



**CAICT**  
No.I23Z60340-SEM06



# SAR TEST REPORT

No. I23Z60340-SEM06

For

**Wingtech Mobile Communications Co.,Ltd.**

**5G Mobile Phone**

**Model Name: TMRV065G**

**with**

**Hardware Version: V1.0**

**Software Version: TMRV065G\_0.01.01**

**FCC ID: 2APXW-TMRV065G**

**Issued Date: 2023-4-11**

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## REPORT HISTORY

Report Number	Revision	Issue Date	Description
I23Z60340-SEM06	Rev.0	2023-4-11	Initial creation of test report

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## 1 Test Laboratory

### 1.1 Testing Location

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

### 1.2 Testing Environment

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

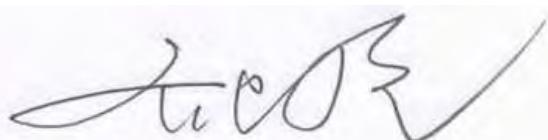
### 1.3 Project Data

Project Leader:	Qi Dianyuan
Test Engineer:	Yao Juming
Testing Start Date:	March 10, 2023
Testing End Date:	April 7, 2023

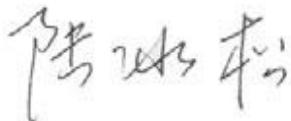
### 1.4 Signature



Yao Juming  
(Prepared this test report)



Qi Dianyuan  
(Reviewed this test report)



Lu Bingsong  
Deputy Director of the laboratory  
(Approved this test report)

## 2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Wingtech Group (Hong Kong) Limited. 5G Mobile Phone TMRV065G is as follows:

**Table 2.1: Highest Reported SAR (1g)**

Technology Band	Head	Hotspot	Body-Worn	Phablet-10g	Equipment Class
GSM850	<b>0.74</b>	<b>1.13</b>	<b>1.13</b>	/	PCE
GSM1900	<b>0.30</b>	<b>1.09</b>	<b>1.09</b>	/	
WCDMA1900	<b>0.32</b>	<b>0.71</b>	<b>0.53</b>	/	
WCDMA1700	<b>0.17</b>	<b>0.44</b>	<b>0.29</b>	/	
WCDMA 850	<b>0.29</b>	<b>0.62</b>	<b>0.62</b>	/	
LTE Band2-ANT1	<b>0.42</b>	<b>0.51</b>	<b>0.43</b>	/	
LTE Band2-ANT3	<b>0.60</b>	<b>0.52</b>	<b>0.52</b>	/	
LTE Band7	<b>0.19</b>	<b>0.70</b>	<b>0.52</b>	/	
LTE Band12	<b>0.25</b>	<b>0.44</b>	<b>0.44</b>	/	
LTE Band25	<b>0.28</b>	<b>0.56</b>	<b>0.53</b>	/	
LTE Band26	<b>0.27</b>	<b>0.36</b>	<b>0.34</b>	/	
LTE Band41-PC3	<b>0.43</b>	<b>0.29</b>	<b>0.23</b>	/	
LTE Band41-PC2	<b>0.66</b>	<b>0.43</b>	<b>0.31</b>	/	
LTE Band66-ANT1	<b>0.22</b>	<b>0.36</b>	<b>0.41</b>	/	
LTE Band66-ANT3	<b>0.61</b>	<b>0.65</b>	<b>0.41</b>	/	
LTE Band71	<b>0.20</b>	<b>0.39</b>	<b>0.39</b>	/	
5G NR n25	<b>0.21</b>	<b>0.55</b>	<b>0.33</b>	/	
5G NR n41	<b>0.79</b>	<b>0.71</b>	<b>0.77</b>	/	
5G NR n66	<b>0.22</b>	<b>0.31</b>	<b>0.22</b>	/	
5G NR n71	<b>0.10</b>	<b>0.26</b>	<b>0.22</b>	/	
5G NR n77	<b>1.03</b>	<b>0.74</b>	<b>0.92</b>	/	
WLAN 2.4GHz	<b>0.98</b>	<b>0.23</b>	<b>0.23</b>	/	DTS
WLAN 5GHz	<b>0.74</b>	<b>0.50</b>	<b>0.63</b>	/	NII
BT	<b>0.08</b>	<b>0.01</b>	<b>0.01</b>	/	DSS

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

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

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

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of (**Table 2.1**), and the values are: **1.13 W/kg(1g)**.

**Remark:**

This device supports both LTE B4/B5 and LTE B66/B26. Since the supported frequency span for LTE B4/B5 falls completely within the supports frequency span for LTE B66/B26, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/B26.

**Table 2.2: The sum of SAR values for Main antenna + WiFi2.4G +BT**

	Position	Main antenna	WiFi-2.4G	BT	Sum
<b>Highest SAR value for Head</b>	Right head, Tilt (ENDC 2A-n41A)	1.03	0.24	0.08	<b>1.35</b>
<b>Highest SAR value for Body</b>	Rear 15mm (ENDC 2A-n41A)	1.02	0.21	0.01	<b>1.24</b>

**Table 2.3: The sum of SAR values for Main antenna + WiFi5G +BT**

	Position	Main antenna	WiFi-5G	BT	Sum
<b>Highest SAR value for Head</b>	Right head, Tilt (ENDC 2A-n41A)	1.03	0.27	0.08	<b>1.38</b>
<b>Highest SAR value for Body</b>	Rear 15mm (ENDC 2A-n41A)	1.02	0.53	0.01	<b>1.56</b>

**Table 2.4: The SAR values for ENDC**

LTE	NR	Mode	Position	Reported SAR 1g(W/kg)
LTE Band 2-ANT1	n41	Head	Right Tilt	<b>1.03(0.24+0.79)</b>
		Body	Rear 15mm	<b>1.02(0.43+0.59)</b>
LTE Band 2-ANT3	n66	Head	Right Tilt	<b>0.67(0.60+0.07)</b>
		Body	Rear 15mm	<b>0.74(0.52+0.22)</b>
	n71	Head	Right Tilt	<b>0.65(0.60+0.05)</b>
		Body	Rear 15mm	<b>0.74(0.52+0.22)</b>
LTE Band 66-ANT1	n41	Head	Right Tilt	<b>0.95(0.16+0.79)</b>
		Body	Rear 15mm	<b>1.00(0.41+0.59)</b>
LTE Band 66-ANT3	n25	Head	Right Tilt	<b>0.75(0.61+0.14)</b>
		Body	Rear 15mm	<b>0.74(0.41+0.33)</b>
	n71	Head	Right Tilt	<b>0.66(0.61+0.05)</b>
		Body	Rear 10mm	<b>0.69(0.47+0.22)</b>

**Conclusion:**

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

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

### 3 Client Information

#### 3.1 Applicant Information

Company Name:	Wingtech Group (Hong Kong) Limited
Address/Post:	Flat/RM 1903 19/F, Podium Plaza, 5 Hanoi Road, Tsim Sha Tsui, KL, HK
Contact Person:	sharui
Contact Email:	sharui@wingtech.com
Telephone:	+86-21-53529900

#### 3.2 Manufacturer Information

Company Name:	Wingtech Group (Hong Kong) Limited
Address/Post:	Flat/RM 1903 19/F, Podium Plaza, 5 Hanoi Road, Tsim Sha Tsui, KL, HK
Contact Person:	sharui
Contact Email:	sharui@wingtech.com
Telephone:	+86-21-53529900

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

### 4.1 About EUT

Description:	5G Mobile Phone
Model name:	TMRV065G
Operating mode(s):	GSM850/900/1800/1900, WCDMA B2/B4/B5 LTE Band2/4/5/7/12/25/26/28/38/41/66/71 BT, Wi-Fi(2.4G/5G) 5G NR n25/n41/n66/n71/n77
Tested Tx Frequency:	824 – 849 MHz (GSM 850) 1850 – 1910 MHz (GSM 1900) 824 – 849 MHz (WCDMA 850 Band V) 1850 – 1910 MHz (WCDMA1900 Band IV) 1710-1755 MHz (WCDMA1700 Band II) 1850.7 – 1909.3 MHz (LTE Band 2) 2502.5 – 2567.5 MHz (LTE Band 7) 699.7 – 715.3 MHz (LTE Band 12) 1850.7–1914.3 MHz (LTE Band 25) 814.7–848.3 MHz (LTE Band 26) 2498.5 – 2687.5 MHz (LTE Band41) 1710.7 –1779.3 MHz (LTE Band 66) 665.5 –695.5 MHz (LTE Band 71) 2412 – 2462 MHz (Wi-Fi 2.4G) 5180 – 5240 MHz (Wi-Fi 5.2G) 5260 – 5320 MHz (Wi-Fi 5.3G) 5500 – 5720 MHz (Wi-Fi 5.5G) 5745 – 5825 MHz (Wi-Fi 5.8G) 2400 – 2483.5 MHz (Bluetooth) 1850 – 1915 MHz(n25) 2496 – 2690 MHz(n41) 1710 – 1780 MHz(n66) 663 – 698 MHz(n71) 3450– 3550 MHz ,3700– 3980 MHz (n77)
GPRS/EGPRS Multislot Class:	12
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Hotspot mode:	Support

#### 4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	861690060030661	V1.0	TMRV065G_0.01.01
EUT2	861690060030653	V1.0	TMRV065G_0.01.01
EUT3	861690060030703	V1.0	TMRV065G_0.01.01
EUT4	861690060030695	V1.0	TMRV065G_0.01.01
EUT5	861690060030711	V1.0	TMRV065G_0.01.01
EUT6	861690060030745	V1.0	TMRV065G_0.01.01
EUT7	861690060033236	V1.0	TMRV065G_0.01.01
EUT8	861690060033293	V1.0	TMRV065G_0.01.01
EUT9	861690060033228	V1.0	TMRV065G_0.01.01
EUT10	861690060032733	V1.0	TMRV065G_0.01.01
EUT11	861690060032758	V1.0	TMRV065G_0.01.01

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

**Note:** It is performed to test SAR with the EUT1~6 and conducted power with the EUT7~11.

#### 4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	RE001	/	SUNWODA ELECTRONIC CO ., LTD

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

## 5 TEST METHODOLOGY

### 5.1 Applicable Limit Regulations

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

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

### 5.2 Applicable Measurement Standards

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

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

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

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

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

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

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

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

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

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

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

## 6 Specific Absorption Rate (SAR)

### 6.1 Introduction

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

### 6.2 SAR Definition

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

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

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

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

Where:  $C$  is the specific heat capacity,  $\delta T$  is the temperature rise and  $\delta t$  is the exposure duration, or related to the electrical field in the tissue by

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

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  is the mass density of tissue and  $E$  is the RMS electrical field strength.

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

## 7 Tissue Simulating Liquids

### 7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

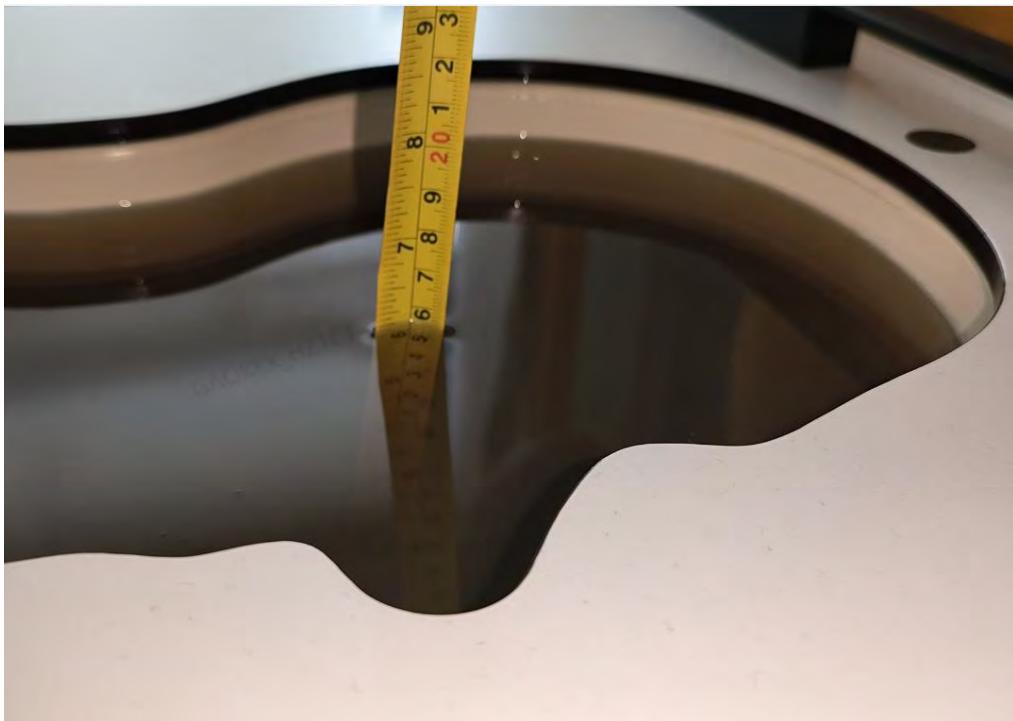
Frequency(MHz)	Liquid Type	Conductivity( $\sigma$ )	$\pm 5\%$ Range	Permittivity( $\epsilon$ )	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.94	39.8~44.0
835	Head	0.90	0.86~0.95	41.5	39.4~43.6
1750	Head	1.37	1.30~1.44	40.08	38.1~42.1
1900	Head	1.40	1.33~1.47	40.0	38.0~42.0
2450	Head	1.67	1.59~1.75	39.47	37.5~41.4
2600	Head	1.96	1.76~2.16	39.01	35.11~42.91
3500	Head	2.91	2.76~3.06	37.93	36.03~39.83
3700	Head	3.22	3.06~3.38	37.6	35.72~39.48
3900	Head	3.32	3.15~3.49	37.5	35.63~39.38
5250	Head	4.71	4.47~4.95	35.93	34.13~37.73
5600	Head	5.07	4.82~5.32	35.53	33.8~37.3
5750	Head	5.22	4.96~5.48	35.36	33.59~37.13

### 7.2 Dielectric Performance

Table 7.3: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity $\epsilon$	Drift (%)	Conductivity $\sigma$ (S/m)	Drift (%)
2023-3-10	Head	750 MHz	42.891	2.27%	0.912	2.47%
2023-3-11	Head	750 MHz	41.254	-1.64%	0.897	0.79%
2023-3-4	Head	835 MHz	41.312	-0.45%	0.903	0.33%
2023-3-13	Head	1750 MHz	41.12	2.59%	1.354	-1.17%
2023-3-15	Head	1750 MHz	41.362	3.20%	1.367	-0.22%
2023-3-19	Head	1900 MHz	39.87	-0.33%	1.434	2.43%
2023-3-20	Head	1900 MHz	39.654	-0.86%	1.44	2.86%
2023-3-30	Head	2450 MHz	39.84	1.63%	1.822	1.22%
2023-3-25	Head	2600 MHz	39.54	1.36%	1.912	-2.45%
2023-3-27	Head	2600 MHz	39.625	1.58%	1.904	-2.86%
2023-4-1	Head	3500 MHz	39.214	3.09%	2.854	1.57%
2023-4-1	Head	3700 MHz	39.154	3.55%	2.956	-2.12%
2023-4-2	Head	3900 MHz	39.01	3.78%	3.274	1.68%
2023-4-5	Head	5250 MHz	36.57	1.78%	4.654	-1.19%
2023-4-6	Head	5600 MHz	36.324	2.23%	4.97	-1.97%
2023-4-7	Head	5750 MHz	36.233	2.47%	5.245	0.48%

Note: The liquid temperature is 22.0°C



**Picture 7-1 Liquid depth in the Head Phantom**

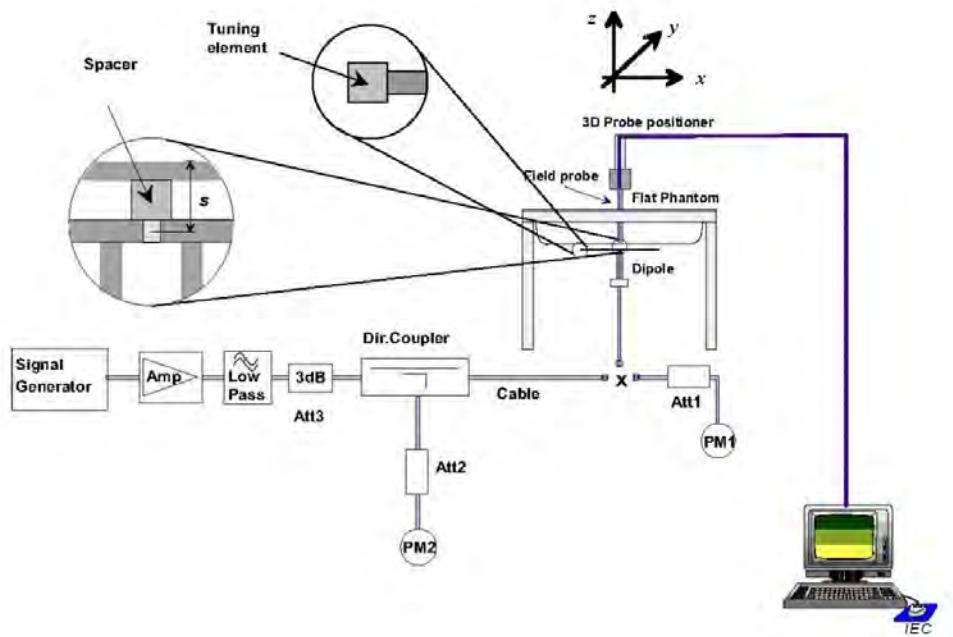


**Picture 7-2 Liquid depth in the Flat Phantom**

## 8 System verification

### 8.1 System Setup

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



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

## 8.2 System Verification

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

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

**Table 8.1: System Verification of Head**

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2023-3-10	750 MHz	5.64	8.63	5.84	8.84	3.55%	2.43%
2023-3-11	750 MHz	5.64	8.63	5.64	8.60	0.00%	-0.35%
2023-3-4	835 MHz	6.34	9.73	6.16	9.48	-2.84%	-2.57%
2023-3-13	1750 MHz	19.3	36.8	19.5	37.0	0.93%	0.54%
2023-3-15	1750 MHz	19.3	36.8	19.2	36.7	-0.31%	-0.33%
2023-3-19	1900 MHz	20.7	39.7	20.5	39.4	-0.87%	-0.76%
2023-3-20	1900 MHz	20.7	39.7	20.8	39.9	0.29%	0.45%
2023-3-30	2450 MHz	24.9	52.7	24.5	51.9	-1.53%	-1.48%
2023-3-25	2600 MHz	25.2	55.8	25.8	57.2	2.54%	2.51%
2023-3-27	2600 MHz	25.2	55.8	25.6	56.9	1.75%	1.94%
2023-4-1	3500 MHz	25.3	67.5	24.9	66.5	-1.58%	-1.48%
2023-4-1	3700 MHz	24.4	67.3	24.7	67.9	1.23%	0.89%
2023-4-2	3900 MHz	24.1	69.6	23.8	68.9	-1.24%	-1.01%
2023-4-5	5250 MHz	22.7	79.5	22.1	77.4	-2.64%	-2.64%
2023-4-6	5600 MHz	23.7	83.8	24.1	84.8	1.69%	1.19%
2023-4-7	5750 MHz	22.7	81	22.1	78.9	-2.64%	-2.59%

## 9 Measurement Procedures

### 9.1 Tests to be performed

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

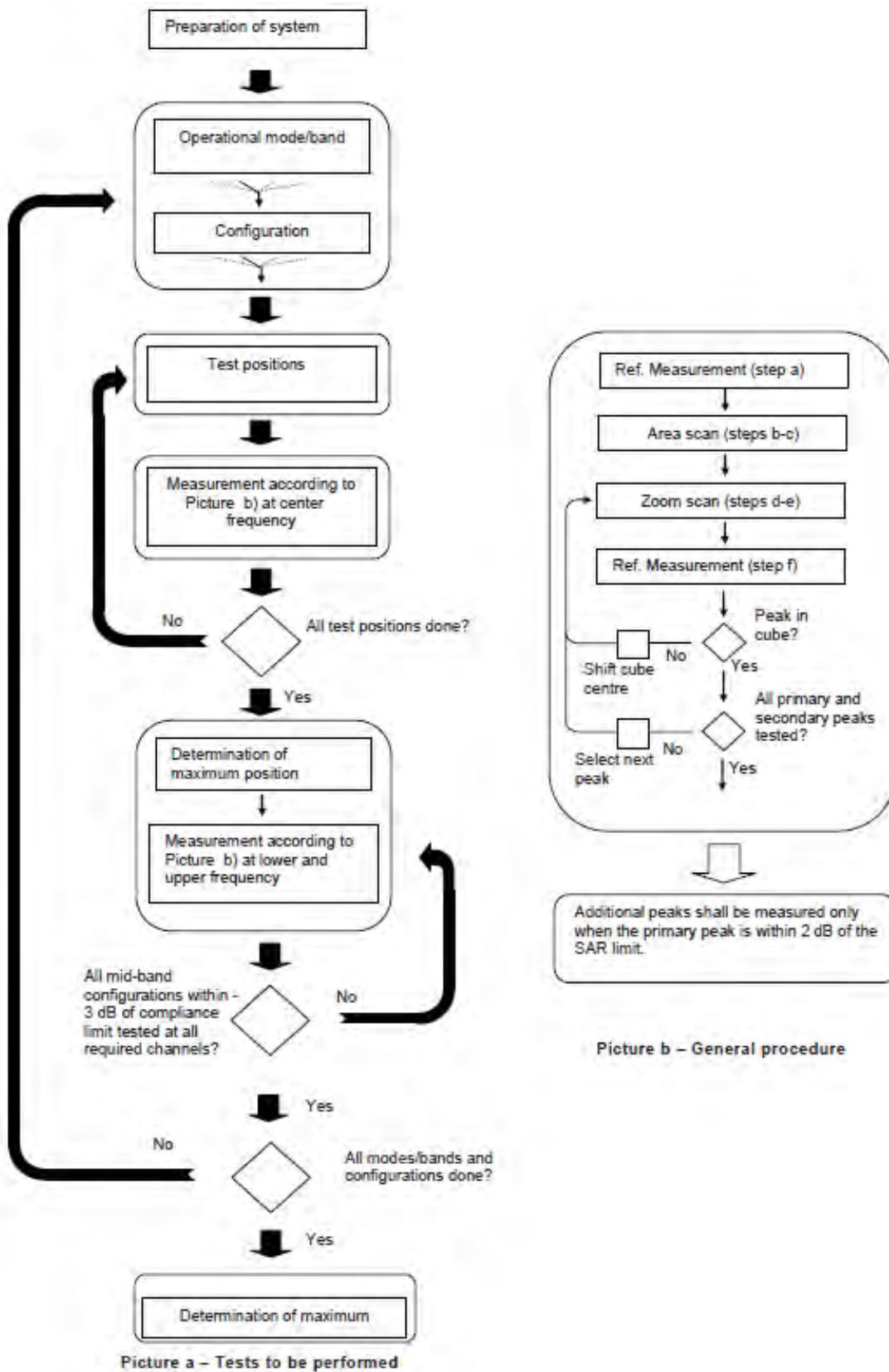
**Step 1:** The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band ( $f_c$ ) for:

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

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

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

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


**Picture 9.1** Block diagram of the tests to be performed

## 9.2 General Measurement Procedure

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

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

### 9.3 WCDMA Measurement Procedures for SAR

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

#### For Release 5 HSDPA Data Devices:

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}$	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

#### For Release 6 HSPA Data Devices

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

#### Rel.8 DC-HSDPA (Cat 24)

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

## 9.4 SAR Measurement for LTE

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

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

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

### 1) QPSK with 1 RB allocation

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

### 2) QPSK with 50% RB allocation

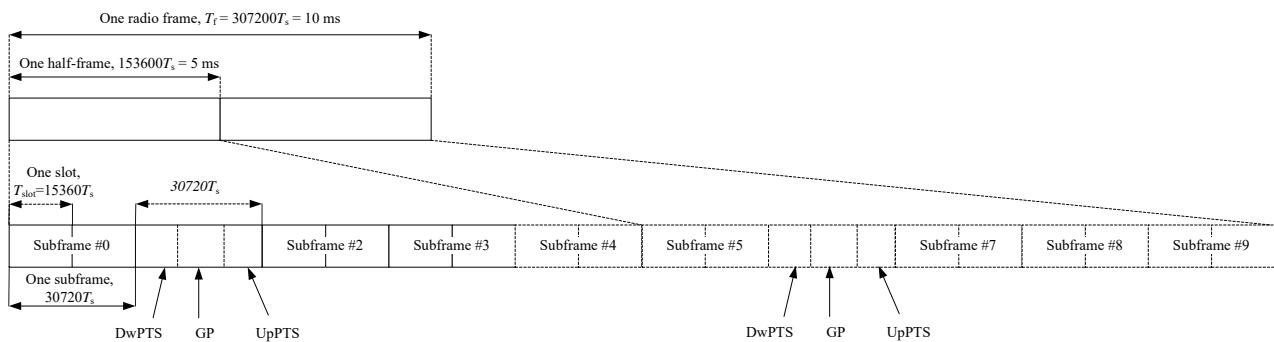
The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

### 3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are  $\leq 0.8$  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.

