



FCC SAR TEST REPORT

Report No: ZR/2020/80074
Applicant: vivo Mobile Communication Co., Ltd.
Manufacturer: vivo Mobile Communication Co., Ltd.
Product Name: Mobile phone
Model No.(EUT): V2028
Trade Mark: vivo
FCC ID: 2AUCY- V2027
Standards: FCC 47CFR §2.1093
Date of Receipt: 2020-09-03
Date of Test: 2020-09-04 to 2020-09-08
Date of Issue: 2020-09-20
Test conclusion: **PASS ***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:

Derek Yang

Wireless Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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REVISION HISTORY

Report Number	Revision	Description	Issue Date
ZR/2020/8007409	01	Original	2020-09-20

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TEST SUMMARY

Frequency Band	Maximum Reported SAR(W/kg)			
	Head	Body-worn	Hotspot	Product Specific 10-g SAR
GSM850	0.57	0.19	0.38	NA
GSM1900	0.98	0.46	0.78	1.64
WCDMA Band II	0.96	0.66	1.07	2.39
WCDMA Band IV	0.92	0.33	0.71	NA
WCDMA Band V	0.60	0.14	0.24	NA
LTE Band 2	0.87	0.60	0.58	2.45
LTE Band 4	0.80	0.37	0.58	NA
LTE Band 5	0.63	0.15	0.30	NA
LTE Band 7	0.93	0.46	0.67	NA
LTE Band 38	0.90	0.30	0.49	NA
LTE Band 41	0.85	0.33	0.49	NA
WI-FI (2.4GHz)	0.40	0.20	0.18	NA
WI-FI (5GHz)	0.74	0.28	0.92	0.58
BT	0.27	NA	0.06	NA
SAR Limited(W/kg)	1.6			4.0
Maximum Simultaneous Transmission SAR (W/kg)				
Scenario	Head	Body-worn	Hotspot	Product Specific 10-g SAR
Sum SAR	1.20	0.97	1.20	2.98
SPLSR	NA	NA	NA	NA
SPLSR Limited	0.04			0.1
Note: The Simultaneous transmission SAR is the same test position of the WWAN antenna + WiFi/BT antenna.				

Approved & Released by

Simon Ling

SAR Manager

Tested by

Gavin Gao

SAR Engineer

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1 General Information

1.1 Details of Client

Applicant:	vivo Mobile Communication Co., Ltd.
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Manufacturer:	vivo Mobile Communication Co., Ltd.
Address:	#283,BBK Road,Wusha,Chang'An, DongGuan City, China

1.2 Test Location

Company:	SGS-CSTC Standards Technical Services Co., Ltd. Xi'an Branch
Address:	Single floor D, building 1, Kanghong orange square science and technology park, No.137 keyuan 3rd road, fengdong new town, Xi 'an city, shanxi China
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1.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 4854.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Xi'an Branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

- **FCC –Designation Number: CN1271**

SGS-CSTC Standards Technical Services Co., Ltd., Xi'an Branch has been recognized as an accredited testing laboratory.

Designation Number: CN1271. Test Firm Registration Number: 637380.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Xi'an Branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0095

ISED#: 25613.

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1.4 General Description of EUT

Product Name:	Mobile phone		
Model No.(EUT):	V2028		
Trade Mark:	vivo		
FCC ID:	2AUCY- V2027		
Device Type :	Identical Prototype		
Exposure Category:	uncontrolled environment / general population		
Product Phase:	Identical Prototype		
SN:	191cdcb0 / 191cdc1b / 1918dc0c		
Hardware Version:	MP_0.1		
Software Version:	PD2042F_EX_A_3.3.8		
Antenna Type:	Fixed Internal Antenna		
Device Operating Configurations :			
Modulation Mode:	GSM: GMSK, 8PSK; WCDMA: QPSK; LTE: QPSK,16QAM,64QAM; WIFI: DSSS, OFDM; BT: GFSK, π/4DQPSK,8DPSK		
Device Class:	B		
GPRS Multi-slots Class:	33	EGPRS Multi-slots Class:	33
HSDPA UE Category:	14	HSUPA UE Category	6
DC-HSDPA UE Category:	24		
Power Class	4,tested with power level 5(GSM850)		
	1,tested with power level 0(GSM1900)		
	3, tested with power control “all 1”(WCDMA Band II/IV/V)		
	3, tested with power control Max Power(LTE Band 2/4/5/7/38/41)		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	GSM850	824~849	869~894
	GSM1900	1850~1910	1930~1990
	WCDMA Band II	1850~1910	1930~1990
	WCDMA Band IV	1710~1755	2110~2155
	WCDMA Band V	824~849	869~894
	LTE Band 2	1850 ~1910	1930 ~1990
	LTE Band 4	1710~1755	2110~2155
	LTE Band 5	824~849	869~894
	LTE Band 7	2500~2570	2620~2690
	LTE Band 38	2570~2620	2570~2620
	LTE Band 41	2535~2655	2535~2655
	Wi-Fi 2.4G	2402~2472	2402~2472
	Wi-Fi 5G	5150~5350	5150~5350
		5470~5725	5470~5725
		5725~5850	5725~5850
	Bluetooth	2402~2480	2402~2480
Battery Information:	Model:	B-O5	
	Normal Voltage:	+3.87V	
	Rated capacity:	4910mAh	
	Manufacturer:	Huizhou Desay Battery Co., Ltd.	
Headset Information:	Model:	XE160	
	Manufacturer:	Jiangxi Tianjian Electroacoustic Co., Ltd.	

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For this second source of product: V2028, brand name: vivo. The difference as follow:

Items	Original: V2027	Second Source: V2028
Camera	3 back cameras	2 back cameras
Charging circuit	Support 9V2A and 5V2A with charger IC BQ25601	Support 5V2A without additional charger IC
Memory	4+128G	3+32G

Except for the above-mentioned modification, all the other portions remain unchanged.

Remark:

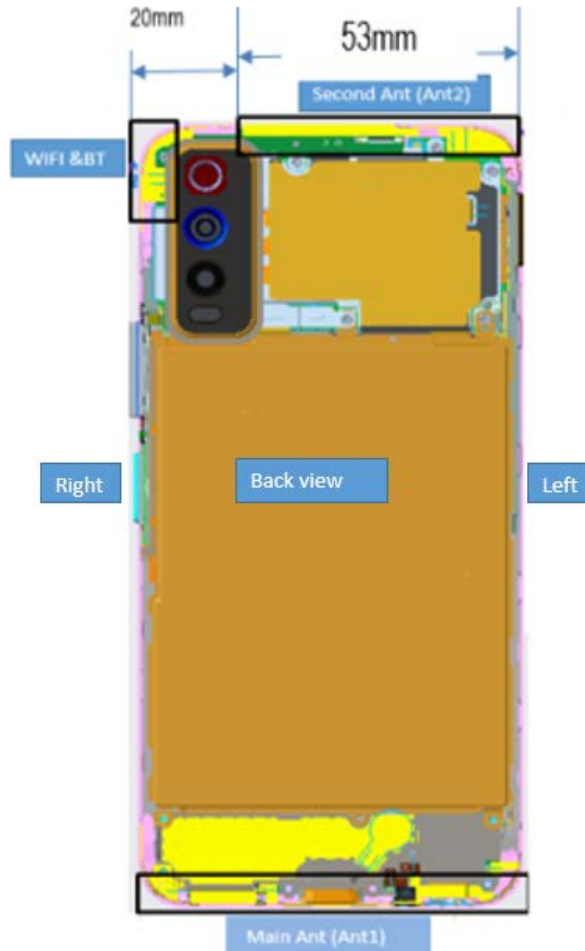
According the difference description above, V2028 shares the same test data of V2027(Report No.: ZR/2020/8001707) and additional SAR tests are performed based on the SAR worst case of V2027 for each frequency band.

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1.4.1 DUT Antenna Locations



Note:

- 1) SAR Proximity sensor location is same as Second antenna.
- 2) The test device is a Mobile phone. The overall diagonal dimension of this device is 172 mm. Per KDB 648474 D04, because the diagonal distance of this device is $\geq 160\text{mm}$, so it is a phablet.

