TEST REPORT

Report Number: C21T00061-SAR01-V01

Applicant	Shanghai Sunmi Technology Co.,Ltd.
Product Name	Handheld Wireless Terminal
Model Name	T8911
Brand Name	SUNMI
FCC ID	2AH25T8911
IC	22621-T8911

Industrial Internet Innovation Center (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in ANSI C95.1-1992, IEEE std 1528-2013, RSS-102 Issue 5-2015.

Prepared by	李浪	Reviewed by	鄢航
Approved by		Issue Date	2021-11-25

Industrial Internet Innovation Center (Shanghai) Co., Ltd.

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Revision Version

Report Number	Revision	Date	Memo
C21T00061-SAR01-V00	00	2021-11-08	Initial creation of test report
C21T00061-SAR01-V01	00	2021-11-25	Add ISED rule and clarify transmit simultaneously mode

CONTENTS

1. Test Laboratory

1.1. Testing Location

Primary Lab:

Company Name	Industrial Internet Innovation Center (Shanghai) Co., Ltd.
Address	Building 4, No. 766 Jingang Rd, Pudong, Shanghai, China
FCC Registration No.	958356
FCC Designation No.	CN1177
IC Designation No.	10766A

1.2. Testing Environment

Normal Temperature	18℃~25℃
Relative Humidity	25%RH~75%RH

1.3. Project Information

Project Leader	Wang Wenwen
Testing Start Date	2021-06-21
Testing End Date	2021-10-27

2. Client Information

2.1. Applicant Information

Company Name	Shanghai Sunmi Technology Co.,Ltd.
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Telephone	+86 18721763396

2.2. Manufacturer Information

Company Name	Shanghai Sunmi Technology Co.,Ltd.
Address	Room 505, KIC Plaza, No.388 Song Hu Road, Yang Pu District, Shanghai, China
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3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Product Name	Handheld Wireless Terminal
Model name	T8911
Supported Radio Technology and Bands	GSM850/GSM900/GSM1800/GSM1900 WCDMA Band I/II/IV/V/VIII LTE Band 1/2/3/4/5/7/12/13/14/17/18/19/25/26/28/38/41/66/71/CA_7C/ CA_41C CDMA BC0/BC1/BC10 BT5.0 BLE WLAN 802.11a/b/g/n/ac GNSS NFC
Tx Frequency	824.2-848.8 MHz (GSM850) 1850.2-1909.8MHz (GSM1900) 1852.4-1907.6 MHz (WCDMA Band II) 1712.4-1752.6 MHz (WCDMA Band IV) 826.4-846.6MHz (WCDMA Band V) 1850.7-1909.3 MHz (LTE Band 2) 1710.7-1754.3 MHz (LTE Band 4) 824.7-848.3 MHz (LTE Band 5) 2502.5-2567.5 MHz (LTE Band 7) 699.7-715.3 MHz (LTE Band 12) 779.7-784.5 MHz (LTE Band 13) 790.5-795.5 MHz (LTE Band 14) 706.5-713.5 MHz (LTE Band 17) 817.5-827.5 MHz (LTE Band 18) 832.5-842.5 MHz (LTE Band 19) 1850.7-1914.3 MHz (LTE Band 25) 814.7-848.3 MHz (LTE Band 26) 2572.5-2595 MHz (LTE Band 38) 2498.5-2687.5MHz (LTE Band 41) 1710.7-1779.3 MHz (LTE Band 66) 665.5-695.5 MHz (LTE Band 71) 824.7-848.31 MHz (CDMA BC0) 1851.25-1908.75 MHz (CDMA BC1) 817.25-822.25 MHz (CDMA BC10) 2412-2462 MHz (Wi-Fi) 5180-5240 MHz (U-NII-1)

	5260-5320 MHz (U-NII-2A) 5500-5700 MHz (U-NII-2C) 5745-5825 MHz (U-NII-3) 2402-2480 MHz (BT)
Hardware Version	V1.02
Software Version	V01_T46
FCC ID	2AH25T8911
IC	22621-T8911
Dimension	152mm*73mm*18mm

Note : 1. Photographs of EUT are shown in ANNEX C of this test report.

2. This device supports LTE Band 2/4/17/5/18/19/38 and LTE Band 25/66/12/26/41. Since the supported frequency span for LTE Band 2/4/17/5,18,19/38 completely within the supports frequency span for LTE Band 25/66/12/26/41, both LTE bands have the same target power, and both LTE bands share the same transmission pat therefore, SAR was only assessed for LTE Band 25/66/12/26/41.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of Receipt
N04	864679050005517 864679050014808	V1.02	V01_T46	2021-06-04
N06	864679050005434 864679050014725	V1.02	V01_T46	2021-06-04

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

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	SN/Remark
BA04	Battery	JKNR	N/A
BA06	Battery	JKNR	N/A

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

*The AE is provided by the client.

4. Reference Documents

4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
ANSI C95.1	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.	1992
IEEE std 1528	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.	2013
RSS-102 Issue 5	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)	2015
KDB648474	Handset SAR	D04 v01r03
KDB248227	802 11 Wi-Fi SAR	D01 v02r02
KDB447498	General RF Exposure Guidance	D01 v06
KDB865664	SAR Measurement 100 MHz to 6 GHz	D01 v01r04
KDB865664	RF Exposure Reporting	D02 v01r02
KDB941225	3G SAR Procedures	D01 v03r01
KDB941225	SAR for LTE Devices	D05 v02r05
KDB941225	Hotspot SAR	D06 v02r01
KDB616217	SAR for laptop and tablets	D04 v01r02
TCB workshop	RF Exposure Procedures (LTE UL/DL Carrier Aggregation SAR)	2017

4.2. Criterion

At frequencies between 100 kHz and 6 GHz, the MPE (Maximum Permissible Exposure) in population/ uncontrolled environments for electromagnetic field strengths may be exceeded if

a) The exposure conditions can be shown by appropriate techniques to produce SARs below 0.08W/kg, as averaged over the whole body, and spatial peak SAR values not exceeding 1.6 W/kg, as averaged over any 1g of tissue (defined as a tissue volume in the shape of a cube), except for the hands, wrists, feet, and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10g of tissue (defined as a tissue volume in the shape of a cube); and

b) The induced currents in the body confirm with the MPE in table 2, Part B in ANSI C95.1-1992.

5. Test Summary

5.1. Summary of Test Results

The maximum results of Specific Absorption Rate (SAR) in standalone mode are as follows.

Band	Reported SAR 1g(W/Kg)		
	Head	Body(5mm)	Limb(0mm)
GSM850	0.263	0.438	0.686
GSM1900	0.136	1.007	1.122
WCDMA Band2	0.276	0.991	1.242
WCDMA Band4	0.259	0.783	1.073
WCDMA Band5	0.288	0.408	0.652
LTE Band7	0.152	1.163	0.420
LTE CA-7C	0.039	0.781	0.483
LTE Band12	0.128	0.227	0.087
LTE Band13	0.125	0.211	0.077
LTE Band14	0.111	0.196	0.073
LTE Band25	0.235	1.075	1.301
LTE Band26	0.195	0.368	0.534
LTE Band41	0.050	0.501	0.333
LTE CA-41C	0.053	0.690	0.670
LTE Band66	0.225	0.870	1.129
LTE Band71	0.092	0.196	0.387
CDMA BC0	0.303	0.412	1.165
CDMA BC1	0.453	**1.224**	**1.309**
CDMA BC10	0.269	0.531	0.948
BT5.0	0.092	0.058	0.070
BLE	0.009	0.003	0.003
Wi-Fi 2.4G	0.265	0.150	0.172
Wi-Fi 5G UNII-1	0.259	0.454	0.397
Wi-Fi 5G UNII-2C	0.294	0.683	0.502
Wi-Fi 5G UNII-3	**0.595**	0.621	0.458

The maximum results of Specific Absorption Rate (SAR) in simultaneous mode are as follows.

Highest Reported SAR 1g(W/kg)		
Mode	Position	Simultaneous Transmission SAR
CDMA BC1& BT &Wi-Fi 5G UNII-3	Head	0.921
LTE Band 7& BT &Wi-Fi 5G UNII-2C	Body(5mm)	1.471
LTE Band 25& BT &Wi-Fi 2.4G	Limb(0mm)	1.473

5.2. Statements

The T8911, manufactured by Shanghai Sunmi Technology Co.,Ltd. is a new product for testing.

The product has two SIM cards, SIM 1 and SIM 2 does not support simultaneous work, only supports a single transmitter; When SIM 1 is working, SIM 2 will be suspended until SIM 2 is selected. When stop using the SIM 1, SIM 2 would work. SIM2 is the worst case.

Industrial Internet Innovation Center (Shanghai) Co., Ltd. has verified that the compliance of the tested device specified in section 3 of this test report is successfully evaluated according to the procedure and test methods as defined in type certification requirement listed in section 4 of this test report.

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:

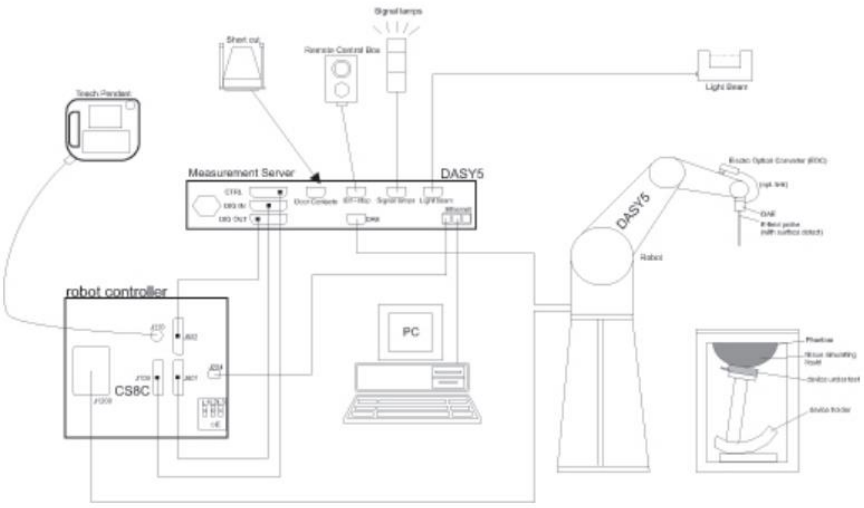
- σ is the conductivity of the tissue
- ρ is the mass density of tissue, which is normally set to 1g/cm^3
- E is the RMS electrical field strength

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

7. SAR Measurement System Introduction

7.1. Measurement Set-up

The DASY5 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



Picture 7-1 SAR Measurement Set-up

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

The phantom, the device holder and other accessories according to the targeted measurement.

7.2. E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multi-fiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 software reads the reflection during a software approach and looks for the maximum using 2nd order curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications	
Model	EX3DV4
Frequency Range	4 MHz – 10 GHz
Calibration	In head simulating tissue at frequency from 650MHz to 5900MHz
Linearity	±0.2 dB (30 MHz – 10 GHz)
Dynamic Range	10 µW/g – >100 mW/g
Probe Length	337 mm
Probe Tip Length	20 mm
Body Diameter	12 mm
Tip Diameter	2.5 mm
Tip-Center	1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better than 30%

Picture 7-2 Detail of Probe

Picture 7-3 E-field Probe

7.3. E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm2) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and inn a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm2..

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

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

Where:

Δt = Exposure time (30 seconds),

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

ΔT = Temperature increase due to RF exposure.

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

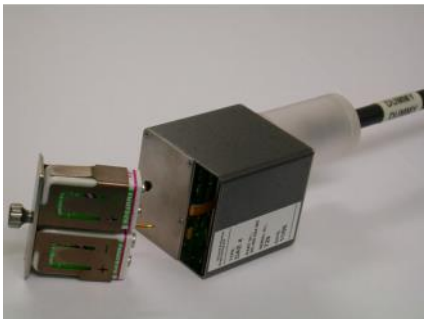
Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

7.4. Other Test Equipment

7.4.1. Data Acquisition Electronics (DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.	 Picture 7-4: DAE
The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection. The input impedance of the DAE is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.	

7.4.2. Robot

The SPEAG DASY system uses the high precision robots (DASY5: TX90) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application	 Picture 7-5: DASY5
➢ High precision (repeatability 0.02mm) ➢ High reliability (industrial design) ➢ Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives) ➢ Jerk-free straight movements (brushless synchronal motors; no stepper motors) ➢ Low ELF interference (motor control fields shielded via the closed metallic construction shields)	

7.4.3. Measurement Server

The DASY5 measurement server is based on a PC/104 CPU board with a 400 MHz intel ULV Celeron, 128 MB chipdisk and 128 MB RAM. The necessary circuits for communication with either the DAE4 (or DAE3) electronics box as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.

Picture 7-6: Server for DASY5

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

7.4.4. Device Holder for Phantom

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

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

Picture 7-7: Device Holder

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

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.	
The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity ε =3 and loss tangent δ =0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.	Picture 7-8: Laptop Extension Kit

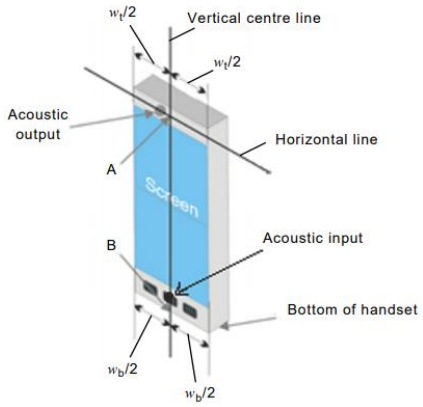
7.4.5. Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a table. The shape of the shell is based on data from an anatomical study designed to represent the 90th percentile of the population. The phantom enables the dissymmetric evaluation of SAR for both left and right handed handset usage, as well as body-worn usage using the flat phantom region. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. The shell phantom has a 2mm shell thickness (except the ear region where shell thickness increases to 6 mm).		
Shell Thickness	2 ± 0.2 mm	
Available	Special	
Filling Volume	Approx. 25 liters	
Dimensions	810 mm x l000 mm x 500 mm (H x L x W)	Picture 7-9: SAM Twin Phantom

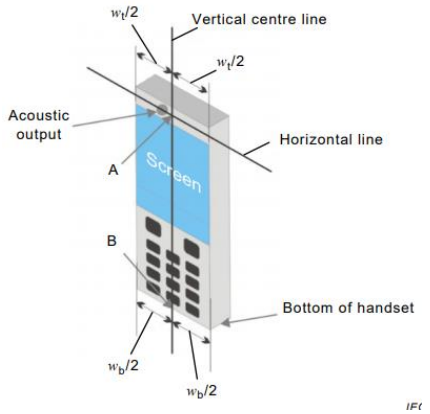
8. Test Position in Relation to the Phantom

8.1. General considerations

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

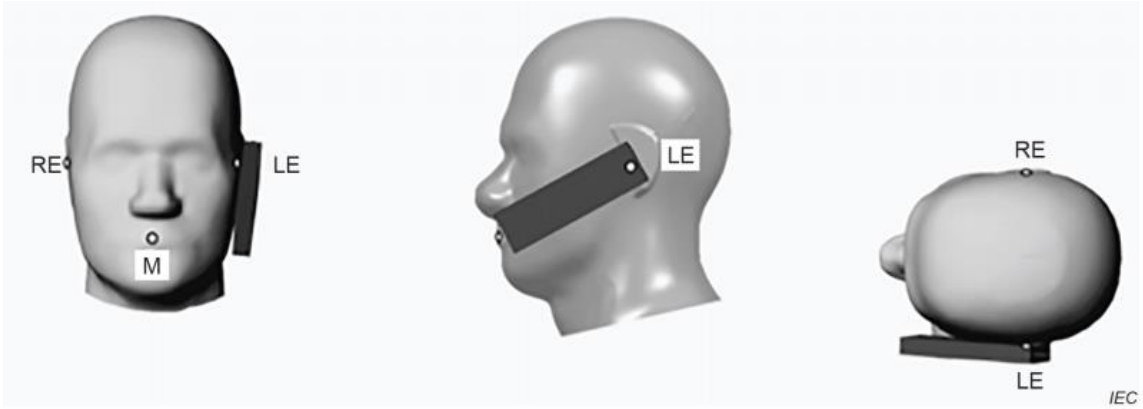


Picture 8-1 full touch screen smart phone (top)

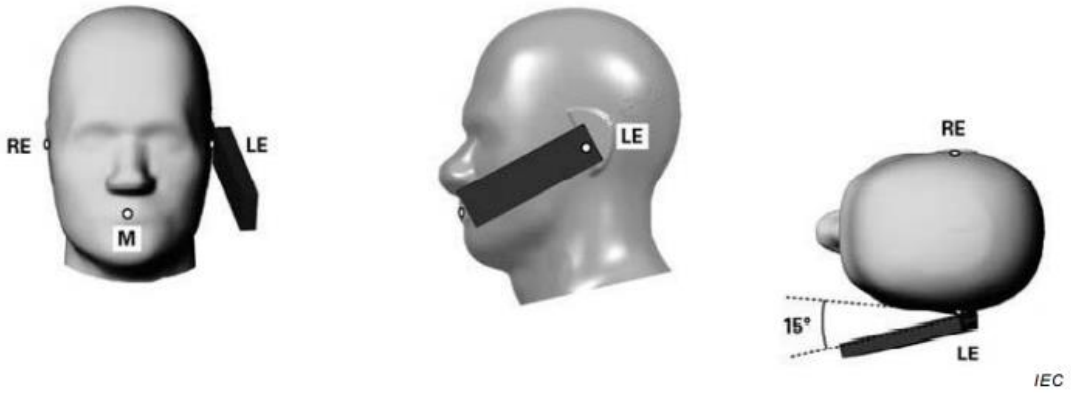


Picture 8-2 keyboard handset (bottom)

W_t	Width of the handset at the level of the acoustic output
W_b	Width of the bottom of the handset
A	Midpoint of the width W_t of the DUT at the level of the acoustic output
B	Midpoint of the width W_b of the bottom of the handset

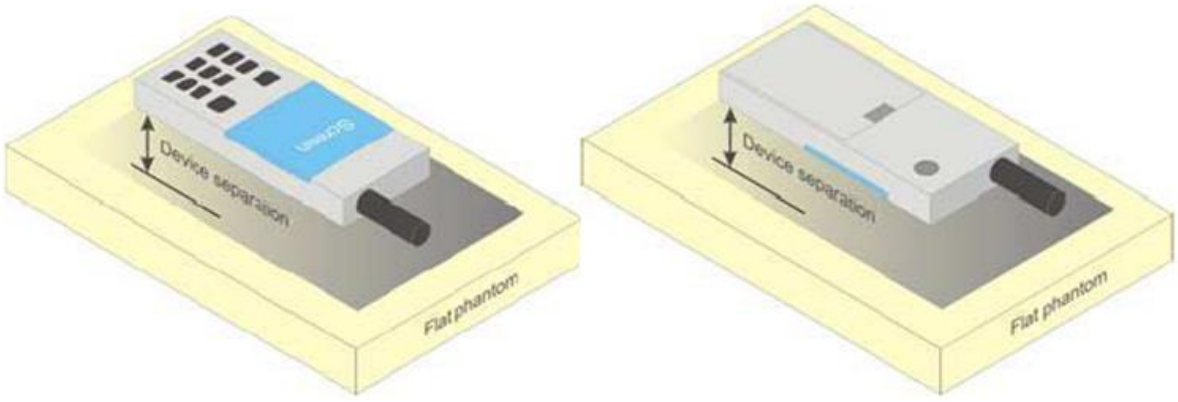


Picture 8-3 Cheek position of the wireless device on the left side of SAM



Picture 8-4 Tilt position of the wireless device on the left side of SAM

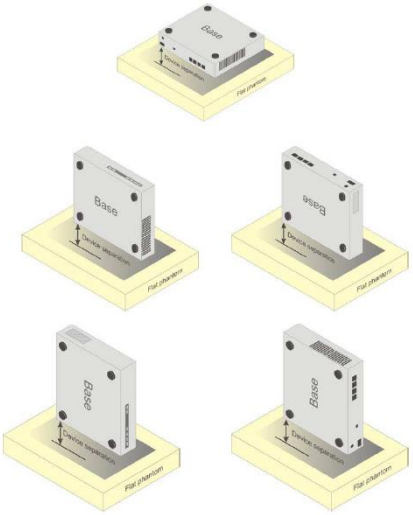
8.2. Body-worn device



Picture 8-5 Test positions for body-worn devices

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

8.3. Desktop device

A typical example of a desktop device is a wireless enabled desktop computer placed on a table or desk when used.	
The DUT shall be positioned at the distance and in the orientation to the phantom that corresponds to the intended use as specified by the manufacturer in the user instructions. For devices that employ an external antenna with variable positions.	
Tests shall be performed for all antenna positions specified.	
Picture 8-6 shows positions for desktop device SAR tests. If the intended use is not specified, the device shall be tested directly against the flat	Picture 8-6 Test positions for desktop devices

9. Tissue Simulating Liquids

9.1. Equivalent Tissues Composition

The liquid used for the frequency range of 650-6000 MHz consisted of water, sugar, salt, preventol, glycol monobutyl and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table 9.1 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528 and IEC 62209.

Table 9.1: Composition of the Head Tissue Equivalent Matter

Frequency (MHz)	835	900	1800	1950	2300	2450	2600	5800
Ingredients (% by weight)								
Water	41.45	40.92	55.242	54.89	56.34	58.79	58.79	65.53
Sugar	56.0	56.5	/	/	/	/	/	
Salt	1.45	1.48	0.306	0.18	0.14	0.06	0.06	
Preventol	0.1	0.1	/	/	/	/	/	
Cellulose	1.0	1.0	/	/	/	/	/	
GlycolMonobutyl	/	/	44.452	44.93	43.52	41.15	41.15	
Diethylenglycol momohexylether	/	/	/	/	/	/	/	17.24
Triton X-100	/	/	/	/	/	/	/	17.23
Dielectric Parameters Target Value	ε=41.5 σ=0.90	ε=41.5 σ=0.97	ε=40.0 σ=1.40	ε=40.0 σ=1.40	ε=39.5 σ=1.67	ε=39.2 σ=1.80	ε=39.0 σ=1.96	ε=35.3 σ=5.27

Table 9.2: Targets for tissue simulating liquid

Frequency (MHz)	Liquid Type	Conductivity (σ)	± 5% Range	Permittivity (ε)	± 5% Range
835	Head	0.90	0.874~0.97	41.5	39.4~43.6
900	Head	0.97	0.92~1.02	41.5	39.4~43.6
1800	Head	1.40	1.33~1.47	40.0	38.0~42.0
1950	Head	1.40	1.33~1.47	40.0	38.0~42.0
2300	Head	1.67	1.59~1.75	39.5	37.5~41.4
2450	Head	1.80	1.71~1.89	39.2	37.2~41.2
2600	Head	1.96	1.86~2.06	39.0	37.5~40.95
5200	Head	4.66	4.43~4.89	35.99	34.19~37.79
5300	Head	4.76	4.52~4.99	35.87	34.08~37.66
5500	Head	4.96	4.71~5.2	35.6	33.82~37.38
5600	Head	5.07	4.82~5.32	35.53	33.75~37.30
5800	Head	5.27	5.01~5.53	35.3	33.54~37.05

9.2. Dielectric Performance of TSL

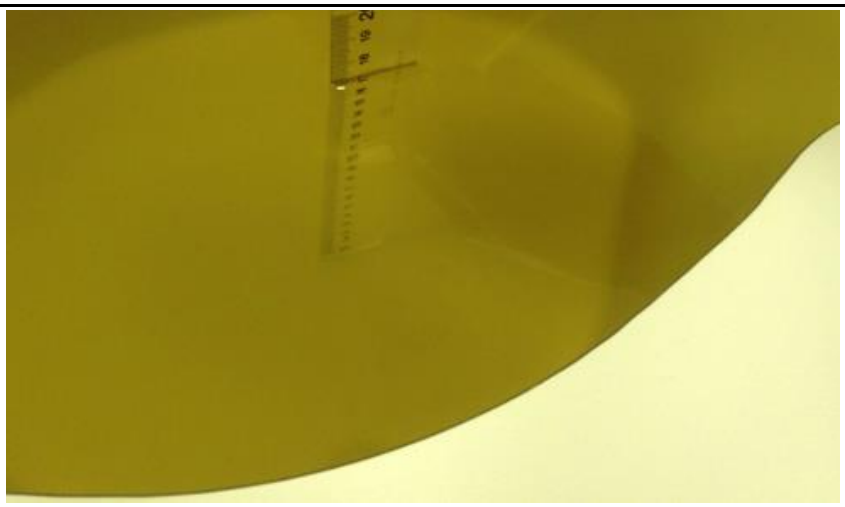
Table 9.3: Dielectric Performance of Head Tissue Simulating Liquid

Tissue Simulating Liquid								
Frequency (MHz)	Head(Standard)		Temperature	Date	Test Result		Deviation (%)	
	Permittivity ε	Conductivity σ			Permittivity ε	Conductivity σ	Permittivity ε	Conductivity σ
673	42.34	0.89	21.3℃	2021-07-10	42.163	0.871	-0.42%	-1.85%
683	42.29	0.89	21.3℃	2021-07-10	42.115	0.874	-0.41%	-1.59%
688	42.26	0.89	21.3℃	2021-07-10	42.092	0.876	-0.41%	-1.41%
704	42.18	0.89	21.3℃	2021-07-10	42.025	0.881	-0.37%	-0.99%
707.5	42.16	0.89	21.3℃	2021-07-10	42.015	0.883	-0.35%	-0.79%
711	42.14	0.89	21.3℃	2021-07-10	42.006	0.884	-0.33%	-0.71%
782	41.78	0.90	21.4℃	2021-08-01	41.69	0.91	-0.20%	1.58%
793	41.72	0.90	21.4℃	2021-08-01	41.647	0.914	-0.17%	1.93%
817.25	41.62	0.90	21.6℃	2021-08-20	41.572	0.923	-0.12%	2.14%
819.75	41.61	0.90	21.6℃	2021-08-20	41.565	0.924	-0.11%	2.14%
822.25	41.60	0.91	21.6℃	2021-08-20	41.558	0.926	-0.11%	2.25%
821.5	41.60	0.91	21.7℃	2021-06-21	41.56	0.925	-0.10%	2.12%
824.2	41.59	0.91	21.7℃	2021-06-21	41.551	0.927	-0.10%	2.28%
824.7	41.59	0.91	21.6℃	2021-08-20	41.551	0.927	-0.10%	2.26%
826.4	41.59	0.91	21.7℃	2021-06-21	41.546	0.927	-0.09%	2.17%
831.5	41.57	0.91	21.7℃	2021-06-21	41.529	0.929	-0.10%	2.20%
836.52	41.55	0.91	21.6℃	2021-08-20	41.512	0.931	-0.09%	2.19%
836.6	41.55	0.91	21.7℃	2021-06-21	41.511	0.931	-0.09%	2.19%
841.5	41.53	0.91	21.7℃	2021-06-21	41.495	0.933	-0.09%	2.20%
846.6	41.51	0.91	21.7℃	2021-06-21	41.478	0.935	-0.08%	2.20%
848.31	41.51	0.92	21.6℃	2021-08-20	41.472	0.936	-0.09%	2.25%
848.8	41.51	0.92	21.7℃	2021-06-21	41.47	0.936	-0.09%	2.23%

1712.4	40.13	1.35	21.4℃	2021-07-08	39.414	1.358	-1.79%	0.64%
1720	40.12	1.35	21.4℃	2021-07-08	39.403	1.363	-1.79%	0.67%
1732.6	40.10	1.36	21.4℃	2021-07-08	39.39	1.371	-1.78%	0.75%
1752.6	40.09	1.37	21.4℃	2021-07-08	39.372	1.384	-1.79%	0.84%
1755	40.08	1.37	21.4℃	2021-07-08	39.367	1.385	-1.78%	1.02%
1770	40.05	1.38	21.4℃	2021-07-08	39.337	1.394	-1.77%	0.82%
1850.2	40.00	1.40	22.7℃	2021-06-24	39.189	1.447	-2.03%	3.36%
1851.25	40.00	1.40	20.9℃	2021-09-13	39.203	1.447	-1.99%	3.36%
1852.4-1	40.00	1.40	22.7℃	2021-06-24	39.185	1.448	-2.04%	3.43%
1852.4-2	40.00	1.40	21.5℃	2021-11-04	38.8	1.428	-3.00%	2.00%
1860	40.00	1.40	20.9℃	2021-09-13	39.173	1.453	-2.07%	3.79%
1880-1	40.00	1.40	22.7℃	2021-06-24	39.138	1.466	-2.16%	4.71%
1880-2	40.00	1.40	20.9℃	2021-09-13	39.61	1.466	-0.98%	4.71%
1880-3	40.00	1.40	21.5℃	2021-11-04	38.75	1.443	-3.13%	3.07%
1882.5	40.00	1.40	20.9℃	2021-09-13	39.133	1.468	-2.17%	4.86%
1905	40.00	1.40	20.9℃	2021-09-13	39.081	1.462	-2.30%	4.43%
1907.6-1	40.00	1.40	22.7℃	2021-06-24	39.074	1.463	-2.32%	4.50%
1907.6-2	40.00	1.40	21.5℃	2021-11-04	38.704	1.461	-3.24%	4.36%
1908.75	40.00	1.40	20.9℃	2021-09-13	39.09	1.463	-2.27%	4.50%
1909.8	40.00	1.40	22.7℃	2021-06-24	39.068	1.464	-2.33%	4.57%
2402	39.29	1.76	21.7℃	2021-08-18	38.197	1.831	-2.77%	4.19%
2412	39.27	1.77	21.7℃	2021-08-18	38.177	1.839	-2.78%	4.12%
2437	39.22	1.79	21.7℃	2021-08-18	38.138	1.858	-2.77%	3.89%
2440	39.22	1.79	21.7℃	2021-08-18	38.135	1.861	-2.76%	3.90%
2441	39.22	1.79	21.7℃	2021-08-18	38.134	1.862	-2.76%	3.91%
2462	39.18	1.81	21.7℃	2021-08-18	38.099	1.878	-2.77%	3.58%
2480	39.16	1.83	21.7℃	2021-08-18	38.063	1.892	-2.81%	3.23%

2499.3	39.14	1.85	21.5℃	2021-10-27	38.635	1.873	-1.28%	1.02%
2505.5	39.13	1.86	21.5℃	2021-10-27	38.625	1.878	-1.29%	0.94%
2506-1	39.13	1.86	21.8℃	2021-09-03	38.016	1.911	-2.84%	2.68%
2506-2	39.13	1.86	21.5℃	2021-10-27	38.624	1.879	-1.29%	0.96%
2510-1	39.12	1.87	21.6℃	2021-08-10	38.01	1.915	-2.85%	2.66%
2510-2	39.12	1.87	21.5℃	2021-10-27	38.62	1.881	-1.29%	0.83%
2525.1	39.10	1.88	21.5℃	2021-10-27	38.601	1.895	-1.29%	0.70%
2535	39.09	1.89	21.6℃	2021-08-10	37.971	1.937	-2.87%	2.34%
2540.2	39.09	1.90	21.5℃	2021-10-27	38.573	1.907	-1.31%	0.46%
2560	39.06	1.92	21.6℃	2021-08-10	37.925	1.957	-2.91%	1.93%
2583.1	39.03	1.95	21.5℃	2021-10-27	38.493	1.944	-1.38%	-0.06%
2593	39.02	1.96	21.8℃	2021-09-03	37.874	1.983	-2.93%	1.38%
2680	38.91	2.05	21.8℃	2021-09-03	37.729	2.057	-3.03%	0.30%
5180	36.02	4.64	21.9℃	2021-09-06	37.254	4.545	3.43%	-2.03%
5200	36.00	4.66	21.9℃	2021-09-06	37.215	4.566	3.38%	-2.02%
5240	36.16	4.49	21.9℃	2021-09-06	37.142	4.61	2.72%	2.67%
5510	35.64	4.98	21.7℃	2021-09-10	36.63	4.904	2.79%	-1.44%
5550	35.58	5.02	21.7℃	2021-09-10	36.559	4.95	2.77%	-1.35%
5670	35.40	5.14	21.7℃	2021-09-10	36.331	5.081	2.64%	-1.22%
5745	35.21	5.36	22.1℃	2021-09-07	36.188	5.167	2.78%	-3.60%
5785	35.13	5.44	22.1℃	2021-09-07	36.117	5.209	2.81%	-4.25%
5825	35.05	5.52	22.1℃	2021-09-07	36.039	5.254	2.82%	-4.82%

9.3. Liquid depth



Picture 9-1 Liquid depth in the Flat Phantom

A	The Measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0±0.2mm (bottom Plate) filled with Body or Head simulating Liquid.
B	The depth of tissue-equivalent liquid in a phantom must be ⩾ 15.0 cm for SAR measurements.

