TESTING
NVLAP LAB CODE 600118-0

SAR TEST REPORT

No. I23Z70136-SEM01

For

Samsung Electronics Co., Ltd.

Multi-band GSM/WCDMA/LTE Tablet with Bluetooth, WLAN

Model Name: SM-X115

with

Hardware Version: REV1.0

Software Version: X115.001

FCC ID: ZCASMX115

Issued Date: 2023-8-1

Note:

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Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Issue Date	Description
I23Z70136-SEM01	Rev.0	2023-7-31	Initial creation of test report
I23Z70136-SEM01	Rev.1	2023-8-1	Update information in section 14.3

TABLE OF CONTENT

1 Test Laboratory

1.1 Testing Location

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

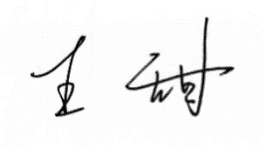
1.2 Testing Environment

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

1.3 Project Data

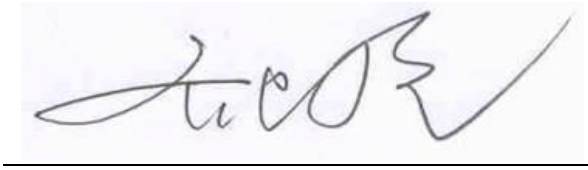
Project Leader:	Qi Dianyuan
Test Engineer:	WangTian
Testing Start Date:	July 1, 2023
Testing End Date:	July 31, 2023

1.4 Signature



WangTian

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)

Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Samsung Electronics Co., Ltd. Multi-band GSM/WCDMA/LTE Tablet with Bluetooth, WLAN SM-X115 are as follows:

Table 2.1: Highest Reported SAR (1g)

Mode		Highest Reported SAR (1g)	
		1g SAR Head	1g SAR Body
GSM	GSM 850	0.23	1.12
	PCS 1900	0.39	0.44
WCDMA	UMTS FDD 5	0.14	0.84
	UMTS FDD 4	0.56	0.57
	UMTS FDD 2	0.51	0.75
LTE	LTE Band 2	0.42	0.56
	LTE Band 5	0.35	0.90
	LTE Band 7	0.15	0.88
	LTE Band 12/17	0.12	0.51
	LTE Band 28	0.18	0.83
	LTE Band 38/41	0.11	0.39
	LTE Band 4/66	0.56	0.87
WLAN 2.4 GHz		0.19	0.54
WLAN 5 GHz		0.16	0.60
BT		0.13	0.27

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

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

The device have similar frequency in some LTE bands ： LTE Band4/66,12/17,38/41, since the supported frequency spans for the smaller LTE bands are completely cover by the larger LTE bands and the channel bandwidth and other operating parameters for the smaller band be fully supported by the larger band, therefore, only larger LTE bands were required to be tested for SAR.

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

Head：0.56 W/kg (1g)
Body：1.12 W/kg (1g)

Table 2.2: The sum of SAR values for WWAN+WLAN+BT

	Position	WWAN	WLAN	BT	Sum
Highest SAR value	Rear 0mm	0.59 (WCDMA850)	0.60 (WIFI5G)	0.27	**1.46**

According to the above tables, the highest sum of reported SAR values is **1.46 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 14.

Conclusion:

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

3 Client Information

3.1 Applicant Information

Company Name:	Samsung Electronics Co., Ltd.
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Fax	

3.2 Manufacturer Information

Company Name:	Samsung Electronics Co., Ltd.
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Contact Email:	jp426.kim@samsung.com
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4 Equipment Under Test (EUT) and Ancillary Equipment (AE)

4.1 About EUT

Description:	Multi-band GSM/WCDMA/LTE Tablet with Bluetooth, WLAN
Model name:	SM-X115
Tested Band:	GSM 850/900/1800/1900, WCDMA B1/B2/B4/B5/B8 LTE Band 1/2/3/4/5/7/8/12/17/18/19/20/28/38/40/41/66 BT, Wi-Fi(2.4G/5G)
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)
	704 –716 MHz (LTE Band 17)
	2570 – 2620 MHz (LTE Band 38)
	2496 – 2690 MHz (LTE Band 41)
	1710 – 1780 MHz (LTE Band 66)
	2412 – 2462 MHz (Wi-Fi 2.4G)
	5180 – 5240 MHz (Wi-Fi 5.2G)
	5260 – 5320 MHz (Wi-Fi 5.3G)
	5500 – 5720 MHz (Wi-Fi 5.5G)
	5745 – 5825 MHz (Wi-Fi 5.8G)
	2400 – 2483.5 MHz (Bluetooth)
GPRS/EGPRS Multislot Class:	12
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	I23Z70136-09A	REV1.0	X115.001
EUT2	I23Z70136-10A	REV1.0	X115.001
EUT3	I23Z70136-11A	REV1.0	X115.001
EUT4	I23Z70136-13A	REV1.0	X115.001
EUT5	I23Z70136-14A	REV1.0	X115.001
EUT6	I23Z70136-16A	REV1.0	X115.001

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

Note: It is performed to test SAR with the EUT1-4 and conducted power with the EUT5-6.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	HQ-3565S	/	SCUD(Fujian) Electronics Co., LTD.

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

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

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

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

5.2 Applicable Measurement Standards

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

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

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

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

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

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

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

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

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

6 Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ) . The equation description is as below:

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

SAR is expressed in units of Watts per kilogram (W/kg)
SAR measurement can be either related to the temperature elevation in tissue by

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

Where: C is the specific head capacity, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

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

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

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

7 Tissue Simulating Liquids

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

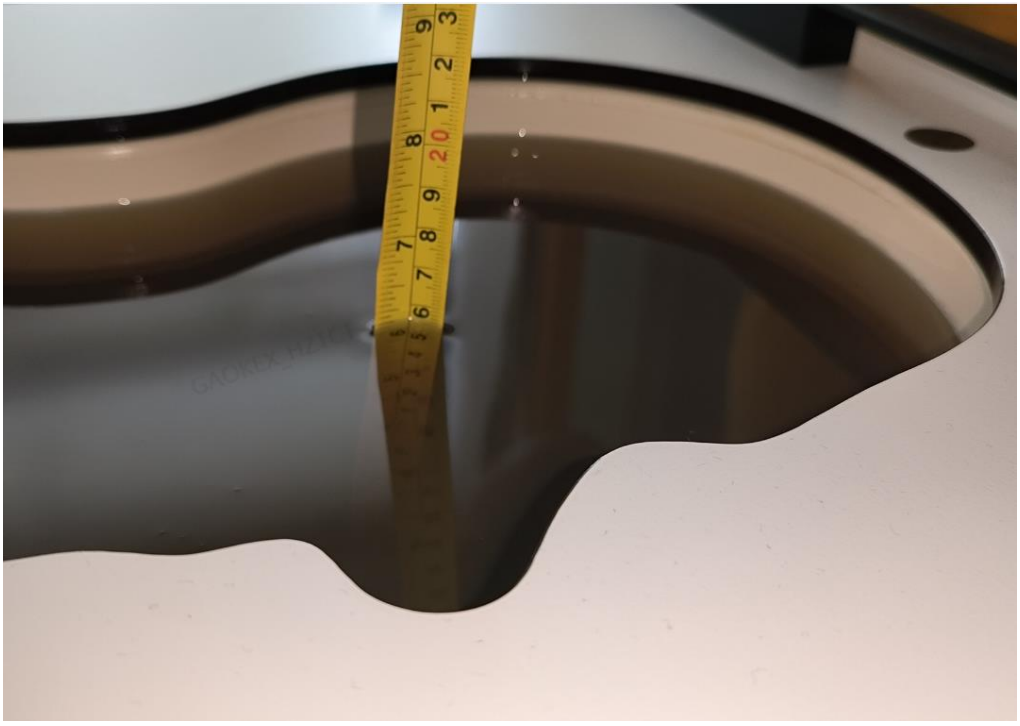
Frequency(MHz)	Liquid Type	Conductivity(σ)	± 5% Range	Permittivity(ε)	± 5% Range
750	Head	0.89	0.85～0.93	41.94	39.8～44.0
900	Head	0.97	0.92～1.02	41.50	39.40～43.60
1800	Head	1.40	1.33～1.47	40.00	38.00～42.00
1900	Head	1.40	1.33～1.47	40.00	38.00～42.00
2450	Head	1.80	1.71～1.89	39.20	37.30～41.10
2600	Head	1.96	1.86～2.06	39.01	37.06～40.96
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

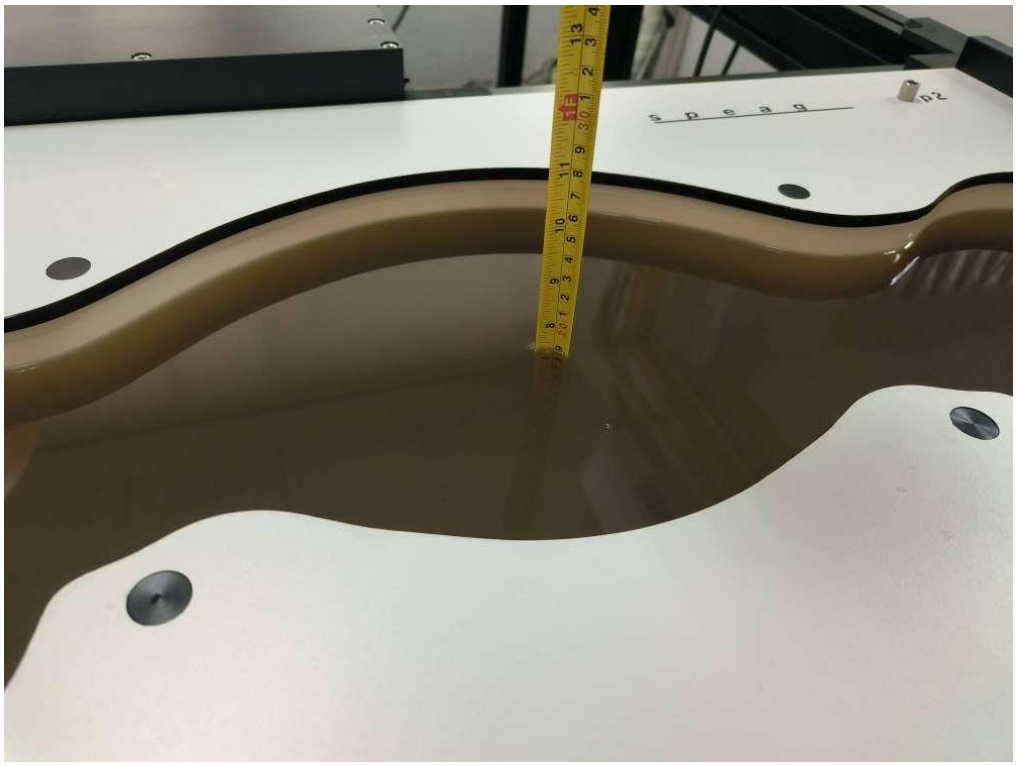
Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ε	Drift (%)	Conductivity σ (S/m)	Drift (%)
2023/7/1	Head	750 MHz	43.37	3.41	0.9009	1.22
2023/7/3	Head	900 MHz	42.84	3.23	0.9588	-1.15
2023/7/5	Head	1800 MHz	40.92	2.30	1.41	0.71
2023/7/7	Head	1900 MHz	40.76	1.90	1.466	4.71
2023/7/11	Head	2450 MHz	39.92	1.84	1.845	2.50
2023/7/13	Head	2600 MHz	39.67	1.69	1.968	0.41
2023/7/15	Head	5250 MHz	34.99	-2.62	4.521	-4.01
2023/7/16	Head	5600 MHz	34.4	-3.18	4.867	-4.00
2023/7/17	Head	5750 MHz	34.06	-3.68	5.04	-3.45

Note: The liquid temperature is 22.0°C



Picture 7-1 Liquid depth in the Head Phantom

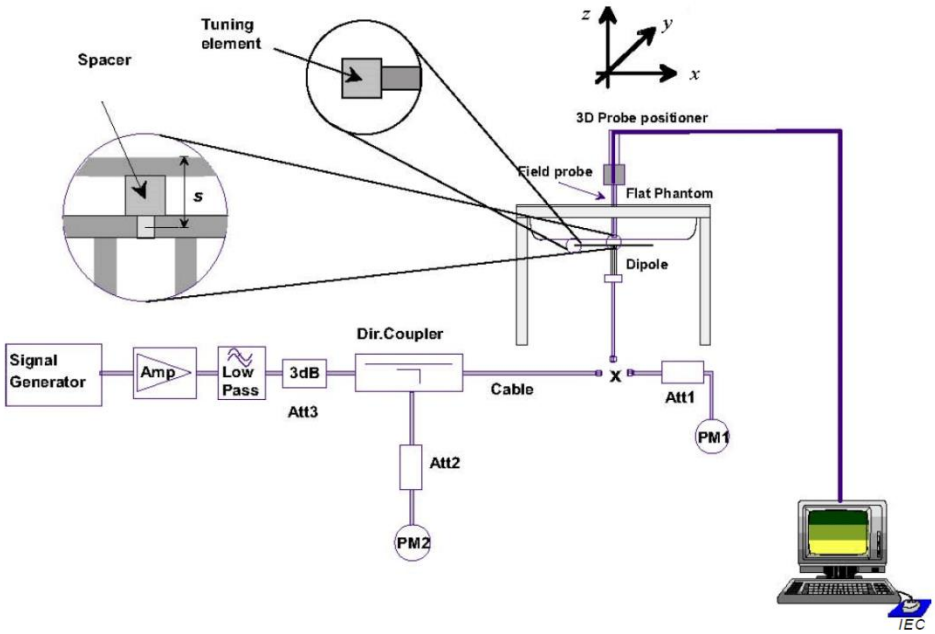


Picture 7-2 Liquid depth in the Flat Phantom

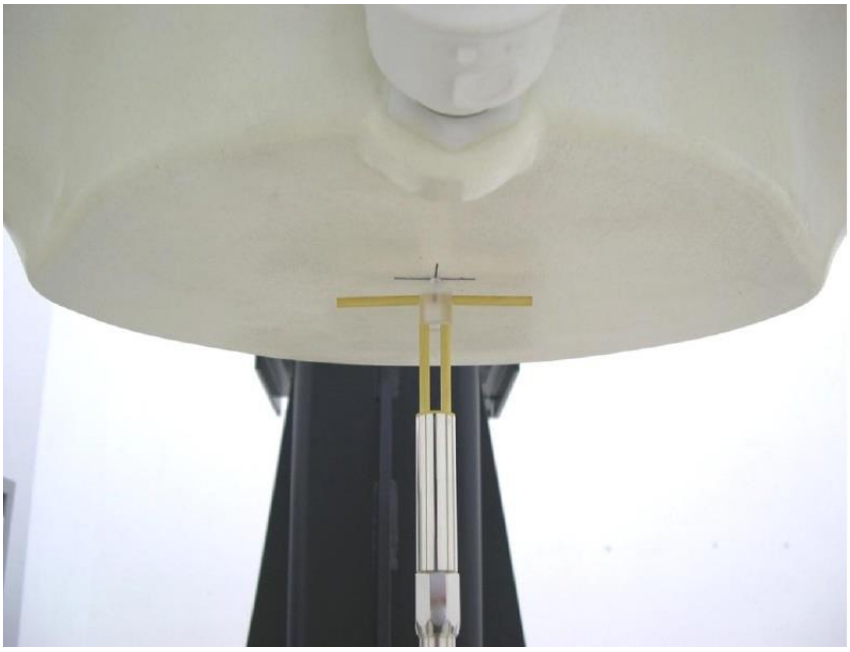
8 System verification

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.

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
2023/7/1	750 MHz	5.64	8.63	5.68	8.48	0.71%	-1.74%
2023/7/3	900 MHz	7.05	11.00	6.68	10.52	-5.25%	-4.36%
2023/7/5	1800 MHz	20.2	38.8	21.0	39.7	3.96%	2.27%
2023/7/7	1900 MHz	20.7	39.7	20.3	38.4	-1.84%	-3.27%
2023/7/11	2450 MHz	24.9	52.7	25.4	53.2	2.01%	0.95%
2023/7/13	2600 MHz	25.2	55.8	24.9	56.0	-1.27%	0.36%
2023/7/15	5250 MHz	22.8	79.6	23.4	77.9	2.63%	-2.14%
2023/7/16	5600 MHz	23.8	83.6	23.7	83.6	-0.42%	0.00%
2023/7/17	5750 MHz	22.7	80.5	23.0	82.0	1.32%	1.86%

9 Measurement Procedures

9.1 Tests to be performed

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

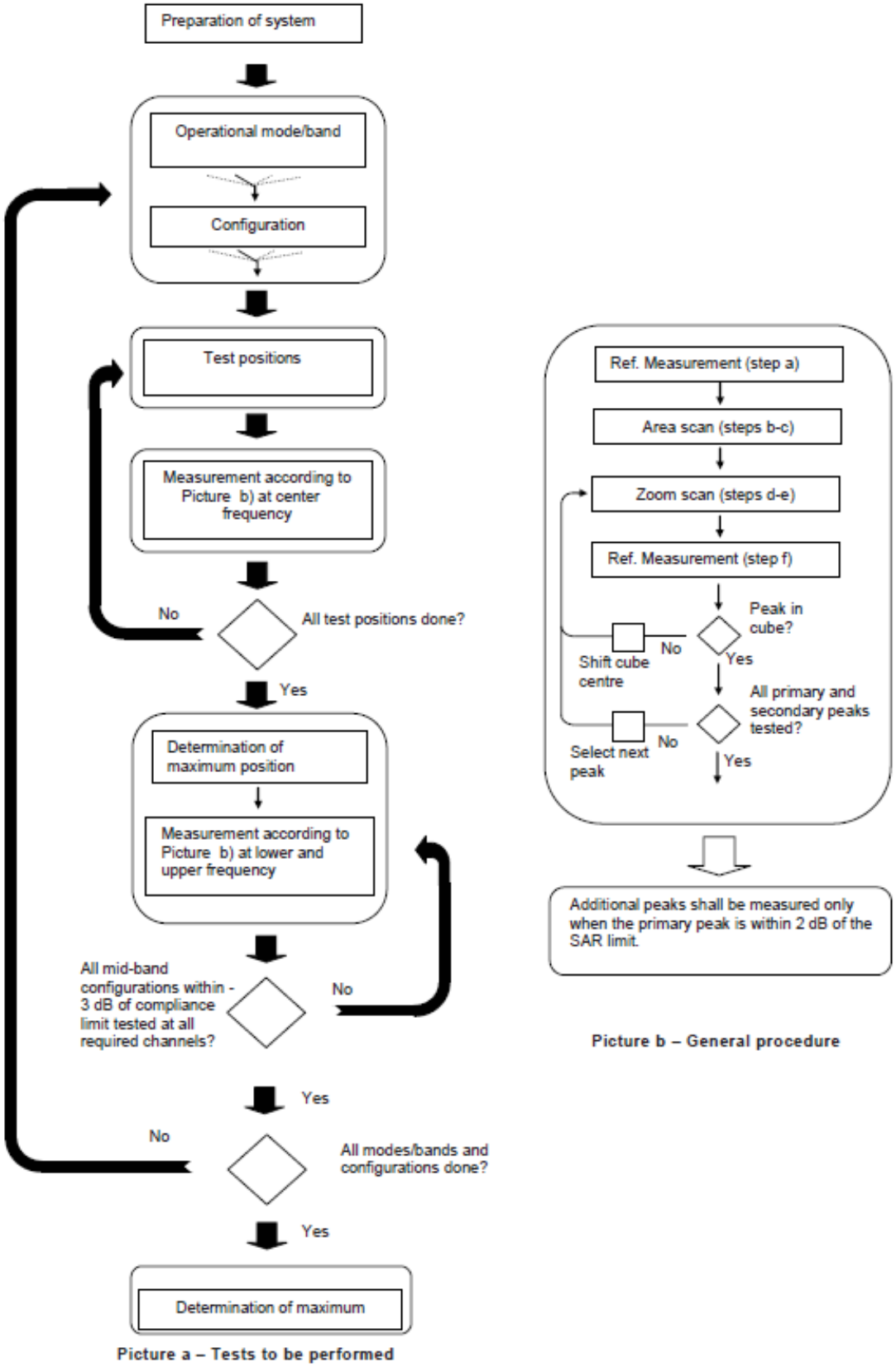
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

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

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

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

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



Picture 9-1 Block diagram of the tests to be performed

9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEC/IEEE 62209-1528. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 ± 1 mm</td><td>½·δ·ln(2) ± 0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}</td><td>≤ 2 GHz: ≤ 8 mm
2 – 3 GHz: ≤ 5 mm*</td><td>3 – 4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">uniform grid: $\Delta z_{Zoom}(n)$</td><td>≤ 5 mm</td><td>3 – 4 GHz: ≤ 4 mm
4 – 5 GHz: ≤ 3 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤ 4 mm</td><td>3 – 4 GHz: ≤ 3 mm
4 – 5 GHz: ≤ 2.5 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td>$\Delta z_{Zoom}(n>1)$: between subsequent points</td><td colspan="2">≤ 1.5·$\Delta z_{Zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3 – 4 GHz: ≥ 28 mm
4 – 5 GHz: ≥ 25 mm
5 – 6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
* When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

9.3 WCDMA Measurement Procedures for SAR

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

For Release 5 HSDPA Data Devices:

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

For Release 6 HSPA Data Devices

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

Rel.8 DC-HSDPA (Cat 24)

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

9.4 SAR Measurement for LTE

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

1) QPSK with 1 RB allocation
   Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.
2) QPSK with 50% RB allocation
   The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.
3) QPSK with 100% RB allocation
   For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

TDD test:

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

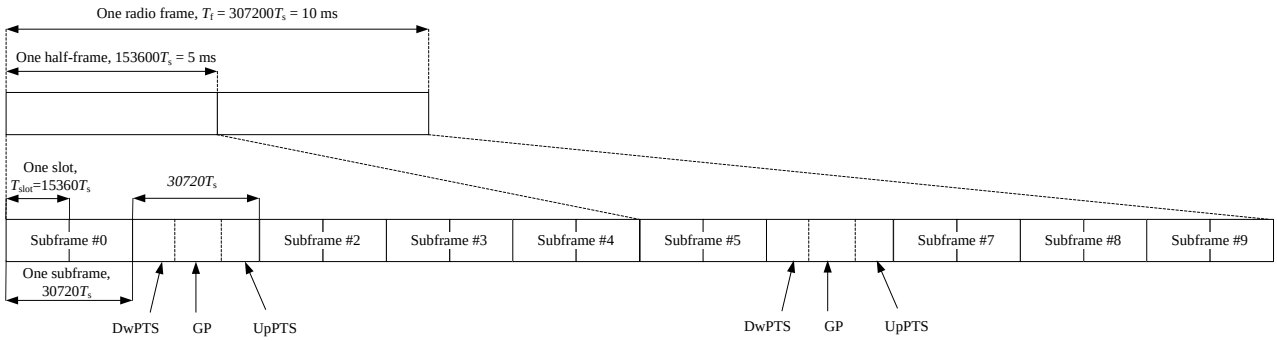


Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)

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

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

Table 9.2: Uplink-downlink configurations

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

Duty factor is calculated by:

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

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

= 0.633

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

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

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

9.6 Power Drift

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

10 Area Scan Based 1-g SAR

10.1 Requirement of KDB

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

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

10.2 Fast SAR Algorithms

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

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

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

Both algorithms are implemented in DASY software.

11 Conducted Output Power

Table11.1: Summary of Receiver detection mechanism

Main Antenna	Sensor off	Sensor on
	DSI0	DSI1

11.1 GSM Measurement result

GSM850-DSI0

GSM850	Conducted Power (dBm)			Tune up				
	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)	33.5				
	31.70	31.82	32.00					
GSM 850	Burst Power (dBm)				calculation	Frame Power (dBm)		
GPRS (GMSK)	251	190	128	Tune up	(dB)	251	190	128
1 Txslot	31.52	31.63	31.82	33.50	-9.03	22.49	22.60	22.79
2 Txslots	30.28	30.37	30.56	31.50	-6.02	24.26	24.35	24.54
3Txslots	28.32	28.37	28.55	29.50	-4.26	24.06	24.11	24.29
4 Txslots	27.35	27.38	27.55	28.50	-3.01	24.34	24.37	24.54
GSM 850	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (GMSK)	251	190	128	Tune up	(dB)	251	190	128
1 Txslot	31.69	31.63	31.82	33.50	-9.03	22.66	22.60	22.79
2 Txslots	30.25	30.37	30.57	31.50	-6.02	24.23	24.35	24.55
3Txslots	28.30	28.38	28.56	29.50	-4.26	24.04	24.12	24.30
4 Txslots	27.33	27.38	27.56	28.50	-3.01	24.32	24.37	24.55
GSM 850	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (8PSK)	251	190	128	Tune up	(dB)	251	190	128
1 Txslot	26.31	26.25	26.17	28.00	-9.03	17.28	17.22	17.14
2 Txslots	24.44	24.32	24.36	26.00	-6.02	18.42	18.30	18.34
3Txslots	22.19	22.15	22.04	24.00	-4.26	17.93	17.89	17.78
4 Txslots	21.33	21.22	21.18	23.00	-3.01	18.32	18.21	18.17

GSM850-DSI1

GSM850	Conducted Power (dBm)			Tune up				
	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)					
	23.74	23.95	24.25	24.50				
GSM 850	Burst Power (dBm)				calculation	Frame Power (dBm)		
GPRS (GMSK)	251	190	128		(dB)	251	190	128
1 Txslot	23.67	23.89	24.20	24.50	-9.03	14.64	14.86	15.17
2 Txslots	21.68	21.90	22.29	22.50	-6.02	15.66	15.88	16.27
3Txslots	19.65	19.81	20.22	20.50	-4.26	15.39	15.55	15.96
4 Txslots	18.79	18.86	19.32	19.50	-3.01	15.78	15.85	16.31
GSM 850	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (GMSK)	251	190	128		(dB)	251	190	128
1 Txslot	23.68	23.91	24.21	24.50	-9.03	14.65	14.88	15.18
2 Txslots	21.70	21.92	22.30	22.50	-6.02	15.68	15.90	16.28
3Txslots	19.67	19.84	20.23	20.50	-4.26	15.41	15.58	15.97
4 Txslots	18.71	18.97	19.33	19.50	-3.01	15.70	15.96	16.32
GSM 850	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (8PSK)	251	190	128		(dB)	251	190	128
1 Txslot	17.23	17.15	17.64	19.00	-9.03	8.20	8.12	8.61
2 Txslots	15.62	15.61	15.48	17.00	-6.02	9.60	9.59	9.46
3Txslots	13.26	13.61	13.16	15.00	-4.26	9.00	9.35	8.90
4 Txslots	12.32	12.28	12.20	14.00	-3.01	9.31	9.27	9.19

GSM1900-DSI0

PCS1900	Conducted Power (dBm)							
	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)	30.5				
	28.86	29.07	28.94					
PCS1900	Burst Power (dBm)				calculation	Frame Power (dBm)		
GPRS (GMSK)	810	661	512	Tune up	(dB)	810	661	512
1 Txslot	28.69	28.93	28.83	30.50	-9.03	19.66	19.90	19.80
2 Txslots	27.32	27.53	27.43	28.50	-6.02	21.30	21.51	21.41
3Txslots	25.30	25.49	25.42	26.50	-4.26	21.04	21.23	21.16
4 Txslots	24.28	24.46	24.39	25.50	-3.01	21.27	21.45	21.38
PCS1900	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (GMSK)	810	661	512	Tune up	(dB)	810	661	512
1 Txslot	28.74	28.96	28.86	30.50	-9.03	19.71	19.93	19.83
2 Txslots	27.37	27.56	27.46	28.50	-6.02	21.35	21.54	21.44
3Txslots	25.35	25.53	25.45	26.50	-4.26	21.09	21.27	21.19
4 Txslots	24.33	24.49	24.41	25.50	-3.01	21.32	21.48	21.40
PCS1900	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (8PSK)	810	661	512	Tune up	(dB)	810	661	512
1 Txslot	25.07	25.21	25.29	27.00	-9.03	16.04	16.18	16.26
2 Txslots	23.75	23.90	23.94	25.00	-6.02	17.73	17.88	17.92
3Txslots	21.45	21.57	21.61	23.00	-4.26	17.19	17.31	17.35
4 Txslots	20.54	20.68	20.74	22.00	-3.01	17.53	17.67	17.73