According to the distance between LTE/WCDMA/GSM&WIFI&BT antennas and the sides of the EUT we can draw the conclusion that:

EUT Sides for SAR Testing							
Mode	Exposure Condition	Front	Back	Left	Right	Top	Bottom
Main antenna(Ant1)	Hotspot/Product specific 10g SAR	Yes	Yes	Yes	Yes	No	Yes
Second antenna(Ant2)	Hotspot/Product specific 10g SAR	Yes	Yes	Yes	Yes	Yes	No
WIFI 2.4G/5G&BT	Hotspot/Product specific 10g SAR	Yes	Yes	No	Yes	Yes	No

Table 1: EUT Sides for SAR Testing

Note:

- 1) When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.

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1.4.2 Power reduction specification

This device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation

- 1) The proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of Main antenna to ensure SAR compliance (Refer to section 5.4 for detailed proximity Sensor information and validation data per KDB 616217).
- 2) This device uses the receiver to indicate whether the user is making a voice call in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. A fixed level power reduction is applied for some frequency bands when the audio receiver is on.
- 3) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction.

The following tables summarize the key power reduction information. The detailed full power which is the Max. power the state can use and reduced tune-up specifications and conducted power measurement results are provided in Section 8 of this report.

Main Antenna Power Level(dBm)				
Power Reduction Scenario	WCDMA Band II	WCDMA Band IV	LTE Band 2	LTE Band 4
Full Power	24.5	24.0	24.7	23.7
Hotspot/WIFI on(Body)	23.5	23.0	21.2	21.2

Second Antenna Power Level(dBm)											
Power Reduction Scenario	GSM 850	GSM 1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 38	LTE Band 41
Full Power	34.5	31.5	24.5	24.0	24.5	24.7	23.7	25.0	24.5	24.5	24.5
Receiver on+Hotspot/WIFI off(Head)	33.5	24.5	17.5	18.5	/	17.2	17.7	/	18.5	20.5	20.5
Receiver on+Hotspot/WIFI on(Head)	33.5	22.5	15.5	16.5	21.5	16.2	16.7	24.5	16.5	18.5	18.5
Receiver off+Sensor on+Hotspot/WIFI off(Body)	/	29.0	20.5	22.0	/	21.2	21.2	/	21.5	22.5	23.0
Receiver off+Sensor on+Hotspot/WIFI on(Body)	/	29.0	19.0	20.0	/	19.2	19.2	/	/	21.5	21.5
Receiver off+Sensor off+Hotspot/WIFI on(Body)	/	26.5	18.5	19.0	/	18.7	18.7	/	20.5	21.5	20.5

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1.5 Test Specification

Identity	Document Title
FCC 47CFR §2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices
IEEE C95.1-1991	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.
IEEE 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
KDB 941225 D01	3G SAR Measurement Procedures v03r01
KDB 941225 D05	SAR for LTE Devices v02r05
KDB 941225 D06	Hotspot Mode SAR v02r01
KDB 248227 D01	SAR Guidance for IEEE 802.11 Wi-Fi SAR v02r02
KDB 648474 D04	Handset SAR v01r03
KDB 447498 D01	General RF Exposure Guidance v06
KDB 865664 D01	SAR Measurement 100 MHz to 6 GHz v01r04
KDB 616217 D04	SAR for laptop and tablets v01r02

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1.6 RF exposure limits

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

Notes:

- * The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time
- ** The Spatial Average value of the SAR averaged over the whole body.
- *** The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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

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

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2 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

Table 2: The Ambient Conditions

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3 SAR Measurements System Configuration

3.1 The SAR Measurement System

This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY5 professional system). A E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation $SAR = \sigma (|E_i|^2) / \rho$ where σ and ρ are the conductivity and mass density of the tissue-Simulate.

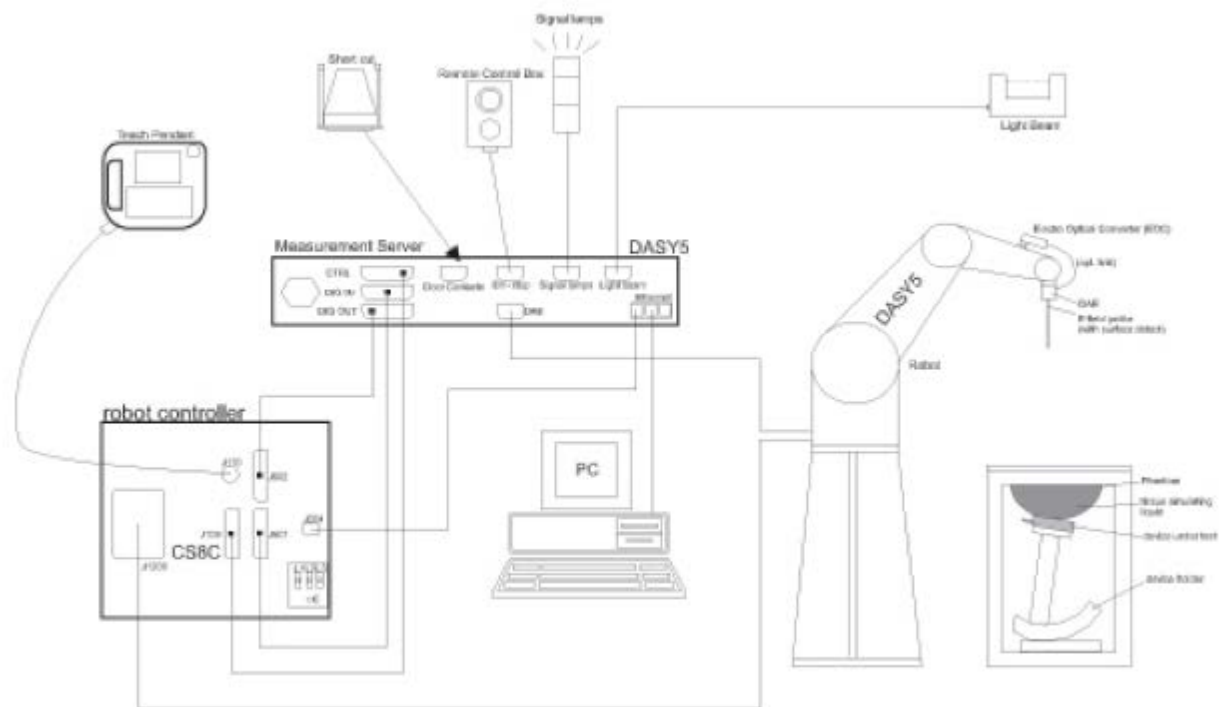
The DASY5 system for performing compliance tests consists of the following items:

A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software .An arm extension for accommodation 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 electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.



F-1. SAR Measurement System Configuration

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- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 7.
- DASY5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing left-hand, right-hand and Body Worn usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing to validating the proper functioning of the system.

3.2 Isotropic E-field Probe EX3DV4

	Symmetrical design with triangular core 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 Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

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3.3 Data Acquisition Electronics (DAE)

Model	DAE	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV,400mV)	
Input Offset Voltage	< 5μV (with auto zero)	
Input Bias Current	< 50 f A	
Dimensions	60 x 60 x 68 mm	

3.4 SAM Twin Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)	
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions (incl. Wooden Support)	Length: 1000 mm Width: 500 mm Height: adjustable feet	
Filling Volume	approx. 25 liters	
Wooden Support	SPEAG standard phantom table	

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.

Twin SAM V5.0 has the same shell geometry and is manufactured from the same material as Twin SAM V4.0, but has reinforced top structure.

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3.5 ELI Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm Minor axis: 400 mm
Filling Volume	approx. 30 liters
Wooden Support	SPEAG standard phantom table



Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.

ELI V5.0 has the same shell geometry and is manufactured from the same material as ELI4, but has reinforced top structure.

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3.6 Device Holder for Transmitters



F-2. Device Holder for Transmitters

- The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation centres for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.
- The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon=3$ and loss tangent $\delta=0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

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3.7 Measurement procedure

3.7.1 Scanning procedure

Step 1: Power reference measurement

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.

