

# SAR TEST REPORT

For

**Mobile Phone**

**Model Number: RMX3370**

**FCC ID: 2AUYFRMX3370**

**Report Number: WT218002348**

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## Test report declaration

Applicant : Realme Chongqing Mobile Telecommunications Corp., Ltd.  
Address : No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China  
Manufacturer : Realme Chongqing Mobile Telecommunications Corp., Ltd.  
Address : No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China  
EUT Description : Mobile Phone  
Model No. : RMX3370  
Brand : realme  
FCC ID : 2AUYFRMX3370

### Test Standards:

FCC 47CFR Part 2(2.1093) IEEE Std 1528-2013 KDB 447498 D01v06 KDB 248227 D01v02r02 KDB 865664 D01v01r04 KDB 865664 D02v01r02 KDB 648474 D04v01r03 KDB 941225 D01v03r01 KDB 941225 D05v02r05 KDB 941225 D06v02r01

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the compliance of the applicable standards stated above. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results.

The results documented in this report only apply to the tested sample, under the conditions and modes of operation as described herein.

The test report shall not be reproduced in part without written approval of the laboratory.


Project Engineer:



Date: Oct.11, 2021

(Zhang Qiang)

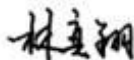
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Date: Oct.11, 2021

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Approved by:



Date: Oct.11, 2021

(Lin YiXiang)

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# 1. REPORTED SAR SUMMARY

## 1.1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing are as follows.

Band		Highest SAR Summary			
		Head (Gap 0mm)	Hotspot (Gap10m)	Body-worn (Gap15m)	Extremity (Gap 0mm)
		1g SAR (W/kg)			10g SAR (W/kg)
GSM	GSM850	0.831	0.264	0.166	N/A
	PCS1900	0.470	0.886	0.303	N/A
WCDMA	WCDMA Band II	0.804	0.854	0.391	N/A
	WCDMA Band IV	0.777	0.852	0.304	N/A
	WCDMA Band V	0.784	0.492	0.165	N/A
LTE	LTE Band 2	0.565	0.775	0.381	N/A
	LTE Band 4	0.502	0.546	0.287	N/A
	LTE Band 5	0.668	0.221	0.156	N/A
	LTE Band 7	0.432	0.657	0.392	N/A
	LTE Band 12	0.604	0.175	0.159	N/A
	LTE Band 13	0.699	0.192	0.174	N/A
	LTE Band 17	0.595	0.177	0.142	N/A
	LTE Band 26	0.692	0.247	0.133	N/A

	LTE Band 38	0.329	0.446	0.204	N/A
	LTE Band 41	0.327	0.516	0.201	N/A
	LTE Band 66	0.454	0.642	0.294	N/A
5G NR	5G NR n5	0.141	0.162	0.147	N/A
	5G NR n7	0.553	0.395	0.132	N/A
	5G NR n38	0.722	0.578	0.184	N/A
	5G NR n41	0.764	0.625	0.252	N/A
	5G NR n66	0.618	0.710	0.310	N/A
WLAN	2.4GHzWLAN	0.888	0.419	0.206	N/A
	5GHzWLAN	<b>0.938</b>	<b>0.892</b>	<b>0.558</b>	N/A
2.4GHz Band	Bluetooth	0.035	0.019	0.011	N/A

Maximum Report SAR 1g(W/kg)	Head	0.938	Limit(W/kg): 1.6 W/kg
	Body-worn	0.558	
	Hotspot	0.892	

Highest Simultaneous SAR 1g(W/kg)	ENDC(LTE Band 7+n66)+2.4G WIFI(Chain0)+5GWIFI(Chain 0+1)	1.490	Limit(W/kg): 1.6 W/kg
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Note:

1. This device is in compliance with Specific Absorption Rate (SAR) for general population or uncontrolled exposure limits (1.6W/kg as averaged over any 1 gram of tissue; specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992), and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.
2. When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% risk level.

## 1.2. RF exposure limits (ICNIRP Guidelines)

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR*(Brain/Body)	<b>1.60mW/g</b>	8.00mW/g
Spatial Average SAR** (Whole Body)	0.08mW/g	0.40mW/g
Spatial Peak SAR***(Limbs)	4.00mW/g	20.00mW/g

**Table 2: RF exposure limits**

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

Notes:

- \* The Spatial Peak value of the SAR averaged over any 1 grams 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 1 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.)

## 1.3. Ratings and System Details

EUT Description	Mobile Phone
Model No.	RMX3370
Brand	realme
EUT Supports Radios application:	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 19098 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV: 1712.4 MHz ~ 17526 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784. 5 MHz

	<p>LTE Band 17: 706.5 MHz ~ 713.5 MHz  LTE Band 26: 814.7 MHz ~ 8483 MHz  LTE Band 38: 2572.5 MHz ~ 2617.5 MHz  LTE Band 41: 2498.5 MHz ~ 2687.5 MHz  LTE Band 66: 1710.7 MHz ~ 1779.3 MHz  5G NRn5: 826.5 MHz ~ 846.5 MHz  5G NR n7: 2502.5 MHz ~ 2567.5 MHz  5G NR n38: 2570 MHz ~ 2620 MHz  5G NR n41 : 2506.02 MHz ~ 2679.99 MHz  5G NR n66: 1712.5 MHz ~ 1777.5 MHz  WL AN 24GHz Band: 2412 MHz ~ 2462 MHz  WL AN 5.2GHz Band: 5180 MHz ~ 5240 MHz  WL AN 5.3GHz Band: 5260 MHz ~ 5320 MHz  WL AN 5.5GHz Band: 5500 MHz ~ 5720 MHz  WL AN 5.8GHz Band: 5745 MHz ~ 5825 MHz  Bluetooth: 2402 MHz ~ 2480 MHz  NFC: 13.56 MHz</p>
Modulation Mode	<p>GSM/GPRS/EGPRS  AMR I RMC 12.2Kbps  HSDPA  HSUPA  DC-HSDPA  HSPA+ (16QAM uplink)  CDMA2000 : 1xRTT/1xEv-Do(Rel.0)/1xEv-Do(Rev.A)  LTE: QPSK, 16QAM, 64QAM, 256QAM  5G NR : CP-OFDM/ DFT-s-OFDM, QPSK, 16QAM, 64QAM, 256QAM  WL AN 24GHz : 802.11b/g/n/ac HT20/HT40/VHT20/VHT40  WL AN 2.4GHz : 802.11ax HE20/HE40  WL AN 5GHz : 802.11a/n/ac/ax  HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160  Bluetooth BR/EDR/L E  NFC: ASK</p>
Battery Specification	BLP887
Battery Applicant	2440mAh 7.74V 3.0C BLP887 513290 NA I934
Hardware version:	realme UI V2.0
Software version:	11



#### 1.4. Test specification(s)

FCC 47CFR Part 2(2.1093)	Radiofrequency Radiation Exposure Evaluation: Portable Devices
IEEE Std 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
KDB 447498 D01v06	General RF Exposure Guidance No deviation
KDB 248227 D01v02r02	SAR Measurement Procedures for 802.11 Transmitters
KDB 865664 D01v01r04	SAR Measurement 100 MHz to 6 GHz
KDB 865664 D02v01r02	RF Exposure Reporting
KDB 648474 D04v01r03	Handset SAR
KDB 941225 D01v03r01	3G SAR MEAUREMENT PROCEDURES
KDB 941225 D05v02r05	SAR Evaluation Consideration for LTE Devices
KDB 941225 D06v02r01	SAR Evaluation Procedures For Portable Devices With Wireless Router Capabilities
<p><b>Note 1:</b> The test item is not applicable.</p> <p><b>Note 2:</b> Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.</p>	

## 1.5.List of Test and Measurement Instruments

	Equipment	Model No.	Serial No.	Manufacturer	Last Calibration Date	Period
<input checked="" type="checkbox"/>	SAR test system	TX60L	F08/5AY8A1/A/01+F08/	SPEAG	NCR	NCR
<input checked="" type="checkbox"/>	Electronic Data Transmitter	DAE4	1636	SPEAG	2020.11.17	1year
<input checked="" type="checkbox"/>	SAR Probe	EX3DV4	7623	SPEAG	2020.11.06	1year
<input checked="" type="checkbox"/>	Software	85070	--	Agilent	--	--
<input checked="" type="checkbox"/>	Software	DASY5	--	SPEAG	--	--
<input checked="" type="checkbox"/>	System Validation Dipole,750MHz	D750V3	1103	SPEAG	2020.01.06	3year
<input type="checkbox"/>	System Validation Dipole,835MHz	D835V2	4d141	SPEAG	2021.08.31	3year
<input checked="" type="checkbox"/>	System Validation Dipole,1900MHz	D1900V2	5d162	SPEAG	2021.09.01	3year
<input type="checkbox"/>	System Validation Dipole,2300MHz	D2300V2	1034	SPEAG	2020.01.02	3year
<input checked="" type="checkbox"/>	System Validation Dipole,2450MHz	D2450V2	818	SPEAG	2021.08.26	3year
<input checked="" type="checkbox"/>	System Validation Dipole,2600MHz	D2600V2	1074	SPEAG	2020.01.02	3year
<input checked="" type="checkbox"/>	System Validation Dipole,1750MHz	D1750V2	1108	SPEAG	2020.01.03	3year
<input checked="" type="checkbox"/>	System Validation Dipole,5GHz	D5GzV2	1185	SPEAG	2019.12.31	3year
<input checked="" type="checkbox"/>	Dielectric Probe Kit	85070E	MY44300455	Agilent	NCR	NCR
<input checked="" type="checkbox"/>	Dual-directional coupler,0.10-2.0GHz	778D	MY48220198	Agilent	NCR	NCR
<input checked="" type="checkbox"/>	Dual-directional coupler,2.00-18GHz	772D	MY46151160	Agilent	NCR	NCR
<input checked="" type="checkbox"/>	Power Amplifier	ZVE-8G	SC280800926	MINI-CIRCUITS	NCR	NCR
<input checked="" type="checkbox"/>	Power Amplifier	ZHL42W	81709	MINI-CIRCUITS	NCR	NCR
<input checked="" type="checkbox"/>	Signal Generator	SMR20	100047	R&S	2021.02.19	1year

<input checked="" type="checkbox"/>	Power Sensor	NRP-Z21	102626	R&S	2021.06.04	1year
<input checked="" type="checkbox"/>	Power Sensor	NRP-Z21	102627	R&S	2021.06.04	1year
<input checked="" type="checkbox"/>	Call Tester	CMU 200	100110	R&S	2021.05.18	1year
<input checked="" type="checkbox"/>	Network Analyzer	E5071C	MY46109550	Agilent	2021.02.19	1Year
<input checked="" type="checkbox"/>	Flat Phantom	ELI4.0	TP-1904	SPEAG	NCR	NCR
<input checked="" type="checkbox"/>	Twin Phantom	SAM	TP-1504	SPEAG	NCR	NCR
<input checked="" type="checkbox"/>	Wideband Radio Communication Tester	CMW500	125469	R&S	2021.05.18	1Year
<input checked="" type="checkbox"/>	Precision Thermometer	--	--	--	2021.08.07	1Year

**Table 3: List of Test and Measurement Equipment**

Note: All the test equipments are calibrated once a year, except the dipoles, which are calibrated every three years. Moreover, we have self-calibration every year to the dipoles.

## **2. GENERAL INFORMATION**

### **2.1. Report information**

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

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### **2.2. Laboratory Accreditation and Relationship to Customer**

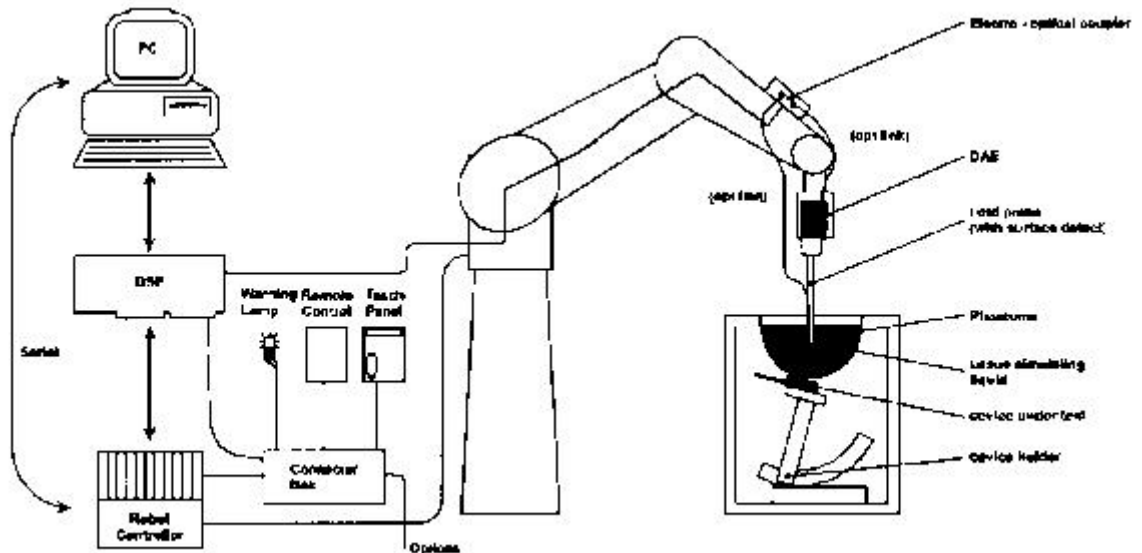
The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations: China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579. The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918. The Laboratory is registered to perform emission tests with Innovation, Science and

Economic Development (ISED), and the registration number is 11177A. The Laboratory is registered to perform emission tests with VCCI, and the registration numbers are C-20048, G20076, R-20077, R-20078, and T-20047.

The Laboratory is Accredited Testing Laboratory of American Association for Laboratory Accreditation (A2LA) and certificate number is 3292.01.

### 3. SAR MEASUREMENT SYSTEM CONFIGURATION

#### 3.1. SAR Measurement Set-up




The DASY5 system for performing compliance tests consists of the following items:


- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- A unit to operate the optical surface detector which is connected to the EOC.

- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
  - The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. • A computer operating Windows XP.
  - DASY5 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
  - The device holder for handheld mobile phones.
  - Tissue simulating liquid mixed according to the given recipes.
  - System checks dipoles allowing validating the proper functioning of the system.
  - Test environment
  - The DASY5 measurement system is placed at the head end of a room with dimensions: 4.5 x 4 x 3 m<sup>3</sup>, the SAM phantom is placed in a distance of 1.3 m from the side walls and 1.1m from the rear wall.
- Picture 1 of the photo documentation shows a complete view of the test environment.

### 3.2. Probe description

Isotropic E-Field Probe EX3DV4 for Dosimetric Measurements

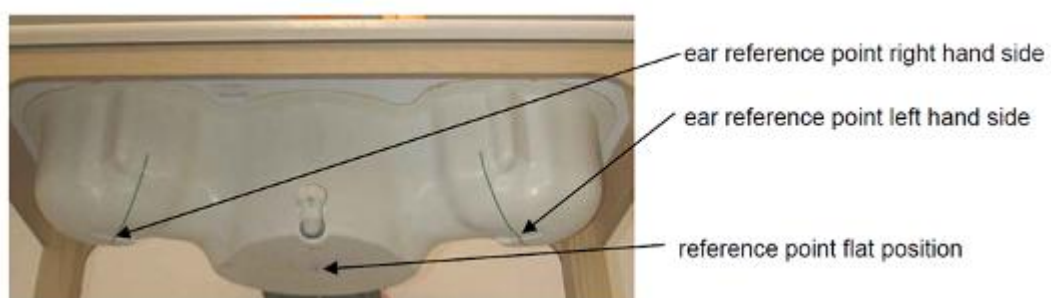
Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	ISO/IEC 17025 calibration service available.	
Frequency	10 MHz to >6 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 6 GHz)	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	

Dynamic range	10 $\mu\text{W/g}$ to $> 100 \text{ mW/g}$ ; Linearity: $\pm 0.2 \text{ dB}$ (noise: typically $< 1 \mu\text{W/g}$ )	
Dimensions	Overall length: 337 mm (Tip: 20mm) Tip length: 2.5 mm (Body: 12mm) Typical distance from probe tip to dipole centers: 1mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

### 3.3. Phantom description

The used SAM Phantom meets the requirements specified in Edition 01-01 of Supplement C to OET Bulletin 65 for Specific Absorption Rate (SAR) measurements.

The phantom consists of a fibreglass shell integrated in a wooden table. It allows left-hand and right-hand head as well as body-worn measurements with a maximum liquid depth of 18 cm in head position and 22 cm in planar position (body measurements). The thickness of the Phantom shell is 2 mm +/- 0.1 mm.





ELI4 Phantom

Shell Thickness	2mm+/- 0.2mm
Filling Volume	Approximately 30 liters
Measurement Areas	Flat phantom
The ELI4 phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30MHz to 6GHz. ELI4 is fully compatible with the latest draft of the standard IEC 62209-2 and all known tissue simulating liquids.	

The phantom shell material is resistant to all ingredients used in the tissue-equivalent liquid recipes. The shell of the phantom including ear spacers is constructed from low permittivity and low loss material, with a relative permittivity  $\leq 5$  and a loss tangent  $\leq 0.05$ .

### 3.4. Device holder description

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of  $65^\circ$ . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard



mobile phones or PDA's only. If necessary an additional support of polystyrene material is used.

Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots



with maximum SAR values.

Therefore those devices are normally only tested at the flat part of the SAM.

## 4. SAR MEASUREMENT PROCEDURE

### 4.1. Scanning procedure

- The DASY5 installation includes predefined files with recommended procedures for measurements and system check. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.
- The reference and drift measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. +/- 5 %.
- The surface check measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above  $\pm 0.1\text{mm}$ ). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within  $\pm 30^\circ$ .)
- The area scan measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension ( $\leq$

2GHz) , 12 mm in x- and y- dimension(2-4 GHz) and 10mm in x- and y- dimension(4-6GHz). If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation.

Results of this coarse scan are shown in Appendix B.

- A “zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine grid with maximum scan spatial resolution:  $\Delta x_{zoom}$ ,  $\Delta y_{zoom} \leq 2GHz \leq 8 \text{ mm}$ ,  $2-4GHz - \leq 5 \text{ mm}$  and  $4-6 \text{ GHz} - \leq 4 \text{ mm}$ ;  $\Delta z_{zoom} \leq 3GHz - \leq 5 \text{ mm}$ ,  $3-4 \text{ GHz} - \leq 4 \text{ mm}$  and  $4-6GHz - \leq 2\text{mm}$  where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. DASY5 is also able to perform repeated zoom scans if more than 1 peak is found during area scan. Test results relevant for the specified standard (see chapter 1.5.) are shown in table form in chapter 3.2.

- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2mm steps. This measurement shows the continuity of the liquid and can – depending in the field strength- also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in Appendix B.

The following table summarizes the area scan and zoom scan resolutions per FCC KDB 865664D01:

Frequency	Maximum Area Scan resolution ( $\Delta x_{area}, \Delta y_{area}$ )	Maximum Zoom Scan spatial resolution( $\Delta x_{zoom}, \Delta y_{zoom}$ )	Maximum Zoom Scan spatial resolution			Minimum zoom scan volume (x,y,z)
			Uniform Grid	Graded Grad		
				$\Delta z_{zoom}(n)$	$\Delta z_{zoom}(1)$	
$\leq 2GHz$	$\leq 15\text{mm}$	$\leq 8\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 1.5 * \Delta z_{zoom}(n-1)$	$\geq 30\text{mm}$
2-3GHz	$\leq 12\text{mm}$	$\leq 5\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 1.5 * \Delta z_{zoom}(n-1)$	$\geq 30\text{mm}$
3-4GHz	$\leq 10\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 3\text{mm}$	$\leq$	$\geq 28\text{mm}$

					$1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	
4-5GHz	$\leq 10\text{mm}$	$\leq 4\text{mm}$	$\leq 3\text{mm}$	$\leq 2.5\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	$\geq 25\text{mm}$
5-6GHz	$\leq 10\text{mm}$	$\leq 4\text{mm}$	$\leq 2\text{mm}$	$\leq 2\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1)$	$\geq 22\text{mm}$

### Spatial Peak SAR Evaluation

- The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The bases of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 5 x 5 x 7 points (with 8mm horizontal resolution) or 7 x 7 x 7 points (with 5mm horizontal resolution).
- The algorithm that finds the maximal averaged volume is separated into three different stages.
- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting 'Graph Evaluated'.
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.
- Extrapolation
- The extrapolation is based on a least square algorithm [W. Gander, Computermathematik, p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

### Interpolation

- The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computermathematik,

p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff ].

- Volume Averaging
- At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.
- Advanced Extrapolation
- DASY5 uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

#### 6.1.1. Data Storage and Evaluation

##### Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension DAE4. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm<sup>2</sup>], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

##### Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Normi, ai0, ai1, ai2
- Conversion factor	ConvFi	
- Diode compression point	Dcpi	

Device parameters:	- Frequency	f
- Crest factor	cf	
Media parameters:	- Conductivity	$\sigma$
- Density	$\rho$	

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf/dcpi$$

with  $V_i$  = compensated signal of channel  $i$  ( $i = x, y, z$ )

$U_i$  = input signal of channel  $i$  ( $i = x, y, z$ )

cf = crest factor of exciting field (DASY parameter)

dcpi = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes:  $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$

H-field probes:  $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2)/f$

with  $V_i$  = compensated signal of channel  $i$  ( $i = x, y, z$ )

$Norm_i$  = sensor sensitivity of channel  $i$  ( $i = x, y, z$ )

[mV/(V/m)<sup>2</sup>] for E-field Probes

ConvF = sensitivity enhancement in solution

$a_{ij}$  = sensor sensitivity factors for H-field probes

$f$  = carrier frequency [GHz]

$E_i$  = electric field strength of channel  $i$  in V/m

$H_i$  = magnetic field strength of channel  $i$  in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot}^2 \cdot \sigma) / (\rho \cdot 1000)$$

with SAR = local specific absorption rate in mW/g

$E_{tot}$  = total field strength in V/m

$\sigma$  = conductivity in [mho/m] or [Siemens/m]

$\rho$  = equivalent tissue density in g/cm<sup>3</sup>

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^2 \cdot 37.7$$

with  $P_{pwe}$  = equivalent power density of a plane wave in mW/cm<sup>2</sup>

$E_{tot}$  = total electric field strength in V/m

$H_{tot}$  = total magnetic field strength in A/m

## 7. SYSTEM VERIFICATION PROCEDURE

### 7.1. Tissue Verification

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters 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

Ingredient (% by weight )	Head Tissue				
	750	835	1750	1900	2450
Water	34.4	41.45	52.64	55.24	62.7
Salt(NaCl)	0.79	1.45	0.36	0.306	0.5
Sugar	64.81	56.0	0.0	0.0	0.0
HEC	0.0	1.0	0.0	0.0	0.0
Bactericide	0.0	0.1	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	47.0	44.54	36.8

**Table 4 : Tissue Dielectric Properties**

Salt: 99+% Pure Sodium Chloride; Sugar: 98+% Pure Sucrose; Water: De-ionized, 16M $\Omega$ + 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

Tissue-equivalent liquid measurements:

f/MHz	Date Tested	Dielectric Parameters	Target	Tolerance (%)	Temp (°C)
750	2021.09.10	$\epsilon_r = 41.79$	41.9 (39.81~44.00)	±5	20
		$\sigma = 0.90$	0.89 (0.85~0.93)		
835	2021.09.13	$\epsilon_r = 41.5$	41.5 (39.43~43.58)	±5	20
		$\sigma = 0.89$	0.90 (0.86~0.95)		
1750	2021.09.15	$\epsilon_r = 40.1$	40.17 (38.16~42.18)	±5	20
		$\sigma = 1.41$	1.35 (1.28~1.42)		
1900	2021.09.17	$\epsilon_r = 39.75$	39.75 (37.76~41.74)	±5	20
		$\sigma = 1.45$	1.45 (1.38~1.52)		
750	2021.09.11	$\epsilon_r = 40.59$	41.9 (39.81~44.00)	±5	20
		$\sigma = 0.86$	0.89 (0.85~0.93)		
835	2021.09.16	$\epsilon_r = 41.9$	41.5 (39.43~43.58)	±5	20
		$\sigma = 0.91$	0.90 (0.86~0.95)		
1750	2021.09.19	$\epsilon_r = 40.17$	40.17 (38.16~42.18)	±5	20
		$\sigma = 1.35$	1.35 (1.28~1.42)		
1900	2021.09.22	$\epsilon_r = 38.32$	39.75 (37.76~41.74)	±5	20



		$\sigma=1.42$	1.45 (1.38~1.52)		
2300	2021.09.21	$\epsilon_r = 40.13$	39.8 (37.81~41.79)	$\pm 5$	20
		$\sigma=1.64$	1.70 (1.62~1.79)		
2450	2021.09.24	$\epsilon_r = 37.97$	37.97 (36.07~39.87)	$\pm 5$	20
		$\sigma=1.88$	1.88 (1.79~1.97)		
2600	2021.09.28	$\epsilon_r = 39.11$	39.11 (37.15~41.07)	$\pm 5$	20
		$\sigma=1.97$	1.97 (1.87~2.07)		
5.25G	2021.09.30	$\epsilon_r = 35.53$	36.0 (34.20~37.80)	$\pm 5$	20
		$\sigma=4.51$	4.66 (4.43~4.89)		
5.5G	2021.09.30	$\epsilon_r = 35.5$	35.6 (33.82~37.38)	$\pm 5$	20
		$\sigma=4.93$	4.96 (4.71~5.21)		
5.75G	2021.09.30	$\epsilon_r = 35.96$	35.3 (33.54~37.07)	$\pm 5$	20
		$\sigma=5.19$	5.27 (5.01~5.53)		
5.25G	2021.10.02	$\epsilon_r = 36.15$	36.0 (34.20~37.80)	$\pm 5$	20
		$\sigma=4.47$	4.66 (4.43~4.89)		
5.5G	2021.10.04	$\epsilon_r = 35.42$	35.6 (33.82~37.38)	$\pm 5$	20
		$\sigma=4.94$	4.96		

			(4.71~5.21)		
5.75G	2021.10.07	$\epsilon_r = 35.82$	35.3 (33.54~37.07)	$\pm 5$	20
		$\sigma = 5.21$	5.27 (5.01~5.53)		
$\epsilon_r$ = Relative permittivity, $\sigma$ = Conductivity					

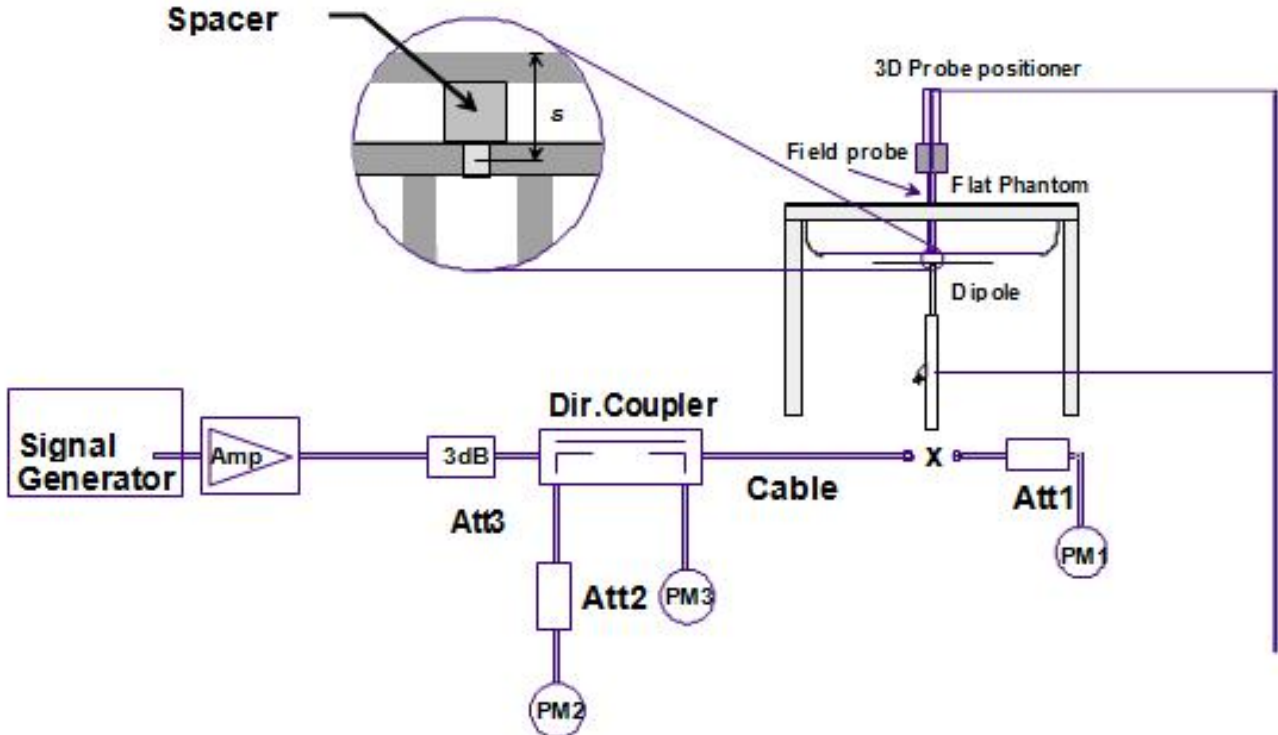
System check, Tissue-equivalent liquid:

f/MHz	Date Tested	SAR(W/kg), 1g	SAR(W/kg), 10g	Target 1g	Target 10g	Tolerance (%)	Temp (°C)
750	2021.09.10	8.48	5.36	8.66 (7.79~8.66)	5.83 (5.25~5.83)	±10	20
835	2021.09.13	9.6	6.4	9.44 (8.50~10.38)	6.12 (5.51~6.73)	±10	20
1750	2021.09.15	37.6	17.96	35.7 (32.13~35.70)	18.8 (16.92~18.80)	±10	20
1900	2021.09.17	41.6	21.36	39.32 (35.39~43.25)	20.04 (18.04~22.04)	±10	20
750	2021.09.11	8.32	5.64	8.66 (7.79~8.66)	5.83 (5.25~5.83)	±10	20
835	2021.09.16	9.8	6.0	9.44 (8.50~10.38)	6.12 (5.51~6.73)	±10	20
1750	2021.09.19	35.72	17.6	35.7 (32.13~35.70)	18.8 (16.92~18.80)	±10	20
1900	2021.09.22	40.4	20.84	39.32 (35.39~43.25)	20.04 (18.04~22.04)	±10	20
2300	2021.09.21	48.40	23.24	47.5 (42.75~47.50)	22.4 (20.16~22.40)	±10	20
2450	2021.09.24	52.8	24.52	51.6 (46.44~56.76)	23.64 (21.28~26.00)	±10	20
2600	2021.09.28	53.2	24.72	56.9 (51.21~56.90)	25.2 (22.68~25.20)	±10	20
5.25G	2021.09.30	75.2	20.9	76.5 (68.85~76.50)	21.8 (19.62~21.80)	±10	20
5.5G	2021.09.30	78.30	20.4	80.2 (72.18~80.20)	22.8 (20.52~22.80)	±10	20
5.75G	2021.09.30	73.7	21.8	78.2 (70.38~78.20)	22.2 (19.98~22.20)	±10	20
5.25G	2021.10.02	69.8	20.40	76.5 (68.85~76.50)	21.8 (19.62~21.80)	±10	20
5.5G	2021.10.04	76.7	21.90	80.2 (72.18~80.20)	22.8 (20.52~22.80)	±10	20
5.75G	2021.10.07	74.5	21.80	78.2	22.2	±10	20

				(70.38~78.20)	(19.98~22.20)		
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**System Checking**

The manufacturer calibrates the probes annually. A system check measurement was made following the determination of the dielectric parameters of the tissue-equivalent liquid, using the dipole validation kit. A power level of 250mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom.



The system checking results (dielectric parameters and SAR values) are given in the table below.

The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE P1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests (Graphic Plot(s)see Appendix A).

## 8. SAR MEASUREMENT VARIABILITY AND UNCERTAINTY

### 8.1. SAR measurement variability

Per KDB865664 D01 SAR measurement 100MHz to 6GHz v01r04, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurement requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is  $<0.80$  W/kg; step2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.8$  W/kg , repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is  $>1.20$  or when the original or repeated measurement is  $\geq 1.45$  W/kg (~10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$ W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $>1.20$ .

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

### 8.2. SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100MHz to 6GHz v01r03, when the highest measured 1-g SAR within a frequency band is  $<1.5$ W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2003 is not required in SAR reports submitted for equipment approval. The equivalent ratio(1.5/1.6) is applied to

extremity and occupational exposure conditions.

## 9. Test Configuration

The DUT is tested using a CMU 200 or E5515C communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted peak power.

Test positions as described in the tables above are in accordance with the specified test standard.

### GSM Test Configuration

SAR tests for GSM 850 and PCS 1900, a communication link is set up with a System Simulator (SS) by air link. Using CMU 200 or E5515C the power level is set to “5” for GSM 850, set to “0” for PCS 1900. 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 timeslots is 5.

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Output power of reductions:

Number of timeslots in uplink assignment	Permissible nominal reduction of maximum output power,(dB)
1	0
2	0 to 3,0
3	1,8 to 4,8
4	3,0 to 6,0

### WCDMA Test Configuration

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The EUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

	Mode	Rel99
	Subtest	---

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	$\beta_c / \beta_d$	8/15

### Handsets with Release 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the “Release 5 HSDPA Data Devices” section of this document, for the highest reported SAR body-worn accessory exposure configuration in 12.2 kbps RMC. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

HSDPA should be configured according to the UE category of a test device. The number of HSDSCH/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 conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors ( $\beta_c$ ,  $\beta_d$ ), and HS-DPCCH power offset parameters ( $\Delta_{ACK}$ ,  $\Delta_{NACK}$ ,  $\Delta_{CQI}$ ) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Sub-set	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}$ (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note1:  $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 8$      $\Delta_{hs} = \beta_{hs}/\beta_c = 30/15$      $\Delta_{hs} = 30/15 * \beta_c$   
Note2: CM=1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ .  
Note3: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ .

### HSUPA Test Configuration

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the “Release 6 HSPA Data Devices” section of this document, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn accessory measurements is tested for next to the ear head exposure.

Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the  $\beta$  values indicated in Table 2 and other applicable procedures described in the ‘WCDMA Handset’ and ‘Release 5 HSDPA Data Devices’ sections of this document

Sub-set	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	$\beta_{ec}$	$\beta_{ed}$	$\beta_{ed}$ (SF)	$\beta_{ed}$ (codes)	CM <sup>(2)</sup> (dB)	MPR (dB)	AG <sup>(4)</sup> Index	E-TFCI
1	11/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	11/15 <sup>(3)</sup>	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 <sup>(4)</sup>	15/15 <sup>(4)</sup>	64	15/15 <sup>(4)</sup>	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1:  $\Delta_{ACK}, \Delta_{NACK}$  and  $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$ .

Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15, \beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ .

Note 4: For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$ .

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.

Note 6:  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.



UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?
NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)						

#### HSPA, HSPA+ and DC-HSDPA Test Configuration

measurement is required for HSPA, HSPA+ or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements.<sup>35</sup> Without prior KDB confirmation to determine the SAR results are acceptable, a PBA is required for TCB approval. SAR test exclusion for HSPA, HSPA+ and DC-HSDPA is determined according to the following:

- 1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required Sub-test mode(s) to determine SAR test exclusion.
- 2) SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (Up antenna) HSPA+ with 12.2 kbps RMC as the primary mode.<sup>36</sup> Power is measured for HSPA+ that supports Up antenna 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.
- 3) SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be

acceptable.

4) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA, HSPA+ or DC-HSDPA: a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121.

i) Power measurement difficulties due to test equipment setup or availability must be resolved between the grantee and its test lab.

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.

c) The UE category, operating parameters, such as the  $\beta$  and  $\Delta$  values used to configure the device for testing, power setback procedures described in 3GPP TS 34.121 for the power measurements, and HSPA/HSPA+ channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

5) When SAR measurement is required, the test configurations, procedures and power measurement results must be clearly described to confirm that the required test parameters are used, including E-TFCI and AG index stability and output power conditions.

HS-DSCH category	Maximum number of HS-DSCH codes received	Minimum inter-TTI interval	Maximum number of bits of an HS-DSCH transport block received within an HS-DSCH TTI NOTE 1	Total number of soft channel bits	Supported modulations without MIMO operation or dual cell operation	Supported modulations with MIMO operation and without dual cell operation	Supported modulations with dual cell operation		
Category 1	5	3	7298	19200	QPSK, 16QAM	Not applicable (MIMO not supported)	Not applicable (dual cell operation not supported)		
Category 2	5	3	7298	28800					
Category 3	5	2	7298	28800					
Category 4	5	2	7298	38400					
Category 5	5	1	7298	57600					
Category 6	5	1	7298	67200					
Category 7	10	1	14411	115200					
Category 8	10	1	14411	134400					
Category 9	15	1	20251	172800					
Category 10	15	1	27952	172800					
Category 11	5	2	3630	14400				QPSK	
Category 12	5	1	3630	28800				QPSK, 16QAM, 64QAM	
Category 13	15	1	35280	259200				QPSK, 16QAM	
Category 14	15	1	42192	259200				64QAM	
Category 15	15	1	23370	345600				QPSK, 16QAM	
Category 16	15	1	27952	345600				QPSK, 16QAM	
Category 17 NOTE 2	15	1	35280	259200	QPSK, 16QAM, 64QAM	-			
			23370	345600	-	QPSK, 16QAM			
Category 18 NOTE 3	15	1	42192	259200	QPSK, 16QAM, 64QAM	-			
			27952	345600	-	QPSK, 16QAM			
Category 19	15	1	35280	518400	QPSK, 16QAM, 64QAM				
Category 20	15	1	42192	518400	QPSK, 16QAM, 64QAM				
Category 21	15	1	23370	345600	QPSK, 16QAM, 64QAM				
Category 22	15	1	27952	345600	QPSK, 16QAM, 64QAM				
Category 23	15	1	35280	518400	QPSK, 16QAM, 64QAM				
Category 24	15	1	42192	518400	QPSK, 16QAM, 64QAM				

## LTE Test Configuration

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02r05. 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:

**Maximun Power Reduction(MRP) for Power Class 3**

Modulation	Channel bandwidth / Transmission bandwidth( $N_{RB}$ )						MPR(dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	>5	>4	>8	>12	>16	>18	$\leq 1$
16 QAM	$\leq 5$	$\leq 4$	$\leq 8$	$\leq 12$	$\leq 16$	$\leq 18$	$\leq 1$
16 QAM	>5	>4	>8	>12	>16	>18	$\leq 2$

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

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

8	$24144 T_S$			-	-	-
9	$13168 T_S$			-	-	-

### Uplink-downlink configurations

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

Calculated Duty Cycle = Extended cyclic prefix in uplink x (Ts) x # of S + # of U

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

Calculated Duty Cycle =  $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

Where  $T_s = 1/(15000 \times 2048)$  seconds

### LTE Test Configuration

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02r05. 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:

**Maximun Power Reduction(MRP) for Power Class 3**

Modulation	Channel bandwidth / Transmission bandwidth( $N_{RB}$ )						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
16 QAM	>5	>4	>8	>12	>16	>18	≤2

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

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 T_S$	$2192 T_S$	$2560 T_S$	$7680 T_S$	$2192 T_S$	$2560 T_S$
1	$19760 T_S$			$20480 T_S$		
2	$21952 T_S$			$23040 T_S$		
3	$24144 T_S$			$25600 T_S$		
4	$26336 T_S$	$4384 T_S$	$5120 T_S$	$7680 T_S$	$4384 T_S$	$5120 T_S$
5	$6592 T_S$			$20480 T_S$		
6	$19760 T_S$			$23040 T_S$		

7	$21952 T_S$			12800		
				$T_S$		
8	$24144 T_S$			-	-	-
9	$13168 T_S$			-	-	-

### Uplink-downlink configurations

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

Calculated Duty Cycle = Extended cyclic prefix in uplink x (Ts) x # of S + # of U

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

Calculated Duty Cycle =  $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

Where Ts =  $1/(15000 \times 2048)$  seconds

#### 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  $\leq 0.8\text{W/kg}$ , testing of the remaining RB offset configurations and required test channels is not required for 1RB 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  $> 1.45 \text{ W/kg}$ , 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  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.

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.

### 5G NR Test Configuration

This device support DPS ( Dynamic Power Share ) function to achieve higher uplink data rate keeping the total power unchanged in 5G NSa EN-DC mode according to 3GPP 38. 213 , when the equipment has a dynamic power sharing capability, it adjusts the LTE or NR transmission power so that the instantaneous total power does not exceed the specified value, when the maximum transmission power of NR (  $P_{LTE}$ ,  $P_{NR}$  and the specified total power (  $P$

total )have been set and the instantaneous calculated total transmission power exceeds P total, the NR transmission power is reduced so that the actual transmission power of the user equipment will not exceed P total power

For EN-DC DPS function, considering two conditions, one is the maximum total power tend to 5G NR bands ( 5G NR maximum SAR ) , the other is the maximum total tend to LtE bands ( 5G NR minimum SAR ) summed 5G NR( maximum power ) SAR or LTE( maximum power ) SAR as EN-DC SAR to consider simultaneous transmission evaluation For 5G NR SAR testing, due to test setup limitations, SAR testing for NR was performed using factory test mode software to establish the connection and perform SAR with 100% transmission The DFT-S-OFDM and CP-OFDM waveforms were investigated, and DFT-S-OFDM was found to be the worst case The worst-case scenario for all measurements is based on an engineering evaluation and QPSK was observed as the worst one and set for all conducted and radiated. Output power measurements were measured on QPSK, 16QAM, 64QAM, 256QAM, and BPSK, modulations

#### **LTE CA additional specification**

The device supports uplink LTE Carrier Aggregation(CA).When carrier aggregation applies, implementation and measurement details for the following are necessary.

- a) Intra-band carrier aggregation requirements for uplink.
- b) Support of contiguous component carriers for intra-band aggregation requirements for uplink.

1. This device supports uplink carrier aggregation for LTE CA\_7C/CA\_38C/CA\_41C with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. For the non-contiguously allocated resource blocks which the MPR level is determined by various RB separation and RB sizes requirement, and the allowed MPR levels, settings and the conducted powers are permanently implemented in this device per the 3GPP 36.101 section 6.2.3A.1.3 requirements.

2) The device supports Inter-band uplink LTE CA for CA\_7A with two component carriers in the uplink.

2. The output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.

3. In applying the power measurement procedures to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs

4. Maximum output power measurement is required for each UL CA configuration for the required test channels. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC. The following applied to intra-band contiguous UL CA only:

a. Maximum output power measurement is required for each UL CA configuration for the required test channels. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC

b. UL CA SAR is measured for each exposure condition in each frequency band using the highest SAR configuration tested in standalone LTE mode to establish the UL CA PCC. The SCC and subsequent CC must use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions.

c. When the SAR configuration tested in step b) has a maximum output power specification more than /dB lower than the highest maximum output power conditions measured in the power measurements in step a) above and the reported SAR in step b) is larger than 1.5 W/kg. SAR measurement is also required for the configuration in step a) d. All standalone SAR configurations with SAR > 1.5 W/kg must also be tested by applying the procedures in step b.

### **WIFI Test Configurations**

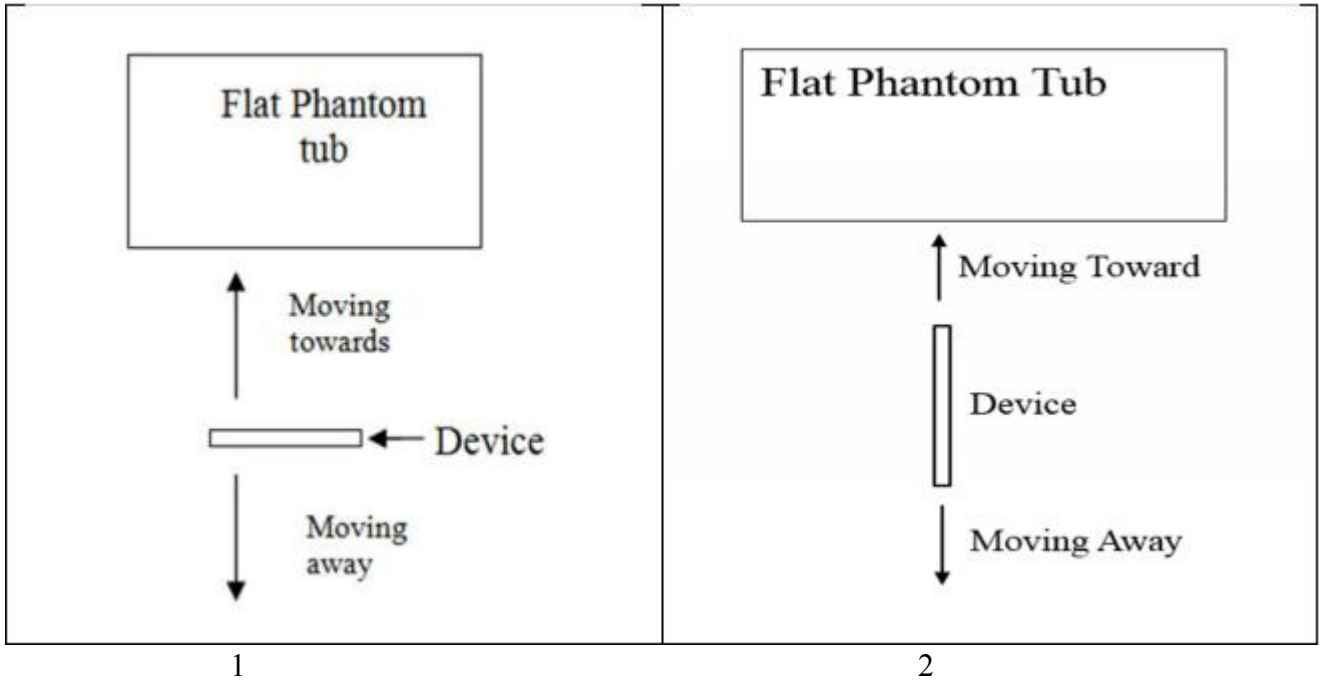
For WLAN SAR testing, WLAN engineering testing software installed on the DUT can provide continuous transmitting RF signal. The Tx power is set according to tune up procedure for 802.11 b mode by software. This RF signal utilized in SAR measurement has almost 100% duty cycle and its crest factor is 1.

For the 802.11b/g/n SAR tests, a communication link is set up with the test mode software for WiFi mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode.

## 9.1. Proximity Sensor Triggering Test

### <Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (4100MHz) and lowest (750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body at the front or back of the device.
3. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
4. The sensors can use to detect the proximity of the user's body (Body-Worn condition) at the front or back side and handheld state at frontback/righttop/bottom sides of the device use a detection threshold distance. The trigger distance shown in the sections below.
5. The device employs proximity sensors that detect the presence of the user's body at the front, back sides of the device. When front or back body worn condition is detected reduced power will be active.
6. The device employs proximity sensors also can detect the presence of the user's a finger or hand when handheld state at the front/back/right/top/left /bottom sides of the device. When frontback/righttop /bottom sides of handheld condition is detected reduced power will be active.



1.Sensor detection test set-up, front and back sides

2.Sensor detection test set-up,left/top sides

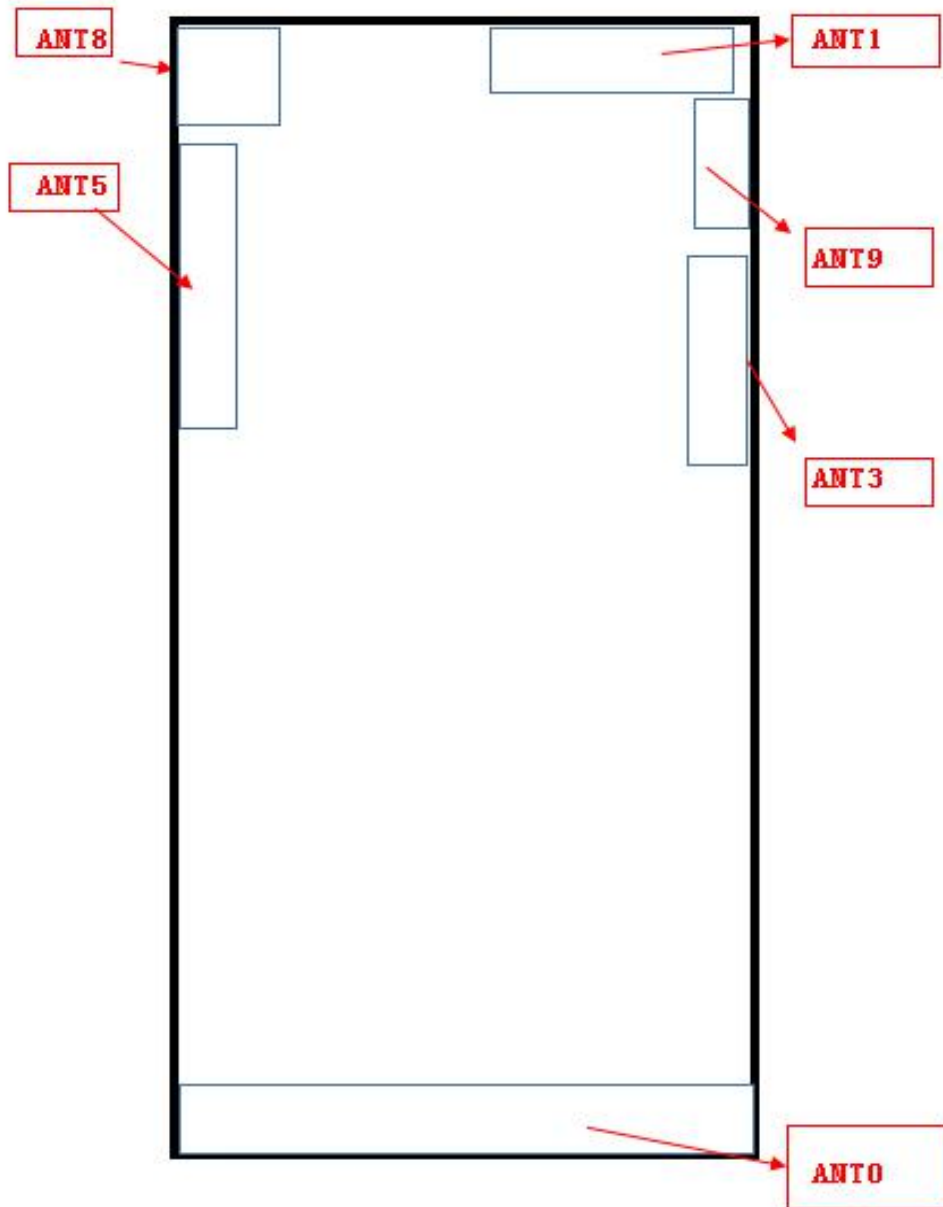
Power level	Head SAR(Receiver on)			Body SAR(Receiver off)			Body SAR(Receiver off)		
	Sensor on/off			Sensor off			Sensor on		
Antenna	Standalone	WWAN+2. 4G/5G	WWAN+2. 4G+5G	Standalone	WWAN+2. 4G/5G	WWAN+2. 4G+5G	Standalone	WWAN+2. 4G/5G	WWAN+2. 4G+5G
WWAN Ant1	Sar_state1	Sar_state6	Sar_state11	Sar_state5	Sar_state10	Sar_state15	Sar_state2/3/4	Sar_state7/8/9	Sar_state12/13/14

Antenna	Trigger distance-front side		Trigger distance- back side		Trigger distance - bottom edge		Trigger distance - top edge		Trigger distance - left edge		Trigger distance - right edge	
	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom

WWA N Ant 1	16mm	16mm	18mm	18mm	NA	NA	18mm	17mm	8mm	8mm	NA	NA
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## 10. AR TEST RESULTS

### 10.1. EUT Antenna Locations





ANT0	2G/3G/4G/5G: LMHB
ANT1	2G/3G/4G/5G: LMHB
ANT3	4G/5G:MHB
ANT5	4G/5G:MHB
ANT8	BT&WIFI CH0
ANT9	WIFI CH1

## 10.2. Power Reduction Configuration

Overview of power reduction scenarios

The mobile phone device meets SAR requirements by accurately reducing the power of various scenes. Mainly the following scenarios:

- a. Head SAR is mainly determined by whether the receiver is working.
- b. Body SAR is judged by WIFI state working + the receiver not working

Description of power reduction scenarios

1) The mobile phone device supports the receiver detection mechanism. This device uses the receiver to indicate whether the user is making a call in head or body.

When there is a voice call (including VOIP) and the audio is actively routed through the earpiece receiver, which indicating the head exposure condition it will trigger the head exposure reduced the power.

When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body exposure conditions will trigger the body exposure reduced the power.

When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.

