

FCC SAR Compliance Test Report

For

INFINIX MOBILITY LIMITED

FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET

FOTAN NT HONGKONG

Model: X6856

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Modified History

REV.	Modification Description	Issued Date	Remark
REV.1.0	Initial Test Report Relesse	06 January 2025	Li Huaibi

1 General information

1.1 Notes

The test results of this test report relate exclusively to the test item specified in this test report. Shenzhen Timeway Testing Laboratories does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report is not to be reproduced or published in full without the prior written permission.

1.2 Application details

Date of receipt of test item: 2024-11-08

Start of test: 2024-11-09

End of test: 2024-12-23

1.3 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for KJ8s is as below:

Band	Position Test Points	MAX Reported SAR _{1g} (W/kg)
GSM850	Head	0.167
	Body & Hotspot 10mm	0.370
GSM1900	Head	0.060
	Body & Hotspot 10mm	0.545
UMTS Band 2	Head	0.088
	Body & Hotspot 10mm	0.684
UMTS Band 4	Head	0.084
	Body & Hotspot 10mm	0.712
UMTS Band 5	Head	0.151
	Body & Hotspot 10mm	0.334
LTE Band 2	Head	0.033
	Body & Hotspot 10mm	0.186
LTE Band 4	Head	0.131
	Body & Hotspot 10mm	0.619
LTE Band 5	Head	0.168
	Body & Hotspot 10mm	0.346
LTE Band 7	Head	0.031
	Body & Hotspot 10mm	0.250
LTE Band 12	Head	0.066
	Body & Hotspot 10mm	0.150
LTE Band 17	Head	0.075
	Body & Hotspot 10mm	0.157
LTE Band 38	Head	0.033
	Body & Hotspot 10mm	0.278
LTE Band 41	Head	0.094
	Body & Hotspot 10mm	0.670
LTE Band 42	Head	1.056
	Body & Hotspot 10mm	0.314
LTE Band 66	Head	0.116
	Body & Hotspot 10mm	0.599
NR n5	Head	0.148
	Body & Hotspot 10mm	0.131
NR n7	Head	0.051
	Body & Hotspot 10mm	0.282
NR n12	Head	0.080
	Body & Hotspot 10mm	0.209
NR n38	Head	0.019
	Body & Hotspot 10mm	0.207
NR n41	Head	0.020
	Body & Hotspot 10mm	0.205
NR n66	Head	0.040
	Body & Hotspot 10mm	0.238
NR n71	Head	0.078
	Body & Hotspot 10mm	0.216

NR n77	Head	0.667
	Body & Hotspot 10mm	0.205
NR n77	Head	0.881
	Body & Hotspot 10mm	0.163
NR n77	Head	0.695
	Body & Hotspot 10mm	0.076
NR n78	Head	0.173
	Body & Hotspot 10mm	0.065
NR n78	Head	0.218
	Body & Hotspot 10mm	0.053
NR n78	Head	0.209
	Body & Hotspot 10mm	0.041
2-n7	Head	1.111
	Body & Hotspot 10mm	0.302
2-n66	Head	1.089
	Body & Hotspot 10mm	0.238
2-n78	Head	1.075
	Body & Hotspot 10mm	0.314
4-n7	Head	0.518
	Body & Hotspot 10mm	0.064
4-n41	Head	0.653
	Body & Hotspot 10mm	0.063
4-n78	Head	0.493
	Body & Hotspot 10mm	0.091
5-n7	Head	0.092
	Body & Hotspot 10mm	0.371
5-n38	Head	0.081
	Body & Hotspot 10mm	0.186
5-n41	Head	0.081
	Body & Hotspot 10mm	0.173
5-n66	Head	0.093
	Body & Hotspot 10mm	0.294
5-n77	Head	0.114
	Body & Hotspot 10mm	0.138
5-n78	Head	0.116
	Body & Hotspot 10mm	0.143
7-n7	Head	0.160
	Body & Hotspot 10mm	0.660
7-n66	Head	0.993
	Body & Hotspot 10mm	0.151
7-n77	Head	0.949
	Body & Hotspot 10mm	0.118
7-n78	Head	1.114
	Body & Hotspot 10mm	0.189
38-n78	Head	0.180
	Body & Hotspot 10mm	0.092
41-n41	Head	0.326
	Body & Hotspot 10mm	0.086
41-n77	Head	0.402
	Body & Hotspot 10mm	0.064
41-n78	Head	0.413
	Body & Hotspot 10mm	0.063

66-n7	Head	0.713
	Body & Hotspot 10mm	0.057
66-n38	Head	0.814
	Body & Hotspot 10mm	0.046
66-n41	Head	0.702
	Body & Hotspot 10mm	0.060
66-n66	Head	0.701
	Body & Hotspot 10mm	0.062
66-n77	Head	0.822
	Body & Hotspot 10mm	0.078
66-n78	Head	0.765
	Body & Hotspot 10mm	0.066
WIFI5G Band1	Head	0.124
	Body & Hotspot 10mm	0.089
WIFI5G Band2	Head	0.217
	Body & Hotspot 10mm	0.164
WIFI5G Band3	Head	0.225
	Body & Hotspot 10mm	0.260
WIFI5G Band4	Head	0.238
	Body & Hotspot 10mm	0.298
BT	Head	0.043
	Body & Hotspot 10mm	0.045
Wi-Fi 2.4G	Head	0.278
	Body & Hotspot 10mm	0.015
Maximum Max. SAR Level(s) Measured: (Limit: 1.6W/Kg):	7-n78	1.114W/kg1gHeadTissue
	Wi-Fi 2.4G	0.278W/kg1gHeadTissue
	UMTS Band 4	0.712W/kg1gBodyTissue
	WIFI5G Band4	0.298W/kg1gBodyTissue
The Head highest simultaneous SAR :		1.392W/kg1gHeadTissue
The Body highest simultaneous SAR :		1.010W/kg1gBodyTissue

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontraolled exposure limits of 1.6 W/Kg as averaged over any 1g tissue according to the FCC rule the ANSI/IEEE C95.1:2005, the NCRP Report Number 86 for uncontrolled environment, according to the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013.

1.4 EUT Information

Device Information:	
Product Type:	Mobile Phone
Model:	X6856
Trade Name:	Infinix
Device Type:	Portable device
Exposure Category:	uncontrolled environment / general population
Production Unit or Identical Prototype:	Production Unit
Software version :	X6856-15.0.1
Hardware version:	V1.2
Antenna Type :	Integral Antenna
Device Operating Configurations:	
Supporting Mode(s) :	GSM/GPRS/EGPRS 850/1900 MHz WCDMA/HSDPA/HSUPA Band 2/4/5 FDD LTE Band 2/4/5/7/12/B13/66 TDD LTE Band 38/41/42 FDD NR Band 5/7/12/66/71 TDD NR Band 38/41/77/78 NSA(EN-DC): DC_2A_n7A, DC_2A_n66A, DC_2A_n78A, DC_4A_n7A, DC_4A_n41A, DC_4A_n78A, DC_5A_n7A, DC_5A_n38A, DC_5A_n41A, DC_5A_n66A, DC_5A_n77A, DC_5A_n78A, DC_7A_n7A, DC_7A_n66A, DC_7A_n77A, DC_7A_n78A, DC_38A_n78A DC_41A_n41A, DC_41A_n77A, DC_41A_n78A, DC_66A_n7A, DC_66A_n38A, DC_66A_n41A, DC_66A_n66A, DC_66A_n77A, DC_66A_n78A
Modulation:	GSM/GPRS: GMSK EGPRS: 8PSK WCDMA: QPSK HSDPA/HSUPA: QPSK /16QAM LTE: QPSK/16QAM NR: BPSK/ QPSK/16QAM/64QAM/256QAM DSSS (DBPSK, DQPSK, CCK) for IEEE 802.11b OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM,) for IEEE 802.11g/n IEEE 802.11a/n/ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) BT: GFSK, $\pi/4$ -DQPSK, 8-DPSK
Device Class :	Class B, No DTM Mode

Operating Frequency Range(s)

Band	TX(MHz)	RX(MHz)
GSM850	824~849	869~894
GSM1900	1850~1910	1930~1990
UMTS Band 2	1850~1910	1930~1990
UMTS Band 4	1710~1755	2110~2155
UMTS Band 5	824~849	869~894
LTE Band 2	1850~1910	1930~1990
LTE Band 4	1710~1755	2110~2155
LTE Band 5	824~849	869~894
LTE Band 7	2500~2570	2620~2690
LTE Band 12	699~716	729~746
LTE Band 17	704~716	734~746
LTE Band38	2570~2620	2570~2620
LTE Band 41	2496~2690	2496~2690
LTE Band 42	3450~3550	3450~3550
LTE Band 66	1710~1780	2110~2200
NR Band 5	824~849	869~894
NR Band 7	2500~2570	2620~2690
NR Band 12	699~716	729~746
NR Band 38	2570~2620	2570~2620
NR Band 41	2496~2690	2496~2690
NR Band 66	1710~1780	2110~2200
NR Band 71	663~698	617~652
NR Band 77	3450~3550	3450~3550
NR Band 77	3700~3980	3700~3980
NR Band 78	3450~3550	3450~3550
NR Band 78	3700~3800	3700~3800
Wi-Fi (2.4G)	2412-2462	
Wi-Fi (5G)	5180-5240	5180-5240
	5260-5320	5260-5320
	5500-5700	5500-5700
	5745-5825	5745-5825
BT	2402~2480	
NFC	13.553-13.567	

Antenna gain:	GSM 850/WCDMA B5/LTE B5/NR N5: -5.2dbi PCS 1900/WCDMA B2/LTE B2: -2.08dbi WCDMA B4/LTE B4/ LTE B66/NR N66: -2.08dbi LTE B7/ LTE B38/ LTE B41/ NR N7/ NR N38/ NR N41:-2.42dbi LTE B12/LTE B17/NR N12: -3.8dbi NR N71:-5.26dbi LTE B42/NR 77/NR 78: -2.56dBi BT: -2.6dBi WIFI:ANT1:-2.6dBi,ANT2: -1.73dBi 5GWIFI:ANT1:-2.61dBi, ANT2:-0.25dBi
Radiated Power (EIRP/ERP) Limit	GSM 850/WCDMA B5/LTE B5/NR N5: 7.00W(38.45dBm) PCS 1900/WCDMA B2/LTE B2:2.00W(33.01dBm) WCDMA B4/LTE B4/ LTE B66/NR N66: 1.00W(30.00dBm) LTE B7/LTE B38/LTE B41/NR N7/NR N38/NR N41: 2.00W(33.01dBm) LTE B12/B17/NR N12/NR N71: 3.00W(34.77dBm) LTE B42/NR 77/NR 78: 1.00W(30.00dBm)
Power Source:	Rechargeable Li-ion Polymer Battery Model: BL-5ABX Rated Voltage: 3.86V Rated Capacity: 4900mAh/18.97Wh Typical Capacity: 5000mAh/19.35Wh Limited Charge Voltage: 4.45V

Note:1:The test results of this test report relate exclusively to the test item specified in this test report. World Standardization Certification & Testing Group (Shenzhen) Co.,Ltd does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report is not to be reproduced or published in full without the prior written permission.

2: For NFC evaluation, it is not necessary to test NFC because its power is very low

2 Testing laboratory

Test Site	World Standardization Certification & Testing Group (Shenzhen) Co., Ltd.
Laboratory A:	Building A-B, Baoli'an Industrial Park, No.58 and 60, Tangtuo Avenue, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, China
Laboratory B:	Building J-7F and Building D, Dongjiang Science & Technology Park, Tangjia Community, Fenghuang Street, Guangming District, Shenzhen City, Guangdong Province, China

3 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

CBTL	IECEE (International Electrotechnical Commission, The certificate registration number is TL672)	Laboratory A ☐
		Laboratory B ☐
China	CNAS (The certificated registration number: L3732)	Laboratory A ☐
		Laboratory B ☐
USA	A2LA (The certificated registration number: 5768.01)	Laboratory A ☐
		Laboratory B ☐
USA	ANAB (The certificated registration number: AT-3951)	Laboratory A ☒
		Laboratory B ☐

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.wsct-cert.com>

4 Test Environment

	Required	Actual
Ambient temperature:	18 – 25 °C	22 ± 2 °C
Tissue Simulating liquid:	22 ± 2 °C	22 ± 2 °C
Relative humidity content:	30 – 70 %	30 – 70 %

5 Applicant and Manufacturer

Applicant/Client Name:	INFINIX MOBILITY LIMITED
Applicant Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Manufacturer Name:	INFINIX MOBILITY LIMITED
Manufacturer Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

6 Test standard/s:

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	IEC/IEEE 62209-1528	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate in the Human Head from Wireless Communications Devices: Measurement Techniques
3	KDB447498 D01	General RF Exposure Guidance v06
4	KDB447498 D04	Interim General RF Exposure Guidance v01
5	KDB865664 D01	SAR measurement 100MHz to 6GHz v01r04
6	KDB865664 D02	RF Exposure Reporting v01r02
7	KDB941225 D01	3G SAR Procedures v03r01
8	KDB941225 D05	SAR for LTE Devices v02r05
9	KDB248227 D01	802.11 Wi-Fi SAR v02r02
10	KDB941225 D06	Hotspot Mode v02r01
11	KDB648474 D04	Handset SAR v01r03
12	KDB690783 D01	SAR Listings on Grant v01r03

6.1 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain/Body/Arms/Legs)	1.60 mW/g	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Heads/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

The limit applied in this test report is shown in bold letters

Notes:

* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

** The Spatial Average value of the SAR averaged over the whole body.

*** The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation.

6.2 SAR Definition

Specific Absorption Rate is defined as 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).

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

SAR is expressed in units of watts per kilogram (W/kg). SAR can be related to the electric field at a point by

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

where:

σ = conductivity of the tissue (S/m)

ρ = mass density of the tissue (kg/m³)

E = rms electric field strength (V/m)

7 SAR Measurement System

7.1 The Measurement System

Comosar is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The Comosar system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Device holder
- Head simulating tissue

The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

7.2 Robot

The COMOSAR system uses the high precision robots KR 6 R900 sixx type out of the newer series from Satimo SA (France). For the 6-axis controller COMOSAR system, the KUKA robot controller version from Satimo is used. The KR 6 R900 sixx robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller
-

7.3 Probe

For the measurements the Specific Dosimetric E-Field Probe SSE 5 with following specifications is used



Figure 1 – MVG COMOSAR Dosimetric E field Dipole

- Dynamic range: 0.01-100 W/kg

Probe Length	330 mm
Length of Individual Dipoles	4.5 mm
Maximum external diameter	8 mm
Probe Tip External Diameter	5 mm
Distance between dipoles / probe	2.7 mm

- Calibration range: 300MHz to 3GHz for head & body simulating liquid.

Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 2 – MVG COMOSAR Dosimetric E field Dipole

Dynamic range: 0.01-100 W/kg

Probe Length	330 mm
Length of Individual Dipoles	2 mm
Maximum external diameter	8 mm
Probe Tip External Diameter	2.5 mm
Distance between dipoles / probe	1 mm

- Calibration range: 0.15GHz to 7.5GHz for head & body simulating liquid.