Step 2: Area scan

The SAR distribution at the exposed side of the head was measured at a distance of 4mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 15mm*15mm or 12mm*12mm or 10mm*10mm. Based on the area scan data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Zoom scan

Around this point, a volume of 32mm*32mm*30mm ($f \leq 2\text{GHz}$), 30mm*30mm*30mm (f for 2-3GHz) and 24mm*24mm*22mm (f for 5-6GHz) was assessed by measuring 5x5x7 points ($f \leq 2\text{GHz}$), 7x7x7 points (f for 2-3GHz) and 7x7x12 points (f for 5-6GHz). On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

The data at the surface was extrapolated, since the centre of the dipoles is 2.0mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. (This can be variable. Refer to the probe specification). The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The volume was integrated with the trapezoidal algorithm. One thousand points were interpolated to calculate the average. All neighbouring volumes were evaluated until no neighboring volume with a higher average value was found.

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std. 1528-2013.

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		$\leq 3 \text{ GHz}$	$> 3 \text{ GHz}$
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		$5 \pm 1 \text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$		$\leq 2 \text{ GHz}: \leq 15 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 12 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 12 \text{ mm}$ $4 - 6 \text{ GHz}: \leq 10 \text{ mm}$
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$		$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$	$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid $\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$\leq 4 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 3 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z	$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$

Step 4: Power reference measurement (drift)

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The indicated drift is mainly the variation of the DUT's output power and should vary max. $\pm 5 \%$

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3.7.2 Data Storage

The DASY 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], [m W/g], [m W/cm²], [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.

3.7.3 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	ε
- Density	ρ	

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 DASY 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:

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

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)

dcp i = diode compression point (DASY parameter)

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

E-field probes:

$$E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$$

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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 ($i = x, y, z$)
 N_{ormi} = sensor sensitivity of channel i ($i = x, y, z$)
 [mV/(V/m)²] 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.

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

with SAR = local specific absorption rate in mW/g
 E_{tot} = total field strength in V/m
 σ = conductivity in [mho/m] or [Siemens/m]
 ϵ = equivalent tissue density in g/cm³

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.

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

with P_{pwe} = equivalent power density of a plane wave in mW/cm²
 E_{tot} = total electric field strength in V/m
 H_{tot} = total magnetic field strength in A/m

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4 SAR measurement variability and uncertainty

4.1 SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz 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 measurements 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; steps 2) through 4) do not apply.
 - 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
 - 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
 - 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .
- 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.

4.2 SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, 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 1528-2013 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.

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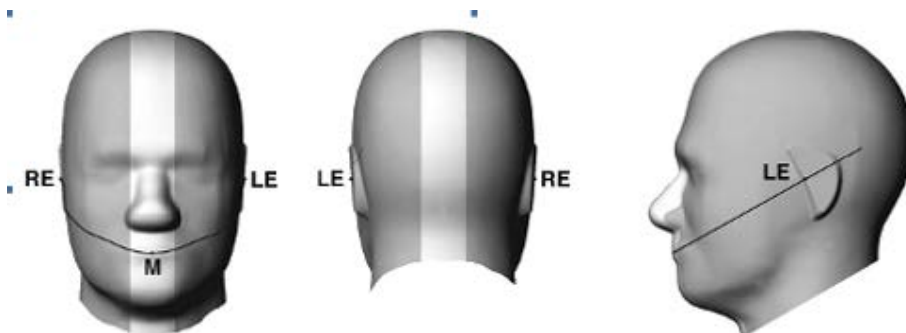
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5 Description of Test Position

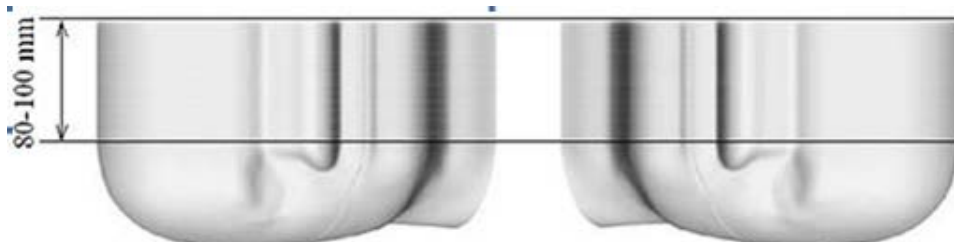
5.1 Head Exposure Condition

5.1.1 SAM Phantom Shape

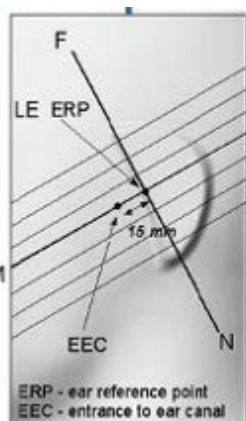


F-3. Front, back, and side views of SAM (model for the phantom shell). Full-head model is for illustration purposes only-procedures in this recommended practice are intended primarily for the phantom setup.

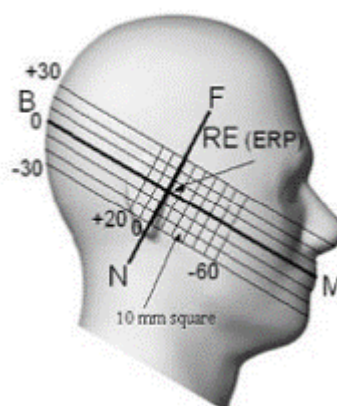
Note: The centre strip including the nose region has a different thickness tolerance.



F-4. Sagittally bisected phantom with extended perimeter (shown placed on its side as used for SAR measurements)



F-5. Close-up side view of phantom, showing the ear region, N-F and B-M lines, and seven cross-sectional plane locations



F-6. Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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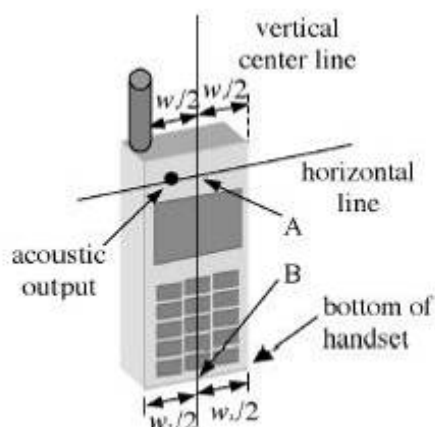
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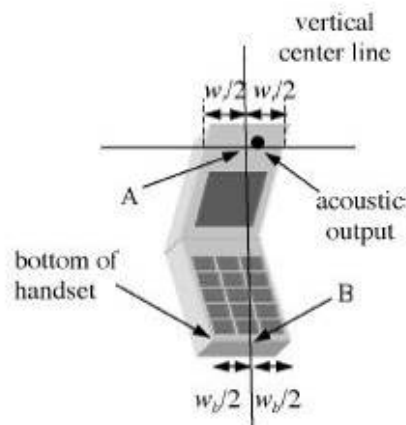
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5.1.2 EUT constructions



F-7. Handset vertical and horizontal reference lines—"fixed case"



F-8. Handset vertical and horizontal reference lines—"clam-shell case"

5.1.3 Definition of the "cheek" position

- Position the device with the vertical centre line of the body of the device and the horizontal line crossing the centre of the ear piece in a plane parallel to the sagittal plane of the phantom ("initial position"). While maintaining the device in this plane, align the vertical centre line with the reference plane containing the three ear and mouth reference points (M, RE and LE) and align the centre of the ear piece with the line RE-LE.
- Translate the mobile phone box towards the phantom with the ear piece aligned with the line LE-RE until telephone touches the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the box until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.