### TDD test:

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



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

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

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

**Table 9.2: Uplink-downlink configurations**

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

Duty factor is calculated by:

$$\text{Duty factor} = \text{uplink frame} * 6 + \text{UpPTS} * 2 / \text{one frame length}$$

$$= (30720 \cdot T_s * 6 + 5120 \cdot T_s * 2) / 307200 \cdot T_s$$

$$= 0.633$$

## 9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

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

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

## 9.6 Power Drift

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

## 10 Area Scan Based 1-g SAR

### 10.1 Requirement of KDB

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

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

### 10.2 Fast SAR Algorithms

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

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

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

Both algorithms are implemented in DASY software.

## 11 Conducted Output Power

Table11.1: Summary of Receiver detection mechanism-Main antenna

Antenna	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WLAN off (DSI2)	Receiver on+ WLAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WLAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WLAN on (DSI5)
Main Antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1

Antenna	Receiver off+ Hotspot on (DSI1)	Receiver off+ sensor on+ Hotspot off+ WLAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WLAN on (DSI5)
Main Antenna -Only for LTE B2/B66- ANT1 under ENDC	Power Level B2	Power Level E2	Power Level F2

Table11.2: Summary of Receiver detection mechanism-WiFi antenna

Antenna	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WWAN off (DSI2)	Receiver on+ WWAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WWAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WWAN on (DSI5)
WLAN Antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1

## 11.1 GSM Measurement result

**Table 11.1-1: The conducted power measurement results –GSM850  
-Power Level A1/B1/C1/D1/E1/F1**

GSM 850 Speech (GMSK)	Measured timeslot-averaged output power (dBm)			Tune up	calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.53	32.77	32.79	33.50	/	/	/	/
GSM 850 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.59	32.78	32.77	33.50	-9.03	23.56	23.75	23.74
2 Txslots	29.90	30.06	30.06	31.50	-6.02	23.88	24.04	24.04
3 Txslots	28.17	28.20	28.16	30.00	-4.26	23.91	23.94	23.90
<b>4 Txslots</b>	<b>26.93</b>	<b>27.00</b>	<b>27.07</b>	<b>28.50</b>	<b>-3.01</b>	<b>23.92</b>	<b>23.99</b>	<b>24.06</b>
GSM 850 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.61	32.77	32.74	33.50	-9.03	23.58	23.74	23.71
2 Txslots	29.90	29.97	30.03	31.50	-6.02	23.88	23.95	24.01
3 Txslots	28.15	28.18	28.15	30.00	-4.26	23.89	23.92	23.89
<b>4 Txslots</b>	<b>26.93</b>	<b>26.99</b>	<b>27.04</b>	<b>28.50</b>	<b>-3.01</b>	<b>23.92</b>	<b>23.98</b>	<b>24.03</b>
GSM 850 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	251	190	128			251	190	128
1 Txslot	26.33	26.39	26.41	27.50	-9.03	17.30	17.36	17.38
2 Txslots	26.21	26.25	26.28	26.50	-6.02	20.19	20.23	20.26
3Txslots	24.43	24.43	24.42	24.50	-4.26	20.17	20.17	20.16
4 Txslots	22.75	22.78	23.15	23.50	-3.01	19.74	19.77	20.14

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 4Txslots for GSM850.**

**Table 11.1-2: The conducted power measurement results-GSM1900  
-Power Level A1/B1/C1/D1/E1/F1**

PCS1900 Speech (GMSK)	Measured timeslot-averaged output power (dBm)			Tune up	calculation	Source-based time-averaged output power (dBm)		
	810	661	512		/	810	661	512
1 Txslot	29.66	29.75	29.59	30.50	/	/	/	/
PCS1900 GPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.65	29.33	29.65	30.50	-9.03	20.62	20.30	20.62
2 Txslots	27.85	27.92	27.87	29.50	-6.02	21.83	21.90	21.85
3 Txslots	26.84	27.11	27.12	27.50	-4.26	22.58	22.85	22.86
<b>4 Txslots</b>	25.87	25.87	25.89	26.50	-3.01	22.86	22.86	22.88
PCS1900 EGPRS (GMSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.37	29.37	29.66	30.50	-9.03	20.34	20.34	20.63
2 Txslots	27.80	27.79	27.78	29.50	-6.02	21.78	21.77	21.76
3 Txslots	26.91	27.11	27.15	27.50	-4.26	22.65	22.85	22.89
<b>4 Txslots</b>	25.73	25.88	25.93	26.50	-3.01	22.72	22.87	22.92
PCS1900 EGPRS (8PSK)	Measured timeslot-averaged output power (dBm)				calculation	Source-based time-averaged output power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.45	25.33	25.31	26.50	-9.03	16.42	16.30	16.28
2 Txslots	25.26	25.12	25.11	25.50	-6.02	19.24	19.10	19.09
3Txslots	23.49	23.42	23.49	23.50	-4.26	19.23	19.16	19.23
4 Txslots	22.44	22.46	22.36	22.50	-3.01	19.43	19.45	19.35

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 4Txslots for GSM1900.**

## 11.2 WCDMA Measurement result

Table 11.2-1: The conducted Power for WCDMA B2/B4 -Power Level A1/C1/D1

WCDMA1900	FDDII result (dBm)			Tune up
	9538/9938 (1907.6MHz)	9400/9800 (1880MHz)	9262/9662 (1852.4MHz)	
	23.28	23.34	23.24	
	20.98	20.95	20.95	
HSUPA	19.58	19.59	19.62	21.50
	19.99	20.09	20.06	21.50
	19.01	19.06	18.50	20.50
	21.05	21.06	20.93	22.00
	21.34	21.39	21.25	23.00
HSPA+	21.64	21.68	21.53	23.00
	21.87	21.75	21.65	23.00
	20.71	20.69	20.79	22.50
	20.63	20.68	20.55	22.50

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738 (1752.6MHz)	1412/1637 (1732.4MHz)	1312/1537 (1712.4MHz)	
	23.45	23.48	23.54	
	21.45	21.47	21.48	
HSUPA	19.68	19.75	19.63	21.50
	20.62	20.67	20.63	21.50
	19.66	19.67	19.66	21.00
	21.67	21.71	21.61	22.50
	21.97	21.98	21.91	23.00
HSPA+	21.31	21.40	21.51	23.00
	21.74	21.69	21.81	23.00
	21.21	21.28	21.14	22.50
	21.09	21.27	21.24	22.50
DC-HSDPA				

Table 11.2-2: The conducted Power for WCDMA B2/B4 -Power Level B1/E1/F1

WCDMA1900	FDDII result (dBm)			Tune up
	9538/9938 (1907.6MHz)	9400/9800 (1880MHz)	9262/9662 (1852.4MHz)	
	21.04	21.00	20.98	
	18.64	18.70	18.44	
HSUPA	18.26	18.30	18.41	19.00
	18.26	18.29	18.40	19.00
	17.77	17.82	17.91	19.00
	18.89	18.94	18.92	19.00
	19.73	19.74	19.71	21.00
HSPA+	19.94	19.92	19.91	21.00
	19.26	19.21	19.14	21.00
	19.25	19.13	19.16	21.00
	19.05	19.07	19.10	21.00
DC-HSDPA	19.94	19.92	19.91	21.00
	19.26	19.21	19.14	21.00
	19.25	19.13	19.16	21.00
	19.05	19.07	19.10	21.00

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738 (1752.6MHz)	1412/1637 (1732.4MHz)	1312/1537 (1712.4MHz)	
	18.97	18.88	18.86	
	18.51	18.40	18.37	
HSUPA	18.52	18.37	18.31	19.00
	18.04	17.90	17.86	19.00
	18.97	18.87	18.96	19.00
	19.89	19.76	19.74	20.00
	19.85	19.86	19.88	20.00
HSPA+	19.25	19.13	19.26	20.00
	19.11	19.16	19.13	20.00
	19.12	19.10	19.08	20.00
	18.97	18.88	18.86	19.00
DC-HSDPA	19.25	19.13	19.26	20.00
	19.11	19.16	19.13	20.00
	19.12	19.10	19.08	20.00
	18.97	18.88	18.86	19.00

**Table 11.2-3: The conducted Power for WCDMA B5 -Power Level A1/B1/C1/D1/E1/F1**

WCDMA850	FDDV result (dBm)			Tune up
	4233/4458 (846.6MHz)	4183/4408 (836.6MHz)	4132/4357 (826.4MHz)	
	23.21	23.23	23.12	
	20.58	20.57	20.52	
HSUPA	20.61	20.56	20.48	21.00
	20.59	20.57	20.53	21.00
	20.13	20.09	20.05	20.50
	21.62	21.52	21.45	22.00
	22.08	22.06	22.04	23.00
DC-HSDPA	22.46	22.47	22.45	22.50
	21.93	21.88	21.77	22.50
	21.42	21.48	21.43	22.00
	21.45	21.43	21.37	22.00

### 11.3 LTE Measurement result

#### Maximum Target Power for Production Unit

Band	Tune up (dBm)					
	Receiver off+ Sensor off (DSI0)	Receiver off+ Hotspot on (DSI1)	Receiver on+ WLAN off (DSI2)	Receiver on+ WLAN on (DSI3)	Receiver off+ sensor on+ Hotspot off+ WLAN off (DSI4)	Receiver off+ sensor on+ Hotspot off+ WLAN on (DSI5)
	Power Level A1	Power Level B1	Power Level C1	Power Level D1	Power Level E1	Power Level F1
Band 2-ANT1	24.5	22	24.5	24.5	22	22
Band 2-ANT3	24	20	15	15	22	20
Band 7	24.5	21	24.5	24.5	21	21
Band 12	24.5	24.5	24.5	24.5	24.5	24.5
Band 25	24.5	22	24.5	24.5	22	22
Band 26	24.5	24.5	24.5	24.5	24.5	24.5
Band 41-PC3	24.5	19	16	16	22	19
Band 41-PC2	27.5	22.5	19.5	19.5	25.5	22.5
Band 66-ANT1	24.5	22	24.5	24.5	24.5	22
Band 66-ANT3	24	22	16	16	24	22
Band 71	24.5	24.5	24.5	24.5	24.5	24.5

Band	Tune up (dBm)		
	Receiver off+ Hotspot on (DSI1)	Receiver off+ sensor on+ WLAN off (DSI4)	Receiver off+ sensor on+ WLAN on (DSI5)
	Power Level B2	Power Level E2	Power Level F2
LTE B2-ANT1 under ENDC	20	22	20
LTE B66-ANT1 under ENDC	20	22	20

**LTE B2 ANT1-Power Level A1/C1/D1**

LTE B2 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	22.96	22.22	21.09
		1880 (18900)	22.98	22.30	21.06
		1850.7 (18607)	22.96	22.27	21.05
	1RB-Middle (3)	1909.3 (19193)	23.00	22.23	21.17
		1880 (18900)	22.99	22.09	21.07
		1850.7 (18607)	23.03	22.37	21.19
	1RB-Low (0)	1909.3 (19193)	23.00	22.27	21.20
		1880 (18900)	22.97	22.15	21.17
		1850.7 (18607)	23.00	22.13	21.11
	3RB-High (3)	1909.3 (19193)	23.08	21.97	21.12
		1880 (18900)	22.97	21.92	21.01
		1850.7 (18607)	23.04	22.01	21.08
	3RB-Middle (1)	1909.3 (19193)	23.07	21.98	21.10
		1880 (18900)	23.01	21.99	21.04
		1850.7 (18607)	23.03	22.05	21.08
	3RB-Low (0)	1909.3 (19193)	23.07	22.03	21.14
		1880 (18900)	23.00	22.01	21.08
		1850.7 (18607)	23.04	21.97	21.10
	6RB (0)	1909.3 (19193)	22.03	21.08	19.95
		1880 (18900)	21.97	21.04	19.90
		1850.7 (18607)	21.99	21.10	19.92
3MHz	1RB-High (14)	1908.5 (19185)	23.02	22.15	21.17
		1880 (18900)	22.91	22.28	21.13
		1851.5 (18615)	23.02	22.25	21.20
	1RB-Middle (7)	1908.5 (19185)	23.03	22.32	21.17
		1880 (18900)	22.99	22.16	21.10
		1851.5 (18615)	23.05	22.20	21.26
	1RB-Low (0)	1908.5 (19185)	23.01	22.23	21.08
		1880 (18900)	22.97	22.22	21.16
		1851.5 (18615)	22.98	22.22	21.14
	8RB-High (7)	1908.5 (19185)	21.97	21.09	20.06
		1880 (18900)	21.92	20.95	19.93
		1851.5 (18615)	21.99	21.01	20.01
	8RB-Middle (4)	1908.5 (19185)	22.01	21.09	20.02
		1880 (18900)	21.91	21.00	19.91
		1851.5 (18615)	22.00	21.05	19.95

	8RB-Low (0)	1908.5 (19185)	22.06	21.08	20.03
		1880 (18900)	21.99	21.04	20.02
		1851.5 (18615)	22.02	21.05	20.01
	15RB (0)	1908.5 (19185)	22.01	21.00	19.98
		1880 (18900)	21.91	20.96	19.89
		1851.5 (18615)	21.96	20.99	20.01
	1RB-High (24)	1907.5 (19175)	23.02	22.33	21.15
		1880 (18900)	22.95	22.13	21.04
		1852.5 (18625)	23.03	22.31	21.10
	1RB-Middle (12)	1907.5 (19175)	23.08	22.26	21.19
		1880 (18900)	22.99	22.29	21.11
		1852.5 (18625)	23.04	22.29	21.15
5MHz	1RB-Low (0)	1907.5 (19175)	23.03	22.33	21.08
		1880 (18900)	22.97	22.23	21.08
		1852.5 (18625)	23.02	22.18	21.12
	12RB-High (13)	1907.5 (19175)	21.96	20.96	19.90
		1880 (18900)	21.87	20.89	19.84
		1852.5 (18625)	22.00	20.96	19.92
	12RB-Middle (6)	1907.5 (19175)	22.03	20.97	20.01
		1880 (18900)	21.97	20.93	19.94
		1852.5 (18625)	22.01	21.00	19.95
	12RB-Low (0)	1907.5 (19175)	21.98	20.98	20.03
		1880 (18900)	22.00	21.00	20.00
		1852.5 (18625)	22.04	21.01	20.01
	25RB (0)	1907.5 (19175)	22.03	21.03	19.97
		1880 (18900)	21.95	20.96	19.90
		1852.5 (18625)	21.99	21.00	19.94
10MHz	1RB-High (49)	1905 (19150)	23.00	22.26	21.17
		1880 (18900)	22.92	22.19	21.14
		1855 (18650)	22.94	22.25	21.14
	1RB-Middle (24)	1905 (19150)	23.04	22.31	21.10
		1880 (18900)	23.07	22.22	21.03
		1855 (18650)	22.99	22.22	21.11
	1RB-Low (0)	1905 (19150)	22.97	22.20	21.04
		1880 (18900)	23.02	22.32	21.07
		1855 (18650)	23.02	22.19	21.13
	25RB-High (25)	1905 (19150)	22.05	21.03	19.98
		1880 (18900)	21.93	20.96	19.89
		1855 (18650)	21.98	20.91	19.88
	25RB-Middle (12)	1905 (19150)	22.03	21.04	19.95

		1880 (18900)	22.00	20.90	19.90
		1855 (18650)	21.95	20.94	19.93
25RB-Low (0)		1905 (19150)	22.06	21.06	20.00
		1880 (18900)	21.94	20.95	19.99
		1855 (18650)	22.02	21.02	20.02
		1905 (19150)	22.05	21.02	20.01
50RB (0)		1880 (18900)	21.95	20.89	19.86
		1855 (18650)	22.02	20.97	19.92
		1902.5 (19125)	22.91	22.31	21.12
15MHz	1RB-High (74)	1880 (18900)	22.85	22.21	21.02
		1857.5 (18675)	22.87	22.27	21.01
	1RB-Middle (37)	1902.5 (19125)	22.95	22.30	21.08
		1880 (18900)	22.95	22.27	21.12
		1857.5 (18675)	22.94	22.25	21.13
	1RB-Low (0)	1902.5 (19125)	22.85	22.23	20.95
		1880 (18900)	22.84	22.19	21.02
		1857.5 (18675)	22.96	22.22	21.09
	36RB-High (38)	1902.5 (19125)	21.98	20.94	19.91
		1880 (18900)	21.88	20.88	19.91
		1857.5 (18675)	21.95	20.93	19.91
	36RB-Middle (19)	1902.5 (19125)	21.92	20.93	19.95
		1880 (18900)	21.94	20.98	19.94
		1857.5 (18675)	21.98	20.93	19.91
	36RB-Low (0)	1902.5 (19125)	21.93	20.90	19.95
		1880 (18900)	21.92	20.98	19.93
		1857.5 (18675)	21.95	20.99	19.99
20MHz	75RB (0)	1902.5 (19125)	21.97	20.92	19.91
		1880 (18900)	21.97	20.90	19.90
		1857.5 (18675)	21.99	20.92	19.95
	1RB-High (99)	1900 (19100)	23.15	22.28	21.26
		1880 (18900)	22.98	22.18	21.10
		1860 (18700)	23.08	22.29	21.20
	1RB-Middle (50)	1900 (19100)	23.17	22.37	21.22
		1880 (18900)	23.15	22.42	21.24
		1860 (18700)	23.15	22.44	21.26
	1RB-Low (0)	1900 (19100)	23.05	22.36	21.16
		1880 (18900)	23.07	22.23	21.14
		1860 (18700)	23.16	22.30	21.18
	50RB-High (50)	1900 (19100)	22.11	21.12	20.06
		1880 (18900)	22.04	21.03	19.97

	1860 (18700)	22.14	21.14	20.06
50RB-Middle (25)	1900 (19100)	22.17	21.15	20.14
	1880 (18900)	22.15	21.05	20.06
	1860 (18700)	22.16	21.15	20.07
	1900 (19100)	22.22	21.14	20.16
50RB-Low (0)	1880 (18900)	22.13	21.06	20.03
	1860 (18700)	22.18	21.20	20.13
	1900 (19100)	22.13	21.06	20.04
	1880 (18900)	22.09	21.02	19.94
100RB (0)	1860 (18700)	22.14	21.12	20.06

**LTE B2 ANT1-Power Level B1/E1/F1/E2**

LTE B2 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	20.87	20.27	19.19
		1880 (18900)	20.82	20.36	19.14
		1850.7 (18607)	20.87	20.22	19.12
	1RB-Middle (3)	1909.3 (19193)	20.93	20.33	19.23
		1880 (18900)	20.86	20.21	19.20
		1850.7 (18607)	20.91	20.28	19.22
	1RB-Low (0)	1909.3 (19193)	20.87	20.31	19.21
		1880 (18900)	20.88	20.38	19.24
		1850.7 (18607)	20.87	20.24	19.20
	3RB-High (3)	1909.3 (19193)	20.93	20.06	19.12
		1880 (18900)	20.88	19.94	19.07
		1850.7 (18607)	20.91	20.03	19.11
	3RB-Middle (1)	1909.3 (19193)	20.90	20.08	19.19
		1880 (18900)	20.88	19.99	19.02
		1850.7 (18607)	20.91	20.11	19.16
	3RB-Low (0)	1909.3 (19193)	20.89	20.09	19.08
		1880 (18900)	20.81	19.96	19.12
		1850.7 (18607)	20.95	20.03	19.12
	6RB (0)	1909.3 (19193)	20.07	19.18	17.96
		1880 (18900)	19.97	19.08	17.95
		1850.7 (18607)	20.02	19.16	17.96
3MHz	1RB-High (14)	1908.5 (19185)	20.86	20.33	19.11
		1880 (18900)	20.79	20.17	19.21
		1851.5 (18615)	20.91	20.44	19.24
	1RB-Middle (7)	1908.5 (19185)	20.94	20.32	19.15

