.5	16.88
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2592.99	518598	17.5	16.95
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2549.51	509902	17.5	16.85
5	Low	30	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2506.02	501204	17.5	16.85
6	High	30	100	DFT-s-OFDM QPSK	Edge_1RB_Right (1@271)	1@272	2640	528000	17.5	16.01
7	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2616.51	523302	17.5	16.81
8	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2592.99	518598	17.5	16.79
9	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2569.5	513900	17.5	16.74
10	Low	30	100	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2546.01	509202	17.5	15.92

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	30	20	DFT-s-OFDM P1/2 BPSK1	Inner_Full (25@12)	25@12	2592.99	518598	17.5	16.91
1	Middle-1	30	20	DFT-s-OFDM 16QAM	Inner_Full (25@12)	25@12	2592.99	518598	17.5	17.03
2	Middle-1	30	20	DFT-s-OFDM 64QAM	Inner_Full (25@12)	25@12	2592.99	518598	17.5	16.92
3	Middle-1	30	20	DFT-s-OFDM 256QAM	Inner_Full (25@12)	25@12	2592.99	518598	17.5	17.01
4	Middle-1	30	20	CP-OFDM QPSK	Inner_Full (25@12)	25@12	2592.99	518598	17.5	16.94
5	Middle-1	30	20	CP-OFDM 16QAM	Inner_Full (25@12)	25@12	2592.99	518598	17.5	17.04
6	Middle-1	30	20	CP-OFDM 64QAM	Inner_Full (25@12)	25@12	2592.99	518598	17.5	16.84
7	Middle-1	30	20	CP-OFDM 256QAM	Inner_Full (25@12)	25@12	2592.99	518598	17.5	16.91
8	Middle-1	30	20	CP-OFDM 16QAM	Edge_Full_Right	2@49	2679.99	535998	17.5	16.85
9	Middle-1	30	20	CP-OFDM 16QAM	Edge_Full_Left	2@0	2679.99	535998	17.5	16.86
10	Middle-1	30	20	CP-OFDM 16QAM	Inner_1RB_Right	1@49	2679.99	535998	17.5	17.27
11	Middle-1	30	20	CP-OFDM 16QAM	Inner_1RB_Left	1@1	2679.99	535998	17.5	17.19
12	Middle-1	30	20	CP-OFDM 16QAM	Outer_Full	50@0	2679.99	535998	17.5	16.87
13	Middle-1	30	40	CP-OFDM 16QAM	Inner_1RB_Right	1@104	2679.99	535998	17.5	16.80
14	Middle-1	30	50	CP-OFDM 16QAM	Inner_1RB_Right	1@131	2679.99	535998	17.5	16.86
15	Middle-1	30	60	CP-OFDM 16QAM	Inner_1RB_Right	1@160	2679.99	535998	17.5	16.95
16	Middle-1	30	80	CP-OFDM 16QAM	Inner_1RB_Right	1@215	2679.99	535998	17.5	16.25
17	Middle-1	30	90	CP-OFDM 16QAM	Inner_1RB_Right	1@243	2679.99	535998	17.5	16.03

Maximum Target Power for Production Unit – Level C5

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@50)	1@50	2679.99	535998	24	23.76
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2636.49	527298	27.5	25.93
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2592.99	518598	27.5	26.18
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	2549.51	509902	27.5	26.35
5	Low	30	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2506.02	501204	24	23.78
6	High	30	100	DFT-s-OFDM QPSK	Edge 1RB Right (1@271)	1@272	2640	528000	24	23.04
7	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2616.51	523302	27.5	25.87
8	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2592.99	518598	27.5	26.06
9	Middle	30	100	DFT-s-OFDM QPSK	Inner Full (135@67)	135@67	2569.5	513900	27.5	26.44
10	Low	30	100	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	2546.01	509202	24	23.09

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Middle-1	30	100	DFT-s-OFDM PI/2 BPSK1	Inner Full (135@67)	135@67	2569.5	513900	27.5	26.43
2	Middle-1	30	100	DFT-s-OFDM 16QAM	Inner Full (135@67)	135@67	2569.5	513900	26.5	26.34
3	Middle-1	30	100	DFT-s-OFDM 64QAM	Inner Full (135@67)	135@67	2569.5	513900	25.5	24.88
4	Middle-1	30	100	DFT-s-OFDM 256QAM	Inner Full (135@67)	135@67	2569.5	513900	23	22.88
5	Middle-1	30	100	CP-OFDM QPSK	Inner Full (135@67)	135@67	2569.5	513900	26	25.87
6	Middle-1	30	100	CP-OFDM 16QAM	Inner Full (135@67)	135@67	2569.5	513900	25.5	25.44
7	Middle-1	30	100	CP-OFDM 64QAM	Inner Full (135@67)	135@67	2569.5	513900	24	23.83
8	Middle-1	30	100	CP-OFDM 256QAM	Inner Full (135@67)	135@67	2569.5	513900	21	21.00
9	Middle-1	30	100	DFT-s-OFDM QPSK	Edge Full Right	2@271	2569.5	513900	24	22.91
10	Middle-1	30	100	DFT-s-OFDM QPSK	Edge Full Left	2@0	2569.5	513900	24	23.10
11	Middle-1	30	100	DFT-s-OFDM QPSK	Inner 1RB Right	1@271	2569.5	513900	27.5	25.20
12	Middle-1	30	100	DFT-s-OFDM QPSK	Inner 1RB Left	1@1	2569.5	513900	27.5	25.54
13	Middle-1	30	100	DFT-s-OFDM QPSK	Outer Full	270@0	2569.5	513900	26.5	26.07
14	Middle-1	30	40	DFT-s-OFDM QPSK	Inner Full	50@25	2569.5	513900	27.5	26.31
15	Middle-1	30	50	DFT-s-OFDM QPSK	Inner Full	64@32	2569.5	513900	27.5	26.34
16	Middle-1	30	60	DFT-s-OFDM QPSK	Inner Full	81@40	2569.5	513900	27.5	26.19
17	Middle-1	30	80	DFT-s-OFDM QPSK	Inner Full	108@54	2569.5	513900	27.5	26.24
18	Middle-1	30	90	DFT-s-OFDM QPSK	Inner Full	120@60	2569.5	513900	27.5	26.24

Maximum Target Power for Production Unit – Level A5

No.	Test Freq Description	5G-n66							QRCT设置信道	Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.			
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right (1@24)	1@24	1777.5	355500	355050	15.5	13.76
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	348550	15.5	13.85
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1712.5	342500	342050	15.5	13.77
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@105)	1@105	1770	354000	352092	15.5	13.65
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full (50@25)	50@25	1745	349000	347092	15.5	13.80
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1720	344000	342092	15.5	13.64

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							QRCT设置信道	Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.			
1	default	15	5	FT-s-OFDM PI/2 BPSK	Inner Full (12@6)	12@6	1745	349000	347092	15.5	13.79
2	default	15	5	DFT-s-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	347092	15.5	13.97
3	default	15	5	DFT-s-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	347092	15.5	13.94
4	default	15	5	DFT-s-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	347092	15.5	13.99
5	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	347092	15.5	14.11
6	default	15	5	CP-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	347092	15.5	14.2
7	default	15	5	CP-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	347092	15.5	14.13
8	default	15	5	CP-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	347092	15.5	14.09
9	default	15	5	CP-OFDM 16QAM	Edge Full Right (2@23)	(2@23)	1745	349000	347092	15.5	13.89
10	default	15	5	CP-OFDM 16QAM	Edge Full Left (2@0)	(2@0)	1745	349000	347092	15.5	13.94
11	default	15	5	CP-OFDM 16QAM	Inner 1RB Right (1@23)	(1@23)	1745	349000	347092	15.5	14.32
12	default	15	5	CP-OFDM 16QAM	Inner 1RB Left (1@1)	(1@1)	1745	349000	347092	15.5	14.35
13	default	15	5	CP-OFDM 16QAM	Outer Full (25@0)	(25@0)	1745	349000	347092	15.5	14.07
14	default	15	10	CP-OFDM 16QAM	Inner Full (25@12)	25@12	1745	349000	348064	15.5	13.99
15	default	15	15	CP-OFDM 16QAM	Inner Full (36@18)	36@18	1745	349000	347578	15.5	13.61

Maximum Target Power for Production Unit – Level B5

No.	Test Freq Description	5G-n66							QRCT设置信道	Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.			
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right (1@24)	1@24	1777.5	355500	355050	22	20.70
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	348550	22	20.72
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1712.5	342500	342050	22	20.65
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@105)	1@105	1770	354000	352092	22	20.57
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full (50@25)	50@25	1745	349000	347092	22	20.69
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1720	344000	342092	22	20.47

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							QRCT设置信道	Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.			
1	default	15	5	FT-s-OFDM PI/2 BPSK	Inner Full (12@6)	12@6	1745	349000	347092	22	20.48
2	default	15	5	DFT-s-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	347092	22	21.04
3	default	15	5	DFT-s-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	347092	22	21.06
4	default	15	5	DFT-s-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	347092	20	18.99
5	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	347092	22	21.66
6	default	15	5	CP-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	347092	22	21.72
7	default	15	5	CP-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	347092	21	20.54
8	default	15	5	CP-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	347092	18	17.00
9	default	15	5	CP-OFDM 16QAM	Edge Full Right (2@23)	(2@23)	1745	349000	347092	22	20.81
10	default	15	5	CP-OFDM 16QAM	Edge Full Left (2@0)	(2@0)	1745	349000	347092	22	20.85
11	default	15	5	CP-OFDM 16QAM	Inner 1RB Right (1@23)	(1@23)	1745	349000	347092	22	21.63
12	default	15	5	CP-OFDM 16QAM	Inner 1RB Left (1@1)	(1@1)	1745	349000	347092	22	21.61
13	default	15	5	CP-OFDM 16QAM	Outer Full (25@0)	(25@0)	1745	349000	347092	22	21.08
14	default	15	10	CP-OFDM 16QAM	Inner Full (25@12)	(1@23)	1745	349000	348064	22	21.66
15	default	15	15	CP-OFDM 16QAM	Inner Full (36@18)	(1@23)	1745	349000	347578	22	21.63

Maximum Target Power for Production Unit – Level C5

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Edge 1RB Right (1@24)	1@24	1777.5	355500	24	22.47
2	Middle	15	5	DFT-s-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	25	23.55
3	Low	15	5	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1712.5	342500	24	22.35
4	High	15	20	DFT-s-OFDM QPSK	Edge 1RB Right (1@105)	1@105	1770	354000	24	22.30
5	Middle	15	20	DFT-s-OFDM QPSK	Inner Full (50@25)	50@25	1745	349000	25	23.45
6	Low	15	20	DFT-s-OFDM QPSK	Edge 1RB Left (1@0)	1@0	1720	344000	24	22.20

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	default	15	5	DFT-s-OFDM P1/2 BPSK1	Inner Full (12@6)	12@6	1745	349000	25	23.01
2	default	15	5	DFT-s-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	24	22.81
3	default	15	5	DFT-s-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	22.5	21.15
4	default	15	5	DFT-s-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	20.5	19.05
5	default	15	5	CP-OFDM QPSK	Inner Full (12@6)	12@6	1745	349000	23.5	22.91
6	default	15	5	CP-OFDM 16QAM	Inner Full (12@6)	12@6	1745	349000	23	22.37
7	default	15	5	CP-OFDM 64QAM	Inner Full (12@6)	12@6	1745	349000	21.5	20.60
8	default	15	5	CP-OFDM 256QAM	Inner Full (12@6)	12@6	1745	349000	18.5	17.07
9	default	15	5	DFT-s-OFDM QPSK	Edge Full Right (2@23)	(2@23)	1745	349000	24	22.4
10	default	15	5	DFT-s-OFDM QPSK	Edge Full Left(2@0)	(2@0)	1745	349000	24	22.35
11	default	15	5	DFT-s-OFDM QPSK	Inner 1RB Right (1@23)	(1@23)	1745	349000	25	23.43
12	default	15	5	DFT-s-OFDM QPSK	Inner 1RB Left (1@1)	(1@1)	1745	349000	25	23.42
13	default	15	5	DFT-s-OFDM QPSK	Outer Full (25@0)	(25@0)	1745	349000	24	22.37
14	default	15	10	DFT-s-OFDM QPSK	Inner Full (25@12)	25@12	1745	349000	25	23.26
15	default	15	15	DFT-s-OFDM QPSK	Inner Full (36@18)	36@18	1745	349000	25	23.4

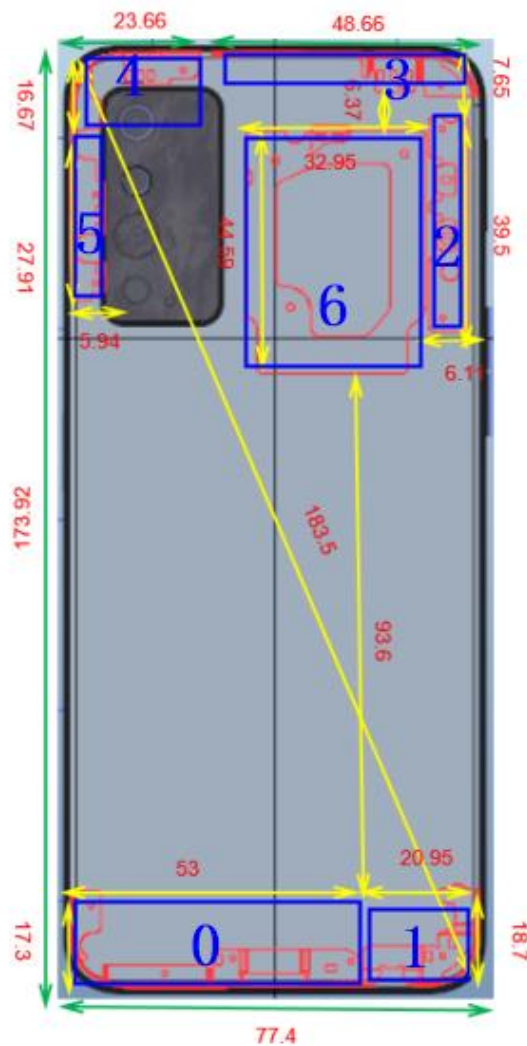
12 Simultaneous TX SAR Considerations

12.1 Introduction

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

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

12.2 Transmit Antenna Separation Distances



Aantenna	Mode	Band
ANT0	Main LB+HB (TX, RX)	2G:GSM850/900 3G:WCDMA850 4G:LTE B5/B7/B12/13/20/26/28/B38/40/41/71 (TX/PRX) 5G:n71_TX (SA/NSA) N41_TX (SA)
ANT1	Main MB (TX, RX)	2G:GSM1800/1900 3G:WCDMA B1/2/B4 4G:LTE B1/2/3/4/66/25/39 (TX/PRX) 5G:n25/n66_TX (SA)
ANT2		4G:B2/66 (RX) 5G:n25/n66/n41 (RX)
ANT3	LB+MB+HB	2G:GSM850/900/1800/1900 3G:WCDMA B1/2/4/5 4G:LTE B1/2/3/4/5/B7/B12/13/20/25/26/28/B38/39/40/ 41/66/71 (DRX) 5G:n25/41/66 (NSA_TX) ENDC:B2/B66 TX (B2_N71, B66_N71)
ANT4	Wifi/GPS	GPS/Wifi 2.4G/5G/BT
ANT5	NR_MB	4G:B66_DRX (B66_N71, B66_N41) 5G:N25/66/41 (DRX_MIMO)
ANT6	NFC	

Picture 12.1 Antenna Locations

12.3 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR v01, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
ANT0	Yes	Yes	Yes	Yes	No	Yes
ANT1	Yes	Yes	Yes	No	No	Yes
ANT3	Yes	Yes	Yes	Yes	Yes	No
ANT4	Yes	Yes	No	Yes	Yes	No

12.4 Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

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

Table 12.1: Standalone SAR test exclusion considerations

Band/Mode	F(GHz)	Position	SAR test exclusion threshold(mW)	RF output power		SAR test exclusion
				dBm	mW	
Bluetooth	2.441	Head	9.60	11	12.59	No
		Body	19.20	11	12.59	Yes
2.4GHz WLAN	2.45	Head	9.58	24	251.19	No
		Body	19.17	24	251.19	No
5GHz WLAN	5.2	Head	6.58	20.5	112.20	No
		Body	13.16	20.5	112.20	No
	5.3	Head	6.52	20.5	112.20	No
		Body	13.03	20.5	112.20	No
	5.6	Head	6.34	21.5	141.25	No
		Body	12.68	21.5	141.25	No
	5.8	Head	6.23	22	158.49	No
		Body	12.46	22	158.49	No

13 Evaluation of Simultaneous

Table 13.1: The sum of reported SAR values for Main antenna and WiFi-5G+BT

	Position	Cellular antenna	WiFi	BT	Sum
Highest reported SAR value for Head	Right hand, Tilt	0.90	0.55	<0.01	1.45
Maximum reported SAR value for Body	Rear 15mm	1.23	0.35	<0.01	1.58

Note1: we have evaluated and chose the highest value of WiFi 2.4G and 5G in the above table.

Table 13.2: The sum of reported SAR values for Main antenna and WiFi-2.4G

	Band	Cellular antenna	WiFi	Sum
Highest reported SAR value for Head	Left hand, Cheek	0.65	0.71	1.36
Maximum reported SAR value for Body	Front 15mm	0.93	0.62	1.55

	LTE	NR	Position	Reported SAR 1g(W/kg)
ENDC	LTE Band 2(ANT1)	N25(ANT3)	Head	0.87
	LTE Band 12(ANT0)	N25(ANT3)	Head	0.87
	LTE Band 66(ANT1)	N25(ANT3)	Head	0.90
	LTE Band 2(ANT1)	N66(ANT3)	Head	0.71
	LTE Band 12(ANT0)	N66(ANT3)	Head	0.71
	LTE Band 2(ANT3)	N71(ANT0)	Head	0.52
	LTE Band 66(ANT3)	N71(ANT0)	Head	0.64
	LTE Band 2(ANT1)	N41(ANT3)	Head	0.70
	LTE Band 66(ANT1)	N41(ANT3)	Head	0.77

	LTE	NR	Position	Reported SAR 1g(W/kg)
ENDC	LTE Band 2(ANT1)	N25(ANT3)	Body 10mm	0.70
	LTE Band 12(ANT0)	N25(ANT3)	Body 10mm	0.53
	LTE Band 66(ANT1)	N25(ANT3)	Body 10mm	0.66
	LTE Band 2(ANT1)	N66(ANT3)	Body 10mm	0.94
	LTE Band 12(ANT0)	N66(ANT3)	Body 10mm	0.77
	LTE Band 2(ANT3)	N71(ANT0)	Body 10mm	0.80
	LTE Band 66(ANT3)	N71(ANT0)	Body 10mm	0.75
	LTE Band 2(ANT1)	N41(ANT3)	Body 10mm	0.64
	LTE Band 66(ANT1)	N41(ANT3)	Body 10mm	0.60

	LTE	NR	Position	Reported SAR 1g(W/kg)
ENDC	LTE Band 2(ANT1)	N25(ANT3)	Body 15mm	1.23
	LTE Band 12(ANT0)	N25(ANT3)	Body 15mm	1.03
	LTE Band 66(ANT1)	N25(ANT3)	Body 15mm	1.22
	LTE Band 2(ANT1)	N66(ANT3)	Body 15mm	1.11
	LTE Band 12(ANT0)	N66(ANT3)	Body 15mm	0.91
	LTE Band 2(ANT1)	N41(ANT3)	Body 15mm	0.99
	LTE Band 66(ANT1)	N41(ANT3)	Body 15mm	0.98

	LTE	NR	Position	Reported SAR 1g(W/kg)
ULCA	LTE Band 2(ANT1)	LTE Band 12(ANT0)	Head	0.53
	LTE Band	LTE Band 12(ANT0)	Head	0.60

	LTE	LTE	Position	Reported SAR 1g(W/kg)
ULCA	LTE Band 2(ANT1)	LTE Band 12(ANT0)	Body 10mm	0.79
	LTE Band 66(ANT1)	LTE Band 12(ANT0)	Body 10mm	0.74

	LTE	LTE	Position	Reported SAR 1g(W/kg)
ULCA	LTE Band 2(ANT1)	LTE Band 12(ANT0)	Body 15mm	0.73
	LTE Band 66(ANT1)	LTE Band 12(ANT0)	Body 15mm	0.61

Conclusion:

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

14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.
The distance is 10 mm or 15mm and just applied to the condition of body worn accessory.

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

The calculated SAR is obtained by the following formula:

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

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

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

Table 14.1: Duty Cycle

Mode	Duty Cycle
Speech for GSM850/1900	1:8.3
GPRS&EGPRS for GSM850/1900	1:4
WCDMA<E FDD	1:1
LTE B38	1:1.58
LTE B41 PC3	1:1.58
LTE B41 PC3	1:2.309

14.1 SAR results for Fast SAR

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	Left	Touch	/	32.60	33.50	0.133	0.16	0.181	0.22	-0.04
190	836.6	Left	Tilt	/	32.60	33.50	0.084	0.10	0.111	0.14	0.03
251	848.8	Right	Touch	/	32.51	33.50	0.138	0.17	0.188	0.24	0.16
190	836.6	Right	Touch	Fig.1	32.60	33.50	0.156	0.19	0.202	0.25	-0.05
128	824.2	Right	Touch	/	32.53	33.50	0.141	0.18	0.191	0.24	-0.01
190	836.6	Right	Tilt	/	32.60	33.50	0.109	0.13	0.145	0.18	0.13

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode (number of timeslots)	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	GPRS (2)	Front	/	31.62	32.50	0.295	0.36	0.477	0.58	-0.01
251	848.8	GPRS (2)	Rear	/	31.56	32.50	0.384	0.48	0.671	0.83	-0.06
190	836.6	GPRS (2)	Rear	Fig.2	31.62	32.50	0.431	0.53	0.739	0.90	0.11
128	824.2	GPRS (2)	Rear	/	31.54	32.50	0.401	0.50	0.668	0.83	-0.13
190	836.6	GPRS (2)	Left	/	31.62	32.50	0.112	0.14	0.176	0.22	0.13
190	836.6	GPRS (2)	Right	/	31.62	32.50	0.166	0.20	0.245	0.30	0.06
190	836.6	GPRS (2)	Bottom	/	31.62	32.50	0.282	0.35	0.540	0.66	0.06
190	836.6	EGPRS (2)	Rear	/	31.56	32.50	0.343	0.43	0.622	0.77	0.01

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

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
810	1909.8	Left	Touch	/	29.24	30.50	0.078	0.10	0.125	0.17	-0.01
661	1880	Left	Touch	Fig.3	29.44	30.50	0.090	0.11	0.144	0.18	0.03
512	1850.2	Left	Touch	/	29.72	30.50	0.073	0.09	0.116	0.14	0.04
661	1880	Left	Tilt	/	29.44	30.50	0.039	0.05	0.062	0.08	0.12
661	1880	Right	Touch	/	29.44	30.50	0.050	0.06	0.076	0.10	-0.10
661	1880	Right	Tilt	/	29.44	30.50	0.042	0.05	0.068	0.09	-0.13

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode (number of timeslots)	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
661	1880	GPRS (2)	Front	/	28.39	29.50	0.174	0.22	0.304	0.39	0.12
810	1909.8	GPRS (2)	Rear	Fig.4	28.20	29.50	0.327	0.44	0.558	0.75	-0.10
661	1880	GPRS (2)	Rear	/	28.39	29.50	0.286	0.37	0.511	0.66	-0.01
512	1850.2	GPRS (2)	Rear	/	28.69	29.50	0.268	0.32	0.469	0.57	0.10
661	1880	GPRS (2)	Left	/	28.39	29.50	0.170	0.22	0.307	0.40	0.09
661	1880	GPRS (2)	Right	/	28.39	29.50	0.111	0.14	0.065	0.08	0.17
661	1880	GPRS (2)	Bottom	/	28.39	29.50	0.118	0.15	0.199	0.26	-0.05
810	1909.8	EGPRS (2)	Rear	/	28.11	29.50	0.308	0.42	0.540	0.74	0.10

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

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
4182	836.4	Left	Touch	/	23.68	25.50	0.173	0.26	0.225	0.34	0.09
4182	836.4	Left	Tilt	/	23.68	25.50	0.098	0.15	0.121	0.18	0.04
4233	846.6	Right	Touch	/	23.68	25.50	0.146	0.22	0.187	0.28	-0.06
4182	836.4	Right	Touch	/	23.68	25.50	0.183	0.28	0.233	0.35	0.11
4132	826.4	Right	Touch	Fig.5	23.78	25.50	0.183	0.27	0.235	0.35	-0.11
4182	836.4	Right	Tilt	/	23.68	25.50	0.137	0.21	0.171	0.26	0.06

Table 14.1-6: SAR Values (WCDMA 850 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
4182	836.4	Front	/	23.68	25.50	0.132	0.20	0.217	0.33	0.06
4233	846.6	Rear	/	23.68	25.50	0.171	0.26	0.296	0.45	0.01
4182	836.4	Rear	/	23.68	25.50	0.191	0.29	0.327	0.50	0.02
4132	826.4	Rear	Fig.6	23.78	25.50	0.207	0.31	0.353	0.52	0.10
4182	836.4	Left	/	23.68	25.50	0.038	0.06	0.060	0.09	0.05
4182	836.4	Right	/	23.68	25.50	0.131	0.20	0.199	0.30	-0.10
4182	836.4	Bottom	/	23.68	25.50	0.140	0.21	0.266	0.40	0.08

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

Table 14.1-7: SAR Values (WCDMA 1700 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
1513	1752.6	Left	Touch	Fig.7	22.88	24.50	0.103	0.15	0.158	0.23	0.09
1412	1732.4	Left	Touch	/	22.88	24.50	0.085	0.12	0.126	0.18	-0.10
1312	1712.4	Left	Touch	/	22.93	24.50	0.092	0.13	0.139	0.20	0.06
1412	1732.4	Left	Tilt	/	22.88	24.50	0.043	0.06	0.063	0.09	-0.06
1412	1732.4	Right	Touch	/	22.88	24.50	0.072	0.10	0.107	0.16	-0.02
1412	1732.4	Right	Tilt	/	22.88	24.50	0.063	0.09	0.099	0.14	-0.08

Table 14.1-8: SAR Values (WCDMA 1700 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
1412	1732.4	Front	/	22.88	24.50	0.141	0.20	0.221	0.32	0.12
1513	1752.6	Rear	Fig.8	22.88	24.50	0.287	0.42	0.446	0.65	-0.13
1412	1732.4	Rear	/	22.88	24.50	0.280	0.41	0.442	0.64	-0.11
1312	1712.4	Rear	/	22.93	24.50	0.239	0.34	0.376	0.54	0.03
1412	1732.4	Left	/	22.88	24.50	0.123	0.18	0.224	0.33	-0.06
1412	1732.4	Right	/	22.88	24.50	0.086	0.12	0.143	0.21	0.19
1412	1732.4	Bottom	/	22.88	24.50	0.125	0.18	0.216	0.31	-0.03

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

Table 14.1-9: SAR Values (WCDMA 1900 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
9538	1907.6	Left	Touch	/	22.83	24.50	0.117	0.17	0.183	0.27	0.09
9400	1880	Left	Touch	Fig.9	22.83	24.50	0.131	0.19	0.206	0.30	0.11
9262	1852.4	Left	Touch	/	22.81	24.50	0.118	0.17	0.183	0.27	-0.08
9400	1880	Left	Tilt	/	22.83	24.50	0.053	0.08	0.082	0.12	0.12
9400	1880	Right	Touch	/	22.83	24.50	0.092	0.14	0.136	0.20	0.11
9400	1880	Right	Tilt	/	22.83	24.50	0.064	0.09	0.102	0.15	-0.09

Table 14.1-10: SAR Values (WCDMA 1900 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
9400	1880	Front	/	22.83	24.50	0.193	0.28	0.298	0.44	-0.08
9538	1907.6	Rear	/	22.83	24.50	0.358	0.53	0.543	0.80	-0.13
9400	1880	Rear	Fig.10	22.83	24.50	0.348	0.51	0.564	0.83	0.07
9262	1852.4	Rear	/	22.81	24.50	0.309	0.46	0.461	0.68	-0.03
9400	1880	Left	/	22.83	24.50	0.150	0.22	0.255	0.37	-0.04
9400	1880	Right	/	22.83	24.50	0.079	0.12	0.118	0.17	0.08
9400	1880	Bottom	/	22.83	24.50	0.128	0.19	0.215	0.32	0.02

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

Table 14.1-11: SAR Values (LTE Band2 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
18900	1880	1RB_Mid	Left	Touch	Fig.11	23.60	25.00	0.111	0.15	0.174	0.24	0.06
18900	1880	1RB_Mid	Left	Tilt	/	23.60	25.00	0.056	0.08	0.089	0.12	-0.10
18900	1880	1RB_Mid	Right	Touch	/	23.60	25.00	0.080	0.11	0.123	0.17	-0.03
18900	1880	1RB_Mid	Right	Tilt	/	23.60	25.00	0.063	0.09	0.100	0.14	-0.05
18700	1860	50RB_High	Left	Touch	/	22.59	24.00	0.094	0.13	0.146	0.20	0.02
18700	1860	50RB_High	Left	Tilt	/	22.59	24.00	0.059	0.08	0.091	0.13	0.12
18700	1860	50RB_High	Right	Touch	/	22.59	24.00	0.060	0.08	0.091	0.13	0.13
18700	1860	50RB_High	Right	Tilt	/	22.59	24.00	0.059	0.08	0.092	0.13	0.11

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-12: SAR Values (LTE Band2 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
18900	1880	1RB_Mid	Front	/	20.66	21.50	0.173	0.21	0.291	0.35	0.02
18900	1880	1RB_Mid	Rear	Fig.12	20.66	21.50	0.198	0.24	0.334	0.41	-0.01
18900	1880	1RB_Mid	Left	/	20.66	21.50	0.076	0.09	0.138	0.17	-0.07
18900	1880	1RB_Mid	Right	/	20.66	21.50	0.051	0.06	0.098	0.12	0.13
18900	1880	1RB_Mid	Bottom	/	20.66	21.50	0.137	0.17	0.236	0.29	-0.06
18700	1860	50RB_High	Front	/	20.25	21.50	0.087	0.12	0.152	0.20	-0.07
18700	1860	50RB_High	Rear	/	20.25	21.50	0.132	0.18	0.235	0.31	0.01
18700	1860	50RB_High	Left	/	20.25	21.50	0.046	0.06	0.081	0.11	0.02
18700	1860	50RB_High	Right	/	20.25	21.50	0.041	0.05	0.075	0.10	0.16
18700	1860	50RB_High	Bottom	/	20.25	21.50	0.081	0.11	0.140	0.19	0.08

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-13: SAR Values (LTE Band2 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
18900	1880	1RB_Mid	Front	/	23.60	25.00	0.116	0.16	0.197	0.27	-0.12
18900	1880	1RB_Mid	Rear	Fig.13	23.60	25.00	0.186	0.26	0.317	0.44	0.03
18700	1860	50RB_High	Front	/	22.59	24.00	0.107	0.15	0.179	0.25	0.13
18700	1860	50RB_High	Rear	/	22.59	24.00	0.162	0.22	0.276	0.38	0.08

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-14: SAR Values (LTE Band4 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20050	1720	1RB_Mid	Left	Touch	Fig.14	23.42	25.00	0.096	0.14	0.146	0.21	0.13
20050	1720	1RB_Mid	Left	Tilt	/	23.42	25.00	0.040	0.06	0.060	0.09	0.05
20050	1720	1RB_Mid	Right	Touch	/	23.42	25.00	0.070	0.10	0.107	0.15	-0.09
20050	1720	1RB_Mid	Right	Tilt	/	23.42	25.00	0.069	0.10	0.113	0.16	0.08
20050	1720	50RB_Low	Left	Touch	/	22.53	24.00	0.076	0.11	0.115	0.16	0.01
20050	1720	50RB_Low	Left	Tilt	/	22.53	24.00	0.033	0.05	0.053	0.07	0.02
20050	1720	50RB_Low	Right	Touch	/	22.53	24.00	0.059	0.08	0.091	0.13	0.04
20050	1720	50RB_Low	Right	Tilt	/	22.53	24.00	0.054	0.08	0.085	0.12	-0.06

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-15 SAR Values (LTE Band4 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20050	1720	1RB_Mid	Front	/	23.42	25.00	0.180	0.26	0.295	0.42	0.12
20300	1745	1RB_Mid	Rear	/	23.34	25.00	0.381	0.56	0.590	0.86	0.03
20175	1732.5	1RB_Mid	Rear	/	23.41	25.00	0.376	0.54	0.579	0.83	0.17
20050	1720	1RB_Mid	Rear	Fig.15	23.42	25.00	0.388	0.56	0.608	0.87	0.03
20050	1720	1RB_Mid	Left	/	23.42	25.00	0.236	0.34	0.403	0.58	0.08
20050	1720	1RB_Mid	Right	/	23.42	25.00	0.096	0.14	0.162	0.23	0.03
20050	1720	1RB_Mid	Bottom	/	23.42	25.00	0.220	0.32	0.386	0.56	0.07
20050	1720	50RB_Low	Front	/	22.53	24.00	0.103	0.14	0.170	0.24	0.03
20050	1720	50RB_Low	Rear	/	22.53	24.00	0.333	0.47	0.529	0.74	0.06
20050	1720	50RB_Low	Left	/	22.53	24.00	0.188	0.26	0.326	0.46	-0.01
20050	1720	50RB_Low	Right	/	22.53	24.00	0.073	0.10	0.128	0.18	0.16
20050	1720	50RB_Low	Bottom	/	22.53	24.00	0.224	0.31	0.394	0.55	0.06
20050	1720	100RB	Rear	/	22.52	24.00	0.324	0.46	0.507	0.71	0.16

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-16: SAR Values (LTE Band5 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20450	829	1RB_Mid	Left	Touch	/	24.17	25.50	0.185	0.25	0.239	0.32	-0.09
20450	829	1RB_Mid	Left	Tilt	/	24.17	25.50	0.122	0.17	0.150	0.20	0.08
20450	829	1RB_Mid	Right	Touch	Fig.16	24.17	25.50	0.204	0.28	0.263	0.36	0.06
20450	829	1RB_Mid	Right	Tilt	/	24.17	25.50	0.149	0.20	0.189	0.26	0.11
20450	829	25RB_Low	Left	Touch	/	23.16	24.50	0.130	0.18	0.169	0.23	-0.12
20450	829	25RB_Low	Left	Tilt	/	23.16	24.50	0.089	0.12	0.112	0.15	-0.02
20450	829	25RB_Low	Right	Touch	/	23.16	24.50	0.143	0.19	0.185	0.25	0.03
20450	829	25RB_Low	Right	Tilt	/	23.16	24.50	0.104	0.14	0.131	0.18	-0.08

Note1: The LTE mode is QPSK_10MHz.