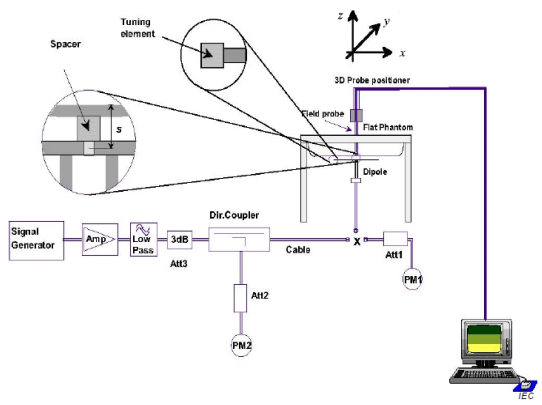
10. System Validation

10.1. System Validation

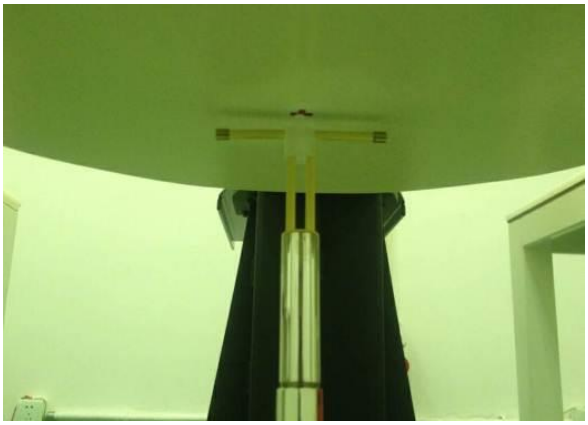
Each DASY system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the DASY software, enable the user to conduct the system performance check and system validation. System validation kit includes a dipole, tripod holder to fix it underneath the flat phantom and a corresponding distance holder.

10.2. 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 10-1 Setup for System Evaluation



Picture 10-2. Setup for Dipole

10.3. System Validation Result

Table 10.1: System Validation Result of SAR

SAR System Validation								
Frequency (MHz)	Target Value (w/kg)		Temperature	Date	Test Result (w/kg)		Deviation (%)	
	10g	1g			10g	1g	10g	1g
750-1	5.59	8.5	21.3℃	2021-07-10	5.48	8.32	-1.97%	-2.12%
750-2	5.59	8.5	21.4℃	2021-08-01	5.84	8.92	4.47%	4.94%
835-1	6.25	9.63	21.7℃	2021-06-21	6.24	9.6	-0.16%	-0.31%
835-2	6.25	9.63	21.6℃	2021-08-20	6.32	9.8	1.12%	1.77%
1750	19.4	36.5	21.4℃	2021-07-08	19.08	35.8	-1.65%	-1.92%
1900-1	21.1	40.5	22.7℃	2021-06-24	20.68	39.76	-1.99%	-1.83%
1900-2	21.1	40.5	20.9℃	2021-09-13	20.92	40.8	-0.85%	0.74%
1900-3	21.1	40.5	21.5℃	2021-11-04	19.96	37.88	-5.40%	-6.47%
2450	24.4	52.4	21.7℃	2021-08-18	25	53.6	2.46%	2.29%
2600-1	25.4	57.2	21.6℃	2021-08-10	26.2	58	3.15%	1.40%
2600-2	25.4	57.2	21.8℃	2021-09-03	25.2	56.4	-0.79%	-1.40%
2600-3	24.4	55.4	21.5℃	2021-10-27	23.96	52	-1.80%	-6.14%
5200	21.4	74.9	21.9℃	2021-09-06	21.4	73.7	0.00%	-1.60%
5600	22.2	79.3	21.7℃	2021-09-10	23.1	80.9	4.05%	2.02%
5800	20.7	73.7	22.1℃	2021-09-07	20.6	71.9	-0.48%	-2.44%
Note: The system verifies that the measured input power level is equivalent to 250mW, and the measured results are compared with the target value by converting to 1W.								

11. Measurement Procedures

11.1. Test Steps

According to the SAR test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

(a) Power reference measurement

The reference and drift jobs are useful for monitoring the power drift of the device under test in the batch process. Both jobs measure the electric field strength at a specified reference position, at a selectable distance from the phantom surface. The reference position can be either the selected section's grid reference point or a user point in this section. The reference job projects the selected point onto the phantom surface, orients the probe perpendicularly to the surface, and approaches the surface using the selected detection method.

(b) Area scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a finer measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum locations even in relatively coarse grids. The scan area is defined by an editable grid. This grid is anchored at the grid reference point of the selected section in the phantom. When the area scan's property sheet is brought up, grid was at to 15mm * 15mm and can be edited by users.

(c) Zoom scan

Zoom scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1g and 10g of simulated tissue. The default zoom scan measures 5 * 5 * 7 points within a cube whose base faces are centered around the maximum found in a preceding area scan job within the same procedure. If the preceding Area Scan job indicates more than one maximum, the number of Zoom Scans has to be enlarged accordingly.

(d) Power drift measurement

The drift job measures the field at the same location as the most recent reference job within the same procedure, and with the same setting. The drift measurement gives the field difference in dB from the reading conducted within the last reference measurement. Several drift measurements are possible for one reference measurement. This allows a user to monitor the power drift of the device under within a batch process. In the properties of the drift job, the user can specify a limit for the drift and have DASY software stop the measurements if this limit is exceeded. This ensures that the power drift during one measurement is within 5%.

The SAR measurement procedures for each of test conditions are as follows:

(a) Make EUT to transmit it maximum output power

(b) Measure conducted output power through RF cable

(c) Place the EUT in the specific position of phantom

(d) Measure SAR results for Middle channel or the highest power channel on each testing position

(e) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

(f) Record the SAR value

11.2. Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the IEEE1529 standard. It can be conducted for 1g and 10g.

The DASY system allows evaluations that combine measured data and robot positions, such as:

a) Maximum Search

During a maximum search, global and local maximum searches are automatically performed in 2D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2dB of the global maxima for all SAR distributions.

b) Extrapolation

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3D space. They are used in the Cube Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation. For a grid using 5*5*5 measurement points with 5mm resolution amounting to 343 measurement points, the uncertainty of the extrapolation routines is less than 1% for 1g and 10 cubes.

c) Boundary effect

For measurements in the immediate vicinity of a phantom surface, the field coupling effects between the probe and the boundary influence the probe characteristics. Boundary effect errors of different dosi-metric probe types have been analyzed by measurements and using a numerical probe model. As expected, both methods showed an enhanced sensitivity in the immediate vicinity of the boundary. The effect strongly depends on the probe dimensions and disappears with increasing distance from the boundary. The sensitivity can be approximately given as:

$$S \approx So + Sb * \exp\left(-\frac{z}{a}\right) * \cos\left(\pi\frac{z}{\lambda}\right)$$

Since the decay of the boundary effect dominates for small probe ($a \ll \lambda$), the cos-term can be omitted. Factors Sb (parameter Alpha in the DASY software) and a (parameter Delta in the DASY software) ard assessed during probe calibration and used for numerical compensation of the boundary effect. Several simulations and measurements have confirmed that the compensation is valid for different field and boundary configurations.

This simple compensation procedure can largely reduce the probe uncertainty near boundaries. It works well as long as:

- The boundary curvature is small
- The probe axis is angled less than 30_to the boundary normal
- The distance between probe and boundary is larger than 25% of the probe diameter
- The probe is symmetric (all sensors have the same offset from the probe tip)

Since all of these requirements are fulfilled in a DASY system, the correction of the probe boundary effect in the vicinity of the phantom surface is performed in a fully automated manner via the measurement data extraction during post processing.

11.3. General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

Table 11.1: Test Resolution Requirement

<table>
<tr><th colspan="3">Items</th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum Distance</td><td>5mm ±1mm</td><td>$\frac{1}{2} * \delta * \ln(2)$ mm ±0.5mm</td></tr>
<tr><td colspan="3">Maximum probe angle</td><td>30±1°</td><td>20±1°</td></tr>
<tr><td colspan="3" rowspan="3">Maximum Area Scan spatial resolution:
Δx_{Area} , Δy_{Area}</td><td>≤2GHz: ≤15mm</td><td>3-4GHz: ≤12mm</td></tr>
<tr><td>2-3GHz: ≤12mm</td><td>4-6GHz: ≤10mm</td></tr>
<tr><td colspan="2">when the x or y dimension of the device , in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the device with at least one measurement point on the device</td></tr>
<tr><td colspan="3" rowspan="2">Maximum Zoom Scan spatial resolution:
Δx_{Zoom} , Δy_{Zoom}</td><td>≤2GHz: ≤8mm</td><td>3-4GHz: ≤5mm</td></tr>
<tr><td>2-3GHz: ≤5mm</td><td>4-6GHz: ≤4mm</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>≤5mm</td><td>3-4GHz: ≤4mm
4-5GHz: ≤3mm
5-6GHz: ≤2mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤4mm</td><td>3-4GHz: ≤3mm
4-5GHz: ≤2.5mm
5-6GHz: ≤2mm</td></tr>
<tr><td>$\Delta z_{Zoom}(n>1)$ between subsequent points</td><td colspan="2">≤1.5*</td></tr>
<tr><td>minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥30mm</td><td>3-4GHz: ≥28mm
4-5GHz: ≥25mm
5-6GHz: ≥22mm</td></tr>
<tr><td colspan="5">Notes:
δ is the penetration depth of a plane-wave at normal incidence to the tissue medium in IEEE 1528-2013.
When Zoom Scan is required and reported SAR from the Area Scan based 1-g SAR estimation procedure of KDB</td></tr>
</table>

publication 447498 is ≤1.4 W/kg, ≤8mm for 2GHz-3GHz, ≤7mm for 3GHz-4GHz, ≤5mm for 4GHz-6GHz Zoom Scan resolution may be applied.

11.4. WCDMA Measurement Procedures

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), 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.

Table 11.2: HSDPA setting for Release 5

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	CM (dB)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	1.5	0.5
2	12/15	15/15	64	12/15	24/25	2.0	1
3	15/15	8/15	64	15/8	30/15	2.0	1
4	15/15	4/15	64	15/4	30/15	2.0	1

Table 11.3: HSUPA setting for Release 6

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

11.5. LTE Measurement Procedure

SAR tests for LTE are performed with a base station simulator. Closed loop power control was used so the UE transmits with maximum output power during SAR testing.

1. Per KDB 941225 D05, 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 for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. 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 are $\leq$ 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.

4. 16QAM/64QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is $\leq$ 1.45 W/kg; 16QAM/64QAM SAR testing is not required.

5. Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is $\leq$ 1.45 W/kg; smaller bandwidth SAR testing is not required.
6. For LTE Band 12/26 the maximum bandwidth does not support three non-overlapping channels, 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.
7. LTE band 17/2/5/38/4 SAR test was covered by Band 12/25/26/41/66; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
a. The maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion.
b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

LTE Carrier Aggregation Conducted Power (Downlink)

According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.

LTE Carrier Aggregation Conducted Power (Uplink)

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.
UL CA power measurements were performed for each antennas at with QPSK modulation based on the worst-case standalone SAR.

The UL CA mode power measurements represent the total power across both carriers. Measurements were made for all supported PCC bandwidths using the channel/RB combination resulting in the highest standalone output power at the least MPR (0 dB). SCCs were set to use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions (highest maximum power with MPR of 0 dB).

The standalone power measurement is the power for the PCC in the non-CA mode (i.e. single carrier power).

LTE TDD Considerations

According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special sub-frame configuration 7.

LTE TDD Band 41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special sub-frame configurations.

Table 11.4 Calculated Duty Cycle for LTE TDD

Uplink-Downlink Configuration		Sub-frame Number										Calculated
0	Periodicity	1	2	3	4	5	6	7	8	9	10	Duty Cycle (%)
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle = (5120 × Ts × 2 + 6 ms) / 10ms = 63.33%

Where

Ts = 1/(15000 x 2048) seconds

11.6. Bluetooth & Wi-Fi Measurement Procedures

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

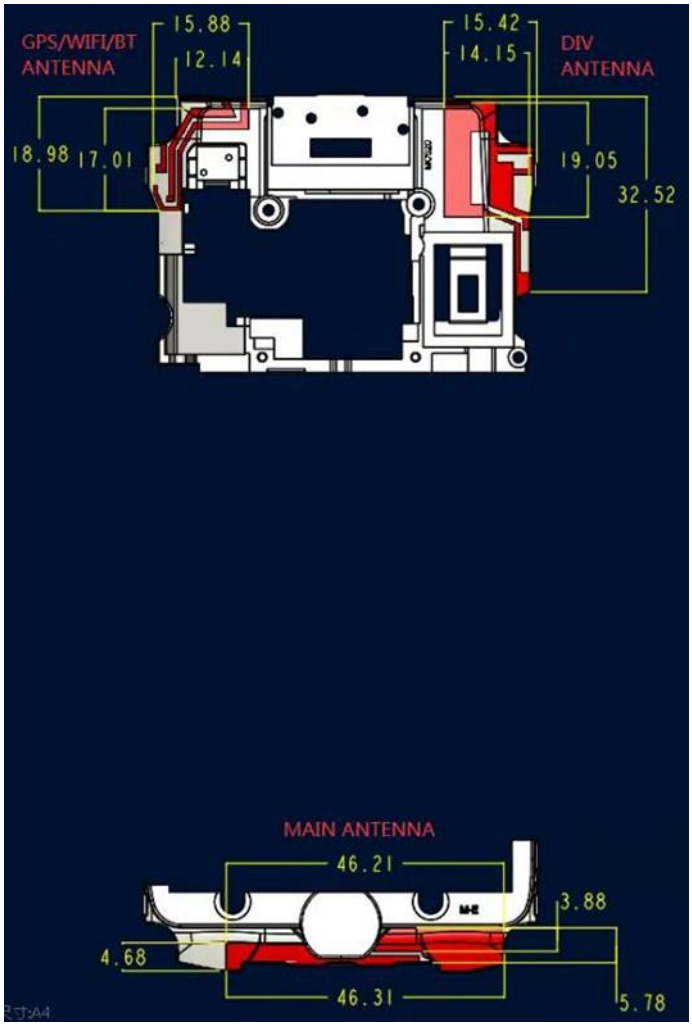
antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

12. Simultaneous Transmission SAR Considerations

12.1. Reference Document

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

12.2. Antenna Separation Distances



Picture 12-1 Antenna Locations

12.3. SAR Measurement Positions

The edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

Table 12.1: SAR measurement Positions

Antenna Mode	Front	Back	Left	Right	Top	Bottom
2/3/4G	Yes	Yes	Yes	Yes	No	Yes
BT/Wi-Fi	Yes	Yes	Yes	Yes	Yes	No

12.4. Low Power Transmitters SAR Consideration

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

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

$$\frac{(max.power\ of\ channel, including\ tune-up\ tolerance, mW)}{(min.test\ separation\ distance, mm)} \times \sqrt{Frequency(GHz)} \leq 3.0$$

Where:

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

According to the KDB447498 appendix A, the SAR test exclusion threshold for 2450MHz at 5mm test separation distances is 10mW. That means the transmitters with tune-up power below 10mW are excluded for SAR measurement.

12.5. Simultaneous Transmission Analysis

KDB 447498 D01 General RF Exposure Guidance introduces a new formula for calculating the SPLSR (SAR to Peak Location Ratio) between pairs of simultaneously transmitting antennas:

$$\mathrm{SPLSR} = \sqrt{(\mathrm{SAR1} + \mathrm{SAR2})^3}/\mathrm{Ri}$$

Where:

SAR1 is the highest measured or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.

SAR2 is the highest measured or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first.

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location , based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$$(\mathrm{x1} - \mathrm{x2})^2 + (\mathrm{y1} - \mathrm{y2})^2 + (z1 - z2)^2$$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$$\sqrt{(\mathrm{SAR1} + \mathrm{SAR2})^3}/\mathrm{Ri} < 0.04$$

12.6. Simultaneous Transmission Table

Table 12.3: Simultaneous Transmission Configurations

Items	Capable Transmit Configurations
1	GSM/GPRS/EDGE + BT+ Wi-Fi
3	WCDMA + BT+ Wi-Fi
5	CDMA + BT +Wi-Fi
7	LTE + BT +Wi-Fi

13. Conducted Output Power

13.1. GSM Measurement result

Table 13.1: The conducted power measurement results for GSM850

GSM			GSM850								
Model	Modulation	Time Slot	Tune up (dBm)	Measure Power(dBm)			Devision Factor (dB)	Average Power(dBm)		
				128	190	251		128	190	251
GSM	GMSK	1 Tx	33.00	32.10	32.26	32.38	-9.03	23.07	23.23	23.35
GPRS	GMSK	1 Tx	32.50	31.74	31.85	31.95	-9.03	22.71	22.82	22.92
		2 Tx	30.00	29.56	29.54	29.75	-6.02	23.54	23.52	23.73
		3 Tx	29.00	28.24	28.40	28.45	-4.26	23.98	24.14	**24.19**
		4 Tx	25.00	24.23	24.47	24.45	-3.01	21.22	21.46	21.44
EGPRS	8PSK	1 Tx	24.50	23.54	23.86	23.62	-9.03	14.51	14.83	14.59
		2 Tx	22.50	21.99	21.66	21.79	-6.02	15.97	15.64	15.77
		3 Tx	20.50	20.25	20.01	20.13	-4.26	15.99	15.75	15.87
		4 Tx	19.00	18.13	18.13	18.52	-3.01	15.12	15.12	15.51

Table 13.2: The conducted power measurement results for GSM1900

GSM			GSM1900								
Model	Modulation	Time Slot	Tune up (dBm)	Measure Power(dBm)			Devision Factor (dB)	Average Power(dBm)		
				512	661	810		512	661	810
GSM	GMSK	1 Tx	30.50	29.63	29.88	30.00	-9.03	20.60	20.85	20.97
GPRS	GMSK	1 Tx	30.50	29.50	29.88	30.00	-9.03	20.47	20.85	20.97
		2 Tx	29.00	27.66	28.60	28.75	-6.02	21.64	22.58	22.73
		3 Tx	28.00	26.50	27.39	27.25	-4.26	22.24	**23.13**	22.99
		4 Tx	25.50	24.44	25.01	25.21	-3.01	21.43	22.00	22.20
EGPRS	8PSK	1 Tx	23.50	22.54	22.67	22.92	-9.03	13.51	13.64	13.89
		2 Tx	23.00	21.93	22.09	22.38	-6.02	15.91	16.07	16.36
		3 Tx	20.50	19.54	20.08	20.10	-4.26	15.28	15.82	15.84
		4 Tx	18.50	17.38	18.13	17.97	-3.01	14.37	15.12	14.96

NOTES:

1) Division Factors

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

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

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

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

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

According to the conducted power as above, the body measurements are performed with 3Txslots for GSM850 and 3Txslots for GSM1900.

13.2. CDMA Measurement result

Table 13.3: The conducted Full Power for CDMA BC0

CDMA			CDMA2000 BC0			
Model	Radio Config	Data Rate	Tune up	Channel		
				1013	384	777
1xRTT	RC1	SO55	24.5	24.17	24.08	24.14
	RC3	SO55	24.5	24.16	24.08	24.20
	RC3	SO32(F-SCH)	24.5	23.86	24.07	24.19
	RC3	SO32(SCH)	24.5	23.89	24.06	24.21
1xEVDO	RTAP	153.6	24.5	24.29	24.31	24.25
	RETAP	4096	24.5	23.98	23.90	23.76

Table 13.4: The conducted Full Power for CDMA BC1

CDMA			CDMA2000 BC1			
Model	Radio Config	Data Rate	Tune up	Channel		
				25	600	1175
1xRTT	RC1	SO55	23.5	22.76	22.51	22.87
	RC3	SO55	23.5	22.66	22.60	22.92
	RC3	SO32(F-SCH)	23.5	22.76	22.58	22.89
	RC3	SO32(SCH)	23.5	22.65	22.60	22.88
1xEVDO	RTAP	153.6	23.5	23.20	23..23	23.46
	RETAP	4096	23.5	23.42	23.25	23.44

Table 13.5: The conducted Reduce Power for CDMA BC1

CDMA			CDMA2000 BC1			
Model	Radio Config	Data Rate	Tune up	Channel		
				25	600	1175
1xRTT	RC1	SO55	19	17.69	17.59	17.84
	RC3	SO55	19	17.68	17.60	17.94
	RC3	SO32(F-SCH)	19	17.71	17.55	17.85
	RC3	SO32(SCH)	19	17.67	17.62	17.81
1xEVDO	RTAP	153.6	19	18.22	18.19	18.43
	RETAP	4096	19	18.39	18.21	18.40

Table 13.6: The conducted Full Power for CDMA BC10

CDMA			CDMA2000 BC10			
Model	Radio Config	Data Rate	Tune up	Channel		
				450	550	650
1xRTT	RC1	SO55	25	24.82	24.52	24.73
	RC3	SO55	25	24.71	24.58	24.76
	RC3	SO32(F-SCH)	25	24.76	24.55	24.78
	RC3	SO32(SCH)	25	24.77	24.54	24.74
1xEVDO	RTAP	153.6	25	24.74	24.51	24.71
	RETAP	4096	25	24.62	24.36	24.58

13.3. WCDMA Measurement result

Table 13.7: The conducted Full Power for WCDMA Band Ⅱ

WCDMA		WCDMA B Ⅱ			
Mode	Test Mode	Tune up	Channel		
			9262	9400	9538
WCDMA	RMC	23.5	22.97	23.08	23.20
HSDPA	Subtest1	23	22.26	22.32	22.46
	Subtest2	22.5	22.03	22.15	22.28
	Subtest3	22.5	21.70	21.85	21.99
	Subtest4	22.5	21.65	21.84	21.92
HSUPA	Subtest1	22.5	21.60	21.75	21.85
	Subtest2	21.5	20.65	20.69	20.89
	Subtest3	21.5	20.64	20.81	20.82
	Subtest4	22	21.49	21.53	21.69
	Subtest5	22	21.25	21.43	21.62

Table 13.8: The conducted Reduce Power for WCDMA Band Ⅱ

WCDMA		WCDMA B2			
Mode	Test Mode	Tune up	Channel		
			9262	9400	9538
WCDMA	RMC	20	19.24	19.23	19.31
HSDPA	Subtest1	18.5	18.03	18	18.06
	Subtest2	18.5	18.13	18.11	18.18
	Subtest3	18.5	18.08	18.06	18.13
	Subtest4	18.5	18.11	18.07	18.14
HSUPA	Subtest1	18.5	18.01	17.99	18.06
	Subtest2	18.5	18.23	18.2	18.29
	Subtest3	18.5	18.11	18.1	18.15
	Subtest4	18.5	18.14	18.13	18.2
	Subtest5	18.5	18.05	18.03	18.1

Table 13.9: The conducted Full Power for WCDMA Band Ⅳ

WCDMA		WCDMA BⅣ			
Mode	Test Mode	Tune up	Channel		
			1312	1413	1513
WCDMA	RMC	23.5	23	23.03	22.78
HSDPA	Subtest1	23	22.26	22.3	22.02
	Subtest2	22.5	22.08	22.1	21.86
	Subtest3	22	21.73	21.78	21.57
	Subtest4	22	21.65	21.71	21.44
HSUPA	Subtest1	22	21.63	21.7	21.43
	Subtest2	21	20.68	20.64	20.47
	Subtest3	21	20.67	20.77	20.4
	Subtest4	22	21.47	21.48	21.31
	Subtest5	22	21.23	21.42	21.24

Table 13.10: The conducted Full Power for WCDMA Band Ⅴ

WCDMA		WCDMA BⅤ			
Mode	Test Mode	Tune up	Channel		
			4132	4183	4233
WCDMA	RMC	24.5	23.52	24.05	23.61
HSDPA	Subtest1	24	22.78	23.34	22.85
	Subtest2	23.5	22.6	23.09	22.69
	Subtest3	23.5	22.25	22.8	22.4
	Subtest4	23	22.17	22.73	22.27
HSUPA	Subtest1	23	22.15	22.72	22.26
	Subtest2	22	21.21	21.66	21.26
	Subtest3	22	21.19	21.79	21.23
	Subtest4	23	21.99	22.5	22.14
	Subtest5	23	21.8	22.44	22.04

13.4. LTE Measurement result

Table 13.11: The conducted Full Power for LTE Band 2/4/5/7/12/13/14/17/18/19/25/26/38/41/66/71

LTE			LTE B2			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				18607	18900	19193
QPSK	1	Low	23	21.90	22.11	22.22
		Middle		21.93	22.25	22.23
		High		21.94	22.10	22.23
	50%	Low	23	21.96	22.13	22.26
		Middle		21.98	22.15	22.41
		High		22.00	22.11	22.30
	100%	/	22	20.94	21.12	21.22
16QAM	1	Low	22	21.37	21.53	21.59
		Middle		21.33	21.36	21.67
		High		21.24	21.41	21.63
	5	Low	22	20.86	21.13	21.30
		Middle		20.88	21.26	21.33
		High		20.90	21.15	21.29
	100%	/	21	20.14	20.27	20.34
64QAM	1	Low	21	20.59	20.67	20.37
		Middle		20.67	20.69	20.41
		High		20.58	20.58	20.35
	5	Low	21	20.44	20.47	20.58
		Middle		20.38	20.45	20.55
		High		20.44	20.46	20.61
	100%	/	20	19.23	19.30	19.59
Modulation	RB	RB Offset	Tune up	3MHz		
				18615	18900	19185
QPSK	1	Low	23	21.94	22.25	22.54
		Middle		21.92	22.36	22.14
		High		21.88	22.18	22.26
	50%	Low	22	20.99	21.25	21.36
		Middle		21.00	21.21	21.36
		High		20.96	21.19	21.40
	100%	/	22	20.99	21.25	21.37
16QAM	1	Low	22	21.34	21.69	21.77
		Middle		21.21	21.42	21.63
		High		21.23	21.44	21.64
	50%	Low	22	20.00	20.23	20.40
		Middle		20.07	20.24	20.47
		High		20.05	20.29	20.38

	100%	/	21	20.02	20.24	20.40
64QAM	1	Low	21	20.36	20.60	20.40
		Middle		20.32	20.59	20.45
		High		20.27	20.52	20.45
	50%	Low	20	19.18	19.51	19.29
		Middle		19.07	19.48	19.28
		High		19.16	19.42	19.28
	100%	/	20	19.42	19.35	19.23
Modulation	RB	RB Offset	Tune up	5MHz		
				18625	18900	19175
QPSK	1	Low	23	22.03	22.42	22.45
		Middle		21.98	22.30	22.26
		High		22.00	22.14	22.31
	50%	Low	22	21.02	21.29	21.46
		Middle		20.97	21.21	21.38
		High		20.94	21.29	21.25
	100%	/	22	21.03	21.21	21.40
16QAM	1	Low	22	21.27	21.69	21.86
		Middle		21.26	21.48	21.51
		High		21.37	21.55	21.66
	50%	Low	22	20.04	20.32	20.45
		Middle		20.00	20.21	20.40
		High		19.94	20.27	20.39
	100%	/	21	20.00	20.21	20.37
64QAM	1	Low	21	20.44	20.48	20.66
		Middle		20.53	20.33	20.56
		High		20.46	20.33	20.48
	50%	Low	20	19.36	19.37	19.49
		Middle		19.35	19.27	19.44
		High		19.27	19.37	19.37
	100%	/	20	19.35	19.40	19.48
Modulation	RB	RB Offset	Tune up	10MHz		
				18650	18900	19150
QPSK	1	Low	23	22.28	22.29	22.61
		Middle		22.15	22.14	22.46
		High		22.20	22.21	22.34
	50%	Low	22	21.04	21.33	21.41
		Middle		21.03	21.16	21.35
		High		21.06	21.21	21.35
	100%	/	22	21.02	21.18	21.37
16QAM	1	Low	22	21.47	21.59	21.87
		Middle		21.20	21.33	21.49