		1880 (18900)	20.79	20.38	19.09
		1851.5 (18615)	20.87	20.26	19.23
1RB-Low (0)		1908.5 (19185)	20.86	20.33	19.22
		1880 (18900)	20.83	20.27	19.11
		1851.5 (18615)	20.85	20.22	19.13
		1908.5 (19185)	20.05	19.11	18.07
8RB-High (7)		1880 (18900)	19.92	19.06	17.92
		1851.5 (18615)	20.01	19.09	18.02
		1908.5 (19185)	20.07	19.17	18.02
8RB-Middle (4)		1880 (18900)	19.96	19.01	17.97
		1851.5 (18615)	20.06	19.08	18.06
		1908.5 (19185)	20.04	19.13	18.03
8RB-Low (0)		1880 (18900)	19.99	19.07	17.99
		1851.5 (18615)	20.03	19.05	18.10
		1908.5 (19185)	19.99	19.03	18.03
15RB (0)		1880 (18900)	19.96	18.95	17.95
		1851.5 (18615)	20.01	19.07	18.02
		1907.5 (19175)	20.92	20.40	19.24
5MHz	1RB-High (24)	1880 (18900)	20.91	20.23	19.09
		1852.5 (18625)	20.94	20.34	19.16
		1907.5 (19175)	20.85	20.44	19.19
1RB-Middle (12)		1880 (18900)	20.90	20.40	19.09
		1852.5 (18625)	20.94	20.46	19.23
		1907.5 (19175)	20.88	20.38	19.25
1RB-Low (0)		1880 (18900)	20.93	20.44	19.14
		1852.5 (18625)	20.92	20.33	19.27
		1907.5 (19175)	19.99	18.93	17.97
12RB-High (13)		1880 (18900)	19.96	18.96	17.99
		1852.5 (18625)	20.03	18.98	18.00
		1907.5 (19175)	20.06	19.08	18.00
12RB-Middle (6)		1880 (18900)	19.96	18.99	17.99
		1852.5 (18625)	20.04	19.07	18.09
		1907.5 (19175)	20.10	19.10	18.04
12RB-Low (0)		1880 (18900)	19.98	18.97	17.98
		1852.5 (18625)	20.05	19.07	18.08
		1907.5 (19175)	20.06	19.07	18.06
25RB (0)		1880 (18900)	20.06	19.04	18.02
		1852.5 (18625)	20.06	19.06	18.05
		1905 (19150)	20.93	20.48	19.23
10MHz	1RB-High (49)	1880 (18900)	20.82	20.32	19.09

		1855 (18650)	20.86	20.36	19.19
15MHz	1RB-Middle (24)	1905 (19150)	20.93	20.32	19.21
		1880 (18900)	20.89	20.26	19.14
		1855 (18650)	20.96	20.40	19.18
	1RB-Low (0)	1905 (19150)	20.98	20.27	19.22
		1880 (18900)	20.88	20.24	19.21
		1855 (18650)	20.97	20.40	19.17
	25RB-High (25)	1905 (19150)	20.06	19.02	18.02
		1880 (18900)	19.98	18.99	18.03
		1855 (18650)	20.02	19.11	18.02
	25RB-Middle (12)	1905 (19150)	20.08	18.99	18.01
		1880 (18900)	20.01	19.03	18.02
		1855 (18650)	20.02	19.04	18.05
	25RB-Low (0)	1905 (19150)	20.10	19.03	18.07
		1880 (18900)	19.99	18.97	18.01
		1855 (18650)	20.07	19.10	18.09
	50RB (0)	1905 (19150)	20.14	19.06	18.10
		1880 (18900)	20.02	19.05	17.98
		1855 (18650)	20.14	19.10	18.05
15MHz	1RB-High (74)	1902.5 (19125)	20.86	20.24	19.19
		1880 (18900)	20.72	20.23	18.94
		1857.5 (18675)	20.76	20.24	19.17
	1RB-Middle (37)	1902.5 (19125)	20.90	20.38	19.22
		1880 (18900)	20.85	20.17	19.25
		1857.5 (18675)	20.85	20.38	19.25
	1RB-Low (0)	1902.5 (19125)	20.78	20.24	19.05
		1880 (18900)	20.80	20.26	19.11
		1857.5 (18675)	20.83	20.33	19.04
	36RB-High (38)	1902.5 (19125)	19.91	18.93	17.95
		1880 (18900)	19.97	18.89	17.93
		1857.5 (18675)	20.04	19.07	17.96
	36RB-Middle (19)	1902.5 (19125)	20.00	18.98	18.07
		1880 (18900)	19.95	18.92	17.95
		1857.5 (18675)	19.99	18.93	17.96
	36RB-Low (0)	1902.5 (19125)	19.95	18.98	17.97
		1880 (18900)	20.01	19.01	18.01
		1857.5 (18675)	20.02	19.05	17.99
	75RB (0)	1902.5 (19125)	20.06	18.98	18.01
		1880 (18900)	20.08	18.97	17.95
		1857.5 (18675)	20.03	19.06	17.98

20MHz	1RB-High (99)	1900 (19100)	20.98	20.34	19.33
		1880 (18900)	20.85	20.35	19.12
		1860 (18700)	20.93	20.29	19.15
	1RB-Middle (50)	1900 (19100)	21.01	20.50	19.32
		1880 (18900)	20.98	20.45	19.18
		1860 (18700)	21.05	20.49	19.24
	1RB-Low (0)	1900 (19100)	20.86	20.25	19.09
		1880 (18900)	20.93	20.37	19.18
		1860 (18700)	21.00	20.37	19.24
	50RB-High (50)	1900 (19100)	20.05	19.04	18.02
		1880 (18900)	20.09	19.13	18.05
		1860 (18700)	20.15	19.13	18.13
	50RB-Middle (25)	1900 (19100)	20.16	19.10	18.13
		1880 (18900)	20.14	19.09	18.08
		1860 (18700)	20.18	19.20	18.12
	50RB-Low (0)	1900 (19100)	20.11	19.12	18.10
		1880 (18900)	20.09	19.09	18.03
		1860 (18700)	20.23	19.17	18.18
	100RB (0)	1900 (19100)	20.12	19.11	18.11
		1880 (18900)	20.08	19.12	18.01
		1860 (18700)	20.19	19.16	18.08

### LTE B2 ANT1-Power Level B2/F2

LTE B2 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	18.83	18.00	16.91
		1880 (18900)	18.76	18.04	16.92
		1850.7 (18607)	18.80	18.15	16.97
	1RB-Middle (3)	1909.3 (19193)	18.83	18.07	16.97
		1880 (18900)	18.78	18.02	16.95
		1850.7 (18607)	18.86	18.24	16.93
	1RB-Low (0)	1909.3 (19193)	18.82	18.21	17.01
		1880 (18900)	18.79	18.03	16.99
		1850.7 (18607)	18.84	18.16	16.95
	3RB-High (3)	1909.3 (19193)	18.90	17.92	16.88
		1880 (18900)	18.82	17.81	16.84
		1850.7 (18607)	18.88	17.85	16.88
	3RB-Middle (1)	1909.3 (19193)	18.87	17.82	16.91
		1880 (18900)	18.79	17.79	16.82

		1850.7 (18607)	18.87	17.84	16.91
3MHz	3RB-Low (0)	1909.3 (19193)	18.86	17.91	16.90
		1880 (18900)	18.82	17.74	16.82
		1850.7 (18607)	18.81	17.75	16.94
		1909.3 (19193)	17.83	16.91	15.81
3MHz	6RB (0)	1880 (18900)	17.80	16.81	15.69
		1850.7 (18607)	17.85	16.91	15.73
		1908.5 (19185)	18.81	18.06	16.92
3MHz	1RB-High (14)	1880 (18900)	18.76	18.13	16.88
		1851.5 (18615)	18.84	18.04	16.88
		1908.5 (19185)	18.84	18.16	17.06
3MHz	1RB-Middle (7)	1880 (18900)	18.81	18.21	16.97
		1851.5 (18615)	18.89	18.20	17.06
		1908.5 (19185)	18.81	18.20	16.94
3MHz	1RB-Low (0)	1880 (18900)	18.81	18.02	16.95
		1851.5 (18615)	18.78	18.02	16.91
		1908.5 (19185)	17.87	16.91	15.82
3MHz	8RB-High (7)	1880 (18900)	17.71	16.85	15.69
		1851.5 (18615)	17.79	16.85	15.85
		1908.5 (19185)	17.86	16.89	15.83
3MHz	8RB-Middle (4)	1880 (18900)	17.77	16.79	15.76
		1851.5 (18615)	17.81	16.82	15.84
		1908.5 (19185)	17.87	16.91	15.81
3MHz	8RB-Low (0)	1880 (18900)	17.74	16.90	15.77
		1851.5 (18615)	17.81	16.85	15.84
		1908.5 (19185)	17.85	16.82	15.83
3MHz	15RB (0)	1880 (18900)	17.74	16.79	15.74
		1851.5 (18615)	17.81	16.81	15.77
		1907.5 (19175)	18.85	18.05	17.02
5MHz	1RB-High (24)	1880 (18900)	18.81	18.17	16.92
		1852.5 (18625)	18.86	18.17	16.91
		1907.5 (19175)	18.90	18.20	16.92
5MHz	1RB-Middle (12)	1880 (18900)	18.82	18.09	16.95
		1852.5 (18625)	18.84	18.20	16.98
		1907.5 (19175)	18.86	18.26	17.06
5MHz	1RB-Low (0)	1880 (18900)	18.89	18.20	17.04
		1852.5 (18625)	18.85	18.08	17.00
		1907.5 (19175)	17.90	16.84	15.81
5MHz	12RB-High (13)	1880 (18900)	17.79	16.83	15.79
		1852.5 (18625)	17.85	16.82	15.75

	12RB-Middle (6)	1907.5 (19175)	17.89	16.88	15.84
		1880 (18900)	17.82	16.78	15.77
		1852.5 (18625)	17.84	16.84	15.78
	12RB-Low (0)	1907.5 (19175)	17.81	16.88	15.85
		1880 (18900)	17.80	16.78	15.77
		1852.5 (18625)	17.84	16.84	15.77
	25RB (0)	1907.5 (19175)	17.86	16.90	15.82
		1880 (18900)	17.84	16.85	15.82
		1852.5 (18625)	17.81	16.85	15.75
10MHz	1RB-High (49)	1905 (19150)	18.86	18.12	17.04
		1880 (18900)	18.79	18.08	16.88
		1855 (18650)	18.77	18.07	16.95
	1RB-Middle (24)	1905 (19150)	18.90	18.23	17.04
		1880 (18900)	18.85	18.09	16.98
		1855 (18650)	18.90	18.23	17.08
	1RB-Low (0)	1905 (19150)	18.80	18.21	17.01
		1880 (18900)	18.81	18.16	16.98
		1855 (18650)	18.88	18.08	16.97
	25RB-High (25)	1905 (19150)	17.90	16.91	15.86
		1880 (18900)	17.77	16.78	15.70
		1855 (18650)	17.79	16.84	15.77
	25RB-Middle (12)	1905 (19150)	17.91	16.85	15.86
		1880 (18900)	17.85	16.82	15.81
		1855 (18650)	17.79	16.81	15.79
	25RB-Low (0)	1905 (19150)	17.97	16.94	15.91
		1880 (18900)	17.86	16.84	15.77
		1855 (18650)	17.83	16.87	15.79
	50RB (0)	1905 (19150)	17.91	16.90	15.87
		1880 (18900)	17.81	16.79	15.76
		1855 (18650)	17.82	16.82	15.78
15MHz	1RB-High (74)	1902.5 (19125)	18.85	18.29	16.96
		1880 (18900)	18.78	18.13	16.95
		1857.5 (18675)	18.81	18.19	16.90
	1RB-Middle (37)	1902.5 (19125)	18.87	18.17	17.00
		1880 (18900)	18.86	18.16	16.97
		1857.5 (18675)	18.78	18.11	16.90
	1RB-Low (0)	1902.5 (19125)	18.80	18.19	16.93
		1880 (18900)	18.78	18.18	16.96
		1857.5 (18675)	18.87	18.23	17.01
	36RB-High (38)	1902.5 (19125)	17.89	16.89	15.82

		1880 (18900)	17.81	16.81	15.79
		1857.5 (18675)	17.80	16.79	15.77
36RB-Middle (19)		1902.5 (19125)	17.92	16.84	15.84
		1880 (18900)	17.79	16.78	15.82
		1857.5 (18675)	17.83	16.79	15.81
		1902.5 (19125)	17.86	16.90	15.86
36RB-Low (0)		1880 (18900)	17.83	16.82	15.81
		1857.5 (18675)	17.89	16.79	15.81
		1902.5 (19125)	17.89	16.88	15.83
75RB (0)		1880 (18900)	17.84	16.81	15.79
		1857.5 (18675)	17.91	16.80	15.81
		1900 (19100)	18.86	18.09	17.04
20MHz	1RB-High (99)	1880 (18900)	18.76	18.09	16.92
		1860 (18700)	18.82	18.18	16.98
		1900 (19100)	18.88	18.23	17.02
20MHz	1RB-Middle (50)	1880 (18900)	18.90	18.15	16.99
		1860 (18700)	18.92	18.08	16.95
		1900 (19100)	18.77	18.20	16.98
20MHz	1RB-Low (0)	1880 (18900)	18.80	18.12	17.02
		1860 (18700)	18.90	18.20	17.13
		1900 (19100)	17.81	16.87	15.84
20MHz	50RB-High (50)	1880 (18900)	17.85	16.82	15.82
		1860 (18700)	17.86	16.89	15.85
		1900 (19100)	17.89	16.87	15.91
20MHz	50RB-Middle (25)	1880 (18900)	17.87	16.79	15.81
		1860 (18700)	17.92	16.86	15.85
		1900 (19100)	17.92	16.94	15.93
20MHz	50RB-Low (0)	1880 (18900)	17.88	16.82	15.79
		1860 (18700)	17.95	16.88	15.84
		1900 (19100)	17.86	16.87	15.79
20MHz	100RB (0)	1880 (18900)	17.84	16.76	15.78
		1860 (18700)	17.86	16.82	15.87

**LTE B2 ANT3-Power Level A1**

<b>LTE B2 ANT3</b>					
<b>BANDWIDTH</b>	<b>Number of RBs</b>	<b>Frequency</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>
1.4MHz	1RB-High (5)	1909.3 (19193)	22.98	22.27	21.24
		1880 (18900)	23.05	22.23	21.19
		1850.7 (18607)	23.12	22.38	21.28
	1RB-Middle (3)	1909.3 (19193)	22.94	22.27	21.12
		1880 (18900)	23.05	22.32	21.24
		1850.7 (18607)	23.12	22.45	21.25
	1RB-Low (0)	1909.3 (19193)	22.98	22.24	21.22
		1880 (18900)	23.04	22.38	21.31
		1850.7 (18607)	23.09	22.32	21.22
	3RB-High (3)	1909.3 (19193)	23.00	21.91	21.13
		1880 (18900)	23.09	22.05	21.18
		1850.7 (18607)	23.10	22.10	21.28
	3RB-Middle (1)	1909.3 (19193)	23.03	22.01	21.13
		1880 (18900)	23.05	22.02	21.15
		1850.7 (18607)	23.14	21.99	21.25
	3RB-Low (0)	1909.3 (19193)	23.01	22.00	21.11
		1880 (18900)	23.06	22.03	21.21
		1850.7 (18607)	23.12	22.11	21.21
	6RB (0)	1909.3 (19193)	21.98	21.13	20.03
		1880 (18900)	22.05	21.19	20.04
		1850.7 (18607)	22.07	21.27	20.07
3MHz	1RB-High (14)	1908.5 (19185)	23.05	22.16	21.13
		1880 (18900)	23.08	22.30	21.26
		1851.5 (18615)	23.14	22.32	21.32
	1RB-Middle (7)	1908.5 (19185)	23.00	22.20	21.25
		1880 (18900)	23.06	22.40	21.32
		1851.5 (18615)	23.09	22.45	21.34
	1RB-Low (0)	1908.5 (19185)	23.03	22.22	21.18
		1880 (18900)	23.03	22.33	21.20
		1851.5 (18615)	23.09	22.31	21.22
	8RB-High (7)	1908.5 (19185)	21.99	21.08	20.09
		1880 (18900)	22.03	21.15	20.16
		1851.5 (18615)	22.09	21.21	20.17
	8RB-Middle (4)	1908.5 (19185)	22.01	21.11	20.00
		1880 (18900)	22.02	21.17	20.06
		1851.5 (18615)	22.08	21.23	20.17

		8RB-Low (0)	1908.5 (19185)	22.05	21.18	20.08
		8RB-Low (0)	1880 (18900)	22.04	21.17	20.08
		8RB-Low (0)	1851.5 (18615)	22.13	21.24	20.22
		15RB (0)	1908.5 (19185)	22.03	21.15	20.05
		15RB (0)	1880 (18900)	22.07	21.10	20.10
		15RB (0)	1851.5 (18615)	22.14	21.16	20.12
		1RB-High (24)	1907.5 (19175)	23.05	22.29	21.26
		1RB-High (24)	1880 (18900)	23.09	22.22	21.25
		1RB-High (24)	1852.5 (18625)	23.23	22.35	21.45
		1RB-Middle (12)	1907.5 (19175)	23.17	22.37	21.28
		1RB-Middle (12)	1880 (18900)	23.18	22.44	21.34
		1RB-Middle (12)	1852.5 (18625)	23.25	22.54	21.37
		1RB-Low (0)	1907.5 (19175)	23.09	22.31	21.35
		1RB-Low (0)	1880 (18900)	23.07	22.30	21.25
		1RB-Low (0)	1852.5 (18625)	23.16	22.43	21.35
	5MHz	12RB-High (13)	1907.5 (19175)	22.06	21.08	20.05
	5MHz	12RB-High (13)	1880 (18900)	22.08	21.14	20.07
	5MHz	12RB-High (13)	1852.5 (18625)	22.16	21.20	20.22
	5MHz	12RB-Middle (6)	1907.5 (19175)	22.12	21.10	20.10
	5MHz	12RB-Middle (6)	1880 (18900)	22.09	21.14	20.12
	5MHz	12RB-Middle (6)	1852.5 (18625)	22.18	21.22	20.17
	5MHz	12RB-Low (0)	1907.5 (19175)	22.14	21.21	20.22
	5MHz	12RB-Low (0)	1880 (18900)	22.11	21.14	20.21
	5MHz	12RB-Low (0)	1852.5 (18625)	22.21	21.29	20.27
	5MHz	25RB (0)	1907.5 (19175)	22.10	21.14	20.14
	5MHz	25RB (0)	1880 (18900)	22.11	21.18	20.14
	5MHz	25RB (0)	1852.5 (18625)	22.20	21.23	20.21
	10MHz	1RB-High (49)	1905 (19150)	23.08	22.30	21.30
	10MHz	1RB-High (49)	1880 (18900)	23.14	22.35	21.41
	10MHz	1RB-High (49)	1855 (18650)	23.23	22.43	21.32
	10MHz	1RB-Middle (24)	1905 (19150)	23.18	22.33	21.27
	10MHz	1RB-Middle (24)	1880 (18900)	23.20	22.36	21.36
	10MHz	1RB-Middle (24)	1855 (18650)	23.26	22.63	21.46
	10MHz	1RB-Low (0)	1905 (19150)	23.09	22.23	21.18
	10MHz	1RB-Low (0)	1880 (18900)	23.11	22.33	21.24
	10MHz	1RB-Low (0)	1855 (18650)	23.17	22.49	21.35
	10MHz	25RB-High (25)	1905 (19150)	22.14	21.15	20.18
	10MHz	25RB-High (25)	1880 (18900)	22.17	21.23	20.21
	10MHz	25RB-High (25)	1855 (18650)	22.21	21.35	20.28
	10MHz	25RB-Middle (12)	1905 (19150)	22.14	21.15	20.20

		1880 (18900)	22.16	21.21	20.20
		1855 (18650)	22.26	21.34	20.24
25RB-Low (0)		1905 (19150)	22.17	21.25	20.20
		1880 (18900)	22.17	21.26	20.23
		1855 (18650)	22.25	21.29	20.26
		1905 (19150)	22.20	21.19	20.18
50RB (0)		1880 (18900)	22.14	21.25	20.20
		1855 (18650)	22.28	21.35	20.32
		1902.5 (19125)	23.26	22.29	21.44
15MHz	1RB-High (74)	1880 (18900)	23.22	22.49	21.44
		1857.5 (18675)	23.31	22.56	21.44
		1902.5 (19125)	23.31	22.42	21.35
	1RB-Middle (37)	1880 (18900)	23.34	22.49	21.46
		1857.5 (18675)	23.41	22.61	21.50
		1902.5 (19125)	23.24	22.37	21.38
	1RB-Low (0)	1880 (18900)	23.24	22.35	21.30
		1857.5 (18675)	23.25	22.48	21.41
		1902.5 (19125)	22.28	21.32	20.33
	36RB-High (38)	1880 (18900)	22.20	21.25	20.25
		1857.5 (18675)	22.36	21.35	20.38
		1902.5 (19125)	22.22	21.28	20.19
	36RB-Middle (19)	1880 (18900)	22.29	21.27	20.26
		1857.5 (18675)	22.27	21.37	20.37
		1902.5 (19125)	22.24	21.29	20.20
	36RB-Low (0)	1880 (18900)	22.27	21.26	20.24
		1857.5 (18675)	22.39	21.38	20.31
		1902.5 (19125)	22.26	21.23	20.21
20MHz	75RB (0)	1880 (18900)	22.32	21.33	20.21
		1857.5 (18675)	22.36	21.46	20.30
		1900 (19100)	23.05	22.17	21.15
	1RB-High (99)	1880 (18900)	23.05	22.26	21.25
		1860 (18700)	23.21	22.35	21.37
		1900 (19100)	23.17	22.39	21.27
	1RB-Middle (50)	1880 (18900)	23.18	22.43	21.36
		1860 (18700)	23.32	22.54	21.46
		1900 (19100)	23.03	22.30	21.18
	1RB-Low (0)	1880 (18900)	23.09	22.31	21.24
		1860 (18700)	23.13	22.32	21.30
		1900 (19100)	22.03	21.05	20.07
	50RB-High (50)	1880 (18900)	22.14	21.14	20.16

	1860 (18700)	22.35	21.36	20.34
50RB-Middle (25)	1900 (19100)	22.11	21.26	20.14
	1880 (18900)	22.17	21.19	20.17
	1860 (18700)	22.28	21.25	20.28
	1900 (19100)	22.07	21.08	20.05
50RB-Low (0)	1880 (18900)	22.24	21.30	20.24
	1860 (18700)	22.33	21.27	20.31
	1900 (19100)	22.08	21.10	20.06
100RB (0)	1880 (18900)	22.14	21.21	20.16
	1860 (18700)	22.28	21.30	20.33