WWAN Reduced power level table

Reduced level	Receiver state	Antenna	Power reduced bands	Transmitting
---------------	----------------	---------	---------------------	--------------

				conditions
Level 1	On (Head Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN Use Only
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		Ant5	LTE Band 7/66	
		Ant8	LTE Band 7/66	
Level 2	On (Head Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN+WLAN 2.4G
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	
Level 3	On (Head Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN+WLAN 5G
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	
Level 4	On (Head Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN+WLAN 2.4G+WLAN 5G
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	

		Ant9	Wifi2.4G/5G	
Level 5	Off (Body Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN Use Only
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		LTE Band 7/66		
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	
		Ant9	Wifi2.4G/5G	
Level 6	Off (Body Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN+WLAN 2.4G
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		LTE Band 7/66		
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	
		Ant9	Wifi2.4G/5G	
Level 7	Off (Body Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN+WLAN 5G
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		LTE Band 7/66		
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	
		Ant9	Wifi2.4G/5G	
Level 8	Off (Body Scenarion)	Ant1 Ant 0	GSM850/1900	WWAN+WLAN 2.4G+WLAN 5G
			WCDMA Band II/IV/V	
			LTE Band 2/4/5/7/12/13/17/26/66/38 /41	
			N5/7/38/41/66	
		Ant3	N7/38/41	
		LTE Band 7/66		
		Ant5	LTE Band 7/66	
		Ant8	BT/Wifi2.4G/5G	
		Ant9	Wifi2.4G/5G	

## 11. TUNE-UP LIMIT

### 11.1. Tune-up Limit

**State1/State6/State11** : Turn on the handset and reduce the power(Head)

**State2/State7/State12** : Turn off the handset and reduce the power and CSIO1 or CSIO2 approaches,At the same time, CSIO4 is far away(Body)

**State3/State8/State13** : Turn off the handset and reduce the power and CSIO4 approaches,At the same time, CSIO1 and CSIO2 is far away(Body)

**State4/State9/State14** : Turn off the handset and reduce the power and Full approach (csio1 or csio2 approach and Csio4 approach)(Body)

#### The GSM850 power adjust procedure

GSM850	ANT0/1 Original power(dBm)	Tolerance(dBm)
GSM (GMSK, 1Tx-slot)	32.5	( ±1)
GPRS (GMSK, 1Tx-slot)	32.5	( ±1)
GPRS (GMSK, 2Tx-slot)	30.0	( ±1)
GPRS (GMSK, 3Tx-slot)	28.0	( ±1)
GPRS (GMSK, 4Tx-slot)	27.0	( ±1)
EDGE (8PSK, 1Tx-slot)	26.0	( ±1)
EDGE (8PSK, 2Tx-slot)	24.0	( ±1)

EDGE (8PSK, 3Tx-slot)	22.0	( ±1)
EDGE (8PSK, 4Tx-slot)	21.5	( ±1)

### The PCS1900 power adjust procedure

GSM 1900	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	ANT0 State3/4	Tolerance(dBm)
GSM (GMSK, 1Tx-slot)	29.5	25.0	26.5	27.5	( ±1)
GPRS (GMSK, 1Tx-slot)	29.5	25.0	26.5	27.5	( ±1)
GPRS (GMSK, 2Tx-slot)	27.0	22.5	24.0	25.0	( ±1)
GPRS (GMSK, 3Tx-slot)	25.0	20.5	22.0	23.0	( ±1)
GPRS (GMSK, 4Tx-slot)	24.0	19.5	21.0	22.0	( ±1)
EDGE (8PSK, 1Tx-slot)	25.0	20.5	22.0	23.0	( ±1)
EDGE (8PSK, 2Tx-slot)	23.0	18.5	20.0	21.0	( ±1)
EDGE (8PSK, 3Tx-slot)	21.0	16.5	18.0	19.0	( ±1)
EDGE (8PSK, 4Tx-slot)	20.5	16.0	17.5	18.5	( ±1)

### The WCDMA Band 2 power adjust procedure

WCDMA II	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	ANT0 State3/4	Tolerance(dBm)
RMC 12.2K	23.5	19.0	20.5	21.5	( ±1)
HSDPA/DC-HSDPA	22.0	17.5	19.0	20.0	( ±1)
HSUDA Sub-test1	22.0	17.5	19.0	20.0	( ±1)
HSUDA Sub-test2	22.0	17.5	19.0	20.0	( ±1)
HSUDA Sub-test3	21.5	17.0	18.5	19.5	( ±1)
HSUDA Sub-test4	21.5	17.0	18.5	19.5	( ±1)
HSUPA Sub-test1	20.5	16.0	17.5	18.5	( ±1)
HSUPA Sub-test2	20.5	16.0	17.5	18.5	( ±1)
HSUPA Sub-test3	20.0	15.5	17.0	18.0	( ±1)
HSUPA Sub-test4	19.5	15.0	16.5	17.5	( ±1)
HSUPA Sub-test5	22.0	17.5	19.0	20.0	( ±1)
HSPA+	20.5	16.0	17.5	18.5	( ±1)

### The WCDMA Band 4 power adjust procedure

WCDMA IV	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	ANT0 State3/4	Tolerance(dBm)
RMC 12.2K	23.5	18.5	21.0	21.5	( ±1)
HSDPA/DC-HSDPA	22.5	17.5	20.0	20.5	( ±1)
HSUDA Sub-test1	22.5	17.5	20.0	20.5	( ±1)
HSUDA Sub-test2	22.5	17.5	20.0	20.5	( ±1)
HSUDA Sub-test3	22.0	17.0	19.5	20.0	( ±1)
HSUDA Sub-test4	22.0	17.0	19.5	20.0	( ±1)
HSUPA Sub-test1	21.0	16.0	18.5	19.0	( ±1)
HSUPA Sub-test2	21.0	16.0	18.5	19.0	( ±1)
HSUPA Sub-test3	20.5	15.5	18.0	18.5	( ±1)
HSUPA Sub-test4	20.0	15.0	17.5	18.0	( ±1)
HSUPA Sub-test5	22.5	17.5	20.0	20.5	( ±1)
HSPA+	21.0	16.0	18.5	19.0	( ±1)

### The WCDMA Band 5 power adjust procedure

WCDMA V	ANT0/1 Original power	ANT1 state1	Tolerance(dBm)
RMC 12.2K	23.5	23.0	( ±1)
HSDPA/DC-HSDPA	22.5	22.0	( ±1)
HSUDA Sub-test1	22.5	22.0	( ±1)
HSUDA Sub-test2	22.5	22.0	( ±1)
HSUDA Sub-test3	22.0	21.5	( ±1)
HSUDA Sub-test4	22.0	21.5	( ±1)
HSUPA Sub-test1	21.0	20.5	( ±1)
HSUPA Sub-test2	21.0	20.5	( ±1)
HSUPA Sub-test3	20.5	20.0	( ±1)
HSUPA Sub-test4	20.0	19.5	( ±1)
HSUPA Sub-test5	22.5	22.0	( ±1)
HSPA+	21.0	20.5	( ±1)

### The LTE Band 2 power adjust procedure

LTE Band 2	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	ANT0 State3/4	Tolerance(dBm)
1.4/3/5/10/15/20 MHz QPSK	22.5	18.0	19.5	20.5	( ±1)
1.4/3/5/10/15/20 MHz 16QAM	21.5	17.0	18.5	19.5	( ±1)

### The LTE Band 4 power adjust procedure

LTE Band 4	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	ANT0 State3/4	Tolerance(dBm)
1.4/3/5/10/15/20 MHz QPSK	23.0	18.5	20.5	21.0	( ±1)
1.4/3/5/10/15/20 MHz 16QAM	22.0	17.5	19.5	20.0	( ±1)

### The LTE Band 5 power adjust procedure

LTE Band 5	ANT0/1 Original power	ANT1 state1	Tolerance(dBm)
1.4/3/5/10 MHz QPSK	23.5	23.0	( ±1)
1.4/3/5/10 MHz 16QAM	22.5	22.0	( ±1)

### The LTE Band 7 power adjust procedure

LTE Band 7	ANT0/1/5 Original power	ANT1 state1	ANT1 state2/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	22.7	18.2	19.7	( ±1)
5/10/15/20 MHz 16QAM	21.7	17.2	18.7	( ±1)

### The LTE Band 7C power adjust procedure

LTE Band 7	ANT0/1/5 Original power	ANT1 state1	ANT1 state2/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	22.7	18.2	19.7	( ±1)
5/10/15/20 MHz 16QAM	21.7	17.2	18.7	( ±1)



### The LTE Band 12 power adjust procedure

LTE Band 12	ANT0/1 Original power	Tolerance(dBm)
1.4/3/5/10 MHz QPSK	23.5	( ±1)
1.4/3/5/10 MHz 16QAM	22.5	( ±1)

### The LTE Band 13 power adjust procedure

LTE Band 13	ANT0/1 Original power	Tolerance(dBm)
5/10 MHz QPSK	23.5	( ±1)
5/10 MHz 16QAM	22.5	( ±1)

### The LTE Band 17 power adjust procedure

LTE Band 17	ANT0/1 Original power	Tolerance(dBm)
5/10 MHz QPSK	23.5	( ±1)
5/10 MHz 16QAM	22.5	( ±1)

### The LTE Band 26 power adjust procedure

LTE Band 26	ANT0/1 Original power	Tolerance(dBm)
1.4/3/5/10/15 MHz QPSK	23.5	( ±1)
1.4/3/5/10/15 MHz 16QAM	22.5	( ±1)

### The LTE Band 66 power adjust procedure

LTE Band 66	ANT0/1/3/5 Original power	ANT1 state1	ANT1 state2/4	ANT0 State3/4	Tolerance(dBm)
1.4/3/5/10/15/20 MHz QPSK	23.0	18.0	20.0	21.0	( ±1)
1.4/3/5/10/15/20 MHz 16QAM	22.0	17.0	19.0	20.0	( ±1)

### The LTE Band 38 power adjust procedure

LTE Band 38	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	20.0	21.5	( ±1)
5/10/15/20 MHz 16QAM	22.0	19.0	20.5	( ±1)

### The LTE Band 38C power adjust procedure

LTE Band 38C	ANT0/1 Original power	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	( ±1)
5/10/15/20 MHz 16QAM	22.0	( ±1)

### The LTE Band 41 power adjust procedure

LTE Band 41	ANT0/1 Original power	ANT1 state1	ANT1 state2/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	20.0	21.5	( ±1)
5/10/15/20 MHz 16QAM	22.0	19.0	20.5	( ±1)

### The LTE Band 41C power adjust procedure

LTE Band 41C	ANT0/1 Original power	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	( ±1)
5/10/15/20 MHz 16QAM	22.0	( ±1)

### The NR Band 5 power adjust procedure

NR Band 5	ANT0/1 Original power	ANT1 state1	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	22.5	( ±1.2)
5/10/15/20 MHz 16QAM	22.0	21.5	( ±1.2)

### The ENDC Band 5 power adjust procedure

ENDC Band 5	ANT0 Original power	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	( ±1.2)
5/10/15/20 MHz 16QAM	22.0	( ±1.2)

### The NR Band 7 power adjust procedure

NR Band 7	ANT0/1 Original power	ANT1 state1/2/4	ANT0 State3/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	22.7	17.7	22.2	( ±1.2)
5/10/15/20 MHz 16QAM	21.4	16.4	20.9	( ±1.2)

### The ENDC Band 7 power adjust procedure

ENDC Band 7	ANT1/3 Original power	ANT1 state1	ANT1 State2	ANT3 State1/2/3/4/5	Tolerance(dBm)
5/10/15/20 MHz QPSK	22.7	14.7	15.7	16.7	( ±1.2)
5/10/15/20 MHz 16QAM	21.4	13.4	14.4	15.4	( ±1.2)

### The NR Band 38 power adjust procedure

NR Band 38	ANT0/1 Original power	ANT1 state1	ANT1 State2/4	Tolerance(dBm)
20 MHz QPSK	23.0	19.5	20.0	( ±1.2)
20 MHz 16QAM	22.0	18.5	19.0	( ±1.2)

### The NR Band 41 power adjust procedure

NR Band 41	ANT0/1 Original power	ANT1 state1	ANT1 State2/4	ANT0 State3/4	Tolerance(dBm)
20/30/40/50/60/80/90/100MHz QPSK	23.0	20.0	20.5	21.0	( ±1.2)
20/30/40/50/60/80/90/100MHz 16QAM	22.0	19.0	19.5	20.0	( ±1.2)

### The ENDC Band 41 power adjust procedure

ENDC Band 41	ANT1/3 Original power	ANT1 state1	ANT1 State2/4	ANT3 State1	ANT3 State2/3/4/5	Tolerance(dBm)
20/30/40/50/60/80/90/100MHz QPSK	23.0	13.0	14.0	17.0	18.0	( ±1.2)
20/30/40/50/60/80/90/100MHz 16QAM	22.0	12.0	13.0	16.0	17.0	( ±1.2)

### The NR Band 66 power adjust procedure

NR Band 66	ANT0/1 Original power	ANT1 state1	ANT1 State2/4	ANT0 State3/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	16.0	20.0	20.5	( ±1.2)
5/10/15/20 MHz 16QAM	22.0	15.0	19.0	19.5	( ±1.2)

### The ENDC Band 66 power adjust procedure

ENDC Band 66	ANT1/3 Original power	ANT1 state1	ANT1 State2/4	Tolerance(dBm)
5/10/15/20 MHz QPSK	23.0	12.0	13.0	( ±1.2)
5/10/15/20 MHz 16QAM	22.0	11.0	12.0	( ±1.2)

**WLAN Original powe:**

Wi-Fi2.4G	802.11 b	802.11 g	802.11 n-HT20	Tolerance(dBm)
Chain 0	17.5	17.5	17.5	( ±1)
Chain 1	16.5	16.5	16.5	( ±1)
Chain 0+1	19.5	19.5	19.5	( ±1)

Wi-F5.2G/5.3G/5.6G	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	17.0	17.0	17.0	17.0	( ±1)
Chain 1	17.0	17.0	17.0	17.0	( ±1)
Chain 0+1	19.5	19.5	19.5	19.5	( ±1)

Wi-F5.8G	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	11.0	11.0	11.0	11.0	( ±1)
Chain 1	11.0	11.0	11.0	11.0	( ±1)
Chain 0+1	13.5	13.5	13.5	13.5	( ±1)

**WLAN Single engine power reduction:**

Wi-Fi2.4G Head	802.11 b	802.11 g	802.11 n-HT20	Tolerance(dBm)
Chain 0	15.0	15.0	15.0	( ±1)
Chain 1	16.5	16.5	16.5	( ±1)
Chain 0+1	14.5	14.5	14.5	( ±1)

Wi-Fi2.4G Body	802.11 b	802.11 g	802.11 n-HT20	Tolerance(dBm)
Chain 0	17.5	17.5	17.5	( ±1)
Chain 1	16.5	16.5	16.5	( ±1)
Chain 0+1	16.5	16.5	16.5	( ±1)

Wi-F5.2G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	15.0	15.0	15.0	15.0	( ±1)
Chain 1	17.0	17.0	17.0	17.0	( ±1)
Chain 0+1	15.0	15.0	15.0	15.0	( ±1)

Wi-F5.2G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	17.0	17.0	17.0	17.0	( ±1)
Chain 1	17.0	17.0	17.0	17.0	( ±1)
Chain 0+1	15.0	15.0	15.0	15.0	( ±1)

Wi-F5.3G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	13.5	13.5	13.5	13.5	( ±1)
Chain 1	17.0	17.0	17.0	17.0	( ±1)
Chain 0+1	13.0	13.0	13.0	13.0	( ±1)

Wi-F5.3G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	16.5	16.5	16.5	16.5	( ±1)
Chain 1	15.0	15.0	15.0	15.0	( ±1)
Chain 0+1	14.0	14.0	14.0	14.0	( ±1)

Wi-F5.6G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	12.5	12.5	12.5	12.5	( ±1)
Chain 1	13.0	13.0	13.0	13.0	( ±1)
Chain 0+1	12.5	12.5	12.5	12.5	( ±1)

Wi-F5.6G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	16.0	16.0	16.0	16.0	( ±1)
Chain 1	13.0	13.0	13.0	13.0	( ±1)
Chain 0+1	12.5	12.5	12.5	12.5	( ±1)

Wi-F5.8G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	11.0	11.0	11.0	11.0	( ±1)
Chain 1	11.0	11.0	11.0	11.0	( ±1)
Chain 0+1	12.0	12.0	12.0	12.0	( ±1)

Wi-F5.8G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	11.0	11.0	11.0	11.0	( ±1)
Chain 1	11.0	11.0	11.0	11.0	( ±1)
Chain 0+1	13.5	13.5	13.5	13.5	( ±1)

**WLAN Simultaneous power reduction:**

Wi-Fi2.4G Head	802.11 b	802.11 g	802.11 n-HT20	Tolerance(dBm)
Chain 0	12.0	12.0	12.0	( ±1)
Chain 1	14.5	14.5	14.5	( ±1)
Chain 0+1	11.0	11.0	11.0	( ±1)

Wi-Fi2.4G Body	802.11 b	802.11 g	802.11 n-HT20	Tolerance(dBm)
Chain 0	17.5	17.5	17.5	( ±1)
Chain 1	16.5	16.5	16.5	( ±1)
Chain 0+1	15.0	15.0	15.0	( ±1)

Wi-F5.2G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	10.0	10.0	10.0	10.0	( ±1)
Chain 1	17.0	17.0	17.0	17.0	( ±1)
Chain 0+1	9.5	9.5	9.5	9.5	( ±1)

Wi-F5.2G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	12.0	12.0	12.0	12.0	( ±1)
Chain 1	12.5	12.5	12.5	12.5	( ±1)
Chain 0+1	11.5	11.5	11.5	11.5	( ±1)

Wi-F5.3G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	9.5	9.5	9.5	9.5	( ±1)
Chain 1	14.0	14.0	14.0	14.0	( ±1)
Chain 0+1	9.0	9.0	9.0	9.0	( ±1)

Wi-F5.3G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	13.0	13.0	13.0	13.0	( ±1)
Chain 1	11.5	11.5	11.5	11.5	( ±1)
Chain 0+1	10.5	10.5	10.5	10.5	( ±1)



Wi-F5.6G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	9.0	9.0	9.0	9.0	( ±1)
Chain 1	13.0	13.0	13.0	13.0	( ±1)
Chain 0+1	8.5	8.5	8.5	8.5	( ±1)

Wi-F5.6G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	13.0	13.0	13.0	13.0	( ±1)
Chain 1	10.5	10.5	10.5	10.5	( ±1)
Chain 0+1	10.5	10.5	10.5	10.5	( ±1)

Wi-F5.8G Head	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	8.5	8.5	8.5	8.5	( ±1)
Chain 1	11.0	11.0	11.0	11.0	( ±1)
Chain 0+1	8.5	8.5	8.5	8.5	( ±1)

Wi-F5.8G Body	802.11 a	802.11 n-HT20	802.11 n-HT40	802.11ac-HT80	Tolerance(dBm)
Chain 0	11.0	11.0	11.0	11.0	( ±1)
Chain 1	10.5	10.5	10.5	10.5	( ±1)
Chain 0+1	10.5	10.5	10.5	10.5	( ±1)

### The BT power adjust procedure

Wi-F5.8G Body	BR&EDR	BLE	Tolerance(dBm)
BT	11.5	-2	( ±1)

## 12. MEASUREMENT RESULTS

Result: Passed

Date of testing : 2020.06.23~2018.07.15;  
Ambient temperature : 20°C~22°C  
Relative humidity : 50~68%

### 12.1. Conducted Power

For the measurements a Rohde & Schwarz Radio Communication Tester CMU 200 was used. SAR drift measured at the same position in liquid before and after each SAR test.

Note: CMU200 measures GSM peak and average output power for active timeslots. For SAR the time based average power is relevant. The difference in between depends on the duty cycle of the TDMA signal:

No. of Timeslots	1	2	3	4
Duty Cycle	1:8.3	1:4.1	1:2.77	1:2.08
Time based avg. power compared to slotted avg. power	-9.00dB	-6.00 dB	-4.26dB	-3.00dB

The signalling modes differ as follows:

Mode	Coding scheme	Modulation
GPRS	CS1 to CS4	GMSK
EDGE	MCS1 to MCS4	GMSK
EDGE	MCS5 to MCS9	8PSK

Apart from modulation change (GMSK/8PSK) coding schemes differ in code rate without influence on the RF signal. Therefore one coding scheme per mode was selected for conducted power measurements.

## Original power 1#ANT:

Band: GSM850	Burst Average Power (dBm)			Frame Average Power (dBm)		
	128	190	251	128	190	251
Channel						
GSM (CS)	32.07	32.22	32.37	23.07	23.22	23.37
GPRS/EDGE (GMSK, 1 Tx slot)	32.05	32.15	32.33	23.05	23.15	23.33
GPRS/EDGE (GMSK, 2 Tx slots)	29.37	29.44	29.64	23.37	23.44	23.64
GPRS/EDGE (GMSK, 3 Tx slots)	27.24	27.09	27.41	22.98	22.83	23.15
GPRS/EDGE (GMSK, 4 Tx slots)	26.14	26.12	26.06	23.14	23.12	23.06
EDGE (8PSK, 1 Tx slot)	25.36	25.48	25.51	16.36	16.48	16.51
EDGE (8PSK, 2 Tx slots)	23.27	23.37	23.41	17.27	17.37	17.41
EDGE (8PSK, 3 Tx slots)	21.45	21.42	21.52	17.19	17.16	17.26
EDGE (8PSK, 4 Tx slots)	20.72	20.88	20.72	17.72	17.88	17.72

### Remark:

The conducted power of GSM850 is measured with RMS detector.

Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.

Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.

Band: DCS1900	Burst Average Power (dBm)			Frame Average Power (dBm)		
	513	661	810	513	661	810
Channel						
GSM (CS)	30.18	30.12	30.12	21.18	21.12	21.12
GPRS/EDGE (GMSK, 1 Tx slot)	30.10	30.06	30.06	21.10	21.06	21.06
GPRS/EDGE (GMSK, 2 Tx slots)	27.01	26.64	26.81	21.01	20.64	20.81
GPRS/EDGE (GMSK, 3 Tx slots)	25.33	25.30	25.01	21.07	21.04	20.75
GPRS/EDGE (GMSK, 4 Tx slots)	24.13	24.07	23.80	21.13	21.07	20.80
EDGE (8PSK, 1 Tx slot)	24.81	24.61	24.65	15.81	15.61	15.65
EDGE (8PSK, 2 Tx slots)	23.68	23.63	23.61	17.68	17.63	17.61
EDGE (8PSK, 3 Tx slots)	21.96	21.96	21.92	17.70	17.70	17.66
EDGE (8PSK, 4 Tx slots)	21.21	21.03	21.11	18.21	18.03	18.11

Remark:

- 1) The conducted power of GSM1900 is measured with RMS detector.
  - 2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.

UMTS Band V		Conducted Power (dBm)		
		4133	4175	4232
WCDMA	12.2kbps RMC	23.73	23.74	23.63
	64kbps RMC	23.66	23.69	23.58
	144kbps RMC	23.68	23.62	23.63
	384kbps RMC	23.72	23.73	23.63
HSDPA	Subtest 1	22.65	22.74	22.59
	Subtest 2	21.93	21.75	21.85
	Subtest 3	21.85	21.89	21.78
	Subtest 4	21.87	21.66	21.74
HSUPA	Subtest 1	22.54	22.53	22.43
	Subtest 2	19.58	19.61	19.49
	Subtest 3	19.50	19.50	19.45
	Subtest 4	19.57	19.59	19.44
	Subtest 5	17.98	17.95	17.84

Remark:

The conducted power of UMTS Band V is measured with RMS detector

Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

UMTS Band II		Conducted Power (dBm)		
		9262	9400	9538
WCDMA	12.2kbps RMC	23.70	23.72	23.73
	64kbps RMC	23.48	23.63	23.69
	144kbps RMC	23.46	23.60	23.72
	384kbps RMC	23.44	23.64	23.69
HSDPA	Subtest 1	23.18	23.26	23.29
	Subtest 2	21.93	20.67	22.04
	Subtest 3	21.83	21.96	21.98
	Subtest 4	21.65	21.35	21.94
HSUPA	Subtest 1	23.01	22.61	22.62
	Subtest 2	20.52	20.60	20.61
	Subtest 3	21.47	21.61	21.62
	Subtest 4	20.57	20.62	20.64
	Subtest 5	23.04	23.10	23.10

Remark:

- 1) The conducted power of UMTS Band II is measured with RMS detector
- 2) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

UMTS Band IV		Conducted Power (dBm)		
		1312	1412	1513
WCDMA	12.2kbps RMC	23.22	23.45	23.37
	64kbps RMC	23.15	23.40	23.32
	144kbps RMC	23.17	23.32	23.37
	384kbps RMC	23.20	23.44	23.37
HSDPA	Subtest 1	23.37	23.26	23.36
	Subtest 2	22.58	20.62	22.57
	Subtest 3	22.51	21.19	22.52
	Subtest 4	22.53	22.01	22.45
HSUPA	Subtest 1	22.44	22.39	22.26
	Subtest 2	20.45	20.54	20.38
	Subtest 3	21.31	21.41	21.30
	Subtest 4	20.40	20.40	20.37
	Subtest 5	23.33	23.40	23.30

Remark:

- 1)The conducted power of UMTS Band V is measured with RMS detector
- 2)Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

LTE B2:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18607	18900	19193
1.4MHz	QPSK	1	0	22.89	22.91	22.87
		1	13	22.87	22.89	22.90
		1	24	22.81	22.86	22.89
		12	0	21.79	21.61	21.92
		12	6	21.67	21.68	21.83
		12	13	21.73	21.62	21.69
		25	0	21.88	21.84	21.81
	16QAM	1	0	21.70	21.27	21.64
		1	13	21.48	21.34	21.21
		1	24	21.48	21.67	21.70
		12	0	20.64	20.62	20.96
		12	6	21.01	20.65	20.91
		12	13	21.01	20.89	21.05
		25	0	20.83	20.51	21.25

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18615	18900	19185
3MHz	QPSK	1	0	22.91	22.82	22.87
		1	13	22.99	22.91	23.00
		1	24	22.87	22.84	22.94
		12	0	21.75	21.79	21.86
		12	6	21.64	21.73	21.77
		12	13	21.84	21.85	21.64
		25	0	21.72	21.91	21.54
	16QAM	1	0	21.71	21.58	21.52
		1	13	21.37	21.36	21.41
		1	24	21.40	21.24	21.44
		12	0	21.00	21.07	20.65
		12	6	20.66	21.00	20.56
		12	13	20.58	20.68	20.83
		25	0	21.15	20.55	20.87



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18625	18900	19175
5MHz	QPSK	1	0	22.93	22.75	22.86
		1	13	23.03	22.97	22.93
		1	24	22.95	22.92	22.79
		12	0	21.57	21.90	21.57
		12	6	21.67	21.66	21.89
		12	13	21.68	21.76	21.78
		25	0	21.74	21.89	21.60
	16QAM	1	0	21.61	21.36	21.73
		1	13	21.23	21.46	21.64
		1	24	21.38	21.66	21.27
		12	0	21.21	20.73	20.95
		12	6	20.62	21.02	21.02
		12	13	21.20	20.47	20.79
		25	0	21.02	20.56	21.09

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18650	18900	19150
10MHz	QPSK	1	0	22.93	22.77	22.86
		1	13	22.96	22.80	22.85
		1	24	22.73	22.82	22.91
		12	0	21.59	21.81	21.59
		12	6	21.48	21.42	21.59
		12	13	21.60	21.46	21.51
		25	0	21.56	21.65	21.75
	16QAM	1	0	21.12	21.18	21.56
		1	13	21.23	21.48	21.06
		1	24	21.42	21.22	21.54
		12	0	20.94	20.51	20.39
		12	6	20.87	20.31	20.71
		12	13	20.84	20.42	20.96
		25	0	20.34	20.45	20.72

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18675	18900	19125
15MHz	QPSK	1	0	22.66	22.77	22.99
		1	13	22.87	22.97	23.00
		1	24	22.84	22.93	22.72
		12	0	21.69	21.61	21.63
		12	6	21.63	21.79	21.50
		12	13	21.69	21.76	21.82
		25	0	21.76	21.62	21.55
	16QAM	1	0	21.63	21.43	21.44
		1	13	21.53	21.49	21.36
		1	24	21.50	21.36	21.26
		12	0	21.03	20.90	20.81
		12	6	20.37	20.88	20.56
		12	13	20.76	20.71	20.94
		25	0	20.56	20.93	20.82

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18700	18900	19100
20MHz	QPSK	1	0	22.85	22.75	22.87
		1	50	23.32	23.27	23.23
		1	99	22.82	22.75	22.72
		50	0	21.68	21.75	21.78
		50	25	21.70	21.67	21.81
		50	50	21.81	21.87	21.76
		100	0	21.70	21.56	21.90
	16QAM	1	0	21.24	21.20	21.40
		1	50	21.66	21.25	21.46
		1	99	21.75	21.29	21.73
		50	0	21.04	21.17	20.63
		50	25	21.03	20.62	21.06
		50	50	21.20	20.68	20.61
		100	0	21.21	20.82	20.95

LTE B4:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19957	20175	20393
1.4MHz	QPSK	1	0	23.25	23.44	23.32
		1	13	23.48	23.58	23.40
		1	24	23.52	23.45	23.24
		12	0	22.24	22.28	22.49
		12	6	22.43	22.32	22.22
		12	13	22.48	22.21	22.16
		25	0	22.44	22.10	22.52
	16QAM	1	0	21.90	22.08	22.15
		1	13	21.85	21.90	21.73
		1	24	22.06	21.99	22.25
		12	0	21.35	21.35	21.53
		12	6	21.70	21.51	21.32
		12	13	21.63	21.37	21.34
		25	0	21.53	21.39	21.61

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19965	20175	20385
3MHz	QPSK	1	0	23.56	23.48	23.45
		1	13	23.66	23.64	23.61
		1	24	23.36	23.27	23.28
		12	0	22.15	22.20	22.19
		12	6	22.44	22.50	22.34
		12	13	22.25	22.42	22.25
		25	0	22.25	22.32	22.42
	16QAM	1	0	22.17	21.95	21.85
		1	13	22.16	21.82	21.79
		1	24	22.25	21.91	22.04
		12	0	21.43	21.37	21.39
		12	6	21.20	21.36	21.36
		12	13	21.64	21.28	21.31
		25	0	21.55	21.24	21.20

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19975	20175	20375
5MHz	QPSK	1	0	23.48	23.42	23.58
		1	13	23.33	23.60	23.58
		1	24	23.55	23.25	23.22
		12	0	22.30	22.20	22.41
		12	6	22.53	22.19	22.09
		12	13	22.44	22.35	22.26
		25	0	22.24	22.20	22.15
	16QAM	1	0	21.92	21.99	22.24
		1	13	22.13	21.88	22.08
		1	24	21.89	22.14	21.97
		12	0	21.64	21.74	21.33
		12	6	21.66	21.30	21.56
		12	13	21.31	21.18	21.28
		25	0	21.23	21.73	21.66

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20000	20175	20350
10MHz	QPSK	1	0	23.55	23.20	23.41
		1	13	23.36	23.39	23.58
		1	24	23.33	23.42	23.35
		12	0	22.10	22.23	22.15
		12	6	22.12	22.14	22.26
		12	13	22.06	22.15	22.12
		25	0	22.16	22.38	22.27
	16QAM	1	0	21.91	21.92	21.88
		1	13	22.00	21.74	22.12
		1	24	21.62	22.00	21.62
		12	0	21.11	21.55	21.05
		12	6	21.45	21.13	21.41
		12	13	21.11	21.28	21.26
		25	0	21.09	21.12	21.18

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20025	20175	20325
15MHz	QPSK	1	0	23.33	23.35	23.32
		1	13	23.46	23.56	23.48
		1	24	23.43	23.52	23.25
		12	0	22.24	22.16	22.39
		12	6	22.33	22.03	22.05
		12	13	22.21	22.13	22.17
		25	0	22.24	22.12	22.24
	16QAM	1	0	21.99	22.07	21.71
		1	13	22.15	22.09	21.70
		1	24	21.87	22.07	21.84
		12	0	21.31	20.93	21.09
		12	6	21.19	21.42	21.06
		12	13	21.08	21.56	21.08
		25	0	21.11	21.17	21.06

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20050	20175	20300
20MHz	QPSK	1	0	23.45	23.24	23.25
		1	50	23.80	23.80	23.76
		1	99	23.48	23.52	23.26
		50	0	22.21	22.47	22.42
		50	25	22.21	22.20	22.26
		50	50	22.22	22.20	22.22
		100	0	22.47	22.41	22.18
	16QAM	1	0	21.92	22.15	22.00
		1	50	21.93	21.86	21.96
		1	99	21.91	21.96	22.08
		50	0	21.42	21.50	21.23
		50	25	21.59	21.60	21.41
		50	50	21.63	21.57	21.60
		100	0	21.13	21.24	21.21

LTE B5:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20407	20525	20643
1.4MHz	QPSK	1	0	23.45	23.37	23.48
		1	13	23.61	23.44	23.41
		1	24	23.51	23.49	23.33
		12	0	22.37	22.20	22.44
		12	6	22.37	22.15	22.38
		12	13	22.48	22.44	22.27
		25	0	22.37	22.33	22.39
	16QAM	1	0	21.94	22.30	21.90
		1	13	21.89	22.01	21.92
		1	24	22.18	21.93	22.03
		12	0	21.12	21.43	21.63
		12	6	21.24	21.31	21.63
		12	13	21.61	21.30	21.40
		25	0	21.36	21.45	21.19

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20415	20525	20635
3MHz	QPSK	1	0	23.54	23.53	23.39
		1	13	23.64	23.63	23.41
		1	24	23.58	23.54	23.50
		12	0	22.52	22.24	22.30
		12	6	22.57	22.36	22.40
		12	13	22.18	22.21	22.28
		25	0	22.40	22.30	22.49
	16QAM	1	0	21.93	21.95	22.14
		1	13	21.95	22.00	21.85
		1	24	22.13	22.10	22.13
		12	0	21.28	21.81	21.35
		12	6	21.54	21.30	21.25
		12	13	21.32	21.48	21.16
		25	0	21.31	21.26	21.22

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20425	20525	20625
5MHz	QPSK	1	0	23.54	23.55	23.65
		1	13	23.82	23.81	23.76
		1	24	23.43	23.29	23.38
		12	0	22.33	22.40	22.48
		12	6	22.13	22.27	22.21
		12	13	22.42	22.32	22.16
		25	0	22.15	22.19	22.52
	16QAM	1	0	22.25	21.92	21.81
		1	13	21.92	22.14	21.84
		1	24	21.76	21.93	22.08
		12	0	21.35	21.25	21.68
		12	6	21.58	21.17	21.33
		12	13	21.24	21.27	21.58
		25	0	21.79	21.33	21.31

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20450	20525	20600
10MHz	QPSK	1	0	23.56	23.47	23.30
		1	13	23.39	23.41	23.63
		1	24	23.29	23.49	23.58
		12	0	22.06	22.18	22.02
		12	6	22.33	22.24	22.33
		12	13	22.21	22.18	22.03
		25	0	22.36	22.19	22.31
	16QAM	1	0	21.63	21.78	21.88
		1	13	22.08	21.89	21.83
		1	24	21.94	22.09	21.75
		12	0	21.58	21.08	21.06
		12	6	21.10	21.42	21.03
		12	13	21.65	21.10	21.11
		25	0	21.25	21.22	21.15

LTE B7:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20775	21100	21425
5MHz	QPSK	1	0	23.22	23.22	23.36
		1	13	23.25	23.49	23.23
		1	24	23.27	23.32	23.11
		12	0	22.17	22.28	22.16
		12	6	22.00	21.99	22.17
		12	13	22.29	22.05	22.26
		25	0	22.27	22.26	22.20
	16QAM	1	0	21.61	21.83	21.68
		1	13	22.10	21.67	22.12
		1	24	21.79	21.91	21.91
		12	0	21.31	21.64	21.13
		12	6	21.67	20.91	21.24
		12	13	21.52	21.60	20.88
		25	0	21.47	21.27	21.47

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20800	21100	21400
10MHz	QPSK	1	0	23.38	23.15	23.07
		1	13	23.35	23.36	23.48
		1	24	23.14	23.08	23.24
		12	0	21.93	21.84	22.03
		12	6	21.96	21.99	22.26
		12	13	21.94	22.03	21.92
		25	0	22.02	21.97	22.17
	16QAM	1	0	21.80	21.80	21.88
		1	13	21.83	21.40	21.71
		1	24	21.53	21.44	21.79
		12	0	21.18	21.17	20.90
		12	6	21.07	20.99	20.94
		12	13	21.29	21.38	21.12
		25	0	20.93	20.65	20.97



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20825	21100	21375
15MHz	QPSK	1	0	23.04	23.25	23.23
		1	13	23.33	23.47	23.22
		1	24	23.34	23.28	23.15
		12	0	22.07	22.01	21.91
		12	6	22.05	22.09	21.95
		12	13	21.85	21.93	22.25
		25	0	22.22	22.01	21.93
	16QAM	1	0	21.76	21.67	21.51
		1	13	21.74	21.79	21.76
		1	24	21.71	21.58	21.77
		12	0	20.93	20.98	20.93
		12	6	21.25	21.25	21.29
		12	13	20.99	20.83	21.00
		25	0	21.50	21.11	21.43

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20850	21100	21350
20MHz	QPSK	1	0	23.29	23.27	23.44
		1	50	23.58	23.59	23.63
		1	99	23.24	23.22	23.19
		50	0	22.07	22.10	22.04
		50	25	22.01	22.33	22.02
		50	50	21.88	22.19	22.04
		100	0	22.30	22.23	22.28
	16QAM	1	0	21.66	21.76	21.96
		1	50	21.75	21.76	21.75
		1	99	21.82	21.88	21.55
		50	0	20.95	21.38	21.41
		50	25	21.10	20.99	21.22
		50	50	21.20	21.40	21.50
		100	0	21.16	21.22	21.45

LTE B12:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23017	23095	23173
1.4MHz	QPSK	1	0	23.06	23.25	23.30
		1	13	23.19	23.40	23.36
		1	24	23.16	23.13	23.14
		12	0	22.14	21.95	21.89
		12	6	21.96	21.90	22.01
		12	13	22.18	21.95	21.92
		25	0	21.99	22.01	22.10
	16QAM	1	0	21.97	21.86	21.84
		1	13	21.69	22.04	21.69
		1	24	21.94	21.91	21.60
		12	0	21.15	21.12	21.53
		12	6	21.20	21.08	21.24
		12	13	21.05	20.72	21.22
		25	0	21.09	21.45	21.03

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23025	23095	23165
3MHz	QPSK	1	0	23.31	23.03	23.24
		1	13	23.30	23.26	23.28
		1	24	23.18	23.23	23.10
		12	0	22.07	22.07	22.22
		12	6	22.05	22.19	22.02
		12	13	22.00	22.18	22.02
		25	0	22.01	22.06	22.06
	16QAM	1	0	21.69	21.78	21.79
		1	13	21.55	21.61	21.77
		1	24	21.98	21.59	21.91
		12	0	20.85	20.84	20.98
		12	6	20.85	21.49	21.09
		12	13	21.13	21.25	21.00
		25	0	21.10	20.96	21.28

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23035	23095	23155
5MHz	QPSK	1	0	23.07	23.07	23.20
		1	13	23.52	23.52	23.48
		1	24	23.31	23.05	23.21
		12	0	21.78	22.12	22.02
		12	6	22.09	22.10	22.11
		12	13	22.05	21.99	22.09
		25	0	22.10	21.86	21.98
	16QAM	1	0	21.71	22.01	21.69
		1	13	21.94	21.79	21.81
		1	24	21.77	21.76	22.09
		12	0	21.47	21.08	20.98
		12	6	21.07	20.81	21.18
		12	13	20.94	21.16	20.95
		25	0	21.25	21.38	20.73

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23060	23095	23130
10MHz	QPSK	1	0	23.13	23.13	23.11
		1	13	23.25	23.18	23.16
		1	24	23.14	23.04	23.23
		12	0	21.91	21.90	21.79
		12	6	21.97	21.98	21.91
		12	13	22.12	22.09	21.95
		25	0	21.98	21.96	21.97
	16QAM	1	0	21.40	21.63	21.82
		1	13	21.56	21.37	21.61
		1	24	21.63	21.87	21.80
		12	0	21.13	21.29	20.96
		12	6	21.24	21.02	20.77
		12	13	20.70	20.94	20.90
		25	0	21.00	20.76	21.22

LTE B13:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23205	23230	23255
5MHz	QPSK	1	0	23.33	23.28	23.40
		1	13	23.64	23.68	23.66
		1	24	23.22	23.22	23.23
		12	0	22.20	22.26	22.24
		12	6	22.33	22.19	22.42
		12	13	22.23	22.15	22.31
		25	0	22.15	22.14	22.28
	16QAM	1	0	22.13	21.71	21.99
		1	13	21.82	22.05	21.94
		1	24	22.12	21.79	22.25
		12	0	21.37	21.07	21.46
		12	6	21.33	21.67	21.01
		12	13	21.69	21.27	21.00
		25	0	21.56	21.54	21.28

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23230	23230	23230
10MHz	QPSK	1	0	23.40	23.22	23.29
		1	13	23.46	23.29	23.35
		1	24	23.22	23.50	23.32
		12	0	22.07	22.19	22.34
		12	6	22.04	22.32	22.00
		12	13	21.99	22.22	22.18
		25	0	22.05	22.05	21.97
	16QAM	1	0	21.77	21.85	21.67
		1	13	21.90	21.85	21.93
		1	24	21.85	21.81	21.73
		12	0	21.39	20.86	21.01
		12	6	21.14	20.82	21.07
		12	13	21.29	21.00	21.01
		25	0	21.18	21.06	21.34

LTE B17:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23755	23790	23825
5MHz	QPSK	1	0	23.08	23.19	23.23
		1	13	23.53	23.54	23.52
		1	24	23.16	23.20	23.27
		12	0	21.88	21.94	22.19
		12	6	21.96	22.12	22.00
		12	13	22.03	21.93	21.89
		25	0	22.03	22.12	21.96
	16QAM	1	0	21.67	21.64	21.53
		1	13	21.96	21.61	21.61
		1	24	21.70	21.74	22.14
		12	0	21.17	21.03	21.25
		12	6	20.94	21.06	21.34
		12	13	21.24	21.24	20.98
		25	0	21.28	21.60	21.41

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23780	23790	23800
10MHz	QPSK	1	0	23.23	23.00	23.08
		1	13	23.34	23.27	23.27
		1	24	23.25	23.04	23.22
		12	0	21.81	21.79	21.88
		12	6	21.80	21.85	22.03
		12	13	22.00	21.82	21.96
		25	0	21.89	21.78	21.67
	16QAM	1	0	22.02	21.79	21.49
		1	13	21.36	21.34	21.62
		1	24	21.52	21.69	21.42
		12	0	20.72	20.80	21.12
		12	6	20.87	21.13	21.14
		12	13	20.74	21.28	21.15
		25	0	20.62	21.37	20.95

LTE B26:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26697	26865	27033
1.4MHz	QPSK	1	0	23.39	23.32	23.40
		1	13	23.44	23.46	23.58
		1	24	23.50	23.41	23.52
		12	0	22.24	22.14	22.51
		12	6	22.46	22.16	22.23
		12	13	22.22	22.53	22.24
		25	0	22.32	22.14	22.27
	16QAM	1	0	21.97	22.34	21.91
		1	13	21.94	22.22	21.82
		1	24	21.95	22.13	21.94
		12	0	21.11	21.31	21.73
		12	6	21.19	21.49	21.21
		12	13	21.28	21.22	21.36
		25	0	21.52	21.40	21.13

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26705	26865	27025
3MHz	QPSK	1	0	23.57	23.48	23.61
		1	13	23.59	23.47	23.50
		1	24	23.27	23.45	23.41
		12	0	22.43	22.32	22.21
		12	6	22.30	22.50	22.25
		12	13	22.30	22.30	22.44
		25	0	22.27	22.25	22.31
	16QAM	1	0	21.86	21.88	21.86
		1	13	21.94	22.26	22.21
		1	24	22.16	22.25	21.90
		12	0	21.62	21.83	21.54
		12	6	21.35	21.30	21.09
		12	13	21.41	21.74	21.28
		25	0	21.89	21.52	21.31

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26715	26865	27015
5MHz	QPSK	1	0	23.37	23.35	23.45
		1	13	23.80	23.83	23.79
		1	24	23.34	23.50	23.51
		12	0	22.25	22.21	22.36
		12	6	22.42	22.34	22.42
		12	13	22.15	22.56	22.41
		25	0	22.43	22.13	22.27
	16QAM	1	0	21.86	22.01	21.92
		1	13	21.81	22.33	22.04
		1	24	21.96	22.27	21.94
		12	0	21.47	21.34	21.23
		12	6	21.72	21.33	21.23
		12	13	21.61	21.31	21.33
		25	0	21.29	21.48	21.18

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26740	26865	26990
10MHz	QPSK	1	0	23.46	23.53	23.55
		1	13	23.55	23.68	23.67
		1	24	23.49	23.51	23.58
		12	0	22.17	22.14	22.31
		12	6	22.30	22.16	22.31
		12	13	22.17	22.30	22.18
		25	0	22.04	22.37	22.34
	16QAM	1	0	22.14	21.93	22.21
		1	13	22.25	21.85	21.84
		1	24	22.18	21.70	21.79
		12	0	21.16	21.03	20.90
		12	6	21.59	20.92	20.99
		12	13	21.50	21.23	21.04
		25	0	21.03	21.57	21.53

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26765	26865	26965
15MHz	QPSK	1	0	23.38	23.29	23.49
		1	13	23.46	23.53	23.57
		1	24	23.48	23.38	23.44
		12	0	22.13	22.23	22.23
		12	6	22.17	22.29	22.37
		12	13	22.18	22.26	22.43
		25	0	22.41	22.20	22.26
	16QAM	1	0	21.77	21.89	21.71
		1	13	22.20	22.06	21.96
		1	24	21.71	21.79	21.89
		12	0	20.89	21.66	21.07
		12	6	21.48	21.52	20.86
		12	13	21.07	21.14	21.09
		25	0	21.66	21.11	20.90



LTE B38:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37775	38000	38225
5MHz	QPSK	1	0	23.32	23.38	23.32
		1	13	23.31	23.40	23.20
		1	24	23.23	23.40	23.18
		12	0	22.19	22.33	22.34
		12	6	22.33	22.09	22.23
		12	13	22.10	22.24	22.17
		25	0	22.10	22.33	22.21
	16QAM	1	0	22.08	22.03	21.71
		1	13	22.06	21.86	21.85
		1	24	21.83	21.83	22.03
		12	0	21.03	21.44	21.46
		12	6	21.25	21.03	21.44
		12	13	21.20	21.26	21.51
		25	0	21.24	21.51	21.24

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37800	38000	38200
10MHz	QPSK	1	0	23.36	23.41	23.35
		1	13	23.30	23.19	23.42
		1	24	23.35	23.41	23.33
		12	0	22.12	22.00	22.14
		12	6	22.14	22.07	21.88
		12	13	22.09	22.13	22.07
		25	0	22.13	22.13	22.09
	16QAM	1	0	21.61	21.75	21.60
		1	13	22.02	21.72	21.73
		1	24	21.91	21.91	22.02
		12	0	21.07	20.98	20.81
		12	6	20.91	21.04	20.99

		12	13	21.04	21.25	21.06
		25	0	20.81	21.07	21.05

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37825	38000	38175
15MHz	QPSK	1	0	23.29	23.36	23.31
		1	13	23.28	23.44	23.35
		1	24	23.44	23.29	23.42
		12	0	22.14	22.24	21.99
		12	6	22.14	21.99	21.88
		12	13	22.07	22.20	22.00
		25	0	22.11	22.00	21.99
	16QAM	1	0	21.73	21.80	21.93
		1	13	21.69	21.72	21.73
		1	24	21.75	21.76	21.51
		12	0	21.30	20.98	21.20
		12	6	20.76	21.20	20.98
		12	13	21.03	21.03	21.23
		25	0	21.25	21.30	20.95
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37850	38000	38150
20MHz	QPSK	1	0	23.36	23.30	23.31
		1	50	23.58	23.60	23.58
		1	99	23.40	23.30	23.18
		50	0	22.24	22.24	22.33
		50	25	22.22	22.33	22.33
		50	50	22.01	22.34	22.01
		100	0	22.19	22.33	22.29
	16QAM	1	0	22.13	21.83	21.84
		1	50	22.06	22.00	21.85
		1	99	21.71	21.90	21.71
		50	0	21.61	21.20	21.28
		50	25	21.25	21.24	21.16
		50	50	21.61	21.12	21.41
		100	0	21.12	21.24	21.19

LTE B41:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40065	40640	41215
5MHz	QPSK	1	0	23.52	23.40	23.40
		1	13	23.50	23.52	23.39
		1	24	23.33	23.48	23.39
		12	0	22.41	22.26	22.32
		12	6	22.40	22.53	22.29
		12	13	22.38	22.29	22.32
		25	0	22.55	22.39	22.32
	16QAM	1	0	22.25	21.95	21.93
		1	13	22.25	21.95	22.25
		1	24	22.29	22.16	22.13
		12	0	21.10	21.73	21.50
		12	6	21.73	21.22	21.73
		12	13	21.37	21.43	21.37
		25	0	21.50	21.50	21.73

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40090	40640	41190
10MHz	QPSK	1	0	23.29	23.56	23.42
		1	13	23.32	23.51	23.56
		1	24	23.47	23.29	23.32
		12	0	22.31	22.22	22.30
		12	6	22.33	22.28	22.25
		12	13	22.25	22.19	22.21
		25	0	22.22	22.15	22.22
	16QAM	1	0	21.96	22.14	21.94
		1	13	21.67	21.81	21.79
		1	24	21.90	21.90	21.79
		12	0	21.30	21.15	21.29
		12	6	20.89	21.52	21.62

		12	13	21.39	21.16	21.21
		25	0	21.34	21.15	21.26

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40115	40640	41165
15MHz	QPSK	1	0	23.50	23.46	23.47
		1	13	23.46	23.47	23.42
		1	24	23.46	23.50	23.56
		12	0	22.28	22.28	22.39
		12	6	22.12	22.21	22.28
		12	13	22.21	22.25	22.19
		25	0	22.26	22.15	22.39
	16QAM	1	0	21.94	21.96	21.78
		1	13	22.05	22.14	21.81
		1	24	22.14	21.84	21.81
		12	0	21.22	21.01	21.01
		12	6	21.21	21.07	21.15
		12	13	21.29	21.43	21.26
		25	0	21.63	21.10	21.21
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40140	40640	41140
20MHz	QPSK	1	0	23.40	23.48	23.50
		1	50	23.71	23.72	23.69
		1	99	23.39	23.48	23.53
		50	0	22.43	22.38	22.26
		50	25	22.29	22.29	22.41
		50	50	22.23	22.41	22.25
		100	0	22.26	22.53	22.27
	16QAM	1	0	22.20	21.95	21.95
		1	50	22.11	22.11	22.05
		1	99	22.29	22.29	21.95
		50	0	21.42	21.50	21.50
		50	25	21.64	21.46	21.50
		50	50	21.36	21.83	21.46
		100	0	21.43	21.51	21.83

LTE B66:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	23.66	23.79	23.58
		1	13	23.87	23.64	23.72
		1	24	23.54	23.80	23.66
		12	0	22.67	22.36	22.44
		12	6	22.55	22.60	22.54
		12	13	22.42	22.67	22.57
		25	0	22.40	22.58	22.53
	16QAM	1	0	22.26	22.38	22.12
		1	13	22.18	22.07	22.00
		1	24	22.08	22.05	22.02
		12	0	21.76	21.62	21.50
		12	6	21.73	21.90	21.45
		12	13	21.27	21.62	21.59
		25	0	21.87	21.79	21.79

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	23.65	23.68	23.68
		1	13	23.75	23.70	23.71
		1	24	23.56	23.69	23.53
		12	0	22.47	22.39	22.49
		12	6	22.38	22.46	22.74
		12	13	22.40	22.40	22.65
		25	0	22.58	22.65	22.49
	16QAM	1	0	22.20	22.36	22.47
		1	13	22.17	22.08	22.39
		1	24	21.99	22.29	22.02
		12	0	21.81	21.34	21.47
		12	6	21.73	21.34	21.93
		12	13	21.79	21.55	21.46
		25	0	21.55	21.87	21.37

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	23.61	23.84	23.63
		1	13	23.66	23.68	23.63
		1	24	23.73	23.72	23.63
		12	0	22.40	22.61	22.43
		12	6	22.76	22.61	22.49
		12	13	22.53	22.53	22.58
		25	0	22.43	22.53	22.44
	16QAM	1	0	22.31	22.14	22.05
		1	13	22.13	22.31	22.26
		1	24	22.27	22.17	22.24
		12	0	21.82	21.34	21.54
		12	6	21.63	21.91	21.84
		12	13	21.72	21.54	21.80
		25	0	21.77	21.91	21.98

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	23.58	23.67	23.75
		1	13	23.81	23.85	23.80
		1	24	23.64	23.51	23.63
		12	0	22.32	22.45	22.47
		12	6	22.39	22.26	22.44
		12	13	22.48	22.49	22.47
		25	0	22.37	22.60	22.48
	16QAM	1	0	22.06	22.19	22.25
		1	13	22.27	21.97	22.08
		1	24	22.09	22.32	22.01
		12	0	21.30	21.36	21.26
		12	6	21.11	21.75	21.49
		12	13	21.21	21.51	21.27
		25	0	21.72	21.64	21.49



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	23.73	23.82	23.71
		1	13	23.83	23.78	23.74
		1	24	23.55	23.83	23.65
		12	0	22.52	22.46	22.33
		12	6	22.42	22.23	22.48
		12	13	22.58	22.56	22.50
		25	0	22.40	22.52	22.61
	16QAM	1	0	22.20	22.27	22.18
		1	13	22.07	22.09	22.24
		1	24	22.14	21.97	22.31
		12	0	21.15	21.59	21.67
		12	6	21.35	21.51	21.24
		12	13	21.15	21.45	21.16
		25	0	21.13	21.12	21.35

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	23.59	23.70	23.81
		1	50	23.96	23.93	23.95
		1	99	23.62	23.72	23.76
		50	0	22.76	22.59	22.50
		50	25	22.42	22.64	22.62
		50	50	22.46	22.58	22.58
		100	0	22.67	22.45	22.55
	16QAM	1	0	22.42	22.34	22.41
		1	50	22.29	22.16	22.19
		1	99	22.20	22.11	22.43
		50	0	21.33	21.72	21.66
		50	25	21.70	21.52	21.51
		50	50	21.50	21.80	21.58
		100	0	21.53	21.41	21.48

NR Band n5 ANT1 Full power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				166800/ 834	167300/ 836.5	167800/ 839	
	QPSK	1	1	1	22.48	22.29	22.51
		1	53	1	22.60	22.34	22.27
		1	104	1	22.40	22.30	22.43
		50	0	1	22.43	22.39	22.43
		50	28	1	22.69	22.77	22.73
		50	56	1	22.28	22.48	22.22
		100	0	1	22.50	22.61	22.45
	16QAM	1	1	1	22.45	22.47	22.28
64QAM	1	1	1	20.53	20.52	20.51	
256QAM	1	1	1	18.65	18.89	19.03	
Channel/Frequency(MHz)				166300/ 831.5	167300/ 836.5	168300/ 841.5	
15	QPSK	1	1	1	22.70	22.67	22.67
Channel/Frequency(MHz)				165800/ 829	167300/ 836.5	168800/ 844	
10	QPSK	1	1	1	22.48	22.43	22.41
Channel/Frequency(MHz)				165300/ 826.5	167300/ 836.5	169300/ 846.5	
5	QPSK	1	1	1	22.69	22.55	22.54

NR Band n7 ANT1 Full power				Conducted power(dBm)		
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
				1	1	22.85
1	0	22.86	22.96	22.71		
1	215	22.81	22.67	22.80		
108	0	22.77	23.00	22.86		
108	54	23.05	23.17	22.98		
108	114	22.88	22.84	22.65		
216	0	22.74	22.98	22.88		
16QAM	108	54	22.95	22.77	22.87	
64QAM	108	54	20.95	20.89	20.96	
256QAM	108	54	19.09	19.33	19.14	
Channel/Frequency(MHz)				503000/ 2515	507000/ 2535	511000/ 2555
Channel/Frequency(MHz)				501500/ 2507.5	507000/ 2535	512500/ 2562.5
15	QPSK	36	18	22.79	22.92	22.77
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	23.10	23.04	22.93
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	22.79	23.01	22.81

NR Band n38 ANT1 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	23.45	23.52	23.54
		1	53	23.72	23.55	23.72
		1	105	23.65	23.63	23.42
		50	0	23.64	23.61	23.48
		50	28	23.67	23.95	23.75
		50	56	23.73	23.56	23.55
		100	0	23.65	23.74	23.52
	16QAM	50	25	23.79	23.48	23.45
64QAM	50	25	21.67	21.69	21.69	
256QAM	50	25	20.21	20.12	20.14	

NR Band n41 ANT1 Full power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	23.67	23.70	23.45
		1	137	23.66	23.61	23.62
		1	271	23.63	23.57	23.35
		135	0	23.40	23.63	23.48
		135	69	23.60	23.90	23.82
		135	138	23.52	23.53	23.66
		270	0	23.61	23.44	23.56
	16QAM	135	67	23.44	23.71	23.70
	64QAM	135	67	21.60	21.71	21.58
	256QAM	135	67	20.08	20.06	19.81
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	23.52	23.72	23.64
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	23.72	23.75	23.61
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	23.48	23.63	23.63
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	23.66	23.61	23.77
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	23.76	23.78	23.72
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98
30	QPSK	36	18	23.57	23.55	23.72

Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	23.68	23.57	23.50

NR Band n66 ANT1 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				344000/ 1720	349000/ 1745	354000/ 1770
	QPSK	1	1	23.06	23.02	23.17
		1	53	23.30	23.17	23.20
		1	104	23.23	23.14	23.17
		50	0	23.18	22.99	23.18
		50	28	23.43	23.45	23.37
		50	56	23.07	22.99	23.12
		100	0	22.97	23.06	23.18
	16QAM	1	1	23.17	23.19	23.01
64QAM	1	1	21.20	21.22	21.22	
256QAM	1	1	19.62	19.50	19.46	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5
15	QPSK	1	1	23.45	23.27	23.25
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775
10	QPSK	1	1	23.35	23.28	23.34
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5
5	QPSK	1	1	23.25	23.19	23.05

## Original power 0#ANT:

Band: GSM850	Burst Average Power (dBm)			Frame Average Power (dBm)		
	128	190	251	128	190	251
GSM (CS)	32.39	32.54	32.72	23.39	23.54	23.72
GPRS/EDGE (GMSK, 1 Tx slot)	32.38	32.46	32.60	23.38	23.46	23.60
GPRS/EDGE (GMSK, 2 Tx slots)	29.52	29.62	29.70	23.52	23.62	23.70
GPRS/EDGE (GMSK, 3 Tx slots)	27.08	27.33	27.33	22.82	23.07	23.07
GPRS/EDGE (GMSK, 4 Tx slots)	26.04	26.08	26.19	23.04	23.08	23.19
EDGE (8PSK, 1 Tx slot)	25.47	25.46	25.41	16.47	16.46	16.41
EDGE (8PSK, 2 Tx slots)	23.30	23.38	23.30	17.30	17.38	17.30
EDGE (8PSK, 3 Tx slots)	21.42	21.55	21.41	17.16	17.29	17.15
EDGE (8PSK, 4 Tx slots)	20.76	20.82	20.82	17.76	17.82	17.82

## Remark:

- 1)The conducted power of GSM850 is measured with RMS detector.
- 2)Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 3)Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.



Band: DCS1900	Burst Average Power (dBm)			Frame Average Power (dBm)		
	513	661	810	513	661	810
Channel						
GSM (CS)	30.28	30.01	30.05	21.28	21.01	21.05
GPRS/EDGE (GMSK, 1 Tx slot)	30.23	29.97	29.99	21.23	20.97	20.99
GPRS/EDGE (GMSK, 2 Tx slots)	27.05	26.96	27.20	21.05	20.96	21.20
GPRS/EDGE (GMSK, 3 Tx slots)	25.63	25.55	25.32	21.37	21.29	21.06
GPRS/EDGE (GMSK, 4 Tx slots)	24.50	24.37	24.19	21.50	21.37	21.19
EDGE (8PSK, 1 Tx slot)	24.89	24.65	24.64	15.89	15.65	15.64
EDGE (8PSK, 2 Tx slots)	23.72	23.58	23.63	17.72	17.58	17.63
EDGE (8PSK, 3 Tx slots)	21.98	21.96	21.88	17.82	17.70	17.62
EDGE (8PSK, 4 Tx slots)	21.24	21.17	21.14	18.24	18.17	18.14

Remark:

1) The conducted power of GSM1900 is measured with RMS detector.

2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.

Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.