Angle between probe axis (evaluation axis) and surface normal line: less than 30°

7.4 Measurement procedure

The following steps are used for each test position

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface.
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16 mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors can not directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8 * 4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The SATIMO software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

SAR Averaged Methods

In SATIMO, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

7.5 Description of interpolation/extrapolation scheme

- The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimise measurements errors, but the highest local SAR will occur at the surface of the phantom.
- An extrapolation is used to determine these highest local SAR values.
The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.
- The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR average over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

7.6 Phantom

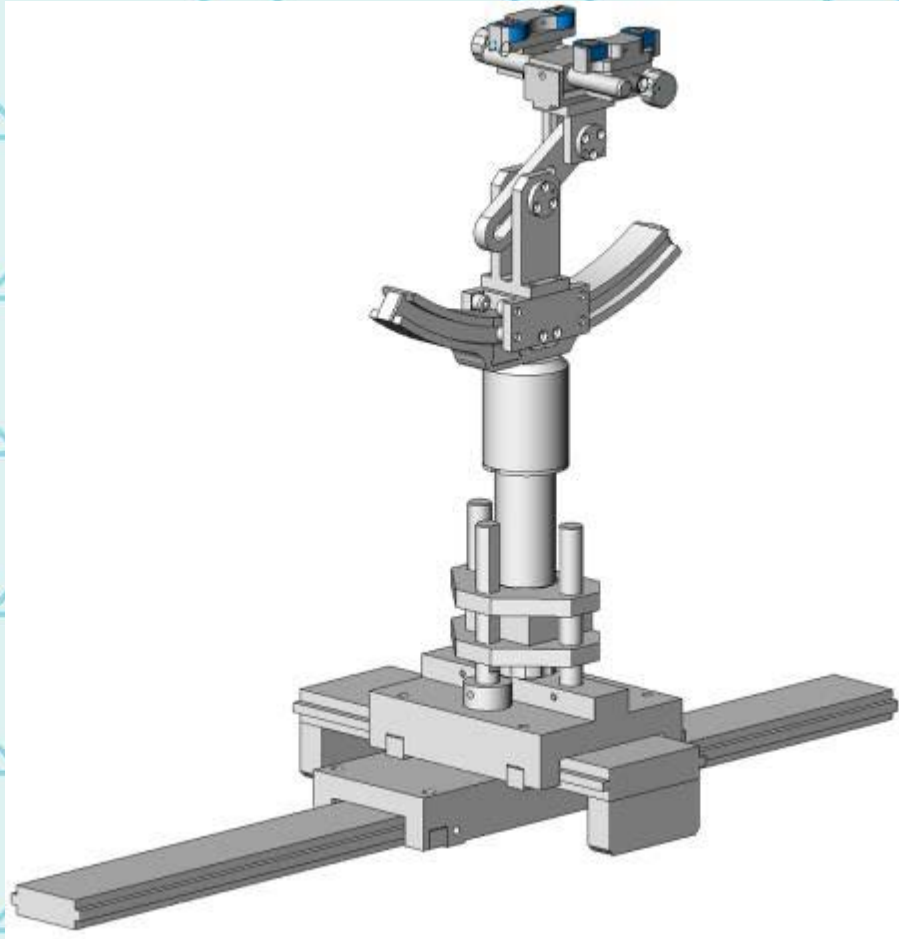
For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.



System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

7.7 Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1°.



Device holder

System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

7.8 Video Positioning System

- The video positioning system is used in OpenSAR to check the probe. Which is composed of a camera, LED, mirror and mechanical parts. The camera is piloted by the main computer with firewire link.
- During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.
- The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.



7.9 Tissue simulating liquids: dielectric properties

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameter are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

The following materials are used for producing the tissue-equivalent materials.

(Liquids used for tests are marked with ☒):

Ingredients(% of weight)	Frequency (MHz)					
	☒ 750	☒ 835	☒ 1800	☒ 1900	☒ 2450	☒ 2600
frequency band	Head	Head	Head	Head	Head	Head
Tissue Type	Head	Head	Head	Head	Head	Head
Water	39.2	41.45	52.64	55.242	62.7	55.242
Salt (NaCl)	2.7	1.45	0.36	0.306	0.5	0.306
Sugar	57.0	56.0	0.0	0.0	0.0	0.0
HEC	0.0	1.0	0.0	0.0	0.0	0.0
Bactericide	0.0	0.1	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	47.0	44.542	0.0	44.452

Salt: 99+% Pure Sodium Chloride

Sugar: 98+% Pure Sucrose

Water: De-ionized, 16MΩ+ resistivity

HEC: Hydroxyethyl Cellulose

DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]

Triton X-100(ultra pure): Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl)phenyl]ether

☒ Simulating Head Liquid for 5G(HBBL3500-5800MHz), Manufactured by SPEAG:

Ingredients	(% by weight)
Water	50-65%
Mineral oil	10-30%
Emulsifiers	8-25%
Sodium salt	0-1.5%

7.10 Tissue simulating liquids: parameters

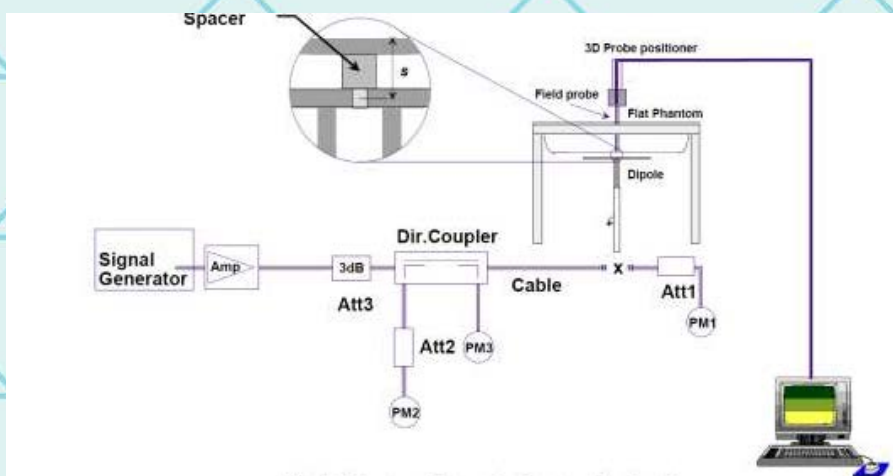
Used Target Frequency	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
	ϵ_r (+/-5%)	σ (S/m) (+/-5%)	ϵ_r	σ (S/m)		
750MHz Head	41.90 (39.04~43.99)	0.89 (0.85~0.93)	41.35	0.89	21.6°C	2024-11-09
835MHz Head	41.50 (39.43~43.57)	0.90 (0.86~0.95)	40.53	0.93	21.6°C	2024-11-13
1800MHz Head	40.00 (38.00~42.00)	1.40 (1.33~1.47)	40.31	1.37	21.6°C	2024-11-17
1900MHz Head	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.84	1.43	21.6°C	2024-11-21
2450MHz Head	39.20 (37.24~41.16)	1.80 (1.71~1.89)	40.27	1.82	21.6°C	2024-11-25
2600MHz Head	39.00 (37.05~40.95)	1.96 (1.86~2.05)	39.87	1.94	21.6°C	2024-11-29
3500MHz Head	37.90 (36.01~39.79)	2.91 (2.77~3.05)	38.20	2.94	21.6°C	2024-12-03
3700MHz Head	37.70 (35.82~39.58)	3.12 (2.97~3.27)	38.33	3.16	21.6°C	2024-12-08
5200MHz Head	36.00 (34.20~37.80)	4.66 (4.43~4.89)	35.62	4.52	21.6°C	2024-12-12
5500MHz Head	35.60 (33.82~37.38)	4.96 (4.71~5.20)	36.11	5.02	21.6°C	2024-12-17
5800MHz Head	35.30 (33.54~37.06)	5.27 (5.01~5.53)	34.63	5.16	21.6°C	2024-12-20
ϵ_r = Relative permittivity, σ = Conductivity						

8 System Check

8.1 System check procedure

The System check is performed by using a System check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 100 mW. To adjust this power a power meter is used. The power sensor is connected to the cable before the System check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the validation to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



8.2 System check results

The system Check is performed for verifying the accuracy of the complete measurement system and performance of the software. The following table shows System check results for all frequency bands and tissue liquids used during the tests (plot(s) see annex A).

System Check	Target SAR (1W) (+/-10%)		Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/kg)	10-g (W/kg)	1-g (W/kg)	10-g (W/kg)		
D750V2 Body	8.49 (7.65~9.33)	5.55 (5.00~6.10)	7.84	5.37	21.6°C	2024-11-09
D835V2 Body	9.82 (8.61~10.51)	6.22 (5.60~6.84)	10.15	6.45	21.6°C	2024-11-13
D1800V2 Body	38.40 (34.56~42.24)	20.10 (18.09~22.11)	41.56	21.72	21.6°C	2024-11-17
D1900V2 Body	39.70 (35.73~43.67)	20.50 (18.45~22.55)	39.33	20.94	21.6°C	2024-11-21
D2450V2 Body	52.40 (47.16~57.64)	24.00 (21.60~26.40)	54.33	23.33	21.6°C	2024-11-25
D2600V2 Body	55.30 (49.77~60.83)	24.60 (22.14~27.06)	53.18	23.43	21.6°C	2024-11-29
D3500V2 Body	67.10 (60.39~73.81)	25.00 (22.50~27.5)	63.09	24.35	21.6°C	2024-12-03
D3700V2 Body	67.40 (60.66~74.14)	24.20 (21.78~26.62)	62.69	23.74	21.6°C	2024-12-08
D5200V2 Body	76.50 (68.85~84.15)	21.60 (19.44~23.76)	77.18	22.64	21.6°C	2024-12-12
D5500V2 Body	83.30 (74.97~91.63)	23.40 (21.06~25.74)	83.37	22.82	21.6°C	2024-12-17
D5800V2 Body	78.00 (70.20~85.50)	21.90 (19.71~24.09)	79.66	20.80	21.6°C	2024-12-20

Note: 1. All SAR values are normalized to 1W forward power.

2. The actual forward power output to the dipole antenna is 20dbm(100mw), so the measured value differs ten times from the table

9 SAR Test Test Configuration

9.1 GSM Test Configurations

SAR tests for GSM850 and GSM1900, a communication link is set up with a base station by air link. Using CMU200 the power lever is set to “5” and “0” in SAR of GSM850 and GSM1900. The tests in the band of GSM 850 and GSM 1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

9.2 UMTS Test Configuration

1) Output Power Verification

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1”s for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPDCH, DPDCHn and spreading codes, HSDPA, HSPA) are required in the SAR report. All configurations that are not supported by the Headset or cannot be measured due to technical or equipment limitations must be clearly identified.

2) WCDMA

a. Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1”s. The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

b. Body SAR Measurements

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1”s. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the Headset with 12.2 kbps RMC as the primary mode

3) HSDPA

SAR for body exposure configurations is measured according to the “Body SAR Measurements” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in

the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as "otherwise" in the applicable procedures; SAR measurement is required for the secondary mode.

Per KDB941225 D01, the 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures for the highest reported SAR body exposure configuration in 12.2 kbps RMC.

HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The β_c and β_d gain factors for DPCCH and DPDCH were set according to the values in the below table, β_{hs} for HS-DPCCH is set automatically to the correct value when ΔACK , $\Delta NACK$, $\Delta CQI = 8$. The variation of the β_c / β_d ratio causes a power reduction at sub-tests 2 - 4.

Sub-test ^o	β_c ^o	β_d ^o	β_d (SF) ^o	β_c / β_d ^o	β_{hs} (1) ^o	CM(dB)(2) ^o	MPR (dB) ^o
1 ^o	2/15 ^o	15/15 ^o	64 ^o	2/15 ^o	4/15 ^o	0.0 ^o	0 ^o
2 ^o	12/15(3) ^o	15/15(3) ^o	64 ^o	12/15(3) ^o	24/15 ^o	1.0 ^o	0 ^o
3 ^o	15/15 ^o	8/15 ^o	64 ^o	15/8 ^o	30/15 ^o	1.5 ^o	0.5 ^o
4 ^o	15/15 ^o	4/15 ^o	64 ^o	15/4 ^o	30/15 ^o	1.5 ^o	0.5 ^o

Note 1: ΔACK , $\Delta NACK$ and $\Delta CQI = 8$ $A_{hs} = \beta_{hs} / \beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2: CM=1 for $\beta_c / \beta_d = 12/15$, $\beta_{hs} / \beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 3: For subtest 2 the β_c / β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.:

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI's
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

4) HSUPA

SAR for body exposure configurations is measured according to the "Body SAR Measurements" procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

Per KDB941225 D01v03, the 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures for the highest reported body exposure SAR configuration in 12.2 kbps RMC.

9.3 LTE Test Configuration

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices. The CMW500 WideBand Radio Communication Tester was used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR test were performed with the same number of RB and RB offsets transmitting on all TTI frames (Maximum TTI)

1) Spectrum Plots for RB configurations

A properly configured base station simulator was used for LTE output power measurements and SAR testing. Therefore, spectrum plots for RB configurations were not required to be included in this report.

2) MPR

When MPR is implemented permanently within the UE, regardless of network requirements, only those RB configurations allowed by 3GPP for the channel bandwidth and modulation combinations may be tested with MPR active. Configurations with RB allocations less than the RB thresholds required by 3GPP must be tested without MPR.

The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

3) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by using Network Signalling Value of "NS_01" on the base station simulator.

4) LTE procedures for SAR testing

A) Largest channel bandwidth standalone SAR test requirements

i) 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 for 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.

ii) QPSK with 50% RB allocation

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

iii) 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 i) and ii) 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.

iv) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

B) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5) TDD LTE test configuration

According to KDB 941225 D05 SAR for LTE Devices v02r04, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

9.4 Wi-Fi Test Configuration

For the 802.11b/g SAR tests, a communication link is set up with the test mode software for Wi-Fi mode test. The Absolute Radio Frequency Channel Number(ARFCN) is allocated to 1, 6 and 11 respectively in the case of 2450 MHz. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Each channel should be tested at the lowest data rate. 802.11b/g operating modes are tested independently according to the service requirements in each frequency band. 802.11b/g modes are tested on channel 1, 6, 11; however, if output power reduction is necessary for channels 1 and/or 11 to meet restricted band requirements the highest output channel closest to each of these channels must be tested instead.

SAR is not required for 802.11g/n channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels.

Mode	Band	GHz	Channel	"Default Test Channels"	
				802.11b	802.11g
802.11b/g	2.4 GHz	2412	1#	√	△
		2437	6	√	△
		2462	11#	√	△

Notes:

√ = "default test channels"

△ = possible 802.11g channels with maximum average output ¼ dB the "default test channels"

= when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels should be tested.

802.11 Test Channels per FCC Requirements

9.5 WiFi 2.4G SAR Test Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

A) 802.11b DSSS SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel (section 3.1 of of KDB 248227D01v02) for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

B) 2.4GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3 of of KDB 248227D01v02r01). SAR is not required for the following 2.4 GHz OFDM conditions.

- 1) When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
- 2) When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

C) SAR Test Requirements for OFDM configurations

When SAR measurement is required for 802.11 g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

10 Detailed Test Results

10.1 Conducted Power measurements

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

10.1.1 Conducted Power of GSM

Mode: GSM850		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH128	CH190	CH251		CH128	CH190	CH251
			824.2MHz	836.6MHz	848.8MHz		824.2MHz	836.6MHz	848.8MHz
GSM(CS)		32.00	31.77	31.86	31.71	-9.03	24.42	24.51	24.36
GPRS (GMSK)	1Tx slot	30.50	30.42	30.49	29.10	-9.03	23.07	23.14	21.75
	2Tx slots	30.00	29.93	29.39	29.82	-9.03	22.58	22.04	22.47
	3Tx slots	31.00	29.54	29.99	30.53	-6.02	22.19	22.64	23.18
	4Tx slots	30.50	30.27	29.73	29.96	-4.26	22.92	22.38	22.61
EGPRS (8PSK)	1Tx slot	28.00	26.54	26.81	27.85	-3.01	19.19	19.46	20.50
	2Tx slots	26.50	26.42	25.91	26.07	-9.03	19.07	18.56	18.72
	3Tx slots	27.00	26.93	26.94	26.73	-6.02	19.58	19.59	19.38
	4Tx slots	27.50	27.36	26.71	26.87	-4.26	20.01	19.36	19.52
Mode: GSM1900		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH512	CH661	CH810		CH512	CH661	CH810
			1850.2MHz	1880.0MHz	1909.8MHz		1850.2MHz	1880.0MHz	1909.8MHz
GSM(CS)		30.00	29.49	29.07	29.68	-9.03	27.41	26.99	27.60
GPRS (GMSK)	1Tx slot	27.50	27.36	26.41	26.06	-9.03	25.28	24.33	23.98
	2Tx slots	27.50	26.37	27.08	26.60	-9.03	24.29	25.00	24.52
	3Tx slots	27.00	26.62	26.20	26.55	-6.02	24.54	24.12	24.47
	4Tx slots	27.50	26.40	27.06	26.83	-4.26	24.32	24.98	24.75
EGPRS (8PSK)	1Tx slot	25.00	24.77	24.30	24.21	-3.01	22.69	22.22	22.13
	2Tx slots	25.50	24.15	24.36	25.08	-9.03	22.13	22.07	23.28
	3Tx slots	25.00	24.04	24.52	24.64	-6.02	23.00	21.96	22.44
	4Tx slots	25.00	24.60	24.67	24.48	-4.26	22.52	22.59	22.40

Note:

Division Factors

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

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

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

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

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

10.1.2 Conducted Power of WCDMA

Mode		Maximum Tune-up(dBm)	WCDMA Band 2		
			Conducted Power (dBm)		
			CH9262	CH9400	CH9538
RMC 12.2K		22.50	20.86	22.28	21.45
HSDPA	Subtest-1	22.00	21.09	21.60	21.49
	Subtest-2	22.50	22.41	21.77	20.57
	Subtest-3	22.00	21.52	21.52	21.34
	Subtest-4	21.50	21.11	21.00	20.68
HSUPA	Subtest-1	22.50	20.72	22.42	21.60
	Subtest-2	22.50	21.68	21.85	22.19
	Subtest-3	22.00	21.70	21.85	21.72
	Subtest-4	22.00	20.50	21.89	21.08
	Subtest-5	22.50	20.91	21.12	22.04
Mode		Maximum Tune-up(dBm)	WCDMA Band 4		
			Conducted Power (dBm)		
			CH1312	CH1413	CH1513
RMC 12.2K		23.50	22.32	22.54	23.08
HSDPA	Subtest-1	24.00	22.81	23.52	23.39
	Subtest-2	23.00	22.08	22.82	22.83
	Subtest-3	24.00	23.53	21.90	23.45
	Subtest-4	23.50	22.64	21.98	23.43
HSUPA	Subtest-1	23.00	22.93	22.15	22.09
	Subtest-2	22.50	22.50	22.09	22.04
	Subtest-3	23.00	22.82	22.34	21.76
	Subtest-4	22.50	22.34	21.54	22.22
	Subtest-5	23.50	22.00	23.17	21.54
Mode		Maximum Tune-up(dBm)	WCDMA Band 5		
			Conducted Power (dBm)		
			CH4132	CH4183	CH4233
RMC 12.2K		23.00	22.23	22.68	22.16
HSDPA	Subtest-1	22.00	21.61	21.54	21.96
	Subtest-2	22.50	21.30	22.37	21.98
	Subtest-3	22.00	21.95	21.89	20.77
	Subtest-4	22.50	21.50	21.13	22.27
HSUPA	Subtest-1	22.00	21.16	21.94	21.55
	Subtest-2	23.00	21.61	22.57	22.13
	Subtest-3	22.00	21.88	21.03	21.39
	Subtest-4	23.00	22.39	21.23	22.56
	Subtest-5	23.00	22.06	22.56	21.35
Per KDB 941225 D01, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/2$ dB higher than the primary mode (RMC12.2kbps) or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.					