GSM1900-DSI1

PCS1900	Conducted Power (dBm)							
	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)	tune up				
	17.07	17.22	16.95	17.5				
PCS1900	Burst Power (dBm)				calculation	Frame Power (dBm)		
GPRS (GMSK)	810	661	512		(dB)	810	661	512
1 Txslot	17.08	17.21	16.94	17.50	-9.03	8.05	8.18	7.91
2 Txslots	15.02	15.12	14.99	15.50	-6.02	9.00	9.10	8.97
3Txslots	13.04	13.08	12.95	13.50	-4.26	8.78	8.82	8.69
4 Txslots	11.82	11.98	11.72	12.50	-3.01	8.81	8.97	8.71
PCS1900	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (GMSK)	810	661	512		(dB)	810	661	512
1 Txslot	17.06	17.20	16.93	17.50	-9.03	8.03	8.17	7.90
2 Txslots	15.02	15.12	14.99	15.50	-6.02	9.00	9.10	8.97
3Txslots	13.04	13.08	12.94	13.50	-4.26	8.78	8.82	8.68
4 Txslots	11.83	11.98	11.72	12.50	-3.01	8.82	8.97	8.71
PCS1900	Burst Power (dBm)				calculation	Frame Power (dBm)		
EGPRS (8PSK)	810	661	512		(dB)	810	661	512
1 Txslot	12.58	12.65	12.54	14.00	-9.03	3.55	3.62	3.51
2 Txslots	10.54	10.55	10.65	12.00	-6.02	4.52	4.53	4.63
3Txslots	8.63	8.62	8.63	10.00	-4.26	4.37	4.36	4.37
4 Txslots	7.76	7.59	7.63	9.00	-3.01	4.75	4.58	4.62

11.2 WCDMA Measurement result

WCDMA1900-DSI0

WCDMA1900	FDDII result (dBm)			
	9538/9938	9400/9800	9262/9662	Tune up
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	22.71	22.69	22.75	24
HSUPA	19.57	19.49	19.44	
	19.56	19.51	19.52	
	20.47	20.51	20.41	
	19.11	19.01	19.16	
	20.46	20.51	20.48	
HSPA+	20.47	20.59	20.52	
DC-HSDPA	19.44	19.54	19.62	
	19.58	19.53	19.66	
	19.15	19.04	19.13	
	19.12	19.02	19.07	

WCDMA1900-DSI1

WCDMA1900	FDDII result (dBm)			
	9538/9938	9400/9800	9262/9662	tune up
	(1907.6MHz)	(1880MHz)	(1852.4MHz)	
	9.13	9.12	9.21	10
HSUPA	6.06	5.86	5.86	
	5.65	5.85	5.95	
	6.68	6.78	6.68	
	5.99	5.79	5.69	
	7.23	7.03	6.83	
HSPA+	7.59	7.59	7.59	
DC-HSDPA	8.06	8.26	8.46	
	7.28	7.38	7.38	
	6.94	6.84	7.04	
	6.69	6.79	6.89	

WCDMA1700-DSI0

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	23.04	22.81	23.01	24
HSUPA	19.53	19.53	19.66	
	19.29	19.25	19.31	
	20.16	20.23	20.17	
	19.24	19.14	19.12	
	20.11	20.24	20.13	
HSPA+	20.81	20.83	20.78	
DC-HSDPA	19.96	19.88	19.94	
	19.55	19.51	19.46	
	19.28	19.08	19.13	
	18.43	18.29	18.34	

WCDMA1700-DSI1

WCDMA1700	FDDIV result (dBm)			tune up
	1513/1738	1412/1637	1312/1537	
	(1752.6MHz)	(1732.4MHz)	(1712.4MHz)	
	12.22	12.17	12.28	13
HSUPA	9.87	9.77	9.97	
	9.59	9.69	9.89	
	10.9	10.70	10.90	
	9.54	9.54	9.74	
	10.88	10.98	11.18	
HSPA+	11.13	11.33	11.43	
DC-HSDPA	11.01	11.11	11.21	
	10.05	10.15	10.15	
	9.49	9.69	9.89	
	9.72	9.62	9.62	

WCDMA850-DSI0

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	23.16	22.95	23.03	24
HSUPA	20.15	20.01	20.12	
	19.81	19.77	19.83	
	20.69	20.76	20.66	
	19.22	19.28	19.21	
	20.76	20.78	20.71	
HSPA+	21.19	21.26	21.17	
DC-HSDPA	19.92	19.87	19.72	
	19.77	19.84	19.74	
	19.25	19.38	19.26	
	18.86	18.79	18.73	

WCDMA850-DSI1

WCDMA850	FDDV result (dBm)			tune up
	4233/4458	4183/4408	4132/4357	
	(846.6MHz)	(836.6MHz)	(826.4MHz)	
	15.19	15.11	15.28	16
HSUPA	13.34	13.24	13.44	
	12.99	13.19	13.29	
	14.08	14.18	14.38	
	12.98	12.98	12.98	
	14.25	14.45	14.55	
HSPA+	15.09	14.89	15.09	
DC-HSDPA	14.29	14.49	14.39	
	13.61	13.61	13.81	
	13.26	13.16	13.36	
	13.19	13.09	13.29	

11.3 LTE Measurement result

Maximum Target Power for Production Unit

The tune up power for LTE Band (dBm)

band	Sensor off	Sensor on
LTEB2	23.5	9.5
LTEB5	24	17
LTEB7	25	10
LTEB12/17	25	14
LTEB28	25.5	16
LTEB41/38	25	12
LTEB66/4	23.5	13

LTE B2-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	22.22	21.50	20.43
		1880 (18900)	22.17	21.46	20.46
		1850.7 (18607)	22.12	21.32	20.34
	1RB-Middle (3)	1909.3 (19193)	22.27	21.53	20.56
		1880 (18900)	22.24	21.45	20.59
		1850.7 (18607)	22.19	21.55	20.48
	1RB-Low (0)	1909.3 (19193)	22.22	21.50	20.57
		1880 (18900)	22.16	21.35	20.40
		1850.7 (18607)	22.13	21.47	20.42
	3RB-High (3)	1909.3 (19193)	22.35	21.30	20.51
		1880 (18900)	22.27	21.28	20.47
		1850.7 (18607)	22.24	21.17	20.43
	3RB-Middle (1)	1909.3 (19193)	22.38	21.34	20.54
		1880 (18900)	22.30	21.34	20.49
		1850.7 (18607)	22.23	21.32	20.44
	3RB-Low (0)	1909.3 (19193)	22.33	21.31	20.51
		1880 (18900)	22.28	21.20	20.45
		1850.7 (18607)	22.24	21.16	20.38
	6RB (0)	1909.3 (19193)	21.43	20.51	19.45
		1880 (18900)	21.39	20.49	19.42
		1850.7 (18607)	21.33	20.42	19.39
3MHz	1RB-High (14)	1908.5 (19185)	22.08	21.24	20.40
		1880 (18900)	22.04	21.21	20.28
		1851.5 (18615)	22.06	21.19	20.36
	1RB-Middle (7)	1908.5 (19185)	22.19	21.46	20.51
		1880 (18900)	22.19	21.49	20.42
		1851.5 (18615)	22.13	21.38	20.41
	1RB-Low (0)	1908.5 (19185)	22.08	21.33	20.37
		1880 (18900)	22.08	21.25	20.29
		1851.5 (18615)	21.96	21.29	20.25
	8RB-High (7)	1908.5 (19185)	21.30	20.35	19.38
		1880 (18900)	21.29	20.34	19.34
		1851.5 (18615)	21.23	20.27	19.34

	8RB-Middle (4)	1908.5 (19185)	21.36	20.43	19.46
		1880 (18900)	21.33	20.36	19.38
		1851.5 (18615)	21.28	20.34	19.37
	8RB-Low (0)	1908.5 (19185)	21.30	20.38	19.39
		1880 (18900)	21.27	20.31	19.34
		1851.5 (18615)	21.21	20.28	19.25
	15RB (0)	1908.5 (19185)	21.31	20.31	19.36
		1880 (18900)	21.28	20.26	19.29
		1851.5 (18615)	21.23	20.22	19.29
5MHz	1RB-High (24)	1907.5 (19175)	22.31	21.52	20.50
		1880 (18900)	22.25	21.59	20.40
		1852.5 (18625)	22.26	21.56	20.46
	1RB-Middle (12)	1907.5 (19175)	22.42	21.59	20.66
		1880 (18900)	22.40	21.71	20.60
		1852.5 (18625)	22.39	21.73	20.65
	1RB-Low (0)	1907.5 (19175)	22.29	21.61	20.48
		1880 (18900)	22.28	21.49	20.50
		1852.5 (18625)	22.24	21.53	20.41
	12RB-High (13)	1907.5 (19175)	21.36	20.37	19.38
		1880 (18900)	21.33	20.30	19.41
		1852.5 (18625)	21.37	20.33	19.46
	12RB-Middle (6)	1907.5 (19175)	21.44	20.43	19.49
		1880 (18900)	21.41	20.36	19.48
		1852.5 (18625)	21.37	20.37	19.45
	12RB-Low (0)	1907.5 (19175)	21.43	20.40	19.47
		1880 (18900)	21.34	20.34	19.42
		1852.5 (18625)	21.28	20.25	19.33
	25RB (0)	1907.5 (19175)	21.38	20.39	19.43
		1880 (18900)	21.36	20.35	19.43
		1852.5 (18625)	21.31	20.33	19.37
10MHz	1RB-High (49)	1905 (19150)	22.39	21.60	20.53
		1880 (18900)	22.34	21.71	20.57
		1855 (18650)	22.38	21.63	20.56
	1RB-Middle (24)	1905 (19150)	22.40	21.73	20.60
		1880 (18900)	22.40	21.74	20.56
		1855 (18650)	22.42	21.75	20.61
	1RB-Low (0)	1905 (19150)	22.38	21.67	20.51

		1880 (18900)	22.41	21.60	20.58
		1855 (18650)	22.33	21.60	20.48
	25RB-High (25)	1905 (19150)	21.30	20.33	19.38
		1880 (18900)	21.32	20.33	19.40
		1855 (18650)	21.39	20.45	19.45
	25RB-Middle (12)	1905 (19150)	21.44	20.44	19.51
		1880 (18900)	21.42	20.41	19.47
		1855 (18650)	21.39	20.40	19.45
	25RB-Low (0)	1905 (19150)	21.35	20.36	19.41
		1880 (18900)	21.37	20.40	19.45
		1855 (18650)	21.26	20.24	19.30
	50RB (0)	1905 (19150)	21.35	20.34	19.37
		1880 (18900)	21.38	20.36	19.40
		1855 (18650)	21.37	20.32	19.39
15MHz	1RB-High (74)	1902.5 (19125)	22.34	21.57	20.51
		1880 (18900)	22.31	21.50	20.47
		1857.5 (18675)	22.38	21.60	20.50
	1RB-Middle (37)	1902.5 (19125)	22.43	21.74	20.55
		1880 (18900)	22.42	21.74	20.59
		1857.5 (18675)	22.44	21.75	20.54
	1RB-Low (0)	1902.5 (19125)	22.29	21.57	20.49
		1880 (18900)	22.38	21.58	20.52
		1857.5 (18675)	22.28	21.62	20.40
	36RB-High (38)	1902.5 (19125)	21.34	20.32	19.41
		1880 (18900)	21.34	20.33	19.41
		1857.5 (18675)	21.40	20.36	19.43
	36RB-Middle (19)	1902.5 (19125)	21.41	20.38	19.47
		1880 (18900)	21.40	20.40	19.47
		1857.5 (18675)	21.40	20.35	19.41
	36RB-Low (0)	1902.5 (19125)	21.30	20.25	19.37
		1880 (18900)	21.39	20.41	19.45
		1857.5 (18675)	21.26	20.23	19.32
	75RB (0)	1902.5 (19125)	21.33	20.32	19.35
		1880 (18900)	21.40	20.38	19.40
		1857.5 (18675)	21.36	20.31	19.36
20MHz	1RB-High (99)	1900 (19100)	22.37	21.49	20.45
		1880 (18900)	22.29	21.60	20.48

		1860 (18700)	22.36	21.58	20.53
	1RB-Middle (50)	1900 (19100)	22.48	21.72	20.65
		1880 (18900)	22.51	21.74	20.67
		1860 (18700)	22.49	21.68	20.57
	1RB-Low (0)	1900 (19100)	22.30	21.65	20.41
		1880 (18900)	22.37	21.53	20.53
		1860 (18700)	22.24	21.60	20.40
	50RB-High (50)	1900 (19100)	21.41	20.35	19.38
		1880 (18900)	21.43	20.39	19.39
		1860 (18700)	21.49	20.43	19.48
	50RB-Middle (25)	1900 (19100)	21.53	20.48	19.51
		1880 (18900)	21.56	20.47	19.53
		1860 (18700)	21.51	20.50	19.52
	50RB-Low (0)	1900 (19100)	21.40	20.33	19.37
		1880 (18900)	21.54	20.52	19.54
		1860 (18700)	21.34	20.27	19.33
	100RB (0)	1900 (19100)	21.38	20.33	19.36
		1880 (18900)	21.45	20.44	19.45
		1860 (18700)	21.41	20.35	19.39

LTE B2-DSI1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	8.02	8.3	8.16
		1880 (18900)	8.02	8.22	8.15
		1850.7 (18607)	7.86	8.06	8.08
	1RB-Middle (3)	1909.3 (19193)	8.16	8.28	8.19
		1880 (18900)	8.01	8.32	8.3
		1850.7 (18607)	8.1	8.28	8.37
	1RB-Low (0)	1909.3 (19193)	7.82	8.04	7.9
		1880 (18900)	7.9	8.09	7.98
		1850.7 (18607)	7.7	8	7.77
	3RB-High (3)	1909.3 (19193)	7.79	7.99	7.99
		1880 (18900)	7.81	7.99	7.92
		1850.7 (18607)	8.18	8.22	8.25
	3RB-Middle	1909.3 (19193)	8.04	8.04	7.95

	(1)	1880 (18900)	7.95	8.08	8.09
		1850.7 (18607)	8.18	8.15	8.1
	3RB-Low (0)	1909.3 (19193)	7.76	8.01	7.94
		1880 (18900)	8.29	7.98	8.14
		1850.7 (18607)	8.06	7.92	7.92
	6RB (0)	1909.3 (19193)	8.08	8	7.94
		1880 (18900)	7.92	7.97	8
		1850.7 (18607)	7.93	8.02	7.99
3MHz	1RB-High (14)	1908.5 (19185)	8.03	8.36	8.32
		1880 (18900)	8.07	8.31	8.16
		1851.5 (18615)	8.04	8.36	8.23
	1RB-Middle (7)	1908.5 (19185)	8.28	8.48	8.27
		1880 (18900)	8.2	8.42	8.29
		1851.5 (18615)	8.09	8.44	8.26
	1RB-Low (0)	1908.5 (19185)	7.97	8.17	7.98
		1880 (18900)	8.06	8.23	8.15
		1851.5 (18615)	7.97	8.05	7.95
	8RB-High (7)	1908.5 (19185)	8.01	8.04	8.06
		1880 (18900)	8.06	7.97	8.11
		1851.5 (18615)	8.28	8.27	8.27
	8RB-Middle (4)	1908.5 (19185)	8.18	8.2	8.21
		1880 (18900)	8.27	8.15	8.16
		1851.5 (18615)	8.13	8.12	8.22
	8RB-Low (0)	1908.5 (19185)	8.14	8.03	8.02
		1880 (18900)	8.22	8.25	8.2
		1851.5 (18615)	8.02	7.97	7.96
	15RB (0)	1908.5 (19185)	8.03	8.13	7.97
		1880 (18900)	8.19	8.08	8.03
		1851.5 (18615)	8.1	8.1	8.06
5MHz	1RB-High (24)	1907.5 (19175)	8.04	8.31	8.12
		1880 (18900)	7.95	8.12	8.08
		1852.5 (18625)	7.94	8.11	8.16
	1RB-Middle (12)	1907.5 (19175)	8.1	8.41	8.3
		1880 (18900)	7.91	8.37	8.29

		1852.5 (18625)	7.95	8.25	8.36
	1RB-Low (0)	1907.5 (19175)	7.83	7.95	7.95
		1880 (18900)	7.95	8.18	7.99
		1852.5 (18625)	7.74	8.13	7.88
	12RB-High (13)	1907.5 (19175)	7.87	7.81	7.93
		1880 (18900)	7.99	8.09	7.78
		1852.5 (18625)	8.28	8.27	8.14
	12RB-Middle (6)	1907.5 (19175)	8.11	8.02	7.98
		1880 (18900)	7.97	8.17	8.13
		1852.5 (18625)	8.17	8.08	7.97
	12RB-Low (0)	1907.5 (19175)	7.9	8.04	8.02
		1880 (18900)	8.14	8.11	8.12
		1852.5 (18625)	8.02	7.9	7.83
	25RB (0)	1907.5 (19175)	8.06	8.03	8.1
		1880 (18900)	7.99	7.88	8.06
		1852.5 (18625)	8	8.03	8
10MHz	1RB-High (49)	1905 (19150)	8.09	8.3	8.29
		1880 (18900)	8.11	8.31	8.23
		1855 (18650)	8.04	8.21	8.13
	1RB-Middle (24)	1905 (19150)	8.1	8.56	8.23
		1880 (18900)	8.27	8.46	8.33
		1855 (18650)	8.14	8.4	8.33
	1RB-Low (0)	1905 (19150)	7.91	8.19	8.07
		1880 (18900)	8.1	8.34	8.29
		1855 (18650)	7.92	8.08	7.97
	25RB-High (25)	1905 (19150)	8.02	7.98	8.12
		1880 (18900)	7.98	8.03	7.97
		1855 (18650)	8.34	8.32	8.27
	25RB-Middle (12)	1905 (19150)	8.11	8.12	8.15
		1880 (18900)	8.18	8.2	8.19
		1855 (18650)	8.28	8.24	8.26
	25RB-Low (0)	1905 (19150)	7.94	8.03	8.07
		1880 (18900)	8.12	8.13	8.26
		1855 (18650)	7.97	7.89	7.96
	50RB (0)	1905 (19150)	8.08	7.95	8.06

		1880 (18900)	8	8.09	8.01
		1855 (18650)	8.17	8.1	8.06
15MHz	1RB-High (74)	1902.5 (19125)	8.2	8.42	8.29
		1880 (18900)	8.1	8.3	8.19
		1857.5 (18675)	8.03	8.17	8.18
	1RB-Middle (37)	1902.5 (19125)	8.28	8.42	8.3
		1880 (18900)	8.11	8.42	8.34
		1857.5 (18675)	8.13	8.32	8.37
	1RB-Low (0)	1902.5 (19125)	7.91	8.09	7.98
		1880 (18900)	8.03	8.2	8.14
		1857.5 (18675)	7.85	8.18	7.92
	36RB-High (38)	1902.5 (19125)	7.99	7.99	8.13
		1880 (18900)	8.01	8.09	7.98
		1857.5 (18675)	8.31	8.34	8.31
	36RB-Middle (19)	1902.5 (19125)	8.2	8.15	8.08
		1880 (18900)	8.11	8.24	8.14
		1857.5 (18675)	8.26	8.24	8.17
	36RB-Low (0)	1902.5 (19125)	7.96	8.05	8.08
		1880 (18900)	8.31	8.18	8.19
		1857.5 (18675)	8.1	7.99	7.96
	75RB (0)	1902.5 (19125)	8.11	8.13	8.11
		1880 (18900)	8.01	8.08	8.1
		1857.5 (18675)	8.07	8.04	8
20MHz	1RB-High (99)	1900 (19100)	8.21	8.5	8.4
		1880 (18900)	8.12	8.35	8.32
		1860 (18700)	8.16	8.36	8.3
	1RB-Middle (50)	1900 (19100)	8.28	8.59	8.41
		1880 (18900)	8.29	8.46	8.47
		1860 (18700)	8.26	8.49	8.46
	1RB-Low (0)	1900 (19100)	8.06	8.22	8.16
		1880 (18900)	8.15	8.4	8.33
		1860 (18700)	7.97	8.2	8.11
	50RB-High (50)	1900 (19100)	8.16	8.16	8.16
		1880 (18900)	8.18	8.16	8.16

		1860 (18700)	8.37	8.34	8.35
	50RB-Middle (25)	1900 (19100)	8.28	8.25	8.26
		1880 (18900)	8.42	8.28	8.29
		1860 (18700)	8.29	8.28	8.27
	50RB-Low (0)	1900 (19100)	8.14	8.13	8.13
		1880 (18900)	8.32	8.31	8.29
		1860 (18700)	8.1	8.07	8.1
	100RB (0)	1900 (19100)	8.15	8.13	8.13
		1880 (18900)	8.2	8.17	8.2
		1860 (18700)	8.22	8.17	8.18

LTE B5-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (20643)	22.52	21.97	20.95
		836.5 (20525)	22.65	22.02	21.00
		824.7 (20407)	22.73	22.15	21.14
	1RB-Middle (3)	848.3 (20643)	22.63	22.07	20.93
		836.5 (20525)	22.73	21.97	21.06
		824.7 (20407)	22.84	22.24	21.14
	1RB-Low (0)	848.3 (20643)	22.54	21.83	20.95
		836.5 (20525)	22.62	22.04	20.95
		824.7 (20407)	22.72	22.08	21.14
	3RB-High (3)	848.3 (20643)	22.69	21.72	21.00
		836.5 (20525)	22.75	21.79	21.06
		824.7 (20407)	22.87	21.84	21.12
	3RB-Middle (1)	848.3 (20643)	22.69	21.72	20.97
		836.5 (20525)	22.79	21.79	21.00
		824.7 (20407)	22.91	21.96	21.13
	3RB-Low (0)	848.3 (20643)	22.68	21.74	21.00
		836.5 (20525)	22.76	21.83	20.99
		824.7 (20407)	22.87	21.96	21.13
	6RB (0)	848.3 (20643)	21.79	20.95	19.87
		836.5 (20525)	21.85	21.00	19.88
		824.7 (20407)	21.99	21.13	20.07
3MHz	1RB-High (14)	847.5 (20635)	22.44	21.78	20.81

		836.5 (20525)	22.49	21.90	20.83
		825.5 (20415)	22.61	22.02	20.97
	1RB-Middle (7)	847.5 (20635)	22.54	21.89	20.87
		836.5 (20525)	22.62	22.05	20.97
		825.5 (20415)	22.76	22.10	21.13
	1RB-Low (0)	847.5 (20635)	22.42	21.81	20.80
		836.5 (20525)	22.50	21.88	20.79
		825.5 (20415)	22.60	21.91	21.01
	8RB-High (7)	847.5 (20635)	21.69	20.80	19.75
		836.5 (20525)	21.77	20.85	19.85
		825.5 (20415)	21.91	20.98	19.95
	8RB-Middle (4)	847.5 (20635)	21.78	20.84	19.83
		836.5 (20525)	21.82	20.92	19.86
		825.5 (20415)	21.93	21.04	20.03
	8RB-Low (0)	847.5 (20635)	21.68	20.80	19.75
		836.5 (20525)	21.75	20.86	19.83
		825.5 (20415)	21.89	20.97	19.98
	15RB (0)	847.5 (20635)	21.69	20.72	19.70
		836.5 (20525)	21.74	20.79	19.76
		825.5 (20415)	21.85	20.92	19.91
5MHz	1RB-High (24)	846.5 (20625)	22.63	21.98	20.96
		836.5 (20525)	22.75	22.16	20.98
		826.5 (20425)	22.83	22.23	21.17
	1RB-Middle (12)	846.5 (20625)	22.80	22.09	21.09
		836.5 (20525)	22.86	22.27	21.18
		826.5 (20425)	22.96	22.43	21.32
	1RB-Low (0)	846.5 (20625)	22.67	22.06	20.97
		836.5 (20525)	22.74	22.15	20.98
		826.5 (20425)	22.86	22.28	21.17
	12RB-High (13)	846.5 (20625)	21.76	20.77	19.84
		836.5 (20525)	21.83	20.83	19.91
		826.5 (20425)	21.93	20.92	20.00
	12RB-Middle (6)	846.5 (20625)	21.80	20.85	19.91
		836.5 (20525)	21.87	20.92	19.95
		826.5 (20425)	22.02	21.05	20.07
	12RB-Low (0)	846.5 (20625)	21.79	20.79	19.86
		836.5 (20525)	21.84	20.85	19.90
		826.5 (20425)	21.97	20.97	19.99

	25RB (0)	846.5 (20625)	21.78	20.83	19.83
		836.5 (20525)	21.84	20.88	19.90
		826.5 (20425)	21.97	21.01	20.03
10MHz	1RB-High (49)	844 (20600)	22.75	22.03	21.05
		836.5 (20525)	22.77	22.15	21.05
		829 (20450)	22.82	22.18	21.05
	1RB-Middle (24)	844 (20600)	22.81	22.22	21.14
		836.5 (20525)	22.88	22.23	21.16
		829 (20450)	22.97	22.30	21.25
	1RB-Low (0)	844 (20600)	22.78	22.24	21.11
		836.5 (20525)	22.80	22.21	21.08
		829 (20450)	22.95	22.23	21.24
	25RB-High (25)	844 (20600)	21.75	20.79	19.79
		836.5 (20525)	21.81	20.86	19.90
		829 (20450)	21.86	20.89	19.94
	25RB-Middle (12)	844 (20600)	21.80	20.86	19.87
		836.5 (20525)	21.88	20.92	19.93
		829 (20450)	21.97	21.01	20.03
	25RB-Low (0)	844 (20600)	21.76	20.83	19.83
		836.5 (20525)	21.82	20.87	19.90
		829 (20450)	21.93	21.00	20.00
	50RB (0)	844 (20600)	21.79	20.82	19.83
		836.5 (20525)	21.83	20.85	19.89
		829 (20450)	21.93	20.92	19.96

LTE B5-DSI1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (20643)	15.67	16	15.94
		836.5 (20525)	15.73	16.13	16.02
		824.7 (20407)	15.89	16.29	16.2
	1RB-Middle (3)	848.3 (20643)	15.75	16.07	16.02
		836.5 (20525)	15.83	16.04	16.21
		824.7 (20407)	15.96	16.33	16.2