Table 14.1-17: SAR Values (LTE Band5 - Body)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C						
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20450	829	1RB_Mid	Front	/	24.17	25.50	0.265	0.36	0.440	0.60	0.12
20600	844	1RB_Mid	Rear	/	24.07	25.50	0.248	0.34	0.548	0.76	0.16
20525	836.5	1RB_Mid	Rear	/	24.15	25.50	0.271	0.37	0.560	0.76	0.07
20450	829	1RB_Mid	Rear	Fig.17	24.17	25.50	0.378	0.51	0.656	0.89	-0.08
20450	829	1RB_Mid	Left	/	24.17	25.50	0.132	0.18	0.202	0.27	-0.09
20450	829	1RB_Mid	Right	/	24.17	25.50	0.236	0.32	0.361	0.49	-0.13
20450	829	1RB_Mid	Bottom	/	24.17	25.50	0.188	0.26	0.363	0.49	0.03
20450	829	25RB_Low	Front	/	23.16	24.50	0.185	0.25	0.308	0.42	-0.08
20450	829	25RB_Low	Rear	/	23.16	24.50	0.265	0.36	0.459	0.62	0.00
20450	829	25RB_Low	Left	/	23.16	24.50	0.095	0.13	0.145	0.20	-0.13
20450	829	25RB_Low	Right	/	23.16	24.50	0.169	0.23	0.258	0.35	0.10
20450	829	25RB_Low	Bottom	/	23.16	24.50	0.134	0.18	0.259	0.35	-0.07
20450	829	100RB	Rear	/	23.14	24.50	0.234	0.32	0.322	0.44	-0.11

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-18: SAR Values (LTE Band7 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20850	2510	1RB_Mid	Left	Touch	Fig.18	23.33	24.00	0.082	0.10	0.153	0.18	0.01
20850	2510	1RB_Mid	Left	Tilt	/	23.33	24.00	0.055	0.06	0.105	0.12	0.03
20850	2510	1RB_Mid	Right	Touch	/	23.33	24.00	0.069	0.08	0.132	0.15	0.04
20850	2510	1RB_Mid	Right	Tilt	/	23.33	24.00	0.044	0.05	0.079	0.09	0.12
20850	2510	50RB_Mid	Left	Touch	/	22.32	23.00	0.063	0.07	0.115	0.13	0.08
20850	2510	50RB_Mid	Left	Tilt	/	22.32	23.00	0.035	0.04	0.069	0.08	-0.03
20850	2510	50RB_Mid	Right	Touch	/	22.32	23.00	0.050	0.06	0.096	0.11	0.07
20850	2510	50RB_Mid	Right	Tilt	/	22.32	23.00	0.026	0.03	0.048	0.06	0.08

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-19: SAR Values (LTE Band7 - Body)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C						
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
21350	2560	1RB_Mid	Front	/	20.24	21.50	0.116	0.16	0.225	0.30	-0.11
21350	2560	1RB_Mid	Rear	/	20.24	21.50	0.116	0.16	0.238	0.32	-0.13
21350	2560	1RB_Mid	Left	/	20.24	21.50	0.046	0.06	0.083	0.11	0.10
21350	2560	1RB_Mid	Right	/	20.24	21.50	0.035	0.05	0.065	0.09	-0.03
21350	2560	1RB_Mid	Bottom	Fig.19	20.24	21.50	0.204	0.27	0.418	0.56	-0.01
21350	2560	50RB_Mid	Front	/	19.82	21.50	0.101	0.15	0.198	0.29	-0.05
21350	2560	50RB_Mid	Rear	/	19.82	21.50	0.104	0.15	0.211	0.31	-0.03
21350	2560	50RB_Mid	Left	/	19.82	21.50	0.032	0.05	0.060	0.09	0.12
21350	2560	50RB_Mid	Right	/	19.82	21.50	0.032	0.05	0.060	0.09	0.03
21350	2560	50RB_Mid	Bottom	/	19.82	21.50	0.181	0.27	0.371	0.55	0.08

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-20: SAR Values (LTE Band7 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20850	2510	1RB_Mid	Front	/	23.33	24.00	0.171	0.20	0.343	0.40	0.06
20850	2510	1RB_Mid	Rear	Fig.20	23.33	24.00	0.221	0.26	0.440	0.51	-0.07
20850	2510	50RB_Mid	Front	/	22.32	23.00	0.122	0.14	0.245	0.29	0.01
20850	2510	50RB_Mid	Rear	/	22.32	23.00	0.158	0.18	0.315	0.37	-0.11

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-21: SAR Values (LTE Band12 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
23060	704	1RB_Low	Left	Touch	/	24.62	25.00	0.136	0.15	0.171	0.19	0.11
23060	704	1RB_Low	Left	Tilt	/	24.62	25.00	0.099	0.11	0.123	0.13	0.04
23060	704	1RB_Low	Right	Touch	Fig.21	24.62	25.00	0.146	0.16	0.184	0.20	0.09
23060	704	1RB_Low	Right	Tilt	/	24.62	25.00	0.106	0.12	0.132	0.14	0.05
23130	711	25RB_Mid	Left	Touch	/	23.59	24.00	0.119	0.13	0.151	0.17	0.13
23130	711	25RB_Mid	Left	Tilt	/	23.59	24.00	0.081	0.09	0.099	0.11	0.05
23130	711	25RB_Mid	Right	Touch	/	23.59	24.00	0.135	0.15	0.171	0.19	-0.12
23130	711	25RB_Mid	Right	Tilt	/	23.59	24.00	0.092	0.10	0.115	0.13	-0.12

Note1: The LTE mode is QPSK_10MHz.

Table 14.1-22: SAR Values (LTE Band12 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
23060	704	1RB_Low	Front	/	24.62	25.00	0.112	0.12	0.142	0.15	-0.02
23060	704	1RB_Low	Rear	/	24.62	25.00	0.171	0.19	0.221	0.24	-0.03
23060	704	1RB_Low	Left	/	24.62	25.00	0.104	0.11	0.147	0.16	-0.01
23060	704	1RB_Low	Right	Fig.22	24.62	25.00	0.188	0.21	0.266	0.29	0.04
23060	704	1RB_Low	Bottom	/	24.62	25.00	0.104	0.11	0.203	0.22	0.10
23130	711	25RB_Mid	Front	/	23.59	24.00	0.093	0.10	0.135	0.15	-0.10
23130	711	25RB_Mid	Rear	/	23.59	24.00	0.134	0.15	0.211	0.23	-0.04
23130	711	25RB_Mid	Left	/	23.59	24.00	0.058	0.06	0.084	0.09	0.08

23130	711	25RB_Mid	Right	/	23.59	24.00	0.138	0.15	0.197	0.22	-0.12
23130	711	25RB_Mid	Bottom	/	23.59	24.00	0.073	0.08	0.133	0.15	-0.08

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-23: SAR Values (LTE Band13 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
23230	782	1RB_Mid	Left	Touch	Fig.23	22.86	24.00	0.053	0.07	0.066	0.09	-0.03
23230	782	1RB_Mid	Left	Tilt	/	22.86	24.00	<0.01	<0.01	<0.01	<0.01	/
23230	782	1RB_Mid	Right	Touch	/	22.86	24.00	0.052	0.07	0.066	0.09	-0.03
23230	782	1RB_Mid	Right	Tilt	/	22.86	24.00	0.034	0.04	0.042	0.05	0.06
23230	782	25RB_ Mid	Left	Touch	/	21.79	23.00	0.040	0.05	0.050	0.07	-0.05
23230	782	25RB_ Mid	Left	Tilt	/	21.79	23.00	<0.01	<0.01	<0.01	<0.01	/
23230	782	25RB_ Mid	Right	Touch	/	21.79	23.00	0.041	0.05	0.052	0.07	0.05
23230	782	25RB_ Mid	Right	Tilt	/	21.79	23.00	<0.01	<0.01	<0.01	<0.01	/

Note1: The LTE mode is QPSK_10MHz.

Table 14.1-24: SAR Values (LTE Band13 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
23230	782	1RB_Mid	Front	/	22.86	24.00	0.051	0.07	0.084	0.11	0.09
23230	782	1RB_Mid	Rear	Fig.24	22.86	24.00	0.103	0.13	0.184	0.24	-0.05
23230	782	1RB_Mid	Left	/	22.86	24.00	0.027	0.04	0.041	0.05	-0.12
23230	782	1RB_Mid	Right	/	22.86	24.00	0.079	0.10	0.124	0.16	-0.10
23230	782	1RB_Mid	Bottom	/	22.86	24.00	0.076	0.10	0.145	0.19	-0.09
23230	782	25RB_Mid	Front	/	21.79	23.00	0.040	0.05	0.067	0.09	0.00
23230	782	25RB_Mid	Rear	/	21.79	23.00	0.081	0.11	0.144	0.19	0.12
23230	782	25RB_Mid	Left	/	21.79	23.00	0.022	0.03	0.031	0.04	-0.02
23230	782	25RB_Mid	Right	/	21.79	23.00	0.061	0.08	0.096	0.13	0.08
23230	782	25RB_Mid	Bottom	/	21.79	23.00	0.059	0.08	0.113	0.15	0.09

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-25: SAR Values (LTE Band25 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
26365	1882.5	1RB_Mid	Left	Touch	Fig.25	24.03	24.50	0.122	0.14	0.195	0.22	-0.08
26365	1882.5	1RB_Mid	Left	Tilt	/	24.03	24.50	0.063	0.07	0.104	0.12	0.13
26365	1882.5	1RB_Mid	Right	Touch	/	24.03	24.50	0.093	0.10	0.148	0.16	-0.08
26365	1882.5	1RB_Mid	Right	Tilt	/	24.03	24.50	0.105	0.12	0.176	0.20	0.09
26140	1860	50RB_Low	Left	Touch	/	22.97	23.50	0.085	0.10	0.133	0.15	-0.02
26140	1860	50RB_Low	Left	Tilt	/	22.97	23.50	0.047	0.05	0.075	0.08	-0.04
26140	1860	50RB_Low	Right	Touch	/	22.97	23.50	0.061	0.07	0.097	0.11	0.01
26140	1860	50RB_Low	Right	Tilt	/	22.97	23.50	0.063	0.07	0.103	0.12	-0.12

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-26: SAR Values (LTE Band25 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conduc- ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26365	1882.5	1RB_Mid	Front	/	24.03	24.50	0.391	0.44	0.636	0.71	-0.11
26590	1905	1RB_Mid	Rear	Fig.26	24.01	24.50	0.531	0.59	0.869	0.97	-0.02
26365	1882.5	1RB_Mid	Rear	/	24.03	24.50	0.528	0.59	0.860	0.96	0.09
26140	1860	1RB_Mid	Rear	/	24.01	24.50	0.447	0.50	0.774	0.87	0.12
26365	1882.5	1RB_Mid	Left	/	24.03	24.50	0.282	0.31	0.505	0.56	0.01
26365	1882.5	1RB_Mid	Right	/	24.03	24.50	0.167	0.19	0.222	0.25	0.13
26365	1882.5	1RB_Mid	Bottom	/	24.03	24.50	0.343	0.38	0.590	0.66	-0.03
26140	1860	50RB_Low	Front	/	22.97	23.50	0.229	0.26	0.384	0.43	0.08
26140	1860	50RB_Low	Rear	/	22.97	23.50	0.342	0.39	0.600	0.68	-0.08
26140	1860	50RB_Low	Left	/	22.97	23.50	0.195	0.22	0.343	0.39	0.12
26140	1860	50RB_Low	Right	/	22.97	23.50	0.111	0.13	0.183	0.21	0.19
26140	1860	50RB_Low	Bottom	/	22.97	23.50	0.253	0.29	0.439	0.50	-0.13
26140	1860	100RB	Rear	/	22.97	23.50	0.362	0.41	0.639	0.72	0.09

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-27: SAR Values (LTE Band26 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
26775	822.5	1RB_Mid	Left	Touch	/	24.52	25.00	0.152	0.17	0.193	0.22	0.03
26775	822.5	1RB_Mid	Left	Tilt	/	24.52	25.00	0.093	0.10	0.115	0.13	-0.08
26775	822.5	1RB_Mid	Right	Touch	Fig.27	24.52	25.00	0.203	0.23	0.262	0.29	0.03
26775	822.5	1RB_Mid	Right	Tilt	/	24.52	25.00	0.132	0.15	0.168	0.19	-0.01
26775	822.5	36RB_Low	Left	Touch		23.47	24.00	0.118	0.13	0.150	0.17	0.00
26775	822.5	36RB_Low	Left	Tilt	/	23.47	24.00	0.071	0.08	0.088	0.10	0.01
26775	822.5	36RB_Low	Right	Touch	/	23.47	24.00	0.156	0.18	0.200	0.23	0.13
26775	822.5	36RB_Low	Right	Tilt	/	23.47	24.00	0.101	0.11	0.127	0.14	-0.07

Note1: The LTE mode is QPSK_15MHz.

Table 14.1-28: SAR Values (LTE Band26 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26775	822.5	1RB_Mid	Front	/	24.52	25.00	0.205	0.23	0.319	0.36	0.06
26775	822.5	1RB_Mid	Rear	Fig.28	24.52	25.00	0.267	0.30	0.449	0.50	0.10
26775	822.5	1RB_Mid	Left	/	24.52	25.00	0.104	0.12	0.153	0.17	-0.05
26775	822.5	1RB_Mid	Right	/	24.52	25.00	0.190	0.21	0.279	0.31	0.02
26775	822.5	1RB_Mid	Bottom	/	24.52	25.00	0.204	0.23	0.367	0.41	0.00
26775	822.5	36RB_Low	Front	/	23.47	24.00	0.160	0.18	0.249	0.28	-0.06
26775	822.5	36RB_Low	Rear	/	23.47	24.00	0.205	0.23	0.343	0.39	-0.10
26775	822.5	36RB_Low	Left	/	23.47	24.00	0.082	0.09	0.121	0.14	0.09
26775	822.5	36RB_Low	Right	/	23.47	24.00	0.150	0.17	0.221	0.25	0.12
26775	822.5	36RB_Low	Bottom	/	23.47	24.00	0.154	0.17	0.276	0.31	-0.11

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

Note2: The LTE mode is QPSK_15MHz.

Table 14.1-29: SAR Values (LTE Band38 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
37850	2580	1RB_Mid	Left	Touch	Fig.29	23.14	23.50	0.018	0.02	0.034	0.04	-0.08
37850	2580	1RB_Mid	Left	Tilt	/	23.14	23.50	0.013	0.01	0.024	0.03	-0.10
37850	2580	1RB_Mid	Right	Touch	/	23.14	23.50	0.016	0.02	0.031	0.03	0.10
37850	2580	1RB_Mid	Right	Tilt	/	23.14	23.50	<0.01	<0.01	<0.01	<0.01	/
37850	2580	50RB_Low	Left	Touch	/	22.03	22.50	0.015	0.02	0.027	0.03	-0.01
37850	2580	50RB_Low	Left	Tilt	/	22.03	22.50	0.009	0.01	0.019	0.02	-0.11
37850	2580	50RB_Low	Right	Touch	/	22.03	22.50	0.013	0.01	0.025	0.03	-0.05
37850	2580	50RB_Low	Right	Tilt	/	22.03	22.50	<0.01	<0.01	<0.01	<0.01	/

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-30: SAR Values (LTE Band38 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
37850	2580	1RB_Mid	Front	/	23.14	23.50	0.135	0.15	0.294	0.32	-0.09
37850	2580	1RB_Mid	Rear	/	23.14	23.50	0.155	0.17	0.327	0.36	-0.01
37850	2580	1RB_Mid	Left	/	23.14	23.50	0.025	0.03	0.047	0.05	0.08
37850	2580	1RB_Mid	Right	/	23.14	23.50	0.073	0.08	0.143	0.16	-0.04
37850	2580	1RB_Mid	Bottom	Fig.30	23.14	23.50	0.248	0.27	0.518	0.56	-0.05
37850	2580	50RB_Low	Front	/	22.03	22.50	0.104	0.12	0.230	0.26	0.13
37850	2580	50RB_Low	Rear	/	22.03	22.50	0.123	0.14	0.258	0.29	0.12
37850	2580	50RB_Low	Left	/	22.03	22.50	0.021	0.02	0.039	0.04	0.06
37850	2580	50RB_Low	Right	/	22.03	22.50	0.057	0.06	0.113	0.13	0.01
37850	2580	50RB_Low	Bottom	/	22.03	22.50	0.195	0.22	0.407	0.45	0.10

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-31: SAR Values (LTE Band41 PC2- Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
39750	2506	1RB_Mid	Left	Touch	Fig.31	26.58	27.00	0.081	0.09	0.150	0.17	0.04
39750	2506	1RB_Mid	Left	Tilt	/	26.58	27.00	0.054	0.06	0.106	0.12	-0.10
39750	2506	1RB_Mid	Right	Touch	/	26.58	27.00	0.045	0.05	0.087	0.10	-0.02
39750	2506	1RB_Mid	Right	Tilt	/	26.58	27.00	0.028	0.03	0.053	0.06	-0.05
39750	2506	50RB_Low	Left	Touch	/	25.54	26.00	0.065	0.07	0.122	0.14	-0.11
39750	2506	50RB_Low	Left	Tilt	/	25.54	26.00	0.047	0.05	0.091	0.10	0.02
39750	2506	50RB_Low	Right	Touch	/	25.54	26.00	0.034	0.04	0.065	0.07	-0.03
39750	2506	50RB_Low	Right	Tilt	/	25.54	26.00	0.023	0.03	0.043	0.05	0.02

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-32: SAR Values (LTE Band41 PC2- Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
39750	2506	1RB_Mid	Front	/	26.58	27.00	0.289	0.32	0.599	0.66	-0.04
39750	2506	1RB_Mid	Rear	/	26.58	27.00	0.309	0.34	0.655	0.72	-0.06
39750	2506	1RB_Mid	Left	/	26.58	27.00	0.142	0.16	0.265	0.29	0.13
39750	2506	1RB_Mid	Right	/	26.58	27.00	0.131	0.14	0.254	0.28	-0.04
41490	2680	1RB_Mid	Bottom	/	26.44	27.00	0.476	0.54	1.020	1.16	0.01
41055	2636.5	1RB_Mid	Bottom	Fig.32	26.38	27.00	0.547	0.63	1.150	1.33	0.11
40620	2593	1RB_Mid	Bottom	/	26.51	27.00	0.551	0.62	1.140	1.28	0.07
40185	2549.5	1RB_Mid	Bottom	/	26.42	27.00	0.460	0.53	0.960	1.10	0.04
39750	2506	1RB_Mid	Bottom	/	26.58	27.00	0.518	0.57	1.080	1.19	-0.06
39750	2506	50RB_Low	Front	/	25.54	26.00	0.232	0.26	0.481	0.53	-0.09
39750	2506	50RB_Low	Rear	/	25.54	26.00	0.244	0.27	0.519	0.58	-0.03
39750	2506	50RB_Low	Left	/	25.54	26.00	0.112	0.12	0.209	0.23	0.00
39750	2506	50RB_Low	Right	/	25.54	26.00	0.105	0.12	0.203	0.23	-0.01
41490	2680	50RB_Mid	Bottom	/	25.45	26.00	0.392	0.44	0.834	0.95	0.01
41055	2636.5	50RB_Low	Bottom	/	25.39	26.00	0.439	0.51	0.925	1.06	0.04
40620	2593	50RB_Low	Bottom	/	25.53	26.00	0.425	0.47	0.881	0.98	-0.03
40185	2549.5	50RB_Mid	Bottom	/	25.36	26.00	0.365	0.42	0.767	0.89	0.09
39750	2506	50RB_Low	Bottom	/	25.54	26.00	0.409	0.45	0.856	0.95	-0.13
39750	2506	100RB	Bottom	/	25.53	26.00	0.423	0.47	0.883	0.98	0.12

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

Note4: The LTE mode is QPSK_20MHz.

Table 14.1-33: SAR Values (LTE Band41 PC3- Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
39750	2506	1RB_Mid	Left	Touch	Fig.33	23.62	24.00	0.059	0.06	0.109	0.12	0.09
39750	2506	1RB_Mid	Left	Tilt	/	23.62	24.00	0.035	0.04	0.065	0.07	0.07
39750	2506	1RB_Mid	Right	Touch	/	23.62	24.00	0.039	0.04	0.074	0.08	0.03
39750	2506	1RB_Mid	Right	Tilt	/	23.62	24.00	0.020	0.02	0.036	0.04	0.10
39750	2506	50RB_Mid	Left	Touch	/	22.58	23.00	0.047	0.05	0.085	0.09	-0.02
39750	2506	50RB_Mid	Left	Tilt	/	22.58	23.00	0.028	0.03	0.052	0.06	-0.13
39750	2506	50RB_Mid	Right	Touch	/	22.58	23.00	0.031	0.03	0.059	0.06	-0.02
39750	2506	50RB_Mid	Right	Tilt	/	22.58	23.00	<0.01	<0.01	<0.01	<0.01	/
41515	2682.5	1RB_Low	Left	Touch	ULCA	23.28	24.00	0.051	0.06	0.096	0.11	0.17

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-34: SAR Values (LTE Band41 PC3- Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
39750	2506	1RB_Mid	Front	/	23.62	24.00	0.200	0.22	0.426	0.46	0.13
39750	2506	1RB_Mid	Rear	/	23.62	24.00	0.217	0.24	0.497	0.54	0.13
39750	2506	1RB_Mid	Left	/	23.62	24.00	0.079	0.09	0.144	0.16	0.12
39750	2506	1RB_Mid	Right	/	23.62	24.00	0.108	0.12	0.210	0.23	0.11
41490	2680	1RB_Mid	Bottom	/	23.59	24.00	0.363	0.40	0.776	0.85	-0.04
41055	2636.5	1RB_Mid	Bottom	Fig.34	23.48	24.00	0.417	0.47	0.883	1.00	-0.06
40620	2593	1RB_Mid	Bottom	/	23.59	24.00	0.416	0.46	0.874	0.96	-0.04
40185	2549.5	1RB_Mid	Bottom	/	23.48	24.00	0.351	0.40	0.741	0.84	0.11
39750	2506	1RB_Mid	Bottom	/	23.62	24.00	0.382	0.42	0.841	0.92	-0.07
39750	2506	50RB_Mid	Front	/	22.58	23.00	0.161	0.18	0.341	0.38	-0.11
39750	2506	50RB_Mid	Rear	/	22.58	23.00	0.178	0.20	0.403	0.44	0.08
39750	2506	50RB_Mid	Left	/	22.58	23.00	0.064	0.07	0.116	0.13	-0.05
39750	2506	50RB_Mid	Right	/	22.58	23.00	0.091	0.10	0.175	0.19	-0.05
39750	2506	50RB_Mid	Bottom	/	22.58	23.00	0.310	0.34	0.685	0.75	0.05
39750	2506	100RB	Bottom	/	22.56	23.00	0.255	0.28	0.510	0.56	0.19
41515	2682.5	1RB_Low	Bottom	ULCA	23.28	24.00	0.391	0.46	0.829	0.98	0.17

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

Note4: The LTE mode is QPSK_20MHz.

Table 14.1-35: SAR Values (LTE Band66 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
132322	1745	1RB_Mid	Left	Touch	Fig.35	23.90	24.50	0.138	0.16	0.297	0.34	-0.11
132322	1745	1RB_Mid	Left	Tilt	/	23.90	24.50	0.061	0.07	0.150	0.17	-0.04
132322	1745	1RB_Mid	Right	Touch	/	23.90	24.50	0.095	0.11	0.205	0.24	-0.05
132322	1745	1RB_Mid	Right	Tilt	/	23.90	24.50	0.070	0.08	0.150	0.17	0.07
132072	1720	50RB_Mid	Left	Touch	/	23.04	23.50	0.103	0.11	0.217	0.24	0.06
132072	1720	50RB_Mid	Left	Tilt	/	23.04	23.50	0.060	0.07	0.131	0.15	-0.03
132072	1720	50RB_Mid	Right	Touch	/	23.04	23.50	0.070	0.08	0.147	0.16	0.09
132072	1720	50RB_Mid	Right	Tilt	/	23.04	23.50	0.046	0.05	0.096	0.11	0.08

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-36: SAR Values (LTE Band66 - Body)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132072	1720	1RB_Mid	Front	/	22.47	22.60	0.155	0.16	0.261	0.27	0.13
132072	1720	1RB_Mid	Rear	Fig.36	22.47	22.60	0.214	0.22	0.357	0.37	-0.07
132072	1720	1RB_Mid	Left	/	22.47	22.60	0.080	0.08	0.147	0.15	0.10
132072	1720	1RB_Mid	Right	/	22.47	22.60	0.056	0.06	0.103	0.11	0.06
132072	1720	1RB_Mid	Bottom	/	22.47	22.60	0.174	0.18	0.313	0.32	-0.13
132072	1720	50RB_Low	Front	/	22.02	22.60	0.134	0.15	0.228	0.26	-0.08
132072	1720	50RB_Low	Rear	/	22.02	22.60	0.186	0.21	0.310	0.35	0.05
132072	1720	50RB_Low	Left	/	22.02	22.60	0.070	0.08	0.129	0.15	-0.03
132072	1720	50RB_Low	Right	/	22.02	22.60	0.043	0.05	0.091	0.10	0.17
132072	1720	50RB_Low	Bottom	/	22.02	22.60	0.150	0.17	0.271	0.31	-0.05

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-37: SAR Values (LTE Band66 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132322	1745	1RB_Mid	Front	/	23.90	24.50	0.157	0.18	0.241	0.28	0.10
132322	1745	1RB_Mid	Rear	Fig.37	23.90	24.50	0.242	0.28	0.374	0.43	-0.02
132072	1720	50RB_Mid	Front	/	23.04	23.50	0.132	0.15	0.205	0.23	0.04
132072	1720	50RB_Mid	Rear	/	23.04	23.50	0.202	0.22	0.314	0.35	0.03

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-38: SAR Values (LTE Band71 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
133222	673	1RB_Mid	Left	Touch	/	24.41	25.00	0.085	0.10	0.104	0.12	0.10
133222	673	1RB_Mid	Left	Tilt	/	24.41	25.00	0.055	0.06	0.066	0.08	0.12
133222	673	1RB_Mid	Right	Touch	Fig.38	24.41	25.00	0.150	0.17	0.185	0.21	-0.10
133222	673	1RB_Mid	Right	Tilt	/	24.41	25.00	0.066	0.08	0.079	0.09	-0.02
133322	683	50RB_Mid	Left	Touch	/	23.39	24.00	0.064	0.07	0.077	0.09	-0.05
133322	683	50RB_Mid	Left	Tilt	/	23.39	24.00	0.041	0.05	0.049	0.06	-0.09
133322	683	50RB_Mid	Right	Touch	/	23.39	24.00	0.083	0.10	0.102	0.12	0.06
133322	683	50RB_Mid	Right	Tilt	/	23.39	24.00	0.047	0.05	0.071	0.08	-0.08

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-39: SAR Values (LTE Band71 - Body)

Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
133222	673	1RB_Mid	Front	/	24.41	25.00	0.148	0.17	0.190	0.22	0.12
133222	673	1RB_Mid	Rear	/	24.41	25.00	0.175	0.20	0.269	0.31	-0.10
133222	673	1RB_Mid	Left	/	24.41	25.00	0.145	0.17	0.206	0.24	0.13
133222	673	1RB_Mid	Right	Fig.39	24.41	25.00	0.204	0.23	0.289	0.33	-0.07
133222	673	1RB_Mid	Bottom	/	24.41	25.00	0.123	0.14	0.225	0.26	-0.10
133322	683	50RB_Mid	Front	/	23.39	24.00	0.110	0.13	0.141	0.16	0.10
133322	683	50RB_Mid	Rear	/	23.39	24.00	0.176	0.20	0.228	0.26	-0.09
133322	683	50RB_Mid	Left	/	23.39	24.00	0.114	0.13	0.159	0.18	-0.13
133322	683	50RB_Mid	Right	/	23.39	24.00	0.204	0.23	0.285	0.33	-0.13
133322	683	50RB_Mid	Bottom	/	23.39	24.00	0.086	0.10	0.158	0.18	0.12

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

Note2: The LTE mode is QPSK_20MHz.

14.2 SAR results for Standard procedure(ANT0)

There is zoom scan measurement to be added for the highest measured SAR in each exposure configuration/band.