10.1.3 Conducted Power of LTE Band 2

LTE-FDD Band 2				Maximum Tune- up(dBm)	Conducted Power(dBm)			
Bandwidth	Modulation	RB allocation	RB offset		18607	18900	19193	
					1850.7MHz	1880.0MHz	1909.3MHz	
1.4MHz	QPSK	1	0	24.00	23.50	23.52	23.36	
			2	24.00	23.53	23.54	23.44	
			5	24.00	23.52	23.53	23.41	
		3	0	23.50	23.47	23.40	23.35	
			2	23.50	23.46	23.39	23.43	
			3	23.50	23.46	23.40	23.44	
	16QAM	6	0	23.00	22.53	22.43	22.40	
			0	23.00	22.52	22.65	22.62	
			1	23.00	22.49	22.68	22.63	
		3	5	23.00	22.51	22.63	22.67	
			0	23.00	22.67	22.60	22.65	
			2	23.00	22.64	22.61	22.67	
6	3	23.00	22.66	22.59	22.68			
	0	22.00	21.69	21.64	21.58			
	Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	18615	18900	19185
1851.5MHz						1880.0MHz	1908.5MHz	
3MHz	QPSK	1	0	24.00	23.54	23.45	23.44	
			7	24.00	23.50	23.47	23.42	
			14	24.00	23.50	23.38	23.48	
		8	0	22.50	22.49	22.45	22.44	
			4	22.50	22.48	22.44	22.39	
			7	23.00	22.50	22.42	22.39	
	16QAM	15	0	22.50	22.49	22.40	22.42	
			1	0	23.00	22.99	22.69	22.29
				7	23.00	22.98	22.68	22.28
		14		23.00	22.87	22.59	22.31	
		8	0	22.00	21.56	21.48	21.47	
			4	22.00	21.52	21.47	21.42	
7	22.00		21.58	21.44	21.40			
15	0	22.00	21.56	21.37	21.48			
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	18625	18900	19175	
					1852.5MHz	1880.0MHz	1907.5MHz	
5MHz	QPSK	1	0	24.00	23.66	23.53	23.38	
			13	24.00	23.65	23.56	23.44	
			24	24.00	23.63	23.46	23.43	
		12	0	23.00	22.55	22.47	22.47	
			6	23.00	22.51	22.42	22.45	
			13	23.00	22.58	22.42	22.44	
	16QAM	25	0	23.00	22.60	22.50	22.51	
			1	0	23.50	23.10	22.88	22.81
				13	23.50	23.08	22.89	22.84
		24		23.50	23.05	22.81	22.85	
		12	0	22.00	21.58	21.47	21.52	
			6	22.00	21.58	21.44	21.48	
13	22.00		21.58	21.41	21.48			
25	0	22.00	21.54	21.50	21.47			

LTE-FDD Band 2				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		18650 1855.0MHz	18900 1880.0MHz	19150 1905.0MHz
10MHz	QPSK	1	0	24.00	23.71	23.64	23.62
			25	24.00	23.57	23.51	23.51
			49	24.00	23.64	23.52	23.67
		25	0	23.00	22.58	22.57	22.53
			13	23.00	22.56	22.50	22.46
			25	23.00	22.61	22.49	22.46
	16QAM	50	0	23.00	22.59	22.51	22.49
			0	23.50	23.14	22.83	22.43
			25	23.00	22.97	22.75	22.29
		1	0	23.50	23.06	22.69	22.60
			25	22.00	21.60	21.54	21.52
			13	22.00	21.58	21.48	21.43
15MHz	QPSK	25	25	22.00	21.61	21.47	21.46
			0	22.00	21.59	21.52	21.45
			0	22.00	21.59	21.52	21.45
		50	0	22.00	21.59	21.52	21.45
			13	22.00	21.58	21.48	21.43
			25	22.00	21.61	21.47	21.46
	16QAM	1	0	22.00	21.59	21.52	21.45
			13	22.00	21.58	21.48	21.43
			25	22.00	21.61	21.47	21.46
		25	0	22.00	21.59	21.52	21.45
			13	22.00	21.58	21.48	21.43
			25	22.00	21.61	21.47	21.46
20MHz	QPSK	1	0	24.00	23.77	23.74	23.78
			38	24.00	23.71	23.68	23.72
			74	24.00	23.63	23.58	23.81
		36	0	23.00	22.61	22.61	22.59
			18	23.00	22.57	22.53	22.53
			39	23.00	22.55	22.52	22.51
	16QAM	75	0	23.00	22.60	22.58	22.54
			0	23.50	23.13	22.87	22.73
			38	23.50	23.08	22.83	22.68
		36	74	23.00	22.97	22.73	22.67
			0	22.00	21.64	21.67	21.55
			18	22.00	21.61	21.60	21.51
25MHz	QPSK	39	22.00	21.60	21.60	21.60	21.52
			75	22.00	21.60	21.57	21.59
			0	22.00	21.60	21.57	21.59
		75	0	22.00	21.60	21.57	21.59
			18	22.00	21.61	21.60	21.51
			39	22.00	21.60	21.60	21.52
	16QAM	1	0	22.00	21.60	21.57	21.59
			18	22.00	21.61	21.60	21.51
			39	22.00	21.60	21.60	21.52
		36	75	22.00	21.60	21.57	21.59
			0	22.00	21.60	21.57	21.59
			18	22.00	21.61	21.60	21.51
30MHz	QPSK	1	0	24.00	23.74	23.77	23.72
			50	24.00	23.69	23.75	23.59
			99	24.00	23.62	23.72	23.63
		50	0	23.00	22.63	22.66	22.65
			25	23.00	22.63	22.60	22.60
			50	23.00	22.59	22.59	22.55
	16QAM	100	0	23.00	22.61	22.64	22.60
			0	23.50	23.26	22.93	22.99
			50	23.50	23.08	22.91	22.89
		1	99	23.50	23.13	22.86	22.92
			0	22.00	21.67	21.64	21.68
			25	22.00	21.70	21.58	21.64
35MHz	QPSK	50	50	22.00	21.64	21.56	21.56
			0	22.00	21.63	21.60	21.60
			0	22.00	21.63	21.60	21.60
		100	0	22.00	21.63	21.60	21.60
			25	22.00	21.64	21.56	21.56
			50	22.00	21.64	21.56	21.56
	16QAM	1	0	22.00	21.63	21.60	21.60
			25	22.00	21.64	21.56	21.56
			50	22.00	21.64	21.56	21.56
		50	0	22.00	21.63	21.60	21.60
			25	22.00	21.64	21.56	21.56
			50	22.00	21.64	21.56	21.56

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10.1.4 Conducted Power of LTE Band 4

LTE-FDD Band 4				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		19957 1710.7MHz	20175 1732.5MHz	20393 1754.3MHz
1.4MHz	QPSK	1	0	24.00	23.60	23.61	23.51
			2	24.00	23.62	23.62	23.55
			5	24.00	23.53	23.63	23.51
		3	0	24.00	23.59	23.48	23.64
			2	24.00	23.56	23.48	23.61
			3	24.00	23.57	23.50	23.61
	16QAM	1	0	23.00	22.52	22.52	22.59
			2	23.00	22.47	22.75	22.78
			5	23.00	22.46	22.72	22.81
		3	0	23.00	22.44	22.75	22.81
			2	23.00	22.71	22.67	22.77
			3	23.00	22.69	22.67	22.77
3MHz	QPSK	1	0	23.00	22.72	22.66	22.75
			2	23.00	22.72	22.66	22.75
			6	22.00	21.73	21.70	21.76
		8	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75
	16QAM	1	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75
		8	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75
5MHz	QPSK	1	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75
		8	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75
	16QAM	1	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75
		8	0	23.00	22.71	22.67	22.77
			2	23.00	22.71	22.67	22.77
			3	23.00	22.72	22.66	22.75

LTE-FDD Band 4				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20000 1715.0MHz	20175 1732.5MHz	20350 1750.0MHz
10MHz	QPSK	1	0	24.00	23.85	23.72	23.80
			25	24.00	23.61	23.58	23.62
			49	24.00	23.70	23.65	23.75
		25	0	23.00	22.65	22.64	22.67
			13	23.00	22.60	22.57	22.62
			25	23.00	22.63	22.58	22.67
	16QAM	50	0	23.00	22.63	22.65	22.64
			0	23.50	23.15	22.91	22.61
			25	23.00	22.91	22.76	22.42
		1	49	23.50	23.02	22.84	22.53
			0	22.00	21.66	21.61	21.64
			13	22.00	21.61	21.56	21.60
15MHz	QPSK	25	25	22.00	21.64	21.56	21.63
			0	22.00	21.60	21.62	21.62
			0	22.00	21.60	21.62	21.62
	16QAM	50	0	22.00	21.60	21.62	21.62
			0	22.00	21.60	21.62	21.62
			0	22.00	21.60	21.62	21.62
20MHz	QPSK	1	0	24.00	23.84	23.78	23.90
			38	24.00	23.76	23.68	23.80
			74	24.00	23.73	23.67	23.85
		36	0	23.00	22.64	22.70	22.74
			18	23.00	22.59	22.63	22.71
			39	23.00	22.60	22.64	22.67
	16QAM	75	0	23.00	22.65	22.67	22.71
			0	23.50	23.15	22.98	22.90
			38	23.50	23.09	22.91	22.86
		36	74	23.50	23.08	22.87	22.89
			0	22.00	21.68	21.76	21.72
			18	22.00	21.64	21.68	21.66
20MHz	QPSK	36	39	22.00	21.65	21.70	21.68
			0	22.00	21.66	21.68	21.78
			0	22.00	21.66	21.68	21.78
	16QAM	75	0	22.00	21.66	21.68	21.78
			0	22.00	21.66	21.68	21.78
			0	22.00	21.66	21.68	21.78
20MHz	QPSK	1	0	24.00	23.78	23.68	23.83
			50	24.00	23.72	23.72	23.75
			99	24.00	23.75	23.75	23.68
		50	0	23.00	22.68	22.76	22.79
			25	23.00	22.69	22.71	22.76
			50	23.00	22.67	22.68	22.73
	16QAM	100	0	23.00	22.70	22.72	22.78
			0	23.50	23.07	22.92	23.07
			50	23.50	23.00	22.95	23.03
		50	99	23.50	23.04	22.93	22.96
			0	22.00	21.73	21.73	21.83
			25	22.00	21.74	21.67	21.79
20MHz	QPSK	50	50	22.00	21.71	21.66	21.75
			0	22.00	21.67	21.67	21.77
			0	22.00	21.67	21.67	21.77
	16QAM	100	0	22.00	21.67	21.67	21.77
			0	22.00	21.67	21.67	21.77
			0	22.00	21.67	21.67	21.77

10.1.5 Conducted Power of LTE Band 5

LTE-FDD Band 5				Maximum Tune- up(dBm)	Conducted Power(dBm)				
Bandwidth	Modulation	RB allocation	RB offset		20407	20525	20643		
					824.7MHz	836.5MHz	848.3MHz		
1.4MHz	QPSK	1	0	25.00	24.52	24.82	24.65		
			2	25.00	24.50	24.82	24.64		
			5	25.00	24.54	24.82	24.66		
		3	0	25.00	24.47	24.74	24.65		
			2	25.00	24.45	24.74	24.65		
			3	25.00	24.58	24.74	24.66		
	16QAM	6	0	24.00	23.53	23.75	23.66		
			1	0	24.00	23.82	23.84	23.66	
				2	24.00	23.73	23.81	23.59	
		3		5	24.00	23.80	23.87	23.65	
			0	0	24.00	23.78	23.96	23.90	
				2	24.00	23.81	23.98	23.91	
3	24.00	23.84		23.95	23.87				
6	0	23.00	22.74	22.95	22.82				
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	20415	20525	20635		
					825.5MHz	836.5MHz	847.5MHz		
3MHz	QPSK	1	0	25.00	24.54	24.82	24.71		
			7	25.00	24.58	24.82	24.65		
			14	25.00	24.62	24.83	24.69		
		8	0	24.00	23.53	23.81	23.66		
			4	24.00	23.54	23.79	23.63		
			7	24.00	23.54	23.81	23.64		
		15	0	24.00	23.55	23.80	23.69		
			16QAM	0	0	24.50	23.63	24.19	23.82
					7	24.50	23.65	24.27	23.76
	14	24.50			23.70	24.31	23.84		
	8	0		23.00	22.58	22.83	22.71		
		4		23.00	22.55	22.82	22.65		
		7		23.00	22.57	22.82	22.67		
	15	0		23.00	22.63	22.85	22.77		

LTE-FDD Band 5				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20425	20525	20625
					826.5MHz	836.5MHz	846.5MHz
5MHz	QPSK	1	0	25.00	24.61	24.89	24.73
			13	25.00	24.59	24.93	24.68
			24	25.00	24.63	24.99	24.64
		12	0	24.00	23.61	23.81	23.78
			6	24.00	23.65	23.81	23.73
			13	24.00	23.68	23.84	23.70
	16QAM	25	0	24.00	23.70	23.87	23.77
		1	0	24.50	23.85	24.40	24.08
			13	24.50	23.92	24.42	24.03
			24	24.50	24.01	24.21	23.96
		12	0	23.00	22.66	22.81	22.85
			6	23.00	22.73	22.82	22.76
			13	23.00	22.73	22.81	22.77
		25	0	23.00	22.66	22.90	22.73
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	20450	20525	20600
					829.0MHz	836.5MHz	844.0MHz
10MHz	QPSK	1	0	25.00	24.63	24.87	24.97
			25	25.00	24.69	24.92	24.80
			49	25.50	24.82	25.01	24.73
		25	0	24.00	23.69	23.83	23.92
			13	24.00	23.75	23.86	23.84
			25	24.00	23.81	23.90	23.82
	16QAM	50	0	24.00	23.77	23.89	23.85
		1	0	24.50	23.78	23.89	24.30
			25	24.50	23.86	23.90	24.14
			49	24.50	23.98	24.03	24.04
		25	0	23.00	22.69	22.83	22.92
			13	23.00	22.74	22.86	22.85
			25	23.00	22.81	22.89	22.79
		50	0	23.00	22.77	22.86	22.82

