



CAICT
No.I23Z60212-SEM10



SAR TEST REPORT

No. I23Z60212-SEM10

For

HMD Global Oy

Smartphone

Model Name: TA-1573

With

Hardware Version: V1.0

Software Version: 04US_0_170

FCC ID: 2AJOTTA-1573

Issued Date: 2023-5-10

Note:

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REPORT HISTORY

Report Number	Revision	Issue Date	Description
I23Z60212-SEM10	Rev.0	2023-5-5	Initial creation of test report
I23Z60212-SEM10	Rev.1	2023-5-10	Update the information in Chapter 2 on page 6

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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.

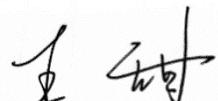
1.2 Testing Environment

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

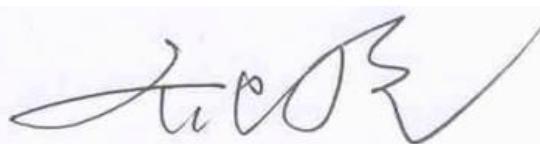
1.3 Project Data

Project Leader:	Qi Dianyuan
Test Engineer:	WangTian
Testing Start Date:	March 20,2023
Testing End Date:	April 26,2023

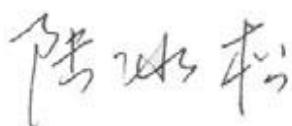
1.4 Signature



WangTian
(Prepared this test report)



Qi Dianyuan
(Reviewed this test report)



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

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for HMD Global Oy Smartphone TA-1573 is as follows:

Table 2.1: Highest Reported SAR (1g)

Mode		Antenna	Highest Reported SAR (1g)		
			1g SAR Head	1g SAR Hotspot	1g SAR Body worn
GSM	GSM 850	2	0.24	0.42	0.35
	PCS 1900	1	0.18	0.70	0.34
WCDMA	UMTS FDD 5	2	0.18	0.45	0.27
	UMTS FDD 4	1	0.27	1.10	0.69
	UMTS FDD 2	1	0.27	0.88	0.70
LTE	LTE Band 2	1	0.19	0.82	0.36
	LTE Band 2	3	0.56	0.47	0.42
	LTE Band 7	8	1.40	0.96	0.34
	LTE Band 12	2	0.11	0.25	0.19
	LTE Band 13	2	0.14	0.32	0.20
	LTE Band 25	1	0.19	0.91	0.65
	LTE Band 26	2	0.15	0.33	0.24
	LTE Band 41 PC2	8	1.32	0.52	0.28
	LTE Band 41 PC3	8	1.07	0.49	0.29
	LTE Band 66	1	0.19	0.81	0.54
	LTE Band 66	3	0.39	0.66	0.29
	LTE Band 71	2	0.12	0.30	0.25
NR	N25	1	0.17	0.89	0.54
	N25	3	0.57	0.60	0.41
	N41 PC2	8	1.20	0.58	0.35
	N41 PC3	8	0.61	0.49	0.32
	N66	1	0.11	1.00	0.47
	N71	2	0.10	0.30	0.22
	N77-L	6	1.16	1.18	0.37
	N77-H	6	1.27	1.28	0.63
WLAN 2.4 GHz		7	1.23	0.22	0.06
WLAN 5 GHz		7	0.85	0.67	0.58
BT		7	0.15	<0.01	<0.01

Note: This DUT has NFC operations. The NFC antenna is integrated into the device for this model. According to KDB 447498 D01 v06 and KDB 648474 D04 v01r03 chapter 8, all SAR tests were performed and evaluated with the device which already incorporates the NFC antenna.

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

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

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

Head: 1.40 W/kg (1g)

Body: 1.28 W/kg (1g)

Table 2.2: The sum of SAR values for Main antenna + WiFi

	Position	ENDC-LTE	ENDC-NR	WiFi	BT	Sum
Highest SAR value	Rear 10mm	0.53 (LTEB66 ANT1)	0.55 (N25 ANT3)	0.51 (WiFi5G)	<0.01	1.59

According to the above tables, the highest sum of reported SAR values is **1.59 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 14.

Conclusion:

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

3 Client Information

3.1 Applicant Information

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Telephone:	+491735287964
Fax	/

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

4.1 About EUT

Description:	Smartphone
Model name:	TA-1573
Tested Band:	GSM850/1900, WCDMA B2/4/B5 LTE Band2/7/12/13/25/26/41//66/71 NR N25/41/66/71/77 BT, Wi-Fi(2.4G), Wi-Fi(5G)
Tx Frequency:	824 – 849 MHz (GSM 850) 1850 – 1910 MHz (GSM 1900) 824–849 MHz (WCDMA 850 Band V) 1710 – 1755 MHz (WCDMA 1700 Band IV) 1850–1910 MHz (WCDMA1900 Band II) 1850 – 1910 MHz(LTE Band 2) 2500 – 2570 MHz(LTE Band 7) 699 – 716 MHz (LTE Band 12) 777 –787 MHz (LTE Band 13) 1850 – 1915 MHz(LTE Band 25) 814 – 849 MHz (LTE Band 26) 2496 – 2690 MHz (LTE Band 41) 1710 – 1780 MHz (LTE Band 66) 663 – 698 MHz (LTE Band 71) 1850 – 1915 MHz (n25) 2496 – 2690 MHz (n41) 1710– 1780 MHz (n66) 663 – 698 MHz (n71) 3450 – 3550 MHz (n77L) 3700 – 4200 MHz (n77H) 2412 – 2462 MHz (Wi-Fi 2.4G) 5180 – 5240 MHz (Wi-Fi 5.2G) 5260 – 5320 MHz (Wi-Fi 5.3G) 5500 – 5720 MHz (Wi-Fi 5.5G) 5745 – 5825 MHz (Wi-Fi 5.8G) 2400 – 2483.5 MHz (Bluetooth)
GPRS/EGPRS Multislot Class:	33
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	350547140009404	V1.0	04US_0_170
EUT2	350547140009362	V1.0	04US_0_170
EUT3	350547140008984	V1.0	04US_0_170

EUT4	350547140009628	V1.0	04US_0_170
EUT5	350547140015294	V1.0	04US_0_170
EUT6	350547140006251	V1.0	04US_0_170

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

Note: It is performed to test SAR with the EUT1-5 and conducted power with the EUT6.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	HQ610	/	Fenghua Lithium Battery Co., Ltd
AE2	Battery	HQ610		Huizhou Highpower Technology Co.,LTD
AE3	Headset	JWEP1275-ZN01H	/	Ju wei electronics co., LTD

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

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

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

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

5.2 Applicable Measurement Standards

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

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

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

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

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

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

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

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

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

6 Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

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

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

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

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

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

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

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

7 Tissue Simulating Liquids

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

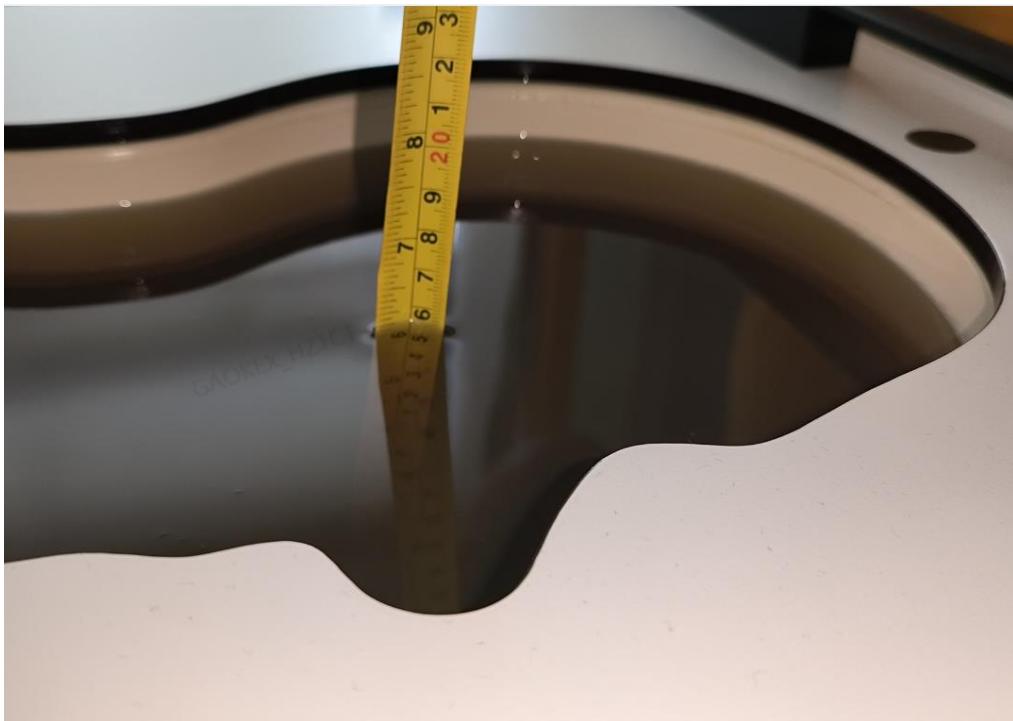
Frequency(MHz)	Liquid Type	Conductivity(σ)	$\pm 5\%$ Range	Permittivity(ϵ)	$\pm 5\%$ Range
750	Head	0.89	0.85~0.93	41.94	39.8~44.0
835	Head	0.90	0.86~0.95	41.5	39.4~43.6
1750	Head	1.37	1.30~1.44	40.08	38.1~42.1
1900	Head	1.40	1.33~1.47	40.0	38.0~42.0
2450	Head	1.67	1.59~1.75	39.47	37.5~41.4
2600	Head	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

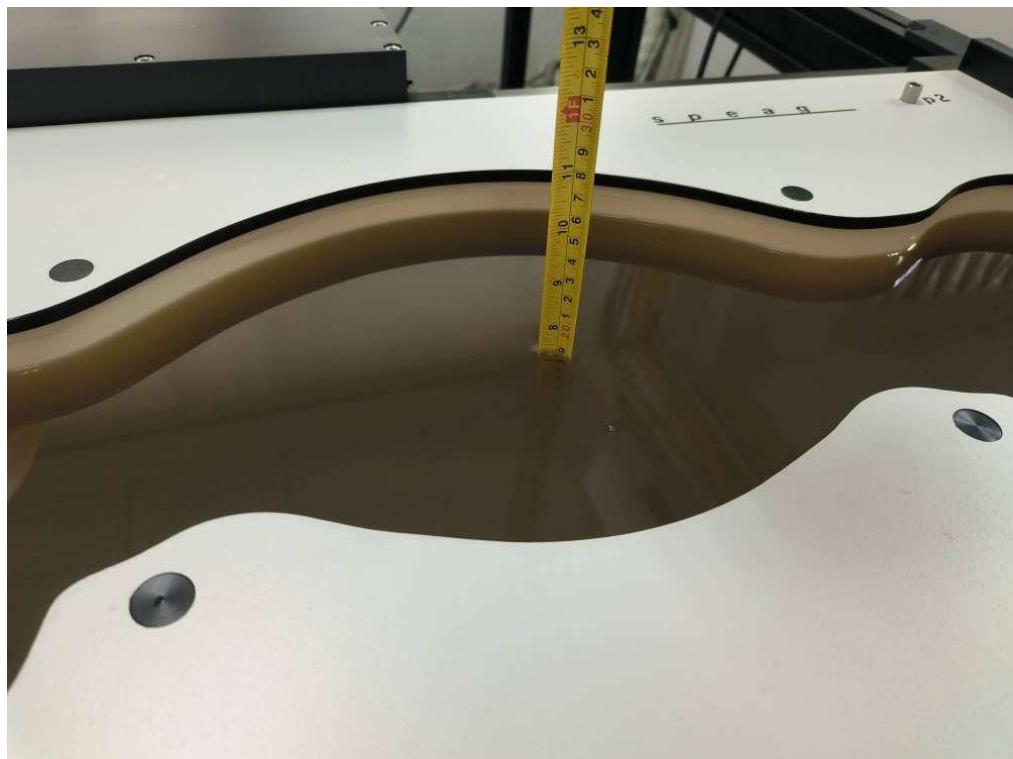
Table 7.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ϵ	Drift (%)	Conductivity σ (S/m)	Drift (%)
2023/3/20	Head	750 MHz	43.37	3.41	0.9009	1.22
2023/3/23	Head	835 MHz	43.12	3.90	0.9352	3.91
2023/3/27	Head	1750 MHz	41.05	2.42	1.384	1.02
2023/4/1	Head	1900 MHz	40.76	1.90	1.466	4.71
2023/4/6	Head	2450 MHz	40.04	2.14	1.809	0.50
2023/4/9	Head	2600 MHz	39.67	1.69	1.968	0.41
2023/4/15	Head	3500 MHz	38.1	0.45	2.794	-3.99
2023/4/18	Head	3700 MHz	37.93	0.61	2.98	-4.49
2023/4/18	Head	3900 MHz	37.38	-0.24	3.26	-1.81
2023/4/21	Head	5250 MHz	34.99	-2.62	4.521	-4.01
2023/4/23	Head	5600 MHz	34.4	-3.18	4.867	-4.00
2023/4/26	Head	5750 MHz	34.06	-3.68	5.04	-3.45

Note: The liquid temperature is 22.0°C



Picture 7-1 Liquid depth in the Head Phantom

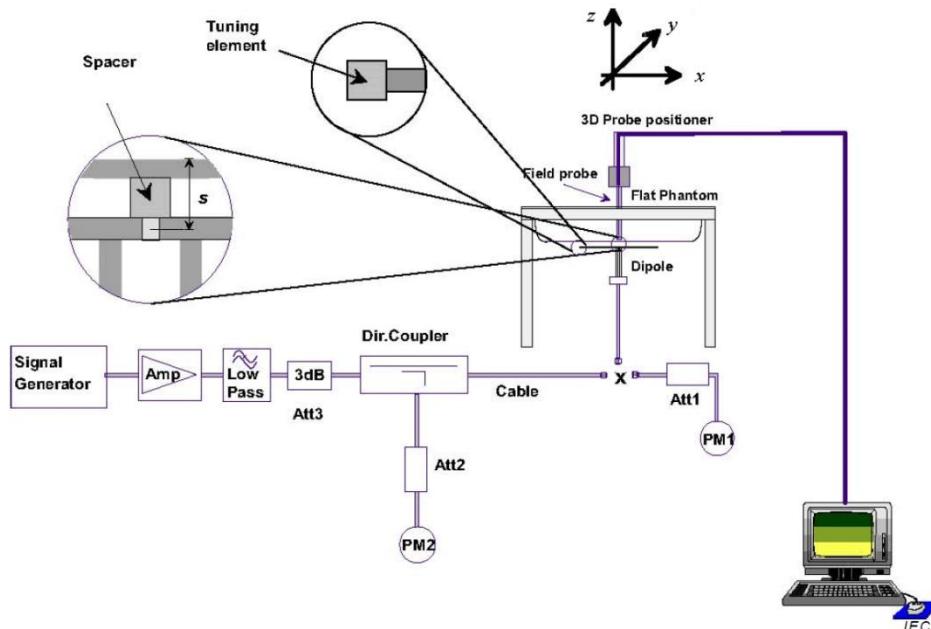


Picture 7-2 Liquid depth in the Flat Phantom

8 System verification

8.1 System Setup

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



Picture 8-1 System Setup for System Evaluation



Picture 8-2 Photo of Dipole Setup

8.2 System Verification

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

Table 8.1: System Verification of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2023/3/20	750 MHz	5.64	8.63	5.52	8.52	-2.13%	-1.27%
2023/3/23	835 MHz	6.34	9.73	6.28	9.36	-0.95%	-3.80%
2023/3/27	1750 MHz	19.3	36.8	19.0	36.9	-1.35%	0.22%
2023/4/1	1900 MHz	20.7	39.7	20.6	39.6	-0.68%	-0.35%
2023/4/6	2450 MHz	24.9	52.7	23.5	53.2	-5.54%	0.95%
2023/4/9	2600 MHz	25.2	55.8	25.7	58.8	2.06%	5.38%
2023/4/15	3500 MHz	24.8	66.40	25.2	64.4	1.61%	-3.01%
2023/4/18	3700 MHz	23.9	65.7	24.6	65.3	2.93%	-0.61%
2023/4/18	3900 MHz	23.6	68.3	23.1	66.6	-2.12%	-2.49%
2023/4/21	5250 MHz	22.3	78.1	21.3	75.2	-4.48%	-3.71%
2023/4/23	5600 MHz	23.7	83.2	24.3	81.5	2.53%	-2.04%
2023/4/26	5750 MHz	22.8	80.4	22.1	76.8	-3.07%	-4.48%

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.

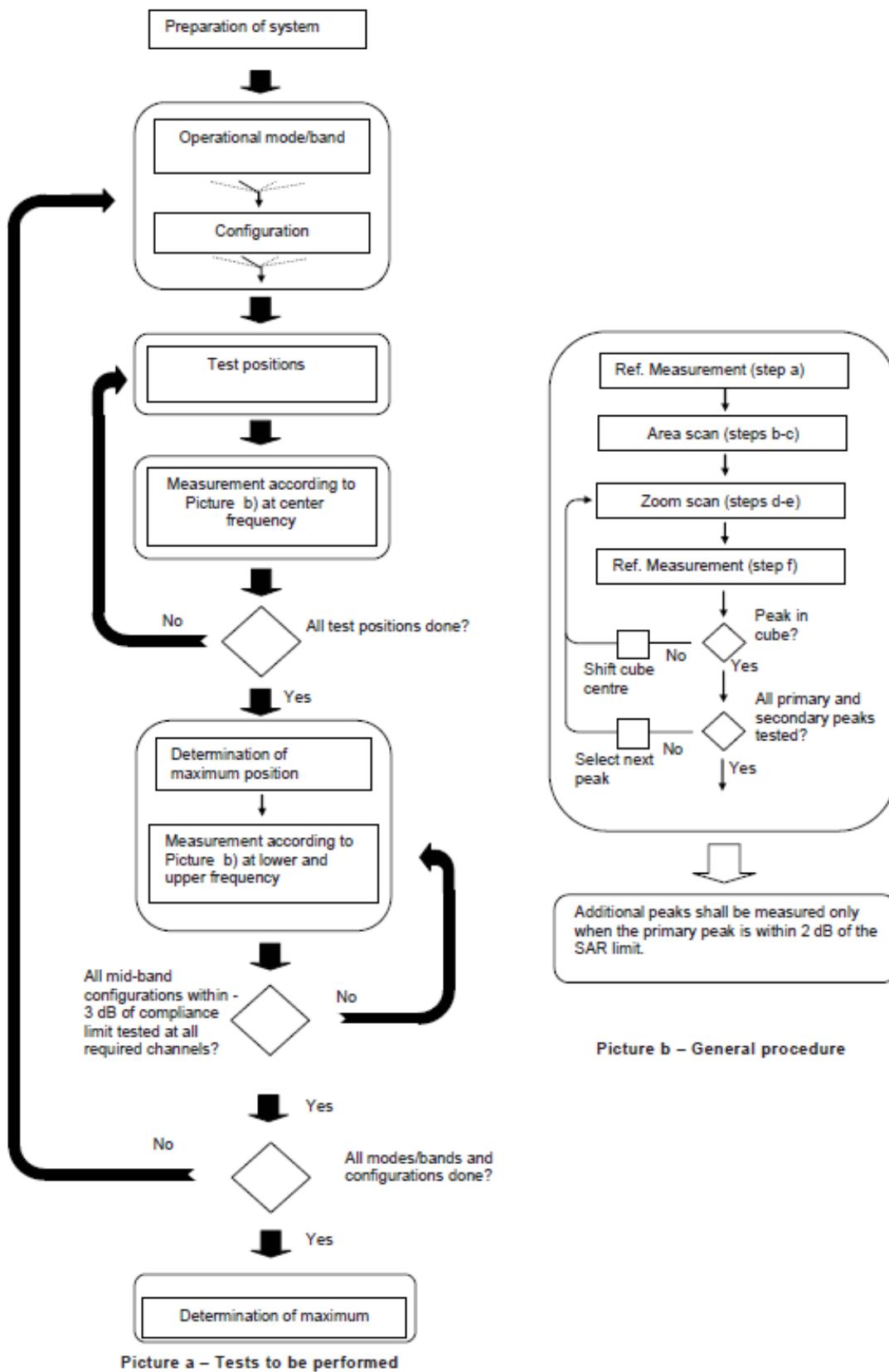
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

- 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 graded grid	$\Delta z_{\text{Zoom}}(1): \text{between 1}^{\text{st}}$ two points closest to phantom surface $\Delta z_{\text{Zoom}}(n>1): \text{between}$ subsequent points	$\leq 4 \text{ mm}$ $\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$
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: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.			
* When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ 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_n), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

For Release 5 HSDPA Data Devices:

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

For Release 6 HSPA Data Devices

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

Rel.8 DC-HSDPA (Cat 24)

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

9.4 SAR Measurement for LTE

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

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

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

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

TDD test:

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

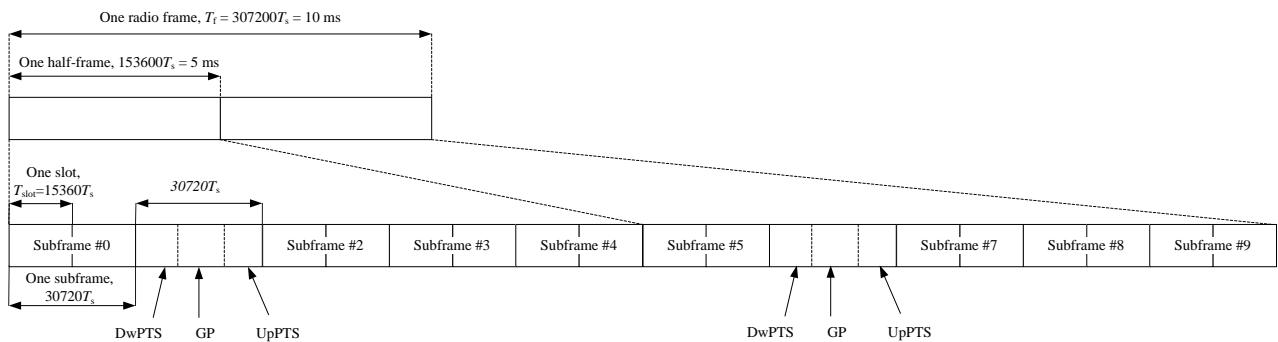


Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)

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

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

Table 9.2: Uplink-downlink configurations

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

Duty factor is calculated by:

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

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

$$= 0.633$$

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. 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

	Standalone			WIFI ON/ENDC/ULCA		
Antenna	Receiver ON SAR sensor OFF Hotspot OFF	Receiver OFF SAR sensor OFF Hotspot ON	Receiver OFF SAR sensor ON Hotspot OFF	Receiver ON SAR sensor OFF Hotspot OFF	Receiver OFF SAR sensor OFF Hotspot ON	Receiver OFF SAR sensor ON Hotspot OFF
Main Antenna	DSI0	DSI1	DSI2	DSI3	DSI4	DSI5

11.1 GSM Measurement result

GSM850-DSI0/1/2/3/4/5 ANT2

GSM Part			tune up				
	Conducted Power (dBm)						
GSM850	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)				
	32.44	33.14	32.50				
GSM 850	Burst Power (dBm)						
GPRS (GMSK)	251	190	128				
1 Txslot	32.38	33.11	32.40	34.00			
2 Txslots	30.97	31.77	30.98	32.00			
3Txslots	28.82	29.44	28.75	30.00			
4 Txslots	27.57	28.73	27.82	29.00			
GSM 850	Burst Power (dBm)						
EGPRS (GMSK)	251	190	128				
1 Txslot	32.38	33.12	32.38	34.00			
2 Txslots	30.93	31.75	30.95	32.00			
3Txslots	28.74	29.38	28.68	30.00			
4 Txslots	27.50	28.66	27.76	29.00			
GSM 850	Burst Power (dBm)						
EGPRS (8PSK)	251	190	128				
1 Txslot	26.69	27.08	26.67	28.50			
2 Txslots	25.53	26.40	25.49	26.50			
3Txslots	23.56	24.41	23.56	24.50			
4 Txslots	23.17	23.13	23.26	23.50			
	Frame Power (dBm)						
	251	190	128				
	-9.03	23.35	24.08				
	-6.02	24.95	25.75				
	-4.26	24.56	25.18				
	-3.01	24.56	25.72				
	Frame Power (dBm)						
	251	190	128				
	-9.03	23.35	24.09				
	-6.02	24.91	25.73				
	-4.26	24.48	25.12				
	-3.01	24.49	25.65				
	Frame Power (dBm)						
	251	190	128				
	-9.03	17.66	18.05				
	-6.02	19.51	20.38				
	-4.26	19.30	20.15				
	-3.01	20.16	20.12				

GSM1900- DSI0/1/2/3/4/5 ANT1

GSM Part			tune up				
	Conducted Power (dBm)						
PCS1900	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)				
	30.65	30.78	30.02				
PCS1900	Burst Power (dBm)						
GPRS (GMSK)	810	661	512				
1 Txslot	30.65	30.71	29.95	31.00			
2 Txslots	28.92	28.74	28.12	29.00			
3Txslots	26.72	26.60	25.91	27.00			
4 Txslots	25.74	25.52	25.08	26.00			
PCS1900	Burst Power (dBm)						
EGPRS (GMSK)	810	661	512				
1 Txslot	30.73	30.77	30.01	31.00			
2 Txslots	28.88	28.83	28.15	29.00			
3Txslots	26.88	26.72	26.02	27.00			
4 Txslots	25.89	25.62	25.18	26.00			
PCS1900	Burst Power (dBm)						
EGPRS (8PSK)	810	661	512				
1 Txslot	26.72	26.70	25.93	27.50			
2 Txslots	25.36	25.29	24.52	25.50			
3Txslots	22.86	23.14	22.84	23.50			
4 Txslots	22.35	21.82	21.54	22.50			
	Frame Power (dBm)						
	810	661	512				
	-9.03	21.62	21.68				
	-6.02	22.90	22.72				
	-4.26	22.46	22.34				
	-3.01	22.73	22.51				
	Frame Power (dBm)						
	810	661	512				
	-9.03	21.70	21.74				
	-6.02	22.86	22.81				
	-4.26	22.62	22.46				
	-3.01	22.88	22.61				
	Frame Power (dBm)						
	810	661	512				
	-9.03	17.69	17.67				
	-6.02	19.34	19.27				
	-4.26	18.60	18.88				
	-3.01	19.34	18.81				

11.2 WCDMA Measurement result

WCDMA850- DS10/1/2/3/4/5 ANT2

WCDMA850	FDDV result (dBm)			tune up
	4233/4458 (846.6MHz)	4183/4408 (836.6MHz)	4132/4357 (826.4MHz)	
	24.30	24.29	24.32	
HSUPA	23.38	23.32	23.44	24.00
	21.43	21.36	21.51	22.00
	22.46	22.37	22.43	23.00
	21.39	21.36	21.42	22.00
	23.41	23.34	23.44	24.00
HSPA+	22.53	22.57	22.58	23.50
DC-HSDPA	23.76	23.69	23.73	24.00
	22.96	22.96	23.12	23.50
	22.44	22.39	22.42	23.00
	22.4	22.43	22.38	23.00

WCDMA1700- DS10/1/2/3/4/5 ANT1

WCDMA1700	FDDIV result (dBm)			tune up
	1513/1738 (1752.6MHz)	1412/1637 (1732.4MHz)	1312/1537 (1712.4MHz)	
	24.25	24.18	24.22	
HSUPA	23.23	23.27	23.24	24.00
	21.22	21.31	21.28	22.00
	22.32	22.22	22.37	23.00
	21.33	21.24	21.30	22.00
	23.04	22.94	22.99	24.00
HSPA+	22.77	22.80	22.85	23.50
DC-HSDPA	23.27	23.21	23.16	24.00
	22.48	22.39	22.46	23.50
	21.99	22.01	21.93	23.00
	21.93	22.10	22.02	23.00