Table 14.2-1: SAR Values (GSM 850 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	Right	Touch	Fig.1	32.60	33.50	0.156	0.19	0.202	0.25	-0.05

Table 14.2-2: SAR Values (GSM 850 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode (number of timeslots)	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	GPRS (2)	Rear	Fig.2	31.62	32.50	0.431	0.53	0.739	0.90	0.11

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

Table 14.2-3: SAR Values (GSM 1900 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
661	1880	Left	Touch	Fig.3	29.44	30.50	0.090	0.11	0.144	0.18	0.03

Table 14.2-4: SAR Values (GSM 1900 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode (number of timeslots)	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
810	1909.8	GPRS (2)	Rear	Fig.4	28.20	29.50	0.327	0.44	0.558	0.75	-0.10

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

Table 14.2-5: SAR Values (WCDMA 850 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
4132	826.4	Right	Touch	Fig.5	23.78	25.50	0.183	0.27	0.235	0.35	-0.11

Table 14.2-6: SAR Values (WCDMA 850 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
4132	826.4	Rear	Fig.6	23.78	25.50	0.207	0.31	0.353	0.52	0.10

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

Table 14.2-7: SAR Values (WCDMA 1700 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
1513	1752.6	Left	Touch	Fig.7	22.88	24.50	0.103	0.15	0.158	0.23	0.09

Table 14.2-8: SAR Values (WCDMA 1700 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
1513	1752.6	Rear	Fig.8	22.88	24.50	0.287	0.42	0.446	0.65	-0.13

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

Table 14.2-9: SAR Values (WCDMA 1900 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
9400	1880	Left	Touch	Fig.9	22.83	24.50	0.131	0.19	0.206	0.30	0.11

Table 14.2-10: SAR Values (WCDMA 1900 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
9400	1880	Rear	Fig.10	22.83	24.50	0.348	0.51	0.564	0.83	0.07

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

Table 14.2-11: SAR Values (LTE Band2 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
18900	1880	1RB_Mid	Left	Touch	Fig.11	23.60	25.00	0.111	0.15	0.174	0.24	0.06

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-12: SAR Values (LTE Band2 - Body)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
18900	1880	1RB_Mid	Rear	Fig.12	20.66	21.50	0.198	0.24	0.334	0.41	-0.01

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-13: SAR Values (LTE Band2 - Body)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C						
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
18900	1880	1RB_Mid	Rear	Fig.13	23.60	25.00	0.186	0.26	0.317	0.44	0.03

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-14: SAR Values (LTE Band4 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20050	1720	1RB_Mid	Left	Touch	Fig.14	23.42	25.00	0.096	0.14	0.146	0.21	0.13

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-15 SAR Values (LTE Band4 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20050	1720	1RB_Mid	Rear	Fig.15	23.42	25.00	0.388	0.56	0.608	0.87	0.03

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-16: SAR Values (LTE Band5 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Positio n	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20450	829	1RB_Mid	Right	Touch	Fig.16	24.17	25.50	0.204	0.28	0.263	0.36	0.06

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-17: SAR Values (LTE Band5 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20450	829	1RB_Mid	Rear	Fig.17	24.17	25.50	0.378	0.51	0.656	0.89	-0.08

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-18: SAR Values (LTE Band7 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20850	2510	1RB_Mid	Left	Touch	Fig.18	23.33	24.00	0.082	0.10	0.153	0.18	0.01

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-19: SAR Values (LTE Band7 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
21350	2560	1RB_Mid	Bottom	Fig.19	20.24	21.50	0.204	0.27	0.418	0.56	-0.01

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-20: SAR Values (LTE Band7 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20850	2510	1RB_Mid	Rear	Fig.20	23.33	24.00	0.221	0.26	0.440	0.51	-0.07

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-21: SAR Values (LTE Band12 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
23060	704	1RB_Low	Right	Touch	Fig.21	24.62	25.00	0.146	0.16	0.184	0.20	0.09

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-22: SAR Values (LTE Band12 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
23060	704	1RB_Low	Right	Fig.22	24.62	25.00	0.188	0.21	0.266	0.29	0.04

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-23: SAR Values (LTE Band13 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
23230	782	1RB_Mid	Left	Touch	Fig.23	22.86	24.00	0.053	0.07	0.066	0.09	-0.03

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-24: SAR Values (LTE Band13 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
23230	782	1RB_Mid	Rear	Fig.24	22.86	24.00	0.103	0.13	0.184	0.24	-0.05

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-25: SAR Values (LTE Band25 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
26365	1882.5	1RB_Mid	Left	Touch	Fig.25	24.03	24.50	0.122	0.14	0.195	0.22	-0.08

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-26: SAR Values (LTE Band25 - Body)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26590	1905	1RB_Mid	Rear	Fig.26	24.01	24.50	0.531	0.59	0.869	0.97	-0.02

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-27: SAR Values (LTE Band26 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
26775	822.5	1RB_Mid	Right	Touch	Fig.27	24.52	25.00	0.203	0.23	0.262	0.29	0.03

Note1: The LTE mode is QPSK_15MHz.

Table 14.2-28: SAR Values (LTE Band26 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26775	822.5	1RB_Mid	Rear	Fig.28	24.52	25.00	0.267	0.30	0.449	0.50	0.10

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

Note2: The LTE mode is QPSK_15MHz.

Table 14.2-29: SAR Values (LTE Band38 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
37850	2580	1RB_Mid	Left	Touch	Fig.29	23.14	23.50	0.018	0.02	0.034	0.04	-0.08

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-30: SAR Values (LTE Band38 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conduc ted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
37850	2580	1RB_Mid	Bottom	Fig.30	23.14	23.50	0.248	0.27	0.518	0.56	-0.05

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-31: SAR Values (LTE Band41 PC2- Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
39750	2506	1RB_Mid	Left	Touch	Fig.31	26.58	27.00	0.081	0.09	0.150	0.17	0.04

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-32: SAR Values (LTE Band41 PC2- Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
41055	2636.5	1RB_Mid	Bottom	Fig.32	26.38	27.00	0.547	0.63	1.15	1.33	0.11

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

Note4: The LTE mode is QPSK_20MHz.

Table 14.2-33: SAR Values (LTE Band41 PC3- Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
39750	2506	1RB_Mid	Left	Touch	Fig.33	23.62	24.00	0.059	0.06	0.109	0.12	0.09

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-34: SAR Values (LTE Band41 PC3- Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
41055	2636.5	1RB_Mid	Bottom	Fig.34	23.48	24.00	0.417	0.47	0.883	1.00	-0.06

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

Note4: The LTE mode is QPSK_20MHz.

Table 14.2-35: SAR Values (LTE Band66 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
132322	1745	1RB_Mid	Left	Touch	Fig.35	23.90	24.50	0.138	0.16	0.297	0.34	-0.11

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-36: SAR Values (LTE Band66 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132072	1720	1RB_Mid	Rear	Fig.36	22.47	22.50	0.214	0.22	0.357	0.36	-0.07

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-37: SAR Values (LTE Band66 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132322	1745	1RB_Mid	Rear	Fig.37	23.90	24.50	0.242	0.28	0.374	0.43	-0.02

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-38: SAR Values (LTE Band71 - Head)

Ambient Temperature: 22.9 °C							Liquid Temperature: 22.5°C					
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
133222	673	1RB_Mid	Right	Touch	Fig.38	24.41	25.00	0.150	0.17	0.185	0.21	-0.10

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-39: SAR Values (LTE Band71 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
133222	673	1RB_Mid	Right	Fig.39	24.41	25.00	0.204	0.23	0.289	0.33	-0.07

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

Note2: The LTE mode is QPSK_20MHz.

14.3 WLAN Evaluation for 2.4G

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

Head Evaluation-Standalone

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.										
2437	6	Left	Touch	/	13.46	14	0.245	0.28	0.668	0.76	-0.04
2437	6	Left	Tilt	/	13.46	14	0.210	0.24	0.503	0.57	0.05
2437	6	Right	Touch	/	13.46	14	0.076	0.09	0.183	0.21	-0.10
2437	6	Right	Tilt	/	13.46	14	0.100	0.11	0.250	0.28	0.00

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

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.										
2437	6	Left	Touch	Fig.40	13.46	14	0.231	0.26	0.630	0.71	-0.04
2437	6	Left	Tilt		13.46	14	0.200	0.23	0.578	0.65	0.05

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

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

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

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

Ambient Temperature: 22.9 °C				Liquid Temperature: 22.5°C			
Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.						
2437	6	Left	Touch	100%	100%	0.71	0.71

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

Body Evaluation- Standalone

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.									
2437	6	Front 0mm	/	13.48	14.5	0.095	0.12	0.211	0.27	0.02
2437	6	Rear 0mm	/	13.48	14.5	0.126	0.16	0.294	0.37	0.07
2437	6	Right 0mm	/	23.05	24	0.279	0.35	0.550	0.68	0.19
2437	6	Top 0mm	/	13.48	14.5	0.178	0.23	0.439	0.56	0.13
2437	6	Front 13mm	/	23.05	24	0.280	0.35	0.566	0.70	0.08
2437	6	Rear 24mm	/	23.05	24	0.129	0.16	0.236	0.29	0.08
2437	6	Top 18mm	/	23.05	24	0.281	0.35	0.569	0.71	-0.01
2437	6	Front 15mm	/	23.05	24	0.249	0.31	0.495	0.62	-0.06
2437	6	Rear 15mm	/	13.48	14.5	0.062	0.08	0.132	0.17	0.00

As shown above table, the initial test position for body is “Top 18mm ”. So the body SAR of WLAN is presented as below:

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

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C					
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.									
2437	6	Rear 24mm	Fig.41	23.05	24	0.285	0.35	0.573	0.71	0.08
2437	6	Top 18mm		23.05	24	0.290	0.36	0.565	0.70	-0.01

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

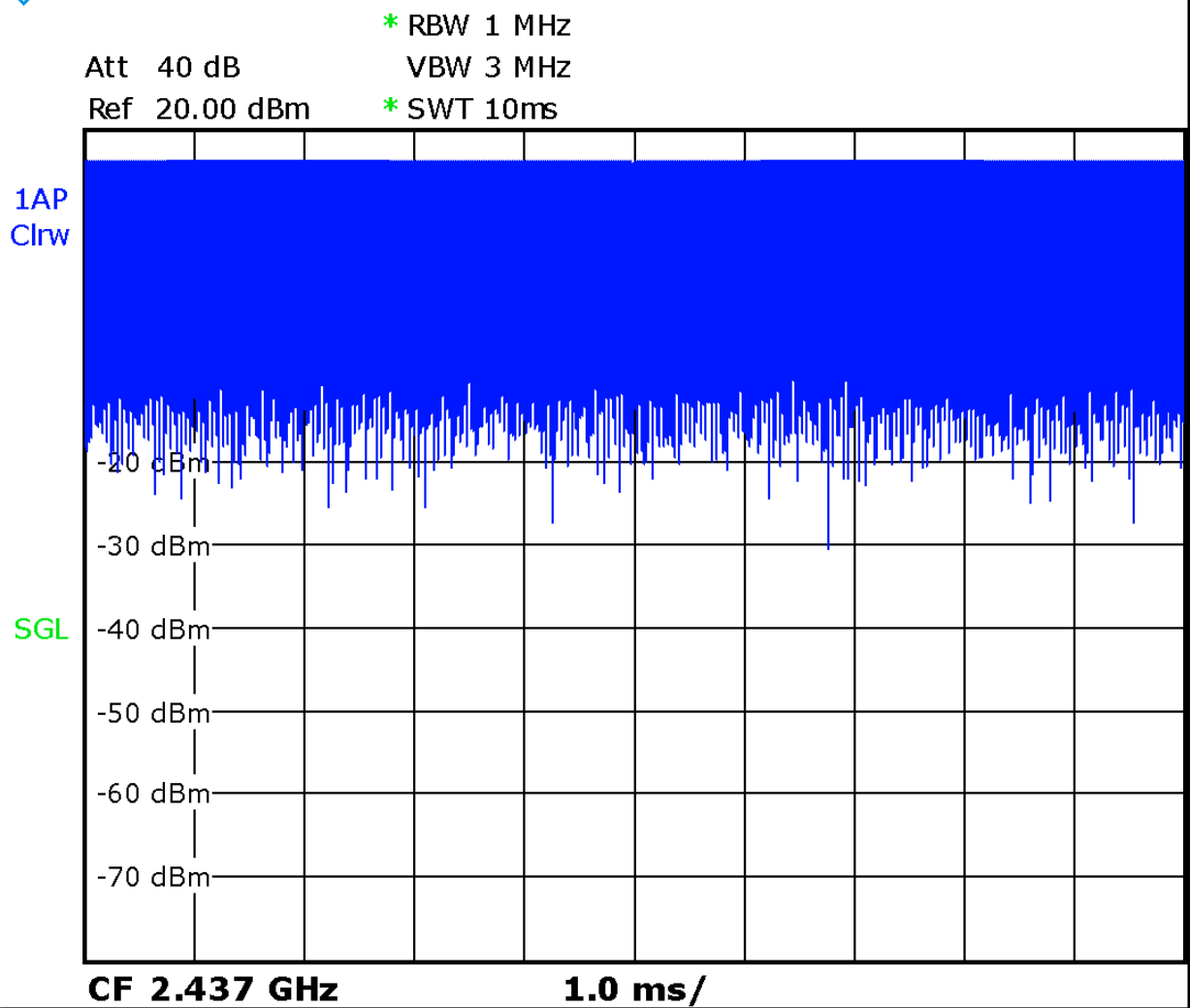
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg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

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

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

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.					
2437	6	Rear 24mm	100%	100%	0.71	0.71

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



Picture 14.1 Duty factor plot for head

14.4 WLAN Evaluation For 5G

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

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

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

Table 14.4-2: Maximum output power specified of WLAN antenna for Head (Receiver on+ sensor on)

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

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

Table 14.4-3: Maximum output power specified of WLAN antenna for Body (Receiver off + sensor on)

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	22		22	22	22	22	22	
U-NII-2A	22		22	22	22	22	22	
U-NII-2C	25		25	25	25	25	25	
U-NII-3	32		32	32	32	32	32	
§ 15.247 (5.8 GHz)								

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

Table 14.4-4: Maximum output power specified of WLAN antenna for Body (Receiver off + sensor on)

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	112		100	100	100	100	100	
U-NII-2A	112		100	100	100	100	100	
U-NII-2C	141		126	112	112	112	112	
U-NII-3	158		141	112	112	112	112	
§ 15.247 (5.8 GHz)								
- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes. - The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.								

Table 14.4-5: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations - Head (Receiver on+ sensor on)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 Lower power	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 16
U-NII-2A	52/56/60/64 Lower power	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 18
U-NII-2C	100/104/108/112 116/120/124/128 132/136/140/144 Lower power	100/104/108/112 116/132/136/140 Lower power	102/110/134 Lower power	100/104/108/112 116/132/136/140 Lower power	102/110/134 Lower power	106/122/ 138 17/18/ 19
U-NII-3	149/153/157/161/ 165 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 22
- The bold numbers is the maximum output measured power (mW). - Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are highlighted in yellow.						

Table 14.4-6: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations - Body (Receiver off + sensor on)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 Lower power	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 16
U-NII-2A	52/56/60/64 Lower power	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 19
U-NII-2C	100/104/108/112 116/120/124/128 132/136/140/144 Lower power	100/104/108/112 116/132/136/140 Lower power	102/110/134 Lower power	100/104/108/112 116/132/136/140 Lower power	102/110/134 Lower power	106/122/138 20/19/21
U-NII-3	149/153/157/161/ 165 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 24
- The bold numbers is the maximum output measured power (mW). - Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are highlighted in yellow.						

Table 14.4-7: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations – Body (Receiver off + sensor off)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 76/76/75/75	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 80/90/101/109	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/112 98/94/89/86 116/120/124/128 85/86/92/96 132/136/140/144 100/101/99/97	100/104/108/112 116/132/136/140 Lower power	102/110/134 Lower power	100/104/108 /112 116/132/136/ 140 Lower power	102/110/134 Lower power	106 Lower power
U-NII-3	149/153/157/161/165 100/107/113/118/121	149/153/157/16 1/165 Lower power	151/159 Lower power	149/153/157 /161/165 Lower power	151/159 Lower power	155 Lower power
- The bold numbers is the maximum output measured power (mW). - Channels with measured maximum power within 0.25dB are considered to have the same measured output. Channels selected for initial test configuration are highlighted in yellow.						

Table 14.4-8: Reported SAR of initial test configuration for Head (Receiver on+ sensor on)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42 UNII-2A exclusion applied
U-NII-2A	52/56/60/64	52/56/60/64	54/62	52/56/60/64	54/62	58 0.17
U-NII-2C	100/104/108/112/ 116/120/124/128/ 132/136/140/144	100/104/108/112 116/132/136/140	102/110/118/ 126/134	100/104/108/112 116/132/136/140	102/110 /134	106/122/138 0.51
U-NII-3	149/153/157/161 /165	149/153/157/161 /165	151/159	149/153/157/161 /165	151/159	155 0.58

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

The tune up of UNII-1 is less than UNII-2A. SAR is measured for UNII-2A band first. Adjusted SAR of UNII-2A band is ≤ 1.2 W/kg. SAR is not required for UNII-1 band.

Table 14.4-9: Reported SAR of initial test configuration for Body (Receiver off + sensor on)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42 UNII-2A exclusion applied
U-NII-2A	52/56/60/64	52/56/60/64	54/62	52/56/60/64	54/62	58 0.17
U-NII-2C	100/104/108/112/ 116/120/124/128/ 132/136/140/144	100/104/108/112 116/132/136/140	102/110/118/ 126/134	100/104/108/112 116/132/136/140	102/110 /134	106/122/138 0.39
U-NII-3	149/153/157/161 /165	149/153/157/161 /165	151/159	149/153/157/161 /165	151/159	155 0.38

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

The tune up of UNII-1 is less than UNII-2A. SAR is measured for UNII-2A band first. Adjusted SAR of UNII-2A band is ≤ 1.2 W/kg. SAR is not required for UNII-1 band.

Table 14.4-10: Reported SAR of initial test configuration for Body (Receiver off + sensor off)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 UNII-2A exclusion applied	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64 0.32	52/56/60/64	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/ 116/120/124/128/ 132/136/140/144 0.56	100/104/108/112 116/132/136/140	102/110/118/ 126/134	100/104/108/112 116/132/136/140	102/110 /134	106/122/138
U-NII-3	149/153/157/161 /165 0.66	149/153/157/161 /165	151/159	149/153/157/161 /165	151/159	155

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

The tune up of UNII-1 is less than UNII-2A. SAR is measured for UNII-2A band first. Adjusted SAR of UNII-2A band is ≤ 1.2 W/kg. SAR is not required for UNII-1 band.

Table 14.4-11: SAR Values (WLAN – Head standalone)

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
5290	58	Left	Touch	/	12.45	13	0.023	0.03	0.099	0.11	0.05
5290	58	Left	Tilt	/	12.45	13	0.035	0.04	0.148	0.17	-0.08
5290	58	Right	Touch	/	12.45	13	0.015	0.02	0.068	0.08	0.11
5290	58	Right	Tilt	/	12.45	13	0.022	0.02	0.096	0.11	-0.09
5690	138	Left	Touch	/	12.81	14	0.083	0.11	0.290	0.38	-0.10
5690	138	Left	Tilt	/	12.81	14	0.105	0.14	0.390	0.51	0.05
5690	138	Right	Touch	/	12.81	14	0.059	0.08	0.202	0.27	-0.04
5690	138	Right	Tilt	/	12.81	14	0.085	0.11	0.276	0.36	-0.13
5775	155	Left	Touch		13.42	15	0.100	0.14	0.370	0.53	-0.08
5775	155	Left	Tilt	Fig.42	13.42	15	0.114	0.16	0.404	0.58	-0.12
5775	155	Right	Touch	/	13.42	15	0.089	0.13	0.296	0.43	-0.07
5775	155	Right	Tilt	/	13.42	15	0.119	0.17	0.384	0.55	-0.11

Table 14.4-12: SAR Values (WLAN - Body)

Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
5290	58	Front	/	12.89	13.5	0.011	0.01	0.030	0.03	0.04
5290	58	Rear	/	12.89	13.5	0.025	0.03	0.075	0.09	-0.11
5290	58	Top	/	12.89	13.5	0.044	0.05	0.147	0.17	-0.06
5690	138	Front	/	13.24	14	0.035	0.04	0.103	0.12	-0.10
5690	138	Rear	/	13.24	14	0.098	0.12	0.284	0.34	0.01
5690	138	Top	/	13.24	14	0.112	0.13	0.325	0.39	0.06
5775	155	Front	/	13.8	15	0.035	0.05	0.099	0.13	0.05
5775	155	Rear	/	13.8	15	0.090	0.12	0.262	0.35	-0.03
5775	155	Top	/	13.8	15	0.101	0.13	0.290	0.38	-0.07
5320	64	Front	Note2	20.37	20.5	0.038	0.04	0.094	0.09	0.08
5320	64	Rear	Note3	20.37	20.5	0.042	0.04	0.108	0.19	0.01
5320	64	Right	/	20.37	20.5	0.050	0.05	0.129	0.12	-0.11
5320	64	Top	Note4	20.37	20.5	0.074	0.08	0.183	0.32	-0.07
5680	136	Front	Note2	20.05	21.5	0.054	0.08	0.136	0.19	0.02
5680	136	Rear	Note3	20.05	21.5	0.180	0.25	0.404	0.56	0.06
5680	136	Right	/	20.05	21.5	0.092	0.13	0.216	0.30	0.00
5680	136	Top	Note4	20.05	21.5	0.124	0.17	0.307	0.43	0.01
5825	165	Front	Note2	20.82	22	0.181	0.24	0.487	0.64	-0.13
5825	165	Rear	Note3 Fig.43	20.82	22	0.211	0.28	0.500	0.66	0.17
5825	165	Right	/	20.82	22	0.149	0.20	0.350	0.46	0.09
5825	165	Rear	Note3	20.82	22	0.169	0.22	0.419	0.55	0.03

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

Note2: The distance between the EUT and the phantom bottom is 13mm.

Note3: The distance between the EUT and the phantom bottom is 24mm.

Note4: The distance between the EUT and the phantom bottom is 20mm.

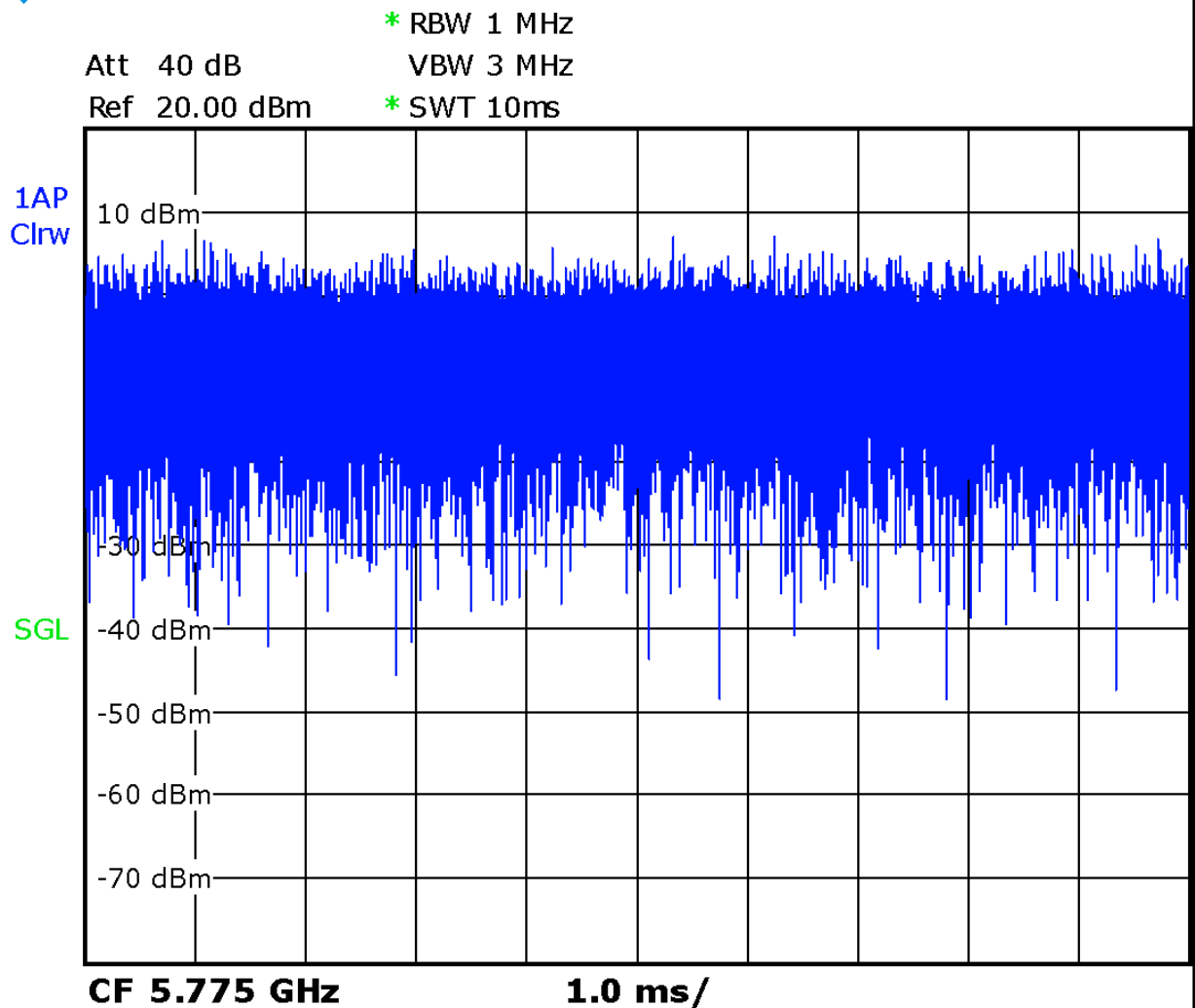
According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

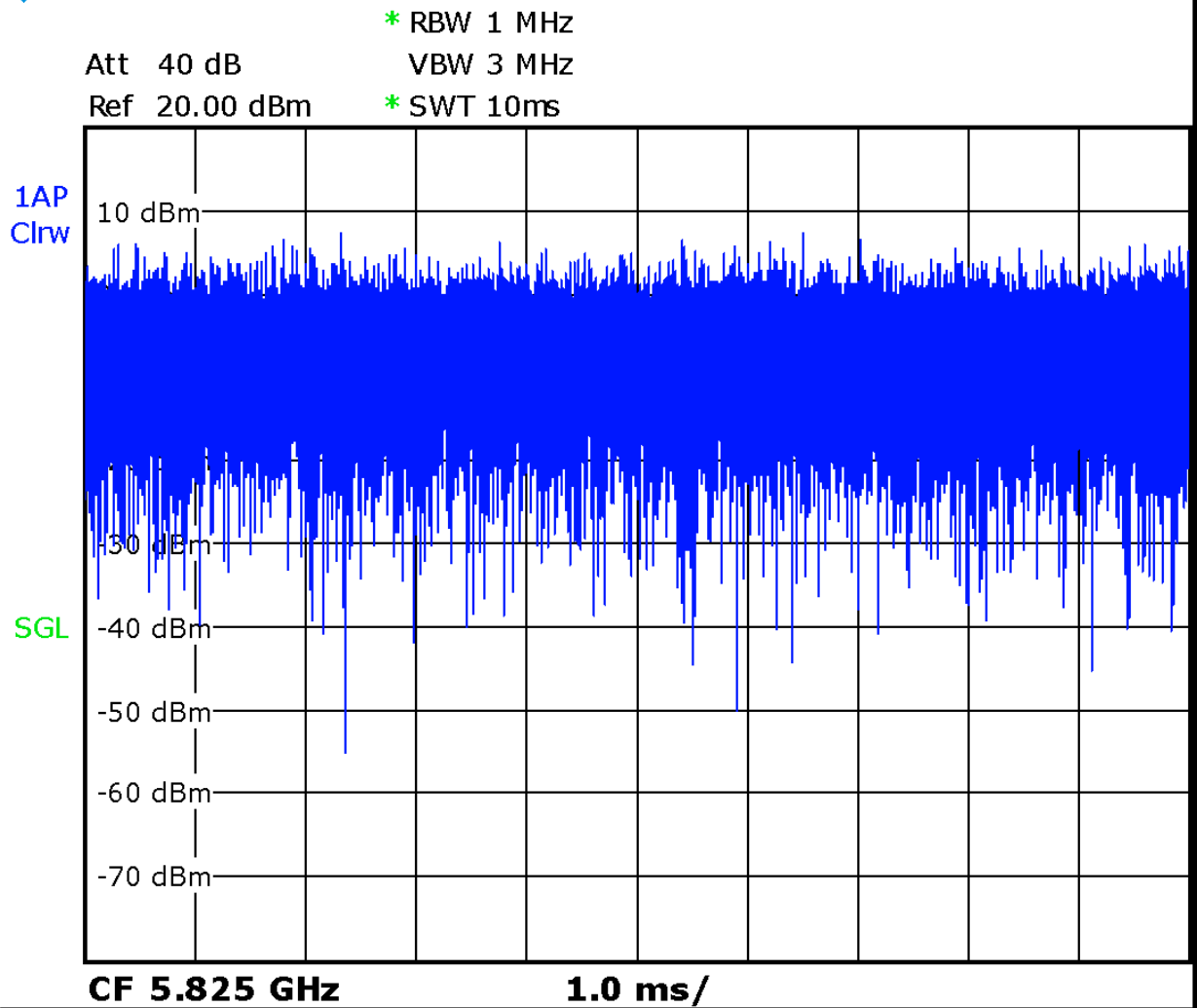
Table 14.4-13: SAR Values (WLAN - Head) - Scaled Reported SAR

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
5775	155	Left	Tilt	100%	100%	0.58	0.58

Table 14.4-14: SAR Values (WLAN – Body) – Scaled Reported SAR

Frequency		Test Position	D (mm)	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
5825	165	Rear	10	100%	100%	0.66	0.66


Picture 14.3 The plot of duty factor for Head



Picture 14.3 The plot of duty factor for Body

14.5 SAR results for Fast BT

Table 14.5-1: SAR Values (Bluetooth - Head)

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
39	2441	Left	Touch	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/
39	2441	Left	Tilt	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/
39	2441	Right	Touch	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/
39	2441	Right	Tilt	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/

Table 14.5-1: SAR Values (Bluetooth - Body)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C				
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch	MHz									
39	2441	Front	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/
39	2441	Rear	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/
39	2441	Left	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/
39	2441	Top	/	9.58	11	< 0.01	< 0.01	< 0.01	< 0.01	/

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

14.6 SAR results for SUB6G

Table 14.6-1: SAR Values (NR5G n25-Head ANT1)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
376500	1882.5	Left	Cheek	Fig.44	24.13	25.50	0.091	0.12	0.147	0.20	0.10
376500	1882.5	Left	Tilt	/	24.13	25.50	0.054	0.07	0.090	0.12	-0.09
376500	1882.5	Right	Cheek	/	24.13	25.50	0.069	0.09	0.109	0.15	0.07
376500	1882.5	Right	Tilt	/	24.13	25.50	0.061	0.08	0.104	0.14	0.13
376500	1882.5	Left	Cheek	CP-OFDM	23.71	24.00	0.079	0.08	0.133	0.14	0.05

Table 14.6-2: SAR Values (NR5G n25-Body ANT1)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C				
Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
376500	1882.5	Front	/	20.65	21.00	0.158	0.17	0.254	0.28	-0.12
376500	1882.5	Rear		20.65	21.00	0.227	0.25	0.371	0.40	-0.09
376500	1882.5	Left	/	20.65	21.00	0.098	0.11	0.177	0.19	-0.05
376500	1882.5	Right	/	20.65	21.00	0.071	0.08	0.142	0.15	0.08
376500	1882.5	Bottom	Fig.45	20.65	21.00	0.272	0.29	0.468	0.51	-0.06
376500	1882.5	Bottom	DFT-s-OFDM	19.92	21.00	0.229	0.29	0.401	0.51	0.13

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

Table 14.6-3: SAR Values (NR5G n25-Body ANT1)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C				
Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
376500	1882.5	Front	/	24.13	25.50	0.226	0.31	0.363	0.50	0.15
376500	1882.5	Rear	Fig.46	24.13	25.50	0.303	0.42	0.489	0.67	0.18
376500	1882.5	Rear	CP-OFDM	23.71	24.00	0.150	0.16	0.245	0.26	0.13

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

Table 14.6-4: SAR Values (NR5G n25-Head ANT3)

Frequency		Ambient Temperature: 22.2 °C				Liquid Temperature: 22 °C					
Ch.	MHz	Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
376500	1882.5	Left	Cheek	/	14.70	15.50	0.131	0.16	0.254	0.31	0.14
376500	1882.5	Left	Tilt	/	14.70	15.50	0.218	0.26	0.437	0.53	0.18
376500	1882.5	Right	Cheek	/	14.70	15.50	0.227	0.27	0.483	0.58	0.02
376500	1882.5	Right	Tilt	Fig.47	14.70	15.50	0.272	0.33	0.608	0.73	0.25
376500	1882.5	Right	Tilt	DFT-s-OFDM	14.25	15.50	0.152	0.20	0.286	0.38	0.05

Table 14.6-5: SAR Values (NR5G n25-Body ANT3)