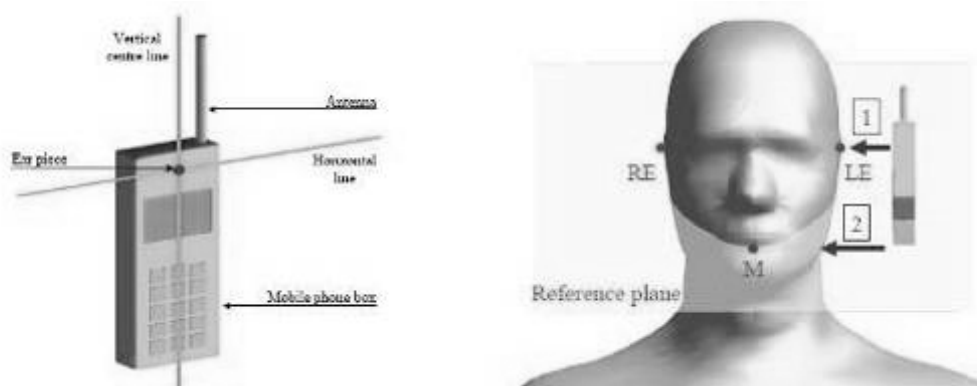
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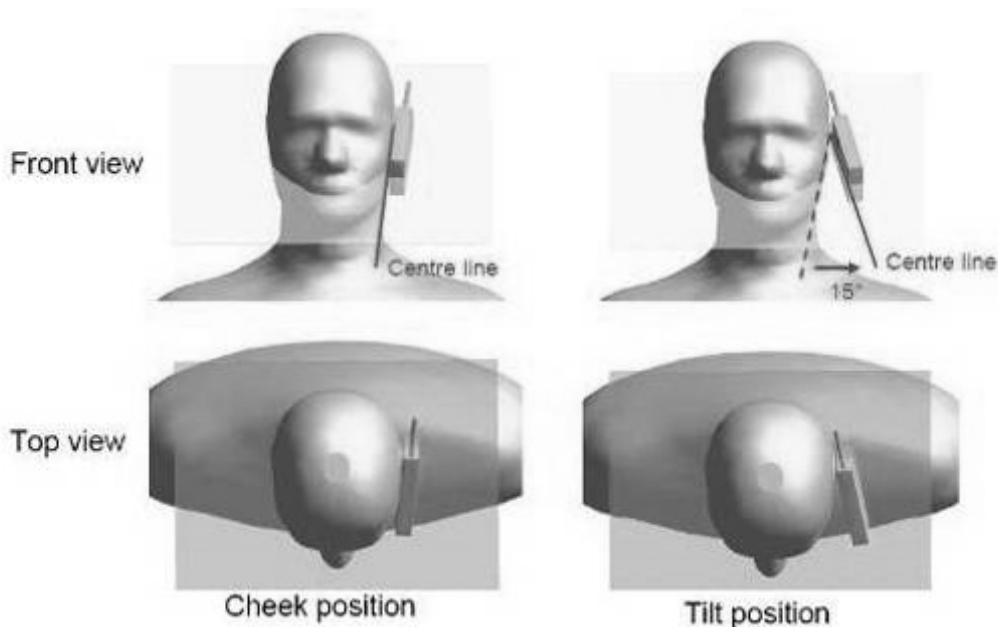
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5.1.4 Definition of the “tilted” position

- Position the device in the “cheek” position described above;
- While maintaining the device in the reference plane described above and pivoting against the ear, move it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.



F-9. Definition of the reference lines and points, on the phone and on the phantom and initial position



F-10. “Cheek” and “tilt” positions of the mobile phone on the left side

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5.2 Body Exposure Condition

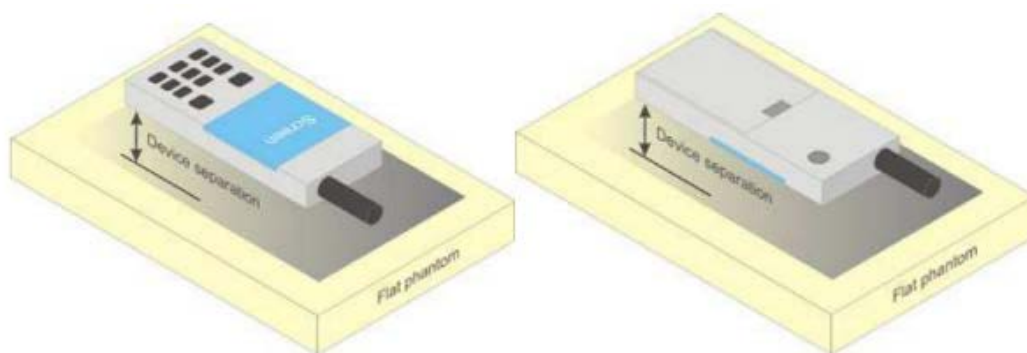
5.2.1 Body-worn accessory exposure conditions

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration. Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.



F-11. Test positions for body-worn devices

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5.2.2 Wireless Router exposure conditions

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. For devices with form factors smaller than $9 \text{ cm} \times 5 \text{ cm}$, a test separation distance of 5 mm is required.

5.3 Extremity exposure conditions

Per FCC KDB 648474D04, for smart phones with a display diagonal dimension $> 15.0 \text{ cm}$ or an overall diagonal dimension $> 16.0 \text{ cm}$ that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the device is marketed as "Phablet". The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at $\leq 25 \text{ mm}$ from that surface or edge, in direct contact with a flat phantom, for Product Specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR $> 1.2 \text{ W/kg}$; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.

Due to the SAR result, only the following frequency bands of Second Antenna are required to test with 0mm for the Product Specific 10 g SAR.

GSM1900:

Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Product Specific 10-g SAR SAR Exclusion
Hotspot Test data(Separate 10mm)										
Front side	GPRS 4TS	661/1880	1:2.075	0.288	0.02	19.63	26.00	4.335	1.249	NO
Back side	GPRS 4TS	661/1880	1:2.075	0.328	-0.01	19.63	26.00	4.335	1.422	NO
Left side	GPRS 4TS	661/1880	1:2.075	0.072	0.06	19.63	26.00	4.335	0.310	YES
Right side	GPRS 4TS	661/1880	1:2.075	0.042	0.03	19.63	26.00	4.335	0.183	YES
Top side	GPRS 4TS	661/1880	1:2.075	0.473	0.02	19.63	26.00	4.335	2.051	NO
Hotspot Test data at the worst case with Battery 2#										
Top side	GPRS 4TS	661/1880	1:2.075	0.463	0.10	19.63	26.00	4.335	2.007	NO
Hotspot Test data at the worst case with Battery 3#										
Top side	GPRS 4TS	661/1880	1:2.075	0.453	-0.01	19.63	26.00	4.335	1.964	NO
Hotspot Test data at the worst case with Sample 2										
Top side	GPRS 4TS	661/1880	1:2.075	0.459	0.03	19.63	26.00	4.335	1.990	NO

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SGS-CSTC Standards Technical Services Co., Ltd.

Xi'An Branch

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WCDMA Band II:

Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Product Specific 10-g SAR SAR Exclusion
Hotspot Test data(Separate 10mm)										
Front side	RMC	9400/1880	1:1	0.197	0.11	16.93	24.50	5.715	1.126	YES
Back side	RMC	9400/1880	1:1	0.243	-0.08	16.93	24.50	5.715	1.389	NO
Left side	RMC	9400/1880	1:1	0.049	0.03	16.93	24.50	5.715	0.280	YES
Right side	RMC	9400/1880	1:1	0.035	0.03	16.93	24.50	5.715	0.199	YES
Top side	RMC	9400/1880	1:1	0.331	0.06	16.93	24.50	5.715	1.892	NO
Hotspot Test data at the worst case with Battery 2#										
Top side	RMC	9400/1880	1:1	0.315	-0.02	16.93	24.50	5.715	1.800	NO
Hotspot Test data at the worst case with Battery 3#										
Top side	RMC	9400/1880	1:1	0.320	0.06	16.93	24.50	5.715	1.829	NO
Hotspot Test data at the worst case with Sample 2										
Top side	RMC	9400/1880	1:1	0.315	0.06	16.93	24.50	5.715	1.800	NO

LTE Band 2:

Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Product Specific 10-g SAR SAR Exclusion
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_50	19100/1900	1:1	0.199	0.03	18.15	24.70	4.519	0.899	YES
Back side	20	QPSK 1RB_50	19100/1900	1:1	0.247	0.14	18.15	24.70	4.519	1.116	YES
Left side	20	QPSK 1RB_50	19100/1900	1:1	0.064	-0.04	18.15	24.70	4.519	0.288	YES
Right side	20	QPSK 1RB_50	19100/1900	1:1	0.036	0.06	18.15	24.70	4.519	0.164	YES
Top side	20	QPSK 1RB_50	19100/1900	1:1	0.369	-0.03	18.15	24.70	4.519	1.667	NO
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	19100/1900	1:1	0.207	0.01	18.00	23.70	3.715	0.769	YES
Back side	20	QPSK 50RB_0	19100/1900	1:1	0.254	0.03	18.00	23.70	3.715	0.944	YES
Left side	20	QPSK 50RB_0	19100/1900	1:1	0.066	-0.05	18.00	23.70	3.715	0.246	YES
Right side	20	QPSK 50RB_0	19100/1900	1:1	0.038	-0.02	18.00	23.70	3.715	0.140	YES
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.381	0.14	18.00	23.70	3.715	1.416	NO
Hotspot Test data at the worst case with Battery 2#											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.370	-0.06	18.00	23.70	3.715	1.375	NO
Hotspot Test data at the worst case with Battery 3#											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.375	-0.02	18.00	23.70	3.715	1.393	NO
Hotspot Test data at the worst case with Sample 2											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.375	-0.02	18.00	23.70	3.715	1.393	NO

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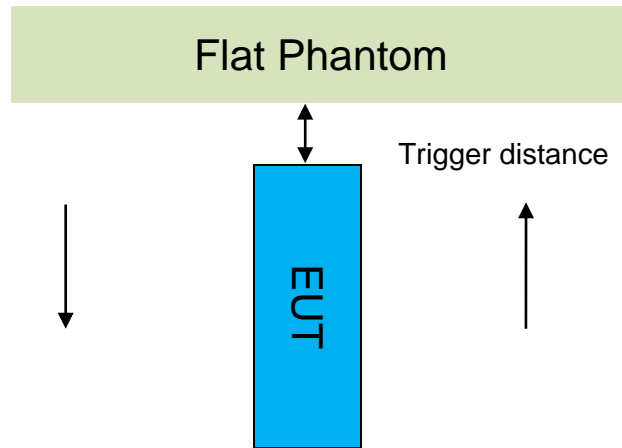
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5.4 Proximity Sensor Triggering Test

1) Proximity sensor triggering distances:

The Proximity sensor triggering was applied to GSM1900, WCDMA Band II/IV, LTE B2/4/7/38/41. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed.



	Proximity Sensor Triggering Distance(mm)		
Position	Front side	Back side	Top side
Minimum	5	9	11
Required SAR Test	4	8	10

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Band	Sensor Trigger Distance	Power reduction (dB)
GSM1900	Front side: 5mm Back side: 9mm Top side: 11mm	2.5
WCDMA Band II	Front side: 5mm Back side: 9mm Top side: 11mm	4.0
WCDMA Band IV	Front side: 5mm Back side: 9mm Top side: 11mm	2.0
LTE Band 2	Front side: 5mm Back side: 9mm Top side: 11mm	3.5
LTE Band 4	Front side: 5mm Back side: 9mm Top side: 11mm	2.5
LTE Band 7	Front side: 5mm Back side: 9mm Top side: 11mm	3.0
LTE Band 38	Front side: 5mm Back side: 9mm Top side: 11mm	2.0
LTE Band 41	Front side: 5mm Back side: 9mm Top side: 11mm	1.5

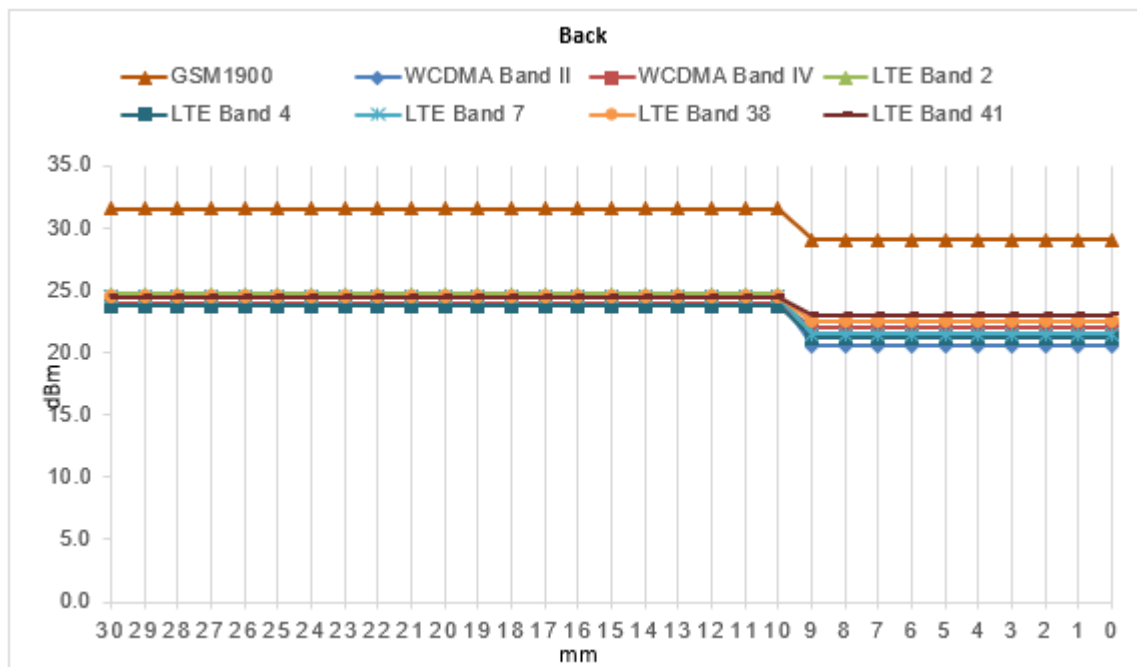
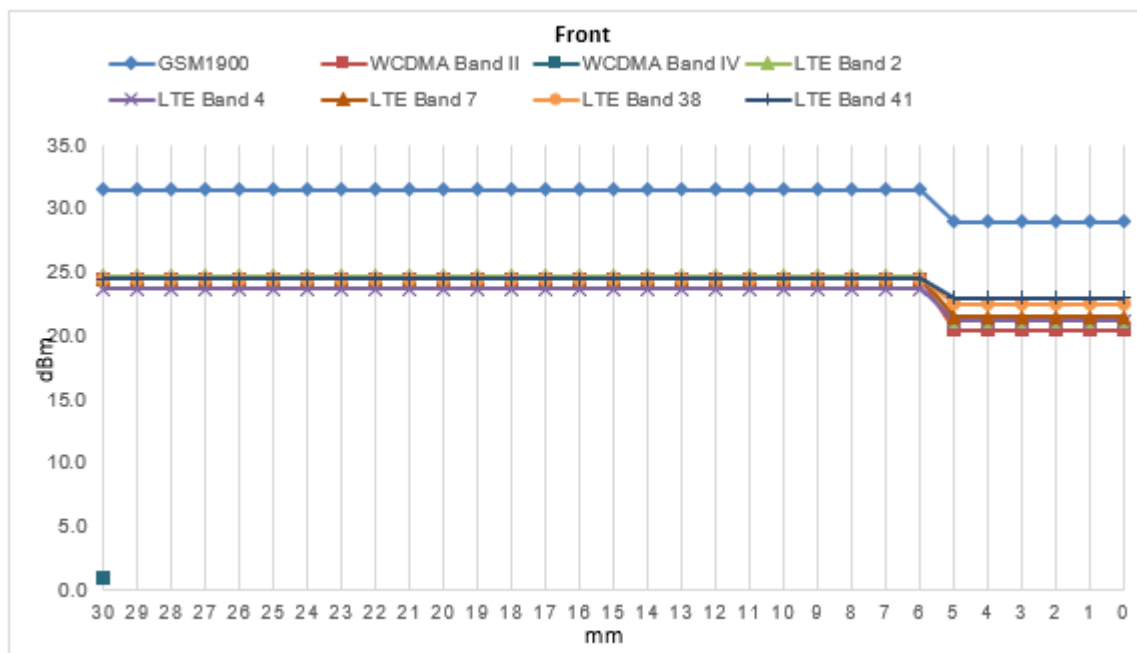
Note: SAR tests with proximity sensor power reduction are only required for the sides of frequency bands in the table above. For the other sides or other frequency bands of the device, SAR is still tested at the maximum power level with sensor off.