10.1.6 Conducted Power of LTE Band 7

LTE-FDD Band 7				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20775 2502.5MHz	21100 2535.0MHz	21425 2567.5MHz
5MHz	QPSK	1	0	23.50	22.89	23.18	23.05
			13	23.50	22.97	23.21	23.06
			24	23.50	23.11	23.16	23.16
		12	0	22.50	21.85	22.26	22.00
			6	22.50	21.87	22.20	21.98
			13	22.50	21.94	22.21	22.07
		25	0	22.50	21.93	22.26	22.05
	16QAM	1	0	23.00	22.36	22.51	22.47
			13	23.00	22.49	22.57	22.48
			24	23.00	22.52	22.50	22.54
		12	0	21.50	20.84	21.32	21.01
			6	21.50	20.84	21.29	20.98
			13	21.50	20.90	21.26	21.03
10MHz	QPSK	1	0	23.50	22.90	23.22	23.06
			25	23.50	22.99	23.17	22.94
			49	23.50	23.10	23.16	23.12
		25	0	22.50	21.92	22.27	21.96
			13	22.50	21.97	22.23	21.95
			25	22.50	22.03	22.26	22.01
		50	0	22.50	21.96	22.29	21.99
	16QAM	1	0	22.50	22.34	22.45	22.04
			25	22.50	22.44	22.37	21.91
			49	23.00	22.51	22.39	22.13
		25	0	21.50	20.93	21.25	20.95
			13	21.50	20.96	21.21	20.94
			25	21.50	21.03	21.23	20.98
		50	0	21.50	20.95	21.27	20.96

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20825	21100	21375
					2057.5MHz	2535.0MHz	2562.5MHz
15MHz	QPSK	1	0	23.50	22.89	23.19	23.07
			38	23.50	23.08	23.22	23.03
			74	23.50	23.13	23.08	23.08
		36	0	22.50	21.96	22.21	21.99
			18	22.50	21.99	22.22	21.92
			39	22.50	22.05	22.19	21.97
	16QAM	75	0	22.50	22.06	22.23	22.00
			0	22.50	22.25	22.48	22.19
			38	23.00	22.41	22.52	22.15
		36	74	23.00	22.51	22.40	22.20
			0	21.50	21.01	21.32	20.99
			18	21.50	21.05	21.31	20.92
20MHz	QPSK	39	21.50	21.09	21.09	21.27	20.97
			0	21.50	21.04	21.24	21.06
			75	21.50	21.04	21.24	21.06
	16QAM	1	0	23.50	22.84	23.37	23.02
			50	23.50	23.03	23.41	23.03
			99	23.50	23.19	23.24	22.99
	QPSK	50	0	22.50	22.03	22.30	22.05
			25	22.50	22.08	22.31	22.01
			50	22.50	22.12	22.23	22.01
	16QAM	100	0	22.50	22.04	22.27	22.00
			0	22.50	22.22	22.48	22.32
			50	22.50	22.38	22.50	22.28
	QPSK	1	99	23.00	22.51	22.33	22.27
			0	21.50	21.05	21.27	21.05
			25	21.50	21.10	21.26	21.02
	16QAM	50	50	21.50	21.16	21.20	21.01
			0	21.50	21.02	21.22	20.98
			100	21.50	21.02	21.22	20.98

10.1.7 Conducted Power of LTE Band 12

LTE-FDD Band 12				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		23017	23095	23173
					699.7MHz	707.5MHz	715.5MHz
1.4MHz	QPSK	1	0	24.50	23.83	24.14	24.08
			2	24.50	23.83	24.13	24.10
			5	24.50	23.78	24.13	24.17
		3	0	24.50	23.90	24.12	24.10
			2	24.50	23.90	24.11	24.12
			3	24.50	23.88	24.10	24.15
		6	0	23.50	22.86	23.09	23.17
	16QAM	1	0	23.50	23.08	22.97	23.17
			2	23.50	23.04	22.96	23.17
			5	23.50	23.09	23.14	23.25
		3	0	23.50	23.04	23.26	23.35
			2	23.50	23.05	23.23	23.33
			3	23.50	23.03	23.25	23.36
6	0	22.50	22.04	22.26	22.32		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	23025	23095	23165
					700.5MHz	707.5MHz	714.5MHz
3MHz	QPSK	1	0	24.50	23.87	24.16	24.29
			7	24.50	23.88	24.14	24.21
			14	24.50	23.86	24.16	24.36
		8	0	23.50	22.90	23.13	23.17
			4	23.50	22.95	23.11	23.15
			7	23.50	22.94	23.11	23.15
		15	0	23.50	22.95	23.14	23.17
	16QAM	1	0	24.00	23.14	23.00	23.68
			7	24.00	23.12	22.99	23.62
			14	24.00	23.13	22.95	23.70
		8	0	22.50	21.91	22.14	22.22
			4	22.50	21.95	22.11	22.19
			7	22.50	21.96	22.11	22.20
		15	0	22.50	21.87	22.18	22.23

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23035	23095	23155
					701.5MHz	707.5MHz	713.5MHz
5MHz	QPSK	1	0	24.50	23.98	24.17	24.31
			13	24.50	23.98	24.28	24.38
			24	24.50	24.02	24.33	24.46
		12	0	23.50	22.97	23.14	23.23
			6	23.50	22.99	23.18	23.23
			13	23.50	22.99	23.19	23.20
		25	0	23.50	23.00	23.21	23.26
	16QAM	1	0	24.00	23.35	23.59	23.62
			13	24.00	23.32	23.72	23.61
			24	24.00	23.43	23.75	23.66
		12	0	22.50	22.05	22.16	22.22
			6	22.50	22.05	22.19	22.20
			13	22.50	22.04	22.22	22.19
		25	0	22.50	21.96	22.13	22.25
					22.50	23095	23130
					704.0MHz	707.5MHz	711.0MHz
10MHz	QPSK	1	0	24.50	24.09	24.01	24.33
			25	24.50	24.10	24.14	24.29
			49	24.50	24.29	24.25	24.35
		25	0	23.50	23.07	23.14	23.28
			13	23.50	23.11	23.21	23.28
			25	23.50	23.20	23.24	23.25
		50	0	23.50	23.10	23.20	23.27
	16QAM	1	0	23.50	23.40	23.23	23.13
			25	23.50	23.45	23.37	23.08
			49	24.00	23.62	23.49	23.11
		25	0	22.50	22.06	22.12	22.27
			13	22.50	22.09	22.20	22.26
			25	22.50	22.19	22.24	22.22
		50	0	22.50	22.06	22.22	22.23

10.1.8 Conducted Power of LTE Band 17

LTE-FDD Band 17				Maximum Tune- up(dBm)	Conducted Power(dBm)				
Bandwidth	Modulation	RB allocation	RB offset		23755	23790	23825		
					706.5MHz	710.0MHz	713.5MHz		
5MHz	QPSK	1	0	24.50	24.10	24.09	24.36		
			13	24.50	24.16	24.22	24.35		
			24	24.50	24.21	24.19	24.24		
		12	0	23.50	23.13	23.25	23.32		
			6	23.50	23.12	23.24	23.30		
			13	23.50	23.13	23.22	23.25		
	16QAM	25	0	23.50	23.17	23.26	23.29		
			1	0	24.00	23.43	23.40	23.78	
				13	24.00	23.50	23.49	23.79	
		24		24.00	23.56	23.51	23.61		
		16QAM	12	0	22.50	22.09	22.30	22.30	
				6	22.50	22.10	22.34	22.27	
	13			22.50	22.12	22.29	22.22		
	25		0	22.50	22.17	22.23	22.29		
			Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	23780	23790
709.0MHz								710.0MHz	711.0MHz
10MHz	QPSK	1	0	24.50	24.17	24.11	24.30		
			25	24.50	24.26	24.25	24.31		
			49	24.50	24.39	24.25	24.29		
		25	0	23.50	23.18	23.26	23.31		
			13	23.50	23.28	23.29	23.32		
			25	23.50	23.32	23.30	23.30		
		50	0	23.50	23.24	23.26	23.27		
			16QAM	1	0	24.00	23.65	23.35	23.10
					25	24.00	23.72	23.50	23.10
	49	24.00			23.83	23.48	23.36		
	25	0		22.50	22.18	22.23	22.27		
		13		22.50	22.25	22.25	22.30		
		25		22.50	22.31	22.27	22.26		
	50	0		22.50	22.24	22.26	22.24		

10.1.9 Conducted Power of LTE Band 38

LTE-TDD Band 38				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		37775 2572.5MHz	38000 2595.0MHz	38225 2617.5MHz
5MHz	QPSK	1	0	23.00	22.75	22.89	22.81
			13	23.00	22.86	22.89	22.79
			24	23.00	22.91	22.86	22.81
		12	0	22.00	21.85	21.91	21.79
			6	22.00	21.79	21.85	21.79
			13	22.00	21.86	21.88	21.76
	16QAM	25	0	22.00	21.89	21.93	21.80
			0	22.50	22.15	22.25	22.13
			13	22.50	22.20	22.25	22.10
		1	24	22.50	22.22	22.23	22.12
			0	21.00	20.82	20.95	20.76
			6	21.00	20.76	20.88	20.72
10MHz	QPSK	12	13	21.00	20.84	20.92	20.76
			0	21.00	20.90	20.87	20.84
			25	21.00	20.90	20.87	20.84
		25	0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
		50	0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
	16QAM	1	0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
		25	0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
		50	0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84
			0	21.00	20.90	20.87	20.84

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	37825	38000	38175
					2577.5MHz	2595.0MHz	2612.5MHz
15MHz	QPSK	1	0	23.50	22.88	22.98	23.08
			38	23.00	22.99	23.00	22.97
			74	23.00	22.92	22.87	22.89
		36	0	22.00	21.91	21.91	21.88
			18	22.00	21.91	21.89	21.82
			39	22.00	21.91	21.90	21.79
		75	0	22.00	21.95	21.91	21.84
	16QAM	1	0	22.50	22.40	22.14	22.19
			38	23.00	22.52	22.21	22.10
			74	22.50	22.41	22.01	22.02
		36	0	21.00	20.95	20.98	20.86
			18	21.00	20.96	20.95	20.78
			39	21.00	20.96	20.97	20.77
		75	0	21.00	20.95	20.90	20.89
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	38750	38000	38150
					2580.0MHz	2595.0MHz	2610.0MHz
20MHz	QPSK	1	0	23.50	22.89	23.00	22.87
			50	23.50	23.01	23.06	22.91
			99	23.00	22.94	22.97	22.81
		50	0	22.50	21.97	21.99	21.94
			25	22.50	22.02	21.96	21.91
			50	22.00	22.00	21.95	21.84
		100	0	22.00	21.96	21.95	21.91
	16QAM	1	0	22.50	22.20	22.17	22.18
			50	22.50	22.30	22.23	22.20
			99	22.50	22.25	22.13	22.09
		50	0	21.50	21.01	20.97	20.89
			25	21.50	21.03	20.94	20.84
			50	21.50	21.03	20.93	20.85
		100	0	21.00	20.96	20.94	20.88

10.1.10 Conducted Power of LTE Band 41

LTE-TDD Band 41					Conducted Power(dBm)				
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	39675	40160	40620	41080	41565
					2498.5MHz	2552.0MHz	2593 MHz	2639.5 MHz	2687.5 MHz
5MHz	QPSK	1	0	24.50	24.29	24.18	24.46	23.60	24.26
			13	24.50	24.35	23.97	24.49	24.48	24.23
			24	24.50	24.39	24.19	24.49	23.62	24.25
		12	0	25.00	24.34	24.26	24.54	23.53	24.20
			6	24.50	24.27	24.14	24.43	23.44	24.10
			13	24.50	24.40	24.36	24.48	24.47	24.15
	16QAM	25	0	25.00	24.38	24.20	24.55	23.49	24.21
			0	25.00	24.62	24.45	24.81	23.92	24.80
			13	25.00	24.64	24.45	24.85	23.86	24.76
		1	24	25.00	24.69	24.42	24.85	23.99	24.77
			0	25.00	24.34	24.11	24.54	24.51	24.22
			6	24.50	24.32	24.06	24.47	24.42	24.12
		12	13	25.00	24.35	24.19	24.52	24.46	24.19
			0	24.50	24.40	24.00	24.48	24.47	24.19
		25	0	25.00	24.40	24.00	24.48	24.47	24.19
			0	25.00	24.62	24.45	24.81	23.92	24.80
			13	25.00	24.64	24.45	24.85	23.86	24.76
			24	25.00	24.69	24.42	24.85	23.99	24.77
		1	0	25.00	24.34	24.11	24.54	24.51	24.22
			6	24.50	24.32	24.06	24.47	24.42	24.12
			13	25.00	24.35	24.19	24.52	24.46	24.19
			0	24.50	24.40	24.00	24.48	24.47	24.19
10MHz	QPSK	1	0	25.00	24.40	24.15	24.57	24.09	24.31
			25	25.00	24.40	23.74	24.55	23.93	24.22
			49	25.00	24.58	24.44	24.57	24.04	24.22
		25	0	25.00	24.38	24.31	24.55	23.80	24.25
			13	25.00	24.43	23.55	24.52	23.92	24.16
			25	25.00	24.50	23.99	24.52	23.51	24.17
		50	0	25.00	24.45	23.65	24.55	24.01	24.18
			0	25.00	24.92	23.60	24.71	23.89	24.29
			25	25.00	24.94	24.37	24.67	23.72	24.20
		1	49	25.50	25.12	24.03	24.69	24.13	24.24
			0	25.00	24.38	24.46	24.53	23.86	24.26
			13	25.00	24.41	24.23	24.51	23.63	24.16
	16QAM	25	25	25.00	24.50	24.27	24.49	23.82	24.15
			0	25.00	24.43	24.27	24.56	23.64	24.18
		50	0	25.00	24.43	24.27	24.56	23.64	24.18
			0	25.00	24.40	24.15	24.57	24.09	24.31
			25	25.00	24.40	23.74	24.55	23.93	24.22
			49	25.00	24.58	24.44	24.57	24.04	24.22
		25	0	25.00	24.38	24.31	24.55	23.80	24.25
			13	25.00	24.43	23.55	24.52	23.92	24.16
			25	25.00	24.50	23.99	24.52	23.51	24.17
		50	0	25.00	24.45	23.65	24.55	24.01	24.18
			0	25.00	24.92	23.60	24.71	23.89	24.29
			25	25.00	24.94	24.37	24.67	23.72	24.20
		1	49	25.50	25.12	24.03	24.69	24.13	24.24
			0	25.00	24.38	24.46	24.53	23.86	24.26
			13	25.00	24.41	24.23	24.51	23.63	24.16
			25	25.00	24.50	24.27	24.49	23.82	24.15
			0	25.00	24.43	24.27	24.56	23.64	24.18

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	39725	40160	40620	41030	41515
					2503.5MHz	2547.0MHz	2593.0MHz	2634.0MHz	2682.5MHz
15MHz	QPSK	1	0	25.00	24.39	24.32	24.59	23.89	24.47
			38	25.00	24.55	24.20	24.61	23.59	24.32
			74	25.00	24.66	23.97	24.55	24.44	24.28
		36	0	25.00	24.42	23.96	24.53	24.47	24.27
			18	25.00	24.49	24.25	24.54	23.76	24.25
			39	25.00	24.56	24.49	24.52	24.10	24.18
		75	0	25.00	24.52	23.52	24.54	23.56	24.26
	16QAM	1	0	25.00	24.93	24.24	24.70	24.15	24.60
			38	25.50	25.02	24.14	24.74	24.46	24.47
			74	25.50	25.15	23.76	24.68	24.50	24.39
		36	0	25.00	24.48	23.67	24.61	24.45	24.27
			18	25.00	24.55	23.95	24.62	23.69	24.24
			39	25.00	24.61	23.96	24.58	24.08	24.19
20MHz	QPSK	1	0	25.00	24.37	23.51	24.61	24.44	24.31
			50	25.00	24.55	24.46	24.65	24.08	24.34
			99	25.00	24.71	23.93	24.63	24.03	24.22
		50	0	25.00	24.49	23.87	24.63	23.98	24.30
			25	25.00	24.61	24.03	24.60	24.01	24.33
			50	25.00	24.71	24.47	24.59	24.19	24.21
		100	0	25.00	24.60	23.77	24.61	23.55	24.29
			0	25.00	24.66	23.91	24.78	24.13	24.53
			50	25.00	24.86	23.50	24.81	23.62	24.54
		1	99	25.50	25.02	24.41	24.80	23.51	24.44
			0	25.00	24.54	23.87	24.59	24.49	24.35
			25	25.00	24.66	24.11	24.55	23.54	24.35
	16QAM	50	50	25.00	24.74	24.13	24.54	24.07	24.22
			0	25.00	24.60	23.81	24.58	24.00	24.32