		High		21.47	21.43	21.56
	50%	Low	22	19.98	20.26	20.37
		Middle		20.06	20.18	20.41
		High		20.05	20.19	20.32
	100%	/	21	20.05	20.21	20.37
64QAM	1	Low	21	20.42	20.72	20.67
		Middle		20.34	20.60	20.53
		High		20.52	20.69	20.68
	50%	Low	20	19.32	19.42	19.47
		Middle		19.42	19.40	19.44
		High		19.41	19.36	19.52
	100%	/	20	19.32	19.36	19.48
Modulation	RB	RB Offset	Tune up	15MHz		
				18675	18900	19125
QPSK	1	Low	23	22.09	22.42	22.62
		Middle		22.06	22.21	22.24
		High		22.18	22.45	22.38
	50%	Low	22	21.03	21.13	21.25
		Middle		21.09	21.18	21.34
		High		20.99	21.20	21.37
	100%	/	22	21.04	21.17	21.27
16QAM	1	Low	22	21.26	21.59	21.98
		Middle		21.23	21.30	21.65
		High		21.52	21.40	21.68
	50%	Low	22	20.04	20.15	20.27
		Middle		20.05	20.17	20.33
		High		19.98	20.16	20.30
	100%	/	21	20.03	20.16	20.26
64QAM	1	Low	21	20.39	20.75	20.76
		Middle		20.28	20.71	20.52
		High		20.63	20.48	20.61
	50%	Low	20	19.43	19.70	19.76
		Middle		19.62	19.67	19.58
		High		19.57	19.74	19.60
	100%	/	20	19.26	19.30	19.36
Modulation	RB	RB Offset	Tune up	20MHz		
				18700	18900	19100
QPSK	1	Low	23	21.97	22.22	**22.41**
		Middle		21.91	22.10	22.29
		High		21.82	21.97	22.07
	50%	Low	22	21.04	21.25	**21.35**
		Middle		21.02	21.22	21.28

		High		20.96	21.13	21.33
	100%	/	22	20.96	21.14	**21.33**
16QAM	1	Low	22	21.00	21.55	21.59
		Middle		21.13	21.27	21.84
		High		21.02	21.08	21.14
	50%	Low	22	20.06	20.22	20.35
		Middle		20.04	20.22	20.31
		High		19.98	20.15	20.29
	100%	/	21	19.96	20.14	20.38
64QAM	1	Low	21	20.52	20.56	20.78
		Middle		20.56	20.45	20.87
		High		20.41	20.27	20.50
	50%	Low	20	19.27	19.33	19.39
		Middle		19.18	19.28	19.38
		High		19.21	19.34	19.35
	100%	/	20	19.16	19.22	19.34

LTE			LTE B4			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				19957	20175	20393
QPSK	1	Low	23	21.89	22.10	21.85
		Middle		21.99	21.94	21.87
		High		21.89	22.12	22.11
	50%	Low	23	21.89	22.36	22.13
		Middle		21.86	22.31	21.97
		High		21.86	22.29	22.02
	100%	/	22	20.89	21.15	20.95
16QAM	1	Low	22	21.29	21.52	21.41
		Middle		21.27	21.55	21.33
		High		21.27	21.39	21.18
	5	Low	21.5	20.79	21.20	21.02
		Middle		20.85	21.24	20.91
		High		20.79	21.01	21.01
	100%	/	21	19.99	20.32	20.12
64QAM	1	Low	21	20.00	20.48	20.14
		Middle		20.00	20.57	20.15
		High		19.95	20.43	20.16
	5	Low	21	19.92	20.42	20.36
		Middle		19.94	20.37	20.33
		High		19.96	20.39	20.35
	100%	/	20	19.20	19.13	19.34
Modulation	RB	RB Offset	Tune up	3MHz		
				19965	20175	20385
QPSK	1	Low	23	22.11	22.35	22.07
		Middle		21.86	22.20	22.17
		High		22.01	22.19	-10.94
	50%	Low	22	21.13	21.38	21.13
		Middle		21.04	21.29	21.06
		High		21.01	21.33	21.05
	100%	/	22	20.99	21.28	21.10
16QAM	1	Low	22	21.20	21.73	21.19
		Middle		21.24	21.47	21.34
		High		21.16	21.42	21.29
	50%	Low	21.5	20.16	20.42	20.24
		Middle		20.06	20.39	20.15
		High		20.06	20.33	20.12
	100%	/	21	20.08	20.32	20.13
64QAM	1	Low	21	20.19	20.59	20.23
		Middle		20.16	20.45	20.25

		High		20.09	20.31	20.22
	50%	Low	21	19.08	19.40	19.09
		Middle		19.14	19.38	19.01
		High		18.89	19.32	19.00
	100%	/	20	19.19	19.16	19.29
Modulation	RB	RB Offset	Tune up	5MHz		
				19975	20175	20375
QPSK	1	Low	23	22.05	22.52	22.23
		Middle		22.11	22.26	22.29
		High		22.00	22.26	22.02
	50%	Low	22	21.08	21.47	21.27
		Middle		21.09	21.29	21.17
		High		21.00	21.25	21.10
	100%	/	22	21.13	21.35	21.18
16QAM	1	Low	22	21.38	21.96	21.47
		Middle		21.24	21.35	21.40
		High		21.33	21.64	21.35
	50%	Low	21.5	20.09	20.50	20.27
		Middle		20.10	20.30	20.19
		High		20.06	20.27	20.12
	100%	/	21	20.17	20.31	20.19
64QAM	1	Low	21	20.21	20.27	20.43
		Middle		20.32	20.47	20.35
		High		20.23	20.27	20.24
	50%	Low	21	19.12	19.29	19.29
		Middle		19.17	19.27	19.19
		High		19.05	19.13	19.13
	100%	/	20	19.19	19.22	19.26
Modulation	RB	RB Offset	Tune up	10MHz		
				20000	20175	20350
QPSK	1	Low	23	22.34	22.60	22.62
		Middle		22.09	22.37	22.20
		High		22.36	22.46	22.25
	50%	Low	22	21.11	21.47	21.30
		Middle		21.15	21.44	21.22
		High		21.19	21.32	21.20
	100%	/	22	21.17	21.39	21.29
16QAM	1	Low	22	21.50	21.73	21.63
		Middle		21.29	21.56	21.32
		High		21.51	21.76	21.61
	50%	Low	21.5	20.17	20.52	20.25
		Middle		20.17	20.50	20.25

		High		20.13	20.36	20.23
	100%	/	21	20.26	20.48	20.31
64QAM	1	Low	21	20.36	20.66	20.47
		Middle		20.27	20.47	20.28
		High		20.56	20.69	20.48
	50%	Low	21	19.16	19.38	19.31
		Middle		19.07	19.33	19.28
		High		19.28	19.23	19.30
	100%	/	20	19.24	19.31	19.27
Modulation	RB	RB Offset	Tune up	15MHz		
				20025	20175	20325
QPSK	1	Low	23	22.46	22.51	22.52
		Middle		22.12	22.07	21.88
		High		22.33	22.41	22.14
	50%	Low	22	21.22	21.30	21.13
		Middle		21.34	21.17	20.99
		High		21.28	21.21	21.03
	100%	/	22	21.27	21.26	21.09
16QAM	1	Low	22	21.73	21.52	21.61
		Middle		21.39	21.25	21.19
		High		21.55	21.56	21.37
	50%	Low	21.5	20.28	20.29	20.14
		Middle		20.35	20.20	20.02
		High		20.22	20.25	20.08
	100%	/	21	20.26	20.25	20.10
64QAM	1	Low	21	20.53	20.66	20.40
		Middle		20.34	20.38	20.17
		High		20.49	20.67	20.44
	50%	Low	21	19.52	19.66	19.52
		Middle		19.44	19.56	19.44
		High		19.49	19.68	19.35
	100%	/	20	19.21	19.19	19.06
Modulation	RB	RB Offset	Tune up	20MHz		
				20050	20175	20300
QPSK	1	Low	23	22.41	22.24	**22.53**
		Middle		22.19	22.04	22.11
		High		22.30	22.36	22.10
	50%	Low	22	**21.43**	21.40	21.23
		Middle		21.33	21.27	21.17
		High		21.33	21.26	21.13
	100%	/	22	**21.38**	21.37	21.28
16QAM	1	Low	22	21.68	21.48	21.55

		Middle		21.30	21.44	21.32
		High		21.45	21.59	21.36
	50%	Low	21.5	20.49	20.33	20.32
		Middle		20.40	20.27	20.26
		High		20.43	20.26	20.25
	100%	/	21	20.38	20.35	20.30
64QAM	1	Low	21	20.57	20.43	20.58
		Middle		20.49	20.32	20.46
		High		20.64	20.51	20.59
	50%	Low	21	19.27	19.31	19.18
		Middle		19.29	19.29	19.25
		High		19.30	19.27	19.21
	100%	/	20	19.24	19.29	19.21

LTE			LTE B5			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				20407	20525	20643
QPSK	1	Low	23.5	22.91	23.00	23.09
		Middle		22.98	22.95	22.98
		High		22.91	22.89	22.93
	50%	Low	23.5	22.95	22.96	23.09
		Middle		22.96	23.02	23.07
		High		22.97	22.95	23.01
	100%	/	22.5	21.93	22.01	22.06
16QAM	1	Low	23	22.31	22.20	22.43
		Middle		22.36	22.45	22.54
		High		22.36	22.45	22.32
	5	Low	22.5	21.99	22.12	22.05
		Middle		22.05	22.11	22.07
		High		22.04	22.06	22.01
	100%	/	21.5	21.03	21.09	21.09
64QAM	1	Low	21.5	20.20	20.79	20.67
		Middle		20.24	20.86	20.59
		High		20.29	20.75	20.47
	5	Low	21.5	20.34	20.67	20.66
		Middle		20.33	20.56	20.56
		High		20.37	20.61	20.65
	100%	/	20.5	19.41	19.43	19.72
Modulation	RB	RB Offset	Tune up	3MHz		
				20415	20525	20635
QPSK	1	Low	23.5	22.89	22.95	23.08
		Middle		23.00	23.05	23.07
		High		22.96	23.10	23.15
	50%	Low	22.5	22.00	22.01	21.99
		Middle		21.99	22.08	22.17
		High		21.99	22.04	22.09
	100%	/	22.5	21.97	22.08	22.18
16QAM	1	Low	23	22.31	22.50	22.36
		Middle		22.30	22.35	22.73
		High		22.44	22.43	22.46
	50%	Low	22	21.10	21.08	21.12
		Middle		21.07	21.20	21.15
		High		21.05	21.11	21.17
	100%	/	22	20.93	21.13	21.19
64QAM	1	Low	21.5	20.41	20.68	20.60
		Middle		20.54	20.73	20.61

		High		20.46	20.71	20.67
	50%	Low	20.5	19.32	19.52	19.44
		Middle		19.42	19.47	19.58
		High		19.35	19.58	19.51
	100%	/	20.5	19.54	19.47	19.74
Modulation	RB	RB Offset	Tune up	5MHz		
				20425	20525	20625
QPSK	1	Low	23.5	22.95	23.01	23.17
		Middle		22.92	22.98	23.00
		High		23.02	22.93	23.06
	50%	Low	22.5	21.98	22.08	22.08
		Middle		21.97	22.09	22.06
		High		21.97	22.06	22.08
	100%	/	22.5	22.01	22.09	22.10
16QAM	1	Low	23	22.36	22.35	22.38
		Middle		22.04	22.29	22.29
		High		22.23	22.40	22.45
	50%	Low	22	20.98	21.10	21.15
		Middle		20.99	21.13	21.13
		High		21.08	21.16	21.16
	100%	/	22	21.09	21.09	21.18
64QAM	1	Low	21.5	20.57	20.42	20.81
		Middle		20.63	20.48	20.74
		High		20.53	20.40	20.65
	50%	Low	20.5	19.42	19.35	19.58
		Middle		19.49	19.44	19.66
		High		19.41	19.49	19.60
	100%	/	20.5	19.49	19.47	19.65
Modulation	RB	RB Offset	Tune up	10MHz		
				20450	20525	20600
QPSK	1	Low	23.5	23.02	23.04	23.29
		Middle		23.05	23.05	23.06
		High		**23.41**	23.30	23.32
	50%	Low	22.5	22.05	22.13	**22.18**
		Middle		22.06	22.16	22.14
		High		22.01	22.14	22.12
	100%	/	22.5	22.10	**22.18**	22.14
16QAM	1	Low	23	22.33	22.53	22.61
		Middle		22.39	22.42	22.41
		High		22.61	22.72	22.44
	50%	Low	22	21.03	21.12	21.20
		Middle		21.10	21.13	21.13

		High		21.01	21.21	21.30
	100%	/	22	21.13	21.16	21.18
64QAM	1	Low	21.5	20.62	20.79	20.82
		Middle		20.54	20.67	20.60
		High		20.93	21.02	20.89
	50%	Low	20.5	19.55	19.49	19.70
		Middle		19.65	19.59	19.73
		High		19.61	19.55	19.67
	100%	/	20.5	19.58	19.57	19.68

LTE			LTE B7			
Modulation	RB	RB Offset	Tune up	5MHz		
				20775	21100	21425
QPSK	1	Low	23	21.84	21.99	22.17
		Middle		21.66	22.01	22.29
		High		21.68	21.98	22.23
	50%	Low	22	20.81	20.95	21.17
		Middle		20.65	20.98	21.21
		High		20.83	20.98	21.12
	100%	/	22	20.72	20.94	21.22
16QAM	1	Low	22	21.13	21.30	21.49
		Middle		20.88	21.11	21.29
		High		20.87	21.21	21.34
	5	Low	21	19.73	19.95	20.23
		Middle		19.58	19.99	20.20
		High		19.71	19.97	20.22
	100%	/	21	19.75	20.00	20.27
64QAM	1	Low	21	19.39	19.59	19.91
		Middle		19.38	19.58	19.88
		High		19.50	19.59	19.89
	5	Low	20	18.43	18.59	18.81
		Middle		18.45	18.53	18.77
		High		18.34	18.59	18.83
	100%	/	20	18.37	18.64	18.73
Modulation	RB	RB Offset	Tune up	10MHz		
				20800	21100	21400
QPSK	1	Low	23	21.86	22.16	22.51
		Middle		21.69	21.93	22.02
		High		21.98	22.10	22.37
	50%	Low	22	20.74	20.92	21.24
		Middle		20.70	20.96	21.16
		High		20.66	21.04	21.17
	100%	/	22	20.74	20.97	21.24
16QAM	1	Low	22	21.08	21.31	21.65
		Middle		20.83	21.00	21.38
		High		21.01	21.17	21.43
	50%	Low	21	19.83	19.94	20.19
		Middle		19.71	19.99	20.14
		High		19.72	20.01	20.17
	100%	/	21	19.80	19.95	20.20
64QAM	1	Low	21	19.64	19.85	19.95
		Middle		19.41	19.64	19.75

		High		19.58	19.81	20.00
	50%	Low	20	18.59	18.61	18.86
		Middle		18.48	18.59	18.84
		High		18.42	18.62	18.88
	100%	/	20	18.42	18.59	18.92
Modulation	RB	RB Offset	Tune up	15MHz		
				20825	21100	21375
QPSK	1	Low	23	21.59	21.86	22.02
		Middle		21.72	21.95	22.29
		High		21.73	22.03	22.08
	50%	Low	22	20.83	20.94	21.14
		Middle		20.81	21.10	21.21
		High		20.81	21.20	21.19
	100%	/	22	20.82	21.08	21.18
16QAM	1	Low	22	20.86	20.88	21.33
		Middle		20.93	21.13	21.32
		High		20.94	21.11	21.34
	50%	Low	21	19.78	19.92	20.10
		Middle		19.82	20.10	20.24
		High		19.81	20.11	20.14
	100%	/	21	19.79	20.08	20.16
64QAM	1	Low	21	19.64	19.64	19.71
		Middle		19.41	19.71	19.73
		High		19.58	19.78	19.87
	50%	Low	20	18.59	19.61	19.72
		Middle		18.47	19.59	19.78
		High		18.42	19.76	19.79
	100%	/	20	18.42	18.70	18.71
Modulation	RB	RB Offset	Tune up	20MHz		
				20850	21100	21350
QPSK	1	Low	23	21.69	21.85	22.00
		Middle		21.70	21.96	**22.11**
		High		21.97	22.05	22.06
	50%	Low	22	20.77	21.04	21.10
		Middle		20.79	21.16	21.19
		High		20.90	21.06	**21.24**
	100%	/	22	20.84	21.00	**21.29**
16QAM	1	Low	22	20.81	20.91	21.13
		Middle		20.71	21.17	21.34
		High		20.92	21.29	21.41
	50%	Low	21	19.77	20.02	20.17
		Middle		19.80	20.11	20.24

		High		19.92	20.16	20.18
	100%	/	21	19.83	20.00	20.20
64QAM	1	Low	21	19.29	19.75	19.94
		Middle		19.39	19.84	20.01
		High		19.34	19.77	20.04
	50%	Low	20	19.33	18.58	18.74
		Middle		19.39	18.64	18.77
		High		19.38	18.71	18.69
	100%	/	20	18.41	18.61	18.75

LTE			LTE B12			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				23017	23095	23173
QPSK	1	Low	23.5	22.37	22.55	22.58
		Middle		22.47	22.54	22.69
		High		22.54	22.71	22.68
	50%	Low	23.5	22.63	22.72	22.66
		Middle		22.57	22.72	22.85
		High		22.59	22.82	22.77
	100%	/	22.5	21.61	21.66	21.57
16QAM	1	Low	22.5	21.93	22.09	21.88
		Middle		21.80	22.20	22.15
		High		21.72	21.93	21.90
	5	Low	22	21.59	21.70	21.63
		Middle		21.59	21.80	21.68
		High		21.61	21.71	21.59
	100%	/	21.5	20.62	20.76	20.71
64QAM	1	Low	21.5	20.40	20.58	20.31
		Middle		20.48	20.54	20.38
		High		20.26	20.63	20.36
	5	Low	21.5	20.29	19.39	19.19
		Middle		20.26	19.44	19.11
		High		20.00	19.41	19.09
	100%	/	20.5	18.89	18.33	18.40
Modulation	RB	RB Offset	Tune up	3MHz		
				23025	23095	23165
QPSK	1	Low	23.5	22.48	22.68	22.76
		Middle		22.63	22.94	22.67
		High		22.60	22.66	22.82
	50%	Low	22.5	21.60	21.78	21.77
		Middle		21.60	21.80	21.72
		High		21.58	21.83	21.67
	100%	/	22.5	21.68	21.80	21.80
16QAM	1	Low	22.5	21.63	22.11	21.90
		Middle		21.99	22.30	21.96
		High		21.93	21.99	22.13
	50%	Low	22	20.47	20.74	20.79
		Middle		20.60	20.79	20.85
		High		20.53	20.78	20.71
	100%	/	21.5	20.61	20.74	20.78
64QAM	1	Low	21.5	20.06	20.39	20.34
		Middle		20.16	20.47	20.45

		High		20.25	20.35	20.39
	50%	Low	20.5	18.82	19.29	19.20
		Middle		18.88	19.33	19.11
		High		18.89	19.29	19.19
	100%	/	20.5	19.26	19.36	19.28
Modulation	RB	RB Offset	Tune up	5MHz		
				23035	23095	23155
QPSK	1	Low	23.5	22.56	22.77	22.64
		Middle		22.81	22.72	22.58
		High		22.80	22.90	22.98
	50%	Low	22.5	21.66	21.81	21.69
		Middle		21.70	21.79	21.69
		High		21.68	21.79	21.67
	100%	/	22.5	21.68	21.84	21.78
16QAM	1	Low	22.5	21.81	22.09	21.93
		Middle		21.66	22.03	22.17
		High		21.91	22.24	22.05
	50%	Low	22	20.67	20.73	20.74
		Middle		20.70	20.78	20.77
		High		20.67	20.69	20.75
	100%	/	21.5	20.75	20.74	20.81
64QAM	1	Low	21.5	20.36	20.67	20.53
		Middle		20.37	20.49	20.30
		High		20.34	20.70	20.47
	50%	Low	20.5	19.17	19.43	19.46
		Middle		19.11	19.35	19.37
		High		19.15	19.45	19.37
	100%	/	20.5	19.30	19.38	19.31
Modulation	RB	RB Offset	Tune up	10MHz		
				23060	23095	23130
QPSK	1	Low	23.5	22.73	22.85	22.89
		Middle		22.84	23.02	22.73
		High		22.85	**23.10**	22.88
	50%	Low	22.5	21.90	21.83	21.86
		Middle		21.82	21.81	21.72
		High		21.76	**21.95**	21.81
	100%	/	22.5	21.79	**21.90**	21.69
16QAM	1	Low	22.5	22.07	22.09	22.25
		Middle		21.92	22.11	22.18
		High		22.18	22.23	22.17
	50%	Low	22	20.80	20.74	20.87
		Middle		20.78	20.75	20.80

		High		20.74	20.95	20.83
	100%	/	21.5	20.81	20.82	20.87
64QAM	1	Low	21.5	20.46	20.33	20.56
		Middle		20.34	20.30	20.55
		High		20.54	20.33	20.54
	50%	Low	20.5	19.40	20.37	19.57
		Middle		19.44	20.16	19.55
		High		19.37	20.39	19.59
	100%	/	20.5	19.32	19.35	19.40

LTE			LTE B13			
Modulation	RB	RB Offset	Tune up	5MHz		
				23205	23230	23255
QPSK	1	Low	24	22.96	22.92	23.01
		Middle		22.80	22.98	23.12
		High		22.91	23.01	22.96
	50%	Low	23	21.92	22.04	22.05
		Middle		21.90	21.97	22.06
		High		21.87	22.02	22.12
	100%	/	23	21.85	22.02	22.06
16QAM	1	Low	23	22.21	22.19	22.27
		Middle		22.22	22.23	22.16
		High		22.17	22.30	22.55
	5	Low	22	20.94	21.11	21.01
		Middle		20.93	21.03	21.03
		High		20.93	20.97	21.09
	100%	/	22	20.91	21.03	21.02
64QAM	1	Low	22	21.15	21.14	21.12
		Middle		20.82	10.81	20.78
		High		20.97	20.99	20.98
	5	Low	21	19.66	19.66	19.66
		Middle		19.65	19.68	19.58
		High		19.56	19.51	19.55
	100%	/	21	19.65	19.68	19.68
Modulation	RB	RB Offset	Tune up	10MHz		
				23230	23230	23230
QPSK	1	Low	24	**23.49**	23.25	23.42
		Middle		22.99	22.95	22.96
		High		23.26	23.25	23.32
	50%	Low	23	**22.12**	22.07	22.10
		Middle		22.07	22.07	22.08
		High		22.06	22.03	22.04
	100%	/	23	22.10	22.10	**22.11**
16QAM	1	Low	23	22.55	22.61	22.43
		Middle		22.28	22.34	22.25
		High		22.54	22.43	22.38
	50%	Low	22	20.91	20.96	21.07
		Middle		21.00	21.10	21.09
		High		21.04	20.97	21.03
	100%	/	22	21.03	21.03	21.09
64QAM	1	Low	22	20.40	20.66	21.00
		Middle		20.54	20.66	20.96

		High		20.45	20.71	21.06
	50%	Low	21	19.54	19.52	19.91
		Middle		19.44	19.55	19.84
		High		19.43	19.59	19.88
	100%	/	21	19.54	19.58	19.99

LTE			LTE B14			
Modulation	RB	RB Offset	Tune up	5MHz		
				23305	23330	23355
QPSK	1	Low	24	23.54	23.44	23.37
		Middle		23.38	23.36	23.35
		High		23.39	23.26	23.41
	50%	Low	23	22.48	22.30	22.36
		Middle		22.47	22.35	22.31
		High		22.41	22.26	22.28
	100%	/	23	22.62	22.35	22.37
16QAM	1	Low	23	22.87	22.79	22.62
		Middle		22.67	22.54	22.54
		High		22.65	22.45	22.65
	5	Low	22	21.51	21.21	21.38
		Middle		21.53	21.24	21.29
		High		21.40	21.25	21.27
	100%	/	22	21.57	21.23	21.27
64QAM	1	Low	22	21.39	21.41	21.08
		Middle		20.99	20.98	21.00
		High		21.19	21.15	21.15
	5	Low	21	20.10	20.07	20.09
		Middle		19.89	20.07	19.98
		High		19.78	19.76	19.74
	100%	/	21	20.01	20.01	19.91
Modulation	RB	RB Offset	Tune up	10MHz		
				23330	23330	23330
QPSK	1	Low	24	**23.65**	23.60	23.63
		Middle		23.35	23.34	23.25
		High		23.50	23.44	23.45
	50%	Low	23	**22.67**	22.60	22.59
		Middle		22.30	22.38	22.37
		High		22.24	22.27	22.29
	100%	/	23	22.48	**22.53**	22.46
16QAM	1	Low	23	22.86	22.87	22.79
		Middle		22.48	22.46	22.51
		High		22.71	22.76	22.63
	50%	Low	22	21.42	21.55	21.49
		Middle		21.31	21.31	21.39
		High		21.32	21.30	21.22
	100%	/	22	21.40	21.60	21.53
64QAM	1	Low	22	20.92	21.06	21.15
		Middle		20.82	21.08	21.42

		High		20.69	21.00	21.00
	50%	Low	21	19.71	19.89	20.09
		Middle		19.82	19.88	19.74
		High		19.73	19.84	19.98
	100%	/	21	19.82	19.91	19.98

LTE			LTE B17			
Modulation	RB	RB Offset	Tune up	5MHz		
				23755	23790	23825
QPSK	1	Low	23.5	22.89	22.87	22.79
		Middle		22.81	22.91	22.70
		High		22.94	22.91	22.70
	50%	Low	22.5	21.88	21.90	21.84
		Middle		21.90	21.96	21.91
		High		21.89	21.91	21.90
	100%	/	22.5	21.90	21.86	21.95
16QAM	1	Low	22.5	22.12	22.04	22.15
		Middle		22.13	22.09	22.09
		High		22.21	22.11	22.16
	5	Low	21.5	20.88	20.92	20.87
		Middle		20.89	21.00	20.85
		High		20.95	20.85	20.89
	100%	/	21.5	20.85	20.79	20.95
64QAM	1	Low	21.5	20.55	20.72	20.61
		Middle		20.29	20.54	20.32
		High		20.50	20.68	20.53
	5	Low	20.5	19.43	19.40	19.45
		Middle		19.41	19.33	19.49
		High		19.39	19.32	19.50
	100%	/	20.5	19.32	19.43	19.33
Modulation	RB	RB Offset	Tune up	10MHz		
				23780	23790	23800
QPSK	1	Low	23.5	**23.14**	23.10	23.02
		Middle		22.83	22.96	22.93
		High		22.96	23.02	23.07
	50%	Low	22.5	**21.93**	21.91	**21.93**
		Middle		21.87	21.80	21.89
		High		21.88	21.91	21.91
	100%	/	22.5	21.87	**21.97**	21.95
16QAM	1	Low	23	22.27	22.28	22.36
		Middle		22.00	22.23	22.01
		High		22.33	22.30	22.27
	50%	Low	21.5	20.88	20.84	20.91
		Middle		20.94	20.83	20.90
		High		20.88	20.92	20.94
	100%	/	21.5	20.88	20.91	20.91
64QAM	1	Low	21.5	20.34	20.53	20.37
		Middle		20.30	20.58	20.40

		High		20.31	20.49	20.43
	50%	Low	20.5	19.27	19.40	19.45
		Middle		19.29	19.38	19.39
		High		19.24	19.33	19.30
	100%	/	20.5	19.23	19.47	19.30

LTE			LTE B18			
Modulation	RB	RB Offset	Tune up	5MHz		
				23875	23925	23975
QPSK	1	Low	23.5	22.80	22.95	22.83
		Middle		22.87	22.73	22.84
		High		22.88	22.83	22.73
	50%	Low	22.5	21.80	21.80	21.83
		Middle		21.89	21.80	21.77
		High		21.91	21.86	21.78
	100%	/	22.5	21.81	21.77	21.77
16QAM	1	Low	23	22.00	21.95	22.32
		Middle		22.24	22.07	22.06
		High		22.12	22.07	22.24
	5	Low	22	20.77	20.80	20.85
		Middle		20.78	20.79	20.81
		High		20.84	20.82	20.87
	100%	/	22	20.79	20.80	20.79
64QAM	1	Low	21.5	20.48	20.65	20.64
		Middle		20.38	20.62	20.64
		High		20.43	20.71	20.91
	5	Low	20.5	19.87	19.65	20.16
		Middle		19.78	19.67	20.01
		High		19.56	20.06	20.32
	100%	/	20.5	19.69	19.41	19.57
Modulation	RB	RB Offset	Tune up	10MHz		
				23900	23925	23950
QPSK	1	Low	23.5	22.86	22.88	23.00
		Middle		22.91	22.93	22.89
		High		23.20	23.22	23.06
	50%	Low	22.5	21.80	21.90	21.92
		Middle		21.90	21.93	21.91
		High		21.94	22.02	21.97
	100%	/	22.5	21.86	22.02	22.04
16QAM	1	Low	23	22.12	22.51	22.32
		Middle		22.18	22.14	22.15
		High		22.53	22.65	22.60
	50%	Low	22	20.68	20.74	20.95
		Middle		20.85	20.95	21.03
		High		20.97	21.03	21.00
	100%	/	22	20.78	20.89	20.96
64QAM	1	Low	21.5	20.48	20.65	20.64
		Middle		20.38	20.62	20.64