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● DUT Moving Toward(Trigger)the Phantom

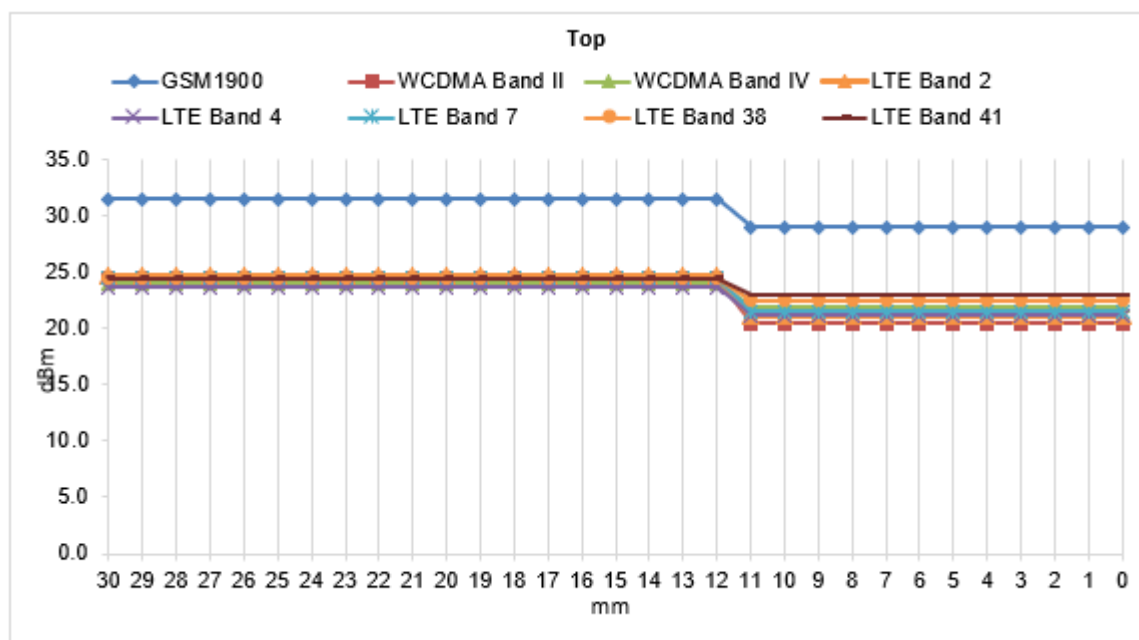


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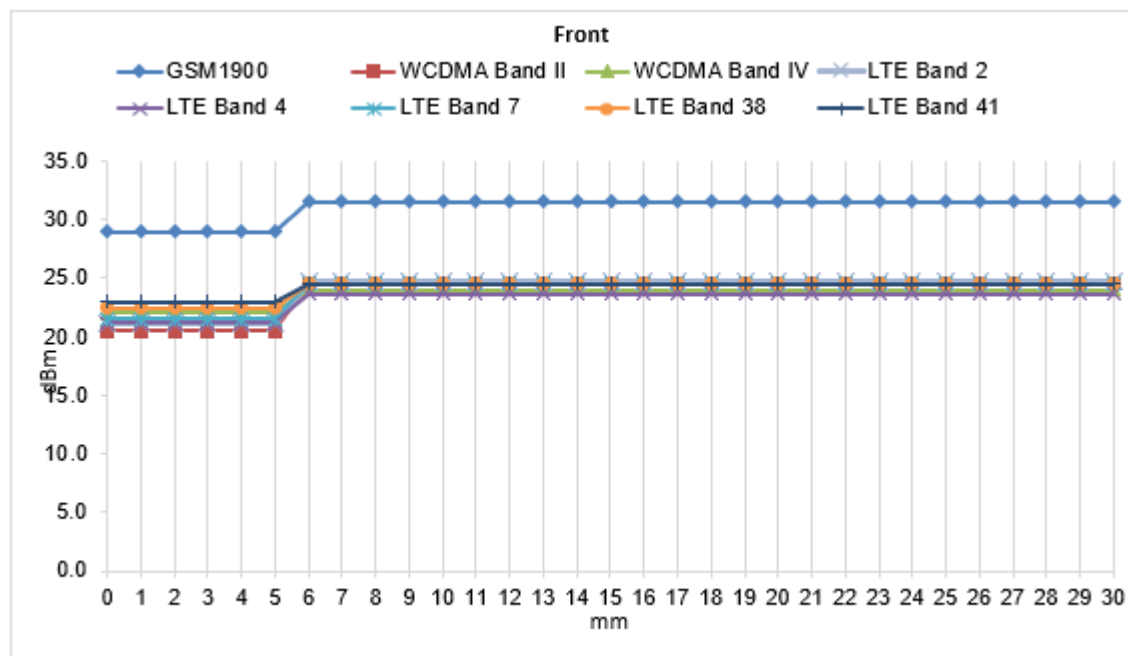
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● DUT Moving Away(Release) from the Phantom

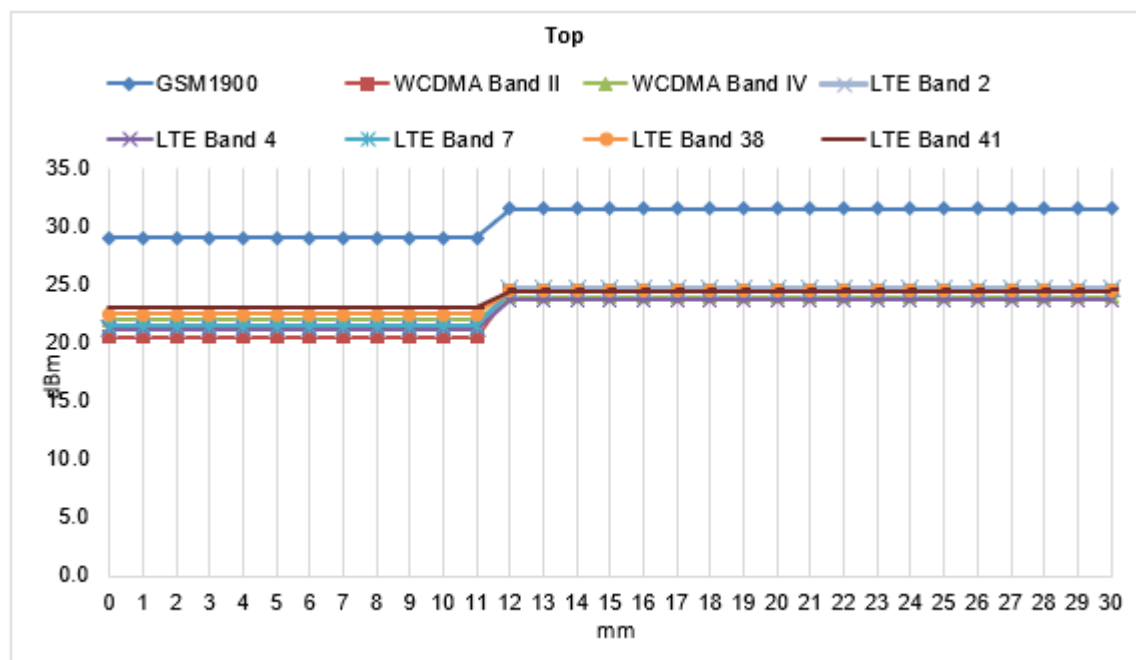
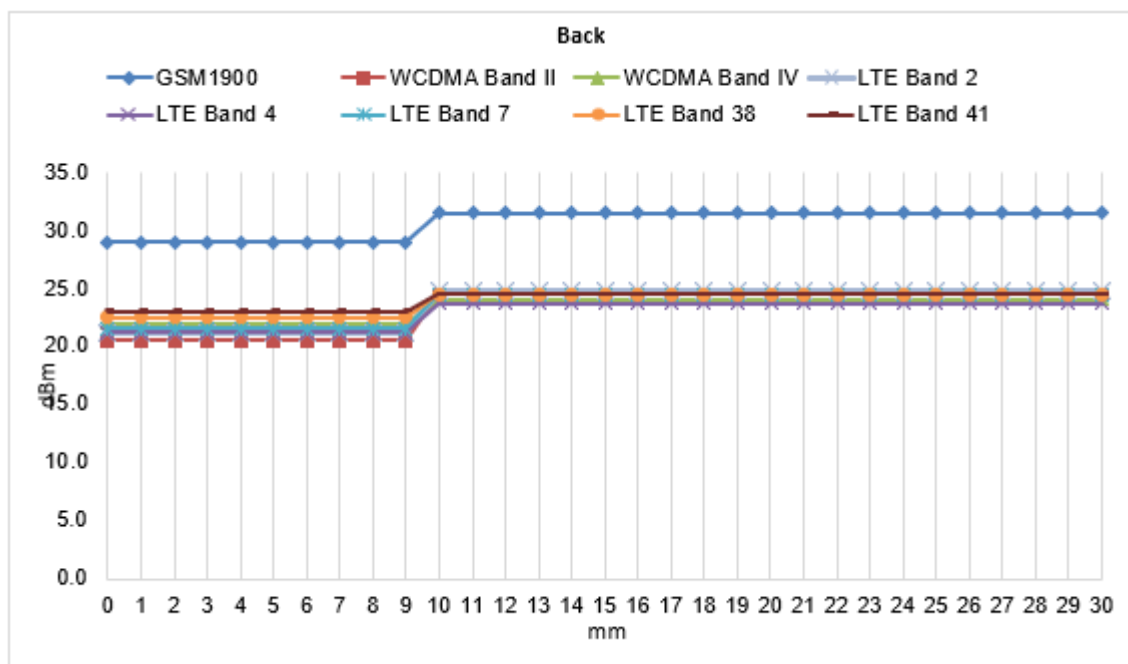