WCDMA1900- DS10/1/2/3/5 ANT1

WCDMA1900	FDDII result (dBm)			tune up
	9538/9938 (1907.6MHz)	9400/9800 (1880MHz)	9262/9662 (1852.4MHz)	
	24.32	24.27	24.29	
HSUPA	23.33	23.43	23.49	24.00
	21.18	21.10	21.14	22.00
	22.52	22.47	22.55	23.00
	21.59	21.50	21.52	22.00
	23.23	23.17	23.26	24.00
HSPA+	22.85	23.03	23.15	23.50
DC-HSDPA	23.43	23.36	23.41	24.00
	22.63	22.62	22.73	23.50
	22.07	22.05	22.28	23.00
	22.05	22.13	22.08	23.00

WCDMA1900-DSI4 ANT1

WCDMA1700	FDDIV result (dBm)			Tune up
	1513/1738 (1752.6MHz)	1412/1637 (1732.4MHz)	1312/1537 (1712.4MHz)	
	23.52	23.54	23.63	
HSUPA	22.09	22.16	22.09	23.00
	20.15	20.23	20.23	21.00
	21.23	21.17	21.23	22.00
	20.18	20.08	20.11	21.00
	21.93	21.86	21.84	23.00
HSPA+	21.69	21.66	21.73	22.50
DC-HSDPA	22.17	22.15	22.10	23.00
	21.3	21.24	21.41	22.50
	20.94	20.81	20.80	22.00
	20.74	20.92	20.82	22.00

11.3 LTE Measurement result

Maximum Target Power for Production Unit

Band	ANT	Tune up (dBm)					
		DSI0	DSI1	DSI2	DSI3	DSI4	DSI5
LTE Band 2	1	24.5	24.5	24.5	24.5	22.5	24.5
LTE Band 2	3	24.5	24.5	24.5	24.5	22.5	24.5
LTE Band 7	8	21.5	24	24	20	24	24
LTE Band 12/17	2	25	25	25	25	25	25
LTE Band 13	2	25	25	25	25	25	25
LTE Band 25	1	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 26/5	2	25	25	25	25	25	25
LTE Band 41 PC2	8	24.5	26.5	26.5	23.5	26.5	26.5
LTE Band 41/38 PC3	8	22	24	24	21	24	24
LTE Band 66/4	1	24.5	24.5	24.5	24.5	23.5	24.5
LTE Band 66	3	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 71	2	25	25	25	25	25	25

Maximum Power Reduction (MPR)

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

LTE Band2- DS10/1/2/3/5 ANT1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	23.35	22.61	21.70	18.68
		1880 (18900)	23.47	22.72	21.78	18.59
		1850.7 (18607)	23.64	22.71	21.69	18.64
	1RB-Middle (3)	1909.3 (19193)	23.43	22.92	21.68	18.60
		1880 (18900)	23.44	22.76	21.54	18.79
		1850.7 (18607)	23.56	22.77	21.91	18.77
	1RB-Low (0)	1909.3 (19193)	23.57	22.68	21.74	18.85
		1880 (18900)	23.40	22.63	21.96	18.47
		1850.7 (18607)	23.46	22.74	21.47	18.66
	3RB-High (3)	1909.3 (19193)	22.64	21.70	20.76	18.90
		1880 (18900)	22.51	21.75	20.71	18.71
		1850.7 (18607)	22.72	21.73	20.77	18.54
	3RB-Middle (1)	1909.3 (19193)	22.62	21.60	20.78	18.93
		1880 (18900)	22.77	21.52	20.53	18.75
		1850.7 (18607)	22.70	21.63	20.70	18.69
	3RB-Low (0)	1909.3 (19193)	22.55	21.67	20.61	18.86
		1880 (18900)	22.64	21.53	20.61	18.86
		1850.7 (18607)	22.80	21.67	20.57	18.69
	6RB (0)	1909.3 (19193)	22.61	21.57	20.70	18.54
		1880 (18900)	22.58	21.71	20.72	18.80
		1850.7 (18607)	22.72	21.60	20.71	18.69
3MHz	1RB-High (14)	1908.5 (19185)	23.45	22.84	21.82	18.58
		1880 (18900)	23.35	22.73	21.74	18.58
		1851.5 (18615)	23.63	22.72	21.96	18.76
	1RB-Middle (7)	1908.5 (19185)	23.48	22.86	21.79	18.54
		1880 (18900)	23.59	22.81	21.79	18.61
		1851.5 (18615)	23.43	22.84	21.86	18.77
	1RB-Low (0)	1908.5 (19185)	23.33	22.98	21.90	18.87
		1880 (18900)	23.62	22.89	21.76	18.55
		1851.5 (18615)	23.49	22.68	21.46	18.65
	8RB-High (7)	1908.5 (19185)	22.52	21.49	20.64	18.64
		1880 (18900)	22.79	21.61	20.47	18.62
		1851.5 (18615)	22.62	21.71	20.75	18.66

		1908.5 (19185)	22.44	21.77	20.77	18.75
		1880 (18900)	22.56	21.66	20.65	18.73
		1851.5 (18615)	22.72	21.83	20.71	18.82
	8RB-Low (0)	1908.5 (19185)	22.63	21.64	20.43	18.80
		1880 (18900)	22.81	21.56	20.67	18.85
		1851.5 (18615)	22.88	21.58	20.60	18.88
	15RB (0)	1908.5 (19185)	22.39	21.53	20.60	18.85
		1880 (18900)	22.63	21.72	20.54	18.64
		1851.5 (18615)	22.57	21.88	20.70	18.74
5MHz	1RB-High (24)	1907.5 (19175)	23.28	22.68	21.51	18.70
		1880 (18900)	23.52	22.99	21.95	18.53
		1852.5 (18625)	23.66	22.78	21.67	18.58
	1RB-Middle (12)	1907.5 (19175)	23.42	22.60	21.78	18.52
		1880 (18900)	23.78	22.71	21.82	18.83
		1852.5 (18625)	23.48	22.91	21.89	18.55
	1RB-Low (0)	1907.5 (19175)	23.52	22.90	21.78	18.76
		1880 (18900)	23.47	22.75	21.66	18.58
		1852.5 (18625)	23.62	22.65	21.67	18.67
	12RB-High (13)	1907.5 (19175)	22.50	21.58	20.77	18.76
		1880 (18900)	22.82	21.74	20.54	18.47
		1852.5 (18625)	22.62	21.50	20.63	18.89
	12RB-Middle (6)	1907.5 (19175)	22.63	21.60	20.69	18.71
		1880 (18900)	22.58	21.71	20.72	18.62
		1852.5 (18625)	22.64	21.80	20.60	18.66
	12RB-Low (0)	1907.5 (19175)	22.73	21.46	20.47	18.72
		1880 (18900)	22.60	21.68	20.74	18.91
		1852.5 (18625)	22.88	21.84	20.69	18.80
	25RB (0)	1907.5 (19175)	22.42	21.59	20.67	18.71
		1880 (18900)	22.43	21.50	20.64	18.61
		1852.5 (18625)	22.56	21.91	20.62	18.73
10MHz	1RB-High (49)	1905 (19150)	23.42	22.70	21.82	18.68
		1880 (18900)	23.35	22.95	21.71	18.70
		1855 (18650)	23.45	22.89	21.77	18.71
	1RB-Middle (24)	1905 (19150)	23.50	22.65	21.55	18.64
		1880 (18900)	23.52	22.70	21.49	18.80
		1855 (18650)	23.68	22.91	21.69	18.88
	1RB-Low (0)	1905 (19150)	23.39	22.65	21.73	18.86
		1880 (18900)	23.65	22.87	21.85	18.53

15MHz	25RB-High (25)	1855 (18650)	23.45	22.94	21.69	18.54
		1905 (19150)	22.39	21.71	20.53	18.74
		1880 (18900)	22.52	21.73	20.68	18.68
		1855 (18650)	22.56	21.54	20.79	18.82
	25RB-Middle (12)	1905 (19150)	22.67	21.55	20.78	18.93
		1880 (18900)	22.72	21.64	20.76	18.69
		1855 (18650)	22.53	21.80	20.54	18.85
	25RB-Low (0)	1905 (19150)	22.59	21.48	20.40	18.81
		1880 (18900)	22.70	21.64	20.71	18.80
		1855 (18650)	22.78	21.68	20.80	18.79
	50RB (0)	1905 (19150)	22.46	21.74	20.78	18.62
		1880 (18900)	22.68	21.85	20.52	18.86
		1855 (18650)	22.81	21.84	20.75	18.77
20MHz	1RB-High (74)	1902.5 (19125)	23.25	22.78	21.83	18.58
		1880 (18900)	23.35	22.88	21.82	18.46
		1857.5 (18675)	23.62	22.70	21.88	18.59
	1RB-Middle (37)	1902.5 (19125)	23.57	22.65	21.61	18.87
		1880 (18900)	23.68	22.73	21.57	18.65
		1857.5 (18675)	23.44	22.81	21.80	18.64
	1RB-Low (0)	1902.5 (19125)	23.61	22.80	21.80	18.72
		1880 (18900)	23.49	22.69	21.70	18.46
		1857.5 (18675)	23.63	22.71	21.76	18.55
	36RB-High (38)	1902.5 (19125)	22.51	21.63	20.59	18.83
		1880 (18900)	22.48	21.61	20.70	18.64
		1857.5 (18675)	22.72	21.70	20.67	18.55
	36RB-Middle (19)	1902.5 (19125)	22.45	21.74	20.59	18.77
		1880 (18900)	22.69	21.74	20.80	18.84
		1857.5 (18675)	22.58	21.65	20.80	18.63
	36RB-Low (0)	1902.5 (19125)	22.65	21.39	20.48	18.56
		1880 (18900)	22.80	21.67	20.79	18.62
		1857.5 (18675)	22.88	21.83	20.68	18.70
	75RB (0)	1902.5 (19125)	22.60	21.57	20.76	18.56
		1880 (18900)	22.46	21.75	20.64	18.77
		1857.5 (18675)	22.72	21.66	20.50	18.70
20MHz	1RB-High (99)	1900 (19100)	23.49	22.86	21.73	18.74
		1880 (18900)	23.56	22.92	21.89	18.71
		1860 (18700)	23.68	22.93	21.86	18.78
	1RB-Middle (50)	1900 (19100)	23.65	22.83	21.70	18.77

		1880 (18900)	23.69	22.84	21.72	18.82
		1860 (18700)	23.63	22.86	21.83	18.80
1RB-Low (0)		1900 (19100)	23.58	22.88	21.85	18.78
		1880 (18900)	23.56	22.86	21.87	18.71
		1860 (18700)	23.58	22.86	21.69	18.76
	50RB-High (50)	1900 (19100)	22.62	21.62	20.74	18.85
		1880 (18900)	22.72	21.71	20.70	18.72
		1860 (18700)	22.66	21.71	20.70	18.79
50RB-Middle (25)		1900 (19100)	22.65	21.73	20.70	18.88
		1880 (18900)	22.82	21.66	20.73	18.77
		1860 (18700)	22.76	21.76	20.76	18.75
50RB-Low (0)		1900 (19100)	22.78	21.62	20.65	18.76
		1880 (18900)	22.81	21.73	20.75	18.83
		1860 (18700)	22.79	21.74	20.77	18.80
100RB (0)		1900 (19100)	22.64	21.72	20.72	18.79
		1880 (18900)	22.68	21.75	20.74	18.82
		1860 (18700)	22.74	21.81	20.71	18.71

LTE Band2- DSI4 ANT1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	21.34	20.93	19.58	17.00
		1880 (18900)	21.39	20.95	19.69	17.06
		1850.7 (18607)	21.45	21.02	19.72	17.04
	1RB-Middle (3)	1909.3 (19193)	21.47	20.96	19.77	17.14
		1880 (18900)	21.50	20.96	19.70	17.09
		1850.7 (18607)	21.49	20.95	19.62	17.10
	1RB-Low (0)	1909.3 (19193)	21.45	20.93	19.64	17.07
		1880 (18900)	21.61	20.84	19.67	17.12
		1850.7 (18607)	21.51	20.80	19.68	17.09
	3RB-High (3)	1909.3 (19193)	20.67	19.71	18.72	17.11
		1880 (18900)	20.65	19.68	18.65	17.07
		1850.7 (18607)	20.65	19.60	18.77	17.09
	3RB-Middle (1)	1909.3 (19193)	20.54	19.61	18.77	16.98
		1880 (18900)	20.73	19.61	18.71	17.11
		1850.7 (18607)	20.66	19.68	18.70	17.04
	3RB-Low (0)	1909.3 (19193)	20.79	19.68	18.65	17.09
		1880 (18900)	20.76	19.82	18.66	17.06

		1850.7 (18607)	20.60	19.64	18.76	17.11
3MHz	6RB (0)	1909.3 (19193)	20.70	19.67	18.74	17.03
		1880 (18900)	20.58	19.68	18.69	17.11
		1850.7 (18607)	20.65	19.71	18.61	17.02
5MHz	1RB-High (14)	1908.5 (19185)	21.26	20.88	19.48	17.01
		1880 (18900)	21.44	20.89	19.67	17.03
		1851.5 (18615)	21.58	21.03	19.86	17.03
	1RB-Middle (7)	1908.5 (19185)	21.33	20.78	19.63	17.08
		1880 (18900)	21.55	20.84	19.68	17.03
		1851.5 (18615)	21.53	20.95	19.62	16.98
	1RB-Low (0)	1908.5 (19185)	21.49	20.94	19.62	17.01
		1880 (18900)	21.46	20.97	19.76	17.01
		1851.5 (18615)	21.67	20.78	19.90	17.06
	8RB-High (7)	1908.5 (19185)	20.60	19.50	18.65	17.00
		1880 (18900)	20.72	19.76	18.66	17.01
		1851.5 (18615)	20.64	19.65	18.68	17.06
	8RB-Middle (4)	1908.5 (19185)	20.72	19.53	18.73	17.06
		1880 (18900)	20.64	19.71	18.90	16.98
		1851.5 (18615)	20.55	19.74	18.66	17.10
	8RB-Low (0)	1908.5 (19185)	20.64	19.66	18.72	17.11
		1880 (18900)	20.67	19.71	18.90	17.00
		1851.5 (18615)	20.50	19.69	18.71	16.98
	15RB (0)	1908.5 (19185)	20.63	19.55	18.65	17.01
		1880 (18900)	20.73	19.70	18.76	17.03
		1851.5 (18615)	20.64	19.59	18.68	17.00
5MHz	1RB-High (24)	1907.5 (19175)	21.29	20.73	19.50	17.10
		1880 (18900)	21.41	20.99	19.68	16.98
		1852.5 (18625)	21.59	21.05	19.92	17.14
	1RB-Middle (12)	1907.5 (19175)	21.34	20.84	19.60	17.10
		1880 (18900)	21.59	20.92	19.55	17.03
		1852.5 (18625)	21.43	20.77	19.66	17.06
	1RB-Low (0)	1907.5 (19175)	21.51	20.80	19.71	17.11
		1880 (18900)	21.61	20.87	19.70	17.11
		1852.5 (18625)	21.71	20.78	19.84	17.11
	12RB-High (13)	1907.5 (19175)	20.51	19.70	18.43	17.08
		1880 (18900)	20.78	19.82	18.76	16.99
		1852.5 (18625)	20.60	19.57	18.76	17.04
	12RB-Middle (6)	1907.5 (19175)	20.69	19.69	18.81	17.10

	12RB-Low (0)	1880 (18900)	20.64	19.64	18.71	17.10
		1852.5 (18625)	20.74	19.77	18.60	17.05
		1907.5 (19175)	20.62	19.63	18.55	17.01
		1880 (18900)	20.57	19.70	18.76	17.10
		1852.5 (18625)	20.52	19.70	18.65	16.99
	25RB (0)	1907.5 (19175)	20.61	19.48	18.71	17.02
		1880 (18900)	20.71	19.69	18.78	17.13
		1852.5 (18625)	20.72	19.60	18.83	17.11
10MHz	1RB-High (49)	1905 (19150)	21.31	20.92	19.66	17.04
		1880 (18900)	21.55	20.80	19.85	17.14
		1855 (18650)	21.60	21.01	19.73	17.06
	1RB-Middle (24)	1905 (19150)	21.42	20.80	19.80	17.11
		1880 (18900)	21.66	20.86	19.61	17.10
		1855 (18650)	21.37	20.88	19.65	17.06
	1RB-Low (0)	1905 (19150)	21.59	20.85	19.77	17.04
		1880 (18900)	21.60	20.87	19.65	17.14
		1855 (18650)	21.72	20.99	19.68	17.08
	25RB-High (25)	1905 (19150)	20.58	19.74	18.60	17.11
		1880 (18900)	20.63	19.67	18.78	17.05
		1855 (18650)	20.71	19.53	18.65	16.98
	25RB-Middle (12)	1905 (19150)	20.71	19.71	18.64	17.04
		1880 (18900)	20.67	19.65	18.76	17.01
		1855 (18650)	20.75	19.62	18.85	17.09
	25RB-Low (0)	1905 (19150)	20.71	19.70	18.55	17.12
		1880 (18900)	20.72	19.61	18.65	17.06
		1855 (18650)	20.62	19.62	18.60	16.99
	50RB (0)	1905 (19150)	20.64	19.64	18.63	17.07
		1880 (18900)	20.70	19.80	18.81	17.14
		1855 (18650)	20.62	19.56	18.69	17.12
15MHz	1RB-High (74)	1902.5 (19125)	21.44	20.73	19.47	17.14
		1880 (18900)	21.61	20.81	19.86	17.02
		1857.5 (18675)	21.55	21.12	19.76	17.10
	1RB-Middle (37)	1902.5 (19125)	21.53	20.98	19.61	17.12
		1880 (18900)	21.54	20.98	19.78	17.03
		1857.5 (18675)	21.55	20.82	19.71	17.04
	1RB-Low (0)	1902.5 (19125)	21.42	20.96	19.60	17.05
		1880 (18900)	21.47	20.92	19.63	17.10
		1857.5 (18675)	21.54	20.97	19.85	17.12

		1902.5 (19125)	20.71	19.70	18.60	17.10
	36RB-High (38)	1880 (18900)	20.68	19.69	18.58	16.98
		1857.5 (18675)	20.74	19.69	18.75	17.09
		1902.5 (19125)	20.63	19.54	18.60	17.05
	36RB-Middle (19)	1880 (18900)	20.67	19.80	18.82	17.11
		1857.5 (18675)	20.61	19.76	18.62	17.13
		1902.5 (19125)	20.64	19.65	18.71	17.08
	36RB-Low (0)	1880 (18900)	20.66	19.63	18.78	17.09
		1857.5 (18675)	20.66	19.66	18.64	17.09
		1902.5 (19125)	20.72	19.50	18.73	17.09
	75RB (0)	1880 (18900)	20.64	19.75	18.79	17.05
		1857.5 (18675)	20.61	19.67	18.68	17.09
		1900 (19100)	21.35	20.82	19.51	17.11
	1RB-High (99)	1880 (18900)	21.46	20.89	19.69	17.13
		1860 (18700)	21.47	20.99	19.78	17.05
		1900 (19100)	21.41	20.82	19.67	17.09
	1RB-Middle (50)	1880 (18900)	21.59	20.81	19.64	17.02
		1860 (18700)	21.46	20.83	19.65	17.02
		1900 (19100)	21.47	20.85	19.67	17.07
	1RB-Low (0)	1880 (18900)	21.46	20.91	19.71	16.99
		1860 (18700)	21.57	20.83	19.73	17.14
		1900 (19100)	20.56	19.58	18.50	17.04
	50RB-High (50)	1880 (18900)	20.66	19.65	18.64	17.13
		1860 (18700)	20.63	19.60	18.61	17.07
		1900 (19100)	20.59	19.58	18.65	16.98
	50RB-Middle (25)	1880 (18900)	20.69	19.67	18.73	17.11
		1860 (18700)	20.60	19.66	18.68	17.02
		1900 (19100)	20.62	19.54	18.56	17.05
	50RB-Low (0)	1880 (18900)	20.65	19.67	18.74	17.09
		1860 (18700)	20.59	19.59	18.64	17.00
		1900 (19100)	20.61	19.56	18.64	17.14
	100RB (0)	1880 (18900)	20.66	19.73	18.71	17.02
		1860 (18700)	20.63	19.55	18.68	17.09

LTE Band2- DSI0/1/2/3/5 ANT3

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM

1.4MHz	1RB-High (5)	1909.3 (19193)	23.76	22.91	21.75	18.98
		1880 (18900)	23.78	23.02	21.88	19.40
		1850.7 (18607)	23.44	22.86	21.90	19.03
	1RB-Middle (3)	1909.3 (19193)	23.66	22.73	21.95	18.87
		1880 (18900)	23.79	23.05	21.89	18.88
		1850.7 (18607)	23.52	22.96	21.87	19.24
	1RB-Low (0)	1909.3 (19193)	23.62	22.92	21.87	19.10
		1880 (18900)	22.72	23.28	21.71	19.26
		1850.7 (18607)	23.64	22.93	21.78	18.94
	3RB-High (3)	1909.3 (19193)	22.75	21.80	20.63	18.93
		1880 (18900)	22.77	21.75	20.83	19.24
		1850.7 (18607)	22.79	21.83	20.82	19.06
	3RB-Middle (1)	1909.3 (19193)	22.74	21.93	20.95	19.21
		1880 (18900)	22.82	21.84	20.73	19.38
		1850.7 (18607)	22.77	21.53	20.65	19.04
	3RB-Low (0)	1909.3 (19193)	22.93	21.98	20.74	19.05
		1880 (18900)	23.00	21.81	21.00	19.17
		1850.7 (18607)	22.94	21.70	20.97	19.02
	6RB (0)	1909.3 (19193)	22.93	21.88	21.00	19.20
		1880 (18900)	22.43	21.51	20.60	19.02
		1850.7 (18607)	22.55	21.62	20.79	18.94
3MHz						
	1RB-High (14)	1908.5 (19185)	23.82	23.20	21.79	19.26
		1880 (18900)	23.86	22.78	21.88	19.23
		1851.5 (18615)	23.50	23.20	21.86	19.08
	1RB-Middle (7)	1908.5 (19185)	23.50	22.99	22.04	19.00
		1880 (18900)	23.88	23.16	21.93	18.99
		1851.5 (18615)	23.66	23.07	21.89	19.19
	1RB-Low (0)	1908.5 (19185)	23.81	23.14	21.96	19.06
		1880 (18900)	22.71	23.21	21.88	19.20
		1851.5 (18615)	23.59	23.15	22.04	18.83
	8RB-High (7)	1908.5 (19185)	22.89	21.82	20.58	19.11
		1880 (18900)	22.61	21.85	20.81	19.28
		1851.5 (18615)	22.43	21.90	20.89	19.17
	8RB-Middle (4)	1908.5 (19185)	22.65	21.69	20.95	18.93
		1880 (18900)	22.91	21.55	20.69	19.02
		1851.5 (18615)	22.69	21.57	20.80	19.37
	8RB-Low (0)	1908.5 (19185)	23.05	21.82	20.87	19.15
		1880 (18900)	22.96	21.87	20.75	19.17
		1851.5 (18615)	22.96	21.79	20.80	19.11

		1908.5 (19185)	22.84	22.02	20.93	18.95
		1880 (18900)	22.43	21.55	20.79	19.00
		1851.5 (18615)	22.52	21.81	20.85	19.16
5MHz	15RB (0)	1907.5 (19175)	23.72	23.06	22.03	19.15
		1880 (18900)	23.64	22.70	21.91	19.39
		1852.5 (18625)	23.68	22.81	21.86	19.19
	1RB-High (24)	1907.5 (19175)	23.57	22.75	21.75	18.86
		1880 (18900)	23.92	22.88	21.71	18.86
		1852.5 (18625)	23.80	22.93	21.90	19.26
	1RB-Middle (12)	1907.5 (19175)	23.56	23.15	21.96	18.95
		1880 (18900)	22.56	22.99	22.03	19.31
		1852.5 (18625)	23.44	23.00	22.05	19.14
	1RB-Low (0)	1907.5 (19175)	22.79	21.81	20.85	19.33
		1880 (18900)	22.61	21.64	20.67	19.28
		1852.5 (18625)	22.59	21.97	21.05	19.18
	12RB-High (13)	1907.5 (19175)	22.80	21.98	20.71	18.92
		1880 (18900)	23.10	21.67	20.52	19.20
		1852.5 (18625)	22.81	21.54	20.79	19.34
	12RB-Middle (6)	1907.5 (19175)	23.04	21.78	20.81	19.37
		1880 (18900)	22.87	21.73	20.97	19.39
		1852.5 (18625)	22.66	21.72	20.78	19.24
	12RB-Low (0)	1907.5 (19175)	22.90	22.06	21.03	19.17
		1880 (18900)	22.56	21.55	20.79	19.17
		1852.5 (18625)	22.65	21.69	20.79	19.16
10MHz	25RB (0)	1905 (19150)	23.61	22.90	22.06	19.09
		1880 (18900)	23.78	22.91	21.91	19.09
		1855 (18650)	23.41	22.97	21.56	19.02
	1RB-High (49)	1905 (19150)	23.48	22.82	21.95	19.00
		1880 (18900)	23.63	23.12	21.80	19.10
		1855 (18650)	23.61	22.89	21.62	18.96
	1RB-Middle (24)	1905 (19150)	23.61	23.01	22.05	18.98
		1880 (18900)	22.53	22.90	21.91	19.21
		1855 (18650)	23.48	22.98	21.73	18.95
	25RB-High (25)	1905 (19150)	22.57	21.75	20.84	19.00
		1880 (18900)	22.78	21.71	20.83	19.22
		1855 (18650)	22.72	21.89	20.66	19.25
	25RB-Middle (12)	1905 (19150)	22.90	21.72	20.79	19.24
		1880 (18900)	22.80	21.61	20.70	19.02

		1855 (18650)	23.01	21.65	20.58	19.36
	25RB-Low (0)	1905 (19150)	22.86	21.82	20.95	19.03
		1880 (18900)	22.65	21.78	20.76	19.36
		1855 (18650)	22.60	21.95	20.79	19.28
	50RB (0)	1905 (19150)	23.08	21.90	20.83	19.23
		1880 (18900)	22.82	21.66	20.56	19.09
		1855 (18650)	22.87	21.68	20.70	19.09
15MHz	1RB-High (74)	1902.5 (19125)	23.75	23.19	21.94	19.11
		1880 (18900)	23.85	22.88	21.60	19.07
		1857.5 (18675)	23.53	22.95	21.58	19.10
	1RB-Middle (37)	1902.5 (19125)	23.72	22.80	21.79	19.19
		1880 (18900)	23.63	23.13	21.67	19.23
		1857.5 (18675)	23.80	23.09	21.90	19.07
	1RB-Low (0)	1902.5 (19125)	23.55	23.15	21.85	19.26
		1880 (18900)	22.82	23.10	21.98	18.94
		1857.5 (18675)	23.49	22.87	21.81	18.98
	36RB-High (38)	1902.5 (19125)	22.96	21.59	20.75	19.14
		1880 (18900)	22.44	21.70	20.58	19.01
		1857.5 (18675)	22.40	21.86	20.79	18.91
	36RB-Middle (19)	1902.5 (19125)	22.67	21.63	20.99	19.09
		1880 (18900)	22.76	21.59	20.84	19.09
		1857.5 (18675)	22.98	21.77	20.80	19.38
	36RB-Low (0)	1902.5 (19125)	22.75	21.94	20.70	19.27
		1880 (18900)	22.68	21.64	20.79	19.03
		1857.5 (18675)	22.87	21.82	20.72	19.06
	75RB (0)	1902.5 (19125)	22.96	21.71	20.91	19.24
		1880 (18900)	22.64	21.52	20.51	19.03
		1857.5 (18675)	22.72	21.57	20.80	19.07
20MHz						
	1RB-High (99)	1900 (19100)	23.68	23.06	21.98	19.18
		1880 (18900)	23.79	22.95	21.85	19.28
		1860 (18700)	23.59	23.06	21.77	19.24
	1RB-Middle (50)	1900 (19100)	23.63	22.87	21.94	19.05
		1880 (18900)	23.80	23.04	21.83	19.10
		1860 (18700)	23.69	23.10	21.86	19.17
	1RB-Low (0)	1900 (19100)	23.69	23.05	21.92	19.13
		1880 (18900)	22.76	23.13	21.93	19.19
		1860 (18700)	23.66	23.02	21.98	19.05
	50RB-High (50)	1900 (19100)	22.81	21.78	20.73	19.18