		High		20.43	20.71	20.91
	50%	Low	21	19.40	20.65	20.39
		Middle		19.49	20.67	20.32
		High		19.45	20.69	20.48
	100%	/	20.5	19.34	19.41	20.49
Modulation	RB	RB Offset	Tune up	15MHz		
				23925	23925	23925
QPSK	1	Low	23.5	22.98	22.81	**23.07**
		Middle		22.86	22.77	22.95
		High		23.03	22.96	23.06
	50%	Low	22.5	21.90	21.88	21.93
		Middle		21.98	21.99	**21.99**
		High		21.91	21.89	21.93
	100%	/	22.5	21.97	21.97	**22.00**
16QAM	1	Low	23	22.26	22.24	22.16
		Middle		22.10	22.26	22.13
		High		22.43	22.26	22.40
	50%	Low	22	20.85	20.91	20.86
		Middle		20.97	20.99	20.95
		High		20.90	20.91	20.90
	100%	/	22	20.95	20.91	20.90
64QAM	1	Low	21.5	20.44	20.39	20.68
		Middle		20.38	20.45	20.61
		High		20.79	20.35	20.72
	50%	Low	21	19.56	19.33	20.66
		Middle		19.48	19.38	20.69
		High		19.55	19.32	20.61
	100%	/	20.5	19.38	19.36	19.41

LTE			LTE B19			
Modulation	RB	RB Offset	Tune up	5MHz		
				24025	24075	24125
QPSK	1	Low	23.5	22.90	22.85	22.85
		Middle		22.70	22.96	22.84
		High		22.60	22.92	22.82
	50%	Low	22.5	21.80	21.96	21.88
		Middle		21.76	21.95	21.82
		High		21.69	22.01	21.83
	100%	/	22.5	21.74	21.90	21.85
16QAM	1	Low	23	22.26	22.26	22.29
		Middle		22.18	22.22	22.05
		High		21.96	22.32	22.31
	5	Low	22	20.80	20.99	20.93
		Middle		20.76	21.07	20.87
		High		20.71	21.01	20.83
	100%	/	22	20.79	20.89	20.89
64QAM	1	Low	21.5	20.56	20.52	20.53
		Middle		20.44	20.63	20.52
		High		20.29	20.58	20.44
	5	Low	20.5	19.41	19.52	19.37
		Middle		19.27	19.55	19.42
		High		19.28	19.53	19.31
	100%	/	20.5	19.21	19.55	19.39
Modulation	RB	RB Offset	Tune up	10MHz		
				24050	24075	24100
QPSK	1	Low	23.5	23.07	23.02	22.95
		Middle		22.81	22.94	22.85
		High		23.17	23.25	23.08
	50%	Low	22.5	21.88	21.98	21.93
		Middle		21.88	21.94	21.87
		High		21.88	22.07	21.96
	100%	/	22.5	21.90	21.97	21.98
16QAM	1	Low	23	22.33	22.30	22.26
		Middle		22.10	22.31	22.06
		High		22.62	22.56	22.33
	50%	Low	22	20.90	20.97	20.92
		Middle		20.88	20.97	20.92
		High		20.89	20.98	20.99
	100%	/	22	20.94	20.95	20.96
64QAM	1	Low	21.5	20.64	20.81	20.53
		Middle		20.38	20.84	20.47

		High		20.75	21.10	20.67
	50%	Low	20.5	19.43	19.61	19.51
		Middle		19.50	19.77	19.58
		High		19.58	19.71	19.56
	100%	/	20.5	19.47	19.61	19.45
Modulation	RB	RB Offset	Tune up	15MHz		
				24075	24075	24075
QPSK	1	Low	23.5	**23.05**	23.03	22.98
		Middle		22.89	22.98	22.99
		High		22.92	22.97	22.85
	50%	Low	22.5	22.12	22.10	**22.14**
		Middle		22.06	22.06	22.02
		High		22.05	22.05	22.06
	100%	/	22.5	22.10	22.10	**22.11**
16QAM	1	Low	23	22.56	22.44	22.32
		Middle		22.42	22.59	22.36
		High		22.27	22.25	22.38
	50%	Low	22	21.03	21.13	21.07
		Middle		21.05	21.01	21.07
		High		21.08	21.07	21.07
	100%	/	22	21.07	21.10	21.08
64QAM	1	Low	21.5	20.84	20.79	20.82
		Middle		20.75	20.70	20.75
		High		20.73	20.71	20.71
	50%	Low	21	20.80	20.81	20.81
		Middle		20.71	20.75	20.69
		High		20.77	20.71	20.77
	100%	/	20.5	19.62	19.63	19.64

LTE			LTE B25			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				26047	26365	26683
QPSK	1	Low	23	21.95	22.02	22.38
		Middle		22.03	21.98	22.45
		High		21.98	22.01	22.36
	50%	Low	23	22.01	22.05	22.46
		Middle		22.07	22.10	22.41
		High		22.02	22.05	22.35
	100%	/	22.5	21.04	21.11	21.43
16QAM	1	Low	22.5	21.38	21.40	21.89
		Middle		21.31	21.31	21.80
		High		21.24	21.22	21.57
	5	Low	22	20.99	21.12	21.41
		Middle		21.05	21.18	21.45
		High		20.97	21.08	21.45
	100%	/	21	20.05	20.11	20.51
64QAM	1	Low	21	20.28	20.34	20.45
		Middle		20.42	20.33	20.41
		High		20.33	20.21	20.27
	5	Low	21	20.23	20.15	20.44
		Middle		20.28	20.18	20.56
		High		20.20	20.12	20.46
	100%	/	20	18.98	18.94	19.57
Modulation	RB	RB Offset	Tune up	3MHz		
				26055	26365	26675
QPSK	1	Low	23	22.05	21.99	22.51
		Middle		22.02	22.11	22.42
		High		21.98	21.96	22.30
	50%	Low	22	21.05	21.16	21.47
		Middle		21.02	21.10	21.42
		High		20.97	21.12	21.37
	100%	/	22	20.99	21.10	21.44
16QAM	1	Low	22.5	21.30	21.29	21.71
		Middle		21.26	21.43	22.03
		High		21.34	21.37	21.90
	50%	Low	22	20.06	20.21	20.64
		Middle		20.09	20.08	20.40
		High		20.01	20.24	20.46
	100%	/	21	20.02	20.03	20.36
64QAM	1	Low	21	20.15	20.26	20.55
		Middle		20.11	20.21	20.42

		High		20.19	20.21	20.28
	50%	Low	20	19.00	19.16	19.27
		Middle		18.91	19.18	19.28
		High		18.99	19.15	19.21
	100%	/	20	19.61	19.01	19.49
Modulation	RB	RB Offset	Tune up	5MHz		
				26065	26365	26665
QPSK	1	Low	23	22.03	22.21	22.62
		Middle		22.08	22.13	22.37
		High		22.01	22.16	22.38
	50%	Low	22	20.99	21.11	21.35
		Middle		21.03	21.17	21.51
		High		21.01	21.07	21.47
	100%	/	22	21.07	21.11	21.42
16QAM	1	Low	22.5	21.43	21.53	21.89
		Middle		21.23	21.42	21.68
		High		21.29	21.41	21.73
	50%	Low	22	20.01	20.10	20.55
		Middle		20.06	20.13	20.48
		High		20.02	20.10	20.36
	100%	/	21	20.04	20.12	20.52
64QAM	1	Low	21	20.21	20.12	20.75
		Middle		20.24	19.99	20.42
		High		20.17	19.98	20.32
	50%	Low	20	19.00	19.00	19.42
		Middle		19.01	18.97	19.42
		High		19.21	18.99	19.29
	100%	/	20	19.11	19.06	19.33
Modulation	RB	RB Offset	Tune up	10MHz		
				26090	26365	26640
QPSK	1	Low	23	22.08	22.37	22.65
		Middle		21.97	22.09	22.39
		High		22.07	22.35	22.48
	50%	Low	22	21.09	21.16	21.32
		Middle		21.00	21.15	21.46
		High		21.15	21.11	21.48
	100%	/	22	20.99	21.10	21.49
16QAM	1	Low	22.5	21.34	21.75	21.77
		Middle		21.34	21.40	21.69
		High		21.65	21.33	21.78
	50%	Low	22	20.06	20.17	20.42
		Middle		20.00	20.13	20.49

		High		20.14	20.14	20.54
	100%	/	21	19.99	20.12	20.43
64QAM	1	Low	21	20.38	20.21	20.87
		Middle		20.15	20.49	20.30
		High		20.13	20.43	20.12
	50%	Low	20	19.15	19.07	19.34
		Middle		19.24	19.06	19.44
		High		19.27	19.09	19.47
	100%	/	20	19.04	19.08	19.34
Modulation	RB	RB Offset	Tune up	15MHz		
				26115	26365	26615
QPSK	1	Low	23	22.15	22.37	22.63
		Middle		22.12	22.14	22.67
		High		22.27	22.41	22.73
	50%	Low	22	21.14	21.24	21.73
		Middle		21.14	21.30	21.64
		High		21.18	21.37	21.81
	100%	/	22	21.20	21.31	21.81
16QAM	1	Low	22.5	21.51	21.70	22.11
		Middle		21.39	21.41	22.06
		High		21.66	21.69	21.89
	50%	Low	22	20.17	20.25	20.68
		Middle		20.17	20.25	20.71
		High		20.12	20.31	20.84
	100%	/	21	20.19	20.34	20.80
64QAM	1	Low	21	20.09	20.42	20.41
		Middle		20.15	20.48	20.44
		High		20.33	20.31	20.43
	50%	Low	20	19.10	19.41	19.80
		Middle		19.33	19.49	19.33
		High		19.14	19.45	19.36
	100%	/	20	19.19	19.27	19.68
Modulation	RB	RB Offset	Tune up	20MHz		
				26140	26365	26590
QPSK	1	Low	23	22.16	22.29	**22.94**
		Middle		22.14	22.09	22.60
		High		21.71	21.69	22.40
	50%	Low	22	21.11	21.23	**21.61**
		Middle		21.08	21.14	21.60
		High		21.03	21.16	21.58
	100%	/	22	21.04	21.18	**21.48**
16QAM	1	Low	22.5	21.49	21.70	22.45

		Middle		21.50	21.53	22.11
		High		21.14	21.45	21.61
	50%	Low	22	20.09	20.17	20.64
		Middle		20.06	20.18	20.68
		High		20.04	20.12	20.52
	100%	/	21	20.05	20.17	20.66
64QAM	1	Low	21	20.32	20.43	20.85
		Middle		20.33	20.31	20.87
		High		20.10	20.14	20.51
	50%	Low	20	19.07	19.13	19.52
		Middle		19.00	19.18	19.45
		High		19.09	19.25	19.54
	100%	/	20	19.04	19.12	19.52

LTE			LTE B26			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				26697	26865	27033
QPSK	1	Low	24	22.81	22.85	22.95
		Middle		22.77	22.87	23.02
		High		22.74	22.90	22.93
	50%	Low	24	22.88	22.82	22.96
		Middle		22.90	22.87	22.95
		High		22.84	22.86	23.03
	100%	/	23	21.83	21.85	22.01
16QAM	1	Low	23.5	22.07	22.17	22.26
		Middle		22.17	22.05	22.17
		High		21.97	22.15	22.31
	5	Low	22.5	21.90	21.89	22.05
		Middle		21.82	21.91	22.01
		High		21.88	21.86	21.89
	100%	/	22	20.92	20.98	21.04
64QAM	1	Low	22	20.24	20.73	20.64
		Middle		20.23	20.73	20.63
		High		20.23	20.69	20.56
	5	Low	22	20.35	20.54	20.68
		Middle		20.33	20.46	20.56
		High		20.30	20.48	20.66
	100%	/	21	19.42	19.42	19.71
Modulation	RB	RB Offset	Tune up	3MHz		
				26705	26865	27025
QPSK	1	Low	24	21.88	22.89	22.98
		Middle		22.06	22.98	22.93
		High		21.83	22.79	22.90
	50%	Low	23	20.99	21.82	22.06
		Middle		20.96	21.91	22.04
		High		20.94	21.85	21.96
	100%	/	23	20.92	21.89	22.03
16QAM	1	Low	23.5	21.14	22.15	22.30
		Middle		21.33	22.33	22.23
		High		21.18	22.19	22.18
	50%	Low	22.5	20.74	20.95	21.09
		Middle		20.73	21.01	21.08
		High		20.71	20.90	21.05
	100%	/	22	20.88	20.98	21.11
64QAM	1	Low	22	20.45	20.66	20.65
		Middle		20.37	20.54	20.65

		High		20.25	20.55	20.60
	50%	Low	21	19.23	19.52	19.47
		Middle		19.09	19.55	19.48
		High		19.07	19.49	19.47
	100%	/	21	19.43	19.41	19.72
Modulation	RB	RB Offset	Tune up	5MHz		
				26715	26865	27015
QPSK	1	Low	24	22.89	22.98	23.19
		Middle		22.59	22.89	23.13
		High		22.78	22.86	22.96
	50%	Low	23	21.74	21.85	22.11
		Middle		21.75	21.83	22.07
		High		21.79	21.92	22.02
	100%	/	23	21.79	21.89	22.11
16QAM	1	Low	23.5	22.33	22.31	22.58
		Middle		21.93	22.16	22.30
		High		22.08	22.14	22.24
	50%	Low	22.5	20.77	20.82	21.09
		Middle		20.69	20.82	21.09
		High		20.82	20.86	21.01
	100%	/	22	20.80	20.85	21.11
64QAM	1	Low	22	20.41	20.43	20.91
		Middle		20.39	20.37	20.77
		High		20.64	20.41	20.67
	50%	Low	21	19.28	19.43	19.65
		Middle		19.32	19.30	19.59
		High		19.28	19.33	19.56
	100%	/	21	19.36	19.32	19.68
Modulation	RB	RB Offset	Tune up	10MHz		
				26750	26865	26990
QPSK	1	Low	24	22.84	23.11	23.49
		Middle		22.64	22.84	23.14
		High		23.00	23.13	23.22
	50%	Low	23	21.72	22.02	22.28
		Middle		21.72	21.96	22.19
		High		21.75	21.98	22.10
	100%	/	23	21.76	22.01	22.18
16QAM	1	Low	23.5	22.11	22.52	22.79
		Middle		21.87	22.24	22.28
		High		22.27	22.53	22.51
	50%	Low	22.5	20.75	20.98	21.29
		Middle		20.76	21.00	21.11

		High		20.80	20.98	21.14
	100%	/	22	20.72	21.05	21.22
64QAM	1	Low	22	20.49	20.90	21.09
		Middle		20.31	20.59	21.76
		High		20.62	20.91	20.85
	50%	Low	21	19.33	19.57	19.88
		Middle		19.41	19.60	19.77
		High		19.40	19.58	19.76
	100%	/	21	19.31	19.52	19.76
Modulation	RB	RB Offset	Tune up	15MHz		
				26775	26865	26965
QPSK	1	Low	24	23.08	23.59	**23.77**
		Middle		22.99	23.15	23.46
		High		23.40	23.63	23.74
	50%	Low	23	22.12	22.59	**22.77**
		Middle		22.02	22.33	22.57
		High		21.88	22.15	22.37
	100%	/	23	22.06	22.34	**22.62**
16QAM	1	Low	23.5	22.31	22.87	23.07
		Middle		22.41	22.81	22.68
		High		22.71	23.02	22.86
	50%	Low	22.5	21.15	21.65	21.84
		Middle		21.06	21.37	21.59
		High		20.93	21.13	21.34
	100%	/	22	21.02	21.28	21.60
64QAM	1	Low	22	20.71	21.35	21.36
		Middle		20.52	21.44	21.11
		High		21.01	21.41	21.33
	50%	Low	21	19.66	20.34	20.38
		Middle		19.78	20.41	20.26
		High		19.99	20.14	20.29
	100%	/	21	19.55	19.83	20.15

LTE			LTE B38			
Modulation	RB	RB Offset	Tune up	5MHz		
				37775	38000	38225
QPSK	1	Low	23	22.08	22.17	22.38
		Middle		22.15	22.07	22.32
		High		21.95	22.16	22.22
	50%	Low	22	21.05	21.13	21.20
		Middle		20.99	21.14	21.20
		High		20.98	21.23	21.26
	100%	/	22	20.97	21.27	21.19
16QAM	1	Low	22	21.23	21.43	21.41
		Middle		21.24	21.46	21.43
		High		21.25	21.34	21.49
	5	Low	21	20.12	20.26	20.33
		Middle		20.18	20.18	20.38
		High		20.09	20.21	20.34
	100%	/	21	20.19	20.26	20.22
64QAM	1	Low	21	20.50	20.49	20.44
		Middle		20.46	20.50	20.36
		High		20.45	20.41	20.35
	5	Low	20	19.10	19.45	19.44
		Middle		19.00	19.51	19.59
		High		19.02	19.50	19.35
	100%	/	20	18.96	19.51	19.39
Modulation	RB	RB Offset	Tune up	10MHz		
				37800	38000	38200
QPSK	1	Low	23	22.28	22.36	22.53
		Middle		22.08	22.04	22.13
		High		22.19	22.44	22.37
	50%	Low	22	21.12	21.13	21.31
		Middle		21.16	21.22	21.23
		High		21.10	21.28	21.25
	100%	/	22	21.18	21.17	21.23
16QAM	1	Low	22	21.47	21.62	21.68
		Middle		21.29	21.26	21.28
		High		21.60	21.65	21.84
	50%	Low	21	20.09	20.17	20.34
		Middle		20.22	20.17	20.32
		High		20.21	20.45	20.38
	100%	/	21	20.24	20.24	20.36
64QAM	1	Low	21	20.58	20.49	20.44
		Middle		20.33	20.31	20.31

		High		20.62	20.61	20.66
	50%	Low	20	19.01	19.47	19.52
		Middle		19.03	19.55	19.67
		High		19.05	19.56	19.55
	100%	/	20	19.08	19.45	19.36
Modulation	RB	RB Offset	Tune up	15MHz		
				37825	38000	38175
QPSK	1	Low	23	22.27	22.27	22.49
		Middle		21.94	22.06	22.36
		High		22.35	22.63	22.76
	50%	Low	22	20.93	21.03	21.31
		Middle		21.09	21.24	21.30
		High		21.19	21.20	21.45
	100%	/	22	21.04	21.20	21.43
16QAM	1	Low	22	21.37	21.42	21.71
		Middle		21.22	21.25	21.30
		High		21.74	21.80	21.93
	50%	Low	21	19.96	20.05	20.28
		Middle		20.18	20.15	20.53
		High		20.32	20.22	20.33
	100%	/	21	20.10	20.32	20.50
64QAM	1	Low	21	20.58	20.21	20.28
		Middle		20.38	20.08	20.16
		High		20.90	20.61	20.56
	50%	Low	20	19.52	19.35	19.54
		Middle		19.78	19.56	19.55
		High		19.77	19.89	19.76
	100%	/	20	19.05	19.23	19.18
Modulation	RB	RB Offset	Tune up	20MHz		
				37850	38000	38150
QPSK	1	Low	23	22.11	22.13	22.40
		Middle		22.10	22.03	22.22
		High		22.60	22.42	**22.82**
	50%	Low	22	21.03	20.99	21.25
		Middle		21.09	21.09	21.34
		High		**21.38**	21.33	21.37
	100%	/	22	21.21	21.22	**21.31**
16QAM	1	Low	22	21.28	21.31	21.51
		Middle		21.32	21.25	21.56
		High		21.65	21.71	21.88
	50%	Low	21	20.17	20.07	20.33
		Middle		20.28	20.28	20.34

		High		20.32	20.42	20.46
	100%	/	21	20.31	20.21	20.37
64QAM	1	Low	21	20.21	20.15	20.22
		Middle		20.16	20.19	20.45
		High		20.66	20.35	20.41
	50%	Low	20	18.98	18.94	18.99
		Middle		19.25	18.89	19.04
		High		19.38	19.09	19.23
	100%	/	20	19.12	19.06	19.04

LTE			LTE B41			
Modulation	RB	RB Offset	Tune up	5MHz		
				39675	40620	41565
QPSK	1	Low	23	20.99	21.78	21.04
		Middle		20.98	21.70	21.19
		High		20.98	21.56	21.10
	50%	Low	22	20.02	20.85	20.31
		Middle		19.97	20.77	20.24
		High		19.99	20.71	20.22
	100%	/	22	19.92	20.68	20.21
16QAM	1	Low	22	20.16	20.98	20.27
		Middle		20.16	20.89	20.40
		High		20.19	20.74	20.27
	5	Low	21	19.20	19.75	19.33
		Middle		19.14	19.91	19.34
		High		19.12	19.67	19.26
	100%	/	21	19.08	19.74	19.27
64QAM	1	Low	22	21.02	20.90	20.40
		Middle		20.97	21.05	20.61
		High		20.99	20.74	20.32
	5	Low	21	19.59	20.19	20.23
		Middle		19.58	20.12	20.21
		High		19.55	20.11	20.18
	100%	/	21	19.47	20.14	20.18
Modulation	RB	RB Offset	Tune up	10MHz		
				39700	40620	41540
QPSK	1	Low	23	21.29	21.71	20.81
		Middle		21.13	21.73	21.19
		High		21.29	21.61	20.80
	50%	Low	22	20.04	20.72	20.44
		Middle		19.93	20.65	20.15
		High		20.03	20.69	20.19
	100%	/	22	19.93	20.70	20.35
16QAM	1	Low	22	20.40	21.13	20.03
		Middle		20.17	20.83	20.41
		High		20.49	20.91	19.99
	50%	Low	21	19.09	19.72	19.28
		Middle		19.13	19.70	19.21
		High		19.08	19.71	19.25
	100%	/	21	19.13	19.70	19.42
64QAM	1	Low	22	21.03	20.68	20.17
		Middle		20.84	20.88	20.50

		High		21.07	20.35	19.98
	50%	Low	21	19.51	20.17	20.09
		Middle		19.53	20.11	20.05
		High		19.57	20.08	20.01
	100%	/	21	19.60	20.06	20.07
Modulation	RB	RB Offset	Tune up	15MHz		
				39725	40620	41515
QPSK	1	Low	23	21.06	21.81	21.05
		Middle		21.50	21.99	21.13
		High		20.73	21.37	20.95
	50%	Low	22	20.46	21.15	20.87
		Middle		20.43	21.22	20.82
		High		20.27	20.76	20.45
	100%	/	22	20.44	20.96	20.60
16QAM	1	Low	22	20.17	21.13	20.31
		Middle		20.57	21.35	20.39
		High		20.03	20.67	20.13
	50%	Low	21	19.43	20.09	19.96
		Middle		19.30	20.05	19.74
		High		19.17	19.79	19.43
	100%	/	21	19.30	19.95	19.68
64QAM	1	Low	22	20.67	20.76	20.45
		Middle		21.11	20.81	20.45
		High		20.38	20.43	20.25
	50%	Low	21	19.66	19.74	20.46
		Middle		19.44	19.82	20.31
		High		19.46	19.47	20.25
	100%	/	21	19.68	19.91	20.16
Modulation	RB	RB Offset	Tune up	20MHz		
				39750	40620	41490
QPSK	1	Low	23	21.43	21.91	20.97
		Middle		21.47	**21.96**	21.08
		High		21.64	21.73	20.97
	50%	Low	22	20.44	21.07	20.82
		Middle		20.56	21.13	20.83
		High		20.57	**21.17**	20.84
	100%	/	22	20.55	**21.15**	20.97
16QAM	1	Low	22	20.66	21.41	20.27
		Middle		20.76	21.36	20.35
		High		20.87	21.06	20.23
	50%	Low	21	19.45	20.29	19.96
		Middle		19.67	20.10	19.94

		High		19.60	20.33	19.80
	100%	/	21	19.56	20.17	19.90
64QAM	1	Low	22	20.93	21.50	20.13
		Middle		20.94	21.30	20.10
		High		21.04	20.88	19.87
	50%	Low	21	19.86	20.17	20.25
		Middle		19.89	20.09	20.13
		High		20.01	20.30	20.12
	100%	/	21	19.85	20.20	20.15

LTE			LTE B66			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				131979	132322	132665
QPSK	1	Low	23	21.32	21.23	21.14
		Middle		21.42	21.27	21.13
		High		21.37	21.2	21.1
	50%	Low	23	21.42	21.32	21.22
		Middle		21.49	21.36	21.24
		High		21.47	21.37	21.21
	100%	/	22	20.38	20.3	20.14
16QAM	1	Low	22.5	21.24	21.14	21.04
		Middle		21.21	21.16	21.05
		High		21.21	21.06	20.98
	5	Low	21.5	20.9	20.79	20.64
		Middle		20.95	20.84	20.71
		High		20.91	20.82	20.71
	100%	/	21	19.99	19.79	19.67
64QAM	1	Low	21	19.84	19.73	19.50
		Middle		19.78	19.73	19.38
		High		19.72	19.71	19.48
	5	Low	21	18.74	19.61	19.63
		Middle		18.66	19.55	19.58
		High		18.63	19.56	19.63
	100%	/	20	18.71	18.44	18.58
Modulation	RB	RB Offset	Tune up	3MHz		
				131987	132322	132657
QPSK	1	Low	23	21.34	21.22	21.27
		Middle		21.43	21.38	21.01
		High		21.20	21.13	21.00
	50%	Low	22	21.47	21.35	21.36
		Middle		21.51	21.36	21.23
		High		21.53	21.37	21.28
	100%	/	22	20.55	20.37	20.12
16QAM	1	Low	22	21.63	20.63	20.64
		Middle		21.46	20.87	20.72
		High		21.14	20.57	21.17
	50%	Low	21.5	20.96	20.80	20.83
		Middle		20.86	20.88	20.72
		High		20.97	20.92	20.67
	100%	/	21	20.17	19.81	19.66
64QAM	1	Low	21	19.49	19.64	19.45
		Middle		19.57	19.77	19.45

		High		19.58	19.63	19.42
	50%	Low	21	18.47	18.65	18.27
		Middle		18.39	18.38	18.31
		High		18.55	18.58	18.33
	100%	/	20	18.31	18.47	18.61
Modulation	RB	RB Offset	Tune up	5MHz		
				131997	132322	132647
QPSK	1	Low	23	22.13	21.97	21.79
		Middle		21.97	21.84	21.63
		High		21.98	21.81	21.56
	50%	Low	22	21.05	20.86	20.74
		Middle		20.93	20.78	20.66
		High		20.93	20.71	20.59
	100%	/	22	20.95	20.81	20.64
16QAM	1	Low	22	21.5	21.31	21.05
		Middle		21.27	21.1	20.95
		High		21.31	21.15	20.93
	50%	Low	21.5	20.15	19.95	19.76
		Middle		20.02	19.9	19.71
		High		19.97	19.81	19.65
	100%	/	21	19.97	19.87	19.67
64QAM	1	Low	21	19.84	19.59	19.52
		Middle		19.78	19.50	19.50
		High		19.72	19.41	19.41
	50%	Low	21	18.74	18.46	18.50
		Middle		18.77	18.44	18.45
		High		18.63	18.31	18.37
	100%	/	20	18.71	18.48	18.49
Modulation	RB	RB Offset	Tune up	10MHz		
				132022	132322	132622
QPSK	1	Low	23	20.97	21.12	21.000
		Middle		21.60	21.62	21.46
		High		22.10	22.13	22.11
	50%	Low	22	20.56	20.74	20.58
		Middle		20.71	20.75	20.60
		High		20.71	20.84	20.69
	100%	/	22	20.7	20.75	20.60
16QAM	1	Low	22	20.39	20.49	20.22
		Middle		20.94	20.98	20.74
		High		21.32	21.34	21.12
	50%	Low	21.5	19.67	19.70	19.46
		Middle		19.88	19.73	19.49

		High		19.87	19.77	19.52
	100%	/	21	19.85	19.7	19.46
64QAM	1	Low	21	19.24	19.24	18.86
		Middle		19.79	19.28	19.44
		High		20.24	20.14	19.95
	50%	Low	21	18.67	18.51	18.37
		Middle		18.86	18.52	18.45
		High		18.68	18.57	18.61
	100%	/	20	18.76	18.52	18.35
Modulation	RB	RB Offset	Tune up	15MHz		
				132047	132322	132597
QPSK	1	Low	23	22.24	22.09	21.95
		Middle		21.91	21.61	21.6
		High		22.03	21.81	21.71
	50%	Low	22	21.03	20.81	20.76
		Middle		20.98	20.72	20.69
		High		20.89	20.64	20.61
	100%	/	22	21.01	20.73	20.72
16QAM	1	Low	22	21.21	21.08	20.96
		Middle		20.87	20.7	20.77
		High		20.94	20.78	20.69
	50%	Low	21.5	19.67	19.42	19.49
		Middle		19.63	19.4	19.42
		High		19.57	19.33	19.33
	100%	/	21	19.61	19.37	19.41
64QAM	1	Low	21	20.11	19.93	19.82
		Middle		19.67	19.66	19.46
		High		19.83	19.76	19.61
	50%	Low	21	20.07	19.97	19.79
		Middle		19.74	19.88	19.66
		High		19.74	19.76	19.57
	100%	/	20	18.54	18.36	18.35
Modulation	RB	RB Offset	Tune up	20MHz		
				132072	132322	132572
QPSK	1	Low	23	21.42	21.20	21.24
		Middle		21.40	21.27	21.21
		High		21.60	21.57	**21.74**
	50%	Low	22	20.47	20.28	20.26
		Middle		20.44	20.28	20.24
		High		20.39	20.27	**20.49**
	100%	/	22	**20.45**	20.26	20.29
16QAM	1	Low	22	20.79	20.55	20.53

		Middle		20.65	20.54	20.56
		High		20.97	20.88	20.81
	50%	Low	21.5	19.45	19.22	19.24
		Middle		19.43	19.28	19.25
		High		19.46	19.27	19.23
	100%	/	21	19.41	19.29	19.25
64QAM	1	Low	21	19.92	19.43	19.59
		Middle		19.87	19.45	19.65
		High		20.18	19.83	19.96
	50%	Low	21	18.55	18.37	18.31
		Middle		18.65	18.33	18.38
		High		18.66	18.38	18.30
	100%	/	20	18.51	18.34	18.36