**LTE B2 ANT3-Power Level B1/F1**

LTE B2 ANT3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	19.18	18.33	17.35
		1880 (18900)	19.17	18.45	17.27
		1850.7 (18607)	19.20	18.61	17.38
	1RB-Middle (3)	1909.3 (19193)	19.17	18.34	17.30
		1880 (18900)	19.23	18.58	17.38
		1850.7 (18607)	19.27	18.51	17.44
	1RB-Low (0)	1909.3 (19193)	19.14	18.43	17.34
		1880 (18900)	19.16	18.51	17.27
		1850.7 (18607)	19.26	18.64	17.34
	3RB-High (3)	1909.3 (19193)	19.23	18.21	17.24
		1880 (18900)	19.14	18.17	17.25
		1850.7 (18607)	19.31	18.22	17.40
	3RB-Middle (1)	1909.3 (19193)	19.22	18.21	17.26
		1880 (18900)	19.20	18.19	17.22
		1850.7 (18607)	19.29	18.33	17.33
	3RB-Low (0)	1909.3 (19193)	19.22	18.21	17.32
		1880 (18900)	19.22	18.21	17.26
		1850.7 (18607)	19.29	18.23	17.40
	6RB (0)	1909.3 (19193)	18.15	17.25	16.08
		1880 (18900)	18.19	17.21	16.14
		1850.7 (18607)	18.30	17.35	16.22
3MHz	1RB-High (14)	1908.5 (19185)	19.15	18.39	17.26
		1880 (18900)	19.14	18.44	17.28
		1851.5 (18615)	19.24	18.72	17.39
	1RB-Middle (7)	1908.5 (19185)	19.19	18.50	17.35

		1880 (18900)	19.16	18.48	17.28
		1851.5 (18615)	19.24	18.66	17.35
1RB-Low (0)		1908.5 (19185)	19.10	18.39	17.27
		1880 (18900)	19.12	18.55	17.38
		1851.5 (18615)	19.18	18.61	17.39
		1908.5 (19185)	18.16	17.19	16.19
8RB-High (7)		1880 (18900)	18.13	17.18	16.07
		1851.5 (18615)	18.21	17.30	16.19
		1908.5 (19185)	18.11	17.24	16.14
8RB-Middle (4)		1880 (18900)	18.18	17.24	16.12
		1851.5 (18615)	18.28	17.31	16.27
		1908.5 (19185)	18.18	17.25	16.18
8RB-Low (0)		1880 (18900)	18.14	17.20	16.15
		1851.5 (18615)	18.29	17.32	16.27
		1908.5 (19185)	18.18	17.16	16.05
15RB (0)		1880 (18900)	18.15	17.14	16.14
		1851.5 (18615)	18.26	17.18	16.23
		1907.5 (19175)	19.19	18.39	17.29
5MHz	1RB-High (24)	1880 (18900)	19.26	18.47	17.32
		1852.5 (18625)	19.30	18.49	17.47
		1907.5 (19175)	19.21	18.55	17.34
1RB-Middle (12)		1880 (18900)	19.25	18.46	17.36
		1852.5 (18625)	19.29	18.77	17.48
		1907.5 (19175)	19.17	18.48	17.38
1RB-Low (0)		1880 (18900)	19.18	18.60	17.39
		1852.5 (18625)	19.28	18.66	17.45
		1907.5 (19175)	18.13	17.12	16.14
12RB-High (13)		1880 (18900)	18.13	17.11	16.12
		1852.5 (18625)	18.20	17.21	16.19
		1907.5 (19175)	18.20	17.13	16.18
12RB-Middle (6)		1880 (18900)	18.18	17.20	16.17
		1852.5 (18625)	18.25	17.28	16.26
		1907.5 (19175)	18.23	17.16	16.23
12RB-Low (0)		1880 (18900)	18.21	17.24	16.27
		1852.5 (18625)	18.34	17.32	16.33
		1907.5 (19175)	18.21	17.20	16.17
25RB (0)		1880 (18900)	18.21	17.21	16.20
		1852.5 (18625)	18.28	17.32	16.25
		1905 (19150)	19.22	18.57	17.29
10MHz	1RB-High (49)	1880 (18900)	19.17	18.55	17.27

		1855 (18650)	19.28	18.61	17.36
15MHz	1RB-Middle (24)	1905 (19150)	19.18	18.48	17.33
		1880 (18900)	19.19	18.51	17.33
		1855 (18650)	19.25	18.52	17.46
		1905 (19150)	19.13	18.49	17.33
	1RB-Low (0)	1880 (18900)	19.18	18.46	17.29
		1855 (18650)	19.31	18.66	17.50
		1905 (19150)	18.19	17.14	16.17
	25RB-High (25)	1880 (18900)	18.18	17.21	16.16
		1855 (18650)	18.26	17.32	16.20
		1905 (19150)	18.16	17.16	16.17
	25RB-Middle (12)	1880 (18900)	18.20	17.23	16.18
		1855 (18650)	18.32	17.31	16.27
		1905 (19150)	18.20	17.19	16.20
	25RB-Low (0)	1880 (18900)	18.22	17.26	16.20
		1855 (18650)	18.37	17.35	16.29
		1905 (19150)	18.22	17.20	16.20
	50RB (0)	1880 (18900)	18.21	17.22	16.18
		1855 (18650)	18.36	17.32	16.34
		1902.5 (19125)	19.17	18.42	17.36
	1RB-High (74)	1880 (18900)	19.06	18.39	17.29
		1857.5 (18675)	19.12	18.31	17.32
		1902.5 (19125)	19.09	18.39	17.19
	1RB-Middle (37)	1880 (18900)	19.12	18.47	17.33
		1857.5 (18675)	19.33	18.61	17.45
		1902.5 (19125)	19.06	18.25	17.23
	1RB-Low (0)	1880 (18900)	19.05	18.36	17.32
		1857.5 (18675)	19.20	18.57	17.45
		1902.5 (19125)	18.03	17.12	16.04
	36RB-High (38)	1880 (18900)	18.12	17.18	16.17
		1857.5 (18675)	18.18	17.29	16.17
		1902.5 (19125)	18.10	17.13	16.14
	36RB-Middle (19)	1880 (18900)	18.14	17.15	16.15
		1857.5 (18675)	18.23	17.28	16.25
		1902.5 (19125)	18.14	17.11	16.07
	36RB-Low (0)	1880 (18900)	18.18	17.18	16.16
		1857.5 (18675)	18.30	17.32	16.27
		1902.5 (19125)	18.19	17.15	16.07
	75RB (0)	1880 (18900)	18.16	17.24	16.16
		1857.5 (18675)	18.33	17.28	16.28

20MHz	1RB-High (99)	1900 (19100)	19.02	18.23	17.18
		1880 (18900)	19.04	18.28	17.11
		1860 (18700)	19.08	18.46	17.27
	1RB-Middle (50)	1900 (19100)	18.97	18.31	17.21
		1880 (18900)	19.13	18.41	17.31
		1860 (18700)	19.15	18.49	17.30
	1RB-Low (0)	1900 (19100)	19.02	18.27	17.16
		1880 (18900)	19.02	18.37	17.19
		1860 (18700)	19.09	18.34	17.29
	50RB-High (50)	1900 (19100)	17.92	16.93	15.90
		1880 (18900)	18.06	17.03	16.01
		1860 (18700)	18.22	17.15	16.16
	50RB-Middle (25)	1900 (19100)	18.06	17.05	15.99
		1880 (18900)	18.08	17.10	16.02
		1860 (18700)	18.24	17.08	16.08
	50RB-Low (0)	1900 (19100)	18.03	16.97	15.96
		1880 (18900)	18.11	17.13	16.10
		1860 (18700)	18.18	17.17	16.15
	100RB (0)	1900 (19100)	17.97	16.98	15.94
		1880 (18900)	18.09	17.09	16.06
		1860 (18700)	18.21	17.11	16.13

### LTE B2 ANT3-Power Level C1/D1

LTE B2 ANT3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	13.98	13.22	12.16
		1880 (18900)	13.98	13.26	12.17
		1850.7 (18607)	14.03	13.31	12.19
	1RB-Middle (3)	1909.3 (19193)	14.07	13.34	12.22
		1880 (18900)	14.02	13.27	12.19
		1850.7 (18607)	14.09	13.39	12.24
	1RB-Low (0)	1909.3 (19193)	13.94	13.38	12.18
		1880 (18900)	14.01	13.23	12.22
		1850.7 (18607)	14.08	13.46	12.25
	3RB-High (3)	1909.3 (19193)	14.07	13.09	12.14
		1880 (18900)	14.00	13.02	12.14
		1850.7 (18607)	14.07	13.09	12.16
	3RB-Middle (1)	1909.3 (19193)	14.07	13.06	12.12
		1880 (18900)	14.02	13.08	12.17

		1850.7 (18607)	14.12	13.12	12.16
3RB-Low (0)	1909.3 (19193)	14.03	13.07	12.14	
	1880 (18900)	14.05	12.99	12.12	
	1850.7 (18607)	14.10	13.08	12.14	
	1909.3 (19193)	13.03	12.12	11.03	
6RB (0)	1880 (18900)	13.00	12.10	11.00	
	1850.7 (18607)	13.06	12.17	11.01	
	1908.5 (19185)	14.01	13.29	12.18	
1RB-High (14)	1880 (18900)	14.09	13.30	12.17	
	1851.5 (18615)	14.05	13.40	12.31	
	1908.5 (19185)	13.98	13.34	12.25	
1RB-Middle (7)	1880 (18900)	14.01	13.26	12.16	
	1851.5 (18615)	14.13	13.38	12.28	
	1908.5 (19185)	13.95	13.29	12.18	
1RB-Low (0)	1880 (18900)	14.01	13.41	12.16	
	1851.5 (18615)	14.12	13.30	12.20	
	1908.5 (19185)	13.07	12.14	11.02	
8RB-High (7)	1880 (18900)	13.00	12.08	11.04	
	1851.5 (18615)	13.11	12.19	11.15	
	1908.5 (19185)	13.06	12.13	11.03	
8RB-Middle (4)	1880 (18900)	13.00	12.07	11.00	
	1851.5 (18615)	13.12	12.15	11.09	
	1908.5 (19185)	13.03	12.12	11.04	
8RB-Low (0)	1880 (18900)	13.02	12.13	11.04	
	1851.5 (18615)	13.08	12.11	11.12	
	1908.5 (19185)	13.08	12.06	11.04	
15RB (0)	1880 (18900)	13.03	12.05	11.02	
	1851.5 (18615)	13.09	12.11	11.10	
	1907.5 (19175)	14.06	13.36	12.12	
5MHz	1880 (18900)	14.04	13.36	12.17	
	1852.5 (18625)	14.12	13.42	12.35	
	1907.5 (19175)	14.09	13.36	12.25	
1RB-Middle (12)	1880 (18900)	14.08	13.42	12.27	
	1852.5 (18625)	14.10	13.47	12.31	
	1907.5 (19175)	14.01	13.31	12.11	
1RB-Low (0)	1880 (18900)	14.13	13.44	12.18	
	1852.5 (18625)	14.13	13.37	12.22	
	1907.5 (19175)	13.02	12.05	11.00	
12RB-High (13)	1880 (18900)	12.94	11.95	10.94	
	1852.5 (18625)	13.08	12.07	11.07	

		1907.5 (19175)	13.12	12.04	11.05
	12RB-Middle (6)	1880 (18900)	13.07	12.03	11.01
		1852.5 (18625)	13.15	12.10	11.18
		1907.5 (19175)	13.06	12.07	11.10
	12RB-Low (0)	1880 (18900)	13.09	12.00	11.10
		1852.5 (18625)	13.17	12.19	11.20
		1907.5 (19175)	13.08	12.08	11.03
	25RB (0)	1880 (18900)	13.03	12.04	10.97
		1852.5 (18625)	13.14	12.14	11.07
10MHz		1905 (19150)	14.04	13.38	12.18
	1RB-High (49)	1880 (18900)	13.96	13.31	12.10
		1855 (18650)	14.07	13.38	12.31
		1905 (19150)	13.99	13.28	12.21
	1RB-Middle (24)	1880 (18900)	14.13	13.30	12.19
		1855 (18650)	14.16	13.44	12.30
		1905 (19150)	14.06	13.33	12.23
	1RB-Low (0)	1880 (18900)	14.11	13.31	12.22
		1855 (18650)	14.11	13.37	12.27
		1905 (19150)	12.97	12.02	10.98
15MHz	25RB-High (25)	1880 (18900)	13.09	12.08	11.02
		1855 (18650)	13.09	12.14	11.06
		1905 (19150)	13.10	12.12	11.07
	25RB-Middle (12)	1880 (18900)	13.06	12.07	11.06
		1855 (18650)	13.13	12.19	11.14
		1905 (19150)	13.09	12.13	11.11
	25RB-Low (0)	1880 (18900)	13.08	12.09	11.03
		1855 (18650)	13.18	12.17	11.17
		1905 (19150)	13.08	12.07	11.07
	50RB (0)	1880 (18900)	13.07	12.03	11.01
		1855 (18650)	13.21	12.14	11.15
15MHz		1902.5 (19125)	14.08	13.43	12.26
	1RB-High (74)	1880 (18900)	14.04	13.33	12.22
		1857.5 (18675)	14.14	13.50	12.22
		1902.5 (19125)	14.09	13.46	12.22
	1RB-Middle (37)	1880 (18900)	14.09	13.37	12.30
		1857.5 (18675)	14.17	13.50	12.27
		1902.5 (19125)	14.07	13.33	12.22
	1RB-Low (0)	1880 (18900)	14.09	13.26	12.26
		1857.5 (18675)	14.10	13.42	12.27
	36RB-High (38)	1902.5 (19125)	13.03	12.02	11.09

		1880 (18900)	13.08	12.11	11.00
		1857.5 (18675)	13.17	12.08	11.09
36RB-Middle (19)		1902.5 (19125)	13.14	12.08	11.13
		1880 (18900)	13.09	12.05	11.01
		1857.5 (18675)	13.10	12.12	11.10
		1902.5 (19125)	13.10	12.09	11.04
36RB-Low (0)		1880 (18900)	13.02	12.02	11.03
		1857.5 (18675)	13.19	12.15	11.13
		1902.5 (19125)	13.11	12.02	10.99
75RB (0)		1880 (18900)	13.06	12.10	11.04
		1857.5 (18675)	13.13	12.11	11.10
		1900 (19100)	13.98	13.24	12.16
20MHz	1RB-High (99)	1880 (18900)	13.91	13.16	12.03
		1860 (18700)	14.01	13.31	12.19
		1900 (19100)	14.00	13.26	12.16
1RB-Middle (50)		1880 (18900)	14.02	13.36	12.14
		1860 (18700)	14.06	13.44	12.24
		1900 (19100)	13.85	13.11	12.07
1RB-Low (0)		1880 (18900)	13.90	13.31	12.10
		1860 (18700)	13.99	13.26	12.22
		1900 (19100)	12.92	11.92	10.89
50RB-High (50)		1880 (18900)	12.91	11.90	10.91
		1860 (18700)	13.11	12.12	11.11
		1900 (19100)	13.02	11.95	10.96
50RB-Middle (25)		1880 (18900)	13.03	12.01	10.97
		1860 (18700)	13.13	12.05	11.08
		1900 (19100)	12.96	11.91	10.95
50RB-Low (0)		1880 (18900)	12.97	11.97	10.99
		1860 (18700)	13.15	12.13	11.10
		1900 (19100)	12.96	11.90	10.86
100RB (0)		1880 (18900)	12.96	11.92	10.91
		1860 (18700)	13.12	12.05	11.03

### LTE B2 ANT3-Power Level E1

LTE B2 ANT3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	21.16	20.49	19.35
		1880 (18900)	21.21	20.43	19.33
		1850.7 (18607)	21.22	20.49	19.36

	1RB-Middle (3)	1909.3 (19193)	21.15	20.48	19.28
		1880 (18900)	21.16	20.54	19.42
		1850.7 (18607)	21.24	20.55	19.30
	1RB-Low (0)	1909.3 (19193)	21.14	20.40	19.37
		1880 (18900)	21.21	20.41	19.26
		1850.7 (18607)	21.23	20.59	19.39
	3RB-High (3)	1909.3 (19193)	21.21	20.20	19.30
		1880 (18900)	21.23	20.21	19.23
		1850.7 (18607)	21.29	20.23	19.33
	3RB-Middle (1)	1909.3 (19193)	21.17	20.21	19.29
		1880 (18900)	21.23	20.13	19.28
		1850.7 (18607)	21.22	20.28	19.34
	3RB-Low (0)	1909.3 (19193)	21.16	20.14	19.26
		1880 (18900)	21.19	20.14	19.30
		1850.7 (18607)	21.22	20.32	19.31
	6RB (0)	1909.3 (19193)	20.17	19.28	18.16
		1880 (18900)	20.19	19.25	18.13
		1850.7 (18607)	20.21	19.34	18.17
3MHz	1RB-High (14)	1908.5 (19185)	21.17	20.43	19.29
		1880 (18900)	21.19	20.52	19.28
		1851.5 (18615)	21.27	20.53	19.49
	1RB-Middle (7)	1908.5 (19185)	21.17	20.47	19.29
		1880 (18900)	21.20	20.56	19.37
		1851.5 (18615)	21.24	20.59	19.47
	1RB-Low (0)	1908.5 (19185)	21.14	20.42	19.26
		1880 (18900)	21.21	20.45	19.30
		1851.5 (18615)	21.19	20.51	19.43
	8RB-High (7)	1908.5 (19185)	20.17	19.20	18.19
		1880 (18900)	20.14	19.22	18.16
		1851.5 (18615)	20.20	19.32	18.22
	8RB-Middle (4)	1908.5 (19185)	20.19	19.18	18.19
		1880 (18900)	20.19	19.21	18.15
		1851.5 (18615)	20.22	19.27	18.21
	8RB-Low (0)	1908.5 (19185)	20.17	19.21	18.19
		1880 (18900)	20.17	19.24	18.22
		1851.5 (18615)	20.22	19.32	18.24
	15RB (0)	1908.5 (19185)	20.14	19.15	18.13
		1880 (18900)	20.13	19.20	18.14
		1851.5 (18615)	20.20	19.31	18.20
5MHz	1RB-High (24)	1907.5 (19175)	21.22	20.42	19.37

		1880 (18900)	21.23	20.49	19.38
		1852.5 (18625)	21.27	20.52	19.45
1RB-Middle (12)	1907.5 (19175)	21.19	20.51	19.41	
	1880 (18900)	21.27	20.44	19.43	
	1852.5 (18625)	21.30	20.66	19.52	
	1907.5 (19175)	21.14	20.34	19.28	
1RB-Low (0)	1880 (18900)	21.23	20.57	19.44	
	1852.5 (18625)	21.25	20.61	19.41	
	1907.5 (19175)	20.15	19.17	18.11	
12RB-High (13)	1880 (18900)	20.16	19.08	18.16	
	1852.5 (18625)	20.19	19.17	18.14	
	1907.5 (19175)	20.19	19.19	18.19	
12RB-Middle (6)	1880 (18900)	20.21	19.15	18.24	
	1852.5 (18625)	20.30	19.27	18.26	
	1907.5 (19175)	20.21	19.19	18.17	
12RB-Low (0)	1880 (18900)	20.23	19.25	18.30	
	1852.5 (18625)	20.29	19.28	18.27	
	1907.5 (19175)	20.14	19.16	18.15	
25RB (0)	1880 (18900)	20.21	19.20	18.22	
	1852.5 (18625)	20.22	19.27	18.27	
	1905 (19150)	21.19	20.43	19.33	
1RB-High (49)	1880 (18900)	21.15	20.54	19.22	
	1855 (18650)	21.32	20.59	19.44	
	1905 (19150)	21.17	20.36	19.26	
1RB-Middle (24)	1880 (18900)	21.24	20.59	19.43	
	1855 (18650)	21.27	20.58	19.40	
	1905 (19150)	21.19	20.44	19.30	
1RB-Low (0)	1880 (18900)	21.20	20.52	19.31	
	1855 (18650)	21.25	20.54	19.28	
	1905 (19150)	20.12	19.15	18.06	
25RB-High (25)	1880 (18900)	20.17	19.21	18.15	
	1855 (18650)	20.20	19.24	18.22	
	1905 (19150)	20.22	19.17	18.22	
25RB-Middle (12)	1880 (18900)	20.24	19.27	18.12	
	1855 (18650)	20.25	19.29	18.23	
	1905 (19150)	20.27	19.19	18.24	
25RB-Low (0)	1880 (18900)	20.16	19.19	18.17	
	1855 (18650)	20.38	19.33	18.33	
	1905 (19150)	20.22	19.20	18.11	
50RB (0)	1880 (18900)	20.25	19.23	18.15	

		1855 (18650)	20.33	19.32	18.32
15MHz	1RB-High (74)	1902.5 (19125)	21.11	20.45	19.36
		1880 (18900)	21.15	20.46	19.16
		1857.5 (18675)	21.22	20.53	19.49
		1902.5 (19125)	21.16	20.41	19.31
	1RB-Middle (37)	1880 (18900)	21.19	20.66	19.38
		1857.5 (18675)	21.17	20.55	19.46
		1902.5 (19125)	21.18	20.48	19.39
	1RB-Low (0)	1880 (18900)	21.16	20.51	19.35
		1857.5 (18675)	21.27	20.59	19.42
		1902.5 (19125)	20.10	19.14	18.13
20MHz	36RB-High (38)	1880 (18900)	20.12	19.12	18.12
		1857.5 (18675)	20.27	19.31	18.22
		1902.5 (19125)	20.20	19.20	18.18
	36RB-Middle (19)	1880 (18900)	20.23	19.18	18.17
		1857.5 (18675)	20.32	19.30	18.31
		1902.5 (19125)	20.09	19.14	18.17
	36RB-Low (0)	1880 (18900)	20.21	19.20	18.18
		1857.5 (18675)	20.32	19.28	18.30
		1902.5 (19125)	20.14	19.12	18.05
20MHz	75RB (0)	1880 (18900)	20.26	19.19	18.12
		1857.5 (18675)	20.34	19.37	18.32
		1900 (19100)	20.99	20.24	19.04
	1RB-High (99)	1880 (18900)	21.00	20.28	19.09
		1860 (18700)	21.02	20.32	19.14
		1900 (19100)	21.05	20.39	19.21
	1RB-Middle (50)	1880 (18900)	21.09	20.41	19.12
		1860 (18700)	21.20	20.38	19.35
		1900 (19100)	21.04	20.24	19.19
20MHz	1RB-Low (0)	1880 (18900)	21.08	20.39	19.22
		1860 (18700)	21.08	20.30	19.15
		1900 (19100)	20.02	18.98	17.92
	50RB-High (50)	1880 (18900)	20.01	19.00	17.95
		1860 (18700)	20.17	19.13	18.06
		1900 (19100)	20.16	19.01	18.02
	50RB-Middle (25)	1880 (18900)	20.02	19.03	17.98
		1860 (18700)	20.19	19.14	18.13
		1900 (19100)	20.18	18.99	17.92
20MHz	50RB-Low (0)	1880 (18900)	20.05	19.04	18.05
		1860 (18700)	20.28	19.25	18.23