Frequency		Ambient Temperature: 22.2 °C				Liquid Temperature: 22 °C				
Ch.	MHz	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Report ed SAR(10 g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
376500	1882.5	Front	/	19.73	20.00	0.163	0.17	0.319	0.34	-0.11
376500	1882.5	Rear	/	19.73	20.00	0.154	0.16	0.276	0.29	-0.08
376500	1882.5	Left	/	19.73	20.00	0.052	0.06	0.093	0.10	0.09
376500	1882.5	Right		19.73	20.00	0.048	0.05	0.087	0.09	0.01
376500	1882.5	Top	Fig.48	19.73	20.00	0.242	0.26	0.484	0.52	0.13
376500	1882.5	Top	CP-OFDM	19.27	20.00	0.200	0.24	0.377	0.45	-0.15

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

Table 14.6-6: SAR Values (NR5G n25-Body ANT3)

Frequency		Ambient Temperature: 22.2 °C				Liquid Temperature: 22 °C				
Ch.	MHz	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Report ed SAR(10 g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
376500	1882.5	Front	/	23.85	24.50	0.311	0.36	0.539	0.63	0.06
376500	1882.5	Rear	Fig.49	23.85	24.50	0.382	0.44	0.677	0.79	0.17
376500	1882.5	Rear	CP-OFDM	22.97	23.00	0.189	0.19	0.312	0.31	0.07

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

Table 14.6-7: SAR Values (NR5G n66-Head ANT1)

Frequency		Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C									
Ch.	MHz	Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
349000	1745	Left	Cheek	Fig.50	23.90	25.50	0.145	0.21	0.218	0.32	0.05
349000	1745	Left	Tilt	/	23.90	25.50	0.064	0.09	0.095	0.14	0.08
349000	1745	Right	Cheek	/	23.90	25.50	0.131	0.19	0.202	0.29	0.09
349000	1745	Right	Tilt	/	23.90	25.50	0.080	0.12	0.122	0.18	0.04
349000	1745	Left	Cheek	CP-OFDM	23.37	24.00	0.105	0.12	0.158	0.18	0.12

Table 14.6-8: SAR Values (NR5G n66-Body ANT1)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
349000	1745	Front	/	23.71	24.00	0.262	0.28	0.413	0.44	0.13
349000	1745	Rear		23.71	24.00	0.430	0.46	0.665	0.71	-0.13
349000	1745	Left	/	23.71	24.00	0.172	0.18	0.293	0.31	-0.13
349000	1745	Right	/	23.71	24.00	0.097	0.10	0.117	0.13	0.02
355500	1777.5	Bottom	/	23.64	24.00	0.312	0.34	0.520	0.56	0.19
349000	1745	Bottom	Fig.51	23.71	24.00	0.455	0.49	0.764	0.82	0.03
342500	1712.5	Bottom	/	23.70	24.00	0.330	0.35	0.550	0.59	0.19
349000	1745	Bottom	DFT-s-OFDM	23.66	24.00	0.449	0.49	0.747	0.81	0.12

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

Table 14.6-9: SAR Values (NR5G n66-Body ANT1)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Report ed SAR(10 g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
349000	1745	Front	/	23.90	25.50	0.165	0.24	0.256	0.37	0.16
349000	1745	Rear	Fig.52	23.90	25.50	0.267	0.39	0.414	0.60	0.12
349000	1745	Rear	CP-OFDM	23.37	24.00	0.238	0.28	0.383	0.44	0.07

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

Table 14.6-10: SAR Values (NR5G n66-Head ANT3)

Frequency		Ambient Temperature: 22.2 °C				Liquid Temperature: 22 °C					
Ch.	MHz	Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
349000	1745	Left	Cheek	/	14.35	15.00	0.157	0.18	0.278	0.32	0.12
349000	1745	Left	Tilt	/	14.35	15.00	0.175	0.20	0.333	0.39	-0.09
349000	1745	Right	Cheek	/	14.35	15.00	0.186	0.22	0.344	0.40	0.09
349000	1745	Right	Tilt	Fig.53	14.35	15.00	0.226	0.26	0.488	0.57	0.03
349000	1745	Right	Tilt	DFT-s-OFDM	13.99	15.00	0.211	0.27	0.452	0.57	0.03

Table 14.6-11: SAR Values (NR5G n66-Body ANT3)

Frequency		Ambient Temperature: 22.2 °C				Liquid Temperature: 22 °C				
Ch.	MHz	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Report ed SAR(10 g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
349000	1745	Front	/	21.72	22.00	0.252	0.27	0.454	0.48	-0.03
349000	1745	Rear	/	21.72	22.00	0.277	0.30	0.495	0.53	-0.01
349000	1745	Left	/	21.72	22.00	0.076	0.08	0.135	0.14	0.06
349000	1745	Right		21.72	22.00	0.030	0.03	0.053	0.06	0.08
349000	1745	Top	Fig.54	21.72	22.00	0.289	0.31	0.561	0.60	-0.06
349000	1745	Top	CP-OFDM	21.06	22.00	0.270	0.34	0.481	0.60	0.16

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

Table 14.6-12: SAR Values (NR5G n66-Body ANT3)

Frequency		Ambient Temperature: 22.2 °C				Liquid Temperature: 22 °C				
Ch.	MHz	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Report ed SAR(10 g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
349000	1745	Front	/	23.55	25.00	0.267	0.37	0.473	0.66	-0.06
349000	1745	Rear	Fig.55	23.55	25.00	0.274	0.38	0.479	0.67	0.02
349000	1745	Rear	CP-OFDM	22.91	23.50	0.129	0.15	0.210	0.24	0.06

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

Table 14.6-13: SAR Values (NR5G n71-Head ANT0)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
136100	680.5	Left	Cheek	/	24.50	25.50	0.100	0.13	0.136	0.17	0.09
136100	680.5	Left	Tilt	/	24.50	25.50	0.053	0.07	0.071	0.09	-0.13
136100	680.5	Right	Cheek	Fig.56	24.50	25.50	0.138	0.17	0.172	0.22	-0.12
136100	680.5	Right	Tilt	/	24.50	25.50	0.076	0.10	0.101	0.13	-0.07
136100	680.5	Right	Cheek	CP-OFDM	23.97	24.00	0.088	0.09	0.109	0.11	0.06

Table 14.6-14: SAR Values (NR5G n71-Body ANT0)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C				
Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
136100	680.5	Front	/	24.50	25.50	0.142	0.18	0.195	0.25	-0.03
136100	680.5	Rear	Fig.57	24.50	25.50	0.224	0.28	0.290	0.37	-0.06
136100	680.5	Left	/	24.50	25.50	0.071	0.09	0.108	0.14	-0.12
136100	680.5	Right	/	24.50	25.50	0.094	0.12	0.142	0.18	-0.06
136100	680.5	Bottom	/	24.50	25.50	0.075	0.09	0.137	0.17	-0.10
136100	680.5	Rear	CP-OFDM	23.97	24.00	0.152	0.15	0.193	0.19	0.17

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

Table 14.6-15: SAR Values (NR5G n41-Head ANT0)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
513900	2569.5	Left	Cheek	Fig.58	26.37	27.50	0.098	0.13	0.184	0.24	-0.12
513900	2569.5	Left	Tilt	/	26.37	27.50	0.085	0.11	0.126	0.16	0.00
513900	2569.5	Right	Cheek	/	26.37	27.50	0.059	0.08	0.135	0.18	-0.06
513900	2569.5	Right	Tilt	/	26.37	27.50	0.032	0.04	0.054	0.07	-0.03
513900	2569.5	Left	Cheek	CP-OFDM	25.81	26.00	0.104	0.11	0.200	0.21	0.09

Table 14.6-16: SAR Values (NR5G n41-Body ANT0)

Ambient Temperature: 22.2 °C					Liquid Temperature: 22 °C					
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
518598	2592.99	Front	/	22.61	23.00	0.180	0.20	0.345	0.38	0.08
518598	2592.99	Rear	/	22.61	23.00	0.228	0.25	0.444	0.49	-0.02
518598	2592.99	Left	/	22.61	23.00	0.057	0.06	0.109	0.12	-0.12
518598	2592.99	Right	/	22.61	23.00	0.078	0.09	0.143	0.16	0.05
528000	2640.00	Bottom	Fig.59	22.55	23.00	0.529	0.59	1.080	1.20	0.04
523302	2616.51	Bottom	/	22.57	23.00	0.470	0.52	0.943	1.04	-0.11
518598	2592.99	Bottom	/	22.61	23.00	0.463	0.51	0.934	1.02	0.02
513900	2569.50	Bottom	/	22.54	23.00	0.373	0.41	0.750	0.83	-0.06
509202	2546.01	Bottom	/	22.53	23.00	0.472	0.53	0.943	1.05	0.04
528000	2640.00	Bottom	CP-OFDM	22.39	23.00	0.449	0.52	0.871	1.00	0.03

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

Table 14.6-17: SAR Values (NR5G n41-Body ANT0)

Ambient Temperature: 22.2 °C					Liquid Temperature: 22 °C					
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Report ed SAR(10 g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
513900	2569.5	Front	/	26.37	27.50	0.196	0.25	0.355	0.46	0.11
513900	2569.5	Rear	Fig.60	26.37	27.50	0.258	0.33	0.481	0.62	-0.03
513900	2569.5	Rear	CP-OFDM	25.81	26.00	0.233	0.24	0.433	0.45	-0.06

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

Table 14.6-18: SAR Values (NR5G n41 - Head ANT0) - Scaled Reported SAR

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
513900	2569.5	Left	Cheek	100%	100%	0.24	0.24

Table 14.6-19: SAR Values (NR5G n41- Body ANT0) – Scaled Reported SAR

Frequency		Test Position	D (mm)	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
528000	2640.00	Bottom	10	100%	100%	1.20	1.20
513900	2569.5	Rear	15	100%	100%	0.62	0.62

Table 14.6-20: SAR Values (NR5G n41-Head ANT3)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
527298	2636.49	Left	Cheek	/	14.75	15.00	0.067	0.07	0.116	0.12	0.06
527298	2636.49	Left	Tilt	/	14.75	15.00	0.075	0.08	0.147	0.16	0.17
527298	2636.49	Right	Cheek	Fig.61	14.75	15.00	0.211	0.22	0.496	0.53	0.05
527298	2636.49	Right	Tilt		14.75	15.00	0.074	0.08	0.170	0.18	0.11
527298	2636.49	Right	Cheek	DFT-s-OFDM	14.51	15.00	0.202	0.23	0.399	0.45	0.03

Table 14.6-21: SAR Values (NR5G n41-Body ANT3)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
535998	2679.99	Front	/	17.27	17.50	0.097	0.10	0.201	0.21	0.16
535998	2679.99	Rear	/	17.27	17.50	0.101	0.11	0.219	0.23	0.04
535998	2679.99	Left	/	17.27	17.50	0.093	0.10	0.220	0.23	0.17
535998	2679.99	Right		17.27	17.50	0.065	0.07	0.136	0.14	0.17
535998	2679.99	Top	Fig.62	17.27	17.50	0.105	0.11	0.259	0.27	0.05
535998	2679.99	Top	DFT-s-OFDM	17.03	17.50	0.098	0.11	0.231	0.26	-0.03

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

Table 14.6-22: SAR Values (NR5G n41-Body ANT3)

Ambient Temperature: 22.2 °C						Liquid Temperature: 22 °C				
Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
513900	2569.5	Front	/	26.44	27.50	0.202	0.26	0.425	0.54	-0.09
513900	2569.5	Rear	Fig.63	26.44	27.50	0.203	0.26	0.428	0.55	-0.04
513900	2569.5	Rear	CP-OFDM	25.87	26.00	0.217	0.22	0.521	0.54	0.09

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

Table 14.6-23 SAR Values (NR5G n41 - Head) - Scaled Reported SAR

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
527298	2636.49	Right	Cheek	100%	100%	0.53	0.53

Table 14.6-24: SAR Values (NR5G n41- Body) – Scaled Reported SAR

Frequency		Test Position	D (mm)	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
535998	2679.99	Top	10	100%	100%	0.27	0.27
513900	2569.5	Rear	15	100%	100%	0.55	0.55

Table 14.6-25: SAR Values (LTE Band2 – Head ANT3)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C												
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
18900	1880	1RB_Mid	Left	Touch	/	12.66	13.50	0.078	0.09	0.140	0.17	0.11
18900	1880	1RB_Mid	Left	Tilt	/	12.66	13.50	0.096	0.12	0.179	0.22	-0.06
18900	1880	1RB_Mid	Right	Touch	/	12.66	13.50	0.091	0.11	0.162	0.20	0.12
18900	1880	1RB_Mid	Right	Tilt	/	12.66	13.50	0.147	0.18	0.324	0.39	0.09
18700	1860	50RB_Mid	Left	Touch	/	12.65	13.50	0.067	0.08	0.116	0.14	-0.05
18700	1860	50RB_Mid	Left	Tilt	/	12.65	13.50	0.085	0.10	0.155	0.19	-0.13
18700	1860	50RB_Mid	Right	Touch	/	12.65	13.50	0.087	0.11	0.157	0.19	-0.07
18700	1860	50RB_Mid	Right	Tilt		12.65	13.50	0.133	0.16	0.295	0.36	-0.11

Note1: The LTE mode is QPSK_20MHz.

Note2: The data is used for ENDC-n71

Table 14.6-26: SAR Values (LTE Band2 – Body ANT3)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
18700	1860	1RB_Mid	Front	/	18.79	20.00	0.181	0.24	0.330	0.44	-0.02
18700	1860	1RB_Mid	Rear	/	18.79	20.00	0.180	0.24	0.327	0.43	-0.06
18700	1860	1RB_Mid	Left	/	18.79	20.00	0.050	0.07	0.085	0.11	-0.02
18700	1860	1RB_Mid	Right	/	18.79	20.00	0.027	0.04	0.043	0.06	-0.05
18700	1860	1RB_Mid	Top	/	18.79	20.00	0.215	0.28	0.433	0.57	-0.08
18900	1880	50RB_Low	Front	/	18.77	20.00	0.172	0.23	0.313	0.42	0.02
18900	1880	50RB_Low	Rear	/	18.77	20.00	0.176	0.23	0.307	0.41	0.01

18900	1880	50RB_Low	Left	/	18.77	20.00	0.051	0.07	0.088	0.12	0.01
18900	1880	50RB_Low	Right	/	18.77	20.00	0.028	0.04	0.046	0.06	0.06
18900	1880	50RB_Low	Top	/	18.77	20.00	0.205	0.27	0.410	0.54	0.13

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

Note2: The LTE mode is QPSK_20MHz.

Note3: The data is used for ENDC-n71

Table 14.6-27: SAR Values (LTE Band2 – Body ANT3)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
19100	1900	1RB_High	Front	/	22.80	24.00	0.196	0.26	0.312	0.41	0.12
19100	1900	1RB_High	Rear	/	22.80	24.00	0.210	0.28	0.368	0.49	-0.01
18900	1880	50RB_Low	Front	/	21.82	23.00	0.187	0.25	0.304	0.40	0.13
18900	1880	50RB_Low	Rear	/	21.82	23.00	0.206	0.27	0.329	0.43	0.01

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

Note2: The LTE mode is QPSK_20MHz.

Note3: The data is used for ENDC-n71

Table 14.6-28: SAR Values (LTE Band66 – Head ANT3)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
132572	1770	1RB_Mid	Left	Touch	/	12.77	14.50	0.096	0.14	0.174	0.26	-0.10
132572	1770	1RB_Mid	Left	Tilt	/	12.77	14.50	0.112	0.17	0.213	0.32	0.05
132572	1770	1RB_Mid	Right	Touch	/	12.77	14.50	0.116	0.17	0.208	0.31	0.10
132572	1770	1RB_Mid	Right	Tilt	/	12.77	14.50	0.142	0.21	0.308	0.46	0.13
132072	1720	50RB_Low	Left	Touch	/	12.95	14.50	0.079	0.11	0.143	0.20	0.09
132072	1720	50RB_Low	Left	Tilt	/	12.95	14.50	0.092	0.13	0.177	0.25	-0.02
132072	1720	50RB_Low	Right	Touch	/	12.95	14.50	0.141	0.20	0.291	0.42	0.11
132072	1720	50RB_Low	Right	Tilt		12.95	14.50	0.142	0.20	0.311	0.44	0.06

Note1: The LTE mode is QPSK_20MHz.

Note2: The data is used for ENDC-n71

Table 14.6-29: SAR Values (LTE Band66 – Body ANT3)

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C				
Ch.	MHz	Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
132072	1720	1RB_Mid	Front	/	19.76	21.00	0.150	0.20	0.283	0.38	-0.01
132072	1720	1RB_Mid	Rear	/	19.76	21.00	0.157	0.21	0.283	0.38	-0.03
132072	1720	1RB_Mid	Left	/	19.76	21.00	0.039	0.05	0.072	0.10	0.06
132072	1720	1RB_Mid	Right	/	19.76	21.00	0.029	0.04	0.052	0.07	-0.02
132072	1720	1RB_Mid	Top	/	19.76	21.00	0.198	0.26	0.392	0.52	0.02
132072	1720	50RB_Low	Front	/	19.75	21.00	0.148	0.20	0.275	0.37	0.01
132072	1720	50RB_Low	Rear	/	19.75	21.00	0.156	0.21	0.283	0.38	-0.07
132072	1720	50RB_Low	Left	/	19.75	21.00	0.040	0.05	0.071	0.09	0.04
132072	1720	50RB_Low	Right	/	19.75	21.00	0.025	0.03	0.043	0.06	0.13
132072	1720	50RB_Low	Top	/	19.75	21.00	0.168	0.22	0.340	0.45	0.13

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

Note2: The LTE mode is QPSK_20MHz.

Note3: The data is used for ENDC-n71

Table 14.6-30: SAR Values (LTE Band66 – Body ANT3)

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C				
Ch.	MHz	Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
132072	1720	1RB_Mid	Front	/	23.44	24.50	0.183	0.23	0.311	0.40	-0.11
132072	1720	1RB_Mid	Rear	/	23.44	24.50	0.172	0.22	0.291	0.37	0.13
132072	1720	50RB_Low	Front	/	22.41	23.50	0.176	0.23	0.301	0.39	0.16
132072	1720	50RB_Low	Rear	/	22.41	23.50	0.169	0.22	0.284	0.37	0.19

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

Note2: The LTE mode is QPSK_20MHz.

Note3: The data is used for ENDC-n71

14.7 SAR results for Phablet

Table 14.7-1: SAR Values for Phablet

Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Power Drift
Body	F	LTE Band2	18900	1880	1RB-Middle Front 0mm	20.66	21.50	0.626	0.76	1.33	1.61	0.12
Body	F	LTE Band2	18900	1880	1RB-Middle Rear 0mm	20.66	21.50	1.52	1.84	3.10	3.76	0.11
Body	F	LTE Band2	18900	1880	1RB-Middle Bottom Edge 0mm	20.66	21.50	0.672	0.82	1.71	2.07	0.03
Body	F	LTE Band2	18900	1880	1RB-Middle Front 6mm	23.60	25.00	0.468	0.65	0.875	1.21	0.02
Body	F	LTE Band2	18900	1880	1RB-Middle Rear 5mm	23.60	25.00	0.849	1.17	1.56	2.15	-0.13
Body	F	LTE Band2	18900	1880	1RB-Middle Left 0mm	23.60	25.00	1.37	1.89	2.95	4.07	0.02
Body	F	LTE Band2	18900	1880	1RB-Middle Bottom Edge 4mm	23.60	25.00	0.758	1.05	1.37	1.89	0.11
Body	F	LTE Band12	23060	704	1RB-Low Rear 0mm	24.62	25.00	1.35	1.47	2.99	3.26	0.11
Body	F	LTE Band12	23060	704	1RB-Low Bottom Edge 0mm	24.62	25.00	0.624	0.68	1.65	1.80	-0.14
Body	F	LTE Band41	41490	2680	1RB-Middle Bottom Edge 0mm	26.44	27.00	1.71	1.95	4.24	4.82	0.16
Body	F	LTE Band41	41055	2636.5	1RB-Middle Bottom Edge 0mm	26.38	27.00	1.97	2.27	4.78	5.51	0.03
Body	F	LTE Band41	40620	2593	1RB-Middle Bottom Edge 0mm	26.51	27.00	1.98	2.22	4.74	5.31	0.03
Body	F	LTE Band41	40185	2549.5	1RB-Middle Bottom Edge 0mm	26.42	27.00	1.66	1.90	3.99	4.56	0.08
Body	F	LTE Band41	39750	2506	1RB-Middle Bottom Edge 0mm	26.58	27.00	1.87	2.06	4.49	4.95	0.17
Body	F	LTE Band66	132072	1720	1RB-Middle Front 0mm	22.47	22.60	1.020	1.05	2.070	2.13	0.19
Body	F	LTE Band66	132072	1720	1RB-Middle Rear 0mm	22.47	22.60	2.200	2.27	4.460	4.60	0.02
Body	F	LTE Band66	132072	1720	1RB-Middle Bottom Edge 0mm	22.47	22.60	1.990	2.05	4.270	4.40	0.16
Body	F	LTE Band66	132322	1745	1RB-Middle Front 6mm	23.90	24.50	0.435	0.50	0.724	0.83	0.19
Body	F	LTE Band66	132322	1745	1RB-Middle Rear 5mm	23.90	24.50	0.818	0.94	1.410	1.62	-0.04
Body	F	LTE Band66	132322	1745	1RB-Middle Bottom 4mm	23.90	24.50	0.832	0.96	1.480	1.70	0.08
Body	F	LTE Band66	132322	1745	1RB-Middle Left 0mm	23.90	24.50	1.560	1.79	3.340	3.83	0.05
Body	F	WLAN	6	2437	Front 0mm 1M 13db	13.48	14.5	0.497	0.63	1.430	1.81	0.05
Body	F	WLAN	6	2437	Rear 0mm	13.48	14.5	0.514	0.65	1.470	1.86	0.03
Body	F	WLAN	6	2437	Top Edge 0mm	13.48	14.5	0.259	0.33	0.547	0.69	0.07
Body	F	WLAN	138	5690	Front 0mm	13.24	14	0.124	0.15	0.425	0.51	0.00
Body	F	WLAN	138	5690	Rear 0mm	13.24	14	0.399	0.48	1.560	1.86	-0.02
Body	F	WLAN	138	5690	Top Edge 0mm	13.24	14	0.532	0.63	2.870	3.42	0.09

Antenna	Test Position	Phantom position L/R/F	Frequency Band	Channel Number	Frequency (MHz)	Test setup	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Power Drift
ANT1	Body	F	N25	376500	1882.5	Front GPRS 0mm	20.65	21.00	1.050	1.14	2.430	2.63	-0.18
ANT1	Body	F	N25	376500	1882.5	Rear GPRS 0mm	20.65	21.00	1.810	1.96	3.970	4.30	-0.18
ANT1	Body	F	N25	376500	1882.5	Bottom Edge GPRS 0mm	20.65	21.00	0.884	0.96	2.160	2.34	0.01
ANT1	Body	F	N25	376500	1882.5	Front GPRS 6mm	24.13	25.50	0.486	0.67	0.902	1.24	0.05
ANT1	Body	F	N25	376500	1882.5	Rear GPRS 5mm	24.13	25.50	1.520	2.08	2.910	3.99	0.19
ANT1	Body	F	N25	376500	1882.5	Bottom GPRS 4mm	24.13	25.50	1.490	2.04	2.770	3.80	-0.10
ANT1	Body	F	N66	349000	1745	Front GPRS 0mm	23.71	24.00	1.660	1.77	3.620	3.87	-0.06
ANT1	Body	F	N66	349000	1745	Rear GPRS 0mm	23.71	24.00	2.960	3.16	6.200	6.63	-0.06
ANT1	Body	F	N66	349000	1745	Bottom Edge GPRS 0mm	23.71	24.00	1.690	1.81	3.170	3.39	0.01
ANT1	Body	F	N66	349000	1745	Front GPRS 6mm	23.90	25.50	0.569	0.82	1.010	1.46	0.06
ANT1	Body	F	N66	349000	1745	Rear GPRS 5mm	23.90	25.50	1.070	1.55	1.770	2.56	0.09
ANT1	Body	F	N66	349000	1745	Bottom GPRS 4mm	23.90	25.50	1.340	1.94	2.400	3.47	0.17
ANT3	Body	F	N25	376500	1882.5	Front GPRS 0mm	19.73	20.00	1.270	1.35	2.980	3.17	0.12
ANT3	Body	F	N25	376500	1882.5	Rear GPRS 0mm	19.73	20.00	0.792	0.84	1.640	1.75	0.12
ANT3	Body	F	N25	376500	1882.5	TOP EGPRS 0mm 18.5	19.73	20.00	1.170	1.25	3.170	3.37	0.11
ANT3	Body	F	N25	376500	1882.5	Front GPRS 6mm	23.85	24.50	1.320	1.53	2.690	3.12	0.13
ANT3	Body	F	N25	376500	1882.5	Rear GPRS 5mm	23.85	24.50	1.030	1.20	1.900	2.21	0.07
ANT3	Body	F	N25	376500	1882.5	Top GPRS 6mm	23.85	24.50	1.230	1.43	2.740	3.18	-0.11
ANT3	Body	F	N66	349000	1745	Front GPRS 0mm	21.72	22.00	1.400	1.49	3.230	3.45	0.00
ANT3	Body	F	N66	349000	1745	Rear GPRS 0mm	21.72	22.00	0.940	1.00	1.830	1.95	0.00
ANT3	Body	F	N66	349000	1745	Top Edge GPRS 0mm	21.72	22.00	1.530	1.63	4.170	4.45	-0.15
ANT3	Body	F	N66	349000	1745	Front GPRS 6mm	23.55	25.00	0.814	1.14	1.550	2.16	0.03
ANT3	Body	F	N66	349000	1745	Rear GPRS 5mm	23.55	25.00	0.954	1.33	1.770	2.47	0.09
ANT3	Body	F	N66	349000	1745	Top GPRS 6mm	23.55	25.00	0.915	1.28	1.990	2.78	0.17
ANT0	Body	F	N41	518598	2592.99	Rear GPRS 0mm	22.61	23.00	1.950	2.13	4.750	5.20	0.09
ANT0	Body	F	N41	518598	2592.99	Bottom Edge GPRS 0mm	22.61	23.00	2.370	2.59	6.000	6.56	0.07
ANT0	Body	F	N41	513900	2569.50	Rear GPRS 5mm	26.37	27.50	1.340	1.74	2.980	3.87	0.03
ANT0	Body	F	N41	513900	2569.50	Bottom GPRS 6mm	26.37	27.50	1.190	1.54	2.570	3.33	0.08
ANT3	Body	F	N41	535998	2679.99	Front GPRS 0mm	17.27	17.50	0.580	0.61	1.250	1.32	0.16
ANT3	Body	F	N41	535998	2679.99	Rear GPRS 0mm	17.27	17.50	0.747	0.79	1.710	1.80	0.02
ANT3	Body	F	N41	535998	2679.99	Top Edge GPRS 0mm	17.27	17.50	0.576	0.61	1.670	1.76	0.07
ANT3	Body	F	N41	535998	2679.99	Front GPRS 6mm	26.44	27.50	1.050	1.34	1.920	2.45	0.02
ANT3	Body	F	N41	535998	2679.99	Rear GPRS 5mm	26.44	27.50	1.580	2.02	3.430	4.38	0.19
ANT3	Body	F	N41	535998	2679.99	Left Edge GPRS 0mm	26.44	27.50	1.550	1.98	3.940	5.03	0.07
ANT3	Body	F	N41	535998	2679.99	Top Edge GPRS 6mm	26.44	27.50	0.994	1.27	2.550	3.25	0.07

15 SAR Measurement Variability

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

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

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 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 ($\sim 10\%$ 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 15.1: SAR Measurement Variability for Body LTE B25 (1g)

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz							
26590	1905	1RB_Mid	Rear	10	0.869	0.831	1.05	/

Table 15.2: SAR Measurement Variability for Body LTE B41 PC2 (1g)

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz							
41055	2636.5	1RB_Mid	Rear	10	1.15	1.09	1.06	/

Table 15.3: SAR Measurement Variability for Body LTE B41 PC3 (1g)

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz							
41055	2636.5	1RB_Mid	Rear	10	0.883	0.861	1.03	/

Table 15.4: SAR Measurement Variability for Body n41 ANT0 (1g)

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz						
528000	2640.00	Bottom	10	1.08	0.993	1.09	/

16 Measurement Uncertainty

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

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

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

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

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

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

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

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

19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						10.4	10.3	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						20.8	20.6	

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

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

16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						13.5	13.4	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						27.0	26.8	

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 14, 2021	One year
02	Power meter	NRP2	101919	May 12, 2020	One year
03	Power sensor	NRP-Z91	101547		
04	Signal Generator	E4438C	MY49070393	May 14, 2020	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159890	January 25 2021	One year
07	E-field Probe	SPEAG EX3DV4	7307	May 29, 2020	One year
08	DAE	SPEAG DAE4	536	November 6, 2020	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 24,2020	One year
10	Dipole Validation Kit	SPEAG D835V2	4d069	July 24,,2020	One year
11	Dipole Validation Kit	SPEAG D1750V2	1003	July 24, 2020	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 28,2020	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	July 21,2020	One year
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 21,2020	One year
15	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 27,2020	One year

END OF REPORT BODY

ANNEX A Graph Results

GSM850_CH190 Right Cheek

Date: 4/4/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 836.6$; $\sigma = 0.9$ mho/m; $\epsilon_r = 40.92$; $\rho = 1000$ kg/m³

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

Communication System: GSM850 836.6 Duty Cycle: 1: 8.3

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

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

Maximum value of SAR (interpolated) = 0.246 W/kg

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

Reference Value = 7.099 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.244 W/kg

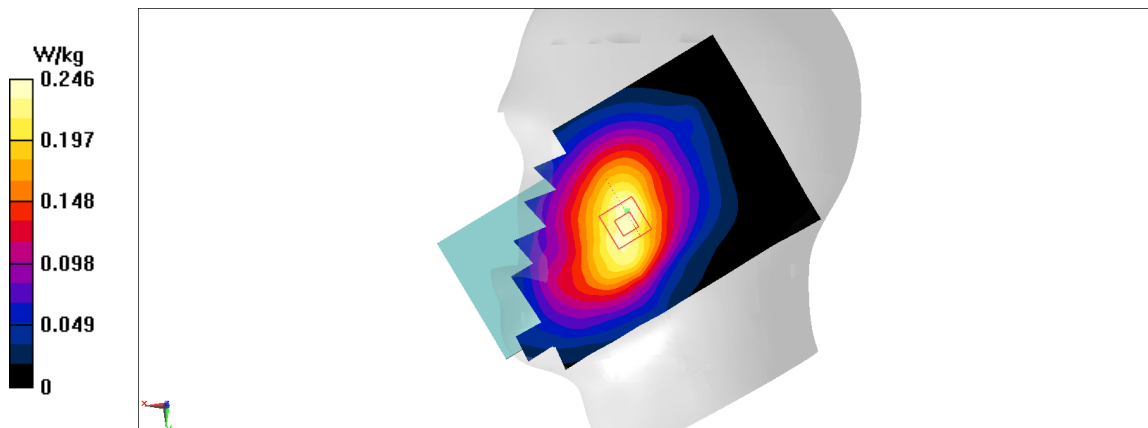


Fig A.1

GSM850_CH190 Rear

Date: 4/4/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 836.6$; $\sigma = 0.9$ mho/m; $\epsilon_r = 40.92$; $\rho = 1000$ kg/m³

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

Communication System: GSM850 836.6 Duty Cycle: 1: 4

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

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

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

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

Reference Value = 18.66 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.739 W/kg; SAR(10 g) = 0.431 W/kg

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

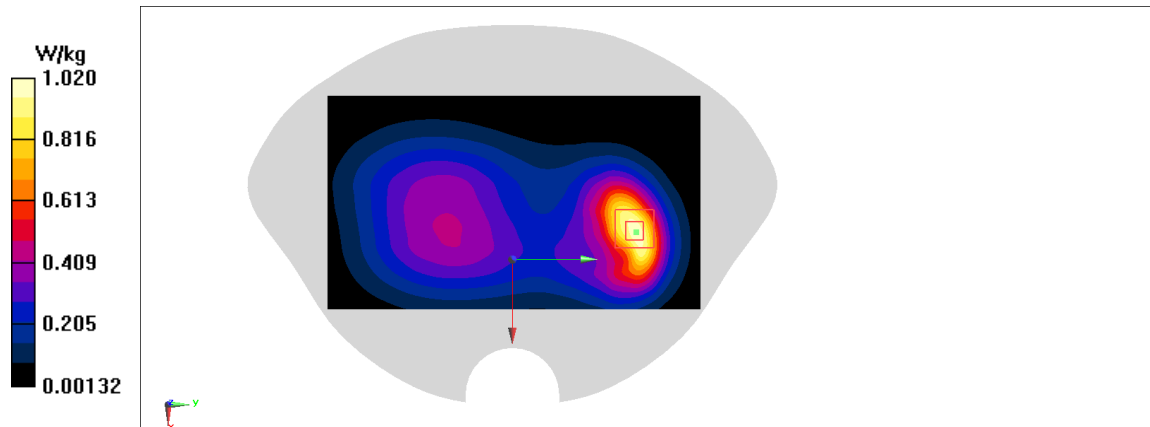


Fig A.2

PCS1900_CH661 Left Cheek

Date: 4/9/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$; $\sigma = 1.389$ mho/m; $\epsilon_r = 40.76$; $\rho = 1000$ kg/m³