LTE			LTE B71			
Modulation	RB	RB Offset	Tune up	5MHz		
				133147	133297	133447
QPSK	1	Low	23	21.99	21.94	21.96
		Middle		21.81	21.90	21.94
		High		21.78	21.86	21.93
	50%	Low	22.5	21.32	20.87	20.82
		Middle		21.31	20.92	20.79
		High		21.29	20.97	20.76
	100%	/	22	21.26	20.94	20.89
16QAM	1	Low	22.5	21.28	20.95	21.07
		Middle		21.30	20.91	21.05
		High		21.34	20.87	21.04
	5	Low	21.5	20.31	19.88	19.93
		Middle		20.30	19.93	19.90
		High		20.28	19.98	19.87
	100%	/	21	20.25	19.95	20.00
64QAM	1	Low	21	20.27	19.96	20.18
		Middle		20.29	19.92	20.16
		High		20.33	19.88	20.15
	5	Low	20	19.30	18.89	19.04
		Middle		19.29	18.94	19.01
		High		19.27	18.99	18.98
	100%	/	20	19.24	18.96	19.11
Modulation	RB	RB Offset	Tune up	10MHz		
				133172	133297	133422
QPSK	1	Low	23	21.43	21.49	20.98
		Middle		22.18	22.22	21.83
		High		22.59	22.64	22.20
	50%	Low	22.5	21.05	20.81	20.67
		Middle		21.18	20.90	20.79
		High		21.31	20.99	20.90
	100%	/	22	21.09	20.89	20.75
16QAM	1	Low	22.5	20.42	20.50	20.09
		Middle		21.17	21.23	20.94
		High		21.58	21.65	21.31
	50%	Low	21.5	20.04	19.82	19.78
		Middle		20.17	19.91	19.90
		High		20.30	20.00	20.01
	100%	/	21	20.08	19.90	19.86
64QAM	1	Low	21	19.41	19.51	19.20
		Middle		20.16	20.24	20.05

		High		20.57	20.66	20.42
	50%	Low	20	19.03	18.83	18.89
		Middle		19.16	18.92	19.01
		High		19.29	19.01	19.12
	100%	/	20	19.07	18.91	18.97
Modulation	RB	RB Offset	Tune up	15MHz		
				133197	133297	133397
QPSK	1	Low	23	21.82	21.77	21.56
		Middle		22.04	22.08	21.75
		High		21.97	21.79	21.67
	50%	Low	22.5	21.81	21.77	21.49
		Middle		21.86	21.77	21.60
		High		21.90	21.76	21.71
	100%	/	22	20.81	20.65	20.45
16QAM	1	Low	22.5	20.81	20.78	20.67
		Middle		21.03	21.09	20.86
		High		20.96	20.80	20.78
	50%	Low	21.5	20.80	20.78	20.60
		Middle		20.85	20.78	20.71
		High		20.89	20.77	20.82
	100%	/	21	19.80	19.66	19.56
64QAM	1	Low	21	19.80	19.79	19.78
		Middle		20.02	20.10	19.97
		High		19.95	19.81	19.89
	50%	Low	20	19.79	19.79	19.71
		Middle		19.84	19.79	19.82
		High		19.88	19.78	19.93
	100%	/	20	18.79	18.67	18.67
Modulation	RB	RB Offset	Tune up	20MHz		
				133222	133322	133372
QPSK	1	Low	23	21.58	21.56	21.43
		Middle		22.43	22.55	**22.57**
		High		22.47	22.45	22.49
	50%	Low	22.5	20.70	21.15	21.13
		Middle		21.51	21.50	**21.56**
		High		20.98	21.44	21.45
	100%	/	22	20.81	**20.83**	20.75
16QAM	1	Low	22.5	21.17	21.15	21.20
		Middle		22.13	22.24	22.12
		High		22.10	22.14	22.15
	50%	Low	21.5	20.12	20.28	20.18
		Middle		20.56	20.55	20.47

		High		20.45	20.46	20.44
	100%	/	21	20.32	20.38	20.27
64QAM	1	Low	21	19.24	19.20	19.17
		Middle		20.30	20.29	20.15
		High		20.12	20.05	20.15
	50%	Low	20	18.50	18.57	18.53
		Middle		18.60	18.67	18.65
		High		18.70	18.77	18.76
	100%	/	20	18.62	18.64	18.58

Table 13.12: The conducted Reduce Power for LTE Band 2/4/7/25/38/41/66

LTE			LTE B2			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				18607	18900	19193
QPSK	1	Low	20.5	19.13	19.48	19.52
		Middle		19.18	19.46	19.53
		High		19.12	19.40	19.55
	50%	Low	20.5	19.16	19.39	19.44
		Middle		19.19	19.44	19.54
		High		19.14	19.38	19.55
	100%	/	20.5	19.14	19.41	19.44
16QAM	1	Low	20.5	19.45	19.78	19.75
		Middle		19.42	19.84	20.00
		High		19.30	19.71	19.66
	5	Low	20.5	19.20	19.47	19.58
		Middle		19.12	19.54	19.65
		High		19.04	19.53	19.59
	100%	/	20.5	19.16	19.46	19.59
64QAM	1	Low	20.5	18.80	18.73	18.48
		Middle		18.91	18.77	18.55
		High		18.79	18.68	18.38
	5	Low	20.5	18.68	18.58	18.45
		Middle		18.67	18.58	18.55
		High		18.66	18.57	18.64
	100%	/	20.5	18.46	18.38	18.39
Modulation	RB	RB Offset	Tune up	3MHz		
				18615	18900	19185
QPSK	1	Low	20.5	19.22	19.47	19.47
		Middle		19.19	19.45	19.83
		High		19.13	19.47	19.52
	50%	Low	20.5	19.25	19.44	19.56
		Middle		19.19	19.46	19.55
		High		19.15	19.39	19.57
	100%	/	20.5	19.15	19.44	19.59
16QAM	1	Low	20.5	19.41	19.83	19.93
		Middle		19.34	19.74	19.71
		High		19.24	19.71	19.88
	50%	Low	20.5	19.30	19.57	19.75
		Middle		19.22	19.52	19.74
		High		19.22	19.46	19.66
	100%	/	20.5	19.20	19.58	19.62
64QAM	1	Low	20.5	18.58	18.63	19.12

		Middle		18.62	18.59	19.13
		High		18.53	18.55	19.13
	50%	Low	20.5	18.40	18.56	19.08
		Middle		18.39	18.54	19.05
		High		18.37	18.52	19.02
	100%	/	20.5	18.64	18.41	18.91
Modulation	RB	RB Offset	Tune up	5MHz		
				18625	18900	19175
QPSK	1	Low	20.5	19.28	19.61	19.60
		Middle		19.16	19.43	19.52
		High		19.27	19.52	19.44
	50%	Low	20.5	19.34	19.56	19.65
		Middle		19.22	19.48	19.58
		High		19.17	19.54	19.66
	100%	/	20.5	19.25	19.51	19.65
16QAM	1	Low	20.5	19.67	19.96	20.09
		Middle		19.49	19.66	19.83
		High		19.65	19.73	19.77
	50%	Low	20.5	19.30	19.57	19.68
		Middle		19.17	19.49	19.61
		High		19.12	19.53	19.60
	100%	/	20.5	19.21	19.53	19.49
64QAM	1	Low	20.5	18.81	18.52	19.15
		Middle		18.73	18.41	19.06
		High		18.76	18.34	19.00
	50%	Low	20.5	18.59	18.46	19.02
		Middle		18.56	18.45	18.96
		High		18.52	18.43	18.90
	100%	/	20.5	18.59	18.51	18.98
Modulation	RB	RB Offset	Tune up	10MHz		
				18650	18900	19150
QPSK	1	Low	20.5	19.37	19.63	19.76
		Middle		19.29	19.49	19.68
		High		19.24	19.51	19.49
	50%	Low	20.5	19.23	19.51	19.61
		Middle		19.28	19.46	19.63
		High		19.23	19.46	19.54
	100%	/	20.5	19.25	19.48	19.61
16QAM	1	Low	20.5	19.66	19.75	20.40
		Middle		19.59	19.80	20.05
		High		19.59	19.83	20.06
	50%	Low	20.5	19.18	19.51	19.57

		Middle		19.29	19.45	19.64
		High		19.33	19.45	19.55
	100%	/	20.5	19.32	19.37	19.63
64QAM	1	Low	20.5	18.65	18.84	19.15
		Middle		18.66	18.71	19.10
		High		18.70	18.74	19.10
	50%	Low	20.5	18.51	18.52	18.94
		Middle		18.59	18.50	18.97
		High		18.66	18.47	18.99
	100%	/	20.5	18.53	18.44	18.99
Modulation	RB	RB Offset	Tune up	15MHz		
				18675	18900	19125
QPSK	1	Low	20.5	19.35	19.67	19.76
		Middle		19.24	19.42	19.60
		High		19.36	19.40	19.51
	50%	Low	20.5	19.30	19.40	19.41
		Middle		19.31	19.43	19.56
		High		19.20	19.36	19.42
	100%	/	20.5	19.25	19.40	19.48
16QAM	1	Low	20.5	19.58	20.10	20.19
		Middle		19.51	19.74	20.02
		High		19.81	19.80	19.87
	50%	Low	20.5	19.27	19.39	19.40
		Middle		19.29	19.51	19.49
		High		19.28	19.44	19.56
	100%	/	20.5	19.26	19.48	19.47
64QAM	1	Low	20.5	18.42	18.79	19.32
		Middle		18.30	18.59	19.02
		High		18.58	18.80	19.17
	50%	Low	20.5	18.41	18.80	19.22
		Middle		18.51	18.83	19.19
		High		18.60	18.86	19.15
	100%	/	20.5	18.31	18.40	18.84
Modulation	RB	RB Offset	Tune up	20MHz		
				18700	18900	19100
QPSK	1	Low	20.5	19.22	19.58	19.38
		Middle		19.06	19.36	**19.59**
		High		18.92	19.22	19.26
	50%	Low	20.5	19.18	19.48	**19.60**
		Middle		19.18	19.46	19.51
		High		19.09	19.39	19.52
	100%	/	20.5	19.11	19.42	**19.52**

16QAM	1	Low	20.5	19.57	19.89	20.07
		Middle		19.37	19.73	20.19
		High		19.22	19.69	19.70
	50%	Low	20.5	19.10	19.48	19.65
		Middle		19.15	19.48	19.47
		High		19.14	19.40	19.56
	100%	/	20.5	19.21	19.33	19.51
64QAM	1	Low	20.5	18.50	18.70	19.28
		Middle		18.49	18.60	19.47
		High		18.38	18.47	18.98
	50%	Low	20.5	18.29	18.48	18.15
		Middle		18.27	18.35	18.22
		High		18.25	18.39	18.28
	100%	/	20.5	18.15	18.40	18.19

LTE			LTE B4			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				19957	20175	20393
QPSK	1	Low	20	19.17	19.09	19.04
		Middle		19.26	19.10	19.10
		High		18.84	19.28	19.07
	50%	Low	20	18.96	19.27	19.14
		Middle		19.23	19.27	19.10
		High		19.05	19.18	19.08
	100%	/	20	19.21	19.18	19.09
16QAM	1	Low	20	19.20	19.41	19.26
		Middle		19.25	19.46	19.49
		High		19.04	19.39	19.33
	5	Low	20	19.25	19.21	19.21
		Middle		19.33	19.21	19.23
		High		19.07	19.11	19.14
	100%	/	20	19.12	19.17	19.10
64QAM	1	Low	20	18.57	18.71	18.80
		Middle		18.62	18.65	18.80
		High		18.54	18.95	18.66
	5	Low	20	18.58	18.92	18.92
		Middle		18.57	18.95	18.92
		High		18.56	18.81	18.91
	100%	/	20	18.22	18.25	18.40
Modulation	RB	RB Offset	Tune up	3MHz		
				19965	20175	20385
QPSK	1	Low	20	19.08	19.47	19.19
		Middle		18.91	19.34	19.29
		High		18.85	19.35	19.10
	50%	Low	20	19.09	19.38	19.17
		Middle		19.10	19.32	19.18
		High		19.00	19.32	19.07
	100%	/	20	18.99	19.28	19.16
16QAM	1	Low	20	19.58	19.62	19.43
		Middle		19.65	19.55	19.44
		High		19.44	19.65	19.27
	50%	Low	20	19.36	19.43	19.27
		Middle		19.19	19.45	19.21
		High		19.10	19.42	19.18
	100%	/	20	19.07	19.38	19.11
64QAM	1	Low	20	18.76	19.20	18.92
		Middle		18.70	19.16	18.84

		High		18.64	18.97	18.75
	50%	Low	20	18.22	18.49	18.12
		Middle		18.12	18.48	18.10
		High		18.02	18.46	18.08
	100%	/	20	18.30	18.35	18.37
Modulation	RB	RB Offset	Tune up	5MHz		
				19975	20175	20375
QPSK	1	Low	20	19.14	19.46	19.38
		Middle		19.01	19.21	19.14
		High		19.01	19.44	19.12
	50%	Low	20	19.16	19.50	19.26
		Middle		19.09	19.33	19.22
		High		19.12	19.28	19.11
	100%	/	20	19.17	19.36	19.19
16QAM	1	Low	20	19.72	19.73	19.70
		Middle		19.47	19.54	19.42
		High		19.66	19.63	19.40
	50%	Low	20	19.19	19.48	19.29
		Middle		19.23	19.26	19.20
		High		19.18	19.26	19.14
	100%	/	20	19.16	19.27	19.16
64QAM	1	Low	20	18.86	19.17	19.06
		Middle		18.94	18.92	18.97
		High		18.83	18.96	18.90
	50%	Low	20	18.24	18.41	18.39
		Middle		18.23	18.35	18.32
		High		18.21	18.28	18.24
	100%	/	20	18.32	18.37	18.35
Modulation	RB	RB Offset	Tune up	10MHz		
				20000	20175	20350
QPSK	1	Low	20	19.50	19.54	19.41
		Middle		19.03	19.36	19.09
		High		19.35	19.62	19.43
	50%	Low	20	19.35	19.47	19.34
		Middle		19.28	19.44	19.20
		High		19.21	19.32	19.21
	100%	/	20	19.25	19.38	19.30
16QAM	1	Low	20	19.82	19.77	19.93
		Middle		19.64	19.62	19.44
		High		19.72	19.81	19.71
	50%	Low	20	19.20	19.31	19.33
		Middle		19.25	19.34	19.31

		High		19.23	19.26	19.23
	100%	/	20	19.27	19.32	19.34
64QAM	1	Low	20	19.00	19.25	19.11
		Middle		18.88	19.07	18.82
		High		19.09	19.31	19.05
	50%	Low	20	18.29	18.52	18.40
		Middle		18.35	18.45	18.42
		High		18.41	18.38	18.43
	100%	/	20	18.34	18.44	18.41
Modulation	RB	RB Offset	Tune up	15MHz		
				20025	20175	20325
QPSK	1	Low	20	19.32	19.48	19.35
		Middle		19.16	19.18	18.94
		High		19.49	19.52	19.31
	50%	Low	20	19.24	19.24	19.10
		Middle		19.27	19.10	19.00
		High		19.21	19.21	19.03
	100%	/	20	19.27	19.20	19.11
16QAM	1	Low	20	19.86	19.82	19.59
		Middle		19.58	19.63	19.30
		High		19.65	19.98	19.56
	50%	Low	20	19.27	19.22	19.13
		Middle		19.23	19.14	18.97
		High		19.20	19.19	18.99
	100%	/	20	19.29	19.15	19.05
64QAM	1	Low	20	19.26	19.32	19.10
		Middle		19.04	18.99	18.85
		High		19.09	19.31	18.99
	50%	Low	20	18.71	18.79	18.65
		Middle		18.66	18.84	18.56
		High		18.60	18.88	18.46
	100%	/	20	18.30	18.36	18.18
Modulation	RB	RB Offset	Tune up	20MHz		
				20050	20175	20300
QPSK	1	Low	20	19.37	19.21	19.33
		Middle		19.19	19.13	19.13
		High		19.36	**19.47**	19.20
	50%	Low	20	**19.35**	19.32	19.24
		Middle		19.27	19.19	19.27
		High		19.27	19.21	19.11
	100%	/	20	**19.31**	**19.31**	19.24
16QAM	1	Low	20	19.98	19.34	19.55

		Middle		19.59	19.34	19.50
		High		19.74	19.54	19.46
	50%	Low	20	19.23	19.27	19.13
		Middle		19.29	19.16	19.22
		High		19.30	19.23	19.15
	100%	/	20	19.34	19.27	19.21
64QAM	1	Low	20	19.16	19.06	19.22
		Middle		19.15	18.94	19.07
		High		19.29	19.16	19.22
	50%	Low	20	18.40	18.44	18.27
		Middle		18.42	18.41	18.29
		High		18.43	18.38	18.30
	100%	/	20	18.38	18.38	18.31

LTE			LTE B7			
Modulation	RB	RB Offset	Tune up	5MHz		
				20775	21100	21425
QPSK	1	Low	14.5	13.30	13.61	13.65
		Middle		13.21	13.50	13.54
		High		13.30	13.56	13.61
	50%	Low	14.5	13.33	13.53	13.64
		Middle		13.27	13.60	13.54
		High		13.35	13.55	13.53
	100%	/	14.5	13.33	13.59	13.49
16QAM	1	Low	14.5	13.32	13.44	13.49
		Middle		13.23	13.36	13.48
		High		13.23	13.49	13.48
	5	Low	14.5	13.40	13.58	13.67
		Middle		13.35	13.65	13.62
		High		13.40	13.58	13.56
	100%	/	14.5	13.37	13.58	13.53
64QAM	1	Low	14.5	13.08	13.16	13.65
		Middle		13.08	13.13	13.67
		High		12.96	13.10	13.59
	5	Low	14.5	13.09	13.12	13.51
		Middle		13.06	13.10	13.46
		High		12.93	13.10	13.43
	100%	/	14.5	13.03	13.20	13.32
Modulation	RB	RB Offset	Tune up	10MHz		
				20800	21100	21400
QPSK	1	Low	14.5	13.53	13.76	13.80
		Middle		13.28	13.58	13.54
		High		13.56	13.74	13.74
	50%	Low	14.5	13.45	13.49	13.59
		Middle		13.39	13.51	13.58
		High		13.37	13.55	13.51
	100%	/	14.5	13.37	13.42	13.67
16QAM	1	Low	14.5	13.35	13.63	13.64
		Middle		13.27	13.39	13.48
		High		13.43	13.69	13.67
	50%	Low	14.5	13.39	13.48	13.60
		Middle		13.37	13.55	13.56
		High		13.28	13.62	13.41
	100%	/	14.5	13.40	13.50	13.69
64QAM	1	Low	14.5	13.31	13.50	13.65
		Middle		13.18	13.39	13.45

		High		13.31	13.50	13.60
	50%	Low	14.5	13.25	13.12	13.53
		Middle		13.21	13.11	13.52
		High		13.07	13.12	13.53
	100%	/	14.5	13.06	13.15	13.28
Modulation	RB	RB Offset	Tune up	15MHz		
				20825	21100	21375
QPSK	1	Low	14.5	13.31	13.29	13.51
		Middle		13.15	13.33	13.57
		High		13.55	13.53	13.62
	50%	Low	14.5	13.27	13.38	13.54
		Middle		13.46	13.47	13.65
		High		13.53	13.55	13.70
	100%	/	14.5	13.40	13.40	13.55
16QAM	1	Low	14.5	13.27	13.42	13.67
		Middle		13.14	13.49	13.64
		High		13.30	13.60	13.65
	50%	Low	14.5	13.32	13.33	13.57
		Middle		13.40	13.47	13.57
		High		13.53	13.45	13.67
	100%	/	14.5	13.40	13.39	13.65
64QAM	1	Low	14.5	13.05	13.35	13.46
		Middle		13.23	13.43	13.45
		High		13.12	13.47	13.45
	50%	Low	14.5	13.13	13.36	13.47
		Middle		13.17	13.39	13.45
		High		13.12	13.45	13.45
	100%	/	14.5	13.04	13.31	13.39
Modulation	RB	RB Offset	Tune up	20MHz		
				20850	21100	21350
QPSK	1	Low	14.5	13.29	13.55	13.79
		Middle		13.47	13.75	**13.83**
		High		13.69	13.78	13.80
	50%	Low	14.5	13.42	13.58	13.70
		Middle		13.57	13.54	13.79
		High		13.69	13.71	**13.81**
	100%	/	14.5	13.44	13.60	**13.75**
16QAM	1	Low	14.5	13.38	13.59	13.51
		Middle		13.53	13.68	13.68
		High		13.67	13.64	13.65
	50%	Low	14.5	13.41	13.57	13.71
		Middle		13.51	13.53	13.78

		High		13.65	13.70	13.77
	100%	/	14.5	13.46	13.66	13.77
64QAM	1	Low	14.5	13.31	13.35	13.66
		Middle		13.37	13.39	13.70
		High		13.46	13.44	13.66
	50%	Low	14.5	13.12	13.26	13.42
		Middle		13.17	13.27	13.39
		High		13.12	13.30	13.38
	100%	/	14.5	13.04	13.19	13.43

LTE			LTE B25			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				26047	26365	26683
QPSK	1	Low	20.5	18.95	19.13	19.52
		Middle		18.92	19.13	19.62
		High		18.88	19.06	19.49
	50%	Low	20.5	18.90	19.11	19.42
		Middle		18.97	19.13	19.57
		High		18.91	19.05	19.51
	100%	/	20.5	18.95	19.07	19.59
16QAM	1	Low	20.5	19.34	19.20	19.56
		Middle		19.21	19.15	19.94
		High		19.18	19.10	19.69
	5	Low	20.5	19.03	19.25	19.52
		Middle		18.91	19.29	19.69
		High		18.86	19.20	19.58
	100%	/	20.5	19.09	19.21	19.58
64QAM	1	Low	20.5	19.34	19.36	19.34
		Middle		19.31	19.41	19.34
		High		19.21	19.29	19.34
	5	Low	20.5	19.38	19.24	19.40
		Middle		19.37	19.23	19.40
		High		19.36	19.22	19.40
	100%	/	20.5	18.41	18.01	18.40
Modulation	RB	RB Offset	Tune up	3MHz		
				26055	26365	26675
QPSK	1	Low	20.5	18.96	19.12	19.28
		Middle		18.94	19.20	19.65
		High		18.98	19.03	19.50
	50%	Low	20.5	19.00	19.23	19.59
		Middle		19.00	19.13	19.52
		High		18.92	19.19	19.42
	100%	/	20.5	19.01	19.18	19.54
16QAM	1	Low	20.5	19.44	19.50	19.87
		Middle		19.42	19.67	19.97
		High		19.25	19.56	19.95
	50%	Low	20.5	19.02	19.24	19.61
		Middle		19.10	19.27	19.54
		High		19.08	19.27	19.44
	100%	/	20.5	18.96	19.24	19.53
64QAM	1	Low	20.5	19.32	19.27	19.35
		Middle		19.25	19.31	19.35

		High		19.35	19.27	19.35
	50%	Low	20.5	18.15	18.23	19.35
		Middle		18.13	18.25	18.35
		High		18.11	18.26	18.35
	100%	/	20.5	18.36	18.06	18.45
Modulation	RB	RB Offset	Tune up	5MHz		
				26065	26365	26665
QPSK	1	Low	20.5	19.04	19.22	19.63
		Middle		18.93	19.07	19.50
		High		18.95	19.06	19.59
	50%	Low	20.5	18.99	19.24	19.65
		Middle		18.98	19.20	19.58
		High		18.97	19.17	19.48
	100%	/	20.5	19.01	19.16	19.51
16QAM	1	Low	20.5	19.26	19.64	19.96
		Middle		19.23	19.41	19.79
		High		19.18	19.54	19.80
	50%	Low	20.5	19.01	19.18	19.63
		Middle		19.08	19.18	19.53
		High		19.01	19.18	19.49
	100%	/	20.5	19.02	19.25	19.54
64QAM	1	Low	20.5	19.45	19.14	18.45
		Middle		19.40	19.07	19.44
		High		19.31	19.05	18.45
	50%	Low	20.5	18.18	18.01	19.44
		Middle		18.17	18.02	19.44
		High		18.15	18.03	19.44
	100%	/	20.5	18.27	18.12	18.41
Modulation	RB	RB Offset	Tune up	10MHz		
				26090	26365	26640
QPSK	1	Low	20.5	19.12	19.37	19.77
		Middle		18.97	19.12	19.48
		High		19.30	19.33	19.72
	50%	Low	20.5	19.12	19.21	19.49
		Middle		19.04	19.20	19.61
		High		19.14	19.19	19.58
	100%	/	20.5	19.01	19.15	19.64
16QAM	1	Low	20.5	19.57	19.63	19.88
		Middle		19.39	19.41	19.74
		High		19.57	19.67	20.00
	50%	Low	20.5	19.03	19.26	19.47
		Middle		18.99	19.19	19.59

		High		19.14	19.24	19.74
	100%	/	20.5	18.96	19.15	19.55
64QAM	1	Low	20.5	19.33	19.35	19.43
		Middle		19.15	19.28	19.42
		High		19.43	19.65	19.43
	50%	Low	20.5	18.32	18.12	18.43
		Middle		18.36	18.15	18.46
		High		18.4	18.18	18.48
	100%	/	20.5	18.22	18.07	18.42
Modulation	RB	RB Offset	Tune up	15MHz		
				26115	26365	26615
QPSK	1	Low	20.5	19.21	19.39	19.86
		Middle		19.10	19.22	19.73
		High		19.14	19.24	19.55
	50%	Low	20.5	19.20	19.32	19.79
		Middle		19.20	19.34	19.82
		High		19.21	19.35	19.88
	100%	/	20.5	19.20	19.44	19.92
16QAM	1	Low	20.5	19.44	19.69	20.29
		Middle		19.38	19.47	20.06
		High		19.48	19.57	20.14
	50%	Low	20.5	19.17	19.27	19.85
		Middle		19.19	19.29	19.82
		High		19.17	19.42	19.98
	100%	/	20.5	19.25	19.45	19.93
64QAM	1	Low	20.5	19.26	19.31	19.99
		Middle		19.24	19.36	19.99
		High		19.28	19.67	19.56
	50%	Low	20.5	19.31	19.36	19.99
		Middle		19.28	19.52	19.99
		High		19.26	19.68	19.99
	100%	/	20.5	18.29	18.31	18.79
Modulation	RB	RB Offset	Tune up	20MHz		
				26140	26365	26590
QPSK	1	Low	20.5	19.22	19.45	**19.76**
		Middle		19.01	19.34	19.63
		High		18.85	19.18	19.37
	50%	Low	20.5	19.16	19.32	**19.77**
		Middle		19.17	19.32	19.73
		High		19.17	19.30	19.71
	100%	/	20.5	19.20	19.32	**19.73**
16QAM	1	Low	20.5	19.45	19.98	20.23

		Middle		19.34	19.73	20.03
		High		19.39	19.67	19.68
	50%	Low	20.5	19.10	19.37	19.82
		Middle		19.10	19.32	19.83
		High		19.07	19.36	19.75
	100%	/	20.5	19.11	19.33	19.96
64QAM	1	Low	20.5	19.51	19.35	20.21
		Middle		19.51	19.35	19.94
		High		19.07	19.35	19.52
	50%	Low	20.5	18.19	18.13	18.75
		Middle		18.11	18.13	18.70
		High		18.04	18.13	18.64
	100%	/	20.5	18.08	18.13	18.71

LTE			LTE B38			
Modulation	RB	RB Offset	Tune up	5MHz		
				37775	38000	38225
QPSK	1	Low	16.5	15.40	15.36	15.41
		Middle		15.36	15.31	15.45
		High		15.42	15.38	15.36
	50%	Low	16.5	15.26	15.32	15.36
		Middle		15.33	15.21	15.28
		High		15.40	15.35	15.42
	100%	/	16.5	15.44	15.40	15.42
16QAM	1	Low	16.5	15.42	15.63	15.61
		Middle		15.39	15.37	15.57
		High		15.44	15.57	15.62
	5	Low	16.5	15.27	15.20	15.41
		Middle		15.38	15.20	15.35
		High		15.46	15.36	15.38
	100%	/	16.5	15.49	15.42	15.35
64QAM	1	Low	16.5	15.44	15.05	15.5
		Middle		15.28	15.05	15.5
		High		15.36	15.26	15.5
	5	Low	16.5	15.44	15.11	14.79
		Middle		14.97	15.11	14.72
		High		14.34	15.08	14.69
	100%	/	16.5	14.39	15.07	14.65
Modulation	RB	RB Offset	Tune up	10MHz		
				37800	38000	38200
QPSK	1	Low	16.5	15.72	15.60	15.71
		Middle		15.49	15.34	15.31
		High		15.90	15.72	15.86
	50%	Low	16.5	15.43	15.30	15.31
		Middle		15.43	15.21	15.31
		High		15.49	15.37	15.36
	100%	/	16.5	15.46	15.32	15.45
16QAM	1	Low	16.5	15.78	15.66	15.86
		Middle		15.63	15.52	15.63
		High		15.92	15.92	15.89
	50%	Low	16.5	15.32	15.37	15.37
		Middle		15.40	15.35	15.46
		High		15.54	15.43	15.46
	100%	/	16.5	15.45	15.37	15.46
64QAM	1	Low	16.5	15.40	15.18	15.66
		Middle		15.80	15.18	15.66

		High		15.40	15.18	15.66
	50%	Low	16.5	15.80	15.18	15.66
		Middle		15.20	15.18	15.66
		High		15.60	15.18	15.66
	100%	/	16.5	15.60	15.18	15.66
Modulation	RB	RB Offset	Tune up	15MHz		
				37825	38000	38175
QPSK	1	Low	16.5	15.52	15.39	15.60
		Middle		15.27	15.06	15.24
		High		15.82	15.73	15.83
	50%	Low	16.5	15.15	15.22	15.33
		Middle		15.26	15.10	15.25
		High		15.48	15.32	15.25
	100%	/	16.5	15.32	15.29	15.34
16QAM	1	Low	16.5	15.77	15.59	15.85
		Middle		15.51	15.39	15.43
		High		15.91	15.92	15.90
	50%	Low	16.5	15.14	15.14	15.32
		Middle		15.20	15.07	15.30
		High		15.48	15.29	15.37
	100%	/	16.5	15.37	15.35	15.40
64QAM	1	Low	16.5	14.48	15.13	14.65
		Middle		15.72	15.10	14.65
		High		14.39	15.10	14.65
	50%	Low	16.5	15.88	15.13	14.70
		Middle		15.28	15.13	14.65
		High		14.52	15.10	14.65
	100%	/	16.5	14.59	15.09	14.65
Modulation	RB	RB Offset	Tune up	20MHz		
				37850	38000	38150
QPSK	1	Low	16.5	15.47	15.24	15.54
		Middle		15.19	15.18	15.23
		High		**15.97**	15.77	15.96
	50%	Low	16.5	15.32	15.20	15.36
		Middle		15.30	15.16	15.32
		High		**15.51**	15.39	15.47
	100%	/	16.5	15.39	15.41	**15.43**
16QAM	1	Low	16.5	15.71	15.45	15.57
		Middle		15.59	15.53	15.51
		High		15.92	15.92	15.91
	50%	Low	16.5	15.24	15.27	15.29
		Middle		15.35	15.15	15.36