	1RB-Low (0)	848.3 (20643)	15.67	16	15.97
		836.5 (20525)	15.77	15.96	16.15
		824.7 (20407)	15.87	16.12	16.24
	3RB-High (3)	848.3 (20643)	15.83	15.84	15.99
		836.5 (20525)	15.88	15.9	16.12
		824.7 (20407)	16.03	16.03	16.19
	3RB-Middle (1)	848.3 (20643)	15.86	15.85	16.04
		836.5 (20525)	15.91	15.89	16.08
		824.7 (20407)	16.02	16.07	16.22
	3RB-Low (0)	848.3 (20643)	15.8	15.8	16.02
		836.5 (20525)	15.84	15.83	16.1
		824.7 (20407)	15.99	16	16.25
	6RB (0)	848.3 (20643)	15.9	16.05	15.96
		836.5 (20525)	15.95	16.07	16
		824.7 (20407)	16.09	16.16	16.13
3MHz	1RB-High (14)	847.5 (20635)	15.59	15.96	15.9
		836.5 (20525)	15.64	15.86	15.87
		825.5 (20415)	15.73	15.93	16.1
	1RB-Middle (7)	847.5 (20635)	15.68	16.06	15.95
		836.5 (20525)	15.71	16.04	15.98
		825.5 (20415)	15.84	16.19	16.23
	1RB-Low (0)	847.5 (20635)	15.53	15.93	15.92
		836.5 (20525)	15.61	16.02	15.89
		825.5 (20415)	15.72	16.06	16.03
	8RB-High (7)	847.5 (20635)	15.8	15.9	15.84
		836.5 (20525)	15.86	15.93	15.92
		825.5 (20415)	15.97	16.05	16.06
	8RB-Middle (4)	847.5 (20635)	15.85	15.96	15.9
		836.5 (20525)	15.89	15.97	15.99
		825.5 (20415)	16.05	16.08	16.11
	8RB-Low (0)	847.5 (20635)	15.79	15.89	15.88
		836.5 (20525)	15.85	15.93	15.89
		825.5 (20415)	15.96	16.05	16.06
	15RB (0)	847.5 (20635)	15.8	15.86	15.85
		836.5 (20525)	15.83	15.87	15.89
		825.5 (20415)	15.95	16	15.97
5MHz	1RB-High (24)	846.5 (20625)	15.79	16.06	16.06

		836.5 (20525)	15.83	16.21	16.03
		826.5 (20425)	15.97	16.24	16.11
	1RB-Middle (12)	846.5 (20625)	15.95	16.15	16.13
		836.5 (20525)	16	16.33	16.16
		826.5 (20425)	16.11	16.48	16.41
	1RB-Low (0)	846.5 (20625)	15.79	16.04	16.01
		836.5 (20525)	15.88	16.14	16.13
		826.5 (20425)	16	16.37	16.26
	12RB-High (13)	846.5 (20625)	15.89	15.87	15.91
		836.5 (20525)	15.92	15.93	15.99
		826.5 (20425)	16.03	16.03	16.09
	12RB-Middle (6)	846.5 (20625)	15.9	15.94	15.98
		836.5 (20525)	15.98	16.03	16.05
		826.5 (20425)	16.11	16.14	16.15
	12RB-Low (0)	846.5 (20625)	15.9	15.92	15.95
		836.5 (20525)	15.92	15.89	15.98
		826.5 (20425)	16.04	16.06	16.08
	25RB (0)	846.5 (20625)	15.84	15.89	15.91
		836.5 (20525)	15.93	15.97	15.97
		826.5 (20425)	16.06	16.06	16.09
10MHz	1RB-High (49)	844 (20600)	15.91	16.21	16.07
		836.5 (20525)	15.94	16.3	16.17
		829 (20450)	15.98	16.33	16.19
	1RB-Middle (24)	844 (20600)	15.97	16.31	16.14
		836.5 (20525)	16.37	16.39	16.18
		829 (20450)	16.41	16.34	16.27
	1RB-Low (0)	844 (20600)	15.97	16.29	16.18
		836.5 (20525)	15.99	16.37	16.2
		829 (20450)	16.11	16.39	16.33
	25RB-High (25)	844 (20600)	15.83	15.87	15.89
		836.5 (20525)	15.91	15.94	15.97
		829 (20450)	15.95	15.99	16.02
	25RB-Middle (12)	844 (20600)	15.93	15.96	15.99
		836.5 (20525)	15.99	16.03	16.04
		829 (20450)	16.12	16.1	16.11
	25RB-Low (0)	844 (20600)	15.9	15.95	15.95
		836.5 (20525)	15.92	15.95	15.96
		829 (20450)	16.03	16.06	16.08

	50RB (0)	844 (20600)	15.89	15.93	15.97
		836.5 (20525)	15.93	15.92	15.96
		829 (20450)	16.02	16.02	16.05

LTE B7-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	24.27	23.61	22.54
		2535 (21100)	24.46	23.73	22.74
		2502.5 (20775)	24.54	23.79	22.74
	1RB-Middle (12)	2567.5 (21425)	24.48	23.70	22.65
		2535 (21100)	24.65	23.96	22.89
		2502.5 (20775)	24.65	23.78	22.78
	1RB-Low (0)	2567.5 (21425)	24.33	23.53	22.60
		2535 (21100)	24.49	23.70	22.70
		2502.5 (20775)	24.49	23.67	22.68
	12RB-High (13)	2567.5 (21425)	23.42	22.43	21.52
		2535 (21100)	23.59	22.65	21.71
		2502.5 (20775)	23.65	22.66	21.73
	12RB-Middle (6)	2567.5 (21425)	23.48	22.51	21.58
		2535 (21100)	23.60	22.69	21.75
		2502.5 (20775)	23.67	22.67	21.76
	12RB-Low (0)	2567.5 (21425)	23.48	22.49	21.56
		2535 (21100)	23.61	22.63	21.70
		2502.5 (20775)	23.59	22.58	21.68
	25RB (0)	2567.5 (21425)	23.47	22.49	21.56
		2535 (21100)	23.62	22.70	21.72
		2502.5 (20775)	23.64	22.71	21.70
10MHz	1RB-High (49)	2565 (21400)	24.41	23.66	22.72
		2535 (21100)	24.55	23.70	22.77
		2505 (20800)	24.65	23.77	22.90
	1RB-Middle (24)	2565 (21400)	24.48	23.62	22.64
		2535 (21100)	24.67	23.96	22.88
		2505 (20800)	24.70	23.83	22.78

	1RB-Low (0)	2565 (21400)	24.45	23.62	22.64
		2535 (21100)	24.63	23.77	22.88
		2505 (20800)	24.58	23.72	22.76
	25RB-High (25)	2565 (21400)	23.48	22.51	21.54
		2535 (21100)	23.61	22.67	21.69
		2505 (20800)	23.69	22.73	21.78
	25RB-Middle (12)	2565 (21400)	23.55	22.55	21.61
		2535 (21100)	23.66	22.73	21.77
		2505 (20800)	23.66	22.70	21.74
	25RB-Low (0)	2565 (21400)	23.58	22.58	21.63
		2535 (21100)	23.64	22.70	21.73
		2505 (20800)	23.61	22.63	21.67
	50RB (0)	2565 (21400)	23.58	22.55	21.61
		2535 (21100)	23.65	22.67	21.67
		2505 (20800)	23.70	22.69	21.72
15MHz	1RB-High (74)	2562.5 (21375)	24.36	23.67	22.62
		2535 (21100)	24.48	23.72	22.72
		2507.5 (20825)	24.60	23.73	22.78
	1RB-Middle (37)	2562.5 (21375)	24.48	23.79	22.64
		2535 (21100)	24.66	23.98	22.88
		2507.5 (20825)	24.65	23.84	22.87
	1RB-Low (0)	2562.5 (21375)	24.43	23.59	22.65
		2535 (21100)	24.57	23.85	22.77
		2507.5 (20825)	24.54	23.77	22.74
	36RB-High (38)	2562.5 (21375)	23.47	22.50	21.54
		2535 (21100)	23.54	22.60	21.66
		2507.5 (20825)	23.67	22.71	21.77
	36RB-Middle (19)	2562.5 (21375)	23.53	22.52	21.59
		2535 (21100)	23.61	22.65	21.71
		2507.5 (20825)	23.67	22.69	21.76
	36RB-Low (0)	2562.5 (21375)	23.55	22.56	21.60
		2535 (21100)	23.58	22.64	21.66
		2507.5 (20825)	23.56	22.58	21.66
	75RB (0)	2562.5 (21375)	23.56	22.53	21.55
		2535 (21100)	23.59	22.61	21.65
		2507.5 (20825)	23.64	22.64	21.69
20MHz	1RB-High (99)	2560 (21350)	24.27	23.44	22.52

		2535 (21100)	24.36	23.65	22.68
		2510 (20850)	24.49	23.69	22.60
	1RB-Middle (50)	2560 (21350)	24.46	23.70	22.72
		2535 (21100)	24.61	23.82	22.90
		2510 (20850)	24.65	23.87	22.86
	1RB-Low (0)	2560 (21350)	24.34	23.65	22.57
		2535 (21100)	24.49	23.72	22.70
		2510 (20850)	24.45	23.68	22.56
	50RB-High (50)	2560 (21350)	23.45	22.45	21.49
		2535 (21100)	23.51	22.59	21.58
		2510 (20850)	23.68	22.69	21.72
	50RB-Middle (25)	2560 (21350)	23.60	22.59	21.61
		2535 (21100)	23.64	22.69	21.72
		2510 (20850)	23.71	22.74	21.77
	50RB-Low (0)	2560 (21350)	23.60	22.56	21.61
		2535 (21100)	23.62	22.65	21.65
		2510 (20850)	23.55	22.57	21.61
	100RB (0)	2560 (21350)	23.51	22.49	21.50
		2535 (21100)	23.57	22.59	21.61
		2510 (20850)	23.61	22.60	21.66

LTE B7-DSI1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	9.48	9.67	9.64
		2535 (21100)	9.43	9.69	9.58
		2502.5 (20775)	9.59	9.87	9.74
	1RB-Middle (12)	2567.5 (21425)	9.61	9.87	9.86
		2535 (21100)	9.61	9.87	9.77
		2502.5 (20775)	9.7	10	9.83
	1RB-Low (0)	2567.5 (21425)	9.44	9.73	9.67
		2535 (21100)	9.47	9.78	9.63
		2502.5 (20775)	9.53	9.83	9.72
	12RB-High (13)	2567.5 (21425)	9.52	9.5	9.58
		2535 (21100)	9.51	9.52	9.57
		2502.5 (20775)	9.64	9.62	9.66

	12RB-Middle (6)	2567.5 (21425)	9.58	9.52	9.6
		2535 (21100)	9.54	9.52	9.58
		2502.5 (20775)	9.69	9.64	9.7
	12RB-Low (0)	2567.5 (21425)	9.57	9.52	9.55
		2535 (21100)	9.56	9.55	9.6
		2502.5 (20775)	9.62	9.6	9.62
	25RB (0)	2567.5 (21425)	9.54	9.54	9.54
		2535 (21100)	9.56	9.54	9.59
		2502.5 (20775)	9.64	9.64	9.66
10MHz	1RB-High (49)	2565 (21400)	9.58	9.83	9.82
		2535 (21100)	9.51	9.8	9.65
		2505 (20800)	9.69	9.89	9.87
	1RB-Middle (24)	2565 (21400)	9.61	9.82	9.77
		2535 (21100)	9.59	9.82	9.74
		2505 (20800)	9.72	9.85	9.9
	1RB-Low (0)	2565 (21400)	9.52	9.71	9.71
		2535 (21100)	9.54	9.84	9.69
		2505 (20800)	9.66	9.83	9.73
	25RB-High (25)	2565 (21400)	9.55	9.53	9.56
		2535 (21100)	9.53	9.55	9.55
		2505 (20800)	9.74	9.75	9.75
	25RB-Middle (12)	2565 (21400)	9.6	9.57	9.61
		2535 (21100)	9.57	9.59	9.61
		2505 (20800)	9.67	9.67	9.7
	25RB-Low (0)	2565 (21400)	9.61	9.6	9.61
		2535 (21100)	9.55	9.56	9.55
		2505 (20800)	9.62	9.59	9.61
	50RB (0)	2565 (21400)	9.61	9.57	9.59
		2535 (21100)	9.54	9.53	9.54
		2505 (20800)	9.69	9.67	9.68
15MHz	1RB-High (74)	2562.5 (21375)	9.53	9.85	9.71
		2535 (21100)	9.44	9.74	9.58
		2507.5 (20825)	9.62	9.81	9.78
	1RB-Middle (37)	2562.5 (21375)	9.57	9.88	9.73
		2535 (21100)	9.58	9.8	9.8
		2507.5 (20825)	9.69	9.96	9.82
	1RB-Low (0)	2562.5 (21375)	9.47	9.68	9.57

		2535 (21100)	9.51	9.76	9.76
		2507.5 (20825)	9.56	9.81	9.77
	36RB-High (38)	2562.5 (21375)	9.51	9.5	9.54
		2535 (21100)	9.49	9.48	9.53
		2507.5 (20825)	9.66	9.66	9.72
	36RB-Middle (19)	2562.5 (21375)	9.54	9.51	9.57
		2535 (21100)	9.52	9.53	9.57
		2507.5 (20825)	9.67	9.68	9.71
	36RB-Low (0)	2562.5 (21375)	9.54	9.51	9.56
		2535 (21100)	9.52	9.51	9.55
		2507.5 (20825)	9.58	9.57	9.62
	75RB (0)	2562.5 (21375)	9.56	9.52	9.52
		2535 (21100)	9.5	9.51	9.5
		2507.5 (20825)	9.63	9.63	9.62
20MHz	1RB-High (99)	2560 (21350)	9.41	9.66	9.57
		2535 (21100)	9.33	9.64	9.55
		2510 (20850)	9.49	9.76	9.66
	1RB-Middle (50)	2560 (21350)	9.53	9.81	9.73
		2535 (21100)	9.59	9.95	9.73
		2510 (20850)	9.96	9.94	9.79
	1RB-Low (0)	2560 (21350)	9.37	9.68	9.55
		2535 (21100)	9.48	9.65	9.62
		2510 (20850)	9.49	9.66	9.62
	50RB-High (50)	2560 (21350)	9.49	9.47	9.49
		2535 (21100)	9.48	9.48	9.46
		2510 (20850)	9.67	9.65	9.68
	50RB-Middle (25)	2560 (21350)	9.59	9.57	9.61
		2535 (21100)	9.59	9.58	9.58
		2510 (20850)	9.7	9.6	9.61
	50RB-Low (0)	2560 (21350)	9.53	9.54	9.57
		2535 (21100)	9.52	9.54	9.56
		2510 (20850)	9.56	9.52	9.57
	100RB (0)	2560 (21350)	9.49	9.47	9.47
		2535 (21100)	9.52	9.47	9.5
		2510 (20850)	9.61	9.57	9.57

LTE B12-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3 (23173)	24.21	23.18	22.20
		707.5 (23095)	24.22	23.36	22.40
		699.7 (23017)	24.28	23.46	22.54
	1RB-Middle (3)	715.3 (23173)	24.29	23.17	22.33
		707.5 (23095)	24.32	23.47	22.41
		699.7 (23017)	24.31	23.54	22.52
	1RB-Low (0)	715.3 (23173)	24.16	23.13	22.22
		707.5 (23095)	24.21	23.31	22.37
		699.7 (23017)	24.20	23.45	22.46
	3RB-High (3)	715.3 (23173)	24.32	23.16	22.31
		707.5 (23095)	24.33	23.25	22.47
		699.7 (23017)	24.35	23.31	22.60
	3RB-Middle (1)	715.3 (23173)	24.33	23.11	22.26
		707.5 (23095)	24.36	23.23	22.46
		699.7 (23017)	24.39	23.29	22.62
	3RB-Low (0)	715.3 (23173)	24.28	23.08	22.26
		707.5 (23095)	24.34	23.29	22.49
		699.7 (23017)	24.35	23.25	22.56
	6RB (0)	715.3 (23173)	23.41	22.33	21.26
		707.5 (23095)	23.46	22.50	21.45
		699.7 (23017)	23.51	22.58	21.52
3MHz	1RB-High (14)	714.5 (23165)	24.06	23.05	22.09
		707.5 (23095)	24.06	23.19	22.22
		700.5 (23025)	24.12	23.40	22.49
	1RB-Middle (7)	714.5 (23165)	24.16	23.15	22.23
		707.5 (23095)	24.17	23.29	22.49
		700.5 (23025)	24.27	23.55	22.59
	1RB-Low (0)	714.5 (23165)	24.06	23.16	22.16
		707.5 (23095)	24.07	23.23	22.35
		700.5 (23025)	24.09	23.38	22.40
	8RB-High (7)	714.5 (23165)	23.22	22.13	21.15
		707.5 (23095)	23.31	22.33	21.36
		700.5 (23025)	23.39	22.46	21.46

	8RB-Middle (4)	714.5 (23165)	23.29	22.20	21.24
		707.5 (23095)	23.37	22.38	21.38
		700.5 (23025)	23.45	22.48	21.52
	8RB-Low (0)	714.5 (23165)	23.24	22.20	21.22
		707.5 (23095)	23.29	22.28	21.34
		700.5 (23025)	23.37	22.44	21.40
	15RB (0)	714.5 (23165)	23.26	22.14	21.19
		707.5 (23095)	23.34	22.31	21.34
		700.5 (23025)	23.42	22.41	21.39
5MHz	1RB-High (24)	713.5 (23155)	24.21	23.25	22.15
		707.5 (23095)	24.22	23.49	22.38
		701.5 (23035)	24.28	23.51	22.45
	1RB-Middle (12)	713.5 (23155)	24.36	23.41	22.36
		707.5 (23095)	24.40	23.53	22.50
		701.5 (23035)	24.47	23.67	22.69
	1RB-Low (0)	713.5 (23155)	24.25	23.34	22.39
		707.5 (23095)	24.28	23.48	22.45
		701.5 (23035)	24.33	23.50	22.60
	12RB-High (13)	713.5 (23155)	23.22	22.09	21.18
		707.5 (23095)	23.39	22.33	21.41
		701.5 (23035)	23.46	22.45	21.50
	12RB-Middle (6)	713.5 (23155)	23.35	22.29	21.35
		707.5 (23095)	23.42	22.40	21.46
		701.5 (23035)	23.50	22.50	21.53
	12RB-Low (0)	713.5 (23155)	23.38	22.32	21.37
		707.5 (23095)	23.39	22.32	21.40
		701.5 (23035)	23.44	22.44	21.45
	25RB (0)	713.5 (23155)	23.33	22.26	21.29
		707.5 (23095)	23.41	22.39	21.41
		701.5 (23035)	23.48	22.47	21.52
10MHz	1RB-High (49)	711 (23130)	24.28	23.22	22.29
		707.5 (23095)	24.31	23.35	22.45
		704 (23060)	24.32	23.48	22.46
	1RB-Middle (24)	711 (23130)	24.38	23.50	22.54
		707.5 (23095)	24.42	23.55	22.54
		704 (23060)	24.45	23.70	22.58
	1RB-Low (0)	711 (23130)	24.39	23.47	22.52

		707.5 (23095)	24.40	23.57	22.61
		704 (23060)	24.43	23.71	22.62
	25RB-High (25)	711 (23130)	23.29	22.18	21.23
		707.5 (23095)	23.43	22.36	21.40
		704 (23060)	23.43	22.37	21.42
	25RB-Middle (12)	711 (23130)	23.46	22.41	21.42
		707.5 (23095)	23.49	22.45	21.48
		704 (23060)	23.50	22.51	21.51
	25RB-Low (0)	711 (23130)	23.40	22.37	21.37
		707.5 (23095)	23.43	22.41	21.43
		704 (23060)	23.43	22.40	21.42
	50RB (0)	711 (23130)	23.37	22.29	21.34
		707.5 (23095)	23.46	22.41	21.42
		704 (23060)	23.46	22.39	21.45

LTE B12-DSI1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3 (23173)	12.91	13.37	13.16
		707.5 (23095)	13.22	13.19	13.26
		699.7 (23017)	13.14	13.35	13.34
	1RB-Middle (3)	715.3 (23173)	13.08	13.24	13.09
		707.5 (23095)	13.11	13.28	13.26
		699.7 (23017)	13.21	13.2	13.26
	1RB-Low (0)	715.3 (23173)	13.06	13.35	13.38
		707.5 (23095)	13.19	13.15	13.32
		699.7 (23017)	13.12	13.21	13.27
	3RB-High (3)	715.3 (23173)	12.84	12.87	12.99
		707.5 (23095)	12.93	13.02	13.06
		699.7 (23017)	12.92	13.13	13.05
	3RB-Middle (1)	715.3 (23173)	13.04	13.22	13.15
		707.5 (23095)	13.22	13.05	13.15
		699.7 (23017)	13.15	13.13	13.13
	3RB-Low (0)	715.3 (23173)	12.92	13.12	13.13
		707.5 (23095)	13.17	12.99	13.24

		699.7 (23017)	13.04	13.03	13.15
	6RB (0)	715.3 (23173)	13.11	13.05	13.01
		707.5 (23095)	13.08	12.92	13.11
		699.7 (23017)	13.18	13.14	13.11
3MHz	1RB-High (14)	714.5 (23165)	13.17	13.26	13.26
		707.5 (23095)	13.21	13.33	13.22
		700.5 (23025)	13.25	13.35	13.19
	1RB-Middle (7)	714.5 (23165)	13.18	13.43	13.42
		707.5 (23095)	13.23	13.36	13.31
		700.5 (23025)	13.25	13.35	13.32
	1RB-Low (0)	714.5 (23165)	13.3	13.35	13.35
		707.5 (23095)	13.34	13.34	13.28
		700.5 (23025)	13.23	13.47	13.41
	8RB-High (7)	714.5 (23165)	13.04	12.96	13.11
		707.5 (23095)	13.08	13.15	13.24
		700.5 (23025)	13.12	13.18	13.13
	8RB-Middle (4)	714.5 (23165)	13.21	13.17	13.22
		707.5 (23095)	13.18	13.17	13.28
		700.5 (23025)	13.19	13.24	13.34
	8RB-Low (0)	714.5 (23165)	13.07	13.13	13.09
		707.5 (23095)	13.2	13.19	13.21
		700.5 (23025)	13.21	13.2	13.1
	15RB (0)	714.5 (23165)	13.13	13.12	13.02
		707.5 (23095)	13.18	13.1	13.26
		700.5 (23025)	13.15	13.17	13.24
5MHz	1RB-High (24)	713.5 (23155)	13.02	13.38	13.18
		707.5 (23095)	13.24	13.28	13.41
		701.5 (23035)	13.16	13.4	13.35
	1RB-Middle (12)	713.5 (23155)	13.2	13.43	13.29
		707.5 (23095)	13.29	13.3	13.34
		701.5 (23035)	13.3	13.25	13.27
	1RB-Low (0)	713.5 (23155)	13.19	13.43	13.43
		707.5 (23095)	13.25	13.28	13.38
		701.5 (23035)	13.18	13.36	13.33

	12RB-High (13)	713.5 (23155)	13.03	12.93	13.12
		707.5 (23095)	13.11	13.13	13.07
		701.5 (23035)	13.1	13.19	13.24
	12RB-Middle (6)	713.5 (23155)	13.12	13.23	13.19
		707.5 (23095)	13.34	13.2	13.24
		701.5 (23035)	13.35	13.31	13.29
	12RB-Low (0)	713.5 (23155)	13.11	13.2	13.15
		707.5 (23095)	13.18	13.1	13.26
		701.5 (23035)	13.05	13.15	13.15
	25RB (0)	713.5 (23155)	13.13	13.08	13.08
		707.5 (23095)	13.15	13.09	13.18
		701.5 (23035)	13.23	13.26	13.12
10MHz	1RB-High (49)	711 (23130)	13.18	13.38	13.3
		707.5 (23095)	13.27	13.48	13.41
		704 (23060)	13.27	13.41	13.35
	1RB-Middle (24)	711 (23130)	13.29	13.48	13.45
		707.5 (23095)	13.37	13.43	13.42
		704 (23060)	13.39	13.45	13.43
	1RB-Low (0)	711 (23130)	13.33	13.44	13.44
		707.5 (23095)	13.38	13.47	13.44
		704 (23060)	13.36	13.47	13.46
	25RB-High (25)	711 (23130)	13.14	13.1	13.13
		707.5 (23095)	13.28	13.27	13.27
		704 (23060)	13.29	13.26	13.29
	25RB-Middle (12)	711 (23130)	13.29	13.26	13.27
		707.5 (23095)	13.34	13.33	13.35
		704 (23060)	13.36	13.37	13.38
	25RB-Low (0)	711 (23130)	13.26	13.25	13.26
		707.5 (23095)	13.28	13.27	13.28
		704 (23060)	13.24	13.25	13.26
	50RB (0)	711 (23130)	13.2	13.17	13.18
		707.5 (23095)	13.31	13.28	13.28
		704 (23060)	13.3	13.28	13.3

LTE B28-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
3MHz	1RB-High (14)	746.5 (27645)	24.22	23.20	22.43
		719.5 (27375)	24.05	23.28	22.42
		704.5 (27225)	24.22	23.39	22.47
	1RB-Middle (7)	746.5 (27645)	24.31	23.37	22.57
		719.5 (27375)	24.19	23.43	22.56
		704.5 (27225)	24.31	23.48	22.58
	1RB-Low (0)	746.5 (27645)	24.16	23.43	22.43
		719.5 (27375)	24.09	23.26	22.42
		704.5 (27225)	24.19	23.27	22.45
	8RB-High (7)	746.5 (27645)	23.41	22.46	21.50
		719.5 (27375)	23.29	22.42	21.40
		704.5 (27225)	23.40	22.52	21.55
	8RB-Middle (4)	746.5 (27645)	23.48	22.57	21.60
		719.5 (27375)	23.35	22.45	21.47
		704.5 (27225)	23.48	22.54	21.58
	8RB-Low (0)	746.5 (27645)	23.44	22.55	21.52
		719.5 (27375)	23.28	22.38	21.40
		704.5 (27225)	23.41	22.49	21.52
	15RB (0)	746.5 (27645)	23.49	22.49	21.53
		719.5 (27375)	23.33	22.37	21.37
		704.5 (27225)	23.44	22.48	21.49
5MHz	1RB-High (24)	745.5 (27635)	24.20	23.43	22.57
		720.5 (27385)	24.26	23.43	22.54
		705.5 (27235)	24.40	23.69	22.67
	1RB-Middle (12)	745.5 (27635)	24.60	23.76	22.67
		720.5 (27385)	24.41	23.65	22.65
		705.5 (27235)	24.57	23.83	22.77
	1RB-Low (0)	745.5 (27635)	24.42	23.64	22.60
		720.5 (27385)	24.33	23.54	22.58
		705.5 (27235)	24.44	23.66	22.61
	12RB-High (13)	745.5 (27635)	23.45	22.42	21.53
		720.5 (27385)	23.36	22.37	21.44
		705.5 (27235)	23.50	22.54	21.59

	12RB-Middle (6)	745.5 (27635)	23.61	22.63	21.70
		720.5 (27385)	23.42	22.46	21.54
		705.5 (27235)	23.56	22.59	21.66
	12RB-Low (0)	745.5 (27635)	23.54	22.52	21.58
		720.5 (27385)	23.38	22.40	21.44
		705.5 (27235)	23.48	22.55	21.56
	25RB (0)	745.5 (27635)	23.55	22.56	21.59
		720.5 (27385)	23.37	22.41	21.44
		705.5 (27235)	23.53	22.56	21.60
10MHz	1RB-High (49)	743 (27610)	24.46	23.61	22.61
		723 (27410)	24.32	23.56	22.48
		708 (27260)	24.46	23.62	22.68
	1RB-Middle (24)	743 (27610)	24.50	23.72	22.67
		723 (27410)	24.40	23.60	22.63
		708 (27260)	24.54	23.78	22.73
	1RB-Low (0)	743 (27610)	24.38	23.69	22.68
		723 (27410)	24.42	23.61	22.61
		708 (27260)	24.55	23.67	22.65
	25RB-High (25)	743 (27610)	23.46	22.48	21.51
		723 (27410)	23.36	22.37	21.42
		708 (27260)	23.46	22.55	21.55
	25RB-Middle (12)	743 (27610)	23.59	22.61	21.64
		723 (27410)	23.41	22.50	21.50
		708 (27260)	23.54	22.59	21.61
	25RB-Low (0)	743 (27610)	23.47	22.55	21.56
		723 (27410)	23.37	22.46	21.44
		708 (27260)	23.51	22.56	21.59
	50RB (0)	743 (27610)	23.51	22.53	21.56
		723 (27410)	23.39	22.40	21.43
		708 (27260)	23.53	22.55	21.59
15MHz	1RB-High (74)	740.5 (27585)	24.46	23.57	22.61
		725.5 (27435)	24.26	23.55	22.54
		710.5 (27285)	24.31	23.57	22.52
	1RB-Middle (37)	740.5 (27585)	24.46	23.60	22.73
		725.5 (27435)	24.41	23.73	22.66
		710.5 (27285)	24.48	23.78	22.75
	1RB-Low (0)	740.5 (27585)	24.36	23.68	22.64