		1880 (18900)	22.69	21.74	20.78	19.20
		1860 (18700)	22.64	21.87	20.90	19.15
50RB-Middle (25)	1900 (19100)	22.84	21.84	20.88	19.14	
	1880 (18900)	22.95	21.75	20.69	19.27	
	1860 (18700)	22.89	21.69	20.77	19.28	
	1900 (19100)	22.93	21.99	20.93	19.28	
	1880 (18900)	22.85	21.88	20.88	19.27	
50RB-Low (0)	1860 (18700)	22.85	21.90	20.86	19.19	
	1900 (19100)	22.95	21.94	20.97	19.14	
	1880 (18900)	22.68	21.68	20.67	19.20	
	1860 (18700)	22.76	21.75	20.74	19.14	

LTE Band2- DS14 ANT3

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	21.78	20.87	19.74	16.82
		1880 (18900)	21.75	20.90	19.80	17.01
		1850.7 (18607)	21.63	20.83	19.73	16.96
	1RB-Middle (3)	1909.3 (19193)	21.60	21.14	19.61	16.92
		1880 (18900)	21.72	21.10	19.82	16.93
		1850.7 (18607)	21.64	21.07	18.72	16.83
	1RB-Low (0)	1909.3 (19193)	21.67	20.86	19.86	16.80
		1880 (18900)	21.72	21.08	18.78	16.91
		1850.7 (18607)	21.67	20.92	19.68	16.84
	3RB-High (3)	1909.3 (19193)	20.70	19.73	18.79	16.79
		1880 (18900)	20.70	19.87	18.88	16.93
		1850.7 (18607)	20.61	19.82	18.93	16.77
	3RB-Middle (1)	1909.3 (19193)	20.81	19.67	18.84	16.86
		1880 (18900)	20.75	19.88	18.63	16.79
		1850.7 (18607)	20.79	19.79	18.80	16.92
	3RB-Low (0)	1909.3 (19193)	20.83	19.82	18.86	16.89
		1880 (18900)	20.96	20.07	18.95	16.76
		1850.7 (18607)	20.78	19.91	18.68	16.81
	6RB (0)	1909.3 (19193)	20.80	19.98	18.87	16.76
		1880 (18900)	20.82	19.91	17.64	16.92
		1850.7 (18607)	20.72	19.80	17.79	16.84
3MHz	1RB-High (14)	1908.5 (19185)	21.73	20.86	19.85	16.77

		1880 (18900)	21.95	21.03	19.78	16.86
		1851.5 (18615)	21.61	20.88	19.65	16.80
1RB-Middle (7)	1RB-Low (0)	1908.5 (19185)	21.64	20.98	19.66	16.90
		1880 (18900)	21.69	21.15	19.75	16.85
		1851.5 (18615)	21.80	20.85	18.76	16.83
		1908.5 (19185)	21.85	20.97	19.85	16.84
		1880 (18900)	21.77	21.02	18.79	16.83
8RB-High (7)	8RB-Middle (4)	1851.5 (18615)	21.72	20.95	19.74	16.86
		1908.5 (19185)	20.82	19.67	18.77	16.91
		1880 (18900)	20.87	19.78	17.87	16.79
		1851.5 (18615)	20.63	19.63	17.80	16.81
		1908.5 (19185)	20.76	19.70	18.89	16.76
8RB-Low (0)	15RB (0)	1880 (18900)	20.77	19.83	17.76	16.87
		1851.5 (18615)	20.83	19.89	17.67	16.84
		1908.5 (19185)	20.90	19.84	18.90	16.92
		1880 (18900)	20.88	19.96	17.93	16.92
		1851.5 (18615)	20.88	19.83	17.93	16.90
5MHz	1RB-High (24)	1908.5 (19185)	20.89	19.92	18.95	16.86
		1880 (18900)	20.69	19.79	17.61	16.89
		1851.5 (18615)	20.85	19.86	17.83	16.84
	1RB-Middle (12)	1907.5 (19175)	21.70	20.96	19.89	16.93
		1880 (18900)	21.78	20.94	19.83	16.83
		1852.5 (18625)	21.61	20.83	19.61	16.89
	1RB-Low (0)	1907.5 (19175)	21.55	21.04	19.66	16.84
		1880 (18900)	21.70	21.24	19.96	16.92
		1852.5 (18625)	21.53	20.93	18.65	16.93
	12RB-High (13)	1907.5 (19175)	21.68	20.84	19.86	16.76
		1880 (18900)	21.70	20.90	18.84	16.84
		1852.5 (18625)	21.76	20.95	19.56	16.93
	12RB-Middle (6)	1907.5 (19175)	20.70	19.80	18.77	16.85
		1880 (18900)	20.78	19.86	17.87	16.81
		1852.5 (18625)	20.65	19.73	17.91	16.75
	12RB-Low (0)	1907.5 (19175)	20.81	19.77	18.85	16.87
		1880 (18900)	20.79	19.84	17.67	16.86
		1852.5 (18625)	20.93	19.83	17.82	16.80
	25RB (0)	1907.5 (19175)	20.76	19.81	18.85	16.84

		1880 (18900)	20.74	19.95	17.78	16.79
		1852.5 (18625)	20.73	19.87	17.72	16.84
10MHz	1RB-High (49)	1905 (19150)	21.80	20.78	19.82	16.76
		1880 (18900)	21.83	21.00	19.81	16.78
		1855 (18650)	21.58	20.98	19.62	16.81
	1RB-Middle (24)	1905 (19150)	21.69	20.95	19.78	16.90
		1880 (18900)	21.75	21.12	19.72	16.88
		1855 (18650)	21.74	20.91	18.82	16.89
	1RB-Low (0)	1905 (19150)	21.76	21.02	19.85	16.85
		1880 (18900)	21.73	21.10	18.90	16.86
		1855 (18650)	21.83	20.95	19.69	16.77
	25RB-High (25)	1905 (19150)	20.74	19.69	18.86	16.81
		1880 (18900)	20.82	19.79	17.84	16.77
		1855 (18650)	20.65	19.66	17.89	16.87
	25RB-Middle (12)	1905 (19150)	20.73	19.84	18.80	16.80
		1880 (18900)	20.83	19.71	17.69	16.84
		1855 (18650)	20.79	19.79	17.67	16.89
	25RB-Low (0)	1905 (19150)	20.94	19.74	18.82	16.89
		1880 (18900)	20.87	20.00	17.87	16.81
		1855 (18650)	20.78	19.76	17.82	16.92
	50RB (0)	1905 (19150)	20.93	19.88	18.95	16.82
		1880 (18900)	20.74	19.75	17.77	16.79
		1855 (18650)	20.76	19.89	17.74	16.77
15MHz	1RB-High (74)	1902.5 (19125)	21.78	20.90	19.82	16.77
		1880 (18900)	21.76	20.93	19.81	16.83
		1857.5 (18675)	21.67	20.92	19.70	16.83
	1RB-Middle (37)	1902.5 (19125)	21.63	21.06	19.71	16.90
		1880 (18900)	21.69	21.19	19.90	16.76
		1857.5 (18675)	21.60	21.02	18.74	16.88
	1RB-Low (0)	1902.5 (19125)	21.70	20.87	19.84	16.84
		1880 (18900)	21.79	21.00	18.87	16.80
		1857.5 (18675)	21.68	20.98	19.64	16.86
	36RB-High (38)	1902.5 (19125)	20.71	19.78	18.69	16.83
		1880 (18900)	20.72	19.91	17.82	16.77
		1857.5 (18675)	20.61	19.76	17.90	16.89
	36RB-Middle (19)	1902.5 (19125)	20.90	19.76	18.91	16.78
		1880 (18900)	20.79	19.82	17.72	16.89
		1857.5 (18675)	20.89	19.87	17.73	16.91

20MHz	36RB-Low (0)	1902.5 (19125)	20.87	19.86	18.82	16.80
		1880 (18900)	20.95	19.98	17.91	16.90
		1857.5 (18675)	20.84	19.94	17.76	16.80
	75RB (0)	1902.5 (19125)	20.85	19.88	18.86	16.75
		1880 (18900)	20.77	19.86	17.70	16.76
		1857.5 (18675)	20.79	19.87	17.74	16.93
	1RB-High (99)					
		1900 (19100)	21.71	20.88	19.75	16.83
		1880 (18900)	21.85	20.99	19.74	16.78
	1RB-Middle (50)	1860 (18700)	21.66	20.96	19.61	16.86
		1900 (19100)	21.65	21.00	19.72	16.87
		1880 (18900)	21.86	21.09	19.82	16.82
	1RB-Low (0)	1860 (18700)	21.70	20.93	18.72	16.78
		1900 (19100)	21.78	20.94	19.88	16.84
		1880 (18900)	21.81	21.00	18.85	16.80
	50RB-High (50)	1860 (18700)	21.77	20.91	19.64	16.87
		1900 (19100)	20.81	19.76	18.76	16.80
		1880 (18900)	20.80	19.82	17.80	16.82
	50RB-Middle (25)	1860 (18700)	20.70	19.70	17.82	16.74
		1900 (19100)	20.81	19.75	18.88	16.74
		1880 (18900)	20.99	19.81	17.71	16.78
	50RB-Low (0)	1860 (18700)	20.80	19.79	17.76	16.89
		1900 (19100)	20.96	19.84	18.87	16.76
		1880 (18900)	20.89	19.90	17.89	16.80
	100RB (0)	1860 (18700)	20.85	19.86	17.84	16.78
		1900 (19100)	20.93	19.87	18.85	16.86
		1880 (18900)	20.67	19.84	17.67	16.74
		1860 (18700)	20.79	19.84	17.78	16.79

LTE Band7- DS10 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2567.5 (21425)	20.90	20.24	18.95	16.23
		2535 (21100)	20.66	20.40	19.02	16.13
		2502.5 (20775)	20.65	20.20	19.09	16.18
	1RB-Middle (12)	2567.5 (21425)	20.57	20.19	19.05	16.17
		2535 (21100)	21.03	20.20	18.99	16.18
		2502.5 (20775)	20.67	20.05	18.93	16.24

	10MHz	1RB-Low (0)	2567.5 (21425)	20.85	20.07	19.10	16.04
			2535 (21100)	20.75	20.04	18.85	16.26
			2502.5 (20775)	20.78	20.24	19.15	16.11
		12RB-High (13)	2567.5 (21425)	19.98	19.08	18.06	16.17
			2535 (21100)	19.96	18.97	17.89	16.28
			2502.5 (20775)	20.06	19.04	17.98	16.27
		12RB-Middle (6)	2567.5 (21425)	20.13	18.94	18.22	16.14
			2535 (21100)	20.18	19.12	18.12	16.04
			2502.5 (20775)	20.00	19.04	18.06	16.07
		12RB-Low (0)	2567.5 (21425)	20.18	19.12	18.07	16.14
			2535 (21100)	19.84	18.79	18.07	16.17
			2502.5 (20775)	20.08	19.10	18.10	16.07
		25RB (0)	2567.5 (21425)	20.08	19.08	17.84	16.13
			2535 (21100)	19.81	19.09	17.89	16.05
			2502.5 (20775)	19.89	18.99	18.07	16.22
	15MHz	1RB-High (49)	2565 (21400)	20.94	20.07	19.16	16.04
			2535 (21100)	20.84	20.19	18.93	16.29
			2505 (20800)	20.79	20.08	19.17	16.12
		1RB-Middle (24)	2565 (21400)	20.66	20.08	19.12	16.11
			2535 (21100)	20.94	20.14	19.01	16.32
			2505 (20800)	20.80	19.98	18.95	16.04
		1RB-Low (0)	2565 (21400)	20.84	20.35	19.07	16.12
			2535 (21100)	20.73	20.12	18.93	16.18
			2505 (20800)	20.69	20.31	19.19	16.09
		25RB-High (25)	2565 (21400)	20.17	19.10	18.09	16.05
			2535 (21100)	19.93	18.89	17.92	16.15
			2505 (20800)	20.08	18.99	18.06	16.18
		25RB-Middle (12)	2565 (21400)	19.96	19.04	18.09	16.31
			2535 (21100)	20.05	18.93	17.88	16.13
			2505 (20800)	20.07	19.02	18.14	16.24
		25RB-Low (0)	2565 (21400)	20.03	19.14	18.02	16.21
			2535 (21100)	19.98	18.89	17.99	16.13
			2505 (20800)	19.95	19.14	18.05	16.29
		50RB (0)	2565 (21400)	20.16	19.07	18.05	16.08
			2535 (21100)	19.93	19.00	17.82	16.09
			2505 (20800)	19.89	18.95	18.02	16.18
	15MHz	1RB-High (74)	2562.5 (21375)	20.81	20.23	19.05	16.22
			2535 (21100)	20.75	20.30	19.03	16.25

		2507.5 (20825)	20.74	20.17	19.01	16.18
1RB-Middle (37)	2562.5 (21375)	20.66	20.25	19.14	16.04	
	2535 (21100)	20.93	20.12	19.09	16.06	
	2507.5 (20825)	20.61	19.99	18.86	16.31	
	2562.5 (21375)	20.93	20.17	19.08	16.22	
1RB-Low (0)	2535 (21100)	20.66	20.09	18.88	16.13	
	2507.5 (20825)	20.70	20.34	19.19	16.15	
	2562.5 (21375)	20.01	19.07	18.06	16.18	
36RB-High (38)	2535 (21100)	19.86	18.93	17.91	16.26	
	2507.5 (20825)	20.10	18.94	17.89	16.25	
	2562.5 (21375)	20.04	19.04	18.13	16.09	
36RB-Middle (19)	2535 (21100)	20.20	19.03	18.06	16.31	
	2507.5 (20825)	20.02	19.07	17.97	16.23	
	2562.5 (21375)	20.11	19.02	18.01	16.28	
36RB-Low (0)	2535 (21100)	19.82	18.87	17.97	16.10	
	2507.5 (20825)	20.01	19.17	18.00	16.24	
	2562.5 (21375)	20.03	19.05	17.90	16.20	
75RB (0)	2535 (21100)	19.91	19.00	17.81	16.18	
	2507.5 (20825)	19.91	19.06	18.07	16.19	
20MHz	1RB-High (99)	2560 (21350)	20.88	20.17	19.09	16.27
		2535 (21100)	20.78	20.24	19.03	16.15
		2510 (20850)	20.82	20.11	19.07	16.21
	1RB-Middle (50)	2560 (21350)	20.84	20.15	19.06	16.20
		2535 (21100)	20.89	20.11	18.99	16.19
		2510 (20850)	20.71	20.06	18.95	16.27
	1RB-Low (0)	2560 (21350)	20.83	20.25	19.07	16.14
		2535 (21100)	20.70	20.17	18.97	16.16
		2510 (20850)	20.79	20.25	19.12	16.11
	50RB-High (50)	2560 (21350)	20.08	19.01	18.08	16.17
		2535 (21100)	19.88	18.90	17.95	16.21
		2510 (20850)	20.00	18.96	17.97	16.22
	50RB-Middle (25)	2560 (21350)	20.05	19.05	18.11	16.11
		2535 (21100)	20.10	18.95	17.98	16.11
		2510 (20850)	19.98	19.01	18.05	16.04
	50RB-Low (0)	2560 (21350)	20.03	19.04	18.09	16.08
		2535 (21100)	19.90	18.94	17.93	16.21
		2510 (20850)	20.04	19.07	18.02	16.10
	100RB (0)	2560 (21350)	20.07	19.07	17.97	16.30
		2535 (21100)	19.95	18.96	17.83	16.23

		2510 (20850)	19.98	18.96	18.05	16.04

LTE Band7- DS1/2/4/5 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2567.5 (21425)	22.79	22.26	21.39	18.32
		2535 (21100)	22.89	22.23	20.89	18.10
		2502.5 (20775)	22.85	22.28	21.38	18.00
	1RB-Middle (12)	2567.5 (21425)	22.79	22.23	21.05	18.31
		2535 (21100)	22.94	22.14	21.14	18.00
		2502.5 (20775)	22.79	22.24	21.12	17.98
	1RB-Low (0)	2567.5 (21425)	22.89	22.17	21.02	18.19
		2535 (21100)	22.76	22.53	21.27	18.21
		2502.5 (20775)	23.06	22.20	21.26	18.26
	12RB-High (13)	2567.5 (21425)	22.02	20.86	20.03	18.07
		2535 (21100)	21.80	21.15	19.92	17.98
		2502.5 (20775)	22.08	21.07	19.97	18.19
	12RB-Middle (6)	2567.5 (21425)	21.98	21.04	20.07	18.36
		2535 (21100)	22.09	20.82	19.95	18.21
		2502.5 (20775)	22.22	21.18	20.15	18.05
	12RB-Low (0)	2567.5 (21425)	22.06	21.01	20.08	18.00
		2535 (21100)	22.06	21.01	19.83	18.07
		2502.5 (20775)	22.04	21.29	20.22	18.03
	25RB (0)	2567.5 (21425)	21.86	21.08	20.08	18.04
		2535 (21100)	21.91	20.86	19.98	18.20
		2502.5 (20775)	22.00	21.28	19.96	18.09
10MHz	1RB-High (49)	2565 (21400)	22.99	22.18	21.50	18.29
		2535 (21100)	22.70	22.08	21.00	18.21
		2505 (20800)	22.94	22.24	21.16	17.94
	1RB-Middle (24)	2565 (21400)	22.91	22.24	21.29	18.10
		2535 (21100)	23.02	22.33	21.37	17.98
		2505 (20800)	22.95	22.29	21.15	17.98
	1RB-Low (0)	2565 (21400)	22.69	22.09	21.26	18.40
		2535 (21100)	22.82	22.33	21.37	18.06
		2505 (20800)	22.88	22.33	21.22	18.11
	25RB-High (25)	2565 (21400)	21.88	21.00	19.91	18.16

	25RB-Middle (12)	2535 (21100)	22.03	20.93	19.84	18.06
		2505 (20800)	22.22	20.99	20.21	18.19
		2565 (21400)	22.09	21.14	20.02	18.33
		2535 (21100)	22.17	21.07	20.05	18.30
		2505 (20800)	22.10	21.10	20.11	18.12
		2565 (21400)	21.84	20.96	20.04	17.99
	25RB-Low (0)	2535 (21100)	21.86	20.86	20.02	18.19
		2505 (20800)	22.09	21.25	20.07	18.19
		2565 (21400)	21.99	20.97	19.95	18.06
	50RB (0)	2535 (21100)	21.97	21.13	20.05	18.07
		2505 (20800)	22.25	21.30	19.97	18.32
15MHz	1RB-High (74)	2562.5 (21375)	23.04	22.10	21.57	18.36
		2535 (21100)	22.77	22.13	21.03	18.19
		2507.5 (20825)	22.91	22.25	21.12	17.99
	1RB-Middle (37)	2562.5 (21375)	22.65	22.01	21.20	18.20
		2535 (21100)	22.95	22.30	21.36	17.88
		2507.5 (20825)	22.91	22.30	21.36	17.98
	1RB-Low (0)	2562.5 (21375)	22.97	22.00	21.29	18.32
		2535 (21100)	22.87	22.30	21.20	18.00
		2507.5 (20825)	22.96	22.21	21.40	18.13
	36RB-High (38)	2562.5 (21375)	21.96	21.07	19.99	18.29
		2535 (21100)	21.98	21.10	19.89	18.01
		2507.5 (20825)	22.06	20.99	20.14	18.24
	36RB-Middle (19)	2562.5 (21375)	22.03	20.91	19.97	18.33
		2535 (21100)	22.27	20.93	20.11	18.07
		2507.5 (20825)	22.04	21.09	20.20	18.15
	36RB-Low (0)	2562.5 (21375)	21.94	21.17	20.07	17.92
		2535 (21100)	21.90	20.99	19.97	17.98
		2507.5 (20825)	22.26	21.19	20.15	18.15
	75RB (0)	2562.5 (21375)	21.99	21.02	19.89	18.11
		2535 (21100)	21.97	21.03	19.88	18.25
		2507.5 (20825)	22.26	21.34	20.09	18.29
20MHz	1RB-High (99)					
		2560 (21350)	22.93	22.19	21.47	18.26
		2535 (21100)	22.79	22.08	21.04	18.13
	1RB-Middle (50)	2510 (20850)	22.88	22.38	21.24	18.08
		2560 (21350)	22.79	22.14	21.16	18.24
		2535 (21100)	22.98	22.19	21.28	18.00
		2510 (20850)	22.88	22.34	21.27	18.05

		2560 (21350)	22.82	22.13	21.15	18.28
	1RB-Low (0)	2535 (21100)	22.76	22.41	21.26	18.11
		2510 (20850)	22.97	22.27	21.31	18.16
	50RB-High (50)	2560 (21350)	21.96	20.98	20.05	18.14
		2535 (21100)	21.90	21.01	19.96	18.04
		2510 (20850)	22.14	21.11	20.09	18.15
	50RB-Middle (25)	2560 (21350)	22.06	21.06	20.01	18.26
		2535 (21100)	22.21	20.97	20.00	18.17
		2510 (20850)	22.10	21.17	20.11	18.20
	50RB-Low (0)	2560 (21350)	21.99	21.05	19.95	18.05
		2535 (21100)	21.99	21.00	19.97	18.05
		2510 (20850)	22.17	21.14	20.15	18.04
	100RB (0)	2560 (21350)	22.00	21.03	20.02	18.02
		2535 (21100)	21.95	21.00	20.03	18.21
		2510 (20850)	22.14	21.19	20.08	18.18

LTE Band7- DSI3 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2567.5 (21425)	18.71	18.03	16.95	14.11
		2535 (21100)	18.84	18.00	16.93	14.04
		2502.5 (20775)	18.69	18.10	16.85	14.06
	1RB-Middle (12)	2567.5 (21425)	18.70	17.96	17.12	14.09
		2535 (21100)	18.97	18.04	16.90	14.04
		2502.5 (20775)	18.61	18.09	16.93	14.07
	1RB-Low (0)	2567.5 (21425)	18.77	18.04	16.97	14.09
		2535 (21100)	18.85	17.78	16.87	14.08
		2502.5 (20775)	18.67	17.95	17.28	14.12
	12RB-High (13)	2567.5 (21425)	17.83	16.99	16.03	14.06
		2535 (21100)	17.92	16.89	15.98	14.05
		2502.5 (20775)	18.13	17.06	16.05	14.10
	12RB-Middle (6)	2567.5 (21425)	17.97	17.06	16.14	14.14
		2535 (21100)	17.93	16.94	15.97	14.02
		2502.5 (20775)	18.25	17.07	16.32	14.18
	12RB-Low (0)	2567.5 (21425)	18.04	16.82	16.14	14.07
		2535 (21100)	18.02	16.95	15.91	14.10
		2502.5 (20775)	18.13	17.17	16.15	14.13
	25RB (0)	2567.5 (21425)	17.81	17.09	15.96	14.08

		2535 (21100)	17.96	17.07	15.81	14.04
		2502.5 (20775)	18.04	17.14	16.24	14.03
10MHz	1RB-High (49)	2565 (21400)	18.75	18.06	16.85	14.13
		2535 (21100)	18.74	18.07	16.82	14.12
		2505 (20800)	18.73	18.14	16.90	14.13
	1RB-Middle (24)	2565 (21400)	18.69	18.19	17.00	14.10
		2535 (21100)	18.81	17.88	16.92	14.12
		2505 (20800)	18.74	18.02	16.92	14.14
	1RB-Low (0)	2565 (21400)	18.69	18.00	16.98	14.04
		2535 (21100)	18.73	18.03	16.92	14.03
		2505 (20800)	18.81	18.01	17.14	14.14
	25RB-High (25)	2565 (21400)	17.89	16.95	16.11	14.02
		2535 (21100)	17.88	17.05	16.07	14.15
		2505 (20800)	17.99	17.12	16.13	14.15
	25RB-Middle (12)	2565 (21400)	17.93	17.08	15.98	14.10
		2535 (21100)	18.15	17.06	16.02	14.04
		2505 (20800)	18.19	17.04	16.20	14.08
	25RB-Low (0)	2565 (21400)	17.98	16.92	16.06	14.06
		2535 (21100)	18.08	17.01	16.07	14.15
		2505 (20800)	18.01	17.08	16.13	14.17
	50RB (0)	2565 (21400)	18.04	17.02	15.96	14.15
		2535 (21100)	17.84	17.11	15.87	14.04
		2505 (20800)	18.16	16.99	16.15	14.03
15MHz	1RB-High (74)	2562.5 (21375)	18.71	18.11	17.00	14.10
		2535 (21100)	18.76	18.01	17.00	14.11
		2507.5 (20825)	18.78	18.13	16.84	14.08
	1RB-Middle (37)	2562.5 (21375)	18.68	18.05	17.03	14.02
		2535 (21100)	18.96	18.00	16.86	14.06
		2507.5 (20825)	18.71	18.18	16.89	14.18
	1RB-Low (0)	2562.5 (21375)	18.72	18.07	16.89	14.02
		2535 (21100)	18.80	17.84	16.85	14.07
		2507.5 (20825)	18.76	18.05	17.18	14.09
	36RB-High (38)	2562.5 (21375)	17.84	17.04	15.97	14.12
		2535 (21100)	17.85	16.91	15.96	14.14
		2507.5 (20825)	18.11	17.04	16.02	14.01
	36RB-Middle (19)	2562.5 (21375)	18.02	17.04	16.09	14.11
		2535 (21100)	18.03	16.96	16.02	14.05
		2507.5 (20825)	18.16	17.12	16.22	14.18

20MHz	36RB-Low (0)	2562.5 (21375)	18.04	16.92	16.12	14.02
		2535 (21100)	17.93	16.87	16.00	14.11
		2507.5 (20825)	18.11	17.12	16.22	14.15
	75RB (0)	2562.5 (21375)	17.87	17.03	15.93	14.08
		2535 (21100)	18.00	17.03	15.90	14.17
		2507.5 (20825)	17.96	17.08	16.14	14.16
	1RB-High (99)					
		2560 (21350)	18.80	18.10	16.92	14.03
		2535 (21100)	18.74	17.98	16.92	14.08
	1RB-Middle (50)	2510 (20850)	18.76	18.11	16.94	14.04
		2560 (21350)	18.78	18.09	16.93	14.15
		2535 (21100)	18.86	17.94	16.84	14.10
	1RB-Low (0)	2510 (20850)	18.80	18.12	16.94	14.11
		2560 (21350)	18.72	18.07	16.96	14.01
		2535 (21100)	18.74	17.94	16.82	14.16
		2510 (20850)	18.85	18.01	17.14	14.12
	50RB-High (50)	2560 (21350)	17.90	16.96	16.02	14.03
		2535 (21100)	17.92	16.96	16.00	14.18
		2510 (20850)	18.09	17.09	16.08	14.11
	50RB-Middle (25)	2560 (21350)	17.94	17.01	16.03	14.10
		2535 (21100)	18.13	16.98	16.00	14.10
		2510 (20850)	18.12	17.13	16.12	14.10
	50RB-Low (0)	2560 (21350)	18.01	16.99	16.04	14.06
		2535 (21100)	18.00	16.95	16.03	14.02
		2510 (20850)	18.09	17.12	16.22	14.05
	100RB (0)	2560 (21350)	17.95	17.04	15.88	14.03
		2535 (21100)	17.90	17.03	15.85	14.03
		2510 (20850)	18.06	17.09	16.08	14.06