UMTS Band V		Conducted Power (dBm)		
		4133	4175	4232
WCDMA	12.2kbps RMC	24.07	24.14	24.00
	64kbps RMC	24.00	24.09	23.95
	144kbps RMC	24.02	24.02	24.00
	384kbps RMC	24.06	24.13	24.00
HSDPA	Subtest 1	23.04	23.10	22.97
	Subtest 2	22.28	22.33	22.20
	Subtest 3	22.22	22.26	21.93
	Subtest 4	22.26	22.33	22.21
HSUPA	Subtest 1	22.54	22.53	22.45
	Subtest 2	19.60	19.62	19.52
	Subtest 3	19.53	19.50	19.45
	Subtest 4	19.56	19.59	19.44
	Subtest 5	18.00	17.97	17.89

Remark:

- 1 ) The conducted power of UMTS Band V is measured with RMS detector
- 2 ) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

UMTS Band II		Conducted Power (dBm)		
		9262	9400	9538
WCDMA	12.2kbps RMC	24.36	24.45	24.47
	64kbps RMC	24.14	24.36	24.43
	144kbps RMC	24.12	24.33	24.46
	384kbps RMC	24.10	24.37	24.43
HSDPA	Subtest 1	23.95	23.89	23.96
	Subtest 2	22.68	22.63	22.39
	Subtest 3	22.65	22.67	22.59
	Subtest 4	22.64	22.58	22.63
HSUPA	Subtest 1	22.65	22.73	22.74
	Subtest 2	20.68	20.71	20.78
	Subtest 3	21.66	21.69	21.75
	Subtest 4	20.69	20.68	20.72
	Subtest 5	23.22	23.25	23.25

Remark:

- 1) The conducted power of UMTS Band II is measured with RMS detector
- 2) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

UMTS Band IV		Conducted Power (dBm)		
		1312	1412	1513
WCDMA	12.2kbps RMC	24.17	24.21	24.15
	64kbps RMC	24.10	24.16	24.10
	144kbps RMC	24.12	24.08	24.15
	384kbps RMC	24.15	24.20	24.15
HSDPA	Subtest 1	24.19	24.18	24.14
	Subtest 2	23.42	23.42	23.38
	Subtest 3	23.32	23.38	22.94
	Subtest 4	23.29	23.34	23.29
HSUPA	Subtest 1	22.47	22.52	22.44
	Subtest 2	20.62	20.66	20.58
	Subtest 3	21.47	21.48	21.45
	Subtest 4	20.54	20.49	20.42
	Subtest 5	23.48	23.50	23.47

Remark:

- 1 ) The conducted power of UMTS Band V is measured with RMS detector
- 2 ) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

LTE B2:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18607	18900	19193
1.4MHz	QPSK	1	0	22.87	22.85	22.87
		1	13	22.77	22.75	22.79
		1	24	22.85	22.85	22.89
		12	0	21.83	21.59	21.83
		12	6	21.61	21.59	21.86
		12	13	21.69	21.65	21.72
		25	0	21.85	21.85	21.72
	16QAM	1	0	21.67	21.28	21.58
		1	13	21.41	21.31	21.24
		1	24	21.47	21.62	21.65
		12	0	20.61	20.61	20.94
		12	6	21.02	20.59	20.93
		12	13	21.06	20.82	20.97
		25	0	20.80	20.50	21.16

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18615	18900	19185
3MHz	QPSK	1	0	22.88	22.79	22.79
		1	13	22.88	22.79	22.87
		1	24	22.86	22.75	22.87
		12	0	21.69	21.83	21.85
		12	6	21.65	21.69	21.69
		12	13	21.83	21.86	21.69
		25	0	21.73	21.83	21.56
	16QAM	1	0	21.67	21.61	21.57
		1	13	21.33	21.41	21.41
		1	24	21.41	21.28	21.47
		12	0	20.97	21.02	20.66
		12	6	20.57	21.02	20.61
		12	13	20.59	20.61	20.80
		25	0	21.08	20.59	20.80

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18625	18900	19175
5MHz	QPSK	1	0	22.85	22.79	22.86
		1	13	22.94	22.85	22.79
		1	24	22.87	22.91	22.79
		12	0	21.61	21.83	21.57
		12	6	21.61	21.65	21.83
		12	13	21.61	21.72	21.73
		25	0	21.73	21.89	21.61
	16QAM	1	0	21.58	21.28	21.67
		1	13	21.21	21.48	21.61
		1	24	21.29	21.66	21.29
		12	0	21.12	20.74	20.91
		12	6	20.55	20.97	21.06
		12	13	21.14	20.50	20.80
		25	0	20.94	20.59	21.12

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18650	18900	19150
10MHz	QPSK	1	0	22.94	22.76	22.89
		1	13	22.87	22.71	22.76
		1	24	22.70	22.86	22.93
		12	0	21.62	21.73	21.59
		12	6	21.46	21.45	21.59
		12	13	21.62	21.45	21.49
		25	0	21.59	21.59	21.73
	16QAM	1	0	21.13	21.20	21.47
		1	13	21.28	21.46	21.10
		1	24	21.36	21.14	21.50
		12	0	20.95	20.53	20.34
		12	6	20.85	20.36	20.70
		12	13	20.81	20.40	20.87
		25	0	20.29	20.42	20.70

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18675	18900	19125
15MHz	QPSK	1	0	22.71	22.78	22.92
		1	13	22.78	22.88	22.89
		1	24	22.76	22.86	22.70
		12	0	21.73	21.62	21.59
		12	6	21.59	21.73	21.46
		12	13	21.73	21.73	21.73
		25	0	21.75	21.55	21.59
	16QAM	1	0	21.56	21.47	21.43
		1	13	21.46	21.50	21.28
		1	24	21.47	21.40	21.28
		12	0	20.95	20.81	20.73
		12	6	20.39	20.81	20.59
		12	13	20.81	20.73	20.95
		25	0	20.61	20.87	20.80

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18700	18900	19100
20MHz	QPSK	1	0	22.86	22.72	22.85
		1	50	23.18	23.14	23.10
		1	99	22.85	22.79	22.77
		50	0	21.61	21.69	21.73
		50	25	21.71	21.69	21.80
		50	50	21.85	21.85	21.71
		100	0	21.61	21.56	21.83
	16QAM	1	0	21.27	21.21	21.33
		1	50	21.67	21.24	21.48
		1	99	21.66	21.29	21.67
		50	0	21.08	21.12	20.60
		50	25	21.02	20.61	21.02
		50	50	21.12	20.60	20.60
		100	0	21.17	20.80	20.94

LTE B4:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19957	20175	20393
1.4MHz	QPSK	1	0	23.22	23.40	23.26
		1	13	23.38	23.48	23.26
		1	24	23.50	23.50	23.26
		12	0	22.28	22.19	22.43
		12	6	22.45	22.23	22.22
		12	13	22.41	22.22	22.14
		25	0	22.39	22.14	22.45
	16QAM	1	0	21.90	21.99	22.14
		1	13	21.89	21.95	21.75
		1	24	21.99	21.93	22.20
		12	0	21.29	21.29	21.57
		12	6	21.70	21.56	21.32
		12	13	21.67	21.35	21.26
		25	0	21.57	21.35	21.57

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19965	20175	20385
3MHz	QPSK	1	0	23.50	23.45	23.50
		1	13	23.52	23.52	23.50
		1	24	23.38	23.30	23.30
		12	0	22.13	22.19	22.22
		12	6	22.37	22.45	22.37
		12	13	22.23	22.40	22.19
		25	0	22.20	22.32	22.37
	16QAM	1	0	22.20	21.95	21.80
		1	13	22.14	21.86	21.80
		1	24	22.16	21.86	22.06
		12	0	21.46	21.28	21.43
		12	6	21.24	21.29	21.27
		12	13	21.65	21.29	21.26
		25	0	21.57	21.29	21.25



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19975	20175	20375
5MHz	QPSK	1	0	23.39	23.45	23.50
		1	13	23.23	23.50	23.47
		1	24	23.50	23.26	23.25
		12	0	22.22	22.17	22.33
		12	6	22.45	22.13	22.13
		12	13	22.39	22.32	22.23
		25	0	22.18	22.13	22.18
	16QAM	1	0	21.95	21.93	22.18
		1	13	22.09	21.86	22.05
		1	24	21.92	22.13	21.89
		12	0	21.60	21.70	21.29
		12	6	21.70	21.35	21.56
		12	13	21.29	21.12	21.24
		25	0	21.28	21.70	21.65

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20000	20175	20350
10MHz	QPSK	1	0	23.51	23.21	23.42
		1	13	23.22	23.26	23.49
		1	24	23.38	23.38	23.38
		12	0	22.08	22.15	22.09
		12	6	22.15	22.09	22.24
		12	13	22.07	22.10	22.12
		25	0	22.09	22.30	22.18
	16QAM	1	0	21.95	21.94	21.82
		1	13	21.98	21.75	22.07
		1	24	21.64	21.94	21.64
		12	0	21.05	21.49	21.07
		12	6	21.40	21.07	21.39
		12	13	21.04	21.22	21.25
		25	0	21.11	21.04	21.22

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20025	20175	20325
15MHz	QPSK	1	0	23.37	23.37	23.26
		1	13	23.37	23.46	23.38
		1	24	23.46	23.51	23.21
		12	0	22.25	22.15	22.31
		12	6	22.27	22.07	22.10
		12	13	22.13	22.14	22.13
		25	0	22.24	22.07	22.15
	16QAM	1	0	21.94	22.12	21.75
		1	13	22.12	22.12	21.70
		1	24	21.79	22.03	21.84
		12	0	21.25	20.89	21.14
		12	6	21.22	21.35	21.03
		12	13	21.08	21.49	21.08
		25	0	21.06	21.11	21.04

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20050	20175	20300
20MHz	QPSK	1	0	23.47	23.22	23.26
		1	50	23.69	23.66	23.62
		1	99	23.48	23.52	23.26
		50	0	22.23	22.43	22.33
		50	25	22.20	22.14	22.19
		50	50	22.23	22.23	22.23
		100	0	22.41	22.39	22.20
	16QAM	1	0	21.93	22.13	21.95
		1	50	21.93	21.86	21.92
		1	99	21.89	21.89	22.05
		50	0	21.46	21.46	21.15
		50	25	21.57	21.58	21.46
		50	50	21.57	21.58	21.56
		100	0	21.15	21.28	21.24

LTE B5:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20407	20525	20643
1.4MHz	QPSK	1	0	23.48	23.30	23.48
		1	13	23.48	23.30	23.28
		1	24	23.44	23.46	23.30
		12	0	22.28	22.17	22.35
		12	6	22.34	22.18	22.38
		12	13	22.52	22.35	22.28
		25	0	22.38	22.38	22.32
	16QAM	1	0	21.88	22.27	21.88
		1	13	21.92	22.05	21.87
		1	24	22.12	21.94	21.96
		12	0	21.10	21.44	21.55
		12	6	21.26	21.31	21.59
		12	13	21.59	21.26	21.38
		25	0	21.31	21.50	21.23

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20415	20525	20635
3MHz	QPSK	1	0	23.49	23.44	23.32
		1	13	23.51	23.51	23.28
		1	24	23.54	23.54	23.44
		12	0	22.52	22.18	22.34
		12	6	22.49	22.41	22.32
		12	13	22.18	22.18	22.23
		25	0	22.42	22.35	22.52
	16QAM	1	0	21.96	21.89	22.06
		1	13	21.89	21.94	21.89
		1	24	22.12	22.05	22.05
		12	0	21.26	21.77	21.31
		12	6	21.55	21.28	21.27
		12	13	21.24	21.50	21.10
		25	0	21.26	21.25	21.24

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20425	20525	20625
5MHz	QPSK	1	0	23.57	23.54	23.57
		1	13	23.71	23.72	23.67
		1	24	23.38	23.28	23.32
		12	0	22.35	22.42	22.49
		12	6	22.16	22.21	22.23
		12	13	22.38	22.28	22.18
		25	0	22.17	22.17	22.52
	16QAM	1	0	22.19	21.93	21.79
		1	13	21.91	22.12	21.88
		1	24	21.79	21.88	22.09
		12	0	21.26	21.25	21.72
		12	6	21.56	21.10	21.31
		12	13	21.25	21.23	21.56
		25	0	21.72	21.24	21.29

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20450	20525	20600
10MHz	QPSK	1	0	23.50	23.45	23.34
		1	13	23.27	23.29	23.53
		1	24	23.34	23.47	23.50
		12	0	22.07	22.18	22.06
		12	6	22.28	22.20	22.31
		12	13	22.15	22.15	22.06
		25	0	22.31	22.16	22.24
	16QAM	1	0	21.68	21.82	21.85
		1	13	22.01	21.81	21.80
		1	24	21.94	22.01	21.77
		12	0	21.56	21.06	21.04
		12	6	21.13	21.35	21.03
		12	13	21.56	21.13	21.06
		25	0	21.29	21.13	21.10

LTE B7:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20775	21100	21425
5MHz	QPSK	1	0	23.14	23.25	23.32
		1	13	23.14	23.37	23.14
		1	24	23.20	23.37	23.16
		12	0	22.20	22.20	22.16
		12	6	21.93	21.93	22.20
		12	13	22.34	21.98	22.20
		25	0	22.20	22.28	22.20
	16QAM	1	0	21.64	21.83	21.69
		1	13	22.15	21.64	22.10
		1	24	21.81	21.95	21.87
		12	0	21.30	21.63	21.13
		12	6	21.63	20.86	21.18
		12	13	21.50	21.55	20.87
		25	0	21.46	21.18	21.45

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20800	21100	21400
10MHz	QPSK	1	0	23.30	23.20	23.09
		1	13	23.22	23.24	23.34
		1	24	23.15	23.11	23.16
		12	0	21.90	21.83	21.99
		12	6	21.97	21.97	22.24
		12	13	21.94	22.06	21.88
		25	0	22.04	21.95	22.14
	16QAM	1	0	21.84	21.72	21.88
		1	13	21.84	21.43	21.70
		1	24	21.53	21.45	21.84
		12	0	21.16	21.09	20.88
		12	6	21.11	20.98	20.98
		12	13	21.34	21.29	21.09
		25	0	20.96	20.66	20.97

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20825	21100	21375
15MHz	QPSK	1	0	23.09	23.30	23.18
		1	13	23.20	23.36	23.13
		1	24	23.30	23.30	23.11
		12	0	22.10	21.94	21.94
		12	6	22.10	22.02	21.90
		12	13	21.81	21.88	22.22
		25	0	22.18	21.94	21.88
	16QAM	1	0	21.76	21.66	21.43
		1	13	21.66	21.70	21.74
		1	24	21.70	21.55	21.72
		12	0	20.98	20.99	20.93
		12	6	21.25	21.25	21.25
		12	13	20.98	20.77	20.96
		25	0	21.42	21.11	21.34

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20850	21100	21350
20MHz	QPSK	1	0	23.33	23.20	23.38
		1	50	23.49	23.48	23.51
		1	99	23.19	23.16	23.10
		50	0	22.07	22.14	21.98
		50	25	21.98	22.24	22.04
		50	50	21.91	22.14	22.04
		100	0	22.28	22.24	22.20
	16QAM	1	0	21.69	21.76	21.95
		1	50	21.76	21.80	21.77
		1	99	21.87	21.81	21.54
		50	0	20.96	21.30	21.32
		50	25	21.01	21.01	21.13
		50	50	21.19	21.45	21.50
		100	0	21.09	21.18	21.45

LTE B12:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23017	23095	23173
1.4MHz	QPSK	1	0	23.11	23.27	23.27
		1	13	23.06	23.27	23.27
		1	24	23.12	23.09	23.06
		12	0	22.14	22.00	21.90
		12	6	22.01	21.82	22.00
		12	13	22.14	21.95	21.90
		25	0	21.94	22.04	22.15
	16QAM	1	0	21.98	21.83	21.84
		1	13	21.71	21.95	21.74
		1	24	21.88	21.84	21.58
		12	0	21.10	21.05	21.46
		12	6	21.19	21.05	21.15
		12	13	21.05	20.77	21.21
		25	0	21.10	21.37	21.05

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23025	23095	23165
3MHz	QPSK	1	0	23.27	23.06	23.27
		1	13	23.16	23.16	23.15
		1	24	23.21	23.27	23.06
		12	0	22.05	21.99	22.14
		12	6	22.07	22.14	22.05
		12	13	22.04	22.14	22.05
		25	0	22.06	22.06	22.04
	16QAM	1	0	21.71	21.72	21.77
		1	13	21.56	21.56	21.72
		1	24	21.95	21.57	21.89
		12	0	20.85	20.88	20.90
		12	6	20.90	21.44	21.07
		12	13	21.18	21.21	21.05
		25	0	21.07	20.87	21.21

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23035	23095	23155
5MHz	QPSK	1	0	23.10	23.11	23.23
		1	13	23.38	23.43	23.39
		1	24	23.27	23.08	23.23
		12	0	21.82	22.05	22.06
		12	6	22.14	22.04	22.05
		12	13	22.01	21.95	22.00
		25	0	22.14	21.89	21.94
	16QAM	1	0	21.74	21.98	21.70
		1	13	21.88	21.75	21.76
		1	24	21.68	21.77	22.00
		12	0	21.44	21.12	20.98
		12	6	21.12	20.85	21.15
		12	13	20.89	21.19	20.87
		25	0	21.22	21.32	20.77

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23060	23095	23130
10MHz	QPSK	1	0	23.15	23.08	23.05
		1	13	23.15	23.04	23.04
		1	24	23.15	23.05	23.19
		12	0	21.94	21.90	21.84
		12	6	21.95	21.91	21.94
		12	13	22.04	22.12	21.90
		25	0	21.94	21.95	21.97
	16QAM	1	0	21.45	21.59	21.78
		1	13	21.57	21.35	21.60
		1	24	21.61	21.78	21.72
		12	0	21.05	21.25	20.89
		12	6	21.25	20.98	20.69
		12	13	20.64	20.91	20.95
		25	0	21.05	20.67	21.16



LTE B13:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23205	23230	23255
5MHz	QPSK	1	0	23.36	23.23	23.39
		1	13	23.55	23.58	23.57
		1	24	23.23	23.24	23.23
		12	0	22.18	22.30	22.29
		12	6	22.24	22.16	22.40
		12	13	22.21	22.16	22.27
		25	0	22.12	22.14	22.29
	16QAM	1	0	22.05	21.76	21.90
		1	13	21.78	22.04	21.95
		1	24	22.09	21.74	22.18
		12	0	21.36	21.02	21.51
		12	6	21.34	21.64	21.02
		12	13	21.64	21.28	21.02
		25	0	21.51	21.49	21.28

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23230	23230	23230
10MHz	QPSK	1	0	23.32	23.19	23.27
		1	13	23.36	23.19	23.22
		1	24	23.19	23.43	23.36
		12	0	22.08	22.20	22.30
		12	6	21.99	22.25	21.97
		12	13	22.03	22.25	22.17
		25	0	21.97	22.04	22.01
	16QAM	1	0	21.72	21.79	21.61
		1	13	21.94	21.76	21.86
		1	24	21.77	21.77	21.76
		12	0	21.43	20.83	20.92
		12	6	21.15	20.81	21.10
		12	13	21.23	20.96	21.01
		25	0	21.13	21.07	21.30

LTE B17:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23755	23790	23825
5MHz	QPSK	1	0	22.99	23.15	23.18
		1	13	23.39	23.41	23.38
		1	24	23.08	23.15	23.28
		12	0	21.83	21.92	22.20
		12	6	22.01	22.04	21.95
		12	13	22.07	21.95	21.83
		25	0	22.03	22.03	21.90
	16QAM	1	0	21.71	21.60	21.54
		1	13	21.89	21.58	21.57
		1	24	21.64	21.71	22.07
		12	0	21.20	21.06	21.27
		12	6	20.92	21.11	21.28
		12	13	21.22	21.20	20.91
		25	0	21.27	21.57	21.38

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23780	23790	23800
10MHz	QPSK	1	0	23.25	23.03	23.07
		1	13	23.20	23.18	23.17
		1	24	23.18	22.99	23.22
		12	0	21.77	21.80	21.93
		12	6	21.84	21.80	22.03
		12	13	21.93	21.87	21.89
		25	0	21.93	21.77	21.69
	16QAM	1	0	21.96	21.78	21.49
		1	13	21.39	21.39	21.63
		1	24	21.53	21.60	21.46
		12	0	20.71	20.85	21.17
		12	6	20.85	21.17	21.15
		12	13	20.71	21.29	21.06
		25	0	20.64	21.29	20.95

LTE B26:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26697	26865	27033
1.4MHz	QPSK	1	0	23.34	23.36	23.34
		1	13	23.34	23.34	23.48
		1	24	23.52	23.46	23.53
		12	0	22.27	22.18	22.47
		12	6	22.47	22.20	22.20
		12	13	22.24	22.50	22.18
		25	0	22.30	22.18	22.20
	16QAM	1	0	21.91	22.33	21.88
		1	13	21.91	22.27	21.85
		1	24	21.97	22.06	21.91
		12	0	21.06	21.26	21.78
		12	6	21.21	21.52	21.21
		12	13	21.31	21.21	21.31
		25	0	21.55	21.36	21.13

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26705	26865	27025
3MHz	QPSK	1	0	23.49	23.46	23.53
		1	13	23.48	23.38	23.38
		1	24	23.27	23.38	23.34
		12	0	22.47	22.35	22.18
		12	6	22.21	22.47	22.25
		12	13	22.35	22.35	22.38
		25	0	22.18	22.18	22.29
	16QAM	1	0	21.85	21.91	21.88
		1	13	21.91	22.28	22.13
		1	24	22.11	22.22	21.94
		12	0	21.66	21.78	21.55
		12	6	21.29	21.33	21.06
		12	13	21.35	21.68	21.27
		25	0	21.83	21.52	21.35

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26715	26865	27015
5MHz	QPSK	1	0	23.34	23.34	23.49
		1	13	23.71	23.72	23.67
		1	24	23.27	23.41	23.48
		12	0	22.25	22.25	22.29
		12	6	22.35	22.29	22.46
		12	13	22.18	22.47	22.38
		25	0	22.46	22.13	22.29
	16QAM	1	0	21.82	22.06	21.94
		1	13	21.85	22.33	21.97
		1	24	21.97	22.23	21.91
		12	0	21.38	21.26	21.21
		12	6	21.75	21.33	21.21
		12	13	21.55	21.26	21.27
		25	0	21.21	21.52	21.21

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26740	26865	26990
10MHz	QPSK	1	0	23.38	23.45	23.47
		1	13	23.42	23.54	23.54
		1	24	23.52	23.52	23.50
		12	0	22.19	22.08	22.25
		12	6	22.28	22.08	22.24
		12	13	22.11	22.28	22.20
		25	0	22.03	22.36	22.37
	16QAM	1	0	22.11	21.87	22.12
		1	13	22.19	21.80	21.86
		1	24	22.12	21.74	21.71
		12	0	21.12	21.00	20.94
		12	6	21.57	20.85	20.99
		12	13	21.54	21.15	21.08
		25	0	20.99	21.57	21.47

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				26765	26865	26965
15MHz	QPSK	1	0	23.33	23.33	23.42
		1	13	23.37	23.41	23.48
		1	24	23.51	23.41	23.46
		12	0	22.14	22.24	22.20
		12	6	22.17	22.24	22.37
		12	13	22.19	22.20	22.35
		25	0	22.36	22.20	22.24
	16QAM	1	0	21.80	21.87	21.74
		1	13	22.22	22.00	21.95
		1	24	21.74	21.80	21.84
		12	0	20.94	21.62	21.10
		12	6	21.39	21.57	20.85
		12	13	21.05	21.08	21.05
		25	0	21.62	21.06	20.92

LTE B38:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37775	38000	38225
5MHz	QPSK	1	0	23.52	23.52	23.34
		1	13	23.32	23.31	23.52
		1	24	23.31	23.32	23.47
		12	0	22.32	22.36	22.34
		12	6	22.31	22.27	22.28
		12	13	22.07	22.34	22.27
		25	0	22.14	22.19	22.14
	16QAM	1	0	22.09	22.13	21.91
		1	13	22.06	21.91	21.81
		1	24	22.06	22.08	21.81
		12	0	21.17	21.28	21.48
		12	6	21.10	21.23	21.61
		12	13	21.53	21.29	21.35
		25	0	21.28	21.63	21.53

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37800	38000	38200
10MHz	QPSK	1	0	23.46	23.36	23.46
		1	13	23.30	23.27	23.42
		1	24	23.33	23.30	23.30
		12	0	22.09	21.97	22.27
		12	6	22.12	22.04	22.28
		12	13	22.00	22.26	22.05
		25	0	22.18	22.00	22.04
	16QAM	1	0	21.72	21.70	21.70
		1	13	22.01	21.78	21.97
		1	24	21.68	21.90	21.93
		12	0	21.14	21.19	21.22
		12	6	21.16	21.32	21.42

		12	13	21.28	20.86	21.33
		25	0	21.35	21.08	21.40

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37825	38000	38175
15MHz	QPSK	1	0	23.52	23.50	23.24
		1	13	23.31	23.31	23.50
		1	24	23.33	23.30	23.46
		12	0	22.12	22.12	22.30
		12	6	22.05	22.07	22.17
		12	13	22.24	22.24	21.97
		25	0	22.25	22.13	22.05
	16QAM	1	0	22.02	21.95	21.93
		1	13	21.89	21.72	21.95
		1	24	22.00	21.89	21.86
		12	0	21.32	21.27	21.08
		12	6	21.09	21.28	21.22
		12	13	21.32	21.19	21.28
		25	0	20.89	20.86	21.02
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37850	38000	38150
20MHz	QPSK	1	0	23.47	23.29	23.47
		1	50	23.64	23.64	23.64
		1	99	23.28	23.47	23.47
		50	0	22.18	22.34	22.34
		50	25	22.28	22.27	22.22
		50	50	22.14	22.35	22.20
		100	0	22.14	22.37	22.10
	16QAM	1	0	21.81	21.75	21.97
		1	50	21.81	22.11	21.75
		1	99	21.79	22.13	21.92
		50	0	21.17	21.17	21.49
		50	25	21.23	21.17	21.43
		50	50	21.29	21.29	21.56
		100	0	21.08	21.53	21.43



LTE B41:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40065	40640	41215
5MHz	QPSK	1	0	23.61	23.50	23.58
		1	13	23.62	23.55	23.47
		1	24	23.58	23.39	23.43
		12	0	22.58	22.37	22.61
		12	6	22.50	22.32	22.28
		12	13	22.58	22.42	22.43
		25	0	22.56	22.32	22.54
	16QAM	1	0	21.81	22.31	22.42
		1	13	22.01	22.42	22.23
		1	24	22.31	22.16	22.06
		12	0	21.77	21.37	21.35
		12	6	21.67	21.53	21.73
		12	13	21.92	21.32	21.73
		25	0	21.37	21.73	21.35

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40090	40640	41190
10MHz	QPSK	1	0	23.64	23.59	23.60
		1	13	23.47	23.44	23.49
		1	24	23.49	23.62	23.57
		12	0	22.34	22.51	22.51
		12	6	22.46	22.28	22.34
		12	13	22.45	22.31	22.27
		25	0	22.33	22.29	22.38
	16QAM	1	0	22.06	22.12	21.92
		1	13	22.05	22.03	21.80
		1	24	22.19	22.12	21.90
		12	0	21.22	21.01	21.53
		12	6	21.71	21.23	21.52

		12	13	21.50	21.54	21.70
		25	0	21.32	21.53	21.46

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40115	40640	41165
15MHz	QPSK	1	0	23.61	23.49	23.49
		1	13	23.54	23.60	23.57
		1	24	23.65	23.65	23.51
		12	0	22.31	22.18	22.34
		12	6	22.28	22.44	22.09
		12	13	22.31	22.38	22.32
		25	0	22.33	22.39	22.51
	16QAM	1	0	21.85	22.11	22.19
		1	13	22.18	22.20	22.03
		1	24	21.95	21.92	22.03
		12	0	21.52	21.54	21.53
		12	6	21.50	21.46	21.44
		12	13	21.46	21.14	21.56
		25	0	21.01	21.16	21.53
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40140	40640	41140
20MHz	QPSK	1	0	23.63	23.51	23.47
		1	50	23.79	23.78	23.82
		1	99	23.60	23.51	23.50
		50	0	22.57	22.43	22.61
		50	25	22.56	22.42	22.48
		50	50	22.54	22.42	22.37
		100	0	22.50	22.39	22.38
	16QAM	1	0	22.03	22.42	22.14
		1	50	22.14	22.29	22.16
		1	99	22.06	22.31	22.17
		50	0	21.92	21.67	21.43
		50	25	21.73	21.22	21.77
		50	50	21.91	21.77	21.44
		100	0	21.71	21.23	21.73

LTE B66:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	23.70	23.76	23.58
		1	13	23.77	23.52	23.59
		1	24	23.59	23.71	23.61
		12	0	22.58	22.41	22.47
		12	6	22.53	22.54	22.56
		12	13	22.47	22.68	22.56
		25	0	22.35	22.61	22.54
	16QAM	1	0	22.22	22.37	22.04
		1	13	22.13	22.05	22.04
		1	24	22.13	22.04	21.97
		12	0	21.76	21.64	21.48
		12	6	21.66	21.81	21.50
		12	13	21.28	21.53	21.53
		25	0	21.78	21.81	21.83

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	23.68	23.64	23.70
		1	13	23.61	23.58	23.59
		1	24	23.58	23.61	23.55
		12	0	22.48	22.41	22.49
		12	6	22.39	22.41	22.68
		12	13	22.35	22.41	22.61
		25	0	22.54	22.62	22.54
	16QAM	1	0	22.22	22.40	22.41
		1	13	22.22	22.13	22.32
		1	24	22.04	22.20	22.04
		12	0	21.84	21.35	21.48
		12	6	21.76	21.35	21.84
		12	13	21.83	21.50	21.48
		25	0	21.59	21.78	21.35

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	23.61	23.75	23.64
		1	13	23.52	23.58	23.52
		1	24	23.71	23.68	23.58
		12	0	22.35	22.56	22.39
		12	6	22.68	22.56	22.41
		12	13	22.54	22.54	22.54
		25	0	22.47	22.44	22.39
	16QAM	1	0	22.23	22.14	22.03
		1	13	22.04	22.22	22.28
		1	24	22.32	22.13	22.23
		12	0	21.79	21.39	21.48
		12	6	21.64	21.83	21.81
		12	13	21.72	21.51	21.79
		25	0	21.78	21.90	21.90

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	23.57	23.60	23.71
		1	13	23.71	23.74	23.70
		1	24	23.60	23.54	23.56
		12	0	22.25	22.49	22.51
		12	6	22.40	22.31	22.49
		12	13	22.43	22.44	22.40
		25	0	22.31	22.52	22.44
	16QAM	1	0	22.04	22.17	22.30
		1	13	22.22	21.94	22.11
		1	24	22.03	22.30	22.02
		12	0	21.27	21.33	21.27
		12	6	21.14	21.69	21.51
		12	13	21.14	21.52	21.32
		25	0	21.69	21.58	21.49

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	23.76	23.77	23.75
		1	13	23.69	23.65	23.65
		1	24	23.57	23.75	23.65
		12	0	22.51	22.38	22.34
		12	6	22.39	22.25	22.48
		12	13	22.49	22.52	22.51
		25	0	22.44	22.44	22.58
	16QAM	1	0	22.21	22.25	22.09
		1	13	22.02	22.04	22.21
		1	24	22.16	21.93	22.23
		12	0	21.18	21.52	21.69
		12	6	21.27	21.52	21.27
		12	13	21.14	21.49	21.07
		25	0	21.18	21.14	21.30

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	23.58	23.72	23.77
		1	50	23.94	23.90	23.92
		1	99	23.61	23.66	23.72
		50	0	22.68	22.54	22.53
		50	25	22.44	22.68	22.58
		50	50	22.44	22.53	22.54
		100	0	22.61	22.44	22.48
	16QAM	1	0	22.41	22.27	22.37
		1	50	22.34	22.14	22.19
		1	99	22.13	22.13	22.41
		50	0	21.35	21.70	21.70
		50	25	21.70	21.54	21.54
		50	50	21.53	21.73	21.59
		100	0	21.54	21.35	21.48

NR Band n5 ANT0 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				166800/ 834	167300/ 836.5	167800/ 839
	QPSK	1	1	22.58	22.36	22.40
		1	53	22.48	22.45	22.45
		1	104	22.49	22.49	22.40
		50	0	22.50	22.62	22.56
		50	28	22.60	22.79	22.67
		50	56	22.42	22.31	22.30
		100	0	22.62	22.45	22.33
	16QAM	1	1	22.60	22.49	22.51
64QAM	1	1	20.55	20.52	20.53	
256QAM	1	1	18.94	18.85	18.66	
Channel/Frequency(MHz)				166300/ 831.5	167300/ 836.5	168300/ 841.5
15	QPSK	1	1	22.77	22.55	22.78
Channel/Frequency(MHz)				165800/ 829	167300/ 836.5	168800/ 844
10	QPSK	1	1	22.46	22.46	22.62
Channel/Frequency(MHz)				165300/ 826.5	167300/ 836.5	169300/ 846.5
5	QPSK	1	1	22.54	22.46	22.68

NR Band n7 ANT0 Full power				Conducted power(dBm)		
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
		QPSK	1	1	22.88	22.83
	1		0	22.75	22.96	22.68
	1		215	22.83	22.87	22.69
	108		0	22.71	22.73	22.89
	108		54	22.92	23.19	23.18
	108		114	22.77	23.02	22.75
	216		0	22.83	22.95	22.96
	16QAM	108	54	22.73	22.70	22.78
	64QAM	108	54	20.90	20.91	20.95
	256QAM	108	54	19.02	19.22	19.03
Channel/Frequency(MHz)				503000/ 2515	507000/ 2535	511000/ 2555
Channel/Frequency(MHz)				501500/ 2507.5	507000/ 2535	512500/ 2562.5
15	QPSK	36	18	22.84	22.97	22.97
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	22.92	23.11	22.96
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	22.76	22.76	22.97



NR Band n38 ANT0 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	23.65	23.70	23.57
		1	53	23.50	23.80	23.71
		1	105	23.71	23.45	23.69
		50	0	23.64	23.61	23.41
		50	28	23.65	23.95	23.86
		50	56	23.59	23.74	23.53
		100	0	23.45	23.74	23.71
	16QAM	50	25	23.46	23.75	23.64
64QAM	50	25	21.72	21.66	21.72	
256QAM	50	25	19.90	19.92	20.25	

NR Band n41 ANT0 Full power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	23.64	23.62	23.44
		1	137	23.50	23.70	23.63
		1	271	23.53	23.53	23.66
		135	0	23.64	23.75	23.40
		135	69	23.78	23.90	23.84
		135	138	23.41	23.42	23.59
		270	0	23.74	23.68	23.65
	16QAM	135	67	23.75	23.57	23.68
	64QAM	135	67	21.66	21.63	21.57
	256QAM	135	67	20.11	19.86	19.97
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	23.76	23.75	23.57
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	23.56	23.72	23.72
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	23.63	23.60	23.53
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	23.55	23.74	23.56
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	23.74	23.62	23.66
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98
30	QPSK	36	18	23.71	23.73	23.85

Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	23.72	23.69	23.83

NR Band n66 ANT0 Full power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				344000/ 1720	349000/ 1745	354000/ 1770	
		QPSK	1	1	23.07	23.26	22.98
			1	53	23.17	23.04	22.94
			1	104	22.96	23.19	23.18
			50	0	23.02	23.06	23.18
			50	28	23.42	23.43	23.17
			50	56	22.94	23.13	23.04
			100	0	23.14	23.06	23.20
		16QAM	1	1	23.04	23.20	22.99
	64QAM	1	1	21.15	21.25	21.24	
	256QAM	1	1	19.27	19.69	19.31	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5	
15	QPSK	1	1	23.30	23.29	23.19	
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775	
10	QPSK	1	1	23.05	23.04	23.17	
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5	
5	QPSK	1	1	23.18	23.11	23.13	

Original power 3#ANT:

LTE Band66 3ANT :

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	23.72	23.72	23.73
		1	13	23.77	23.72	23.81
		1	24	23.53	23.63	23.60
		12	0	22.55	22.45	22.36
		12	6	22.45	22.36	22.45
		12	13	22.71	22.46	22.55
		25	0	22.36	22.36	22.49
	16QAM	1	0	22.52	22.31	22.36
		1	13	22.09	22.04	22.41
		1	24	22.32	22.30	22.04
		12	0	21.47	21.40	21.75
		12	6	21.39	21.87	21.36
		12	13	21.74	21.47	21.75
		25	0	21.47	21.84	21.74

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	23.52	23.76	23.60
		1	13	23.58	23.52	23.80
		1	24	23.57	23.72	23.57
		12	0	22.65	22.46	22.39
		12	6	22.70	22.62	22.65
		12	13	22.59	22.65	22.76
		25	0	22.40	22.35	22.65
	16QAM	1	0	22.30	22.42	22.09
		1	13	22.34	22.15	22.40
		1	24	22.28	22.04	22.20
		12	0	21.47	21.67	21.36

		12	6	21.67	21.53	21.75
		12	13	21.63	22.01	21.47
		25	0	22.01	21.63	21.75

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	23.72	23.63	23.76
		1	13	23.72	23.76	23.58
		1	24	23.54	23.76	23.57
		12	0	22.55	22.45	22.36
		12	6	22.55	22.55	22.55
		12	13	22.35	22.55	22.76
		25	0	22.39	22.68	22.53
	16QAM	1	0	22.17	22.42	22.04
		1	13	22.41	22.36	22.26
		1	24	22.20	22.41	22.31
		12	0	21.74	21.74	22.01
		12	6	21.83	21.29	21.67
		12	13	21.36	21.83	21.83
		25	0	21.92	21.87	21.67
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	23.65	23.65	23.72
		1	13	23.76	23.75	23.72
		1	24	23.79	23.76	23.53
		12	0	22.35	22.45	22.66
		12	6	22.36	22.62	22.50
		12	13	22.30	22.66	22.49
		25	0	22.45	22.58	22.49
	16QAM	1	0	22.23	22.37	22.37
		1	13	22.21	22.04	21.93
		1	24	22.29	22.20	22.04
		12	0	21.42	21.15	21.46
		12	6	21.74	21.71	21.63
		12	13	21.80	21.71	21.54
		25	0	21.66	21.39	21.66

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	23.51	23.76	23.51
		1	13	23.53	23.62	23.76
		1	24	23.59	23.73	23.75
		12	0	22.55	22.49	22.58
		12	6	22.58	22.62	22.58
		12	13	22.45	22.30	22.58
		25	0	22.39	22.35	22.45
	16QAM	1	0	22.30	22.06	22.06
		1	13	22.09	21.98	22.37
		1	24	22.20	22.17	22.19
		12	0	21.53	21.26	21.62
		12	6	21.26	21.26	21.80
		12	13	21.18	21.26	21.46
		25	0	21.56	21.62	21.32
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	23.74	23.52	23.60
		1	50	23.92	23.95	23.99
		1	99	23.76	23.60	23.52
		50	0	22.72	22.55	22.59
		50	25	22.68	22.39	22.68
		50	50	22.55	22.68	22.56
		100	0	22.35	22.68	22.70
	16QAM	1	0	22.34	22.49	22.09
		1	50	22.30	22.15	22.37
		1	99	22.36	22.29	22.15
		50	0	21.75	21.67	21.67
		50	25	21.82	21.87	21.84
		50	50	21.47	21.47	21.29
		100	0	21.83	21.53	21.87



NR Band n5 ANT3 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				166800/ 834	167300/ 836.5	167800/ 839
	QPSK	1	1	22.39	22.29	22.44
		1	53	22.28	22.37	22.43
		1	104	22.35	22.34	22.27
		50	0	22.37	22.52	22.33
		50	28	22.61	22.78	22.63
		50	56	22.42	22.60	22.29
		100	0	22.51	22.40	22.36
	16QAM	1	1	22.39	22.38	22.38
64QAM	1	1	20.51	20.49	20.46	
256QAM	1	1	19.03	18.84	18.76	
Channel/Frequency(MHz)				166300/ 831.5	167300/ 836.5	168300/ 841.5
15	QPSK	1	1	22.52	22.61	22.59
Channel/Frequency(MHz)				165800/ 829	167300/ 836.5	168800/ 844
10	QPSK	1	1	22.67	22.44	22.46
Channel/Frequency(MHz)				165300/ 826.5	167300/ 836.5	169300/ 846.5
5	QPSK	1	1	22.71	22.72	22.52

NR Band n7 ANT3 Full power				Conducted power(dBm)		
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
				503000/ 2515	507000/ 2535	511000/ 2555
20M	QPSK	1	1	22.80	22.84	22.90
		1	0	23.00	22.92	22.74
		1	215	22.69	22.79	22.86
		108	0	22.86	22.90	22.65
		108	54	22.92	23.19	22.92
		108	114	22.99	22.90	22.64
		216	0	22.82	22.93	22.98
	16QAM	108	54	23.03	23.02	22.69
	64QAM	108	54	20.91	21.02	20.99
	256QAM	108	54	19.39	19.29	19.35
Channel/Frequency(MHz)				503000/ 2515	507000/ 2535	511000/ 2555
Channel/Frequency(MHz)				501500/ 2507.5	507000/ 2535	512500/ 2562.5
15	QPSK	36	18	23.07	22.97	22.97
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	23.00	23.04	22.82
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	22.93	22.78	22.93

NR Band n38 ANT3 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	23.50	23.69	23.57
		1	53	23.56	23.77	23.54
		1	105	23.59	23.45	23.59
		50	0	23.75	23.77	23.69
		50	28	23.93	23.94	23.71
		50	56	23.77	23.61	23.53
		100	0	23.46	23.52	23.68
	16QAM	50	25	23.77	23.74	23.55
64QAM	50	25	21.69	21.73	21.73	
256QAM	50	25	20.07	20.20	19.86	

NR Band n41 ANT3 Full power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	23.70	23.47	23.36
		1	137	23.45	23.57	23.58
		1	271	23.59	23.65	23.70
		135	0	23.50	23.57	23.54
		135	69	23.83	23.90	23.60
		135	138	23.74	23.65	23.47
		270	0	23.41	23.70	23.67
	16QAM	135	67	23.64	23.59	23.46
	64QAM	135	67	21.65	21.65	21.70
	256QAM	135	67	20.09	19.96	19.92
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	23.81	23.58	23.74
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	23.59	23.64	23.67
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	23.76	23.82	23.77
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	23.71	23.48	23.58
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	23.54	23.63	23.52
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98
30	QPSK	36	18	23.86	23.73	23.88

Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	23.51	23.60	23.65

NR Band n66 ANT3 Full power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				344000/ 1720	349000/ 1745	354000/ 1770
	QPSK	1	1	23.02	23.24	22.94
		1	53	23.08	23.06	22.97
		1	104	22.94	23.17	23.11
		50	0	22.99	22.97	22.97
		50	28	23.30	23.41	23.13
		50	56	23.26	22.98	22.91
		100	0	23.06	23.10	22.94
	16QAM	1	1	22.93	23.11	23.10
64QAM	1	1	21.15	21.13	21.13	
256QAM	1	1	19.44	19.51	19.54	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5
15	QPSK	1	1	23.23	23.31	23.25
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775
10	QPSK	1	1	23.21	23.23	23.06
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5
5	QPSK	1	1	23.15	23.18	23.26

Original power 5#ANT:

LTE Band7 5ANT

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20775	21100	21425
5MHz	QPSK	1	0	23.37	23.48	23.44
		1	13	23.40	23.23	23.37
		1	24	23.24	23.42	23.40
		12	0	22.13	22.31	22.30
		12	6	22.32	22.30	22.21
		12	13	22.21	22.22	22.09
		25	0	22.24	22.09	22.10
	16QAM	1	0	21.92	22.12	21.78
		1	13	22.12	21.98	21.82
		1	24	21.99	21.86	21.79
		12	0	21.48	21.27	21.15
		12	6	21.01	21.34	21.37
		12	13	21.29	21.51	21.57
		25	0	21.16	21.29	21.16

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20800	21100	21400
10MHz	QPSK	1	0	23.33	23.31	23.32
		1	13	23.37	23.33	23.23
		1	24	23.22	23.44	23.29
		12	0	21.96	22.16	22.04
		12	6	22.14	22.20	22.11
		12	13	22.21	22.03	22.04
		25	0	21.98	22.20	22.22
	16QAM	1	0	21.67	21.66	21.93
		1	13	22.02	22.01	21.68
		1	24	21.68	21.71	21.66
		12	0	21.13	21.40	20.87

		12	6	21.40	21.08	20.98
		12	13	21.36	21.38	21.13
		25	0	21.33	20.94	21.08



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20825	21100	21375
15MHz	QPSK	1	0	23.31	23.41	23.31
		1	13	23.22	23.33	23.43
		1	24	23.36	23.28	23.39
		12	0	22.22	22.19	22.04
		12	6	22.21	22.12	22.04
		12	13	22.00	22.04	22.19
		25	0	21.99	22.16	22.04
	16QAM	1	0	21.93	21.71	21.75
		1	13	21.67	21.68	21.88
		1	24	21.88	22.02	22.03
		12	0	21.40	21.38	20.98
		12	6	20.94	21.34	21.40
		12	13	20.80	21.34	20.84
		25	0	21.38	20.97	21.06
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20850	21100	21350
20MHz	QPSK	1	0	23.37	23.37	23.30
		1	50	23.59	23.63	23.62
		1	99	23.38	23.37	23.34
		50	0	22.34	22.23	22.22
		50	25	22.23	22.23	22.10
		50	50	22.37	22.22	22.23
		100	0	22.34	22.06	22.30
	16QAM	1	0	21.86	21.86	21.79
		1	50	21.78	22.12	21.79
		1	99	21.77	22.13	21.82
		50	0	21.54	21.16	21.55
		50	25	21.54	21.37	21.18
		50	50	21.61	21.61	21.19
		100	0	21.47	21.60	21.09

LTE Band66 5ANT

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	23.80	23.61	23.65
		1	13	23.77	23.77	23.61
		1	24	23.76	23.65	23.71
		12	0	22.66	22.50	22.50
		12	6	22.54	22.49	22.49
		12	13	22.65	22.50	22.64
		25	0	22.57	22.65	22.65
	16QAM	1	0	22.19	22.45	22.36
		1	13	22.35	22.26	22.18
		1	24	22.18	22.40	22.45
		12	0	21.53	21.85	21.84
		12	6	21.83	21.78	21.91
		12	13	21.67	21.78	21.89
		25	0	21.81	21.91	21.89

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	23.61	23.71	23.71
		1	13	23.77	23.80	23.80
		1	24	23.81	23.80	23.84
		12	0	22.62	22.50	22.64
		12	6	22.68	22.52	22.46
		12	13	22.52	22.65	22.51
		25	0	22.46	22.66	22.64
	16QAM	1	0	22.26	22.26	22.39
		1	13	22.44	22.45	22.42
		1	24	22.44	22.45	22.26
		12	0	21.51	21.69	21.84
		12	6	21.83	21.91	21.67

		12	13	21.75	21.90	21.95
		25	0	21.78	21.49	21.51

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	23.80	23.61	23.61
		1	13	23.77	23.71	23.66
		1	24	23.65	23.65	23.65
		12	0	22.66	22.59	22.50
		12	6	22.60	22.65	22.46
		12	13	22.60	22.65	22.65
		25	0	22.50	22.64	22.49
	16QAM	1	0	22.45	22.44	22.45
		1	13	22.18	22.42	22.38
		1	24	22.18	22.44	22.27
		12	0	21.84	21.89	21.53
		12	6	21.78	21.54	21.81
		12	13	21.81	21.92	21.92
		25	0	21.59	21.59	21.83
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	23.58	23.79	23.79
		1	13	23.79	23.62	23.60
		1	24	23.79	23.58	23.64
		12	0	22.56	22.40	22.40
		12	6	22.41	22.60	22.39
		12	13	22.47	22.58	22.54
		25	0	22.51	22.41	22.40
	16QAM	1	0	22.15	22.34	22.07
		1	13	22.34	22.31	22.05
		1	24	22.31	22.07	22.31
		12	0	21.70	21.74	21.64
		12	6	21.70	21.30	21.64
		12	13	21.62	21.38	21.38
		25	0	21.73	21.28	21.32

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	23.76	23.58	23.64
		1	13	23.73	23.62	23.60
		1	24	23.58	23.79	23.62
		12	0	22.49	22.59	22.40
		12	6	22.45	22.44	22.44
		12	13	22.55	22.40	22.60
		25	0	22.51	22.50	22.49
	16QAM	1	0	22.04	22.16	22.33
		1	13	22.28	22.24	22.04
		1	24	22.34	22.31	22.25
		12	0	21.70	21.48	21.71
		12	6	21.30	21.62	21.62
		12	13	21.60	21.62	21.28
		25	0	21.73	21.69	21.68
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	23.77	23.71	23.73
		1	50	24.02	23.97	24.02
		1	99	23.76	23.65	23.84
		50	0	22.49	22.51	22.55
		50	25	22.60	22.54	22.57
		50	50	22.55	22.69	22.66
		100	0	22.50	22.72	22.65
	16QAM	1	0	22.19	22.44	22.27
		1	50	22.26	22.18	22.44
		1	99	22.46	22.42	22.46
		50	0	21.78	21.84	21.67
		50	25	21.90	21.54	21.54
		50	50	21.90	21.81	21.92
		100	0	21.89	21.81	21.69

State 1 : ANT1#:

Band: DCS1900	Burst Average Power (dBm)			Frame Average Power (dBm)		
	513	661	810	513	661	810
GSM (CS)	25.64	25.61	25.59	16.65	16.62	16.61
GPRS/EDGE (GMSK, 1 Tx slot)	25.58	25.55	25.54	16.58	16.54	16.54
GPRS/EDGE (GMSK, 2 Tx slots)	22.51	22.11	22.28	16.51	16.10	16.28
GPRS/EDGE (GMSK, 3 Tx slots)	20.82	20.77	20.50	16.58	16.50	16.25
GPRS/EDGE (GMSK, 4 Tx slots)	19.58	19.55	19.28	16.60	16.55	16.26
EDGE (8PSK, 1 Tx slot)	20.30	20.07	20.14	11.29	11.11	11.11
EDGE (8PSK, 2 Tx slots)	19.15	19.11	19.07	13.13	13.12	13.11
EDGE (8PSK, 3 Tx slots)	17.44	17.44	17.41	13.18	13.19	13.14
EDGE (8PSK, 4 Tx slots)	16.70	16.49	16.57	13.70	13.51	13.56

Remark:

1) The conducted power of GSM1900 is measured with RMS detector.

2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.

Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.

UMTS Band V		Conducted Power (dBm)		
		4133	4175	4232
WCDMA	12.2kbps RMC	23.21	23.24	23.10
	64kbps RMC	23.15	23.17	23.06
	144kbps RMC	23.17	23.07	23.10
	384kbps RMC	23.20	23.21	23.13
HSDPA	Subtest 1	22.15	22.23	22.10
	Subtest 2	21.40	21.25	21.31
	Subtest 3	21.34	21.37	21.24
	Subtest 4	21.36	21.12	21.22
HSUPA	Subtest 1	22.02	21.99	21.88
	Subtest 2	19.05	19.12	18.97
	Subtest 3	18.97	18.99	18.91
	Subtest 4	19.05	19.08	18.90
	Subtest 5	17.46	17.44	17.33

Remark:

- 1 ) The conducted power of UMTS Band V is measured with RMS detector
- 2 ) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

UMTS Band II		Conducted Power (dBm)		
		9262	9400	9538
WCDMA	12.2kbps RMC	19.16	19.21	19.24
	64kbps RMC	18.97	19.12	19.18
	144kbps RMC	18.96	19.07	19.21
	384kbps RMC	18.92	19.11	19.14
HSDPA	Subtest 1	18.67	18.75	18.76
	Subtest 2	17.44	16.16	17.49
	Subtest 3	17.32	17.44	17.47
	Subtest 4	17.16	16.84	17.41
HSUPA	Subtest 1	18.51	18.07	18.10
	Subtest 2	16.01	16.08	16.09
	Subtest 3	16.95	17.08	17.13
	Subtest 4	16.05	16.09	16.13
	Subtest 5	18.49	18.56	18.58

Remark:

- 1) The conducted power of UMTS Band II is measured with RMS detector
- 2) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.



UMTS Band IV		Conducted Power (dBm)		
		1312	1412	1513
WCDMA	12.2kbps RMC	18.19	18.44	18.36
	64kbps RMC	18.12	18.37	18.30
	144kbps RMC	18.15	18.29	18.36
	384kbps RMC	18.19	18.41	18.37
HSDPA	Subtest 1	18.32	18.22	18.32
	Subtest 2	17.57	15.60	17.55
	Subtest 3	17.47	16.17	17.48
	Subtest 4	17.50	16.98	17.43
HSUPA	Subtest 1	17.41	17.39	17.25
	Subtest 2	15.43	15.49	15.38
	Subtest 3	16.30	16.40	16.27
	Subtest 4	15.39	15.40	15.36
	Subtest 5	18.30	18.40	18.29

Remark:

- 1 ) The conducted power of UMTS Band V is measured with RMS detector
- 2 ) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

LTE B2:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18607	18900	19193
1.4MHz	QPSK	1	0	18.36	18.38	18.34
		1	13	18.36	18.34	18.38
		1	24	18.29	18.32	18.37
		12	0	17.26	17.07	17.38
		12	6	17.17	17.17	17.31
		12	13	17.21	17.11	17.17
		25	0	17.35	17.32	17.29
	16QAM	1	0	17.18	16.74	17.12
		1	13	16.95	16.83	16.69
		1	24	16.97	17.14	17.19
		12	0	16.14	16.11	16.46
		12	6	16.48	16.15	16.40
		12	13	16.50	16.36	16.53
		25	0	16.31	16.00	16.72

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18615	18900	19185
3MHz	QPSK	1	0	18.38	18.31	18.35
		1	13	18.45	18.38	18.48
		1	24	18.38	18.31	18.43
		12	0	17.24	17.28	17.33
		12	6	17.09	17.19	17.24
		12	13	17.33	17.34	17.10
		25	0	17.18	17.38	17.00
	16QAM	1	0	17.18	17.08	17.01
		1	13	16.85	16.83	16.92
		1	24	16.86	16.70	16.91
		12	0	16.47	16.56	16.13
		12	6	16.14	16.49	16.05
		12	13	16.05	16.16	16.30
		25	0	16.62	16.01	16.35

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18625	18900	19175
5MHz	QPSK	1	0	18.40	18.23	18.33
		1	13	18.53	18.44	18.40
		1	24	18.42	18.40	18.24
		12	0	17.07	17.37	17.03
		12	6	17.16	17.14	17.35
		12	13	17.16	17.23	17.24
		25	0	17.22	17.35	17.11
	16QAM	1	0	17.11	16.85	17.22
		1	13	16.72	16.95	17.13
		1	24	16.87	17.12	16.73
		12	0	16.69	16.21	16.43
		12	6	16.10	16.51	16.51
		12	13	16.67	15.94	16.24
		25	0	16.50	16.04	16.57

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18650	18900	19150
10MHz	QPSK	1	0	18.41	18.26	18.36
		1	13	18.43	18.29	18.36
		1	24	18.22	18.31	18.39
		12	0	17.08	17.27	17.05
		12	6	16.96	16.89	17.08
		12	13	17.07	16.94	16.98
		25	0	17.05	17.14	17.22
	16QAM	1	0	16.59	16.65	17.04
		1	13	16.68	16.95	16.52
		1	24	16.92	16.69	17.03
		12	0	16.41	16.00	15.89
		12	6	16.34	15.81	16.20
		12	13	16.33	15.92	16.41
		25	0	15.79	15.93	16.20

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18675	18900	19125
15MHz	QPSK	1	0	18.13	18.24	18.49
		1	13	18.35	18.44	18.47
		1	24	18.32	18.38	18.19
		12	0	17.17	17.10	17.12
		12	6	17.09	17.26	16.97
		12	13	17.17	17.23	17.30
		25	0	17.25	17.12	17.03
	16QAM	1	0	17.14	16.93	16.92
		1	13	16.99	16.95	16.84
		1	24	16.99	16.85	16.72
		12	0	16.50	16.37	16.29
		12	6	15.85	16.35	16.06
		12	13	16.23	16.20	16.40
		25	0	16.05	16.42	16.33

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18700	18900	19100
20MHz	QPSK	1	0	18.34	18.24	18.36
		1	50	18.79	18.75	18.73
		1	99	18.30	18.24	18.19
		50	0	17.17	17.23	17.25
		50	25	17.20	17.15	17.29
		50	50	17.31	17.36	17.22
		100	0	17.16	17.06	17.38
	16QAM	1	0	16.72	16.67	16.91
		1	50	17.14	16.72	16.97
		1	99	17.24	16.75	17.23
		50	0	16.52	16.66	16.12
		50	25	16.50	16.09	16.53
		50	50	16.69	16.17	16.08
		100	0	16.71	16.29	16.43

LTE B4:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19957	20175	20393
1.4MHz	QPSK	1	0	18.72	18.93	18.81
		1	13	18.95	19.07	18.88
		1	24	19.03	18.93	18.73
		12	0	17.74	17.78	17.95
		12	6	17.91	17.79	17.70
		12	13	17.96	17.68	17.65
		25	0	17.91	17.58	18.03
	16QAM	1	0	17.37	17.57	17.62
		1	13	17.33	17.39	17.20
		1	24	17.54	17.50	17.71
		12	0	16.82	16.83	17.02
		12	6	17.19	17.00	16.82
		12	13	17.11	16.84	16.83
		25	0	17.02	16.89	17.11

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19965	20175	20385
3MHz	QPSK	1	0	19.02	18.98	18.91
		1	13	19.13	19.13	19.08
		1	24	18.85	18.74	18.76
		12	0	17.63	17.68	17.69
		12	6	17.92	17.97	17.82
		12	13	17.75	17.90	17.73
		25	0	17.74	17.77	17.91
	16QAM	1	0	17.63	17.41	17.36
		1	13	17.63	17.30	17.27
		1	24	17.71	17.39	17.51
		12	0	16.88	16.86	16.89
		12	6	16.69	16.84	16.87
		12	13	17.13	16.74	16.79
		25	0	17.04	16.71	16.68

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19975	20175	20375
5MHz	QPSK	1	0	18.99	18.89	19.06
		1	13	18.81	19.08	19.08
		1	24	19.03	18.73	18.70
		12	0	17.80	17.69	17.88
		12	6	17.99	17.65	17.58
		12	13	17.91	17.84	17.73
		25	0	17.73	17.67	17.62
	16QAM	1	0	17.41	17.46	17.74
		1	13	17.60	17.37	17.55
		1	24	17.37	17.64	17.43
		12	0	17.13	17.22	16.82
		12	6	17.14	16.75	17.03
		12	13	16.80	16.64	16.78
		25	0	16.68	17.20	17.14

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20000	20175	20350
10MHz	QPSK	1	0	19.06	18.67	18.89
		1	13	18.86	18.87	19.05
		1	24	18.80	18.89	18.84
		12	0	17.60	17.71	17.61
		12	6	17.59	17.62	17.74
		12	13	17.52	17.61	17.60
		25	0	17.64	17.86	17.76
	16QAM	1	0	17.38	17.40	17.37
		1	13	17.51	17.21	17.59
		1	24	17.09	17.50	17.09
		12	0	16.62	17.04	16.53
		12	6	16.93	16.59	16.88
		12	13	16.62	16.75	16.74
		25	0	16.56	16.62	16.67

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20025	20175	20325
15MHz	QPSK	1	0	18.82	18.83	18.79
		1	13	18.92	19.03	18.95
		1	24	18.92	19.00	18.71
		12	0	17.74	17.66	17.87
		12	6	17.80	17.53	17.53
		12	13	17.70	17.60	17.65
		25	0	17.73	17.57	17.73
	16QAM	1	0	17.46	17.54	17.18
		1	13	17.63	17.55	17.17
		1	24	17.35	17.52	17.33
		12	0	16.79	16.44	16.58
		12	6	16.68	16.89	16.56
		12	13	16.54	17.05	16.56
		25	0	16.59	16.63	16.54

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20050	20175	20300
20MHz	QPSK	1	0	18.93	18.73	18.71
		1	50	19.27	19.26	19.23
		1	99	18.98	19.01	18.74
		50	0	17.69	17.96	17.90
		50	25	17.69	17.68	17.76
		50	50	17.69	17.67	17.69
		100	0	17.93	17.90	17.64
	16QAM	1	0	17.41	17.62	17.50
		1	50	17.44	17.34	17.43
		1	99	17.39	17.44	17.55
		50	0	16.92	16.99	16.71
		50	25	17.09	17.10	16.91
		50	50	17.10	17.07	17.07
		100	0	16.61	16.72	16.69

LTE B5:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20407	20525	20643
1.4MHz	QPSK	1	0	22.92	22.83	22.96
		1	13	23.09	22.93	22.89
		1	24	23.00	22.94	22.82
		12	0	21.84	21.69	21.93
		12	6	21.84	21.63	21.86
		12	13	21.97	21.92	21.76
		25	0	21.85	21.81	21.86
	16QAM	1	0	21.42	21.77	21.39
		1	13	21.36	21.48	21.40
		1	24	21.67	21.42	21.50
		12	0	20.60	20.91	21.11
		12	6	20.73	20.78	21.11
		12	13	21.06	20.77	20.90
		25	0	20.83	20.95	20.70

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20415	20525	20635
3MHz	QPSK	1	0	23.02	23.00	22.87
		1	13	23.13	23.09	22.88
		1	24	23.06	23.02	22.96
		12	0	22.02	21.71	21.79
		12	6	22.05	21.85	21.88
		12	13	21.67	21.68	21.76
		25	0	21.88	21.79	21.97
	16QAM	1	0	21.41	21.45	21.63
		1	13	21.40	21.47	21.32
		1	24	21.60	21.59	21.62
		12	0	20.76	21.30	20.82
		12	6	21.02	20.76	20.76
		12	13	20.80	20.97	20.65
		25	0	20.78	20.73	20.69



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20425	20525	20625
5MHz	QPSK	1	0	23.04	23.02	23.15
		1	13	23.30	23.28	23.25
		1	24	22.90	22.77	22.87
		12	0	21.81	21.86	21.95
		12	6	21.60	21.76	21.71
		12	13	21.89	21.81	21.63
		25	0	21.61	21.68	22.00
	16QAM	1	0	21.73	21.39	21.30
		1	13	21.41	21.62	21.33
		1	24	21.25	21.42	21.55
		12	0	20.84	20.71	21.13
		12	6	21.05	20.63	20.81
		12	13	20.70	20.73	21.08
		25	0	21.27	20.82	20.77

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20450	20525	20600
10MHz	QPSK	1	0	23.03	22.96	22.78
		1	13	22.86	22.90	23.09
		1	24	22.77	22.96	23.05
		12	0	21.54	21.66	21.50
		12	6	21.82	21.70	21.79
		12	13	21.69	21.64	21.49
		25	0	21.86	21.66	21.77
	16QAM	1	0	21.13	21.26	21.34
		1	13	21.56	21.38	21.32
		1	24	21.44	21.59	21.25
		12	0	21.05	20.54	20.55
		12	6	20.57	20.90	20.51
		12	13	21.15	20.59	20.60
		25	0	20.75	20.70	20.64

LTE B7:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20775	21100	21425
5MHz	QPSK	1	0	18.70	18.73	18.83
		1	13	18.74	18.97	18.69
		1	24	18.75	18.81	18.61
		12	0	17.62	17.74	17.64
		12	6	17.49	17.44	17.64
		12	13	17.76	17.54	17.74
		25	0	17.74	17.75	17.69
	16QAM	1	0	17.08	17.30	17.17
		1	13	17.57	17.14	17.58
		1	24	17.28	17.42	17.39
		12	0	16.80	17.12	16.58
		12	6	17.17	16.38	16.72
		12	13	16.99	17.08	16.33
		25	0	16.94	16.73	16.96

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20800	21100	21400
10MHz	QPSK	1	0	18.84	18.66	18.55
		1	13	18.86	18.85	18.97
		1	24	18.61	18.57	18.69
		12	0	17.41	17.32	17.49
		12	6	17.43	17.49	17.75
		12	13	17.43	17.53	17.39
		25	0	17.50	17.44	17.64
	16QAM	1	0	17.28	17.30	17.35
		1	13	17.32	16.86	17.18
		1	24	17.03	16.93	17.27
		12	0	16.64	16.65	16.38
		12	6	16.53	16.45	16.41
		12	13	16.78	16.86	16.62
		25	0	16.40	16.13	16.44

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20825	21100	21375
15MHz	QPSK	1	0	18.54	18.74	18.74
		1	13	18.79	18.96	18.69
		1	24	18.83	18.75	18.63
		12	0	17.53	17.49	17.38
		12	6	17.52	17.55	17.44
		12	13	17.32	17.41	17.73
		25	0	17.70	17.51	17.42
	16QAM	1	0	17.24	17.16	16.99
		1	13	17.22	17.28	17.23
		1	24	17.18	17.03	17.27
		12	0	16.43	16.47	16.42
		12	6	16.72	16.73	16.77
		12	13	16.44	16.30	16.50
		25	0	16.99	16.58	16.91

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20850	21100	21350
20MHz	QPSK	1	0	18.78	18.74	18.93
		1	50	19.07	19.06	19.09
		1	99	18.75	18.68	18.69
		50	0	17.53	17.59	17.52
		50	25	17.46	17.82	17.50
		50	50	17.34	17.66	17.53
		100	0	17.79	17.68	17.76
	16QAM	1	0	17.14	17.24	17.45
		1	50	17.26	17.25	17.22
		1	99	17.30	17.34	17.03
		50	0	16.43	16.85	16.90
		50	25	16.59	16.48	16.71
		50	50	16.69	16.87	16.96
		100	0	16.65	16.68	16.92

LTE B38:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37775	38000	38225
5MHz	QPSK	1	0	20.29	20.37	20.32
		1	13	20.28	20.39	20.16
		1	24	20.23	20.38	20.13
		12	0	19.18	19.32	19.33
		12	6	19.32	19.10	19.24
		12	13	19.09	19.21	19.13
		25	0	19.07	19.32	19.21
	16QAM	1	0	19.04	19.02	18.69
		1	13	19.04	18.86	18.84
		1	24	18.80	18.81	19.01
		12	0	18.03	18.45	18.45
		12	6	18.21	18.01	18.43
		12	13	18.17	18.25	18.50
		25	0	18.22	18.50	18.22