		725.5 (27435)	24.40	23.65	22.67
		710.5 (27285)	24.51	23.63	22.64
	36RB-High (38)	740.5 (27585)	23.45	22.49	21.55
		725.5 (27435)	23.38	22.42	21.49
		710.5 (27285)	23.47	22.49	21.58
	36RB-Middle (19)	740.5 (27585)	23.43	22.51	21.55
		725.5 (27435)	23.43	22.51	21.52
		710.5 (27285)	23.48	22.53	21.57
	36RB-Low (0)	740.5 (27585)	23.40	22.46	21.51
		725.5 (27435)	23.41	22.46	21.52
		710.5 (27285)	23.50	22.53	21.60
	75RB (0)	740.5 (27585)	23.48	22.54	21.53
		725.5 (27435)	23.42	22.46	21.47
		710.5 (27285)	23.48	22.53	21.53
20MHz	1RB-High (99)	738 (27560)	24.37	23.48	22.51
		728 (27460)	24.24	23.46	22.48
		713 (27310)	24.18	23.52	22.43
	1RB-Middle (50)	738 (27560)	24.40	23.68	22.70
		728 (27460)	24.39	23.63	22.65
		713 (27310)	24.47	23.70	22.67
	1RB-Low (0)	738 (27560)	24.26	23.66	22.56
		728 (27460)	24.37	23.62	22.56
		713 (27310)	24.41	23.58	22.57
	50RB-High (50)	738 (27560)	23.47	22.49	21.50
		728 (27460)	23.46	22.45	21.51
		713 (27310)	23.53	22.53	21.57
	50RB-Middle (25)	738 (27560)	23.51	22.56	21.57
		728 (27460)	23.48	22.48	21.49
		713 (27310)	23.54	22.58	21.57
	50RB-Low (0)	738 (27560)	23.36	22.40	21.41
		728 (27460)	23.39	22.42	21.45
		713 (27310)	23.45	22.51	21.50
	100RB (0)	738 (27560)	23.41	22.43	21.47
		728 (27460)	23.46	22.45	21.48
		713 (27310)	23.51	22.51	21.55

LTE B28-DSI1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
3MHz	1RB-High (14)	746.5 (27645)	14.8	14.95	15.02
		719.5 (27375)	14.67	14.84	14.91
		704.5 (27225)	14.8	15.06	15.09
	1RB-Middle (7)	746.5 (27645)	14.93	15.06	15.22
		719.5 (27375)	14.77	15.02	15.12
		704.5 (27225)	14.94	15.15	15.17
	1RB-Low (0)	746.5 (27645)	14.82	15.03	15.03
		719.5 (27375)	14.65	15	14.88
		704.5 (27225)	14.79	15.06	14.94
	8RB-High (7)	746.5 (27645)	15.01	15.04	15.02
		719.5 (27375)	14.89	14.92	14.89
		704.5 (27225)	15	15.03	15.03
	8RB-Middle (4)	746.5 (27645)	15.09	15.12	15.07
		719.5 (27375)	14.93	14.97	14.93
		704.5 (27225)	15.08	15.06	15.06
	8RB-Low (0)	746.5 (27645)	15.01	15.09	15.04
		719.5 (27375)	14.87	14.93	14.91
		704.5 (27225)	15	15	15
	15RB (0)	746.5 (27645)	15.02	15.02	15.01
		719.5 (27375)	14.87	14.88	14.88
		704.5 (27225)	15	15	15.02
5MHz	1RB-High (24)	745.5 (27635)	15.03	15.23	15.16
		720.5 (27385)	14.86	15.03	15.01
		705.5 (27235)	15	15.19	15.2
	1RB-Middle (12)	745.5 (27635)	15.16	15.41	15.3
		720.5 (27385)	15.02	15.16	15.19
		705.5 (27235)	15.21	15.31	15.3
	1RB-Low (0)	745.5 (27635)	15	15.25	15.2
		720.5 (27385)	14.92	15.23	15.07
		705.5 (27235)	15.05	15.25	15.16
	12RB-High (13)	745.5 (27635)	15.05	15	15.05
		720.5 (27385)	14.92	14.89	14.93
		705.5 (27235)	15.09	15.04	15.08

	12RB-Middle (6)	745.5 (27635)	15.18	15.12	15.18
		720.5 (27385)	15.01	14.97	15.03
		705.5 (27235)	15.15	15.12	15.12
	12RB-Low (0)	745.5 (27635)	15.1	15.09	15.12
		720.5 (27385)	14.95	14.95	14.96
		705.5 (27235)	15.12	15.06	15.11
	25RB (0)	745.5 (27635)	15.12	15.09	15.11
		720.5 (27385)	14.94	14.97	14.97
		705.5 (27235)	15.11	15.1	15.1
10MHz	1RB-High (49)	743 (27610)	15.08	15.34	15.22
		723 (27410)	14.94	15.27	15.12
		708 (27260)	15.07	15.36	15.17
	1RB-Middle (24)	743 (27610)	15.09	15.37	15.26
		723 (27410)	15	15.25	15.13
		708 (27260)	15.13	15.45	15.26
	1RB-Low (0)	743 (27610)	15	15.19	15.23
		723 (27410)	15.06	15.32	15.2
		708 (27260)	15.13	15.39	15.26
	25RB-High (25)	743 (27610)	15.03	15.04	15.04
		723 (27410)	14.89	14.89	14.92
		708 (27260)	15.09	15.09	15.1
	25RB-Middle (12)	743 (27610)	15.15	15.14	15.14
		723 (27410)	14.97	14.97	15.03
		708 (27260)	15.15	15.11	15.13
	25RB-Low (0)	743 (27610)	15.07	15.03	15.05
		723 (27410)	14.96	14.96	14.96
		708 (27260)	15.09	15.1	15.1
	50RB (0)	743 (27610)	15.1	15.07	15.08
		723 (27410)	14.94	14.93	14.93
		708 (27260)	15.1	15.1	15.1
15MHz	1RB-High (74)	740.5 (27585)	15.06	15.25	15.18
		725.5 (27435)	14.85	15.16	14.96
		710.5 (27285)	14.96	15.24	15.07
	1RB-Middle (37)	740.5 (27585)	15.08	15.31	15.19
		725.5 (27435)	15.03	15.32	15.24
		710.5 (27285)	15.12	15.38	15.31
	1RB-Low (0)	740.5 (27585)	14.93	15.11	15.11

		725.5 (27435)	15.08	15.25	15.22
		710.5 (27285)	15.1	15.28	15.18
	36RB-High (38)	740.5 (27585)	15.04	15.04	15.06
		725.5 (27435)	14.98	14.95	15.02
		710.5 (27285)	15.07	15.07	15.08
	36RB-Middle (19)	740.5 (27585)	15.03	15.01	15.06
		725.5 (27435)	15.02	15.02	15.05
		710.5 (27285)	15.07	15.05	15.1
	36RB-Low (0)	740.5 (27585)	14.99	14.97	15.01
		725.5 (27435)	15.02	15.02	15.06
		710.5 (27285)	15.1	15.06	15.09
	75RB (0)	740.5 (27585)	15.05	15.02	15.03
		725.5 (27435)	15.01	14.99	14.99
		710.5 (27285)	15.09	15.04	15.07
20MHz	1RB-High (99)	738 (27560)	15.01	15.14	15.1
		728 (27460)	14.85	15.16	14.98
		713 (27310)	14.82	15.13	15
	1RB-Middle (50)	738 (27560)	15.04	15.36	15.2
		728 (27460)	15.01	15.26	15.15
		713 (27310)	15.37	15.32	15.3
	1RB-Low (0)	738 (27560)	14.91	15.15	14.97
		728 (27460)	14.96	15.27	15.05
		713 (27310)	15.07	15.32	15.11
	50RB-High (50)	738 (27560)	15.04	15.01	15.05
		728 (27460)	15.05	15.02	15.04
		713 (27310)	15.12	15.11	15.12
	50RB-Middle (25)	738 (27560)	15.08	15.05	15.09
		728 (27460)	15.05	15.03	15.03
		713 (27310)	15.13	15.1	15.11
	50RB-Low (0)	738 (27560)	14.92	14.91	14.91
		728 (27460)	14.99	14.97	14.97
		713 (27310)	15.06	15.01	15.04
	100RB (0)	738 (27560)	14.97	14.94	14.95
		728 (27460)	15.01	14.99	15.01
		713 (27310)	15.09	15.05	15.06

LTE B41-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	24.78	23.87	22.48
		2640.3(41093)	24.79	23.88	22.48
		2593 (40620)	24.78	23.86	22.46
		2545.8(40148)	24.53	23.63	22.19
		2498.5 (39675)	24.90	23.87	22.55
	1RB-Middle (12)	2687.5 (41565)	24.84	23.94	22.56
		2640.3(41093)	24.93	23.97	22.61
		2593 (40620)	24.88	23.89	22.59
		2545.8(40148)	24.64	23.71	22.36
		2498.5 (39675)	25.00	23.96	22.64
	1RB-Low (0)	2687.5 (41565)	24.68	23.78	22.43
		2640.3(41093)	24.81	23.87	22.48
		2593 (40620)	24.80	23.78	22.47
		2545.8(40148)	24.57	23.60	22.25
		2498.5 (39675)	24.89	23.84	22.52
	12RB-High (13)	2687.5 (41565)	23.79	22.78	21.84
		2640.3(41093)	23.89	22.85	21.90
		2593 (40620)	23.85	22.80	21.90
		2545.8(40148)	23.62	22.55	21.60
		2498.5 (39675)	23.94	22.88	21.95
	12RB-Middle (6)	2687.5 (41565)	23.87	22.83	21.92
		2640.3(41093)	23.97	22.89	21.97
		2593 (40620)	23.90	22.81	21.95
		2545.8(40148)	23.67	22.59	21.71
		2498.5 (39675)	23.97	22.88	21.94
	12RB-Low (0)	2687.5 (41565)	23.84	22.78	21.86
		2640.3(41093)	23.90	22.85	21.93
		2593 (40620)	23.84	22.78	21.88
		2545.8(40148)	23.58	22.54	21.61
		2498.5 (39675)	23.91	22.82	21.90
	25RB (0)	2687.5 (41565)	23.77	22.77	21.81
		2640.3(41093)	23.87	22.87	21.89
		2593 (40620)	23.81	22.86	21.88
		2545.8(40148)	23.53	22.60	21.60

		2498.5 (39675)	23.84	22.85	21.96
10MHz	1RB-High (49)	2685 (41540)	24.84	23.93	22.52
		2639(41080)	24.86	23.84	22.50
		2593 (40620)	24.91	23.90	22.52
		2547(40160)	24.64	23.65	22.27
		2501 (39700)	24.98	23.94	22.60
	1RB-Middle (24)	2685 (41540)	24.86	23.91	22.57
		2639(41080)	24.95	24.00	22.65
		2593 (40620)	24.96	23.96	22.62
		2547(40160)	24.68	23.75	22.38
		2501 (39700)	24.98	23.74	22.67
	1RB-Low (0)	2685 (41540)	24.79	23.79	22.45
		2639(41080)	24.97	23.74	22.64
		2593 (40620)	24.92	23.88	22.54
		2547(40160)	24.68	23.71	22.31
		2501 (39700)	25.00	23.94	22.57
	25RB-High (25)	2685 (41540)	23.75	22.75	21.85
		2639(41080)	23.82	22.83	21.86
		2593 (40620)	23.83	22.82	21.93
		2547(40160)	23.58	22.63	21.68
		2501 (39700)	23.90	22.91	21.98
	25RB-Middle (12)	2685 (41540)	23.77	22.88	21.93
		2639(41080)	23.96	22.91	21.99
		2593 (40620)	23.87	22.93	21.98
		2547(40160)	23.68	22.63	21.71
		2501 (39700)	23.90	22.93	21.97
	25RB-Low (0)	2685 (41540)	23.69	22.77	21.85
		2639(41080)	23.92	22.90	21.95
		2593 (40620)	23.79	22.82	21.90
		2547(40160)	23.56	22.61	21.71
		2501 (39700)	23.82	22.85	21.96
	50RB (0)	2685 (41540)	23.69	22.77	21.84
		2639(41080)	23.80	22.86	21.92
		2593 (40620)	23.33	22.83	21.86
		2547(40160)	23.53	22.65	21.69
		2501 (39700)	23.82	22.84	21.88
15MHz	1RB-High (74)	2682.5 (41515)	24.74	23.84	22.49

		2637.8(41068)	24.82	23.85	22.44
		2593 (40620)	24.86	23.89	22.52
		2548.3(40173)	24.58	23.64	22.25
		2503.5 (39725)	24.92	23.88	22.54
	1RB-Middle (37)	2682.5 (41515)	24.82	23.85	22.50
		2637.8(41068)	24.93	23.97	22.63
		2593 (40620)	24.97	23.99	22.61
		2548.3(40173)	24.65	23.76	22.34
		2503.5 (39725)	24.98	24.00	22.68
	1RB-Low (0)	2682.5 (41515)	24.68	23.76	22.32
		2637.8(41068)	24.96	23.97	22.59
		2593 (40620)	24.81	23.85	22.48
		2548.3(40173)	24.61	23.68	22.30
		2503.5 (39725)	24.92	23.87	22.54
	36RB-High (38)	2682.5 (41515)	23.74	22.75	21.72
		2637.8(41068)	23.84	22.83	21.80
		2593 (40620)	23.85	22.88	21.89
		2548.3(40173)	23.61	22.55	21.62
		2503.5 (39725)	23.86	22.83	21.99
	36RB-Middle (19)	2682.5 (41515)	23.79	22.77	21.78
		2637.8(41068)	24.00	22.92	22.00
		2593 (40620)	23.86	22.79	21.93
		2548.3(40173)	23.65	22.58	21.63
		2503.5 (39725)	23.95	22.90	21.97
	36RB-Low (0)	2682.5 (41515)	23.75	22.72	21.70
		2637.8(41068)	23.92	22.88	21.97
		2593 (40620)	23.85	22.80	21.81
		2548.3(40173)	23.51	22.57	21.59
		2503.5 (39725)	23.89	22.84	21.87
	75RB (0)	2682.5 (41515)	23.70	22.71	21.77
		2637.8(41068)	23.84	22.81	21.94
		2593 (40620)	23.77	22.83	21.83
		2548.3(40173)	23.61	22.57	21.64
		2503.5 (39725)	23.83	22.84	21.91
20MHz	1RB-High (99)	2680 (41490)	24.71	23.78	22.37
		2636.5(41055)	24.73	23.78	22.37
		2593 (40620)	24.75	23.78	22.42
		2549.5(40185)	24.50	23.55	22.16

		2506 (39750)	24.77	23.76	22.47
	1RB-Middle (50)	2680 (41490)	24.80	23.79	22.48
		2636.5(41055)	24.96	23.88	22.67
		2593 (40620)	24.97	23.93	22.60
		2549.5(40185)	24.67	23.72	22.37
		2506 (39750)	24.95	24.00	22.66
	1RB-Low (0)	2680 (41490)	24.70	23.70	22.34
		2636.5(41055)	24.93	23.94	22.59
		2593 (40620)	24.75	23.73	22.40
		2549.5(40185)	24.54	23.62	22.21
		2506 (39750)	24.82	23.79	22.44
	50RB-High (50)	2680 (41490)	23.61	22.65	21.68
		2636.5(41055)	23.74	22.75	21.81
		2593 (40620)	23.74	22.81	21.83
		2549.5(40185)	23.56	22.57	21.60
		2506 (39750)	23.83	22.90	21.90
	50RB-Middle (25)	2680 (41490)	23.72	22.71	21.77
		2636.5(41055)	23.86	22.92	22.00
		2593 (40620)	23.87	22.87	21.90
		2549.5(40185)	23.59	22.63	21.67
		2506 (39750)	23.85	22.91	21.93
	50RB-Low (0)	2680 (41490)	23.66	22.65	21.71
		2636.5(41055)	23.86	22.91	21.95
		2593 (40620)	23.73	22.79	21.86
		2549.5(40185)	23.49	22.55	21.62
		2506 (39750)	23.77	22.79	21.80
	100RB (0)	2680 (41490)	23.68	22.72	21.71
		2636.5(41055)	23.90	22.85	21.93
		2593 (40620)	23.79	22.84	21.85
		2549.5(40185)	23.61	22.54	21.59
		2506 (39750)	23.87	22.89	21.87

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BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	11.91	11.98	11.58

		2640.3(41093)	11.9	11.98	11.61
		2593 (40620)	11.87	11.92	11.53
		2545.8(40148)	11.65	11.73	11.32
		2498.5 (39675)	11.81	11.86	11.47
	1RB-Middle (12)	2687.5 (41565)	12	11.91	11.67
		2640.3(41093)	11.92	11.97	11.72
		2593 (40620)	11.85	11.92	11.59
		2545.8(40148)	11.75	11.86	11.49
		2498.5 (39675)	11.87	11.98	11.57
	1RB-Low (0)	2687.5 (41565)	11.81	11.87	11.48
		2640.3(41093)	11.97	11.94	11.6
		2593 (40620)	11.76	11.82	11.43
		2545.8(40148)	11.67	11.7	11.33
		2498.5 (39675)	11.74	11.77	11.41
	12RB-High (13)	2687.5 (41565)	11.91	11.82	11.91
		2640.3(41093)	11.95	11.85	11.95
		2593 (40620)	11.82	11.74	11.85
		2545.8(40148)	11.68	11.62	11.71
		2498.5 (39675)	11.84	11.79	11.89
	12RB-Middle (6)	2687.5 (41565)	11.94	11.87	11.97
		2640.3(41093)	11.91	11.92	11.93
		2593 (40620)	11.86	11.82	11.9
		2545.8(40148)	11.73	11.69	11.78
		2498.5 (39675)	11.91	11.82	11.9
	12RB-Low (0)	2687.5 (41565)	11.91	11.83	11.9
		2640.3(41093)	11.95	11.91	11.99
		2593 (40620)	11.8	11.74	11.81
		2545.8(40148)	11.68	11.64	11.68
		2498.5 (39675)	11.83	11.73	11.82
	25RB (0)	2687.5 (41565)	11.78	11.83	11.93
		2640.3(41093)	11.88	11.96	11.98
		2593 (40620)	11.72	11.82	11.82
		2545.8(40148)	11.6	11.71	11.74
		2498.5 (39675)	11.75	11.78	11.81
10MHz	1RB-High (49)	2685 (41540)	11.91	11.91	11.63
		2639(41080)	11.97	11.91	11.61
		2593 (40620)	11.96	11.91	11.64
		2547(40160)	11.74	11.8	11.41

		2501 (39700)	11.93	11.95	11.59
	1RB-Middle (24)	2685 (41540)	11.96	11.99	11.65
		2639(41080)	11.96	11.99	11.71
		2593 (40620)	11.9	11.97	11.62
		2547(40160)	11.77	11.86	11.5
		2501 (39700)	11.91	12	11.62
	1RB-Low (0)	2685 (41540)	11.87	11.92	11.54
		2639(41080)	11.95	11.92	11.74
		2593 (40620)	11.87	11.94	11.56
		2547(40160)	11.79	11.85	11.49
		2501 (39700)	11.85	11.92	11.52
	25RB-High (25)	2685 (41540)	11.8	11.87	11.96
		2639(41080)	11.84	11.89	11.92
		2593 (40620)	11.77	11.84	11.9
		2547(40160)	11.69	11.74	11.79
		2501 (39700)	11.9	11.86	11.94
	25RB-Middle (12)	2685 (41540)	11.88	11.92	11.98
		2639(41080)	11.96	11.97	11.91
		2593 (40620)	11.83	11.91	11.91
		2547(40160)	11.69	11.71	11.79
		2501 (39700)	11.82	11.86	11.93
	25RB-Low (0)	2685 (41540)	11.76	11.85	11.87
		2639(41080)	11.92	12	11.96
		2593 (40620)	11.72	11.83	11.91
		2547(40160)	11.62	11.69	11.73
		2501 (39700)	11.71	11.81	11.89
	50RB (0)	2685 (41540)	11.81	11.81	11.83
		2639(41080)	11.88	11.95	11.94
		2593 (40620)	11.75	11.86	11.82
		2547(40160)	11.65	11.7	11.73
		2501 (39700)	11.65	11.79	11.78
15MHz	1RB-High (74)	2682.5 (41515)	11.92	11.94	11.56
		2637.8(41068)	11.93	11.95	11.58
		2593 (40620)	11.94	11.91	11.6
		2548.3(40173)	11.72	11.77	11.38
		2503.5 (39725)	11.9	11.92	11.55
	1RB-Middle (37)	2682.5 (41515)	11.93	11.96	11.58
		2637.8(41068)	11.99	11.92	11.77

		2593 (40620)	11.93	11.98	11.66
		2548.3(40173)	11.8	11.85	11.46
		2503.5 (39725)	11.97	11.91	11.65
	1RB-Low (0)	2682.5 (41515)	11.8	11.87	11.46
		2637.8(41068)	11.92	11.91	11.7
		2593 (40620)	11.81	11.84	11.48
		2548.3(40173)	11.77	11.77	11.39
		2503.5 (39725)	11.76	11.85	11.43
	36RB-High (38)	2682.5 (41515)	11.85	11.74	11.84
		2637.8(41068)	11.92	11.87	11.91
		2593 (40620)	11.82	11.74	11.82
		2548.3(40173)	11.71	11.67	11.7
		2503.5 (39725)	11.9	11.79	11.86
	36RB-Middle (19)	2682.5 (41515)	11.85	11.79	11.83
		2637.8(41068)	11.92	11.96	11.92
		2593 (40620)	11.85	11.79	11.85
		2548.3(40173)	11.75	11.73	11.76
		2503.5 (39725)	11.86	11.82	11.81
	36RB-Low (0)	2682.5 (41515)	11.83	11.79	11.81
		2637.8(41068)	11.99	11.92	11.99
		2593 (40620)	11.78	11.74	11.79
		2548.3(40173)	11.71	11.65	11.68
		2503.5 (39725)	11.79	11.77	11.77
	75RB (0)	2682.5 (41515)	11.81	11.79	11.81
		2637.8(41068)	11.89	12	11.96
		2593 (40620)	11.75	11.79	11.83
		2548.3(40173)	11.63	11.71	11.71
		2503.5 (39725)	11.8	11.82	11.84
20MHz	1RB-High (99)	2680 (41490)	11.86	11.86	11.49
		2636.5(41055)	11.85	11.91	11.54
		2593 (40620)	11.86	11.92	11.55
		2549.5(40185)	11.58	11.68	11.27
		2506 (39750)	11.77	11.85	11.45
	1RB-Middle (50)	2680 (41490)	11.91	11.94	11.59
		2636.5(41055)	11.93	11.99	11.75
		2593 (40620)	11.95	11.96	11.6
		2549.5(40185)	11.79	11.89	11.49
		2506 (39750)	11.94	11.91	11.61

	1RB-Low (0)	2680 (41490)	11.77	11.84	11.45
		2636.5(41055)	11.92	11.97	11.69
		2593 (40620)	11.71	11.74	11.4
		2549.5(40185)	11.69	11.73	11.33
		2506 (39750)	11.71	11.71	11.36
	50RB-High (50)	2680 (41490)	11.68	11.73	11.72
		2636.5(41055)	11.83	11.9	11.87
		2593 (40620)	11.73	11.82	11.83
		2549.5(40185)	11.63	11.67	11.71
		2506 (39750)	11.83	11.92	11.84
	50RB-Middle (25)	2680 (41490)	11.81	11.81	11.79
		2636.5(41055)	11.94	11.81	11.93
		2593 (40620)	11.97	11.89	11.87
		2549.5(40185)	11.66	11.78	11.72
		2506 (39750)	11.8	11.86	11.88
	50RB-Low (0)	2680 (41490)	11.77	11.76	11.75
		2636.5(41055)	11.95	11.91	11.92
		2593 (40620)	11.71	11.8	11.8
		2549.5(40185)	11.56	11.64	11.62
		2506 (39750)	11.56	11.72	11.74
	100RB (0)	2680 (41490)	11.79	11.78	11.79
		2636.5(41055)	11.9	11.94	11.96
		2593 (40620)	11.78	11.78	11.77
		2549.5(40185)	11.65	11.69	11.68
		2506 (39750)	11.78	11.77	11.79

LTE B66-DSI0

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	22.28	21.55	20.57
		1745 (132322)	22.40	21.66	20.85
		1710.7 (131979)	22.47	21.83	20.86
	1RB-Middle (3)	1779.3 (132665)	22.34	21.53	20.63
		1745 (132322)	22.48	21.86	20.86
		1710.7 (131979)	22.60	21.87	20.95
	1RB-Low (0)	1779.3 (132665)	22.32	21.60	20.57
		1745 (132322)	22.43	21.81	20.80

		1710.7 (131979)	22.53	21.91	20.84
	3RB-High (3)	1779.3 (132665)	22.33	21.28	20.56
		1745 (132322)	22.55	21.62	20.79
		1710.7 (131979)	22.65	21.68	20.88
	3RB-Middle (1)	1779.3 (132665)	22.34	21.36	20.59
		1745 (132322)	22.54	21.56	20.80
		1710.7 (131979)	22.67	21.71	20.87
	3RB-Low (0)	1779.3 (132665)	22.33	21.38	20.55
		1745 (132322)	22.57	21.53	20.80
		1710.7 (131979)	22.63	21.68	20.88
	6RB (0)	1779.3 (132665)	21.43	20.57	19.54
		1745 (132322)	21.64	20.78	19.73
		1710.7 (131979)	21.73	20.88	19.83
3MHz	1RB-High (14)	1778.5 (132657)	22.18	21.55	20.55
		1745 (132322)	22.39	21.73	20.76
		1711.5 (131987)	22.41	21.73	20.72
	1RB-Middle (7)	1778.5 (132657)	22.30	21.59	20.63
		1745 (132322)	22.46	21.76	20.88
		1711.5 (131987)	22.54	21.71	20.82
	1RB-Low (0)	1778.5 (132657)	22.16	21.53	20.52
		1745 (132322)	22.34	21.66	20.73
		1711.5 (131987)	22.45	21.64	20.70
	8RB-High (7)	1778.5 (132657)	21.38	20.45	19.49
		1745 (132322)	21.57	20.66	19.68
		1711.5 (131987)	21.64	20.73	19.77
	8RB-Middle (4)	1778.5 (132657)	21.44	20.49	19.51
		1745 (132322)	21.66	20.76	19.74
		1711.5 (131987)	21.75	20.82	19.86
	8RB-Low (0)	1778.5 (132657)	21.38	20.46	19.50
		1745 (132322)	21.58	20.67	19.70
		1711.5 (131987)	21.64	20.69	19.77
	15RB (0)	1778.5 (132657)	21.38	20.44	19.45
		1745 (132322)	21.60	20.60	19.64
		1711.5 (131987)	21.68	20.69	19.75
5MHz	1RB-High (24)	1777.5 (132647)	22.42	21.69	20.67
		1745 (132322)	22.62	21.96	20.82
		1712.5 (131997)	22.66	21.98	20.85