10.1.11 Conducted Power of LTE Band 42

LTE-TDD Band 42				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		42115 3452.5MHz	42590 3500.0MHz	43065 3547.5MHz
5MHz	QPSK	1	0	20.50	19.81	19.97	20.05
			13	20.50	19.83	19.94	20.12
			24	20.50	19.88	19.95	20.17
		12	0	19.50	18.75	18.96	19.06
			6	19.50	18.80	18.92	19.04
			13	19.50	18.80	18.94	19.09
	16QAM	25	0	19.50	18.81	19.00	19.11
			0	20.00	19.12	19.36	19.65
			13	20.00	19.14	19.40	19.70
		1	24	20.00	19.20	19.36	19.72
			0	18.50	17.74	18.04	18.07
			6	18.50	17.76	18.01	18.14
10MHz	QPSK	12	13	18.50	17.77	17.99	18.12
			25	18.50	17.83	17.97	18.03
		25	0	18.50	17.83	17.97	18.03
	16QAM	1	0	20.50	19.94	20.12	20.00
			25	20.50	19.93	20.00	19.98
			49	20.50	20.00	20.07	20.10
	QPSK	25	0	19.50	18.85	19.01	18.97
			13	19.00	18.83	18.95	18.94
			25	19.50	18.87	18.98	19.07
		50	0	19.00	18.82	18.99	18.99
			0	19.50	19.38	19.27	19.00
			25	19.50	19.33	19.13	18.98
15MHz	QPSK	1	49	19.50	19.47	19.21	19.14
			0	18.00	17.82	17.95	17.96
			13	18.00	17.80	17.89	17.93
	16QAM	25	25	18.50	17.83	17.94	18.01
			0	18.00	17.83	17.99	17.99
			0	18.00	17.83	17.99	17.99

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	42165	42590	43015
					3457.5MHz	3500.0MHz	3542.5MHz
15MHz	QPSK	1	0	20.50	19.87	20.14	20.05
			38	20.50	19.94	20.10	20.08
			74	20.50	19.98	20.08	20.19
		36	0	19.50	18.86	19.03	18.95
			18	19.00	18.86	18.98	18.98
			39	19.50	18.89	18.99	19.06
	16QAM	75	0	19.50	18.88	19.02	18.98
			0	19.50	19.35	19.26	19.20
			38	19.50	19.45	19.18	19.23
		36	74	19.50	19.46	19.26	19.35
			0	18.50	17.91	18.10	17.92
			18	18.50	17.90	18.04	17.91
75	39	18.50	17.93	18.08	18.00		
	0	18.50	17.90	18.00	18.02		
	Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	42190	42590
3460.0MHz						3500.0MHz	3540.0MHz
20MHz	QPSK	1	0	20.50	19.83	20.16	20.05
			50	20.50	19.90	20.06	19.99
			99	20.50	19.91	20.11	20.13
		50	0	19.50	18.87	19.07	19.02
			25	19.50	18.88	19.04	19.02
			50	19.50	18.89	19.03	19.10
	16QAM	100	0	19.50	18.88	19.06	19.02
			0	19.50	19.16	19.37	19.26
			50	19.50	19.22	19.29	19.19
		1	99	19.50	19.23	19.36	19.34
			0	18.50	17.92	18.07	18.01
			25	18.50	17.94	18.02	17.98
50	50	18.50	17.96	18.04	18.09		
	0	18.50	17.91	18.06	18.01		

10.1.12 Conducted Power of LTE Band 66

LTE-FDD Band 66					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	131979 1710.7MHz	132322 1755.0MHz	132665 1779.3MHz
1.4MHz	QPSK	1	0	23.50	23.36	23.42	23.46
			2	23.50	23.41	23.44	23.49
			5	23.50	23.42	23.40	23.47
		3	0	23.50	23.36	23.44	23.41
			2	23.50	23.35	23.42	23.39
			3	23.50	23.37	23.43	23.43
		6	0	22.50	22.39	22.44	22.43
			0	23.00	22.65	22.67	22.71
			2	23.00	22.61	22.63	22.65
	16QAM	1	5	23.00	22.63	22.68	22.69
			0	23.00	22.56	22.66	22.62
			2	23.00	22.55	22.68	22.61
		3	3	23.00	22.57	22.66	22.60
			0	22.00	21.62	21.62	21.59
			0	22.00	21.62	21.62	21.59
		6	0	22.00	21.62	21.62	21.59
			0	22.00	21.62	21.62	21.59
			0	22.00	21.62	21.62	21.59
3MHz	QPSK	1	0	23.50	23.37	23.45	23.40
			7	23.50	23.33	23.43	23.41
			14	23.50	23.39	23.41	23.39
		8	0	22.50	22.33	22.45	22.47
			4	22.50	22.33	22.39	22.43
			7	22.50	22.38	22.41	22.44
		15	0	22.50	22.35	22.40	22.46
			0	23.00	22.45	22.86	22.68
			7	23.00	22.41	22.84	22.65
	16QAM	1	14	23.00	22.38	22.83	22.64
			0	21.50	21.38	21.44	21.48
			4	21.50	21.36	21.42	21.46
		8	7	21.50	21.38	21.43	21.46
			0	21.50	21.45	21.46	21.40
			0	21.50	21.45	21.46	21.40
		15	0	21.50	21.45	21.46	21.40
			0	21.50	21.45	21.46	21.40
			0	21.50	21.45	21.46	21.40
5MHz	QPSK	1	0	24.00	23.56	23.56	23.45
			13	24.00	23.56	23.53	23.51
			24	24.00	23.50	23.55	23.44
		12	0	23.00	22.44	22.50	22.52
			6	22.50	22.47	22.46	22.48
			13	23.00	22.41	22.46	22.50
		25	0	23.00	22.49	22.53	22.55
			0	23.50	23.01	22.99	22.79
			13	23.50	22.96	23.01	22.80
	16QAM	1	24	23.50	22.91	23.01	22.79
			0	22.00	21.46	21.49	21.60
			6	22.00	21.44	21.45	21.56
		12	13	22.00	21.44	21.45	21.54
			0	22.00	21.44	21.53	21.51
			0	22.00	21.44	21.53	21.51
		25	0	22.00	21.44	21.53	21.51
			0	22.00	21.44	21.53	21.51
			0	22.00	21.44	21.53	21.51

LTE-FDD Band 66				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		132022 1715.0MHz	132322 1755.0MHz	132622 1775.0MHz
10MHz	QPSK	1	0	24.00	23.66	23.66	23.64
			25	24.00	23.45	23.49	23.53
			49	24.00	23.54	23.57	23.65
		25	0	23.00	22.47	22.55	22.57
			13	23.00	22.45	22.51	22.53
			25	23.00	22.47	22.52	22.55
	16QAM	50	0	23.00	22.47	22.54	22.55
			0	23.50	23.06	22.82	22.43
			25	23.00	22.85	22.72	22.33
		1	49	23.00	22.95	22.75	22.45
			0	22.00	21.49	21.56	21.55
			13	21.50	21.44	21.48	21.48
15MHz	QPSK	25	25	22.00	21.47	21.50	21.51
			0	22.00	21.45	21.55	21.52
			0	22.00	21.45	21.55	21.52
	16QAM	50	0	22.00	21.45	21.55	21.52
			13	21.50	21.44	21.48	21.48
			25	22.00	21.47	21.50	21.51
20MHz	QPSK	75	0	22.00	21.45	21.55	21.52
			13	21.50	21.44	21.48	21.48
			25	22.00	21.47	21.50	21.51
	16QAM	100	0	22.00	21.45	21.55	21.52
			13	21.50	21.44	21.48	21.48
			25	22.00	21.47	21.50	21.51

10.1.13 Conducted Power of NR n5

NR n5				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		165800 829.0MHz	167300 836.5MHz	168800 844.0MHz
10MHz	DFT_BPSK	1@1	LOW	24.00	23.35	23.63	23.60
	DFT_QPSK	24@0	LOW	23.00	22.63	22.76	22.54
	DFT_QPSK	12@6	LOW	24.00	23.63	23.83	23.50
	DFT_QPSK	1@1	LOW	24.50	23.40	24.09	23.76
	DFT_QPSK	1@22	LOW	24.50	23.50	24.04	23.48
	DFT_QAM16	1@1	LOW	23.00	22.36	22.57	22.77
	DFT_QAM64	1@1	LOW	21.50	20.93	21.06	21.15
	DFT_QAM256	1@1	LOW	19.50	18.84	19.29	19.12
	CP_QPSK	1@1	LOW	22.50	22.49	22.42	22.14
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	166300 831.5MHz	167300 836.5MHz	168300 841.5MHz
15MHz	DFT_BPSK	1@1	LOW	24.00	23.46	23.88	23.81
	DFT_QPSK	36@0	LOW	23.00	22.75	22.80	22.72
	DFT_QPSK	18@9	LOW	24.00	23.76	23.81	23.80
	DFT_QPSK	1@1	LOW	24.00	23.60	23.61	23.71
	DFT_QPSK	1@36	LOW	24.00	23.75	23.58	23.21
	DFT_QAM16	1@1	LOW	23.50	23.21	22.88	22.86
	DFT_QAM64	1@1	LOW	22.00	21.22	21.26	21.61
	DFT_QAM256	1@1	LOW	20.00	19.29	19.10	19.51
	CP_QPSK	1@1	LOW	22.50	21.91	22.22	22.32
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	166800 834.0MHz	167300 836.5MHz	167800 839.0MHz
20MHz	DFT_BPSK	1@1	LOW	24.00	23.41	23.46	23.60
	DFT_QPSK	50@0	LOW	23.00	22.71	22.72	22.73
	DFT_QPSK	25@12	LOW	24.00	23.80	23.78	23.74
	DFT_QPSK	1@1	LOW	24.00	23.54	23.53	23.70
	DFT_QPSK	1@49	LOW	24.00	23.63	23.42	23.38
	DFT_QAM16	1@1	LOW	23.00	22.63	22.70	22.43
	DFT_QAM64	1@1	LOW	21.50	21.36	21.23	21.03
	DFT_QAM256	1@1	LOW	19.50	18.87	19.12	19.11
	CP_QPSK	1@1	LOW	23.00	22.05	22.30	22.68

10.1.14 Conducted Power of NR n7

NR n7				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		501000	507000	513000
					2505.0MHz	2535.0MHz	2565.0MHz
10MHz	DFT_BPSK	1@1	LOW	23.00	22.79	22.90	22.96
	DFT_QPSK	24@0	LOW	22.50	21.86	22.14	22.13
	DFT_QPSK	12@6	LOW	23.50	22.90	23.15	23.17
	DFT_QPSK	1@1	LOW	23.50	23.06	23.36	22.98
	DFT_QPSK	1@22	LOW	23.50	23.13	23.32	23.09
	DFT_QAM16	1@1	LOW	22.50	21.61	22.28	22.34
	DFT_QAM64	1@1	LOW	21.00	20.09	20.66	20.23
	DFT_QAM256	1@1	LOW	19.00	18.26	18.47	18.89
	CP_QPSK	1@1	LOW	22.50	21.69	21.94	22.03
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	501500	507000	512000
					2507.5MHz	2535.0MHz	2562.5MHz
15MHz	DFT_BPSK	1@1	LOW	23.50	22.87	23.34	22.73
	DFT_QPSK	36@0	LOW	22.50	21.92	22.23	22.03
	DFT_QPSK	18@9	LOW	23.50	23.00	23.32	23.03
	DFT_QPSK	1@1	LOW	23.50	22.76	23.19	22.48
	DFT_QPSK	1@36	LOW	23.00	22.89	22.99	22.81
	DFT_QAM16	1@1	LOW	22.50	21.99	22.17	22.13
	DFT_QAM64	1@1	LOW	21.50	20.21	21.16	20.63
	DFT_QAM256	1@1	LOW	19.00	18.06	18.83	18.39
	CP_QPSK	1@1	LOW	22.00	20.95	21.91	21.59
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	502000	507000	512000
					2510.0MHz	2535.0MHz	2560.0MHz
20MHz	DFT_BPSK	1@1	LOW	23.50	22.69	23.13	22.82
	DFT_QPSK	50@0	LOW	22.50	22.01	22.20	22.04
	DFT_QPSK	25@12	LOW	23.50	23.02	23.17	23.06
	DFT_QPSK	1@1	LOW	23.50	22.74	23.18	22.97
	DFT_QPSK	1@49	LOW	23.50	23.01	22.94	23.25
	DFT_QAM16	1@1	LOW	22.00	21.86	21.92	21.79
	DFT_QAM64	1@1	LOW	20.50	20.30	20.45	20.43
	DFT_QAM256	1@1	LOW	19.00	18.31	18.39	18.55
	CP_QPSK	1@1	LOW	22.50	21.39	22.17	21.32

10.1.15 Conducted Power of NR n12

NR n12				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		140800 704.0MHz	141500 707.5MHz	142200 711.0MHz
5MHz	DFT_BPSK	1@1	LOW	24.00	23.64	23.69	23.89
	DFT_QPSK	25@0	LOW	23.00	22.62	22.68	22.72
	DFT_QPSK	12@6	LOW	24.00	23.58	23.70	23.73
	DFT_QPSK	1@1	LOW	24.00	23.79	23.79	23.71
	DFT_QPSK	1@23	LOW	24.00	23.78	23.84	23.68
	DFT_QAM16	1@1	LOW	23.00	22.90	22.87	22.70
	DFT_QAM64	1@1	LOW	21.50	21.19	20.77	21.19
	DFT_QAM256	1@1	LOW	20.00	19.06	19.55	19.31
10MHz	CP_QPSK	1@1	LOW	23.00	22.24	22.59	22.46
	DFT_BPSK	1@1	LOW	24.00	23.56	23.65	23.54
	DFT_QPSK	50@0	LOW	23.00	22.63	22.71	22.68
	DFT_QPSK	25@12	LOW	24.00	23.62	23.62	23.71
	DFT_QPSK	1@1	LOW	24.00	23.44	23.53	23.42
	DFT_QPSK	1@50	LOW	24.00	23.47	23.58	23.41
	DFT_QAM16	1@1	LOW	23.00	22.32	22.59	22.60
	DFT_QAM64	1@1	LOW	21.50	20.95	21.32	20.74
15MHz	DFT_QAM256	1@1	LOW	19.50	19.32	18.65	18.89
	CP_QPSK	1@1	LOW	22.50	22.25	21.86	21.59
	DFT_BPSK	1@1	LOW	24.00	23.60	23.86	23.65
	DFT_QPSK	75@0	LOW	23.00	22.72	22.75	22.71
	DFT_QPSK	36@18	LOW	24.00	23.69	23.69	23.71
	DFT_QPSK	1@1	LOW	24.00	23.66	23.91	23.54
	DFT_QPSK	1@77	LOW	24.00	23.73	23.97	23.62
	DFT_QAM16	1@1	LOW	23.00	22.68	23.00	22.67
	DFT_QAM64	1@1	LOW	22.00	20.99	21.59	21.24
	DFT_QAM256	1@1	LOW	20.00	19.25	19.75	19.27
	CP_QPSK	1@1	LOW	22.50	22.32	21.99	22.37

10.1.16 Conducted Power of NR n38

NR n38				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		515000	519000	523000
					2575.0MHz	2595.0MHz	2615.0MHz
10MHz	DFT_BPSK	1@1	LOW	24.50	24.27	24.08	24.22
	DFT_QPSK	24@0	LOW	23.50	23.27	23.07	23.20
	DFT_QPSK	12@6	LOW	24.50	24.24	24.13	24.25
	DFT_QPSK	1@1	LOW	24.50	24.14	24.07	24.25
	DFT_QPSK	1@22	LOW	24.50	24.17	24.17	24.14
	DFT_QAM16	1@1	LOW	23.50	23.25	23.14	23.24
	DFT_QAM64	1@1	LOW	22.00	21.91	21.87	21.62
	DFT_QAM256	1@1	LOW	20.00	19.66	19.79	19.70
	CP_QPSK	1@1	LOW	23.50	22.74	23.32	22.81
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	515500	519000	522500
					2577.5MHz	2595.0MHz	2612.5MHz
	DFT_BPSK	1@1	LOW	24.50	24.02	24.21	24.33
15MHz	DFT_QPSK	36@0	LOW	23.50	23.24	23.21	23.27
	DFT_QPSK	18@9	LOW	24.50	24.21	24.14	24.30
	DFT_QPSK	1@1	LOW	24.50	23.87	24.08	24.40
	DFT_QPSK	1@36	LOW	24.50	23.85	24.23	24.21
	DFT_QAM16	1@1	LOW	23.50	23.27	22.83	23.12
	DFT_QAM64	1@1	LOW	22.00	21.33	21.27	21.88
	DFT_QAM256	1@1	LOW	20.00	19.64	19.01	19.68
	CP_QPSK	1@1	LOW	23.00	22.86	22.62	22.74
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	522500	519000	522000
					2580.0MHz	2595.0MHz	2610.0MHz
20MHz	DFT_BPSK	1@1	LOW	24.50	24.01	24.14	24.17
	DFT_QPSK	50@0	LOW	23.50	23.25	23.27	23.31
	DFT_QPSK	25@12	LOW	24.50	24.32	24.23	24.30
	DFT_QPSK	1@1	LOW	24.50	24.20	24.00	24.18
	DFT_QPSK	1@49	LOW	24.50	24.12	24.18	24.19
	DFT_QAM16	1@1	LOW	23.50	23.16	23.47	23.24
	DFT_QAM64	1@1	LOW	22.00	21.78	21.38	21.60
	DFT_QAM256	1@1	LOW	20.00	19.62	19.53	19.44
	CP_QPSK	1@1	LOW	23.00	22.61	22.42	22.44