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

Communication System: PCS1900 1880 Duty Cycle: 1: 8.3

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.205 W/kg

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

Reference Value = 3.806 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.09 W/kg

Maximum value of SAR (measured) = 0.198 W/kg

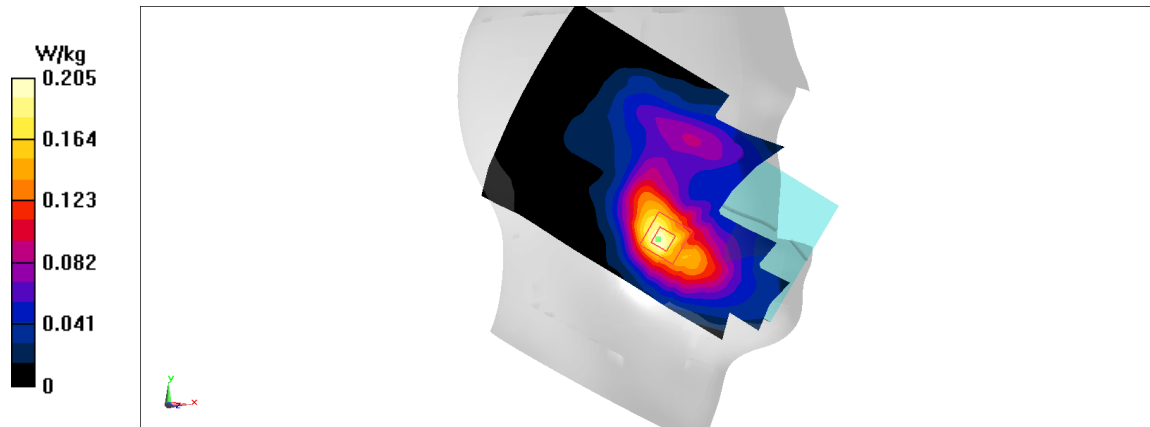


Fig A.3

PCS1900_CH810 Rear

Date: 4/9/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1909.8$; $\sigma = 1.418$ mho/m; $\epsilon_r = 40.73$; $\rho = 1000$ kg/m³

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

Communication System: PCS1900 1909.8 Duty Cycle: 1: 4

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.948 W/kg

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

Reference Value = 16.33 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.327 W/kg

Maximum value of SAR (measured) = 0.835 W/kg

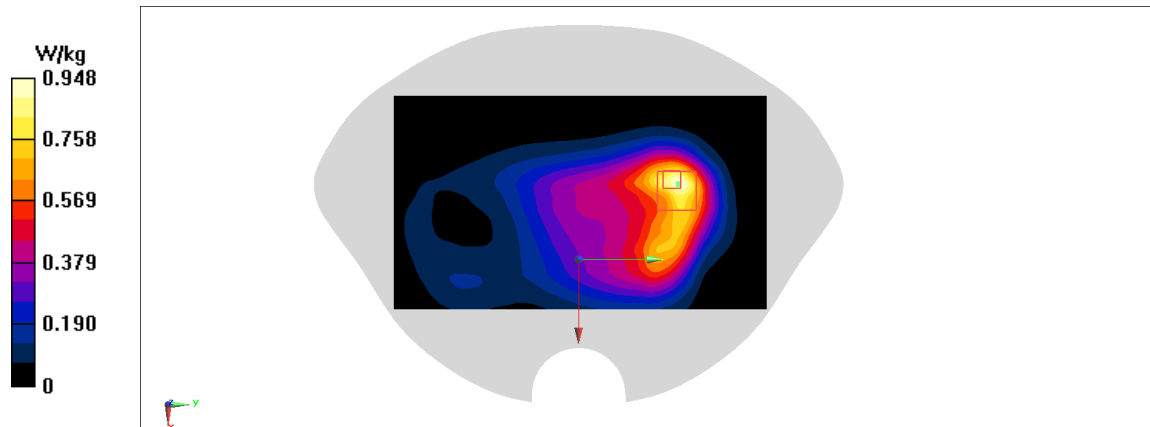


Fig A.4

WCDMA1900-BII_CH9400 Left Cheek

Date: 4/9/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$; $\sigma = 1.389$ mho/m; $\epsilon_r = 40.76$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA1900-BII 1880 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.288 W/kg

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

Reference Value = 5.121 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.324 W/kg

SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.131 W/kg

Maximum value of SAR (measured) = 0.28 W/kg

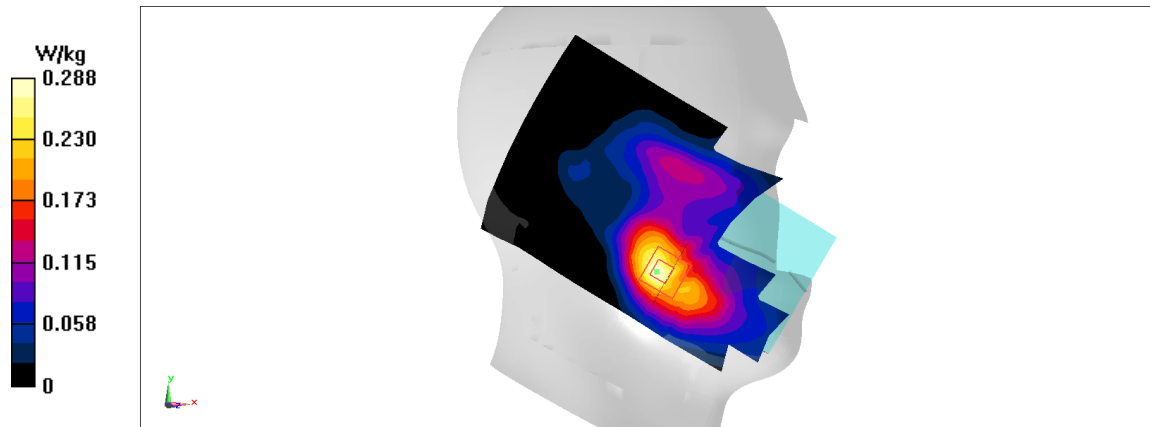


Fig A.5

WCDMA1900-BII_CH9400 Rear

Date: 4/9/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$; $\sigma = 1.389$ mho/m; $\epsilon_r = 40.76$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA1900-BII 1880 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.63 W/kg

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

Reference Value = 11.59 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.719 W/kg

SAR(1 g) = 0.564 W/kg; SAR(10 g) = 0.348 W/kg

Maximum value of SAR (measured) = 0.608 W/kg

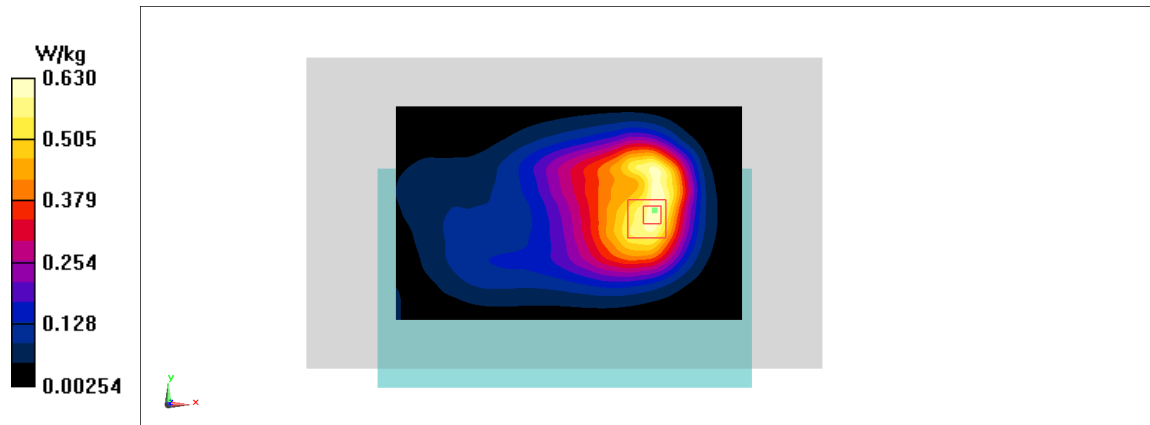


Fig A.6

WCDMA1700-BIV_CH1513 Left Cheek

Date: 4/6/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1752.6$; $\sigma = 1.361$ mho/m; $\epsilon_r = 39.69$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.212 W/kg

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

Reference Value = 3.552 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.244 W/kg

SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.213 W/kg

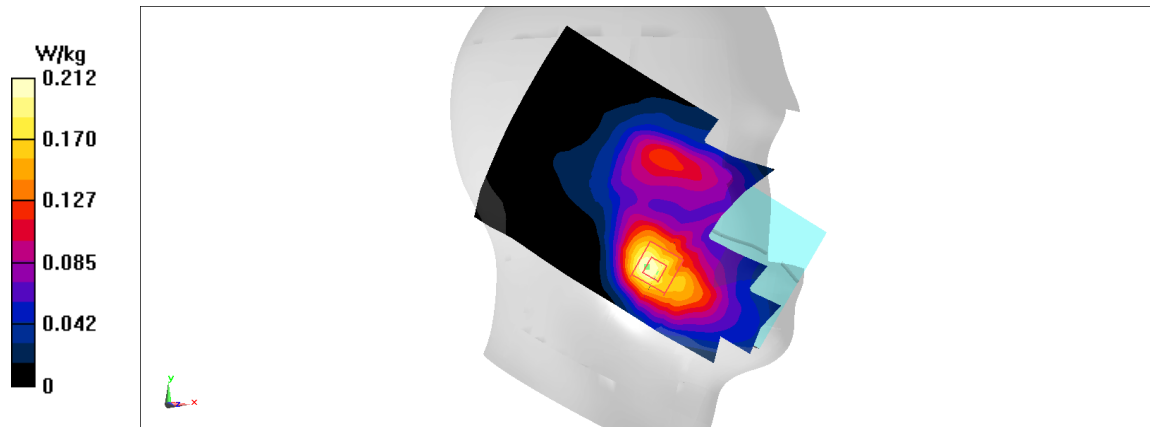


Fig A.7

WCDMA1700-BIV_CH1513 Rear

Date: 4/6/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1752.6$; $\sigma = 1.361$ mho/m; $\epsilon_r = 39.69$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.63 W/kg

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

Reference Value = 11.59 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.719 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 0.608 W/kg

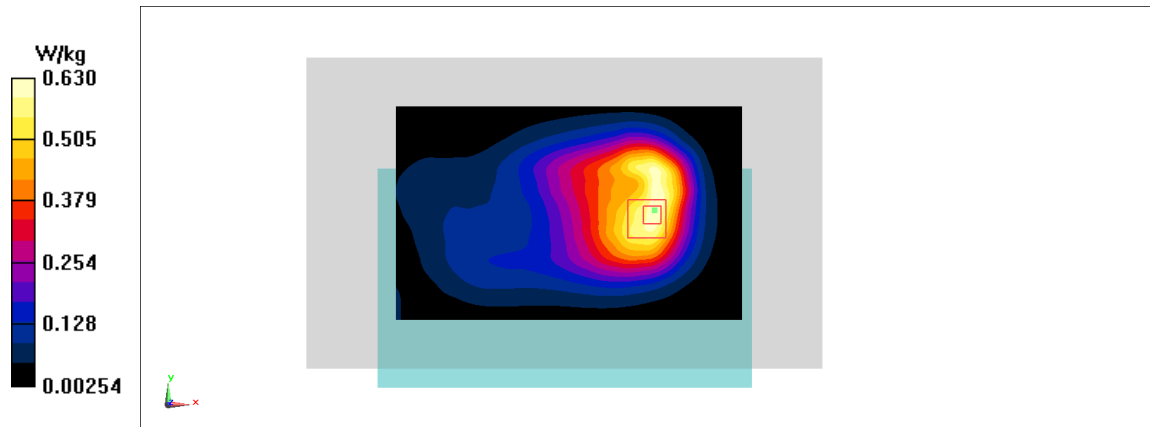


Fig A.8

WCDMA850-BV_CH4132 Right Cheek

Date: 4/4/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 826.4$; $\sigma = 0.889$ mho/m; $\epsilon_r = 40.93$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA850-BV 826.4 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

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

Maximum value of SAR (interpolated) = 0.292 W/kg

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

Reference Value = 9.215 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.322 W/kg

SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.183 W/kg

Maximum value of SAR (measured) = 0.289 W/kg

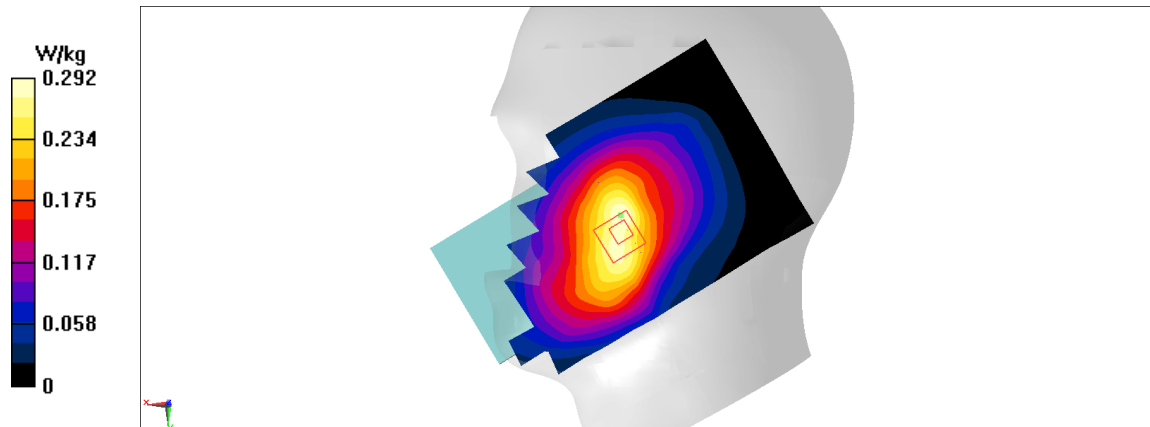


Fig A.9

WCDMA850-BV_CH4132 Rear

Date: 4/4/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 826.4$; $\sigma = 0.889$ mho/m; $\epsilon_r = 40.93$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA850-BV 826.4 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

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

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

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

Reference Value = 10.36 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.635 W/kg

SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.207 W/kg

Maximum value of SAR (measured) = 0.515 W/kg

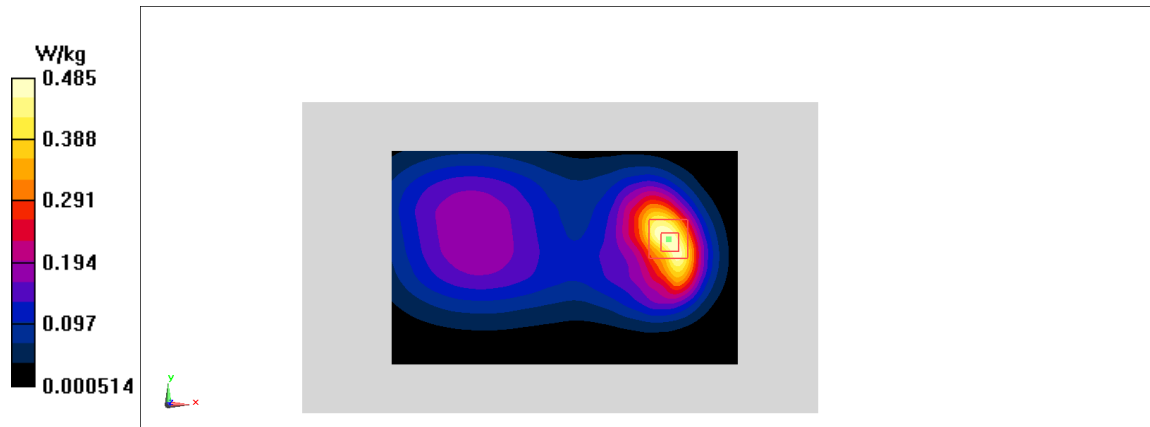


Fig A.10

LTE1900-FDD2_CH18900 Left Cheek

Date: 4/10/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.381$ mho/m; $\epsilon_r = 40.56$; $\rho = 1000$ kg/m³

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

Communication System: LTE1900-FDD2 1880 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.249 W/kg

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

Reference Value = 6.374 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.111 W/kg

Maximum value of SAR (measured) = 0.245 W/kg

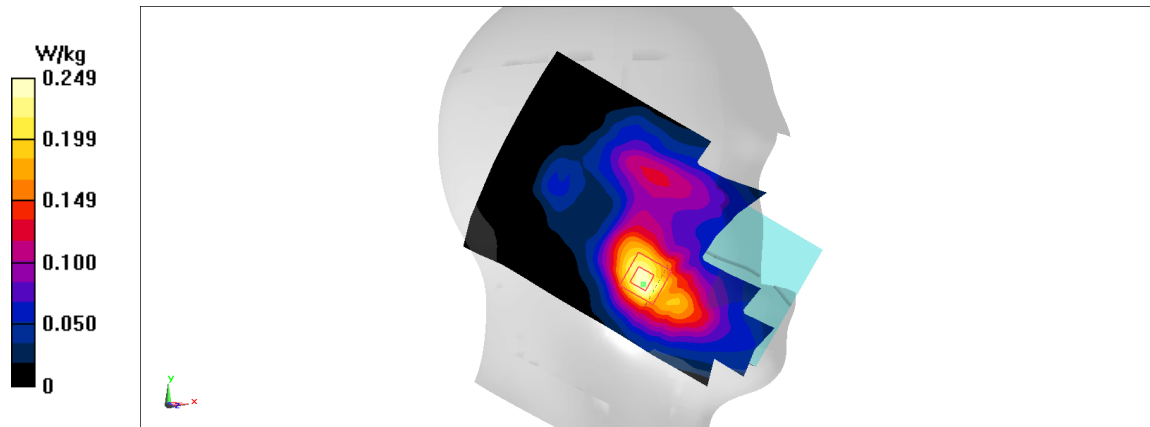


Fig A.11

LTE1900-FDD2_CH18900 Rear

Date: 4/10/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.381 \text{ mho/m}$; $\epsilon_r = 40.56$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE1900-FDD2 1880 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.566 W/kg

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

Reference Value = 11.29 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.63 W/kg

SAR(1 g) = 0.334 W/kg ; SAR(10 g) = 0.198 W/kg

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

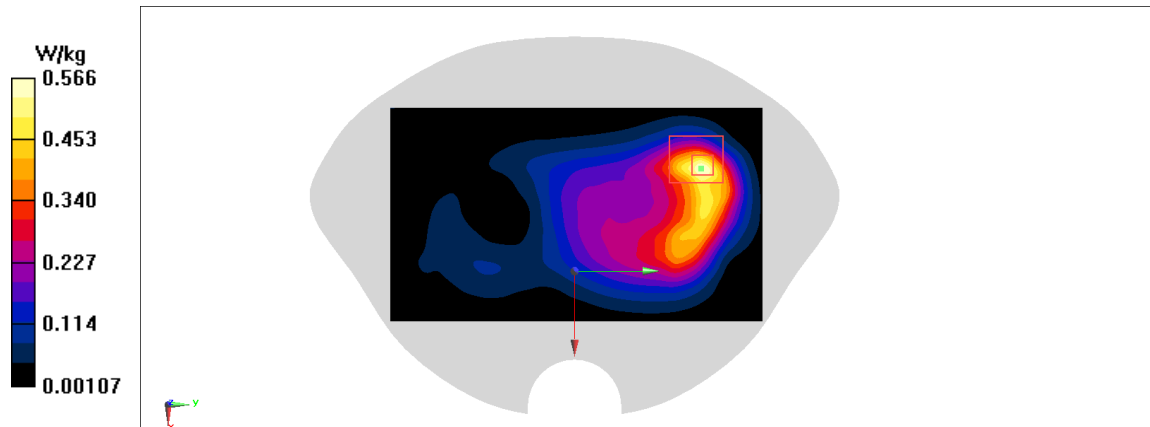


Fig A.12

LTE1900-FDD2_CH18900 Rear

Date: 4/10/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.381$ mho/m; $\epsilon_r = 40.56$; $\rho = 1000$ kg/m³

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

Communication System: LTE1900-FDD2 1880 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.478 W/kg

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

Reference Value = 10.77 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.556 W/kg

SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.467 W/kg

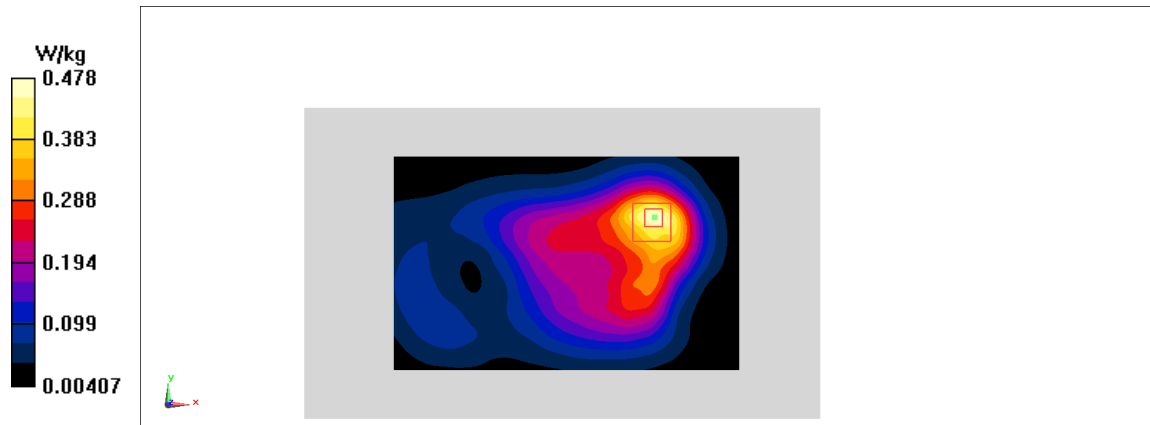


Fig A.13

LTE1700-FDD4_CH20050 Left Cheek

Date: 4/6/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1720 \text{ MHz}$; $\sigma = 1.33 \text{ mho/m}$; $\epsilon_r = 39.73$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE1700-FDD4 1720 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.2 W/kg

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

Reference Value = 2.708 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.096 W/kg

Maximum value of SAR (measured) = 0.194 W/kg

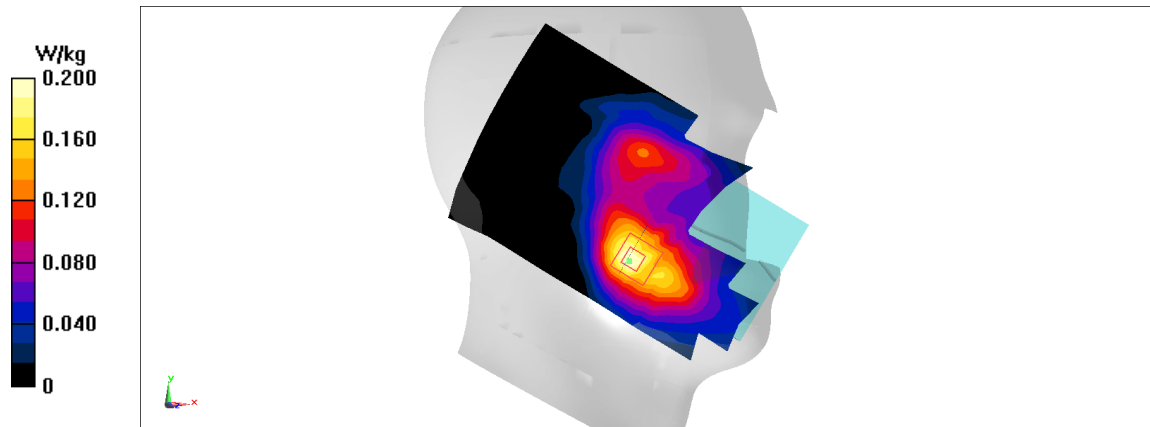


Fig A.14

LTE1700-FDD4_CH20050 Rear

Date: 4/6/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1720 \text{ MHz}$; $\sigma = 1.33 \text{ mho/m}$; $\epsilon_r = 39.73$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE1700-FDD4 1720 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.844 W/kg

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

Reference Value = 10.52 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.934 W/kg

SAR(1 g) = 0.608 W/kg ; SAR(10 g) = 0.388 W/kg

Maximum value of SAR (measured) = 0.806 W/kg

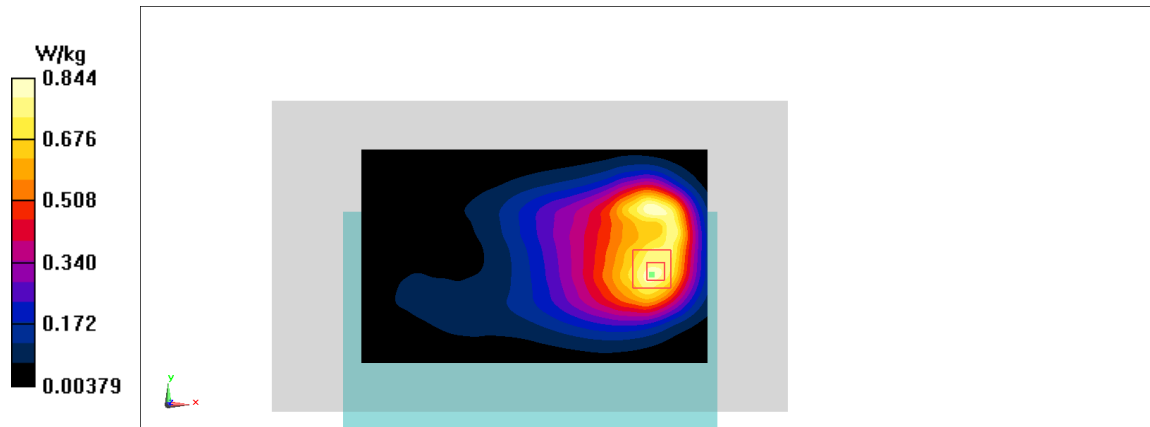


Fig A.15

LTE850-FDD5_CH20450 Right Cheek

Date: 4/5/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.886 \text{ mho/m}$; $\epsilon_r = 41.35$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.323 W/kg

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

Reference Value = 9.302 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.355 W/kg

SAR(1 g) = 0.263 W/kg ; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.319 W/kg

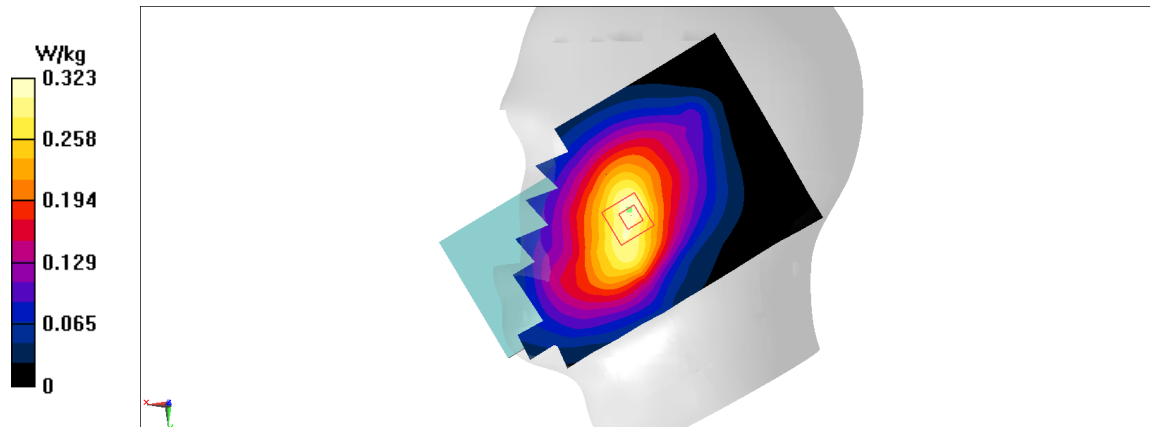


Fig A.16

LTE850-FDD5_CH20450 Rear

Date: 4/5/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.886 \text{ mho/m}$; $\epsilon_r = 41.35$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.963 W/kg

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

Reference Value = 13.48 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.656 W/kg ; SAR(10 g) = 0.378 W/kg

Maximum value of SAR (measured) = 1 W/kg

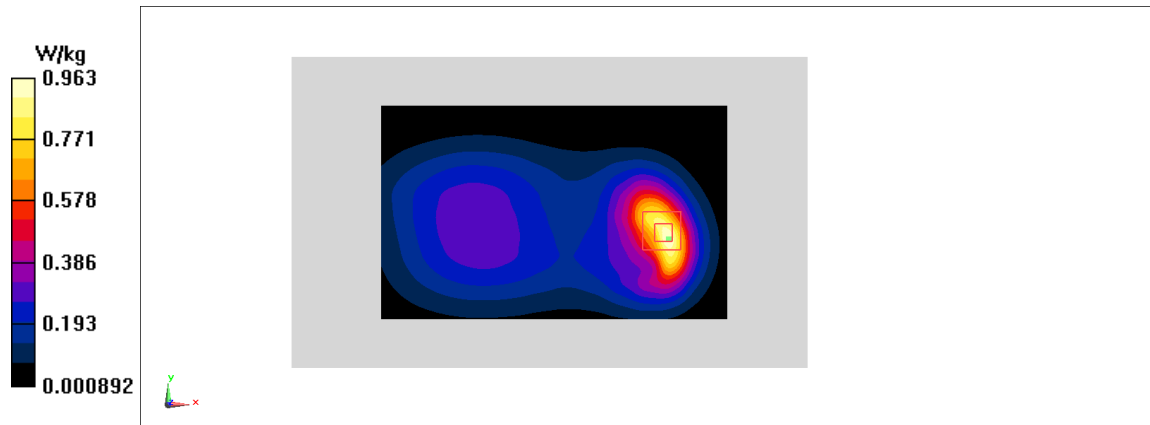


Fig A.17

LTE2500-FDD7_CH20850 Left Cheek

Date: 4/13/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.914$ mho/m; $\epsilon_r = 39.11$; $\rho = 1000$ kg/m³

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

Communication System: LTE2500-FDD7 2510 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.264 W/kg

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

Reference Value = 2.298 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.234 W/kg

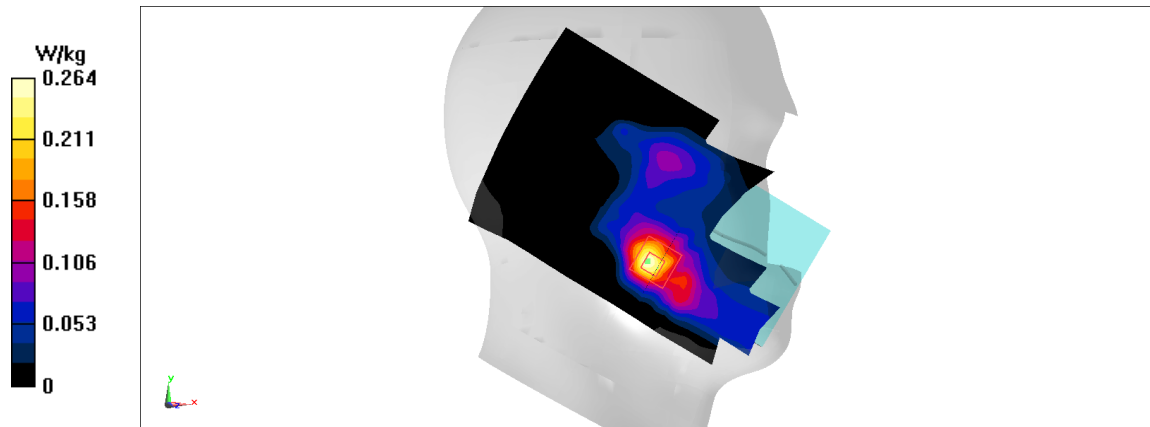


Fig A.18

LTE2500-FDD7_CH21350 Bottom

Date: 4/13/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.961$ mho/m; $\epsilon_r = 39.05$; $\rho = 1000$ kg/m³