LTE Band12- DS10/1/2/3/4/5 ANT2

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	715.3 (23173)	24.18	23.69	22.29	19.51
		707.5 (23095)	24.17	23.77	22.54	19.59
		699.7 (23017)	24.43	23.31	22.49	19.39
	1RB-Middle (3)	715.3 (23173)	24.29	23.72	22.34	19.56
		707.5 (23095)	24.46	23.72	22.48	19.53

	1RB-Low (0)	699.7 (23017)	24.34	23.71	22.36	19.50
		715.3 (23173)	24.38	23.84	22.75	19.54
		707.5 (23095)	24.10	23.63	22.47	19.41
		699.7 (23017)	24.29	23.95	22.59	19.45
	3RB-High (3)	715.3 (23173)	23.43	22.33	21.50	19.49
		707.5 (23095)	23.24	22.34	21.54	19.55
		699.7 (23017)	23.32	22.32	21.49	19.49
	3RB-Middle (1)	715.3 (23173)	23.49	22.34	21.55	19.47
		707.5 (23095)	23.61	22.53	21.42	19.28
		699.7 (23017)	23.31	22.56	21.42	19.53
	3RB-Low (0)	715.3 (23173)	23.37	22.23	21.41	19.41
		707.5 (23095)	23.39	22.21	21.50	19.29
		699.7 (23017)	23.32	22.43	21.64	19.40
	6RB (0)	715.3 (23173)	23.41	22.42	21.49	19.47
		707.5 (23095)	23.41	22.55	21.45	19.43
		699.7 (23017)	23.21	22.47	21.37	19.26
3MHz	1RB-High (14)					
		714.5 (23165)	24.26	23.74	22.21	19.30
		707.5 (23095)	24.20	23.74	22.63	19.51
	1RB-Middle (7)	700.5 (23025)	24.38	23.33	22.44	19.58
		714.5 (23165)	24.40	23.50	22.34	19.48
		707.5 (23095)	24.35	23.56	22.53	19.45
	1RB-Low (0)	700.5 (23025)	24.31	23.53	22.35	19.42
		714.5 (23165)	24.29	23.74	22.79	19.39
		707.5 (23095)	24.11	23.62	22.37	19.54
	8RB-High (7)	700.5 (23025)	24.38	23.81	22.60	19.37
		714.5 (23165)	23.35	22.51	21.49	19.28
		707.5 (23095)	23.52	22.28	21.42	19.49
	8RB-Middle (4)	700.5 (23025)	23.46	22.21	21.40	19.24
		714.5 (23165)	23.39	22.36	21.36	19.29
		707.5 (23095)	23.47	22.49	21.58	19.31
	8RB-Low (0)	700.5 (23025)	23.26	22.31	21.40	19.41
		714.5 (23165)	23.41	22.26	21.40	19.64
		707.5 (23095)	23.39	22.20	21.55	19.51
	15RB (0)	700.5 (23025)	23.27	22.53	21.61	19.35
		714.5 (23165)	23.48	22.50	21.59	19.51
		707.5 (23095)	23.53	22.40	21.34	19.33
		700.5 (23025)	23.31	22.37	21.60	19.46
5MHz	1RB-High (24)	713.5 (23155)	24.17	23.73	22.14	19.32

		707.5 (23095)	24.22	23.77	22.56	19.54
		701.5 (23035)	24.25	23.58	22.38	19.60
1RB-Middle (12)		713.5 (23155)	24.21	23.73	22.44	19.55
		707.5 (23095)	24.38	23.53	22.47	19.25
		701.5 (23035)	24.11	23.63	22.44	19.35
	1RB-Low (0)	713.5 (23155)	24.31	23.77	22.65	19.55
		707.5 (23095)	24.23	23.85	22.51	19.47
		701.5 (23035)	24.20	23.98	22.79	19.32
12RB-High (13)		713.5 (23155)	23.53	22.55	21.44	19.36
		707.5 (23095)	23.40	22.34	21.37	19.62
		701.5 (23035)	23.25	22.30	21.57	19.52
	12RB-Middle (6)	713.5 (23155)	23.36	22.37	21.33	19.55
		707.5 (23095)	23.46	22.58	21.34	19.42
		701.5 (23035)	23.41	22.48	21.38	19.67
12RB-Low (0)		713.5 (23155)	23.41	22.30	21.48	19.36
		707.5 (23095)	23.45	22.47	21.28	19.40
		701.5 (23035)	23.41	22.38	21.43	19.47
	25RB (0)	713.5 (23155)	23.59	22.36	21.63	19.49
		707.5 (23095)	23.36	22.56	21.53	19.32
		701.5 (23035)	23.45	22.33	21.53	19.24
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10MHz	1RB-High (49)	711 (23130)	24.20	23.69	22.25	19.43
		707.5 (23095)	24.26	23.73	22.58	19.52
		704 (23060)	24.28	23.43	22.40	19.50
	1RB-Middle (24)	711 (23130)	24.28	23.61	22.45	19.50
		707.5 (23095)	24.48	23.68	22.53	19.40
		704 (23060)	24.24	23.63	22.48	19.37
	1RB-Low (0)	711 (23130)	24.41	23.80	22.64	19.43
		707.5 (23095)	24.25	23.76	22.52	19.48
		704 (23060)	24.32	23.89	22.66	19.41
	25RB-High (25)	711 (23130)	23.42	22.42	21.41	19.34
		707.5 (23095)	23.39	22.40	21.42	19.47
		704 (23060)	23.33	22.36	21.42	19.38
	25RB-Middle (12)	711 (23130)	23.46	22.46	21.46	19.44
		707.5 (23095)	23.47	22.44	21.43	19.34
		704 (23060)	23.40	22.42	21.52	19.52
	25RB-Low (0)	711 (23130)	23.45	22.33	21.43	19.49
		707.5 (23095)	23.30	22.32	21.41	19.36
		704 (23060)	23.37	22.40	21.49	19.39
	50RB (0)	711 (23130)	23.45	22.44	21.53	19.42

		707.5 (23095)	23.44	22.45	21.47	19.37
		704 (23060)	23.36	22.36	21.49	19.39

LTE Band13- DS10/1/2/3/4/5 ANT2

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	784.5 (23255)	24.47	23.54	22.62	19.48
		782 (23230)	24.47	23.33	22.59	19.19
		779.5 (23205)	24.23	23.91	22.36	19.50
	1RB-Middle (12)	784.5 (23255)	24.19	23.63	22.48	19.29
		782 (23230)	24.44	23.59	22.75	19.22
		779.5 (23205)	24.15	23.80	22.34	19.40
	1RB-Low (0)	784.5 (23255)	24.24	23.67	22.60	19.27
		782 (23230)	24.28	23.35	22.69	19.27
		779.5 (23205)	24.26	23.85	22.38	19.37
	12RB-High (13)	784.5 (23255)	23.59	22.48	21.63	19.40
		782 (23230)	23.43	22.36	21.46	19.32
		779.5 (23205)	23.57	22.35	21.53	19.37
	12RB-Middle (6)	784.5 (23255)	23.33	22.59	21.50	19.47
		782 (23230)	23.62	22.43	21.30	19.52
		779.5 (23205)	23.56	22.59	21.51	19.43
	12RB-Low (0)	784.5 (23255)	23.43	22.45	21.41	19.54
		782 (23230)	23.37	22.39	21.44	19.26
		779.5 (23205)	23.47	22.46	21.36	19.43
	25RB (0)	784.5 (23255)	23.34	22.46	21.35	19.48
		782 (23230)	23.32	22.39	21.50	19.43
		779.5 (23205)	23.50	22.22	21.63	19.42
10MHz	1RB-High (49)	782 (23230)	24.34	23.61	22.57	19.41
	1RB-Middle (24)	782 (23230)	24.36	23.44	22.68	19.33
	1RB-Low (0)	782 (23230)	24.29	23.88	22.47	19.46
	25RB-High (25)	782 (23230)	23.46	22.45	21.49	19.38
	25RB-Middle (12)	782 (23230)	23.49	22.40	21.44	19.44
	25RB-Low (0)	782 (23230)	23.42	22.45	21.46	19.37
	50RB (0)	782 (23230)	23.43	22.35	21.49	19.45

LTE Band25- DSIO/1/2/3/4/5 ANT1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	23.72	22.90	21.63	18.72
		1882.5 (26365)	23.62	22.80	21.71	18.75
		1850.7 (26047)	23.51	23.17	21.79	18.81
	1RB-Middle (3)	1914.3 (26683)	23.47	22.85	21.75	18.58
		1882.5 (26365)	23.70	22.70	21.82	19.00
		1850.7 (26047)	23.62	22.90	21.63	18.77
	1RB-Low (0)	1914.3 (26683)	23.40	22.64	21.77	18.67
		1882.5 (26365)	23.50	23.03	21.78	18.65
		1850.7 (26047)	23.65	22.92	21.77	18.90
	3RB-High (3)	1914.3 (26683)	22.55	21.53	20.53	18.71
		1882.5 (26365)	22.57	21.71	20.84	18.81
		1850.7 (26047)	22.77	21.85	20.68	18.92
	3RB-Middle (1)	1914.3 (26683)	22.64	21.64	20.82	18.60
		1882.5 (26365)	22.88	21.76	20.88	18.55
		1850.7 (26047)	22.75	21.71	20.67	18.97
	3RB-Low (0)	1914.3 (26683)	22.51	21.61	20.63	18.89
		1882.5 (26365)	22.81	21.72	20.61	18.62
		1850.7 (26047)	22.84	21.61	20.70	18.73
	6RB (0)	1914.3 (26683)	22.51	21.75	20.72	18.70
		1882.5 (26365)	22.54	21.77	20.86	19.07
		1850.7 (26047)	22.63	21.67	20.58	18.90
3MHz	1RB-High (14)	1913.5 (26675)	23.58	22.80	21.73	18.73
		1882.5 (26365)	23.45	22.63	21.70	18.96
		1851.5 (26055)	23.48	23.06	21.79	19.01
	1RB-Middle (7)	1913.5 (26675)	23.42	22.81	21.73	18.81
		1882.5 (26365)	23.50	22.69	21.83	18.94
		1851.5 (26055)	23.61	22.80	21.80	18.72
	1RB-Low (0)	1913.5 (26675)	23.56	22.83	21.82	18.51
		1882.5 (26365)	23.72	22.99	21.73	18.68
		1851.5 (26055)	23.73	22.97	21.78	18.84
	8RB-High (7)	1913.5 (26675)	22.66	21.75	20.78	18.73
		1882.5 (26365)	22.73	21.70	20.71	18.77
		1851.5 (26055)	22.60	21.83	20.76	18.85
	8RB-Middle (4)	1913.5 (26675)	22.55	21.60	20.62	18.54

	8RB-Low (0)	1882.5 (26365)	22.74	21.74	20.82	18.62
		1851.5 (26055)	22.60	21.63	20.70	18.95
		1913.5 (26675)	22.74	21.54	20.56	18.84
		1882.5 (26365)	22.57	21.61	20.81	18.86
		1851.5 (26055)	22.79	21.91	20.64	18.73
	15RB (0)	1913.5 (26675)	22.60	21.87	20.89	18.66
		1882.5 (26365)	22.58	21.81	20.66	18.79
		1851.5 (26055)	22.70	21.69	20.68	18.81
5MHz	1RB-High (24)	1912.5 (26665)	23.78	22.96	21.71	18.82
		1882.5 (26365)	23.51	22.62	22.00	18.72
		1852.5 (26065)	23.49	23.12	21.74	18.96
	1RB-Middle (12)	1912.5 (26665)	23.39	22.84	21.52	18.56
		1882.5 (26365)	23.58	22.83	21.76	18.87
		1852.5 (26065)	23.70	23.07	21.65	18.65
	1RB-Low (0)	1912.5 (26665)	23.49	22.64	21.65	18.69
		1882.5 (26365)	23.67	23.06	21.90	18.51
		1852.5 (26065)	23.61	22.87	21.67	18.74
	12RB-High (13)	1912.5 (26665)	22.80	21.83	20.75	18.50
		1882.5 (26365)	22.62	21.78	20.63	18.95
		1852.5 (26065)	22.77	21.69	20.54	18.87
	12RB-Middle (6)	1912.5 (26665)	22.63	21.74	20.63	18.66
		1882.5 (26365)	22.78	21.89	20.90	18.59
		1852.5 (26065)	22.81	21.68	20.65	18.93
	12RB-Low (0)	1912.5 (26665)	22.54	21.63	20.54	18.76
		1882.5 (26365)	22.78	21.54	20.68	18.75
		1852.5 (26065)	22.82	21.81	20.69	18.85
	25RB (0)	1912.5 (26665)	22.71	21.91	20.64	18.58
		1882.5 (26365)	22.83	21.63	20.74	18.89
		1852.5 (26065)	22.80	21.69	20.67	18.89
10MHz	1RB-High (49)	1910 (26640)	23.75	22.80	21.87	18.73
		1882.5 (26365)	23.48	22.82	21.91	18.87
		1855 (26090)	23.52	22.99	21.71	18.92
	1RB-Middle (24)	1910 (26640)	23.52	22.90	21.76	18.67
		1882.5 (26365)	23.71	22.85	21.60	18.83
		1855 (26090)	23.53	23.03	21.60	18.52
	1RB-Low (0)	1910 (26640)	23.35	22.66	21.85	18.46
		1882.5 (26365)	23.51	23.01	21.97	18.51
		1855 (26090)	23.54	22.74	21.86	18.67

		1910 (26640)	22.61	21.61	20.79	18.72
	25RB-High (25)	1882.5 (26365)	22.59	21.60	20.64	18.76
		1855 (26090)	22.71	21.65	20.55	18.84
		1910 (26640)	22.55	21.49	20.73	18.53
	25RB-Middle (12)	1882.5 (26365)	22.74	21.82	20.69	18.57
		1855 (26090)	22.62	21.55	20.62	19.00
		1910 (26640)	22.53	21.50	20.68	18.88
	25RB-Low (0)	1882.5 (26365)	22.66	21.74	20.73	18.65
		1855 (26090)	22.77	21.84	20.83	18.88
		1910 (26640)	22.75	21.82	20.72	18.67
	50RB (0)	1882.5 (26365)	22.77	21.76	20.78	18.98
		1855 (26090)	22.80	21.79	20.51	18.90
		1907.5 (26615)	23.75	22.86	21.83	18.69
	1RB-High (74)	1882.5 (26365)	23.38	22.79	21.93	18.70
		1857.5 (26115)	23.36	23.16	21.87	18.82
		1907.5 (26615)	23.39	22.92	21.55	18.66
	1RB-Middle (37)	1882.5 (26365)	23.73	22.80	21.71	18.84
		1857.5 (26115)	23.60	22.83	21.79	18.75
		1907.5 (26615)	23.42	22.70	21.86	18.57
	1RB-Low (0)	1882.5 (26365)	23.58	23.01	21.75	18.60
		1857.5 (26115)	23.73	22.90	21.91	18.73
		1907.5 (26615)	22.56	21.56	20.68	18.59
	36RB-High (38)	1882.5 (26365)	22.65	21.57	20.78	18.90
		1857.5 (26115)	22.82	21.65	20.69	18.74
		1907.5 (26615)	22.59	21.63	20.60	18.55
	36RB-Middle (19)	1882.5 (26365)	22.94	21.95	20.93	18.57
		1857.5 (26115)	22.82	21.58	20.85	18.87
		1907.5 (26615)	22.59	21.55	20.59	18.87
	36RB-Low (0)	1882.5 (26365)	22.60	21.66	20.80	18.91
		1857.5 (26115)	22.68	21.62	20.76	18.65
		1907.5 (26615)	22.54	21.67	20.67	18.68
	75RB (0)	1882.5 (26365)	22.83	21.80	20.79	18.77
		1857.5 (26115)	22.78	21.64	20.60	18.97
		1905 (26590)	23.64	22.94	21.74	18.70
	1RB-High (99)	1882.5 (26365)	23.52	22.76	21.85	18.81
		1860 (26140)	23.51	23.04	21.86	18.90
		1905 (26590)	23.49	22.81	21.67	18.71
	1RB-Middle (50)	1882.5 (26365)	23.65	22.83	21.73	18.93

		1860 (26140)	23.62	22.94	21.75	18.62
1RB-Low (0)	1905 (26590)	23.50	22.73	21.79	18.59	
	1882.5 (26365)	23.61	22.96	21.87	18.66	
	1860 (26140)	23.64	22.87	21.81	18.77	
50RB-High (50)	1905 (26590)	22.68	21.68	20.68	18.60	
	1882.5 (26365)	22.72	21.66	20.77	18.88	
	1860 (26140)	22.75	21.74	20.61	18.80	
50RB-Middle (25)	1905 (26590)	22.63	21.63	20.74	18.59	
	1882.5 (26365)	22.79	21.82	20.81	18.55	
	1860 (26140)	22.70	21.62	20.75	18.95	
50RB-Low (0)	1905 (26590)	22.65	21.54	20.65	18.82	
	1882.5 (26365)	22.72	21.65	20.74	18.77	
	1860 (26140)	22.78	21.76	20.73	18.74	
100RB (0)	1905 (26590)	22.65	21.76	20.74	18.67	
	1882.5 (26365)	22.69	21.76	20.76	18.92	
	1860 (26140)	22.72	21.66	20.64	18.91	

LTE Band26- DS10/1/2/3/4/5 ANT2

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	848.3 (27033)	24.09	23.44	22.23	19.53
		831.5 (26865)	24.44	23.49	22.61	19.38
		814.7 (26697)	24.32	23.54	22.44	19.30
	1RB-Middle (3)	848.3 (27033)	24.44	23.76	22.32	19.56
		831.5 (26865)	24.55	23.60	22.79	19.58
		814.7 (26697)	24.54	23.73	22.49	19.38
	1RB-Low (0)	848.3 (27033)	24.37	23.76	22.46	19.46
		831.5 (26865)	24.36	23.88	22.73	19.38
		814.7 (26697)	24.32	23.67	22.79	19.45
	3RB-High (3)	848.3 (27033)	23.46	22.33	21.50	19.46
		831.5 (26865)	23.33	22.49	21.50	19.46
		814.7 (26697)	23.53	22.45	21.46	19.44
	3RB-Middle (1)	848.3 (27033)	23.47	22.24	21.38	19.69
		831.5 (26865)	23.56	22.49	21.58	19.42
		814.7 (26697)	23.41	22.59	21.45	19.61
	3RB-Low (0)	848.3 (27033)	23.56	22.42	21.53	19.42
		831.5 (26865)	23.36	22.56	21.39	19.43
		814.7 (26697)	23.56	22.36	21.24	19.30

	6RB (0)	848.3 (27033)	23.53	22.36	21.53	19.52	
		831.5 (26865)	23.43	22.29	21.26	19.52	
		814.7 (26697)	23.62	22.42	21.30	19.28	
	3MHz						
		1RB-High (14)	847.5 (27025)	24.19	23.50	22.34	19.57
			831.5 (26865)	24.23	23.50	22.42	19.55
			815.5 (26705)	24.21	23.55	22.60	19.58
		1RB-Middle (7)	847.5 (27025)	24.31	23.67	22.55	19.75
			831.5 (26865)	24.32	23.72	22.66	19.45
			815.5 (26705)	24.33	23.73	22.61	19.24
		1RB-Low (0)	847.5 (27025)	24.44	23.72	22.48	19.50
			831.5 (26865)	24.32	23.69	22.65	19.48
			815.5 (26705)	24.52	23.79	22.60	19.57
		8RB-High (7)	847.5 (27025)	23.50	22.28	21.27	19.46
			831.5 (26865)	23.24	22.43	21.42	19.24
			815.5 (26705)	23.46	22.57	21.70	19.34
		8RB-Middle (4)	847.5 (27025)	23.62	22.29	21.36	19.67
			831.5 (26865)	23.69	22.53	21.51	19.63
			815.5 (26705)	23.37	22.65	21.54	19.60
		8RB-Low (0)	847.5 (27025)	23.53	22.49	21.52	19.38
			831.5 (26865)	23.40	22.45	21.38	19.37
			815.5 (26705)	23.57	22.35	21.51	19.54
		15RB (0)	847.5 (27025)	23.47	22.62	21.60	19.61
			831.5 (26865)	23.41	22.38	21.49	19.53
			815.5 (26705)	23.42	22.50	21.41	19.37
	5MHz						
		1RB-High (24)	846.5 (27015)	24.25	23.41	22.22	19.54
			831.5 (26865)	24.40	23.65	22.57	19.48
			816.5 (26715)	24.27	23.71	22.41	19.32
		1RB-Middle (12)	846.5 (27015)	24.41	23.73	22.58	19.61
			831.5 (26865)	24.33	23.83	22.74	19.47
			816.5 (26715)	24.53	23.68	22.50	19.28
		1RB-Low (0)	846.5 (27015)	24.52	23.73	22.48	19.21
			831.5 (26865)	24.27	23.77	22.64	19.20
			816.5 (26715)	24.38	23.76	22.72	19.61
		12RB-High (13)	846.5 (27015)	23.44	22.19	21.44	19.45
			831.5 (26865)	23.32	22.51	21.39	19.25
			816.5 (26715)	23.48	22.34	21.60	19.30
		12RB-Middle (6)	846.5 (27015)	23.57	22.34	21.49	19.64
			831.5 (26865)	23.62	22.41	21.31	19.61

		816.5 (26715)	23.51	22.66	21.63	19.52
12RB-Low (0)		846.5 (27015)	23.32	22.43	21.51	19.42
		831.5 (26865)	23.27	22.51	21.55	19.54
		816.5 (26715)	23.39	22.41	21.35	19.28
		846.5 (27015)	23.23	22.51	21.62	19.41
25RB (0)		831.5 (26865)	23.16	22.42	21.45	19.48
		816.5 (26715)	23.42	22.47	21.46	19.46
10MHz	1RB-High (49)	844 (26990)	24.11	23.57	22.26	19.46
		831.5 (26865)	24.26	23.54	22.49	19.64
		820 (26750)	24.24	23.59	22.41	19.55
	1RB-Middle (24)	844 (26990)	24.43	23.70	22.42	19.76
		831.5 (26865)	24.42	23.65	22.65	19.66
		820 (26750)	24.27	23.79	22.49	19.37
	1RB-Low (0)	844 (26990)	24.30	23.76	22.50	19.47
		831.5 (26865)	24.33	23.88	22.80	19.38
		820 (26750)	24.47	23.76	22.72	19.41
	25RB-High (25)	844 (26990)	23.32	22.37	21.35	19.64
		831.5 (26865)	23.44	22.34	21.58	19.42
		820 (26750)	23.51	22.29	21.59	19.47
	25RB-Middle (12)	844 (26990)	23.66	22.36	21.42	19.63
		831.5 (26865)	23.44	22.33	21.44	19.63
		820 (26750)	23.46	22.63	21.63	19.74
	25RB-Low (0)	844 (26990)	23.39	22.32	21.34	19.46
		831.5 (26865)	23.43	22.45	21.50	19.59
		820 (26750)	23.52	22.35	21.50	19.54
	50RB (0)	844 (26990)	23.43	22.56	21.56	19.59
		831.5 (26865)	23.19	22.35	21.28	19.42
		820 (26750)	23.56	22.65	21.55	19.38
15MHz	1RB-High (74)	841.5 (26965)	24.18	23.43	22.35	19.49
		831.5 (26865)	24.30	23.63	22.46	19.51
		822.5 (26775)	24.24	23.64	22.46	19.43
	1RB-Middle (37)	841.5 (26965)	24.43	23.64	22.47	19.62
		831.5 (26865)	24.45	23.70	22.65	19.60
		822.5 (26775)	24.41	23.72	22.56	19.36
	1RB-Low (0)	841.5 (26965)	24.44	23.73	22.58	19.36
		831.5 (26865)	24.42	23.80	22.66	19.34
		822.5 (26775)	24.39	23.77	22.69	19.47
	36RB-High (38)	841.5 (26965)	23.42	22.34	21.42	19.49

		831.5 (26865)	23.39	22.40	21.46	19.36
		822.5 (26775)	23.50	22.43	21.55	19.36
36RB-Middle (19)	36RB-Middle (19)	841.5 (26965)	23.53	22.39	21.37	19.59
		831.5 (26865)	23.58	22.41	21.44	19.56
		822.5 (26775)	23.50	22.53	21.53	19.62
	36RB-Low (0)	841.5 (26965)	23.46	22.41	21.39	19.36
		831.5 (26865)	23.35	22.48	21.42	19.48
		822.5 (26775)	23.46	22.40	21.39	19.42
75RB (0)	75RB (0)	841.5 (26965)	23.38	22.49	21.50	19.49
		831.5 (26865)	23.30	22.35	21.34	19.48
		822.5 (26775)	23.53	22.55	21.45	19.42

LTE Band41 PC2- DS10 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2687.5 (41565)	23.37	22.88	21.35	18.34
		2640.3(41093)	23.33	22.75	21.33	18.49
		2593 (40620)	23.11	22.58	21.38	18.42
		2545.8(40148)	23.30	22.73	21.46	18.24
		2498.5 (39675)	23.18	22.38	21.04	18.27
	1RB-Middle (12)	2687.5 (41565)	23.43	22.50	21.53	18.46
		2640.3(41093)	23.24	22.64	21.51	18.33
		2593 (40620)	23.61	22.50	21.36	18.63
		2545.8(40148)	23.14	22.47	21.34	18.61
		2498.5 (39675)	23.15	22.44	21.14	18.30
	1RB-Low (0)	2687.5 (41565)	23.37	22.97	21.78	18.39
		2640.3(41093)	23.35	22.82	21.44	18.41
		2593 (40620)	23.28	22.84	21.56	18.48
		2545.8(40148)	23.07	22.58	21.30	18.24
		2498.5 (39675)	23.10	22.37	21.32	18.45
	12RB-High (13)	2687.5 (41565)	22.44	21.70	20.57	18.39
		2640.3(41093)	22.63	21.58	20.38	18.31
		2593 (40620)	22.48	21.11	20.39	18.59
		2545.8(40148)	22.19	21.35	20.19	18.27
		2498.5 (39675)	22.13	21.15	20.11	18.40
	12RB-Middle (6)	2687.5 (41565)	22.50	21.44	20.58	18.34
		2640.3(41093)	22.54	21.69	20.65	18.23
		2593 (40620)	22.57	21.55	20.55	18.36