10.1.17 Conducted Power of NR n41

NR n41				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		501204 2506.0MHz	518598 2593.0MHz	535998 2680.0MHz
20MHz	DFT_BPSK	1@1	LOW	23.50	22.95	23.14	22.93
	DFT_QPSK	50@0	LOW	22.50	22.09	22.31	22.00
	DFT_QPSK	25@12	LOW	23.50	23.12	23.31	23.11
	DFT_QPSK	1@1	LOW	23.50	22.86	23.07	22.81
	DFT_QPSK	1@49	LOW	23.50	23.06	23.26	23.00
	DFT_QAM16	1@1	LOW	22.50	22.02	21.94	21.64
	DFT_QAM64	1@1	LOW	20.50	20.37	20.39	20.29
	DFT_QAM256	1@1	LOW	19.00	18.53	18.57	18.62
	CP_QPSK	1@1	LOW	22.00	21.51	21.65	21.27
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	504204 2521.0MHz	518598 2593.0MHz	532998 2665.0MHz
50MHz	DFT_BPSK	1@1	LOW	23.50	22.93	23.20	23.13
	DFT_QPSK	128@0	LOW	22.50	22.25	22.25	22.01
	DFT_QPSK	64@32	LOW	23.50	23.31	23.26	22.98
	DFT_QPSK	1@1	LOW	23.50	23.00	23.12	23.15
	DFT_QPSK	1@131	LOW	23.50	22.92	23.14	23.19
	DFT_QAM16	1@1	LOW	22.50	22.04	22.44	22.12
	DFT_QAM64	1@1	LOW	21.00	20.78	20.65	20.62
	DFT_QAM256	1@1	LOW	19.00	18.63	18.75	18.37
	CP_QPSK	1@1	LOW	22.00	21.55	21.58	21.47
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	509202 2546.0MHz	518598 2593.0MHz	528000 2640.0MHz
100MHz	DFT_BPSK	1@1	LOW	23.50	23.06	22.94	23.11
	DFT_QPSK	270@0	LOW	22.50	22.12	22.25	22.11
	DFT_QPSK	135@67	LOW	23.50	23.20	23.30	23.05
	DFT_QPSK	1@1	LOW	23.50	22.98	22.92	23.05
	DFT_QPSK	1@271	LOW	23.50	23.17	23.03	22.86
	DFT_QAM16	1@1	LOW	22.50	22.03	21.84	22.36
	DFT_QAM64	1@1	LOW	21.00	20.56	20.45	20.49
	DFT_QAM256	1@1	LOW	19.00	18.61	18.32	18.61
	CP_QPSK	1@1	LOW	22.00	21.63	21.54	21.77

10.1.18 Conducted Power of NR n66

NR n66				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		343000	349000	355000
					1715.0MHz	1745.0MHz	1775.0MHz
10MHz	DFT_BPSK	1@1	LOW	23.50	23.34	23.18	23.04
	DFT_QPSK	24@0	LOW	22.50	22.17	22.19	22.14
	DFT_QPSK	12@6	LOW	23.50	23.07	23.23	23.19
	DFT_QPSK	1@1	LOW	23.50	23.24	23.41	23.08
	DFT_QPSK	1@22	LOW	23.50	23.27	23.36	23.13
	DFT_QAM16	1@1	LOW	23.00	22.39	22.55	22.31
	DFT_QAM64	1@1	LOW	21.50	21.02	21.20	20.96
	DFT_QAM256	1@1	LOW	19.50	18.71	19.08	18.42
	CP_QPSK	1@1	LOW	23.00	21.67	22.68	21.97
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	344000	349000	354000
					1720.0MHz	1745.0MHz	1770.0MHz
	DFT_BPSK	1@1	LOW	23.50	23.09	23.17	23.13
20MHz	DFT_QPSK	50@0	LOW	22.50	22.15	22.27	22.12
	DFT_QPSK	25@12	LOW	23.50	23.13	23.27	23.18
	DFT_QPSK	1@1	LOW	23.50	23.05	23.25	23.03
	DFT_QPSK	1@49	LOW	23.50	23.04	23.23	23.01
	DFT_QAM16	1@1	LOW	22.50	22.35	22.18	22.13
	DFT_QAM64	1@1	LOW	21.00	20.68	20.67	20.78
	DFT_QAM256	1@1	LOW	19.00	18.70	18.68	18.83
	CP_QPSK	1@1	LOW	22.50	21.88	22.14	21.65
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	346000	349000	352000
					1730.0MHz	1745.0MHz	1760.0MHz
40MHz	DFT_BPSK	1@1	LOW	24.00	23.29	23.27	23.59
	DFT_QPSK	100@0	LOW	22.50	22.24	22.36	22.24
	DFT_QPSK	50@25	LOW	23.50	23.33	23.36	23.21
	DFT_QPSK	1@1	LOW	23.50	23.10	23.30	23.39
	DFT_QPSK	1@104	LOW	23.50	23.12	23.13	23.23
	DFT_QAM16	1@1	LOW	23.00	22.15	22.45	22.54
	DFT_QAM64	1@1	LOW	21.50	21.08	20.88	21.14
	DFT_QAM256	1@1	LOW	19.00	18.91	18.92	18.62
	CP_QPSK	1@1	LOW	22.00	21.67	21.90	21.89

10.1.19 Conducted Power of NR n71

NR n66				Maximum Tune- up(dBm)	Conducted Power(dBm)			
Bandwidth	Modulation	RB allocation	RB offset		133100	136100	139100	
					665.5MHz	680.5MHz	695.5MHz	
5MHz	DFT_BPSK	1@1	LOW	23.00	22.43	22.59	22.57	
	DFT_QPSK	24@0	LOW	22.00	21.64	21.62	21.62	
	DFT_QPSK	12@6	LOW	23.00	22.71	22.60	22.66	
	DFT_QPSK	1@1	LOW	23.00	22.88	22.78	22.72	
	DFT_QPSK	1@22	LOW	23.00	22.95	22.78	22.68	
	DFT_QAM16	1@1	LOW	22.00	21.37	21.79	21.81	
	DFT_QAM64	1@1	LOW	20.50	19.87	20.11	19.77	
	DFT_QAM256	1@1	LOW	19.00	18.08	18.06	18.51	
	CP_QPSK	1@1	LOW	22.00	21.14	21.24	21.60	
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	133600	136100	138600	
					668MHz	680.5MHz	693MHz	
10MHz	DFT_BPSK	1@1	LOW	23.00	22.71	22.72	22.49	
	DFT_QPSK	50@0	LOW	22.00	21.66	21.64	21.57	
	DFT_QPSK	25@12	LOW	23.00	22.65	22.66	22.60	
	DFT_QPSK	1@1	LOW	22.50	22.46	22.48	22.20	
	DFT_QPSK	1@49	LOW	23.00	22.51	22.40	22.24	
	DFT_QAM16	1@1	LOW	22.00	21.72	21.75	21.88	
	DFT_QAM64	1@1	LOW	20.50	20.06	20.40	20.42	
	DFT_QAM256	1@1	LOW	18.50	17.83	18.38	18.08	
		CP_QPSK	1@1	LOW	21.50	20.73	21.16	21.37
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	134600	136100	137600	
					673MHz	680.5MHz	688MHz	
20MHz	DFT_BPSK	1@1	LOW	23.00	22.34	22.49	22.50	
	DFT_QPSK	100@0	LOW	22.00	21.60	21.61	21.61	
20MHz	DFT_QPSK	50@25	LOW	23.00	22.70	22.59	22.62	
	DFT_QPSK	1@1	LOW	23.00	22.40	22.67	22.49	
	DFT_QPSK	1@104	LOW	23.00	22.52	22.59	22.55	
	DFT_QAM16	1@1	LOW	22.00	21.66	21.43	21.51	
	DFT_QAM64	1@1	LOW	20.50	20.09	19.99	20.20	
	DFT_QAM256	1@1	LOW	18.50	18.01	18.11	18.26	
		CP_QPSK	1@1	LOW	22.00	21.19	21.63	20.95

10.1.20 Conducted Power of NR n77(3450-3550)

NR n77				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		630334 3455.0MHz	633334 3500.0MHz	636332 3545.0MHz
10MHz	DFT_BPSK	1@1	LOW	26.00	25.48	25.94	25.50
	DFT_QPSK	24@0	LOW	25.00	24.44	24.82	24.44
	DFT_QPSK	12@6	LOW	26.00	25.32	25.89	25.55
	DFT_QPSK	1@1	LOW	26.00	25.55	25.65	25.52
	DFT_QPSK	1@22	LOW	26.00	25.56	25.51	25.36
	DFT_QAM16	1@1	LOW	25.00	24.89	24.70	24.67
	DFT_QAM64	1@1	LOW	24.00	23.29	23.59	23.24
	DFT_QAM256	1@1	LOW	22.00	21.28	21.52	21.18
	CP_QPSK	1@1	LOW	25.50	24.30	25.13	24.37
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	631668	633334	635000
					3475.0MHz	3500.0MHz	3525.0MHz
50MHz	DFT_BPSK	1@1	LOW	26.00	25.26	25.43	25.50
	DFT_QPSK	128@0	LOW	25.00	24.58	24.66	24.71
	DFT_QPSK	64@32	LOW	26.00	25.60	25.67	25.75
	DFT_QPSK	1@1	LOW	26.00	25.24	25.54	25.47
	DFT_QPSK	1@131	LOW	26.00	25.57	25.72	25.47
	DFT_QAM16	1@1	LOW	25.00	24.37	24.14	24.54
	DFT_QAM64	1@1	LOW	23.50	22.77	22.74	23.14
	DFT_QAM256	1@1	LOW	21.50	20.98	20.69	21.44
	CP_QPSK	1@1	LOW	24.50	23.83	24.10	22.68
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	633334		
					3500.0MHz		
100MHz	DFT_BPSK	1@1	LOW	25.50	25.14		
	DFT_QPSK	270@0	LOW	25.00	24.69		
	DFT_QPSK	135@67	LOW	26.00	25.75		
	DFT_QPSK	1@1	LOW	25.50	25.28		
	DFT_QPSK	1@271	LOW	25.50	25.40		
	DFT_QAM16	1@1	LOW	24.50	24.24		
	DFT_QAM64	1@1	LOW	23.50	23.08		
	DFT_QAM256	1@1	LOW	21.50	21.00		
	CP_QPSK	1@1	LOW	24.00	23.71		

10.1.21 Conducted Power of NR n77(3550-3700)

NR n77				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		637000 3560.0MHz	641666 3625.0MHz	646332 3695.0MHz
10MHz	DFT_BPSK	1@1	LOW	26.00	25.73	25.83	25.39
	DFT_QPSK	24@0	LOW	25.00	24.78	24.81	24.44
	DFT_QPSK	12@6	LOW	26.00	25.99	25.82	25.48
	DFT_QPSK	1@1	LOW	26.00	25.38	25.72	25.54
	DFT_QPSK	1@22	LOW	26.00	25.94	25.64	25.63
	DFT_QAM16	1@1	LOW	25.00	24.87	24.73	24.07
	DFT_QAM64	1@1	LOW	23.50	23.39	23.26	22.71
	DFT_QAM256	1@1	LOW	21.50	20.84	21.43	20.57
50MHz	CP_QPSK	1@1	LOW	25.00	24.56	24.40	23.94
	DFT_BPSK	1@1	LOW	26.00	25.77	25.70	25.47
	DFT_QPSK	128@0	LOW	25.00	24.96	24.82	24.50
	DFT_QPSK	64@32	LOW	26.50	26.03	25.84	25.55
	DFT_QPSK	1@1	LOW	26.00	25.71	25.77	25.44
	DFT_QPSK	1@131	LOW	26.00	25.88	25.46	25.46
	DFT_QAM16	1@1	LOW	25.00	24.72	24.71	24.82
	DFT_QAM64	1@1	LOW	24.00	23.31	23.56	22.92
100MHz	DFT_QAM256	1@1	LOW	22.00	21.67	21.58	21.14
	CP_QPSK	1@1	LOW	24.50	24.35	24.27	23.94
	DFT_BPSK	1@1	LOW	26.00	25.73	25.76	25.76
	DFT_QPSK	270@0	LOW	25.00	24.88	24.73	24.62
	DFT_QPSK	135@67	LOW	26.00	25.91	25.81	25.58
	DFT_QPSK	1@1	LOW	26.00	25.75	25.70	25.68
	DFT_QPSK	1@271	LOW	26.00	25.51	25.29	25.39
	DFT_QAM16	1@1	LOW	25.00	24.89	24.72	24.68
100MHz	DFT_QAM64	1@1	LOW	23.50	23.15	23.40	23.29
	DFT_QAM256	1@1	LOW	21.50	21.12	21.49	21.24
	CP_QPSK	1@1	LOW	24.50	24.14	24.41	24.20

10.1.22 Conducted Power of NR n77(3700-3980)

NR n77				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		647000	656000	665000
					3705.0MHz	3890.0MHz	3975.0MHz
10MHz	DFT_BPSK	1@1	LOW	26.00	25.35	25.81	24.91
	DFT_QPSK	24@0	LOW	25.50	24.58	25.04	23.91
	DFT_QPSK	12@6	LOW	26.50	25.61	26.06	25.07
	DFT_QPSK	1@1	LOW	26.00	25.53	25.83	24.84
	DFT_QPSK	1@22	LOW	26.50	25.50	26.00	24.90
	DFT_QAM16	1@1	LOW	25.00	24.52	24.93	23.68
	DFT_QAM64	1@1	LOW	23.50	23.39	23.36	22.37
	DFT_QAM256	1@1	LOW	21.50	21.31	21.27	20.33
	CP_QPSK	1@1	LOW	25.00	24.86	24.49	23.35
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	648334	656000	663666
					3725.0MHz	3890.0MHz	3955.0MHz
	DFT_BPSK	1@1	LOW	26.00	25.37	25.81	25.07
50MHz	DFT_QPSK	128@0	LOW	25.50	24.62	25.04	24.21
	DFT_QPSK	64@32	LOW	26.50	25.60	26.01	25.18
	DFT_QPSK	1@1	LOW	26.00	25.45	25.78	25.18
	DFT_QPSK	1@131	LOW	26.50	25.55	26.13	25.10
	DFT_QAM16	1@1	LOW	25.00	24.08	24.77	24.12
	DFT_QAM64	1@1	LOW	23.50	22.71	23.25	22.86
	DFT_QAM256	1@1	LOW	22.00	20.88	21.52	20.95
		CP_QPSK	1@1	LOW	24.50	24.16	24.30
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	650000	656000	662000
					3750.0MHz	3890.0MHz	3930.0MHz
100MHz	DFT_BPSK	1@1	LOW	26.00	25.32	25.55	25.90
	DFT_QPSK	270@0	LOW	25.50	24.58	25.00	24.33
	DFT_QPSK	135@67	LOW	26.50	25.64	26.07	25.44
	DFT_QPSK	1@1	LOW	26.00	25.37	25.59	25.74
	DFT_QPSK	1@271	LOW	26.50	25.38	26.04	25.08
	DFT_QAM16	1@1	LOW	25.00	24.72	24.50	24.85
	DFT_QAM64	1@1	LOW	24.00	22.84	22.92	23.63
	DFT_QAM256	1@1	LOW	22.00	20.93	20.99	21.52
		CP_QPSK	1@1	LOW	25.00	23.93	23.98