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

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.669 W/kg

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

Reference Value = 9.967 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.864 W/kg

SAR(1 g) = 0.418 W/kg; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.666 W/kg

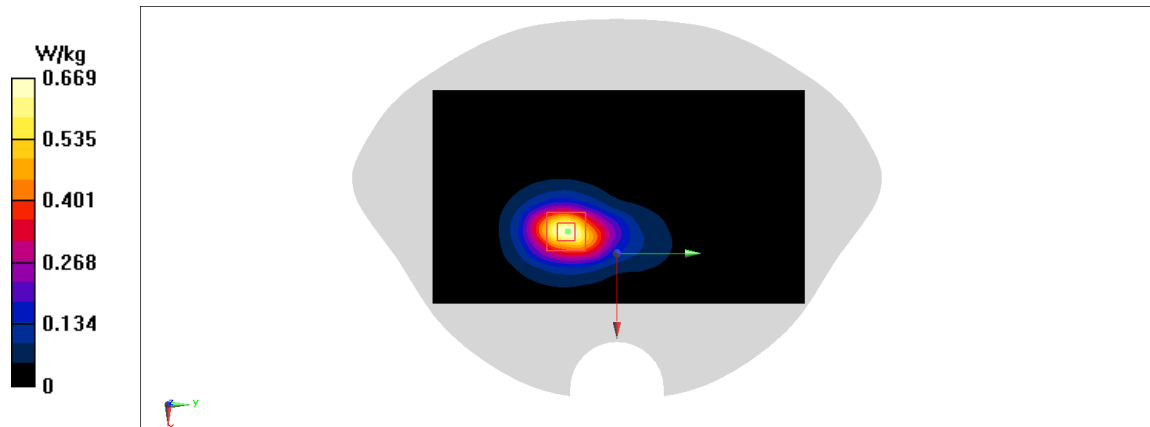


Fig A.19

LTE2500-FDD7_CH20850 Rear

Date: 4/13/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.914$ mho/m; $\epsilon_r = 39.11$; $\rho = 1000$ kg/m³

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

Communication System: LTE2500-FDD7 2510 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.643 W/kg

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

Reference Value = 6.817 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.836 W/kg

SAR(1 g) = 0.44 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.689 W/kg

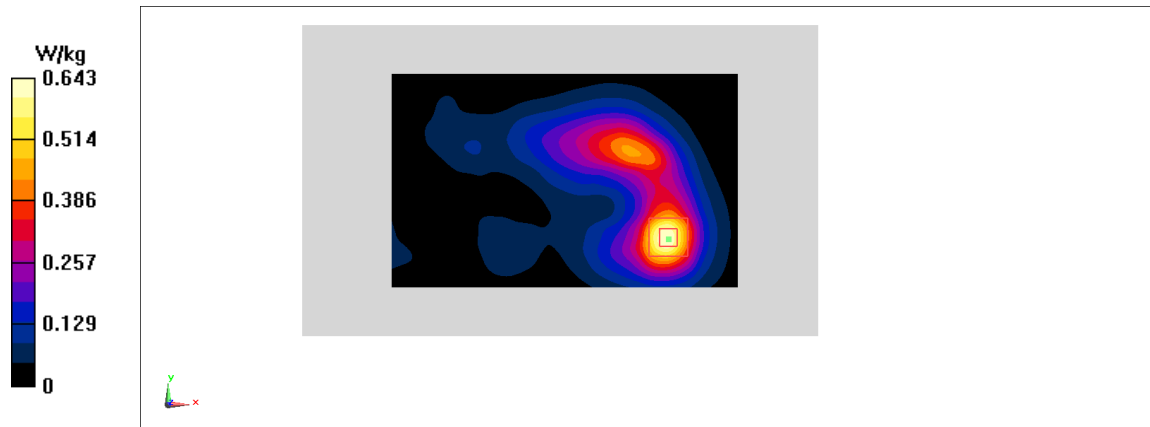


Fig A.20

LTE700-FDD12_CH23060 Right Cheek

Date: 4/2/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.846 \text{ mho/m}$; $\epsilon_r = 41.34$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.22 W/kg

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

Reference Value = 8.567 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.242 W/kg

SAR(1 g) = 0.184 W/kg ; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (measured) = 0.22 W/kg

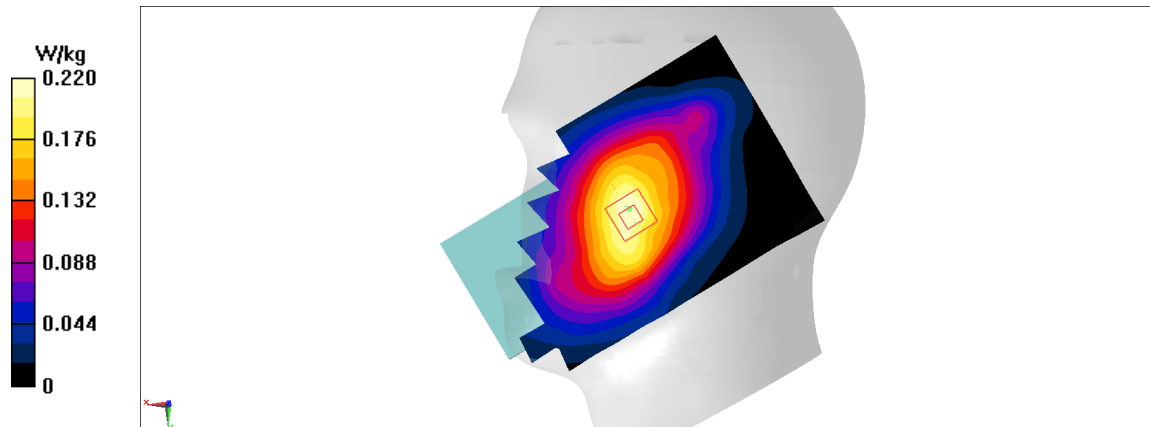


Fig A.21

LTE700-FDD12_CH23060 Right

Date: 4/2/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.846 \text{ mho/m}$; $\epsilon_r = 41.34$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

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

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

Reference Value = 21.05 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.402 W/kg

SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.35 W/kg

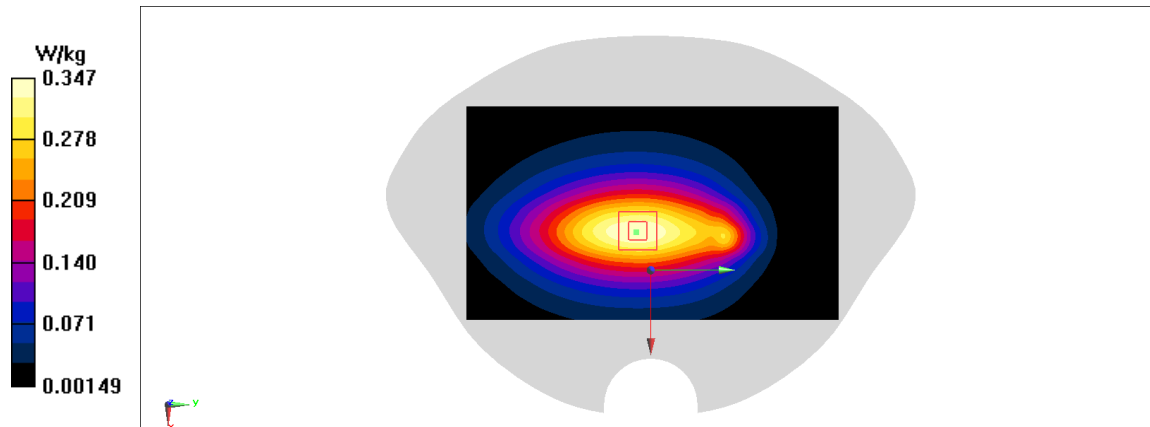


Fig A.22

LTE750-FDD13_CH23230 Left Cheek

Date: 4/2/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 41.24$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0766 W/kg

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

Reference Value = 1.985 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.086 W/kg

SAR(1 g) = 0.066 W/kg ; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.077 W/kg

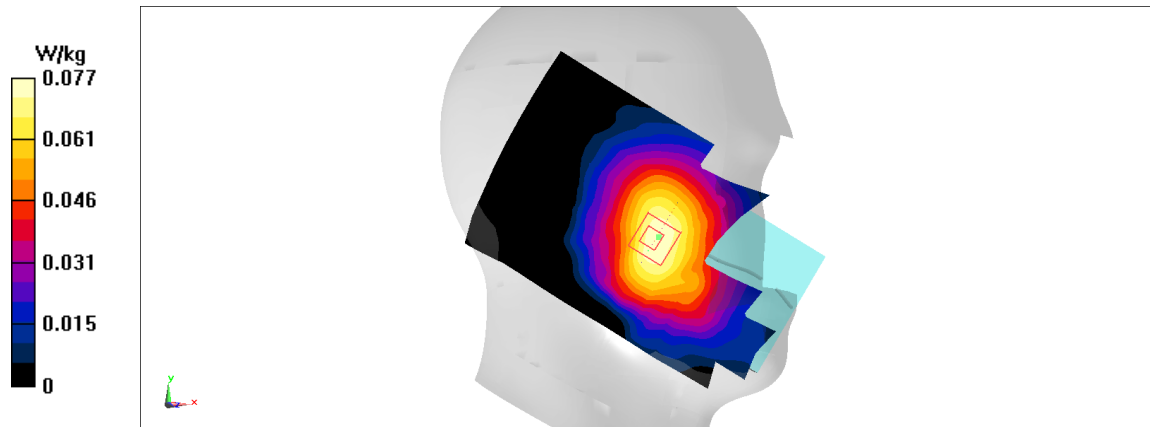


Fig A.23

LTE750-FDD13_CH23230 Rear

Date: 4/2/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 41.24$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.283 W/kg

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

Reference Value = 10.54 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.357 W/kg

SAR(1 g) = 0.184 W/kg ; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.286 W/kg

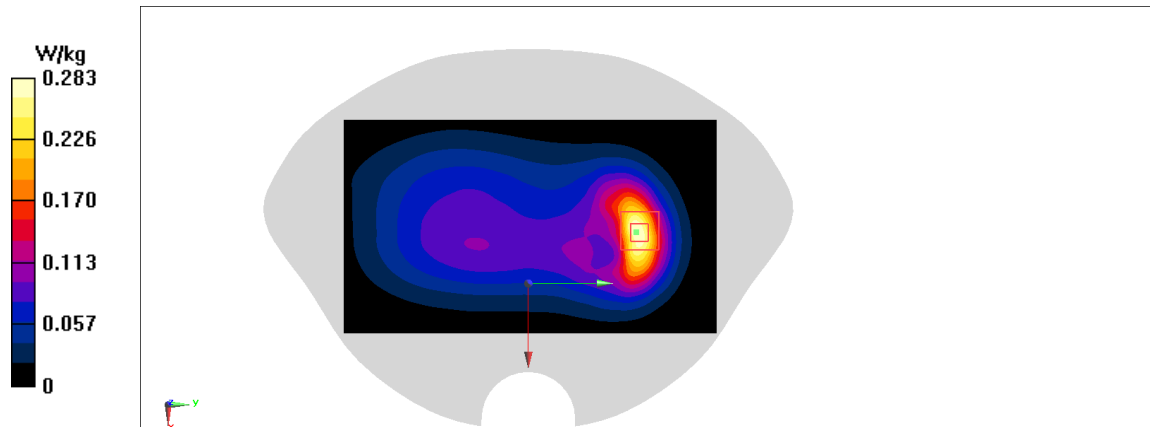


Fig A.24

LTE1900-FDD25_CH26365 Left Cheek

Date: 4/10/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.383$ mho/m; $\epsilon_r = 40.56$; $\rho = 1000$ kg/m³

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

Communication System: LTE1900-FDD25 1882.5 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.28 W/kg

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

Reference Value = 5.973 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.321 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.275 W/kg

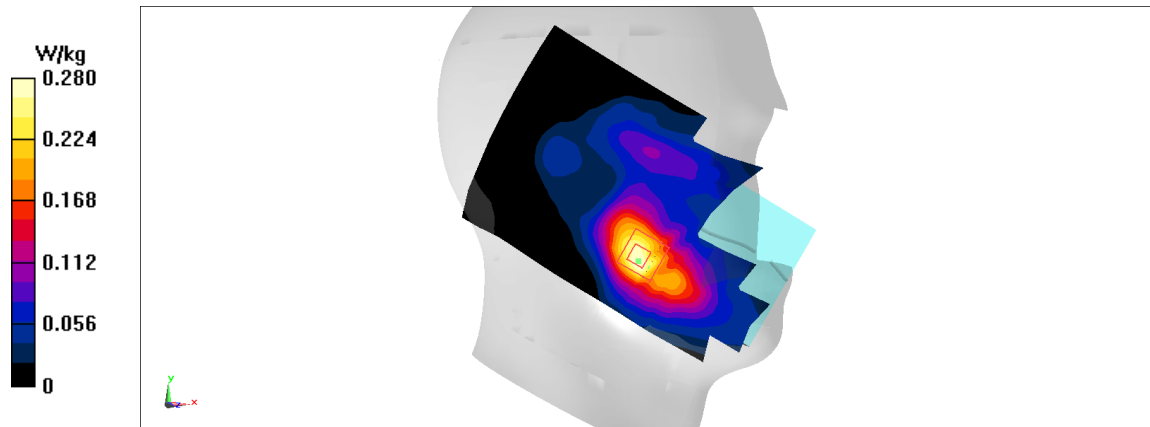


Fig A.25

LTE1900-FDD25_CH26590 Rear

Date: 4/10/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1905 \text{ MHz}$; $\sigma = 1.405 \text{ mho/m}$; $\epsilon_r = 40.53$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE1900-FDD25 1905 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

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

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

Reference Value = 16.07 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.869 W/kg ; SAR(10 g) = 0.531 W/kg

Maximum value of SAR (measured) = 1.22 W/kg

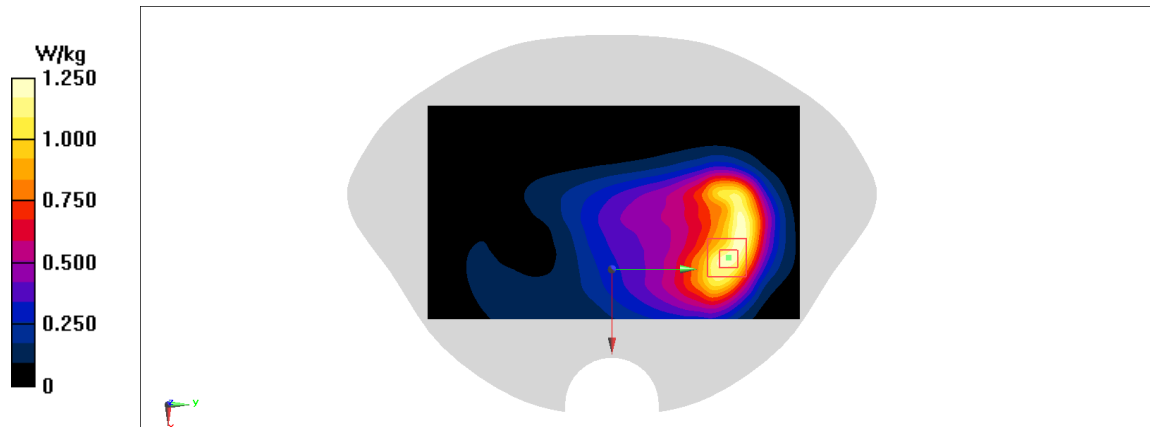


Fig A.26

LTE850-FDD26_CH26775 Right Cheek

Date: 4/5/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 822.5$ MHz; $\sigma = 0.88$ mho/m; $\epsilon_r = 41.36$; $\rho = 1000$ kg/m³

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

Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

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

Maximum value of SAR (interpolated) = 0.324 W/kg

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

Reference Value = 9.207 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.352 W/kg

SAR(1 g) = 0.262 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.317 W/kg

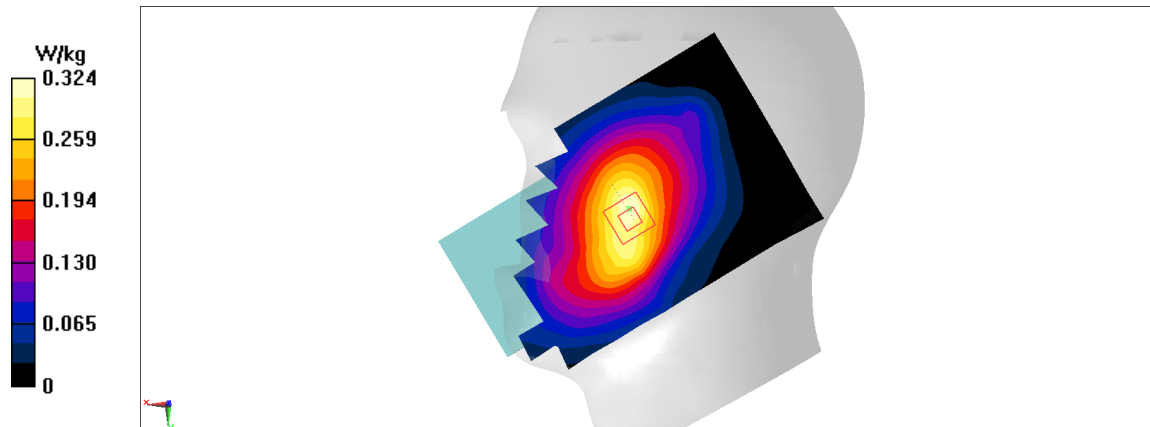


Fig A.27

LTE850-FDD26_CH26775 Rear

Date: 4/5/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 822.5$ MHz; $\sigma = 0.88$ mho/m; $\epsilon_r = 41.36$; $\rho = 1000$ kg/m³

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

Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

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

Maximum value of SAR (interpolated) = 0.667 W/kg

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

Reference Value = 18.94 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.818 W/kg

SAR(1 g) = 0.449 W/kg; SAR(10 g) = 0.267 W/kg

Maximum value of SAR (measured) = 0.671 W/kg

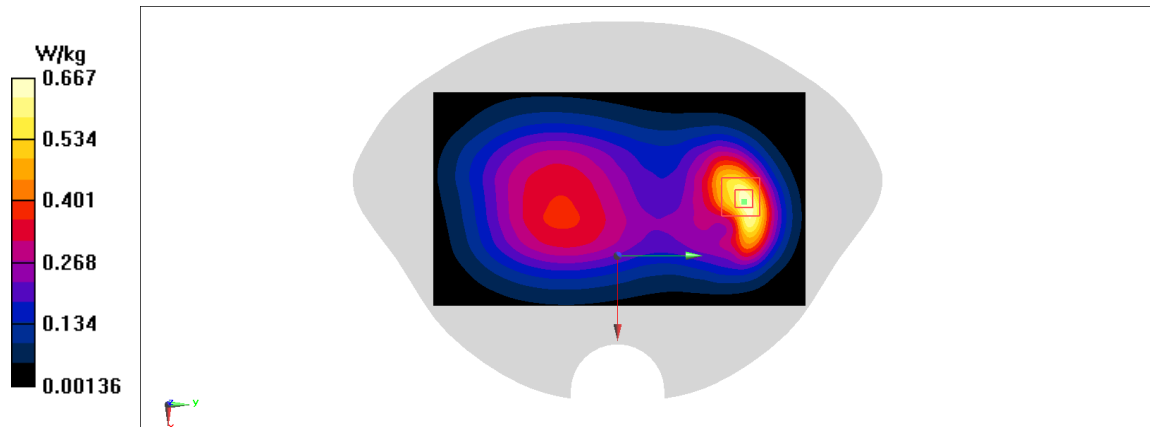


Fig A.28

LTE2600-TDD38_CH37850 Left Cheek

Date: 4/13/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2580$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 39.02$; $\rho = 1000$ kg/m³

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

Communication System: LTE2600-TDD38 2580 MHz Duty Cycle: 1: 1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.0933 W/kg

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

Reference Value = 0.697 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.066 W/kg

SAR(1 g) = 0.034 W/kg; SAR(10 g) = 0.018 W/kg

Maximum value of SAR (measured) = 0.0515 W/kg

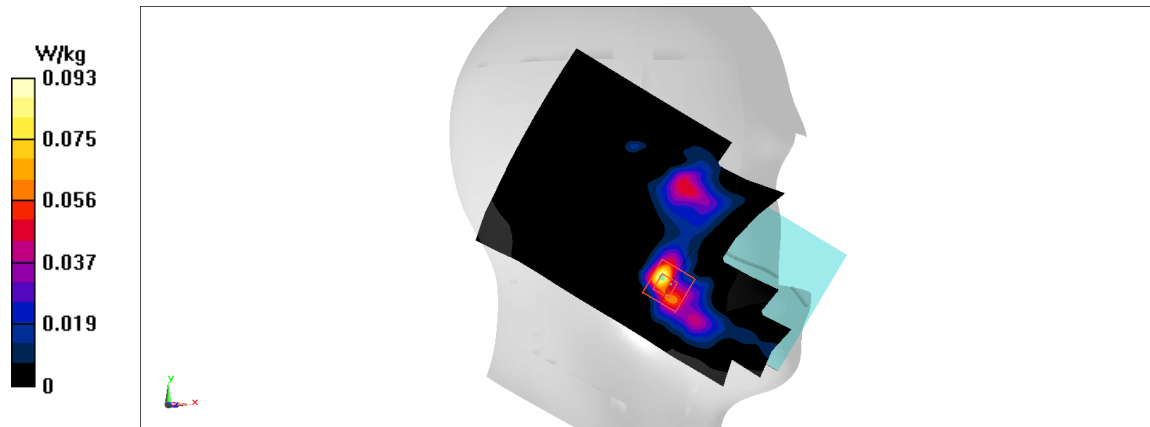


Fig A.29

LTE2600-TDD38_CH37850 Bottom

Date: 4/13/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2580 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 39.02$; $\rho = 1000 \text{ kg/m}^3$

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

Communication System: LTE2600-TDD38 2580 MHz Duty Cycle: 1: 1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.844 W/kg

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

Reference Value = 14.91 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.518 W/kg ; SAR(10 g) = 0.248 W/kg

Maximum value of SAR (measured) = 0.86 W/kg

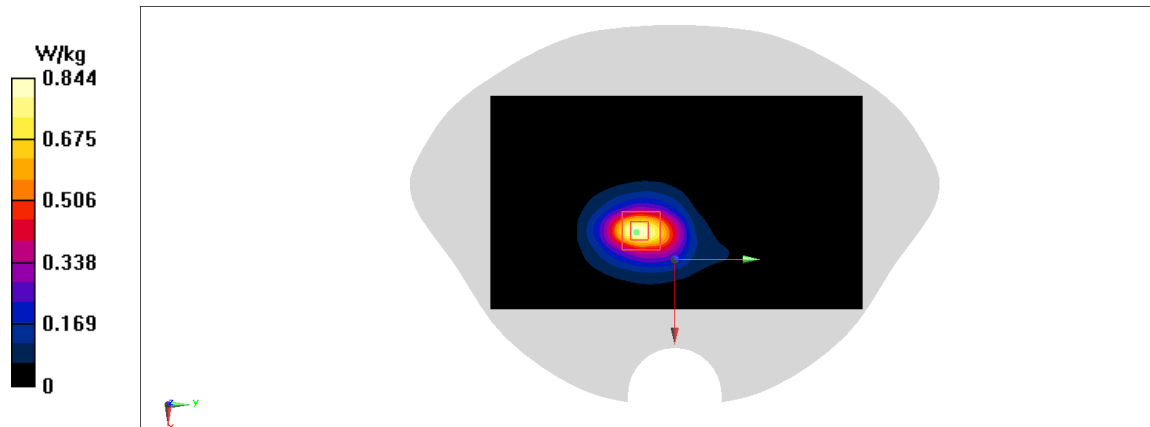


Fig A.30

LTE2600-TDD41_CH39750 Left Cheek

Date: 4/14/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2506$; $\sigma = 1.851$ mho/m; $\epsilon_r = 38.65$; $\rho = 1000$ kg/m³

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

Communication System: LTE2600-TDD41 2506 Duty Cycle: 1: 1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.258 W/kg

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

Reference Value = 1.338 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.15 W/kg; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 0.229 W/kg

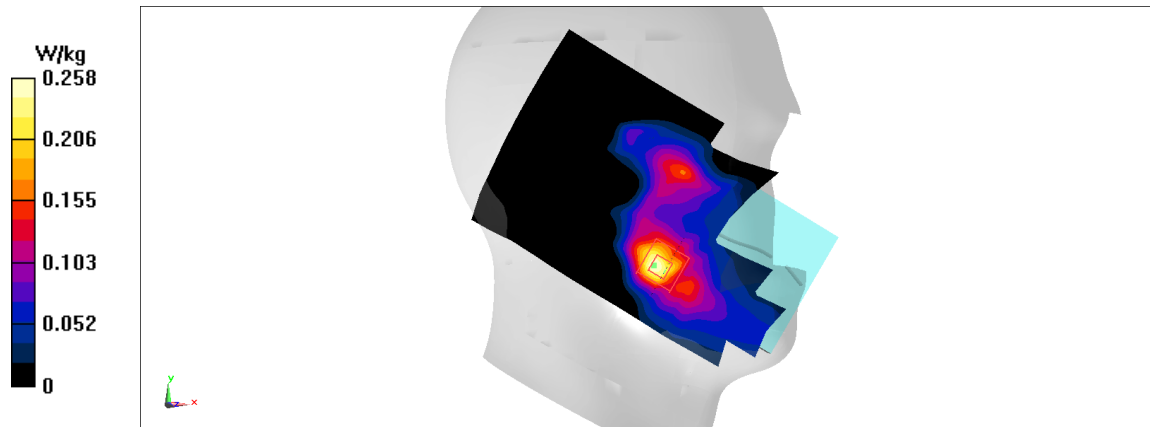


Fig A.31

LTE2600-TDD41_CH41055 Bottom

Date: 4/14/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2636.5$; $\sigma = 1.971$ mho/m; $\epsilon_r = 38.22$; $\rho = 1000$ kg/m³

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

Communication System: LTE2600-TDD41 2636.5 Duty Cycle: 1: 1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 1.9 W/kg

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

Reference Value = 20.42 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.4 W/kg

SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.547 W/kg

Maximum value of SAR (measured) = 1.91 W/kg

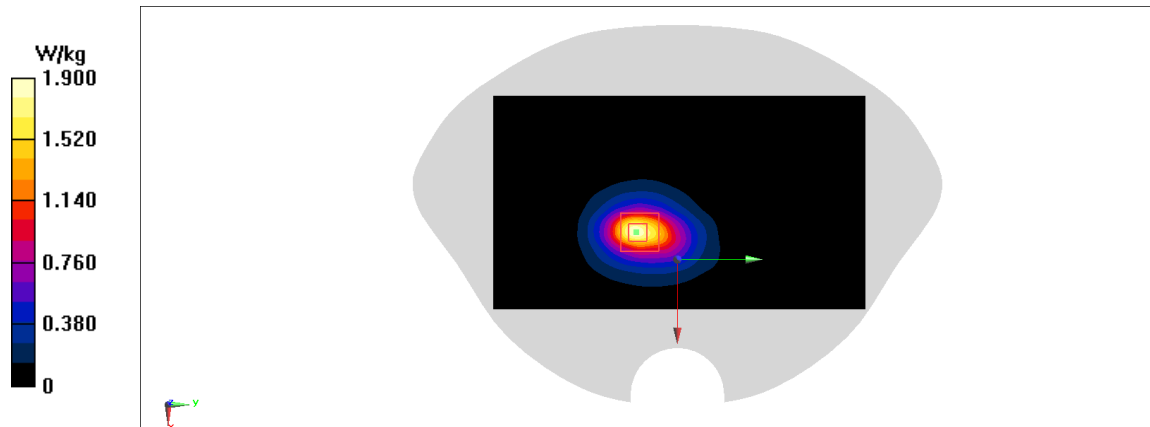


Fig A.32

LTE2600-TDD41_CH39750 Left Cheek

Date: 4/14/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2506$; $\sigma = 1.851$ mho/m; $\epsilon_r = 38.65$; $\rho = 1000$ kg/m³

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

Communication System: LTE2600-TDD41 2506 Duty Cycle: 1: 1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.19 W/kg

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

Reference Value = 0.913 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.206 W/kg

SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.059 W/kg

Maximum value of SAR (measured) = 0.168 W/kg

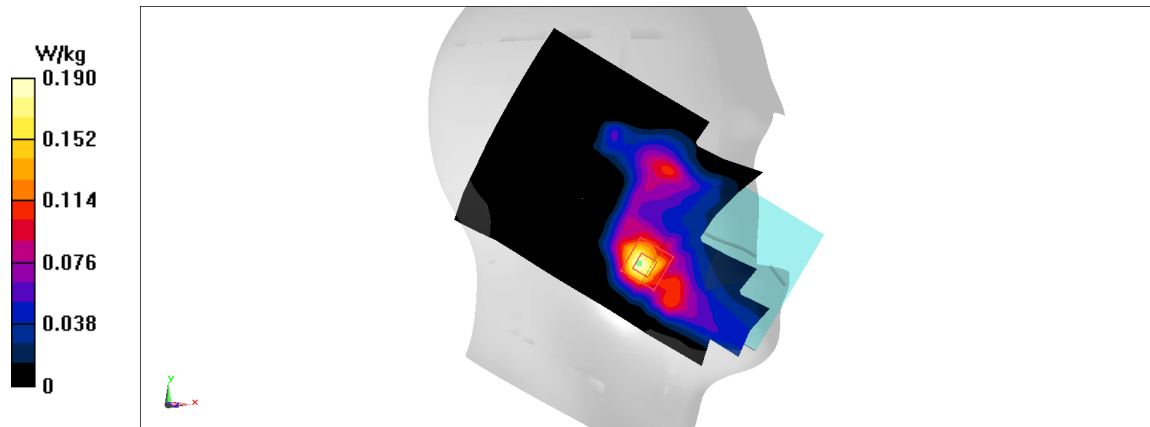


Fig A.33

LTE2600-TDD41_CH41055 Bottom

Date: 4/14/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2636.5$; $\sigma = 1.971$ mho/m; $\epsilon_r = 38.22$; $\rho = 1000$ kg/m³

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

Communication System: LTE2600-TDD41 2636.5 Duty Cycle: 1: 1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 1.46 W/kg

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

Reference Value = 17.9 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 0.883 W/kg; SAR(10 g) = 0.417 W/kg

Maximum value of SAR (measured) = 1.48 W/kg

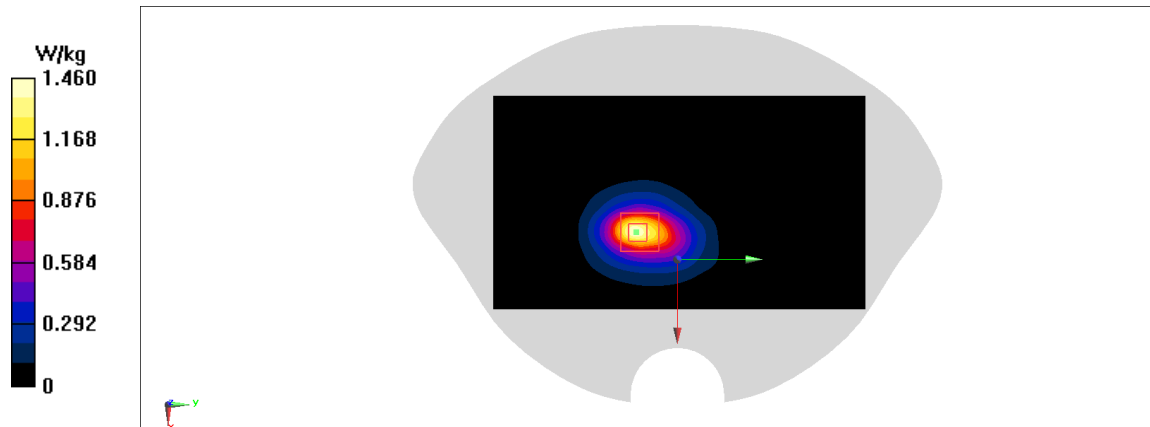


Fig A.34

LTE1700-FDD66_CH132322 Left Cheek

Date: 4/7/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.374$ mho/m; $\epsilon_r = 40.66$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 1745 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.251 W/kg