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37800	38000	38200
10MHz	QPSK	1	0	20.34	20.39	20.33
		1	13	20.28	20.17	20.42
		1	24	20.32	20.38	20.32
		12	0	19.09	18.99	19.12
		12	6	19.09	19.05	18.85
		12	13	19.08	19.09	19.02
		25	0	19.09	19.11	19.07
	16QAM	1	0	18.60	18.72	18.59
		1	13	19.00	18.69	18.73
		1	24	18.88	18.87	19.00
		12	0	18.04	17.97	17.79
		12	6	17.87	18.01	17.96

		12	13	18.02	18.22	18.02
		25	0	17.78	18.05	18.02

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37825	38000	38175
15MHz	QPSK	1	0	20.27	20.36	20.29
		1	13	20.26	20.44	20.33
		1	24	20.42	20.25	20.37
		12	0	19.11	19.25	18.98
		12	6	19.13	18.97	18.87
		12	13	19.07	19.20	18.98
		25	0	19.10	18.99	18.96
	16QAM	1	0	18.69	18.77	18.92
		1	13	18.69	18.70	18.70
		1	24	18.71	18.74	18.49
		12	0	18.29	17.97	18.16
		12	6	17.73	18.19	17.96
		12	13	17.99	18.01	18.23
		25	0	18.22	18.29	17.92
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37850	38000	38150
20MHz	QPSK	1	0	20.36	20.30	20.27
		1	50	20.56	20.58	20.55
		1	99	20.40	20.29	20.18
		50	0	19.21	19.20	19.31
		50	25	19.22	19.30	19.32
		50	50	19.02	19.33	19.00
		100	0	19.18	19.32	19.30
	16QAM	1	0	19.09	18.82	18.80
		1	50	19.06	18.98	18.83
		1	99	18.69	18.88	18.71
		50	0	18.58	18.17	18.26
		50	25	18.23	18.21	18.16
		50	50	18.58	18.08	18.40
		100	0	18.09	18.22	18.17

LTE B41:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40065	40640	41215
5MHz	QPSK	1	0	20.49	20.37	20.39
		1	13	20.46	20.49	20.36
		1	24	20.31	20.46	20.38
		12	0	19.38	19.25	19.30
		12	6	19.39	19.48	19.29
		12	13	19.36	19.29	19.28
		25	0	19.52	19.39	19.28
	16QAM	1	0	19.23	18.95	18.92
		1	13	19.22	18.94	19.23
		1	24	19.27	19.14	19.11
		12	0	18.07	18.73	18.45
		12	6	18.68	18.22	18.73
		12	13	18.32	18.40	18.34
		25	0	18.49	18.47	18.74

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40090	40640	41190
10MHz	QPSK	1	0	20.26	20.55	20.40
		1	13	20.30	20.50	20.55
		1	24	20.43	20.28	20.31
		12	0	19.27	19.20	19.30
		12	6	19.33	19.26	19.23
		12	13	19.23	19.17	19.21
		25	0	19.19	19.12	19.22
	16QAM	1	0	18.93	19.10	18.90
		1	13	18.65	18.81	18.76
		1	24	18.88	18.89	18.74
		12	0	18.27	18.14	18.28
		12	6	17.88	18.49	18.63

		12	13	18.36	18.15	18.22
		25	0	18.32	18.13	18.24



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40115	40640	41165
15MHz	QPSK	1	0	20.49	20.46	20.44
		1	13	20.42	20.46	20.39
		1	24	20.43	20.48	20.55
		12	0	19.28	19.26	19.35
		12	6	19.10	19.18	19.26
		12	13	19.18	19.25	19.16
		25	0	19.26	19.14	19.36
	16QAM	1	0	18.91	18.96	18.77
		1	13	19.05	19.13	18.78
		1	24	19.12	18.84	18.79
		12	0	18.19	17.99	17.99
		12	6	18.17	18.06	18.13
		12	13	18.27	18.41	18.25
		25	0	18.58	18.07	18.21
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40140	40640	41140
20MHz	QPSK	1	0	20.41	20.47	20.50
		1	50	20.68	20.72	20.66
		1	99	20.37	20.43	20.50
		50	0	19.39	19.36	19.22
		50	25	19.27	19.28	19.39
		50	50	19.22	19.41	19.23
		100	0	19.23	19.51	19.23
	16QAM	1	0	19.17	18.95	18.95
		1	50	19.08	19.07	19.04
		1	99	19.26	19.26	18.93
		50	0	18.38	18.47	18.50
		50	25	18.62	18.43	18.48
		50	50	18.32	18.83	18.45
		100	0	18.41	18.49	18.80

LTE B66:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	18.66	18.77	18.55
		1	13	18.85	18.62	18.70
		1	24	18.52	18.76	18.65
		12	0	17.67	17.36	17.42
		12	6	17.54	17.59	17.53
		12	13	17.39	17.66	17.54
		25	0	17.39	17.55	17.51
	16QAM	1	0	17.24	17.37	17.08
		1	13	17.19	17.05	16.99
		1	24	17.08	17.01	16.98
		12	0	16.76	16.62	16.45
		12	6	16.69	16.89	16.44
		12	13	16.25	16.61	16.55
		25	0	16.84	16.77	16.78

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	18.63	18.66	18.67
		1	13	18.73	18.70	18.72
		1	24	18.54	18.65	18.52
		12	0	17.42	17.38	17.47
		12	6	17.34	17.45	17.73
		12	13	17.39	17.37	17.64
		25	0	17.56	17.63	17.48
	16QAM	1	0	17.19	17.34	17.47
		1	13	17.15	17.05	17.37
		1	24	16.98	17.29	16.99
		12	0	16.81	16.31	16.45
		12	6	16.71	16.32	16.90
		12	13	16.76	16.51	16.45
		25	0	16.52	16.84	16.35

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	18.61	18.83	18.59
		1	13	18.63	18.66	18.63
		1	24	18.68	18.70	18.63
		12	0	17.39	17.58	17.40
		12	6	17.72	17.57	17.45
		12	13	17.51	17.54	17.55
		25	0	17.41	17.53	17.42
	16QAM	1	0	17.30	17.12	17.02
		1	13	17.12	17.29	17.23
		1	24	17.24	17.12	17.21
		12	0	16.81	16.31	16.49
		12	6	16.64	16.90	16.81
		12	13	16.73	16.54	16.77
		25	0	16.75	16.88	16.94

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	18.57	18.63	18.73
		1	13	18.81	18.83	18.79
		1	24	18.63	18.48	18.61
		12	0	17.32	17.44	17.44
		12	6	17.34	17.25	17.41
		12	13	17.47	17.45	17.47
		25	0	17.36	17.56	17.46
	16QAM	1	0	17.01	17.18	17.23
		1	13	17.24	16.96	17.04
		1	24	17.08	17.30	17.00
		12	0	16.28	16.33	16.24
		12	6	16.08	16.72	16.48
		12	13	16.20	16.50	16.23
		25	0	16.69	16.61	16.49

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	18.70	18.77	18.69
		1	13	18.81	18.76	18.73
		1	24	18.52	18.80	18.64
		12	0	17.50	17.44	17.32
		12	6	17.39	17.21	17.46
		12	13	17.54	17.56	17.47
		25	0	17.36	17.52	17.56
	16QAM	1	0	17.19	17.23	17.13
		1	13	17.04	17.05	17.21
		1	24	17.11	16.94	17.30
		12	0	16.16	16.56	16.65
		12	6	16.31	16.47	16.23
		12	13	16.13	16.43	16.13
		25	0	16.11	16.13	16.33

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	18.57	18.68	18.78
		1	50	18.95	18.93	18.91
		1	99	18.62	18.70	18.73
		50	0	17.75	17.56	17.50
		50	25	17.40	17.61	17.60
		50	50	17.44	17.59	17.54
		100	0	17.64	17.43	17.55
	16QAM	1	0	17.40	17.30	17.36
		1	50	17.24	17.15	17.17
		1	99	17.19	17.12	17.42
		50	0	16.32	16.71	16.65
		50	25	16.67	16.52	16.47
		50	50	16.50	16.78	16.57
		100	0	16.51	16.41	16.46

NR

NR Band n5 ANT1 power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				166800/ 834	167300/ 836.5	167800/ 839	
		QPSK	1	1	22.01	21.89	21.82
			1	53	21.87	21.81	21.86
			1	104	22.01	22.11	21.99
			50	0	21.90	21.94	21.82
			50	28	22.07	22.29	22.00
			50	56	21.95	21.90	21.85
			100	0	22.09	21.96	22.03
		16QAM	1	1	21.88	22.14	21.90
	64QAM	1	1	20.05	20.05	20.05	
	256QAM	1	1	18.39	18.46	18.16	
Channel/Frequency(MHz)				166300/ 831.5	167300/ 836.5	168300/ 841.5	
15	QPSK	1	1	22.02	22.14	22.15	
Channel/Frequency(MHz)				165800/ 829	167300/ 836.5	168800/ 844	
10	QPSK	1	1	22.18	22.05	22.02	
Channel/Frequency(MHz)				165300/ 826.5	167300/ 836.5	169300/ 846.5	
5	QPSK	1	1	22.24	22.10	22.12	

ENDC

NR Band n7 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
	QPSK	1	1	14.81	14.84	14.96
		1	0	14.73	14.73	14.84
		1	215	14.73	14.84	14.97
		108	0	14.82	14.96	14.69
		108	54	15.02	15.21	14.95
		108	114	14.73	14.82	15.00
		216	0	15.06	14.94	14.94
	16QAM	108	54	14.90	14.88	14.69
64QAM	108	54	12.97	12.91	12.95	
256QAM	108	54	11.16	11.45	11.42	
Channel/Frequency(MHz)				503000/ 2515	507000/ 2535	511000/ 2555
15	QPSK	36	18	15.14	15.01	15.07
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	14.95	14.97	15.01
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	15.03	14.93	15.13

ENDC

NR Band n38 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
20M	QPSK	1	1	13.75	13.59	13.67
		1	53	13.62	13.67	13.50
		1	105	13.53	13.61	13.50
		50	0	13.57	13.77	13.61
		50	28	13.75	13.95	13.65
		50	56	13.58	13.64	13.41
		100	0	13.51	13.67	13.48
	16QAM	50	25	13.74	13.66	13.55
	64QAM	50	25	11.67	11.70	11.76
	256QAM	50	25	10.20	10.17	9.85

## NR

NR Band n38 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	20.03	20.29	20.14
		1	53	20.27	20.29	20.11
		1	105	20.32	20.14	20.08
		50	0	20.13	20.21	20.17
		50	28	20.29	20.47	20.36
		50	56	20.29	20.21	20.03
		100	0	20.01	20.19	20.01
	16QAM	50	25	20.11	20.02	20.08
64QAM	50	25	18.21	18.28	18.29	
256QAM	50	25	16.46	16.44	16.60	



ENDC

NR Band n41 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 100M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	13.53	13.62	13.66
		1	137	13.73	13.73	13.51
		1	271	13.76	13.46	13.54
		135	0	13.70	13.64	13.61
		135	69	13.79	13.91	13.68
		135	138	13.41	13.65	13.47
		270	0	13.41	13.59	13.51
	16QAM	135	67	13.58	13.62	13.71
	64QAM	135	67	11.62	11.64	11.60
	256QAM	135	67	10.08	9.92	9.99
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	13.66	13.59	13.60
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	13.70	13.77	13.67
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	13.54	13.67	13.56
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	13.54	13.51	13.68
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	13.79	13.79	13.67
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98

30	QPSK	36	18	13.73	13.83	13.76
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	13.59	13.75	13.56

NR

NR Band n41 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	20.52	20.49	20.42
		1	137	20.41	20.54	20.50
		1	271	20.48	20.71	20.53
		135	0	20.50	20.61	20.50
		135	69	20.90	20.91	20.90
		135	138	20.67	20.63	20.69
		270	0	20.75	20.44	20.50
	16QAM	135	67	20.65	20.55	20.57
	64QAM	135	67	18.63	18.63	18.59
	256QAM	135	67	16.79	16.77	17.17
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	20.68	20.66	20.68
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	20.75	20.65	20.54
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	20.55	20.53	20.48
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	20.83	20.77	20.86
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	20.61	20.65	20.62
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98

30	QPSK	36	18	20.85	20.67	20.74
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	20.74	20.74	20.60

NR

NR Band n66 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				344000/ 1720	349000/ 1745	354000/ 1770
	QPSK	1	1	15.97	16.20	16.00
		1	53	16.03	15.99	16.01
		1	104	16.11	15.96	15.93
		50	0	15.97	16.03	15.94
		50	28	16.18	16.45	16.44
		50	56	16.30	16.16	15.99
		100	0	16.23	16.19	16.04
	16QAM	1	1	16.19	16.08	16.08
64QAM	1	1	14.17	14.30	14.16	
256QAM	1	1	12.48	12.46	12.59	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5
15	QPSK	1	1	16.19	16.13	16.28
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775
10	QPSK	1	1	16.16	16.18	16.38
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5
5	QPSK	1	1	16.20	16.16	16.13

ENDC

NR Band n66 ANT1 power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				344000/ 1720	349000/ 1745	354000/ 1770	
	QPSK	1	1	1	12.13	12.25	11.88
		1	53	1	12.21	12.17	11.89
		1	104	1	11.98	12.15	12.14
		50	0	1	12.04	12.19	12.01
		50	28	1	12.14	12.43	12.15
		50	56	1	12.25	12.14	12.16
		100	0	1	11.99	12.26	12.13
	16QAM	1	1	1	12.06	12.16	12.03
64QAM	1	1	1	10.21	10.17	10.15	
256QAM	1	1	1	8.24	8.25	8.27	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5	
15	QPSK	1	1	12.02	12.09	12.15	
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775	
10	QPSK	1	1	12.21	12.15	12.17	
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5	
5	QPSK	1	1	12.05	12.15	12.20	

## State 2/4 : 1#ANT:

Band: DCS1900	Burst Average Power (dBm)			Frame Average Power (dBm)		
	513	661	810	513	661	810
GSM (CS)	27.18	27.08	27.08	18.14	18.09	18.10
GPRS/EDGE (GMSK, 1 Tx slot)	27.07	27.04	27.01	18.09	18.05	18.03
GPRS/EDGE (GMSK, 2 Tx slots)	24.00	23.62	23.77	18.00	17.62	17.78
GPRS/EDGE (GMSK, 3 Tx slots)	22.32	22.29	22.00	18.04	18.01	17.70
GPRS/EDGE (GMSK, 4 Tx slots)	21.12	21.04	20.78	18.11	18.03	17.77
EDGE (8PSK, 1 Tx slot)	21.78	21.58	21.65	12.80	12.58	12.64
EDGE (8PSK, 2 Tx slots)	20.67	20.62	20.61	14.67	14.60	14.58
EDGE (8PSK, 3 Tx slots)	18.95	18.93	18.88	14.66	14.67	14.65
EDGE (8PSK, 4 Tx slots)	18.17	18.02	18.10	15.20	15.00	15.06

## Remark:

1) The conducted power of GSM1900 is measured with RMS detector.

2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.

Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.

UMTS Band II		Conducted Power (dBm)		
		9262	9400	9538
WCDMA	12.2kbps RMC	20.69	20.69	20.71
	64kbps RMC	20.44	20.60	20.67
	144kbps RMC	20.45	20.57	20.70
	384kbps RMC	20.44	20.64	20.69
HSDPA	Subtest 1	20.14	20.23	20.28
	Subtest 2	18.91	17.66	19.03
	Subtest 3	18.80	18.93	18.98
	Subtest 4	18.63	18.31	18.90
HSUPA	Subtest 1	19.98	19.58	19.60
	Subtest 2	17.49	17.59	17.57
	Subtest 3	18.46	18.58	18.61
	Subtest 4	17.56	17.61	17.64
	Subtest 5	20.02	20.05	20.07

Remark:

- 1) The conducted power of UMTS Band II is measured with RMS detector
- 2) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.



UMTS Band IV		Conducted Power (dBm)		
		1312	1412	1513
WCDMA	12.2kbps RMC	20.70	20.95	20.84
	64kbps RMC	20.63	20.89	20.79
	144kbps RMC	20.63	20.81	20.85
	384kbps RMC	20.70	20.92	20.84
HSDPA	Subtest 1	20.86	20.71	20.84
	Subtest 2	20.09	18.10	20.04
	Subtest 3	20.00	18.65	20.02
	Subtest 4	20.00	19.49	19.92
HSUPA	Subtest 1	19.93	19.85	19.76
	Subtest 2	17.91	18.05	17.85
	Subtest 3	18.78	18.86	18.79
	Subtest 4	17.87	17.89	17.85
	Subtest 5	20.83	20.86	20.77

Remark:

- 1 ) The conducted power of UMTS Band V is measured with RMS detector
- 2 ) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

LTE B2:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18607	18900	19193
1.4MHz	QPSK	1	0	19.87	19.90	19.83
		1	13	19.84	19.87	19.89
		1	24	19.80	19.84	19.90
		12	0	18.78	18.59	18.89
		12	6	18.64	18.65	18.81
		12	13	18.70	18.60	18.65
		25	0	18.86	18.83	18.78
	16QAM	1	0	18.65	18.26	18.60
		1	13	18.45	18.31	18.18
		1	24	18.46	18.65	18.70
		12	0	17.63	17.61	17.97
		12	6	17.98	17.65	17.90
		12	13	18.00	17.85	18.04
		25	0	17.81	17.50	18.25

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18615	18900	19185
3MHz	QPSK	1	0	19.87	19.80	19.85
		1	13	19.96	19.89	19.97
		1	24	19.85	19.83	19.93
		12	0	18.74	18.80	18.86
		12	6	18.62	18.71	18.74
		12	13	18.82	18.83	18.62
		25	0	18.69	18.89	18.52
	16QAM	1	0	18.70	18.56	18.48
		1	13	18.32	18.34	18.38
		1	24	18.39	18.24	18.39
		12	0	17.98	18.07	17.62
		12	6	17.65	17.97	17.55
		12	13	17.56	17.65	17.80
		25	0	18.11	17.54	17.84

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18625	18900	19175
5MHz	QPSK	1	0	19.92	19.75	19.84
		1	13	20.01	19.93	19.93
		1	24	19.90	19.90	19.76
		12	0	18.57	18.88	18.54
		12	6	18.63	18.65	18.87
		12	13	18.63	18.72	18.76
		25	0	18.74	18.89	18.58
	16QAM	1	0	18.60	18.33	18.72
		1	13	18.21	18.46	18.64
		1	24	18.37	18.66	18.24
		12	0	18.19	17.71	17.94
		12	6	17.63	18.00	18.00
		12	13	18.19	17.45	17.77
		25	0	18.01	17.53	18.06

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18650	18900	19150
10MHz	QPSK	1	0	19.92	19.75	19.84
		1	13	19.95	19.77	19.84
		1	24	19.70	19.79	19.88
		12	0	18.55	18.79	18.58
		12	6	18.44	18.41	18.57
		12	13	18.58	18.45	18.48
		25	0	18.54	18.64	18.73
	16QAM	1	0	18.12	18.16	18.55
		1	13	18.19	18.47	18.03
		1	24	18.38	18.19	18.52
		12	0	17.89	17.49	17.38
		12	6	17.86	17.29	17.69
		12	13	17.81	17.39	17.96
		25	0	17.32	17.42	17.70

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18675	18900	19125
15MHz	QPSK	1	0	19.65	19.75	19.97
		1	13	19.87	19.97	19.98
		1	24	19.80	19.93	19.68
		12	0	18.65	18.58	18.60
		12	6	18.59	18.77	18.46
		12	13	18.69	18.76	18.80
		25	0	18.74	18.60	18.52
	16QAM	1	0	18.62	18.42	18.44
		1	13	18.52	18.48	18.35
		1	24	18.50	18.32	18.24
		12	0	18.00	17.88	17.78
		12	6	17.36	17.86	17.52
		12	13	17.75	17.70	17.90
		25	0	17.53	17.92	17.80

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18700	18900	19100
20MHz	QPSK	1	0	19.83	19.73	19.86
		1	50	20.29	20.28	20.21
		1	99	19.79	19.71	19.71
		50	0	18.65	18.73	18.76
		50	25	18.68	18.66	18.80
		50	50	18.79	18.87	18.72
		100	0	18.66	18.54	18.90
	16QAM	1	0	18.23	18.17	18.37
		1	50	18.64	18.23	18.44
		1	99	18.74	18.25	18.70
		50	0	18.03	18.16	17.63
		50	25	18.04	17.60	18.05
		50	50	18.16	17.67	17.58
		100	0	18.20	17.80	17.91

LTE B4:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19957	20175	20393
1.4MHz	QPSK	1	0	20.72	20.90	20.77
		1	13	20.97	21.05	20.88
		1	24	21.00	20.92	20.73
		12	0	19.72	19.77	19.98
		12	6	19.94	19.80	19.72
		12	13	19.94	19.69	19.63
		25	0	19.94	19.56	20.00
	16QAM	1	0	19.40	19.56	19.63
		1	13	19.32	19.39	19.20
		1	24	19.54	19.48	19.73
		12	0	18.85	18.86	19.00
		12	6	19.19	19.01	18.81
		12	13	19.08	18.87	18.82
		25	0	18.99	18.87	19.11

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19965	20175	20385
3MHz	QPSK	1	0	21.04	20.94	20.94
		1	13	21.14	21.10	21.09
		1	24	20.84	20.75	20.76
		12	0	19.65	19.68	19.67
		12	6	19.93	19.98	19.83
		12	13	19.74	19.90	19.71
		25	0	19.72	19.79	19.91
	16QAM	1	0	19.66	19.43	19.34
		1	13	19.61	19.31	19.28
		1	24	19.75	19.38	19.53
		12	0	18.93	18.82	18.89
		12	6	18.70	18.81	18.84
		12	13	19.13	18.77	18.77
		25	0	19.03	18.72	18.66

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19975	20175	20375
5MHz	QPSK	1	0	20.96	20.89	21.05
		1	13	20.81	21.07	21.06
		1	24	21.03	20.74	20.72
		12	0	19.78	19.70	19.91
		12	6	20.00	19.69	19.58
		12	13	19.95	19.84	19.76
		25	0	19.71	19.69	19.63
	16QAM	1	0	19.42	19.49	19.71
		1	13	19.62	19.36	19.56
		1	24	19.38	19.64	19.47
		12	0	19.14	19.23	18.81
		12	6	19.12	18.81	19.05
		12	13	18.82	18.67	18.79
		25	0	18.70	19.22	19.13

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20000	20175	20350
10MHz	QPSK	1	0	21.03	20.68	20.89
		1	13	20.85	20.88	21.06
		1	24	20.80	20.87	20.82
		12	0	19.57	19.71	19.61
		12	6	19.60	19.64	19.76
		12	13	19.53	19.63	19.60
		25	0	19.63	19.86	19.75
	16QAM	1	0	19.39	19.39	19.36
		1	13	19.47	19.22	19.60
		1	24	19.11	19.49	19.09
		12	0	18.58	19.03	18.52
		12	6	18.94	18.60	18.92
		12	13	18.58	18.76	18.74
		25	0	18.59	18.59	18.65

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20025	20175	20325
15MHz	QPSK	1	0	20.81	20.86	20.78
		1	13	20.93	21.02	20.95
		1	24	20.92	20.99	20.74
		12	0	19.74	19.61	19.87
		12	6	19.82	19.51	19.51
		12	13	19.67	19.61	19.65
		25	0	19.70	19.59	19.72
	16QAM	1	0	19.44	19.53	19.17
		1	13	19.65	19.54	19.17
		1	24	19.33	19.57	19.33
		12	0	18.80	18.40	18.58
		12	6	18.64	18.90	18.54
		12	13	18.57	19.04	18.57
		25	0	18.59	18.63	18.52

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20050	20175	20300
20MHz	QPSK	1	0	20.94	20.72	20.72
		1	50	21.29	21.28	21.25
		1	99	20.95	21.03	20.72
		50	0	19.72	19.96	19.89
		50	25	19.67	19.66	19.75
		50	50	19.71	19.68	19.69
		100	0	19.94	19.90	19.67
	16QAM	1	0	19.40	19.61	19.48
		1	50	19.41	19.33	19.46
		1	99	19.38	19.44	19.57
		50	0	18.92	18.99	18.72
		50	25	19.06	19.07	18.88
		50	50	19.13	19.05	19.09
		100	0	18.59	18.69	18.70

LTE B7:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20775	21100	21425
5MHz	QPSK	1	0	20.20	20.23	20.35
		1	13	20.21	20.49	20.21
		1	24	20.24	20.31	20.10
		12	0	19.16	19.25	19.13
		12	6	18.97	18.99	19.15
		12	13	19.26	19.02	19.25
		25	0	19.27	19.25	19.20
	16QAM	1	0	18.60	18.82	18.68
		1	13	19.11	18.65	19.11
		1	24	18.78	18.89	18.91
		12	0	18.30	18.61	18.11
		12	6	18.68	17.89	18.23
		12	13	18.49	18.57	17.87
		25	0	18.45	18.23	18.43

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20800	21100	21400
10MHz	QPSK	1	0	20.38	20.14	20.05
		1	13	20.35	20.35	20.43
		1	24	20.12	20.04	20.21
		12	0	18.90	18.83	19.01
		12	6	18.93	18.96	19.25
		12	13	18.92	19.02	18.88
		25	0	19.00	18.95	19.17
	16QAM	1	0	18.80	18.78	18.86
		1	13	18.80	18.38	18.68
		1	24	18.51	18.40	18.76
		12	0	18.16	18.16	17.88
		12	6	18.06	17.99	17.92
		12	13	18.25	18.35	18.12
		25	0	17.92	17.65	17.97



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20825	21100	21375
15MHz	QPSK	1	0	20.02	20.26	20.22
		1	13	20.30	20.45	20.20
		1	24	20.32	20.29	20.12
		12	0	19.03	19.01	18.91
		12	6	19.01	19.09	18.92
		12	13	18.82	18.91	19.24
		25	0	19.19	19.01	18.93
	16QAM	1	0	18.77	18.66	18.50
		1	13	18.72	18.77	18.75
		1	24	18.70	18.57	18.75
		12	0	17.91	17.96	17.92
		12	6	18.24	18.26	18.27
		12	13	17.95	17.79	17.95
		25	0	18.46	18.09	18.41

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20850	21100	21350
20MHz	QPSK	1	0	20.26	20.24	20.43
		1	50	20.53	20.59	20.61
		1	99	20.20	20.20	20.19
		50	0	19.08	19.06	19.01
		50	25	18.99	19.33	19.02
		50	50	18.86	19.15	19.00
		100	0	19.26	19.20	19.27
	16QAM	1	0	18.63	18.75	18.95
		1	50	18.73	18.74	18.74
		1	99	18.80	18.87	18.53
		50	0	17.92	18.35	18.39
		50	25	18.09	17.94	18.19
		50	50	18.20	18.36	18.50
		100	0	18.16	18.21	18.41

LTE B38:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37775	38000	38225
5MHz	QPSK	1	0	21.81	21.86	21.81
		1	13	21.79	21.89	21.70
		1	24	21.71	21.89	21.67
		12	0	20.69	20.84	20.84
		12	6	20.82	20.59	20.70
		12	13	20.58	20.74	20.64
		25	0	20.56	20.83	20.69
	16QAM	1	0	20.56	20.51	20.16
		1	13	20.54	20.34	20.34
		1	24	20.31	20.31	20.50
		12	0	19.50	19.93	19.95
		12	6	19.72	19.49	19.95
		12	13	19.67	19.73	20.00
		25	0	19.72	20.01	19.71

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37800	38000	38200
10MHz	QPSK	1	0	21.81	21.88	21.84
		1	13	21.77	21.67	21.91
		1	24	21.83	21.88	21.79
		12	0	20.58	20.45	20.59
		12	6	20.64	20.52	20.33
		12	13	20.59	20.60	20.56
		25	0	20.61	20.61	20.59
	16QAM	1	0	20.10	20.24	20.06
		1	13	20.50	20.19	20.20
		1	24	20.37	20.41	20.52
		12	0	19.58	19.45	19.32
		12	6	19.41	19.53	19.48

		12	13	19.52	19.72	19.53
		25	0	19.31	19.56	19.55

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37825	38000	38175
15MHz	QPSK	1	0	21.80	21.83	21.80
		1	13	21.76	21.91	21.82
		1	24	21.90	21.78	21.90
		12	0	20.63	20.72	20.46
		12	6	20.60	20.48	20.36
		12	13	20.54	20.68	20.46
		25	0	20.58	20.46	20.46
	16QAM	1	0	20.21	20.27	20.43
		1	13	20.17	20.22	20.22
		1	24	20.25	20.24	19.99
		12	0	19.79	19.47	19.69
		12	6	19.23	19.68	19.45
		12	13	19.49	19.48	19.71
		25	0	19.75	19.78	19.45
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37850	38000	38150
20MHz	QPSK	1	0	21.83	21.76	21.78
		1	50	22.08	22.09	22.07
		1	99	21.87	21.81	21.66
		50	0	20.71	20.70	20.78
		50	25	20.71	20.82	20.79
		50	50	20.50	20.83	20.50
		100	0	20.67	20.82	20.77
	16QAM	1	0	20.61	20.31	20.31
		1	50	20.56	20.49	20.34
		1	99	20.18	20.39	20.22
		50	0	20.10	19.67	19.78
		50	25	19.73	19.70	19.65
		50	50	20.09	19.61	19.90
		100	0	19.60	19.70	19.65

LTE B41:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40065	40640	41215
5MHz	QPSK	1	0	21.99	21.88	21.88
		1	13	22.00	21.99	21.86
		1	24	21.84	21.95	21.87
		12	0	20.88	20.75	20.79
		12	6	20.87	21.00	20.77
		12	13	20.89	20.78	20.79
		25	0	21.04	20.89	20.80
	16QAM	1	0	20.75	20.44	20.40
		1	13	20.74	20.42	20.74
		1	24	20.77	20.64	20.61
		12	0	19.61	20.21	19.95
		12	6	20.21	19.68	20.21
		12	13	19.86	19.91	19.87
		25	0	19.97	19.98	20.24

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40090	40640	41190
10MHz	QPSK	1	0	21.76	22.06	21.92
		1	13	21.82	22.00	22.03
		1	24	21.98	21.78	21.81
		12	0	20.76	20.69	20.79
		12	6	20.80	20.75	20.72
		12	13	20.73	20.67	20.72
		25	0	20.71	20.63	20.72
	16QAM	1	0	20.44	20.60	20.42
		1	13	20.14	20.29	20.26
		1	24	20.38	20.38	20.28
		12	0	19.80	19.63	19.77
		12	6	19.38	20.03	20.10

		12	13	19.89	19.63	19.68
		25	0	19.81	19.63	19.73

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40115	40640	41165
15MHz	QPSK	1	0	21.98	21.96	21.96
		1	13	21.95	21.96	21.89
		1	24	21.94	21.98	22.05
		12	0	20.77	20.75	20.87
		12	6	20.61	20.70	20.76
		12	13	20.69	20.74	20.68
		25	0	20.77	20.63	20.89
	16QAM	1	0	20.43	20.45	20.26
		1	13	20.54	20.62	20.28
		1	24	20.61	20.32	20.29
		12	0	19.71	19.48	19.50
		12	6	19.69	19.57	19.62
		12	13	19.76	19.90	19.75
		25	0	20.13	19.57	19.66
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40140	40640	41140
20MHz	QPSK	1	0	21.88	21.96	21.99
		1	50	22.22	22.19	22.17
		1	99	21.88	21.97	22.00
		50	0	20.88	20.85	20.73
		50	25	20.78	20.78	20.88
		50	50	20.74	20.90	20.73
		100	0	20.73	21.03	20.78
	16QAM	1	0	20.68	20.43	20.45
		1	50	20.58	20.58	20.51
		1	99	20.78	20.76	20.43
		50	0	19.91	19.98	19.99
		50	25	20.11	19.93	19.97
		50	50	19.86	20.31	19.94
		100	0	19.90	19.99	20.30

LTE B66:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	20.63	20.77	20.55
		1	13	20.85	20.61	20.70
		1	24	20.52	20.77	20.63
		12	0	19.68	19.35	19.41
		12	6	19.51	19.59	19.50
		12	13	19.41	19.66	19.54
		25	0	19.39	19.56	19.51
	16QAM	1	0	19.27	19.37	19.10
		1	13	19.15	19.05	18.96
		1	24	19.05	19.01	19.01
		12	0	18.74	18.61	18.48
		12	6	18.71	18.89	18.42
		12	13	18.25	18.59	18.58
		25	0	18.84	18.75	18.78

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	20.64	20.63	20.65
		1	13	20.75	20.69	20.67
		1	24	20.54	20.68	20.52
		12	0	19.44	19.37	19.47
		12	6	19.37	19.44	19.73
		12	13	19.36	19.38	19.62
		25	0	19.59	19.64	19.47
	16QAM	1	0	19.15	19.32	19.47
		1	13	19.14	19.07	19.36
		1	24	18.97	19.26	18.97
		12	0	18.79	18.34	18.45
		12	6	18.71	18.31	18.91
		12	13	18.77	18.55	18.46
		25	0	18.55	18.82	18.34



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	20.60	20.84	20.61
		1	13	20.66	20.67	20.59
		1	24	20.72	20.69	20.59
		12	0	19.40	19.57	19.40
		12	6	19.74	19.58	19.44
		12	13	19.52	19.51	19.56
		25	0	19.42	19.51	19.42
	16QAM	1	0	19.31	19.15	19.04
		1	13	19.10	19.31	19.26
		1	24	19.25	19.13	19.22
		12	0	18.82	18.33	18.52
		12	6	18.61	18.91	18.80
		12	13	18.69	18.53	18.77
		25	0	18.74	18.89	18.95

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	20.56	20.62	20.73
		1	13	20.80	20.83	20.76
		1	24	20.61	20.49	20.63
		12	0	19.28	19.42	19.45
		12	6	19.40	19.22	19.43
		12	13	19.47	19.48	19.46
		25	0	19.34	19.58	19.46
	16QAM	1	0	19.06	19.18	19.23
		1	13	19.25	18.97	19.05
		1	24	19.06	19.33	18.98
		12	0	18.28	18.35	18.25
		12	6	18.07	18.75	18.45
		12	13	18.18	18.48	18.27
		25	0	18.68	18.62	18.46

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	20.69	20.79	20.71
		1	13	20.80	20.74	20.69
		1	24	20.53	20.81	20.64
		12	0	19.48	19.45	19.30
		12	6	19.41	19.20	19.48
		12	13	19.53	19.55	19.49
		25	0	19.36	19.52	19.58
	16QAM	1	0	19.16	19.24	19.17
		1	13	19.05	19.08	19.20
		1	24	19.11	18.94	19.28
		12	0	18.15	18.55	18.64
		12	6	18.31	18.47	18.23
		12	13	18.12	18.45	18.16
		25	0	18.11	18.11	18.32

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	20.58	20.70	20.81
		1	50	20.96	20.92	20.90
		1	99	20.61	20.71	20.73
		50	0	19.75	19.58	19.50
		50	25	19.40	19.61	19.59
		50	50	19.43	19.57	19.57
		100	0	19.66	19.45	19.53
	16QAM	1	0	19.39	19.33	19.39
		1	50	19.27	19.14	19.18
		1	99	19.18	19.08	19.41
		50	0	18.31	18.71	18.65
		50	25	18.68	18.51	18.51
		50	50	18.47	18.78	18.56
		100	0	18.50	18.39	18.47

ENDC

NR Band n7 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
20M	QPSK	1	1	15.96	16.02	15.77
		1	0	15.81	16.06	15.94
		1	215	15.75	15.79	15.93
		108	0	15.87	15.88	15.88
		108	54	16.18	16.21	15.94
		108	114	16.05	15.94	15.72
		216	0	15.95	15.90	15.79
	16QAM	108	54	15.73	15.81	16.01
	64QAM	108	54	13.92	14.01	14.03
	256QAM	108	54	12.37	12.21	12.36
15	QPSK	36	18	15.95	15.92	16.12
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	16.02	16.03	15.94
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	15.88	15.92	15.96

ENDC

NR Band n38 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	14.46	14.76	14.48
		1	53	14.56	14.71	14.75
		1	105	14.52	14.78	14.64
		50	0	14.70	14.77	14.58
		50	28	14.73	14.96	14.85
		50	56	14.73	14.80	14.63
		100	0	14.58	14.68	14.74
	16QAM	50	25	14.73	14.57	14.75
64QAM	50	25	12.70	12.80	12.75	
256QAM	50	25	11.24	10.85	10.92	

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NR Band n38 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
20M	QPSK	1	1	20.71	20.63	20.61
		1	53	20.58	20.72	20.40
		1	105	20.77	20.64	20.53
		50	0	20.69	20.69	20.48
		50	28	20.81	20.93	20.78
		50	56	20.74	20.52	20.67
		100	0	20.50	20.52	20.48
	16QAM	50	25	20.76	20.58	20.70
	64QAM	50	25	18.63	18.71	18.60
	256QAM	50	25	16.89	16.82	16.91

ENDC

NR Band n41 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	14.72	14.54	14.49
		1	137	14.75	14.65	14.70
		1	271	14.68	14.65	14.42
		135	0	14.69	14.63	14.57
		135	69	14.68	14.91	14.66
		135	138	14.55	14.50	14.65
		270	0	14.48	14.56	14.42
	16QAM	135	67	14.41	14.58	14.55
	64QAM	135	67	12.69	12.76	12.60
	256QAM	135	67	11.05	11.12	10.94
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	14.72	14.80	14.63
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	14.61	14.74	14.74
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	14.70	14.89	14.82
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	14.65	14.73	14.63
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	14.72	14.73	14.58
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98

30	QPSK	36	18	14.64	14.77	14.71
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	14.65	14.74	14.76

NR

NR Band n41 ANT1 power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	20.99	20.99	20.90
		1	137	20.99	20.96	21.03
		1	271	20.89	20.96	21.11
		135	0	21.03	21.13	21.08
		135	69	21.25	21.39	21.08
		135	138	20.94	20.91	21.12
		270	0	21.21	21.01	20.91
	16QAM	135	67	21.22	21.14	20.94
	64QAM	135	67	19.12	19.22	19.17
	256QAM	135	67	17.54	17.20	17.39
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	21.23	21.38	21.33
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	21.24	21.20	21.07
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	21.25	21.15	21.32
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	21.17	21.14	21.19
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	21.20	21.16	21.10
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98



30	QPSK	36	18	21.15	21.07	21.12
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	21.33	21.15	21.14

NR

NR Band n66 ANT1 power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				344000/ 1720	349000/ 1745	354000/ 1770	
	QPSK	1	1	1	20.15	20.27	20.06
		1	53	1	20.20	20.19	19.98
		1	104	1	20.20	20.16	19.92
		50	0	1	19.93	20.14	19.93
		50	28	1	20.34	20.43	20.29
		50	56	1	20.12	20.28	20.23
		100	0	1	20.19	20.23	19.96
	16QAM	1	1	1	20.27	20.05	19.94
64QAM	1	1	1	18.13	18.14	18.19	
256QAM	1	1	1	16.62	16.59	16.58	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5	
15	QPSK	1	1	20.13	20.21	20.06	
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775	
10	QPSK	1	1	20.31	20.28	20.14	
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5	
5	QPSK	1	1	20.36	20.16	20.13	

ENDC

NR Band n66 ANT1 power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				344000/ 1720	349000/ 1745	354000/ 1770	
	QPSK	1	1	1	12.97	13.25	13.17
		1	53	1	13.25	13.17	13.00
		1	104	1	13.14	13.03	12.97
		50	0	1	13.13	13.09	12.92
		50	28	1	13.33	13.44	13.33
		50	56	1	12.95	13.00	13.14
		100	0	1	13.26	13.14	13.24
	16QAM	1	1	1	13.08	13.13	13.14
64QAM	1	1	1	11.18	11.22	11.11	
256QAM	1	1	1	9.27	9.66	9.60	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5	
15	QPSK	1	1	13.10	13.05	13.02	
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775	
10	QPSK	1	1	13.16	13.34	13.16	
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5	
5	QPSK	1	1	13.27	13.23	13.38	

State 3/4 : 0#ANT:

Band: DCS1900	Burst Average Power (dBm)			Frame Average Power (dBm)		
	513	661	810	513	661	810
GSM (CS)	28.17	28.12	28.09	19.16	19.12	19.11
GPRS/EDGE (GMSK, 1 Tx slot)	28.10	28.06	28.04	19.07	19.04	19.02
GPRS/EDGE (GMSK, 2 Tx slots)	24.98	24.63	24.79	18.99	18.60	18.80
GPRS/EDGE (GMSK, 3 Tx slots)	23.30	23.31	22.97	19.04	19.01	18.75
GPRS/EDGE (GMSK, 4 Tx slots)	22.10	22.04	21.78	19.12	19.03	18.78
EDGE (8PSK, 1 Tx slot)	22.81	22.58	22.62	13.80	13.60	13.62
EDGE (8PSK, 2 Tx slots)	21.66	21.61	21.58	15.65	15.61	15.60
EDGE (8PSK, 3 Tx slots)	19.95	19.95	19.91	15.71	15.66	15.63
EDGE (8PSK, 4 Tx slots)	19.18	19.02	19.10	16.19	16.00	16.09

Remark:

1) The conducted power of GSM1900 is measured with RMS detector.

2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.

Per KDB941225 D01v03, the bolded GPRS 2 Tx mode was selected as the primary mode for SAR testing according to the highest frame- averaged output power table.

UMTS Band II		Conducted Power (dBm)		
		9262	9400	9538
WCDMA	12.2kbps RMC	22.35	22.41	22.43
	64kbps RMC	22.11	22.33	22.44
	144kbps RMC	22.11	22.31	22.43
	384kbps RMC	22.10	22.38	22.42
HSDPA	Subtest 1	21.92	21.88	21.92
	Subtest 2	20.63	20.61	20.38
	Subtest 3	20.60	20.66	20.60
	Subtest 4	20.60	20.57	20.60
HSUPA	Subtest 1	20.63	20.73	20.72
	Subtest 2	18.68	18.68	18.78
	Subtest 3	19.66	19.66	19.73
	Subtest 4	18.67	18.67	18.71
	Subtest 5	21.20	21.22	21.25

Remark:

- 1) The conducted power of UMTS Band II is measured with RMS detector
- 2) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

UMTS Band IV		Conducted Power (dBm)		
		1312	1412	1513
WCDMA	12.2kbps RMC	22.15	22.19	22.13
	64kbps RMC	22.06	22.12	22.09
	144kbps RMC	22.10	22.06	22.10
	384kbps RMC	22.15	22.16	22.15
HSDPA	Subtest 1	22.20	22.16	22.13
	Subtest 2	21.43	21.40	21.36
	Subtest 3	21.28	21.37	20.93
	Subtest 4	21.28	21.32	21.27
HSUPA	Subtest 1	20.46	20.53	20.42
	Subtest 2	18.59	18.65	18.57
	Subtest 3	19.44	19.45	19.42
	Subtest 4	18.50	18.45	18.40
	Subtest 5	21.48	21.47	21.45

Remark:

- 1 ) The conducted power of UMTS Band V is measured with RMS detector
- 2 ) Per KDB 941225 D01v03, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  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 adjusted SAR is  $\leq 1.2$ W/kg, SAR measurement is not required for the secondary mode.

LTE B2:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18607	18900	19193
1.4MHz	QPSK	1	0	20.87	20.84	20.84
		1	13	20.75	20.73	20.77
		1	24	20.84	20.82	20.86
		12	0	19.83	19.58	19.84
		12	6	19.58	19.56	19.83
		12	13	19.65	19.61	19.71
		25	0	19.83	19.82	19.70
	16QAM	1	0	19.63	19.24	19.56
		1	13	19.42	19.29	19.23
		1	24	19.45	19.59	19.63
		12	0	18.60	18.57	18.93
		12	6	19.01	18.58	18.89
		12	13	19.03	18.80	18.97
		25	0	18.78	18.48	19.16

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18615	18900	19185
3MHz	QPSK	1	0	20.86	20.77	20.75
		1	13	20.85	20.77	20.86
		1	24	20.83	20.76	20.85
		12	0	19.68	19.80	19.84
		12	6	19.66	19.66	19.67
		12	13	19.82	19.81	19.70
		25	0	19.72	19.82	19.54
	16QAM	1	0	19.65	19.60	19.54
		1	13	19.30	19.38	19.38
		1	24	19.40	19.27	19.44
		12	0	18.96	18.99	18.64
		12	6	18.55	18.99	18.60
		12	13	18.60	18.57	18.79
		25	0	19.05	18.59	18.81

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18625	18900	19175
5MHz	QPSK	1	0	20.83	20.78	20.82
		1	13	20.95	20.85	20.79
		1	24	20.85	20.89	20.77
		12	0	19.59	19.80	19.54
		12	6	19.59	19.65	19.79
		12	13	19.59	19.70	19.73
		25	0	19.72	19.87	19.58
	16QAM	1	0	19.56	19.27	19.66
		1	13	19.19	19.47	19.59
		1	24	19.25	19.64	19.28
		12	0	19.07	18.71	18.90
		12	6	18.52	18.95	19.05
		12	13	19.12	18.48	18.80
		25	0	18.92	18.57	19.11

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18650	18900	19150
10MHz	QPSK	1	0	20.90	20.75	20.85
		1	13	20.84	20.67	20.75
		1	24	20.65	20.84	20.92
		12	0	19.61	19.71	19.57
		12	6	19.42	19.41	19.59
		12	13	19.61	19.42	19.50
		25	0	19.55	19.54	19.70
	16QAM	1	0	19.10	19.17	19.45
		1	13	19.25	19.44	19.10
		1	24	19.34	19.13	19.48
		12	0	18.92	18.49	18.33
		12	6	18.84	18.36	18.70
		12	13	18.78	18.37	18.88
		25	0	18.28	18.41	18.66



Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18675	18900	19125
15MHz	QPSK	1	0	20.68	20.77	20.92
		1	13	20.75	20.85	20.88
		1	24	20.76	20.83	20.70
		12	0	19.71	19.61	19.58
		12	6	19.56	19.72	19.47
		12	13	19.71	19.73	19.72
		25	0	19.74	19.53	19.57
	16QAM	1	0	19.52	19.47	19.39
		1	13	19.44	19.49	19.27
		1	24	19.46	19.37	19.25
		12	0	18.91	18.78	18.72
		12	6	18.38	18.79	18.58
		12	13	18.80	18.71	18.94
		25	0	18.58	18.88	18.78

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18700	18900	19100
20MHz	QPSK	1	0	20.83	20.73	20.83
		1	50	21.17	21.14	21.06
		1	99	20.85	20.78	20.74
		50	0	19.60	19.67	19.71
		50	25	19.70	19.68	19.79
		50	50	19.84	19.82	19.68
		100	0	19.59	19.56	19.79
	16QAM	1	0	19.25	19.19	19.30
		1	50	19.64	19.21	19.49
		1	99	19.62	19.26	19.67
		50	0	19.08	19.09	18.59
		50	25	18.99	18.59	19.00
		50	50	19.09	18.60	18.57
		100	0	19.14	18.79	18.92

LTE B4:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19957	20175	20393
1.4MHz	QPSK	1	0	21.21	21.38	21.22
		1	13	21.38	21.46	21.25
		1	24	21.49	21.50	21.22
		12	0	20.24	20.17	20.43
		12	6	20.44	20.19	20.19
		12	13	20.40	20.22	20.13
		25	0	20.38	20.13	20.44
	16QAM	1	0	19.90	19.97	20.14
		1	13	19.88	19.94	19.75
		1	24	19.94	19.90	20.16
		12	0	19.27	19.29	19.54
		12	6	19.68	19.53	19.28
		12	13	19.66	19.33	19.22
		25	0	19.55	19.32	19.52

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19965	20175	20385
3MHz	QPSK	1	0	21.47	21.42	21.49
		1	13	21.49	21.49	21.50
		1	24	21.35	21.26	21.26
		12	0	20.12	20.16	20.19
		12	6	20.32	20.41	20.37
		12	13	20.21	20.37	20.15
		25	0	20.19	20.30	20.35
	16QAM	1	0	20.18	19.95	19.76
		1	13	20.11	19.84	19.79
		1	24	20.13	19.85	20.04
		12	0	19.43	19.29	19.38
		12	6	19.22	19.29	19.22
		12	13	19.62	19.26	19.26
		25	0	19.55	19.27	19.24

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19975	20175	20375
5MHz	QPSK	1	0	21.35	21.45	21.47
		1	13	21.23	21.46	21.46
		1	24	21.48	21.24	21.24
		12	0	20.23	20.16	20.32
		12	6	20.42	20.12	20.10
		12	13	20.35	20.29	20.19
		25	0	20.15	20.14	20.15
	16QAM	1	0	19.92	19.88	20.16
		1	13	20.09	19.84	20.01
		1	24	19.91	20.09	19.85
		12	0	19.60	19.67	19.29
		12	6	19.68	19.30	19.52
		12	13	19.27	19.10	19.23
		25	0	19.26	19.69	19.66

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20000	20175	20350
10MHz	QPSK	1	0	21.51	21.18	21.40
		1	13	21.23	21.25	21.48
		1	24	21.35	21.36	21.37
		12	0	20.06	20.13	20.09
		12	6	20.12	20.08	20.22
		12	13	20.06	20.10	20.09
		25	0	20.07	20.27	20.18
	16QAM	1	0	19.92	19.95	19.82
		1	13	19.97	19.72	20.03
		1	24	19.60	19.94	19.62
		12	0	19.03	19.49	19.04
		12	6	19.38	19.05	19.37
		12	13	19.01	19.19	19.23
		25	0	19.09	19.01	19.21

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20025	20175	20325
15MHz	QPSK	1	0	21.35	21.33	21.23
		1	13	21.36	21.45	21.37
		1	24	21.43	21.50	21.17
		12	0	20.21	20.12	20.29
		12	6	20.25	20.04	20.09
		12	13	20.11	20.09	20.11
		25	0	20.21	20.02	20.15
	16QAM	1	0	19.93	20.11	19.72
		1	13	20.11	20.07	19.68
		1	24	19.79	20.01	19.80
		12	0	19.24	18.87	19.11
		12	6	19.21	19.32	19.02
		12	13	19.05	19.47	19.06
		25	0	19.04	19.07	19.01

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20050	20175	20300
20MHz	QPSK	1	0	21.46	21.19	21.24
		1	50	21.68	21.64	21.60
		1	99	21.47	21.50	21.23
		50	0	20.21	20.42	20.29
		50	25	20.15	20.13	20.16
		50	50	20.22	20.20	20.23
		100	0	20.41	20.36	20.21
	16QAM	1	0	19.94	20.11	19.93
		1	50	19.90	19.85	19.93
		1	99	19.88	19.88	20.03
		50	0	19.42	19.43	19.13
		50	25	19.55	19.53	19.42
		50	50	19.56	19.59	19.55
		100	0	19.13	19.28	19.22

LTE B66:

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131979	132322	132665
1.4MHz	QPSK	1	0	21.67	21.75	21.57
		1	13	21.75	21.51	21.58
		1	24	21.58	21.71	21.61
		12	0	20.55	20.39	20.45
		12	6	20.53	20.53	20.53
		12	13	20.43	20.64	20.52
		25	0	20.32	20.59	20.53
	16QAM	1	0	20.22	20.38	20.02
		1	13	20.11	20.02	20.01
		1	24	20.12	20.02	19.95
		12	0	19.74	19.63	19.47
		12	6	19.64	19.80	19.48
		12	13	19.28	19.49	19.51
		25	0	19.77	19.77	19.82

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131987	132322	132657
3MHz	QPSK	1	0	21.65	21.64	21.66
		1	13	21.58	21.59	21.55
		1	24	21.54	21.60	21.54
		12	0	20.48	20.41	20.48
		12	6	20.36	20.38	20.66
		12	13	20.34	20.39	20.60
		25	0	20.52	20.59	20.51
	16QAM	1	0	20.20	20.39	20.38
		1	13	20.20	20.11	20.32
		1	24	20.01	20.18	20.02
		12	0	19.82	19.32	19.44
		12	6	19.74	19.34	19.83
		12	13	19.80	19.45	19.46
		25	0	19.56	19.76	19.33

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				131997	132322	132647
5MHz	QPSK	1	0	21.61	21.74	21.60
		1	13	21.52	21.53	21.50
		1	24	21.70	21.66	21.54
		12	0	20.34	20.55	20.37
		12	6	20.67	20.52	20.41
		12	13	20.52	20.52	20.54
		25	0	20.46	20.41	20.38
	16QAM	1	0	20.19	20.12	20.04
		1	13	20.01	20.18	20.25
		1	24	20.32	20.12	20.20
		12	0	19.77	19.39	19.47
		12	6	19.65	19.78	19.79
		12	13	19.73	19.48	19.76
		25	0	19.77	19.87	19.88

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132022	132322	132622
10MHz	QPSK	1	0	21.57	21.59	21.71
		1	13	21.69	21.71	21.68
		1	24	21.60	21.53	21.54
		12	0	20.22	20.49	20.47
		12	6	20.37	20.29	20.47
		12	13	20.39	20.40	20.36
		25	0	20.30	20.48	20.41
	16QAM	1	0	20.02	20.15	20.27
		1	13	20.21	19.93	20.10
		1	24	20.04	20.28	20.01
		12	0	19.24	19.33	19.25
		12	6	19.10	19.66	19.48
		12	13	19.13	19.51	19.29
		25	0	19.69	19.56	19.48

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	21.77	21.75	21.71
		1	13	21.67	21.64	21.62
		1	24	21.54	21.76	21.62
		12	0	20.50	20.36	20.32
		12	6	20.36	20.25	20.44
		12	13	20.49	20.48	20.48
		25	0	20.44	20.43	20.57
	16QAM	1	0	20.18	20.24	20.08
		1	13	19.97	20.03	20.21
		1	24	20.16	19.91	20.22
		12	0	19.17	19.48	19.67
		12	6	19.25	19.53	19.25
		12	13	19.11	19.44	19.06
		25	0	19.16	19.12	19.29

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	21.55	21.71	21.74
		1	50	21.95	21.87	21.89
		1	99	21.58	21.62	21.69
		50	0	20.68	20.52	20.52
		50	25	20.40	20.67	20.55
		50	50	20.42	20.52	20.52
		100	0	20.58	20.45	20.47
	16QAM	1	0	20.39	20.27	20.34
		1	50	20.31	20.11	20.15
		1	99	20.08	20.11	20.37
		50	0	19.32	19.66	19.70
		50	25	19.69	19.55	19.52
		50	50	19.52	19.71	19.56
		100	0	19.53	19.30	19.47

NR

NR Band n7 ANT0 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
	QPSK	1	1	22.36	22.41	22.37
		1	0	22.31	22.21	22.14
		1	215	22.31	22.45	22.15
		108	0	22.23	22.37	22.40
		108	54	22.39	22.68	22.50
		108	114	22.20	22.36	22.13
		216	0	22.49	22.21	22.35
	16QAM	108	54	22.43	22.41	22.15
64QAM	108	54	20.38	20.52	20.49	
256QAM	108	54	18.91	18.54	18.51	
Channel/Frequency(MHz)				501500/ 2507.5	507000/ 2535	512500/ 2562.5
15	QPSK	36	18	22.44	22.63	22.48
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	22.41	22.57	22.43
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	22.46	22.61	22.54



NR

NR Band n41 ANT0 power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	21.59	21.59	21.33
		1	137	21.57	21.60	21.40
		1	271	21.56	21.58	21.57
		135	0	21.44	21.48	21.45
		135	69	21.71	21.88	21.70
		135	138	21.49	21.62	21.52
		270	0	21.70	21.38	21.37
	16QAM	135	67	21.54	21.50	21.53
	64QAM	135	67	19.60	19.70	19.57
	256QAM	135	67	17.71	18.08	17.68
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	21.62	21.65	21.64
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	21.72	21.63	21.81
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	21.64	21.74	21.67
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	21.65	21.73	21.63
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	21.57	21.58	21.72
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98

30	QPSK	36	18	21.47	21.66	21.69
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	21.71	21.78	21.87

NR

NR Band n66 ANT0 power		Conducted power(dBm)					
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)			
				344000/ 1720	349000/ 1745	354000/ 1770	
	QPSK	1	1	1	20.60	20.72	20.72
		1	53	1	20.44	20.61	20.44
		1	104	1	20.74	20.43	20.40
		50	0	1	20.64	20.69	20.45
		50	28	1	20.91	20.93	20.82
		50	56	1	20.61	20.66	20.69
		100	0	1	20.53	20.44	20.58
	16QAM	1	1	1	20.61	20.45	20.50
64QAM	1	1	1	18.64	18.76	18.68	
256QAM	1	1	1	16.91	16.91	17.01	
Channel/Frequency(MHz)				343500/ 1717.5	349000/ 1745	354500/ 1772.5	
15	QPSK	1	1	20.71	20.74	20.62	
Channel/Frequency(MHz)				343000/ 1715	349000/ 1745	355000/ 1775	
10	QPSK	1	1	20.80	20.63	20.77	
Channel/Frequency(MHz)				342500/ 1712.5	349000/ 1745	355500/ 1777.5	
5	QPSK	1	1	20.73	20.60	20.64	

ENDC:State 1 : 3#ANT:

NR Band n7 ANT3 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
20M	QPSK	1	1	16.95	16.70	16.83
		1	0	16.88	16.68	16.91
		1	215	16.81	16.69	16.74
		108	0	17.00	16.93	16.72
		108	54	16.88	17.17	17.03
		108	114	16.99	16.70	16.87
		216	0	16.70	16.81	16.81
	16QAM	108	54	16.79	16.67	16.67
	64QAM	108	54	14.92	15.01	14.84
	256QAM	108	54	13.19	13.31	13.16
Channel/Frequency(MHz)				501500/ 2507.5	507000/ 2535	512500/ 2562.5
15	QPSK	36	18	16.88	16.86	17.05
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	17.15	17.06	16.94
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	16.89	16.77	16.91

ENDC

NR Band n38 ANT3 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	18.50	18.78	18.59
		1	53	18.52	18.71	18.69
		1	105	18.66	18.60	18.61
		50	0	18.70	18.66	18.49
		50	28	18.81	18.93	18.68
		50	56	18.47	18.56	18.46
		100	0	18.62	18.76	18.43
	16QAM	50	25	18.62	18.49	18.62
64QAM	50	25	16.64	16.73	16.74	
256QAM	50	25	14.97	15.15	14.93	

ENDC

NR Band n41 ANT3 power		Conducted power(dBm)				
Bandwidth(MHz) 100M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	17.53	17.47	17.42
		1	137	17.68	17.63	17.53
		1	271	17.55	17.73	17.54
		135	0	17.55	17.44	17.38
		135	69	17.78	17.90	17.78
		135	138	17.69	17.64	17.53
		270	0	17.46	17.65	17.69
	16QAM	135	67	17.66	17.53	17.53
	64QAM	135	67	15.65	15.74	15.63
	256QAM	135	67	13.76	14.17	14.03
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	17.76	17.62	17.86
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	17.76	17.62	17.67
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	17.86	17.85	17.68
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	17.59	17.68	17.69
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	17.74	17.84	17.74
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98

30	QPSK	36	18	17.52	17.54	17.47
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	17.60	17.79	17.72

ENDC:State 2/3/4 : 3#ANT:

NR Band n7 ANT3 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				504000/ 2520	507000/ 2535	510000/ 2550
20M	QPSK	1	1	16.98	16.90	17.01
		1	0	16.93	16.84	16.85
		1	215	16.80	17.01	16.74
		108	0	16.89	16.94	16.74
		108	54	17.01	17.21	17.20
		108	114	16.89	16.80	16.81
		216	0	17.03	17.05	17.01
	16QAM	108	54	16.98	16.97	16.89
	64QAM	108	54	14.92	15.02	15.00
	256QAM	108	54	13.26	13.30	13.45
Channel/Frequency(MHz)				501500/ 2507.5	507000/ 2535	512500/ 2562.5
15	QPSK	36	18	17.09	17.08	17.09
Channel/Frequency(MHz)				501000/ 2505	507000/ 2535	513000/ 2565
10	QPSK	25	12	16.93	17.13	17.15
Channel/Frequency(MHz)				500500/ 2502.5	507000/ 2535	513500/ 2567.5
5	QPSK	12	6	17.05	17.06	17.12