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2) Proximity sensor coverage

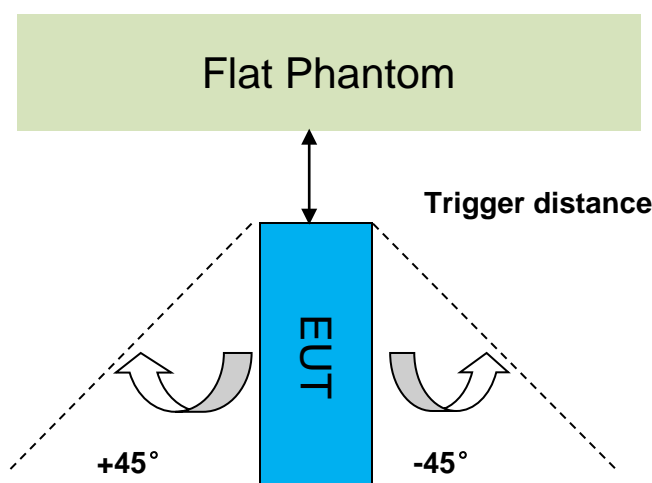
If a sensor is spatially offset from the antenna(s), it is necessary to verify sensor triggering for conditions where the antenna is next to the user but the sensor is laterally further away to ensure sensor coverage is sufficient for reducing the power to maintain compliance. For p-sensor coverage testing, the device is moved and “along the direction of maximum antenna and sensor offset”.

The proximity sensor and main antenna use same metallic electrode, so there is no spatial offset.

3) Device tilt angle influences to proximity sensor triggering

The influence of device tilt angles to proximity sensor triggering was determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at 16mm separation.

Rotating the tablet around the edge next to the phantom in $\leq 10^\circ$ increments until the tablet is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.



Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering

Band (MHz)	Minimum trigger distance Per KDB616217§6.2	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status											
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
GSM1900	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA Band II	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
WCDMA Band IV	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
LTE Band 2	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
LTE Band 4	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
LTE Band 7	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
LTE Band 38	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	
LTE Band 41	Top side:11mm	Top side:11mm	on	on	on	on	on	on	on	on	on	on	on	

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6 SAR System Verification Procedure

6.1 Tissue Simulate Liquid

6.1.1 Recipes for Tissue Simulate Liquid

The following tables give the recipes for tissue simulating liquids to be used in different frequency bands:

Ingredients (% by weight)	Frequency (MHz)				
	450	700-900	1750-2000	2300-2500	2500-2700
Water	38.56	40.30	55.24	55.00	54.92
Salt (NaCl)	3.95	1.38	0.31	0.2	0.23
Sucrose	56.32	57.90	0	0	0
HEC	0.98	0.24	0	0	0
Bactericide	0.19	0.18	0	0	0
Tween	0	0	44.45	44.80	44.85
Salt: 99+ % Pure Sodium Chloride Water: De-ionized, 16 MΩ ⁺ resistivity Tween: Polyoxoethylene (20) sorbitan monolaurate			Sucrose: 98+ % Pure Sucrose HEC: Hydroxyethyl Cellulose		
HSL5GHz is composed of the following ingredients: Water: 50-65% Mineral oil: 10-30% Emulsifiers: 8-25% Sodium salt: 0-1.5%					

Table 3: Recipe of Tissue Simulate Liquid

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6.1.2 Measurement for Tissue Simulate Liquid

The dielectric properties for this Tissue Simulate Liquids were measured by using the Agilent Model 85070E Dielectric Probe in conjunction with Agilent E5071C Network Analyzer (300 KHz-8500 MHz). The Conductivity (σ) and Permittivity (ρ) are listed in bellow table. For the SAR measurement given in this report. The temperature variation of the Tissue Simulate Liquids was $22\pm 2^{\circ}\text{C}$.

Tissue Type	Measured Frequency (MHz)	Target Tissue ($\pm 5\%$)		Measured Tissue		Liquid Temp. ($^{\circ}\text{C}$)	Measured Date
		ϵ_r	$\sigma(\text{S/m})$	ϵ_r	$\sigma(\text{S/m})$		
835 Head	835	41.5 (39.43~43.58)	0.90 (0.86~0.95)	42.457	0.889	22.1	2020/9/8
1750 Head	1750	40.1 (38.10~42.11)	1.37 (1.30~1.44)	38.773	1.334	22.2	2020/9/6
1900 Head	1900	40.0 (38.00~42.00)	1.40 (1.33~1.47)	40.828	1.348	22.3	2020/9/7
2450 Head	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	38.322	1.81	22	2020/9/4
2600 Head	2600	39.0 (37.05~40.95)	1.96 (1.86~2.06)	38.379	1.993	22.1	2020/9/5
5250 Head	5250	35.9 (34.11~37.70)	4.71 (4.47~4.95)	36.233	4.686	22.2	2020/9/4
5600 Head	5600	35.5 (33.73~37.28)	5.07 (4.82~5.32)	35.28	5.07	22.2	2020/9/4
5750 Head	5750	35.4 (33.63~37.17)	5.22 (4.96~5.48)	34.917	5.241	22.2	2020/9/4

Table 4: Measurement result of Tissue electric parameters

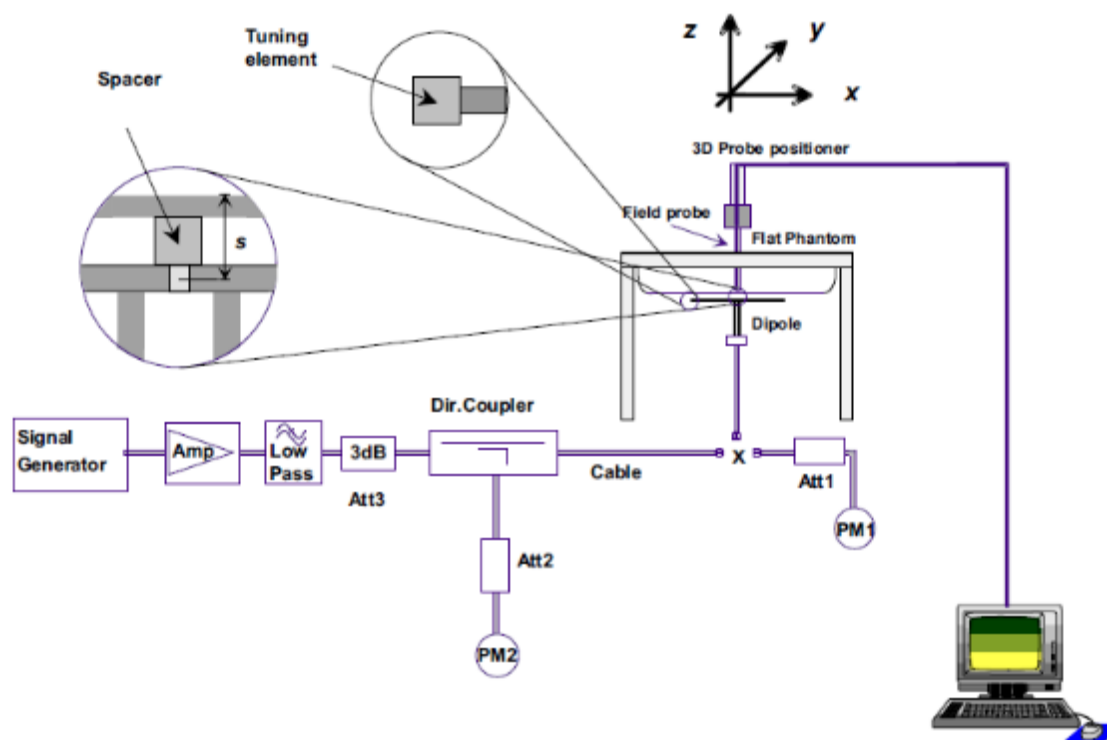
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6.2 SAR System Check