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

Reference Value = 3.647 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.765 W/kg

SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.237 W/kg

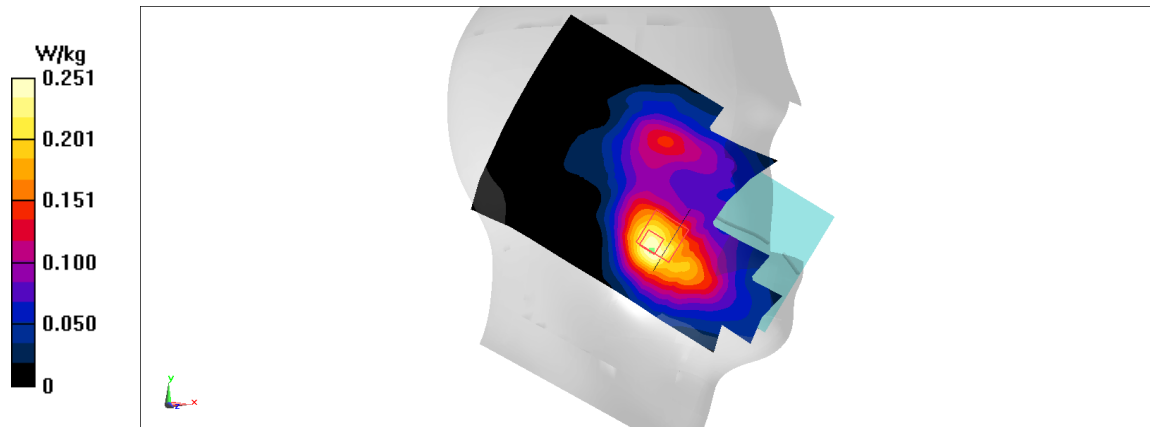


Fig A.35

LTE1700-FDD66_CH132072 Rear

Date: 4/7/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1720$; $\sigma = 1.358$ mho/m; $\epsilon_r = 40.73$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 1720 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.581 W/kg

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

Reference Value = 12.86 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.357 W/kg; SAR(10 g) = 0.214 W/kg

Maximum value of SAR (measured) = 0.539 W/kg

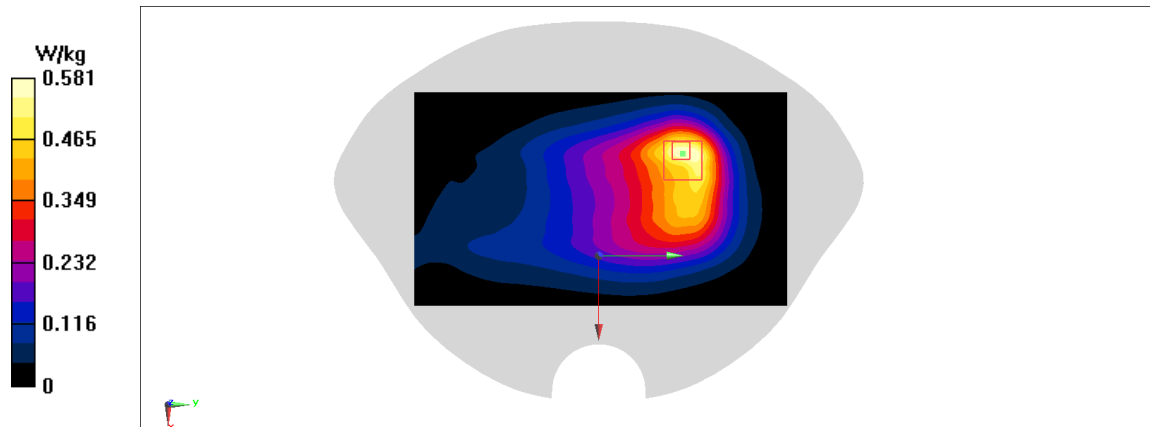


Fig A.36

LTE1700-FDD66_CH132322 Rear

Date: 4/7/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.358$ mho/m; $\epsilon_r = 40.73$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 1720 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.514 W/kg

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

Reference Value = 11.09 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.579 W/kg

SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.5 W/kg

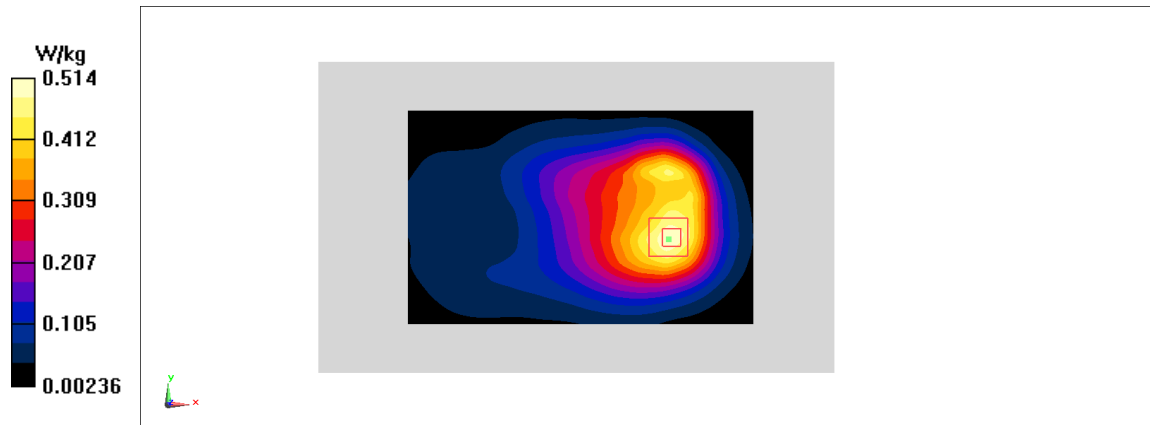


Fig A.37

LTE700-FDD71_CH133222 Right Cheek

Date: 4/3/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 673$; $\sigma = 0.884$ mho/m; $\epsilon_r = 44.97$; $\rho = 1000$ kg/m³

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

Communication System: LTE700-FDD71 673 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

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

Maximum value of SAR (interpolated) = 0.218 W/kg

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

Reference Value = 8.951 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.234 W/kg

SAR(1 g) = 0.185 W/kg; SAR(10 g) = 0.15 W/kg

Maximum value of SAR (measured) = 0.216 W/kg

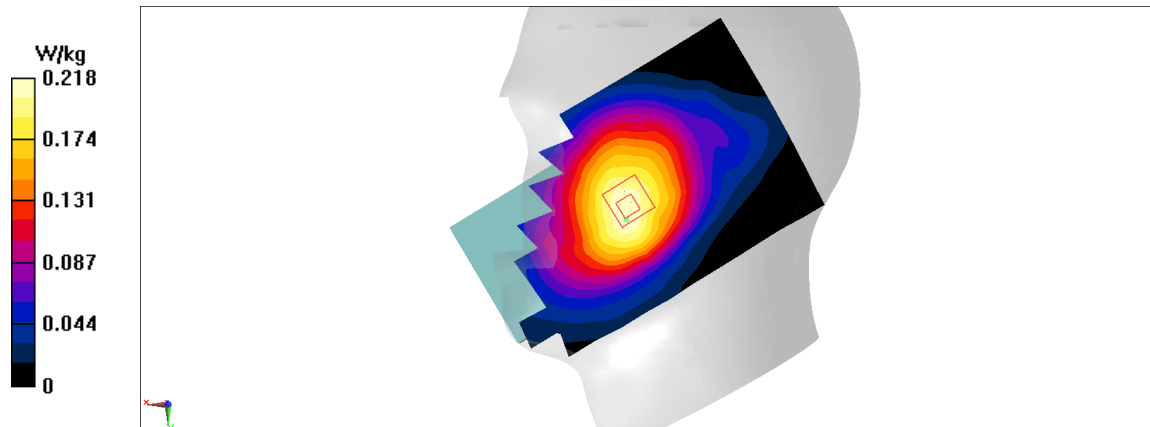


Fig A.38

LTE700-FDD71_CH133222 Right

Date: 4/3/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 673$; $\sigma = 0.884$ mho/m; $\epsilon_r = 44.97$; $\rho = 1000$ kg/m³

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

Communication System: LTE700-FDD71 673 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

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

Maximum value of SAR (interpolated) = 0.376 W/kg

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

Reference Value = 19.73 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.435 W/kg

SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.377 W/kg

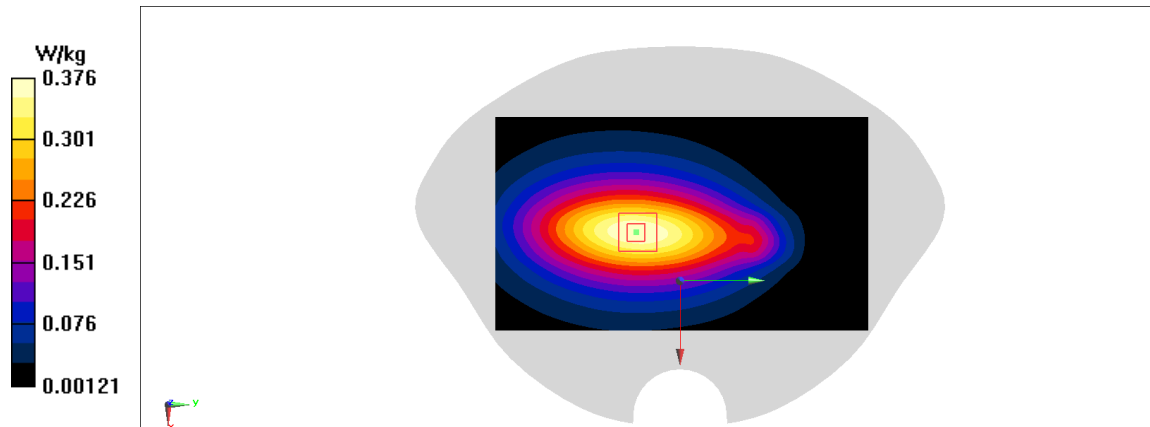


Fig A.39

WLAN2450_CH6 Left Cheek

Date: 4/12/2021

Electronics: DAE4 Sn536

Medium: head 2450 MHz

Medium parameters used: $f = 2437$; $\sigma = 1.784$ mho/m; $\epsilon_r = 39.22$; $\rho = 1000$ kg/m³

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

Communication System: WLAN2450 2437 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.77,7.77,7.77)

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

Maximum value of SAR (interpolated) = 1.31 W/kg

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

Reference Value = 6.671 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.63 W/kg; SAR(10 g) = 0.231 W/kg

Maximum value of SAR (measured) = 1.28 W/kg

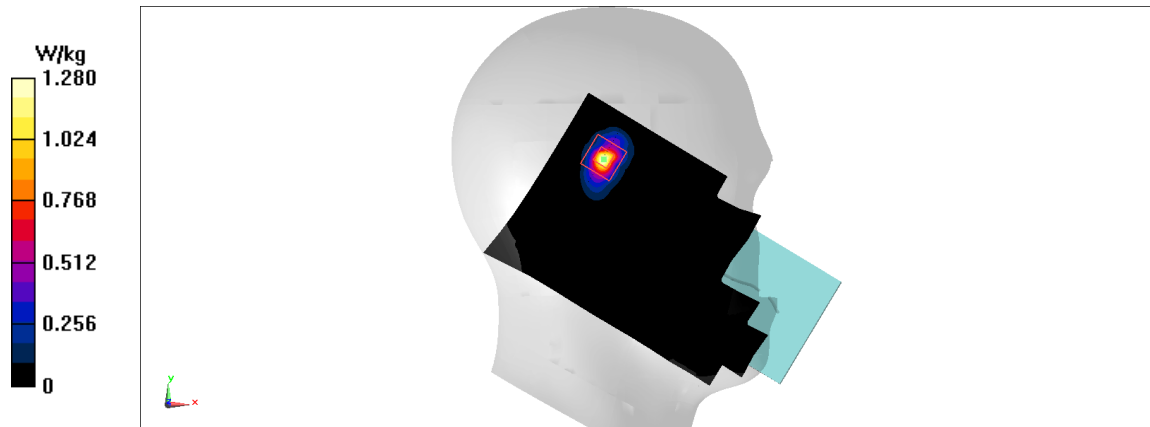


Fig A.40

WLAN2450_CH6 Front

Date: 4/12/2021

Electronics: DAE4 Sn536

Medium: head 2450 MHz

Medium parameters used: $f = 2437$; $\sigma = 1.784$ mho/m; $\epsilon_r = 39.22$; $\rho = 1000$ kg/m³

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

Communication System: WLAN2450 2437 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.77,7.77,7.77)

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

Maximum value of SAR (interpolated) = 0.936 W/kg

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

Reference Value = 1.152 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.573 W/kg; SAR(10 g) = 0.285 W/kg

Maximum value of SAR (measured) = 0.907 W/kg

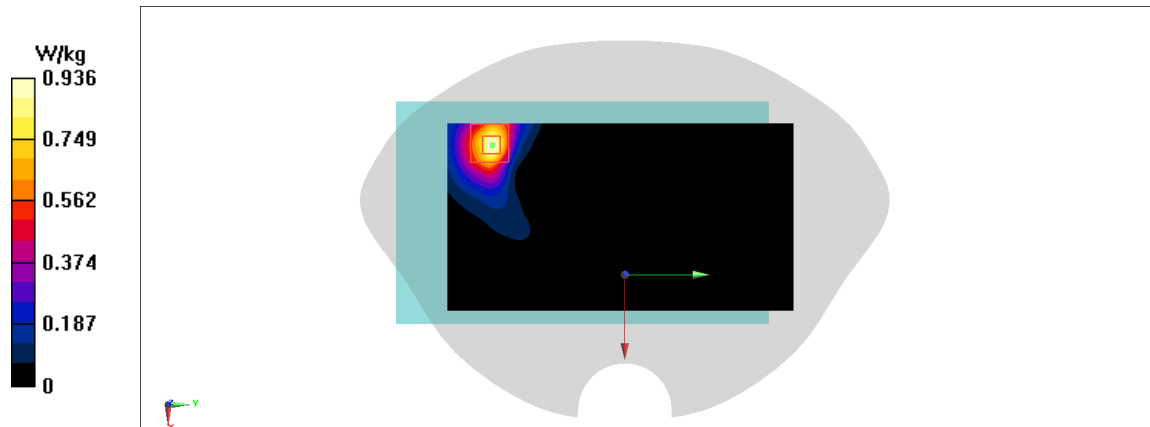


Fig A.41

WLAN5G_CH155 Left Tilt

Date: 4/18/2021

Electronics: DAE4 Sn536

Medium: head 2450 MHz

Medium parameters used: $f = 5775$; $\sigma = 5.194$ mho/m; $\epsilon_r = 35.34$; $\rho = 1000$ kg/m³

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

Communication System: WLAN 5775 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(5.05,5.05,5.05)

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

Maximum value of SAR (interpolated) = 1.47 W/kg

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

Reference Value = 2.586 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 0.404 W/kg; SAR(10 g) = 0.114 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

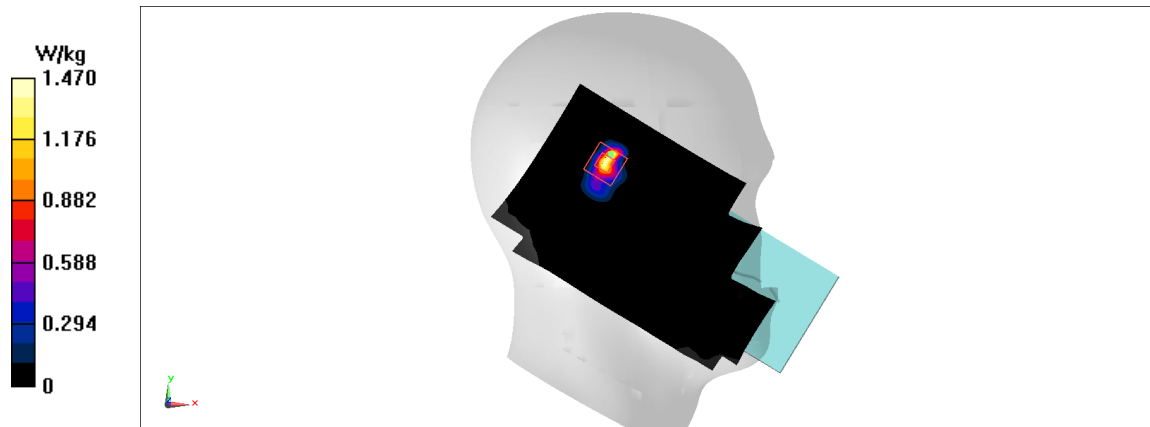


Fig A.42

WLAN5G_CH165 Rear

Date: 4/18/2021

Electronics: DAE4 Sn536

Medium: head 2450 MHz

Medium parameters used: $f = 5825$; $\sigma = 5.244$ mho/m; $\epsilon_r = 35.29$; $\rho = 1000$ kg/m³

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

Communication System: WLAN 5825 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(5.05,5.05,5.05)

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

Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.488 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 0.5 W/kg; SAR(10 g) = 0.211 W/kg

Maximum value of SAR (measured) = 1.13 W/kg

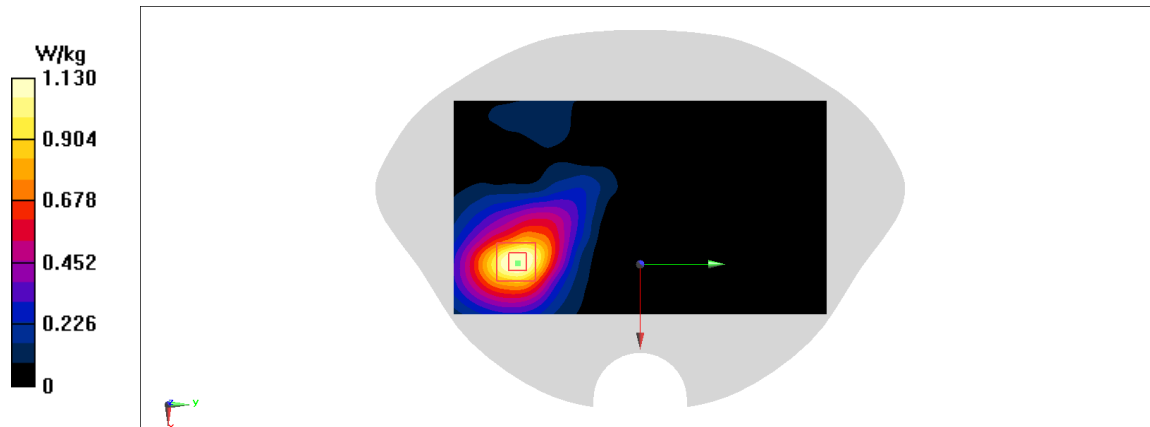


Fig A.43

n25_CH376500 Left Cheek

Date: 4/11/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.2$ MHz; $\sigma = 1.397$ mho/m; $\epsilon_r = 40.67$; $\rho = 1000$ kg/m³

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

Communication System: n25 1882.2 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.214 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.181 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.249 W/kg

SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.204 W/kg

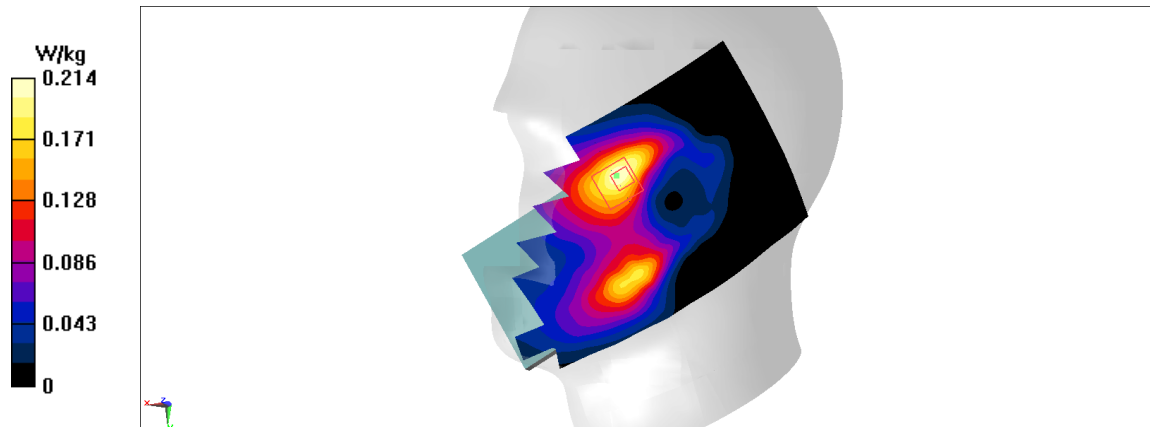


Fig A.44

n25_CH376500 Bottom

Date: 4/11/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.2$ MHz; $\sigma = 1.397$ mho/m; $\epsilon_r = 40.67$; $\rho = 1000$ kg/m³

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

Communication System: n25 1882.2 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.672 W/kg

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

Reference Value = 16.51 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.8 W/kg

SAR(1 g) = 0.468 W/kg; SAR(10 g) = 0.272 W/kg

Maximum value of SAR (measured) = 0.669 W/kg

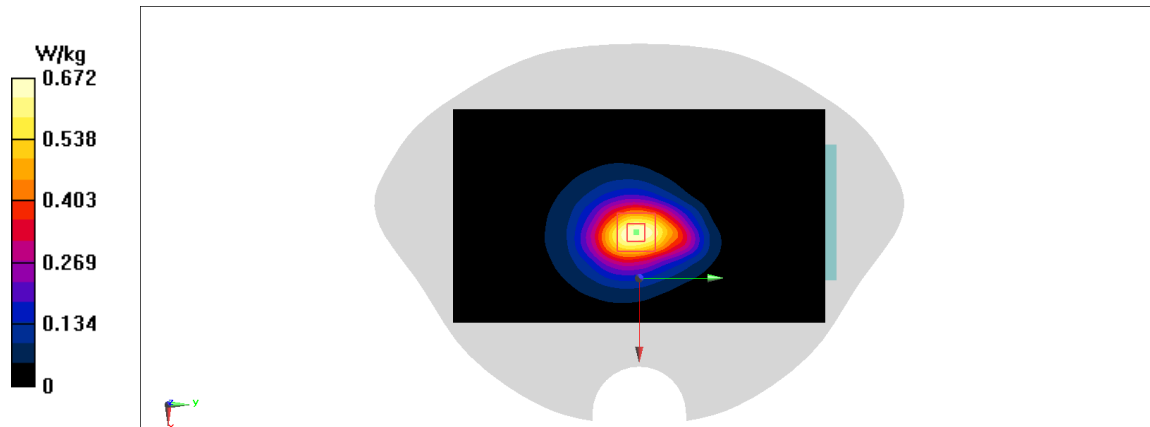


Fig A.45

n25_CH376500 Rear

Date: 4/11/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.2$ MHz; $\sigma = 1.397$ mho/m; $\epsilon_r = 40.67$; $\rho = 1000$ kg/m³

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

Communication System: n25 1882.2 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (81x141x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

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

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

Reference Value = 12.28 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.798 W/kg

SAR(1 g) = 0.489 W/kg; SAR(10 g) = 0.303 W/kg

Maximum value of SAR (measured) = 0.684 W/kg

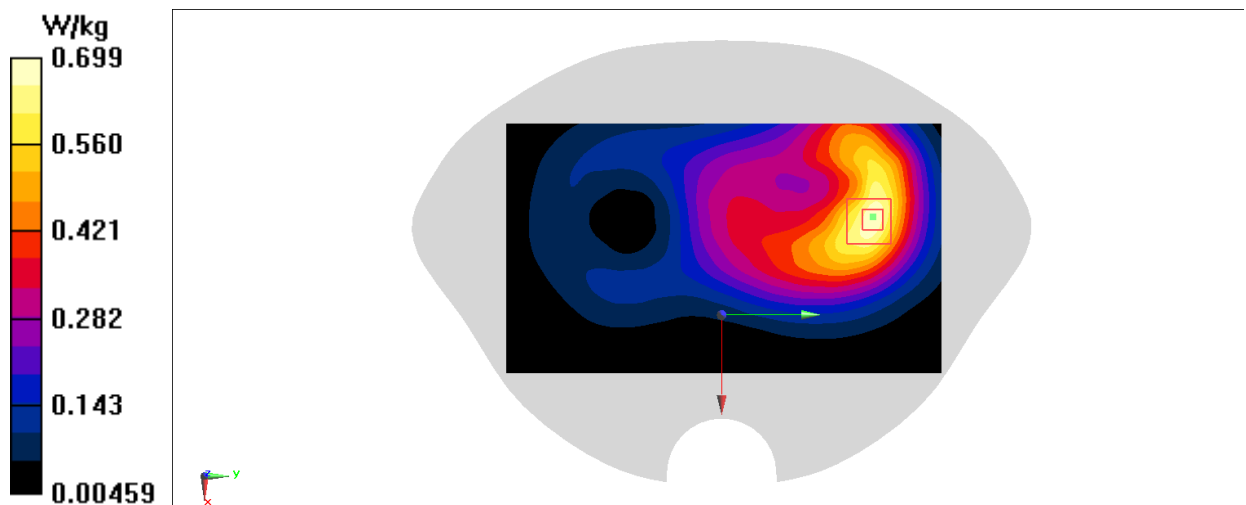


Fig A.46

n25_CH376500 Right Tilt

Date: 4/11/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.2$ MHz; $\sigma = 1.397$ mho/m; $\epsilon_r = 40.67$; $\rho = 1000$ kg/m³

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

Communication System: n25 1882.2 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 1.07 W/kg

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

Reference Value = 13.86 V/m; Power Drift = 0.25 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.608 W/kg; SAR(10 g) = 0.272 W/kg

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

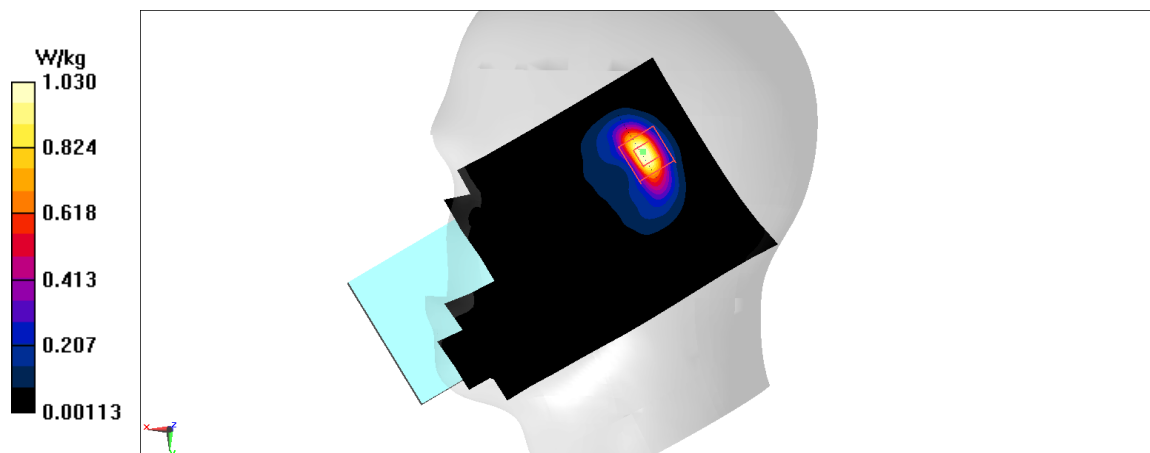


Fig A.47

n25_CH376500 Top

Date: 4/11/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.2$ MHz; $\sigma = 1.397$ mho/m; $\epsilon_r = 40.67$; $\rho = 1000$ kg/m³

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

Communication System: n25 1882.2 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

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

Maximum value of SAR (interpolated) = 0.786 W/kg

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

Reference Value = 10.96 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.939 W/kg

SAR(1 g) = 0.484 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.769 W/kg

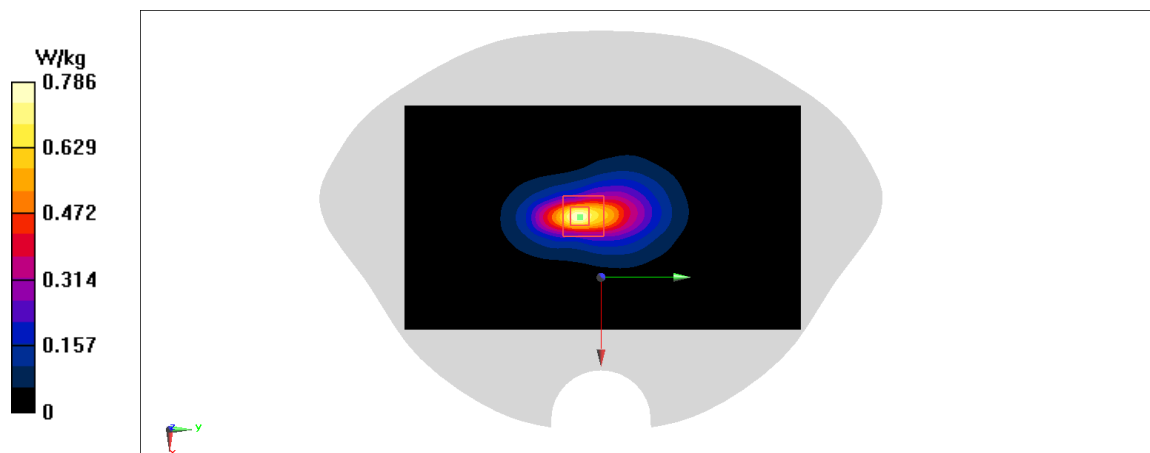


Fig A.48

n25_CH376500 Rear

Date: 4/11/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1882.2$ MHz; $\sigma = 1.397$ mho/m; $\epsilon_r = 40.67$; $\rho = 1000$ kg/m³

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

Communication System: n25 1882.2 MHz Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (81x141x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

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

Zoom Scan (7x8x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 10.83 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.677 W/kg; SAR(10 g) = 0.382 W/kg

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

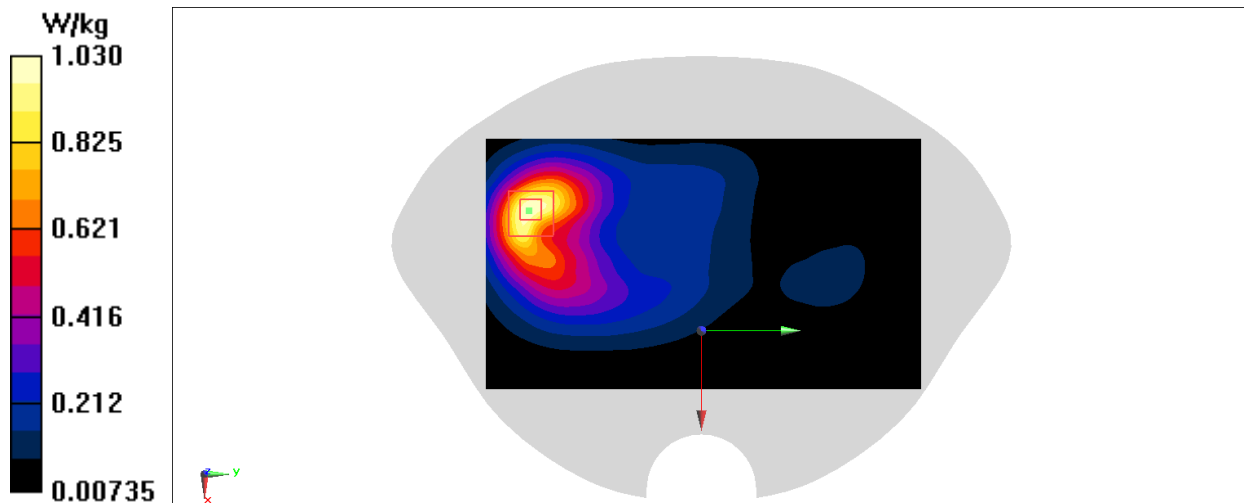


Fig A.49

n41_CH513900 Left Cheek

Date: 4/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2569.5$; $\sigma = 1.938$ mho/m; $\epsilon_r = 39.19$; $\rho = 1000$ kg/m³