ENDC

NR Band n38 ANT3 power		Conducted power(dBm)				
Bandwidth(MHz) 20M	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				518004/ 2590.02	519000/ 2595	519996/ 2599.98
	QPSK	1	1	19.46	19.60	19.59
		1	53	19.71	19.78	19.49
		1	105	19.46	19.72	19.73
		50	0	19.75	19.62	19.67
		50	28	19.87	19.94	19.81
		50	56	19.70	19.54	19.42
		100	0	19.73	19.79	19.73
	16QAM	50	25	19.53	19.77	19.68
64QAM	50	25	17.67	17.75	17.74	
256QAM	50	25	15.87	16.12	16.11	

ENDC

NR Band n41 ANT3 power		Conducted power(dBm)				
Bandwidth(MHz)	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				509202/ 2546.01	518598/ 2592.99	528000 2640
100M	QPSK	1	1	18.61	18.74	18.42
		1	137	18.52	18.44	18.39
		1	271	18.50	18.55	18.48
		135	0	18.40	18.57	18.56
		135	69	18.89	18.90	18.81
		135	138	18.51	18.73	18.65
		270	0	18.48	18.49	18.50
	16QAM	135	67	18.62	18.66	18.60
	64QAM	135	67	16.60	16.72	16.71
	256QAM	135	67	14.91	15.03	15.01
Channel/Frequency(MHz)				508200/ 2541	518598/ 2592.99	528996/ 2644.98
90	QPSK	120	60	18.62	18.55	18.57
Channel/Frequency(MHz)				507204/ 2536.02	518598/ 2592.99	529998/ 2649.99
80	QPSK	108	54	18.71	18.70	18.58
Channel/Frequency(MHz)				505200/ 2526	518598/ 2592.99	531996/ 2659.68
60	QPSK	81	40	18.68	18.65	18.60
Channel/Frequency(MHz)				504204/ 2521.02	518598/ 2592.99	532998/ 2664.99
50	QPSK	64	32	18.48	18.53	18.50
Channel/Frequency(MHz)				503202/ 2516.01	518598/ 2592.99	534000/ 2670
40	QPSK	50	25	18.63	18.55	18.60
Channel/Frequency(MHz)				502200/ 2511	518598/ 2592.99	534996/ 2674.98

30	QPSK	36	18	18.63	18.56	18.50
Channel/Frequency(MHz)				501702/ 2508.51	518598/ 2592.99	535500/ 2677.5
20	QPSK	25	12	18.70	18.89	18.78

## WIFI Original power :

Chain 0

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	17.80	17.68	17.63	17.52
CH 06	2,437	17.64	17.30	17.27	17.33
CH 11	2,462	18.06	17.76	17.42	17.40

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	18.73	17.98	18.03	17.95	17.87	17.75	17.53	17.41
CH 06	2,437	18.60	18.41	18.38	18.44	18.49	18.16	17.88	17.73
CH 11	2,462	19.02	18.85	18.80	18.60	18.65	18.55	18.17	18.03

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	18.59	17.86	17.83	17.77	17.64	17.42	17.30	16.94
CH 06	2,437	18.54	18.42	18.43	18.27	18.17	17.81	17.72	17.53
CH 11	2,462	18.96	18.75	18.52	18.64	18.51	18.18	17.96	17.59

## Chain 1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	17.54	17.42	17.37	17.26
CH 06	2,437	17.48	17.14	17.11	17.17
CH 11	2,462	17.91	17.61	17.27	17.25

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	18.42	17.67	17.72	17.64	17.56	17.44	17.22	17.10
CH 06	2,437	18.35	18.16	18.13	18.19	18.24	17.91	17.63	17.48
CH 11	2,462	18.87	18.70	18.65	18.45	18.50	18.40	18.02	17.88

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	18.3	17.57	17.54	17.48	17.35	17.13	17.01	16.65
CH 06	2,437	18.36	18.24	18.25	18.09	17.99	17.63	17.54	17.35
CH 11	2,462	18.56	18.35	18.12	18.24	18.11	17.78	17.56	17.19

## Chain 0+1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	14.96	14.84	14.79	14.68
CH 06	2,437	14.95	14.61	14.58	14.64
CH 11	2,462	14.93	14.63	14.29	14.27

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	14.76	14.01	14.06	13.98	13.90	13.78	13.56	13.44
CH 06	2,437	14.80	14.61	14.58	14.64	14.69	14.36	14.08	13.93
CH 11	2,462	14.72	14.55	14.50	14.30	14.35	14.25	13.87	13.73

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	14.42	13.69	13.66	13.60	13.47	13.25	13.13	12.77
CH 06	2,437	14.53	14.41	14.42	14.26	14.16	13.80	13.71	13.52
CH 11	2,462	14.52	14.31	14.08	14.20	14.07	13.74	13.52	13.15

## Chain 0

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	19.59
			40	5200	19.47
			44	5220	19.49
			48	5240	19.51
	802.11n (HT20)	MCS0	36	5180	17.30
			40	5200	17.84
			48	5240	17.38
	802.11n (HT40)	MCS0	38	5190	19.31
			46	5230	19.21
	802.11ac (HT20)	MCS0	36	5180	17.53
			40	5200	18.00
			48	5240	17.63
	802.11ac (HT40)	MCS0	38	5190	19.24
			46	5230	19.15
	802.11ac (HT80)	MCS0	42	5210	19.04
			59	5290	19.54
	802.11ax (HT20)	MCS0	36	5180	16.91
			40	5200	16.93
			48	5240	17.15
	802.11ax (HT40)	MCS0	38	5190	17.09
46			5230	17.06	
802.11ax (HT80)	MCS0	42	5210	16.96	
5.3	802.11a	6Mbps	52	5260	19.48
			56	5280	19.54
			60	5300	19.54
			64	5320	19.65
	802.11n (HT20)	MCS0	52	5260	17.35
			60	5300	16.95
			64	5320	17.19

	802.11n (HT40)	MCS0	54	5270	19.52
			62	5310	19.65
	802.11ac (HT20)	MCS0	52	5260	17.56
			60	5300	16.84
			64	5320	17.09
	802.11ac (HT40)	MCS0	54	5270	19.33
			62	5310	19.45
	802.11ac (HT80)	MCS0	54	5270	19.35
			62	5310	19.32
	802.11ax (HT20)	MCS0	52	5260	17.77
			56	5280	17.89
			64	5320	18.52
	802.11ax (HT40)	MCS0	54	5270	17.36
			62	5310	17.44
802.11ax (HT80)	MCS0	58	5290	17.16	
5.6G	802.11a	6Mbps	100	5500	19.32
			104	5520	19.17
			108	5540	19.31
			112	5560	19.44
			116	5580	19.15
			120	5600	19.35
			124	5620	19.21
			128	5640	19.41
			132	5660	19.22
			136	5680	19.42
			140	5700	19.27
	802.11n (HT20)	MCS0	100	5500	17.17
			116	5580	17.48
			140	5700	17.04
	802.11n (HT40)	MCS0	102	5510	19.30
			110	5550	19.30
			134	5670	19.50
	802.11ac	MCS0	100	5500	17.28



	(HT20)		116	5580	18.31
			140	5700	17.64
	802.11ac (HT40)	MCS0	102	5510	19.30
			110	5550	19.27
			142	5710	19.47
	802.11AC (HT80)	MCS0	102	5510	18.94
			134	5670	19.18
	802.11ax (HT20)	MCS0	100	5500	18.92
			116	5580	17.74
			140	5700	16.97
	802.11ax (HT40)	MCS0	102	5510	16.89
			110	5590	16.91
			134	5670	17.00
	802.11AX (HT80)	MCS0	106	5530	16.75
122			5610	16.65	
SRD	802.11a	6Mbps	149	5745	13.06
			157	5785	13.37
			165	5825	13.92
	802.11n (HT20)	MCS0	149	5745	12.74
			157	5785	13.31
			165	5825	13.68
	802.11n (HT40)	MCS0	151	5755	13.09
			159	5795	13.51
	802.11ac (HT20)	MCS0	149	5745	12.68
			157	5785	13.08
			165	5825	13.61
	802.11ac (HT40)	MCS0	151	5755	12.97
			159	5795	13.35
	802.11ac (HT80)	MCS0	155	5775	12.64
802.11ax (HT20)	MCS0	149	5745	10.19	
		157	5785	10.68	
		165	5825	10.58	
802.11ax	MCS0	151	5755	10.55	

	(HT40)		159	5795	10.68
	802.11ax (HT80)	MCS0	155	5775	10.56

Chain 1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	18.68
			40	5200	18.91
			44	5220	18.98
			48	5240	18.68
	802.11n (HT20)	MCS0	36	5180	17.52
			40	5200	17.98
			48	5240	17.94
	802.11n (HT40)	MCS0	38	5190	19.19
			46	5230	19.45
	802.11ac (HT20)	MCS0	36	5180	17.36
			40	5200	18.06
			48	5240	17.88
	802.11ac (HT40)	MCS0	38	5190	16.33
			46	5230	16.31
	802.11ac (HT80)	MCS0	42	5210	15.73
			59	5290	16.82
802.11ax (HT20)	MCS0	36	5180	17.09	
		40	5200	17.22	
		48	5240	17.07	
802.11ax (HT40)	MCS0	38	5190	17.18	
		46	5230	16.87	
802.11ax (HT80)	MCS0	42	5210	17.10	
5.3	802.11a	6Mbps	52	5260	18.99
			56	5280	18.99
			60	5300	18.91
			64	5320	19.17

	802.11n (HT20)	MCS0	52	5260	17.76
			60	5300	17.42
			64	5320	17.36
	802.11n (HT40)	MCS0	54	5270	19.37
			62	5310	19.26
	802.11ac (HT20)	MCS0	52	5260	17.63
			60	5300	17.42
			64	5320	17.45
	802.11ac (HT40)	MCS0	54	5270	16.53
			62	5310	16.59
	802.11ac (HT80)	MCS0	54	5270	16.71
			62	5310	17.02
	802.11ax (HT20)	MCS0	52	5260	17.04
			56	5280	17.09
			64	5320	17.14
	802.11ax (HT40)	MCS0	54	5270	17.15
			62	5310	17.17
	802.11ax (HT80)	MCS0	58	5290	16.76
5.6G	802.11a	6Mbps	100	5500	18.67
			104	5520	18.60
			108	5540	18.52
			112	5560	18.73
			116	5580	18.77
			120	5600	18.65
			124	5620	18.82
			128	5640	18.84
			132	5660	18.62
			136	5680	18.77
			140	5700	18.63
	802.11n (HT20)	MCS0	100	5500	17.50
			116	5580	17.84
			140	5700	17.00
	802.11n	MCS0	102	5510	19.33

	(HT40)		110	5550	19.26
			134	5670	19.30
	802.11ac (HT20)	MCS0	100	5500	17.26
			116	5580	17.79
			140	5700	17.05
	802.11ac (HT40)	MCS0	102	5510	16.86
			110	5550	13.78
			142	5710	17.05
	802.11AC (HT80)	MCS0	102	5510	16.88
			134	5670	16.83
	802.11ax (HT20)	MCS0	100	5500	16.95
			116	5580	16.69
			140	5700	16.94
	802.11ax (HT40)	MCS0	102	5510	16.84
			110	5590	16.78
			134	5670	16.91
	802.11AX (HT80)	MCS0	106	5530	16.54
			122	5610	16.59
SRD	802.11a	6Mbps	149	5745	12.98
			157	5785	13.40
			165	5825	13.88
	802.11n (HT20)	MCS0	149	5745	12.79
			157	5785	13.16
			165	5825	13.45
	802.11n (HT40)	MCS0	151	5755	12.78
			159	5795	13.31
	802.11ac (HT20)	MCS0	149	5745	12.73
			157	5785	12.80
			165	5825	12.18
	802.11ac (HT40)	MCS0	151	5755	10.88
			159	5795	11.42
	802.11ac (HT80)	MCS0	155	5775	11.24
	802.11ax	MCS0	149	5745	10.43

	(HT20)		157	5785	10.89
			165	5825	10.62
	802.11ax (HT40)	MCS0	151	5755	10.43
			159	5795	10.53
	802.11ax (HT80)	MCS0	155	5775	10.52

Chain 0+1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11n (HT20)	MCS0	36	5180	20.33
			40	5200	20.84
			48	5240	20.59
	802.11n (HT40)	MCS0	38	5190	22.17
			46	5230	22.25
	802.11ac (HT20)	MCS0	36	5180	20.35
			40	5200	20.82
			48	5240	20.57
	802.11ac (HT40)	MCS0	38	5190	20.96
			46	5230	20.93
	802.11ac (HT80)	MCS0	42	5210	20.19
			59	5290	20.18
	802.11ax (HT20)	MCS0	36	5180	19.78
			40	5200	19.99
			48	5240	19.92
802.11ax (HT40)	MCS0	38	5190	19.95	
		46	5230	19.93	
802.11ax (HT80)	MCS0	42	5210	10.13	
5.3	802.11n (HT20)	MCS0	52	5260	20.46
			60	5300	20.00
			64	5320	20.10
	802.11n	MCS0	54	5270	22.32

	(HT40)		62	5310	22.35	
	802.11ac (HT20)	MCS0	52	5260	20.41	
			60	5300	20.00	
			64	5320	20.07	
			54	5270	21.13	
	802.11ac (HT40)	MCS0	62	5310	21.20	
			54	5270	21.13	
	802.11ac (HT80)	MCS0	62	5310	21.17	
			52	5260	19.96	
	802.11ax (HT20)	MCS0	56	5280	20.03	
			64	5320	20.15	
			54	5270	20.14	
	802.11ax (HT40)	MCS0	62	5310	20.16	
			58	5290	10.35	
	5.6	802.11n (HT20)	MCS0	100	5500	20.19
				120	5580	20.63
140				5700	20.00	
802.11n (HT40)		MCS0	102	5510	22.22	
			110	5550	22.21	
			134	5670	22.33	
802.11ac (HT20)		MCS0	100	5500	20.18	
			116	5580	20.38	
			140	5700	20.22	
802.11ac (HT40)		MCS0	102	5510	21.14	
			110	5550	20.16	
			142	5710	21.31	
802.11AC (HT80)		MCS0	102	5510	20.82	
			134	5670	21.05	
802.11ax (HT20)		MCS0	100	5500	19.80	
			116	5580	20.70	
	140		5700	19.98		
802.11ax (HT40)	MCS0	102	5510	19.86		
		110	5590	20.17		

			134	5670	19.92
	802.11ax (HT80)	MCS0	106	5530	9.94
			122	5610	10.35
SRD	802.11n (HT20)	MCS0	149	5745	15.63
			157	5785	15.99
			165	5825	16.46
	802.11n (HT40)	MCS0	151	5755	15.87
			159	5795	16.23
	802.11ac (HT20)	MCS0	149	5745	15.60
			157	5785	15.88
	802.11ac (HT40)	MCS0	151	5755	15.07
			159	5795	15.37
	802.11ac (HT80)	MCS0	155	5775	14.90
	802.11ax (HT20)	MCS0	149	5745	13.30
			157	5785	13.78
			165	5825	13.52
	802.11ax (HT40)	MCS0	151	5755	13.40
			159	5795	13.41
802.11ax (HT80)	MCS0	155	5775	10.13	

## BT

Bluetooth 2.4GHz Band Conducted Power		
Channel	Frequency(MHz)	Average Power (dBm)
CH 0	2,402	11.71
CH 39	2,441	11.77
CH 78	2,480	11.77

BLE2.4GHz(5.0_1M) Band Conducted Power		
Channel	Frequency(MHz)	Average Power (dBm)
CH 0	2,402	-2.23
CH 20	2,441	-2.25
CH 39	2,480	-2.26



WIFI Power reduction :

Head : Chain 0

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	14.70	14.58	14.53	14.42
CH 06	2,437	14.68	14.34	14.31	14.37
CH 11	2,462	14.69	14.39	14.05	14.03

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	14.30	13.55	13.60	13.52	13.44	13.32	13.10	12.98
CH 06	2,437	14.33	14.14	14.11	14.17	14.22	13.89	13.61	13.46
CH 11	2,462	14.37	14.20	14.15	13.95	14.00	13.90	13.52	13.38

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	14.29	13.56	13.53	13.47	13.34	13.12	13.00	12.64
CH 06	2,437	14.29	14.17	14.18	14.02	13.92	13.56	13.47	13.28
CH 11	2,462	14.30	14.09	13.86	13.98	13.85	13.52	13.30	12.93

## Chain 1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	16.34	16.22	16.17	16.06
CH 06	2,437	16.29	15.95	15.92	15.98
CH 11	2,462	16.28	15.98	15.64	15.62

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	16.12	15.37	15.42	15.34	15.26	15.14	14.92	14.80
CH 06	2,437	16.13	15.94	15.91	15.97	16.02	15.69	15.41	15.26
CH 11	2,462	16.16	15.99	15.94	15.74	15.79	15.69	15.31	15.17

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	16.07	15.34	15.31	15.25	15.12	14.90	14.78	14.42
CH 06	2,437	16.08	15.96	15.97	15.81	15.71	15.35	15.26	15.07
CH 11	2,462	16.01	15.80	15.57	15.69	15.56	15.23	15.01	14.64

Chain 0+1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	14.96	14.84	14.79	14.68
CH 06	2,437	14.95	14.61	14.58	14.64
CH 11	2,462	14.93	14.63	14.29	14.27

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	14.76	14.01	14.06	13.98	13.90	13.78	13.56	13.44
CH 06	2,437	14.80	14.61	14.58	14.64	14.69	14.36	14.08	13.93
CH 11	2,462	14.72	14.55	14.50	14.30	14.35	14.25	13.87	13.73

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	14.42	13.69	13.66	13.60	13.47	13.25	13.13	12.77
CH 06	2,437	14.53	14.41	14.42	14.26	14.16	13.80	13.71	13.52
CH 11	2,462	14.52	14.31	14.08	14.20	14.07	13.74	13.52	13.15

## Chain 0

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	14.86
			40	5200	14.80
			44	5220	14.78
			48	5240	14.85
	802.11n (HT20)	MCS0	36	5180	14.06
			40	5200	14.20
			48	5240	14.11
	802.11n (HT40)	MCS0	38	5190	14.14
			46	5230	14.16
	802.11ac (HT20)	MCS0	36	5180	14.47
			40	5200	14.45
			48	5240	14.43
	802.11ac (HT40)	MCS0	38	5190	13.75
			46	5230	13.90
	802.11ac (HT80)	MCS0	42	5210	13.85
			59	5290	13.92
	802.11ax (HT20)	MCS0	36	5180	13.91
			40	5200	13.91
			48	5240	14.13
	802.11ax (HT40)	MCS0	38	5190	14.09
46			5230	14.07	
802.11ax (HT80)	MCS0	42	5210	13.95	
5.3	802.11a	6Mbps	52	5260	13.38
			56	5280	13.30
			60	5300	13.38
			64	5320	13.33
	802.11n (HT20)	MCS0	52	5260	13.08
			60	5300	13.06
			64	5320	13.05

	802.11n (HT40)	MCS0	54	5270	12.69
			62	5310	12.68
	802.11ac (HT20)	MCS0	52	5260	12.47
			60	5300	12.40
			64	5320	12.38
	802.11ac (HT40)	MCS0	54	5270	12.36
			62	5310	11.85
	802.11ac (HT80)	MCS0	54	5270	12.38
			62	5310	12.44
	802.11ax (HT20)	MCS0	52	5260	12.27
			56	5280	12.41
			64	5320	13.02
	802.11ax (HT40)	MCS0	54	5270	11.88
			62	5310	11.94
802.11ax (HT80)	MCS0	58	5290	11.64	
5.6G	802.11a	6Mbps	100	5500	12.42
			104	5520	12.42
			108	5540	12.37
			112	5560	12.43
			116	5580	12.43
			120	5600	12.39
			124	5620	12.32
			128	5640	12.42
			132	5660	12.36
			136	5680	12.30
			140	5700	12.40
	802.11n (HT20)	MCS0	100	5500	12.01
			116	5580	11.65
			140	5700	11.78
	802.11n (HT40)	MCS0	102	5510	11.98
			110	5550	12.17
			134	5670	12.26
	802.11ac	MCS0	100	5500	11.40

	(HT20)		116	5580	11.41
			140	5700	11.42
	802.11ac (HT40)	MCS0	102	5510	12.03
			110	5550	11.99
			142	5710	11.95
	802.11AC (HT80)	MCS0	102	5510	12.22
			134	5670	11.79
	802.11ax (HT20)	MCS0	100	5500	11.44
			116	5580	10.25
			140	5700	9.49
	802.11ax (HT40)	MCS0	102	5510	9.41
			110	5590	9.39
			134	5670	9.50
	802.11AC (HT80)	MCS0	106	5530	9.27
			122	5610	9.16
	SRD	802.11a	6Mbps	149	5745
157				5785	10.82
165				5825	10.81
802.11n (HT20)		MCS0	149	5745	10.50
			157	5785	10.51
			165	5825	10.46
802.11n (HT40)		MCS0	151	5755	10.46
			159	5795	10.22
802.11ac (HT20)		MCS0	149	5745	10.50
			157	5785	10.55
			165	5825	10.55
802.11ac (HT40)		MCS0	151	5755	10.86
			159	5795	10.95
802.11ac (HT80)		MCS0	155	5775	10.95
802.11ax (HT20)		MCS0	149	5745	10.21
			157	5785	10.70
	165		5825	10.56	
802.11ax	MCS0	151	5755	10.56	

	(HT40)		159	5795	10.69
	802.11ax (HT80)	MCS0	155	5775	10.58

Chain 1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	16.82
			40	5200	16.79
			44	5220	16.83
			48	5240	16.82
	802.11n (HT20)	MCS0	36	5180	16.16
			40	5200	16.13
			48	5240	16.11
	802.11n (HT40)	MCS0	38	5190	16.17
			46	5230	16.18
	802.11ac (HT20)	MCS0	36	5180	16.44
			40	5200	16.40
			48	5240	16.43
	802.11ac (HT40)	MCS0	38	5190	15.93
			46	5230	15.89
	802.11ac (HT80)	MCS0	42	5210	15.85
			59	5290	15.95
802.11ax (HT20)	MCS0	36	5180	15.61	
		40	5200	15.72	
		48	5240	15.58	
802.11ax (HT40)	MCS0	38	5190	15.66	
		46	5230	15.38	
802.11ax (HT80)	MCS0	42	5210	15.58	
5.3	802.11a	6Mbps	52	5260	16.84
			56	5280	16.80
			60	5300	16.87
			64	5320	16.85

	802.11n (HT20)	MCS0	52	5260	16.57
			60	5300	16.52
			64	5320	16.49
	802.11n (HT40)	MCS0	54	5270	16.17
			62	5310	16.14
	802.11ac (HT20)	MCS0	52	5260	15.92
			60	5300	15.90
			64	5320	15.92
	802.11ac (HT40)	MCS0	54	5270	15.91
			62	5310	15.96
	802.11ac (HT80)	MCS0	54	5270	15.86
			62	5310	15.97
	802.11ax (HT20)	MCS0	52	5260	15.55
			56	5280	15.59
			64	5320	15.63
	802.11ax (HT40)	MCS0	54	5270	15.65
			62	5310	15.69
	802.11ax (HT80)	MCS0	58	5290	15.25
5.6G	802.11a	6Mbps	100	5500	12.90
			104	5520	12.92
			108	5540	12.88
			112	5560	12.93
			116	5580	12.93
			120	5600	12.93
			124	5620	12.87
			128	5640	12.92
			132	5660	12.87
			136	5680	12.85
			140	5700	12.88
	802.11n (HT20)	MCS0	100	5500	12.51
			116	5580	12.38
			140	5700	12.48
	802.11n	MCS0	102	5510	12.43



	(HT40)		110	5550	12.63
			134	5670	12.72
	802.11ac (HT20)	MCS0	100	5500	12.00
			116	5580	11.96
			140	5700	11.93
	802.11ac (HT40)	MCS0	102	5510	12.29
			110	5550	12.46
			142	5710	12.44
	802.11AC (HT80)	MCS0	102	5510	12.59
			134	5670	12.33
	802.11ax (HT20)	MCS0	100	5500	12.44
			116	5580	12.17
			140	5700	12.43
	802.11ax (HT40)	MCS0	102	5510	12.36
			110	5590	12.26
			134	5670	12.42
	802.11AX (HT80)	MCS0	106	5530	12.03
			122	5610	12.10
SRD	802.11a	6Mbps	149	5745	10.84
			157	5785	10.81
			165	5825	10.83
	802.11n (HT20)	MCS0	149	5745	10.50
			157	5785	10.54
			165	5825	10.40
	802.11n (HT40)	MCS0	151	5755	10.42
			159	5795	10.23
	802.11ac (HT20)	MCS0	149	5745	10.52
			157	5785	10.53
			165	5825	10.55
	802.11ac (HT40)	MCS0	151	5755	9.84
			159	5795	9.93
	802.11ac (HT80)	MCS0	155	5775	9.94
	802.11ax	MCS0	149	5745	9.95

	(HT20)		157	5785	10.40
			165	5825	10.13
	802.11ax (HT40)	MCS0	151	5755	9.91
			159	5795	10.02
	802.11ax (HT80)	MCS0	155	5775	10.03

Chain 0+1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11n (HT20)	MCS0	36	5180	14.62
			40	5200	14.62
			48	5240	14.55
	802.11n (HT40)	MCS0	38	5190	13.62
			46	5230	13.79
	802.11ac (HT20)	MCS0	36	5180	14.00
			40	5200	13.94
			48	5240	13.91
	802.11ac (HT40)	MCS0	38	5190	14.21
			46	5230	14.15
	802.11ac (HT80)	MCS0	42	5210	13.12
			59	5290	13.12
	802.11ax (HT20)	MCS0	36	5180	13.10
			40	5200	13.23
			48	5240	13.07
802.11ax (HT40)	MCS0	38	5190	13.21	
		46	5230	12.90	
802.11ax (HT80)	MCS0	42	5210	13.12	
5.3	802.11n (HT20)	MCS0	52	5260	12.65
			60	5300	12.58
			64	5320	12.61
	802.11n	MCS0	54	5270	11.73

	(HT40)		62	5310	11.68
	802.11ac (HT20)	MCS0	52	5260	12.44
			60	5300	12.40
			64	5320	12.38
			54	5270	11.55
	802.11ac (HT40)	MCS0	62	5310	11.52
			54	5270	11.60
	802.11ac (HT80)	MCS0	62	5310	11.53
			52	5260	11.52
	802.11ax (HT20)	MCS0	56	5280	11.55
			64	5320	11.62
			54	5270	11.62
802.11ax (HT40)	MCS0	62	5310	11.66	
		58	5290	11.23	
5.6	802.11n (HT20)	MCS0	100	5500	12.09
			120	5580	12.12
			140	5700	12.14
	802.11n (HT40)	MCS0	102	5510	11.43
			110	5550	11.62
			134	5670	11.74
	802.11ac (HT20)	MCS0	100	5500	11.67
			116	5580	11.60
			140	5700	11.54
	802.11ac (HT40)	MCS0	102	5510	11.51
			110	5550	11.41
			142	5710	11.41
	802.11AC (HT80)	MCS0	102	5510	10.71
			134	5670	10.30
	802.11ax (HT20)	MCS0	100	5500	10.31
			116	5580	10.05
			140	5700	10.31
	802.11ax (HT40)	MCS0	102	5510	10.19
			110	5590	10.14

			134	5670	10.25
	802.11ax (HT80)	MCS0	106	5530	9.89
			122	5610	9.95
SRD	802.11n (HT20)	MCS0	149	5745	12.62
			157	5785	12.59
			165	5825	12.63
	802.11n (HT40)	MCS0	151	5755	11.93
			159	5795	11.74
	802.11ac (HT20)	MCS0	149	5745	12.07
			157	5785	12.05
			165	5825	12.05
	802.11ac (HT40)	MCS0	151	5755	11.90
			159	5795	12.03
	802.11ac (HT80)	MCS0	155	5775	11.69
	802.11ax (HT20)	MCS0	149	5745	11.67
			157	5785	11.49
			165	5825	12.27
	802.11ax (HT40)	MCS0	151	5755	11.55
			159	5795	11.57
802.11ax (HT80)	MCS0	155	5775	11.58	

Body : Chain 0

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	17.20	17.08	17.03	16.92
CH 06	2,437	17.21	16.87	16.84	16.90
CH 11	2,462	17.17	16.87	16.53	16.51

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	16.83	16.08	16.13	16.05	15.97	15.85	15.63	15.51
CH 06	2,437	16.84	16.65	16.62	16.68	16.73	16.40	16.12	15.97
CH 11	2,462	16.86	16.69	16.64	16.44	16.49	16.39	16.01	15.87

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	16.77	16.04	16.01	15.95	15.82	15.60	15.48	15.12
CH 06	2,437	16.78	16.66	16.67	16.51	16.41	16.05	15.96	15.77
CH 11	2,462	16.82	16.61	16.38	16.50	16.37	16.04	15.82	15.45

Chain 1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	16.33	16.21	16.16	16.05
CH 06	2,437	16.31	15.97	15.94	16.00
CH 11	2,462	16.28	15.98	15.64	15.62

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	16.12	15.37	15.42	15.34	15.26	15.14	14.92	14.80
CH 06	2,437	16.12	15.93	15.90	15.96	16.01	15.68	15.40	15.25
CH 11	2,462	16.15	15.98	15.93	15.73	15.78	15.68	15.30	15.16

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	16.10	15.37	15.34	15.28	15.15	14.93	14.81	14.45
CH 06	2,437	16.08	15.96	15.97	15.81	15.71	15.35	15.26	15.07
CH 11	2,462	15.99	15.78	15.55	15.67	15.54	15.21	14.99	14.62

## Chain 0+1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	16.95	16.83	16.78	16.67
CH 06	2,437	16.99	16.65	16.62	16.68
CH 11	2,462	16.93	16.63	16.29	16.27

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	16.77	16.02	16.07	15.99	15.91	15.79	15.57	15.45
CH 06	2,437	16.80	16.61	16.58	16.64	16.69	16.36	16.08	15.93
CH 11	2,462	16.76	16.59	16.54	16.34	16.39	16.29	15.91	15.77

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	16.43	15.70	15.67	15.61	15.48	15.26	15.14	14.78
CH 06	2,437	16.53	16.41	16.42	16.26	16.16	15.80	15.71	15.52
CH 11	2,462	16.55	16.34	16.11	16.23	16.10	15.77	15.55	15.18

## Chain 0

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	16.85
			40	5200	16.84
			44	5220	16.78
			48	5240	16.84
	802.11n (HT20)	MCS0	36	5180	16.04
			40	5200	16.19
			48	5240	16.10
	802.11n (HT40)	MCS0	38	5190	16.12
			46	5230	16.16
	802.11ac (HT20)	MCS0	36	5180	16.50
			40	5200	16.47
			48	5240	16.41
	802.11ac (HT40)	MCS0	38	5190	15.74
			46	5230	15.91
	802.11ac (HT80)	MCS0	42	5210	15.85
			59	5290	15.92
	802.11ax (HT20)	MCS0	36	5180	15.91
			40	5200	15.92
			48	5240	16.15
	802.11ax (HT40)	MCS0	38	5190	16.09
46			5230	16.07	
802.11ax (HT80)	MCS0	42	5210	15.94	
5.3	802.11a	6Mbps	52	5260	16.37
			56	5280	16.33
			60	5300	16.41
			64	5320	16.34
	802.11n (HT20)	MCS0	52	5260	16.09
			60	5300	16.06
			64	5320	16.06



	802.11n (HT40)	MCS0	54	5270	15.69
			62	5310	15.68
	802.11ac (HT20)	MCS0	52	5260	15.44
			60	5300	15.40
			64	5320	15.38
	802.11ac (HT40)	MCS0	54	5270	15.36
			62	5310	14.88
	802.11ac (HT80)	MCS0	54	5270	15.37
			62	5310	15.44
	802.11ax (HT20)	MCS0	52	5260	15.27
			56	5280	15.38
			64	5320	16.02
	802.11ax (HT40)	MCS0	54	5270	14.87
			62	5310	14.95
802.11ax (HT80)	MCS0	58	5290	14.65	
5.6G	802.11a	6Mbps	100	5500	15.92
			104	5520	15.91
			108	5540	15.86
			112	5560	15.92
			116	5580	15.96
			120	5600	15.91
			124	5620	15.84
			128	5640	15.90
			132	5660	15.86
			136	5680	15.84
			140	5700	15.91
	802.11n (HT20)	MCS0	100	5500	15.50
			116	5580	15.14
			140	5700	15.30
	802.11n (HT40)	MCS0	102	5510	15.47
			110	5550	15.67
			134	5670	15.78
	802.11ac	MCS0	100	5500	14.94

	(HT20)		116	5580	14.91
			140	5700	14.92
	802.11ac (HT40)	MCS0	102	5510	15.53
			110	5550	15.47
			142	5710	15.46
	802.11AC (HT80)	MCS0	102	5510	15.70
			134	5670	15.29
	802.11ax (HT20)	MCS0	100	5500	15.40
			116	5580	14.24
			140	5700	13.48
	802.11ax (HT40)	MCS0	102	5510	13.39
			110	5590	13.42
			134	5670	13.51
	802.11AC (HT80)	MCS0	106	5530	13.23
			122	5610	13.15
	SRD	802.11a	6Mbps	149	5745
157				5785	10.81
165				5825	10.83
802.11n (HT20)		MCS0	149	5745	10.49
			157	5785	10.54
			165	5825	10.46
802.11n (HT40)		MCS0	151	5755	10.45
			159	5795	10.23
802.11ac (HT20)		MCS0	149	5745	10.54
			157	5785	10.52
			165	5825	10.56
802.11ac (HT40)		MCS0	151	5755	10.85
			159	5795	10.96
802.11ac (HT80)		MCS0	155	5775	10.94
802.11ax (HT20)		MCS0	149	5745	10.08
			157	5785	10.57
	165		5825	10.47	
802.11ax	MCS0	151	5755	10.47	

	(HT40)		159	5795	10.59
	802.11ax (HT80)	MCS0	155	5775	10.47

Chain 1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	16.81
			40	5200	16.83
			44	5220	16.82
			48	5240	16.84
	802.11n (HT20)	MCS0	36	5180	16.13
			40	5200	16.14
			48	5240	16.12
	802.11n (HT40)	MCS0	38	5190	16.17
			46	5230	16.15
	802.11ac (HT20)	MCS0	36	5180	16.41
			40	5200	16.41
			48	5240	16.41
	802.11ac (HT40)	MCS0	38	5190	15.91
			46	5230	15.88
	802.11ac (HT80)	MCS0	42	5210	15.85
			59	5290	15.93
	802.11ax (HT20)	MCS0	36	5180	15.61
			40	5200	15.70
48			5240	15.58	
802.11ax (HT40)	MCS0	38	5190	15.66	
		46	5230	15.36	
802.11ax (HT80)	MCS0	42	5210	15.60	
5.3	802.11a	6Mbps	52	5260	14.85
			56	5280	14.84
			60	5300	14.86
			64	5320	14.87

	802.11n (HT20)	MCS0	52	5260	14.55
			60	5300	14.54
			64	5320	14.49
	802.11n (HT40)	MCS0	54	5270	14.13
			62	5310	14.16
	802.11ac (HT20)	MCS0	52	5260	13.95
			60	5300	13.94
			64	5320	13.93
	802.11ac (HT40)	MCS0	54	5270	13.88
			62	5310	13.95
	802.11ac (HT80)	MCS0	54	5270	13.86
			62	5310	13.94
	802.11ax (HT20)	MCS0	52	5260	13.52
			56	5280	13.61
			64	5320	13.66
	802.11ax (HT40)	MCS0	54	5270	13.64
			62	5310	13.67
	802.11ax (HT80)	MCS0	58	5290	13.24
5.6G	802.11a	6Mbps	100	5500	12.88
			104	5520	12.91
			108	5540	12.90
			112	5560	12.90
			116	5580	12.95
			120	5600	12.89
			124	5620	12.87
			128	5640	12.90
			132	5660	12.89
			136	5680	12.84
			140	5700	12.91
	802.11n (HT20)	MCS0	100	5500	12.51
			116	5580	12.36
			140	5700	12.49
	802.11n	MCS0	102	5510	12.42

	(HT40)		110	5550	12.60
			134	5670	12.74
	802.11ac (HT20)	MCS0	100	5500	11.97
			116	5580	11.96
			140	5700	11.94
	802.11ac (HT40)	MCS0	102	5510	12.30
			110	5550	12.46
			142	5710	12.44
	802.11AC (HT80)	MCS0	102	5510	12.60
			134	5670	12.33
	802.11ax (HT20)	MCS0	100	5500	11.97
			116	5580	11.67
			140	5700	11.96
	802.11ax (HT40)	MCS0	102	5510	11.82
			110	5590	11.76
			134	5670	11.89
	802.11AX (HT80)	MCS0	106	5530	11.54
			122	5610	11.57
SRD	802.11a	6Mbps	149	5745	10.83
			157	5785	10.82
			165	5825	10.79
	802.11n (HT20)	MCS0	149	5745	10.51
			157	5785	10.51
			165	5825	10.40
	802.11n (HT40)	MCS0	151	5755	10.42
			159	5795	10.24
	802.11ac (HT20)	MCS0	149	5745	10.50
			157	5785	10.49
			165	5825	10.52
	802.11ac (HT40)	MCS0	151	5755	9.85
			159	5795	9.93
	802.11ac (HT80)	MCS0	155	5775	9.94
	802.11ax	MCS0	149	5745	9.41

	(HT20)		157	5785	9.91
			165	5825	9.61
	802.11ax (HT40)	MCS0	151	5755	9.41
			159	5795	9.52
	802.11ax (HT80)	MCS0	155	5775	9.52

Chain 0+1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11n (HT20)	MCS0	36	5180	14.63
			40	5200	14.62
			48	5240	14.53
	802.11n (HT40)	MCS0	38	5190	13.63
			46	5230	13.79
	802.11ac (HT20)	MCS0	36	5180	14.00
			40	5200	13.98
			48	5240	13.91
	802.11ac (HT40)	MCS0	38	5190	14.19
			46	5230	14.14
	802.11ac (HT80)	MCS0	42	5210	13.15
			59	5290	13.13
	802.11ax (HT20)	MCS0	36	5180	13.12
			40	5200	13.26
			48	5240	13.10
802.11ax (HT40)	MCS0	38	5190	13.20	
		46	5230	12.89	
802.11ax (HT80)	MCS0	42	5210	13.12	
5.3	802.11n (HT20)	MCS0	52	5260	13.63
			60	5300	13.61
			64	5320	13.64
	802.11n	MCS0	54	5270	12.73

	(HT40)		62	5310	12.69	
	802.11ac (HT20)	MCS0	52	5260	13.45	
			60	5300	13.40	
			64	5320	13.37	
			54	5270	12.57	
	802.11ac (HT40)	MCS0	62	5310	12.53	
			54	5270	12.59	
	802.11ac (HT80)	MCS0	62	5310	12.56	
			52	5260	12.56	
	802.11ax (HT20)	MCS0	56	5280	12.63	
			64	5320	12.66	
			54	5270	12.68	
	802.11ax (HT40)	MCS0	62	5310	12.70	
			58	5290	12.28	
	5.6	802.11n (HT20)	MCS0	100	5500	12.12
				120	5580	12.11
140				5700	12.15	
802.11n (HT40)		MCS0	102	5510	11.45	
			110	5550	11.59	
			134	5670	11.73	
802.11ac (HT20)		MCS0	100	5500	11.64	
			116	5580	11.61	
			140	5700	11.50	
802.11ac (HT40)		MCS0	102	5510	11.51	
			110	5550	11.43	
			142	5710	11.41	
802.11AC (HT80)		MCS0	102	5510	10.70	
			134	5670	10.29	
802.11ax (HT20)		MCS0	100	5500	10.29	
			116	5580	10.03	
	140		5700	10.28		
802.11ax (HT40)	MCS0	102	5510	10.19		
		110	5590	10.11		

			134	5670	10.25
	802.11ax (HT80)	MCS0	106	5530	9.89
			122	5610	9.91
SRD	802.11n (HT20)	MCS0	149	5745	14.13
			157	5785	14.10
			165	5825	14.11
	802.11n (HT40)	MCS0	151	5755	13.39
			159	5795	13.28
	802.11ac (HT20)	MCS0	149	5745	13.55
			157	5785	13.55
			165	5825	13.54
	802.11ac (HT40)	MCS0	151	5755	13.44
			159	5795	13.54
	802.11ac (HT80)	MCS0	155	5775	13.15
	802.11ax (HT20)	MCS0	149	5745	12.67
			157	5785	12.51
			165	5825	13.25
	802.11ax (HT40)	MCS0	151	5755	12.57
			159	5795	12.56
802.11ax (HT80)	MCS0	155	5775	12.55	



WIFI Simultaneous power reduction :

Head : Chain 0

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	11.69	11.57	11.52	11.41
CH 06	2,437	11.68	11.34	11.31	11.37
CH 11	2,462	11.69	11.39	11.05	11.03

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	11.34	10.59	10.64	10.56	10.48	10.36	10.14	10.02
CH 06	2,437	11.35	11.16	11.13	11.19	11.24	10.91	10.63	10.48
CH 11	2,462	11.35	11.18	11.13	10.93	10.98	10.88	10.50	10.36

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	11.26	10.53	10.50	10.44	10.31	10.09	9.97	9.61
CH 06	2,437	11.29	11.17	11.18	11.02	10.92	10.56	10.47	10.28
CH 11	2,462	11.32	11.11	10.88	11.00	10.87	10.54	10.32	9.95

Chain 1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	14.34	14.22	14.17	14.06
CH 06	2,437	14.29	13.95	13.92	13.98
CH 11	2,462	14.28	13.98	13.64	13.62

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	14.12	13.37	13.42	13.34	13.26	13.14	12.92	12.8
CH 06	2,437	14.13	13.94	13.91	13.97	14.02	13.69	13.41	13.26
CH 11	2,462	14.16	13.99	13.94	13.74	13.79	13.69	13.31	13.17

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	14.07	13.34	13.31	13.25	13.12	12.9	12.78	12.42
CH 06	2,437	14.08	13.96	13.97	13.81	13.71	13.35	13.26	13.07
CH 11	2,462	14.01	13.8	13.57	13.69	13.56	13.23	13.01	12.64

## Chain 0+1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	11.46	11.34	11.29	11.18
CH 06	2,437	11.47	11.13	11.10	11.16
CH 11	2,462	11.44	11.14	10.80	10.78

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	11.28	10.53	10.58	10.50	10.42	10.30	10.08	9.96
CH 06	2,437	11.32	11.13	11.10	11.16	11.21	10.88	10.60	10.45
CH 11	2,462	11.25	11.08	11.03	10.83	10.88	10.78	10.40	10.26

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	10.93	10.20	10.17	10.11	9.98	9.76	9.64	9.28
CH 06	2,437	11.01	10.89	10.90	10.74	10.64	10.28	10.19	10.00
CH 11	2,462	11.02	10.81	10.58	10.70	10.57	10.24	10.02	9.65

## Chain 0

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	9.85
			40	5200	9.81
			44	5220	9.79
			48	5240	9.83
	802.11n (HT20)	MCS0	36	5180	9.03
			40	5200	9.20
			48	5240	9.13
	802.11n (HT40)	MCS0	38	5190	9.11
			46	5230	9.16
	802.11ac (HT20)	MCS0	36	5180	9.50
			40	5200	9.47
			48	5240	9.42
	802.11ac (HT40)	MCS0	38	5190	8.73
			46	5230	8.89
	802.11ac (HT80)	MCS0	42	5210	8.82
			59	5290	8.92
	802.11ax (HT20)	MCS0	36	5180	8.93
			40	5200	8.96
48			5240	9.15	
802.11ax (HT40)	MCS0	38	5190	9.10	
		46	5230	9.06	
802.11ax (HT80)	MCS0	42	5210	8.97	
5.3	802.11a	6Mbps	52	5260	9.38
			56	5280	9.34
			60	5300	9.41
			64	5320	9.31
	802.11n (HT20)	MCS0	52	5260	9.07
			60	5300	9.08
			64	5320	9.07

	802.11n (HT40)	MCS0	54	5270	8.70
			62	5310	8.68
	802.11ac (HT20)	MCS0	52	5260	8.46
			60	5300	8.40
			64	5320	8.38
	802.11ac (HT40)	MCS0	54	5270	8.38
			62	5310	7.87
	802.11ac (HT80)	MCS0	54	5270	8.40
			62	5310	8.45
	802.11ax (HT20)	MCS0	52	5260	8.46
			56	5280	8.59
			64	5320	9.22
	802.11ax (HT40)	MCS0	54	5270	8.04
			62	5310	8.11
802.11ax (HT80)	MCS0	58	5290	7.86	
5.6G	802.11a	6Mbps	100	5500	8.91
			104	5520	8.92
			108	5540	8.86
			112	5560	8.91
			116	5580	8.96
			120	5600	8.93
			124	5620	8.83
			128	5640	8.90
			132	5660	8.90
			136	5680	8.83
			140	5700	8.93
	802.11n (HT20)	MCS0	100	5500	8.54
			116	5580	8.18
			140	5700	8.29
	802.11n (HT40)	MCS0	102	5510	8.47
			110	5550	8.67
			134	5670	8.78
	802.11ac	MCS0	100	5500	7.94

	(HT20)		116	5580	7.92
			140	5700	7.93
	802.11ac (HT40)	MCS0	102	5510	8.51
			110	5550	8.49
			142	5710	8.47
	802.11AC (HT80)	MCS0	102	5510	8.69
			134	5670	8.31
	802.11ax (HT20)	MCS0	100	5500	8.34
			116	5580	8.16
			140	5700	8.38
	802.11ax (HT40)	MCS0	102	5510	8.28
			110	5590	8.33
			134	5670	8.39
	802.11ax (HT80)	MCS0	106	5530	8.16
122			5610	8.06	
SRD	802.11a	6Mbps	149	5745	8.32
			157	5785	8.31
			165	5825	8.31
	802.11n (HT20)	MCS0	149	5745	7.99
			157	5785	8.04
			165	5825	7.98
	802.11n (HT40)	MCS0	151	5755	7.94
			159	5795	7.72
	802.11ac (HT20)	MCS0	149	5745	8.00
			157	5785	8.04
			165	5825	8.07
	802.11ac (HT40)	MCS0	151	5755	8.34
			159	5795	8.42
	802.11ac (HT80)	MCS0	155	5775	8.43
	802.11ax (HT20)	MCS0	149	5745	8.43
			157	5785	8.94
			165	5825	8.82
	802.11ax	MCS0	151	5755	8.80

	(HT40)		159	5795	8.92
	802.11ax (HT80)	MCS0	155	5775	8.78

Chain 1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	16.82
			40	5200	16.81
			44	5220	16.83
			48	5240	16.84
	802.11n (HT20)	MCS0	36	5180	16.14
			40	5200	16.15
			48	5240	16.13
	802.11n (HT40)	MCS0	38	5190	16.18
			46	5230	16.16
	802.11ac (HT20)	MCS0	36	5180	16.42
			40	5200	16.41
			48	5240	16.42
	802.11ac (HT40)	MCS0	38	5190	15.93
			46	5230	15.89
	802.11ac (HT80)	MCS0	42	5210	15.84
			59	5290	15.93
	802.11ax (HT20)	MCS0	36	5180	15.94
			40	5200	16.06
48			5240	15.91	
802.11ax (HT40)	MCS0	38	5190	16.03	
		46	5230	15.70	
802.11ax (HT80)	MCS0	42	5210	15.96	
5.3	802.11a	6Mbps	52	5260	13.86
			56	5280	13.83
			60	5300	13.85
			64	5320	13.88

	802.11n (HT20)	MCS0	52	5260	13.55
			60	5300	13.52
			64	5320	13.52
	802.11n (HT40)	MCS0	54	5270	13.13
			62	5310	13.15
	802.11ac (HT20)	MCS0	52	5260	12.94
			60	5300	12.91
			64	5320	12.91
	802.11ac (HT40)	MCS0	54	5270	12.91
			62	5310	12.94
	802.11ac (HT80)	MCS0	54	5270	12.85
			62	5310	12.93
	802.11ax (HT20)	MCS0	52	5260	12.91
			56	5280	12.94
			64	5320	13.00
	802.11ax (HT40)	MCS0	54	5270	13.01
			62	5310	13.03
	802.11ax (HT80)	MCS0	58	5290	12.64
5.6G	802.11a	6Mbps	100	5500	16.90
			104	5520	16.91
			108	5540	16.89
			112	5560	16.91
			116	5580	16.93
			120	5600	16.91
			124	5620	16.87
			128	5640	16.90
			132	5660	16.89
			136	5680	16.85
			140	5700	16.90
	802.11n (HT20)	MCS0	100	5500	16.50
			116	5580	16.36
			140	5700	16.48
	802.11n	MCS0	102	5510	16.42



	(HT40)		110	5550	16.61
			134	5670	16.73
	802.11ac (HT20)	MCS0	100	5500	15.98
			116	5580	15.96
			140	5700	15.95
	802.11ac (HT40)	MCS0	102	5510	16.31
			110	5550	16.45
			142	5710	16.46
	802.11AC (HT80)	MCS0	102	5510	16.61
			134	5670	16.33
	802.11ax (HT20)	MCS0	100	5500	16.31
			116	5580	16.04
			140	5700	16.33
	802.11ax (HT40)	MCS0	102	5510	16.20
			110	5590	16.15
			134	5670	16.28
	802.11ax (HT80)	MCS0	106	5530	15.91
			122	5610	15.96
SRD	802.11a	6Mbps	149	5745	10.83
			157	5785	10.82
			165	5825	10.81
	802.11n (HT20)	MCS0	149	5745	10.52
			157	5785	10.53
			165	5825	10.42
	802.11n (HT40)	MCS0	151	5755	10.43
			159	5795	10.22
	802.11ac (HT20)	MCS0	149	5745	10.50
			157	5785	10.51
			165	5825	10.53
	802.11ac (HT40)	MCS0	151	5755	9.86
			159	5795	9.92
	802.11ac (HT80)	MCS0	155	5775	9.93
	802.11ax	MCS0	149	5745	9.95

	(HT20)		157	5785	10.40
			165	5825	10.14
	802.11ax (HT40)	MCS0	151	5755	9.95
			159	5795	10.03
	802.11ax (HT80)	MCS0	155	5775	10.02

Chain 0+1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11n (HT20)	MCS0	36	5180	9.16
			40	5200	9.08
			48	5240	9.02
	802.11n (HT40)	MCS0	38	5190	8.16
			46	5230	8.25
	802.11ac (HT20)	MCS0	36	5180	8.50
			40	5200	8.45
			48	5240	8.43
	802.11ac (HT40)	MCS0	38	5190	8.72
			46	5230	8.67
	802.11ac (HT80)	MCS0	42	5210	7.66
			59	5290	7.63
	802.11ax (HT20)	MCS0	36	5180	7.64
			40	5200	7.67
			48	5240	7.89
802.11ax (HT40)	MCS0	38	5190	7.81	
		46	5230	7.77	
802.11ax (HT80)	MCS0	42	5210	7.68	
5.3	802.11n (HT20)	MCS0	52	5260	8.65
			60	5300	8.61
			64	5320	8.62
	802.11n	MCS0	54	5270	7.71

	(HT40)		62	5310	7.67
	802.11ac (HT20)	MCS0	52	5260	8.45
			60	5300	8.43
			64	5320	8.37
	802.11ac (HT40)	MCS0	54	5270	7.57
			62	5310	7.53
	802.11ac (HT80)	MCS0	54	5270	7.60
			62	5310	7.54
	802.11ax (HT20)	MCS0	52	5260	7.56
			56	5280	7.68
			64	5320	8.31
	802.11ax (HT40)	MCS0	54	5270	7.15
62			5310	7.22	
802.11ax (HT80)	MCS0	58	5290	7.21	
5.6	802.11n (HT20)	MCS0	100	5500	8.12
			116	5580	8.06
			140	5700	8.12
	802.11n (HT40)	MCS0	102	5510	7.45
			110	5550	7.62
			134	5670	7.71
	802.11ac (HT20)	MCS0	100	5500	7.65
			116	5580	7.60
			140	5700	7.53
	802.11ac (HT40)	MCS0	102	5510	7.50
			110	5550	7.45
			142	5710	7.41
	802.11AC (HT80)	MCS0	102	5510	7.71
			134	5670	7.31
	802.11ax (HT20)	MCS0	100	5500	7.13
			116	5580	7.35
			140	5700	7.27
	802.11ax (HT40)	MCS0	102	5510	7.29
110			5590	7.39	

			134	5670	7.13
	802.11ax (HT80)	MCS0	106	5530	7.12
			122	5610	7.11
SRD	802.11n (HT20)	MCS0	149	5745	9.10
			157	5785	9.10
			165	5825	9.11
	802.11n (HT40)	MCS0	151	5755	8.40
			159	5795	8.27
	802.11ac (HT20)	MCS0	149	5745	8.55
			157	5785	8.54
			165	5825	8.55
	802.11ac (HT40)	MCS0	151	5755	8.43
			159	5795	8.53
	802.11ac (HT80)	MCS0	155	5775	8.15
	802.11ax (HT20)	MCS0	149	5745	8.14
			157	5785	7.99
			165	5825	8.75
	802.11ax (HT40)	MCS0	151	5755	8.04
159			5795	8.02	
802.11ax (HT80)	MCS0	155	5775	8.05	

Body : Chain 0+1

802.11b AVERAGE CONDUCTED POWER (dBm)					
Channel	Frequency (MHz)	Data Rate (Mbps)			
		1	2	5.5	11
CH 01	2,412	14.95	14.83	14.78	14.67
CH 06	2,437	14.99	14.65	14.62	14.68
CH 11	2,462	14.93	14.63	14.29	14.27

802.11g AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
CH 01	2,412	14.77	14.02	14.07	13.99	13.91	13.79	13.57	13.45
CH 06	2,437	14.80	14.61	14.58	14.64	14.69	14.36	14.08	13.93
CH 11	2,462	14.76	14.59	14.54	14.34	14.39	14.29	13.91	13.77

802.11n-HT20 AVERAGE CONDUCTED POWER (dBm)									
Channel	Frequency (MHz)	Data Rate							
		MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 01	2,412	14.43	13.7	13.67	13.61	13.48	13.26	13.14	12.78
CH 06	2,437	14.53	14.41	14.42	14.26	14.16	13.8	13.71	13.52
CH 11	2,462	14.55	14.34	14.11	14.23	14.1	13.77	13.55	13.18

## Chain 0

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	11.84
			40	5200	11.83
			44	5220	11.76
			48	5240	11.85
	802.11n (HT20)	MCS0	36	5180	11.06
			40	5200	11.21
			48	5240	11.13
	802.11n (HT40)	MCS0	38	5190	11.13
			46	5230	11.17
	802.11ac (HT20)	MCS0	36	5180	11.47
			40	5200	11.46
			48	5240	11.42
	802.11ac (HT40)	MCS0	38	5190	10.75
			46	5230	10.91
	802.11ac (HT80)	MCS0	42	5210	10.86
			59	5290	10.93
	802.11ax (HT20)	MCS0	36	5180	10.93
			40	5200	10.93
			48	5240	11.15
	802.11ax (HT40)	MCS0	38	5190	11.12
46			5230	11.06	
802.11ax (HT80)	MCS0	42	5210	10.97	
5.3	802.11a	6Mbps	52	5260	12.88
			56	5280	12.80
			60	5300	12.89
			64	5320	12.83
	802.11n (HT20)	MCS0	52	5260	12.60
			60	5300	12.55
			64	5320	12.57

	802.11n (HT40)	MCS0	54	5270	12.22
			62	5310	12.20
	802.11ac (HT20)	MCS0	52	5260	11.94
			60	5300	11.93
			64	5320	11.87
	802.11ac (HT40)	MCS0	54	5270	11.89
			62	5310	11.37
	802.11ac (HT80)	MCS0	54	5270	11.88
			62	5310	11.94
	802.11ax (HT20)	MCS0	52	5260	11.94
			56	5280	12.04
			64	5320	12.70
	802.11ax (HT40)	MCS0	54	5270	11.54
			62	5310	11.62
802.11ax (HT80)	MCS0	58	5290	11.32	
5.6G	802.11a	6Mbps	100	5500	12.92
			104	5520	12.93
			108	5540	12.90
			112	5560	12.93
			116	5580	12.96
			120	5600	12.92
			124	5620	12.81
			128	5640	12.90
			132	5660	12.89
			136	5680	12.83
			140	5700	12.90
	802.11n (HT20)	MCS0	100	5500	12.52
			116	5580	12.18
			140	5700	12.28
	802.11n (HT40)	MCS0	102	5510	12.47
			110	5550	12.67
			134	5670	12.77
	802.11ac	MCS0	100	5500	11.93

	(HT20)		116	5580	11.89
			140	5700	11.95
	802.11ac (HT40)	MCS0	102	5510	12.52
			110	5550	12.46
			142	5710	12.43
	802.11AC (HT80)	MCS0	102	5510	12.71
			134	5670	12.31
	802.11ax (HT20)	MCS0	100	5500	12.28
			116	5580	11.11
			140	5700	10.36
	802.11ax (HT40)	MCS0	102	5510	10.26
			110	5590	10.29
			134	5670	10.38
	802.11ax (HT80)	MCS0	106	5530	10.14
			122	5610	10.01
SRD	802.11a	6Mbps	149	5745	10.82
			157	5785	10.80
			165	5825	10.81
	802.11n (HT20)	MCS0	149	5745	10.51
			157	5785	10.53
			165	5825	10.48
	802.11n (HT40)	MCS0	151	5755	10.45
			159	5795	10.24
	802.11ac (HT20)	MCS0	149	5745	10.52
			157	5785	10.54
			165	5825	10.57
	802.11ac (HT40)	MCS0	151	5755	10.84
			159	5795	10.94
	802.11ac (HT80)	MCS0	155	5775	10.93
	802.11ax (HT20)	MCS0	149	5745	9.47
157			5785	9.96	
165			5825	9.84	
802.11ax	MCS0	151	5755	9.81	



	(HT40)		159	5795	9.97
	802.11ax (HT80)	MCS0	155	5775	9.44

Chain 1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11a	6Mbps	36	5180	12.30
			40	5200	12.32
			44	5220	12.33
			48	5240	12.32
	802.11n (HT20)	MCS0	36	5180	11.66
			40	5200	11.63
			48	5240	11.64
	802.11n (HT40)	MCS0	38	5190	11.66
			46	5230	11.64
	802.11ac (HT20)	MCS0	36	5180	11.90
			40	5200	11.90
			48	5240	11.93
	802.11ac (HT40)	MCS0	38	5190	11.41
			46	5230	11.40
	802.11ac (HT80)	MCS0	42	5210	11.32
			59	5290	11.42
802.11ax (HT20)	MCS0	36	5180	11.40	
		40	5200	11.51	
		48	5240	11.40	
802.11ax (HT40)	MCS0	38	5190	11.48	
		46	5230	11.17	
802.11ax (HT80)	MCS0	42	5210	11.40	
5.3	802.11a	6Mbps	52	5260	11.36
			56	5280	11.30
			60	5300	11.38
			64	5320	11.34

	802.11n (HT20)	MCS0	52	5260	11.03
			60	5300	11.02
			64	5320	11.03
	802.11n (HT40)	MCS0	54	5270	10.65
			62	5310	10.66
	802.11ac (HT20)	MCS0	52	5260	10.41
			60	5300	10.43
			64	5320	10.45
	802.11ac (HT40)	MCS0	54	5270	10.41
			62	5310	10.47
	802.11ac (HT80)	MCS0	54	5270	10.36
			62	5310	10.47
	802.11ax (HT20)	MCS0	52	5260	10.47
			56	5280	10.52
			64	5320	10.57
	802.11ax (HT40)	MCS0	54	5270	10.57
			62	5310	10.59
	802.11ax (HT80)	MCS0	58	5290	10.19
5.6G	802.11a	6Mbps	100	5500	10.41
			104	5520	10.43
			108	5540	10.37
			112	5560	10.41
			116	5580	10.43
			120	5600	10.40
			124	5620	10.38
			128	5640	10.39
			132	5660	10.37
			136	5680	10.34
			140	5700	10.42
	802.11n (HT20)	MCS0	100	5500	10.01
			116	5580	9.87
			140	5700	10.00
	802.11n	MCS0	102	5510	9.92

	(HT40)		110	5550	10.12
			134	5670	10.25
	802.11ac (HT20)	MCS0	100	5500	9.49
			116	5580	9.48
			140	5700	9.45
	802.11ac (HT40)	MCS0	102	5510	9.81
			110	5550	9.93
			142	5710	9.94
	802.11AC (HT80)	MCS0	102	5510	10.09
			134	5670	9.85
	802.11ax (HT20)	MCS0	100	5500	12.33
			116	5580	12.05
			140	5700	12.32
	802.11ax (HT40)	MCS0	102	5510	12.20
			110	5590	12.15
			134	5670	12.29
802.11ax (HT80)	MCS0	106	5530	11.91	
		122	5610	11.95	
SRD	802.11a	6Mbps	149	5745	10.33
			157	5785	10.32
			165	5825	10.30
	802.11n (HT20)	MCS0	149	5745	10.02
			157	5785	10.02
			165	5825	9.93
	802.11n (HT40)	MCS0	151	5755	9.95
			159	5795	9.70
	802.11ac (HT20)	MCS0	149	5745	9.98
			157	5785	10.00
			165	5825	10.05
	802.11ac (HT40)	MCS0	151	5755	9.35
			159	5795	9.44
	802.11ac (HT80)	MCS0	155	5775	9.43
	802.11ax	MCS0	149	5745	9.44

	(HT20)		157	5785	9.90
			165	5825	9.61
	802.11ax (HT40)	MCS0	151	5755	9.45
			159	5795	9.53
	802.11ax (HT80)	MCS0	155	5775	9.52

Chain 0+1

Band (GHz)	Mode	Data Rate	CH#	Freq (MHz)	AVERAGE CONDUCTED POWER (dBm)
5.2	802.11n (HT20)	MCS0	36	5180	11.12
			40	5200	11.10
			48	5240	11.02
	802.11n (HT40)	MCS0	38	5190	10.13
			46	5230	10.25
	802.11ac (HT20)	MCS0	36	5180	10.48
			40	5200	10.47
			48	5240	10.40
	802.11ac (HT40)	MCS0	38	5190	10.72
			46	5230	10.64
	802.11ac (HT80)	MCS0	42	5210	9.66
			59	5290	9.63
	802.11ax (HT20)	MCS0	36	5180	9.62
			40	5200	9.64
			48	5240	9.86
802.11ax (HT40)	MCS0	38	5190	9.81	
		46	5230	9.79	
802.11ax (HT80)	MCS0	42	5210	9.67	
5.3	802.11n (HT20)	MCS0	52	5260	10.12
			60	5300	10.09
			64	5320	10.11
	802.11n (HT40)	MCS0	54	5270	9.23
			62	5310	9.16

	802.11ac (HT20)	MCS0	52	5260	9.95
			60	5300	9.94
			64	5320	9.87
	802.11ac (HT40)	MCS0	54	5270	9.06
			62	5310	9.01
	802.11ac (HT80)	MCS0	54	5270	9.08
			62	5310	9.06
	802.11ax (HT20)	MCS0	52	5260	9.05
			56	5280	9.16
			64	5320	9.81
	802.11ax (HT40)	MCS0	54	5270	8.64
			62	5310	8.71
	802.11ax (HT80)	MCS0	58	5290	8.43
5.6	802.11n (HT20)	MCS0	100	5500	10.11
			116	5580	10.05
			140	5700	10.13
	802.11n (HT40)	MCS0	102	5510	9.46
			110	5550	9.62
			134	5670	9.72
	802.11ac (HT20)	MCS0	100	5500	9.67
			116	5580	9.60
			140	5700	9.53
	802.11ac (HT40)	MCS0	102	5510	9.50
			110	5550	9.42
			142	5710	9.44
	802.11AC (HT80)	MCS0	102	5510	8.69
			134	5670	8.30
	802.11ax (HT20)	MCS0	100	5500	8.26
			116	5580	7.11
			140	5700	7.34
	802.11ax (HT40)	MCS0	102	5510	7.27
			110	5590	7.26
			134	5670	7.37

	802.11ax (HT80)	MCS0	106	5530	7.12
			122	5610	7.21
SRD	802.11n (HT20)	MCS0	149	5745	11.11
			157	5785	11.10
			165	5825	11.12
	802.11n (HT40)	MCS0	151	5755	10.39
			159	5795	10.27
	802.11ac (HT20)	MCS0	149	5745	10.55
			157	5785	10.55
			165	5825	10.56
	802.11ac (HT40)	MCS0	151	5755	10.44
			159	5795	10.55
	802.11ac (HT80)	MCS0	155	5775	10.19
	802.11ax (HT20)	MCS0	149	5745	10.17
			157	5785	10.03
			165	5825	10.78
	802.11ax (HT40)	MCS0	151	5755	10.07
			159	5795	10.07
	802.11ax (HT80)	MCS0	155	5775	10.08

Remark:

Output Power Measurement Considerations for Wi-Fi 2.4 GHz band

1. 2.4 GHz 802.11b DSSS:

- Output power measurement is not required:

o When SAR Test Exclusion according to KDB 447498 D01 applies.

o When other power measurement reduction applies.