	12RB-Low (0)	2545.8(40148)	22.24	21.51	20.57	18.35
		2498.5 (39675)	22.26	21.28	20.37	18.42
		2687.5 (41565)	22.81	21.79	20.78	18.59
		2640.3(41093)	22.56	21.34	20.63	18.61
		2593 (40620)	22.38	21.31	20.42	18.31
		2545.8(40148)	22.31	21.53	20.33	18.58
	25RB (0)	2498.5 (39675)	22.39	21.30	20.35	18.30
		2687.5 (41565)	22.69	21.48	20.71	18.52
		2640.3(41093)	22.56	21.53	20.51	18.47
		2593 (40620)	22.29	21.45	20.42	18.32
		2545.8(40148)	22.40	21.29	20.17	18.56
10MHz	1RB-High (49)	2498.5 (39675)	22.05	21.16	20.04	18.56
		2685 (41540)	23.47	22.76	21.54	18.61
		2639(41080)	23.39	22.76	21.43	18.38
		2593 (40620)	23.18	22.55	21.18	18.62
	1RB-Middle (24)	2547(40160)	23.14	22.55	21.40	18.23
		2501 (39700)	23.17	22.32	21.05	18.62
		2685 (41540)	23.24	22.78	21.47	18.28
		2639(41080)	23.25	22.63	21.37	18.32
		2593 (40620)	23.45	22.49	21.33	18.63
	1RB-Low (0)	2547(40160)	23.19	22.53	21.32	18.38
		2501 (39700)	23.05	22.42	21.22	18.60
		2685 (41540)	23.43	22.99	21.83	18.59
		2639(41080)	23.44	22.72	21.56	18.42
		2593 (40620)	23.47	22.64	21.42	18.53
	25RB-High (25)	2547(40160)	23.15	22.45	21.31	18.37
		2501 (39700)	23.08	22.27	21.30	18.24
		2685 (41540)	22.54	21.38	20.40	18.59
		2639(41080)	22.44	21.40	20.52	18.50
		2593 (40620)	22.23	21.21	20.35	18.46
	25RB-Middle (12)	2547(40160)	22.39	21.33	20.37	18.28
		2501 (39700)	22.20	21.22	20.14	18.45
		2685 (41540)	22.56	21.67	20.65	18.42
		2639(41080)	22.36	21.46	20.58	18.47
		2593 (40620)	22.61	21.37	20.54	18.59
	25RB-Low (0)	2547(40160)	22.34	21.25	20.40	18.32
		2501 (39700)	22.23	21.14	20.32	18.46

15MHz	50RB (0)	2593 (40620)	22.53	21.57	20.53	18.61
		2547(40160)	22.39	21.30	20.36	18.41
		2501 (39700)	22.17	21.32	20.16	18.51
	50RB (0)	2685 (41540)	22.52	21.48	20.48	18.22
		2639(41080)	22.50	21.43	20.43	18.36
		2593 (40620)	22.35	21.38	20.34	18.62
		2547(40160)	22.22	21.27	20.16	18.25
		2501 (39700)	22.16	21.02	20.31	18.33
	1RB-High (74)					
		2682.5 (41515)	23.47	22.80	21.41	18.28
		2637.8(41068)	23.22	22.77	21.34	18.31
		2593 (40620)	23.18	22.52	21.36	18.32
		2548.3(40173)	23.27	22.63	21.44	18.26
		2503.5 (39725)	23.10	22.47	21.11	18.37
		2682.5 (41515)	23.38	22.57	21.48	18.26
		2637.8(41068)	23.26	22.59	21.47	18.62
		2593 (40620)	23.61	22.40	21.30	18.59
		2548.3(40173)	23.12	22.47	21.37	18.37
	1RB-Middle (37)	2503.5 (39725)	23.05	22.31	21.18	18.49
	1RB-Low (0)	2682.5 (41515)	23.44	23.00	21.81	18.25
		2637.8(41068)	23.29	22.68	21.52	18.36
		2593 (40620)	23.33	22.73	21.43	18.56
		2548.3(40173)	23.06	22.57	21.40	18.32
	36RB-High (38)	2503.5 (39725)	23.11	22.34	21.23	18.26
		2682.5 (41515)	22.47	21.56	20.47	18.62
		2637.8(41068)	22.55	21.58	20.40	18.22
		2593 (40620)	22.40	21.19	20.30	18.40
		2548.3(40173)	22.16	21.42	20.23	18.59
	36RB-Middle (19)	2503.5 (39725)	22.02	21.16	20.02	18.33
		2682.5 (41515)	22.49	21.49	20.60	18.51
		2637.8(41068)	22.59	21.57	20.56	18.42
		2593 (40620)	22.66	21.49	20.41	18.30
		2548.3(40173)	22.21	21.45	20.44	18.48
	36RB-Low (0)	2503.5 (39725)	22.15	21.37	20.22	18.61
		2682.5 (41515)	22.66	21.66	20.64	18.48
		2637.8(41068)	22.56	21.42	20.52	18.51
		2593 (40620)	22.36	21.36	20.39	18.50
		2548.3(40173)	22.28	21.40	20.32	18.25
	75RB (0)	2503.5 (39725)	22.29	21.29	20.29	18.53
		2682.5 (41515)	22.66	21.55	20.57	18.54

		2637.8(41068)	22.55	21.59	20.40	18.63
		2593 (40620)	22.29	21.52	20.30	18.35
		2548.3(40173)	22.28	21.39	20.15	18.53
		2503.5 (39725)	22.04	21.06	20.14	18.23
20MHz	1RB-High (99)	2680 (41490)	23.32	22.73	21.50	18.25
		2636.5(41055)	23.32	22.64	21.42	18.54
		2593 (40620)	23.18	22.49	21.27	18.23
		2549.5(40185)	23.19	22.57	21.30	18.47
		2506 (39750)	23.03	22.39	21.14	18.49
	1RB-Middle (50)	2680 (41490)	23.33	22.66	21.56	18.44
		2636.5(41055)	23.21	22.59	21.37	18.57
		2593 (40620)	23.55	22.49	21.39	18.27
		2549.5(40185)	23.14	22.45	21.31	18.46
		2506 (39750)	23.04	22.28	21.12	18.48
	1RB-Low (0)	2680 (41490)	23.53	22.87	21.75	18.22
		2636.5(41055)	23.34	22.67	21.54	18.50
		2593 (40620)	23.36	22.73	21.51	18.29
		2549.5(40185)	23.09	22.44	21.27	18.44
		2506 (39750)	22.99	22.35	21.22	18.29
	50RB-High (50)	2680 (41490)	22.47	21.45	20.43	18.52
		2636.5(41055)	22.40	21.44	20.47	18.29
		2593 (40620)	22.25	21.27	20.31	18.35
		2549.5(40185)	22.25	21.30	20.32	18.45
		2506 (39750)	22.10	21.11	20.11	18.59
	50RB-Middle (25)	2680 (41490)	22.56	21.59	20.57	18.44
		2636.5(41055)	22.45	21.50	20.54	18.58
		2593 (40620)	22.63	21.42	20.42	18.44
		2549.5(40185)	22.23	21.30	20.31	18.40
		2506 (39750)	22.17	21.22	20.24	18.37
	50RB-Low (0)	2680 (41490)	22.62	21.59	20.61	18.44
		2636.5(41055)	22.43	21.49	20.46	18.39
		2593 (40620)	22.38	21.45	20.42	18.27
		2549.5(40185)	22.31	21.30	20.33	18.35
		2506 (39750)	22.14	21.19	20.21	18.30
	100RB (0)	2680 (41490)	22.51	21.57	20.58	18.22
		2636.5(41055)	22.44	21.52	20.49	18.32
		2593 (40620)	22.34	21.46	20.40	18.45
		2549.5(40185)	22.29	21.30	20.25	18.27
		2506 (39750)	22.09	21.11	20.16	18.63

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LTE Band41 PC2- DS1/2/4/5 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2687.5 (41565)	25.60	24.72	23.64	19.50
		2640.3(41093)	25.55	25.02	23.71	19.63
		2593 (40620)	25.37	24.87	23.68	19.78
		2545.8(40148)	25.28	24.85	23.61	19.81
		2498.5 (39675)	25.36	24.61	23.71	19.41
	1RB-Middle (12)	2687.5 (41565)	25.62	24.90	23.79	19.62
		2640.3(41093)	25.70	24.84	23.87	19.60
		2593 (40620)	25.54	24.94	23.80	19.91
		2545.8(40148)	25.46	24.67	23.53	19.67
		2498.5 (39675)	25.50	24.78	23.56	19.76
	1RB-Low (0)	2687.5 (41565)	25.49	24.77	24.05	19.57
		2640.3(41093)	25.61	25.04	23.91	19.70
		2593 (40620)	25.52	25.00	23.84	19.55
		2545.8(40148)	25.35	24.80	23.51	19.96
		2498.5 (39675)	25.36	24.83	23.59	19.66
	12RB-High (13)	2687.5 (41565)	24.53	23.71	22.66	19.81
		2640.3(41093)	24.65	23.69	22.74	19.83
		2593 (40620)	24.56	23.75	22.57	19.67
		2545.8(40148)	24.53	23.45	22.52	20.00
		2498.5 (39675)	24.69	23.56	22.58	19.91
	12RB-Middle (6)	2687.5 (41565)	24.79	23.63	22.68	19.94
		2640.3(41093)	24.68	23.87	22.61	19.85
		2593 (40620)	24.64	23.48	22.58	19.57
		2545.8(40148)	24.82	23.57	22.53	19.56
		2498.5 (39675)	24.50	23.63	22.44	19.70
	12RB-Low (0)	2687.5 (41565)	24.65	23.73	22.71	20.01
		2640.3(41093)	24.61	23.76	22.83	19.75
		2593 (40620)	24.81	23.89	22.67	19.45
		2545.8(40148)	24.68	23.41	22.56	19.35
		2498.5 (39675)	24.56	23.70	22.47	19.49
	25RB (0)	2687.5 (41565)	24.67	23.60	22.62	19.76
		2640.3(41093)	24.83	23.69	22.71	19.83
		2593 (40620)	24.72	23.58	22.86	19.54

		2545.8(40148)	24.64	23.57	22.55	19.53
		2498.5 (39675)	24.39	23.71	22.56	19.48
10MHz	1RB-High (49)	2685 (41540)	25.61	24.92	23.70	19.79
		2639(41080)	25.67	25.09	23.92	19.53
		2593 (40620)	25.49	24.83	23.69	19.68
		2547(40160)	25.37	24.70	23.82	19.67
		2501 (39700)	25.49	24.80	23.50	19.49
	1RB-Middle (24)	2685 (41540)	25.56	24.91	23.63	19.72
		2639(41080)	25.46	24.91	23.87	19.68
		2593 (40620)	25.51	24.81	23.58	19.95
		2547(40160)	25.62	24.62	23.75	19.68
		2501 (39700)	25.64	24.81	23.61	19.77
	1RB-Low (0)	2685 (41540)	25.50	25.07	23.89	19.60
		2639(41080)	25.68	24.91	23.85	19.69
		2593 (40620)	25.52	25.14	23.98	19.55
		2547(40160)	25.29	24.82	23.67	19.90
		2501 (39700)	25.27	24.79	23.54	19.59
	25RB-High (25)	2685 (41540)	24.39	23.63	22.41	19.88
		2639(41080)	24.55	23.59	22.61	19.62
		2593 (40620)	24.69	23.76	22.58	19.87
		2547(40160)	24.60	23.53	22.58	19.81
		2501 (39700)	24.66	23.46	22.42	19.89
	25RB-Middle (12)	2685 (41540)	24.57	23.87	22.79	19.82
		2639(41080)	24.71	23.72	22.59	19.86
		2593 (40620)	24.79	23.57	22.44	19.59
		2547(40160)	24.86	23.57	22.59	19.52
		2501 (39700)	24.40	23.60	22.42	19.79
	25RB-Low (0)	2685 (41540)	24.70	23.79	22.56	19.92
		2639(41080)	24.55	23.62	22.78	19.55
		2593 (40620)	24.56	23.85	22.52	19.54
		2547(40160)	24.50	23.42	22.48	19.53
		2501 (39700)	24.51	23.64	22.56	19.65
	50RB (0)	2685 (41540)	24.76	23.69	22.57	19.80
		2639(41080)	24.73	23.62	22.77	19.83
		2593 (40620)	24.60	23.71	22.69	19.76
		2547(40160)	24.40	23.43	22.54	19.49
		2501 (39700)	24.55	23.42	22.63	19.47
15MHz	1RB-High (74)	2682.5 (41515)	25.43	24.81	23.92	19.72

		2637.8(41068)	25.41	24.95	23.88	19.53
		2593 (40620)	25.52	24.90	23.63	19.62
		2548.3(40173)	25.31	24.71	23.57	19.77
		2503.5 (39725)	25.37	24.64	23.51	19.60
1RB-Middle (37)		2682.5 (41515)	25.57	24.73	23.85	19.80
		2637.8(41068)	25.54	24.88	23.84	19.79
		2593 (40620)	25.55	24.76	23.50	19.66
		2548.3(40173)	25.64	24.74	23.65	19.67
		2503.5 (39725)	25.43	24.65	23.56	19.79
1RB-Low (0)		2682.5 (41515)	25.54	24.77	24.10	19.67
		2637.8(41068)	25.66	24.87	23.95	19.80
		2593 (40620)	25.57	24.84	23.95	19.61
		2548.3(40173)	25.50	24.59	23.65	19.72
		2503.5 (39725)	25.54	24.60	23.67	19.75
36RB-High (38)		2682.5 (41515)	24.64	23.65	22.49	20.05
		2637.8(41068)	24.66	23.76	22.69	19.75
		2593 (40620)	24.65	23.58	22.50	19.64
		2548.3(40173)	24.63	23.73	22.42	19.78
		2503.5 (39725)	24.50	23.64	22.63	19.79
36RB-Middle (19)		2682.5 (41515)	24.69	23.76	22.55	19.77
		2637.8(41068)	24.74	23.61	22.77	19.82
		2593 (40620)	24.90	23.61	22.65	19.53
		2548.3(40173)	24.59	23.59	22.43	19.53
		2503.5 (39725)	24.62	23.55	22.65	19.77
36RB-Low (0)		2682.5 (41515)	24.85	23.87	22.83	19.84
		2637.8(41068)	24.64	23.77	22.57	19.67
		2593 (40620)	24.77	23.78	22.59	19.59
		2548.3(40173)	24.56	23.67	22.43	19.55
		2503.5 (39725)	24.63	23.54	22.39	19.63
75RB (0)		2682.5 (41515)	24.66	23.69	22.73	19.91
		2637.8(41068)	24.70	23.78	22.87	19.84
		2593 (40620)	24.70	23.70	22.79	19.57
		2548.3(40173)	24.42	23.62	22.43	19.58
		2503.5 (39725)	24.65	23.41	22.52	19.66
20MHz	1RB-High (99)	2680 (41490)	25.46	24.87	23.78	19.65
		2636.5(41055)	25.55	24.94	23.80	19.62
		2593 (40620)	25.47	24.79	23.68	19.65
		2549.5(40185)	25.43	24.80	23.67	19.69
		2506 (39750)	25.42	24.73	23.63	19.53

	1RB-Middle (50)	2680 (41490)	25.51	24.76	23.73	19.69
		2636.5(41055)	25.56	24.82	23.72	19.70
		2593 (40620)	25.64	24.79	23.65	19.80
		2549.5(40185)	25.55	24.70	23.62	19.69
		2506 (39750)	25.58	24.72	23.61	19.65
	1RB-Low (0)	2680 (41490)	25.56	24.92	23.95	19.59
		2636.5(41055)	25.56	24.92	23.82	19.66
		2593 (40620)	25.57	24.99	23.88	19.56
		2549.5(40185)	25.35	24.70	23.65	19.81
		2506 (39750)	25.39	24.73	23.62	19.62
	50RB-High (50)	2680 (41490)	24.54	23.61	22.52	19.90
		2636.5(41055)	24.61	23.68	22.60	19.75
		2593 (40620)	24.54	23.63	22.55	19.78
		2549.5(40185)	24.50	23.60	22.52	19.93
		2506 (39750)	24.54	23.57	22.49	19.80
	50RB-Middle (25)	2680 (41490)	24.64	23.77	22.64	19.84
		2636.5(41055)	24.67	23.72	22.66	19.79
		2593 (40620)	24.77	23.62	22.57	19.59
		2549.5(40185)	24.73	23.54	22.51	19.57
		2506 (39750)	24.54	23.55	22.53	19.76
	50RB-Low (0)	2680 (41490)	24.74	23.75	22.68	19.89
		2636.5(41055)	24.69	23.73	22.68	19.68
		2593 (40620)	24.70	23.74	22.66	19.55
		2549.5(40185)	24.54	23.55	22.55	19.50
		2506 (39750)	24.55	23.61	22.54	19.62
	100RB (0)	2680 (41490)	24.72	23.75	22.72	19.87
		2636.5(41055)	24.70	23.73	22.80	19.74
		2593 (40620)	24.66	23.70	22.75	19.68
		2549.5(40185)	24.51	23.55	22.58	19.57
		2506 (39750)	24.52	23.56	22.58	19.51

LTE Band41 PC2- DS13 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2687.5 (41565)	22.49	21.83	20.45	17.83
		2640.3(41093)	22.60	21.98	20.54	17.63
		2593 (40620)	22.56	21.55	20.47	17.73

		2545.8(40148)	22.57	21.76	20.48	17.69
		2498.5 (39675)	22.37	21.73	20.54	17.63
1RB-Middle (12)		2687.5 (41565)	22.30	21.78	20.55	17.69
		2640.3(41093)	22.27	21.65	20.54	17.64
		2593 (40620)	22.64	21.60	20.55	17.64
		2545.8(40148)	22.33	21.70	20.57	17.91
		2498.5 (39675)	22.54	21.53	20.56	17.75
		2687.5 (41565)	22.67	22.03	20.58	17.72
1RB-Low (0)		2640.3(41093)	22.42	21.99	20.73	17.79
		2593 (40620)	22.55	21.88	20.69	17.81
		2545.8(40148)	22.36	21.68	20.57	17.72
		2498.5 (39675)	22.36	21.66	20.35	17.85
		2687.5 (41565)	21.61	20.45	19.70	17.68
12RB-High (13)		2640.3(41093)	21.62	20.81	19.74	17.75
		2593 (40620)	21.59	20.53	19.49	17.88
		2545.8(40148)	21.47	20.44	19.68	17.80
		2498.5 (39675)	21.35	20.67	19.50	17.70
		2687.5 (41565)	21.79	20.70	19.80	17.65
12RB-Middle (6)		2640.3(41093)	21.74	20.84	19.45	17.90
		2593 (40620)	21.61	20.65	19.70	17.80
		2545.8(40148)	21.50	20.54	19.68	17.89
		2498.5 (39675)	21.38	20.51	19.51	17.81
		2687.5 (41565)	21.80	20.62	19.79	17.63
12RB-Low (0)		2640.3(41093)	21.49	20.66	19.56	17.75
		2593 (40620)	21.50	20.81	19.97	17.85
		2545.8(40148)	21.73	20.43	19.71	17.92
		2498.5 (39675)	21.46	20.52	19.47	17.73
		2687.5 (41565)	21.84	20.81	19.55	17.70
25RB (0)		2640.3(41093)	21.73	20.56	19.59	17.63
		2593 (40620)	21.62	20.60	19.64	17.75
		2545.8(40148)	21.59	20.59	19.58	17.87
		2498.5 (39675)	21.58	20.66	19.53	17.74
10MHz	1RB-High (49)	2685 (41540)	22.48	21.65	20.60	17.62
		2639(41080)	22.39	21.66	20.63	17.79
		2593 (40620)	22.35	21.65	20.46	17.78
		2547(40160)	22.48	21.76	20.58	17.85
		2501 (39700)	22.48	21.60	20.40	17.70
	1RB-Middle (24)	2685 (41540)	22.26	21.83	20.42	17.88
		2639(41080)	22.37	21.74	20.50	17.89

		2593 (40620)	22.55	21.64	20.58	17.84
		2547(40160)	22.25	21.58	20.38	17.66
		2501 (39700)	22.45	21.68	20.47	17.63
	1RB-Low (0)	2685 (41540)	22.72	21.81	20.83	17.78
		2639(41080)	22.50	21.84	20.76	17.67
		2593 (40620)	22.65	21.77	20.63	17.75
		2547(40160)	22.30	21.82	20.59	17.63
		2501 (39700)	22.27	21.59	20.54	17.71
	25RB-High (25)	2685 (41540)	21.42	20.46	19.68	17.76
		2639(41080)	21.52	20.48	19.53	17.84
		2593 (40620)	21.55	20.51	19.55	17.93
		2547(40160)	21.33	20.53	19.60	17.86
		2501 (39700)	21.43	20.58	19.54	17.92
	25RB-Middle (12)	2685 (41540)	21.54	20.58	19.78	17.76
		2639(41080)	21.62	20.65	19.62	17.71
		2593 (40620)	21.80	20.64	19.49	17.79
		2547(40160)	21.60	20.62	19.58	17.79
		2501 (39700)	21.55	20.44	19.51	17.71
	25RB-Low (0)	2685 (41540)	21.82	20.74	19.66	17.81
		2639(41080)	21.55	20.61	19.69	17.93
		2593 (40620)	21.73	20.59	19.65	17.89
		2547(40160)	21.39	20.63	19.59	17.86
		2501 (39700)	21.60	20.43	19.56	17.75
	50RB (0)	2685 (41540)	21.54	20.82	19.76	17.77
		2639(41080)	21.63	20.63	19.59	17.70
		2593 (40620)	21.69	20.54	19.61	17.68
		2547(40160)	21.40	20.49	19.51	17.83
		2501 (39700)	21.45	20.59	19.49	17.64
15MHz	1RB-High (74)	2682.5 (41515)	22.41	21.76	20.52	17.64
		2637.8(41068)	22.63	21.89	20.59	17.87
		2593 (40620)	22.42	21.55	20.32	17.79
		2548.3(40173)	22.47	21.61	20.56	17.75
		2503.5 (39725)	22.30	21.61	20.44	17.83
	1RB-Middle (37)	2682.5 (41515)	22.37	21.73	20.51	17.76
		2637.8(41068)	22.35	21.56	20.57	17.87
		2593 (40620)	22.62	21.61	20.60	17.82
		2548.3(40173)	22.22	21.57	20.55	17.89
		2503.5 (39725)	22.40	21.59	20.48	17.79
	1RB-Low (0)	2682.5 (41515)	22.71	22.01	20.63	17.86

		2637.8(41068)	22.37	21.88	20.67	17.88
		2593 (40620)	22.58	21.83	20.71	17.81
		2548.3(40173)	22.29	21.62	20.57	17.88
		2503.5 (39725)	22.42	21.70	20.35	17.77
36RB-High (38)		2682.5 (41515)	21.53	20.49	19.61	17.87
		2637.8(41068)	21.54	20.70	19.71	17.83
		2593 (40620)	21.59	20.52	19.45	17.91
		2548.3(40173)	21.49	20.50	19.61	17.70
		2503.5 (39725)	21.43	20.54	19.57	17.64
36RB-Middle (19)		2682.5 (41515)	21.67	20.73	19.74	17.71
		2637.8(41068)	21.63	20.79	19.53	17.88
		2593 (40620)	21.71	20.54	19.59	17.67
		2548.3(40173)	21.55	20.59	19.56	17.84
		2503.5 (39725)	21.40	20.44	19.50	17.80
36RB-Low (0)		2682.5 (41515)	21.77	20.63	19.68	17.68
		2637.8(41068)	21.54	20.73	19.59	17.74
		2593 (40620)	21.58	20.71	19.84	17.76
		2548.3(40173)	21.61	20.43	19.64	17.92
		2503.5 (39725)	21.41	20.57	19.54	17.73
75RB (0)		2682.5 (41515)	21.69	20.77	19.60	17.64
		2637.8(41068)	21.67	20.60	19.67	17.64
		2593 (40620)	21.57	20.68	19.53	17.62
		2548.3(40173)	21.62	20.49	19.56	17.88
		2503.5 (39725)	21.52	20.61	19.43	17.87
20MHz	1RB-High (99)	2680 (41490)	22.44	21.71	20.52	17.64
		2636.5(41055)	22.48	21.75	20.48	17.81
		2593 (40620)	22.34	21.64	20.40	17.89
		2549.5(40185)	22.34	21.64	20.47	17.87
		2506 (39750)	22.37	21.65	20.37	17.67
	1RB-Middle (50)	2680 (41490)	22.36	21.74	20.51	17.66
		2636.5(41055)	22.37	21.65	20.49	17.90
		2593 (40620)	22.61	21.60	20.48	17.64
		2549.5(40185)	22.30	21.61	20.47	17.87
		2506 (39750)	22.32	21.56	20.37	17.79
	1RB-Low (0)	2680 (41490)	22.59	21.91	20.73	17.87
		2636.5(41055)	22.45	21.75	20.61	17.74
		2593 (40620)	22.52	21.86	20.66	17.93
		2549.5(40185)	22.32	21.67	20.47	17.68
		2506 (39750)	22.33	21.55	20.43	17.76

	50RB-High (50)	2680 (41490)	21.47	20.54	19.58	17.82
		2636.5(41055)	21.48	20.57	19.56	17.79
		2593 (40620)	21.46	20.51	19.54	17.69
		2549.5(40185)	21.43	20.51	19.48	17.64
		2506 (39750)	21.43	20.47	19.49	17.78
	50RB-Middle (25)	2680 (41490)	21.64	20.66	19.67	17.67
		2636.5(41055)	21.61	20.64	19.63	17.84
		2593 (40620)	21.72	20.53	19.52	17.67
		2549.5(40185)	21.46	20.51	19.51	17.63
		2506 (39750)	21.44	20.51	19.50	17.89
	50RB-Low (0)	2680 (41490)	21.69	20.68	19.74	17.86
		2636.5(41055)	21.58	20.66	19.65	17.75
		2593 (40620)	21.62	20.64	19.69	17.91
		2549.5(40185)	21.47	20.52	19.56	17.72
		2506 (39750)	21.49	20.52	19.54	17.74
	100RB (0)	2680 (41490)	21.64	20.69	19.63	17.69
		2636.5(41055)	21.55	20.66	19.63	17.85
		2593 (40620)	21.56	20.63	19.58	17.67
		2549.5(40185)	21.48	20.52	19.46	17.83
		2506 (39750)	21.42	20.51	19.46	17.75

LTE Band41 PC3- DS10 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2687.5 (41565)	21.12	20.10	18.73	16.00
		2640.3(41093)	20.96	20.05	18.81	16.13
		2593 (40620)	20.79	19.87	18.48	16.28
		2545.8(40148)	21.09	19.83	18.64	16.06
		2498.5 (39675)	20.67	19.77	18.38	16.24
	1RB-Middle (12)	2687.5 (41565)	21.03	20.07	18.89	16.05
		2640.3(41093)	20.94	20.00	18.86	16.26
		2593 (40620)	21.20	19.91	18.47	16.26
		2545.8(40148)	20.75	19.80	18.86	16.04
		2498.5 (39675)	20.55	19.83	18.45	16.10
	1RB-Low (0)	2687.5 (41565)	21.36	20.27	19.18	16.20
		2640.3(41093)	20.93	20.04	18.72	15.99
		2593 (40620)	21.03	19.98	18.89	16.23