	100RB (0)	1900 (19100)	20.05	18.92	17.98
		1880 (18900)	19.99	18.94	17.96
		1860 (18700)	20.19	19.14	18.17

**LTE B7-Power Level A1/C1/D1**

<b>LTE B7</b>					
<b>BANDWIDTH</b>	<b>Number of RBs</b>	<b>Frequency</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>
5MHz	1RB-High (24)	2567.5 (21425)	23.07	22.29	21.16
		2535 (21100)	22.97	22.25	21.11
		2502.5 (20775)	23.20	22.48	21.34
	1RB-Middle (12)	2567.5 (21425)	23.06	22.23	21.20
		2535 (21100)	23.00	22.30	21.14
		2502.5 (20775)	23.18	22.44	21.30
	1RB-Low (0)	2567.5 (21425)	23.06	22.23	21.19
		2535 (21100)	22.98	22.22	21.19
		2502.5 (20775)	23.22	22.30	21.36
	12RB-High (13)	2567.5 (21425)	22.09	21.10	20.04
		2535 (21100)	21.91	20.94	19.94
		2502.5 (20775)	22.13	21.09	20.16
	12RB-Middle (6)	2567.5 (21425)	22.01	21.00	20.05
		2535 (21100)	21.94	20.98	19.99
		2502.5 (20775)	22.17	21.16	20.14
	12RB-Low (0)	2567.5 (21425)	22.02	20.98	20.02
		2535 (21100)	21.91	20.90	19.95
		2502.5 (20775)	22.16	21.14	20.16
	25RB (0)	2567.5 (21425)	21.99	21.08	20.01
		2535 (21100)	21.96	20.95	19.90
		2502.5 (20775)	22.18	21.14	20.12
10MHz	1RB-High (49)	2565 (21400)	23.07	22.15	21.14
		2535 (21100)	22.96	22.22	21.02
		2505 (20800)	23.12	22.43	21.28
	1RB-Middle (24)	2565 (21400)	23.11	22.31	21.19
		2535 (21100)	23.04	22.22	21.07
		2505 (20800)	23.20	22.47	21.29
	1RB-Low (0)	2565 (21400)	23.02	22.29	21.18
		2535 (21100)	23.03	22.32	21.17
		2505 (20800)	23.18	22.44	21.24
	25RB-High (25)	2565 (21400)	22.08	21.11	20.07
		2535 (21100)	21.98	20.90	19.96

		2505 (20800)	22.13	21.09	20.07
25RB-Middle (12)		2565 (21400)	22.01	21.04	20.04
		2535 (21100)	21.95	20.92	19.93
		2505 (20800)	22.11	21.15	20.17
		2565 (21400)	21.99	21.05	19.96
25RB-Low (0)		2535 (21100)	21.95	20.95	19.98
		2505 (20800)	22.16	21.12	20.13
		2565 (21400)	22.06	21.10	20.08
		2535 (21100)	22.01	21.00	19.94
50RB (0)		2505 (20800)	22.20	21.18	20.10
		2562.5 (21375)	23.01	22.13	21.05
		2535 (21100)	22.89	22.11	20.96
		2507.5 (20825)	23.04	22.21	21.15
15MHz	1RB-High (74)	2562.5 (21375)	22.99	22.17	21.15
		2535 (21100)	22.98	22.22	21.08
		2507.5 (20825)	23.15	22.43	21.24
		2562.5 (21375)	22.94	22.17	21.10
15MHz	1RB-Middle (37)	2535 (21100)	22.94	22.23	21.10
		2507.5 (20825)	23.07	22.29	21.19
		2562.5 (21375)	22.05	21.04	20.03
		2535 (21100)	21.88	20.94	19.96
15MHz	36RB-High (38)	2507.5 (20825)	22.10	21.08	20.05
		2562.5 (21375)	21.97	20.94	19.94
		2535 (21100)	21.87	20.91	19.94
		2507.5 (20825)	22.10	21.12	20.10
15MHz	36RB-Middle (19)	2562.5 (21375)	21.93	20.93	20.02
		2535 (21100)	21.95	20.86	19.94
		2507.5 (20825)	22.03	21.09	20.14
		2562.5 (21375)	22.05	20.95	19.97
15MHz	36RB-Low (0)	2535 (21100)	21.91	20.93	19.89
		2507.5 (20825)	22.03	21.01	20.04
		2562.5 (21350)	22.95	22.27	21.14
		2535 (21100)	22.95	22.23	21.04
20MHz	1RB-High (99)	2510 (20850)	23.08	22.29	21.28
		2560 (21350)	23.06	22.22	21.12
		2535 (21100)	23.12	22.38	21.17
		2510 (20850)	23.17	22.59	21.31
20MHz	1RB-Middle (50)	2560 (21350)	22.96	22.16	21.08
		2535 (21100)	23.02	22.44	21.14
		2510 (20850)	23.11	22.25	21.16
		2560 (21350)	23.08	22.31	21.25

	50RB-High (50)	2560 (21350)	22.15	21.18	20.09
	50RB-High (50)	2535 (21100)	22.01	21.07	19.97
	50RB-High (50)	2510 (20850)	22.21	21.20	20.14
50RB-Middle (25)	50RB-Middle (25)	2560 (21350)	22.16	21.14	20.07
		2535 (21100)	22.16	21.08	19.99
		2510 (20850)	22.22	21.27	20.15
50RB-Low (0)	50RB-Low (0)	2560 (21350)	22.14	21.16	20.07
		2535 (21100)	22.03	21.02	19.91
		2510 (20850)	22.17	21.22	20.19
100RB (0)	100RB (0)	2560 (21350)	22.08	21.14	20.10
		2535 (21100)	22.00	21.02	19.98
		2510 (20850)	22.22	21.25	20.10

### LTE B7-Power Level B1/E1/F1

LTE B7					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	19.99	19.19	18.27
		2535 (21100)	19.91	19.28	18.23
		2502.5 (20775)	20.12	19.34	18.42
	1RB-Middle (12)	2567.5 (21425)	20.00	19.24	18.23
		2535 (21100)	19.97	19.19	18.20
		2502.5 (20775)	20.06	19.44	18.38
	1RB-Low (0)	2567.5 (21425)	19.97	19.23	18.25
		2535 (21100)	19.97	19.31	18.24
		2502.5 (20775)	20.14	19.48	18.39
	12RB-High (13)	2567.5 (21425)	19.01	18.09	17.11
		2535 (21100)	18.84	18.04	17.03
		2502.5 (20775)	19.09	18.18	17.22
	12RB-Middle (6)	2567.5 (21425)	18.98	18.09	17.12
		2535 (21100)	18.86	18.04	17.02
		2502.5 (20775)	19.06	18.20	17.27
	12RB-Low (0)	2567.5 (21425)	18.95	18.12	17.12
		2535 (21100)	18.92	18.02	17.06
		2502.5 (20775)	19.08	18.23	17.27
	25RB (0)	2567.5 (21425)	19.01	18.16	17.13
		2535 (21100)	18.93	18.00	17.05
		2502.5 (20775)	19.02	18.26	17.21
10MHz	1RB-High (49)	2565 (21400)	19.99	19.30	18.29
		2535 (21100)	19.92	19.20	18.16

		2505 (20800)	20.06	19.44	18.31
1RB-Middle (24)	2565 (21400)	19.97	19.32	18.27	
	2535 (21100)	19.91	19.19	18.22	
	2505 (20800)	20.09	19.44	18.45	
	2565 (21400)	19.93	19.24	18.21	
1RB-Low (0)	2535 (21100)	19.92	19.21	18.26	
	2505 (20800)	20.12	19.49	18.42	
	2565 (21400)	19.04	18.21	17.23	
25RB-High (25)	2535 (21100)	18.97	18.12	17.04	
	2505 (20800)	19.04	18.16	17.13	
	2565 (21400)	18.99	18.09	17.11	
25RB-Middle (12)	2535 (21100)	18.90	18.05	17.04	
	2505 (20800)	19.06	18.28	17.30	
	2565 (21400)	18.93	18.13	17.04	
25RB-Low (0)	2535 (21100)	18.88	18.04	17.06	
	2505 (20800)	19.04	18.18	17.20	
	2565 (21400)	19.05	18.17	17.09	
50RB (0)	2535 (21100)	18.94	18.12	17.05	
	2505 (20800)	19.05	18.26	17.20	
	2562.5 (21375)	19.91	19.20	18.11	
1RB-High (74)	2535 (21100)	19.83	19.08	18.15	
	2507.5 (20825)	20.00	19.37	18.30	
	2562.5 (21375)	19.90	19.26	18.26	
1RB-Middle (37)	2535 (21100)	19.91	19.22	18.16	
	2507.5 (20825)	20.05	19.33	18.36	
	2562.5 (21375)	19.84	19.19	18.13	
1RB-Low (0)	2535 (21100)	19.93	19.28	18.27	
	2507.5 (20825)	20.03	19.40	18.37	
	2562.5 (21375)	19.03	18.12	17.18	
36RB-High (38)	2535 (21100)	18.88	18.00	17.01	
	2507.5 (20825)	18.95	18.08	17.08	
	2562.5 (21375)	18.91	18.06	17.05	
36RB-Middle (19)	2535 (21100)	18.91	18.05	17.08	
	2507.5 (20825)	19.02	18.18	17.15	
	2562.5 (21375)	18.94	18.08	17.09	
36RB-Low (0)	2535 (21100)	18.83	18.03	17.07	
	2507.5 (20825)	19.06	18.17	17.25	
	2562.5 (21375)	18.99	18.04	17.07	
75RB (0)	2535 (21100)	18.88	18.01	16.94	
	2507.5 (20825)	19.01	18.14	17.12	

20MHz	1RB-High (99)	2560 (21350)	19.91	19.25	18.16
		2535 (21100)	19.84	19.21	18.18
		2510 (20850)	19.95	19.30	18.30
	1RB-Middle (50)	2560 (21350)	19.92	19.18	18.22
		2535 (21100)	19.97	19.29	18.24
		2510 (20850)	20.10	19.36	18.34
	1RB-Low (0)	2560 (21350)	19.88	19.17	18.18
		2535 (21100)	19.95	19.34	18.29
		2510 (20850)	20.02	19.33	18.32
	50RB-High (50)	2560 (21350)	19.09	18.18	17.11
		2535 (21100)	18.92	18.06	17.00
		2510 (20850)	19.07	18.18	17.21
	50RB-Middle (25)	2560 (21350)	18.94	18.06	17.02
		2535 (21100)	19.05	18.16	17.16
		2510 (20850)	19.13	18.20	17.16
	50RB-Low (0)	2560 (21350)	19.02	18.14	17.17
		2535 (21100)	18.93	18.06	17.07
		2510 (20850)	19.12	18.30	17.25
	100RB (0)	2560 (21350)	19.05	18.13	17.08
		2535 (21100)	18.88	18.08	17.06
		2510 (20850)	19.13	18.18	17.23

### LTE B12-Power Level A1/B1/C1/D1/E1/F1

LTE B12 ANT0					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3 (23173)	22.95	22.11	21.00
		707.5 (23095)	23.02	22.23	21.05
		699.7 (23017)	23.07	22.34	21.13
	1RB-Middle (3)	715.3 (23173)	22.98	22.20	21.03
		707.5 (23095)	23.05	22.16	21.09
		699.7 (23017)	23.06	22.28	21.11
	1RB-Low (0)	715.3 (23173)	22.91	22.16	21.04
		707.5 (23095)	22.99	22.22	21.13
		699.7 (23017)	23.06	22.32	21.16
	3RB-High (3)	715.3 (23173)	22.94	21.93	20.97
		707.5 (23095)	22.99	22.01	21.06
		699.7 (23017)	23.07	22.01	21.08
	3RB-Middle (1)	715.3 (23173)	22.94	21.98	21.00
		707.5 (23095)	23.01	21.99	21.09

		699.7 (23017)	23.07	22.05	21.07
3RB-Low (0)	3RB-Low (0)	715.3 (23173)	22.92	21.86	20.95
		707.5 (23095)	23.02	22.04	21.05
		699.7 (23017)	23.04	22.03	21.11
		715.3 (23173)	21.95	21.01	20.01
6RB (0)	6RB (0)	707.5 (23095)	21.99	21.08	20.07
		699.7 (23017)	22.09	21.13	20.03
		714.5 (23165)	22.93	22.13	21.02
3MHz	1RB-High (14)	707.5 (23095)	22.92	22.08	20.99
		700.5 (23025)	23.02	22.16	21.06
	1RB-Middle (7)	714.5 (23165)	22.94	22.17	21.05
		707.5 (23095)	23.02	22.24	21.18
		700.5 (23025)	23.11	22.35	21.22
	1RB-Low (0)	714.5 (23165)	22.91	22.05	21.04
		707.5 (23095)	23.02	22.25	21.19
		700.5 (23025)	23.11	22.29	21.24
	8RB-High (7)	714.5 (23165)	21.88	20.92	19.99
		707.5 (23095)	21.97	20.99	20.05
		700.5 (23025)	22.01	21.14	20.19
	8RB-Middle (4)	714.5 (23165)	21.87	20.95	20.00
		707.5 (23095)	21.95	21.05	20.15
		700.5 (23025)	22.02	21.08	20.17
	8RB-Low (0)	714.5 (23165)	21.89	20.94	20.03
		707.5 (23095)	21.94	21.09	20.13
		700.5 (23025)	22.03	21.09	20.14
	15RB (0)	714.5 (23165)	21.87	20.91	19.97
		707.5 (23095)	21.94	21.01	20.05
		700.5 (23025)	22.01	21.03	20.12
5MHz	1RB-High (24)	713.5 (23155)	22.98	22.09	21.04
		707.5 (23095)	22.95	22.04	21.02
		701.5 (23035)	23.04	22.20	21.11
	1RB-Middle (12)	713.5 (23155)	22.95	22.24	21.09
		707.5 (23095)	23.07	22.22	21.13
		701.5 (23035)	23.09	22.22	21.25
	1RB-Low (0)	713.5 (23155)	22.96	22.25	21.18
		707.5 (23095)	23.01	22.17	21.16
		701.5 (23035)	23.10	22.34	21.16
	12RB-High (13)	713.5 (23155)	21.84	20.85	19.98
		707.5 (23095)	21.94	20.91	20.08
		701.5 (23035)	21.95	20.92	20.09

10MHz	12RB-Middle (6)	713.5 (23155)	21.92	20.92	20.04
		707.5 (23095)	22.04	20.99	20.16
		701.5 (23035)	22.06	21.02	20.12
	12RB-Low (0)	713.5 (23155)	21.99	20.97	20.05
		707.5 (23095)	22.03	20.98	20.11
		701.5 (23035)	22.00	20.99	20.14
	25RB (0)	713.5 (23155)	21.96	20.95	20.02
		707.5 (23095)	22.03	20.96	20.06
		701.5 (23035)	22.00	21.01	20.09
	1RB-High (49)	711 (23130)	22.99	22.20	21.05
		707.5 (23095)	22.99	22.15	21.14
		704 (23060)	23.02	22.26	21.11
	1RB-Middle (24)	711 (23130)	23.07	22.29	21.16
		707.5 (23095)	23.14	22.24	21.23
		704 (23060)	23.14	22.31	21.15
	1RB-Low (0)	711 (23130)	23.15	22.28	21.30
		707.5 (23095)	23.08	22.37	21.19
		704 (23060)	23.12	22.36	21.22
	25RB-High (25)	711 (23130)	21.95	20.89	20.05
		707.5 (23095)	22.02	21.01	20.17
		704 (23060)	22.00	21.07	20.21
	25RB-Middle (12)	711 (23130)	21.99	21.01	20.14
		707.5 (23095)	22.03	21.05	20.15
		704 (23060)	21.98	21.02	20.18
	25RB-Low (0)	711 (23130)	22.10	21.04	20.13
		707.5 (23095)	22.09	21.09	20.14
		704 (23060)	22.02	21.05	20.17
	50RB (0)	711 (23130)	22.05	20.97	20.07
		707.5 (23095)	22.06	21.07	20.16
		704 (23060)	22.00	20.99	20.11

### LTE B25-Power Level A1/C1/D1

LTE B25 ANT1					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	22.89	22.11	21.01
		1882.5 (26365)	22.90	22.23	21.03
		1850.7 (26047)	22.91	22.22	21.01
	1RB-Middle (3)	1914.3 (26683)	22.97	22.25	21.13
		1882.5 (26365)	22.90	22.26	21.00

		1850.7 (26047)	22.92	22.17	21.03
1RB-Low (0)		1914.3 (26683)	22.90	22.14	21.14
		1882.5 (26365)	22.93	22.20	21.04
		1850.7 (26047)	22.94	22.23	21.16
		1914.3 (26683)	22.98	21.99	20.97
3RB-High (3)		1882.5 (26365)	22.90	21.84	20.93
		1850.7 (26047)	22.97	21.88	21.02
		1914.3 (26683)	23.03	21.99	21.03
3RB-Middle (1)		1882.5 (26365)	22.95	21.93	20.93
		1850.7 (26047)	22.97	21.93	20.98
		1914.3 (26683)	22.94	21.97	21.00
3RB-Low (0)		1882.5 (26365)	22.89	21.87	21.02
		1850.7 (26047)	22.95	21.89	21.03
		1914.3 (26683)	21.91	21.01	19.89
6RB (0)		1882.5 (26365)	21.92	20.98	19.81
		1850.7 (26047)	21.96	21.03	19.86
		1913.5 (26675)	22.89	22.22	21.01
3MHz	1RB-High (14)	1882.5 (26365)	22.89	22.18	21.10
		1851.5 (26055)	22.97	22.30	21.10
		1913.5 (26675)	23.00	22.12	21.09
1RB-Middle (7)		1882.5 (26365)	22.93	22.16	21.12
		1851.5 (26055)	22.93	22.26	21.07
		1913.5 (26675)	22.96	22.25	21.00
1RB-Low (0)		1882.5 (26365)	22.93	22.11	21.01
		1851.5 (26055)	22.92	22.26	21.05
		1913.5 (26675)	21.93	20.97	19.95
8RB-High (7)		1882.5 (26365)	21.83	20.92	19.88
		1851.5 (26055)	21.95	20.99	19.90
		1913.5 (26675)	21.94	21.01	19.95
8RB-Middle (4)		1882.5 (26365)	21.91	20.97	19.93
		1851.5 (26055)	21.94	21.02	19.87
		1913.5 (26675)	22.01	21.03	19.96
8RB-Low (0)		1882.5 (26365)	21.93	20.94	19.92
		1851.5 (26055)	21.92	21.01	19.91
		1913.5 (26675)	21.93	20.96	19.93
15RB (0)		1882.5 (26365)	21.88	20.94	19.81
		1851.5 (26055)	21.93	21.00	19.89
		1912.5 (26665)	22.98	22.22	21.12
5MHz	1RB-High (24)	1882.5 (26365)	22.94	22.13	21.01
		1852.5 (26065)	23.01	22.30	21.18
		1912.5 (26665)	22.97	22.15	21.18

		1882.5 (26365)	23.01	22.29	21.06
		1852.5 (26065)	23.07	22.33	21.19
10MHz	1RB-Low (0)	1912.5 (26665)	23.03	22.20	21.15
		1882.5 (26365)	22.99	22.20	21.14
		1852.5 (26065)	23.05	22.18	21.06
	12RB-High (13)	1912.5 (26665)	21.92	20.87	19.81
		1882.5 (26365)	21.90	20.88	19.92
		1852.5 (26065)	21.97	20.94	19.90
	12RB-Middle (6)	1912.5 (26665)	22.00	20.92	19.95
		1882.5 (26365)	21.91	20.86	19.89
		1852.5 (26065)	21.96	20.91	19.98
	12RB-Low (0)	1912.5 (26665)	22.08	20.99	20.02
		1882.5 (26365)	21.99	20.99	19.95
		1852.5 (26065)	21.98	20.98	19.97
	25RB (0)	1912.5 (26665)	22.03	20.96	19.91
		1882.5 (26365)	21.97	21.02	19.97
		1852.5 (26065)	22.01	20.92	19.98
15MHz	1RB-High (49)	1910 (26640)	22.98	22.27	21.02
		1882.5 (26365)	22.89	22.08	21.06
		1855 (26090)	22.98	22.21	21.02
	1RB-Middle (24)	1910 (26640)	23.01	22.25	21.19
		1882.5 (26365)	22.93	22.18	21.10
		1855 (26090)	23.02	22.24	21.15
	1RB-Low (0)	1910 (26640)	23.02	22.32	21.04
		1882.5 (26365)	22.95	22.24	21.03
		1855 (26090)	22.98	22.18	21.07
	25RB-High (25)	1910 (26640)	21.89	20.89	19.84
		1882.5 (26365)	22.01	20.93	19.99
		1855 (26090)	22.02	20.97	19.93
	25RB-Middle (12)	1910 (26640)	21.98	21.01	19.96
		1882.5 (26365)	21.93	20.91	19.87
		1855 (26090)	21.97	21.00	19.96
	25RB-Low (0)	1910 (26640)	22.11	21.04	20.07
		1882.5 (26365)	21.91	20.92	19.95
		1855 (26090)	21.99	20.98	19.94
	50RB (0)	1910 (26640)	22.04	21.00	19.90
		1882.5 (26365)	22.00	20.96	19.89
		1855 (26090)	22.05	20.98	19.93
15MHz	1RB-High (74)	1907.5 (26615)	22.90	22.18	21.05
		1882.5 (26365)	22.88	22.10	21.02
		1857.5 (26115)	22.96	22.15	21.00