	1RB-Middle (12)	1777.5 (132647)	22.55	21.92	20.80
		1745 (132322)	22.74	22.01	21.00
		1712.5 (131997)	22.76	22.07	20.97
	1RB-Low (0)	1777.5 (132647)	22.47	21.75	20.78
		1745 (132322)	22.62	21.98	20.92
		1712.5 (131997)	22.71	22.04	20.95
	12RB-High (13)	1777.5 (132647)	21.49	20.49	19.54
		1745 (132322)	21.75	20.69	19.80
		1712.5 (131997)	21.77	20.80	19.84
	12RB-Middle (6)	1777.5 (132647)	21.57	20.54	19.61
		1745 (132322)	21.73	20.75	19.85
		1712.5 (131997)	21.77	20.82	19.88
	12RB-Low (0)	1777.5 (132647)	21.48	20.47	19.54
		1745 (132322)	21.64	20.66	19.72
		1712.5 (131997)	21.70	20.68	19.78
	25RB (0)	1777.5 (132647)	21.50	20.53	19.57
		1745 (132322)	21.71	20.76	19.77
		1712.5 (131997)	21.73	20.78	19.84
10MHz	1RB-High (49)	1775 (132622)	22.50	21.85	20.70
		1745 (132322)	22.68	22.00	20.83
		1715 (132022)	22.68	22.02	20.87
	1RB-Middle (24)	1775 (132622)	22.63	21.85	20.82
		1745 (132322)	22.78	22.08	21.03
		1715 (132022)	22.77	22.09	21.01
	1RB-Low (0)	1775 (132622)	22.66	21.90	20.84
		1745 (132322)	22.71	21.97	20.93
		1715 (132022)	22.78	22.09	21.08
	25RB-High (25)	1775 (132622)	21.54	20.56	19.61
		1745 (132322)	21.78	20.78	19.85
		1715 (132022)	21.75	20.77	19.83
	25RB-Middle (12)	1775 (132622)	21.59	20.65	19.66
		1745 (132322)	21.76	20.79	19.84
		1715 (132022)	21.79	20.82	19.85
	25RB-Low (0)	1775 (132622)	21.51	20.56	19.59
		1745 (132322)	21.63	20.66	19.71
		1715 (132022)	21.59	20.61	19.68
	50RB (0)	1775 (132622)	21.56	20.57	19.63
		1745 (132322)	21.73	20.74	19.76

		1715 (132022)	21.71	20.70	19.76
15MHz	1RB-High (74)	1772.5 (132597)	22.43	21.76	20.68
		1745 (132322)	22.64	21.89	20.78
		1717.5 (132047)	22.58	21.86	20.84
	1RB-Middle (37)	1772.5 (132597)	22.63	22.00	20.91
		1745 (132322)	22.76	21.99	20.97
		1717.5 (132047)	22.74	22.01	20.95
	1RB-Low (0)	1772.5 (132597)	22.62	21.94	20.85
		1745 (132322)	22.66	21.90	20.92
		1717.5 (132047)	22.73	22.09	20.94
	36RB-High (38)	1772.5 (132597)	21.61	20.59	19.67
		1745 (132322)	21.73	20.75	19.86
		1717.5 (132047)	21.70	20.69	19.79
	36RB-Middle (19)	1772.5 (132597)	21.63	20.68	19.71
		1745 (132322)	21.74	20.76	19.81
		1717.5 (132047)	21.71	20.73	19.80
	36RB-Low (0)	1772.5 (132597)	21.62	20.65	19.74
		1745 (132322)	21.64	20.65	19.75
		1717.5 (132047)	21.64	20.64	19.72
	75RB (0)	1772.5 (132597)	21.64	20.65	19.68
		1745 (132322)	21.72	20.73	19.79
		1717.5 (132047)	21.66	20.68	19.71
20MHz	1RB-High (99)	1770 (132572)	22.37	21.64	20.59
		1745 (132322)	22.56	21.79	20.75
		1720 (132072)	22.56	21.79	20.73
	1RB-Middle (50)	1770 (132572)	22.69	22.08	20.94
		1745 (132322)	22.73	21.99	20.99
		1720 (132072)	22.71	22.02	20.89
	1RB-Low (0)	1770 (132572)	22.54	21.89	20.73
		1745 (132322)	22.52	21.91	20.70
		1720 (132072)	22.63	21.92	20.87
	50RB-High (50)	1770 (132572)	21.70	20.74	19.79
		1745 (132322)	21.81	20.81	19.86
		1720 (132072)	21.62	20.60	19.65
	50RB-Middle (25)	1770 (132572)	21.69	20.71	19.77
		1745 (132322)	21.82	20.78	19.83
		1720 (132072)	21.76	20.73	19.76

	50RB-Low (0)	1770 (132572)	21.76	20.80	19.87
		1745 (132322)	21.58	20.62	19.64
		1720 (132072)	21.53	20.53	19.56
	100RB (0)	1770 (132572)	21.74	20.77	19.80
		1745 (132322)	21.69	20.68	19.75
		1720 (132072)	21.57	20.54	19.59

LTE B66-DSI1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	12.08	12.22	12.31
		1745 (132322)	11.99	12.27	12.28
		1710.7 (131979)	11.75	12.01	12.05
	1RB-Middle (3)	1779.3 (132665)	12.14	12.31	12.31
		1745 (132322)	12.08	12.37	12.35
		1710.7 (131979)	11.82	11.96	12
	1RB-Low (0)	1779.3 (132665)	12.03	12.33	12.22
		1745 (132322)	12	12.23	12.3
		1710.7 (131979)	11.72	12.05	12.05
	3RB-High (3)	1779.3 (132665)	12.18	12.14	12.39
		1745 (132322)	12.13	12.16	12.34
		1710.7 (131979)	11.89	11.89	12.05
	3RB-Middle (1)	1779.3 (132665)	12.18	12.11	12.36
		1745 (132322)	12.14	12.15	12.34
		1710.7 (131979)	11.89	11.83	12.08
	3RB-Low (0)	1779.3 (132665)	12.15	12.12	12.31
		1745 (132322)	12.11	12.04	12.33
		1710.7 (131979)	11.86	11.78	12.03
	6RB (0)	1779.3 (132665)	12.24	12.33	12.25
		1745 (132322)	12.19	12.3	12.2
		1710.7 (131979)	11.94	12.01	11.92
3MHz	1RB-High (14)	1778.5 (132657)	11.88	12.05	12.26
		1745 (132322)	11.79	12.16	12.1
		1711.5 (131987)	11.53	11.78	11.85
	1RB-Middle (7)	1778.5 (132657)	12	12.36	12.36
		1745 (132322)	11.91	12.31	12.3

		1711.5 (131987)	11.68	11.97	12.04
	1RB-Low (0)	1778.5 (132657)	11.86	12.13	12.16
		1745 (132322)	11.8	12.04	12.06
		1711.5 (131987)	11.56	11.96	11.89
	8RB-High (7)	1778.5 (132657)	12.11	12.21	12.18
		1745 (132322)	12.03	12.15	12.13
		1711.5 (131987)	11.79	11.88	11.91
	8RB-Middle (4)	1778.5 (132657)	12.15	12.24	12.25
		1745 (132322)	12.08	12.18	12.21
		1711.5 (131987)	11.84	11.97	11.96
	8RB-Low (0)	1778.5 (132657)	12.07	12.17	12.21
		1745 (132322)	12	12.13	12.14
		1711.5 (131987)	11.76	11.9	11.91
	15RB (0)	1778.5 (132657)	12.08	12.14	12.14
		1745 (132322)	12.03	12.1	12.11
		1711.5 (131987)	11.78	11.82	11.86
5MHz	1RB-High (24)	1777.5 (132647)	12.12	12.4	12.27
		1745 (132322)	12.06	12.34	12.2
		1712.5 (131997)	11.78	11.98	11.96
	1RB-Middle (12)	1777.5 (132647)	12.23	12.48	12.42
		1745 (132322)	12.18	12.49	12.31
		1712.5 (131997)	11.88	12.21	12.08
	1RB-Low (0)	1777.5 (132647)	12.1	12.37	12.23
		1745 (132322)	12.02	12.32	12.25
		1712.5 (131997)	11.81	12.08	11.98
	12RB-High (13)	1777.5 (132647)	12.16	12.17	12.22
		1745 (132322)	12.13	12.12	12.15
		1712.5 (131997)	11.84	11.85	11.89
	12RB-Middle (6)	1777.5 (132647)	12.22	12.19	12.21
		1745 (132322)	12.15	12.14	12.19
		1712.5 (131997)	11.9	11.9	11.94
	12RB-Low (0)	1777.5 (132647)	12.15	12.11	12.16
		1745 (132322)	12.07	12.07	12.09
		1712.5 (131997)	11.83	11.79	11.83
	25RB (0)	1777.5 (132647)	12.15	12.15	12.17
		1745 (132322)	12.11	12.11	12.11
		1712.5 (131997)	11.85	11.85	11.89

10MHz	1RB-High (49)	1775 (132622)	12.19	12.34	12.33
		1745 (132322)	12.19	12.48	12.33
		1715 (132022)	11.87	12.21	12.03
	1RB-Middle (24)	1775 (132622)	12.24	12.51	12.35
		1745 (132322)	12.14	12.51	12.28
		1715 (132022)	11.89	12.2	12.05
	1RB-Low (0)	1775 (132622)	12.21	12.51	12.35
		1745 (132322)	12.09	12.44	12.31
		1715 (132022)	11.89	12.18	12.15
	25RB-High (25)	1775 (132622)	12.21	12.24	12.22
		1745 (132322)	12.2	12.2	12.22
		1715 (132022)	11.92	11.93	11.93
	25RB-Middle (12)	1775 (132622)	12.25	12.24	12.23
		1745 (132322)	12.16	12.16	12.18
		1715 (132022)	11.91	11.9	11.92
	25RB-Low (0)	1775 (132622)	12.14	12.15	12.17
		1745 (132322)	12.05	12.05	12.06
		1715 (132022)	11.75	11.79	11.8
	50RB (0)	1775 (132622)	12.18	12.17	12.15
		1745 (132322)	12.14	12.13	12.15
		1715 (132022)	11.9	11.87	11.89
15MHz	1RB-High (74)	1772.5 (132597)	12.12	12.38	12.33
		1745 (132322)	12.15	12.43	12.34
		1717.5 (132047)	11.88	11.99	11.99
	1RB-Middle (37)	1772.5 (132597)	12.23	12.54	12.44
		1745 (132322)	12.2	12.5	12.34
		1717.5 (132047)	11.95	12.24	12.09
	1RB-Low (0)	1772.5 (132597)	12.19	12.45	12.41
		1745 (132322)	11.99	12.29	12.15
		1717.5 (132047)	11.83	12.09	12.03
	36RB-High (38)	1772.5 (132597)	12.19	12.17	12.2
		1745 (132322)	12.21	12.2	12.23
		1717.5 (132047)	11.87	11.87	11.91
	36RB-Middle (19)	1772.5 (132597)	12.22	12.2	12.23
		1745 (132322)	12.15	12.14	12.18
		1717.5 (132047)	11.88	11.88	11.92
	36RB-Low (0)	1772.5 (132597)	12.2	12.19	12.21
		1745 (132322)	12.03	12.02	12.09

		1717.5 (132047)	11.8	11.82	11.85
	75RB (0)	1772.5 (132597)	12.25	12.21	12.22
		1745 (132322)	12.14	12.12	12.11
		1717.5 (132047)	11.86	11.85	11.86
20MHz	1RB-High (99)	1770 (132572)	12.05	12.35	12.22
		1745 (132322)	12.08	12.39	12.25
		1720 (132072)	11.85	12.01	11.96
	1RB-Middle (50)	1770 (132572)	12.25	12.47	12.38
		1745 (132322)	12.5	12.49	12.43
		1720 (132072)	11.92	12.29	12.03
	1RB-Low (0)	1770 (132572)	12.11	12.32	12.25
		1745 (132322)	11.88	12.22	12.07
		1720 (132072)	11.76	11.98	11.95
	50RB-High (50)	1770 (132572)	12.29	12.27	12.27
		1745 (132322)	12.29	12.23	12.26
		1720 (132072)	11.94	11.93	11.96
	50RB-Middle (25)	1770 (132572)	12.29	12.27	12.27
		1745 (132322)	12.33	12.18	12.19
		1720 (132072)	11.95	11.95	11.95
	50RB-Low (0)	1770 (132572)	12.21	12.31	12.31
		1745 (132322)	12.03	12.04	12.04
		1720 (132072)	11.72	11.72	11.72
	100RB (0)	1770 (132572)	12.28	12.26	12.28
		1745 (132322)	12.17	12.12	12.15
		1720 (132072)	11.85	11.83	11.86

11.4 Wi-Fi and BT Measurement result

The maximum output power of BT antenna is 5.38dBm.
The maximum tune up of BT antenna is 7dBm.

The average conducted power for Wi-Fi 2.4G-DSI0

FCC			
802.11b(dBm)		power setting	Tune up
Channel\data rate	1Mbps		
11(2462MHz)	17.24	17.00	18.00
6(2437MHz)	16.71	17.00	18.00
1(2412MHz)	16.67	17.00	18.00
802.11g(dBm)			
Channel\data rate	6Mbps		
11(2462MHz)	16.44	16.50	17.50
6(2437MHz)	16.14	16.50	17.50
1(2412MHz)	16.03	16.50	17.50
802.11n(dBm)-20MHz			
Channel\data rate	MCS0		
11(2462MHz)	16.06	16.00	17.00
6(2437MHz)	16.04	16.50	17.50
1(2412MHz)	15.08	15.50	16.50

The average conducted power for Wi-Fi 2.4G-DSI1

2.4GHz				
CE			Power setting	Tune up
802.11b	Channel\data	1Mbps		
WLAN2450	11(2462MHz)	8.84	9	10.00
	6(2437MHz)	8.99	9	10.00
	1(2412MHz)	8.78	9	10.00
802.11g	Channel\data	6Mbps		
WLAN2450	11(2462MHz)	9.16	9	10.00
	6(2437MHz)	8.77	9	10.00
	1(2412MHz)	8.68	9	10.00
802.11n-20MHz	Channel\data	MCS0		
WLAN2450	11(2462MHz)	9.15	9	10.00
	6(2437MHz)	8.64	9	10.00
	1(2412MHz)	8.63	9	10.00

The average conducted power for Wi-Fi 5G-DSI0

5GHz			
802.11n(dBm)-20MHz			
Channel\data rate	MCS0		
36(5180 MHz)	15.87	16.50	17.50
40(5200 MHz)	15.78	16.50	17.50
44(5220 MHz)	15.68	16.50	17.50
48(5240 MHz)	**15.58**	16.50	17.50
52(5260 MHz)	16.01	16.50	17.50
56(5280 MHz)	16.11	16.50	17.50
60(5300 MHz)	16.47	16.50	17.50
64(5320 MHz)	**16.49**	16.50	17.50
802.11n(dBm)-40MHz			
Channel\data rate	MCS0		
102(5510 MHz)	**13.47**	14.00	15.00
110(5550 MHz)	13.72	14.00	15.00
118(5590 MHz)	13.91	14.00	15.00
126(5630 MHz)	14.03	14.00	15.00
134(5670 MHz)	13.58	14.00	15.00
142(5710 MHz)	13.94	14.00	15.00
802.11a(dBm)			
Channel\data rate	6Mbps		
149(5745 MHz)	13.21	13.50	14.50
153(5765 MHz)	13.18	13.50	14.50
157(5785 MHz)	13.23	13.50	14.50
161(5805 MHz)	**12.97**	13.50	14.50
165(5825 MHz)	13.24	13.50	14.50

The average conducted power for Wi-Fi 5G- DSI1

5GHz			
802.11a(dBm)			
Channel\data rate	6Mbps	power setting	Tune up
36(5180 MHz)	4.21	**5**	6.00
40(5200 MHz)	4.19	**5**	6.00
44(5220 MHz)	4.31	**5**	6.00
48(5240 MHz)	4.32	**5**	6.00
52(5260 MHz)	4.98	**5**	6.00
56(5280 MHz)	5.12	**5**	6.00
60(5300 MHz)	5.50	**5**	6.00
64(5320 MHz)	5.26	**5**	6.00
100(5500 MHz)	4.28	**5**	6.00
104(5520 MHz)	4.13	**5**	6.00
108(5540 MHz)	4.75	**5**	6.00
112(5560 MHz)	4.57	**5**	6.00
116(5580 MHz)	4.82	**5**	6.00
120(5600 MHz)	4.76	**5**	6.00
124(5620 MHz)	4.82	**5**	6.00
128(5640 MHz)	4.72	**5**	6.00
132(5660 MHz)	4.45	**5**	6.00
136(5680 MHz)	4.56	**5**	6.00
140(5700 MHz)	4.72	**5**	6.00
144(5720 MHz)	4.53	**5**	6.00
149(5745 MHz)	4.87	**5**	6.00
153(5765 MHz)	4.37	**5**	6.00
157(5785 MHz)	4.58	**5**	6.00
161(5805 MHz)	4.54	**5**	6.00
165(5825 MHz)	4.42	**5**	6.00

12 Simultaneous TX SAR Considerations

12.1 Transmit Antenna Separation Distances

The detail for transmit antenna separation distances is described in the additional document:

Appendix to test report No.I23Z70136-SEM01

The photos of SAR test

12.2 SAR Measurement Positions

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

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
ANT2	< 25mm	< 25mm	< 25mm	>25mm	< 25mm	>25mm
ANT3	< 25mm	< 25mm	< 25mm	>25mm	< 25mm	>25mm
ANT6	< 25mm	< 25mm	< 25mm	< 25mm	< 25mm	> 25mm

13 Evaluation of Simultaneous

State		1												2	3	4	1+3	1+2+4
Head		G850	G1900	W1900	W1700	W850	LTE B2	LTE B5	LTE B7	LTE B12	LTE B28	LTE B41	LTE B66	BT	WiFi 2.4G	WiFi 5G		
Cheek	L	0.16	0.20	0.25	0.35	0.12	0.24	0.31	0.00	0.11	0.18	0.00	0.30	0.11	0.14	0.10	0.49	0.56
Tilt	L	0.17	0.27	0.34	0.40	0.14	0.31	0.28	0.00	0.12	0.18	0.00	0.37	0.13	0.19	0.16	0.59	0.69
Cheek	R	0.23	0.31	0.40	0.55	0.12	0.35	0.35	0.15	0.12	0.17	0.11	0.50	0.07	0.05	0.07	0.60	0.69
Tilt	R	0.18	0.39	0.51	0.56	0.10	0.42	0.29	0.14	0.12	0.16	0.09	0.56	0.08	0.09	0.09	0.65	0.73

State		1												2	3	4	1+3	1+2+4
Body		G850	G1900	W1900	W1700	W850	LTE B2	LTE B5	LTE B7	LTE B12	LTE B28	LTE B41	LTE B66	BT	WiFi 2.4G	WiFi 5G		
Front	17mm	0.34	0.34	0.64	0.57	0.29	0.41	0.26		0.21	0.3		0.87		0.19	0.25	1.06	1.12
Front	16mm								0.88			0.35			0.19	0.25	1.07	1.13
Front	10mm														0.19	0.25	0.19	0.25
Front	0mm	0.25	0.35	0.43	0.51	0.27	0.26	0.33	0.39	0.31	0.38	0.31	0.660	0.13	0.22	0.28	0.88	1.07
Rear	20mm	0.37	0.29	0.46	0.41	0.33	0.30	0.37	0.70	0.22	0.36	0.25	0.45		0.23	0.25	0.93	0.95
Rear	15mm														0.23	0.25	0.23	0.25
Rear	0mm	0.50	0.44	0.57	0.46	0.59	0.56	0.57	0.48	0.51	0.52	0.39	0.580	0.27	0.54	0.60	1.13	1.46
Left	17mm		0.05	0.10	0.15		0.09		0.76			0.38	0.10		0.05	0.05	0.81	0.81
Left	0mm	1.12	0.06	0.12	0.07	0.84	0.06	0.90	0.45	0.50	0.83	0.36	0.08	0.00	0.05	0.05	1.17	1.17
Right	0mm	0.18	0.10	0.21	0.14	0.22	0.13	0.21	0.12	0.24	0.30	0.04	0.21	0.00	0.17	0.14	0.47	0.44
Top	24mm	0.20	0.34	0.75	0.57	0.18	0.45	0.22		0.10	0.20		0.57		0.10	0.39	0.85	1.14
Top	20mm								0.21			0.07			0.10	0.39	0.31	0.60
Top	17mm														0.10	0.39	0.10	0.39
Top	0mm	0.18	0.28	0.45	0.35	0.21	0.27	0.21	0.11	0.29	0.28	0.06	0.480	0.08	0.14	0.38	0.62	0.94

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

Note:

KDB 447498 D01 General RF Exposure Guidance:

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

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

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

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

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

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

KDB 648474 D04 Handset SAR:

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

KDB 941225 D01 SAR test for 3G devices:

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

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.

When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.

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

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

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

dB higher than that of the highest channel bandwidth.

For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

KDB 248227 D01 SAR meas for 802.11:

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

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

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

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

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

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

For all positions/configurations tested using the initial test position and subsequent test

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

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

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

When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

Table 15.1: Duty Cycle

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

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

Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Fig	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Reported SAR 10g (W/kg)	Power Drift
GSM850	128	824.2	GPRS(4TX)	Cheek Left	0mm		19.32	19.50	0.158	**0.16**	0.099	**0.10**	0.17
GSM850	128	824.2	GPRS(4TX)	Tilt Left	0mm		19.32	19.50	0.167	**0.17**	0.098	**0.10**	-0.12
GSM850	251	848.8	GPRS(4TX)	Cheek Right	0mm		18.79	19.50	0.16	**0.19**	0.091	**0.11**	0.09
GSM850	190	836.6	GPRS(4TX)	Cheek Right	0mm		18.86	19.50	0.171	**0.20**	0.094	**0.11**	0.13
GSM850	128	824.2	GPRS(4TX)	Cheek Right	0mm	F.1	19.32	19.50	0.225	**0.23**	0.125	**0.13**	0.10
GSM850	128	824.2	GPRS(4TX)	Tilt Right	0mm		19.32	19.50	0.175	**0.18**	0.095	**0.10**	0.02
GSM850	128	824.2	GPRS(4TX)	Front	17mm		27.55	28.50	0.276	**0.34**	0.25	**0.31**	-0.07
GSM850	128	824.2	GPRS(4TX)	Rear	20mm		27.55	28.50	0.294	**0.37**	0.257	**0.32**	0.03
GSM850	251	848.8	GPRS(4TX)	Left	0mm		27.35	28.50	0.551	**0.72**	0.319	**0.42**	0.06
GSM850	190	836.6	GPRS(4TX)	Left	0mm	F.2	27.38	28.50	0.862	**1.12**	0.423	**0.55**	0.15
GSM850	128	824.2	GPRS(4TX)	Left	0mm		27.55	28.50	0.725	**0.90**	0.419	**0.52**	0.00
GSM850	128	824.2	GPRS(4TX)	Right	0mm		27.55	28.50	0.148	**0.18**	0.109	**0.14**	-0.17
GSM850	128	824.2	GPRS(4TX)	Top	24mm		27.55	28.50	0.162	**0.20**	0.143	**0.18**	0.19
GSM850	128	824.2	GPRS(4TX)	Front	0mm		19.32	19.50	0.243	**0.25**	0.17	**0.18**	-0.09
GSM850	128	824.2	GPRS(4TX)	Rear	0mm		19.32	19.50	0.48	**0.50**	0.293	**0.31**	-0.07
GSM850	128	824.2	GPRS(4TX)	Top	0mm		19.32	19.50	0.171	**0.18**	0.105	**0.11**	0.12
GSM850	190	836.6	EGPRS(4TX)	Left	0mm		27.38	28.50	0.725	**0.94**	0.394	**0.51**	-0.15
GSM1900	661	1880	GPRS(2TX)	Cheek Left	0mm		14.46	15.00	0.177	**0.20**	0.082	**0.09**	0.05
GSM1900	661	1880	GPRS(2TX)	Tilt Left	0mm		14.46	15.00	0.241	**0.27**	0.105	**0.12**	0.15
GSM1900	661	1880	GPRS(2TX)	Cheek Right	0mm		14.46	15.00	0.276	**0.31**	0.136	**0.15**	-0.19
GSM1900	810	1909.8	GPRS(2TX)	Tilt Right	0mm		14.44	15.00	0.322	**0.37**	0.158	**0.18**	0.15
GSM1900	661	1880	GPRS(2TX)	Tilt Right	0mm	F.3	14.46	15.00	0.343	**0.39**	0.165	**0.19**	0.15
GSM1900	512	1850.2	GPRS(2TX)	Tilt Right	0mm		14.38	15.00	0.332	**0.38**	0.157	**0.18**	0.12
GSM1900	661	1880	GPRS(2TX)	Front	17mm		27.53	28.50	0.275	**0.34**	0.14	**0.18**	-0.14
GSM1900	661	1880	GPRS(2TX)	Rear	20mm		27.53	28.50	0.231	**0.29**	0.123	**0.15**	0.09
GSM1900	661	1880	GPRS(2TX)	Left	17mm		27.53	28.50	0.043	**0.05**	0.025	**0.03**	-0.19
GSM1900	661	1880	GPRS(2TX)	Right	0mm		27.53	28.50	0.08	**0.10**	0.036	**0.05**	-0.14
GSM1900	661	1880	GPRS(2TX)	Top	24mm		27.53	28.50	0.268	**0.34**	0.148	**0.19**	0.12
GSM1900	661	1880	GPRS(2TX)	Front	0mm		15.12	15.50	0.323	**0.35**	0.135	**0.15**	-0.15
GSM1900	661	1880	GPRS(2TX)	Rear	0mm	F.4	15.12	15.50	0.406	**0.44**	0.166	**0.18**	-0.19
GSM1900	661	1880	GPRS(2TX)	Left	0mm		15.12	15.50	0.059	**0.06**	0.022	**0.02**	0.11
GSM1900	661	1880	GPRS(2TX)	Top	0mm		15.12	15.50	0.256	**0.28**	0.088	**0.10**	0.17
GSM1900	810	1909.8	EGPRS(2TX)	Rear	0mm		15.12	15.50	0.316	**0.34**	0.14	**0.15**	0.12
WCDMA850	4183	836.6	RMC	Cheek Left	0mm		15.11	16.00	0.096	**0.12**	0.063	0.08	0.13
WCDMA850	4233	846.6	RMC	Tilt Left	0mm		15.19	16.00	0.104	**0.13**	0.064	0.08	-0.06
WCDMA850	4183	836.6	RMC	Tilt Left	0mm		15.11	16.00	0.086	**0.11**	0.054	0.07	0.17
WCDMA850	4132	826.4	RMC	Tilt Left	0mm	F.5	15.28	16.00	0.121	**0.14**	0.076	0.09	-0.07
WCDMA850	4183	836.6	RMC	Cheek Right	0mm		15.11	16.00	0.097	**0.12**	0.055	0.07	0.17
WCDMA850	4183	836.6	RMC	Tilt Right	0mm		15.11	16.00	0.085	**0.10**	0.046	0.06	-0.14
WCDMA850	4183	836.6	RMC	Front	17mm		22.95	24.00	0.23	**0.29**	0.176	0.22	0.18
WCDMA850	4183	836.6	RMC	Rear	20mm		22.95	24.00	0.256	**0.33**	0.19	0.24	-0.06
WCDMA850	4233	846.6	RMC	Left	0mm		23.16	24.00	0.665	**0.81**	0.324	0.39	-0.05
WCDMA850	4183	836.6	RMC	Left	0mm		22.95	24.00	0.571	**0.73**	0.307	0.39	0.06
WCDMA850	4132	826.4	RMC	Left	0mm	F.6	23.03	24.00	0.668	**0.84**	0.33	0.41	0.16
WCDMA850	4183	836.6	RMC	Right	0mm		22.95	24.00	0.176	**0.22**	0.096	0.12	-0.18
WCDMA850	4183	836.6	RMC	Top	24mm		22.95	24.00	0.138	**0.18**	0.102	0.13	0.03
WCDMA850	4183	836.6	RMC	Front	0mm		15.11	16.00	0.224	**0.27**	0.13	0.16	-0.19
WCDMA850	4183	836.6	RMC	Rear	0mm		15.11	16.00	0.483	**0.59**	0.219	0.27	0.14
WCDMA850	4183	836.6	RMC	Top	0mm		15.11	16.00	0.174	**0.21**	0.009	0.01	0.16
WCDMA1700	1513	1752.6	RMC	Cheek Left	0mm		12.22	13.00	0.294	**0.35**	0.134	**0.16**	0.01
WCDMA1700	1513	1752.6	RMC	Tilt Left	0mm		12.22	13.00	0.336	**0.40**	0.151	**0.18**	-0.03
WCDMA1700	1513	1752.6	RMC	Cheek Right	0mm		12.22	13.00	0.458	**0.55**	0.194	**0.23**	0.11
WCDMA1700	1513	1752.6	RMC	Tilt Right	0mm	F.7	12.22	13.00	0.47	**0.56**	0.206	**0.25**	0.07
WCDMA1700	1412	1732.4	RMC	Tilt Right	0mm		12.17	13.00	0.456	**0.55**	0.197	**0.24**	0.03
WCDMA1700	1312	1712.4	RMC	Tilt Right	0mm		12.28	13.00	0.412	**0.49**	0.177	**0.21**	-0.04
WCDMA1700	1513	1752.6	RMC	Front	17mm	F.8	23.04	24.00	0.459	**0.57**	0.27	**0.34**	-0.14
WCDMA1700	1513	1752.6	RMC	Rear	20mm		23.04	24.00	0.325	**0.41**	0.192	**0.24**	0.04
WCDMA1700	1513	1752.6	RMC	Left	17mm		23.04	24.00	0.124	**0.15**	0.078	**0.10**	0.01
WCDMA1700	1513	1752.6	RMC	Right	0mm		23.04	24.00	0.109	**0.14**	0.06	**0.07**	0.10
WCDMA1700	1513	1752.6	RMC	Top	24mm		23.04	24.00	0.454	**0.57**	0.266	**0.33**	0.10
WCDMA1700	1513	1752.6	RMC	Front	0mm		12.22	13.00	0.426	**0.51**	0.196	**0.23**	0.01
WCDMA1700	1513	1752.6	RMC	Rear	0mm		12.22	13.00	0.388	**0.46**	0.172	**0.21**	0.07
WCDMA1700	1513	1752.6	RMC	Left	0mm		12.22	13.00	0.059	**0.07**	0.027	**0.03**	0.10
WCDMA1700	1513	1752.6	RMC	Top	0mm		12.22	13.00	0.29	**0.35**	0.12	**0.14**	-0.14
WCDMA1900	9262	1852.4	RMC	Cheek Left	0mm		11.12	12.00	0.208	**0.25**	0.099	**0.12**	0.00
WCDMA1900	9262	1852.4	RMC	Tilt Left	0mm		11.12	12.00	0.279	**0.34**	0.131	**0.16**	0.15
WCDMA1900	9262	1852.4	RMC	Cheek Right	0mm		11.12	12.00	0.324	**0.40**	0.153	**0.19**	0.13
WCDMA1900	9538	1907.6	RMC	Tilt Right	0mm		11.09	12.00	0.374	**0.46**	0.172	**0.21**	0.15
WCDMA1900	9400	1880	RMC	Tilt Right	0mm	F.9	11.06	12.00	0.411	**0.51**	0.19	**0.24**	0.13
WCDMA1900	9262	1852.4	RMC	Tilt Right	0mm		11.12	12.00	0.381	**0.47**	0.177	**0.22**	-0.16
WCDMA1900	9262	1852.4	RMC	Front	17mm		22.75	24.00	0.481	**0.64**	0.274	**0.37**	0.12
WCDMA1900	9262	1852.4	RMC	Rear	20mm		22.75	24.00	0.345	**0.46**	0.204	**0.27**	0.12
WCDMA1900	9262	1852.4	RMC	Left	17mm		22.75	24.00	0.077	**0.10**	0.049	**0.07**	-0.15
WCDMA1900	9262	1852.4	RMC	Right	0mm		22.75	24.00	0.157	**0.21**	0.076	**0.10**	-0.07
WCDMA1900	9262	1852.4	RMC	Top	24mm	F.10	22.75	24.00	0.56	**0.75**	0.334	**0.45**	0.05
WCDMA1900	9538	1907.6	RMC	Top	24mm		22.71	24.00	0.514	**0.69**	0.309	**0.42**	-0.06
WCDMA1900	9400	1880	RMC	Top	24mm		22.69	24.00	0.512	**0.69**	0.307	**0.42**	0.04
WCDMA1900	9262	1852.4	RMC	Front	0mm		9.21	10.00	0.362	**0.43**	0.175	**0.21**	0.12
WCDMA1900	9262	1852.4	RMC	Rear	0mm		9.21	10.00	0.477	**0.57**	0.198	**0.24**	0.12
WCDMA1900	9262	1852.4	RMC	Left	0mm		9.21	10.00	0.099	**0.12**	0.037	**0.04**	0.13
WCDMA1900	9262	1852.4	RMC	Top	0mm		9.21	10.00	0.378	**0.45**	0.131	**0.16**	-0.16

Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Fig	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Reported SAR 10g (W/kg)	Power Drift
LTE Band2	18900	1880	1RB-Mid	Cheek Left	0mm		10.68	11.50	0.196	**0.24**	0.09	**0.11**	0.06
LTE Band2	18900	1880	1RB-Mid	Tilt Left	0mm		10.68	11.50	0.26	**0.31**	0.12	**0.14**	-0.19
LTE Band2	18900	1880	1RB-Mid	Cheek Right	0mm		10.68	11.50	0.293	**0.35**	0.138	**0.17**	-0.15
LTE Band2	18900	1880	1RB-Mid	Tilt Right	0mm	F.11	10.68	11.50	0.348	**0.42**	0.164	**0.20**	-0.15
LTE Band2	18900	1880	50RB-Mid	Cheek Left	0mm		10.52	11.50	0.183	**0.23**	0.085	**0.11**	0.00
LTE Band2	18900	1880	50RB-Mid	Tilt Left	0mm		10.52	11.50	0.229	**0.29**	0.106	**0.13**	-0.14
LTE Band2	18900	1880	50RB-Mid	Cheek Right	0mm		10.52	11.50	0.279	**0.35**	0.132	**0.17**	-0.14
LTE Band2	18900	1880	50RB-Mid	Tilt Right	0mm		10.52	11.50	0.333	**0.42**	0.158	**0.20**	0.10
LTE Band2	18900	1880	1RB-Mid	Front	17mm		22.51	23.50	0.269	**0.34**	0.086	**0.11**	-0.03
LTE Band2	18900	1880	1RB-Mid	Rear	20mm		22.51	23.50	0.239	**0.30**	0.105	**0.13**	0.08
LTE Band2	18900	1880	1RB-Mid	Left	17mm		22.51	23.50	0.069	**0.09**	0.032	**0.04**	0.06
LTE Band2	18900	1880	1RB-Mid	Right	0mm		22.51	23.50	0.1	**0.13**	0.036	**0.05**	0.11
LTE Band2	18900	1880	1RB-Mid	Top	24mm		22.51	23.50	0.358	**0.45**	0.158	**0.20**	-0.13
LTE Band2	18900	1880	50RB-Mid	Front	17mm		21.56	22.50	0.332	**0.41**	0.136	**0.17**	0.00
LTE Band2	18900	1880	50RB-Mid	Rear	20mm		21.56	22.50	0.182	**0.23**	0.08	**0.10**	0.14
LTE Band2	18900	1880	50RB-Mid	Left	17mm		21.56	22.50	0.031	**0.04**	0.014	**0.02**	-0.15
LTE Band2	18900	1880	50RB-Mid	Right	0mm		21.56	22.50	0.078	**0.10**	0.027	**0.03**	0.08
LTE Band2	18900	1880	50RB-Mid	Top	24mm		21.56	22.50	0.273	**0.34**	0.119	**0.15**	-0.16
LTE Band2	18900	1880	1RB-Mid	Front	0mm		8.29	9.50	0.199	**0.26**	0.072	**0.10**	-0.13
LTE Band2	18900	1880	1RB-Mid	Rear	0mm	F.12	8.29	9.50	0.427	**0.56**	0.175	**0.23**	0.16
LTE Band2	18900	1880	1RB-Mid	Left	0mm		8.29	9.50	0.042	**0.06**	0.014	**0.02**	0.14
LTE Band2	18900	1880	1RB-Mid	Top	0mm		8.29	9.50	0.204	**0.27**	0.054	**0.07**	0.01
LTE Band2	18900	1880	50RB-Mid	Front	0mm		8.42	9.50	0.197	**0.25**	0.071	**0.09**	0.06
LTE Band2	18900	1880	50RB-Mid	Rear	0mm		8.42	9.50	0.25	**0.32**	0.083	**0.11**	-0.12
LTE Band2	18900	1880	50RB-Mid	Left	0mm		8.42	9.50	0.041	**0.05**	0.014	**0.02**	0.09
LTE Band2	18900	1880	50RB-Mid	Top	0mm		8.42	9.50	0.215	**0.28**	0.062	**0.08**	0.07
LTE Band5	20450	829	1RB-Mid	Cheek Left	0mm		16.41	17.00	0.256	**0.29**	0.163	0.19	0.05
LTE Band5	20450	829	1RB-Mid	Tilt Left	0mm		16.41	17.00	0.237	**0.27**	0.144	0.16	0.02
LTE Band5	20450	829	1RB-Mid	Cheek Right	0mm		16.41	17.00	0.286	**0.33**	0.168	0.19	-0.13
LTE Band5	20450	829	1RB-Mid	Tilt Right	0mm		16.41	17.00	0.234	**0.27**	0.13	0.15	0.17
LTE Band5	20450	829	25RB-Mid	Cheek Left	0mm		16.12	17.00	0.257	**0.31**	0.162	0.20	0.06
LTE Band5	20450	829	25RB-Mid	Tilt Left	0mm		16.12	17.00	0.227	**0.28**	0.139	0.17	0
LTE Band5	20450	829	25RB-Mid	Cheek Right	0mm	F.13	16.12	17.00	0.287	**0.35**	0.169	0.21	-0.03
LTE Band5	20450	829	25RB-Mid	Tilt Right	0mm		16.12	17.00	0.233	**0.29**	0.13	0.16	-0.04
LTE Band5	20450	829	1RB-Mid	Front	17mm		22.97	24.00	0.205	**0.26**	0.17	0.22	-0.15
LTE Band5	20450	829	1RB-Mid	Rear	20mm		22.97	24.00	0.243	**0.31**	0.19	0.24	0.11
LTE Band5	20450	829	1RB-Mid	Left	0mm	F.14	22.97	24.00	0.713	**0.90**	0.325	0.41	0.01
LTE Band5	20450	829	1RB-Mid	Right	0mm		22.97	24.00	0.165	**0.21**	0.1	0.13	-0.02
LTE Band5	20450	829	1RB-Mid	Top	24mm		22.97	24.00	0.086	**0.11**	0.067	0.08	0.1
LTE Band5	20450	829	25RB-Mid	Front	17mm		21.97	23.00	0.164	**0.21**	0.135	0.17	0.04
LTE Band5	20450	829	25RB-Mid	Rear	20mm		21.97	23.00	0.294	**0.37**	0.219	0.28	0.13
LTE Band5	20450	829	25RB-Mid	Left	0mm		21.97	23.00	0.678	**0.86**	0.316	0.40	-0.18
LTE Band5	20450	829	25RB-Mid	Right	0mm		21.97	23.00	0.122	**0.15**	0.077	0.10	-0.11
LTE Band5	20450	829	25RB-Mid	Top	24mm		21.97	23.00	0.176	**0.22**	0.14	0.18	-0.16
LTE Band5	20450	829	1RB-Mid	Front	0mm		16.41	17.00	0.287	**0.33**	0.166	0.19	-0.15
LTE Band5	20450	829	1RB-Mid	Rear	0mm		16.41	17.00	0.496	**0.57**	0.262	0.30	-0.06
LTE Band5	20450	829	1RB-Mid	Top	0mm		16.41	17.00	0.186	**0.21**	0.106	0.12	-0.14
LTE Band5	20450	829	25RB-Mid	Front	0mm		16.12	17.00	0.267	**0.33**	0.159	0.19	-0.19
LTE Band5	20450	829	25RB-Mid	Rear	0mm		16.12	17.00	0.432	**0.53**	0.246	0.30	0.01
LTE Band5	20450	829	25RB-Mid	Top	0mm		16.12	17.00	0.192	**0.24**	0.106	0.13	0.06
LTE Band7	20850	2510	1RB-Mid	Cheek Left	0mm		9.96	10.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band7	20850	2510	1RB-Mid	Tilt Left	0mm		9.96	10.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band7	20850	2510	1RB-Mid	Cheek Right	0mm	F.15	9.96	10.00	0.151	**0.15**	0.075	0.08	0.02
LTE Band7	20850	2510	1RB-Mid	Tilt Right	0mm		9.96	10.00	0.137	**0.14**	0.067	0.07	0.12
LTE Band7	20850	2510	50RB-Mid	Cheek Left	0mm		9.70	10.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band7	20850	2510	50RB-Mid	Tilt Left	0mm		9.70	10.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band7	20850	2510	50RB-Mid	Cheek Right	0mm		9.70	10.00	0.118	**0.13**	0.07	0.08	-0.11
LTE Band7	20850	2510	50RB-Mid	Tilt Right	0mm		9.70	10.00	0.111	**0.12**	0.061	0.07	-0.18
LTE Band7	20850	2510	1RB-Mid	Front	16mm	F.16	24.65	25.00	0.81	**0.88**	0.451	0.49	-0.09
LTE Band7	20850	2510	1RB-Mid	Rear	20mm		24.65	25.00	0.538	**0.58**	0.3	0.33	-0.13
LTE Band7	20850	2510	1RB-Mid	Left	17mm		24.65	25.00	0.7	**0.76**	0.392	0.42	0.08
LTE Band7	20850	2510	1RB-Mid	Right	0mm		24.65	25.00	0.113	**0.12**	0.049	0.05	0.16
LTE Band7	20850	2510	1RB-Mid	Top	20mm		24.65	25.00	0.194	**0.21**	0.115	0.12	0.01
LTE Band7	20850	2510	50RB-Mid	Front	16mm		23.71	24.00	0.563	**0.60**	0.322	0.34	0.1
LTE Band7	20850	2510	50RB-Mid	Rear	20mm		23.71	24.00	0.654	**0.70**	0.353	0.38	-0.04
LTE Band7	20850	2510	50RB-Mid	Left	17mm		23.71	24.00	0.667	**0.71**	0.382	0.41	-0.01
LTE Band7	20850	2510	50RB-Mid	Right	0mm		23.71	24.00	0.098	**0.10**	0.042	0.04	0
LTE Band7	20850	2510	50RB-Mid	Top	20mm		23.71	24.00	0.194	**0.21**	0.11	0.12	-0.11
LTE Band7	20850	2510	1RB-Mid	Front	0mm		9.96	10.00	0.373	**0.38**	0.149	0.15	-0.15
LTE Band7	20850	2510	1RB-Mid	Rear	0mm		9.96	10.00	0.454	**0.46**	0.189	0.19	0.03
LTE Band7	20850	2510	1RB-Mid	Left	0mm		9.96	10.00	0.443	**0.45**	0.164	0.17	-0.13
LTE Band7	20850	2510	1RB-Mid	Top	0mm		9.96	10.00	0.108	**0.11**	0.035	0.04	0.16
LTE Band7	20850	2510	50RB-Mid	Front	0mm		9.70	10.00	0.36	**0.39**	0.148	0.16	-0.15
LTE Band7	20850	2510	50RB-Mid	Rear	0mm		9.70	10.00	0.447	**0.48**	0.184	0.20	-0.02
LTE Band7	20850	2510	50RB-Mid	Left	0mm		9.70	10.00	0.41	**0.44**	0.154	0.17	-0.09
LTE Band7	20850	2510	50RB-Mid	Top	0mm		9.70	10.00	0.084	**0.09**	0.033	0.04	0.14
LTE Band12	23060	704	1RB-Mid	Cheek Left	0mm		15.48	15.50	0.107	**0.11**	0.07	**0.07**	0.08
LTE Band12	23060	704	1RB-Mid	Tilt Left	0mm	F.17	15.48	15.50	0.121	**0.12**	0.076	**0.08**	0.06
LTE Band12	23060	704	1RB-Mid	Cheek Right	0mm		15.48	15.50	0.113	**0.11**	0.07	**0.07**	-0.18
LTE Band12	23060	704	1RB-Mid	Tilt Right	0mm		15.48	15.50	0.115	**0.12**	0.066	**0.07**	-0.13
LTE Band12	23060	704	25RB-Mid	Cheek Left	0mm		15.22	15.50	0.105	**0.11**	0.069	**0.07**	-0.01
LTE Band12	23060	704	25RB-Mid	Tilt Left	0mm		15.22	15.50	0.107	**0.11**	0.073	**0.08**	0.04
LTE Band12	23060	704	25RB-Mid	Cheek Right	0mm		15.22	15.50	0.108	**0.12**	0.068	**0.07**	0.00
LTE Band12	23060	704	25RB-Mid	Tilt Right	0mm		15.22	15.50	0.104	**0.11**	0.066	**0.07**	0.04
LTE Band12	23060	704	1RB-Mid	Front	17mm		24.45	25.50	0.164	**0.21**	0.115	**0.15**	0.09
LTE Band12	23060	704	1RB-Mid	Rear	20mm		24.45	25.50	0.173	**0.22**	0.115	**0.15**	0.16
LTE Band12	23060	704	1RB-Mid	Left	0mm		24.45	25.50	0.39	**0.50**	0.179	**0.23**	-0.18
LTE Band12	23060	704	1RB-Mid	Right	0mm		24.45	25.50	0.188	**0.24**	0.084	**0.11**	-0.04
LTE Band12	23060	704	1RB-Mid	Top	24mm		24.45	25.50	0.08	**0.10**	0.055	**0.07**	0.18
LTE Band12	23060	704	25RB-Mid	Front	17mm		23.50	24.50	0.128	**0.16**	0.089	**0.11**	-0.13
LTE Band12	23060	704	25RB-Mid	Rear	20mm		23.50	24.50	0.133	**0.17**	0.089	**0.11**	-0.12
LTE Band12	23060	704	25RB-Mid	Left	0mm		23.50	24.50	0.236	**0.30**	0.117	**0.15**	0.01
LTE Band12	23060	704	25RB-Mid	Right	0mm		23.50	24.50	0.122	**0.15**	0.068	**0.09**	0.15
LTE Band12	23060	704	25RB-Mid	Top	24mm		23.50	24.50	0.054	**0.07**	0.035	**0.04**	0.13
LTE Band12	23060	704	1RB-Mid	Front	0mm		13.39	14.00	0.273	**0.31**	0.132	**0.15**	0.17
LTE Band12	23060	704	1RB-Mid	Rear	0mm		13.39	14.00	0.439	**0.51**	0.196	**0.23**	0.05
LTE Band12	23060	704	1RB-Mid	Top	0mm		13.39	14.00	0.216	**0.25**	0.102	**0.12**	0.00
LTE Band12	23060	704	25RB-Mid	Front	0mm		13.36	14.00	0.201	**0.23**	0.109	**0.13**	-0.11
LTE Band12	23060	704	25RB-Mid	Rear	0mm	F.18	13.36	14.00	0.44	**0.51**	0.197	**0.23**	0.19
LTE Band12	23060	704	25RB-Mid	Top	0mm		13.36	14.00	0.248	**0.29**	0.108	**0.13**	-0.06

Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Fig	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Reported SAR 10g (W/kg)	Power Drift
LTE Band28	27310	713	1RB-Mid	Cheek Left	0mm	F.19	15.37	16.00	0.155	**0.18**	0.103	**0.12**	-0.12
LTE Band28	27310	713	1RB-Mid	Tilt Left	0mm		15.37	16.00	0.154	**0.18**	0.099	**0.11**	0.05
LTE Band28	27310	713	1RB-Mid	Cheek Right	0mm		15.37	16.00	0.145	**0.17**	0.096	**0.11**	-0.03
LTE Band28	27310	713	1RB-Mid	Tilt Right	0mm		15.37	16.00	0.129	**0.15**	0.079	**0.09**	0.17
LTE Band28	27310	713	50RB-Mid	Cheek Left	0mm		15.13	16.00	0.143	**0.17**	0.096	**0.12**	-0.15
LTE Band28	27310	713	50RB-Mid	Tilt Left	0mm		15.13	16.00	0.142	**0.17**	0.097	**0.12**	0.16
LTE Band28	27310	713	50RB-Mid	Cheek Right	0mm		15.13	16.00	0.142	**0.17**	0.094	**0.11**	0.05
LTE Band28	27310	713	50RB-Mid	Tilt Right	0mm		15.13	16.00	0.129	**0.16**	0.079	**0.10**	-0.06
LTE Band28	27310	713	1RB-Middle	Front	17mm		24.47	25.50	0.233	**0.30**	0.168	**0.21**	-0.13
LTE Band28	27310	713	1RB-Middle	Rear	20mm		24.47	25.50	0.283	**0.36**	0.193	**0.24**	-0.01
LTE Band28	27310	713	1RB-Middle	Left	0mm	F.20	24.47	25.50	0.652	**0.83**	0.305	**0.39**	0.01
LTE Band28	27310	713	1RB-Middle	Right	0mm		24.47	25.50	0.236	**0.30**	0.131	**0.17**	-0.11
LTE Band28	27310	713	1RB-Middle	Top	24mm		24.47	25.50	0.154	**0.20**	0.107	**0.14**	0.19
LTE Band28	27310	713	50RB-Mid	Front	17mm		23.54	24.50	0.179	**0.22**	0.13	**0.16**	-0.18
LTE Band28	27310	713	50RB-Mid	Rear	20mm		23.54	24.50	0.221	**0.28**	0.151	**0.19**	-0.06
LTE Band28	27310	713	50RB-Mid	Left	0mm		23.54	24.50	0.412	**0.51**	0.221	**0.28**	0.02
LTE Band28	27310	713	50RB-Mid	Right	0mm		23.54	24.50	0.178	**0.22**	0.109	**0.14**	0.16
LTE Band28	27310	713	50RB-Mid	Top	24mm		23.54	24.50	0.107	**0.13**	0.075	**0.09**	0.01
LTE Band28	27310	713	1RB-Middle	Front	0mm		15.37	16.00	0.329	**0.38**	0.169	**0.20**	-0.04
LTE Band28	27310	713	1RB-Middle	Rear	0mm		15.37	16.00	0.454	**0.52**	0.227	**0.26**	0.13
LTE Band28	27310	713	1RB-Middle	Top	0mm		15.37	16.00	0.222	**0.26**	0.1	**0.12**	0.12
LTE Band28	27310	713	50RB-Mid	Front	0mm		15.13	16.00	0.282	**0.34**	0.157	**0.19**	0.07
LTE Band28	27310	713	50RB-Mid	Rear	0mm		15.13	16.00	0.457	**0.56**	0.226	**0.28**	0.08
LTE Band28	27310	713	50RB-Mid	Top	0mm		15.13	16.00	0.228	**0.28**	0.109	**0.13**	0.19
LTE Band41	40620	2593	1RB-Mid	Cheek Left	0mm		11.95	12.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band41	40620	2593	1RB-Mid	Tilt Left	0mm		11.95	12.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band41	40620	2593	1RB-Mid	Cheek Right	0mm	F.21	11.95	12.00	0.108	**0.11**	0.053	0.05	-0.02
LTE Band41	40620	2593	1RB-Mid	Tilt Right	0mm		11.95	12.00	0.092	**0.09**	0.043	0.04	0.02
LTE Band41	40620	2593	50RB-Mid	Cheek Left	0mm		11.97	12.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band41	40620	2593	50RB-Mid	Tilt Left	0mm		11.97	12.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band41	40620	2593	50RB-Mid	Cheek Right	0mm		11.97	12.00	0.102	**0.10**	0.048	0.05	-0.03
LTE Band41	40620	2593	50RB-Mid	Tilt Right	0mm		11.97	12.00	0.077	**0.08**	0.042	0.04	-0.14
LTE Band41	40620	2593	1RB-Mid	Front	16mm		24.97	25.00	0.352	**0.35**	0.133	0.13	0.09
LTE Band41	40620	2593	1RB-Mid	Rear	20mm		24.97	25.00	0.244	**0.25**	0.092	0.09	-0.16
LTE Band41	40620	2593	1RB-Mid	Left	17mm		24.97	25.00	0.376	**0.38**	0.141	0.14	0.05
LTE Band41	40620	2593	1RB-Mid	Right	0mm		24.97	25.00	0.038	**0.04**	0.008	0.01	0.08
LTE Band41	40620	2593	1RB-Mid	Top	20mm		24.97	25.00	0.069	**0.07**	0.028	0.03	-0.18
LTE Band41	40620	2593	50RB-Mid	Front	16mm		23.87	24.00	0.277	**0.29**	0.105	0.11	-0.04
LTE Band41	40620	2593	50RB-Mid	Rear	20mm		23.87	24.00	0.192	**0.20**	0.072	0.07	-0.09
LTE Band41	40620	2593	50RB-Mid	Left	17mm		23.87	24.00	0.259	**0.27**	0.102	0.11	0.18
LTE Band41	40620	2593	50RB-Mid	Right	0mm		23.87	24.00	<0.01	**<0.01**	<0.01	<0.01	\
LTE Band41	40620	2593	50RB-Mid	Top	20mm		23.87	24.00	0.056	**0.06**	0.022	0.02	0.11
LTE Band41	40620	2593	1RB-Mid	Front	0mm		11.95	12.00	0.309	**0.31**	0.085	0.09	-0.03
LTE Band41	40620	2593	1RB-Mid	Rear	0mm	F.22	11.95	12.00	0.384	**0.39**	0.154	0.16	0
LTE Band41	40620	2593	1RB-Mid	Left	0mm		11.95	12.00	0.353	**0.36**	0.09	0.09	0.09
LTE Band41	40620	2593	1RB-Mid	Top	0mm		11.95	12.00	0.057	**0.06**	0.015	0.02	-0.08
LTE Band41	40620	2593	50RB-Mid	Front	0mm		11.97	12.00	0.306	**0.31**	0.084	0.08	-0.05
LTE Band41	40620	2593	50RB-Mid	Rear	0mm		11.97	12.00	0.356	**0.36**	0.101	0.10	-0.03
LTE Band41	40620	2593	50RB-Mid	Left	0mm		11.97	12.00	0.331	**0.33**	0.087	0.09	0.17
LTE Band41	40620	2593	50RB-Mid	Top	0mm		11.97	12.00	0.083	**0.08**	0.018	0.02	-0.14
LTE Band66	132322	1745	1RB-Mid	Cheek Left	0mm		12.50	13.00	0.251	**0.28**	0.122	**0.14**	0.07
LTE Band66	132322	1745	1RB-Mid	Tilt Left	0mm		12.50	13.00	0.313	**0.35**	0.15	**0.17**	-0.06
LTE Band66	132322	1745	1RB-Mid	Cheek Right	0mm		12.50	13.00	0.428	**0.48**	0.195	**0.22**	-0.18
LTE Band66	132322	1745	1RB-Mid	Tilt Right	0mm		12.50	13.00	0.479	**0.54**	0.215	**0.24**	0.08
LTE Band66	132322	1745	50RB-Mid	Cheek Left	0mm		12.33	13.00	0.256	**0.30**	0.125	**0.15**	-0.14
LTE Band66	132322	1745	50RB-Mid	Tilt Left	0mm		12.33	13.00	0.318	**0.37**	0.152	**0.18**	-0.19
LTE Band66	132322	1745	50RB-Mid	Cheek Right	0mm		12.33	13.00	0.426	**0.50**	0.197	**0.23**	-0.06
LTE Band66	132322	1745	50RB-Mid	Tilt Right	0mm	F.23	12.33	13.00	0.482	**0.56**	0.216	**0.25**	0.14
LTE Band66	132322	1745	1RB-Mid	Front	17mm	F.24	22.73	23.50	0.726	**0.87**	0.402	**0.48**	-0.03
LTE Band66	132322	1745	1RB-Mid	Rear	20mm		22.73	23.50	0.378	**0.45**	0.225	**0.27**	-0.07
LTE Band66	132322	1745	1RB-Mid	Left	17mm		22.73	23.50	0.082	**0.10**	0.055	**0.07**	-0.10
LTE Band66	132322	1745	1RB-Mid	Right	0mm		22.73	23.50	0.173	**0.21**	0.085	**0.10**	0.00
LTE Band66	132322	1745	1RB-Mid	Top	24mm		22.73	23.50	0.481	**0.57**	0.286	**0.34**	-0.06
LTE Band66	132322	1745	50RB-Mid	Front	17mm		21.82	22.50	0.59	**0.69**	0.326	**0.38**	-0.17
LTE Band66	132322	1745	50RB-Mid	Rear	20mm		21.82	22.50	0.309	**0.36**	0.183	**0.21**	0.17
LTE Band66	132322	1745	50RB-Mid	Left	17mm		21.82	22.50	0.066	**0.08**	0.044	**0.05**	0.16
LTE Band66	132322	1745	50RB-Mid	Right	0mm		21.82	22.50	0.12	**0.14**	0.066	**0.08**	0.13
LTE Band66	132322	1745	50RB-Mid	Top	24mm		21.82	22.50	0.467	**0.55**	0.279	**0.33**	-0.11
LTE Band66	132322	1745	1RB-Mid	Front	0mm		12.50	13.00	0.589	**0.66**	0.251	**0.28**	0.08
LTE Band66	132322	1745	1RB-Mid	Rear	0mm		12.50	13.00	0.519	**0.58**	0.247	**0.28**	-0.14
LTE Band66	132322	1745	1RB-Mid	Left	0mm		12.50	13.00	0.075	**0.08**	0.032	**0.04**	0.10
LTE Band66	132322	1745	1RB-Mid	Top	0mm		12.50	13.00	0.432	**0.48**	0.18	**0.20**	-0.15
LTE Band66	132322	1745	50RB-Mid	Front	0mm		12.33	13.00	0.536	**0.63**	0.229	**0.27**	0.14
LTE Band66	132322	1745	50RB-Mid	Rear	0mm		12.33	13.00	0.39	**0.46**	0.144	**0.17**	0.04
LTE Band66	132322	1745	50RB-Mid	Left	0mm		12.33	13.00	0.078	**0.09**	0.033	**0.04**	0.01
LTE Band66	132322	1745	50RB-Mid	Top	0mm		12.33	13.00	0.393	**0.46**	0.175	**0.20**	-0.18