		2545.8(40148)	20.72	19.77	18.69	16.14
		2498.5 (39675)	20.59	19.89	18.52	16.23
12RB-High (13)		2687.5 (41565)	20.01	19.21	18.14	16.09
		2640.3(41093)	19.92	19.25	18.16	15.94
		2593 (40620)	19.82	18.79	17.91	16.28
		2545.8(40148)	19.81	18.97	17.95	16.12
		2498.5 (39675)	19.84	18.76	18.04	16.10
		2687.5 (41565)	20.07	19.25	18.23	15.99
12RB-Middle (6)		2640.3(41093)	20.10	19.01	18.32	16.18
		2593 (40620)	20.23	19.00	18.18	15.99
		2545.8(40148)	20.09	18.82	17.85	16.10
		2498.5 (39675)	19.94	18.88	17.81	16.09
		2687.5 (41565)	20.22	19.37	18.39	16.21
12RB-Low (0)		2640.3(41093)	19.99	19.04	18.16	16.17
		2593 (40620)	20.07	19.03	18.10	16.08
		2545.8(40148)	20.01	19.12	18.06	16.04
		2498.5 (39675)	19.74	18.86	17.92	16.15
		2687.5 (41565)	20.18	19.20	18.31	16.17
25RB (0)		2640.3(41093)	20.12	19.10	17.91	15.96
		2593 (40620)	19.86	19.24	18.23	16.01
		2545.8(40148)	19.97	18.92	18.01	15.95
		2498.5 (39675)	19.83	18.66	17.72	16.27
10MHz	1RB-High (49)	2685 (41540)	21.17	20.07	18.73	16.03
		2639(41080)	21.06	20.04	18.65	16.03
		2593 (40620)	20.81	19.93	18.46	16.19
		2547(40160)	20.71	19.87	18.74	16.28
		2501 (39700)	20.71	19.72	18.38	16.02
	1RB-Middle (24)	2685 (41540)	21.06	20.02	18.73	16.06
		2639(41080)	20.91	20.09	18.87	16.28
		2593 (40620)	21.23	19.85	18.62	16.07
		2547(40160)	20.78	19.80	18.55	16.09
		2501 (39700)	20.77	19.80	18.45	15.93
	1RB-Low (0)	2685 (41540)	21.16	20.31	19.14	16.07
		2639(41080)	20.94	20.22	18.91	16.11
		2593 (40620)	21.08	20.19	18.88	16.19
		2547(40160)	20.76	19.80	18.58	16.20
		2501 (39700)	20.71	19.80	18.38	15.93
	25RB-High (25)	2685 (41540)	20.14	19.02	18.08	16.03
		2639(41080)	19.97	19.06	18.15	16.26

		2593 (40620)	19.93	18.96	17.79	16.02
		2547(40160)	19.73	18.99	17.92	16.25
		2501 (39700)	19.66	18.71	17.85	16.22
	25RB-Middle (12)	2685 (41540)	20.23	19.14	18.27	15.92
		2639(41080)	19.98	19.11	18.11	16.15
		2593 (40620)	20.20	18.91	18.13	16.23
		2547(40160)	19.92	18.81	17.79	16.21
		2501 (39700)	19.84	18.67	17.85	16.26
	25RB-Low (0)	2685 (41540)	20.08	19.24	18.12	15.95
		2639(41080)	20.03	19.15	18.03	16.01
		2593 (40620)	20.05	19.08	17.94	16.16
		2547(40160)	19.83	18.80	17.85	16.21
		2501 (39700)	19.87	18.80	17.94	15.99
	50RB (0)	2685 (41540)	20.13	19.16	18.16	16.17
		2639(41080)	20.24	19.01	18.06	16.11
		2593 (40620)	19.99	18.96	18.03	16.25
		2547(40160)	19.75	19.04	17.86	16.28
		2501 (39700)	19.75	18.89	17.69	16.28
15MHz	1RB-High (74)	2682.5 (41515)	21.03	20.00	18.65	16.09
		2637.8(41068)	20.98	20.13	18.85	16.27
		2593 (40620)	20.77	19.86	18.50	16.03
		2548.3(40173)	20.94	19.89	18.70	16.09
		2503.5 (39725)	20.71	19.80	18.41	16.11
	1RB-Middle (37)	2682.5 (41515)	21.09	20.12	18.78	15.99
		2637.8(41068)	21.03	20.06	18.82	16.16
		2593 (40620)	21.26	19.91	18.50	16.12
		2548.3(40173)	20.79	19.81	18.74	16.20
		2503.5 (39725)	20.60	19.76	18.39	16.28
	1RB-Low (0)	2682.5 (41515)	21.31	20.23	19.08	16.04
		2637.8(41068)	20.98	20.05	18.67	16.23
		2593 (40620)	20.97	20.06	18.82	16.20
		2548.3(40173)	20.64	19.81	18.65	16.05
		2503.5 (39725)	20.57	19.77	18.45	16.00
	36RB-High (38)	2682.5 (41515)	20.06	19.09	18.07	16.18
		2637.8(41068)	19.86	19.13	18.03	15.92
		2593 (40620)	19.92	18.80	17.81	16.09
		2548.3(40173)	19.79	18.98	17.86	15.94
		2503.5 (39725)	19.75	18.80	17.92	16.27
	36RB-Middle (19)	2682.5 (41515)	20.11	19.30	18.22	16.19

		2637.8(41068)	20.12	19.04	18.24	16.10	
		2593 (40620)	20.31	18.94	18.06	16.24	
		2548.3(40173)	20.00	18.80	17.86	15.96	
		2503.5 (39725)	19.79	18.74	17.89	16.04	
		36RB-Low (0)	2682.5 (41515)	20.31	19.24	18.26	16.22
			2637.8(41068)	19.95	19.14	18.23	16.13
			2593 (40620)	20.10	19.12	18.03	16.02
			2548.3(40173)	19.96	19.01	17.96	16.25
			2503.5 (39725)	19.82	18.71	17.88	15.93
		75RB (0)	2682.5 (41515)	20.25	19.09	18.27	16.24
			2637.8(41068)	20.01	19.10	18.00	16.24
			2593 (40620)	19.92	19.15	18.08	15.96
			2548.3(40173)	19.95	18.80	17.95	16.15
			2503.5 (39725)	19.75	18.70	17.76	16.10
20MHz		1RB-High (99)					
			2680 (41490)	21.04	20.07	18.73	16.20
			2636.5(41055)	20.99	20.06	18.72	16.06
			2593 (40620)	20.82	19.96	18.56	16.21
			2549.5(40185)	20.79	19.91	18.61	16.20
			2506 (39750)	20.65	19.73	18.39	16.13
		1RB-Middle (50)	2680 (41490)	21.00	20.10	18.73	16.13
			2636.5(41055)	20.92	19.98	18.73	16.14
			2593 (40620)	21.21	19.92	18.60	16.12
			2549.5(40185)	20.79	19.85	18.65	16.20
			2506 (39750)	20.68	19.75	18.44	16.03
	1RB-Low (0)		2680 (41490)	21.16	20.32	19.00	16.24
			2636.5(41055)	20.99	20.09	18.77	16.06
			2593 (40620)	21.00	20.13	18.77	16.19
			2549.5(40185)	20.73	19.82	18.58	16.21
			2506 (39750)	20.66	19.78	18.36	16.06
	50RB-High (50)		2680 (41490)	20.02	19.07	18.04	16.03
			2636.5(41055)	19.96	18.98	18.00	15.94
			2593 (40620)	19.88	18.89	17.86	16.24
			2549.5(40185)	19.83	18.87	17.94	15.96
			2506 (39750)	19.73	18.74	17.80	16.09
	50RB-Middle (25)		2680 (41490)	20.13	19.22	18.24	16.06
			2636.5(41055)	20.07	19.10	18.09	15.98
			2593 (40620)	20.23	19.00	17.99	15.96
			2549.5(40185)	19.85	18.84	17.85	16.06
			2506 (39750)	19.80	18.76	17.85	16.08

	50RB-Low (0)	2680 (41490)	20.17	19.23	18.20	16.25
		2636.5(41055)	20.05	19.09	18.09	16.17
		2593 (40620)	20.07	18.97	18.04	15.92
		2549.5(40185)	19.85	18.89	17.93	15.92
		2506 (39750)	19.77	18.81	17.84	16.26
	100RB (0)	2680 (41490)	20.17	19.16	18.19	16.28
		2636.5(41055)	20.09	19.07	18.09	15.98
		2593 (40620)	20.00	19.02	18.02	16.19
		2549.5(40185)	19.84	18.89	17.91	16.12
		2506 (39750)	19.70	18.74	17.75	16.03

LTE Band41 PC3- DS1/2/4/5 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
	1RB-High (24)	2687.5 (41565)	23.11	22.04	20.82	17.22
		2640.3(41093)	23.26	22.36	20.89	17.20
		2593 (40620)	23.07	22.11	20.86	17.41
		2545.8(40148)	22.95	21.99	20.79	17.38
		2498.5 (39675)	22.84	21.97	20.66	17.21
	1RB-Middle (12)	2687.5 (41565)	23.09	22.19	20.88	17.36
		2640.3(41093)	23.03	22.31	20.76	17.27
		2593 (40620)	23.27	22.14	20.84	17.08
		2545.8(40148)	22.78	22.06	20.79	17.20
		2498.5 (39675)	22.78	22.06	20.61	17.27
5MHz	1RB-Low (0)	2687.5 (41565)	23.20	22.34	20.99	17.19
		2640.3(41093)	23.24	22.42	20.98	17.55
		2593 (40620)	23.15	22.29	20.98	17.31
		2545.8(40148)	22.78	22.17	20.59	17.35
		2498.5 (39675)	22.91	22.02	20.58	17.50
	12RB-High (13)	2687.5 (41565)	22.17	21.04	20.13	17.51
		2640.3(41093)	22.26	21.26	20.44	17.15
		2593 (40620)	22.23	21.12	20.21	17.49
		2545.8(40148)	22.04	21.11	19.97	17.20
		2498.5 (39675)	21.98	21.15	20.12	17.41
	12RB-Middle (6)	2687.5 (41565)	22.23	21.32	20.35	17.12
		2640.3(41093)	22.30	21.37	20.23	17.02
		2593 (40620)	22.17	21.11	20.10	17.63

	12RB-Low (0)	2545.8(40148)	22.01	21.12	20.06	17.02
		2498.5 (39675)	22.18	21.19	20.08	17.23
		2687.5 (41565)	22.20	21.19	20.28	17.37
		2640.3(41093)	22.12	21.24	20.21	17.33
		2593 (40620)	22.35	21.28	20.30	17.40
		2545.8(40148)	22.08	21.04	20.08	17.21
	25RB (0)	2498.5 (39675)	22.22	21.01	20.24	17.30
		2687.5 (41565)	22.30	21.20	20.17	17.45
		2640.3(41093)	22.32	21.36	20.27	17.38
		2593 (40620)	22.20	21.27	20.37	17.35
		2545.8(40148)	21.94	21.12	19.90	17.57
10MHz	1RB-High (49)	2498.5 (39675)	22.01	20.94	19.91	17.47
		2685 (41540)	22.93	22.22	20.67	17.19
		2639(41080)	23.09	22.15	20.79	17.27
		2593 (40620)	22.96	22.12	20.66	17.39
		2547(40160)	22.85	22.09	20.83	17.48
	1RB-Middle (24)	2501 (39700)	22.80	21.94	20.52	17.07
		2685 (41540)	23.07	22.18	20.85	17.34
		2639(41080)	23.02	22.13	20.82	17.03
		2593 (40620)	23.28	22.16	20.82	17.32
		2547(40160)	22.87	22.13	20.78	17.23
	1RB-Low (0)	2501 (39700)	22.92	22.12	20.65	17.41
		2685 (41540)	23.31	22.45	20.83	17.09
		2639(41080)	23.06	22.42	20.94	17.47
		2593 (40620)	23.04	22.49	21.04	17.39
		2547(40160)	22.96	22.18	20.67	17.34
	25RB-High (25)	2501 (39700)	22.92	22.17	20.50	17.33
		2685 (41540)	21.97	21.26	20.13	17.35
		2639(41080)	22.17	21.08	20.29	17.25
		2593 (40620)	22.05	21.10	20.09	17.31
		2547(40160)	22.05	21.17	19.99	17.23
	25RB-Middle (12)	2501 (39700)	21.91	21.16	20.05	17.34
		2685 (41540)	22.20	21.34	20.25	17.11
		2639(41080)	22.19	21.34	20.44	17.08
		2593 (40620)	22.22	21.12	20.01	17.43
		2547(40160)	22.14	21.19	20.09	17.23
	25RB-Low (0)	2501 (39700)	22.17	21.06	20.21	17.18
		2685 (41540)	22.38	21.46	20.18	17.58
		2639(41080)	22.36	21.40	20.27	17.18

15MHz	50RB (0)	2593 (40620)	22.31	21.22	20.24	17.20
		2547(40160)	22.15	21.21	19.97	17.13
		2501 (39700)	22.00	21.19	20.03	17.37
		2685 (41540)	22.28	21.27	20.27	17.27
		2639(41080)	22.37	21.29	20.22	17.50
		2593 (40620)	22.30	21.32	20.14	17.20
		2547(40160)	22.03	21.18	19.90	17.56
		2501 (39700)	22.14	21.23	20.17	17.53
	1RB-High (74)	2682.5 (41515)	23.03	22.13	20.58	17.30
		2637.8(41068)	23.09	22.30	20.83	17.22
		2593 (40620)	23.09	22.10	20.72	17.38
		2548.3(40173)	22.95	22.16	20.81	17.30
		2503.5 (39725)	22.83	22.06	20.51	17.08
	1RB-Middle (37)	2682.5 (41515)	22.94	22.23	20.88	17.44
		2637.8(41068)	23.17	22.23	20.84	17.26
		2593 (40620)	23.28	22.09	20.72	17.30
		2548.3(40173)	22.96	22.20	20.73	17.16
		2503.5 (39725)	22.89	22.09	20.65	17.17
	1RB-Low (0)	2682.5 (41515)	23.04	22.35	20.95	17.33
		2637.8(41068)	23.23	22.49	20.98	17.39
		2593 (40620)	23.30	22.37	21.10	17.16
		2548.3(40173)	23.07	22.19	20.51	17.29
		2503.5 (39725)	23.00	22.19	20.68	17.34
	36RB-High (38)	2682.5 (41515)	22.09	21.24	20.13	17.48
		2637.8(41068)	22.33	21.35	20.18	17.10
		2593 (40620)	22.22	21.13	20.02	17.53
		2548.3(40173)	21.97	21.10	20.07	17.29
		2503.5 (39725)	22.06	20.98	20.18	17.24
	36RB-Middle (19)	2682.5 (41515)	22.16	21.35	20.16	17.07
		2637.8(41068)	22.08	21.36	20.40	17.12
		2593 (40620)	22.30	21.03	20.19	17.36
		2548.3(40173)	21.87	21.20	20.11	17.16
		2503.5 (39725)	22.19	21.06	20.28	17.12
	36RB-Low (0)	2682.5 (41515)	22.31	21.45	20.36	17.43
		2637.8(41068)	22.25	21.30	20.32	17.33
		2593 (40620)	22.19	21.20	20.27	17.39
		2548.3(40173)	22.18	21.09	20.02	17.37
		2503.5 (39725)	22.24	21.02	20.16	17.44
	75RB (0)	2682.5 (41515)	22.14	21.15	20.21	17.25

		2637.8(41068)	22.27	21.36	20.37	17.36
		2593 (40620)	22.28	21.36	20.16	17.45
		2548.3(40173)	21.94	21.04	20.03	17.52
		2503.5 (39725)	22.19	21.20	20.10	17.44
20MHz	1RB-High (99)	2680 (41490)	23.03	22.16	20.72	17.30
		2636.5(41055)	23.18	22.28	20.86	17.25
		2593 (40620)	23.04	22.18	20.76	17.34
		2549.5(40185)	23.00	22.11	20.70	17.34
		2506 (39750)	22.94	22.07	20.58	17.14
	1RB-Middle (50)	2680 (41490)	23.01	22.13	20.82	17.48
		2636.5(41055)	23.08	22.20	20.83	17.15
		2593 (40620)	23.26	22.18	20.75	17.18
		2549.5(40185)	22.93	22.07	20.68	17.28
		2506 (39750)	22.90	22.02	20.59	17.28
	1RB-Low (0)	2680 (41490)	23.17	22.37	20.96	17.22
		2636.5(41055)	23.17	22.35	20.93	17.44
		2593 (40620)	23.19	22.40	20.96	17.28
		2549.5(40185)	22.92	22.06	20.62	17.24
		2506 (39750)	22.92	22.10	20.65	17.48
	50RB-High (50)	2680 (41490)	22.07	21.14	20.16	17.47
		2636.5(41055)	22.19	21.21	20.29	17.13
		2593 (40620)	22.08	21.15	20.08	17.46
		2549.5(40185)	22.04	21.05	20.07	17.17
		2506 (39750)	22.04	21.09	20.13	17.37
	50RB-Middle (25)	2680 (41490)	22.22	21.28	20.29	17.16
		2636.5(41055)	22.21	21.30	20.30	17.11
		2593 (40620)	22.32	21.14	20.14	17.50
		2549.5(40185)	22.02	21.05	20.06	17.15
		2506 (39750)	22.06	21.13	20.14	17.13
	50RB-Low (0)	2680 (41490)	22.29	21.33	20.32	17.44
		2636.5(41055)	22.22	21.32	20.32	17.27
		2593 (40620)	22.23	21.28	20.24	17.35
		2549.5(40185)	22.04	21.06	20.07	17.22
		2506 (39750)	22.10	21.14	20.16	17.39
	100RB (0)	2680 (41490)	22.21	21.29	20.28	17.37
		2636.5(41055)	22.23	21.24	20.26	17.50
		2593 (40620)	22.17	21.21	20.23	17.32
		2549.5(40185)	22.01	21.04	20.03	17.42
		2506 (39750)	22.07	21.09	20.06	17.45

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LTE Band41 PC3- DS13 ANT8

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	2687.5 (41565)	20.06	19.00	17.68	15.26
		2640.3(41093)	20.14	19.01	17.69	15.01
		2593 (40620)	20.22	19.07	17.53	15.18
		2545.8(40148)	19.99	18.87	17.69	15.05
		2498.5 (39675)	19.89	18.92	17.68	15.05
	1RB-Middle (12)	2687.5 (41565)	20.04	18.93	18.04	15.06
		2640.3(41093)	19.96	18.95	17.55	15.14
		2593 (40620)	20.33	18.99	17.69	15.05
		2545.8(40148)	19.92	18.91	17.83	15.20
		2498.5 (39675)	19.92	18.73	17.76	15.29
	1RB-Low (0)	2687.5 (41565)	20.15	19.19	17.83	15.16
		2640.3(41093)	20.10	18.93	17.85	15.08
		2593 (40620)	20.13	19.13	17.75	15.13
		2545.8(40148)	20.23	18.86	17.77	15.14
		2498.5 (39675)	19.89	19.15	17.66	15.06
	12RB-High (13)	2687.5 (41565)	19.17	18.12	17.01	15.04
		2640.3(41093)	18.93	18.11	17.02	15.14
		2593 (40620)	19.08	17.94	17.25	15.06
		2545.8(40148)	18.81	17.94	16.95	15.05
		2498.5 (39675)	18.85	18.08	16.96	15.26
	12RB-Middle (6)	2687.5 (41565)	19.29	18.04	17.45	15.16
		2640.3(41093)	19.10	18.35	17.01	15.18
		2593 (40620)	19.27	18.12	17.04	15.31
		2545.8(40148)	18.90	18.06	17.00	15.24
		2498.5 (39675)	19.08	17.88	17.14	15.04
	12RB-Low (0)	2687.5 (41565)	19.35	18.41	17.25	15.22
		2640.3(41093)	19.10	18.09	17.32	15.24
		2593 (40620)	19.16	18.15	17.31	15.11
		2545.8(40148)	18.91	17.82	17.03	15.23
		2498.5 (39675)	19.07	18.17	17.23	15.27
	25RB (0)	2687.5 (41565)	19.15	18.17	17.19	15.04
		2640.3(41093)	19.15	18.15	17.14	15.32
		2593 (40620)	19.14	18.37	17.30	15.31
		2545.8(40148)	19.13	17.98	17.02	15.25

		2498.5 (39675)	18.96	18.02	17.19	15.10
10MHz	1RB-High (49)	2685 (41540)	19.99	19.01	17.66	15.14
		2639(41080)	20.16	19.01	17.81	15.31
		2593 (40620)	19.96	19.09	17.66	15.13
		2547(40160)	19.97	19.00	17.70	15.25
		2501 (39700)	19.93	18.93	17.59	15.21
10MHz	1RB-Middle (24)	2685 (41540)	20.00	18.90	17.80	15.24
		2639(41080)	19.98	19.06	17.73	15.31
		2593 (40620)	20.15	18.81	17.76	15.01
		2547(40160)	19.87	19.00	17.80	15.04
		2501 (39700)	19.94	19.03	17.57	15.13
10MHz	1RB-Low (0)	2685 (41540)	20.23	19.29	17.83	15.18
		2639(41080)	20.04	19.01	17.81	15.15
		2593 (40620)	20.13	19.15	17.85	15.13
		2547(40160)	20.07	18.95	17.64	15.27
		2501 (39700)	19.79	18.89	17.67	15.31
10MHz	25RB-High (25)	2685 (41540)	18.97	17.98	17.02	15.11
		2639(41080)	19.00	18.14	16.97	15.27
		2593 (40620)	19.05	18.07	17.07	15.13
		2547(40160)	18.87	17.90	16.96	15.24
		2501 (39700)	19.02	18.18	16.98	15.06
10MHz	25RB-Middle (12)	2685 (41540)	19.15	18.17	17.10	15.09
		2639(41080)	19.03	18.23	17.34	15.04
		2593 (40620)	19.28	18.16	17.04	15.28
		2547(40160)	19.05	18.08	17.06	15.16
		2501 (39700)	19.05	18.00	16.97	15.13
10MHz	25RB-Low (0)	2685 (41540)	19.23	18.21	17.22	15.04
		2639(41080)	19.10	18.03	17.25	15.16
		2593 (40620)	19.08	18.12	17.11	15.24
		2547(40160)	19.03	18.01	16.97	15.20
		2501 (39700)	19.15	18.09	17.09	15.09
10MHz	50RB (0)	2685 (41540)	19.21	18.22	17.19	15.20
		2639(41080)	19.20	18.25	17.04	15.01
		2593 (40620)	19.07	18.12	17.19	15.14
		2547(40160)	18.94	18.12	16.93	15.22
		2501 (39700)	19.08	18.13	17.03	15.05
15MHz	1RB-High (74)	2682.5 (41515)	20.10	19.00	17.75	15.18
		2637.8(41068)	20.06	19.09	17.68	15.01

		2593 (40620)	20.07	19.06	17.60	15.31
		2548.3(40173)	20.02	18.95	17.68	15.16
		2503.5 (39725)	19.85	18.89	17.66	15.21
1RB-Middle (37)		2682.5 (41515)	19.94	19.01	17.89	15.18
		2637.8(41068)	19.88	18.94	17.65	15.17
		2593 (40620)	20.31	19.01	17.65	15.06
		2548.3(40173)	19.86	19.00	17.75	15.23
		2503.5 (39725)	19.86	18.83	17.66	15.10
1RB-Low (0)		2682.5 (41515)	20.17	19.18	17.86	15.12
		2637.8(41068)	19.98	18.94	17.88	15.28
		2593 (40620)	20.09	19.09	17.77	15.18
		2548.3(40173)	20.09	18.85	17.63	15.14
		2503.5 (39725)	19.87	19.03	17.65	15.17
36RB-High (38)		2682.5 (41515)	19.07	17.98	16.92	15.23
		2637.8(41068)	18.98	18.21	17.07	15.16
		2593 (40620)	19.07	17.99	17.10	15.06
		2548.3(40173)	18.89	18.01	16.95	15.26
		2503.5 (39725)	18.90	18.08	16.96	15.10
36RB-Middle (19)		2682.5 (41515)	19.19	18.14	17.30	15.16
		2637.8(41068)	19.06	18.20	17.09	15.32
		2593 (40620)	19.18	18.05	17.00	15.32
		2548.3(40173)	18.98	18.00	16.96	15.14
		2503.5 (39725)	19.03	17.93	17.03	15.14
36RB-Low (0)		2682.5 (41515)	19.20	18.30	17.25	15.32
		2637.8(41068)	19.15	18.03	17.29	15.30
		2593 (40620)	19.20	18.25	17.27	15.23
		2548.3(40173)	18.92	17.92	17.12	15.29
		2503.5 (39725)	19.11	18.18	17.20	15.28
75RB (0)		2682.5 (41515)	19.21	18.15	17.07	15.03
		2637.8(41068)	19.21	18.19	17.01	15.04
		2593 (40620)	19.16	18.22	17.15	15.24
		2548.3(40173)	19.00	18.02	17.02	15.19
		2503.5 (39725)	18.98	18.03	17.08	15.31
20MHz	1RB-High (99)	2680 (41490)	20.07	19.05	17.73	15.17
		2636.5(41055)	20.06	19.07	17.71	15.17
		2593 (40620)	20.02	18.95	17.60	15.30
		2549.5(40185)	20.03	19.01	17.64	15.28
		2506 (39750)	19.95	18.95	17.64	15.24
	1RB-Middle (50)	2680 (41490)	20.00	19.00	17.83	15.24

		2636.5(41055)	19.97	18.99	17.68	15.19
		2593 (40620)	20.21	18.90	17.69	15.17
		2549.5(40185)	19.94	18.94	17.68	15.32
		2506 (39750)	19.91	18.93	17.61	15.04
1RB-Low (0)		2680 (41490)	20.19	19.25	17.91	15.07
		2636.5(41055)	20.07	19.01	17.80	15.08
		2593 (40620)	20.17	19.17	17.84	15.02
		2549.5(40185)	19.94	18.92	17.64	15.11
		2506 (39750)	19.89	18.92	17.68	15.32
50RB-High (50)		2680 (41490)	19.03	18.02	17.01	15.06
		2636.5(41055)	19.04	18.06	17.04	15.07
		2593 (40620)	18.99	17.99	17.02	15.19
		2549.5(40185)	18.96	18.00	17.04	15.10
		2506 (39750)	18.93	18.04	17.02	15.06
50RB-Middle (25)		2680 (41490)	19.12	18.16	17.19	15.19
		2636.5(41055)	19.08	18.14	17.19	15.17
		2593 (40620)	19.19	18.02	17.04	15.32
		2549.5(40185)	18.95	18.00	17.01	15.19
		2506 (39750)	18.94	18.01	17.03	15.21
50RB-Low (0)		2680 (41490)	19.18	18.19	17.20	15.29
		2636.5(41055)	19.09	18.12	17.14	15.16
		2593 (40620)	19.12	18.14	17.15	15.06
		2549.5(40185)	19.01	18.01	17.07	15.20
		2506 (39750)	19.01	18.04	17.07	15.05
100RB (0)		2680 (41490)	19.10	18.16	17.14	15.29
		2636.5(41055)	19.09	18.17	17.09	15.22
		2593 (40620)	19.08	18.12	17.09	15.22
		2549.5(40185)	18.97	18.00	16.98	15.12
		2506 (39750)	18.93	18.01	16.99	15.11

LTE Band66- DS10/1/2/3/5 ANT1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	23.38	23.18	22.11	18.48
		1745 (132322)	23.60	22.73	21.83	18.46
		1710.7 (131979)	23.86	22.99	22.28	18.60
	1RB-Middle (3)	1779.3 (132665)	23.84	22.95	21.71	18.89