		1907.5 (26615)	23.04	22.31	21.19
		1882.5 (26365)	22.95	22.25	21.04
		1857.5 (26115)	23.00	22.23	21.12
	1RB-Low (0)	1907.5 (26615)	22.95	22.15	21.09
		1882.5 (26365)	22.94	22.18	21.01
		1857.5 (26115)	22.97	22.23	20.99
	36RB-High (38)	1907.5 (26615)	21.88	20.86	19.88
		1882.5 (26365)	21.85	20.83	19.84
		1857.5 (26115)	21.90	20.98	19.91
	36RB-Middle (19)	1907.5 (26615)	21.95	20.97	19.92
		1882.5 (26365)	21.89	20.88	19.91
		1857.5 (26115)	21.94	20.96	19.93
	36RB-Low (0)	1907.5 (26615)	22.01	20.99	20.04
		1882.5 (26365)	21.95	20.88	19.88
		1857.5 (26115)	21.98	20.93	19.98
	75RB (0)	1907.5 (26615)	21.99	21.01	19.87
		1882.5 (26365)	21.96	20.94	19.86
		1857.5 (26115)	21.94	20.97	19.89
20MHz	1RB-High (99)	1905 (26590)	23.06	22.30	21.19
		1882.5 (26365)	22.99	22.28	21.04
		1860 (26140)	23.02	22.21	21.11
	1RB-Middle (50)	1905 (26590)	23.20	22.43	21.34
		1882.5 (26365)	23.09	22.24	21.08
		1860 (26140)	23.10	22.25	21.18
	1RB-Low (0)	1905 (26590)	23.03	22.32	21.17
		1882.5 (26365)	23.00	22.31	21.15
		1860 (26140)	23.07	22.37	21.11
	50RB-High (50)	1905 (26590)	21.93	20.92	19.95
		1882.5 (26365)	22.07	21.01	19.96
		1860 (26140)	22.10	21.06	20.03
	50RB-Middle (25)	1905 (26590)	22.20	21.10	20.13
		1882.5 (26365)	22.05	21.03	20.01
		1860 (26140)	22.10	21.09	20.03
	50RB-Low (0)	1905 (26590)	22.11	21.14	20.12
		1882.5 (26365)	22.05	21.04	20.01
		1860 (26140)	22.19	21.11	20.11
	100RB (0)	1905 (26590)	22.01	20.99	19.96
		1882.5 (26365)	22.05	21.03	19.92
		1860 (26140)	22.12	21.07	20.05

**LTE B25-Power Level B1/E1/F1**

LTE B25					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	20.80	20.14	19.17
		1882.5 (26365)	20.95	20.16	19.18
		1850.7 (26047)	20.92	20.37	19.17
	1RB-Middle (3)	1914.3 (26683)	20.90	20.22	19.17
		1882.5 (26365)	20.98	20.22	19.25
		1850.7 (26047)	20.96	20.45	19.16
	1RB-Low (0)	1914.3 (26683)	20.89	20.20	19.19
		1882.5 (26365)	20.88	20.26	19.29
		1850.7 (26047)	20.93	20.41	19.29
	3RB-High (3)	1914.3 (26683)	20.95	19.87	19.17
		1882.5 (26365)	20.93	20.09	19.11
		1850.7 (26047)	20.96	20.17	19.19
	3RB-Middle (1)	1914.3 (26683)	20.94	19.95	19.20
		1882.5 (26365)	20.93	20.03	19.14
		1850.7 (26047)	20.98	20.18	19.20
	3RB-Low (0)	1914.3 (26683)	20.92	19.93	19.15
		1882.5 (26365)	20.93	20.02	19.16
		1850.7 (26047)	20.97	20.13	19.15
	6RB (0)	1914.3 (26683)	19.89	19.17	17.99
		1882.5 (26365)	20.04	19.15	17.98
		1850.7 (26047)	20.10	19.19	18.04
3MHz	1RB-High (14)	1913.5 (26675)	20.84	20.09	19.21
		1882.5 (26365)	20.94	20.20	19.26
		1851.5 (26055)	20.97	20.44	19.34
	1RB-Middle (7)	1913.5 (26675)	20.89	20.24	19.23
		1882.5 (26365)	20.91	20.19	19.22
		1851.5 (26055)	20.95	20.42	19.19
	1RB-Low (0)	1913.5 (26675)	20.95	20.21	19.19
		1882.5 (26365)	20.92	20.14	19.27
		1851.5 (26055)	20.94	20.43	19.35
	8RB-High (7)	1913.5 (26675)	19.89	19.08	18.02
		1882.5 (26365)	20.05	19.09	18.03
		1851.5 (26055)	20.12	19.15	18.07
	8RB-Middle (4)	1913.5 (26675)	19.91	19.13	18.09
		1882.5 (26365)	20.07	19.14	18.01
		1851.5 (26055)	20.07	19.16	18.11

		8RB-Low (0)	1913.5 (26675)	19.96	19.16	18.09
		8RB-Low (0)	1882.5 (26365)	20.05	19.12	18.11
		8RB-Low (0)	1851.5 (26055)	20.10	19.13	18.10
		15RB (0)	1913.5 (26675)	19.92	19.07	18.01
		15RB (0)	1882.5 (26365)	20.07	19.03	18.04
		15RB (0)	1851.5 (26055)	20.05	19.09	17.99
		1RB-High (24)	1912.5 (26665)	20.93	20.16	19.28
		1RB-High (24)	1882.5 (26365)	21.00	20.20	19.23
		1RB-High (24)	1852.5 (26065)	21.01	20.42	19.33
		1RB-Middle (12)	1912.5 (26665)	20.94	20.27	19.19
		1RB-Middle (12)	1882.5 (26365)	20.99	20.20	19.29
		1RB-Middle (12)	1852.5 (26065)	21.07	20.51	19.22
		1RB-Low (0)	1912.5 (26665)	20.98	20.35	19.33
		1RB-Low (0)	1882.5 (26365)	21.00	20.32	19.33
		1RB-Low (0)	1852.5 (26065)	21.02	20.45	19.23
		12RB-High (13)	1912.5 (26665)	19.86	18.99	17.98
		12RB-High (13)	1882.5 (26365)	19.95	19.13	18.13
		12RB-High (13)	1852.5 (26065)	20.05	19.13	18.12
		12RB-Middle (6)	1912.5 (26665)	19.95	19.10	18.08
		12RB-Middle (6)	1882.5 (26365)	20.08	19.07	18.07
		12RB-Middle (6)	1852.5 (26065)	20.12	19.09	18.14
		12RB-Low (0)	1912.5 (26665)	20.11	19.12	18.09
		12RB-Low (0)	1882.5 (26365)	20.14	19.10	18.07
		12RB-Low (0)	1852.5 (26065)	20.14	19.15	18.08
		25RB (0)	1912.5 (26665)	19.95	19.10	18.07
		25RB (0)	1882.5 (26365)	20.00	19.11	18.13
		25RB (0)	1852.5 (26065)	20.10	19.14	18.11
		1RB-High (49)	1910 (26640)	20.90	20.28	19.28
		1RB-High (49)	1882.5 (26365)	20.96	20.20	19.23
		1RB-High (49)	1855 (26090)	21.00	20.33	19.21
		1RB-Middle (24)	1910 (26640)	21.00	20.40	19.21
		1RB-Middle (24)	1882.5 (26365)	20.98	20.34	19.28
		1RB-Middle (24)	1855 (26090)	21.01	20.39	19.24
		1RB-Low (0)	1910 (26640)	20.88	20.30	19.27
		1RB-Low (0)	1882.5 (26365)	20.92	20.34	19.19
		1RB-Low (0)	1855 (26090)	21.00	20.39	19.28
		25RB-High (25)	1910 (26640)	19.86	19.03	18.01
		25RB-High (25)	1882.5 (26365)	19.93	19.12	18.13
		25RB-High (25)	1855 (26090)	20.15	19.16	18.13
		25RB-Middle (12)	1910 (26640)	20.05	19.13	18.04

		1882.5 (26365)	20.12	19.10	18.08
		1855 (26090)	20.09	19.09	18.14
25RB-Low (0)		1910 (26640)	20.16	19.16	18.12
		1882.5 (26365)	20.13	19.17	18.07
		1855 (26090)	20.15	19.17	18.13
		1910 (26640)	20.05	19.12	18.04
50RB (0)		1882.5 (26365)	20.18	19.11	18.10
		1855 (26090)	20.21	19.13	18.09
		1907.5 (26615)	20.87	20.09	19.22
15MHz	1RB-High (74)	1882.5 (26365)	20.85	20.20	19.18
		1857.5 (26115)	20.86	20.29	19.13
		1907.5 (26615)	20.92	20.30	19.28
	1RB-Middle (37)	1882.5 (26365)	20.96	20.17	19.17
		1857.5 (26115)	20.98	20.49	19.35
		1907.5 (26615)	20.89	20.37	19.21
	1RB-Low (0)	1882.5 (26365)	20.92	20.38	19.17
		1857.5 (26115)	20.94	20.32	19.17
		1907.5 (26615)	20.00	19.00	18.07
	36RB-High (38)	1882.5 (26365)	20.08	19.06	17.99
		1857.5 (26115)	20.07	19.09	18.15
		1907.5 (26615)	20.03	19.09	18.11
20MHz	36RB-Middle (19)	1882.5 (26365)	20.04	19.06	18.05
		1857.5 (26115)	20.04	19.12	18.07
		1907.5 (26615)	20.10	19.10	18.12
	36RB-Low (0)	1882.5 (26365)	20.08	19.05	18.09
		1857.5 (26115)	20.16	19.12	18.07
		1907.5 (26615)	20.14	19.09	18.00
	75RB (0)	1882.5 (26365)	20.08	19.09	18.01
		1857.5 (26115)	20.14	19.06	18.07
		1905 (26590)	20.94	20.24	19.13
	1RB-High (99)	1882.5 (26365)	20.95	20.25	19.11
		1860 (26140)	20.90	20.24	19.19
		1905 (26590)	20.97	20.44	19.21
	1RB-Middle (50)	1882.5 (26365)	21.00	20.26	19.21
		1860 (26140)	21.05	20.51	19.37
		1905 (26590)	20.96	20.31	19.19
	1RB-Low (0)	1882.5 (26365)	20.95	20.34	19.19
		1860 (26140)	20.96	20.48	19.24
		1905 (26590)	20.03	19.03	18.01
	50RB-High (50)	1882.5 (26365)	20.00	19.06	18.09

	1860 (26140)	20.23	19.16	18.19
50RB-Middle (25)	1905 (26590)	20.15	19.20	18.11
	1882.5 (26365)	20.15	19.17	18.16
	1860 (26140)	20.20	19.17	18.21
	1905 (26590)	20.22	19.19	18.16
50RB-Low (0)	1882.5 (26365)	20.14	19.16	18.16
	1860 (26140)	20.25	19.23	18.22
	1905 (26590)	20.16	19.10	18.05
100RB (0)	1882.5 (26365)	20.14	19.11	18.08
	1860 (26140)	20.18	19.14	18.17

**LTE B26-Power Level A1/B1/C1/D1/E1/F1**

LTE B26 ANT0					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (27033)	22.97	22.26	21.05
		831.5 (26865)	23.05	22.26	21.09
		814.7 (26697)	22.96	22.21	21.08
	1RB-Middle (3)	848.3 (27033)	23.09	22.34	21.17
		831.5 (26865)	23.06	22.36	21.21
		814.7 (26697)	22.93	22.23	21.06
	1RB-Low (0)	848.3 (27033)	22.97	22.16	21.11
		831.5 (26865)	23.07	22.35	21.20
		814.7 (26697)	22.95	22.18	21.05
	3RB-High (3)	848.3 (27033)	23.06	22.00	21.11
		831.5 (26865)	23.05	21.98	21.04
		814.7 (26697)	22.99	21.94	21.02
	3RB-Middle (1)	848.3 (27033)	23.03	21.94	21.06
		831.5 (26865)	23.08	22.02	21.07
		814.7 (26697)	22.99	21.96	20.99
	3RB-Low (0)	848.3 (27033)	23.04	21.97	21.09
		831.5 (26865)	23.06	22.04	21.00
		814.7 (26697)	23.00	22.00	21.05
	6RB (0)	848.3 (27033)	22.00	21.06	19.92
		831.5 (26865)	22.01	21.03	19.87
		814.7 (26697)	21.94	21.02	19.88
3MHz	1RB-High (14)	847.5 (27025)	22.98	22.30	21.08
		831.5 (26865)	23.05	22.30	21.13
		815.5 (26705)	22.91	22.23	21.10
	1RB-Middle (7)	847.5 (27025)	22.97	22.22	21.13

		831.5 (26865)	23.05	22.24	21.15
		815.5 (26705)	22.97	22.28	21.13
1RB-Low (0)		847.5 (27025)	23.00	22.21	21.12
		831.5 (26865)	23.02	22.14	21.19
		815.5 (26705)	22.92	22.24	21.09
		847.5 (27025)	21.93	21.02	20.02
8RB-High (7)		831.5 (26865)	22.01	21.11	20.02
		815.5 (26705)	21.93	20.98	19.93
		847.5 (27025)	21.98	21.10	20.00
8RB-Middle (4)		831.5 (26865)	21.95	21.07	19.96
		815.5 (26705)	21.93	20.95	19.97
		847.5 (27025)	22.00	21.06	20.03
8RB-Low (0)		831.5 (26865)	21.96	21.05	20.00
		815.5 (26705)	21.52	21.03	20.12
		847.5 (27025)	21.98	21.00	20.00
15RB (0)		831.5 (26865)	21.97	21.07	20.00
		815.5 (26705)	21.85	21.06	20.01
		846.5 (27015)	23.05	22.18	21.24
5MHz	1RB-High (24)	831.5 (26865)	23.07	22.36	21.20
		816.5 (26715)	23.07	22.27	21.14
		846.5 (27015)	23.09	22.27	21.10
1RB-Middle (12)		831.5 (26865)	23.11	22.38	21.18
		816.5 (26715)	23.06	22.21	21.15
		846.5 (27015)	23.05	22.28	21.12
1RB-Low (0)		831.5 (26865)	23.02	22.22	21.18
		816.5 (26715)	22.98	22.26	21.11
		846.5 (27015)	21.99	21.00	20.01
12RB-High (13)		831.5 (26865)	22.02	21.01	20.02
		816.5 (26715)	22.02	20.93	19.95
		846.5 (27015)	22.02	21.05	20.02
12RB-Middle (6)		831.5 (26865)	22.07	21.01	20.00
		816.5 (26715)	22.03	20.96	19.97
		846.5 (27015)	22.03	21.05	20.02
12RB-Low (0)		831.5 (26865)	21.98	21.00	19.98
		816.5 (26715)	22.06	20.97	19.98
		846.5 (27015)	22.02	21.04	20.03
25RB (0)		831.5 (26865)	22.05	20.99	19.98
		816.5 (26715)	21.98	20.95	19.98
		844 (26990)	23.04	22.30	21.17
10MHz	1RB-High (49)	831.5 (26865)	23.02	22.29	21.11

	820 (26750)	23.02	22.22	21.17
1RB-Middle (24)	844 (26990)	23.08	22.22	21.20
	831.5 (26865)	23.14	22.36	21.17
	820 (26750)	23.06	22.35	21.14
	844 (26990)	23.07	22.36	21.21
1RB-Low (0)	831.5 (26865)	23.02	22.25	21.15
	820 (26750)	23.05	22.18	21.10
	844 (26990)	21.95	21.03	20.00
25RB-High (25)	831.5 (26865)	22.09	21.07	20.03
	820 (26750)	21.98	21.04	20.00
	844 (26990)	22.03	20.98	19.94
25RB-Middle (12)	831.5 (26865)	22.08	21.04	20.02
	820 (26750)	22.03	21.06	19.99
	844 (26990)	22.04	21.07	20.00
25RB-Low (0)	831.5 (26865)	21.96	20.94	19.91
	820 (26750)	21.92	20.95	19.88
	844 (26990)	21.99	21.00	19.99
50RB (0)	831.5 (26865)	22.01	20.99	19.98
	820 (26750)	21.98	20.94	19.91
	841.5 (26965)	22.96	22.22	21.14
15MHz	831.5 (26865)	22.90	22.22	21.05
	822.5 (26775)	22.96	22.21	21.11
	841.5 (26965)	22.94	22.26	21.10
1RB-Middle (37)	831.5 (26865)	23.09	22.28	21.16
	822.5 (26775)	23.00	22.27	21.20
	841.5 (26965)	23.11	22.25	21.14
1RB-Low (0)	831.5 (26865)	23.02	22.24	21.14
	822.5 (26775)	22.98	22.24	21.10
	841.5 (26965)	21.94	20.92	19.94
36RB-High (38)	831.5 (26865)	21.99	20.93	19.99
	822.5 (26775)	21.96	20.99	20.04
	841.5 (26965)	21.99	20.94	20.00
36RB-Middle (19)	831.5 (26865)	21.96	20.97	19.99
	822.5 (26775)	21.98	20.98	20.04
	841.5 (26965)	22.02	20.92	20.08
36RB-Low (0)	831.5 (26865)	21.97	20.94	20.02
	822.5 (26775)	21.95	20.90	20.02
	841.5 (26965)	22.01	20.93	19.92
75RB (0)	831.5 (26865)	22.02	20.94	19.90
	822.5 (26775)	21.96	21.00	20.02

**LTE B41 PC3-Power Level A1**

LTE B41 PC3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	23.50	22.53	21.11
		2640.3(41093)	23.25	22.24	20.87
		2593 (40620)	23.65	22.65	21.26
		2545.8(40148)	23.40	22.41	21.01
		2498.5 (39675)	24.00	22.98	21.59
	1RB-Middle (12)	2687.5 (41565)	23.54	22.50	21.15
		2640.3(41093)	23.29	22.29	20.90
		2593 (40620)	23.70	22.65	21.29
		2545.8(40148)	23.42	22.43	20.99
		2498.5 (39675)	24.04	22.95	21.60
	1RB-Low (0)	2687.5 (41565)	23.50	22.47	21.11
		2640.3(41093)	23.33	22.32	20.94
		2593 (40620)	23.70	22.69	21.31
		2545.8(40148)	23.40	22.40	21.02
		2498.5 (39675)	24.03	22.98	21.62
	12RB-High (13)	2687.5 (41565)	22.46	21.37	20.43
		2640.3(41093)	22.20	21.12	20.21
		2593 (40620)	22.56	21.49	20.57
		2545.8(40148)	22.32	21.26	20.35
		2498.5 (39675)	22.91	21.81	20.88
	12RB-Middle (6)	2687.5 (41565)	22.45	21.38	20.47
		2640.3(41093)	22.20	21.11	20.19
		2593 (40620)	22.55	21.47	20.51
		2545.8(40148)	22.35	21.27	20.32
		2498.5 (39675)	22.88	21.81	20.88
	12RB-Low (0)	2687.5 (41565)	22.47	21.39	20.47
		2640.3(41093)	22.26	21.17	20.27
		2593 (40620)	22.57	21.54	20.53
		2545.8(40148)	22.34	21.29	20.30
		2498.5 (39675)	22.92	21.82	20.90
	25RB (0)	2687.5 (41565)	22.46	21.47	20.45
		2640.3(41093)	22.21	21.25	20.24
		2593 (40620)	22.58	21.61	20.63
		2545.8(40148)	22.28	21.32	20.31
		2498.5 (39675)	22.91	21.88	20.89
10MHz	1RB-High (49)	2685 (41540)	23.48	22.49	21.10

		2639(41080)	23.18	22.21	20.81
		2593 (40620)	23.59	22.62	21.20
		2547(40160)	23.37	22.38	20.96
		2501 (39700)	23.89	22.91	21.50
1RB-Middle (24)	1RB-Middle (24)	2685 (41540)	23.46	22.49	21.10
		2639(41080)	23.28	22.33	20.92
		2593 (40620)	23.67	22.71	21.26
		2547(40160)	23.43	22.45	21.03
		2501 (39700)	23.97	22.97	21.57
1RB-Low (0)	1RB-Low (0)	2685 (41540)	23.45	22.45	21.09
		2639(41080)	23.32	22.35	20.95
		2593 (40620)	23.67	22.69	21.29
		2547(40160)	23.41	22.43	21.01
		2501 (39700)	24.00	22.98	21.57
25RB-High (25)	25RB-High (25)	2685 (41540)	22.44	21.47	20.48
		2639(41080)	22.17	21.21	20.22
		2593 (40620)	22.56	21.59	20.56
		2547(40160)	22.32	21.35	20.34
		2501 (39700)	22.88	21.89	20.90
25RB-Middle (12)	25RB-Middle (12)	2685 (41540)	22.40	21.47	20.47
		2639(41080)	22.20	21.24	20.26
		2593 (40620)	22.58	21.58	20.61
		2547(40160)	22.35	21.39	20.35
		2501 (39700)	22.87	21.87	20.90
25RB-Low (0)	25RB-Low (0)	2685 (41540)	22.39	21.47	20.44
		2639(41080)	22.25	21.27	20.28
		2593 (40620)	22.58	21.63	20.59
		2547(40160)	22.32	21.34	20.35
		2501 (39700)	22.86	21.86	20.85
50RB (0)	50RB (0)	2685 (41540)	22.44	21.52	20.49
		2639(41080)	22.25	21.29	20.25
		2593 (40620)	22.60	21.65	20.59
		2547(40160)	22.32	21.37	20.29
		2501 (39700)	22.91	21.92	20.87
15MHz	1RB-High (74)	2682.5 (41515)	23.39	22.43	21.09
		2637.8(41068)	23.13	22.15	20.76
		2593 (40620)	23.51	22.53	21.15
		2548.3(40173)	23.31	22.36	20.96
		2503.5 (39725)	23.78	22.82	21.39
	1RB-Middle (37)	2682.5 (41515)	23.43	22.46	21.10

		2637.8(41068)	23.25	22.28	20.91
		2593 (40620)	23.64	22.68	21.28
		2548.3(40173)	23.38	22.43	21.04
		2503.5 (39725)	23.90	22.93	21.55
1RB-Low (0)	36RB-High (38)	2682.5 (41515)	23.35	22.37	21.01
		2637.8(41068)	23.31	22.33	20.95
		2593 (40620)	23.64	22.69	21.29
		2548.3(40173)	23.34	22.39	20.98
		2503.5 (39725)	23.89	22.91	21.52
36RB-Middle (19)	36RB-Low (0)	2682.5 (41515)	22.40	21.34	20.42
		2637.8(41068)	22.17	21.16	20.18
		2593 (40620)	22.54	21.50	20.53
		2548.3(40173)	22.30	21.28	20.30
		2503.5 (39725)	22.80	21.79	20.78
20MHz	75RB (0)	2682.5 (41515)	22.37	21.35	20.40
		2637.8(41068)	22.22	21.19	20.24
		2593 (40620)	22.56	21.53	20.56
		2548.3(40173)	22.30	21.31	20.32
		2503.5 (39725)	22.81	21.81	20.81
1RB-High (99)	1RB-Middle (50)	2682.5 (41515)	22.40	21.34	20.38
		2637.8(41068)	22.25	21.24	20.26
		2593 (40620)	22.56	21.55	20.56
		2548.3(40173)	22.31	21.27	20.30
		2503.5 (39725)	22.82	21.82	20.82
1RB-Low (0)	1RB-Low (0)	2682.5 (41515)	22.43	21.39	20.38
		2637.8(41068)	22.27	21.25	20.25
		2593 (40620)	22.60	21.62	20.60
		2548.3(40173)	22.32	21.36	20.31
		2503.5 (39725)	22.87	21.85	20.85
1RB-High (99)	1RB-Middle (50)	2680 (41490)	23.56	22.58	21.21
		2636.5(41055)	23.30	22.33	20.92
		2593 (40620)	23.69	22.70	21.30
		2549.5(40185)	23.55	22.56	21.16
		2506 (39750)	24.00	22.98	21.55
1RB-Middle (50)	1RB-Low (0)	2680 (41490)	23.61	22.64	21.21
		2636.5(41055)	23.45	22.50	21.09
		2593 (40620)	23.86	22.88	21.45
		2549.5(40185)	23.63	22.65	21.23
		2506 (39750)	24.16	23.17	21.74
1RB-Low (0)		2680 (41490)	23.51	22.52	21.13