- Otherwise, output power measurement is required on:

o Channels 1, 6, and 11, when the output power specified for other channels is no higher than the abovementioned channels.

- o The closest adjacent channels to the aforementioned channels, when the output power specified for these adjacent channels is higher.

- For ease of identification, 802.11b DSSS is identified as the Initial Test Configuration for the 2.4 GHz band.

## 2. 2.4 GHz 802.11g/n OFDM

- Output power measurement is not required:

- o When SAR Test Exclusion according to KDB 447498 D01 applies.

- o When SAR Test Exclusion procedures for 2.4 GHz 802.11g/n OFDM applies, according to the SAR measurement results from 802.11b DSSS; see Section 11 of the report for details.

- Otherwise, output power measurement is required for 2.4 GHz 802.11g/n OFDM, with the following considerations:

- o If 40 MHz bandwidth configurations are supported, measure power for either Channel 6 or the highest specified output power channel.

- o Output power measurement requirements for smaller bandwidth configurations are dependent on the SAR measurement results from the 40 MHz bandwidth configurations.

- o If no 40 MHz bandwidth configurations are supported, then a channel selection process similar to 802.11b DSSS is applied.

- The output power measurement is required for 2.4 GHz 802.11g/n OFDM as a result of 802.11b DSSS reported SAR results, the required test configurations in 2.4 GHz 802.11g/n OFDM are identified as Subsequent Test Configurations with respect to the Initial Test Configuration status assigned to 802.11b DSSS.

- If, for a particular antenna or transmit diversity condition supported by the device, no 802.11b DSSS configurations are available, output power should also be measured as a default for 802.11g/n OFDM when SAR Test Exclusion according to KDB 447498 D01 does not apply; these 802.11g/n OFDM configurations are considered the Initial Test Configurations for the respective antenna/transmit diversity condition.

### Initial Test Position SAR Test Reduction

For both DSSS and OFDM wireless modes, when an Initial Test Configuration is found to require SAR measurements, an Initial Test Position is established for each applicable exposure configuration (Head, Body, etc.) using either:

- Design implementation details from the manufacturer, or

- Investigative results by the test lab, obtained by performing area scans on the Initial Test Configuration for all applicable test positions and identifying the highest measured SAR from the area scan-only measurements.

Complete SAR scans are then performed on the established Initial Test Position on each exposure configuration, using the Initial Test Configuration. When the reported SAR for this Initial Test Position is: -  $\leq 0.4$  W/kg, further SAR measurement is not required for the other test positions in the exposure configuration and wireless mode combination within the frequency band or aggregated band. -  $> 0.4$  W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closest/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel until the reported SAR is  $\leq 0.8$  W/kg or all required test positions are tested.

- For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is  $> 0.8$  W/kg, measure the SAR for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required test channels are considered.



## 12.2. SAR measurement Results

### General Notes:

- 1) Per KDB447498 D01v06, all measurement SAR results are scaled to the maximum tune-up tolerance limit to demonstrate compliant.
- 2) Per KDB447498 D01v06, 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  $\leq 0.8$  W/kg or 2.0W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$ MHz. When the maximum output power variation across the required test channels is  $>1/2$  dB, instead of the middle channel, the highest output power channel must be used.
- 3) Per KDB865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measure SAR is  $\geq 0.8$ 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.
- 4) Per KDB 941225 D06 Hotspot Mode SAR v02:r01, the DUT dimension is bigger than 9cm\*5cm, 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.
- 5) Per KDB648474 D04v01r03, SAR is evaluated without a headset connected to the device. When the standalone reported body-worn SAR is  $\leq 1.2$ W/kg, no additional SAR evaluations using a headset are required.
- 6) Per KDB865664 D02v01r02, 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 plots-processing (refer to appendix B for details).

### GSM Notes:

Per KDB941225 D01v03r01, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including

tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

#### **UMTS Notes:**

Per KDB 941225 D01v03r01, when 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  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode..

Per KDB941225 D01v03, SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

#### **LTE Notes:**

- 7) 1. Per KDB 941225 D05v02r05, 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.
- 8) 2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
- 9) 3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
- 11) 4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $>$  not Vs dB higher than the same configuration in QPSK and the reported SAR for the

QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.

- 12)5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is  $>$  not % dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
- 13)6. For LTE B41/B5/B12/B17 1 B26 1 B38 1 B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
- 14)7. LTE band 2/4/17/38 SAR test was covered by Band 25/66/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
- 15)a. The maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

#### 5G NR Notes:

- 16)1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
- 17)2. SAR testing start with the largest channel bandwidth and measure SAR for PI/2 BPSK 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
- 18)3. 50% RB allocation for PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
- 19)4. PI/2 BPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested
- 20)5. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not % dB higher than the same configuration in BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not

required.

21)6. Smaller bandwidth output power for each RB allocation configuration for this device will not % dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device.

#### ➤General Guidance

1. It is only limited to operate at EN-DC (NSA) for 5G NR implementation According to the character of the device. SAR measurement should be performed separately for the limitations of the probe calculation factors .

2. When the EN-DC is active the output power of the LTE anchors is equal or less than the standalone carrier, therefore the LTE output power and SAR were estimated based on the standalone carrier to performed sim-TX analysis with 5G NR, WL AN and Bluetooth.

3. According to October 2020 TCB Workshop publication, EN-DC SAR assessment should follow:

a. If the signal uplink 1-g SAR values for each band are both less than 0.8 W/kg and the algebraic summation of the 1-g SAR values are less than 1.45 W/kg no additional measurements need to be performed.

b. If one or the signal uplink 1-g SAR values is greater than 0.8 W/kg, instead of algebraically summing the 1-g SAR values, sum up the SAR distributions, similar to the enlarged zoom scan (volume scan) procedures found in FCC KDB Publication 865664 D01. And PAG is required for this case .

c. If the algebraic sum of the 1-g SAR values is  $> 1.45$  W/kg additional measurements may have to be made. Submit a KDB inquiry for additional guidance and PAG is required for this case.

d. When the algebraic sum of the 1-g SAR values is  $> 1.6$  W/kg, SPL SR analysis procedure should be applied.

#### WLAN Notes

Per KDB 248227 D01v02r02, for all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are

tested.

Per KDB 248227 D01v02r02, for 802.11g/n SAR testing is required. 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.

Per KDB 248227 D01v02r02, for OFDM transmission configurations in the 2.4 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11g/n mode is used for SAR measurement, on the highest measured output power channel for each frequency band.

### 12.3. GSM850 SAR results

Configuration	Power Level	Mode	Position	Dist.(mm)	Ch.	Freq.(MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head											
Ant1	1	GSM (CS)	Left Cheek	0	190	836.6	32.22	33.50	1.34	0.508	0.682
	1	GSM (CS)	Left Tilt	0	190	836.6	32.22	33.50	1.34	0.480	0.645
	1	GSM (CS)	Right Cheek	0	190	836.6	32.22	33.50	1.34	0.576	0.773
	1	<b>GSM (CS)</b>	<b>Right Tilt</b>	<b>0</b>	<b>190</b>	<b>836.6</b>	<b>32.22</b>	<b>33.50</b>	<b>1.34</b>	<b>0.619</b>	<b>0.831</b>
Ant0	1	<b>GSM (CS)</b>	<b>Left Cheek</b>	<b>0</b>	<b>190</b>	<b>836.6</b>	<b>32.54</b>	<b>33.50</b>	<b>1.25</b>	<b>0.078</b>	<b>0.097</b>
	1	GSM (CS)	Left Tilt	0	190	836.6	32.54	33.50	1.25	0.045	0.056
	1	GSM (CS)	Right Cheek	0	190	836.6	32.54	33.50	1.25	0.069	0.086
1	GSM (CS)	Right Tilt	0	190	836.6	32.54	33.50	1.25	0.008	0.010	
Body											
Ant1	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	10	190	836.6	29.44	31.00	1.43	0.152	0.218
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Back</b>	<b>10</b>	<b>190</b>	<b>836.6</b>	<b>29.44</b>	<b>31.00</b>	<b>1.43</b>	<b>0.184</b>	<b>0.264</b>
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Left	10	190	836.6	29.44	31.00	1.43	0.077	0.110
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Right	10	190	836.6	29.44	31.00	1.43	0.083	0.119
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Top	10	190	836.6	29.44	31.00	1.43	0.148	0.212
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Bottom	10	190	836.6	29.44	31.00	1.43	0.005	0.007
Ant1 (Sensor)	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Front</b>	<b>15</b>	<b>190</b>	<b>836.6</b>	29.44	31.00	1.432	0.089	0.127
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Back</b>	<b>17</b>	<b>190</b>	<b>836.6</b>	29.44	31.00	1.432	0.112	0.160
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Top</b>	<b>17</b>	<b>190</b>	<b>836.6</b>	29.44	31.00	1.432	0.076	0.109
Ant1	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	15	190	836.6	29.44	31.00	1.43	0.008	0.011
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Back</b>	<b>15</b>	<b>190</b>	<b>836.6</b>	<b>29.44</b>	<b>31.00</b>	<b>1.43</b>	<b>0.116</b>	<b>0.166</b>
Ant0	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	10	190	836.6	29.62	31.00	1.37	0.088	0.121
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Back	10	190	836.6	29.62	31.00	1.37	0.104	0.143
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Left	10	190	836.6	29.62	31.00	1.37	0.059	0.081
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Right	10	190	836.6	29.62	31.00	1.37	0.007	0.010
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Top	10	190	836.6	29.62	31.00	1.37	0.004	0.005
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Bottom</b>	<b>10</b>	<b>190</b>	<b>836.6</b>	<b>29.62</b>	<b>31.00</b>	<b>1.37</b>	<b>0.142</b>	<b>0.195</b>
Ant0	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	15	190	836.6	29.62	31.00	1.37	0.055	0.076

	4	GPRS/EDGE (GMSK, 2 Tx slots)	Back	15	190	836.6	29.62	31.00	1.37	0.079	0.109
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## 12.4. PCS1900 SAR results

Configuration	Power Level	Mode	Position	Dist.(mm)	Ch.	Freq.(MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head											
Ant1	1	GSM (CS)	Left Cheek	0	661	1880	25.61	26.00	1.09	0.311	0.340
	1	GSM (CS)	Left Tilt	0	661	1880	25.61	26.00	1.09	0.412	0.451
	1	GSM (CS)	Right Cheek	0	661	1880	25.61	26.00	1.09	0.330	0.361
	1	GSM (CS)	Right Tilt	0	661	1880	25.61	26.00	1.09	0.430	0.470
Ant0	1	GSM (CS)	Left Cheek	0	661	1880	30.01	30.50	1.12	0.050	0.056
	1	GSM (CS)	Left Tilt	0	661	1880	30.01	30.50	1.12	0.007	0.008
	1	GSM (CS)	Right Cheek	0	661	1880	30.01	30.50	1.12	0.008	0.009
	1	GSM (CS)	Right Tilt	0	661	1880	30.01	30.50	1.12	0.004	0.004
Body											
Ant1	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	10	661	1880	23.62	25.00	1.37	0.169	0.232
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Back	10	661	1880	23.62	25.00	1.37	0.305	0.419
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Left	10	661	1880	23.62	25.00	1.37	0.008	0.011
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Right	10	661	1880	23.62	25.00	1.37	0.007	0.010
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Top</b>	<b>10</b>	<b>661</b>	<b>1880</b>	<b>23.62</b>	<b>25.00</b>	<b>1.37</b>	<b>0.417</b>	<b>0.573</b>
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Bottom	10	661	1880	23.62	25.00	1.37	0.005	0.007
Ant1 (Sensor)	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	15	661	1880	26.64	28.00	1.368	0.085	0.116
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Back	17	661	1880	26.64	28.00	1.368	0.096	0.131
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Top	17	661	1880	26.64	28.00	1.368	0.119	0.163
Ant1	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	15	661	1880	23.62	25.00	1.37	0.114	0.157
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Back</b>	<b>15</b>	<b>661</b>	<b>1880</b>	<b>23.62</b>	<b>25.00</b>	<b>1.37</b>	<b>0.159</b>	<b>0.218</b>
Ant0	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	10	661	1880	24.63	26.00	1.37	0.252	0.345
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Back</b>	<b>10</b>	<b>661</b>	<b>1880</b>	<b>24.63</b>	<b>26.00</b>	<b>1.37</b>	<b>0.425</b>	<b>0.583</b>
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Left	10	661	1880	24.63	26.00	1.37	0.042	0.058
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Right	10	661	1880	24.63	26.00	1.37	0.083	0.114
	4	GPRS/EDGE (GMSK, 2 Tx slots)	Top	10	661	1880	24.63	26.00	1.37	0.009	0.012
	4	GPRS/EDGE	Bottom	10	661	1880	24.63	26.00	1.37	0.646	0.886



		(GMSK, 2 Tx slots)									
Ant0	4	GPRS/EDGE (GMSK, 2 Tx slots)	Front	15	661	1880	24.63	26.00	1.37	0.145	0.199
	4	<b>GPRS/EDGE (GMSK, 2 Tx slots)</b>	<b>Back</b>	<b>15</b>	<b>661</b>	<b>1880</b>	<b>24.63</b>	<b>26.00</b>	<b>1.37</b>	<b>0.221</b>	<b>0.303</b>

## 12.5. WCDMA II SAR results

Configuration	Power Level	Mode	Position	Dist.(mm)	Ch.	Freq.(MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head											
Ant1	1	RMC	Left Cheek	0	9400	1880	19.21	20.00	1.20	0.478	0.573
	1	RMC	Left Tilt	0	9400	1880	19.21	20.00	1.20	0.616	0.739
	1	RMC	Right Cheek	0	9400	1880	19.21	20.00	1.20	0.516	0.619
	1	<b>RMC</b>	<b>Right Tilt</b>	<b>0</b>	<b>9400</b>	<b>1880</b>	<b>19.21</b>	<b>20.00</b>	<b>1.20</b>	<b>0.670</b>	<b>0.804</b>
Ant0	1	<b>RMC</b>	<b>Left Cheek</b>	<b>0</b>	<b>9400</b>	<b>1880</b>	<b>24.45</b>	<b>24.50</b>	<b>1.01</b>	<b>0.153</b>	<b>0.155</b>
	1	RMC	Left Tilt	0	9400	1880	24.45	24.50	1.01	0.078	0.079
	1	RMC	Right Cheek	0	9400	1880	24.45	24.50	1.01	0.086	0.087
	1	RMC	Right Tilt	0	9400	1880	24.45	24.50	1.01	0.067	0.068
Body											
Ant1	4	RMC	Front	10	9400	1880	20.69	21.50	1.21	0.306	0.369
	4	RMC	Back	10	9400	1880	20.69	21.50	1.21	0.494	0.595
	4	RMC	Left	10	9400	1880	20.69	21.50	1.21	0.065	0.078
	4	RMC	Right	10	9400	1880	20.69	21.50	1.21	0.044	0.053
	4	<b>RMC</b>	<b>Top</b>	<b>10</b>	<b>9400</b>	<b>1880</b>	<b>20.69</b>	<b>21.50</b>	<b>1.21</b>	<b>0.709</b>	<b>0.854</b>
	4	RMC	Top	10	9262	1852.4	20.52	21.50	1.25	0.675	0.846
	4	RMC	Top	10	<b>9538</b>	<b>1907.6</b>	20.61	21.50	1.22	0.631	0.775
Ant1 (Sensor)	4	RMC	Bottom	10	9400	1880	20.69	21.50	1.21	0.007	0.008
	4	RMC	Front	15	9400	1880	23.72	24.50	1.19	0.327	0.391
	4	RMC	Back	17	9400	1880	23.72	24.50	1.19	0.346	0.414
Ant1	4	RMC	<b>Top</b>	17	9400	1880	23.72	24.50	1.19	0.599	0.717
	4	RMC	Front	15	9400	1880	20.69	21.50	1.21	0.195	0.235
Ant0	4	<b>RMC</b>	<b>Back</b>	<b>15</b>	9400	1880	<b>20.69</b>	<b>21.50</b>	<b>1.21</b>	<b>0.255</b>	<b>0.307</b>
	4	RMC	Front	10	9400	1880	22.41	22.50	1.02	0.364	0.372
	4	RMC	Back	10	9400	1880	22.41	22.50	1.02	0.571	0.583
	4	RMC	Left	10	9400	1880	22.41	22.50	1.02	0.090	0.092
	4	RMC	Right	10	9400	1880	22.41	22.50	1.02	0.127	0.130
	4	RMC	Top	10	9400	1880	22.41	22.50	1.02	0.007	0.007
	4	<b>RMC</b>	<b>Bottom</b>	<b>10</b>	9400	1880	<b>22.41</b>	<b>22.50</b>	<b>1.02</b>	<b>0.650</b>	<b>0.664</b>
Ant0	4	RMC	Front	15	9400	1880	22.41	22.50	1.02	0.252	0.257
	4	<b>RMC</b>	<b>Back</b>	<b>15</b>	9400	1880	<b>22.41</b>	<b>22.50</b>	<b>1.02</b>	<b>0.383</b>	<b>0.391</b>

## 12.6. WCDMA IV SAR results

Configuration	Power Level	Mode	Position	Dist.(mm)	Ch.	Freq.(MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head											
Ant1	1	RMC	Left Cheek	0	1412	1732.4	18.44	19.50	1.28	0.439	0.560
	1	RMC	Left Tilt	0	1412	1732.4	18.44	19.50	1.28	0.560	0.715
	1	RMC	Right Cheek	0	1412	1732.4	18.44	19.50	1.28	0.477	0.609
	1	<b>RMC</b>	<b>Right Tilt</b>	<b>0</b>	<b>1412</b>	<b>1732.4</b>	<b>18.44</b>	<b>19.50</b>	<b>1.28</b>	<b>0.609</b>	<b>0.777</b>
Ant0	1	RMC	Left Cheek	0	1412	1732.4	24.21	24.50	1.07	0.078	0.083
	1	RMC	Left Tilt	0	1412	1732.4	24.21	24.50	1.07	0.056	0.060
	1	<b>RMC</b>	<b>Right Cheek</b>	<b>0</b>	<b>1412</b>	<b>1732.4</b>	<b>24.21</b>	<b>24.50</b>	<b>1.07</b>	<b>0.086</b>	<b>0.092</b>
	1	RMC	Right Tilt	0	1412	1732.4	24.21	24.50	1.07	0.041	0.044
Body											
Ant1	4	RMC	Front	10	1412	1732.4	20.95	22.00	1.27	0.259	0.330
	4	RMC	Back	10	1412	1732.4	20.95	22.00	1.27	0.420	0.535
	4	RMC	Left	10	1412	1732.4	20.95	22.00	1.27	0.062	0.079
	4	RMC	Right	10	1412	1732.4	20.95	22.00	1.27	0.007	0.009
	4	<b>RMC</b>	<b>Top</b>	<b>10</b>	<b>1412</b>	<b>1732.4</b>	<b>20.95</b>	<b>22.00</b>	<b>1.27</b>	<b>0.669</b>	<b>0.852</b>
	4	RMC	Top	10	1312	1712.4	20.70	22.00	1.35	0.614	0.828
	4	RMC	Top	10	<b>1513</b>	<b>1752.6</b>	20.84	22.00	1.31	0.623	0.814
Ant1 (Sensor)	4	RMC	Bottom	10	1412	1732.4	20.95	22.00	1.27	0.005	0.006
	4	RMC	Front	15	1412	1732.4	23.45	24.50	1.27	0.262	0.334
	4	RMC	Back	17	1412	1732.4	23.45	24.50	1.27	0.318	0.405
Ant1	4	RMC	Top	17	1412	1732.4	23.45	24.50	1.27	0.452	0.576
	4	RMC	Front	15	1412	1732.4	20.95	22.00	1.27	0.159	0.202
Ant0	4	<b>RMC</b>	Back	<b>15</b>	1412	1732.4	<b>20.95</b>	<b>22.00</b>	<b>1.27</b>	<b>0.239</b>	<b>0.304</b>
	4	RMC	Front	10	1412	1732.4	22.19	22.50	1.07	0.214	0.230
	4	RMC	Back	10	1412	1732.4	22.19	22.50	1.07	0.305	0.328
	4	RMC	Left	10	1412	1732.4	22.19	22.50	1.07	0.040	0.043
	4	RMC	Right	10	1412	1732.4	22.19	22.50	1.07	0.063	0.068
	4	RMC	Top	10	1412	1732.4	22.19	22.50	1.07	0.007	0.008
	4	<b>RMC</b>	<b>Bottom</b>	<b>10</b>	1412	1732.4	<b>22.19</b>	<b>22.50</b>	<b>1.07</b>	<b>0.509</b>	<b>0.547</b>
Ant0	4	RMC	Front	15	1412	1732.4	22.19	22.50	1.07	0.177	0.190
	4	<b>RMC</b>	Back	<b>15</b>	1412	1732.4	<b>22.19</b>	<b>22.50</b>	<b>1.07</b>	<b>0.232</b>	<b>0.249</b>

## 12.7. WCDMA V SAR results

Configuration	Power Level	Mode	Position	Dist.(mm)	Ch.	Freq.(MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head											
Ant1	1	RMC	Left Cheek	0	4175	835	23.24	24.00	1.19	0.539	0.642
	1	RMC	Left Tilt	0	4175	835	23.24	24.00	1.19	0.516	0.615
	1	RMC	Right Cheek	0	4175	835	23.24	24.00	1.19	0.622	0.741
	1	<b>RMC</b>	<b>Right Tilt</b>	<b>0</b>	<b>4175</b>	<b>835</b>	<b>23.24</b>	<b>24.00</b>	<b>1.19</b>	<b>0.658</b>	<b>0.784</b>
Ant0	1	<b>RMC</b>	<b>Left Cheek</b>	<b>0</b>	<b>4175</b>	<b>835</b>	<b>24.14</b>	<b>24.50</b>	<b>1.09</b>	<b>0.148</b>	<b>0.161</b>
	1	RMC	Left Tilt	0	4175	835	24.14	24.50	1.09	0.078	0.085
	1	RMC	Right Cheek	0	4175	835	24.14	24.50	1.09	0.130	0.141
	1	RMC	Right Tilt	0	4175	835	24.14	24.50	1.09	0.072	0.078
Body											
Ant1	4	RMC	Front	10	4175	835	23.74	24.50	1.19	0.200	0.238
	4	RMC	Back	10	4175	835	23.74	24.50	1.19	0.235	0.280
	4	RMC	Left	10	4175	835	23.74	24.50	1.19	0.159	0.189
	4	RMC	Right	10	4175	835	23.74	24.50	1.19	0.080	0.095
	4	<b>RMC</b>	<b>Top</b>	<b>10</b>	<b>4175</b>	<b>835</b>	<b>23.74</b>	<b>24.50</b>	<b>1.19</b>	<b>0.413</b>	<b>0.492</b>
	4	RMC	Bottom	10	4175	835	23.74	24.50	1.19	0.007	0.008
Ant1 (Sensor)	4	RMC	Front	15	4175	835	23.74	24.50	1.19	0.098	0.117
	4	RMC	Back	17	4175	835	23.74	24.50	1.19	0.106	0.126
	4	RMC	<b>Top</b>	17	4175	835	23.74	24.50	1.19	0.071	0.085
Ant1	4	RMC	Front	15	4175	835	23.74	24.50	1.19	0.113	0.135
	4	<b>RMC</b>	<b>Back</b>	<b>15</b>	4175	835	<b>23.74</b>	<b>24.50</b>	<b>1.19</b>	<b>0.124</b>	<b>0.148</b>
Ant0	4	RMC	Front	10	4175	835	24.14	24.50	1.09	0.158	0.172
	4	RMC	Back	10	4175	835	24.14	24.50	1.09	0.169	0.184
	4	RMC	Left	10	4175	835	24.14	24.50	1.09	0.119	0.129
	4	RMC	Right	10	4175	835	24.14	24.50	1.09	0.079	0.086
	4	RMC	Top	10	4175	835	24.14	24.50	1.09	0.007	0.008
	4	<b>RMC</b>	<b>Bottom</b>	<b>10</b>	4175	835	<b>24.14</b>	<b>24.50</b>	<b>1.09</b>	<b>0.209</b>	<b>0.227</b>
Ant0	4	RMC	Front	15	4175	835	24.14	24.50	1.09	0.126	0.137
	4	<b>RMC</b>	<b>Back</b>	<b>15</b>	4175	835	<b>24.14</b>	<b>24.50</b>	<b>1.09</b>	<b>0.152</b>	<b>0.165</b>

## 12.8. LTE Band 2 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHz	QPSK	1	50	Left Cheek	0	18900	1880	18.75	19.0	1.059	0.385	0.408
	1	20MHz	QPSK	1	50	Left Tilt	0	18900	1880	18.75	19.0	1.059	0.501	0.531
	1	20MHz	QPSK	1	50	Right Cheek	0	18900	1880	18.75	19.0	1.059	0.403	0.427
	<b>1</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Right Tilt</b>	<b>0</b>	<b>18900</b>	<b>1880</b>	<b>18.75</b>	<b>19.0</b>	<b>1.059</b>	<b>0.533</b>	<b>0.565</b>
Ant0	<b>1</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Right Cheek</b>	<b>0</b>	<b>18900</b>	<b>1880</b>	<b>23.14</b>	<b>23.5</b>	<b>1.086</b>	<b>0.097</b>	<b>0.105</b>
	1	20MHz	QPSK	1	50	Right Tilt	0	18900	1880	23.14	23.5	1.086	0.051	0.055
	1	20MHz	QPSK	1	50	Left Cheek	0	18900	1880	23.14	23.5	1.086	0.062	0.067
	1	20MHz	QPSK	1	50	Left Tilt	0	18900	1880	23.14	23.5	1.086	0.050	0.054
Body														
Ant1	4	20MHz	QPSK	1	50	Front	10	18900	1880	20.28	20.5	1.052	0.207	0.218
	4	20MHz	QPSK	1	50	Back	10	18900	1880	20.28	20.5	1.052	0.357	0.376
	4	20MHz	QPSK	1	50	Left	10	18900	1880	20.28	20.5	1.052	0.048	0.050
	4	20MHz	QPSK	1	50	Right	10	18900	1880	20.28	20.5	1.052	0.009	0.009
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Top</b>	<b>10</b>	<b>18900</b>	<b>1880</b>	<b>20.28</b>	<b>20.5</b>	<b>1.052</b>	<b>0.527</b>	<b>0.554</b>
	4	20MHz	QPSK	1	50	Bottom	10	18900	1880	20.28	20.5	1.052	0.015	0.016
Ant1 (Sensor)	4	20MHz	QPSK	1	50	Front	15	18900	1880	23.27	23.5	1.054	0.22	0.232
	4	20MHz	QPSK	1	50	Back	17	18900	1880	23.27	23.5	1.054	0.147	0.155
	4	20MHz	QPSK	1	50	Left	17	18900	1880	23.27	23.5	1.054	0.228	0.240
Ant1	4	20MHz	QPSK	1	50	Front	15	18900	1880	20.28	20.5	1.052	0.131	0.138
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>15</b>	<b>18900</b>	<b>1880</b>	<b>20.28</b>	<b>20.5</b>	<b>1.052</b>	<b>0.217</b>	<b>0.228</b>
Ant0	4	20MHz	QPSK	1	50	Front	10	18900	1880	21.14	21.5	1.086	0.354	0.385
	4	20MHz	QPSK	1	50	Back	10	18900	1880	21.14	21.5	1.086	0.558	0.606
	4	20MHz	QPSK	1	50	Left	10	18900	1880	21.14	21.5	1.086	0.051	0.055
	4	20MHz	QPSK	1	50	Right	10	18900	1880	21.14	21.5	1.086	0.074	0.080
	4	20MHz	QPSK	1	50	Top	10	18900	1880	21.14	21.5	1.086	0.015	0.016
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Bottom</b>	<b>10</b>	<b>18900</b>	<b>1880</b>	<b>21.14</b>	<b>21.5</b>	<b>1.086</b>	<b>0.713</b>	<b>0.775</b>
Ant0	4	20MHz	QPSK	1	50	Front	15	18900	1880	21.14	21.5	1.086	0.193	0.210
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>15</b>	<b>18900</b>	<b>1880</b>	<b>21.14</b>	<b>21.5</b>	<b>1.086</b>	<b>0.351</b>	<b>0.381</b>

## 12.9. LTE Band 4 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHz	QPSK	1	50	Left Cheek	0	20175	1732.5	19.26	19.5	1.057	0.360	0.380
	1	20MHz	QPSK	1	50	Left Tilt	0	20175	1732.5	19.26	19.5	1.057	0.462	0.488
	1	20MHz	QPSK	1	50	Right Cheek	0	20175	1732.5	19.26	19.5	1.057	0.366	0.387
	<b>1</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Right Tilt</b>	<b>0</b>	<b>20175</b>	<b>1732.5</b>	<b>19.26</b>	<b>19.5</b>	<b>1.057</b>	<b>0.475</b>	<b>0.502</b>
Ant0	1	20MHz	QPSK	1	50	Right Cheek	0	20175	1732.5	23.66	24.0	1.081	0.063	0.068
	1	20MHz	QPSK	1	50	Right Tilt	0	20175	1732.5	23.66	24.0	1.081	0.046	0.050
	1	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Left Cheek</b>	<b>0</b>	<b>20175</b>	<b>1732.5</b>	<b>23.66</b>	<b>24.0</b>	<b>1.081</b>	<b>0.072</b>	<b>0.078</b>
	1	20MHz	QPSK	1	50	Left Tilt	0	20175	1732.5	23.66	24.0	1.081	0.063	0.068
Body														
Ant1	4	20MHz	QPSK	1	50	Front	10	20175	1732.5	21.28	21.5	1.052	0.157	0.165
	4	20MHz	QPSK	1	50	Back	10	20175	1732.5	21.28	21.5	1.052	0.238	0.250
	4	20MHz	QPSK	1	50	Left	10	20175	1732.5	21.28	21.5	1.052	0.007	0.007
	4	20MHz	QPSK	1	50	Right	10	20175	1732.5	21.28	21.5	1.052	0.010	0.011
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Top</b>	<b>10</b>	<b>20175</b>	<b>1732.5</b>	<b>21.28</b>	<b>21.5</b>	<b>1.052</b>	<b>0.348</b>	<b>0.366</b>
	4	20MHz	QPSK	1	50	Bottom	10	20175	1732.5	21.28	21.5	1.052	0.012	0.013
Ant1 (Sensor)	4	20MHz	QPSK	1	50	Front	15	20175	1732.5	23.80	24.0	1.047	0.215	0.225
	4	20MHz	QPSK	1	50	Back	17	20175	1732.5	23.80	24.0	1.047	0.149	0.156
	4	20MHz	QPSK	1	50	Left	17	20175	1732.5	23.80	24.0	1.047	0.211	0.221
Ant1	4	20MHz	QPSK	1	50	Front	15	20175	1732.5	21.28	21.5	1.052	0.140	0.147
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>15</b>	<b>20175</b>	<b>1732.5</b>	<b>21.28</b>	<b>21.5</b>	<b>1.052</b>	<b>0.163</b>	<b>0.171</b>
Ant0	4	20MHz	QPSK	1	50	Front	10	20175	1732.5	21.64	22.0	1.086	0.320	0.348
	4	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>10</b>	<b>20175</b>	<b>1732.5</b>	<b>21.64</b>	<b>22.0</b>	<b>1.086</b>	<b>0.503</b>	<b>0.546</b>
	4	20MHz	QPSK	1	50	Left	10	20175	1732.5	21.64	22.0	1.086	0.009	0.010
	4	20MHz	QPSK	1	50	Right	10	20175	1732.5	21.64	22.0	1.086	0.049	0.053
	4	20MHz	QPSK	1	50	Top	10	20175	1732.5	21.64	22.0	1.086	0.013	0.014
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Bottom</b>	<b>10</b>	<b>20175</b>	<b>1732.5</b>	<b>21.64</b>	<b>22.0</b>	<b>1.086</b>	<b>0.436</b>	<b>0.474</b>
Ant0	4	20MHz	QPSK	1	50	Front	15	20175	1732.5	21.64	22.0	1.086	0.175	0.190
	<b>4</b>	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>15</b>	<b>20175</b>	<b>1732.5</b>	<b>21.64</b>	<b>22.0</b>	<b>1.086</b>	<b>0.264</b>	<b>0.287</b>

## 12.10. LTE Band 5 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	5MHz	QPSK	1	24	Left Cheek	0	20525	836.5	23.28	24.0	1.180	0.470	0.555
	1	5MHz	QPSK	1	24	Left Tilt	0	20525	836.5	23.28	24.0	1.180	0.462	0.545
	1	5MHz	QPSK	1	24	Right Cheek	0	20525	836.5	23.28	24.0	1.180	0.537	0.634
	1	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Right Tilt</b>	<b>0</b>	<b>20525</b>	<b>836.5</b>	<b>23.28</b>	<b>24.0</b>	<b>1.180</b>	<b>0.566</b>	<b>0.668</b>
Ant0	1	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Right Cheek</b>	<b>0</b>	<b>20525</b>	<b>836.5</b>	<b>23.72</b>	<b>24.5</b>	<b>1.197</b>	<b>0.113</b>	<b>0.135</b>
	1	5MHz	QPSK	1	24	Right Tilt	0	20525	836.5	23.72	24.5	1.197	0.059	0.071
	1	5MHz	QPSK	1	24	Left Cheek	0	20525	836.5	23.72	24.5	1.197	0.102	0.122
	1	5MHz	QPSK	1	24	Left Tilt	0	20525	836.5	23.72	24.5	1.197	0.057	0.068
Body														
Ant1	4	5MHz	QPSK	1	24	Front	10	20525	836.5	23.28	24.5	1.324	0.158	0.209
	4	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Back</b>	<b>10</b>	<b>20525</b>	<b>836.5</b>	<b>23.28</b>	<b>24.5</b>	<b>1.324</b>	<b>0.167</b>	<b>0.221</b>
	4	5MHz	QPSK	1	24	Left	10	20525	836.5	23.28	24.5	1.324	0.079	0.105
	4	5MHz	QPSK	1	24	Right	10	20525	836.5	23.28	24.5	1.324	0.082	0.109
	4	5MHz	QPSK	1	24	Top	10	20525	836.5	23.28	24.5	1.324	0.165	0.219
	4	5MHz	QPSK	1	24	Bottom	10	20525	836.5	23.28	24.5	1.324	0.009	0.012
Ant1 (Sensor)	4	5MHz	QPSK	1	24	Front	15	20525	836.5	23.81	24.5	1.172	0.099	0.116
	4	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Back</b>	<b>17</b>	<b>20525</b>	<b>836.5</b>	<b>23.81</b>	<b>24.5</b>	<b>1.172</b>	<b>0.105</b>	<b>0.123</b>
	4	5MHz	QPSK	1	24	Top	17	20525	836.5	23.81	24.5	1.172	0.064	0.075
Ant1	4	5MHz	QPSK	1	24	Front	15	20525	836.5	23.28	24.5	1.324	0.081	0.107
	4	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Back</b>	<b>15</b>	<b>20525</b>	<b>836.5</b>	<b>23.28</b>	<b>24.5</b>	<b>1.324</b>	<b>0.118</b>	<b>0.156</b>
Ant0	4	5MHz	QPSK	1	24	Front	10	20525	836.5	23.72	24.5	1.197	0.118	0.141
	4	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Back</b>	<b>10</b>	<b>20525</b>	<b>836.5</b>	<b>23.72</b>	<b>24.5</b>	<b>1.197</b>	<b>0.132</b>	<b>0.158</b>
	4	5MHz	QPSK	1	24	Left	10	20525	836.5	23.72	24.5	1.197	0.096	0.115
	4	5MHz	QPSK	1	24	Right	10	20525	836.5	23.72	24.5	1.197	0.077	0.092
	4	5MHz	QPSK	1	24	Top	10	20525	836.5	23.72	24.5	1.197	0.005	0.006
	4	5MHz	QPSK	1	24	Bottom	10	20525	836.5	23.72	24.5	1.197	0.129	0.154
Ant0	4	5MHz	QPSK	1	24	Front	15	20525	836.5	23.72	24.5	1.197	0.097	0.116
	4	<b>5MHz</b>	<b>QPSK</b>	<b>1</b>	<b>24</b>	<b>Back</b>	<b>15</b>	<b>20525</b>	<b>836.5</b>	<b>23.72</b>	<b>24.5</b>	<b>1.197</b>	<b>0.105</b>	<b>0.126</b>

## 12.11. LTE Band7 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHz	QPSK	1	50	Left Cheek	0	21100	2535	19.06	19.2	1.033	0.222	0.229
	1	20MHz	QPSK	1	50	Left Tilt	0	21100	2535	19.06	19.2	1.033	0.288	0.297
	1	20MHz	QPSK	1	50	Right Cheek	0	21100	2535	19.06	19.2	1.033	0.337	0.348
	1	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Right Tilt</b>	<b>0</b>	<b>21100</b>	<b>2535</b>	<b>19.06</b>	<b>19.2</b>	<b>1.033</b>	<b>0.418</b>	<b>0.432</b>
	1	20MHz	QPSK	1	0	Right Tilt	0	21001(PCC)	2525.1(PC C)	19.01	19.2	1.045	0.385	0.402
			0	0	21199(SCC)		2544.9(SC C)							
Ant0	1	20MHz	QPSK	1	50	Left Cheek	0	21100	2535	23.48	23.7	1.052	0.213	0.224
	1	20MHz	QPSK	1	50	Left Tilt	0	21100	2535	23.48	23.7	1.052	0.113	0.119
	1	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Right Cheek</b>	<b>0</b>	<b>21100</b>	<b>2535</b>	<b>23.48</b>	<b>23.7</b>	<b>1.052</b>	<b>0.392</b>	<b>0.412</b>
	1	20MHz	QPSK	1	0	Right Cheek	0	21001(PCC)	2525.1(PC C)	23.41	23.7	1.069	0.355	0.380
				0	0		21199(SCC)	2544.9(SC C)						
1	20MHz	QPSK	1	50	Right Tilt	0	21100	2535	23.48	23.7	1.052	0.211	0.222	
Body														
Ant1	4	20MHz	QPSK	1	50	Front	10	21100	2535	20.59	20.7	1.026	0.166	0.170
	4	20MHz	QPSK	1	50	Back	10	21100	2535	20.59	20.7	1.026	0.329	0.337
	4	20MHz	QPSK	1	50	Left	10	21100	2535	20.59	20.7	1.026	0.138	0.142
	4	20MHz	QPSK	1	50	Right	10	21100	2535	20.59	20.7	1.026	0.007	0.007
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Top</b>	<b>10</b>	<b>21100</b>	<b>2535</b>	<b>20.59</b>	<b>20.7</b>	<b>1.026</b>	<b>0.551</b>	<b>0.565</b>
	4	20MHz	QPSK	1	0	Top	10	21001(PCC)	2525.1(PC C)	20.57	20.7	1.030	0.489	0.504
				0	0		21199(SCC)	2544.9(SC C)						
4	20MHz	QPSK	1	50	Bottom	10	21100	2535	20.59	20.7	1.026	0.006	0.006	
Ant1 (Sensor)	Full power	20MHz	QPSK	1	50	Front	15	21100	2535	23.59	23.7	1.026	0.218	0.224
	Full power	20MHz	QPSK	1	50	Back	17	21100	2535	23.59	23.7	1.026	0.167	0.171
	Full power	20MHz	QPSK	1	50	Top	17	21100	2535	23.59	23.7	1.026	0.255	0.262
Ant1	4	20MHz	QPSK	1	50	Front	15	21100	2535	20.59	20.7	1.026	0.110	0.113
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Back</b>	<b>15</b>	<b>21100</b>	<b>2535</b>	<b>20.59</b>	<b>20.7</b>	<b>1.026</b>	<b>0.217</b>	<b>0.223</b>
	4	20MHz	QPSK	1	0	Back	15	21001(PCC)	2525.1(PC C)	20.57	20.7	1.030	0.192	0.198
			0	0	21199(SCC)		2544.9(SC C)							
Ant0	4	20MHz	QPSK	1	50	Front	10	21100	2535	23.48	23.7	1.052	0.568	0.598
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Back</b>	<b>10</b>	<b>21100</b>	<b>2535</b>	<b>23.48</b>	<b>23.7</b>	<b>1.052</b>	<b>0.625</b>	<b>0.657</b>
	4	20MHz	QPSK	1	0	Back	10	21001(PCC)	2525.1(PC C)	23.42	23.7	1.067	0.601	0.641
				0	0		21199(SCC)	2544.9(SC C)						
	4	20MHz	QPSK	1	50	Left	10	21100	2535	23.48	23.7	1.052	0.110	0.116
	4	20MHz	QPSK	1	50	Right	10	21100	2535	23.48	23.7	1.052	0.252	0.265
	4	20MHz	QPSK	1	50	Top	10	21100	2535	23.48	23.7	1.052	0.003	0.003
4	20MHz	QPSK	1	50	Bottom	10	21100	2535	23.48	23.7	1.052	0.400	0.421	
Ant0	4	20MHz	QPSK	1	50	Front	15	21100	2535	23.48	23.7	1.052	0.291	0.306



	4	20MHz	QPSK	1	50	Back	15	21100	2535	23.48	23.7	1.052	0.373	0.392
	4	20MHz	QPSK	1	0	Back	15	21001(PCC)	2525.1(PC C)	23.42	23.7	1.067	0.325	0.347
				0	0			21199(SCC)	2544.9(SC C)					

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant5	Full power	20MHz	QPSK	1	50	Left Cheek	0	21100	2535	23.48	23.7	1.052	0.126	0.133
	Full power	20MHz	QPSK	1	0	Left Cheek	0	21001(PC C)	2525.1(PC C)	23.30	23.7	1.096	0.102	0.112
				0	0			21199(SC C)	2544.9(SC C)					
	Full power	20MHz	QPSK	1	50	Left Tilt	0	21100	2535	23.48	23.7	1.052	0.026	0.027
	Full power	20MHz	QPSK	1	50	Right Cheek	0	21100	2535	23.48	23.7	1.052	0.048	0.050
	Full power	20MHz	QPSK	1	50	Right Tilt	0	21100	2535	23.48	23.7	1.052	0.012	0.013
Body														
Ant5	Full power	20MHz	QPSK	1	50	Front	10	21100	2535	23.48	23.7	1.052	0.023	0.024
	Full power	20MHz	QPSK	1	50	Back	10	21100	2535	23.48	23.7	1.052	0.011	0.012
	Full power	20MHz	QPSK	1	50	Left	10	21100	2535	23.48	23.7	1.052	0.019	0.020
	Full power	20MHz	QPSK	1	50	Right	10	21100	2535	23.48	23.7	1.052	0.051	0.054
	Full power	20MHz	QPSK	1	0	Right	10	21001(PC C)	2525.1(PC C)	23.30	23.7	1.096	0.038	0.042
				0	0			21199(SC C)	2544.9(SC C)					
	Full power	20MHz	QPSK	1	50	Top	10	21100	2535	23.48	23.7	1.052	0.022	0.023
Full power	20MHz	QPSK	1	50	Bottom	10	21100	2535	23.48	23.7	1.052	0.009	0.009	
Ant5	Full power	20MHz	QPSK	1	50	Front	15	21100	2535	23.48	23.7	1.052	0.008	0.008
	Full power	20MHz	QPSK	1	50	Back	15	21100	2535	23.48	23.7	1.052	0.012	0.013
	Full power	20MHz	QPSK	1	0	Back	15	21001(PC C)	2525.1(PC C)	23.30	23.7	1.096	0.01	0.011
0				0	21199(SC C)			2544.9(SC C)						

## 12.12. LTE Band12 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	5MHZ	QPSK	1	13	Left Cheek	0	23095	707.5	23.18	24.5	1.355	0.335	0.454
	1	5MHZ	QPSK	1	13	Left Tilt	0	23095	707.5	23.18	24.5	1.355	0.345	0.468
	1	5MHZ	QPSK	1	13	Right Cheek	0	23095	707.5	23.18	24.5	1.355	0.416	0.564
	1	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Tilt</b>	<b>0</b>	<b>23095</b>	<b>707.5</b>	<b>23.18</b>	<b>24.5</b>	<b>1.355</b>	<b>0.446</b>	<b>0.604</b>
Ant0	1	5MHZ	QPSK	1	13	Right Cheek	0	23095	707.5	23.05	24.5	1.396	0.009	0.013
	1	5MHZ	QPSK	1	13	Right Tilt	0	23095	707.5	23.05	24.5	1.396	0.008	0.011
	1	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left Cheek</b>	<b>0</b>	<b>23095</b>	<b>707.5</b>	<b>23.05</b>	<b>24.5</b>	<b>1.396</b>	<b>0.010</b>	<b>0.014</b>
	1	5MHZ	QPSK	1	13	Left Tilt	0	23095	707.5	23.05	24.5	1.396	0.009	0.013
Body														
Ant1	4	5MHZ	QPSK	1	13	Front	10	23095	707.5	23.18	24.5	1.355	0.089	0.121
	4	5MHZ	QPSK	1	13	Back	10	23095	707.5	23.18	24.5	1.355	0.113	0.153
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left</b>	<b>10</b>	<b>23095</b>	<b>707.5</b>	<b>23.18</b>	<b>24.5</b>	<b>1.355</b>	<b>0.129</b>	<b>0.175</b>
	4	5MHZ	QPSK	1	13	Right	10	23095	707.5	23.18	24.5	1.355	0.091	0.123
	4	5MHZ	QPSK	1	13	Top	10	23095	707.5	23.18	24.5	1.355	0.055	0.075
	4	5MHZ	QPSK	1	13	Bottom	10	23095	707.5	23.18	24.5	1.355	0.012	0.016
Ant1 (Sensor)	4	5MHZ	QPSK	1	13	Front	15	23095	707.5	23.52	24.5	1.253	0.094	0.118
	4	5MHZ	QPSK	1	13	Back	17	23095	707.5	23.52	24.5	1.253	0.112	0.140
	4	5MHZ	QPSK	1	13	Top	17	23095	707.5	23.52	24.5	1.253	0.026	0.033
Ant1	4	5MHZ	QPSK	1	13	Front	15	23095	707.5	23.18	24.5	1.355	0.100	0.136
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>23095</b>	<b>707.5</b>	<b>23.18</b>	<b>24.5</b>	<b>1.355</b>	<b>0.117</b>	<b>0.159</b>
Ant0	4	5MHZ	QPSK	1	13	Front	10	23095	707.5	23.05	24.5	1.396	0.072	0.101
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>10</b>	<b>23095</b>	<b>707.5</b>	<b>23.05</b>	<b>24.5</b>	<b>1.396</b>	<b>0.086</b>	<b>0.120</b>
	4	5MHZ	QPSK	1	13	Left	10	23095	707.5	23.05	24.5	1.396	0.074	0.103
	4	5MHZ	QPSK	1	13	Right	10	23095	707.5	23.05	24.5	1.396	0.054	0.075
	4	5MHZ	QPSK	1	13	Top	10	23095	707.5	23.05	24.5	1.396	0.011	0.015
	4	5MHZ	QPSK	1	13	Bottom	10	23095	707.5	23.05	24.5	1.396	0.062	0.087
Ant0	4	5MHZ	QPSK	1	13	Front	15	23095	707.5	23.05	24.5	1.396	0.073	0.102
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>23095</b>	<b>707.5</b>	<b>23.05</b>	<b>24.5</b>	<b>1.396</b>	<b>0.084</b>	<b>0.117</b>

### 12.13. LTE Band13 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	5MHZ	QPSK	1	13	Left Cheek	0	23230	782.0	23.68	24.5	1.208	0.453	0.547
	1	5MHZ	QPSK	1	13	Left Tilt	0	23230	782.0	23.68	24.5	1.208	0.442	0.534
	1	5MHZ	QPSK	1	13	Right Cheek	0	23230	782.0	23.68	24.5	1.208	0.553	0.668
	<b>1</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Tilt</b>	<b>0</b>	<b>23230</b>	<b>782.0</b>	<b>23.68</b>	<b>24.5</b>	<b>1.208</b>	<b>0.579</b>	<b>0.699</b>
Ant0	<b>1</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Cheek</b>	<b>0</b>	<b>23230</b>	<b>782.0</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.092</b>	<b>0.114</b>
	1	5MHZ	QPSK	1	13	Right Tilt	0	23230	782.0	23.58	24.5	1.236	0.050	0.062
	1	5MHZ	QPSK	1	13	Left Cheek	0	23230	782.0	23.58	24.5	1.236	0.055	0.068
	1	5MHZ	QPSK	1	13	Left Tilt	0	23230	782.0	23.58	24.5	1.236	0.044	0.054
Body														
Ant1	4	5MHZ	QPSK	1	13	Front	10	23230	782.0	23.68	24.5	1.208	0.116	0.140
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>10</b>	<b>23230</b>	<b>782.0</b>	<b>23.68</b>	<b>24.5</b>	<b>1.208</b>	<b>0.150</b>	<b>0.181</b>
	4	5MHZ	QPSK	1	13	Left	10	23230	782.0	23.68	24.5	1.208	0.105	0.127
	4	5MHZ	QPSK	1	13	Right	10	23230	782.0	23.68	24.5	1.208	0.092	0.111
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Top</b>	<b>10</b>	<b>23230</b>	<b>782.0</b>	<b>23.68</b>	<b>24.5</b>	<b>1.208</b>	<b>0.112</b>	<b>0.135</b>
	4	5MHZ	QPSK	1	13	Bottom	10	23230	782.0	23.68	24.5	1.208	0.013	0.016
Ant1 (Sensor)	4	5MHZ	QPSK	1	13	Front	15	23230	782.0	23.68	24.5	1.208	0.112	0.135
	4	5MHZ	QPSK	1	13	Back	17	23230	782.0	23.68	24.5	1.208	0.137	0.165
	4	5MHZ	QPSK	1	13	Top	17	23230	782.0	23.68	24.5	1.208	0.047	0.057
Ant1	4	5MHZ	QPSK	1	13	Front	15	23230	782.0	23.68	24.5	1.208	0.096	0.116
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>23230</b>	<b>782.0</b>	<b>23.68</b>	<b>24.5</b>	<b>1.208</b>	<b>0.144</b>	<b>0.174</b>
Ant0	4	5MHZ	QPSK	1	13	Front	10	23230	782.0	23.58	24.5	1.236	0.108	0.133
	4	5MHZ	QPSK	1	13	Back	10	23230	782.0	23.58	24.5	1.236	0.120	0.148
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left</b>	<b>10</b>	<b>23230</b>	<b>782.0</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.155</b>	<b>0.192</b>
	4	5MHZ	QPSK	1	13	Right	10	23230	782.0	23.58	24.5	1.236	0.082	0.101
	4	5MHZ	QPSK	1	13	Top	10	23230	782.0	23.58	24.5	1.236	0.015	0.019
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Bottom</b>	<b>10</b>	<b>23230</b>	<b>782.0</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.123</b>	<b>0.152</b>
Ant0	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Front</b>	<b>15</b>	<b>23230</b>	<b>782.0</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.118</b>	<b>0.146</b>
	4	5MHZ	QPSK	1	13	Back	15	23230	782.0	23.58	24.5	1.236	0.101	0.125

### 1.1.LTE Band17 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	5MHZ	QPSK	1	13	Left Cheek	0	23095	707.5	23.54	24.5	1.247	0.345	0.430
	1	5MHZ	QPSK	1	13	Left Tilt	0	23095	707.5	23.54	24.5	1.247	0.355	0.443
	1	5MHZ	QPSK	1	13	Right Cheek	0	23095	707.5	23.54	24.5	1.247	0.432	0.539
	1	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Tilt</b>	<b>0</b>	<b>23095</b>	<b>707.5</b>	<b>23.54</b>	<b>24.5</b>	<b>1.247</b>	<b>0.477</b>	<b>0.595</b>
Ant0	1	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Cheek</b>	<b>0</b>	<b>23095</b>	<b>707.5</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.053</b>	<b>0.066</b>
	1	5MHZ	QPSK	1	13	Right Tilt	0	23095	707.5	23.58	24.5	1.236	0.004	0.005
	1	5MHZ	QPSK	1	13	Left Cheek	0	23095	707.5	23.58	24.5	1.236	0.012	0.015
	1	5MHZ	QPSK	1	13	Left Tilt	0	23095	707.5	23.58	24.5	1.236	0.003	0.004
Body														
Ant1	4	5MHZ	QPSK	1	13	Front	10	23095	707.5	23.54	24.5	1.247	0.116	0.145
	4	5MHZ	QPSK	1	13	Back	10	23095	707.5	23.54	24.5	1.247	0.118	0.147
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left</b>	<b>10</b>	<b>23095</b>	<b>707.5</b>	<b>23.54</b>	<b>24.5</b>	<b>1.247</b>	<b>0.142</b>	<b>0.177</b>
	4	5MHZ	QPSK	1	13	Right	10	23095	707.5	23.54	24.5	1.247	0.094	0.117
	4	5MHZ	QPSK	1	13	Top	10	23095	707.5	23.54	24.5	1.247	0.062	0.077
	4	5MHZ	QPSK	1	13	Bottom	10	23095	707.5	23.54	24.5	1.247	0.008	0.010
Ant1 (Sensor)	4	5MHZ	QPSK	1	13	Front	15	23095	707.5	23.54	24.5	1.247	0.098	0.122
	4	5MHZ	QPSK	1	13	Back	17	23095	707.5	23.54	24.5	1.247	0.112	0.140
	4	5MHZ	QPSK	1	13	Top	17	23095	707.5	23.54	24.5	1.247	0.029	0.036
Ant1	4	5MHZ	QPSK	1	13	Front	15	23095	707.5	23.54	24.5	1.247	0.107	0.133
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>23095</b>	<b>707.5</b>	<b>23.54</b>	<b>24.5</b>	<b>1.247</b>	<b>0.114</b>	<b>0.142</b>
Ant0	4	5MHZ	QPSK	1	13	Front	10	23095	707.5	23.58	24.5	1.236	0.073	0.090
	4	5MHZ	QPSK	1	13	Back	10	23095	707.5	23.58	24.5	1.236	0.080	0.099
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left</b>	<b>10</b>	<b>23095</b>	<b>707.5</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.088</b>	<b>0.109</b>
	4	5MHZ	QPSK	1	13	Right	10	23095	707.5	23.58	24.5	1.236	0.059	0.073
	4	5MHZ	QPSK	1	13	Top	10	23095	707.5	23.58	24.5	1.236	0.006	0.007
	4	5MHZ	QPSK	1	13	Bottom	10	23095	707.5	23.58	24.5	1.236	0.062	0.077
Ant0	4	5MHZ	QPSK	1	13	Front	15	23095	707.5	23.58	24.5	1.236	0.065	0.080
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>23095</b>	<b>707.5</b>	<b>23.58</b>	<b>24.5</b>	<b>1.236</b>	<b>0.078</b>	<b>0.096</b>