		1745 (132322)	23.82	22.87	21.65	18.24
		1710.7 (131979)	23.60	23.09	22.08	18.45
1RB-Low (0)	1779.3 (132665)	23.27	22.79	22.17	18.38	
		23.58	22.94	21.92	18.74	
		23.45	23.07	21.84	18.45	
		22.58	21.50	20.64	18.28	
		22.72	21.65	20.58	18.32	
3RB-High (3)	1710.7 (131979)	22.91	21.78	20.93	18.53	
		22.83	21.64	20.56	18.80	
		22.95	21.57	20.71	18.43	
		22.67	21.91	20.95	18.43	
		22.57	21.52	20.63	18.72	
3RB-Middle (1)	1745 (132322)	22.55	21.52	20.50	18.77	
		22.67	21.68	20.61	18.61	
		22.38	21.51	20.48	18.53	
		22.53	21.47	20.75	18.45	
		22.80	21.98	20.87	18.82	
3MHz	1RB-High (14)	1778.5 (132657)	23.34	23.15	22.07	18.56
		1745 (132322)	23.47	22.70	21.83	18.28
		1711.5 (131987)	23.71	23.09	22.37	18.79
	1RB-Middle (7)	1778.5 (132657)	23.83	22.99	21.73	18.79
		1745 (132322)	23.93	22.66	21.89	18.28
		1711.5 (131987)	23.63	22.99	22.20	18.49
	1RB-Low (0)	1778.5 (132657)	23.41	22.76	22.10	18.60
		1745 (132322)	23.78	22.91	22.07	18.61
		1711.5 (131987)	23.47	23.08	22.04	18.61
	8RB-High (7)	1778.5 (132657)	22.67	21.57	20.32	18.46
		1745 (132322)	22.65	21.62	20.58	18.51
		1711.5 (131987)	22.83	21.71	20.95	18.53
	8RB-Middle (4)	1778.5 (132657)	22.57	21.48	20.51	18.89
		1745 (132322)	22.91	21.62	20.80	18.46
		1711.5 (131987)	22.82	21.84	20.87	18.41
	8RB-Low (0)	1778.5 (132657)	22.41	21.61	20.51	18.81
		1745 (132322)	22.64	21.56	20.57	18.91
		1711.5 (131987)	22.77	21.80	20.80	18.63
	15RB (0)	1778.5 (132657)	22.48	21.59	20.50	18.60
		1745 (132322)	22.66	21.52	20.80	18.48
		1711.5 (131987)	22.76	21.84	20.68	18.84

5MHz	1RB-High (24)	1777.5 (132647)	23.38	23.02	22.14	18.54
		1745 (132322)	23.67	22.70	21.95	18.24
		1712.5 (131997)	23.79	23.04	22.22	18.76
	1RB-Middle (12)	1777.5 (132647)	23.88	22.82	21.66	18.82
		1745 (132322)	23.66	22.69	21.75	18.43
		1712.5 (131997)	23.79	23.25	22.05	18.31
	1RB-Low (0)	1777.5 (132647)	23.54	22.93	21.91	18.44
		1745 (132322)	23.66	23.08	22.01	18.48
		1712.5 (131997)	23.59	22.82	21.82	18.59
	12RB-High (13)	1777.5 (132647)	22.54	21.64	20.41	18.44
		1745 (132322)	22.71	21.58	20.41	18.37
		1712.5 (131997)	22.87	21.94	20.75	18.50
	12RB-Middle (6)	1777.5 (132647)	22.61	21.66	20.39	18.96
		1745 (132322)	22.76	21.69	20.80	18.45
		1712.5 (131997)	22.75	21.95	20.79	18.52
	12RB-Low (0)	1777.5 (132647)	22.41	21.53	20.42	18.68
		1745 (132322)	22.71	21.54	20.76	18.75
		1712.5 (131997)	22.82	21.89	20.73	18.88
	25RB (0)	1777.5 (132647)	22.49	21.56	20.56	18.41
		1745 (132322)	22.71	21.71	20.58	18.33
		1712.5 (131997)	22.80	21.75	20.76	18.72
10MHz						
	1RB-High (49)	1775 (132622)	23.53	23.21	22.02	18.43
		1745 (132322)	23.58	22.63	21.79	18.45
		1715 (132022)	23.60	23.08	22.18	18.73
	1RB-Middle (24)	1775 (132622)	23.86	22.92	21.67	18.79
		1745 (132322)	23.69	22.69	21.89	18.36
		1715 (132022)	23.89	23.05	22.20	18.46
	1RB-Low (0)	1775 (132622)	23.52	22.77	21.98	18.53
		1745 (132322)	23.60	23.09	22.06	18.55
		1715 (132022)	23.61	22.83	21.93	18.45
	25RB-High (25)	1775 (132622)	22.49	21.65	20.44	18.22
		1745 (132322)	22.57	21.68	20.64	18.47
		1715 (132022)	22.73	21.76	21.04	18.49
	25RB-Middle (12)	1775 (132622)	22.64	21.68	20.50	18.94
		1745 (132322)	22.92	21.61	20.59	18.55
		1715 (132022)	22.72	21.78	20.89	18.33
	25RB-Low (0)	1775 (132622)	22.59	21.58	20.41	18.73
		1745 (132322)	22.70	21.74	20.77	18.76
		1715 (132022)	22.64	21.77	20.66	18.66

	50RB (0)	1775 (132622)	22.42	21.41	20.49	18.44
		1745 (132322)	22.66	21.54	20.72	18.52
		1715 (132022)	22.86	21.81	20.71	18.84
15MHz	1RB-High (74)	1772.5 (132597)	23.62	23.05	21.95	18.67
		1745 (132322)	23.61	22.69	21.69	18.36
		1717.5 (132047)	23.68	23.00	22.41	18.79
	1RB-Middle (37)	1772.5 (132597)	23.81	22.82	21.73	18.77
		1745 (132322)	23.83	22.88	21.89	18.43
		1717.5 (132047)	23.77	23.23	22.20	18.35
	1RB-Low (0)	1772.5 (132597)	23.39	22.82	22.01	18.60
		1745 (132322)	23.57	22.94	22.07	18.75
		1717.5 (132047)	23.53	22.99	22.00	18.46
	36RB-High (38)	1772.5 (132597)	22.66	21.62	20.58	18.26
		1745 (132322)	22.72	21.48	20.62	18.44
		1717.5 (132047)	22.87	21.80	20.89	18.44
	36RB-Middle (19)	1772.5 (132597)	22.47	21.55	20.54	18.73
		1745 (132322)	22.74	21.68	20.81	18.66
		1717.5 (132047)	22.86	21.83	20.86	18.48
	36RB-Low (0)	1772.5 (132597)	22.57	21.63	20.37	18.67
		1745 (132322)	22.76	21.59	20.63	18.74
		1717.5 (132047)	22.89	21.82	20.70	18.63
	75RB (0)	1772.5 (132597)	22.45	21.63	20.39	18.56
		1745 (132322)	22.70	21.48	20.81	18.49
		1717.5 (132047)	22.81	21.88	20.76	18.84
20MHz	1RB-High (99)	1770 (132572)	23.47	23.13	21.99	18.53
		1745 (132322)	23.52	22.77	21.84	18.37
		1720 (132072)	23.71	23.05	22.30	18.75
	1RB-Middle (50)	1770 (132572)	23.75	22.93	21.66	18.82
		1745 (132322)	23.79	22.79	21.78	18.36
		1720 (132072)	23.75	23.13	22.15	18.46
	1RB-Low (0)	1770 (132572)	23.42	22.84	22.02	18.51
		1745 (132322)	23.66	22.97	22.01	18.60
		1720 (132072)	23.56	22.96	21.92	18.55
	50RB-High (50)	1770 (132572)	22.53	21.50	20.45	18.37
		1745 (132322)	22.60	21.57	20.53	18.38
		1720 (132072)	22.83	21.86	20.89	18.53
	50RB-Middle (25)	1770 (132572)	22.51	21.55	20.53	18.83
		1745 (132322)	22.87	21.71	20.69	18.58

		1720 (132072)	22.79	21.90	20.85	18.45
50RB-Low (0)		1770 (132572)	22.48	21.51	20.52	18.73
		1745 (132322)	22.70	21.66	20.63	18.78
		1720 (132072)	22.78	21.81	20.72	18.74
	100RB (0)	1770 (132572)	22.50	21.53	20.46	18.45
		1745 (132322)	22.66	21.59	20.70	18.48
		1720 (132072)	22.86	21.86	20.80	18.86

LTE Band66- DS14 ANT1

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	22.54	22.06	20.97	
		1745 (132322)	22.58	21.68	20.76	18.27
		1710.7 (131979)	22.39	21.78	20.73	18.31
	1RB-Middle (3)	1779.3 (132665)	22.43	21.87	20.54	18.18
		1745 (132322)	22.88	21.73	20.66	18.14
		1710.7 (131979)	22.65	21.88	20.77	18.22
	1RB-Low (0)	1779.3 (132665)	22.78	21.60	20.59	18.17
		1745 (132322)	22.56	21.62	20.70	18.27
		1710.7 (131979)	22.60	21.84	20.53	18.15
	3RB-High (3)	1779.3 (132665)	21.70	20.67	19.80	18.20
		1745 (132322)	21.55	20.63	19.65	18.25
		1710.7 (131979)	21.69	20.70	19.61	18.12
	3RB-Middle (1)	1779.3 (132665)	21.56	20.56	19.61	18.06
		1745 (132322)	21.66	20.67	19.70	18.12
		1710.7 (131979)	21.85	20.91	19.65	18.15
	3RB-Low (0)	1779.3 (132665)	21.73	20.50	19.59	18.11
		1745 (132322)	21.72	20.72	19.57	18.03
		1710.7 (131979)	21.77	20.71	19.50	18.09
	6RB (0)	1779.3 (132665)	21.57	20.82	19.62	18.21
		1745 (132322)	21.73	20.45	19.72	18.04
		1710.7 (131979)	21.62	20.38	19.46	18.27
3MHz	1RB-High (14)	1778.5 (132657)	22.77	21.99	20.85	18.06
		1745 (132322)	22.40	21.82	20.75	18.26
		1711.5 (131987)	22.42	21.86	20.58	18.24
	1RB-Middle (7)	1778.5 (132657)	22.48	21.82	20.77	18.20
		1745 (132322)	22.71	21.62	20.82	18.07

		1711.5 (131987)	22.46	21.94	20.67	18.23
1RB-Low (0)		1778.5 (132657)	22.45	21.62	20.75	18.18
		1745 (132322)	22.54	21.85	20.73	18.12
		1711.5 (131987)	22.43	21.80	20.72	18.28
8RB-High (7)		1778.5 (132657)	21.72	20.70	19.55	18.19
		1745 (132322)	21.63	20.64	19.62	18.26
		1711.5 (131987)	21.52	20.56	19.53	18.04
8RB-Middle (4)		1778.5 (132657)	21.55	20.48	19.54	18.22
		1745 (132322)	21.80	20.52	19.60	18.12
		1711.5 (131987)	21.73	20.63	19.77	18.03
8RB-Low (0)		1778.5 (132657)	21.49	20.60	19.70	18.12
		1745 (132322)	21.76	20.81	19.51	18.09
		1711.5 (131987)	21.72	20.69	19.52	18.27
15RB (0)		1778.5 (132657)	21.64	20.53	19.52	18.08
		1745 (132322)	21.53	20.72	19.69	18.04
		1711.5 (131987)	21.59	20.52	19.61	18.23
5MHz	1RB-High (24)	1777.5 (132647)	22.69	21.92	20.87	18.12
		1745 (132322)	22.50	21.86	20.75	18.26
		1712.5 (131997)	22.54	21.73	20.73	18.16
	1RB-Middle (12)	1777.5 (132647)	22.52	21.66	20.76	18.29
		1745 (132322)	22.70	21.84	20.81	18.10
		1712.5 (131997)	22.65	21.73	20.69	18.14
	1RB-Low (0)	1777.5 (132647)	22.75	21.61	20.45	18.06
		1745 (132322)	22.65	21.75	20.73	18.04
		1712.5 (131997)	22.39	21.67	20.74	18.27
	12RB-High (13)	1777.5 (132647)	21.87	20.69	19.74	18.15
		1745 (132322)	21.67	20.78	19.50	18.26
		1712.5 (131997)	21.75	20.65	19.52	18.30
	12RB-Middle (6)	1777.5 (132647)	21.71	20.52	19.41	18.12
		1745 (132322)	21.59	20.55	19.89	18.05
		1712.5 (131997)	21.77	20.70	19.63	18.10
	12RB-Low (0)	1777.5 (132647)	21.60	20.56	19.51	18.07
		1745 (132322)	21.52	20.74	19.74	18.16
		1712.5 (131997)	21.55	20.69	19.55	18.02
	25RB (0)	1777.5 (132647)	21.68	20.64	19.68	18.06
		1745 (132322)	21.48	20.64	19.76	18.16
		1712.5 (131997)	21.67	20.45	19.39	18.24
10MHz	1RB-High (49)	1775 (132622)	22.58	21.83	20.96	18.30

		1745 (132322)	22.46	21.64	20.77	18.09
		1715 (132022)	22.62	21.90	20.74	18.05
1RB-Middle (24)		1775 (132622)	22.38	21.65	20.76	18.28
		1745 (132322)	22.71	21.74	20.72	18.13
		1715 (132022)	22.50	21.87	20.66	18.17
	1RB-Low (0)	1775 (132622)	22.47	21.65	20.74	18.16
		1745 (132322)	22.64	21.80	20.86	18.20
		1715 (132022)	22.51	21.75	20.74	18.11
25RB-High (25)		1775 (132622)	21.56	20.60	19.63	18.23
		1745 (132322)	21.78	20.65	19.72	18.28
		1715 (132022)	21.71	20.56	19.55	18.24
	25RB-Middle (12)	1775 (132622)	21.69	20.69	19.48	18.25
		1745 (132322)	21.64	20.76	19.72	18.31
		1715 (132022)	21.72	20.64	19.66	18.21
25RB-Low (0)		1775 (132622)	21.58	20.52	19.70	18.27
		1745 (132322)	21.60	20.77	19.59	18.24
		1715 (132022)	21.75	20.75	19.59	18.08
	50RB (0)	1775 (132622)	21.51	20.67	19.58	18.28
		1745 (132322)	21.74	20.56	19.81	18.31
		1715 (132022)	21.63	20.47	19.48	18.07
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15MHz	1RB-High (74)	1772.5 (132597)	22.61	21.93	20.89	18.06
		1745 (132322)	22.46	21.73	20.73	18.05
		1717.5 (132047)	22.47	21.76	20.74	18.08
	1RB-Middle (37)	1772.5 (132597)	22.51	21.73	20.62	18.05
		1745 (132322)	22.76	21.72	20.67	18.03
		1717.5 (132047)	22.56	21.83	20.76	18.17
	1RB-Low (0)	1772.5 (132597)	22.64	21.70	20.53	18.21
		1745 (132322)	22.53	21.65	20.63	18.17
		1717.5 (132047)	22.46	21.75	20.61	18.14
	36RB-High (38)	1772.5 (132597)	21.73	20.68	19.75	18.27
		1745 (132322)	21.59	20.71	19.58	18.20
		1717.5 (132047)	21.61	20.58	19.49	18.09
	36RB-Middle (19)	1772.5 (132597)	21.59	20.62	19.48	18.21
		1745 (132322)	21.59	20.60	19.74	18.17
		1717.5 (132047)	21.70	20.80	19.59	18.21
	36RB-Low (0)	1772.5 (132597)	21.63	20.58	19.55	18.09
		1745 (132322)	21.59	20.60	19.59	18.09
		1717.5 (132047)	21.62	20.62	19.56	18.27
	75RB (0)	1772.5 (132597)	21.63	20.71	19.69	18.04

		1745 (132322)	21.58	20.54	19.73	18.19
		1717.5 (132047)	21.64	20.47	19.43	18.20
20MHz	1RB-High (99)	1770 (132572)	22.63	21.92	20.81	18.20
		1745 (132322)	22.44	21.74	20.81	18.04
		1720 (132072)	22.51	21.86	20.67	18.06
	1RB-Middle (50)	1770 (132572)	22.44	21.71	20.70	18.29
		1745 (132322)	22.75	21.62	20.73	18.15
		1720 (132072)	22.49	21.89	20.67	18.08
	1RB-Low (0)	1770 (132572)	22.52	21.71	20.60	18.23
		1745 (132322)	22.54	21.72	20.71	18.29
		1720 (132072)	22.48	21.69	20.60	18.25
	50RB-High (50)	1770 (132572)	21.60	20.60	19.61	18.23
		1745 (132322)	21.63	20.64	19.63	18.21
		1720 (132072)	21.56	20.58	19.56	18.08
	50RB-Middle (25)	1770 (132572)	21.54	20.54	19.56	18.23
		1745 (132322)	21.69	20.61	19.67	18.23
		1720 (132072)	21.64	20.66	19.63	18.10
	50RB-Low (0)	1770 (132572)	21.59	20.55	19.58	18.13
		1745 (132322)	21.68	20.66	19.58	18.11
		1720 (132072)	21.61	20.63	19.62	18.26
	100RB (0)	1770 (132572)	21.58	20.60	19.60	18.13
		1745 (132322)	21.60	20.61	19.74	18.26
		1720 (132072)	21.58	20.54	19.50	18.10

LTE Band66- DS10/1/2/3/4/5 ANT3

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	23.97	23.11	22.11	18.93
		1745 (132322)	23.77	22.99	21.91	19.04
		1710.7 (131979)	23.92	23.01	21.91	19.28
	1RB-Middle (3)	1779.3 (132665)	23.82	23.21	22.03	19.00
		1745 (132322)	24.21	23.31	22.05	19.02
		1710.7 (131979)	23.78	23.35	22.30	19.27
	1RB-Low (0)	1779.3 (132665)	23.62	23.37	22.19	19.32
		1745 (132322)	24.00	23.35	21.90	19.26
		1710.7 (131979)	24.12	23.30	22.10	19.36
	3RB-High (3)	1779.3 (132665)	23.07	22.04	21.12	19.11

	3MHz	3RB-Middle (1)	1745 (132322)	23.05	22.06	20.96	19.09
			1710.7 (131979)	23.07	22.13	21.09	19.17
			1779.3 (132665)	23.07	21.81	21.03	19.28
			1745 (132322)	23.23	22.10	21.23	19.34
			1710.7 (131979)	23.05	22.06	21.27	19.09
		3RB-Low (0)	1779.3 (132665)	22.82	22.08	20.76	19.01
			1745 (132322)	22.93	22.04	21.18	19.13
			1710.7 (131979)	23.05	22.00	21.14	19.28
		6RB (0)	1779.3 (132665)	23.02	22.10	21.02	19.16
			1745 (132322)	23.01	21.95	20.97	19.45
			1710.7 (131979)	23.02	22.01	21.05	19.17
		1RB-High (14)	1778.5 (132657)	24.03	23.20	22.15	19.06
			1745 (132322)	23.62	22.90	21.81	19.02
			1711.5 (131987)	24.03	23.15	22.16	19.30
		1RB-Middle (7)	1778.5 (132657)	23.64	23.20	21.87	19.01
			1745 (132322)	24.21	23.33	22.04	19.21
			1711.5 (131987)	23.89	23.16	22.23	19.29
		1RB-Low (0)	1778.5 (132657)	23.84	23.09	22.16	19.20
			1745 (132322)	23.89	23.41	22.05	19.23
			1711.5 (131987)	24.10	23.38	22.25	19.23
		8RB-High (7)	1778.5 (132657)	22.92	22.08	21.20	19.23
			1745 (132322)	22.89	22.01	20.94	19.21
			1711.5 (131987)	23.23	21.98	21.16	19.00
		8RB-Middle (4)	1778.5 (132657)	22.88	22.09	20.95	19.42
			1745 (132322)	23.21	21.92	20.96	19.38
			1711.5 (131987)	23.19	22.13	21.22	19.04
		8RB-Low (0)	1778.5 (132657)	22.78	22.00	20.90	19.25
			1745 (132322)	23.10	22.20	20.98	19.41
			1711.5 (131987)	23.03	22.09	21.12	19.23
		15RB (0)	1778.5 (132657)	22.87	22.09	21.05	19.39
			1745 (132322)	23.02	21.94	20.91	19.22
			1711.5 (131987)	23.06	22.20	21.19	19.34
5MHz		1RB-High (24)	1777.5 (132647)	24.15	23.15	22.05	19.12
			1745 (132322)	23.75	22.88	21.72	19.14
			1712.5 (131997)	23.97	23.00	21.94	19.46
		1RB-Middle (12)	1777.5 (132647)	23.88	23.37	22.13	19.18
			1745 (132322)	24.04	23.19	22.18	19.07
			1712.5 (131997)	24.01	23.14	22.03	19.26

	1RB-Low (0)	1777.5 (132647)	23.62	23.25	22.21	19.12
		1745 (132322)	23.75	23.32	21.80	19.31
		1712.5 (131997)	23.87	23.34	22.20	19.27
	12RB-High (13)	1777.5 (132647)	23.01	21.97	21.00	19.35
		1745 (132322)	22.88	22.08	20.96	19.24
		1712.5 (131997)	22.95	21.92	21.26	19.22
	12RB-Middle (6)	1777.5 (132647)	23.04	21.88	20.94	19.38
		1745 (132322)	23.14	22.18	21.11	19.27
		1712.5 (131997)	22.96	22.03	21.28	19.15
	12RB-Low (0)	1777.5 (132647)	23.05	22.16	20.82	19.20
		1745 (132322)	22.88	22.10	20.91	19.32
		1712.5 (131997)	22.95	21.97	20.95	19.14
	25RB (0)	1777.5 (132647)	22.88	22.03	21.06	19.40
		1745 (132322)	23.00	22.08	20.92	19.32
		1712.5 (131997)	23.19	21.95	21.11	19.21
10MHz	1RB-High (49)	1775 (132622)	24.18	23.27	22.05	19.17
		1745 (132322)	23.68	23.01	21.78	19.03
		1715 (132022)	23.78	23.13	21.90	19.21
	1RB-Middle (24)	1775 (132622)	23.82	23.28	22.07	19.19
		1745 (132322)	23.96	23.27	22.05	19.25
		1715 (132022)	23.95	23.18	22.05	19.36
	1RB-Low (0)	1775 (132622)	23.77	23.24	22.06	19.32
		1745 (132322)	23.89	23.47	21.81	19.35
		1715 (132022)	24.12	23.24	22.22	19.22
	25RB-High (25)	1775 (132622)	23.04	21.93	21.21	19.19
		1745 (132322)	22.93	22.05	21.16	19.23
		1715 (132022)	23.22	22.11	21.21	19.23
	25RB-Middle (12)	1775 (132622)	22.81	21.97	20.83	19.24
		1745 (132322)	22.94	22.08	20.98	19.13
		1715 (132022)	23.08	21.98	21.09	19.06
	25RB-Low (0)	1775 (132622)	23.06	22.16	20.76	19.27
		1745 (132322)	23.02	21.98	21.12	19.19
		1715 (132022)	23.13	22.11	20.98	19.34
	50RB (0)	1775 (132622)	23.03	21.95	21.05	19.15
		1745 (132322)	22.89	21.95	20.96	19.19
		1715 (132022)	23.11	22.08	21.04	19.32
15MHz	1RB-High (74)	1772.5 (132597)	23.90	23.35	21.98	18.96
		1745 (132322)	23.65	22.88	21.80	19.12

		1717.5 (132047)	23.95	22.98	22.05	19.24
1RB-Middle (37)		1772.5 (132597)	23.77	23.46	21.88	19.20
		1745 (132322)	23.97	23.21	22.15	19.07
		1717.5 (132047)	24.06	23.27	22.11	19.39
1RB-Low (0)		1772.5 (132597)	23.66	23.11	21.97	19.33
		1745 (132322)	23.84	23.45	22.07	19.32
		1717.5 (132047)	24.06	23.44	22.25	19.23
36RB-High (38)		1772.5 (132597)	22.89	22.03	21.13	19.18
		1745 (132322)	23.00	22.18	21.07	19.20
		1717.5 (132047)	23.10	21.91	21.27	19.10
36RB-Middle (19)		1772.5 (132597)	22.87	22.03	20.96	19.28
		1745 (132322)	23.22	22.02	21.14	19.25
		1717.5 (132047)	22.99	22.05	21.17	18.99
36RB-Low (0)		1772.5 (132597)	22.85	21.95	20.78	19.11
		1745 (132322)	23.09	22.04	20.97	19.39
		1717.5 (132047)	22.99	22.16	21.19	19.23
75RB (0)		1772.5 (132597)	22.83	22.07	21.05	19.30
		1745 (132322)	23.17	22.12	21.06	19.38
		1717.5 (132047)	23.18	21.99	21.22	19.30
20MHz	1RB-High (99)	1770 (132572)	24.04	23.24	22.12	19.03
		1745 (132322)	23.77	23.02	21.81	19.15
		1720 (132072)	23.88	23.06	22.04	19.31
	1RB-Middle (50)	1770 (132572)	23.75	23.33	21.99	19.05
		1745 (132322)	24.08	23.26	22.03	19.12
		1720 (132072)	23.92	23.24	22.18	19.31
	1RB-Low (0)	1770 (132572)	23.70	23.22	22.06	19.20
		1745 (132322)	23.89	23.38	21.94	19.22
		1720 (132072)	24.01	23.36	22.12	19.25
	50RB-High (50)	1770 (132572)	23.00	22.02	21.08	19.20
		1745 (132322)	22.97	22.04	21.02	19.17
		1720 (132072)	23.08	21.99	21.12	19.09
	50RB-Middle (25)	1770 (132572)	22.92	21.95	20.96	19.31
		1745 (132322)	23.09	22.04	21.09	19.28
		1720 (132072)	23.04	22.04	21.13	19.14
	50RB-Low (0)	1770 (132572)	22.92	22.06	20.89	19.14
		1745 (132322)	23.02	22.07	21.04	19.28
		1720 (132072)	23.00	22.07	21.09	19.26
	100RB (0)	1770 (132572)	22.91	21.95	20.98	19.28
		1745 (132322)	23.02	21.99	20.98	19.31

		1720 (132072)	23.09	22.07	21.07	19.22
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LTE Band71- DS10/1/2/3/4/5 ANT3

BANDWIDTH	Number of RBs	Frequency	QPSK	16QAM	64QAM	256QAM
5MHz	1RB-High (24)	695.5 (133447)	23.73	22.92	22.05	18.62
		680.5 (133297)	23.59	22.96	21.83	19.00
		665.5 (133147)	23.61	22.92	21.95	18.78
	1RB-Middle (12)	695.5 (133447)	23.54	23.03	21.87	19.09
		680.5 (133297)	23.77	23.16	21.67	18.82
		665.5 (133147)	23.55	23.06	21.78	18.84
	1RB-Low (0)	695.5 (133447)	23.76	23.07	22.00	18.83
		680.5 (133297)	23.56	22.98	22.02	18.75
		665.5 (133147)	23.63	23.13	22.15	18.51
	12RB-High (13)	695.5 (133447)	22.87	21.90	20.64	19.11
		680.5 (133297)	22.82	21.73	20.93	18.95
		665.5 (133147)	23.02	21.85	20.89	18.98
	12RB-Middle (6)	695.5 (133447)	22.71	21.73	20.98	18.69
		680.5 (133297)	22.98	21.73	20.71	18.85
		665.5 (133147)	22.75	21.74	20.98	18.88
	12RB-Low (0)	695.5 (133447)	22.82	21.75	20.69	18.77
		680.5 (133297)	22.92	21.82	20.69	18.87
		665.5 (133147)	22.91	21.74	20.87	19.03
	25RB (0)	695.5 (133447)	22.95	21.86	20.82	18.92
		680.5 (133297)	22.86	21.81	20.79	18.60
		665.5 (133147)	22.81	21.95	21.04	18.74
10MHz	1RB-High (49)	693 (132422)	23.69	23.06	22.04	18.46
		680.5 (133297)	23.74	23.13	21.97	18.90
		668 (133172)	23.68	23.14	21.72	18.61
	1RB-Middle (24)	693 (132422)	23.67	22.87	22.10	19.12
		680.5 (133297)	23.68	23.01	21.76	18.80
		668 (133172)	23.62	22.89	21.65	18.61
	1RB-Low (0)	693 (132422)	23.82	23.15	21.75	18.87
		680.5 (133297)	23.52	22.99	22.03	18.62
		668 (133172)	23.67	23.20	22.01	18.56
	25RB-High (25)	693 (132422)	22.98	21.71	20.79	18.96
		680.5 (133297)	22.60	22.03	20.71	19.06