		2636.5(41055)	23.56	22.56	21.16
		2593 (40620)	23.79	22.80	21.39
		2549.5(40185)	23.60	22.63	21.20
		2506 (39750)	24.10	23.10	21.68
50RB-High (50)		2680 (41490)	22.63	21.62	20.53
		2636.5(41055)	22.41	21.44	20.40
		2593 (40620)	22.76	21.77	20.75
		2549.5(40185)	22.59	21.59	20.54
		2506 (39750)	23.10	22.11	21.03
50RB-Middle (25)		2680 (41490)	22.63	21.67	20.66
		2636.5(41055)	22.51	21.54	20.47
		2593 (40620)	22.78	21.80	20.79
		2549.5(40185)	22.65	21.61	20.59
		2506 (39750)	23.11	22.10	21.07
50RB-Low (0)		2680 (41490)	22.62	21.61	20.58
		2636.5(41055)	22.48	21.51	20.51
		2593 (40620)	22.80	21.80	20.78
		2549.5(40185)	22.60	21.60	20.58
		2506 (39750)	23.08	22.08	21.02
100RB (0)		2680 (41490)	22.60	21.64	20.60
		2636.5(41055)	22.46	21.45	20.43
		2593 (40620)	22.76	21.76	20.75
		2549.5(40185)	22.56	21.57	20.53
		2506 (39750)	23.08	22.10	21.07

### LTE B41 PC3-Power Level B1/F1

LTE B41 PC3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	18.53	17.53	16.13
		2640.3(41093)	18.09	17.15	15.73
		2593 (40620)	18.49	17.53	16.12
		2545.8(40148)	18.25	17.31	15.88
		2498.5 (39675)	18.85	17.90	16.48
	1RB-Middle (12)	2687.5 (41565)	18.56	17.53	16.16
		2640.3(41093)	18.18	17.18	15.80
		2593 (40620)	18.57	17.57	16.14
		2545.8(40148)	18.31	17.33	15.92
		2498.5 (39675)	18.90	17.91	16.54
	1RB-Low (0)	2687.5 (41565)	18.51	17.51	16.14

		2640.3(41093)	18.16	17.16	15.78
		2593 (40620)	18.54	17.57	16.18
		2545.8(40148)	18.26	17.32	15.89
		2498.5 (39675)	18.87	17.92	16.48
10MHz	12RB-High (13)	2687.5 (41565)	17.45	16.36	15.45
		2640.3(41093)	17.10	16.05	15.09
		2593 (40620)	17.46	16.40	15.48
		2545.8(40148)	17.22	16.17	15.25
		2498.5 (39675)	17.84	16.71	15.84
	12RB-Middle (6)	2687.5 (41565)	17.46	16.38	15.45
		2640.3(41093)	17.05	16.00	15.07
		2593 (40620)	17.45	16.37	15.45
		2545.8(40148)	17.24	16.18	15.23
		2498.5 (39675)	17.82	16.76	15.82
	12RB-Low (0)	2687.5 (41565)	17.48	16.42	15.46
		2640.3(41093)	17.12	16.02	15.10
		2593 (40620)	17.47	16.41	15.48
		2545.8(40148)	17.24	16.15	15.21
		2498.5 (39675)	17.79	16.76	15.82
	25RB (0)	2687.5 (41565)	17.50	16.47	15.47
		2640.3(41093)	17.15	16.14	15.17
		2593 (40620)	17.52	16.47	15.52
		2545.8(40148)	17.24	16.21	15.20
		2498.5 (39675)	17.84	16.82	15.86
	1RB-High (49)	2685 (41540)	18.48	17.50	16.12
		2639(41080)	18.08	17.14	15.71
		2593 (40620)	18.45	17.52	16.11
		2547(40160)	18.25	17.30	15.87
		2501 (39700)	18.81	17.82	16.41
	1RB-Middle (24)	2685 (41540)	18.51	17.52	16.14
		2639(41080)	18.15	17.20	15.79
		2593 (40620)	18.53	17.59	16.18
		2547(40160)	18.32	17.37	15.94
		2501 (39700)	18.88	17.93	16.49
	1RB-Low (0)	2685 (41540)	18.45	17.48	16.07
		2639(41080)	18.17	17.23	15.82
		2593 (40620)	18.50	17.55	16.13
		2547(40160)	18.28	17.34	15.91
		2501 (39700)	18.87	17.92	16.46
	25RB-High (25)	2685 (41540)	17.43	16.47	15.50

		2639(41080)	17.13	16.12	15.13
		2593 (40620)	17.49	16.49	15.48
		2547(40160)	17.23	16.25	15.29
		2501 (39700)	17.81	16.84	15.83
25RB-Middle (12)	25RB-Middle (12)	2685 (41540)	17.45	16.46	15.49
		2639(41080)	17.09	16.11	15.11
		2593 (40620)	17.47	16.47	15.50
		2547(40160)	17.28	16.28	15.28
		2501 (39700)	17.81	16.78	15.83
25RB-Low (0)	25RB-Low (0)	2685 (41540)	17.49	16.49	15.47
		2639(41080)	17.13	16.15	15.12
		2593 (40620)	17.45	16.48	15.48
		2547(40160)	17.25	16.24	15.27
		2501 (39700)	17.81	16.82	15.84
50RB (0)	50RB (0)	2685 (41540)	17.49	16.52	15.44
		2639(41080)	17.11	16.17	15.10
		2593 (40620)	17.51	16.50	15.47
		2547(40160)	17.26	16.23	15.23
		2501 (39700)	17.83	16.82	15.78
15MHz	1RB-High (74)	2682.5 (41515)	18.41	17.46	16.06
		2637.8(41068)	18.00	17.08	15.64
		2593 (40620)	18.40	17.47	16.05
		2548.3(40173)	18.21	17.28	15.85
		2503.5 (39725)	18.67	17.77	16.32
	1RB-Middle (37)	2682.5 (41515)	18.42	17.46	16.07
		2637.8(41068)	18.12	17.18	15.78
		2593 (40620)	18.51	17.57	16.14
		2548.3(40173)	18.25	17.33	15.92
		2503.5 (39725)	18.79	17.87	16.44
	1RB-Low (0)	2682.5 (41515)	18.34	17.38	16.00
		2637.8(41068)	18.14	17.19	15.80
		2593 (40620)	18.44	17.52	16.10
		2548.3(40173)	18.25	17.30	15.88
		2503.5 (39725)	18.78	17.85	16.40
36RB-High (38)	36RB-High (38)	2682.5 (41515)	17.40	16.36	15.38
		2637.8(41068)	17.07	16.05	15.03
		2593 (40620)	17.43	16.39	15.42
		2548.3(40173)	17.19	16.16	15.17
		2503.5 (39725)	17.76	16.72	15.70
	36RB-Middle (19)	2682.5 (41515)	17.41	16.36	15.40

20MHz	36RB-Low (0)	2637.8(41068)	17.09	16.06	15.09
		2593 (40620)	17.48	16.40	15.40
		2548.3(40173)	17.22	16.18	15.18
		2503.5 (39725)	17.74	16.72	15.73
	75RB (0)	2682.5 (41515)	17.40	16.38	15.34
		2637.8(41068)	17.11	16.07	15.11
		2593 (40620)	17.44	16.41	15.40
		2548.3(40173)	17.20	16.16	15.20
		2503.5 (39725)	17.75	16.72	15.72
	1RB-High (99)	2682.5 (41515)	17.43	16.44	15.39
		2637.8(41068)	17.12	16.12	15.09
		2593 (40620)	17.46	16.46	15.47
		2548.3(40173)	17.21	16.19	15.20
		2503.5 (39725)	17.76	16.78	15.75
	1RB-Middle (50)	2680 (41490)	18.40	17.44	16.05
		2636.5(41055)	17.98	17.05	15.66
		2593 (40620)	18.42	17.49	16.08
		2549.5(40185)	18.25	17.32	15.91
		2506 (39750)	18.68	17.74	16.34
	1RB-Low (0)	2680 (41490)	18.42	17.45	16.06
		2636.5(41055)	18.15	17.19	15.78
		2593 (40620)	18.56	17.61	16.19
		2549.5(40185)	18.34	17.40	15.96
		2506 (39750)	18.87	17.92	16.46
	50RB-High (50)	2680 (41490)	18.28	17.35	15.94
		2636.5(41055)	18.24	17.28	15.90
		2593 (40620)	18.50	17.58	16.15
		2549.5(40185)	18.33	17.37	15.98
		2506 (39750)	18.86	17.93	16.47
	50RB-Middle (25)	2680 (41490)	17.42	16.44	15.38
		2636.5(41055)	17.09	16.10	15.08
		2593 (40620)	17.53	16.53	15.47
		2549.5(40185)	17.32	16.30	15.27
		2506 (39750)	17.81	16.82	15.79
	50RB-Low (0)	2680 (41490)	17.43	16.43	15.43
		2636.5(41055)	17.14	16.18	15.14
		2593 (40620)	17.55	16.53	15.48
		2549.5(40185)	17.33	16.37	15.31
		2506 (39750)	17.85	16.87	15.83

	2636.5(41055)	17.18	16.21	15.16
	2593 (40620)	17.52	16.54	15.51
	2549.5(40185)	17.30	16.32	15.28
	2506 (39750)	17.82	16.82	15.80
100RB (0)	2680 (41490)	17.41	16.40	15.39
	2636.5(41055)	17.12	16.14	15.12
	2593 (40620)	17.53	16.55	15.51
	2549.5(40185)	17.28	16.26	15.26
	2506 (39750)	17.81	16.83	15.76

**LTE B41 PC3-Power Level C1/D1**

<b>LTE B41 PC3</b>					
<b>BANDWIDTH</b>	<b>Number of RBs</b>	<b>Frequency</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>
5MHz	1RB-High (24)	2687.5 (41565)	15.38	14.41	13.04
		2640.3(41093)	15.09	14.11	12.73
		2593 (40620)	15.48	14.51	13.19
		2545.8(40148)	15.29	14.33	13.02
		2498.5 (39675)	15.78	14.82	13.50
	1RB-Middle (12)	2687.5 (41565)	15.44	14.42	13.06
		2640.3(41093)	15.17	14.18	12.81
		2593 (40620)	15.52	14.55	13.24
		2545.8(40148)	15.34	14.38	13.05
		2498.5 (39675)	15.81	14.85	13.55
	1RB-Low (0)	2687.5 (41565)	15.39	14.39	13.03
		2640.3(41093)	15.15	14.16	12.77
		2593 (40620)	15.54	14.54	13.25
		2545.8(40148)	15.33	14.31	13.02
		2498.5 (39675)	15.81	14.85	13.51
	12RB-High (13)	2687.5 (41565)	14.34	13.27	12.43
		2640.3(41093)	14.05	13.00	12.17
		2593 (40620)	14.45	13.45	12.54
		2545.8(40148)	14.28	13.24	12.38
		2498.5 (39675)	14.74	13.79	12.88
	12RB-Middle (6)	2687.5 (41565)	14.33	13.27	12.43
		2640.3(41093)	14.09	13.03	12.17
		2593 (40620)	14.40	13.46	12.54
		2545.8(40148)	14.29	13.28	12.37
		2498.5 (39675)	14.74	13.75	12.82
	12RB-Low (0)	2687.5 (41565)	14.35	13.28	12.47

10MHz	25RB (0)	2640.3(41093)	14.13	13.05	12.21
		2593 (40620)	14.48	13.47	12.59
		2545.8(40148)	14.26	13.26	12.33
		2498.5 (39675)	14.74	13.76	12.84
		2687.5 (41565)	14.37	13.36	12.47
	1RB-High (49)	2640.3(41093)	14.10	13.11	12.20
		2593 (40620)	14.49	13.61	12.60
		2545.8(40148)	14.28	13.35	12.37
		2498.5 (39675)	14.77	13.87	12.87
		2685 (41540)	15.36	14.38	12.99
10MHz	1RB-Middle (24)	2639(41080)	15.05	14.10	12.70
		2593 (40620)	15.42	14.46	13.17
		2547(40160)	15.23	14.27	12.95
		2501 (39700)	15.75	14.77	13.46
		2685 (41540)	15.40	14.41	13.07
	1RB-Low (0)	2639(41080)	15.14	14.20	12.78
		2593 (40620)	15.52	14.58	13.24
		2547(40160)	15.34	14.42	13.07
		2501 (39700)	15.79	14.89	13.54
		2685 (41540)	15.34	14.34	12.96
10MHz	25RB-High (25)	2639(41080)	15.13	14.16	12.89
		2593 (40620)	15.49	14.49	13.23
		2547(40160)	15.29	14.34	13.05
		2501 (39700)	15.77	14.81	13.50
		2685 (41540)	14.34	13.32	12.45
	25RB-Middle (12)	2639(41080)	14.08	13.10	12.20
		2593 (40620)	14.43	13.55	12.58
		2547(40160)	14.23	13.31	12.36
		2501 (39700)	14.73	13.83	12.86
		2685 (41540)	14.32	13.35	12.46
10MHz	25RB-Low (0)	2639(41080)	14.11	13.13	12.24
		2593 (40620)	14.46	13.55	12.57
		2547(40160)	14.30	13.38	12.40
		2501 (39700)	14.72	13.83	12.88
		2685 (41540)	14.34	13.35	12.45
	50RB (0)	2639(41080)	14.11	13.12	12.25
		2593 (40620)	14.44	13.56	12.53
		2547(40160)	14.26	13.37	12.35
		2501 (39700)	14.70	13.79	12.83
		2685 (41540)	14.36	13.35	12.45

		2639(41080)	14.11	13.14	12.19
		2593 (40620)	14.47	13.53	12.54
		2547(40160)	14.29	13.36	12.34
		2501 (39700)	14.79	13.87	12.86
15MHz	1RB-High (74)	2682.5 (41515)	15.29	14.34	12.95
		2637.8(41068)	15.02	14.06	12.65
		2593 (40620)	15.35	14.40	13.13
		2548.3(40173)	15.19	14.25	12.96
		2503.5 (39725)	15.65	14.69	13.37
	1RB-Middle (37)	2682.5 (41515)	15.31	14.34	12.96
		2637.8(41068)	15.12	14.16	12.75
		2593 (40620)	15.51	14.54	13.26
		2548.3(40173)	15.29	14.31	13.04
		2503.5 (39725)	15.76	14.82	13.47
	1RB-Low (0)	2682.5 (41515)	15.25	14.29	12.91
		2637.8(41068)	15.16	14.19	12.90
		2593 (40620)	15.43	14.49	13.18
		2548.3(40173)	15.27	14.32	13.02
		2503.5 (39725)	15.70	14.80	13.46
	36RB-High (38)	2682.5 (41515)	14.27	13.28	12.35
		2637.8(41068)	14.05	13.02	12.12
		2593 (40620)	14.42	13.50	12.46
		2548.3(40173)	14.20	13.22	12.28
		2503.5 (39725)	14.66	13.71	12.75
	36RB-Middle (19)	2682.5 (41515)	14.30	13.28	12.35
		2637.8(41068)	14.07	13.04	12.11
		2593 (40620)	14.45	13.49	12.52
		2548.3(40173)	14.18	13.30	12.27
		2503.5 (39725)	14.68	13.74	12.76
	36RB-Low (0)	2682.5 (41515)	14.26	13.25	12.35
		2637.8(41068)	14.11	13.16	12.16
		2593 (40620)	14.43	13.49	12.47
		2548.3(40173)	14.23	13.31	12.32
		2503.5 (39725)	14.72	13.74	12.77
	75RB (0)	2682.5 (41515)	14.32	13.34	12.41
		2637.8(41068)	14.13	13.13	12.16
		2593 (40620)	14.46	13.54	12.53
		2548.3(40173)	14.24	13.32	12.33
		2503.5 (39725)	14.71	13.78	12.80
20MHz	1RB-High (99)	2680 (41490)	15.26	14.30	12.90

	2636.5(41055)	14.90	13.93	12.55
	2593 (40620)	15.24	14.30	13.00
	2549.5(40185)	15.13	14.16	12.86
	2506 (39750)	15.55	14.59	13.26
1RB-Middle (50)	2680 (41490)	15.29	14.33	12.91
	2636.5(41055)	15.08	14.12	12.71
	2593 (40620)	15.44	14.48	13.15
	2549.5(40185)	15.28	14.30	12.95
	2506 (39750)	15.76	14.79	13.45
1RB-Low (0)	2680 (41490)	15.15	14.19	12.83
	2636.5(41055)	15.10	14.14	12.83
	2593 (40620)	15.36	14.39	13.10
	2549.5(40185)	15.24	14.25	12.96
	2506 (39750)	15.75	14.79	13.44
50RB-High (50)	2680 (41490)	14.29	13.30	12.36
	2636.5(41055)	14.04	13.01	12.10
	2593 (40620)	14.37	13.46	12.45
	2549.5(40185)	14.24	13.31	12.30
	2506 (39750)	14.71	13.80	12.76
50RB-Middle (25)	2680 (41490)	14.30	13.35	12.37
	2636.5(41055)	14.08	13.09	12.14
	2593 (40620)	14.40	13.52	12.48
	2549.5(40185)	14.23	13.33	12.29
	2506 (39750)	14.73	13.85	12.82
50RB-Low (0)	2680 (41490)	14.28	13.29	12.33
	2636.5(41055)	14.11	13.20	12.16
	2593 (40620)	14.37	13.51	12.48
	2549.5(40185)	14.24	13.35	12.31
	2506 (39750)	14.72	13.81	12.76
100RB (0)	2680 (41490)	14.28	13.31	12.35
	2636.5(41055)	14.05	13.06	12.11
	2593 (40620)	14.38	13.46	12.43
	2549.5(40185)	14.21	13.31	12.26
	2506 (39750)	14.69	13.79	12.76

**LTE B41 PC3-Power Level E1**

LTE B41 PC3					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	21.43	20.43	19.05
		2640.3(41093)	21.08	20.10	18.69
		2593 (40620)	21.49	20.45	19.14
		2545.8(40148)	21.26	20.24	18.92
		2498.5 (39675)	21.85	20.83	19.51
	1RB-Middle (12)	2687.5 (41565)	21.48	20.45	19.06
		2640.3(41093)	21.20	20.15	18.75
		2593 (40620)	21.53	20.48	19.20
		2545.8(40148)	21.32	20.29	18.95
		2498.5 (39675)	21.87	20.85	19.56
	1RB-Low (0)	2687.5 (41565)	21.44	20.53	19.01
		2640.3(41093)	21.22	20.13	18.76
		2593 (40620)	21.50	20.48	19.17
		2545.8(40148)	21.26	20.24	18.93
		2498.5 (39675)	21.90	20.91	19.53
	12RB-High (13)	2687.5 (41565)	20.34	19.28	18.44
		2640.3(41093)	20.04	18.94	18.10
		2593 (40620)	20.41	19.40	18.50
		2545.8(40148)	20.16	19.18	18.26
		2498.5 (39675)	20.75	19.76	18.83
	12RB-Middle (6)	2687.5 (41565)	20.35	19.27	18.43
		2640.3(41093)	20.07	18.96	18.14
		2593 (40620)	20.40	19.41	18.46
		2545.8(40148)	20.19	19.23	18.28
		2498.5 (39675)	20.80	19.77	18.80
	12RB-Low (0)	2687.5 (41565)	20.36	19.28	18.45
		2640.3(41093)	20.08	18.97	18.16
		2593 (40620)	20.41	19.44	18.52
		2545.8(40148)	20.18	19.19	18.29
		2498.5 (39675)	20.72	19.80	18.85
	25RB (0)	2687.5 (41565)	20.37	19.38	18.46
		2640.3(41093)	20.10	19.07	18.16
		2593 (40620)	20.42	19.51	18.52
		2545.8(40148)	20.18	19.26	18.27
		2498.5 (39675)	20.78	19.90	18.89
10MHz	1RB-High (49)	2685 (41540)	21.40	20.52	18.98

		2639(41080)	21.03	20.03	18.61
		2593 (40620)	21.40	20.38	19.09
		2547(40160)	21.20	20.22	18.91
		2501 (39700)	21.74	20.74	19.41
1RB-Middle (24)		2685 (41540)	21.45	20.50	19.07
		2639(41080)	21.15	20.15	18.79
		2593 (40620)	21.51	20.54	19.21
		2547(40160)	21.29	20.33	18.96
		2501 (39700)	21.83	20.86	19.51
1RB-Low (0)		2685 (41540)	21.36	20.35	18.94
		2639(41080)	21.16	20.16	18.75
		2593 (40620)	21.50	20.52	19.22
		2547(40160)	21.25	20.25	18.95
		2501 (39700)	21.84	20.84	19.57
25RB-High (25)		2685 (41540)	20.36	19.31	18.46
		2639(41080)	20.00	19.01	18.12
		2593 (40620)	20.39	19.52	18.53
		2547(40160)	20.20	19.28	18.32
		2501 (39700)	20.74	19.83	18.85
25RB-Middle (12)		2685 (41540)	20.34	19.36	18.48
		2639(41080)	20.05	19.06	18.17
		2593 (40620)	20.38	19.50	18.50
		2547(40160)	20.20	19.29	18.33
		2501 (39700)	20.72	19.80	18.83
25RB-Low (0)		2685 (41540)	20.37	19.35	18.46
		2639(41080)	20.09	19.09	18.23
		2593 (40620)	20.42	19.52	18.54
		2547(40160)	20.18	19.28	18.29
		2501 (39700)	20.71	19.80	18.83
50RB (0)		2685 (41540)	20.35	19.38	18.43
		2639(41080)	20.09	19.10	18.16
		2593 (40620)	20.44	19.52	18.52
		2547(40160)	20.21	19.27	18.25
		2501 (39700)	20.75	19.86	18.80
15MHz	1RB-High (74)	2682.5 (41515)	21.32	20.37	18.96
		2637.8(41068)	20.98	20.00	18.60
		2593 (40620)	21.34	20.34	19.03
		2548.3(40173)	21.17	20.21	18.89
		2503.5 (39725)	21.77	20.71	19.32
	1RB-Middle (37)	2682.5 (41515)	21.34	20.37	18.99