10.1.23 Conducted Power of NR n78(3450-3550)

NR n78				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		630334	633334	636332
					3455.0MHz	3500.0MHz	3545.0MHz
10MHz	DFT_BPSK	1@1	LOW	26.00	25.06	25.90	25.84
	DFT_QPSK	24@0	LOW	25.00	24.11	24.79	24.75
	DFT_QPSK	12@6	LOW	26.00	25.05	25.83	25.74
	DFT_QPSK	1@1	LOW	26.00	24.99	25.84	25.68
	DFT_QPSK	1@22	LOW	26.00	24.98	25.69	25.58
	DFT_QAM16	1@1	LOW	25.00	23.95	24.98	24.70
	DFT_QAM64	1@1	LOW	23.50	22.70	23.44	23.09
	DFT_QAM256	1@1	LOW	22.00	20.62	21.56	21.36
	CP_QPSK	1@1	LOW	25.00	24.35	24.80	24.37
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	631668	633334	635000
					3475.0MHz	3500.0MHz	3525.0MHz
	DFT_BPSK	1@1	LOW	26.00	25.79	25.87	25.78
50MHz	DFT_QPSK	128@0	LOW	25.50	25.00	24.93	24.93
	DFT_QPSK	64@32	LOW	26.50	25.86	25.98	26.10
	DFT_QPSK	1@1	LOW	26.00	25.68	25.79	25.80
	DFT_QPSK	1@131	LOW	26.00	25.96	25.91	25.73
	DFT_QAM16	1@1	LOW	25.00	24.31	24.98	24.74
	DFT_QAM64	1@1	LOW	24.00	23.05	23.39	23.70
	DFT_QAM256	1@1	LOW	22.00	21.17	21.74	21.54
	CP_QPSK	1@1	LOW	24.50	24.38	24.46	24.37
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	633334		
					3500.0MHz		
100MHz	DFT_BPSK	1@1	LOW	26.00	25.55		
	DFT_QPSK	270@0	LOW	25.50	25.00		
	DFT_QPSK	135@67	LOW	26.50	26.04		
	DFT_QPSK	1@1	LOW	26.00	25.54		
	DFT_QPSK	1@271	LOW	26.00	25.55		
	DFT_QAM16	1@1	LOW	25.00	24.97		
	DFT_QAM64	1@1	LOW	23.00	22.93		
	DFT_QAM256	1@1	LOW	21.50	21.23		
	CP_QPSK	1@1	LOW	24.50	24.10		

10.1.24 Conducted Power of NR n78(3550-3700)

NR n78				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		637000 3560.0MHz	641666 3625.0MHz	646332 3695.0MHz
10MHz	DFT_BPSK	1@1	LOW	26.00	25.59	25.68	25.28
	DFT_QPSK	24@0	LOW	25.00	24.65	24.52	24.43
	DFT_QPSK	12@6	LOW	26.00	25.67	25.71	25.46
	DFT_QPSK	1@1	LOW	26.00	25.77	25.79	25.48
	DFT_QPSK	1@22	LOW	26.00	25.80	25.67	25.61
	DFT_QAM16	1@1	LOW	25.00	24.27	24.71	24.51
	DFT_QAM64	1@1	LOW	23.50	22.95	23.12	23.21
	DFT_QAM256	1@1	LOW	22.00	20.78	21.62	20.98
50MHz	CP_QPSK	1@1	LOW	24.50	24.20	24.25	23.81
	DFT_BPSK	1@1	LOW	26.00	25.70	25.88	25.29
	DFT_QPSK	128@0	LOW	25.00	24.90	24.82	24.40
	DFT_QPSK	64@32	LOW	26.00	25.98	25.92	25.47
	DFT_QPSK	1@1	LOW	26.00	25.68	25.88	25.37
	DFT_QPSK	1@131	LOW	26.00	25.84	25.59	25.45
	DFT_QAM16	1@1	LOW	25.50	25.12	24.95	24.44
	DFT_QAM64	1@1	LOW	23.50	23.20	23.40	23.09
100MHz	DFT_QAM256	1@1	LOW	21.50	21.48	21.33	21.27
	CP_QPSK	1@1	LOW	24.50	24.26	24.12	24.16
	DFT_BPSK	1@1	LOW	26.00	25.63	25.50	25.54
	DFT_QPSK	128@0	LOW	25.00	24.81	24.58	24.44
	DFT_QPSK	64@32	LOW	26.00	25.82	25.65	25.36
	DFT_QPSK	1@1	LOW	26.00	25.59	25.49	25.60
	DFT_QPSK	1@131	LOW	25.50	25.30	25.18	25.26
	DFT_QAM16	1@1	LOW	25.00	24.56	24.74	24.22
300MHz	DFT_QAM64	1@1	LOW	23.50	23.17	23.07	22.92
	DFT_QAM256	1@1	LOW	21.50	21.04	21.26	20.91
	CP_QPSK	1@1	LOW	24.50	24.07	24.05	24.10
	DFT_BPSK	1@1	LOW	26.00	25.63	25.50	25.54
	DFT_QPSK	128@0	LOW	25.00	24.81	24.58	24.44
	DFT_QPSK	64@32	LOW	26.00	25.82	25.65	25.36
	DFT_QPSK	1@1	LOW	26.00	25.59	25.49	25.60
	DFT_QPSK	1@131	LOW	25.50	25.30	25.18	25.26

10.1.25 Conducted Power of NR n78(3700-3800)

NR n78				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		647000 3705.0MHz	650000 3750.0MHz	653000 3795.0MHz
10MHz	DFT_BPSK	1@1	LOW	26.00	25.19	25.55	25.23
	DFT_QPSK	24@0	LOW	25.00	24.33	24.53	24.32
	DFT_QPSK	12@6	LOW	26.00	25.41	25.54	25.37
	DFT_QPSK	1@1	LOW	26.00	25.32	25.68	25.49
	DFT_QPSK	1@22	LOW	26.00	25.50	25.60	25.43
	DFT_QAM16	1@1	LOW	24.50	24.02	24.40	24.50
	DFT_QAM64	1@1	LOW	23.50	22.65	22.82	23.24
	DFT_QAM256	1@1	LOW	21.50	20.50	21.36	20.93
	CP_QPSK	1@1	LOW	24.50	23.98	24.05	23.99
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	648334	650000	651666
					3725.0MHz	3750.0MHz	3775.0MHz
50MHz	DFT_BPSK	1@1	LOW	26.00	25.41	25.52	25.31
	DFT_QPSK	128@0	LOW	25.00	24.59	24.41	24.62
	DFT_QPSK	64@32	LOW	26.00	25.55	25.56	25.61
	DFT_QPSK	1@1	LOW	25.50	25.38	25.49	25.39
	DFT_QPSK	1@131	LOW	26.00	25.44	25.75	25.37
	DFT_QAM16	1@1	LOW	25.00	24.57	24.49	24.26
	DFT_QAM64	1@1	LOW	23.50	22.77	22.97	23.10
	DFT_QAM256	1@1	LOW	21.50	20.93	20.90	21.22
	CP_QPSK	1@1	LOW	24.50	23.92	23.77	24.14
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	650000		
					3750.0MHz		
100MHz	DFT_BPSK	1@1	LOW	25.50	25.32		
	DFT_QPSK	270@0	LOW	24.50	24.48		
	DFT_QPSK	135@67	LOW	25.50	25.49		
	DFT_QPSK	1@1	LOW	25.50	25.26		
	DFT_QPSK	1@271	LOW	25.50	25.23		
	DFT_QAM16	1@1	LOW	24.50	24.18		
	DFT_QAM64	1@1	LOW	23.00	22.79		
	DFT_QAM256	1@1	LOW	21.00	20.80		
	CP_QPSK	1@1	LOW	24.00	23.78		

10.1.26 Conducted Power of Wi-Fi 2.4G

ANT1

Mode	802.11b		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	22.78	24.01	24.50
Mode	802.11g		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	24.35	25.75	25.77
Mode	802.11n(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	23.68	25.18	25.30
Mode	802.11n(HT40)		
Channel/Frequency(MHz)	1(2422)	6(2437)	11(2452)
Average Power(dBm)	24.44	24.90	24.78
Mode	802.11ax(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	24.45	25.73	
Mode	802.11ax(HT40)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	24.93	25.40	25.28

ANT2

Mode	802.11b		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	18.72	19.92	20.31
Mode	802.11g		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	20.26	21.78	21.64
Mode	802.11n(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	19.63	21.16	21.06
Mode	802.11n(HT40)		
Channel/Frequency(MHz)	1(2422)	6(2437)	11(2452)
Average Power(dBm)	20.34	21.02	20.71
Mode	802.11ax(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	20.45	21.71	21.99
Mode	802.11ax(HT40)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	21.04	21.72	21.36

Mode

Mode	802.11n(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	25.12	26.63	26.69
Mode	802.11n(HT40)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	25.87	26.39	26.22
Mode	802.11n(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	25.91	27.18	27.34
Mode	802.11n(HT40)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	26.42	26.95	26.76

10.1.27 Conducted Power of Wi-Fi 5G

Ant 1						
Band	Mode	Channel	Frequency(MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-1 (5150-5250)	802.11a	36	5180	12.50±1.0	12.16	Yes
		48	5240	10.00±1.0	9.52	No
	802.11n-HT20	36	5180	11.00±1.0	10.65	No
		48	5240	11.00±1.0	10.60	No
	802.11n-HT40	38	5190	9.00±1.0	8.85	No
		46	5230	9.00±1.0	8.73	No
	802.11ac-VHT20	36	5180	11.50±1.0	11.34	No
		48	5240	11.00±1.0	10.55	No
	802.11ac-VHT40	38	5190	9.00±1.0	8.59	No
		46	5230	9.00±1.0	8.60	No
	802.11ac-VHT80	42	5210	5.50±1.0	5.22	No
		36	5180	11.00±1.0	10.60	No
	802.11ax-HT20	48	5240	11.00±1.0	10.65	No
		38	5190	9.00±1.0	8.81	No
U-NII-1 (5150-5250)	802.11a	46	5230	10.00±1.0	9.57	No
		42	5210	8.00±1.0	7.78	No
	802.11ax-HT160	50	5250	9.50±1.0	9.15	No
Ant 2						
Band	Mode	Channel	Frequency(MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-1 (5150-5250)	802.11a	36	5180	11.00±1.0	10.67	No
		48	5240	12.00±1.0	11.66	No
	802.11n-HT20	36	5180	14.00±1.0	13.69	Yes
		48	5240	13.50±1.0	13.37	No
	802.11n-HT40	38	5190	13.00±1.0	12.79	No
		46	5230	11.50±1.0	11.47	No
	802.11ac-VHT20	36	5180	13.50±1.0	13.28	No
		48	5240	13.00±1.0	12.76	No
	802.11ac-VHT40	38	5190	11.50±1.0	11.30	No
		46	5230	12.00±1.0	11.72	No
	802.11ac-VHT80	42	5210	9.50±1.0	9.46	No
		36	5180	13.00±1.0	12.99	No
	802.11ax-HT20	48	5240	13.00±1.0	12.50	No
		38	5190	11.50±1.0	11.08	No
U-NII-1 (5150-5250)	802.11a	46	5230	11.50±1.0	11.35	No
		42	5210	8.00±1.0	7.56	No
	802.11ax-HT160	50	5250	9.50±1.0	9.10	No
MIMO						
Band	Mode	Channel	Frequency(MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-1 (5150-5250)	802.11n-HT20	36	5180	18.00±1.0	17.80	No
		48	5240	18.00±1.0	17.58	No
	802.11n-HT40	38	5190	18.00±1.0	17.96	No
		46	5230	17.50±1.0	17.12	No
	802.11ac-VHT20	36	5180	18.00±1.0	17.79	No
		48	5240	17.50±1.0	17.14	No
	802.11ac-VHT40	38	5190	16.00±1.0	15.74	No
		46	5230	16.50±1.0	16.28	No
	802.11ac-VHT80	42	5210	16.50±1.0	16.41	No
		36	5180	18.00±1.0	17.82	No
	802.11ax-HT20	48	5240	18.00±1.0	17.50	No
		38	5190	17.00±1.0	16.97	No
	802.11ax-HT40	46	5230	18.00±1.0	17.64	No
		42	5210	16.00±1.0	15.75	No
U-NII-1 (5150-5250)	802.11a	46	5230	19.00±1.0	18.72	Yes
		42	5210	16.00±1.0	15.75	No
	802.11ax-HT160	50	5250	19.00±1.0	18.72	Yes

Ant 1						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-2a (5250-5350)	802.11a	52	5260	12.50±1.0	12.25	Yes
		64	5320	11.50±1.0	11.45	No
	802.11n-HT20	52	5260	11.00±1.0	10.80	No
		64	5320	10.00±1.0	9.59	No
	802.11n-HT40	54	5270	9.50±1.0	9.09	No
		62	5310	8.50±1.0	8.26	No
	802.11ac-VHT20	52	5260	10.50±1.0	10.33	No
		64	5320	11.00±1.0	10.62	No
	802.11ac-VHT40	54	5270	9.00±1.0	8.56	No
		62	5310	9.00±1.0	8.58	No
	802.11ac-VHT80	58	5290	4.50±1.0	4.35	No
	802.11ax-HT20	52	5260	10.00±1.0	9.84	No
		64	5320	10.00±1.0	9.76	No
	802.11ax-HT40	54	5270	8.00±1.0	7.73	No
		62	5310	8.50±1.0	8.43	No
	802.11ax-HT80	58	5290	5.00±1.0	4.52	No
Ant 2						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-2a (5250-5350)	802.11a	52	5260	15.00±1.0	14.93	No
		64	5320	15.50±1.0	15.12	Yes
	802.11n-HT20	52	5260	14.00±1.0	13.70	No
		64	5320	14.00±1.0	13.72	No
	802.11n-HT40	54	5270	11.00±1.0	10.76	No
		62	5310	12.00±1.0	11.50	No
	802.11ac-VHT20	52	5260	10.00±1.0	9.71	No
		64	5320	13.00±1.0	12.97	No
	802.11ac-VHT40	54	5270	11.50±1.0	11.24	No
		62	5310	11.00±1.0	10.81	No
	802.11ac-VHT80	58	5290	8.50±1.0	8.42	No
	802.11ax-HT20	52	5260	13.50±1.0	13.03	No
		64	5320	12.50±1.0	12.32	No
	802.11ax-HT40	54	5270	11.00±1.0	10.96	No
		62	5310	10.50±1.0	10.37	No
	802.11ax-HT80	58	5290	8.00±1.0	7.74	No
MIMO						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-2a (5250-5350)	802.11n-HT20	52	5260	18.00±1.0	17.82	Yes
		64	5320	18.00±1.0	17.51	No
	802.11n-HT40	54	5270	17.00±1.0	16.61	No
		62	5310	16.50±1.0	16.35	No
	802.11ac-VHT20	52	5260	15.50±1.0	15.31	No
		64	5320	17.50±1.0	17.28	No
	802.11ac-VHT40	54	5270	17.00±1.0	16.81	No
		62	5310	16.50±1.0	16.07	No
	802.11ac-VHT80	58	5290	15.50±1.0	15.43	No
	802.11ax-HT20	52	5260	18.00±1.0	17.55	No
		64	5320	17.50±1.0	17.09	No
	802.11ax-HT40	54	5270	16.50±1.0	16.13	No
		62	5310	16.50±1.0	16.46	No
	802.11ax-HT80	58	5290	15.50±1.0	15.08	No