	15MHz	25RB-Middle (12)	668 (133172)	22.92	21.70	20.80	19.01
			693 (132422)	22.92	22.02	20.99	18.68
			680.5 (133297)	22.75	21.78	20.81	19.03
			668 (133172)	22.75	21.79	20.76	18.91
		25RB-Low (0)	693 (132422)	22.86	21.77	20.86	18.83
			680.5 (133297)	22.82	21.71	20.70	18.72
			668 (133172)	22.79	21.71	20.60	18.81
		50RB (0)	693 (132422)	22.95	21.78	20.85	18.87
			680.5 (133297)	22.88	21.83	20.81	18.82
			668 (133172)	22.73	21.79	20.94	18.87
	20MHz	1RB-High (74)	690.5 (133397)	23.66	22.90	22.03	18.68
			680.5 (133297)	23.57	23.16	21.90	18.84
			670.5 (133197)	23.46	22.93	21.84	18.68
		1RB-Middle (37)	690.5 (133397)	23.67	23.01	22.05	19.03
			680.5 (133297)	23.75	23.08	21.82	18.78
			670.5 (133197)	23.51	22.98	21.63	18.62
		1RB-Low (0)	690.5 (133397)	23.73	22.96	21.78	19.00
			680.5 (133297)	23.66	22.87	21.81	18.51
			670.5 (133197)	23.86	23.09	22.03	18.81
		36RB-High (38)	690.5 (133397)	22.75	21.96	20.60	18.94
			680.5 (133297)	22.85	21.74	20.71	18.95
			670.5 (133197)	23.02	21.93	20.80	18.95
		36RB-Middle (19)	690.5 (133397)	22.94	21.83	20.74	18.60
			680.5 (133297)	22.74	21.69	20.70	18.77
			670.5 (133197)	22.90	21.85	20.82	19.05
		36RB-Low (0)	690.5 (133397)	22.76	21.72	20.89	18.81
			680.5 (133297)	22.71	21.81	20.82	18.81
			670.5 (133197)	22.91	21.78	20.76	18.97
		75RB (0)	690.5 (133397)	22.74	21.93	20.78	18.95
			680.5 (133297)	22.70	21.72	20.94	18.80
			670.5 (133197)	22.98	21.91	21.01	18.74
	20MHz	1RB-High (99)	688 (133372)	23.62	22.96	21.94	18.60
			683 (133322)	23.65	23.10	21.91	18.88
			673 (133222)	23.61	23.07	21.80	18.64
		1RB-Middle (50)	688 (133372)	23.67	22.99	21.97	18.97
			683 (133322)	23.76	23.12	21.69	18.72
			673 (133222)	23.65	22.91	21.78	18.70
		1RB-Low (0)	688 (133372)	23.74	23.05	21.88	18.93

		683 (133322)	23.66	22.90	21.92	18.60
		673 (133222)	23.75	23.07	22.00	18.66
50RB-High (50)	688 (133372)	22.83	21.84	20.75	18.99	
		683 (133322)	22.73	21.88	20.82	18.92
	673 (133222)	22.87	21.85	20.76	18.90	
	688 (133372)	22.84	21.88	20.84	18.75	
	683 (133322)	22.88	21.68	20.80	18.90	
50RB-Middle (25)	673 (133222)	22.80	21.79	20.83	18.91	
	688 (133372)	22.81	21.77	20.83	18.68	
	683 (133322)	22.81	21.76	20.83	18.80	
	673 (133222)	22.80	21.77	20.73	18.95	
	688 (133372)	22.87	21.84	20.86	18.87	
100RB (0)	683 (133322)	22.81	21.77	20.84	18.69	
	673 (133222)	22.83	21.82	20.99	18.73	

LTE Carrier Aggregation Conducted Power (Uplink)
CA_41C PC2 ANT8- Power Level DS10

UL LTE CA Class	PCC				SCC				conducted power (dBm)
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
CA_41C	20M	39750	1	99	5M	39867	1	0	21.64
CA_41C	15M	39725	1	74	10M	39845	1	0	21.55
CA_41C	20M	39750	1	99	10M	39894	1	0	21.39
CA_41C	20M	39750	1	99	15M	39921	1	0	21.49
CA_41C	20M	39750	1	99	20M	39948	1	0	21.57
CA_41C	20M	41490	1	99	5M	41373	1	0	13.27
CA_41C	15M	41515	1	74	10M	41395	1	0	13.19
CA_41C	20M	41490	1	99	10M	41346	1	0	13.16
CA_41C	15M	41515	1	74	15M	41365	1	0	13.17
CA_41C	20M	41490	1	99	15M	41319	1	0	13.33
CA_41C	20M	41490	1	99	20M	41292	1	0	13.32
CA_41C	20M	39750	1	0	5M	39867	1	24	13.21
CA_41C	15M	39725	1	0	10M	39845	1	49	13.15
CA_41C	20M	39750	1	0	10M	39894	1	49	13.15
CA_41C	20M	39750	1	0	15M	39921	1	74	13.18
CA_41C	20M	39750	1	0	20M	39948	1	99	13.22
CA_41C	20M	41490	1	0	5M	41373	1	24	21.77
CA_41C	15M	41515	1	0	10M	41395	1	49	21.53
CA_41C	20M	41490	1	0	10M	41346	1	49	21.47
CA_41C	15M	41515	1	0	15M	41365	1	74	21.63
CA_41C	20M	41490	1	0	15M	41319	1	74	21.75
CA_41C	20M	41490	1	0	20M	41292	1	99	21.6

CA_41C PC2 ANT8- Power Level DS11/2/4/5

UL LTE CA Class	PCC				SCC				conducted power (dBm)
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
CA_41C	20M	39750	1	99	5M	39867	1	0	23.36
CA_41C	15M	39725	1	74	10M	39845	1	0	23.37
CA_41C	20M	39750	1	99	10M	39894	1	0	23.34
CA_41C	20M	39750	1	99	15M	39921	1	0	23.34
CA_41C	20M	39750	1	99	20M	39948	1	0	23.31
CA_41C	20M	41490	1	99	5M	41373	1	0	15.35
CA_41C	15M	41515	1	74	10M	41395	1	0	15.37
CA_41C	20M	41490	1	99	10M	41346	1	0	15.35
CA_41C	15M	41515	1	74	15M	41365	1	0	15.34
CA_41C	20M	41490	1	99	15M	41319	1	0	15.39
CA_41C	20M	41490	1	99	20M	41292	1	0	15.36
CA_41C	20M	39750	1	0	5M	39867	1	24	15.22
CA_41C	15M	39725	1	0	10M	39845	1	49	15.19
CA_41C	20M	39750	1	0	10M	39894	1	49	15.23
CA_41C	20M	39750	1	0	15M	39921	1	74	15.29
CA_41C	20M	39750	1	0	20M	39948	1	99	15.27
CA_41C	20M	41490	1	0	5M	41373	1	24	23.47
CA_41C	15M	41515	1	0	10M	41395	1	49	23.37
CA_41C	20M	41490	1	0	10M	41346	1	49	23.39
CA_41C	15M	41515	1	0	15M	41365	1	74	23.42
CA_41C	20M	41490	1	0	15M	41319	1	74	23.44
CA_41C	20M	41490	1	0	20M	41292	1	99	23.45

CA_41C PC2 ANT8- Power Level DS13

UL LTE CA Class	PCC				SCC				conducted power (dBm)
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
CA_41C	20M	39750	1	99	5M	39867	1	0	20.59
CA_41C	15M	39725	1	74	10M	39845	1	0	20.49
CA_41C	20M	39750	1	99	10M	39894	1	0	20.39
CA_41C	20M	39750	1	99	15M	39921	1	0	20.49
CA_41C	20M	39750	1	99	20M	39948	1	0	20.5
CA_41C	20M	41490	1	99	5M	41373	1	0	12.22
CA_41C	15M	41515	1	74	10M	41395	1	0	12.06
CA_41C	20M	41490	1	99	10M	41346	1	0	12.02
CA_41C	15M	41515	1	74	15M	41365	1	0	12.08
CA_41C	20M	41490	1	99	15M	41319	1	0	12.18
CA_41C	20M	41490	1	99	20M	41292	1	0	12.22
CA_41C	20M	39750	1	0	5M	39867	1	24	12.05
CA_41C	15M	39725	1	0	10M	39845	1	49	12
CA_41C	20M	39750	1	0	10M	39894	1	49	12.09
CA_41C	20M	39750	1	0	15M	39921	1	74	12.04
CA_41C	20M	39750	1	0	20M	39948	1	99	12.09
CA_41C	20M	41490	1	0	5M	41373	1	24	20.69
CA_41C	15M	41515	1	0	10M	41395	1	49	20.54
CA_41C	20M	41490	1	0	10M	41346	1	49	20.27
CA_41C	15M	41515	1	0	15M	41365	1	74	20.6
CA_41C	20M	41490	1	0	15M	41319	1	74	20.69
CA_41C	20M	41490	1	0	20M	41292	1	99	20.53

CA_41C PC3 ANT8- Power Level DS10

UL LTE CA Class	PCC				SCC				conducted power (dBm)
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
CA 41C	20M	39750	1	99	5M	39867	1	0	21.02
CA 41C	15M	39725	1	74	10M	39845	1	0	20.89
CA 41C	20M	39750	1	99	10M	39894	1	0	21.19
CA 41C	20M	39750	1	99	15M	39921	1	0	20.97
CA 41C	20M	39750	1	99	20M	39948	1	0	21.07
CA 41C	20M	41490	1	99	5M	41373	1	0	12.64
CA 41C	15M	41515	1	74	10M	41395	1	0	12.72
CA 41C	20M	41490	1	99	10M	41346	1	0	12.63
CA 41C	15M	41515	1	74	15M	41365	1	0	12.9
CA 41C	20M	41490	1	99	15M	41319	1	0	13.04
CA 41C	20M	41490	1	99	20M	41292	1	0	13.02
CA 41C	20M	39750	1	0	5M	39867	1	24	13
CA 41C	15M	39725	1	0	10M	39845	1	49	12.9
CA 41C	20M	39750	1	0	10M	39894	1	49	12.84
CA 41C	20M	39750	1	0	15M	39921	1	74	12.92
CA 41C	20M	39750	1	0	20M	39948	1	99	13.08
CA 41C	20M	41490	1	0	5M	41373	1	24	21.2
CA 41C	15M	41515	1	0	10M	41395	1	49	21.17
CA 41C	20M	41490	1	0	10M	41346	1	49	21.09
CA 41C	15M	41515	1	0	15M	41365	1	74	20.95
CA 41C	20M	41490	1	0	15M	41319	1	74	21.17
CA 41C	20M	41490	1	0	20M	41292	1	99	20.95

CA_41C PC3 ANT8- Power Level DS1/2/4/5

UL LTE CA Class	PCC				SCC				conducted power (dBm)
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
CA 41C	20M	39750	1	99	5M	39867	1	0	23.03
CA 41C	15M	39725	1	74	10M	39845	1	0	23.03
CA 41C	20M	39750	1	99	10M	39894	1	0	23.24
CA 41C	20M	39750	1	99	15M	39921	1	0	23.03
CA 41C	20M	39750	1	99	20M	39948	1	0	23.09
CA 41C	20M	41490	1	99	5M	41373	1	0	14.76
CA 41C	15M	41515	1	74	10M	41395	1	0	14.85
CA 41C	20M	41490	1	99	10M	41346	1	0	14.8
CA 41C	15M	41515	1	74	15M	41365	1	0	14.91
CA 41C	20M	41490	1	99	15M	41319	1	0	15.04
CA 41C	20M	41490	1	99	20M	41292	1	0	15.11
CA 41C	20M	39750	1	0	5M	39867	1	24	15.13
CA 41C	15M	39725	1	0	10M	39845	1	49	15.03
CA 41C	20M	39750	1	0	10M	39894	1	49	14.92
CA 41C	20M	39750	1	0	15M	39921	1	74	15.08
CA 41C	20M	39750	1	0	20M	39948	1	99	15.11
CA 41C	20M	41490	1	0	5M	41373	1	24	23.2
CA 41C	15M	41515	1	0	10M	41395	1	49	23.15
CA 41C	20M	41490	1	0	10M	41346	1	49	23.11
CA 41C	15M	41515	1	0	15M	41365	1	74	23.06
CA 41C	20M	41490	1	0	15M	41319	1	74	23.21
CA 41C	20M	41490	1	0	20M	41292	1	99	23.04

CA_41C PC3 ANT8- Power Level DS13

UL LTE CA Class	PCC				SCC				conducted power (dBm)
	PCC Bandwidth	channel	RB	RB OFFSET	SCC Bandwidth	channel	RB	RB OFFSET	
CA 41C	20M	39750	1	99	5M	39867	1	0	20.12
CA 41C	15M	39725	1	74	10M	39845	1	0	19.87
CA 41C	20M	39750	1	99	10M	39894	1	0	20.27
CA 41C	20M	39750	1	99	15M	39921	1	0	19.93
CA 41C	20M	39750	1	99	20M	39948	1	0	20.16
CA 41C	20M	41490	1	99	5M	41373	1	0	11.65
CA 41C	15M	41515	1	74	10M	41395	1	0	11.78
CA 41C	20M	41490	1	99	10M	41346	1	0	11.46
CA 41C	15M	41515	1	74	15M	41365	1	0	12
CA 41C	20M	41490	1	99	15M	41319	1	0	11.9
CA 41C	20M	41490	1	99	20M	41292	1	0	11.92
CA 41C	20M	39750	1	0	5M	39867	1	24	11.87
CA 41C	15M	39725	1	0	10M	39845	1	49	11.81
CA 41C	20M	39750	1	0	10M	39894	1	49	11.77
CA 41C	20M	39750	1	0	15M	39921	1	74	11.82
CA 41C	20M	39750	1	0	20M	39948	1	99	12.18
CA 41C	20M	41490	1	0	5M	41373	1	24	20.19
CA 41C	15M	41515	1	0	10M	41395	1	49	20
CA 41C	20M	41490	1	0	10M	41346	1	49	19.99
CA 41C	15M	41515	1	0	15M	41365	1	74	19.94
CA 41C	20M	41490	1	0	15M	41319	1	74	20.26
CA 41C	20M	41490	1	0	20M	41292	1	99	19.91

11.4 Wi-Fi and BT Measurement result

The maximum output power of BT antenna is 12.12dBm.

The maximum tune up of BT antenna is 12.5dBm.

The average conducted power for Wi-Fi 2.4G-DSI0/1/2/4/5:

2.4GHz		tune up
FCC		
802.11b(dBm)		
Channel\data rate	1Mbps	
11(2462MHz)	19.84	20.50
6(2437MHz)	19.95	20.50
1(2412MHz)	20.01	20.50
802.11g(dBm)		
Channel\data rate	6Mbps	
11(2462MHz)	19.25	19.50
6(2437MHz)	19.44	19.50
1(2412MHz)	16.35	16.50
802.11n(dBm)-20MHz		
Channel\data rate	MCS0	
11(2462MHz)	19.10	19.50
6(2437MHz)	19.21	19.50
1(2412MHz)	17.12	17.50
802.11n(dBm)-40MHz		
Channel\data rate	MCS0	
9(2452MHz)	14.88	15.00
6(2437MHz)	18.45	19.00
3(2422MHz)	14.38	15.00

The average conducted power for Wi-Fi 2.4G-DSI3

2.4GHz		Tune up
FCC		
802.11b(dBm)		
Channel\data rate	1Mbps	
11(2462MHz)	17.29	17.50
6(2437MHz)	17.40	17.50
1(2412MHz)	17.41	17.50
802.11g(dBm)		
Channel\data rate	6Mbps	
11(2462MHz)	15.69	16.50
6(2437MHz)	15.87	16.50
1(2412MHz)	13.49	13.50
802.11n(dBm)-20MHz		
Channel\data rate	MCS0	
11(2462MHz)	15.53	16.50
6(2437MHz)	15.75	16.50
1(2412MHz)	13.87	14.50
802.11n(dBm)-40MHz		
Channel\data rate	MCS0	
9(2452MHz)	11.46	12.00
6(2437MHz)	14.89	16.00
3(2422MHz)	10.94	12.00

The average conducted power for Wi-Fi 5G-DSI1/2

5GHz			
802.11n(dBm)-40MHz			
Channel\data rate	MCS0	tune up	
38(5190 MHz)	15.67	17.00	
46(5230 MHz)	17.89	19.00	
54(5270 MHz)	17.47	19.00	
62(5310 MHz)	13.71	14.00	
102(5510 MHz)	13.05	14.00	
110(5550 MHz)	17.72	19.00	
118(5590 MHz)	17.35	19.00	
126(5630 MHz)	17.41	19.00	
134(5670 MHz)	12.77	14.00	
142(5710 MHz)	17.53	19.00	
151(5755 MHz)	17.82	19.00	
159(5795 MHz)	17.91	19.00	

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

5GHz			
802.11n(dBm)-40MHz			
Channel\data rate	MCS0	tune up	
38(5190 MHz)	13.92	15.00	
46(5230 MHz)	16.97	17.00	
54(5270 MHz)	16.92	17.00	
62(5310 MHz)	10.48	12.00	
102(5510 MHz)	11.09	12.00	
110(5550 MHz)	16.09	17.00	
118(5590 MHz)	15.85	17.00	
126(5630 MHz)	16.11	17.00	
134(5670 MHz)	10.89	12.00	
142(5710 MHz)	15.59	17.00	
151(5755 MHz)	15.35	17.00	
159(5795 MHz)	15.92	17.00	

The average conducted power for Wi-Fi 5G- DS13

5GHz		
802.11n(dBm)-40MHz		tune up
Channel\data rate	MCS0	
38(5190 MHz)	12.01	13.00
46(5230 MHz)	14.92	15.00
54(5270 MHz)	14.81	15.00
62(5310 MHz)	8.39	10.00
102(5510 MHz)	8.76	10.00
110(5550 MHz)	14.16	15.00
118(5590 MHz)	13.99	15.00
126(5630 MHz)	14.23	15.00
134(5670 MHz)	9.03	10.00
142(5710 MHz)	13.77	15.00
151(5755 MHz)	13.99	15.00
159(5795 MHz)	14.03	15.00

The average conducted power for Wi-Fi 5G- DS14/5

5GHz		
802.11n(dBm)-40MHz		tune up
Channel\data rate	MCS0	
38(5190 MHz)	14.76	16.00
46(5230 MHz)	17.93	18.00
54(5270 MHz)	17.78	18.00
62(5310 MHz)	11.51	13.00
102(5510 MHz)	12.12	13.00
110(5550 MHz)	16.65	18.00
118(5590 MHz)	16.45	18.00
126(5630 MHz)	16.73	18.00
134(5670 MHz)	11.92	13.00
142(5710 MHz)	16.57	18.00
151(5755 MHz)	16.74	18.00
159(5795 MHz)	16.50	18.00

11.5 5G NR Measurement result

N25- DSIO/1/2/3/4/5 ANT1

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1912.5	382500	24.50	23.69
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1882.5	376500	24.50	23.83
3	Low	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1852.5	370500	24.50	23.66
4	High	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1905	381000	24.50	23.63
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1882.5	376500	24.50	23.82
6	Low	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1860	372000	24.50	23.72
No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
		1	Middle	15	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	1882.5	376500	24.50
		2	Middle	15	DFT-s-OFDM 16QAM	Inner_Full	12_6	1882.5	376500	23.50
		3	Middle	15	DFT-s-OFDM 64QAM	Inner_Full	12_6	1882.5	376500	22.00
		4	Middle	15	DFT-s-OFDM 256QAM	Inner_Full	12_6	1882.5	376500	20.00
		5	Middle	15	CP-OFDM QPSK	Inner_Full	12_6	1882.5	376500	23.00
		6	Middle	15	CP-OFDM 16QAM	Inner_Full	12_6	1882.5	376500	22.50
		7	Middle	15	CP-OFDM 64QAM	Inner_Full	12_6	1882.5	376500	21.00
		8	Middle	15	CP-OFDM 256QAM	Inner_Full	12_6	1882.5	376500	18.00
		9	Middle	15	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	1882.5	376500	23.50
		10	Middle	15	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	1882.5	376500	23.50
		11	Middle	15	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	1882.5	376500	23.50
		12	Middle	15	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	1882.5	376500	23.50
		13	Middle	15	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	1882.5	376500	24.50
		14	Middle	15	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	1882.5	376500	23.75
		15	Middle	15	DFT-s-OFDM QPSK	Outer_Full	25_0	1882.5	376500	24.50
		15	Middle	15	DFT-s-OFDM QPSK	Inner_Full	25_12	1882.5	376500	22.72
		18	Middle	15	DFT-s-OFDM QPSK	Inner_Full	36_18	1882.5	376500	23.35
		18	Middle	15	DFT-s-OFDM QPSK	Inner_Full	36_18	1882.5	376500	23.45

N25- DSIO/1/2/3/4/5 ANT3

No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1912.5	382500	24.50	23.90
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1882.5	376500	24.50	24.08
3	Low	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1852.5	370500	24.50	23.87
4	High	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1905	381000	24.50	24.01
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1882.5	376500	24.50	24.00
6	Low	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1860	372000	24.50	23.95
No.	Test Freq Description	5G-n25							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
		1	Middle	15	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	1882.5	376500	24.50
		2	Middle	15	DFT-s-OFDM 16QAM	Inner_Full	12_6	1882.5	376500	23.50
		3	Middle	15	DFT-s-OFDM 64QAM	Inner_Full	12_6	1882.5	376500	22.00
		4	Middle	15	DFT-s-OFDM 256QAM	Inner_Full	12_6	1882.5	376500	20.00
		5	Middle	15	CP-OFDM QPSK	Inner_Full	12_6	1882.5	376500	23.00
		6	Middle	15	CP-OFDM 16QAM	Inner_Full	12_6	1882.5	376500	22.50
		7	Middle	15	CP-OFDM 64QAM	Inner_Full	12_6	1882.5	376500	21.00
		8	Middle	15	CP-OFDM 256QAM	Inner_Full	12_6	1882.5	376500	18.00
		9	Middle	15	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	1882.5	376500	23.50
		10	Middle	15	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	1882.5	376500	23.50
		11	Middle	15	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	1882.5	376500	23.50
		12	Middle	15	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	1882.5	376500	23.50
		13	Middle	15	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	1882.5	376500	24.50
		14	Middle	15	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	1882.5	376500	24.06
		15	Middle	15	DFT-s-OFDM QPSK	Outer_Full	25_0	1882.5	376500	24.50
		15	Middle	15	DFT-s-OFDM QPSK	Inner_Full	25_12	1882.5	376500	23.09
		18	Middle	15	DFT-s-OFDM QPSK	Inner_Full	36_18	1882.5	376500	23.82
		18	Middle	15	DFT-s-OFDM QPSK	Inner_Full	36_18	1882.5	376500	23.77

N66- DS10/1/2/3/5 ANT1

No.	Test Freq Description	5G-n66							Power Results (dBm)	
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	n66
1	High	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1777.5	355500	24.50	23.76
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1745	349000	24.50	23.86
3	Low	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1712.5	342500	24.50	23.78
4	High	15	40	DFT-s-OFDM QPSK	Inner_Full	108_54	1760	352000	24.50	23.68
5	Middle	15	40	DFT-s-OFDM QPSK	Inner_Full	108_54	1745	349000	24.50	23.80
6	Low	15	40	DFT-s-OFDM QPSK	Inner_Full	108_54	1730	346000	24.50	23.82
No.	Test Freq Description	5G-n66							Power Results (dBm)	
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.	Tune up	n28
1	Middle	15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	1745	349000	24.50	23.72
2	Middle	15	5	DFT-s-OFDM 16QAM	Inner_Full	12_6	1745	349000	23.50	22.81
3	Middle	15	5	DFT-s-OFDM 64QAM	Inner_Full	12_6	1745	349000	22.00	21.27
4	Middle	15	5	DFT-s-OFDM 256QAM	Inner_Full	12_6	1745	349000	20.00	19.18
5	Middle	15	5	CP-OFDM QPSK	Inner_Full	12_6	1745	349000	23.00	22.20
6	Middle	15	5	CP-OFDM 16QAM	Inner_Full	12_6	1745	349000	22.50	21.65
7	Middle	15	5	CP-OFDM 64QAM	Inner_Full	12_6	1745	349000	21.00	20.18
8	Middle	15	5	CP-OFDM 256QAM	Inner_Full	12_6	1745	349000	18.00	17.25
9	Middle	15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	1745	349000	23.50	22.71
10	Middle	15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	1745	349000	23.50	22.74
11	Middle	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	1745	349000	23.50	22.78
12	Middle	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	1745	349000	23.50	22.82
13	Middle	15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	1745	349000	24.50	23.72
14	Middle	15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	1745	349000	24.50	23.74
15	Middle	15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	1745	349000	24.50	22.71
15	Middle	15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	1745	349000	24.50	22.74
18	Middle	15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	1745	349000	24.50	22.81
18	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1745	349000	24.50	22.79
18	Middle	15	30	DFT-s-OFDM QPSK	Inner_Full	80_40	1745	349000	24.50	22.86

N66- DS14 ANT1

No.	Test Freq Description	5G-n66							Power Results (dBm)	
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1777.5	355500	21.86	
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1745	349000	21.95	
3	Low	15	5	DFT-s-OFDM QPSK	Inner_Full	12_6	1712.5	342500	21.88	
4	High	15	40	DFT-s-OFDM QPSK	Inner_Full	108_54	1760	352000	21.78	
5	Middle	15	40	DFT-s-OFDM QPSK	Inner_Full	108_54	1745	349000	21.89	
6	Low	15	40	DFT-s-OFDM QPSK	Inner_Full	108_54	1730	346000	21.91	
No.	Test Freq Description	5G-n66							Power Results (dBm)	
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Middle	15	5	DFT-s-OFDM PI/2 BPSK1	Inner_Full	12_6	1745	349000	21.77	
2	Middle	15	5	DFT-s-OFDM 16QAM	Inner_Full	12_6	1745	349000	21.89	
3	Middle	15	5	DFT-s-OFDM 64QAM	Inner_Full	12_6	1745	349000	21.29	
4	Middle	15	5	DFT-s-OFDM 256QAM	Inner_Full	12_6	1745	349000	19.31	
5	Middle	15	5	CP-OFDM QPSK	Inner_Full	12_6	1745	349000	21.78	
6	Middle	15	5	CP-OFDM 16QAM	Inner_Full	12_6	1745	349000	21.82	
7	Middle	15	5	CP-OFDM 64QAM	Inner_Full	12_6	1745	349000	20.31	
8	Middle	15	5	CP-OFDM 256QAM	Inner_Full	12_6	1745	349000	17.34	
9	Middle	15	5	DFT-s-OFDM QPSK	Edge_Full_Right	2_23	1745	349000	21.83	
10	Middle	15	5	DFT-s-OFDM QPSK	Edge_Full_Left	2_0	1745	349000	21.89	
11	Middle	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right	1_24	1745	349000	21.91	
12	Middle	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left	1_0	1745	349000	21.90	
13	Middle	15	5	DFT-s-OFDM QPSK	Inner_1RB_Right	1_23	1745	349000	21.87	
14	Middle	15	5	DFT-s-OFDM QPSK	Inner_1RB_Left	1_1	1745	349000	21.91	
15	Middle	15	5	DFT-s-OFDM QPSK	Outer_Full	25_0	1745	349000	21.78	
15	Middle	15	10	DFT-s-OFDM QPSK	Inner_Full	25_12	1745	349000	21.81	
18	Middle	15	15	DFT-s-OFDM QPSK	Inner_Full	36_18	1745	349000	21.85	
18	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full	50_25	1745	349000	21.77	
18	Middle	15	30	DFT-s-OFDM QPSK	Inner_Full	80_40	1745	349000	21.82	