		High		15.60	15.50	15.46
	100%	/	16.5	15.47	15.34	15.43
64QAM	1	Low	16.5	14.73	15.42	15.20
		Middle		15.79	15.43	15.85
		High		14.64	15.59	15.20
	50%	Low	16.5	15.95	15.34	15.15
		Middle		15.58	15.26	15.10
		High		15.05	15.43	15.10
	100%	/	16.5	14.83	15.13	14.93

LTE			LTE B41			
Modulation	RB	RB Offset	Tune up	5MHz		
				39675	40620	41565
QPSK	1	Low	16.5	14.92	15.47	14.90
		Middle		14.87	15.41	15.06
		High		14.98	15.41	14.98
	50%	Low	16.5	14.95	15.31	14.89
		Middle		14.83	15.42	14.85
		High		14.96	15.39	14.85
	100%	/	16.5	14.95	15.42	14.84
16QAM	1	Low	16.5	15.17	15.70	15.20
		Middle		14.94	15.47	15.06
		High		15.18	15.65	15.05
	5	Low	16.5	14.81	15.44	15.06
		Middle		14.89	15.29	14.84
		High		15.02	15.45	14.90
	100%	/	16.5	14.93	15.49	14.91
64QAM	1	Low	16.5	15.39	15.27	15.61
		Middle		15.37	15.40	15.55
		High		15.31	15.32	15.56
	5	Low	16.5	14.83	15.46	15.46
		Middle		14.81	15.44	15.47
		High		14.80	15.44	15.43
	100%	/	16.5	14.74	15.40	15.45
Modulation	RB	RB Offset	Tune up	10MHz		
				39700	40620	41540
QPSK	1	Low	16.5	15.12	15.66	15.27
		Middle		15.03	15.32	14.90
		High		15.33	15.84	15.07
	50%	Low	16.5	14.87	15.54	15.00
		Middle		15.01	15.29	14.86
		High		15.08	15.45	14.82
	100%	/	16.5	15.07	15.46	14.98
16QAM	1	Low	16.5	15.08	15.65	15.54
		Middle		15.17	15.48	15.21
		High		15.45	15.66	15.28
	50%	Low	16.5	14.86	15.58	15.05
		Middle		14.93	15.47	15.00
		High		15.03	15.48	14.86
	100%	/	16.5	15.07	15.52	15.04
64QAM	1	Low	16.5	15.11	15.40	15.66
		Middle		15.38	15.23	15.49

		High		15.34	15.44	15.63
	50%	Low	16.5	14.81	15.43	15.39
		Middle		14.91	15.45	15.48
		High		14.81	15.36	15.38
	100%	/	16.5	14.74	15.38	15.54
Modulation	RB	RB Offset	Tune up	15MHz		
				39725	40620	41515
QPSK	1	Low	16.5	14.70	15.36	15.20
		Middle		15.26	15.83	15.40
		High		14.60	15.81	14.55
	50%	Low	16.5	15.10	15.76	15.51
		Middle		15.13	15.82	15.35
		High		15.04	15.45	15.05
	100%	/	16.5	15.16	15.56	15.21
16QAM	1	Low	16.5	15.00	15.52	15.37
		Middle		15.42	15.54	15.53
		High		14.79	15.40	14.75
	50%	Low	16.5	15.03	15.65	15.50
		Middle		15.11	15.70	15.33
		High		15.03	15.39	15.03
	100%	/	16.5	15.15	15.54	15.22
64QAM	1	Low	16.5	15.10	15.17	15.53
		Middle		15.45	15.47	15.63
		High		14.83	14.81	15.36
	50%	Low	16.5	15.10	15.20	15.52
		Middle		15.15	15.23	15.34
		High		14.84	14.86	15.34
	100%	/	16.5	15.06	15.45	15.48
Modulation	RB	RB Offset	Tune up	20MHz		
				39750	40620	41490
QPSK	1	Low	16.5	15.26	15.89	15.61
		Middle		15.19	15.74	15.37
		High		15.61	**15.90**	15.50
	50%	Low	16.5	15.14	15.71	15.48
		Middle		15.27	15.81	15.37
		High		15.40	**15.85**	15.33
	100%	/	16.5	15.35	**15.85**	15.35
16QAM	1	Low	16.5	15.46	15.61	15.67
		Middle		15.60	15.53	15.53
		High		15.65	15.62	15.59
	50%	Low	16.5	15.19	15.75	15.46
		Middle		15.33	15.86	15.33

		High		15.45	15.87	15.40
	100%	/	16.5	15.39	15.88	15.40
64QAM	1	Low	16.5	15.23	15.52	15.57
		Middle		15.26	15.54	15.51
		High		15.38	15.58	15.56
	50%	Low	16.5	15.31	15.51	15.58
		Middle		15.39	15.53	15.56
		High		15.32	15.56	15.53
	100%	/	16.5	15.26	15.43	15.56

LTE			LTE B66			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				131979	132322	132665
QPSK	1	Low	20.5	19.54	19.18	18.94
		Middle		19.39	19.06	19.26
		High		19.51	19.11	19.03
	50%	Low	20.5	19.46	19.19	19.01
		Middle		19.50	19.20	19.08
		High		19.47	19.18	19.05
	100%	/	20.5	19.33	19.18	19.12
16QAM	1	Low	20.5	19.56	19.59	19.61
		Middle		19.50	19.51	19.46
		High		19.76	19.65	19.13
	5	Low	20.5	19.50	19.31	18.97
		Middle		19.65	19.30	19.18
		High		19.60	19.06	19.18
	100%	/	20.5	19.46	19.19	19.14
64QAM	1	Low	20.5	19.08	19.21	19.00
		Middle		19.17	19.21	19.00
		High		19.29	19.21	18.98
	5	Low	20.5	19.10	19.11	19.00
		Middle		19.05	19.09	19.00
		High		19.00	19.06	19.00
	100%	/	20.5	18.68	18.44	18.50
Modulation	RB	RB Offset	Tune up	3MHz		
				131987	132322	132657
QPSK	1	Low	20.5	19.56	19.17	19.07
		Middle		19.40	19.17	19.14
		High		19.34	19.04	18.93
	50%	Low	20.5	19.51	19.22	19.15
		Middle		19.52	19.20	19.07
		High		19.53	19.18	19.12
	100%	/	20.5	19.50	19.25	19.10
16QAM	1	Low	20.5	19.95	19.08	19.21
		Middle		19.75	19.22	19.13
		High		19.69	19.16	19.32
	50%	Low	20.5	19.56	19.32	19.16
		Middle		19.56	19.34	19.19
		High		19.66	19.16	19.14
	100%	/	20.5	19.64	19.21	19.13
64QAM	1	Low	20.5	19.11	19.13	18.95
		Middle		19.08	19.13	18.95

		High		19.18	19.13	19.00
	50%	Low	20.5	18.61	18.65	18.27
		Middle		18.69	18.65	18.30
		High		18.76	18.65	18.33
	100%	/	20.5	18.53	18.65	18.33
Modulation	RB	RB Offset	Tune up	5MHz		
				131997	132322	132647
QPSK	1	Low	20.5	19.66	19.40	19.27
		Middle		19.39	19.05	19.09
		High		19.52	19.24	18.86
	50%	Low	20.5	19.60	19.27	19.20
		Middle		19.53	19.31	19.17
		High		19.43	19.15	19.13
	100%	/	20.5	19.51	19.23	19.16
16QAM	1	Low	20.5	19.96	19.77	19.40
		Middle		19.72	19.58	19.43
		High		19.97	19.58	19.31
	50%	Low	20.5	19.48	19.35	19.26
		Middle		19.55	19.28	19.24
		High		19.48	19.17	19.17
	100%	/	20.5	19.40	19.32	19.21
64QAM	1	Low	20.5	19.22	18.91	19.02
		Middle		19.28	18.91	19.02
		High		19.22	18.91	18.91
	50%	Low	20.5	18.74	18.46	18.5
		Middle		18.69	18.46	18.44
		High		18.63	18.46	18.37
	100%	/	20.5	18.63	18.48	18.49
Modulation	RB	RB Offset	Tune up	10MHz		
				132022	132322	132622
QPSK	1	Low	20.5	19.01	18.58	18.48
		Middle		19.30	19.24	18.98
		High		19.83	19.54	19.55
	50%	Low	20.5	19.49	19.24	19.17
		Middle		19.61	19.28	19.11
		High		19.56	19.25	19.10
	100%	/	20.5	19.56	19.22	19.13
16QAM	1	Low	20.5	19.41	18.69	18.62
		Middle		19.85	19.29	19.02
		High		19.87	19.43	19.18
	50%	Low	20.5	19.44	19.30	19.16
		Middle		19.54	19.24	19.14

		High		19.57	19.32	19.19
	100%	/	20.5	19.54	19.24	19.10
64QAM	1	Low	20.5	18.74	18.74	18.36
		Middle		18.74	19.28	18.94
		High		18.74	19.14	18.45
	50%	Low	20.5	18.24	18.51	18.44
		Middle		18.35	18.51	19.03
		High		18.86	18.51	18.61
	100%	/	20.5	18.76	18.52	18.61
Modulation	RB	RB Offset	Tune up	15MHz		
				132047	132322	132597
QPSK	1	Low	20.5	19.71	19.40	19.52
		Middle		19.49	19.21	19.24
		High		19.49	19.25	19.10
	50%	Low	20.5	19.45	19.27	19.11
		Middle		19.36	19.09	19.04
		High		19.29	19.08	18.99
	100%	/	20.5	19.42	19.13	19.10
16QAM	1	Low	20.5	19.88	19.92	19.86
		Middle		19.78	19.87	19.46
		High		19.74	19.77	19.45
	50%	Low	20.5	19.51	19.19	19.20
		Middle		19.34	19.18	19.05
		High		19.28	19.08	18.97
	100%	/	20.5	19.45	19.09	19.11
64QAM	1	Low	20.5	19.61	19.26	19.11
		Middle		19.17	19.16	19.29
		High		19.33	19.26	19.11
	50%	Low	20.5	19.57	19.47	19.11
		Middle		19.57	19.37	19.09
		High		19.57	19.26	19.07
	100%	/	20.5	18.54	18.36	18.35
Modulation	RB	RB Offset	Tune up	20MHz		
				132072	132322	132572
QPSK	1	Low	20.5	19.51	19.27	18.93
		Middle		19.27	19.05	19.12
		High		19.41	19.49	**19.56**
	50%	Low	20.5	19.32	19.18	19.36
		Middle		19.38	19.21	19.07
		High		19.42	19.16	**19.43**
	100%	/	20.5	19.17	19.26	**19.38**
16QAM	1	Low	20.5	19.18	19.45	19.36

		Middle		19.22	19.31	19.48
		High		19.59	19.73	19.65
	50%	Low	20.5	19.36	19.12	19.09
		Middle		19.36	19.11	18.93
		High		19.34	19.08	18.99
	100%	/	20.5	19.35	19.13	19.14
64QAM	1	Low	20.5	19.42	18.93	19.09
		Middle		19.42	18.95	19.15
		High		19.68	19.33	19.46
	50%	Low	20.5	18.26	18.95	18.81
		Middle		18.28	18.42	18.81
		High		18.39	18.88	18.80
	100%	/	20.5	18.14	18.34	18.26

Table 13.13: The conducted Power for LTE CA _7C/ CA _41C

LTE CA_7C (Sensor off)									
PCC (UL)				SCC(UL)				Tune up	Total Tx Power
BW	Modulation	LCRB@RBstart	Channel	BW	Modulation	LCRB@RBstart	Channel		
20M	QPSK	1RB@99	21001	20M	QPSK	1RB@0	21199	23	21.74
20M	QPSK	1RB@99	21152	20M	QPSK	1RB@0	21350	23	21.65
LTE CA_7C (Sensor on)									
PCC (UL)				SCC(UL)				Tune up	Total Tx Power
BW	Modulation	LCRB@RBstart	Channel	BW	Modulation	LCRB@RBstart	Channel		
10M	QPSK	1RB@49	20805	20M	QPSK	1RB@0	20949	16	**15.88**
20M	QPSK	1RB@99	20850	10M	QPSK	1RB@0	20994	16	15.45
15M	QPSK	1RB@74	20825	10M	QPSK	1RB@0	20945	16	14.86
15M	QPSK	1RB@74	20825	15M	QPSK	1RB@0	20975	16	15.57
15M	QPSK	1RB@74	20828	20M	QPSK	1RB@0	20999	16	15.59
20M	QPSK	1RB@99	20850	15M	QPSK	1RB@0	21021	16	15.61
20M	QPSK	1RB@99	20850	20M	QPSK	1RB@0	21048	16	15.69
10M	QPSK	1RB@49	21006	20M	QPSK	1RB@0	21150	16	15.61
20M	QPSK	1RB@99	21051	10M	QPSK	1RB@0	21195	16	14.74
15M	QPSK	1RB@74	21051	10M	QPSK	1RB@0	21171	16	15.22
15M	QPSK	1RB@74	21025	15M	QPSK	1RB@0	21175	16	15.7
15M	QPSK	1RB@74	21003	20M	QPSK	1RB@0	21174	16	15.43
20M	QPSK	1RB@99	21026	15M	QPSK	1RB@0	21197	16	15.82
20M	QPSK	1RB@99	21001	20M	QPSK	1RB@0	21199	16	15.74
10M	QPSK	1RB@49	21206	20M	QPSK	1RB@0	21350	16	15.39
20M	QPSK	1RB@99	21251	10M	QPSK	1RB@0	21395	16	12.37
15M	QPSK	1RB@74	21277	10M	QPSK	1RB@0	21397	16	14.72
15M	QPSK	1RB@74	21225	15M	QPSK	1RB@0	21375	16	15.42
15M	QPSK	1RB@74	21179	20M	QPSK	1RB@0	21350	16	15.37
20M	QPSK	1RB@99	21201	15M	QPSK	1RB@0	21372	16	15.48

20M	QPSK	1RB@99	21152	20M	QPSK	1RB@0	21350	16	15.34
10M	QPSK	25RB@25	20805	20M	QPSK	50RB@0	20949	16	15.21
10M	QPSK	50RB@0	20805	20M	QPSK	100RB@0	20949	16	15.63

LTE CA_41C (Sensor off)									
PCC (UL)				SCC(UL)				Tune up	Total Tx Power
BW	Modulation	LCRB@RBstart	Channel	BW	Modulation	LCRB@RBstart	Channel		
20M	QPSK	1RB@99	39750	20M	QPSK	1RB@0	39948	23	21.79
20M	QPSK	1RB@99	40521	20M	QPSK	1RB@0	40719	23	21.05
LTE CA_41C (Sensor on)									
PCC (UL)				SCC(UL)				Tune up	Total Tx Power
BW	Modulation	LCRB@RBstart	Channel	BW	Modulation	LCRB@RBstart	Channel		
5M	QPSK	1RB@24	39683	20M	QPSK	1RB@0	39800	19.5	19.4
20M	QPSK	1RB@99	39750	5M	QPSK	1RB@0	39867	19.5	19.02
10M	QPSK	1RB@49	39703	15M	QPSK	1RB@0	39823	19.5	19.06
15M	QPSK	1RB@74	39725	10M	QPSK	1RB@0	39845	19.5	18.9
10M	QPSK	1RB@49	39705	20M	QPSK	1RB@0	39849	19.5	19.22
20M	QPSK	1RB@99	39750	10M	QPSK	1RB@0	39894	19.5	18.98
15M	QPSK	1RB@74	39725	15M	QPSK	1RB@0	39875	19.5	19.06
15M	QPSK	1RB@74	39728	20M	QPSK	1RB@0	39899	19.5	18.91
20M	QPSK	1RB@99	39750	15M	QPSK	1RB@0	39921	19.5	19.01
20M	QPSK	1RB@99	39750	20M	QPSK	1RB@0	39948	19.5	18.15
5M	QPSK	1RB@24	40528	20M	QPSK	1RB@0	40645	19.5	18.28
20M	QPSK	1RB@99	40595	5M	QPSK	1RB@0	40712	19.5	17.85
10M	QPSK	1RB@49	40549	15M	QPSK	1RB@0	40669	19.5	18.06
15M	QPSK	1RB@74	40571	10M	QPSK	1RB@0	40691	19.5	17.72
10M	QPSK	1RB@49	40526	20M	QPSK	1RB@0	40670	19.5	18.16
20M	QPSK	1RB@99	40571	10M	QPSK	1RB@0	40715	19.5	17.96
15M	QPSK	1RB@74	40545	15M	QPSK	1RB@0	40695	19.5	18.22
15M	QPSK	1RB@74	40523	20M	QPSK	1RB@0	40694	19.5	17.83
20M	QPSK	1RB@99	40546	15M	QPSK	1RB@0	40717	19.5	17.95
20M	QPSK	1RB@99	40521	20M	QPSK	1RB@0	40719	19.5	17.31
5M	QPSK	1RB@24	41373	20M	QPSK	1RB@0	41490	19.5	17.53
20M	QPSK	1RB@99	41440	5M	QPSK	1RB@0	41557	19.5	17.19

10M	QPSK	1RB@49	41395	15M	QPSK	1RB@0	41515	19.5	17.44
15M	QPSK	1RB@74	41417	10M	QPSK	1RB@0	41537	19.5	17.54
10M	QPSK	1RB@49	41346	20M	QPSK	1RB@0	41490	19.5	17.44
20M	QPSK	1RB@99	41391	10M	QPSK	1RB@0	41535	19.5	17.14
15M	QPSK	1RB@74	41365	15M	QPSK	1RB@0	41515	19.5	17.47
15M	QPSK	1RB@74	41319	20M	QPSK	1RB@0	41490	19.5	17.54
20M	QPSK	1RB@99	41341	15M	QPSK	1RB@0	41512	19.5	17.16
20M	QPSK	1RB@99	41292	20M	QPSK	1RB@0	41490	19.5	17.86
5M	QPSK	12RB@13	39683	20M	QPSK	50RB@0	39800	19.5	19.24
5M	QPSK	25RB@0	39683	20M	QPSK	100RB@0	39800	19.5	19.23

13.5. BT Measurement result

Table 13.13: The conducted power for Bluetooth

Bluetooth		BT conducted power (dBm)					
Mode	Channel	DH1		2DH1		3DH1	
		Tune up	Output Power	Tune up	Output Power	Tune up	Output Power
BT	2402	10.5	10.15	9	8.73	10.5	10.05
	2441	10.5	10.12	9	8.72	10.5	10.04
	2480	10.5	10.15	9	8.72	10.5	10.06
Bluetooth		BLE conducted power (dBm)					
Mode		Channel		Tune up		Output Power	
BLE		0		5.5		5.308	
		19		4		3.500	
		38		7		6.468	

13.6. Wi-Fi Measurement result

Table 13.14: The average conducted power for Wi-Fi

Wi-Fi			Wi-Fi 2.4G conducted power(dBm)	
Mode	BW	Channel	Tune up	Output Power
802.11b	20M	1	18	17.41
		6	18	17.34
		11	17.5	16.9
802.11g	20M	1	16	15.84
		6	16	15.6
		11	16	15.36
802.11n	20M	1	15	14.84
		6	15	14.58
		11	15	14.27

Wi-Fi			Wi-Fi 5G conducted power(dBm)	
Mode	BW	Channel	Tune up	Output Power
802.11a	20M	36	12.5	12.01
		40	12	11.18
		48	11	10.21
		52	10.5	9.81
		56	10.5	9.87
		64	11	10.28
		100	12	11.62
		136	10.5	9.92
		140	10.5	9.96
		149	11.5	10.74
		157	12.5	11.61
		165	11.5	11.11
802.11n	20M	36	12.5	12.05
		40	12	11.29
		48	11	10.61
		52	10.5	9.74
		56	10.5	9.89
		64	11	10.20
		100	12	11.5
		136	10.5	9.67
		140	10.5	9.80
		149	11	10.35
		157	12	11.2
		165	11.5	10.77
802.11n	40M	38	12.5	11.89
		46	11	10.64
		54	10.5	10.13
		62	11	10.52
		102	13	12.29

		110	13	12.46
		134	11.5	10.80
		151	12	11.44
		159	12.5	11.93
802.11ac	20M	36	9.5	9.05
		40	11.5	10.91
		48	10.5	10.05
		52	10.5	9.68
		56	10.5	9.84
		64	10.5	10.15
		100	12.5	11.57
		136	10	9.65
		140	10.5	9.78
		149	11	10.39
		157	12	11.29
		165	11.5	10.72
	40M	38	12.5	11.89
		46	11	10.65
		54	10.5	10.14
		62	11	10.5
		102	13	12.28
		110	13	12.43
		134	11	10.73
		151	12	11.41
		159	12.5	11.92
	80M	42	10.5	9.98
		58	9.5	8.98
		106	11	10.49
		122	10.5	10.08
		155	10.5	9.97

14. Measurement Results

14.1. Standalone SAR Test Result

Table 14.1: SAR Values for GSM850

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	GSM850	190	836.6	32.26	33	-0.100	0.125	1.19	0.148	/
Left Tilt 15°	Standard	GSM850	190	836.6	32.26	33	-0.070	0.091	1.19	0.108	/
Right Touch	Standard	GSM850	190	836.6	32.26	33	-0.130	0.181	1.19	0.215	/
Right Tilt 15°	Standard	GSM850	190	836.6	32.26	33	-0.070	0.100	1.19	0.118	/
Right Touch	Standard	GSM850	128	824.2	32.1	33	-0.170	0.156	1.23	0.192	/
Right Touch	Standard	GSM850	251	848.8	32.38	33	0.150	0.228	1.15	**0.263**	**1**
Body SAR (5mm)											
Front Side	Standard	GPRS 3TS	190	836.6	28.4	29	-0.090	0.230	1.15	0.264	/
Back Side	Standard	GPRS 3TS	190	836.6	28.4	29	-0.070	0.274	1.15	0.315	/
Left Side	Standard	GPRS 3TS	190	836.6	28.4	29	-0.090	0.086	1.15	0.099	/
Right Side	Standard	GPRS 3TS	190	836.6	28.4	29	-0.110	0.171	1.15	0.196	/
Bottom Side	Standard	GPRS 3TS	190	836.6	28.4	29	-0.030	0.223	1.15	0.256	/
Back Side	Standard	GPRS 3TS	128	824.2	28.24	29	-0.150	0.368	1.19	**0.438**	**2**
Back Side	Standard	GPRS 3TS	251	848.8	28.45	29	-0.160	0.287	1.14	0.326	/
Test Position	**Cover Type**	**Mode**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)											
Back Side	Standard	GPRS 3TS	128	824.2	28.24	29	-0.060	0.576	1.19	**0.686**	**3**

Table 14.2: SAR Values for GSM1900

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	GSM1900	661	1880	29.88	30.5	-0.060	0.091	1.15	0.104	/
Left Tilt 15°	Standard	GSM1900	661	1880	29.88	30.5	0.070	0.047	1.15	0.054	/
Right Touch	Standard	GSM1900	661	1880	29.88	30.5	-0.050	0.054	1.15	0.062	/
Right Tilt 15°	Standard	GSM1900	661	1880	29.88	30.5	-0.030	0.023	1.15	0.026	/
Left Touch	Standard	GSM1900	512	1850.2	29.63	30.5	-0.150	0.111	1.22	**0.136**	**4**
Left Touch	Standard	GSM1900	810	1909.8	30	30.5	-0.050	0.084	1.12	0.095	/
Body SAR (5mm)											
Front Side	Standard	GPRS 3TS	661	1880	27.39	28	-0.180	0.284	1.15	0.327	/
Back Side	Standard	GPRS 3TS	661	1880	27.39	28	-0.070	0.611	1.15	0.703	/
Left Side	Standard	GPRS 3TS	661	1880	27.39	28	-0.010	0.331	1.15	0.381	/
Right Side	Standard	GPRS 3TS	661	1880	27.39	28	-0.170	0.122	1.15	0.140	/
Bottom Side	Standard	GPRS 3TS	661	1880	27.39	28	-0.020	0.368	1.15	0.423	/
Back Side	Standard	GPRS 3TS	512	1850.2	26.5	28	-0.120	0.557	1.41	0.787	/
Back Side	Standard	GPRS 3TS	810	1909.8	27.25	28	0.020	0.731	1.19	0.869	/
Body SAR (5mm) Repeated											
Back Side	Standard	GPRS 3TS	810	1909.8	27.25	28	-0.060	0.847	1.19	**1.007**	**5**
Test Position	**Cover Type**	**Mode**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)											
Back Side	Standard	GPRS 3TS	810	1909.8	27.25	28	-0.040	0.944	1.19	**1.122**	**6**

Table 14.3: SAR Values for WCDMA Band Ⅱ

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	RMC12.2k	9400	1880	23.08	23.5	0.070	0.197	1.10	0.217	/
Left Tilt 15°	Standard	RMC12.2k	9400	1880	23.08	23.5	0.150	0.107	1.10	0.118	/
Right Touch	Standard	RMC12.2k	9400	1880	23.08	23.5	-0.110	0.156	1.10	0.172	/
Right Tilt 15°	Standard	RMC12.2k	9400	1880	23.08	23.5	0.160	0.057	1.10	0.062	/
Left Touch	Standard	RMC12.2k	9262	1852.4	22.97	23.5	0.080	0.244	1.13	0.276	/
Left Touch	Standard	RMC12.2k	9538	1907.6	23.2	23.5	0.130	0.255	1.07	**0.273**	**7**
Body SAR (Full Power 5mm)											
Front Side	Standard	RMC12.2k	9400	1880	23.08	23.5	-0.100	0.453	1.10	0.499	/
Left Side	Standard	RMC12.2k	9400	1880	23.08	23.5	0.100	0.521	1.10	0.574	/
Right Side	Standard	RMC12.2k	9400	1880	23.08	23.5	-0.110	0.217	1.10	0.239	/
Body SAR (Full Power 18mm)											
Back Side	Standard	RMC12.2k	9400	1880	23.08	23.5	-0.030	0.290	1.10	0.319	/
Bottom Side	Standard	RMC12.2k	9400	1880	23.08	23.5	-0.170	0.185	1.10	0.204	/
Body SAR (Reduced Power 5mm)											
Back Side	Standard	RMC12.2k	9400	1880	19.23	20	0.030	0.817	1.19	**0.975**	**8**
Bottom Side	Standard	RMC12.2k	9400	1880	19.23	20	-0.080	0.475	1.19	0.567	/
Back Side	Standard	RMC12.2k	9262	1852.4	19.24	20	0.000	0.686	1.19	0.817	/
Back Side	Standard	RMC12.2k	9538	1907.6	19.31	20	0.080	0.814	1.17	0.954	/
Body SAR (Reduced Power 5mm) Repeated											
Back Side	Standard	RMC12.2k	9400	1880	19.23	20	0.120	0.732	1.19	0.874	/
Test Position	**Cover Type**	**Mode**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Reduced Power Distance 0mm)											
Back Side	Standard	RMC12.2k	9400	1880	19.23	20	0.040	1.030	1.19	**1.230**	**9**

Table 14.4: SAR Values for WCDMA Band Ⅳ

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.070	0.200	1.11	0.223	/
Left Tilt 15°	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.140	0.128	1.11	0.143	/
Right Touch	Standard	RMC12.2k	1413	1732.6	23.03	23.5	0.090	0.085	1.11	0.095	/
Right Tilt 15°	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.040	0.063	1.11	0.070	/
Left Touch	Standard	RMC12.2k	1312	1712.4	23	23.5	-0.120	0.231	1.12	**0.259**	**10**
Left Touch	Standard	RMC12.2k	1513	1752.6	22.78	23.5	0.100	0.194	1.18	0.229	/
Body SAR (5mm)											
Front Side	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.140	0.369	1.11	0.411	/
Back Side	Standard	RMC12.2k	1413	1732.6	23.03	23.5	0.030	0.695	1.11	0.774	/
Left Side	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.100	0.558	1.11	0.622	/
Right Side	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.090	0.098	1.11	0.109	/
Bottom Side	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.010	0.337	1.11	0.376	/
Back Side	Standard	RMC12.2k	1312	1712.4	23	23.5	-0.030	0.667	1.12	0.748	/
Back Side	Standard	RMC12.3k	1513	1752.6	22.78	23.5	0.040	0.663	1.18	**0.783**	**11**
Test Position	**Cover Type**	**Mode**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)											
Back Side	Standard	RMC12.2k	1413	1732.6	23.03	23.5	-0.100	0.963	1.11	**1.073**	**12**

Table 14.5: SAR Values for WCDMA Band Ⅴ

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	RMC12.2k	4183	836.6	24.05	24.5	0.120	0.182	1.11	0.202	/
Left Tilt 15°	Standard	RMC12.2k	4183	836.6	24.05	24.5	0.090	0.165	1.11	0.183	/
Right Touch	Standard	RMC12.2k	4183	836.6	24.05	24.5	0.100	0.251	1.11	0.278	/
Right Tilt 15°	Standard	RMC12.2k	4183	836.6	24.05	24.5	-0.060	0.161	1.11	0.179	/
Right Touch	Standard	RMC12.2k	4132	826.4	23.52	24.5	-0.100	0.203	1.25	0.254	/
Right Touch	Standard	RMC12.2k	4233	846.6	23.61	24.5	-0.090	0.235	1.23	**0.288**	**13**
Body SAR (5mm)											
Front Side	Standard	RMC12.2k	4183	836.6	24.05	24.5	-0.100	0.311	1.11	0.345	/
Back Side	Standard	RMC12.2k	4183	836.6	24.05	24.5	-0.110	0.331	1.11	0.367	/
Left Side	Standard	RMC12.2k	4183	836.6	24.05	24.5	-0.100	0.163	1.11	0.181	/
Right Side	Standard	RMC12.2k	4183	836.6	24.05	24.5	-0.100	0.261	1.11	0.289	/
Bottom Side	Standard	RMC12.2k	4183	836.6	24.05	24.5	0.090	0.266	1.11	0.295	/
Back Side	Standard	RMC12.2k	4132	826.4	23.52	24.5	0.060	0.304	1.25	0.381	/
Back Side	Standard	RMC12.3k	4233	846.6	23.61	24.5	-0.110	0.332	1.23	**0.408**	**14**
Test Position	**Cover Type**	**Mode**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)											
Back Side	Standard	RMC12.2k	4183	846.6	23.61	24.5	-0.130	0.531	1.23	**0.652**	**15**