## 12.14. LTE Band26 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	5MHZ	QPSK	1	13	Left Cheek	0	26865	831.5	23.83	24.5	1.167	0.492	0.574
	1	5MHZ	QPSK	1	13	Left Tilt	0	26865	831.5	23.83	24.5	1.167	0.472	0.551
	1	5MHZ	QPSK	1	13	Right Cheek	0	26865	831.5	23.83	24.5	1.167	0.552	0.644
	1	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Tilt</b>	<b>0</b>	<b>26865</b>	<b>831.5</b>	<b>23.83</b>	<b>24.5</b>	<b>1.167</b>	<b>0.593</b>	<b>0.692</b>
Ant0	1	5MHZ	QPSK	1	13	Right Cheek	0	26865	831.5	23.72	24.5	1.197	0.083	0.099
	1	5MHZ	QPSK	1	13	Right Tilt	0	26865	831.5	23.72	24.5	1.197	0.056	0.067
	1	5MHZ	QPSK	1	13	Left Cheek	0	26865	831.5	23.72	24.5	1.197	0.064	0.077
	1	5MHZ	QPSK	1	13	Left Tilt	0	26865	831.5	23.72	24.5	1.197	0.046	0.055
Body														
Ant1	4	5MHZ	QPSK	1	13	Front	10	26865	831.5	23.83	24.5	1.167	0.137	0.160
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>10</b>	<b>26865</b>	<b>831.5</b>	<b>23.83</b>	<b>24.5</b>	<b>1.167</b>	<b>0.212</b>	<b>0.247</b>
	4	5MHZ	QPSK	1	13	Left	10	26865	831.5	23.83	24.5	1.167	0.074	0.086
	4	5MHZ	QPSK	1	13	Right	10	26865	831.5	23.83	24.5	1.167	0.075	0.088
	4	5MHZ	QPSK	1	13	Top	10	26865	831.5	23.83	24.5	1.167	0.145	0.169
	4	5MHZ	QPSK	1	13	Bottom	10	26865	831.5	23.83	24.5	1.167	0.012	0.014
Ant1 (Sensor)	4	5MHZ	QPSK	1	13	Front	15	26865	831.5	23.83	24.5	1.167	0.096	0.112
	4	5MHZ	QPSK	1	13	Back	17	26865	831.5	23.83	24.5	1.167	0.123	0.144
	4	5MHZ	QPSK	1	13	Top	17	26865	831.5	23.83	24.5	1.167	0.069	0.081
Ant1	4	5MHZ	QPSK	1	13	Front	15	26865	831.5	23.83	24.5	1.167	0.069	0.081
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>26865</b>	<b>831.5</b>	<b>23.83</b>	<b>24.5</b>	<b>1.167</b>	<b>0.081</b>	<b>0.095</b>
Ant0	4	5MHZ	QPSK	1	13	Front	10	26865	831.5	23.72	24.5	1.197	0.108	0.129
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>10</b>	<b>26865</b>	<b>831.5</b>	<b>23.72</b>	<b>24.5</b>	<b>1.197</b>	<b>0.127</b>	<b>0.152</b>
	4	5MHZ	QPSK	1	13	Left	10	26865	831.5	23.72	24.5	1.197	0.084	0.101
	4	5MHZ	QPSK	1	13	Right	10	26865	831.5	23.72	24.5	1.197	0.070	0.084
	4	5MHZ	QPSK	1	13	Top	10	26865	831.5	23.72	24.5	1.197	0.011	0.013
	4	5MHZ	QPSK	1	13	Bottom	10	26865	831.5	23.72	24.5	1.197	0.117	0.140
Ant0	4	5MHZ	QPSK	1	13	Front	15	26865	831.5	23.72	24.5	1.197	0.089	0.107
	4	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>26865</b>	<b>831.5</b>	<b>23.72</b>	<b>24.5</b>	<b>1.197</b>	<b>0.111</b>	<b>0.133</b>

## 12.15. LTE Band38 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHz	QPSK	1	50	Left Cheek	0	38000	2595	20.58	21.0	1.102	0.169	0.186
	1	20MHz	QPSK	1	50	Left Tilt	0	38000	2595	20.58	21.0	1.102	0.215	0.237
	1	20MHz	QPSK	1	50	Right Cheek	0	38000	2595	20.58	21.0	1.102	0.253	0.279
	1	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Right Tilt</b>	<b>0</b>	<b>38000</b>	<b>2595</b>	<b>20.58</b>	<b>21.0</b>	<b>1.102</b>	<b>0.299</b>	<b>0.329</b>
	1	20MHz	QPSK	18 0	0 0	Right Tilt	0	37901(PCC) 38099(SCC)	2585.1 2604.9	20.46	21.0	1.132	0.225	0.255
Ant0	1	20MHz	QPSK	1	50	Left Cheek	0	38000	2595	23.64	24.0	1.086	0.130	0.141
	1	20MHz	QPSK	1	50	Left Tilt	0	38000	2595	23.64	24.0	1.086	0.073	0.079
	1	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Right Cheek</b>	<b>0</b>	<b>38000</b>	<b>2595</b>	<b>23.64</b>	<b>24.0</b>	<b>1.086</b>	<b>0.132</b>	<b>0.143</b>
	1	20MHz	QPSK			Right Cheek	0	37901(PCC) 38099(SCC)	2585.1 2604.9	23.51	24.0	1.119	0.108	0.121
	1	20MHz	QPSK	1	50	Right Tilt	0	38000	2595	23.64	24.0	1.086	0.102	0.111
Body														
Ant1	4	20MHz	QPSK	1	50	Front	10	38000	2595	22.09	22.5	1.099	0.130	0.143
	4	20MHz	QPSK	1	50	Back	10	38000	2595	22.09	22.5	1.099	0.264	0.290
	4	20MHz	QPSK	1	50	Left	10	38000	2595	22.09	22.5	1.099	0.103	0.113
	4	20MHz	QPSK	1	50	Right	10	38000	2595	22.09	22.5	1.099	0.008	0.009
	4	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Top</b>	<b>10</b>	<b>38000</b>	<b>2595</b>	<b>22.09</b>	<b>22.5</b>	<b>1.099</b>	<b>0.406</b>	<b>0.446</b>
	4	20MHz	QPSK	18 0	0 0	Top	10	37901(PCC) 38099(SCC)	2585.1 2604.9	21.88	22.5	1.153	0.385	0.444
	4	20MHz	QPSK	1	50	Bottom	10	38000	2595	22.09	22.5	1.099	0.019	0.021
Ant1 (Sensor)	4	20MHz	QPSK	1	50	Front	15	38000	2595	23.60	24.0	1.096	0.072	0.079
	4	20MHz	QPSK	1	50	Back	17	38000	2595	23.60	24.0	1.096	0.121	0.133
	4	20MHz	QPSK	1	50	Top	17	38000	2595	23.60	24.0	1.096	0.213	0.234
Ant1	4	20MHz	QPSK	1	50	Front	15	38000	2595	22.09	22.5	1.099	0.073	0.080
	4	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>15</b>	<b>38000</b>	<b>2595</b>	<b>22.09</b>	<b>22.5</b>	<b>1.099</b>	<b>0.131</b>	<b>0.144</b>
	4	20MHz	QPSK	18 0	0 0	Back	15	37901(PCC) 38099(SCC)	2585.1 2604.9	21.88	22.5	1.153	0.106	0.122
Ant0	4	20MHz	QPSK	1	50	Front	10	38000	2595	23.64	24.0	1.086	0.345	0.375
	4	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>10</b>	<b>38000</b>	<b>2595</b>	<b>23.64</b>	<b>24.0</b>	<b>1.086</b>	<b>0.397</b>	<b>0.431</b>
	4	20MHz	QPSK	18 0	0 0	Back	10	37901(PCC) 38099(SCC)	2585.1 2604.9	23.51	24.0	1.119	0.366	0.410
	4	20MHz	QPSK	1	50	Left	10	38000	2595	23.64	24.0	1.086	0.076	0.083
	4	20MHz	QPSK	1	50	Right	10	38000	2595	23.64	24.0	1.086	0.161	0.175
	4	20MHz	QPSK	1	50	Top	10	38000	2595	23.64	24.0	1.086	0.015	0.016
	4	20MHz	QPSK	1	50	Bottom	10	38000	2595	23.64	24.0	1.086	0.236	0.256
Ant0	4	20MHz	QPSK	1	50	Front	15	38000	2595	23.64	24.0	1.086	0.180	0.196
	4	<b>20MHz</b>	<b>QPSK</b>	<b>1</b>	<b>50</b>	<b>Back</b>	<b>15</b>	<b>38000</b>	<b>2595</b>	<b>23.64</b>	<b>24.0</b>	<b>1.086</b>	<b>0.188</b>	<b>0.204</b>
	4	20MHz	QPSK	18 0	0 0	Back	15	37901(PCC) 38099(SCC)	2585.1 2604.9	23.51	24.0	1.119	0.157	0.176

## 12.16. LTE Band41 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHz	QPSK	1	50	Left Cheek	0	40640	2595	20.72	21.0	1.067	0.169	0.180
	1	20MHz	QPSK	1	50	Left Tilt	0	40640	2595	20.72	21.0	1.067	0.214	0.228
	1	20MHz	QPSK	1	50	Right Cheek	0	40640	2595	20.72	21.0	1.067	0.251	0.268
	1	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Right Tilt</b>	<b>0</b>	<b>40640</b>	<b>2595</b>	<b>20.72</b>	<b>21.0</b>	<b>1.067</b>	<b>0.307</b>	<b>0.327</b>
	1	20MHz	QPSK	1	50	Right Tilt	0	40521(PCC) 40719(SCC)	2583.1 2602.9	20.71	21.0	1.069	0.278	0.297
Ant0	1	20MHz	QPSK	1	50	Right Cheek	0	40640	2595	23.78	24.0	1.052	0.124	0.130
	1	20MHz	QPSK	1	50	Right Tilt	0	40640	2595	23.78	24.0	1.052	0.071	0.075
	1	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Left Cheek</b>	<b>0</b>	<b>40640</b>	<b>2595</b>	<b>23.78</b>	<b>24.0</b>	<b>1.052</b>	<b>0.135</b>	<b>0.142</b>
	1	20MHz	QPSK	1	50	Left Cheek	0	40521(PCC) 40719(SCC)	2583.1 2602.9	23.76	24.0	1.057	0.109	0.115
	1	20MHz	QPSK	1	50	Left Tilt	0	40640	2595	23.78	24.0	1.052	0.107	0.113
Body														
Ant1	4	20MHz	QPSK	1	50	Front	10	40640	2595	22.19	22.5	1.074	0.150	0.161
	4	20MHz	QPSK	1	50	Back	10	40640	2595	22.19	22.5	1.074	0.306	0.329
	4	20MHz	QPSK	1	50	Left	10	40640	2595	22.19	22.5	1.074	0.117	0.126
	4	20MHz	QPSK	1	50	Right	10	40640	2595	22.19	22.5	1.074	0.004	0.004
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Top</b>	<b>10</b>	<b>40640</b>	<b>2595</b>	<b>22.19</b>	<b>22.5</b>	<b>1.074</b>	<b>0.480</b>	<b>0.516</b>
	4	20MHz	QPSK	1	50	Top	10	40521(PCC) 40719(SCC)	2583.1 2602.9	22.13	22.5	1.089	0.416	0.453
	4	20MHz	QPSK	1	50	Bottom	10	40640	2595	22.19	22.5	1.074	0.010	0.011
Ant1 (Sensor)	4	20MHz	QPSK	1	50	Front	15	40640	2595	23.72	24.0	1.067	0.087	0.093
	4	20MHz	QPSK	1	50	Back	17	40640	2595	23.72	24.0	1.067	0.124	0.132
	4	20MHz	QPSK	1	50	Top	17	40640	2595	23.72	24.0	1.067	0.196	0.209
Ant1	4	20MHz	QPSK	1	50	Front	15	40640	2595	22.19	22.5	1.074	0.093	0.100
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Back</b>	<b>15</b>	<b>40640</b>	<b>2595</b>	<b>22.19</b>	<b>22.5</b>	<b>1.074</b>	<b>0.182</b>	<b>0.195</b>
	4	20MHz	QPSK	1	50	Back	15	40521(PCC) 40719(SCC)	2583.1 2602.9	22.13	22.5	1.089	0.151	0.164
Ant0	4	20MHz	QPSK	1	50	Front	10	40640	2595	23.78	24.0	1.052	0.355	0.373
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Back</b>	<b>10</b>	<b>40640</b>	<b>2595</b>	<b>23.78</b>	<b>24.0</b>	<b>1.052</b>	<b>0.398</b>	<b>0.419</b>
	4	20MHz	QPSK	1	50	Back	10	40521(PCC) 40719(SCC)	2583.1 2602.9	23.76	24.0	1.057	0.335	0.354
	4	20MHz	QPSK	1	50	Left	10	40640	2595	23.78	24.0	1.052	0.080	0.084
	4	20MHz	QPSK	1	50	Right	10	40640	2595	23.78	24.0	1.052	0.156	0.164
	4	20MHz	QPSK	1	50	Top	10	40640	2595	23.78	24.0	1.052	0.012	0.013
	4	20MHz	QPSK	1	50	Bottom	10	40640	2595	23.78	24.0	1.052	0.237	0.249
Ant0	4	20MHz	QPSK	1	50	Front	15	40640	2595	23.78	24.0	1.052	0.185	0.195
	4	<b>20MHz</b>	<b>QPSK</b>	1	<b>50</b>	<b>Back</b>	<b>15</b>	<b>40640</b>	<b>2595</b>	<b>23.78</b>	<b>24.0</b>	<b>1.052</b>	<b>0.191</b>	<b>0.201</b>
	4	20MHz	QPSK	1	50	Back	15	40521(PCC) 40719(SCC)	2583.1 2602.9	23.76	24.0	1.057	0.162	0.171



## 12.17. LTE Band66 SAR results

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	5MHZ	QPSK	1	13	Left Cheek	0	132322	2145	18.93	19.0	1.016	0.336	0.341
	1	5MHZ	QPSK	1	13	Left Tilt	0	132322	2145	18.93	19.0	1.016	0.434	0.441
	1	5MHZ	QPSK	1	13	Right Cheek	0	132322	2145	18.93	19.0	1.016	0.345	0.351
	<b>1</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Tilt</b>	<b>0</b>	<b>132322</b>	<b>2145</b>	<b>18.93</b>	<b>19.0</b>	<b>1.016</b>	<b>0.447</b>	<b>0.454</b>
Ant0	1	5MHZ	QPSK	1	13	Right Cheek	0	132322	2145	23.90	24.0	1.023	0.065	0.067
	1	5MHZ	QPSK	1	13	Right Tilt	0	132322	2145	23.90	24.0	1.023	0.043	0.044
	1	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left Cheek</b>	<b>0</b>	<b>132322</b>	<b>2145</b>	<b>23.90</b>	<b>24.0</b>	<b>1.023</b>	<b>0.069</b>	<b>0.071</b>
	1	5MHZ	QPSK	1	13	Left Tilt	0	132322	2145	23.90	24.0	1.023	0.058	0.059
Body														
Ant1	4	5MHZ	QPSK	1	13	Front	10	132322	2145	20.92	21.0	1.019	0.169	0.172
	4	5MHZ	QPSK	1	13	Back	10	132322	2145	20.92	21.0	1.019	0.256	0.261
	4	5MHZ	QPSK	1	13	Left	10	132322	2145	20.92	21.0	1.019	0.008	0.008
	4	5MHZ	QPSK	1	13	Right	10	132322	2145	20.92	21.0	1.019	0.006	0.006
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Top</b>	<b>10</b>	<b>132322</b>	<b>2145</b>	<b>20.92</b>	<b>21.0</b>	<b>1.019</b>	<b>0.630</b>	<b>0.642</b>
	4	5MHZ	QPSK	1	13	Bottom	10	132322	2145	20.92	21.0	1.019	0.009	0.009
Ant1 (Sensor)	4	5MHZ	QPSK	1	13	Front	15	132322	2145	23.93	24.0	1.016	0.146	0.148
	4	5MHZ	QPSK	1	13	Back	17	132322	2145	23.93	24.0	1.016	0.219	0.223
	4	5MHZ	QPSK	1	13	Top	17	132322	2145	23.93	24.0	1.016	0.441	0.448
Ant1	4	5MHZ	QPSK	1	13	Front	15	132322	2145	20.92	21.0	1.019	0.155	0.158
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>132322</b>	<b>2145</b>	<b>20.92</b>	<b>21.0</b>	<b>1.019</b>	<b>0.187</b>	<b>0.190</b>
Ant0	4	5MHZ	QPSK	1	13	Front	10	132322	2145	21.87	22.0	1.030	0.270	0.278
	4	5MHZ	QPSK	1	13	Back	10	132322	2145	21.87	22.0	1.030	0.384	0.396
	4	5MHZ	QPSK	1	13	Left	10	132322	2145	21.87	22.0	1.030	0.006	0.006
	4	5MHZ	QPSK	1	13	Right	10	132322	2145	21.87	22.0	1.030	0.046	0.047
	4	5MHZ	QPSK	1	13	Top	10	132322	2145	21.87	22.0	1.030	0.006	0.006
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Bottom</b>	<b>10</b>	<b>132322</b>	<b>2145</b>	<b>21.87</b>	<b>22.0</b>	<b>1.030</b>	<b>0.414</b>	<b>0.427</b>
Ant0	4	5MHZ	QPSK	1	13	Front	15	132322	2145	21.87	22.0	1.030	0.149	0.154
	<b>4</b>	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>132322</b>	<b>2145</b>	<b>21.87</b>	<b>22.0</b>	<b>1.030</b>	<b>0.285</b>	<b>0.294</b>

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant3	Full power	5MHZ	QPSK	1	13	Left Cheek	0	132322	2145	23.90	24.0	1.023	0.050	0.051
	Full power	5MHZ	QPSK	1	13	Left Tilt	0	132322	2145	23.90	24.0	1.023	0.007	0.007
	Full power	5MHZ	QPSK	1	13	Right Cheek	0	132322	2145	23.90	24.0	1.023	0.098	0.100
	Full power	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Right Tilt</b>	<b>0</b>	<b>132322</b>	<b>2145</b>	23.90	24.0	<b>1.023</b>	<b>0.008</b>	<b>0.008</b>
Ant5	Full power	5MHZ	QPSK	1	13	Right Cheek	0	132322	2145	23.90	24.0	1.023	0.042	0.043
	Full power	5MHZ	QPSK	1	13	Right Tilt	0	132322	2145	23.90	24.0	1.023	0.011	0.011
	Full power	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Left Cheek</b>	<b>0</b>	<b>132322</b>	<b>2145</b>	23.90	24.0	<b>1.023</b>	<b>0.024</b>	<b>0.025</b>
	Full power	5MHZ	QPSK	1	13	Left Tilt	0	132322	2145	23.90	24.0	1.023	0.008	0.008
Body														
Ant3	Full power	5MHZ	QPSK	1	13	Front	10	132322	2145	23.90	24.0	1.023	0.009	0.009
	Full power	5MHZ	QPSK	1	13	Back	10	132322	2145	23.90	24.0	1.023	0.107	0.109
	Full power	5MHZ	QPSK	1	13	Left	10	132322	2145	23.90	24.0	1.023	0.076	0.078
	Full power	5MHZ	QPSK	1	13	Right	10	132322	2145	23.90	24.0	1.023	0.006	0.006
	Full power	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Top</b>	<b>10</b>	<b>132322</b>	<b>2145</b>	23.90	24.0	<b>1.023</b>	<b>0.007</b>	<b>0.007</b>
	Full power	5MHZ	QPSK	1	13	Bottom	10	132322	2145	23.90	24.0	1.023	0.005	0.005
Ant3	Full power	5MHZ	QPSK	1	13	Front	15	132322	2145	23.90	24.0	1.023	0.007	0.007
	Full power	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>132322</b>	<b>2145</b>	23.90	24.0	<b>1.023</b>	<b>0.063</b>	<b>0.064</b>
Ant5	Full power	5MHZ	QPSK	1	13	Front	10	132322	2145	23.90	24.0	1.023	0.012	0.012
	Full power	5MHZ	QPSK	1	13	Back	10	132322	2145	23.90	24.0	1.023	0.008	0.008
	Full power	5MHZ	QPSK	1	13	Left	10	132322	2145	23.90	24.0	1.023	0.008	0.008
	Full power	5MHZ	QPSK	1	13	Right	10	132322	2145	23.90	24.0	1.023	0.064	0.065
	Full power	5MHZ	QPSK	1	13	Top	10	132322	2145	23.90	24.0	1.023	0.013	0.013
	Full power	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Bottom</b>	<b>10</b>	<b>132322</b>	<b>2145</b>	23.90	24.0	<b>1.023</b>	<b>0.011</b>	<b>0.011</b>
Ant5	Full power	5MHZ	QPSK	1	13	Front	15	132322	2145	23.90	24.0	1.023	0.012	0.012
	Full power	<b>5MHZ</b>	<b>QPSK</b>	<b>1</b>	<b>13</b>	<b>Back</b>	<b>15</b>	<b>132322</b>	<b>2145</b>	23.90	24.0	<b>1.023</b>	<b>0.030</b>	<b>0.031</b>

## 12.18. 5G SAR results

### NR N5

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHZ	QPSK	50	28	Left Cheek	0	167300	836.5	22.29	23.7	1.384	0.565	0.782
	1	20MHZ	QPSK	50	28	Left Tilt	0	167300	836.5	22.29	23.7	1.384	0.539	0.746
	1	20MHZ	QPSK	50	28	Right Cheek	0	167300	836.5	22.29	23.7	1.384	0.618	0.855
	<b>1</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Tilt</b>	<b>0</b>	<b>167300</b>	<b>836.5</b>	<b>22.29</b>	<b>23.7</b>	<b>1.384</b>	<b>0.653</b>	<b>0.903</b>
	1	20MHZ	QPSK	50	28	Right Tilt	0	166800	834	22.07	23.7	1.455	0.602	0.876
	1	20MHZ	QPSK	50	28	Right Tilt	0	167800	839	22.00	23.7	1.479	0.589	0.871
Ant0	<b>1</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Cheek</b>	<b>0</b>	<b>167300</b>	<b>836.5</b>	<b>22.79</b>	<b>24.2</b>	<b>1.384</b>	<b>0.102</b>	<b>0.141</b>
	1	20MHZ	QPSK	50	28	Right Tilt	0	167300	836.5	22.79	24.2	1.384	0.056	0.077
	1	20MHZ	QPSK	50	28	Left Cheek	0	167300	836.5	22.79	24.2	1.384	0.084	0.116
	1	20MHZ	QPSK	50	28	Left Tilt	0	167300	836.5	22.79	24.2	1.384	0.035	0.048
Body														
Ant1	4	20MHZ	QPSK	50	28	Front	10	167300	836.5	22.77	24.2	1.390	0.130	0.181
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>10</b>	<b>167300</b>	<b>836.5</b>	<b>22.77</b>	<b>24.2</b>	<b>1.390</b>	<b>0.136</b>	<b>0.189</b>
	4	20MHZ	QPSK	50	28	Left	10	167300	836.5	22.77	24.2	1.390	0.086	0.120
	4	20MHZ	QPSK	50	28	Right	10	167300	836.5	22.77	24.2	1.390	0.099	0.138
	4	20MHZ	QPSK	50	28	Top	10	167300	836.5	22.77	24.2	1.390	0.135	0.188
	4	20MHZ	QPSK	50	28	Bottom	10	167300	836.5	22.77	24.2	1.390	0.008	0.011
Ant1 (Sensor)	4	20MHZ	QPSK	50	28	Front	15	167300	836.5	22.77	24.2	1.390	0.078	0.108
	4	20MHZ	QPSK	50	28	Back	17	167300	836.5	22.77	24.2	1.390	0.082	0.114
Ant1	4	20MHZ	QPSK	50	28	Top	17	167300	836.5	22.77	24.2	1.390	0.065	0.090
	4	20MHZ	QPSK	50	28	Back	15	167300	836.5	22.77	24.2	1.390	0.106	0.147
<b>Ant1</b>	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>167300</b>	<b>836.5</b>	<b>22.77</b>	<b>24.2</b>	<b>1.390</b>	<b>0.126</b>	<b>0.175</b>
	4	20MHZ	QPSK	50	28	Back	15	167300	836.5	22.77	24.2	1.390	0.106	0.147
Ant0	4	20MHZ	QPSK	50	28	Front	10	167300	836.5	22.79	24.2	1.384	0.109	0.151
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>10</b>	<b>167300</b>	<b>836.5</b>	<b>22.79</b>	<b>24.2</b>	<b>1.384</b>	<b>0.117</b>	<b>0.162</b>
	4	20MHZ	QPSK	50	28	Left	10	167300	836.5	22.79	24.2	1.384	0.080	0.111
	4	20MHZ	QPSK	50	28	Right	10	167300	836.5	22.79	24.2	1.384	0.067	0.093
	4	20MHZ	QPSK	50	28	Top	10	167300	836.5	22.79	24.2	1.384	0.013	0.018
	4	20MHZ	QPSK	50	28	Bottom	10	167300	836.5	22.79	24.2	1.384	0.109	0.151
Ant0	4	20MHZ	QPSK	50	28	Back	15	167300	836.5	22.79	24.2	1.384	0.090	0.125
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>167300</b>	<b>836.5</b>	<b>22.79</b>	<b>24.2</b>	<b>1.384</b>	<b>0.106</b>	<b>0.147</b>

**ENDC N5**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant0	<b>1</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Cheek</b>	<b>0</b>	<b>167300</b>	<b>836.5</b>	<b>22.79</b>	<b>24.2</b>	<b>1.384</b>	<b>0.102</b>	<b>0.141</b>
	1	20MHZ	QPSK	50	28	Right Tilt	0	167300	836.5	22.79	24.2	1.384	0.056	0.077
	1	20MHZ	QPSK	50	28	Left Cheek	0	167300	836.5	22.79	24.2	1.384	0.084	0.116
	1	20MHZ	QPSK	50	28	Left Tilt	0	167300	836.5	22.79	24.2	1.384	0.035	0.048
Body														
Ant0	4	20MHZ	QPSK	50	28	Front	10	167300	836.5	22.79	24.2	1.384	0.109	0.151
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>10</b>	<b>167300</b>	<b>836.5</b>	<b>22.79</b>	<b>24.2</b>	<b>1.384</b>	<b>0.117</b>	<b>0.162</b>
	4	20MHZ	QPSK	50	28	Left	10	167300	836.5	22.79	24.2	1.384	0.080	0.111
	4	20MHZ	QPSK	50	28	Right	10	167300	836.5	22.79	24.2	1.384	0.067	0.093
	4	20MHZ	QPSK	50	28	Top	10	167300	836.5	22.79	24.2	1.384	0.013	0.018
	4	20MHZ	QPSK	50	28	Bottom	10	167300	836.5	22.79	24.2	1.384	0.109	0.151
Ant0	4	20MHZ	QPSK	50	28	Back	15	167300	836.5	22.79	24.2	1.384	0.090	0.125
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>167300</b>	<b>836.5</b>	<b>22.79</b>	<b>24.2</b>	<b>1.384</b>	<b>0.106</b>	<b>0.147</b>

**NR N7**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	40MHZ	QPSK	108	54	Left Cheek	0	507000	2535	18.21	18.9	1.172	0.262	0.307
	1	40MHZ	QPSK	108	54	Left Tilt	0	507000	2535	18.21	18.9	1.172	0.334	0.392
	1	40MHZ	QPSK	108	54	Right Cheek	0	507000	2535	18.21	18.9	1.172	0.355	0.416
	<b>1</b>	<b>40MHZ</b>	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Right Tilt</b>	<b>0</b>	<b>507000</b>	<b>2535</b>	<b>18.21</b>	<b>18.9</b>	<b>1.172</b>	<b>0.472</b>	<b>0.553</b>
Ant0	1	40MHZ	QPSK	108	54	Right Cheek	0	507000	2535	23.19	23.9	1.178	0.051	0.060
	1	40MHZ	QPSK	108	54	Right Tilt	0	507000	2535	23.19	23.9	1.178	0.012	0.014
	1	<b>40MHZ</b>	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Left Cheek</b>	<b>0</b>	<b>507000</b>	<b>2535</b>	<b>23.19</b>	<b>23.9</b>	<b>1.178</b>	<b>0.193</b>	<b>0.227</b>
	1	40MHZ	QPSK	108	54	Left Tilt	0	507000	2535	23.19	23.9	1.178	0.133	0.157
Body														
Ant1	4	40MHZ	QPSK	108	54	Front	10	507000	2535	18.21	18.9	1.172	0.131	0.154
	4	40MHZ	QPSK	108	54	Back	10	507000	2535	18.21	18.9	1.172	0.258	0.302
	4	40MHZ	QPSK	108	54	Left	10	507000	2535	18.21	18.9	1.172	0.011	0.012
	4	40MHZ	QPSK	108	54	Right	10	507000	2535	18.21	18.9	1.172	0.007	0.008
	4	<b>40MHZ</b>	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Top</b>	<b>10</b>	<b>507000</b>	<b>2535</b>	<b>18.21</b>	<b>18.9</b>	<b>1.172</b>	<b>0.337</b>	<b>0.395</b>
	4	40MHZ	QPSK	108	54	Bottom	10	507000	2535	18.21	18.9	1.172	0.006	0.007
Ant1 (Sensor)	4	40MHZ	QPSK	108	54	Front	15	507000	2535	23.17	23.9	1.183	0.118	0.140
	4	40MHZ	QPSK	108	54	Back	17	507000	2535	23.17	23.9	1.183	0.216	0.256
	4	40MHZ	QPSK	108	54	Top	17	507000	2535	23.17	23.9	1.183	0.317	0.375
Ant1	4	40MHZ	QPSK	108	54	Back	15	507000	2535	18.21	18.9	1.172	0.058	0.068
	4	<b>40MHZ</b>	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Back</b>	<b>15</b>	<b>507000</b>	<b>2535</b>	<b>18.21</b>	<b>18.9</b>	<b>1.172</b>	<b>0.113</b>	<b>0.132</b>
Ant0	4	40MHZ	QPSK	108	54	Front	10	507000	2535	22.68	23.4	1.180	0.166	0.196
	4	40MHZ	QPSK	108	54	Back	10	507000	2535	22.68	23.4	1.180	0.106	0.125
	4	40MHZ	QPSK	108	54	Left	10	507000	2535	22.68	23.4	1.180	0.012	0.014
	4	40MHZ	QPSK	108	54	Right	10	507000	2535	22.68	23.4	1.180	0.016	0.019
	4	40MHZ	QPSK	108	54	Top	10	507000	2535	22.68	23.4	1.180	0.008	0.009
	4	<b>40MHZ</b>	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Bottom</b>	<b>10</b>	<b>507000</b>	<b>2535</b>	<b>22.68</b>	<b>23.4</b>	<b>1.180</b>	<b>0.243</b>	<b>0.287</b>
Ant0	4	<b>40MHZ</b>	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Back</b>	<b>15</b>	<b>507000</b>	<b>2535</b>	<b>22.68</b>	<b>23.4</b>	<b>1.180</b>	<b>0.074</b>	<b>0.087</b>
	4	40MHZ	QPSK	108	54	Back	15	507000	2535	22.68	23.4	1.180	0.047	0.055

**ENDC N7**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHZ	QPSK	108	54	Left Cheek	0	507000	2535	15.21	15.9	1.172	0.179	0.210
	1	20MHZ	QPSK	108	54	Left Tilt	0	507000	2535	15.21	15.9	1.172	0.233	0.273
	1	20MHZ	QPSK	108	54	Right Cheek	0	507000	2535	15.21	15.9	1.172	0.263	0.308
	1	20MHZ	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Right Tilt</b>	<b>0</b>	<b>507000</b>	<b>2535</b>	15.21	15.9	<b>1.172</b>	<b>0.327</b>	<b>0.383</b>
Ant3	1	20MHZ	QPSK	108	54	Right Cheek	0	507000	2535	17.17	17.9	1.183	0.103	0.122
	1	20MHZ	QPSK	108	54	Right Tilt	0	507000	2535	17.17	17.9	1.183	0.046	0.054
	1	20MHZ	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Left Cheek</b>	<b>0</b>	<b>507000</b>	<b>2535</b>	17.17	17.9	<b>1.183</b>	<b>0.173</b>	<b>0.205</b>
	1	20MHZ	QPSK	108	54	Left Tilt	0	507000	2535	17.17	17.9	1.183	0.049	0.058
Body														
Ant1	4	20MHZ	QPSK	108	54	Front	10	507000	2535	16.18	16.9	1.180	0.096	0.113
	4	20MHZ	QPSK	108	54	Back	10	507000	2535	16.18	16.9	1.180	0.183	0.216
	4	20MHZ	QPSK	108	54	Left	10	507000	2535	16.18	16.9	1.180	0.071	0.084
	4	20MHZ	QPSK	108	54	Right	10	507000	2535	16.18	16.9	1.180	0.007	0.008
	4	20MHZ	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Top</b>	<b>10</b>	<b>507000</b>	<b>2535</b>	16.18	16.9	<b>1.180</b>	<b>0.255</b>	<b>0.301</b>
	4	20MHZ	QPSK	108	54	Bottom	10	507000	2535	16.18	16.9	1.180	0.004	0.005
Ant1	4	20MHZ	QPSK	108	54	Back	15	507000	2535	16.18	16.9	1.180	0.009	0.011
	4	20MHZ	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Back</b>	<b>15</b>	<b>507000</b>	<b>2535</b>	16.18	16.9	<b>1.180</b>	<b>0.105</b>	<b>0.124</b>
Ant3	4	20MHZ	QPSK	108	54	Front	10	507000	2535	17.21	17.9	1.172	0.052	0.061
	4	20MHZ	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Back</b>	<b>10</b>	<b>507000</b>	<b>2535</b>	<b>17.21</b>	<b>17.9</b>	<b>1.172</b>	<b>0.102</b>	<b>0.120</b>
	4	20MHZ	QPSK	108	54	Left	10	507000	2535	17.21	17.9	1.172	0.092	0.108
	4	20MHZ	QPSK	108	54	Right	10	507000	2535	17.21	17.9	1.172	0.017	0.020
	4	20MHZ	QPSK	108	54	Top	10	507000	2535	17.21	17.9	1.172	0.005	0.006
	4	20MHZ	QPSK	108	54	Bottom	10	507000	2535	17.21	17.9	1.172	0.009	0.011
Ant3	4	20MHZ	QPSK	108	54	Back	15	507000	2535	17.21	17.9	1.172	0.010	0.012
	4	20MHZ	<b>QPSK</b>	<b>108</b>	<b>54</b>	<b>Back</b>	<b>15</b>	<b>507000</b>	<b>2535</b>	<b>17.21</b>	<b>17.9</b>	<b>1.172</b>	<b>0.045</b>	<b>0.053</b>

**NR N38**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHZ	QPSK	50	28	Left Cheek	0	519000	2595	20.47	20.7	1.054	0.433	0.457
	1	20MHZ	QPSK	50	28	Left Tilt	0	519000	2595	20.47	20.7	1.054	0.536	0.565
	1	20MHZ	QPSK	50	28	Right Cheek	0	519000	2595	20.47	20.7	1.054	0.555	0.585
	1	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Tilt</b>	<b>0</b>	<b>519000</b>	<b>2595</b>	<b>20.47</b>	<b>20.7</b>	<b>1.054</b>	<b>0.685</b>	<b>0.722</b>
Ant0	1	20MHZ	QPSK	50	28	Right Cheek	0	519000	2595	23.95	24.2	1.059	0.131	0.139
	1	20MHZ	QPSK	50	28	Right Tilt	0	519000	2595	23.95	24.2	1.059	0.062	0.066
	1	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Left Cheek</b>	<b>0</b>	<b>519000</b>	<b>2595</b>	<b>23.95</b>	<b>24.2</b>	<b>1.059</b>	<b>0.167</b>	<b>0.177</b>
	1	20MHZ	QPSK	50	28	Left Tilt	0	519000	2595	23.95	24.2	1.059	0.095	0.101
Body														
Ant1	4	20MHZ	QPSK	50	28	Front	10	519000	2595	20.93	21.2	1.064	0.193	0.205
	4	20MHZ	QPSK	50	28	Back	10	519000	2595	20.93	21.2	1.064	0.368	0.392
	4	20MHZ	QPSK	50	28	Left	10	519000	2595	20.93	21.2	1.064	0.176	0.187
	4	20MHZ	QPSK	50	28	Right	10	519000	2595	20.93	21.2	1.064	0.012	0.013
	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Top</b>	<b>10</b>	<b>519000</b>	<b>2595</b>	<b>20.93</b>	<b>21.2</b>	<b>1.064</b>	<b>0.543</b>	<b>0.578</b>
	4	20MHZ	QPSK	50	28	Bottom	10	519000	2595	20.93	21.2	1.064	0.009	0.010
Ant1 (Sensor)	4	20MHZ	QPSK	50	28	Front	15	519000	2595	23.95	24.2	1.059	0.132	0.140
	4	20MHZ	QPSK	50	28	Back	17	519000	2595	23.95	24.2	1.059	0.212	0.225
Ant1	4	20MHZ	QPSK	50	28	Top	17	519000	2595	23.95	24.2	1.059	0.292	0.309
	4	20MHZ	QPSK	50	28	Back	15	519000	2595	20.93	21.2	1.064	0.085	0.090
Ant1	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>519000</b>	<b>2595</b>	<b>20.93</b>	<b>21.2</b>	<b>1.064</b>	<b>0.173</b>	<b>0.184</b>
	4	20MHZ	QPSK	50	28	Front	10	519000	2595	23.95	24.2	1.059	0.311	0.329
Ant0	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>10</b>	<b>519000</b>	<b>2595</b>	<b>23.95</b>	<b>24.2</b>	<b>1.059</b>	<b>0.373</b>	<b>0.395</b>
	4	20MHZ	QPSK	50	28	Left	10	519000	2595	23.95	24.2	1.059	0.080	0.085
	4	20MHZ	QPSK	50	28	Right	10	519000	2595	23.95	24.2	1.059	0.178	0.189
	4	20MHZ	QPSK	50	28	Top	10	519000	2595	23.95	24.2	1.059	0.012	0.013
	4	20MHZ	QPSK	50	28	Bottom	10	519000	2595	23.95	24.2	1.059	0.213	0.226
	4	20MHZ	QPSK	50	28	Back	15	519000	2595	23.95	24.2	1.059	0.161	0.171
Ant0	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>519000</b>	<b>2595</b>	<b>23.95</b>	<b>24.2</b>	<b>1.059</b>	<b>0.165</b>	<b>0.175</b>

**NR N41**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	100MHZ	QPSK	135	69	Left Cheek	0	518598	2592.99	20.91	21.2	1.069	0.411	0.439
	1	100MHZ	QPSK	135	69	Left Tilt	0	518598	2592.99	20.91	21.2	1.069	0.529	0.566
	1	100MHZ	QPSK	135	69	Right Cheek	0	518598	2592.99	20.91	21.2	1.069	0.581	0.621
	<b>1</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Right Tilt</b>	<b>0</b>	<b>518598</b>	<b>2592.99</b>	<b>20.91</b>	<b>21.2</b>	<b>1.069</b>	<b>0.715</b>	<b>0.764</b>
Ant0	1	100MHZ	QPSK	135	69	Right Cheek	0	518598	2592.99	23.95	24.2	1.059	0.013	0.014
	1	100MHZ	QPSK	135	69	Right Tilt	0	518598	2592.99	23.95	24.2	1.059	0.052	0.055
	1	100MHZ	QPSK	135	69	Left Cheek	0	518598	2592.99	23.95	24.2	1.059	0.028	0.030
	<b>1</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Left Tilt</b>	<b>0</b>	<b>518598</b>	<b>2592.99</b>	<b>23.95</b>	<b>24.2</b>	<b>1.059</b>	<b>0.130</b>	<b>0.138</b>
Body														
Ant1	4	100MHZ	QPSK	135	69	Front	10	518598	2592.99	21.39	21.7	1.074	0.198	0.213
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>10</b>	<b>518598</b>	<b>2592.99</b>	<b>21.39</b>	<b>21.7</b>	<b>1.074</b>	<b>0.377</b>	<b>0.405</b>
	4	100MHZ	QPSK	135	69	Left	10	518598	2592.99	21.39	21.7	1.074	0.126	0.135
	4	100MHZ	QPSK	135	69	Right	10	518598	2592.99	21.39	21.7	1.074	0.011	0.012
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Top</b>	<b>10</b>	<b>518598</b>	<b>2592.99</b>	<b>21.39</b>	<b>21.7</b>	<b>1.074</b>	<b>0.582</b>	<b>0.625</b>
	4	100MHZ	QPSK	135	69	Bottom	10	518598	2592.99	21.39	21.7	1.074	0.017	0.018
Ant1 (Sensor)	4	100MHZ	QPSK	135	69	Front	15	518598	2592.99	23.90	24.2	1.072	0.151	0.162
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>17</b>	<b>518598</b>	<b>2592.99</b>	<b>23.90</b>	<b>24.2</b>	<b>1.072</b>	<b>0.241</b>	<b>0.258</b>
	4	100MHZ	QPSK	135	69	Top	17	518598	2592.99	23.90	24.2	1.072	0.353	0.378
Ant1	4	100MHZ	QPSK	135	69	Back	15	518598	2592.99	21.39	21.7	1.074	0.093	0.100
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>15</b>	<b>518598</b>	<b>2592.99</b>	<b>21.39</b>	<b>21.7</b>	<b>1.074</b>	<b>0.235</b>	<b>0.252</b>
Ant0	4	100MHZ	QPSK	135	69	Front	10	518598	2592.99	21.88	22.2	1.076	0.102	0.110
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>10</b>	<b>518598</b>	<b>2592.99</b>	<b>21.88</b>	<b>22.2</b>	<b>1.076</b>	<b>0.074</b>	<b>0.080</b>
	4	100MHZ	QPSK	135	69	Left	10	518598	2592.99	21.88	22.2	1.076	0.012	0.013
	4	100MHZ	QPSK	135	69	Right	10	518598	2592.99	21.88	22.2	1.076	0.008	0.009
	4	100MHZ	QPSK	135	69	Top	10	518598	2592.99	21.88	22.2	1.076	0.010	0.011
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Bottom</b>	<b>10</b>	<b>518598</b>	<b>2592.99</b>	<b>21.88</b>	<b>22.2</b>	<b>1.076</b>	<b>0.157</b>	<b>0.169</b>
Ant0	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>15</b>	<b>518598</b>	<b>2592.99</b>	<b>21.88</b>	<b>22.2</b>	<b>1.076</b>	<b>0.048</b>	<b>0.052</b>
	4	100MHZ	QPSK	135	69	Back	15	518598	2592.99	21.88	22.2	1.076	0.014	0.015



**ENDC N41**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	100MHZ	QPSK	135	69	Left Cheek	0	518598	2592.99	13.91	14.2	1.069	0.092	0.098
	1	100MHZ	QPSK	135	69	Left Tilt	0	518598	2592.99	13.91	14.2	1.069	0.121	0.129
	1	100MHZ	QPSK	135	69	Right Cheek	0	518598	2592.99	13.91	14.2	1.069	0.139	0.149
	<b>1</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Right Tilt</b>	<b>0</b>	<b>518598</b>	<b>2592.99</b>	13.91	14.2	<b>1.069</b>	<b>0.169</b>	<b>0.181</b>
Ant3	1	100MHZ	QPSK	135	69	Right Cheek	0	518598	2592.99	17.90	18.2	1.072	0.097	0.104
	1	100MHZ	QPSK	135	69	Right Tilt	0	518598	2592.99	17.90	18.2	1.072	0.044	0.047
	1	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Left Cheek</b>	<b>0</b>	<b>518598</b>	<b>2592.99</b>	<b>17.90</b>	<b>18.2</b>	<b>1.072</b>	<b>0.181</b>	<b>0.194</b>
	1	100MHZ	QPSK	135	69	Left Tilt	0	518598	2592.99	17.90	18.2	1.072	0.049	0.053
Body														
Ant1	4	100MHZ	QPSK	135	69	Front	10	518598	2592.99	14.91	15.2	1.069	0.053	0.057
	4	100MHZ	QPSK	135	69	Back	10	518598	2592.99	14.91	15.2	1.069	0.110	0.118
	4	100MHZ	QPSK	135	69	Left	10	518598	2592.99	14.91	15.2	1.069	0.039	0.042
	4	100MHZ	QPSK	135	69	Right	10	518598	2592.99	14.91	15.2	1.069	0.005	0.005
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Top</b>	<b>10</b>	<b>518598</b>	<b>2592.99</b>	14.91	15.2	<b>1.069</b>	<b>0.156</b>	<b>0.167</b>
	4	100MHZ	QPSK	135	69	Bottom	10	518598	2592.99	14.91	15.2	1.069	0.007	0.007
Ant1	4	100MHZ	QPSK	135	69	Back	15	518598	2592.99	14.91	15.2	1.069	0.009	0.010
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>15</b>	<b>518598</b>	<b>2592.99</b>	14.91	15.2	<b>1.069</b>	<b>0.045</b>	<b>0.048</b>
Ant3	4	100MHZ	QPSK	135	69	Front	10	518598	2592.99	18.90	19.2	1.072	0.064	0.069
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>10</b>	<b>518598</b>	<b>2592.99</b>	<b>18.90</b>	<b>19.2</b>	<b>1.072</b>	<b>0.131</b>	<b>0.140</b>
	4	100MHZ	QPSK	135	69	Left	10	518598	2592.99	18.90	19.2	1.072	0.106	0.114
	4	100MHZ	QPSK	135	69	Right	10	518598	2592.99	18.90	19.2	1.072	0.025	0.027
	4	100MHZ	QPSK	135	69	Top	10	518598	2592.99	18.90	19.2	1.072	0.007	0.008
	4	100MHZ	QPSK	135	69	Bottom	10	518598	2592.99	18.90	19.2	1.072	0.020	0.021
Ant3	4	100MHZ	QPSK	135	69	Back	15	518598	2592.99	18.90	19.2	1.072	0.011	0.012
	<b>4</b>	<b>100MHZ</b>	<b>QPSK</b>	<b>135</b>	<b>69</b>	<b>Back</b>	<b>15</b>	<b>518598</b>	<b>2592.99</b>	<b>18.90</b>	<b>19.2</b>	<b>1.072</b>	<b>0.046</b>	<b>0.049</b>

**NR N66**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHZ	QPSK	50	28	Left Cheek	0	349000	1745	16.45	17.2	1.189	0.350	0.416
	1	20MHZ	QPSK	50	28	Left Tilt	0	349000	1745	16.45	17.2	1.189	0.427	0.507
	1	20MHZ	QPSK	50	28	Right Cheek	0	349000	1745	16.45	17.2	1.189	0.383	0.455
	<b>1</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Tilt</b>	<b>0</b>	<b>349000</b>	<b>1745</b>	<b>16.45</b>	<b>17.2</b>	<b>1.189</b>	<b>0.520</b>	<b>0.618</b>
Ant0	<b>1</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Cheek</b>	<b>0</b>	<b>349000</b>	<b>1745</b>	<b>23.43</b>	<b>24.2</b>	<b>1.194</b>	<b>0.053</b>	<b>0.063</b>
	1	20MHZ	QPSK	50	28	Right Tilt	0	349000	1745	23.43	24.2	1.194	0.011	0.013
	1	20MHZ	QPSK	50	28	Left Cheek	0	349000	1745	23.43	24.2	1.194	0.046	0.055
	1	20MHZ	QPSK	50	28	Left Tilt	0	349000	1745	23.43	24.2	1.194	0.008	0.010
Body														
Ant1	4	20MHZ	QPSK	50	28	Front	10	349000	1745	20.43	21.2	1.194	0.290	0.346
	4	20MHZ	QPSK	50	28	Back	10	349000	1745	20.43	21.2	1.194	0.420	0.501
	4	20MHZ	QPSK	50	28	Left	10	349000	1745	20.43	21.2	1.194	0.044	0.053
	4	20MHZ	QPSK	50	28	Right	10	349000	1745	20.43	21.2	1.194	0.012	0.014
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Top</b>	<b>10</b>	<b>349000</b>	<b>1745</b>	<b>20.43</b>	<b>21.2</b>	<b>1.194</b>	<b>0.595</b>	<b>0.710</b>
	4	20MHZ	QPSK	50	28	Bottom	10	349000	1745	20.43	21.2	1.194	0.014	0.017
Ant1 (Sensor)	4	20MHZ	QPSK	50	28	Front	15	349000	1745	23.45	24.2	1.189	0.216	0.257
	4	20MHZ	QPSK	50	28	Back	17	349000	1745	23.45	24.2	1.189	0.289	0.343
	4	20MHZ	QPSK	50	28	Top	17	349000	1745	23.45	24.2	1.189	0.377	0.448
Ant1	4	20MHZ	QPSK	50	28	Back	15	349000	1745	20.43	21.2	1.194	0.140	0.167
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>349000</b>	<b>1745</b>	<b>20.43</b>	<b>21.2</b>	<b>1.194</b>	<b>0.260</b>	<b>0.310</b>
Ant0	4	20MHZ	QPSK	50	28	Front	10	349000	1745	20.93	21.7	1.194	0.255	0.304
	4	20MHZ	QPSK	50	28	Back	10	349000	1745	20.93	21.7	1.194	0.364	0.435
	4	20MHZ	QPSK	50	28	Left	10	349000	1745	20.93	21.7	1.194	0.015	0.018
	4	20MHZ	QPSK	50	28	Right	10	349000	1745	20.93	21.7	1.194	0.088	0.105
	4	20MHZ	QPSK	50	28	Top	10	349000	1745	20.93	21.7	1.194	0.007	0.008
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Bottom</b>	<b>10</b>	<b>349000</b>	<b>1745</b>	<b>20.93</b>	<b>21.7</b>	<b>1.194</b>	<b>0.579</b>	<b>0.691</b>
Ant0	4	20MHZ	QPSK	50	28	Back	15	349000	1745	20.93	21.7	1.194	0.147	0.176
	<b>4</b>	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>349000</b>	<b>1745</b>	<b>20.93</b>	<b>21.7</b>	<b>1.194</b>	<b>0.218</b>	<b>0.260</b>

**ENDC N66**

Configuration	Power Level	BW	Modulation	RB Num	RB Start	Position	Dist. mm	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Head														
Ant1	1	20MHZ	QPSK	50	28	Left Cheek	0	349000	1745	12.43	13.2	1.194	0.135	0.161
	1	20MHZ	QPSK	50	28	Left Tilt	0	349000	1745	12.43	13.2	1.194	0.167	0.199
	1	20MHZ	QPSK	50	28	Right Cheek	0	349000	1745	12.43	13.2	1.194	0.144	0.172
	1	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Right Tilt</b>	<b>0</b>	<b>349000</b>	<b>1745</b>	12.43	13.2	<b>1.194</b>	<b>0.197</b>	<b>0.235</b>
Ant3	1	20MHZ	QPSK	50	28	Right Cheek	0	349000	1745	23.41	24.2	1.199	0.044	0.053
	1	20MHZ	QPSK	50	28	Right Tilt	0	349000	1745	23.41	<b>24.2</b>	1.199	0.015	0.018
	1	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Left Cheek</b>	<b>0</b>	<b>349000</b>	<b>1745</b>	<b>23.41</b>	<b>24.2</b>	<b>1.199</b>	<b>0.091</b>	<b>0.109</b>
	1	20MHZ	QPSK	50	28	Left Tilt	0	349000	1745	23.41	<b>24.2</b>	1.199	0.021	0.025
Body														
Ant1	4	20MHZ	QPSK	50	28	Front	10	349000	1745	13.44	14.2	1.191	0.060	0.071
	4	20MHZ	QPSK	50	28	Back	10	349000	1745	13.44	14.2	1.191	0.099	0.118
	4	20MHZ	QPSK	50	28	Left	10	349000	1745	13.44	14.2	1.191	0.013	0.015
	4	20MHZ	QPSK	50	28	Right	10	349000	1745	13.44	14.2	1.191	0.008	0.010
	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Top</b>	<b>10</b>	<b>349000</b>	<b>1745</b>	13.44	14.2	<b>1.191</b>	<b>0.141</b>	<b>0.168</b>
	4	20MHZ	QPSK	50	28	Bottom	10	349000	1745	13.44	14.2	1.191	0.010	0.012
Ant1	4	20MHZ	QPSK	50	28	Back	15	349000	1745	13.44	14.2	1.191	0.012	0.014
	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>349000</b>	<b>1745</b>	13.44	14.2	<b>1.191</b>	<b>0.068</b>	<b>0.081</b>
Ant3	4	20MHZ	QPSK	50	28	Front	10	349000	1745	23.41	<b>24.2</b>	1.199	0.011	0.013
	4	<b>20MHZ</b>	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>10</b>	<b>349000</b>	<b>1745</b>	<b>23.41</b>	<b>24.2</b>	<b>1.199</b>	<b>0.105</b>	<b>0.126</b>
	4	20MHZ	QPSK	50	28	Left	10	349000	1745	23.41	<b>24.2</b>	1.199	0.056	0.067
	4	20MHZ	QPSK	50	28	Right	10	349000	1745	23.41	<b>24.2</b>	1.199	0.018	0.022
	4	20MHZ	QPSK	50	28	Top	10	349000	1745	23.41	<b>24.2</b>	1.199	0.007	0.008
	4	20MHZ	QPSK	50	28	Bottom	10	349000	1745	23.41	24.2	1.199	0.012	0.014
Ant3	4	20MHZ	QPSK	50	28	Back	15	349000	1745	23.41	<b>24.2</b>	1.199	0.005	0.006
	4	20MHZ	<b>QPSK</b>	<b>50</b>	<b>28</b>	<b>Back</b>	<b>15</b>	<b>349000</b>	<b>1745</b>	23.41	<b>24.2</b>	<b>1.199</b>	<b>0.022</b>	<b>0.026</b>

## 12.19. BT SAR results

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8	<b>BT</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>39</b>	<b>2441</b>	<b>11.77</b>	<b>12.5</b>	<b>1.183</b>	<b>0.030</b>	<b>0.035</b>
	BT	1	Left Tilt	0	39	2441	11.77	12.5	1.183	0.017	0.020
	BT	1	Right Cheek	0	39	2441	11.77	12.5	1.183	0.014	0.017
	BT	1	Right Tilt	0	39	2441	11.77	12.5	1.183	0.009	0.011
Test position of Body (5mm)											
Ant 8	BT	1	Front	10	39	2441	11.77	12.5	1.183	0.010	0.012
	BT	1	Back	10	39	2441	11.77	12.5	1.183	0.014	0.017
	BT	1	Left	10	39	2441	11.77	12.5	1.183	0.002	0.002
	<b>BT</b>	<b>1</b>	<b>Right</b>	<b>10</b>	<b>39</b>	<b>2441</b>	<b>11.77</b>	<b>12.5</b>	<b>1.183</b>	<b>0.016</b>	<b>0.019</b>
	BT	1	Top	10	39	2441	11.77	12.5	1.183	0.010	0.012
	BT	1	Bottom	10	39	2441	11.77	12.5	1.183	0.002	0.002
Ant 8	BT	1	Front	15	39	2441	11.77	12.5	1.183	0.007	0.008
	<b>BT</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>39</b>	<b>2441</b>	<b>11.77</b>	<b>12.5</b>	<b>1.183</b>	<b>0.009</b>	<b>0.011</b>

## 12.20. 2.4GWi-Fi SAR results

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8	<b>802.11b</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>6</b>	<b>2437</b>	<b>14.68</b>	<b>16.0</b>	<b>1.355</b>	<b>0.516</b>	<b>0.699</b>
	802.11b	1	Left Tilt	0	6	2437	14.68	16.0	1.355	0.435	0.590
	802.11b	1	Right Cheek	0	6	2437	14.68	16.0	1.355	0.180	0.244
	802.11b	1	Right Tilt	0	6	2437	14.68	16.0	1.355	0.193	0.262
Test position of Body (5mm)											
Ant 8	802.11b	1	Front	10	6	2437	17.21	18.5	1.346	0.219	0.295
	<b>802.11b</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>6</b>	<b>2437</b>	<b>17.21</b>	<b>18.5</b>	<b>1.346</b>	<b>0.245</b>	<b>0.330</b>
	802.11b	1	Left	10	6	2437	17.21	18.5	1.346	0.049	0.066
	802.11b	1	Right	10	6	2437	17.21	18.5	1.346	0.190	0.256
	802.11b	1	Top	10	6	2437	17.21	18.5	1.346	0.156	0.210
	802.11b	1	Bottom	10	6	2437	17.21	18.5	1.346	0.005	0.007
Ant 8	<b>802.11b</b>	<b>1</b>	<b>Front</b>	<b>15</b>	<b>6</b>	<b>2437</b>	<b>17.21</b>	<b>18.5</b>	<b>1.346</b>	<b>0.109</b>	<b>0.147</b>
	802.11b	1	Back	15	6	2437	17.21	18.5	1.346	0.098	0.132
Head Simultaneous transmission											
Ant 8	<b>802.11b</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>6</b>	<b>2437</b>	<b>11.68</b>	<b>13.0</b>	<b>1.355</b>	<b>0.299</b>	<b>0.405</b>
	802.11b	1	Left Tilt	0	6	2437	11.68	13.0	1.355	0.226	0.306
	802.11b	1	Right Cheek	0	6	2437	11.68	13.0	1.355	0.105	0.142
	802.11b	1	Right Tilt	0	6	2437	11.68	13.0	1.355	0.104	0.141

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 9	802.11b	1	Left Cheek	0	6	2437	16.29	17.5	1.321	0.134	0.177
	802.11b	1	Left Tilt	0	6	2437	16.29	17.5	1.321	0.099	0.131
	<b>802.11b</b>	<b>1</b>	<b>Right Cheek</b>	<b>0</b>	6	2437	<b>16.29</b>	<b>17.5</b>	<b>1.321</b>	<b>0.310</b>	<b>0.410</b>
	802.11b	1	Right Tilt	0	6	2437	16.29	17.5	1.321	0.168	0.222
Test position of Body (5mm)											
Ant 9	802.11b	1	Front	10	6	2437	16.31	17.5	1.315	0.090	0.118
	<b>802.11b</b>	<b>1</b>	<b>Back</b>	<b>10</b>	6	2437	<b>16.31</b>	<b>17.5</b>	<b>1.315</b>	<b>0.191</b>	<b>0.251</b>
	802.11b	1	Left	10	6	2437	16.31	17.5	1.315	0.147	0.193
	802.11b	1	Right	10	6	2437	16.31	17.5	1.315	0.008	0.011
	802.11b	1	Top	10	6	2437	16.31	17.5	1.315	0.045	0.059
	802.11b	1	Bottom	10	6	2437	16.31	17.5	1.315	0.011	0.014
Ant 9	802.11b	1	Front	15	6	2437	16.31	17.5	1.315	0.049	0.064
	<b>802.11b</b>	<b>1</b>	<b>Back</b>	<b>15</b>	6	2437	<b>16.31</b>	<b>17.5</b>	<b>1.315</b>	<b>0.080</b>	<b>0.105</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8+9	<b>802.11b</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	6	2437	<b>14.95</b>	<b>16.0</b>	<b>1.274</b>	<b>0.697</b>	<b>0.888</b>
	802.11b	1	Left Cheek		1	2412	14.96	16.0	1.271	0.532	0.676
	802.11b	1	Left Cheek		11	2462	14.93	16.0	1.279	0.604	0.773
	802.11b	1	Left Tilt	0	6	2437	14.95	16.0	1.274	0.509	0.648
	802.11b	1	Right Cheek	0	6	2437	14.95	16.0	1.274	0.290	0.369
	802.11b	1	Right Tilt	0	6	2437	14.95	16.0	1.274	0.322	0.410
Test position of Body (5mm)											
Ant 8+9	802.11b	1	Front	10	6	2437	16.99	18.0	1.262	0.237	0.299
	<b>802.11b</b>	<b>1</b>	<b>Back</b>	<b>10</b>	6	2437	<b>16.99</b>	<b>18.0</b>	<b>1.262</b>	<b>0.332</b>	<b>0.419</b>
	802.11b	1	Left	10	6	2437	16.99	18.0	1.262	0.169	0.213
	802.11b	1	Right	10	6	2437	16.99	18.0	1.262	0.200	0.252
	802.11b	1	Top	10	6	2437	16.99	18.0	1.262	0.184	0.232
	802.11b	1	Bottom	10	6	2437	16.99	18.0	1.262	0.009	0.011
Ant 8+9	802.11b	1	Front	15	6	2437	16.99	18.0	1.262	0.110	0.139
	<b>802.11b</b>	<b>1</b>	<b>Back</b>	<b>15</b>	6	2437	<b>16.99</b>	<b>18.0</b>	<b>1.262</b>	<b>0.163</b>	<b>0.206</b>
Head Simultaneous transmission											
Ant 8+9	<b>802.11b</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	6	2437	<b>11.47</b>	<b>12.5</b>	<b>1.268</b>	<b>0.262</b>	<b>0.332</b>
	802.11b	1	Left Tilt	0	6	2437	11.47	12.5	1.268	0.216	0.274
	802.11b	1	Right Cheek	0	6	2437	11.47	12.5	1.268	0.141	0.179
	802.11b	1	Right Tilt	0	6	2437	11.47	12.5	1.268	0.132	0.167