14.2 SAR results for WLAN

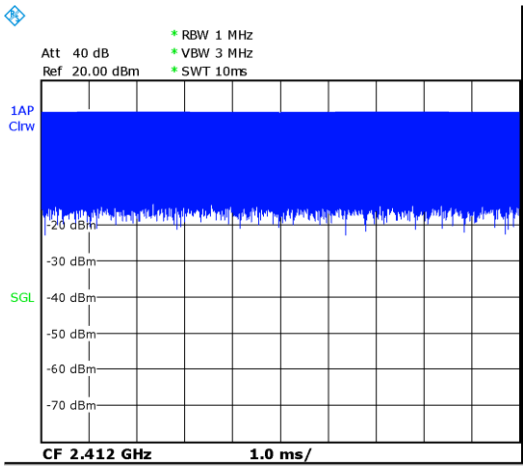
The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default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

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

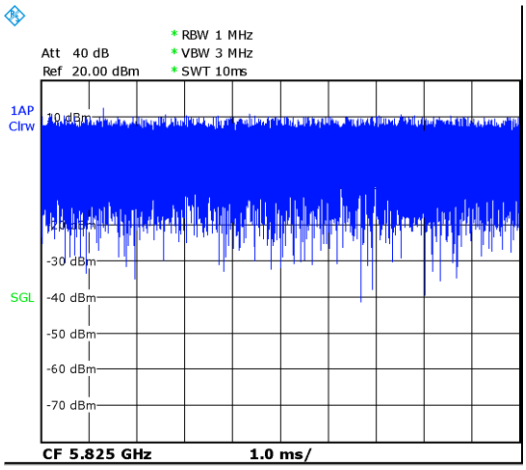
SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest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

Duty factor plot

2.4G



5G



WLAN 2.4G

Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Fig	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Reported SAR 10g (W/kg)	Power Drift
WLAN 2.4G	6	2437	11b	Cheek Left	0mm		8.99	10.00	0.11	**0.14**	0.045	**0.06**	0.01
WLAN 2.4G	11	2462	11b	Tilt Left	0mm		8.84	10.00	0.111	**0.14**	0.045	**0.06**	0.03
WLAN 2.4G	6	2437	11b	Tilt Left	0mm		8.99	10.00	0.118	**0.15**	0.053	**0.07**	-0.08
WLAN 2.4G	1	2412	11b	Tilt Left	0mm	F.27	8.78	10.00	0.144	**0.19**	0.066	**0.09**	0.05
WLAN 2.4G	6	2437	11b	Cheek Right	0mm		8.99	10.00	0.043	**0.05**	0.022	**0.03**	-0.08
WLAN 2.4G	6	2437	11b	Tilt Right	0mm		8.99	10.00	0.072	**0.09**	0.035	**0.04**	0.1
WLAN 2.4G	11	2462	11b	Front	10mm		17.24	18.00	0.157	**0.19**	0.084	**0.10**	-0.18
WLAN 2.4G	11	2462	11b	Rear	15mm		17.24	18.00	0.166	**0.20**	0.087	**0.10**	0.1
WLAN 2.4G	6	2437	11b	Rear	15mm		16.71	18.00	0.153	**0.21**	0.080	**0.11**	0.12
WLAN 2.4G	1	2412	11b	Rear	15mm		16.67	18.00	0.17	**0.23**	0.089	**0.12**	0.04
WLAN 2.4G	11	2462	11b	Left	0mm		17.24	18.00	0.039	**0.05**	0.019	**0.02**	0.08
WLAN 2.4G	11	2462	11b	Right	0mm		17.24	18.00	0.14	**0.17**	0.064	**0.08**	-0.17
WLAN 2.4G	11	2462	11b	Top	17mm		17.24	18.00	0.081	**0.10**	0.044	**0.05**	-0.03
WLAN 2.4G	6	2437	11b	Front	0mm		8.99	10.00	0.173	**0.22**	0.071	**0.09**	0.14
WLAN 2.4G	11	2462	11b	Rear	0mm		8.84	10.00	0.245	**0.32**	0.105	**0.14**	0.11
WLAN 2.4G	6	2437	11b	Rear	0mm		8.99	10.00	0.204	**0.26**	0.090	**0.11**	-0.05
WLAN 2.4G	1	2412	11b	Rear	0mm	F.28	8.78	10.00	0.407	**0.54**	0.162	**0.21**	-0.02
WLAN 2.4G	6	2437	11b	Top	0mm		8.99	10.00	0.109	**0.14**	0.045	**0.06**	0.18

WLAN 5G

Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Fig	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Reported SAR 10g (W/kg)	Power Drift
WLAN 5G	48	5240	11a	Cheek Left	0mm		4.32	6.00	0.062	**0.09**	0.024	**0.04**	0.18
WLAN 5G	48	5240	11a	Tilt Left	0mm	F.29	4.32	6.00	0.106	**0.16**	0.0319	**0.05**	0.09
WLAN 5G	48	5240	11a	Cheek Right	0mm		4.32	6.00	0.049	**0.07**	0.018	**0.03**	0.02
WLAN 5G	48	5240	11a	Tilt Right	0mm		4.32	6.00	0.051	**0.08**	0.019	**0.03**	0.16
WLAN 5G	64	5320	11a	Cheek Left	0mm		5.26	6.00	0.081	**0.10**	0.024	**0.03**	0.06
WLAN 5G	64	5320	11a	Tilt Left	0mm		5.26	6.00	0.1	**0.12**	0.029	**0.03**	-0.02
WLAN 5G	64	5320	11a	Cheek Right	0mm		5.26	6.00	0.049	**0.06**	0.017	**0.02**	0.07
WLAN 5G	64	5320	11a	Tilt Right	0mm		5.26	6.00	0.064	**0.08**	0.022	**0.03**	-0.17
WLAN 5G	124	5620	11a	Cheek Left	0mm		4.82	6.00	0.075	**0.10**	0.025	**0.03**	0.1
WLAN 5G	124	5620	11a	Tilt Left	0mm		4.82	6.00	0.097	**0.13**	0.028	**0.04**	0.08
WLAN 5G	124	5620	11a	Cheek Right	0mm		4.82	6.00	0.051	**0.07**	0.019	**0.02**	0
WLAN 5G	124	5620	11a	Tilt Right	0mm		4.82	6.00	0.068	**0.09**	0.024	**0.03**	-0.13
WLAN 5G	149	5745	11a	Cheek Left	0mm		4.87	6.00	0.065	**0.08**	0.021	**0.03**	-0.1
WLAN 5G	149	5745	11a	Tilt Left	0mm		4.87	6.00	0.087	**0.11**	0.027	**0.04**	-0.07
WLAN 5G	149	5745	11a	Cheek Right	0mm		4.87	6.00	0.047	**0.06**	0.011	**0.01**	0.11
WLAN 5G	149	5745	11a	Tilt Right	0mm		4.87	6.00	0.061	**0.08**	0.022	**0.03**	-0.17
WLAN 5G	36	5180	11N 20M	Front	10mm		15.87	17.50	0.17	**0.25**	0.064	**0.09**	0.12
WLAN 5G	36	5180	11N 20M	Rear	15mm		15.87	17.50	0.172	**0.25**	0.070	**0.10**	0.03
WLAN 5G	36	5180	11N 20M	Left	0mm		15.87	17.50	0.035	**0.05**	0.016	**0.02**	0.18
WLAN 5G	36	5180	11N 20M	Right	0mm		15.87	17.50	0.051	**0.07**	0.018	**0.03**	0.16
WLAN 5G	36	5180	11N 20M	Top	17mm		15.87	17.50	0.267	**0.39**	0.109	**0.16**	0.02
WLAN 5G	64	5320	11N 20M	Front	10mm		16.49	17.50	0.193	**0.24**	0.075	**0.09**	-0.1
WLAN 5G	64	5320	11N 20M	Rear	15mm		16.49	17.50	0.184	**0.23**	0.071	**0.09**	0.07
WLAN 5G	64	5320	11N 20M	Left	0mm		16.49	17.50	0.037	**0.05**	0.013	**0.02**	0.18
WLAN 5G	64	5320	11N 20M	Right	0mm		16.49	17.50	0.059	**0.07**	0.021	**0.03**	-0.1
WLAN 5G	64	5320	11N 20M	Top	17mm		16.49	17.50	0.253	**0.32**	0.104	**0.13**	0.01
WLAN 5G	126	5630	11a	Front	10mm		14.03	15.00	0.174	**0.22**	0.062	**0.08**	-0.15
WLAN 5G	126	5630	11a	Rear	15mm		14.03	15.00	0.135	**0.17**	0.051	**0.06**	0.19
WLAN 5G	126	5630	11a	Left	0mm		14.03	15.00	<0.01	**<0.01**	<0.01	**<0.01**	\
WLAN 5G	126	5630	11a	Right	0mm		14.03	15.00	0.088	**0.11**	0.027	**0.03**	0.07
WLAN 5G	126	5630	11a	Top	17mm		14.03	15.00	0.219	**0.27**	0.085	**0.11**	0.05
WLAN 5G	165	5825	11a	Front	10mm		13.24	14.50	0.127	**0.17**	0.039	**0.05**	-0.18
WLAN 5G	165	5825	11a	Rear	15mm		13.24	14.50	0.101	**0.13**	0.029	**0.04**	0.03
WLAN 5G	165	5825	11a	Left	0mm		13.24	14.50	0.032	**0.04**	0.007	**0.01**	-0.15
WLAN 5G	165	5825	11a	Right	0mm		13.24	14.50	0.103	**0.14**	0.023	**0.03**	-0.15
WLAN 5G	165	5825	11a	Top	17mm		13.24	14.50	0.16	**0.21**	0.051	**0.07**	-0.01
WLAN 5G	48	5240	11a	Front	0mm		4.32	6.00	0.142	**0.21**	0.032	**0.05**	-0.18
WLAN 5G	48	5240	11a	Rear	0mm		4.32	6.00	0.303	**0.45**	0.058	**0.09**	-0.13
WLAN 5G	48	5240	11a	Top	0mm		4.32	6.00	0.256	**0.38**	0.049	**0.07**	-0.13
WLAN 5G	60	5300	11a	Front	0mm		5.26	6.00	0.197	**0.23**	0.04	**0.05**	0
WLAN 5G	60	5300	11a	Rear	0mm		5.26	6.00	0.22	**0.26**	0.052	**0.06**	-0.04
WLAN 5G	60	5300	11a	Top	0mm		5.26	6.00	0.133	**0.16**	0.034	**0.04**	-0.15
WLAN 5G	124	5620	11a	Front	0mm		4.82	6.00	0.212	**0.28**	0.046	**0.06**	-0.09
WLAN 5G	124	5620	11a	Rear	0mm	F.30	4.82	6.00	0.456	**0.60**	0.0825	**0.11**	-0.09
WLAN 5G	124	5620	11a	Top	0mm		4.82	6.00	0.189	**0.25**	0.048	**0.06**	0.05
WLAN 5G	149	5745	11a	Front	0mm		4.87	6.00	0.147	**0.19**	0.033	**0.04**	0.13
WLAN 5G	149	5745	11a	Rear	0mm		4.87	6.00	0.253	**0.33**	0.05	**0.06**	0
WLAN 5G	149	5745	11a	Top	0mm		4.87	6.00	0.102	**0.13**	0.028	**0.04**	-0.12

14.3 SAR results for BT

DSI	RF Exposure Conditions	Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Fig	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Reported SAR 10g (W/kg)	Power Drift
1	Head	BT	0	2402		Cheek Left	0mm		5.38	7.00	0.079	**0.11**	0.036	**0.05**	-0.05
1	Head	BT	78	2480		Tilt Left	0mm		5.15	7.00	0.078	**0.12**	0.040	**0.06**	-0.14
1	Head	BT	39	2441		Tilt Left	0mm		5.12	7.00	0.081	**0.12**	0.035	**0.05**	0.13
1	Head	BT	0	2402		Tilt Left	0mm	F.25	5.38	7.00	0.092	**0.13**	0.042	**0.06**	-0.19
1	Head	BT	0	2402		Cheek Right	0mm		5.38	7.00	0.048	**0.07**	0.025	**0.04**	0.14
1	Head	BT	0	2402		Tilt Right	0mm		5.38	7.00	0.053	**0.08**	0.025	**0.04**	0.01
0	Body	BT	0	2402		Front	0mm		5.38	7.00	0.091	**0.13**	0.040	**0.06**	0.13
0	Body	BT	78	2480		Rear	0mm	F.26	5.15	7.00	0.175	**0.27**	0.067	**0.10**	0.15
0	Body	BT	39	2441		Rear	0mm		5.12	7.00	0.119	**0.18**	0.047	**0.07**	-0.17
0	Body	BT	0	2402		Rear	0mm		5.38	7.00	0.138	**0.20**	0.055	**0.08**	0.14
0	Body	BT	0	2402		Left	0mm		5.38	7.00	<0.01	**<0.01**	<0.01	<0.01	\
0	Body	BT	0	2402		Right	0mm		5.38	7.00	<0.01	**<0.01**	<0.01	<0.01	\
0	Body	BT	0	2402		Top	0mm		5.38	7.00	0.056	**0.08**	0.024	**0.03**	0.08

14.4 SAR results for Phablet

According to the KDB648474 D04, for smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance.

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. 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; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Extremity 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode 10-g extremity SAR.
3. The simultaneous transmission operating configurations applicable to voice and data transmissions for both phone and mini-tablet modes must be taken into consideration separately for 1-g and 10-g SAR to determine the simultaneous transmission SAR test exclusion and measurement requirements for the relevant wireless modes and exposure conditions

15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.
The following procedures are applied to determine if repeated measurements are required.
1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45W/kg (~ 10% from the 1-g SAR limit).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20

Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Originald SAR 1g (W/kg)	First Repeated SAR 1g (W/kg)	The Ratio	Second Repeated SAR 1g (W/kg)
GSM850	190	836.6	GPRS(4TX)	Left	0mm	0.862	0.849	1.02	/
LTE Band7	20850	2510	1RB-Mid	Front	16mm	0.81	0.792	1.02	/

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	√3	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	√3	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	√3	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	√3	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	√3	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	√3	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	√3	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	√3	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	√3	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	√3	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	√3	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	√3	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	√3	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	√3	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	√3	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c^{'} = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					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	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	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	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	∞
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	A	3.3	N	1	1	1	3.3	3.3	71

	positioning									
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 10, 2023	One year
02	Power sensor	NRP110T	101139	January 13, 2023	One year
03	Power sensor	NRP110T	101159	January 13, 2023	One year
04	Signal Generator	E4438C	MY49071430	January 19, 2023	One year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159890	January 12, 2023	One year
07	E-field Probe	SPEAG EX3DV4	7548	August 1, 2022	One year
08	DAE	SPEAG DAE4	1525	September 15, 2022	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 20,,2022	One year
10	Dipole Validation Kit	SPEAG D900V2	1d051	July 26,,2022	One year
11	Dipole Validation Kit	SPEAG D1800V2	2d145	July 18,,2022	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26,2022	One year
13	Dipole Validation Kit	SPEAG D2300V2	1018	July 20,2022	One year
14	Dipole Validation Kit	SPEAG D2450V2	853	July 20,2022	One year
15	Dipole Validation Kit	SPEAG D2600V2	1012	July 20,2022	One year
16	Dipole Validation Kit	SPEAG D5GHzV2	1060	June 19,2023	One year

END OF REPORT BODY

ANNEX A Graph Results

GSM850 Head

Date: 7/3/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 825 MHz; = 0.926 S/m; $_r$ = 42.701; = 1000 kg/m^3

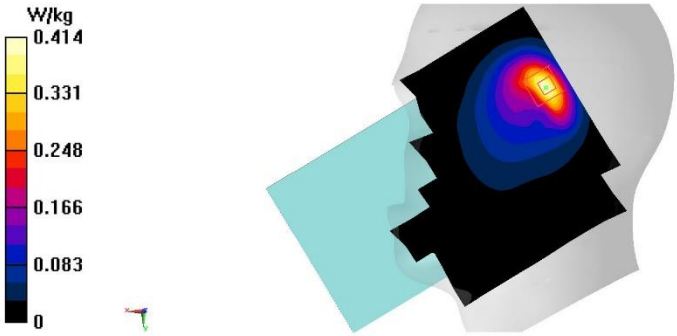
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: GSM850 4TX (0) Frequency: 824.2 MHz Duty Cycle: 1:1.99986

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (111x171x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.414 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.09 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.483 W/kg
SAR(1 g) = 0.225 W/kg; SAR(10 g) = 0.125 W/kg
Maximum value of SAR (measured) = 0.355 W/kg



GSM850 Body

Date: 7/3/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 837.5 MHz; = 0.854 S/m; $_r$ = 45.316; = 1000 kg/m^3

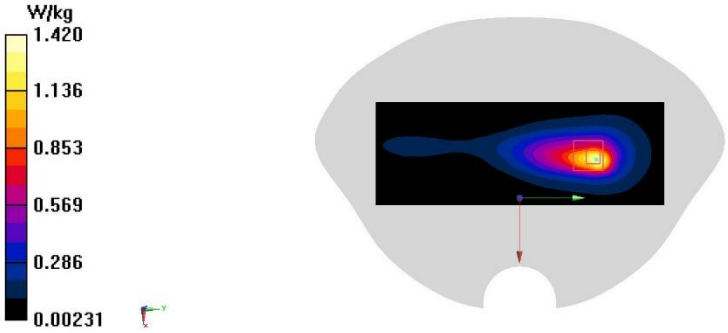
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: GSM850 4TX (0) Frequency: 836.6 MHz Duty Cycle: 1:1.99986

Probe: EX3DV4 - SN7548 ConvF(9.81, 9.81, 9.81)

Area Scan (51x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.42 W/kg

Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.60 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 2.05 W/kg
SAR(1 g) = 0.862 W/kg; SAR(10 g) = 0.423 W/kg
Maximum value of SAR (measured) = 1.02 W/kg



GSM1900 Head

Date: 7/7/2023

Electronics: DAE4 Sn1525

Medium: H700-6000M

Medium parameters used: f = 1880 MHz; = 1.458 S/m; $_r$ = 40.787; = 1000 kg/m^3

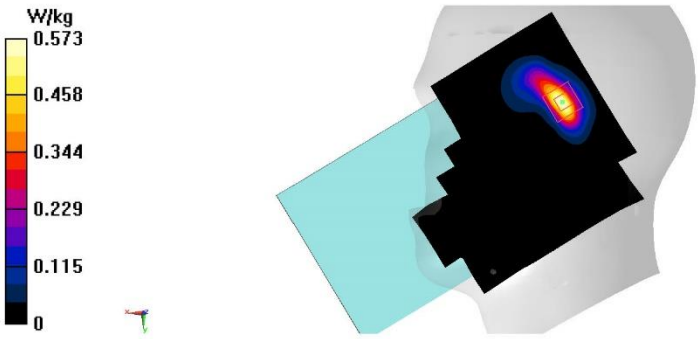
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900 GPRS-2 (0) Frequency: 1880 MHz Duty Cycle: 1:4.00037

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.573 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.08 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.679 W/kg
SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.165 W/kg
Maximum value of SAR (measured) = 0.388 W/kg



GSM1900 Body

Date: 7/7/2023

Electronics: DAE4 Sn1525

Medium: H700-6000M

Medium parameters used: f = 1880 MHz; = 1.458 S/m; $_r$ = 40.787; = 1000 kg/m^3

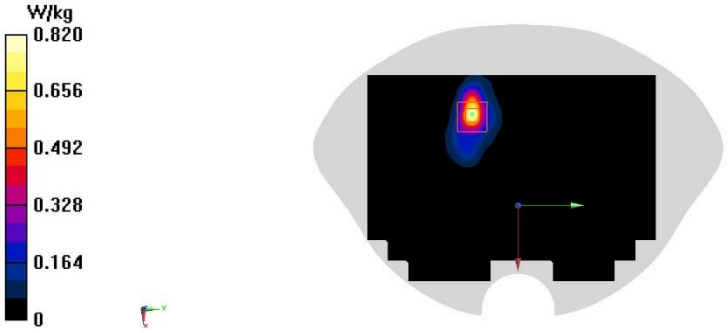
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900 GPRS-2 (0) Frequency: 1880 MHz Duty Cycle: 1:4.00037

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (101x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.820 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.369 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.406 W/kg; SAR(10 g) = 0.166 W/kg
Maximum value of SAR (measured) = 0.842 W/kg



A. 4

WCDMA850 Head

Date: 7/3/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used : f = 826.4 MHz; = 0.932 S/m; $_r$ = 43.139; = 1000 kg/m^3

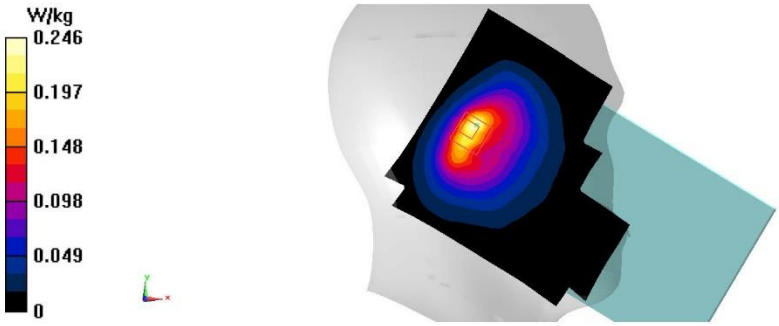
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA 850 (0) Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.246 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.23 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.203 W/kg
SAR(1 g) = 0.121 W/kg; SAR(10 g) = 0.076 W/kg
Maximum value of SAR (measured) = 0.133 W/kg



WCDMA850 Body

Date: 7/3/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used : f = 826.4 MHz; = 0.849 S/m; $_r$ = 45.357; = 1000 kg/m^3

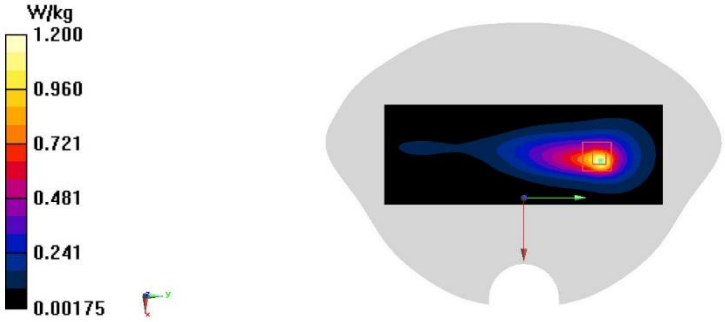
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA850(B5) (0) Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (51x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.97 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.56 W/kg
SAR(1 g) = 0.668 W/kg; SAR(10 g) = 0.330 W/kg
Maximum value of SAR (measured) = 0.785 W/kg



A. 6

WCDMA1700 Head

Date/Time: 7/5/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used : f = 1752.6 MHz; = 1.377 S/m; $_r$ = 40.626; = 1000 kg/m^3 Ambient

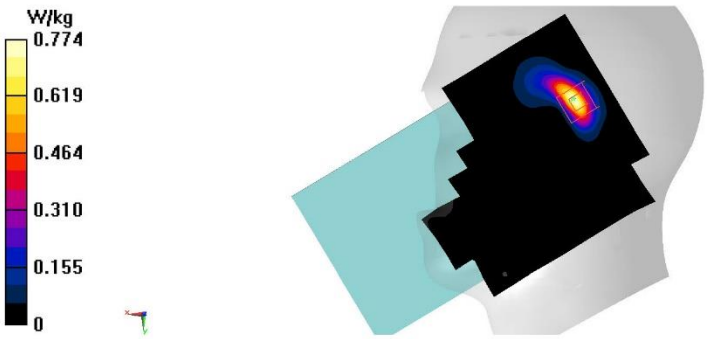
Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: UID 0, WCDMA 1700 Band4 (0) Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13); Calibrated: 8/1/2022

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.07 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.96 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.470 W/kg; SAR(10 g) = 0.206 W/kg
Maximum value of SAR (measured) = 0.518 W/kg



A. 7

WCDMA1700 Body

Date: 7/5/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used : f = 1752.6 MHz; = 1.377 S/m; $_r$ = 40.626; = 1000 kg/m^3

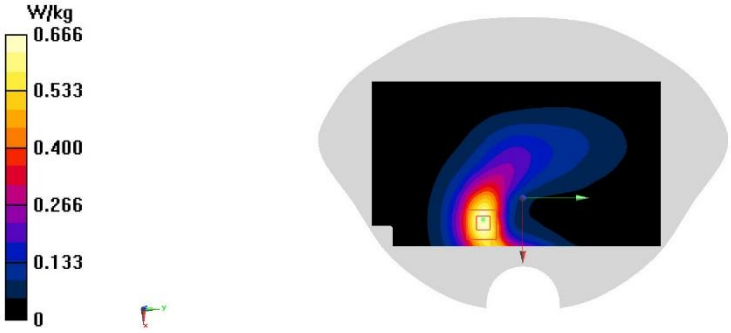
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1700 Band4 (0) Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.666 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.54 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.778 W/kg
SAR(1 g) = 0.459 W/kg; SAR(10 g) = 0.270 W/kg
Maximum value of SAR (measured) = 0.652 W/kg