Table 14.6: SAR Values for LTE Band 7

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	20	1	mid	21350	2560	22.11	23	-0.06	0.123	1.23	0.151	/
Left Tilt 15°	Standard	QPSK	20	1	mid	21350	2560	22.11	23	0.060	0.063	1.23	0.077	/
Right Touch	Standard	QPSK	20	1	mid	21350	2560	22.11	23	0.100	0.053	1.23	0.065	/
Right Tilt 15°	Standard	QPSK	20	1	mid	21350	2560	22.11	23	0.090	0.124	1.23	**0.152**	**16**
Left Touch	Standard	QPSK	20	50%	high	21350	2560	21.24	22	0.05	0.104	1.19	0.124	/
Left Tilt 15°	Standard	QPSK	20	50%	high	21350	2560	21.24	22	0.060	0.055	1.19	0.065	/
Right Touch	Standard	QPSK	20	50%	high	21350	2560	21.24	22	0.140	0.047	1.19	0.056	/
Right Tilt 15°	Standard	QPSK	20	50%	high	21350	2560	21.24	22	0.100	0.100	1.19	0.119	/
Left Touch	Standard	QPSK	20	1	mid	20850	2510	21.7	23	-0.070	0.087	1.35	0.117	/
Left Touch	Standard	QPSK	20	1	mid	21100	2535	21.96	23	0.070	0.097	1.27	0.123	/
Body SAR (Full Power 5mm)														
Front Side	Standard	QPSK	20	1	mid	21350	2560	22.11	23	-0.030	0.546	1.23	0.670	/
Left Side	Standard	QPSK	20	1	mid	21350	2560	22.11	23	-0.060	0.425	1.23	0.522	/
Right Side	Standard	QPSK	20	1	mid	21350	2560	22.11	23	-0.010	0.074	1.23	0.090	/
Front Side	Standard	QPSK	20	50%	high	21350	2560	21.24	22	-0.030	0.421	1.19	0.502	/
Left Side	Standard	QPSK	20	50%	high	21350	2560	21.24	22	0.030	0.337	1.19	0.401	/
Right Side	Standard	QPSK	20	50%	high	21350	2560	21.24	22	-0.020	0.057	1.19	0.068	/
Body SAR (Full Power 18mm)														
Back Side	Standard	QPSK	20	1	mid	21350	2560	22.11	23	-0.090	0.871	1.23	1.069	/
Bottom Side	Standard	QPSK	20	1	mid	21350	2560	22.11	23	0.020	0.854	1.23	1.048	/
Back Side	Standard	QPSK	20	50%	high	21350	2560	21.24	22	-0.020	0.693	1.19	0.826	/
Bottom Side	Standard	QPSK	20	50%	high	21350	2560	21.24	22	-0.010	0.684	1.19	0.815	/
Back Side	Standard	QPSK	20	1	mid	20850	2510	21.7	23	-0.130	0.841	1.35	1.134	/
Back Side	Standard	QPSK	20	1	mid	21100	2535	21.96	23	-0.120	0.908	1.27	1.154	/
Back Side	Standard	QPSK	20	50%	high	20850	2510	20.9	22	0.050	0.744	1.29	0.958	/
Back Side	Standard	QPSK	20	50%	high	21100	2535	21.06	22	0.070	0.806	1.24	1.001	/
Bottom Side	Standard	QPSK	20	1	mid	20850	2510	21.7	23	-0.130	0.806	1.35	1.087	/
Bottom Side	Standard	QPSK	20	1	mid	21100	2535	21.96	23	-0.100	0.915	1.27	**1.163**	**17**
Bottom Side	Standard	QPSK	20	50%	high	20850	2510	20.9	22	-0.010	0.676	1.29	0.871	/
Bottom Side	Standard	QPSK	20	50%	high	21100	2535	21.06	22	-0.120	0.842	1.24	1.045	/
Body SAR (Reduced Power 5mm)														
Back Side	Standard	QPSK	20	1	mid	21350	2560	13.83	14.5	-0.100	0.598	1.17	0.698	/
Bottom Side	Standard	QPSK	20	1	mid	21350	2560	13.83	14.5	-0.080	0.515	1.17	0.601	/
Back Side	Standard	QPSK	20	50%	high	21350	2560	13.81	14.5	-0.180	0.581	1.17	0.681	/
Bottom Side	Standard	QPSK	20	50%	high	21350	2560	13.81	14.5	-0.110	0.506	1.17	0.593	/
Back Side	Standard	QPSK	20	1	mid	20850	2510	13.47	14.5	-0.070	0.591	1.27	0.749	/
Back Side	Standard	QPSK	20	1	mid	21100	2535	13.75	14.5	-0.100	0.565	1.19	0.672	/
Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (Reduced Powe Distance 0mm)														
Bottom Side	Standard	QPSK	20	1	mid	21100	2535	13.75	14.5	-0.080	0.353	1.19	**0.420**	**18**

Table 14.7: SAR Values for LTE Band CA_7C

Test Position	Cover Type	Mode					Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation		BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR (Sensor off)															
Right Tilt 15°	Standard	QPSK	PCC	20	1	high	21152	2540.2	21.65	22	-0.020	0.036	1.08	0.039	**19**
			SCC	20	1	low	21350	2560							
Body SAR 5mm (Sensor on)															
Back Side	Standard	QPSK	PCC	20	1	high	20850	2510	15.34	16	-0.130	0.671	1.16	**0.781**	**20**
			SCC	20	1	low	21021	2527.1							
Back Side	Standard	QPSK	PCC	10	1	high	20805	2505.5	15.88	16	-0.120	0.604	1.03	0.621	/
			SCC	20	1	low	20949	2519.9							
Back Side	Standard	QPSK	PCC	10	50%	high	20805	2505.5	15.21	16	-0.035	0.622	1.20	0.746	/
			SCC	20	50%	low	20949	2519.9							
Back Side	Standard	QPSK	PCC	10	100%	low	20805	2505.5	15.63	16	-0.120	0.615	1.09	0.670	/
			SCC	20	100%	low	20949	2519.9							
Body SAR 18mm (Sensor off)															
Bottom Side	Standard	QPSK	PCC	20	1	high	21001	2525.1	21.74	22	-0.030	0.490	1.06	0.520	/
			SCC	20	1	low	21199	2544.9							
Test Position	Cover Type	Mode					Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation		BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Body SAR 0mm (Sensor on)															
Bottom Side	Standard	QPSK	PCC	20	1	high	20850	2510	15.34	16	-0.030	0.366	1.16	0.426	/
			SCC	20	1	low	21021	2527.1							
Bottom Side	Standard	QPSK	PCC	10	1	high	20805	2505.5	15.88	16	-0.050	0.369	1.03	0.379	/
			SCC	20	1	low	20949	2519.9							
Bottom Side	Standard	QPSK	PCC	10	50%	high	20805	2505.5	15.21	16	0.050	0.403	1.20	**0.483**	**21**
			SCC	20	50%	low	20949	2519.9							
Bottom Side	Standard	QPSK	PCC	10	100%	low	20805	2505.5	15.63	16	-0.080	0.336	1.09	0.366	/
			SCC	20	100%	low	20949	2519.9							

Table 14.8: SAR Values for LTE Band 12

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.150	0.103	1.10	0.113	/
Left Tilt 15°	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.110	0.082	1.10	0.090	/
Right Touch	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.180	0.117	1.10	**0.128**	**22**
Right Tilt 15°	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.070	0.078	1.10	0.085	/
Left Touch	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	0.130	0.077	1.14	0.087	/
Left Tilt 15°	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	0.010	0.060	1.14	0.068	/
Right Touch	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	0.140	0.085	1.14	0.096	/
Right Tilt 15°	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	-0.110	0.058	1.14	0.065	/
Right Touch	Standard	QPSK	10	1	high	23060	704	22.85	23.5	-0.160	0.097	1.16	0.113	/
Right Touch	Standard	QPSK	10	1	high	23130	711	22.88	23.5	-0.070	0.104	1.15	0.120	/
Body SAR (5mm)														
Front Side	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	0.06	0.143	1.10	0.157	/
Back Side	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.12	0.186	1.10	0.204	/
Left Side	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	0.03	0.134	1.10	0.147	/
Right Side	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.08	0.203	1.10	0.223	/
Bottom Side	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.02	0.081	1.10	0.089	/
Front Side	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	0.00	0.111	1.14	0.126	/
Back Side	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	-0.10	0.129	1.14	0.146	/
Left Side	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	0.05	0.135	1.14	0.153	/
Right Side	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	-0.06	0.148	1.14	0.168	/
Bottom Side	Standard	QPSK	10	50%	high	23095	707.5	21.95	22.5	-0.03	0.059	1.14	0.067	/
Right Side	Standard	QPSK	10	1	high	23060	704	22.85	23.5	0.00	0.192	1.16	0.223	/
Right Side	Standard	QPSK	10	1	high	23130	711	22.88	23.5	-0.05	0.197	1.15	**0.227**	**23**
Test Position	**Cover Type**	**Mode**				**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
		Modulation	**BW(MHz)**	**RB Allocation**	**RB Offset**						**Measured SAR10g**	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)														
Right Side	Standard	QPSK	10	1	high	23095	707.5	23.1	23.5	-0.02	0.079	1.10	**0.087**	**24**

Table 14.9: SAR Values for LTE Band 13

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	10	1	low	23230	782	23.49	24	0.000	0.093	1.12	0.104	/
Left Tilt 15°	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.120	0.074	1.12	0.083	/
Right Touch	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.180	0.111	1.12	**0.125**	**25**
Right Tilt 15°	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.020	0.074	1.12	0.083	/
Left Touch	Standard	QPSK	10	50%	low	23230	782	22.12	23	0.010	0.085	1.22	0.104	/
Left Tilt 15°	Standard	QPSK	10	50%	low	23230	782	22.12	23	-0.060	0.052	1.22	0.063	/
Right Touch	Standard	QPSK	10	50%	low	23230	782	22.12	23	0.090	0.081	1.22	0.099	/
Right Tilt 15°	Standard	QPSK	10	50%	low	23230	782	22.12	23	-0.030	0.051	1.22	0.063	/
Body SAR (5mm)														
Front Side	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.050	0.164	1.12	0.184	/
Back Side	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.020	0.173	1.12	0.195	/
Left Side	Standard	QPSK	10	1	low	23230	782	23.49	24	0.030	0.110	1.12	0.124	/
Right Side	Standard	QPSK	10	1	low	23230	782	23.49	24	0.020	0.188	1.12	**0.211**	**26**
Bottom Side	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.140	0.122	1.12	0.137	/
Front Side	Standard	QPSK	10	50%	low	23230	782	22.12	23	-0.080	0.121	1.22	0.148	/
Back Side	Standard	QPSK	10	50%	low	23230	782	22.12	23	-0.050	0.122	1.22	0.149	/
Left Side	Standard	QPSK	10	50%	low	23230	782	22.12	23	0.090	0.074	1.22	0.090	/
Right Side	Standard	QPSK	10	50%	low	23230	782	22.12	23	-0.100	0.069	1.22	0.085	/
Bottom Side	Standard	QPSK	10	50%	low	23230	782	22.12	23	-0.080	0.090	1.22	0.110	/
Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (Distance 0mm)														
Right Side	Standard	QPSK	10	1	low	23230	782	23.49	24	-0.14	0.07	1.12	**0.077**	**27**

Table 14.10: SAR Values for LTE Band 14

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	10	1	low	23330	793	23.65	24	-0.080	0.097	1.08	0.105	/
Left Tilt 15°	Standard	QPSK	10	1	low	23330	793	23.65	24	0.020	0.069	1.08	0.075	/
Right Touch	Standard	QPSK	10	1	low	23330	793	23.65	24	-0.100	0.102	1.08	**0.111**	**28**
Right Tilt 15°	Standard	QPSK	10	1	low	23330	793	23.65	24	0.060	0.088	1.08	0.095	/
Left Touch	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.100	0.070	1.08	0.076	/
Left Tilt 15°	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.060	0.052	1.08	0.056	/
Right Touch	Standard	QPSK	10	50%	low	23330	793	22.67	23	0.160	0.075	1.08	0.081	/
Right Tilt 15°	Standard	QPSK	10	50%	low	23330	793	22.67	23	0.130	0.065	1.08	0.070	/
Body SAR (5mm)														
Front Side	Standard	QPSK	10	1	low	23330	793	23.65	24	-0.130	0.165	1.08	0.179	/
Back Side	Standard	QPSK	10	1	low	23330	793	23.65	24	-0.070	0.170	1.08	0.184	/
Left Side	Standard	QPSK	10	1	low	23330	793	23.65	24	0.020	0.096	1.08	0.104	/
Right Side	Standard	QPSK	10	1	low	23330	793	23.65	24	-0.140	0.181	1.08	**0.196**	**29**
Bottom Side	Standard	QPSK	10	1	low	23330	793	23.65	24	-0.190	0.124	1.08	0.134	/
Front Side	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.050	0.124	1.08	0.134	/
Back Side	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.030	0.118	1.08	0.127	/
Left Side	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.020	0.068	1.08	0.074	/
Right Side	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.080	0.134	1.08	0.145	/
Bottom Side	Standard	QPSK	10	50%	low	23330	793	22.67	23	-0.190	0.094	1.08	0.101	/
Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (Distance 0mm)														
Right Side	Standard	QPSK	10	1	low	23330	793	23.65	24	0.05	0.0688	1.08	**0.073**	**30**

Table 14.11: SAR Values for LTE Band 25

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	20	1	low	26590	1905	22.94	23	0.190	0.232	1.01	**0.235**	**31**
Left Tilt 15°	Standard	QPSK	20	1	low	26590	1905	22.94	23	-0.170	0.110	1.01	0.112	/
Right Touch	Standard	QPSK	20	1	low	26590	1905	22.94	23	-0.120	0.146	1.01	0.148	/
Right Tilt 15°	Standard	QPSK	20	1	low	26590	1905	22.94	23	0.030	0.053	1.01	0.054	/
Left Touch	Standard	QPSK	20	50%	low	26590	1905	21.61	22	0.030	0.177	1.09	0.194	/
Left Tilt 15°	Standard	QPSK	20	50%	low	26590	1905	21.61	22	0.070	0.090	1.09	0.098	/
Right Touch	Standard	QPSK	20	50%	low	26590	1905	21.61	22	0.100	0.119	1.09	0.130	/
Right Tilt 15°	Standard	QPSK	20	50%	low	26590	1905	21.61	22	-0.040	0.041	1.09	0.044	/
Left Touch	Standard	QPSK	20	1	low	26140	1860	22.16	23	-0.110	0.184	1.21	0.223	/
Left Touch	Standard	QPSK	20	1	low	26365	1882.5	22.29	23	0.110	0.197	1.18	0.232	/
Body SAR (Full Power 5mm)														
Front Side	Standard	QPSK	20	1	low	26590	1905	22.94	23	-0.080	0.420	1.01	0.426	/
Left Side	Standard	QPSK	20	1	low	26590	1905	22.94	23	0.030	0.446	1.01	0.452	/
Right Side	Standard	QPSK	20	1	low	26590	1905	22.94	23	-0.090	0.352	1.01	0.357	/
Front Side	Standard	QPSK	20	50%	low	26590	1905	21.61	22	-0.070	0.661	1.09	0.723	/
Left Side	Standard	QPSK	20	50%	low	26590	1905	21.61	22	-0.100	0.180	1.09	0.197	/
Right Side	Standard	QPSK	20	50%	low	26590	1905	21.61	22	-0.030	0.181	1.09	0.198	/
Front Side	Standard	QPSK	20	50%	low	26140	1860	21.11	22	-0.080	0.521	1.23	0.639	/
Front Side	Standard	QPSK	20	50%	low	26365	1882.5	21.23	22	-0.090	0.588	1.19	0.702	/
Body SAR (Full Power 18mm)														
Back Side	Standard	QPSK	20	1	low	26590	1905	22.94	23	-0.130	0.354	1.01	0.359	/
Bottom Side	Standard	QPSK	20	1	low	26590	1905	22.94	23	-0.150	0.250	1.01	0.253	/
Back Side	Standard	QPSK	20	50%	low	26590	1905	21.61	22	-0.190	0.313	1.09	0.342	/
Bottom Side	Standard	QPSK	20	50%	low	26590	1905	21.61	22	-0.050	0.238	1.09	0.260	/
Body SAR (Reduced Power 5mm)														
Back Side	Standard	QPSK	20	1	low	26590	1905	19.76	20.5	-0.110	0.895	1.19	1.061	/
Bottom Side	Standard	QPSK	20	1	low	26590	1905	19.76	20.5	-0.030	0.534	1.19	0.633	/
Back Side	Standard	QPSK	20	50%	low	26590	1905	19.77	20.5	-0.090	0.909	1.18	**1.075**	**32**
Bottom Side	Standard	QPSK	20	50%	low	26590	1905	19.77	20.5	-0.060	0.571	1.18	0.676	/
Back Side	Standard	QPSK	20	1	low	26140	1860	19.22	20.5	-0.060	0.721	1.34	0.968	/
Back Side	Standard	QPSK	20	1	low	26365	1882.5	19.45	20.5	-0.100	0.747	1.27	0.951	/
Back Side	Standard	QPSK	20	50%	low	26140	1860	19.16	20.5	-0.120	0.695	1.36	0.946	/
Back Side	Standard	QPSK	20	50%	low	26365	1882.5	19.32	20.5	-0.060	0.793	1.31	1.041	/
Body SAR (Reduced Power 5mm) Repeated														
Back Side	Standard	QPSK	20	50%	low	26590	1905	19.77	20.5	-0.090	0.905	1.18	1.071	/
Test Position	**Cover Type**	**Mode**				**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
		Modulation	**BW(MHz)**	**RB Allocation**	**RB Offset**						**Measured SAR10g**	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Reduced Power Distance 0mm)														
Back Side	Standard	QPSK	20	50%	low	26590	1905	19.77	20.5	-0.090	1.100	1.18	**1.301**	**33**

Table 14.12: SAR Values for LTE Band 26

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.140	0.179	1.05	0.189	/
Left Tilt 15°	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.170	0.079	1.05	0.083	/
Right Touch	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.160	0.130	1.05	0.137	/
Right Tilt 15°	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.110	0.085	1.05	0.090	/
Left Touch	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	-0.120	0.145	1.05	0.153	/
Left Tilt 15°	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	0.000	0.069	1.05	0.073	/
Right Touch	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	-0.130	0.185	1.05	**0.195**	**34**
Right Tilt 15°	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	0.080	0.075	1.05	0.079	/
Right Touch	Standard	QPSK	15	1	low	26775	822.5	23.08	24	-0.120	0.103	1.24	0.127	/
Right Touch	Standard	QPSK	15	1	low	26865	831.5	23.59	24	0.180	0.116	1.10	0.127	/
Body SAR (5mm)														
Front Side	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.110	0.215	1.05	0.227	/
Back Side	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.040	0.349	1.05	**0.368**	**35**
Left Side	Standard	QPSK	15	1	low	26965	841.5	23.77	24	0.080	0.167	1.05	0.176	/
Right Side	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.030	0.289	1.05	0.305	/
Bottom Side	Standard	QPSK	15	1	low	26965	841.5	23.77	24	0.120	0.303	1.05	0.319	/
Front Side	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	-0.140	0.204	1.05	0.215	/
Back Side	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	0.030	0.222	1.05	0.234	/
Left Side	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	0.010	0.131	1.05	0.138	/
Right Side	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	-0.030	0.219	1.05	0.231	/
Bottom Side	Standard	QPSK	15	50%	low	26965	841.5	22.77	23	0.020	0.251	1.05	0.265	/
Back Side	Standard	QPSK	15	1	low	26775	822.5	23.08	24	0.030	0.221	1.24	0.273	/
Back Side	Standard	QPSK	15	1	low	26865	831.5	23.59	24	-0.150	0.262	1.10	0.288	/
Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (Distance 0mm)														
Back Side	Standard	QPSK	15	1	low	26965	841.5	23.77	24	-0.07	0.524	1.05	**0.534**	**36**

Table 14.13: SAR Values for LTE Band 41

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	20	1	mid	40620	2593	21.96	23	-0.120	0.039	1.27	0.049	/
Left Tilt 15°	Standard	QPSK	20	1	mid	40620	2593	21.96	23	0.090	0.031	1.27	0.039	/
Right Touch	Standard	QPSK	20	1	mid	40620	2593	21.96	23	-0.100	0.021	1.27	0.026	/
Right Tilt 15°	Standard	QPSK	20	1	mid	40620	2593	21.96	23	0.180	0.039	1.27	**0.050**	**37**
Left Touch	Standard	QPSK	20	50%	high	40620	2593	21.17	22	0.080	0.030	1.21	0.036	/
Left Tilt 15°	Standard	QPSK	20	50%	high	40620	2593	21.17	22	0.090	0.024	1.21	0.028	/
Right Touch	Standard	QPSK	20	50%	high	40620	2593	21.17	22	0.180	0.017	1.21	0.021	/
Right Tilt 15°	Standard	QPSK	20	50%	high	40620	2593	21.17	22	0.017	0.018	1.21	0.022	/
Right Tilt 15°	Standard	QPSK	20	1	mid	39750	2506	21.47	23	0.030	0.023	1.42	0.033	/
Right Tilt 15°	Standard	QPSK	20	1	mid	41490	2680	21.08	23	0.020	0.028	1.56	0.044	/
Body SAR (Full Power 5mm)														
Front Side	Standard	QPSK	20	1	mid	40620	2593	21.96	23	0.070	0.134	1.27	0.170	/
Left Side	Standard	QPSK	20	1	mid	40620	2593	21.96	23	0.000	0.132	1.27	0.168	/
Right Side	Standard	QPSK	20	1	mid	40620	2593	21.96	23	0.110	0.030	1.27	0.038	/
Front Side	Standard	QPSK	20	50%	high	40620	2593	21.17	22	0.020	0.103	1.21	0.125	/
Left Side	Standard	QPSK	20	50%	high	40620	2593	21.17	22	-0.030	0.122	1.21	0.148	/
Right Side	Standard	QPSK	20	50%	high	40620	2593	21.17	22	-0.100	0.028	1.21	0.034	/
Body SAR (Full Power 18mm)														
Back Side	Standard	QPSK	20	1	mid	40620	2593	21.96	23	-0.020	0.394	1.27	**0.501**	**38**
Bottom Side	Standard	QPSK	20	1	mid	40620	2593	21.96	23	-0.120	0.328	1.27	0.417	/
Back Side	Standard	QPSK	20	50%	high	40620	2593	21.17	22	-0.050	0.310	1.21	0.375	/
Bottom Side	Standard	QPSK	20	50%	high	40620	2593	21.17	22	-0.080	0.288	1.21	0.349	/
Back Side	Standard	QPSK	20	1	mid	39750	2506	21.47	23	-0.050	0.344	1.42	0.489	/
Back Side	Standard	QPSK	20	1	mid	41490	2680	21.08	23	-0.020	0.181	1.56	0.282	/
Body SAR (Reduced Power 5mm)														
Back Side	Standard	QPSK	20	1	high	40620	2593	15.9	16.5	-0.010	0.374	1.15	0.429	/
Bottom Side	Standard	QPSK	20	1	high	40620	2593	15.9	16.5	-0.080	0.269	1.15	0.309	/
Back Side	Standard	QPSK	20	50%	high	40620	2593	15.85	16.5	-0.080	0.380	1.16	0.441	/
Bottom Side	Standard	QPSK	20	50%	high	40620	2593	15.85	16.5	-0.090	0.311	1.16	0.361	/
Back Side	Standard	QPSK	20	1	high	39750	2506	15.61	16.5	0.170	0.397	1.23	0.487	/
Back Side	Standard	QPSK	20	1	high	41490	2680	16.5	16.5	-0.080	0.224	1.00	0.224	/
Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (Reduced Distance 0mm)														
Back Side	Standard	QPSK	20	1	high	39750	2506	15.61	16.5	-0.040	0.271	1.23	**0.333**	**39**

Table 14.14: SAR Values for LTE Band CA_41C

Test Position	Cover Type	Mode					Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation		BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR (Sensor off)															
Right Tilt 15°	Standard	QPSK	PCC	20	1	high	40521	2583.1	21.79	23	-0.10	0.040	1.32	0.053	**40**
			SCC	20	1	low	40719	2602.9							
Body SAR 5mm (Sensor on)															
Back Side	Standard	QPSK	PCC	20	1	high	39750	2506	18.15	19.5	-0.03	0.453	1.36	0.618	/
			SCC	20	1	low	39948	2525.8							
Back Side	Standard	QPSK	PCC	5	1	high	39683	2499.3	19.4	19.5	0.18	0.639	1.02	0.654	/
			SCC	20	1	low	39800	2511							
Back Side	Standard	QPSK	PCC	5	50%	high	39683	2499.3	19.24	19.5	-0.03	0.457	1.06	0.485	/
			SCC	20	50%	low	39800	2511							
Back Side	Standard	QPSK	PCC	5	100%	low	39683	2499.3	19.23	19.5	0.13	0.648	1.06	**0.690**	**41**
			SCC	20	100%	low	39800	2511							
Body SAR 18mm (Sensor off)															
Back Side	Standard	QPSK	PCC	20	1	high	40521	2583.1	21.79	23	0.03	0.230	1.32	0.304	/
			SCC	20	1	low	40719	2602.9							

Test Position	Cover Type	Mode					Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation		BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Body SAR 0mm (Sensor on)															
Back Side	Standard	QPSK	PCC	20	1	high	39750	2506	18.15	19.5	-0.14	0.491	1.36	**0.670**	**42**
			SCC	20	1	low	39948	2525.8							
Back Side	Standard	QPSK	PCC	5	1	high	39683	2499.3	19.4	19.5	-0.14	0.539	1.02	0.552	/
			SCC	20	1	low	39800	2511							
Back Side	Standard	QPSK	PCC	5	50%	high	39683	2499.3	19.24	19.5	-0.048	0.486	1.06	0.516	/
			SCC	20	50%	low	39800	2511							
Back Side	Standard	QPSK	PCC	5	100%	low	39683	2499.3	19.23	19.5	0.067	0.559	1.06	0.595	/
			SCC	20	100%	low	39800	2511							

Table 14.15: SAR Values for LTE Band 66

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	20	1	high	132572	1770	21.74	23	0.140	0.113	1.34	0.151	/
Left Tilt 15°	Standard	QPSK	20	1	high	132572	1770	21.74	23	0.110	0.088	1.34	0.118	/
Right Touch	Standard	QPSK	20	1	high	132572	1770	21.74	23	-0.120	0.097	1.34	0.129	/
Right Tilt 15°	Standard	QPSK	20	1	high	132572	1770	21.74	23	0.050	0.049	1.34	0.065	/
Left Touch	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.190	0.090	1.42	0.128	
Left Tilt 15°	Standard	QPSK	20	50%	high	132572	1770	20.49	22	0.140	0.071	1.42	0.100	/
Right Touch	Standard	QPSK	20	50%	high	132572	1770	20.49	22	0.110	0.073	1.42	0.103	/
Right Tilt 15°	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.170	0.037	1.42	0.053	/
Left Touch	Standard	QPSK	20	1	high	132072	1720	21.6	23	-0.110	0.163	1.38	**0.225**	**43**
Left Touch	Standard	QPSK	20	1	high	132322	1745	21.59	23	0.150	0.125	1.38	0.173	
Body SAR (Full Power 5mm)														
Front Side	Standard	QPSK	20	1	high	132572	1770	21.74	23	-0.170	0.439	1.34	0.587	/
Left Side	Standard	QPSK	20	1	high	132572	1770	21.74	23	-0.100	0.484	1.34	0.647	/
Right Side	Standard	QPSK	20	1	high	132572	1770	21.74	23	-0.160	0.126	1.34	0.168	/
Front Side	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.170	0.357	1.42	0.505	/
Left Side	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.100	0.390	1.42	0.552	/
Right Side	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.130	0.107	1.42	0.151	/
Left Side	Standard	QPSK	20	1	high	132072	1720	21.6	23	-0.080	0.630	1.38	**0.870**	**44**
Left Side	Standard	QPSK	20	1	high	132322	1745	21.59	23	-0.090	0.613	1.38	0.848	/
Body SAR (Full Power 18mm)														
Back Side	Standard	QPSK	20	1	high	132572	1770	21.74	23	-0.010	0.135	1.34	0.180	/
Bottom Side	Standard	QPSK	20	1	high	132572	1770	21.74	23	-0.030	0.099	1.34	0.132	/
Back Side	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.080	0.128	1.42	0.181	/
Bottom Side	Standard	QPSK	20	50%	high	132572	1770	20.49	22	-0.170	0.087	1.42	0.123	/
Body SAR (Redeced Power 5mm)														
Back Side	Standard	QPSK	20	1	high	132572	1770	19.56	20.5	-0.060	0.554	1.24	0.688	/
Bottom Side	Standard	QPSK	20	1	high	132572	1770	19.56	20.5	-0.120	0.239	1.24	0.297	/
Back Side	Standard	QPSK	20	50%	high	132572	1770	19.43	20.5	-0.120	0.561	1.28	0.718	/
Bottom Side	Standard	QPSK	20	50%	high	132572	1770	19.43	20.5	-0.140	0.272	1.28	0.348	/
Back Side	Standard	QPSK	20	1	high	132072	1720	19.41	20.5	-0.030	0.547	1.29	0.703	/
Back Side	Standard	QPSK	20	1	high	132322	1745	19.49	20.5	-0.110	0.555	1.26	0.700	/
Back Side	Standard	QPSK	20	50%	high	132072	1720	19.42	20.5	-0.050	0.543	1.28	0.696	/
Back Side	Standard	QPSK	20	50%	high	132322	1745	19.16	20.5	-0.040	0.548	1.36	0.746	/
Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (Full Power Distance 0mm)														
Left Side	Standard	QPSK	20	1	high	132072	1720	21.6	23	0.020	0.818	1.38	**1.129**	**45**