## 12.21. 5.2GWi-Fi SAR results

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8	802.11a	1	Left Cheek	0	40	5200	14.80	16.0	1.318	0.525	0.692
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>40</b>	<b>5200</b>	<b>14.80</b>	<b>16.0</b>	<b>1.318</b>	<b>0.565</b>	<b>0.745</b>
	802.11a	1	Right Cheek	0	40	5200	14.80	16.0	1.318	0.245	0.323
	802.11a	1	Right Tilt	0	40	5200	14.80	16.0	1.318	0.274	0.361
Test position of Body (5mm)											
Ant 8	802.11a	1	Front	10	40	5200	16.84	18.0	1.306	0.247	0.323
	802.11a	1	Back	10	40	5200	16.84	18.0	1.306	0.428	0.559
	802.11a	1	Left	10	40	5200	16.84	18.0	1.306	0.064	0.084
	802.11a	1	Right	10	40	5200	16.84	18.0	1.306	0.281	0.367
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>40</b>	<b>5200</b>	<b>16.84</b>	<b>18.0</b>	<b>1.306</b>	<b>0.460</b>	<b>0.601</b>
	802.11a	1	Bottom	10	40	5200	16.84	18.0	1.306	0.033	0.043
Ant 8	802.11a	1	Front	15	40	5200	16.84	18.0	1.306	0.138	0.180
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>40</b>	<b>5200</b>	<b>16.84</b>	<b>18.0</b>	<b>1.306</b>	<b>0.268</b>	<b>0.350</b>
Head Simultaneous transmission											
Ant 8	802.11a	1	Left Cheek	0	40	5200	9.81	11.0	1.315	0.268	0.352
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>40</b>	<b>5200</b>	<b>9.81</b>	<b>11.0</b>	<b>1.315</b>	<b>0.283</b>	<b>0.372</b>
	802.11a	1	Right Cheek	0	40	5200	9.81	11.0	1.315	0.157	0.206
	802.11a	1	Right Tilt	0	40	5200	9.81	11.0	1.315	0.188	0.247
Body Simultaneous transmission											
Ant 8	802.11a	1	Front	10	40	5200	11.83	13.0	1.309	0.110	0.144
	802.11a	1	Back	10	40	5200	11.83	13.0	1.309	0.199	0.261
	802.11a	1	Left	10	40	5200	11.83	13.0	1.309	0.057	0.075
	802.11a	1	Right	10	40	5200	11.83	13.0	1.309	0.166	0.217
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>40</b>	<b>5200</b>	<b>11.83</b>	<b>13.0</b>	<b>1.309</b>	<b>0.243</b>	<b>0.318</b>
	802.11a	1	Bottom	10	40	5200	11.83	13.0	1.309	0.047	0.062
Ant 8	802.11a	1	Front	15	40	5200	11.83	13.0	1.309	0.063	0.082
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>40</b>	<b>5200</b>	<b>11.83</b>	<b>13.0</b>	<b>1.309</b>	<b>0.131</b>	<b>0.172</b>



Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 9	802.11a	1	Left Cheek	0	40	5200	16.79	18.0	1.321	0.101	0.133
	802.11a	1	Left Tilt	0	40	5200	16.79	18.0	1.321	0.057	0.075
	<b>802.11a</b>	<b>1</b>	<b>Right Cheek</b>	<b>0</b>	<b>40</b>	<b>5200</b>	<b>16.79</b>	<b>18.0</b>	<b>1.321</b>	<b>0.290</b>	<b>0.383</b>
	802.11a	1	Right Tilt	0	40	5200	16.79	18.0	1.321	0.172	0.227
Test position of Body (5mm)											
Ant 9	802.11a	1	Front	10	40	5200	16.83	18.0	1.309	0.091	0.119
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>40</b>	<b>5200</b>	<b>16.83</b>	<b>18.0</b>	<b>1.309</b>	<b>0.423</b>	<b>0.554</b>
	802.11a	1	Left	10	40	5200	16.83	18.0	1.309	0.398	0.521
	802.11a	1	Right	10	40	5200	16.83	18.0	1.309	0.021	0.027
	802.11a	1	Top	10	40	5200	16.83	18.0	1.309	0.125	0.164
	802.11a	1	Bottom	10	40	5200	16.83	18.0	1.309	0.053	0.069
Ant 9	802.11a	1	Front	15	40	5200	16.83	18.0	1.309	0.044	0.058
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>40</b>	<b>5200</b>	<b>16.83</b>	<b>18.0</b>	<b>1.309</b>	<b>0.338</b>	<b>0.443</b>
Body Simultaneous transmission											
Ant 9	802.11a	1	Front	10	40	5200	12.32	13.5	1.312	0.095	0.125
	802.11a	1	Back	10	40	5200	12.32	13.5	1.312	0.269	0.353
	<b>802.11a</b>	<b>1</b>	<b>Left</b>	<b>10</b>	<b>40</b>	<b>5200</b>	<b>12.32</b>	<b>13.5</b>	<b>1.312</b>	<b>0.288</b>	<b>0.378</b>
	802.11a	1	Right	10	40	5200	12.32	13.5	1.312	0.055	0.072
	802.11a	1	Top	10	40	5200	12.32	13.5	1.312	0.071	0.093
	802.11a	1	Bottom	10	40	5200	12.32	13.5	1.312	0.071	0.093
Ant 9	802.11a	1	Front	15	40	5200	12.32	13.5	1.312	0.033	0.043
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>40</b>	<b>5200</b>	<b>12.32</b>	<b>13.5</b>	<b>1.312</b>	<b>0.164</b>	<b>0.215</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8+9	802.11a	1	Left Cheek	0	40	5200	14.62	16.0	1.374	0.567	0.779
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>40</b>	<b>5200</b>	<b>14.62</b>	<b>16.0</b>	<b>1.374</b>	<b>0.652</b>	<b>0.896</b>
	802.11a	1	Left Tilt	0	36	5180	14.62	16.0	1.374	0.588	0.808
	802.11a	1	Left Tilt	0	48	5240	14.55	16.0	1.396	0.623	0.870
	802.11a	1	Right Cheek	0	40	5200	14.62	16.0	1.374	0.297	0.408
	802.11a	1	Right Tilt	0	40	5200	14.62	16.0	1.374	0.344	0.473
Test position of Body (5mm)											
Ant 8+9	802.11a	1	Front	10	40	5200	14.62	16.0	1.374	0.147	0.202
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>40</b>	<b>5200</b>	<b>14.62</b>	<b>16.0</b>	<b>1.374</b>	<b>0.435</b>	<b>0.598</b>
	802.11a	1	Left	10	40	5200	14.62	16.0	1.374	0.309	0.425
	802.11a	1	Right	10	40	5200	14.62	16.0	1.374	0.200	0.275
	802.11a	1	Top	10	40	5200	14.62	16.0	1.374	0.279	0.383
	802.11a	1	Bottom	10	40	5200	14.62	16.0	1.374	0.049	0.067
Ant 8+9	802.11a	1	Front	15	40	5200	14.62	16.0	1.374	0.077	0.106
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>40</b>	<b>5200</b>	<b>14.62</b>	<b>16.0</b>	<b>1.374</b>	<b>0.285</b>	<b>0.392</b>
Head Simultaneous transmission											
Ant 8+9	802.11a	1	Left Cheek	0	40	5200	9.11	10.5	1.377	0.266	0.366
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>40</b>	<b>5200</b>	<b>9.11</b>	<b>10.5</b>	<b>1.377</b>	<b>0.286</b>	<b>0.394</b>
	802.11a	1	Right Cheek	0	40	5200	9.11	10.5	1.377	0.141	0.194
	802.11a	1	Right Tilt	0	40	5200	9.11	10.5	1.377	0.171	0.236
Body Simultaneous transmission											
Ant 8+9	802.11a	1	Front	10	40	5200	11.14	12.5	1.368	0.111	0.152
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>40</b>	<b>5200</b>	<b>11.14</b>	<b>12.5</b>	<b>1.368</b>	<b>0.262</b>	<b>0.358</b>
	802.11a	1	Left	10	40	5200	11.14	12.5	1.368	0.241	0.330
	802.11a	1	Right	10	40	5200	11.14	12.5	1.368	0.158	0.216
	802.11a	1	Top	10	40	5200	11.14	12.5	1.368	0.214	0.293
	802.11a	1	Bottom	10	40	5200	11.14	12.5	1.368	0.034	0.047
Ant 8+9	802.11a	1	Front	15	40	5200	11.14	12.5	1.368	0.058	0.079
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>40</b>	<b>5200</b>	<b>11.14</b>	<b>12.5</b>	<b>1.368</b>	<b>0.183</b>	<b>0.250</b>

## 12.22. 5.3GWi-Fi SAR results

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>56</b>	<b>5280</b>	<b>13.30</b>	<b>14.5</b>	<b>1.318</b>	<b>0.666</b>	<b>0.878</b>
	802.11a	1	Left Cheek	0	52	5260	13.38	14.5	1.294	0.615	0.796
	802.11a	1	Left Cheek	0	64	5320	13.33	14.5	1.309	0.582	0.762
	802.11a	1	Left Tilt	0	56	5280	13.30	14.5	1.318	0.643	0.848
	802.11a	1	Left Tilt	0	52	5260	13.38	14.5	1.294	0.604	0.782
	802.11a	1	Left Tilt	0	64	5320	13.33	14.5	1.309	0.579	0.758
	802.11a	1	Right Cheek	0	56	5280	13.30	14.5	1.318	0.321	0.423
	802.11a	1	Right Tilt	0	56	5280	13.30	14.5	1.318	0.358	0.472
Test position of Body (5mm)											
Ant 8	802.11a	1	Front	10	56	5280	16.33	17.5	1.309	0.385	0.504
	802.11a	1	Back	10	56	5280	16.33	17.5	1.309	0.557	0.729
	802.11a	1	Left	10	56	5280	16.33	17.5	1.309	0.077	0.101
	802.11a	1	Right	10	56	5280	16.33	17.5	1.309	0.454	0.594
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>56</b>	<b>5280</b>	<b>16.33</b>	<b>17.5</b>	<b>1.309</b>	<b>0.631</b>	<b>0.826</b>
	802.11a	1	Top	10	52	5260	16.37	17.5	1.297	0.601	0.780
	802.11a	1	Top	10	64	5320	16.34	17.5	1.306	0.596	0.778
	802.11a	1	Bottom	10	56	5280	16.33	17.5	1.309	0.034	0.045
Ant 8	802.11a	1	Front	15	56	5280	16.33	17.5	1.309	0.219	0.287
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>56</b>	<b>5280</b>	<b>16.33</b>	<b>17.5</b>	<b>1.309</b>	<b>0.403</b>	<b>0.528</b>
Head Simultaneous transmission											
Ant 8	802.11a	1	Left Cheek	0	56	5280	9.34	10.5	1.306	0.256	0.334
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>56</b>	<b>5280</b>	<b>9.34</b>	<b>10.5</b>	<b>1.306</b>	<b>0.278</b>	<b>0.363</b>
	802.11a	1	Right Cheek	0	56	5280	9.34	10.5	1.306	0.147	0.192
	802.11a	1	Right Tilt	0	56	5280	9.34	10.5	1.306	0.177	0.231
Body Simultaneous transmission											
Ant 8	802.11a	1	Front	10	56	5280	12.80	14.0	1.318	0.149	0.196
	802.11a	1	Back	10	56	5280	12.80	14.0	1.318	0.246	0.324
	802.11a	1	Left	10	56	5280	12.80	14.0	1.318	0.043	0.057
	802.11a	1	Right	10	56	5280	12.80	14.0	1.318	0.177	0.233
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>56</b>	<b>5280</b>	<b>12.80</b>	<b>14.0</b>	<b>1.318</b>	<b>0.288</b>	<b>0.380</b>
	802.11a	1	Bottom	10	56	5280	12.80	14.0	1.318	0.007	0.009
Ant 8	802.11a	1	Front	15	56	5280	12.80	14.0	1.318	0.097	0.128
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>56</b>	<b>5280</b>	<b>12.80</b>	<b>14.0</b>	<b>1.318</b>	<b>0.181</b>	<b>0.239</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 9	802.11a	1	Left Cheek	0	56	5280	16.80	18.0	1.318	0.213	0.281
	802.11a	1	Left Tilt	0	56	5280	16.80	18.0	1.318	0.142	0.187
	<b>802.11a</b>	<b>1</b>	<b>Right Cheek</b>	<b>0</b>	<b>56</b>	<b>5280</b>	<b>16.80</b>	<b>18.0</b>	<b>1.318</b>	<b>0.626</b>	<b>0.825</b>
	802.11a	1	Right Cheek	0	52	5260	16.84	18.0	1.306	0.603	0.788
	802.11a	1	Right Cheek	0	64	5320	16.85	18.0	1.303	0.586	0.764
	802.11a	1	Right Tilt	0	56	5280	16.80	18.0	1.318	0.420	0.554
Test position of Body (5mm)											
Ant 9	802.11a	1	Front	10	56	5280	14.84	16.0	1.306	0.107	0.140
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>56</b>	<b>5280</b>	<b>14.84</b>	<b>16.0</b>	<b>1.306</b>	<b>0.683</b>	<b>0.892</b>
	802.11a	1	Back	10	52	5260	14.85	16.0	1.303	0.633	0.825
	802.11a	1	Back	10	64	5320	14.87	16.0	1.297	0.609	0.790
	802.11a	1	Left	10	56	5280	14.84	16.0	1.306	0.624	0.815
	802.11a	1	Left	10	52	5260	14.85	16.0	1.303	0.612	0.798
	802.11a	1	Left	10	64	5320	14.87	16.0	1.297	0.596	0.773
	802.11a	1	Right	10	56	5280	14.84	16.0	1.306	0.038	0.050
	802.11a	1	Top	10	56	5280	14.84	16.0	1.306	0.201	0.263
	802.11a	1	Bottom	10	56	5280	14.84	16.0	1.306	0.091	0.119
	Ant 9	802.11a	1	Front	15	56	5280	14.84	16.0	1.306	0.066
<b>802.11a</b>		<b>1</b>	<b>Back</b>	<b>15</b>	<b>56</b>	<b>5280</b>	<b>14.84</b>	<b>16.0</b>	<b>1.306</b>	<b>0.356</b>	<b>0.465</b>
Head Simultaneous transmission											
Ant 9	802.11a	1	Left Cheek	0	56	5280	13.83	15.0	1.309	0.099	0.130
	802.11a	1	Left Tilt	0	56	5280	13.83	15.0	1.309	0.062	0.081
	<b>802.11a</b>	<b>1</b>	<b>Right Cheek</b>	<b>0</b>	<b>56</b>	<b>5280</b>	<b>13.83</b>	<b>15.0</b>	<b>1.309</b>	<b>0.288</b>	<b>0.377</b>
	802.11a	1	Right Tilt	0	56	5280	13.83	15.0	1.309	0.162	0.212
Body Simultaneous transmission											
Ant 9	802.11a	1	Front	10	56	5280	11.30	12.5	1.318	0.055	0.073
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>56</b>	<b>5280</b>	<b>11.30</b>	<b>12.5</b>	<b>1.318</b>	<b>0.279</b>	<b>0.368</b>
	802.11a	1	Left	10	56	5280	11.30	12.5	1.318	0.229	0.302
	802.11a	1	Right	10	56	5280	11.30	12.5	1.318	0.030	0.040
	802.11a	1	Top	10	56	5280	11.30	12.5	1.318	0.067	0.088
	802.11a	1	Bottom	10	56	5280	11.30	12.5	1.318	0.032	0.042
Ant 9	802.11a	1	Front	15	56	5280	11.30	12.5	1.318	0.006	0.008
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>56</b>	<b>5280</b>	<b>11.30</b>	<b>12.5</b>	<b>1.318</b>	<b>0.175</b>	<b>0.231</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8+9	802.11a	1	Left Cheek	0	56	5280	12.62	14.0	1.374	0.595	0.818
	802.11a	1	Left Cheek	0	52	5260	12.65	14.0	1.365	0.567	0.774
	802.11a	1	Left Cheek	0	64	5320	12.61	14.0	1.377	0.532	0.733
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>56</b>	<b>5280</b>	<b>12.62</b>	<b>14.0</b>	<b>1.374</b>	<b>0.615</b>	<b>0.845</b>
	802.11a	1	Left Tilt	0	52	5260	12.65	14.0	1.365	0.596	0.813
	802.11a	1	Left Tilt	0	64	5320	12.61	14.0	1.377	0.536	0.738
	802.11a	1	Right Cheek	0	56	5280	12.62	14.0	1.374	0.329	0.452
	802.11a	1	Right Tilt	0	56	5280	12.62	14.0	1.374	0.383	0.526
Test position of Body (5mm)											
Ant 8+9	802.11a	1	Front	10	56	5280	13.64	15.0	1.368	0.231	0.316
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>56</b>	<b>5280</b>	<b>13.64</b>	<b>15.0</b>	<b>1.368</b>	<b>0.652</b>	<b>0.892</b>
	802.11a	1	Back	10	52	5260	13.63	15.0	1.371	0.631	0.865
	802.11a	1	Back	10	64	5320	13.64	15.0	1.368	0.608	0.832
	802.11a	1	Left	10	56	5280	13.64	15.0	1.368	0.621	0.849
	802.11a	1	Left	10	52	5260	13.63	15.0	1.371	0.602	0.825
	802.11a	1	Left	10	64	5320	13.64	15.0	1.368	0.586	0.801
	802.11a	1	Right	10	56	5280	13.64	15.0	1.368	0.266	0.364
	802.11a	1	Top	10	56	5280	13.64	15.0	1.368	0.370	0.506
	802.11a	1	Bottom	10	56	5280	13.64	15.0	1.368	0.070	0.096
Ant 8+9	802.11a	1	Front	15	56	5280	13.64	15.0	1.368	0.134	0.183
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>56</b>	<b>5280</b>	<b>13.64</b>	<b>15.0</b>	<b>1.368</b>	<b>0.408</b>	<b>0.558</b>
Head Simultaneous transmission											
Ant 8+9	802.11a	1	Left Cheek	0	56	5280	8.63	10.0	1.371	0.243	0.333
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>56</b>	<b>5280</b>	<b>8.63</b>	<b>10.0</b>	<b>1.371</b>	<b>0.260</b>	<b>0.356</b>
	802.11a	1	Right Cheek	0	56	5280	8.63	10.0	1.371	0.133	0.182
	802.11a	1	Right Tilt	0	56	5280	8.63	10.0	1.371	0.157	0.215
Body Simultaneous transmission											
Ant 8+9	802.11a	1	Front	10	56	5280	10.13	11.5	1.371	0.090	0.123
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>56</b>	<b>5280</b>	<b>10.13</b>	<b>11.5</b>	<b>1.371</b>	<b>0.227</b>	<b>0.311</b>
	802.11a	1	Left	10	56	5280	10.13	11.5	1.371	0.210	0.288
	802.11a	1	Right	10	56	5280	10.13	11.5	1.371	0.111	0.152
	802.11a	1	Top	10	56	5280	10.13	11.5	1.371	0.152	0.208
	802.11a	1	Bottom	10	56	5280	10.13	11.5	1.371	0.008	0.011
Ant 8+9	802.11a	1	Front	15	56	5280	10.13	11.5	1.371	0.053	0.073
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>56</b>	<b>5280</b>	<b>10.13</b>	<b>11.5</b>	<b>1.371</b>	<b>0.167</b>	<b>0.229</b>

## 12.23. 5.6GWi-Fi SAR results

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>120</b>	<b>5600</b>	<b>12.39</b>	<b>13.5</b>	<b>1.291</b>	<b>0.666</b>	<b>0.860</b>
	802.11a	1	Left Cheek	0	100	5500	12.42	13.5	1.282	0.618	0.792
	802.11a	1	Left Cheek	0	140	5700	12.40	13.5	1.288	0.622	0.801
	802.11a	1	Left Tilt	0	120	5600	12.39	13.5	1.291	0.618	0.798
	802.11a	1	Right Cheek	0	120	5600	12.39	13.5	1.291	0.404	0.522
	802.11a	1	Right Tilt	0	120	5600	12.39	13.5	1.291	0.450	0.581
Test position of Body (5mm)											
Ant 8	802.11a	1	Front	10	120	5600	15.91	17.0	1.285	0.419	0.539
	802.11a	1	Back	10	120	5600	15.91	17.0	1.285	0.443	0.569
	802.11a	1	Left	10	120	5600	15.91	17.0	1.285	0.076	0.098
	802.11a	1	Right	10	120	5600	15.91	17.0	1.285	0.374	0.481
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>120</b>	<b>5600</b>	<b>15.91</b>	<b>17.0</b>	<b>1.285</b>	<b>0.646</b>	<b>0.830</b>
	802.11a	1	Top	10	100	5500	15.92	17.0	1.282	0.604	0.775
	802.11a	1	Top	10	140	5700	15.61	17.0	1.377	0.586	0.807
	802.11a	1	Bottom	10	120	5600	15.91	17.0	1.285	0.041	0.053
Ant 8	802.11a	1	Front	15	120	5600	15.91	17.0	1.285	0.230	0.296
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>120</b>	<b>5600</b>	<b>15.91</b>	<b>17.0</b>	<b>1.285</b>	<b>0.269</b>	<b>0.346</b>
Head Simultaneous transmission											
Ant 8	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>120</b>	<b>5600</b>	<b>8.93</b>	<b>10.0</b>	<b>1.279</b>	<b>0.284</b>	<b>0.363</b>
	802.11a	1	Left Tilt	0	120	5600	8.93	10.0	1.279	0.275	0.352
	802.11a	1	Right Cheek	0	120	5600	8.93	10.0	1.279	0.149	0.191
	802.11a	1	Right Tilt	0	120	5600	8.93	10.0	1.279	0.166	0.212
Body Simultaneous transmission											
Ant 8	802.11a	1	Front	10	120	5600	12.92	14.0	1.282	0.180	0.231
	802.11a	1	Back	10	120	5600	12.92	14.0	1.282	0.217	0.278
	802.11a	1	Left	10	120	5600	12.92	14.0	1.282	0.037	0.047
	802.11a	1	Right	10	120	5600	12.92	14.0	1.282	0.177	0.227
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>120</b>	<b>5600</b>	<b>12.92</b>	<b>14.0</b>	<b>1.282</b>	<b>0.296</b>	<b>0.380</b>
	802.11a	1	Bottom	10	120	5600	12.92	14.0	1.282	0.032	0.041
Ant 8	802.11a	1	Front	15	120	5600	12.92	14.0	1.282	0.120	0.154
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>120</b>	<b>5600</b>	<b>12.92</b>	<b>14.0</b>	<b>1.282</b>	<b>0.138</b>	<b>0.177</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 9	802.11a	1	Left Cheek	0	120	5600	12.93	14.0	1.279	0.083	0.106
	802.11a	1	Left Tilt	0	120	5600	12.93	14.0	1.279	0.069	0.088
	<b>802.11a</b>	<b>1</b>	<b>Right Cheek</b>	<b>0</b>	<b>120</b>	<b>5600</b>	<b>12.93</b>	<b>14.0</b>	<b>1.279</b>	<b>0.232</b>	<b>0.297</b>
	802.11a	1	Right Tilt	0	120	5600	12.93	14.0	1.279	0.207	0.265
Test position of Body (5mm)											
Ant 9	802.11a	1	Front	10	120	5600	12.89	14.0	1.291	0.094	0.121
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>120</b>	<b>5600</b>	<b>12.89</b>	<b>14.0</b>	<b>1.291</b>	<b>0.628</b>	<b>0.811</b>
	802.11a	1	Back	10	100	5500	12.88	14.0	1.294	0.601	0.778
	802.11a	1	Back	10	140	5700	12.91	14.0	1.285	0.587	0.754
	802.11a	1	Left	10	120	5600	12.89	14.0	1.291	0.582	0.751
	802.11a	1	Right	10	120	5600	12.89	14.0	1.291	0.044	0.057
	802.11a	1	Top	10	120	5600	12.89	14.0	1.291	0.105	0.136
	802.11a	1	Bottom	10	120	5600	12.89	14.0	1.291	0.054	0.070
Ant 9	802.11a	1	Front	15	120	5600	12.89	14.0	1.291	0.056	0.072
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>120</b>	<b>5600</b>	<b>12.89</b>	<b>14.0</b>	<b>1.291</b>	<b>0.286</b>	<b>0.369</b>
Body Simultaneous transmission											
Ant 9	802.11a	1	Front	10	120	5600	10.40	11.5	1.288	0.042	0.054
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>120</b>	<b>5600</b>	<b>10.40</b>	<b>11.5</b>	<b>1.288</b>	<b>0.279</b>	<b>0.359</b>
	802.11a	1	Left	10	120	5600	10.40	11.5	1.288	0.222	0.286
	802.11a	1	Right	10	120	5600	10.40	11.5	1.288	0.039	0.050
	802.11a	1	Top	10	120	5600	10.40	11.5	1.288	0.046	0.059
	802.11a	1	Bottom	10	120	5600	10.40	11.5	1.288	0.041	0.053
Ant 9	802.11a	1	Front	15	120	5600	10.40	11.5	1.288	0.045	0.058
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>120</b>	<b>5600</b>	<b>10.40</b>	<b>11.5</b>	<b>1.288</b>	<b>0.172</b>	<b>0.222</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8+9	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>120</b>	<b>5600</b>	<b>12.12</b>	<b>13.5</b>	<b>1.374</b>	<b>0.683</b>	<b>0.938</b>
	802.11a	1	Left Cheek	0	100	5500	12.09	13.5	1.384	0.635	0.879
	802.11a	1	Left Cheek	0	140	5700	12.14	13.5	1.368	0.617	0.844
	802.11a	1	Left Tilt	0	120	5600	12.12	13.5	1.374	0.648	0.890
	802.11a	1	Left Tilt	0	100	5500	12.09	13.5	1.384	0.608	0.841
	802.11a	1	Left Tilt	0	140	5700	12.14	13.5	1.368	0.589	0.806
	802.11a	1	Right Cheek	0	120	5600	12.12	13.5	1.374	0.406	0.558
	802.11a	1	Right Tilt	0	120	5600	12.12	13.5	1.374	0.457	0.628
Test position of Body (5mm)											
Ant 8+9	802.11a	1	Front	10	120	5600	12.11	13.5	1.377	0.178	0.245
	802.11a	1	Back	10	120	5600	12.11	13.5	1.377	0.543	0.748
	<b>802.11a</b>	<b>1</b>	<b>Left</b>	<b>10</b>	<b>120</b>	<b>5600</b>	<b>12.11</b>	<b>13.5</b>	<b>1.377</b>	<b>0.610</b>	<b>0.840</b>
	802.11a	1	Left	10	100	5500	12.12	13.5	1.374	0.591	0.812
	802.11a	1	Left	10	140	5700	12.15	13.5	1.365	0.564	0.770
	802.11a	1	Right	10	120	5600	12.11	13.5	1.377	0.161	0.222
	802.11a	1	Top	10	120	5600	12.11	13.5	1.377	0.313	0.431
	802.11a	1	Bottom	10	120	5600	12.11	13.5	1.377	0.055	0.076
Ant 8+9	802.11a	1	Front	15	120	5600	12.11	13.5	1.377	0.113	0.156
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>120</b>	<b>5600</b>	<b>12.11</b>	<b>13.5</b>	<b>1.377</b>	<b>0.359</b>	<b>0.494</b>
Head Simultaneous transmission											
Ant 8+9	802.11a	1	Left Cheek	0	120	5600	8.12	9.5	1.374	0.275	0.378
	<b>802.11a</b>	<b>1</b>	<b>Left Tilt</b>	<b>0</b>	<b>120</b>	<b>5600</b>	<b>8.12</b>	<b>9.5</b>	<b>1.374</b>	<b>0.279</b>	<b>0.383</b>
	802.11a	1	Right Cheek	0	120	5600	8.12	9.5	1.374	0.184	0.253
	802.11a	1	Right Tilt	0	120	5600	8.12	9.5	1.374	0.208	0.286
Body Simultaneous transmission											
Ant 8+9	802.11a	1	Front	10	120	5600	10.14	11.5	1.368	0.122	0.167
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>120</b>	<b>5600</b>	<b>10.14</b>	<b>11.5</b>	<b>1.368</b>	<b>0.276</b>	<b>0.377</b>
	802.11a	1	Left	10	120	5600	10.14	11.5	1.368	0.245	0.335
	802.11a	1	Right	10	120	5600	10.14	11.5	1.368	0.121	0.165
	802.11a	1	Top	10	120	5600	10.14	11.5	1.368	0.204	0.279
	802.11a	1	Bottom	10	120	5600	10.14	11.5	1.368	0.036	0.049
Ant 8+9	802.11a	1	Front	15	120	5600	10.14	11.5	1.368	0.074	0.101
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>120</b>	<b>5600</b>	<b>10.14</b>	<b>11.5</b>	<b>1.368</b>	<b>0.189</b>	<b>0.259</b>



## 12.24. 5.8GWi-Fi SAR results

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>157</b>	<b>5785</b>	<b>10.82</b>	<b>12.0</b>	<b>1.312</b>	<b>0.497</b>	<b>0.652</b>
	802.11a	1	Left Tilt	0	157	5785	10.82	12.0	1.312	0.444	0.583
	802.11a	1	Right Cheek	0	157	5785	10.82	12.0	1.312	0.339	0.445
	802.11a	1	Right Tilt	0	157	5785	10.82	12.0	1.312	0.355	0.466
Test position of Body (5mm)											
Ant 8	802.11a	1	Front	10	157	5785	10.81	12.0	1.315	0.121	0.159
	802.11a	1	Back	10	157	5785	10.81	12.0	1.315	0.128	0.168
	802.11a	1	Left	10	157	5785	10.81	12.0	1.315	0.040	0.053
	802.11a	1	Right	10	157	5785	10.81	12.0	1.315	0.093	0.122
	<b>802.11a</b>	<b>1</b>	<b>Top</b>	<b>10</b>	<b>157</b>	<b>5785</b>	<b>10.81</b>	<b>12.0</b>	<b>1.315</b>	<b>0.176</b>	<b>0.231</b>
	802.11a	1	Bottom	10	157	5785	10.81	12.0	1.315	0.034	0.045
Ant 8	<b>802.11a</b>	<b>1</b>	<b>Front</b>	<b>15</b>	<b>157</b>	<b>5785</b>	<b>10.81</b>	<b>12.0</b>	<b>1.315</b>	<b>0.079</b>	<b>0.104</b>
	802.11a	1	Back	15	157	5785	10.81	12.0	1.315	0.076	0.100
Head Simultaneous transmission											
Ant 8	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>157</b>	<b>5785</b>	<b>8.31</b>	<b>9.5</b>	<b>1.315</b>	<b>0.281</b>	<b>0.370</b>
	802.11a	1	Left Tilt	0	157	5785	8.31	9.5	1.315	0.244	0.321
	802.11a	1	Right Cheek	0	157	5785	8.31	9.5	1.315	0.190	0.250
	802.11a	1	Right Tilt	0	157	5785	8.31	9.5	1.315	0.191	0.251

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 9	802.11a	1	Left Cheek	0	157	5785	10.81	12.0	1.315	0.007	0.009
	802.11a	1	Left Tilt	0	157	5785	10.81	12.0	1.315	0.038	0.050
	<b>802.11a</b>	<b>1</b>	<b>Right Cheek</b>	<b>0</b>	<b>157</b>	<b>5785</b>	<b>10.81</b>	<b>12.0</b>	<b>1.315</b>	<b>0.141</b>	<b>0.185</b>
	802.11a	1	Right Tilt	0	157	5785	10.81	12.0	1.315	0.079	0.104
Test position of Body (5mm)											
Ant 9	802.11a	1	Front	10	157	5785	10.82	12.0	1.312	0.042	0.055
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>157</b>	<b>5785</b>	<b>10.82</b>	<b>12.0</b>	<b>1.312</b>	<b>0.330</b>	<b>0.433</b>
	802.11a	1	Left	10	157	5785	10.82	12.0	1.312	0.259	0.340
	802.11a	1	Right	10	157	5785	10.82	12.0	1.312	0.044	0.058
	802.11a	1	Top	10	157	5785	10.82	12.0	1.312	0.050	0.066
	802.11a	1	Bottom	10	157	5785	10.82	12.0	1.312	0.047	0.062
Ant 9	802.11a	1	Front	15	157	5785	10.82	12.0	1.312	0.045	0.059
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>157</b>	<b>5785</b>	<b>10.82</b>	<b>12.0</b>	<b>1.312</b>	<b>0.177</b>	<b>0.232</b>
Body Simultaneous transmission											
Ant 9	802.11a	1	Front	10	157	5785	10.32	11.5	1.312	0.041	0.054
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>157</b>	<b>5785</b>	<b>10.32</b>	<b>11.5</b>	<b>1.312</b>	<b>0.260</b>	<b>0.341</b>
	802.11a	1	Left	10	157	5785	10.32	11.5	1.312	0.259	0.340
	802.11a	1	Right	10	157	5785	10.32	11.5	1.312	0.035	0.046
	802.11a	1	Top	10	157	5785	10.32	11.5	1.312	0.043	0.056
	802.11a	1	Bottom	10	157	5785	10.32	11.5	1.312	0.033	0.043
Ant 9	802.11a	1	Front	15	157	5785	10.32	11.5	1.312	0.039	0.051
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>157</b>	<b>5785</b>	<b>10.32</b>	<b>11.5</b>	<b>1.312</b>	<b>0.177</b>	<b>0.232</b>

Config	Mode	Power Level	Position	Dist. (mm)	Ch.	Freq. (MHz)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Meas SAR (W/kg)	1g Scaled SAR (W/kg)
Test Position of Head											
Ant 8+9	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>157</b>	<b>5785</b>	<b>12.59</b>	<b>13.0</b>	<b>1.099</b>	<b>0.692</b>	<b>0.761</b>
	802.11a	1	Left Tilt	0	157	5785	12.59	13.0	1.099	0.577	0.634
	802.11a	1	Right Cheek	0	157	5785	12.59	13.0	1.099	0.457	0.502
	802.11a	1	Right Tilt	0	157	5785	12.59	13.0	1.099	0.493	0.542
Test position of Body (5mm)											
Ant 8+9	802.11a	1	Front	10	157	5785	14.10	14.5	1.096	0.243	0.266
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>157</b>	<b>5785</b>	<b>14.10</b>	<b>14.5</b>	<b>1.096</b>	<b>0.631</b>	<b>0.692</b>
	802.11a	1	Left	10	157	5785	14.10	14.5	1.096	0.548	0.601
	802.11a	1	Right	10	157	5785	14.10	14.5	1.096	0.163	0.179
	802.11a	1	Top	10	157	5785	14.10	14.5	1.096	0.392	0.430
	802.11a	1	Bottom	10	157	5785	14.10	14.5	1.096	0.048	0.053
Ant 8+9	802.11a	1	Front	15	157	5785	14.10	14.5	1.096	0.154	0.169
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>157</b>	<b>5785</b>	<b>14.10</b>	<b>14.5</b>	<b>1.096</b>	<b>0.415</b>	<b>0.455</b>
Head Simultaneous transmission											
Ant 8+9	<b>802.11a</b>	<b>1</b>	<b>Left Cheek</b>	<b>0</b>	<b>157</b>	<b>5785</b>	<b>9.10</b>	<b>9.5</b>	<b>1.096</b>	<b>0.293</b>	<b>0.321</b>
	802.11a	1	Left Tilt	0	157	5785	9.10	9.5	1.096	0.269	0.295
	802.11a	1	Right Cheek	0	157	5785	9.10	9.5	1.096	0.208	0.228
	802.11a	1	Right Tilt	0	157	5785	9.10	9.5	1.096	0.219	0.240
Body Simultaneous transmission											
Ant 8+9	802.11a	1	Front	10	157	5785	11.1	11.5	1.096	0.115	0.126
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>10</b>	<b>157</b>	<b>5785</b>	<b>11.1</b>	<b>11.5</b>	<b>1.096</b>	<b>0.286</b>	<b>0.314</b>
	802.11a	1	Left	10	157	5785	11.1	11.5	1.096	0.280	0.307
	802.11a	1	Right	10	157	5785	11.1	11.5	1.096	0.087	0.095
	802.11a	1	Top	10	157	5785	11.1	11.5	1.096	0.179	0.196
	802.11a	1	Bottom	10	157	5785	11.1	11.5	1.096	0.036	0.039
Ant 8+9	802.11a	1	Front	15	157	5785	11.1	11.5	1.096	0.083	0.091
	<b>802.11a</b>	<b>1</b>	<b>Back</b>	<b>15</b>	<b>157</b>	<b>5785</b>	<b>11.1</b>	<b>11.5</b>	<b>1.096</b>	<b>0.196</b>	<b>0.215</b>

## 12.25. Repeated SAR results

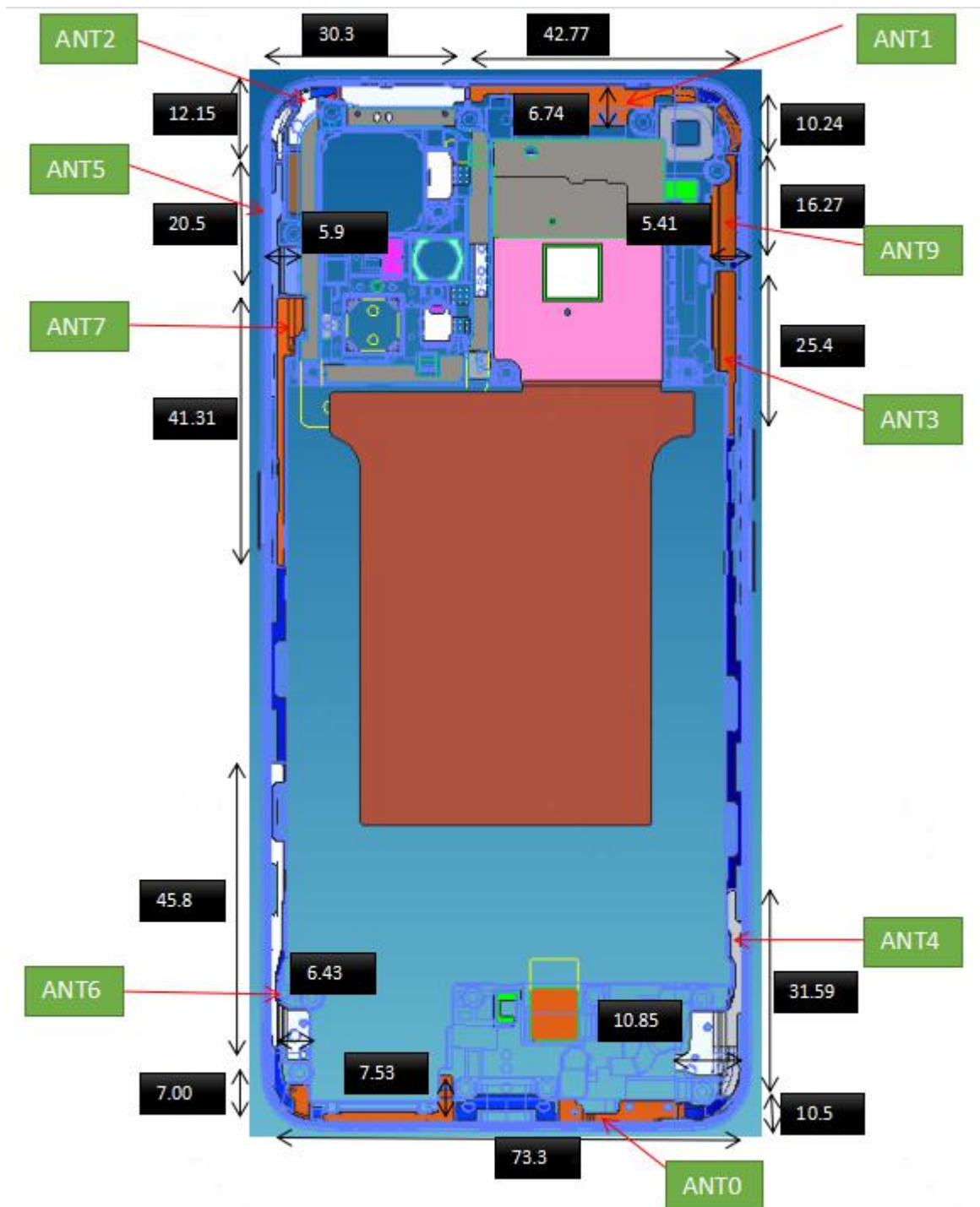
Remark:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8\text{W/kg}$ .
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45\text{W/kg}$ , only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated measured SAR.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

Band	Mode	Test Position	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Scaling Factor	Measured SAR (W/kg)	Reported SAR (W/kg)
/	/	/	/	/	/	/	/	/	/

# 13. EXPOSURE POSITIONS CONSIDERATION

## 13.1. Multiple Transmitter Evaluation



	Distance of the Antenna to the EUT surface edge					
Antennas	Front	Back	Left	Right	Top	Bottom
ANT0	≤25mm	≤25mm	≤25mm	≤25mm	>25mm	≤25mm
ANT1	≤25mm	≤25mm	≤25mm	≤25mm	≤25mm	>25mm
ANT3	≤25mm	≤25mm	≤25mm	≤25mm	>25mm	>25mm
ANT5	≤25mm	≤25mm	>25mm	≤25mm	≤25mm	>25mm
ANT8	≤25mm	≤25mm	>25mm	≤25mm	≤25mm	>25mm
ANT9	≤25mm	≤25mm	≤25mm	>25mm	≤25mm	>25mm

	Positions for SAR tests; Hotspot mode					
Antennas	Front	Back	Left	Right	Top	Bottom
ANT0	Yes	Yes	Yes	Yes	No	Yes
ANT1	Yes	Yes	Yes	Yes	Yes	No
ANT3	Yes	Yes	Yes	Yes	No	No
ANT5	Yes	Yes	No	Yes	Yes	No
ANT8	Yes	Yes	No	Yes	Yes	No
ANT9	Yes	Yes	Yes	No	Yes	No

### 13.2. Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

WLAN		
1	WLAN 2.4GHz(chain 0) + BT(chain 0)	N
2	WLAN 2.4GHz(chain 1) + BT(chain 0)	Y
3	WLAN 5GHz(chain 0) + BT(chain 0)	Y
4	WLAN 5GHz(chain 1) + BT(chain 0)	Y
5	WLAN 2.4GHz MIMO + BT(chain 0)	N
6	WLAN 5GHz MIMO+ BT(chain 0)	Y
7	WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 0)	Y
8	WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 1)	Y
9	WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 0)	Y
10	WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 1)	Y
11	WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 0)	Y
12	WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 1)	Y
13	WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 0)	Y
14	WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 1)	Y
15	WLAN 2.4GHz MIMO+ WLAN 5GHz MIMO	Y
16	WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 0)+BT(chain 0)	N
17	WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 1)+BT(chain 0)	N
18	WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 0)+BT(chain 0)	Y
19	WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 1)+BT(chain 0)	Y
20	WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 0)+BT(chain 0)	N
21	WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 1)+BT(chain 0)	Y
22	WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 0)+BT(chain 0)	N
23	WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 1)+BT(chain 0)	N
24	WLAN 2.4GHz MIMO+ WLAN 5GHz MIMO+BT(chain 0)	N
WWAN +WLAN		
1	WWAN + WLAN 2.4GHz(chain 0) + BT(chain 0)	N
2	WWAN + WLAN 2.4GHz(chain 1) + BT(chain 0)	Y
3	WWAN + WLAN 5GHz(chain 0) + BT(chain 0)	Y
4	WWAN + WLAN 5GHz(chain 1) + BT(chain 0)	Y
5	WWAN + WLAN 2.4GHz MIMO + BT(chain 0)	N
6	WWAN + WLAN 5GHz MIMO+ BT(chain 0)	Y
7	WWAN + WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 0)	Y
8	WWAN + WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 1)	Y
9	WWAN + WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 0)	Y
10	WWAN + WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 1)	Y
11	WWAN + WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 0)	Y
12	WWAN + WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 1)	Y
13	WWAN + WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 0)	Y
14	WWAN + WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 1)	Y
15	WWAN + WLAN 2.4GHz MIMO+ WLAN 5GHz MIMO	Y
16	WWAN + WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 0)+BT(chain 0)	N
17	WWAN + WLAN 2.4GHz (chain 0)+ WLAN 5GHz (chain 1)+BT(chain 0)	N
18	WWAN + WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 0)+BT(chain 0)	Y
19	WWAN + WLAN 2.4GHz (chain 1)+ WLAN 5GHz (chain 1)+BT(chain 0)	Y
20	WWAN + WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 0)+BT(chain 0)	N
21	WWAN + WLAN 5GHz MIMO+ WLAN 2.4GHz (chain 1)+BT(chain 0)	Y
22	WWAN + WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 0)+BT(chain 0)	N
23	WWAN + WLAN 2.4GHz MIMO+ WLAN 5GHz (chain 1)+BT(chain 0)	N
24	WWAN + WLAN 2.4GHz MIMO+ WLAN 5GHz MIMO+BT(chain 0)	N

### **Table 7: Simultaneous Transmission Possibilities**

Note:

- 1) Bluetooth share the same Tx antenna and can't transmit simultaneously.
- 2) 2G&3G&4G&5G can't transmit simultaneously.
- 3) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.



### 13.3. SAR Summation Scenario

Test Position		Left head touched	Left head tilted 15°	Righthhead touched	Right head tilted 15°
	GSM850	<b>0.682</b>	0.645	<b>0.773</b>	<b>0.831</b>
	PCS1900	0.340	0.451	0.361	0.470
	WCDMA Band II	0.573	<b>0.739</b>	0.619	0.804
	WCDMA Band IV	0.560	0.715	0.609	0.777
	WCDMA Band V	0.642	0.615	0.741	0.784
	LTE Band 2	0.408	0.531	0.427	0.565
	LTE Band 4	0.380	0.488	0.387	0.502
	LTE Band 5	0.555	0.545	0.634	0.668
	LTE Band 7	0.229	0.297	0.412	0.432
	LTE Band 12	0.454	0.468	0.564	0.604
	LTE Band 13	0.547	0.534	0.668	0.699
	LTE Band 17	0.430	0.443	0.539	0.595
	LTE Band 26	0.574	0.551	0.644	0.692
	LTE Band 38	0.186	0.237	0.279	0.329
	LTE Band 41	0.180	0.228	0.268	0.327
LTE Band 66	0.341	0.441	0.351	0.454	
NR	n5	0.141	0.077	0.116	0.048
	n7	0.307	0.392	0.416	0.553
	n38	<b>0.457</b>	0.565	0.585	0.722
	n41	0.439	<b>0.566</b>	<b>0.621</b>	<b>0.764</b>
	n66	0.416	0.507	0.455	0.618

## ENDC

Test Position		Left head touched	Left head tilted 15°	Righthhead touched	Right head tilted 15°
ENDC	LTE Band 66 (ANT1/3)	0.341	0.441	0.351	0.454
	n5 (ANT0)	0.141	0.077	0.116	0.048
$\Sigma$ 1g SAR(W/kg)		0.483	0.519	0.467	0.503

Test Position		Left head touched	Left head tilted 15°	Righthhead touched	Right head tilted 15°
ENDC	LTE Band 5 (ANT0)	0.135	0.071	0.122	0.068
	LTE Band 66 (ANT0/5)	0.067	0.044	0.071	0.059
	n7(ANT1/3)	0.210	0.273	0.308	0.383
$\Sigma$ 1g SAR(W/kg)		0.345	0.344	0.430	0.452

Test Position		Left head touched	Left head tilted 15°	Righthhead touched	Right head tilted 15°
ENDC	LTE Band 26 (ANT0)	0.099	0.067	0.077	0.055
	n41 (ANT1/3)	0.104	0.129	0.194	0.181
$\Sigma$ 1g SAR(W/kg)		0.203	0.196	0.271	0.236

Test Position		Left head touched	Left head tilted 15°	Righthhead touched	Right head tilted 15°
ENDC	LTE Band 5 (ANT0)	0.135	0.071	0.122	0.068
	LTE Band 7 (ANT0/5)	0.224	0.119	0.412	0.222
	LTE Band 12 (ANT0)	0.013	0.011	0.014	0.013
	N66 (ANT1/3)	0.161	0.199	0.172	0.235
$\Sigma$ 10g SAR(W/kg)		0.385	0.318	0.584	0.457

Test Position	Left head touched	Left head tilted 15°	Righthhead touched	Right head tilted 15°
WWAN	0.682	0.739	0.773	0.831
ENDC	0.483	0.519	0.584	0.503
802.11b 2.4G(Chain 0)	0.405	0.306	0.142	0.141
802.11b 2.4G(Chain 1)	0.081	0.065	0.196	0.091
802.11b 2.4G(Chain 0+1)	0.332	0.274	0.179	0.167
802.11a 5.2G(Chain 0)	0.352	0.372	0.206	0.247
802.11a 5.2G(Chain 1)	0.133	0.075	0.383	0.227
802.11a 5.2G(Chain 0+1)	0.366	0.394	0.194	0.236
802.11a 5.3G(Chain 0)	0.334	0.363	0.192	0.231
802.11a 5.3G(Chain 1)	0.13	0.081	0.377	0.212
802.11a 5.3G(Chain 0+1)	0.333	0.356	0.182	0.215
802.11a 5.6G(Chain 0)	0.363	0.352	0.191	0.212
802.11a 5.6G(Chain 1)	0.106	0.088	0.297	0.265
802.11a 5.6G(Chain 0+1)	0.378	0.383	0.253	0.286
802.11a 5.8G(Chain 0)	0.37	0.321	0.25	0.251
802.11a 5.8G(Chain 1)	0.009	0.05	0.185	0.104
802.11a 5.8G(Chain 0+1)	0.321	0.295	0.228	0.24
BT	0.035	0.02	0.017	0.011
Σ1g SAR(W/kg)	1.465	1.439	1.369	1.284

Conclusion:

- 1) Simultaneous Transmission SAR evaluation is not required for WiFi and UMTS&GSM&LTE&NSA, because the sum of the 1g SAR is 1.465W/kg <1.6 W/kg.
- 2) One way of determining the threshold power level available to the secondary transmitter(Pavailable) is to calculate it from the measured peak spatial-average SAR of the primarytransmitter (SAR1) according to the equation:

Test Position		Front Side 10mm	Back Side 10mm	Left Side 10mm	Right Side 10mm	Top Side 10mm	Bottom Side 10mm	Front Side 15mm	Back Side 15mm
	GSM850	0.218	0.264	0.110	0.119	0.212	0.195	0.076	0.166
	PCS1900	0.345	0.583	0.058	0.114	0.573	<b>0.886</b>	0.199	0.303
	WCDMA Band I	0.372	0.595	0.092	0.130	<b>0.854</b>	0.664	0.257	0.391
	WCDMA Band IV	0.330	0.535	0.079	0.068	0.852	0.547	0.202	0.304
	WCDMA Band VIII	0.238	0.280	0.189	0.095	0.492	0.227	0.137	0.165
	LTE Band 2	0.385	0.606	0.055	0.080	0.554	0.775	0.210	0.381
	LTE Band 4	0.348	0.546	0.010	0.053	0.366	0.474	0.190	0.287
	LTE Band 5	0.209	0.221	0.115	0.109	0.219	0.154	0.116	0.156
	LTE Band 7	<b>0.598</b>	<b>0.657</b>	0.142	<b>0.265</b>	0.565	0.421	<b>0.306</b>	<b>0.392</b>
	LTE Band 12	0.121	0.153	0.175	0.123	0.075	0.087	0.136	0.159
	LTE Band 13	0.140	0.181	<b>0.192</b>	0.111	0.135	0.152	0.146	0.174
	LTE Band 17	0.145	0.147	0.177	0.117	0.077	0.077	0.133	0.142
	LTE Band 26	0.160	0.247	0.101	0.088	0.169	0.140	0.107	0.133
	LTE Band 38	0.375	0.431	0.113	0.175	0.446	0.256	0.196	0.204

	LTE Band 41	0.373	0.419	0.126	0.164	0.516	0.249	0.195	0.201
	LTE Band 66	0.278	0.396	0.008	0.047	0.642	0.427	0.158	0.294
NR	n5	0.151	0.162	0.111	0.093	0.018	0.151	0.125	0.147
	n7	0.196	0.302	0.014	0.019	0.395	0.287	0.087	0.132
	n38	0.329	0.395	<b>0.187</b>	<b>0.189</b>	0.578	0.226	0.171	0.184
	n41	0.213	0.405	0.135	0.012	0.625	0.169	0.100	0.252
	n66	<b>0.346</b>	<b>0.501</b>	0.053	0.105	<b>0.710</b>	<b>0.691</b>	<b>0.176</b>	<b>0.310</b>

## ENDC

Test Position		Front Side 10mm	Back Side 10mm	Left Side 10mm	Right Side 10mm	Top Side 10mm	Bottom Side 10mm	Front Side 15mm	Back Side 15mm
ENDC	LTE Band 66 (ANT1/3)	0.172	0.261	0.078	0.006	0.642	0.009	0.158	0.190
	n5 (ANT0)	0.151	0.162	0.111	0.093	0.018	0.151	0.125	0.147
Σ1g SAR(W/kg)		0.323	0.423	0.188	0.099	0.660	0.160	0.282	0.337

Test Position		Front Side 10mm	Back Side 10mm	Left Side 10mm	Right Side 10mm	Top Side 10mm	Bottom Side 10mm	Front Side 15mm	Back Side 15mm
ENDC	LTE Band 5 (ANT0)	0.141	0.158	0.115	0.092	0.006	0.154	0.116	0.126
	LTE Band 66 (ANT0/5)	0.278	0.396	0.008	0.065	0.013	0.427	0.154	0.294
	n7(ANT1/3)	0.113	0.216	0.108	0.020	0.301	0.011	0.012	0.124
Σ1g SAR(W/kg)		0.392	0.612	0.223	0.112	0.314	0.437	0.165	0.418

Test Position		Front Side 10mm	Back Side 10mm	Left Side 10mm	Right Side 10mm	Top Side 10mm	Bottom Side 10mm	Front Side 15mm	Back Side 15mm
ENDC	LTE Band 26 (ANT0)	0.160	0.247	0.101	0.088	0.169	0.140	0.107	0.133
	n41 (ANT1/3)	0.069	0.140	0.114	0.027	0.167	0.021	0.012	0.049
Σ1g SAR(W/kg)		0.228	0.388	0.214	0.114	0.336	0.161	0.118	0.182

Test Position		Front Side 10mm	Back Side 10mm	Left Side 10mm	Right Side 10mm	Top Side 10mm	Bottom Side 10mm	Front Side 15mm	Back Side 15mm
ENDC	LTE Band 5 (ANT0)	0.141	0.158	0.115	0.092	0.006	0.154	0.116	0.126
	LTE Band 7	0.598	0.657	0.116	0.265	0.023	0.421	0.306	0.392

	(ANT0/5)								
	LTE Band 12 (ANT0)	0.101	0.120	0.103	0.075	0.015	0.087	0.088	0.108
	N66 (ANT1/3)	<b>0.071</b>	<b>0.126</b>	<b>0.067</b>	<b>0.022</b>	<b>0.168</b>	<b>0.014</b>	<b>0.014</b>	<b>0.081</b>
<b>Σ1g SAR(W/kg)</b>		0.669	0.783	0.183	0.287	0.191	0.435	0.320	0.473

Test Position	Front Side 10mm	Back Side 10mm	Left Side 10mm	Right Side 10mm	Top Side 10mm	Bottom Side 10mm	Front Side 15mm	Back Side 15mm
WWAN	0.598	0.657	0.192	0.265	0.854	0.886	0.306	0.392
ENDC	0.669	0.783	0.223	0.287	0.660	0.437	0.320	0.473
802.11b 2.4G(Chain 0)	0.295	0.33	0.066	0.256	0.21	0.007	0.147	0.132
802.11b 2.4G(Chain 1)	0.118	0.251	0.193	0.011	0.059	0.014	0.064	0.105
802.11b 2.4G(Chain 0+1)	0.144	0.241	0.156	0.124	0.191	0.008	0.096	0.154
802.11a 5.2G(Chain 0)	0.144	0.261	0.075	0.217	0.318	0.062	0.082	0.172
802.11a 5.2G(Chain 1)	0.125	0.353	0.378	0.072	0.093	0.093	0.043	0.215
802.11a 5.2G(Chain 0+1)	0.152	0.358	0.33	0.216	0.293	0.047	0.079	0.25
802.11a 5.3G(Chain 0)	0.196	0.324	0.057	0.233	0.380	0.009	0.128	0.239
802.11a 5.3G(Chain 1)	0.073	0.368	0.302	0.04	0.088	0.042	0.008	0.231
802.11a 5.3G(Chain 0+1)	0.123	0.311	0.288	0.152	0.208	0.011	0.073	0.229
802.11a 5.6G(Chain 0)	0.231	0.278	0.047	0.227	0.380	0.041	0.154	0.177
802.11a 5.6G(Chain 1)	0.054	0.359	0.286	0.05	0.059	0.053	0.058	0.222
802.11a 5.6G(Chain 0+1)	0.167	0.377	0.335	0.165	0.279	0.049	0.101	0.259
802.11a 5.8G(Chain 0)	0.159	0.168	0.053	0.122	0.231	0.045	0.104	0.100
802.11a 5.8G(Chain 1)	0.054	0.341	0.34	0.046	0.056	0.043	0.051	0.232
802.11a 5.8G(Chain 0+1)	0.126	0.314	0.307	0.095	0.196	0.039	0.091	0.215
BT	0.012	0.017	0.002	0.019	0.012	0.002	0.008	0.011
Σ1g SAR(W/kg)	1.195	1.490	0.796	0.776	1.444	0.995	0.621	0.886



Conclusion:

- 1) Simultaneous Transmission SAR evaluation is not required for WiFi and UMTS&GSM&LTE&NSA, because the sum of the 1g SAR is  $1.490\text{W/kg} < 1.6\text{ W/kg}$ .
- 2) One way of determining the threshold power level available to the secondary transmitter( $P_{\text{available}}$ ) is to calculate it from the measured peak spatial-average SAR of the primary transmitter (SAR1) according to the equation:

#### **13.4. Simultaneous Transmission Conclusion**

The above numeral summed SAR results and SPLSR analysis is sufficient to determine that simultaneous cases will not exceed the SAR limit and therefore simultaneous transmission SAR with Volume Scan is not required per KDB 447498 D01v06

**Appendix A. System Check Plots**

**(Pls see Appendix A)**

**Appendix B. MEASUREMENT SCANS**

**(Pls see Appendix B)**

**Appendix C RELEVANT PAGES FROM PROBE CALIBRATION REPORT(S)**

**(Pls see Appendix C)**

**Appendix D. RELEVANT PAGES FROM DAE&DIPOLE VALIDATION KIT REPORT(S)**

**(Pls see Appendix D)**

**Appendix E. Photographs of the Test Set-Up**

**(Pls see Appendix E)**