A. 8

WCDMA1900 Head

Date: 7/7/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 1880 MHz; = 1.458 S/m; $_r$ = 40.787; = 1000 kg/m^3

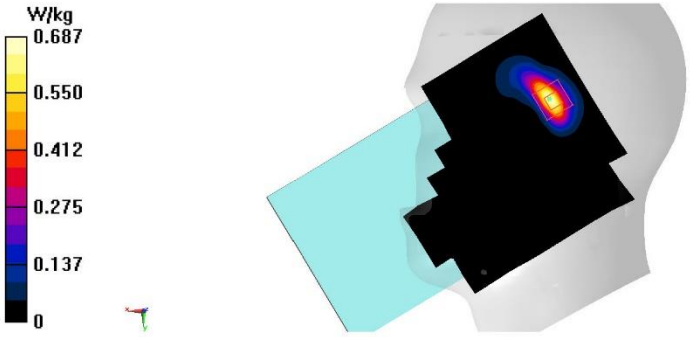
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.687 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.18 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.853 W/kg
SAR(1 g) = 0.411 W/kg; SAR(10 g) = 0.190 W/kg
Maximum value of SAR (measured) = 0.459 W/kg



WCDMA1900 Body

Date: 7/7/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used : f = 1852.4 MHz; = 1.434 S/m; $_r$ = 40.396; = 1000 kg/m^3

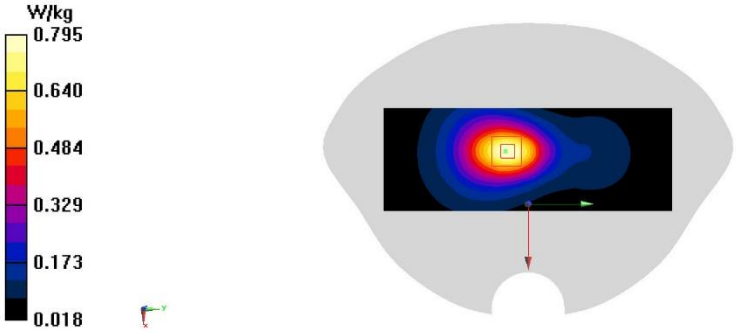
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 (0) Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (51x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.795 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.47 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.942 W/kg
SAR(1 g) = 0.560 W/kg; SAR(10 g) = 0.334 W/kg
Maximum value of SAR (measured) = 0.799 W/kg



A. 10

LTE Band2 Head

Date: 7/7/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 1880 MHz; = 1.449 S/m; $_r$ = 40.371; = 1000 kg/m^3

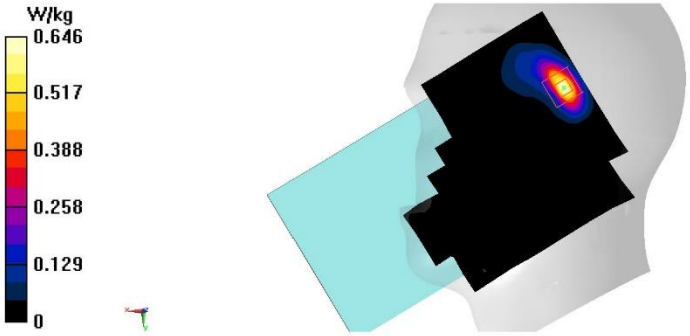
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band2(20MB) (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (101x171x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.646 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.553 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.711 W/kg
SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.164 W/kg
Maximum value of SAR (measured) = 0.405 W/kg



A. 11

LTE Band2 Body

Date: 7/7/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 1880 MHz; = 1.449 S/m; $_r$ = 40.371; = 1000 kg/m^3

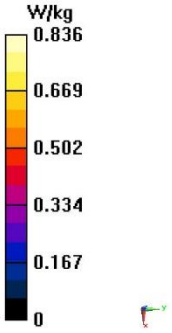
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

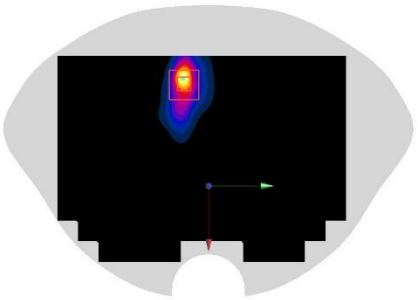
Communication System: LTE Band2(20MB) (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.8, 7.8, 7.8)

Area Scan (101x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.836 W/kg

Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.361 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.175 W/kg
Maximum value of SAR (measured) = 0.772 W/kg





LTE Band5 Head

Date: 7/3/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 829 MHz; = 0.933 S/m; $_r$ = 43.133; = 1000 kg/m^3

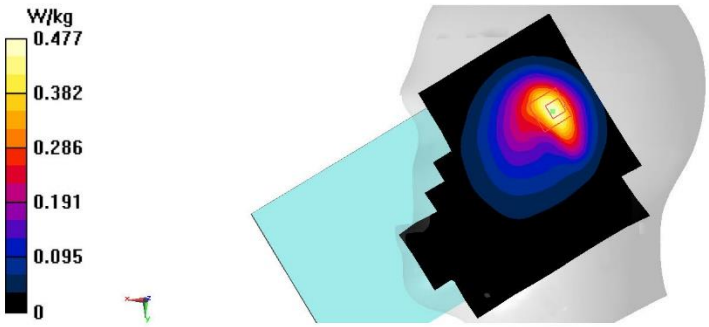
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 (0) Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.477 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.96 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.523 W/kg
SAR(1 g) = 0.287 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 0.300 W/kg



A. 13

LTE Band5 Body

Date/Time: 7/3/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 829 MHz; = 0.933 S/m; $_r$ = 43.133; = 1000 kg/m^3

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

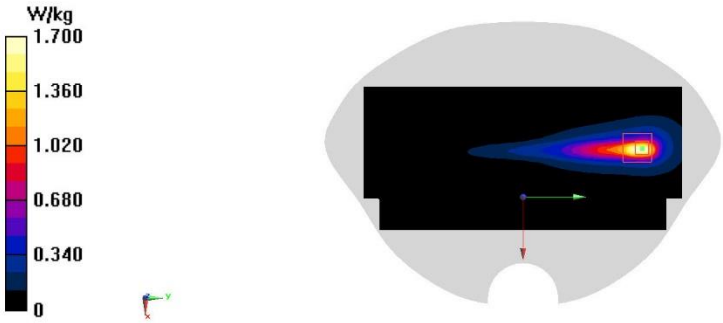
Communication System: UID 0, LTE Band5 (0) Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3);

Area Scan (91x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.70 W/kg

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

Reference Value = 9.328 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.02 W/kg
SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.325 W/kg
Maximum value of SAR (measured) = 0.847 W/kg



A. 14

LTE Band7 Head

Date: 7/11/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 2510 MHz; = 1.896 S/m; $_r$ = 39.813; = 1000 kg/m^3

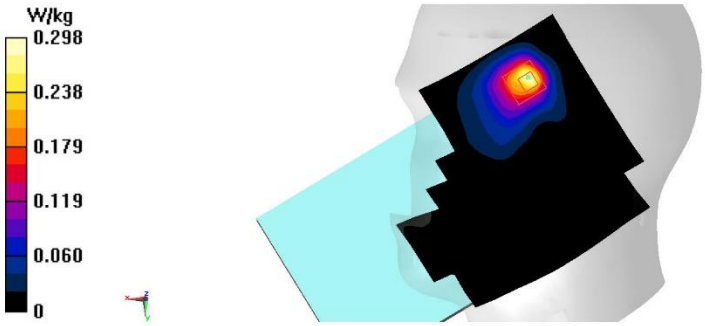
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band7-20M (0) Frequency: 2510 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.298 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.423 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.075 W/kg
Maximum value of SAR (measured) = 0.164 W/kg



A. 15

LTE Band7 Body

Date: 7/11/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 2510 MHz; = 1.896 S/m; $_r$ = 39.813; = 1000 kg/m^3

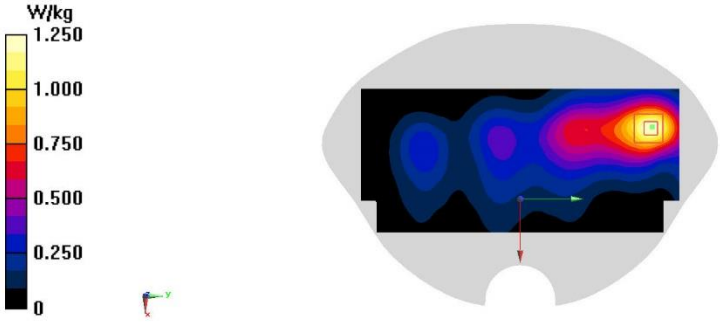
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band7-20M (0) Frequency: 2510 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (91x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.25 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.79 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.810 W/kg; SAR(10 g) = 0.451 W/kg
Maximum value of SAR (measured) = 0.883 W/kg



A. 16

LTE Band12 Head

Date: 7/1/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 704 MHz; = 0.884 S/m; $_r$ = 43.575; = 1000 kg/m^3

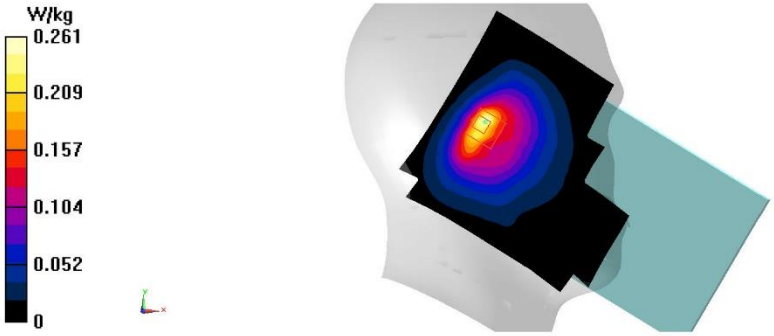
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 (0) Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.261 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.21 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.212 W/kg
SAR(1 g) = 0.121 W/kg; SAR(10 g) = 0.076 W/kg
Maximum value of SAR (measured) = 0.134 W/kg



LTE Band12 Body

Date: 7/1/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 704 MHz; = 0.878 S/m; $_r$ = 43.131; = 1000 kg/m^3

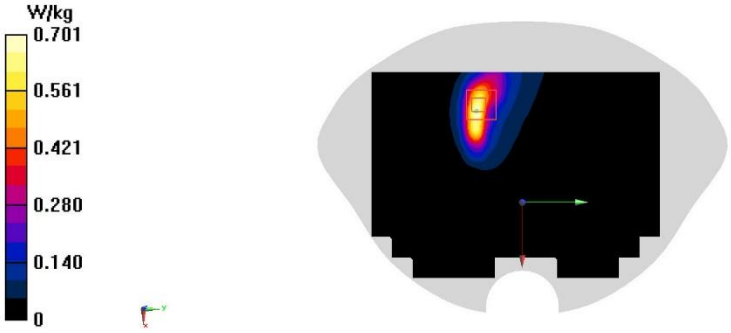
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 (0) Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (101x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.701 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.885 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 0.440 W/kg; SAR(10 g) = 0.197 W/kg
Maximum value of SAR (measured) = 1.01 W/kg



A. 18

LTE Band28 Head

Date: 7/1/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 713 MHz; = 0.888 S/m; $_r$ = 43.541; = 1000 kg/m^3

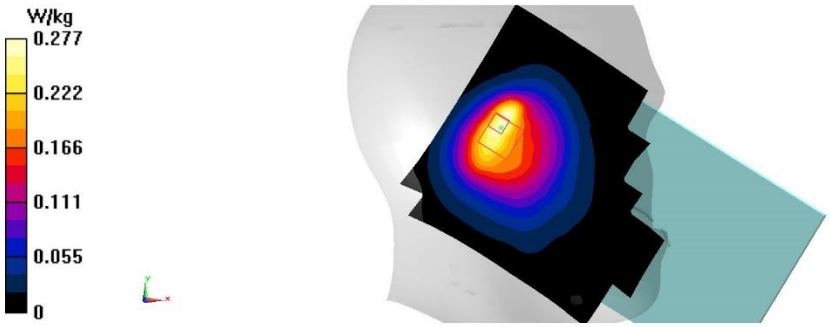
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band28 (0) Frequency: 713 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (101x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.277 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.02 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.267 W/kg
SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.103 W/kg
Maximum value of SAR (measured) = 0.161 W/kg



A. 19

LTE Band28 Body

Date: 7/1/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 713 MHz; = 0.888 S/m; $_r$ = 43.541; = 1000 kg/m^3

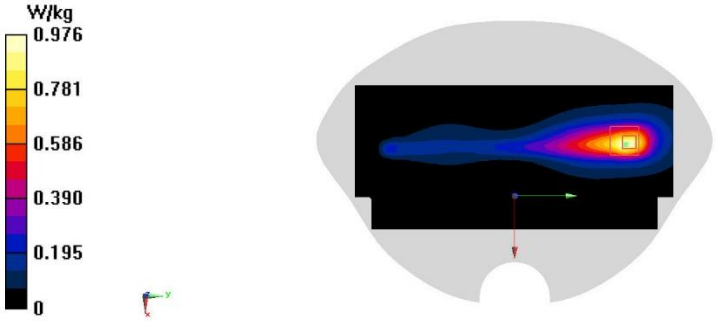
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band28 (0) Frequency: 713 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(10.3, 10.3, 10.3)

Area Scan (91x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.976 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.404 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 0.652 W/kg; SAR(10 g) = 0.305 W/kg
Maximum value of SAR (measured) = 0.723 W/kg



LTE Band41 Head

Date: 7/13/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 2593 MHz; = 1.963 S/m; $_r$ = 39.684; = 1000 kg/m^3

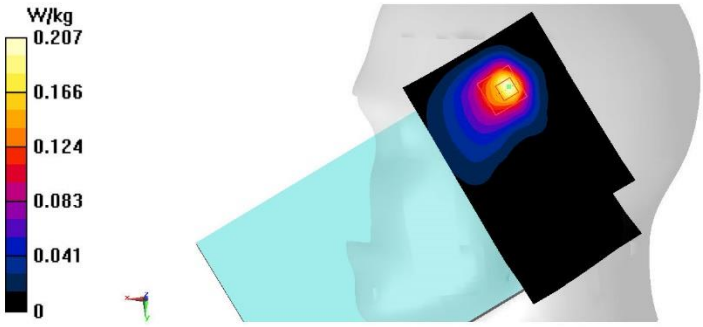
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 Frequency: 2593 MHz Duty Cycle: 1:1.5787 Probe:

EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (101x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.207 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.720 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.224 W/kg
SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.053 W/kg
Maximum value of SAR (measured) = 0.119 W/kg



A. 21

LTE Band41 Body

Date: 7/13/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 2593 MHz; = 1.963 S/m; $_r$ = 39.684; = 1000 kg/m^3

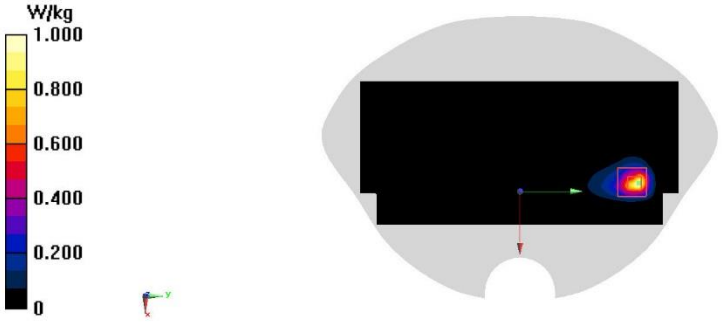
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 Frequency: 2593 MHz Duty Cycle: 1:1.5787 Probe:

EX3DV4 - SN7548 ConvF(7.12, 7.12, 7.12)

Area Scan (91x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.00 W/kg

Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.154 W/kg
Maximum value of SAR (measured) = 0.445 W/kg



LTE Band66 Head

Date: 7/5/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 1745 MHz; = 1.373 S/m; $_r$ = 40.636; = 1000 kg/m^3

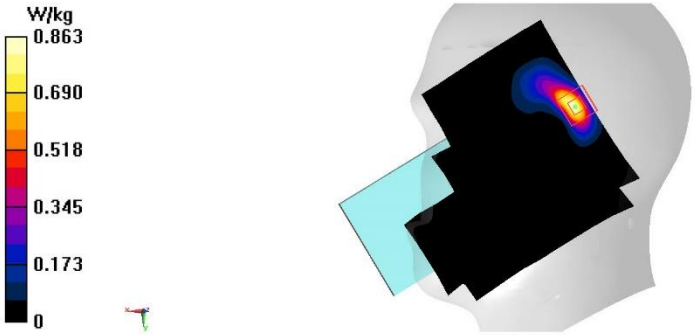
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band66 (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (101x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.863 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.620 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.482 W/kg; SAR(10 g) = 0.216 W/kg
Maximum value of SAR (measured) = 0.846 W/kg



LTE Band66 Body

Date: 7/5/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 1745 MHz; = 1.373 S/m; $_r$ = 40.636; = 1000 kg/m^3

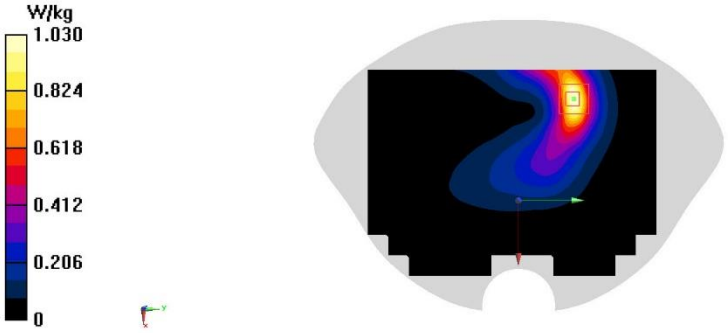
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band66 (0) Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(8.13, 8.13, 8.13)

Area Scan (101x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.03 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.22 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 0.726 W/kg; SAR(10 g) = 0.402 W/kg
Maximum value of SAR (measured) = 1.03 W/kg



BT Head

Date: 7/11/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 2402.5 MHz; = 1.842 S/m; $_r$ = 41.544; = 1000 kg/m^3

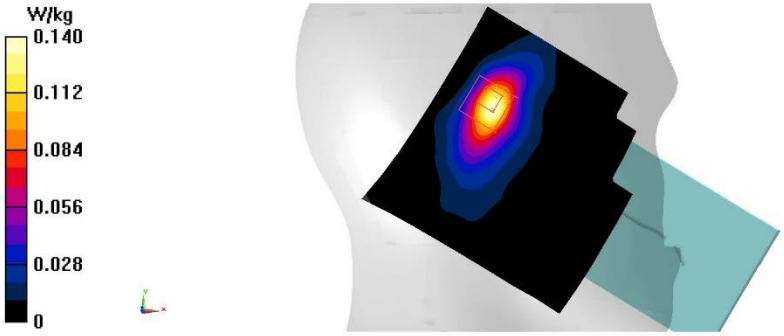
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.140 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.166 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.205 W/kg
SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.042 W/kg
Maximum value of SAR (measured) = 0.0952 W/kg



A. 25

BT Body

Date: 7/11/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 2480 MHz; = 1.906 S/m; $_r$ = 41.434; = 1000 kg/m^3

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

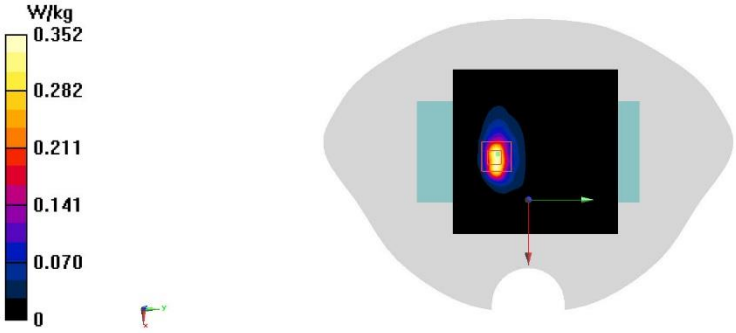
Communication System: BT (0) Frequency: 2480 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.352 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.141 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.493 W/kg
SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.067 W/kg
Maximum value of SAR (measured) = 0.290 W/kg



WLAN424G Head

Date: 7/11/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 2412 MHz; = 1.818 S/m; $_r$ = 40.016; = 1000 kg/m^3

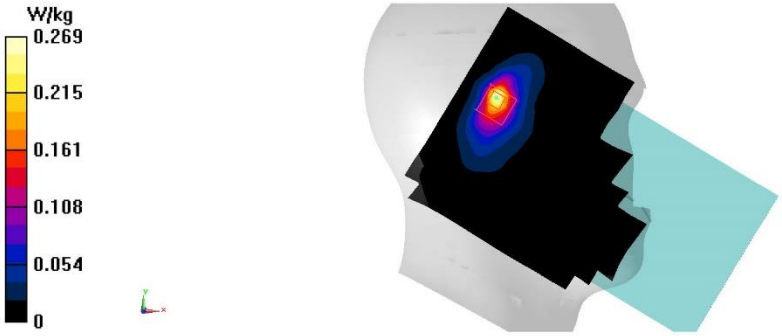
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 (0) Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (131x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.269 W/kg

Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.867 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.328 W/kg
SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.066 W/kg
Maximum value of SAR (measured) = 0.258 W/kg



WLAN2.4G Body

Date: 7/11/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used (interpolated): f = 2412 MHz; = 1.818 S/m; $_r$ = 40.016; = 1000 kg/m^3

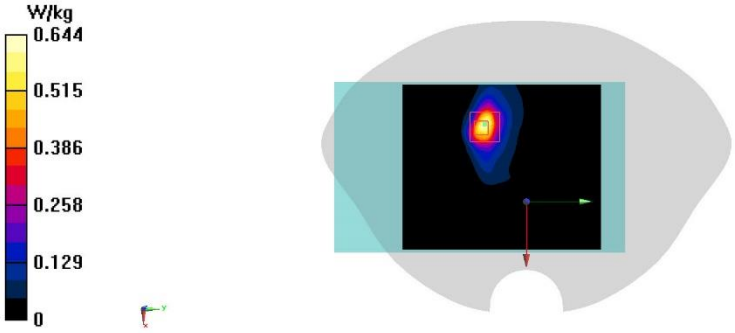
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 (0) Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(7.32, 7.32, 7.32)

Area Scan (101x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.644 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.978 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.407 W/kg; SAR(10 g) = 0.162 W/kg
Maximum value of SAR (measured) = 0.800 W/kg



A. 28

WLAN5G Head

Date: 7/15/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 5240 MHz; = 4.506 S/m; $_r$ = 35.01; = 1000 kg/m^3

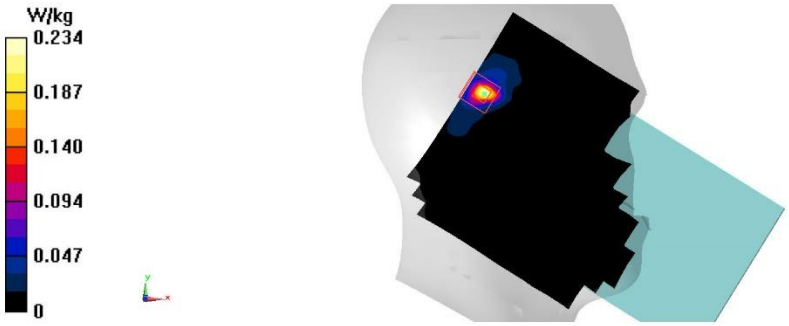
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WIFI 5G (0) Frequency: 5240 MHz Duty Cycle: 1:1 Probe:

EX3DV4 - SN7548 ConvF(4.98, 4.98, 4.98)

Area Scan (161x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.234 W/kg

Zoom Scan (8x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.440 W/kg
SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.032 W/kg
Maximum value of SAR (measured) = 0.271 W/kg



A. 29

WLAN5G Body

Date: 7/16/2023

Electronics: DAE4 Sn1525

Medium: H650-7000M

Medium parameters used: f = 5620 MHz; = 5.115 S/m; $_r$ = 34.88; = 1000 kg/m^3

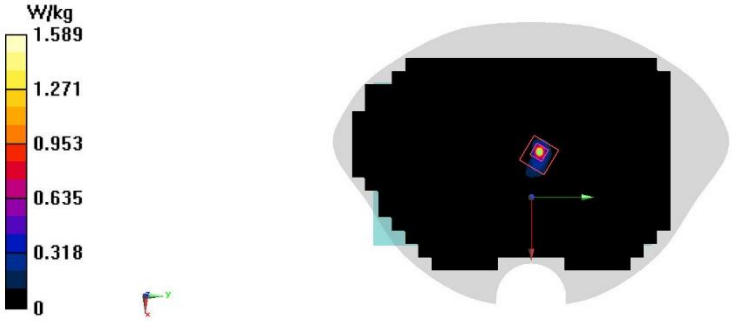
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WIFI 5G (0) Frequency: 5620 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7548 ConvF(4.57, 4.57, 4.57)

Area Scan (161x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.59 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.143 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 3.36 W/kg
SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.082 W/kg
Maximum value of SAR (measured) = 1.45 W/kg



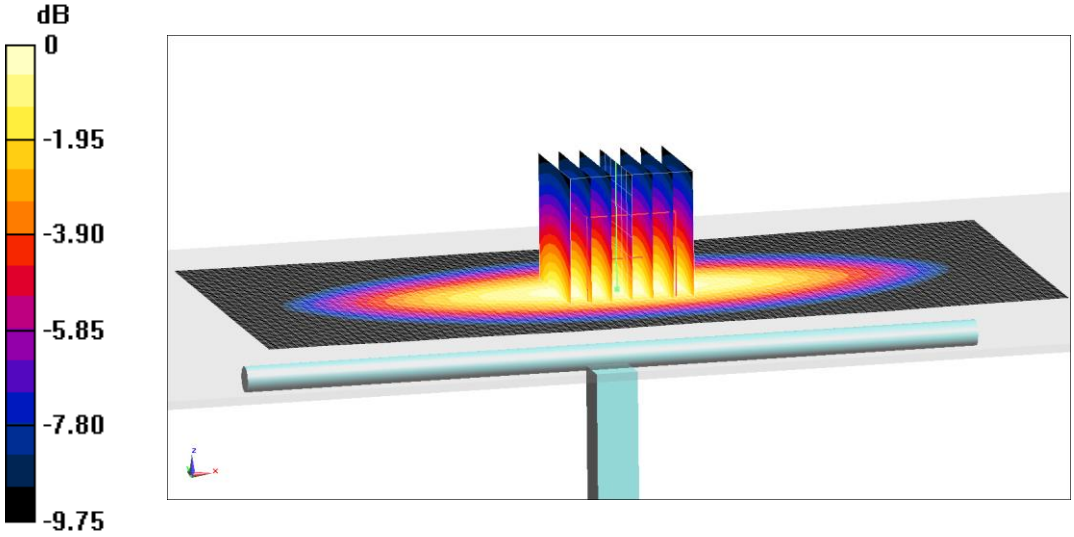
A. 30

ANNEX B System Verification Results

750MHz

Date: 7/1/2023
Electronics: DAE4 Sn1525
Medium: H650-7000 MHz
Medium parameters used: f = 750MHz; σ =0.9009 mho/m; ε_r = 43.37; ρ = 1000 kg/m^3
Ambient Temperature: 22.2ºC Liquid Temperature: 22ºC
Communication System: CW Frequency: 750MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7548 ConvF(10.30, 10.30, 10.30)

Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.84 W/kg
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =58.48 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 3.21 W/kg
SAR(1 g) = 2.12W/kg; SAR(10 g) = 1.42 W/kg
Maximum value of SAR (measured) = 2.84 W/kg



0 dB = 2.84 W/kg = 4.53 dB W/kg