Table 14.16: SAR Values for LTE Band 71

Test Position	Cover Type	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR														
Left Touch	Standard	QPSK	20	1	mid	133372	688	22.57	23	0.070	0.083	1.10	**0.092**	**46**
Left Tilt 15°	Standard	QPSK	20	1	mid	133372	688	22.57	23	-0.120	0.067	1.10	0.074	/
Right Touch	Standard	QPSK	20	1	mid	133372	688	22.57	23	-0.190	0.082	1.10	0.091	/
Right Tilt 15°	Standard	QPSK	20	1	mid	133372	688	22.57	23	0.040	0.069	1.10	0.076	/
Left Touch	Standard	QPSK	20	50%	high	133372	688	21.56	22	0.040	0.058	1.11	0.064	/
Left Tilt 15°	Standard	QPSK	20	50%	high	133372	688	21.56	22	-0.060	0.054	1.11	0.060	/
Right Touch	Standard	QPSK	20	50%	high	133372	688	21.56	22	0.130	0.058	1.11	0.064	/
Right Tilt 15°	Standard	QPSK	20	50%	high	133372	688	21.56	22	0.040	0.049	1.11	0.054	/
Left Touch	Standard	QPSK	20	1	mid	133222	673	22.43	23	-0.090	0.070	1.14	0.079	/
Left Touch	Standard	QPSK	20	1	mid	133322	683	22.55	23	0.050	0.065	1.11	0.072	/
Body SAR (5mm)														
Front Side	Standard	QPSK	20	1	mid	133372	688	22.57	23	0.030	0.120	1.10	0.132	/
Back Side	Standard	QPSK	20	1	mid	133372	688	22.57	23	0.110	0.175	1.10	0.193	/
Left Side	Standard	QPSK	20	1	mid	133372	688	22.57	23	0.080	0.168	1.10	0.185	/
Right Side	Standard	QPSK	20	1	mid	133372	688	22.57	23	0.010	0.147	1.10	0.162	/
Bottom Side	Standard	QPSK	20	1	mid	133372	688	22.57	23	-0.090	0.077	1.10	0.085	/
Front Side	Standard	QPSK	20	50%	high	133372	688	21.56	22	-0.120	0.090	1.11	0.099	/
Back Side	Standard	QPSK	20	50%	high	133372	688	21.56	22	-0.040	0.136	1.11	0.151	/
Left Side	Standard	QPSK	20	50%	high	133372	688	21.56	22	0.030	0.134	1.11	0.148	/
Right Side	Standard	QPSK	20	50%	high	133372	688	21.56	22	-0.080	0.120	1.11	0.133	/
Bottom Side	Standard	QPSK	20	50%	high	133372	688	21.56	22	-0.020	0.061	1.11	0.067	/
Back Side	Standard	QPSK	20	1	mid	133222	673	22.43	23	0.060	0.158	1.14	0.180	/
Back Side	Standard	QPSK	20	1	mid	133322	683	22.55	23	-0.030	0.177	1.11	**0.196**	**47**
Test Position	**Cover Type**	**Mode**				**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
		Modulation	**BW(MHz)**	**RB Allocation**	**RB Offset**						**Measured SAR10g**	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)														
Back Side	Standard	QPSK	20	1	mid	133322	683	22.55	23	0.03	0.349	1.11	**0.387**	**48**

Table 14.17: SAR Values for CDMA BC0

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	1xRTT	384	836.52	24.08	24.5	-0.130	0.163	1.10	0.180	/
Left Tilt 15°	Standard	1xRTT	384	836.52	24.08	24.5	-0.060	0.111	1.10	0.122	/
Right Touch	Standard	1xRTT	384	836.52	24.08	24.5	-0.150	0.239	1.10	0.263	/
Right Tilt 15°	Standard	1xRTT	384	836.52	24.08	24.5	-0.030	0.145	1.10	0.160	/
Left Touch	Standard	Ev-DO-0	384	836.52	24.31	24.5	-0.150	0.167	1.04	0.174	/
Left Tilt 15°	Standard	Ev-DO-0	384	836.52	24.31	24.5	0.100	0.116	1.04	0.121	/
Right Touch	Standard	Ev-DO-0	384	836.52	24.31	24.5	-0.010	0.221	1.04	0.231	/
Right Tilt 15°	Standard	Ev-DO-0	384	836.52	24.31	24.5	0.030	0.120	1.04	0.125	/
Left Touch	Standard	Ev-DO-A	384	836.52	23.9	24.5	0.040	0.166	1.15	0.191	/
Left Tilt 15°	Standard	Ev-DO-A	384	836.52	23.9	24.5	-0.010	0.111	1.15	0.127	/
Right Touch	Standard	Ev-DO-A	384	836.52	23.9	24.5	-0.190	0.211	1.15	0.242	/
Right Tilt 15°	Standard	Ev-DO-A	384	836.52	23.9	24.5	0.180	0.119	1.15	0.137	/
Right Touch	Standard	1xRTT	1013	824.7	24.16	24.5	0.180	0.215	1.08	0.233	/
Right Touch	Standard	1xRTT	777	848.31	24.22	24.5	-0.140	0.284	1.07	**0.303**	**49**
Body SAR (5mm)											
Front Side	Standard	Ev-DO-0	384	836.52	24.31	24.5	-0.120	0.376	1.04	0.393	/
Back Side	Standard	Ev-DO-0	384	836.52	24.31	24.5	-0.060	0.350	1.04	0.366	/
Left Side	Standard	Ev-DO-0	384	836.52	24.31	24.5	0.030	0.303	1.04	0.317	/
Right Side	Standard	Ev-DO-0	384	836.52	24.31	24.5	0.080	0.372	1.04	0.389	/
Bottom Side	Standard	Ev-DO-0	384	836.52	24.31	24.5	-0.150	0.251	1.04	0.262	/
Front Side	Standard	Ev-DO-0	1013	824.7	24.29	24.5	-0.070	0.326	1.05	0.342	/
Front Side	Standard	Ev-DO-0	777	848.31	24.25	24.5	-0.110	0.389	1.06	0.412	**50**
Test Position	**Cover Type**	**Mode** / **Modulation**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)											
Front Side	Standard	Ev-DO-0	777	848.31	24.25	24.5	-0.04	1.100	1.06	**1.165**	**51**

Table 14.18: SAR Values for CDMA BC1

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	1xRTT	600	1880	22.51	23.5	-0.060	0.361	1.26	**0.453**	**52**
Left Tilt 15°	Standard	1xRTT	600	1880	22.51	23.5	0.010	0.181	1.26	0.227	/
Right Touch	Standard	1xRTT	600	1880	22.51	23.5	-0.100	0.153	1.26	0.192	/
Right Tilt 15°	Standard	1xRTT	600	1880	22.51	23.5	0.080	0.089	1.26	0.112	/
Left Touch	Standard	Ev-DO-0	600	1880	23.23	23.5	-0.050	0.369	1.06	0.393	/
Left Tilt 15°	Standard	Ev-DO-0	600	1880	23.23	23.5	0.020	0.164	1.06	0.175	/
Right Touch	Standard	Ev-DO-0	600	1880	23.23	23.5	0.100	0.092	1.06	0.098	/
Right Tilt 15°	Standard	Ev-DO-0	600	1880	23.23	23.5	0.010	0.096	1.06	0.102	/
Left Touch	Standard	Ev-DO-A	600	1880	23.25	23.5	0.190	0.329	1.06	0.348	/
Left Tilt 15°	Standard	Ev-DO-A	600	1880	23.25	23.5	-0.080	0.164	1.06	0.174	/
Right Touch	Standard	Ev-DO-A	600	1880	23.25	23.5	-0.090	0.206	1.06	0.218	/
Right Tilt 15°	Standard	Ev-DO-A	600	1880	23.25	23.5	0.110	0.105	1.06	0.111	/
Left Touch	Standard	Ev-DO-A	25	1851.25	23.42	23.5	-0.140	0.358	1.02	0.365	/
Left Touch	Standard	Ev-DO-A	1175	1908.75	23.44	23.5	0.060	0.372	1.01	0.377	/
Body SAR (Full Power 5mm)											
Front Side	Standard	Ev-DO-0	600	1880	23.23	23.5	-0.030	0.915	1.06	0.974	/
Left Side	Standard	Ev-DO-0	600	1880	23.23	23.5	0.080	1.150	1.06	**1.224**	**53**
Right Side	Standard	Ev-DO-0	600	1880	23.23	23.5	0.020	0.333	1.06	0.354	/
Front Side	Standard	Ev-DO-0	25	1851.25	23.2	23.5	-0.010	0.854	1.07	0.915	/
Front Side	Standard	Ev-DO-0	1175	1908.75	23.46	23.5	-0.060	0.903	1.01	0.911	/
Left Side	Standard	Ev-DO-0	25	1851.25	23.2	23.5	0.060	1.050	1.07	1.125	/
Left Side	Standard	Ev-DO-0	1175	1908.75	23.46	23.5	0.150	0.897	1.01	0.905	/
Body SAR (Full Power 19mm)											
Back Side	Standard	Ev-DO-0	600	1880	23.23	23.5	-0.180	0.406	1.06	0.432	/
Bottom Side	Standard	Ev-DO-0	600	1880	23.23	23.5	-0.010	0.303	1.06	0.322	/
Body SAR (Full Power 5mm)Repeated											
Left Side	Standard	Ev-DO-0	600	1880	23.23	23.5	0.030	1.050	1.06	1.117	/
Test Position	**Cover Type**	**Mode / Modulation**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Full Power Distance 0mm)											
Left Side	Standard	Ev-DO-0	600	1880	23.23	23.5	0.020	1.230	1.06	**1.309**	**54**

Table 14.19: SAR Values for CDMA BC10

Test Position	Cover Type	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR											
Left Touch	Standard	1xRTT	550	819.75	24.55	25	-0.130	0.227	1.11	0.252	/
Left Tilt 15°	Standard	1xRTT	550	819.75	24.55	25	-0.010	0.140	1.11	0.155	/
Right Touch	Standard	1xRTT	550	819.75	24.55	25	0.180	0.242	1.11	0.268	/
Right Tilt 15°	Standard	1xRTT	550	819.75	24.55	25	0.180	0.126	1.11	0.140	/
Left Touch	Standard	Ev-DO-0	550	819.75	24.51	25	-0.160	0.197	1.12	0.221	/
Left Tilt 15°	Standard	Ev-DO-0	550	819.75	24.51	25	0.160	0.135	1.12	0.151	/
Right Touch	Standard	Ev-DO-0	550	819.75	24.51	25	0.160	0.240	1.12	**0.269**	**55**
Right Tilt 15°	Standard	Ev-DO-0	550	819.75	24.51	25	0.140	0.135	1.12	0.151	/
Left Touch	Standard	Ev-DO-A	550	819.75	24.36	25	0.010	0.192	1.16	0.222	/
Left Tilt 15°	Standard	Ev-DO-A	550	819.75	24.36	25	-0.100	0.136	1.16	0.158	/
Right Touch	Standard	Ev-DO-A	550	819.75	24.36	25	-0.150	0.216	1.16	0.250	/
Right Tilt 15°	Standard	Ev-DO-A	550	819.75	24.36	25	0.190	0.119	1.16	0.138	/
Right Touch	Standard	1xRTT	450	817.25	24.76	25	0.180	0.218	1.06	0.230	/
Right Touch	Standard	1xRTT	650	822.25	24.78	25	0.180	0.246	1.05	0.259	/
Body SAR (5mm)											
Front Side	Standard	Ev-DO-0	550	819.75	24.51	25	0.010	0.395	1.12	0.442	/
Back Side	Standard	Ev-DO-0	550	819.75	24.51	25	-0.090	0.474	1.12	0.531	/
Left Side	Standard	Ev-DO-0	550	819.75	24.51	25	0.120	0.196	1.12	0.219	/
Right Side	Standard	Ev-DO-0	550	819.75	24.51	25	0.050	0.391	1.12	0.438	/
Bottom Side	Standard	Ev-DO-0	550	819.75	24.51	25	0.090	0.294	1.12	0.329	/
Back Side	Standard	Ev-DO-0	450	817.25	24.74	25	-0.080	0.442	1.06	0.469	/
Back Side	Standard	Ev-DO-0	650	822.25	24.71	25	-0.100	0.476	1.07	**0.509**	**56**
Test Position	**Cover Type**	**Mode / Modulation**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
								Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)											
Back Side	Standard	Ev-DO-0	650	822.25	24.71	25	-0.12	0.887	1.07	**0.948**	**57**

Table 14.20: SAR Values for BT

Test Position	Cover Type	Mode	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
									Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR												
Left Touch	Standard	BT	1:1	0	2402	10.15	10.5	-0.040	0.043	1.08	0.047	/
Left Tilt 15°	Standard	BT	1:1	0	2402	10.15	10.5	-0.090	0.029	1.08	0.031	/
Right Touch	Standard	BT	1:1	0	2402	10.15	10.5	0.010	0.002	1.08	0.002	/
Right Tilt 15°	Standard	BT	1:1	0	2402	10.15	10.5	0.040	0.002	1.08	0.002	/
Left Touch	Standard	BT	1:1	39	2441	8.73	9.5	-0.020	0.035	1.19	0.042	/
Left Touch	Standard	BT	1:1	78	2480	10.05	10.5	-0.060	0.083	1.11	**0.092**	**58**
Body SAR (5mm)												
Front Side	Standard	BT	1:1	0	2402	10.15	10.5	0.020	0.017	1.08	0.018	/
Back Side	Standard	BT	1:1	0	2402	10.15	10.5	-0.040	0.020	1.08	0.022	/
Left Side	Standard	BT	1:1	0	2402	10.15	10.5	N/A	N/A	1.08	N/A	/
Right Side	Standard	BT	1:1	0	2402	10.15	10.5	0.070	0.025	1.08	0.027	/
Top Side	Standard	BT	1:1	0	2402	10.15	10.5	0.070	0.007	1.08	0.007	/
Right Side	Standard	BT	1:1	39	2441	8.73	9.5	-0.080	0.022	1.19	0.027	/
Right Side	Standard	BT	1:1	78	2480	10.05	10.5	0.150	0.052	1.11	**0.058**	**59**
Test Position	**Cover Type**	**Mode**	**Duty Cycle**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
									Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)												
Right Side	Standard	BT	1:1	78	2480	10.05	10.5	-0.080	0.063	1.11	**0.070**	**60**

Table 14.21: SAR Values for BLE

Test Position	Cover Type	Mode	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
									Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR												
Left Touch	Standard	BLE	1:1	0	2402	3.5	4	-0.180	0.006	1.12	0.007	/
Left Tilt 15°	Standard	BLE	1:1	0	2402	3.5	4	-0.190	0.003	1.12	0.004	/
Right Touch	Standard	BLE	1:1	0	2402	3.5	4	N/A	N/A	1.12	N/A	/
Right Tilt 15°	Standard	BLE	1:1	0	2402	3.5	4	N/A	N/A	1.12	N/A	/
Left Touch	Standard	BLE	1:1	19	2440	5.308	6	-0.170	0.008	1.17	**0.009**	**61**
Left Touch	Standard	BLE	1:1	38	2480	6.468	7	-0.180	0.005	1.13	0.006	/
Body SAR (5mm)												
Front Side	Standard	BLE	1:1	0	2402	3.5	4	N/A	N/A	1.12	N/A	/
Back Side	Standard	BLE	1:1	0	2402	3.5	4	-0.190	0.001	1.12	0.002	/
Left Side	Standard	BLE	1:1	0	2402	3.5	4	N/A	N/A	1.12	N/A	/
Right Side	Standard	BLE	1:1	0	2402	3.5	4	0.170	0.002	1.12	0.002	/
Top Side	Standard	BLE	1:1	0	2402	3.5	4	N/A	N/A	1.12	N/A	/
Right Side	Standard	BLE	1:1	19	2440	5.308	6	0.190	0.003	1.17	**0.003**	**62**
Right Side	Standard	BLE	1:1	38	2480	6.468	7	N/A	N/A	1.13	N/A	/
Test Position	**Cover Type**	**Mode**	**Duty Cycle**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
									Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)												
Right Side	Standard	BLE	1:1	19	2440	5.308	6	-0.190	0.002	1.17	**0.003**	**63**

Table 14.22: SAR Values for Wi-Fi2.4G

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
										Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR													
Left Touch	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.130	0.200	1.15	0.229	/
Left Tilt 15°	Standard	802.11b	20	1:1	1	2412	17.41	18	0.070	0.152	1.15	0.174	/
Right Touch	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.110	0.080	1.15	0.092	/
Right Tilt 15°	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.010	0.053	1.15	0.061	/
Left Touch	Standard	802.11b	20	1:1	6	2437	17.34	18	-0.130	0.228	1.16	**0.265**	**64**
Left Touch	Standard	802.11b	20	1:1	11	2462	16.9	17.5	0.030	0.223	1.15	0.256	/
Body SAR (5mm)													
Front Side	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.070	0.096	1.15	0.110	/
Back Side	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.090	0.131	1.15	**0.150**	**65**
Left Side	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.120	0.014	1.15	0.016	/
Right Side	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.020	0.125	1.15	0.143	/
Top Side	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.020	0.053	1.15	0.061	/
Back Side	Standard	802.11b	20	1:1	6	2437	17.34	18	-0.050	0.120	1.16	0.140	/
Back Side	Standard	802.11b	20	1:1	11	2462	16.9	17.5	-0.010	0.130	1.15	0.149	/
Test Position	**Cover Type**	**Mode**	**BW(MHz)**	**Duty Cycle**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
										Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)													
Back Side	Standard	802.11b	20	1:1	1	2412	17.41	18	-0.03	0.189	0.91	**0.172**	**66**

Table 14.23: SAR Values for Wi-Fi5G UNII-1

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
										Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR													
Left Touch	Standard	802.11a	20	1:1	36	5180	12.01	12.5	-0.100	0.231	1.12	**0.259**	**67**
Left Tilt 15°	Standard	802.11a	20	1:1	36	5180	12.01	12.5	0.080	0.134	1.12	0.150	/
Right Touch	Standard	802.11a	20	1:1	36	5180	12.01	12.5	-0.140	0.127	1.12	0.142	/
Right Tilt 15°	Standard	802.11a	20	1:1	36	5180	12.01	12.5	0.100	0.117	1.12	0.131	/
Left Touch	Standard	802.11a	20	1:1	40	5200	11.18	12	-0.050	0.196	1.21	0.237	/
Left Touch	Standard	802.11a	20	1:1	48	5240	10.21	11	-0.050	0.159	1.20	0.191	/
Body SAR (5mm)													
Front Side	Standard	802.11a	20	1:1	36	5180	12.01	12.5	-0.020	0.147	1.12	0.165	/
Back Side	Standard	802.11a	20	1:1	36	5180	12.01	12.5	-0.070	0.131	1.12	0.147	/
Left Side	Standard	802.11a	20	1:1	36	5180	12.01	12.5	0.000	0.022	1.12	0.025	/
Right Side	Standard	802.11a	20	1:1	36	5180	12.01	12.5	0.010	0.406	1.12	**0.454**	**68**
Top Side	Standard	802.11a	20	1:1	36	5180	12.01	12.5	-0.030	0.206	1.12	0.231	/
Right Side	Standard	802.11a	20	1:1	40	5200	11.18	12	-0.160	0.365	1.21	0.441	/
Right Side	Standard	802.11a	20	1:1	48	5240	10.21	11	-0.100	0.313	1.20	0.375	/
Test Position	**Cover Type**	**Mode**		**Duty Cycle**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
										Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)													
Right Side	Standard	802.11a	20	1:1	36	5180	12.01	12.5	0.060	0.355	1.12	**0.397**	**69**

Table 14.24: SAR Values for Wi-Fi5G UNII-2C

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
										Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR													
Left Touch	Standard	802.11n	40	1:1	110	5550	12.46	13	-0.090	0.260	1.13	**0.294**	**70**
Left Tilt 15°	Standard	802.11n	40	1:1	110	5550	12.46	13	0.170	0.089	1.13	0.100	/
Right Touch	Standard	802.11n	40	1:1	110	5550	12.46	13	-0.020	0.084	1.13	0.095	/
Right Tilt 15°	Standard	802.11n	40	1:1	110	5550	12.46	13	-0.020	0.093	1.13	0.105	/
Left Touch	Standard	802.11n	40	1:1	102	5510	12.29	13	-0.080	0.245	1.18	0.289	/
Left Touch	Standard	802.11n	40	1:1	134	5670	10.8	11.5	-0.080	0.171	1.17	0.201	/
Body SAR (5mm)													
Front Side	Standard	802.11n	40	1:1	110	5550	12.46	13	-0.050	0.090	1.13	0.102	/
Back Side	Standard	802.11n	40	1:1	110	5550	12.46	13	-0.100	0.261	1.13	0.296	/
Left Side	Standard	802.11n	40	1:1	110	5550	12.46	13	0.000	0.043	1.13	0.049	/
Right Side	Standard	802.11n	40	1:1	110	5550	12.46	13	-0.050	0.478	1.13	0.541	/
Top Side	Standard	802.11n	40	1:1	110	5550	12.46	13	0.050	0.306	1.13	0.347	/
Right Side	Standard	802.11n	40	1:1	102	5510	12.29	13	-0.040	0.580	1.18	**0.683**	**71**
Right Side	Standard	802.11n	40	1:1	134	5670	10.8	11.5	-0.140	0.389	1.17	0.457	/
Test Position	**Cover Type**	**Mode**		**Duty Cycle**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
										Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)													
Right Side	Standard	802.11n	40	1:1	102	5510	12.29	13	0.100	0.426	1.18	**0.502**	**72**

Table 14.25: SAR Values for Wi-Fi5G UNII-3

Test Position	Cover Type	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
										Measured SAR1g	Scaling Factor	Report SAR1g	
Head SAR													
Left Touch	Standard	802.11a	20	1:1	157	5785	11.61	12.5	-0.030	0.306	1.23	0.376	/
Left Tilt 15°	Standard	802.11a	20	1:1	157	5785	11.61	12.5	0.010	0.329	1.23	0.404	/
Right Touch	Standard	802.11a	20	1:1	157	5785	11.61	12.5	0.030	0.139	1.23	0.171	/
Right Tilt 15°	Standard	802.11a	20	1:1	157	5785	11.61	12.5	0.040	0.365	1.23	0.448	/
Right Tilt 15°	Standard	802.11a	20	1:1	149	5745	10.74	11.5	0.060	0.288	1.19	0.343	/
Right Tilt 15°	Standard	802.11a	20	1:1	165	5825	11.11	11.5	-0.050	0.544	1.09	**0.595**	**73**
Body SAR (5 mm)													
Front Side	Standard	802.11a	20	1:1	157	5785	11.61	12.5	0.060	0.118	1.23	0.145	/
Back Side	Standard	802.11a	20	1:1	157	5785	11.61	12.5	-0.030	0.113	1.23	0.139	/
Left Side	Standard	802.11a	20	1:1	157	5785	11.61	12.5	-0.070	0.065	1.23	0.080	/
Right Side	Standard	802.11a	20	1:1	157	5785	11.61	12.5	0.090	0.471	1.23	0.578	/
Top Side	Standard	802.11a	20	1:1	157	5785	11.61	12.5	0.050	0.266	1.23	0.326	/
Right Side	Standard	802.11a	20	1:1	149	5745	10.74	11.5	-0.020	0.444	1.19	0.529	/
Right Side	Standard	802.11a	20	1:1	165	5825	11.11	11.5	-0.070	0.568	1.09	**0.621**	**74**
Test Position	**Cover Type**	**Mode**	**BW(MHz)**	**Duty Cycle**	**Channel**	**Frequency (MHz)**	**Measured power (dBm)**	**Tune-up (dBm)**	**Power Drift (dB)**	**Limit of 10gSAR 4.0 W/kg (mW/g)**			**Figure No.**
										Measured SAR10g	**Scaling Factor**	**Report SAR10g**	
Limb SAR (Distance 0mm)													
Right Side	Standard	802.11a	20	1:1	165	5825	11.11	11.5	0.030	0.419	1.09	**0.458**	**75**

14.2. Simultaneous SAR Evaluation

Table 14.26: Standalone SAR

FCC SAR Test		Cellular																			Max. of Cellular
		G850	G1900	W B2	W B4	W B5	L B66	L B71	L B7	L B7C	L B12	L B13	L B14	L B25	L B26	L B41	L B41C	BC0	BC1	BC10	
Head	Left Touch	0.148	0.136	0.276	0.259	0.202	0.225	0.092	0.151	N/A	0.113	0.104	0.105	0.235	0.189	0.049	N/A	0.191	0.453	0.252	0.453
	Left Tilt 15°	0.108	0.054	0.118	0.143	0.183	0.118	0.074	0.077	N/A	0.090	0.083	0.075	0.112	0.083	0.039	N/A	0.127	0.227	0.158	0.227
	Right Touch	0.263	0.062	0.172	0.095	0.288	0.129	0.091	0.065	N/A	0.128	0.125	0.111	0.148	0.195	0.026	N/A	0.303	0.218	0.269	0.303
	Right Tilt 15°	0.118	0.026	0.062	0.070	0.179	0.065	0.076	0.152	0.039	0.085	0.083	0.095	0.054	0.090	0.050	0.053	0.160	0.112	0.151	0.179
Body (5mm)	Top	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Left	0.099	0.381	0.574	0.622	0.181	0.870	0.185	0.522	N/A	0.153	0.124	0.104	0.452	0.176	0.168	N/A	0.317	1.224	0.219	1.224
	Right	0.196	0.140	0.239	0.109	0.289	0.168	0.162	0.090	N/A	0.227	0.211	0.196	0.357	0.305	0.038	N/A	0.389	0.354	0.438	0.438
	Front	0.264	0.327	0.499	0.411	0.345	0.587	0.132	0.670	N/A	0.157	0.184	0.179	0.723	0.227	0.170	N/A	0.412	0.974	0.442	0.974
	Back	0.438	1.007	0.991	0.783	0.408	0.746	0.196	1.154	0.781	0.204	0.195	0.184	1.075	0.368	0.501	0.690	0.366	0.432	0.531	1.154
	Bottom	0.256	0.423	0.567	0.376	0.295	0.348	0.085	1.163	0.520	0.089	0.137	0.134	0.676	0.319	0.417	N/A	0.262	0.322	0.329	1.163
Limb (0mm)	Left	N/A	N/A	N/A	N/A	N/A	1.129	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.309	N/A	1.309
	Right	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.087	0.077	0.073	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.087
	Front	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.165	N/A	N/A	1.165
	Back	0.686	1.122	1.242	1.073	0.652	N/A	0.387	N/A	N/A	N/A	N/A	N/A	1.301	0.534	0.333	0.670	N/A	N/A	0.948	1.301
	Bottom	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.420	0.483	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.483

Table 14.27 Simultaneous transmission SAR

FCC SAR Test		Max. of Cellular	Non-Cellular						同步传输/Simultanuous	
			BT	BLE	WiFi2.4G	WiFi5G UNII-3	WiFi5G UNII-1	WiFi5G UNII-2C	Max(Cel.)+BLE	Max(Cel.)+BT+WiFi 2G+5G
Head	Left Touch	0.453	0.092	0.009	0.265	0.376	0.259	0.294	0.463	0.921
	Left Tilt 15°	0.227	0.031	0.004	0.174	0.404	0.150	0.100	0.231	0.663
	Right Touch	0.303	0.002	N/A	0.092	0.171	0.142	0.095	0.303	0.476
	Right Tilt 15°	0.179	0.002	N/A	0.061	0.595	0.131	0.105	0.179	0.776
Body (5mm)	Top	N/A	0.007	N/A	0.061	0.326	0.231	0.347	N/A	0.354
	Left	1.224	N/A	N/A	0.016	0.080	0.025	0.049	1.224	1.303
	Right	0.438	0.058	0.003	0.143	0.621	0.454	0.683	0.441	1.179
	Front	0.974	0.018	N/A	0.110	0.145	0.165	0.102	0.974	1.156
	Back	1.154	0.022	0.002	0.150	0.139	0.147	0.296	1.155	**1.471**
	Bottom	1.163	N/A	N/A	N/A	N/A	N/A	N/A	1.163	1.163
Limb (0mm)	Left	1.309	N/A	N/A	N/A	N/A	N/A	N/A	1.309	1.309
	Right	0.087	0.070	0.003	N/A	0.458	0.397	0.502	0.089	0.658
	Front	1.165	N/A	N/A	N/A	N/A	N/A	N/A	1.165	1.165
	Back	1.301	N/A	N/A	0.172	N/A	N/A	N/A	1.301	**1.473**
	Bottom	0.483	N/A	N/A	N/A	N/A	N/A	N/A	0.483	0.483

According to the conducted power measurement result, we can draw the conclusion that: stand-alone SAR for Wi-Fi should be performed. Then, simultaneous transmission SAR for Wi-Fi/BT is considered with measurement results of GSM/WCDMA/LTE/CDMA and Wi-Fi/BT.

According to the above table, the sum of reported SAR values for partial-body GSM/WCDMA/LTE/CDMA and Wi-Fi < 1.6W/kg; the sum of reported SAR values for Limb GSM/WCDMA/LTE/CDMA and Wi-Fi < 4.0W/kg. So the simultaneous transmission SAR is not required for Wi-Fi/BT transmitter.

14.3. SAR Measurement Variability

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

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

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45W/kg (~ 10% from the 1-g SAR limit).

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

Table 14.5: SAR Measurement Variability (1g)

Frequency		Configuration	Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio
MHz	Ch.					
1909.8	810	GPRS 3TS	Back Side	0.731	0.847	1.159
1880	9400	RMC12.2k	Back Side	0.817	0.732	1.116
1905	26590	20M 50RB0ffset	Back Side	0.909	0.905	1.004
1880	600	Ev-DO-0	Left Side	1.150	1.050	1.095

Note: According to the KDB 865664 D01 repeated measurement is not required when the original highest measured SAR is < 0.8 W/kg.