		2637.8(41068)	21.11	20.12	18.75
		2593 (40620)	21.48	20.50	19.17
		2548.3(40173)	21.25	20.29	18.94
		2503.5 (39725)	21.76	20.79	19.44
1RB-Low (0)		2682.5 (41515)	21.28	20.32	18.92
		2637.8(41068)	21.14	20.15	18.77
		2593 (40620)	21.47	20.51	19.19
		2548.3(40173)	21.20	20.23	18.92
		2503.5 (39725)	21.79	20.82	19.49
36RB-High (38)		2682.5 (41515)	20.32	19.26	18.38
		2637.8(41068)	20.05	19.01	18.05
		2593 (40620)	20.36	19.42	18.40
		2548.3(40173)	20.15	19.22	18.19
		2503.5 (39725)	20.64	19.67	18.71
36RB-Middle (19)		2682.5 (41515)	20.29	19.26	18.37
		2637.8(41068)	20.06	19.02	18.10
		2593 (40620)	20.40	19.43	18.43
		2548.3(40173)	20.16	19.25	18.23
		2503.5 (39725)	20.67	19.72	18.73
36RB-Low (0)		2682.5 (41515)	20.29	19.24	18.34
		2637.8(41068)	20.09	19.08	18.17
		2593 (40620)	20.42	19.43	18.46
		2548.3(40173)	20.16	19.21	18.23
		2503.5 (39725)	20.72	19.74	18.75
75RB (0)		2682.5 (41515)	20.37	19.35	18.45
		2637.8(41068)	20.09	19.05	18.14
		2593 (40620)	20.42	19.51	18.51
		2548.3(40173)	20.16	19.27	18.22
		2503.5 (39725)	20.69	19.76	18.75
20MHz	1RB-High (99)	2680 (41490)	21.29	20.30	18.91
		2636.5(41055)	20.98	20.01	18.59
		2593 (40620)	21.34	20.34	19.07
		2549.5(40185)	21.22	20.23	18.92
		2506 (39750)	21.62	20.63	19.32
1RB-Middle (50)		2680 (41490)	21.36	20.38	18.97
		2636.5(41055)	21.17	20.17	18.78
		2593 (40620)	21.55	20.55	19.22
		2549.5(40185)	21.33	20.36	19.02
		2506 (39750)	21.83	20.86	19.53
	1RB-Low (0)	2680 (41490)	21.24	20.25	18.84

	2636.5(41055)	21.21	20.25	18.86
	2593 (40620)	21.45	20.47	19.16
	2549.5(40185)	21.28	20.31	18.98
	2506 (39750)	21.86	20.86	19.54
50RB-High (50)	2680 (41490)	20.35	19.34	18.40
	2636.5(41055)	20.10	19.07	18.13
	2593 (40620)	20.40	19.53	18.48
	2549.5(40185)	20.24	19.33	18.34
	2506 (39750)	20.74	19.86	18.83
50RB-Middle (25)	2680 (41490)	20.36	19.40	18.43
	2636.5(41055)	20.17	19.18	18.21
	2593 (40620)	20.48	19.59	18.60
	2549.5(40185)	20.31	19.41	18.37
	2506 (39750)	20.80	19.88	18.84
50RB-Low (0)	2680 (41490)	20.33	19.35	18.38
	2636.5(41055)	20.15	19.19	18.22
	2593 (40620)	20.46	19.53	18.51
	2549.5(40185)	20.27	19.37	18.35
	2506 (39750)	20.77	19.86	18.84
100RB (0)	2680 (41490)	20.33	19.36	18.37
	2636.5(41055)	20.12	19.15	18.15
	2593 (40620)	20.42	19.55	18.53
	2549.5(40185)	20.24	19.33	18.33
	2506 (39750)	20.77	19.85	18.82

### LTE B41 PC2-Power Level A1

LTE B41 PC2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	26.41	25.53	24.48
		2640.3(41093)	26.12	25.28	24.19
		2593 (40620)	26.50	25.82	24.60
		2545.8(40148)	26.29	25.58	24.36
		2498.5 (39675)	26.91	26.13	24.90
	1RB-Middle (12)	2687.5 (41565)	26.43	25.50	24.49
		2640.3(41093)	26.24	25.29	24.23
		2593 (40620)	26.62	25.81	24.62
		2545.8(40148)	26.32	25.58	24.38
		2498.5 (39675)	26.90	26.12	24.92
	1RB-Low (0)	2687.5 (41565)	26.35	25.49	24.43

10MHz	12RB-High (13)	2640.3(41093)	26.20	25.33	24.26
		2593 (40620)	26.56	25.86	24.62
		2545.8(40148)	26.31	25.59	24.34
		2498.5 (39675)	26.92	26.13	24.91
		2687.5 (41565)	25.30	24.53	23.56
	12RB-Middle (6)	2640.3(41093)	25.05	24.26	23.27
		2593 (40620)	25.60	24.65	23.67
		2545.8(40148)	25.36	24.39	23.43
		2498.5 (39675)	25.99	24.97	24.01
		2687.5 (41565)	25.31	24.50	23.56
	12RB-Low (0)	2640.3(41093)	25.07	24.28	23.29
		2593 (40620)	25.60	24.63	23.64
		2545.8(40148)	25.37	24.41	23.44
		2498.5 (39675)	25.96	24.97	24.00
		2687.5 (41565)	25.35	24.53	23.57
	25RB (0)	2640.3(41093)	25.11	24.34	23.33
		2593 (40620)	25.65	24.68	23.71
		2545.8(40148)	25.38	24.44	23.43
		2498.5 (39675)	25.96	24.97	23.99
		2687.5 (41565)	25.34	24.56	23.57
	1RB-High (49)	2640.3(41093)	25.11	24.31	23.31
		2593 (40620)	25.67	24.69	23.68
		2545.8(40148)	25.36	24.42	23.43
		2498.5 (39675)	25.97	25.03	24.02
		2685 (41540)	26.37	25.51	24.44
	1RB-Middle (24)	2639(41080)	26.08	25.23	24.14
		2593 (40620)	26.47	25.76	24.52
		2547(40160)	26.26	25.54	24.30
		2501 (39700)	26.80	26.03	24.83
		2685 (41540)	26.36	25.51	24.44
	1RB-Low (0)	2639(41080)	26.14	25.32	24.24
		2593 (40620)	26.54	25.84	24.62
		2547(40160)	26.29	25.62	24.36
		2501 (39700)	26.85	26.12	24.89
		2685 (41540)	26.34	25.48	24.39
	25RB-High (25)	2639(41080)	26.22	25.38	24.25
		2593 (40620)	26.56	25.88	24.62
		2547(40160)	26.30	25.59	24.31
		2501 (39700)	26.87	26.12	24.85
		2685 (41540)	25.33	24.55	23.54

		2639(41080)	25.06	24.27	23.34
		2593 (40620)	25.61	24.66	23.73
		2547(40160)	25.36	24.41	23.47
		2501 (39700)	25.96	24.98	24.03
25RB-Middle (12)	25RB-Middle (12)	2685 (41540)	25.33	24.51	23.56
		2639(41080)	25.06	24.31	23.32
		2593 (40620)	25.60	24.65	23.69
		2547(40160)	25.41	24.43	23.42
		2501 (39700)	25.94	24.96	23.98
25RB-Low (0)	25RB-Low (0)	2685 (41540)	25.28	24.50	23.52
		2639(41080)	25.11	24.34	23.34
		2593 (40620)	25.62	24.70	23.66
		2547(40160)	25.36	24.41	23.44
		2501 (39700)	25.92	24.95	23.97
50RB (0)	50RB (0)	2685 (41540)	25.33	24.54	23.51
		2639(41080)	25.12	24.32	23.29
		2593 (40620)	25.68	24.70	23.68
		2547(40160)	25.39	24.44	23.39
		2501 (39700)	26.00	24.99	23.98
15MHz	1RB-High (74)	2682.5 (41515)	26.27	25.46	24.39
		2637.8(41068)	25.99	25.15	24.11
		2593 (40620)	26.36	25.70	24.48
		2548.3(40173)	26.21	25.53	24.28
		2503.5 (39725)	26.67	25.92	24.71
	1RB-Middle (37)	2682.5 (41515)	26.31	25.47	24.41
		2637.8(41068)	26.12	25.30	24.22
		2593 (40620)	26.52	25.85	24.60
		2548.3(40173)	26.28	25.59	24.33
		2503.5 (39725)	26.80	26.06	24.82
	1RB-Low (0)	2682.5 (41515)	26.21	25.39	24.31
		2637.8(41068)	26.16	25.31	24.26
		2593 (40620)	26.52	25.82	24.60
		2548.3(40173)	26.22	25.55	24.31
		2503.5 (39725)	26.82	26.08	24.83
36RB-High (38)	36RB-High (38)	2682.5 (41515)	25.28	24.47	23.45
		2637.8(41068)	25.04	24.22	23.21
		2593 (40620)	25.60	24.56	23.60
		2548.3(40173)	25.36	24.35	23.37
		2503.5 (39725)	25.91	24.89	23.88
	36RB-Middle (19)	2682.5 (41515)	25.24	24.44	23.41

20MHz	36RB-Low (0)	2637.8(41068)	25.09	24.29	23.29
		2593 (40620)	25.65	24.62	23.64
		2548.3(40173)	25.38	24.34	23.38
		2503.5 (39725)	25.91	24.89	23.88
		2682.5 (41515)	25.25	24.42	23.43
	75RB (0)	2637.8(41068)	25.13	24.32	23.29
		2593 (40620)	25.64	24.60	23.60
		2548.3(40173)	25.37	24.36	23.37
		2503.5 (39725)	25.92	24.90	23.87
		2682.5 (41515)	25.30	24.44	23.46
20MHz	1RB-High (99)	2637.8(41068)	25.15	24.29	23.31
		2593 (40620)	25.69	24.64	23.66
		2548.3(40173)	25.37	24.39	23.37
		2503.5 (39725)	25.97	24.92	23.92
		2680 (41490)	26.45	25.58	24.49
	1RB-Middle (50)	2636.5(41055)	26.17	25.33	24.22
		2593 (40620)	26.55	25.84	24.60
		2549.5(40185)	26.42	25.72	24.47
		2506 (39750)	26.85	26.09	24.89
		2680 (41490)	26.50	25.64	24.53
20MHz	1RB-Low (0)	2636.5(41055)	26.34	25.64	24.37
		2593 (40620)	26.74	25.98	24.77
		2549.5(40185)	26.55	25.80	24.55
		2506 (39750)	27.06	26.28	25.02
		2680 (41490)	26.35	25.52	24.40
	50RB-High (50)	2636.5(41055)	26.41	25.72	24.48
		2593 (40620)	26.65	25.95	24.69
		2549.5(40185)	26.46	25.79	24.52
		2506 (39750)	26.98	26.23	24.99
		2680 (41490)	25.45	24.67	23.64
20MHz	50RB-Middle (25)	2636.5(41055)	25.35	24.45	23.45
		2593 (40620)	25.81	24.80	23.79
		2549.5(40185)	25.61	24.64	23.61
		2506 (39750)	26.12	25.14	24.11
		2680 (41490)	25.50	24.70	23.66
	50RB-Low (0)	2636.5(41055)	25.46	24.60	23.52
		2593 (40620)	25.84	24.87	23.81
		2549.5(40185)	25.64	24.67	23.63
		2506 (39750)	26.13	25.14	24.11
		2680 (41490)	25.48	24.67	23.63

		2636.5(41055)	25.46	24.55	23.54
		2593 (40620)	25.79	24.88	23.80
		2549.5(40185)	25.61	24.69	23.62
		2506 (39750)	26.10	25.12	24.11
	100RB (0)	2680 (41490)	25.46	24.69	23.65
		2636.5(41055)	25.46	24.50	23.48
		2593 (40620)	25.77	24.83	23.81
		2549.5(40185)	25.62	24.59	23.59
		2506 (39750)	26.14	25.13	24.10

**LTE B41 PC2-Power Level B1/F1**

LTE B41 PC2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	21.58	20.77	19.49
		2640.3(41093)	21.23	20.42	19.16
		2593 (40620)	21.63	20.80	19.60
		2545.8(40148)	21.39	20.56	19.33
		2498.5 (39675)	21.97	21.13	19.93
	1RB-Middle (12)	2687.5 (41565)	21.64	20.75	19.48
		2640.3(41093)	21.33	20.46	19.14
		2593 (40620)	21.71	20.83	19.60
		2545.8(40148)	21.45	20.60	19.37
		2498.5 (39675)	22.03	21.13	19.92
	1RB-Low (0)	2687.5 (41565)	21.59	20.71	19.46
		2640.3(41093)	21.29	20.43	19.19
		2593 (40620)	21.69	20.82	19.61
		2545.8(40148)	21.40	20.54	19.33
		2498.5 (39675)	22.04	21.17	19.89
	12RB-High (13)	2687.5 (41565)	20.51	19.51	18.57
		2640.3(41093)	20.18	19.18	18.28
		2593 (40620)	20.55	19.64	18.63
		2545.8(40148)	20.32	19.36	18.42
		2498.5 (39675)	20.86	19.94	19.02
	12RB-Middle (6)	2687.5 (41565)	20.51	19.50	18.59
		2640.3(41093)	20.17	19.17	18.29
		2593 (40620)	20.55	19.60	18.62
		2545.8(40148)	20.32	19.40	18.41
		2498.5 (39675)	20.87	19.93	18.96
	12RB-Low (0)	2687.5 (41565)	20.53	19.52	18.60
		2640.3(41093)	20.19	19.22	18.28
		2593 (40620)	20.58	19.63	18.67

		2545.8(40148)	20.32	19.36	18.36
		2498.5 (39675)	20.87	19.94	18.97
10MHz	25RB (0)	2687.5 (41565)	20.54	19.53	18.60
		2640.3(41093)	20.22	19.26	18.29
		2593 (40620)	20.59	19.68	18.68
		2545.8(40148)	20.33	19.40	18.38
		2498.5 (39675)	20.89	20.00	19.01
		2685 (41540)	21.56	20.75	19.45
10MHz	1RB-High (49)	2639(41080)	21.22	20.39	19.09
		2593 (40620)	21.57	20.78	19.52
		2547(40160)	21.37	20.55	19.31
		2501 (39700)	21.90	21.05	19.83
		2685 (41540)	21.55	20.72	19.48
	1RB-Middle (24)	2639(41080)	21.26	20.46	19.18
		2593 (40620)	21.67	20.85	19.60
		2547(40160)	21.40	20.60	19.38
		2501 (39700)	21.99	21.14	19.90
		2685 (41540)	21.50	20.67	19.41
10MHz	1RB-Low (0)	2639(41080)	21.32	20.49	19.19
		2593 (40620)	21.63	20.78	19.57
		2547(40160)	21.39	20.59	19.35
		2501 (39700)	21.96	21.09	19.89
		2685 (41540)	20.49	19.51	18.58
	25RB-High (25)	2639(41080)	20.20	19.25	18.33
		2593 (40620)	20.58	19.67	18.70
		2547(40160)	20.34	19.40	18.43
		2501 (39700)	20.87	19.95	19.01
		2685 (41540)	20.51	19.51	18.59
10MHz	25RB-Middle (12)	2639(41080)	20.20	19.24	18.30
		2593 (40620)	20.56	19.65	18.67
		2547(40160)	20.33	19.42	18.44
		2501 (39700)	20.84	19.93	18.98
		2685 (41540)	20.51	19.53	18.63
	25RB-Low (0)	2639(41080)	20.23	19.26	18.35
		2593 (40620)	20.56	19.64	18.68
		2547(40160)	20.29	19.40	18.44
		2501 (39700)	20.84	19.96	18.97
		2685 (41540)	20.52	19.54	18.58
10MHz	50RB (0)	2639(41080)	20.23	19.27	18.29
		2593 (40620)	20.59	19.69	18.66
		2547(40160)	20.32	19.43	18.39
		2501 (39700)	20.89	19.95	18.91

15MHz	1RB-High (74)	2682.5 (41515)	21.48	20.68	19.40
		2637.8(41068)	21.12	20.32	19.06
		2593 (40620)	21.55	20.73	19.48
		2548.3(40173)	21.34	20.53	19.30
		2503.5 (39725)	21.79	21.01	19.80
	1RB-Middle (37)	2682.5 (41515)	21.48	20.67	19.39
		2637.8(41068)	21.26	20.44	19.17
		2593 (40620)	21.62	20.80	19.61
		2548.3(40173)	21.37	20.56	19.35
		2503.5 (39725)	21.90	21.07	19.82
	1RB-Low (0)	2682.5 (41515)	21.44	20.63	19.34
		2637.8(41068)	21.29	20.49	19.23
		2593 (40620)	21.56	20.78	19.53
		2548.3(40173)	21.35	20.59	19.35
		2503.5 (39725)	21.86	21.04	19.81
	36RB-High (38)	2682.5 (41515)	20.46	19.44	18.50
		2637.8(41068)	20.18	19.14	18.21
		2593 (40620)	20.55	19.56	18.60
		2548.3(40173)	20.27	19.34	18.31
		2503.5 (39725)	20.83	19.87	18.85
	36RB-Middle (19)	2682.5 (41515)	20.47	19.44	18.51
		2637.8(41068)	20.19	19.18	18.26
		2593 (40620)	20.57	19.61	18.60
		2548.3(40173)	20.30	19.36	18.36
		2503.5 (39725)	20.78	19.86	18.87
	36RB-Low (0)	2682.5 (41515)	20.42	19.42	18.45
		2637.8(41068)	20.25	19.22	18.28
		2593 (40620)	20.55	19.59	18.56
		2548.3(40173)	20.30	19.33	18.35
		2503.5 (39725)	20.82	19.86	18.83
	75RB (0)	2682.5 (41515)	20.50	19.50	18.52
		2637.8(41068)	20.22	19.25	18.27
		2593 (40620)	20.54	19.63	18.60
		2548.3(40173)	20.32	19.36	18.32
		2503.5 (39725)	20.81	19.88	18.85
20MHz	1RB-High (99)	2680 (41490)	21.45	20.65	19.35
		2636.5(41055)	21.09	20.28	19.00
		2593 (40620)	21.49	20.68	19.49
		2549.5(40185)	21.28	20.46	19.28
		2506 (39750)	21.69	20.85	19.66
	1RB-Middle (50)	2680 (41490)	21.48	20.64	19.35
		2636.5(41055)	21.26	20.43	19.14

	2593 (40620)	21.64	20.82	19.57
	2549.5(40185)	21.36	20.54	19.33
	2506 (39750)	21.90	21.05	19.83
1RB-Low (0)	2680 (41490)	21.37	20.55	19.27
	2636.5(41055)	21.31	20.51	19.22
	2593 (40620)	21.55	20.75	19.53
	2549.5(40185)	21.35	20.53	19.35
	2506 (39750)	21.84	21.05	19.79
50RB-High (50)	2680 (41490)	20.45	19.48	18.51
	2636.5(41055)	20.18	19.18	18.25
	2593 (40620)	20.56	19.69	18.63
	2549.5(40185)	20.30	19.37	18.33
	2506 (39750)	20.82	19.89	18.85
50RB-Middle (25)	2680 (41490)	20.49	19.49	18.55
	2636.5(41055)	20.23	19.31	18.35
	2593 (40620)	20.58	19.65	18.63
	2549.5(40185)	20.35	19.45	18.35
	2506 (39750)	20.86	19.95	18.90
50RB-Low (0)	2680 (41490)	20.44	19.48	18.50
	2636.5(41055)	20.28	19.29	18.33
	2593 (40620)	20.57	19.66	18.64
	2549.5(40185)	20.30	19.40	18.37
	2506 (39750)	20.78	19.87	18.87
100RB (0)	2680 (41490)	20.46	19.47	18.54
	2636.5(41055)	20.20	19.20	18.28
	2593 (40620)	20.54	19.64	18.64
	2549.5(40185)	20.27	19.36	18.32
	2506 (39750)	20.81	19.89	18.86

### LTE B41 PC2-Power Level C1/D1

LTE B41 PC2					
BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	18.54	17.70	16.43
		2640.3(41093)	18.23	17.39	16.11
		2593 (40620)	18.60	17.77	16.49
		2545.8(40148)	18.38	17.56	16.27
		2498.5 (39675)	18.87	18.04	16.74
	1RB-Middle (12)	2687.5 (41565)	18.58	17.70	16.44
		2640.3(41093)	18.32	17.46	16.21
		2593 (40620)	18.68	17.78	16.55

		2545.8(40148)	18.44	17.56	16.32
		2498.5 (39675)	18.88	18.03	16.77
1RB-Low (0)		2687.5 (41565)	18.54	17.68	16.41
		2640.3(41093)	18.29	17.43	16.17
		2593 (40620)	18.64	17.81	16.54
		2545.8(40148)	18.39	17.56	16.28
		2498.5 (39675)	18.86	18.02	16.75
		2687.5 (41565)	17.46	16.44	15.49
12RB-High (13)		2640.3(41093)	17.18	16.18	15.22
		2593 (40620)	17.55	16.52	15.60
		2545.8(40148)	17.28	16.32	15.35
		2498.5 (39675)	17.78	16.78	15.82
		2687.5 (41565)	17.44	16.47	15.49
12RB-Middle (6)		2640.3(41093)	17.18	16.22	15.23
		2593 (40620)	17.52	16.52	15.55
		2545.8(40148)	17.32	16.33	15.33
		2498.5 (39675)	17.78	16.75	15.81
		2687.5 (41565)	17.47	16.46	15.50
12RB-Low (0)		2640.3(41093)	17.24	16.22	15.28
		2593 (40620)	17.55	16.55	15.56
		2545.8(40148)	17.30	16.34	15.35
		2498.5 (39675)	17.76	16.78	15.81
		2687.5 (41565)	17.47	16.49	15.49
25RB (0)		2640.3(41093)	17.22	16.24	15.23
		2593 (40620)	17.56	16.60	15.62
		2545.8(40148)	17.31	16.33	15.36
		2498.5 (39675)	17.78	16.83	15.82
		2685 (41540)	18.48	17.69	16.39
10MHz	1RB-High (49)	2639(41080)	18.22	17.42	16.13
		2593 (40620)	18.54	17.74	16.45
		2547(40160)	18.32	17.53	16.23
		2501 (39700)	18.82	18.00	16.70
		2685 (41540)	18.51	17.74	16.44
1RB-Middle (24)		2639(41080)	18.28	17.47	16.19
		2593 (40620)	18.65	17.86	16.57
		2547(40160)	18.42	17.63	16.37
		2501 (39700)	18.87	18.08	16.76
		2685 (41540)	18.47	17.68	16.36
1RB-Low (0)		2639(41080)	18.29	17.48	16.21
		2593 (40620)	18.57	17.76	16.48