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

Communication System: n41 2569.5 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.325 W/kg

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

Reference Value = 2.909 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.333 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.098 W/kg

Maximum value of SAR (measured) = 0.279 W/kg

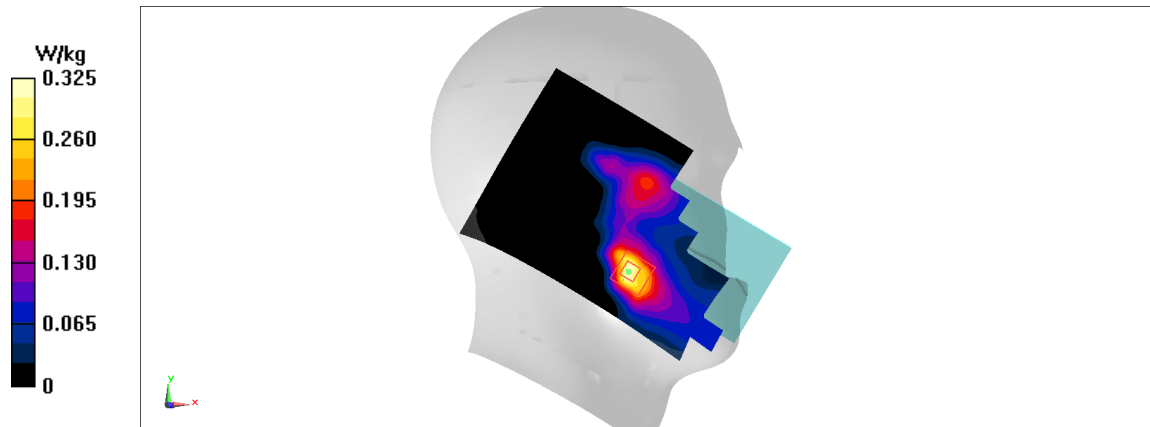


Fig A.50

n41_CH528000 Bottom

Date: 4/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2640$; $\sigma = 2.008$ mho/m; $\epsilon_r = 39.12$; $\rho = 1000$ kg/m³

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

Communication System: n41 2640 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 1.81 W/kg

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

Reference Value = 16.03 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.529 W/kg

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

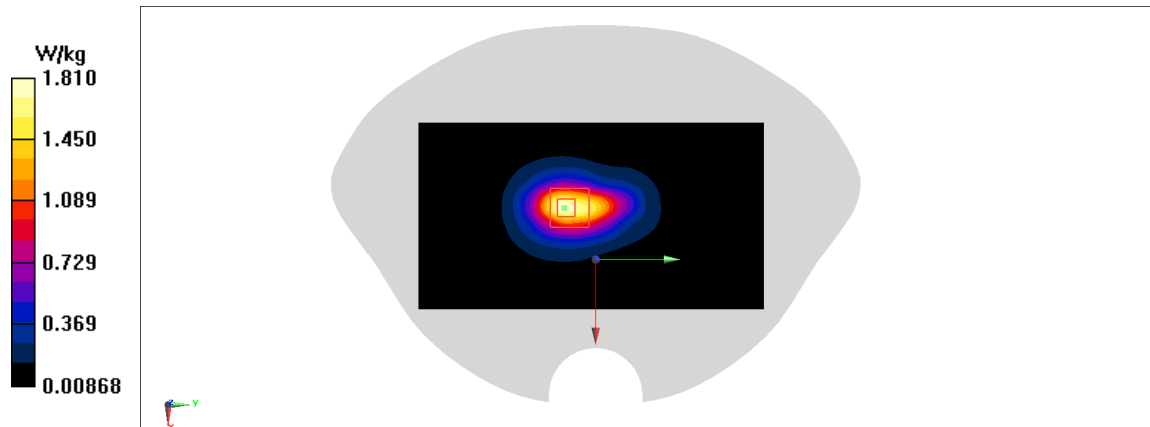


Fig A.51

n41_CH513900 Rear

Date: 4/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2569.5$; $\sigma = 1.938$ mho/m; $\epsilon_r = 39.19$; $\rho = 1000$ kg/m³

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

Communication System: n41 2569.5 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (81x141x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.772 W/kg

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

Reference Value = 3.853 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.899 W/kg

SAR(1 g) = 0.481 W/kg; SAR(10 g) = 0.258 W/kg

Maximum value of SAR (measured) = 0.742 W/kg

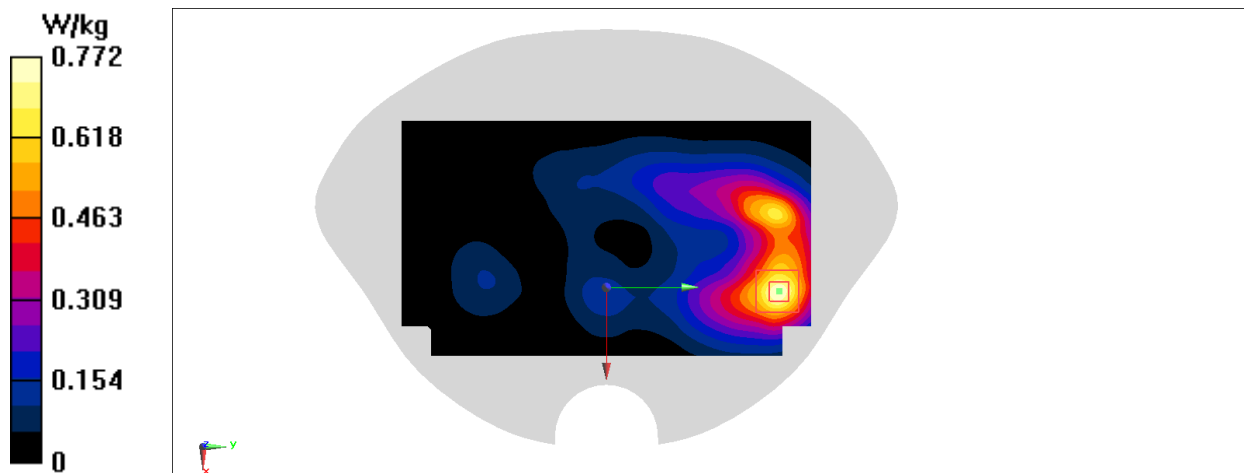


Fig A.52

n41_CH527298 Right Cheek

Date: 4/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2636.49$; $\sigma = 2.008$ mho/m; $\epsilon_r = 39.12$; $\rho = 1000$ kg/m³

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

Communication System: n41 2636.49 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 1.07 W/kg

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

Reference Value = 2.143 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.211 W/kg

Maximum value of SAR (measured) = 0.813 W/kg

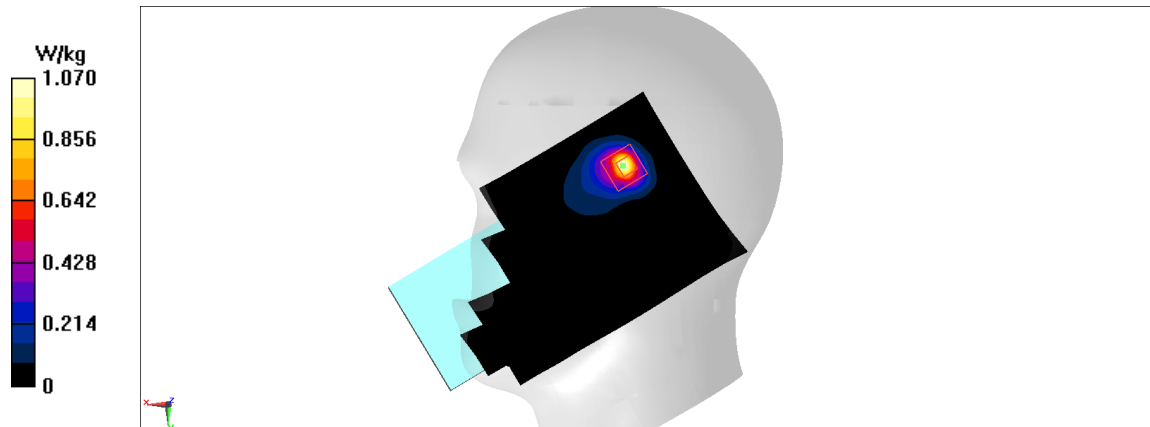


Fig A.53

n41_CH535998 Top

Date: 4/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2679.99$; $\sigma = 2.038$ mho/m; $\epsilon_r = 39.09$; $\rho = 1000$ kg/m³

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

Communication System: n41 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

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

Maximum value of SAR (interpolated) = 0.46 W/kg

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

Reference Value = 3.025 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.622 W/kg

SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.105 W/kg

Maximum value of SAR (measured) = 0.448 W/kg

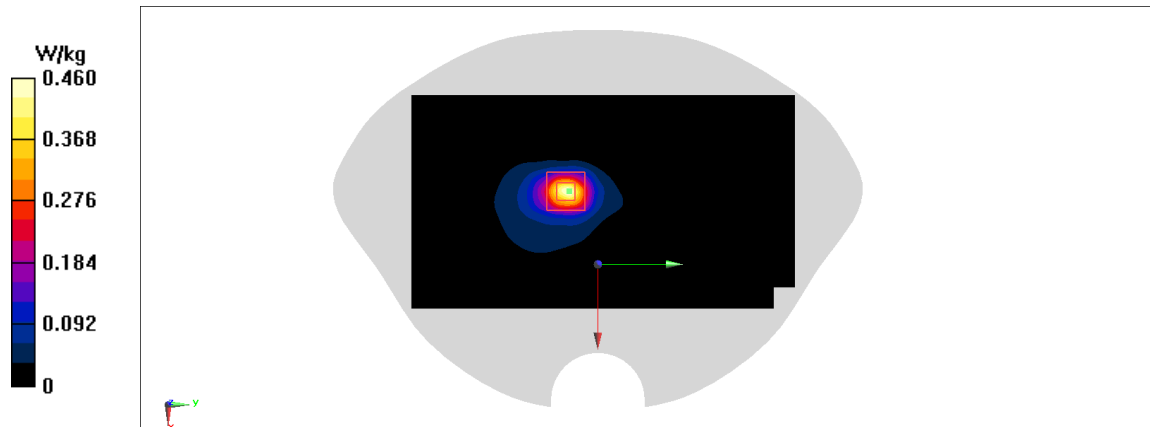


Fig A.54

n41_CH513900 Rear

Date: 4/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: $f = 2569.5$; $\sigma = 1.938$ mho/m; $\epsilon_r = 39.19$; $\rho = 1000$ kg/m³

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

Communication System: n41 2569.5 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (81x141x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

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

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

Reference Value = 13.02 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.534 W/kg

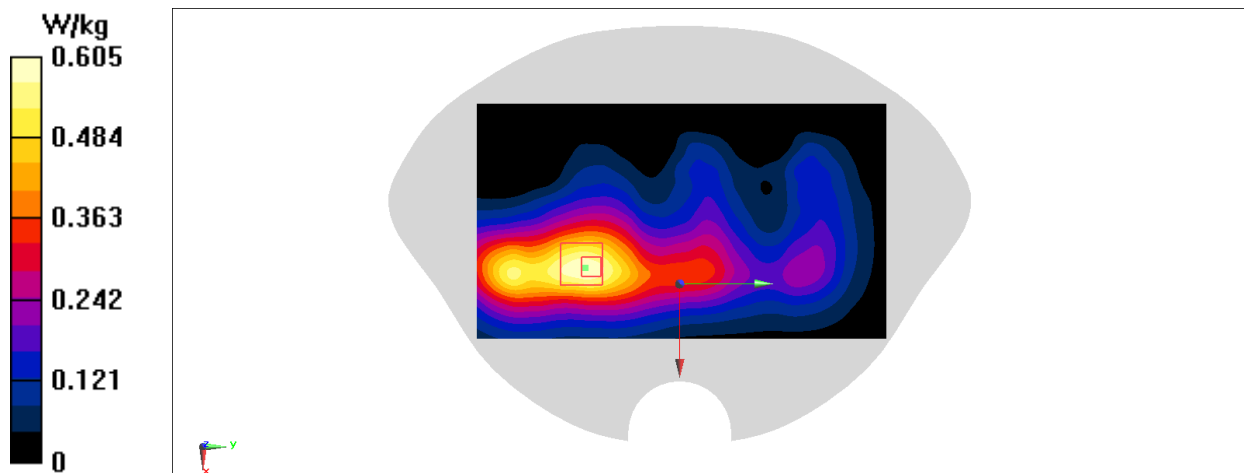


Fig A.55

n61_CH349000 Left Cheek

Date: 4/8/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.45$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.291 W/kg

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

Reference Value = 4.475 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.145 W/kg

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

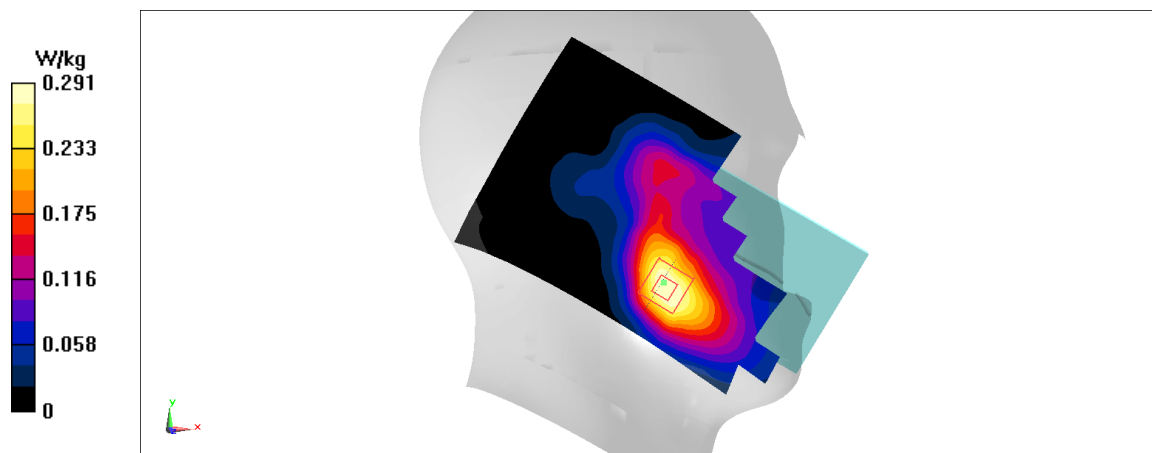


Fig A.56

n61_CH349000 Bottom

Date: 4/8/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.45$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 1.08 W/kg

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

Reference Value = 25.53 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.764 W/kg; SAR(10 g) = 0.455 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

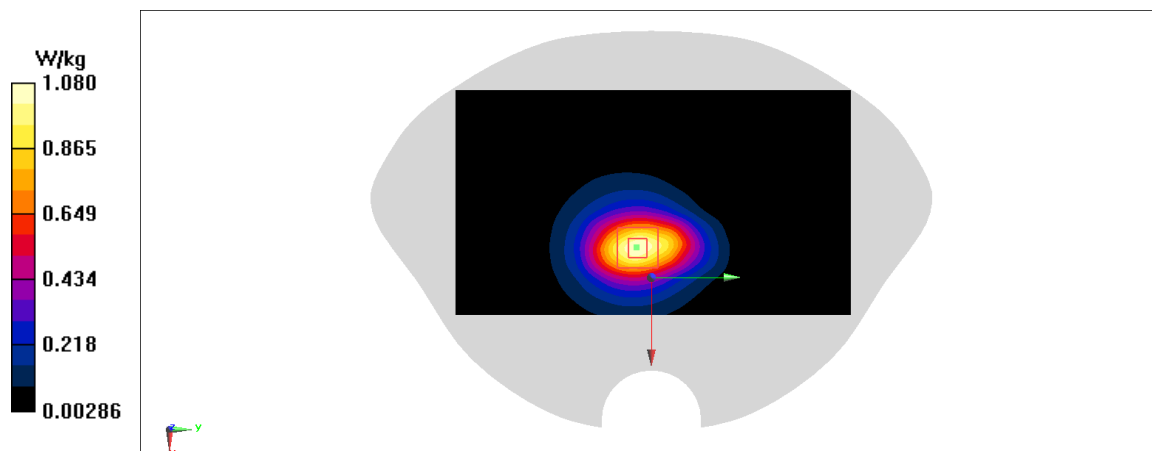


Fig A.57

n61_CH349000 Rear

Date: 4/8/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.45$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (81x141x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.566 W/kg

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

Reference Value = 17.82 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.664 W/kg

SAR(1 g) = 0.414 W/kg; SAR(10 g) = 0.267 W/kg

Maximum value of SAR (measured) = 0.569 W/kg

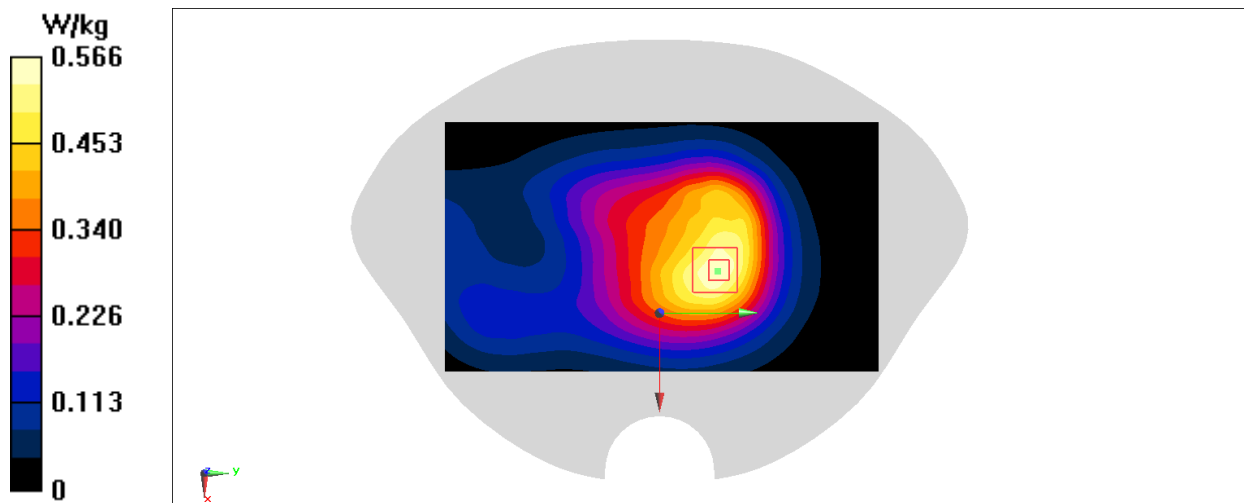


Fig A.58

n61_CH349000 Right Tilt

Date: 4/8/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.45$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.78 W/kg

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

Reference Value = 9.332 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.996 W/kg

SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.226 W/kg

Maximum value of SAR (measured) = 0.675 W/kg

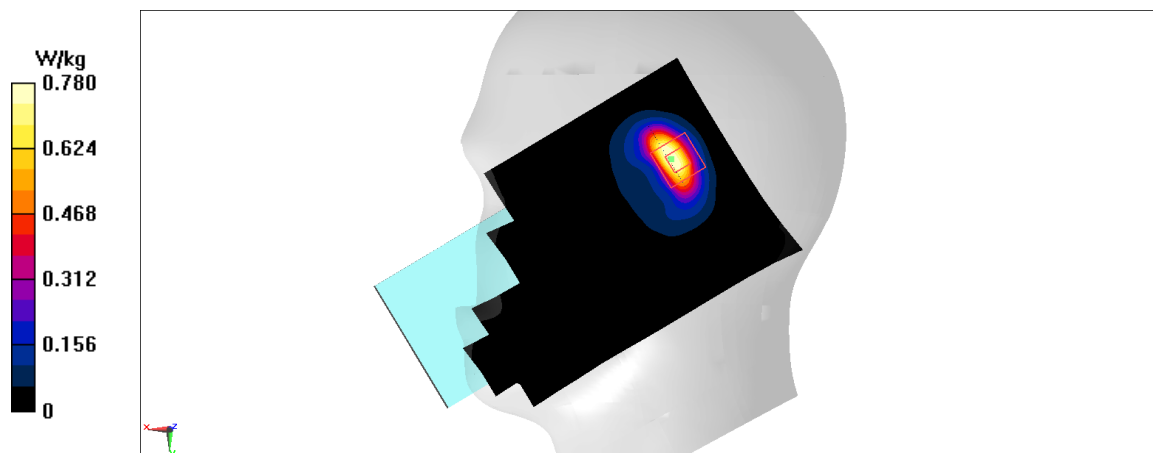


Fig A.59

n61_CH349000 Top

Date: 4/8/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.45$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

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

Maximum value of SAR (interpolated) = 0.836 W/kg

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

Reference Value = 21.37 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 0.89 W/kg

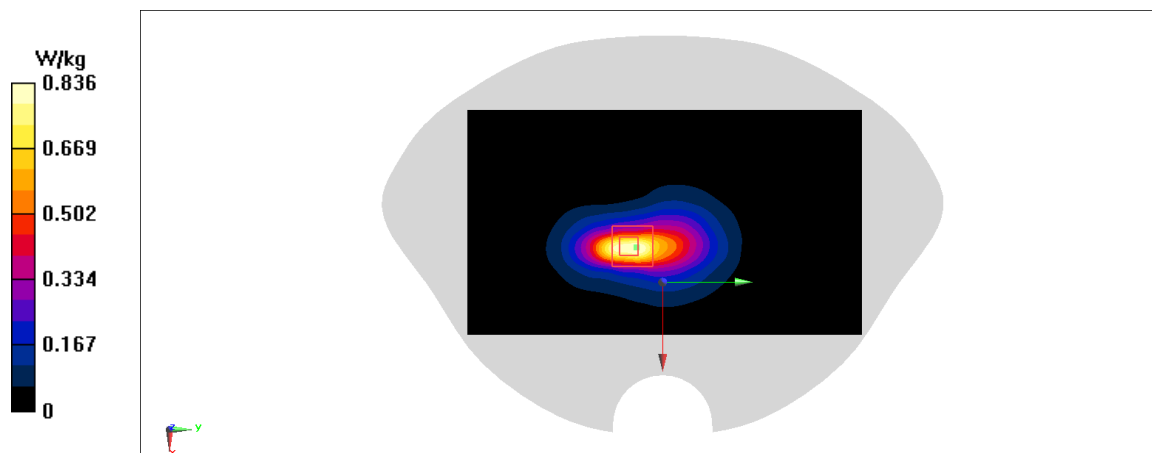


Fig A.60

n61_CH349000 Rear

Date: 4/8/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: $f = 1745$; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.45$; $\rho = 1000$ kg/m³

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

Communication System: LTE1700-FDD66 2679.99 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (81x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.685 W/kg

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

Reference Value = 14.24 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.874 W/kg

SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.274 W/kg

Maximum value of SAR (measured) = 0.702 W/kg

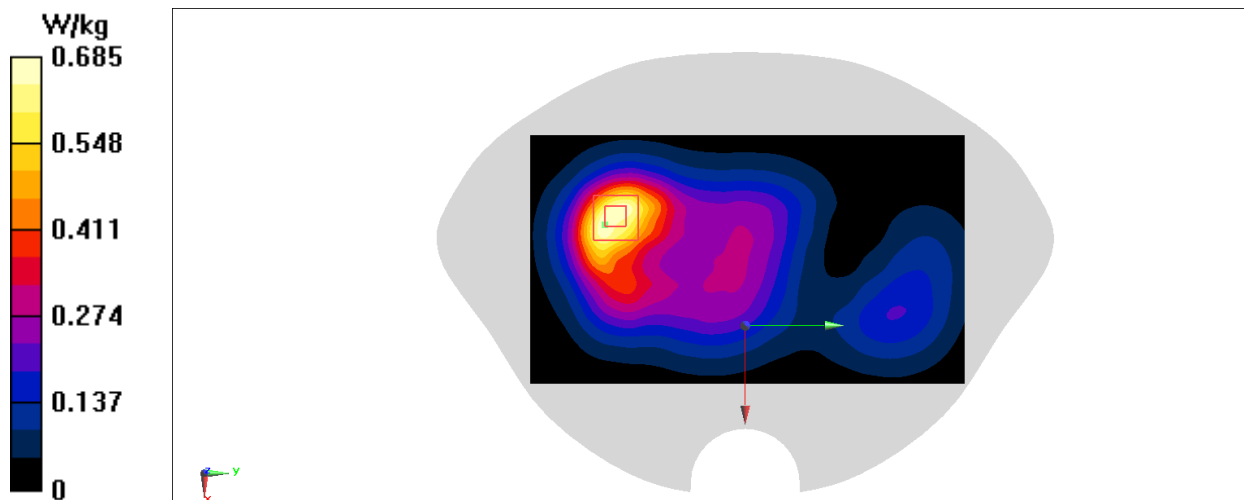


Fig A.61

n71_CH1136100 Right Cheek

Date: 4/3/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 680.5$; $\sigma = 0.884$ mho/m; $\epsilon_r = 44.85$; $\rho = 1000$ kg/m³

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

Communication System: LTE700-FDD71 680.5 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

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

Maximum value of SAR (interpolated) = 0.2 W/kg

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

Reference Value = 3.889 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.219 W/kg

SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.202 W/kg

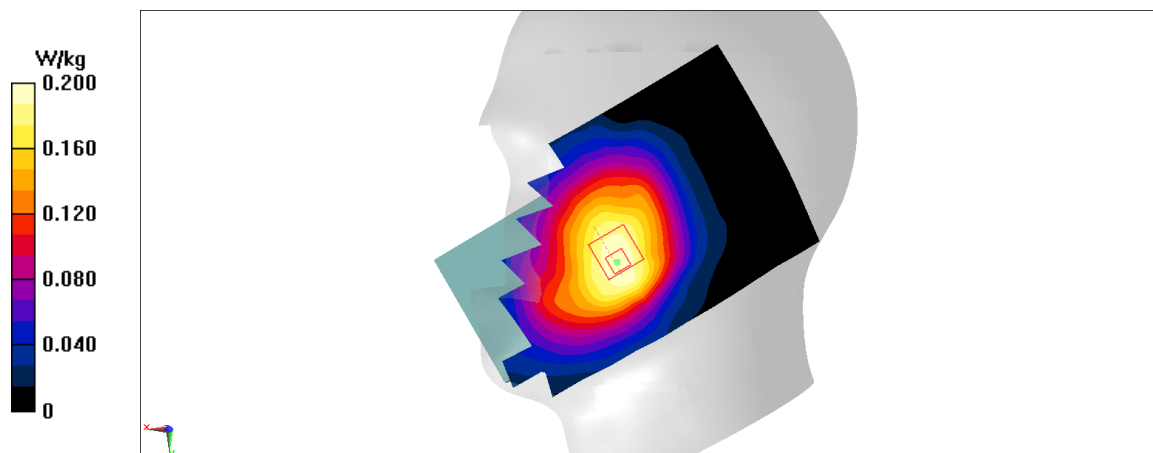


Fig A.62

n71_CH1136100 Rear

Date: 4/3/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: $f = 680.5$; $\sigma = 0.884$ mho/m; $\epsilon_r = 44.85$; $\rho = 1000$ kg/m³

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

Communication System: LTE700-FDD71 680.5 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

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

Maximum value of SAR (interpolated) = 0.35 W/kg

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

Reference Value = 18.8 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.29 W/kg; SAR(10 g) = 0.224 W/kg

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

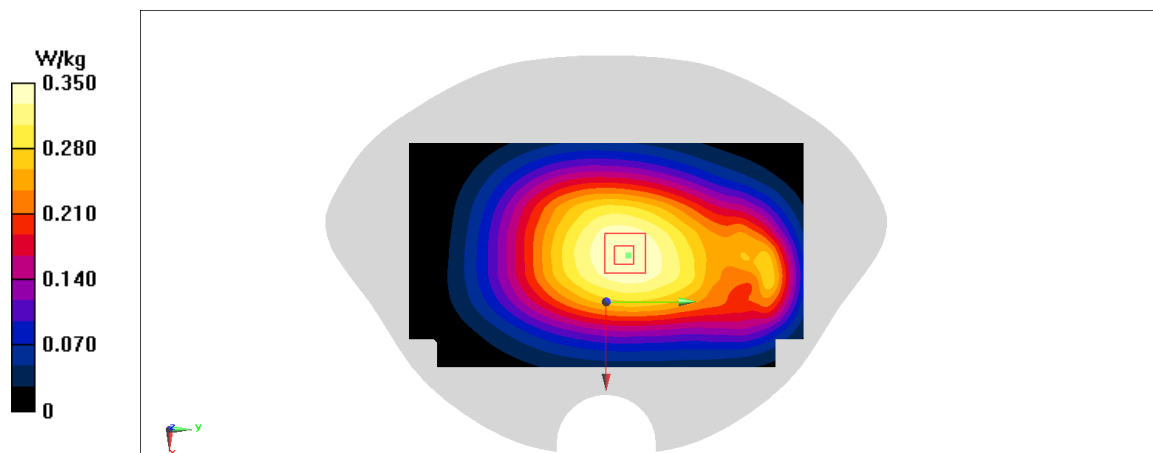


Fig A.63

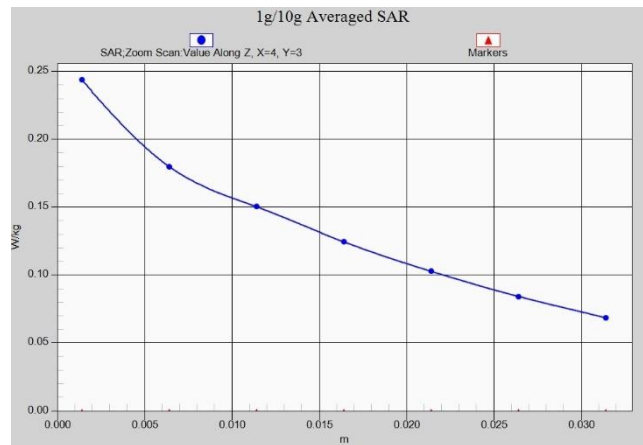


Fig. 1-1 Z-Scan at power reference point (850 MHz)

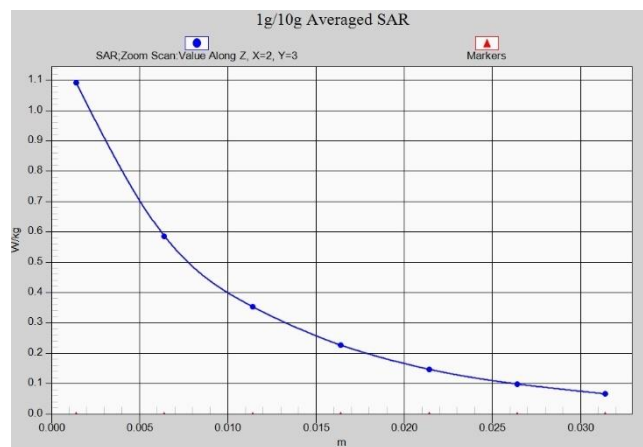


Fig. 1-2 Z-Scan at power reference point (850 MHz)

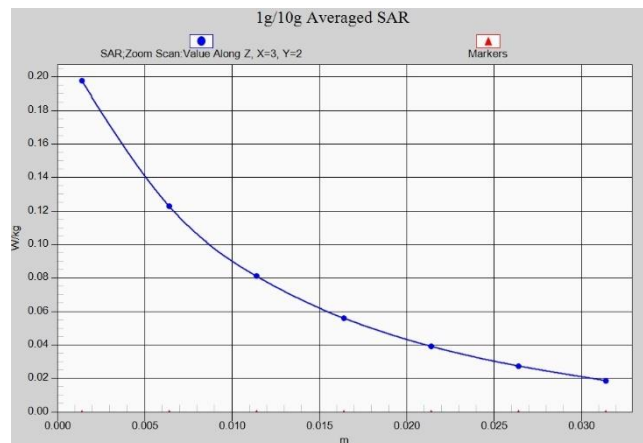


Fig. 1-3 Z-Scan at power reference point (1900 MHz)