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Ant 1						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-2c (5470-5725)	802.11a	100	5500	11.00±1.0	10.50	Yes
		140	5700	10.00±1.0	9.75	No
	802.11n-HT20	100	5500	9.50±1.0	9.40	No
		140	5700	8.50±1.0	8.29	No
	802.11n-HT40	102	5510	7.50±1.0	7.17	No
		134	5670	6.50±1.0	6.34	No
	802.11ac-VHT20	100	5500	9.00±1.0	8.85	No
		140	5700	8.50±1.0	8.27	No
	802.11ac-VHT40	102	5510	7.00±1.0	6.77	No
		134	5670	6.00±1.0	5.84	No
	802.11ac-VHT80	106	5530	3.50±1.0	3.08	No
		122	5610	2.50±1.0	2.14	No
	802.11ax-HT20	100	5500	9.00±1.0	8.90	No
		140	5700	6.50±1.0	6.46	No
	802.11ax-HT40	102	5510	7.00±1.0	6.55	No
		134	5670	4.50±1.0	4.03	No
	802.11ax-HT80	106	5530	8.50±1.0	8.29	No
		122	5610	11.00±1.0	10.50	No
	802.11ax- HT160	114	5570	10.00±1.0	9.75	No
Ant 2						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-2c (5470-5725)	802.11a	100	5500	14.00±1.0	13.81	Yes
		140	5700	13.50±1.0	13.41	No
	802.11n-HT20	100	5500	13.00±1.0	12.62	No
		140	5700	12.50±1.0	12.16	No
	802.11n-HT40	102	5510	10.00±1.0	9.58	No
		134	5670	11.00±1.0	10.89	No
	802.11ac-VHT20	100	5500	11.50±1.0	11.04	No
		140	5700	11.50±1.0	11.43	No
	802.11ac-VHT40	102	5510	10.50±1.0	10.25	No
		134	5670	10.50±1.0	10.42	No
	802.11ac-VHT80	106	5530	7.50±1.0	7.36	No
		122	5610	6.50±1.0	6.28	No
	802.11ax-HT20	100	5500	10.50±1.0	10.38	No
		140	5700	11.50±1.0	11.27	No
	802.11ax-HT40	102	5510	9.00±1.0	8.78	No
		134	5670	9.50±1.0	9.23	No
	802.11ax-HT80	106	5530	7.00±1.0	6.99	No
		122	5610	14.00±1.0	13.81	No
	802.11ax- HT160	114	5570	13.50±1.0	13.41	No
MIMO						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
U-NII-2c (5470-5725)	802.11n-HT20	100	5500	17.00±1.0	16.69	No
		140	5700	16.00±1.0	15.98	No
	802.11n-HT40	102	5510	15.50±1.0	15.15	No
		134	5670	15.50±1.0	15.02	No
	802.11ac-VHT20	100	5500	15.50±1.0	15.40	No
		140	5700	15.50±1.0	15.48	No
	802.11ac-VHT40	102	5510	15.50±1.0	15.39	No
		134	5670	16.00±1.0	15.59	No
	802.11ac-VHT80	106	5530	14.50±1.0	14.27	No
		122	5610	13.50±1.0	13.22	No
	802.11ax-HT20	100	5500	15.50±1.0	15.28	No
		140	5700	15.50±1.0	15.37	No
	802.11ax-HT40	102	5510	15.00±1.0	14.92	No
		134	5670	15.00±1.0	14.61	No
	802.11ax-HT80	106	5530	15.00±1.0	14.73	No
		122	5610	13.00±1.0	12.91	No
	802.11ax- HT160	114	5570	17.00±1.0	16.84	Yes



Ant 1						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Powe(dBm)	SAR Test (Yes/No)
U-NII-3 (5725-5825)	802.11a	149	5745	10.50±1.0	10.17	Yes
		165	5825	9.50±1.0	9.11	No
	802.11n-HT20	149	5745	10.00±1.0	9.63	No
		165	5825	8.50±1.0	8.09	No
	802.11n-HT40	151	5755	7.00±1.0	6.86	No
		159	5795	7.00±1.0	6.99	No
	802.11ac-VHT20	149	5745	9.50±1.0	9.18	No
		165	5825	8.00±1.0	7.87	No
	802.11ac-VHT40	151	5755	6.50±1.0	6.40	No
		159	5795	7.00±1.0	6.98	No
	802.11ac-VHT80	155	5775	3.50±1.0	3.32	No
	802.11ax-HT20	149	5745	8.00±1.0	7.73	No
		165	5825	5.50±1.0	5.36	No
	802.11ax-HT40	151	5755	5.00±1.0	4.92	No
		159	5795	5.00±1.0	4.67	No
	802.11ax-HT80	155	5775	4.50±1.0	4.03	No
Ant 2						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Powe(dBm)	SAR Test (Yes/No)
U-NII-3 (5725-5825)	802.11a	149	5745	14.00±1.0	13.52	Yes
		165	5825	13.00±1.0	12.68	No
	802.11n-HT20	149	5745	12.00±1.0	11.66	No
		165	5825	12.00±1.0	11.68	No
	802.11n-HT40	151	5755	11.00±1.0	10.61	No
		159	5795	10.00±1.0	9.95	No
	802.11ac-VHT20	149	5745	12.50±1.0	12.22	No
		165	5825	12.00±1.0	11.79	No
	802.11ac-VHT40	151	5755	10.50±1.0	10.21	No
		159	5795	8.50±1.0	8.19	No
	802.11ac-VHT80	155	5775	6.50±1.0	6.16	No
	802.11ax-HT20	149	5745	11.50±1.0	11.39	No
		165	5825	10.50±1.0	10.04	No
	802.11ax-HT40	151	5755	9.50±1.0	9.17	No
		159	5795	8.50±1.0	8.47	No
	802.11ax-HT80	155	5775	6.50±1.0	6.45	No
MIMO						
Band	Mode	Channel	Frequency (MHz)	Tune-up	Average Powe(dBm)	SAR Test (Yes/No)
U-NII-3 (5725-5825)	802.11n-HT20	149	5745	16.50±1.0	16.14	No
		165	5825	16.00±1.0	15.62	No
	802.11n-HT40	151	5755	16.00±1.0	15.81	No
		159	5795	16.00±1.0	15.98	No
	802.11ac-VHT20	149	5745	16.50±1.0	16.16	Yes
		165	5825	16.00±1.0	15.61	No
	802.11ac-VHT40	151	5755	15.50±1.0	15.14	No
		159	5795	13.50±1.0	13.37	No
	802.11ac-VHT80	155	5775	11.00±1.0	10.95	No
	802.11ax-HT20	149	5745	16.00±1.0	15.80	No
		165	5825	14.50±1.0	14.13	No
	802.11ax-HT40	151	5755	14.00±1.0	13.82	No
		159	5795	13.50±1.0	13.22	No
	802.11ax-HT80	155	5775	12.00±1.0	11.99	No

10.1.28 Conducted Power of BT

EDR	Mode	Maximum Tune-up(dBm)	Average Conducted Output Power (dBm)		
			0	39	78
			2402MHz	2441MHz	2480MHz
			8.15	8.53	7.93
	GFSK	9.00	8.15	8.53	7.93
	π/4QPSK	8.00	7.17	7.64	7.26
	8DPSK	8.50	8.02	7.67	7.27
BLE	Mode	Maximum Tune-up(dBm)	Average Conducted Output Power (dBm)		
			0	19	39
			2402MHz	2440MHz	2480MHz
			-0.28	0.11	0.94
	1Mbps	1.00	-0.28	0.11	0.94
	2Mbps	2.00	-0.19	-0.13	1.69
Channel	Frequency (GHz)	Max. Tune-up Power (dBm)	Max. Power (dBm)	Exclusion thresholds for 1-g SAR(dBm)	SAR evaluation required
39	2.441	9.00	8.53	4.77	Yes
39	2.480	2.00	1.69	4.77	No

Note

- Per KDB 447498 D04 Interim General RF Exposure Guidance v01, the 1-g SAR test exclusion thresholds for 300 MHz to 6 GHz at test separation distances ≤ 40 cm are determined by:

$$P_{th} (mW) = ERP_{20\text{ cm}} (mW) = \begin{cases} 2040f & 0.3\text{ GHz} \leq f < 1.5\text{ GHz} \\ 3060 & 1.5\text{ GHz} \leq f \leq 6\text{ GHz} \end{cases} \quad (B.1)$$

$$P_{th} (mW) = \begin{cases} ERP_{20\text{ cm}} (d/20\text{ cm})^x & d \leq 20\text{ cm} \\ ERP_{20\text{ cm}} & 20\text{ cm} < d \leq 40\text{ cm} \end{cases} \quad (B.2)$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20\text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{ cm}}$ is per Formula (B.1).

*When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine estimated SAR.

- Per KDB 248227 D01 v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
- The output power of all data rate were prescan, just the worst case (the lowest data rate) of all mode were shown in report.

10.1.29 Tune-up power tolerance

Band	Tune-up power tolerance(dBm)		
GSM850	GSM/GPRS (GMSK)	GSM	Max output power =32.00±1.0dBm
		1TXslots	Max output power =30.50±1.0dBm
		2TXslots	Max output power =30.00±1.0dBm
		3TXslots	Max output power =31.00±1.0dBm
	EGPRS (8-PSK)	4TXslots	Max output power =30.50±1.0dBm
		1TXslots	Max output power =28.00±1.0dBm
		2TXslots	Max output power =26.50±1.0dBm
		3TXslots	Max output power =27.00±1.0dBm
GSM1900	GSM/GPRS (GMSK)	4TXslots	Max output power =27.50±1.0dBm
		GSM	Max output power =30.00±1.0dBm
		1TXslots	Max output power =27.50±1.0dBm
		2TXslots	Max output power =27.50±1.0dBm
	EGPRS (8-PSK)	3TXslots	Max output power =27.00±1.0dBm
		4TXslots	Max output power =27.50±1.0dBm
		1TXslots	Max output power =25.00±1.0dBm
		2TXslots	Max output power =25.50±1.0dBm
WCDMA 2		3TXslots	Max output power =25.00±1.0dBm
WCDMA 4		4TXslots	Max output power =25.00±1.0dBm
WCDMA 5			
LTE B2			
LTE B4			
LTE B5			
LTE B7			
LTE B12			
LTE B17			
LTE B38			
LTE B41			
LTE B42			
LTE B66			
NR n5			
NR n7			
NR n12			
NR n38			
NR n41			
NR n66			
NR n77			
NR n77			
NR n78			
NR n78			

Band	Tune-up power tolerance(dBm)		
WIFI	2.4G (MAIN ANT1)	802.11b	Max output power =25.00±1.0dbm
		802.11g	Max output power =26.00±1.0dbm
		802.11n (HT20)	Max output power =25.50±1.0dbm
		802.11n (HT40)	Max output power =25.00±1.0dbm
		802.11ax20	Max output power =26.00±1.0dbm
		802.11ax40	Max output power =25.50±1.0dbm
	2.4G (AUX ANT2)	802.11b	Max output power =20.50±1.0dbm
		802.11g	Max output power =22.00±1.0dbm
		802.11n (HT20)	Max output power =21.50±1.0dbm
		802.11n (HT40)	Max output power =21.50±1.0dbm
		802.11ax20	Max output power =22.00±1.0dbm
		802.11ax40	Max output power =22.00±1.0dbm
	2.4G (MIMOMode)	802.11n (HT20)	Max output power =27.00±1.0dbm
		802.11n (HT40)	Max output power =26.50±1.0dbm
		802.11ax20	Max output power =27.50±1.0dbm
		802.11ax40	Max output power =27.00±1.0dbm
	U-NII-1 (5150-5250)	Ant 1	802.11a
		Ant 2	802.11n (HT20)
		MIMO	802.11ax (HT160)
	U-NII-2a (5250-5350)	Ant 1	802.11a
		Ant 2	802.11a
		MIMO	802.11a
	U-NII-2c (5470-5725)	Ant 1	802.11a
		Ant 2	802.11a
		MIMO	802.11ax (HT160)
	U-NII-3 (5725-5825)	Ant 1	802.11a
		Ant 2	802.11a
		MIMO	802.11n (HT20)
BT	GFSK mode		Max output power =9.00±1.0dbm
	Pi/4DQPSK mode		Max output power =8.00±1.0dbm
	8DPSK mode		Max output power =8.50±1.0dbm
BLE	1Mbps Power		Max output power =1.00±1.0dbm
	2Mbps Power		Max output power =2.00±1.0dbm

10.2 SAR test results

Notes:

1) Per KDB447498 D01v05 r02, the SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the scaled SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8 \text{ W/kg}$), testing at the high and low channels is optional.

2) Per KDB447498 D01v05r02, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is: $\leq 0.8 \text{ W/kg}$ or 2.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\leq 100 \text{ MHz}$. When the maximum output power variation across the required test channels is $> \frac{1}{2} \text{ dB}$, instead of the middle channel, the highest output power channel must be used.

3) Per KDB447498 D01v05r02, All measurement SAR result is scaled-up to account for tune-up tolerance is compliant.

4) Per KDB648474 D04v01r02, body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn with headset SAR.

5) Per KDB248227 D01v01r02, the procedures required to establish specific device operating configurations for testing the SAR of 802.11 a/b/g transmitters.

(1) For Headsets operating next to ear, hotspot mode or mini-tablet configurations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When the reported SAR of initial test position is $\leq 0.4 \text{ W/kg}$, SAR testing for remaining test positions is not required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is $\leq 0.8 \text{ W/kg}$ or all test positions are measured.

(2) For WLAN 2.4 GHz, the highest measured maximum output power channel for DSSS was selected for SAR measurement. When the reported SAR is $\leq 0.8 \text{ W/kg}$, no further SAR testing is required. Otherwise, SAR is evaluated at the next highest measured output power channel. When any reported SAR is $> 1.2 \text{ W/kg}$, SAR is required for the third channel. For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is $\leq 1.2 \text{ W/kg}$.

(3) For WLAN 5 GHz, the initial test configuration was selected according to the transmission mode with the highest maximum output power. When the reported SAR of initial test configuration is > 0.8 W/kg, SAR is required for the subsequent highest measured output power channel until the reported SAR result is ≤ 1.2 W/kg or all required channels are measured. For other transmission modes, SAR is not required when the highest reported SAR for initial test configuration is adjusted by the ratio of subsequent test configuration to initial test configuration specified maximum output power and it is ≤ 1.2 W/kg.

6) Per KDB865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/Kg; if the deviation among the repeated measurement is $\leq 20\%$, and the measured SAR < 1.45 W/Kg, only one repeated measurement is required.

7) Per KDB865664 D02v01r01, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is > 1.5 W/kg, or > 7.0 W/kg for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing (Refer to appendix B for details).

8) Per KDB941225 D06v01r01, the DUT Dimension is bigger than 9 cm x 5 cm, so 10mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.

9) Per KDB 941225 D01, 3G SAR Measurement Procedures, The mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

10) Per KDB 941225 D05, SAR Evaluation Considerations for LTE Devices

(1) QPSK with 1 RB and 50% RB allocation

Start with the largest channel bandwidth and measure SAR, 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; 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 100% RB allocation

SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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.

(3) Higher order modulations

SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> 1/2$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

(4) Other channel bandwidth

SAR is required when the highest maximum output power of the smaller channel bandwidth is $> 1/2$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

10.3 Test Result

10.3.1 Results overview of GSM

Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
GSM 850 (voice)	Left Cheek	190	836.6	-1.800	0.162	100	1.00	31.86	32.00	1.033	0.167
	Left Tilt	190	836.6	-0.620	0.089	100	1.00	31.86	32.00	1.033	0.092
	Right Cheek	190	836.6	0.470	0.135	100	1.00	31.86	32.00	1.033	0.139
	Right Tilt	190	836.6	-2.460	0.068	100	1.00	31.86	32.00	1.033	0.070
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
GPRS 850+4slots	Front	190	836.6	-0.790	0.358	100	1.00	31.86	32.00	1.033	0.370
	Back	190	836.6	0.430	0.357	100	1.00	31.86	32.00	1.033	0.369
	Left	190	836.6	-3.870	0.195	100	1.00	31.86	32.00	1.033	0.201
	right	190	836.6	0.710	0.243	100	1.00	31.86	32.00	1.033	0.251
	Top	190	836.6	2.490	0.014	100	1.00	31.86	32.00	1.033	0.014
	Bottom	190	836.6	-2.990	0.142	100	1.00	31.86	32.00	1.033	0.147

Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
GSM 1900 (voice)	Left Cheek	810	1909.8	-0.300	0.056	100	1.00	29.68	30.00	1.076	0.060
	Left Tilt	810	1909.8	1.250	0.049	100	1.00	29.68	30.00	1.076	0.053
	Right Cheek	810	1909.8	4.340	0.047	100	1.00	29.68	30.00	1.076	0.051
	Right Tilt	810	1909.8	0.620	0.036	100	1.00	29.68	30.00	1.076	0.039
Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
GPRS 1900+4slots	Front	810	1909.8	0.170	0.461	100	1.00	29.68	30.00	1.076	0.496
	Back	810	1909.8	-1.030	0.506	100	1.00	29.68	30.00	1.076	0.545
	Left	810	1909.8	-0.870	0.204	100	1.00	29.68	30.00	1.076	0.220
	right	810	1909.8	2.600	0.237	100	1.00	29.68	30.00	1.076	0.255
	Top	810	1909.8	-3.320	0.015	100	1.00	29.68	30.00	1.076	0.016
	Bottom	810	1909.8	0.050	0.182	100	1.00	29.68	30.00	1.076	0.196