The microwave circuit arrangement for system Check is sketched in F-12. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR values. The tests were conducted on the same days as the measurement of the EUT. The obtained results from the system accuracy verification are displayed in the following table (A power level of 250mW (below 3GHz) or 100mW (3-6GHz) was input to the dipole antenna). During the tests, the ambient temperature of the laboratory was in the range $22\pm 2^{\circ}\text{C}$, the relative humidity was in the range 60% and the liquid depth above the ear reference points was above $15\pm 0.5\text{ cm}$ in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



F-12. the microwave circuit arrangement used for SAR system check

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6.2.1 Justification for Extended SAR Dipole Calibrations

1) Referring to KDB865664 D01 requirements for dipole calibration, instead of the typical annual calibration recommended by measurement standards, longer calibration intervals of up to three years may be considered when it is demonstrated that the SAR target, impedance and return loss of a dipole have remain stable according to the following requirements. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.

- a) There is no physical damage on the dipole;
- b) System check with specific dipole is within 10% of calibrated value;
- c) Return-loss is within 20% of calibrated measurement;
- d) Impedance is within 5Ω from the previous measurement.

2) Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

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6.2.2 Summary System Check Result(s)

Validation Kit		Measure d SAR 250mW	Measured SAR 250mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W) (±10%)	Target SAR (normalized to 1W) (±10%)	Liquid Temp. (°C)	Measured Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)		
D835V2	Head	2.55	1.67	10.2	6.68	9.64 (8.68~10.60)	6.29 (5.66~6.92)	22.1	2020/9/8
D1750V2	Head	9.8	5.25	39.2	21	36.3 (32.67~39.93)	19.2 (17.28~21.12)	22.2	2020/9/6
D1900V2	Head	10.6	5.45	42.4	21.8	39.3 (35.37~43.23)	20.2 (18.18~22.22)	22.3	2020/9/7
D2450V2	Head	13.1	6.06	52.4	24.24	51.9 (46.71~57.09)	23.8 (21.42~26.18)	22	2020/9/4
D2600V2	Head	14	6.22	56	24.88	56.8 (51.12~62.48)	24.9 (22.41~27.39)	22.1	2020/9/5
Validation Kit		Measure d SAR 100mW	Measured SAR 100mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W) (±10%)	Target SAR (normalized to 1W) (±10%)	Liquid Temp. (°C)	Measured Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)		
D5GHzV2	Head(5.25GHz)	7.84	2.26	78.4	22.6	75.2 (67.68~82.72)	21.5 (19.35~23.65)	22.2	2020/9/4
	Head(5.6GHz)	8.3	2.37	83	23.7	80.0 (72.0~88.0)	22.7 (20.43~24.97)	22.2	2020/9/4
	Head(5.75GHz)	7.84	2.23	78.4	22.3	78.7 (70.83~86.57)	22.3 (20.07~24.53)	22.2	2020/9/4

Table 5: SAR System Check Result

6.2.3 Detailed System Check Results

Please see the Appendix A

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7 Test Configuration

7.1 3G SAR Test Reduction Procedure

According to KDB 941225D01, in the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as "otherwise" in the applicable procedures; SAR measurement is required for the secondary mode.

7.2 Operation Configurations

7.2.1 GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a base station by air link. Using CMW500 the power lever is set to "5" and "0" in SAR of GSM 850 and GSM 1900. The tests in the band of GSM 850 and GSM 1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 33 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5. The EGPRS class is 33 for this EUT, it has at most 4 timeslots in uplink, and at most 4 timeslots in downlink, the maximum total timeslot is 5.

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.

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

The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode

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7.2.2 WCDMA Test Configuration

1) . Output Power Verification

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

2) . Head SAR

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

3) . Body SAR

SAR for body configurations is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the handset, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

4) . HSDPA / HSUPA / DC-HSDPA

According to KDB 941225 D01v03, RMC 12.2kbps setting is used to evaluate SAR. If the maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA

a) HSDPA

HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors(β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) are set according to values indicated in the following table. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

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Sub-test	β_c	Bd	β_d (SF)	β_c/β_d	β_{hs}	CM(dB)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0	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: ΔACK , $\Delta NACK$ and $\Delta CQI = 8$ Ahs = $\beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$
Note2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1.A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, ΔACK and $\Delta NACK = 8$ (Ahs = 30/15) with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta CQI = 7$ (Ahs = 24/15) with $\beta_{hs} = 24/15 * \beta_c$.
Note3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

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

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

Table 6: settings of required H-Set 1 QPSK acc. to 3GPP 34.121

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HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	MaximumH S-DSCH Transport BlockBits/HS-DSCH TTI	Total Soft Channel Bits
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

Table 7: HSDPA UE category

b) HSUPA

Due to inner loop power control requirements in HSUPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSUPA should be configured according to the values indicated below as well as other applicable procedures described in the „WCDMA Handset“ and „Release 5 HSUPA Data Device“ sections of 3G device.

Sub-test ^o	β_c ^o	β_d ^o	β_d (SF) ^o	β_o/β_d ^o	β_{hs} ⁽¹⁾ ^o	β_{ac} ^o	β_{ed} ^o	β_c (SF) ^o	β_{ed} (code) ^o	CM ⁽²⁾ (dB) ^o	MP R ^o (dB) ^c	AG ⁽⁴⁾ Inde x ^o	E- TFC I ^o
1 ^o	11/15 ⁽³⁾ ^o	15/15 ⁽³⁾ ^o	64 ^o	11/15 ⁽³⁾ ^o	22/15 ^o	209/225 ^o	1039/225 ^o	4 ^o	1 ^o	1.0 ^o	0.0 ^o	20 ^o	75 ^o
2 ^o	6/15 ^o	15/15 ^o	64 ^o	6/15 ^o	12/15 ^o	12/15 ^o	94/75 ^o	4 ^o	1 ^o	3.0 ^o	2.0 ^o	12 ^o	67 ^o
3 ^o	15/15 ^o	9/15 ^o	64 ^o	15/9 ^o	30/15 ^o	30/15 ^o	$\beta_{ad1}:47/15o$ $\beta_{ed2}:47/15o$	4 ^o	2 ^o	2.0 ^o	1.0 ^o	15 ^o	92 ^o
4 ^o	2/15 ^o	15/15 ^o	64 ^o	2/15 ^o	4/15 ^o	2/15 ^o	56/75 ^o	4 ^o	1 ^o	3.0 ^o	2.0 ^o	17 ^o	71 ^o
5 ^o	15/15 ⁽⁴⁾ ^o	15/15 ⁽⁴⁾ ^o	64 ^o	15/15 ⁽⁴⁾ ^o	30/15 ^o	24/15 ^o	134/15 ^o	4 ^o	1 ^o	1.0 ^o	0.0 ^o	21 ^o	81 ^o
<p>Note 1: ΔACK, $\Delta NACK$ and $\Delta CQI=8$ $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$</p> <p>Note 2: CM = 1 for $\beta_o/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference^o</p> <p>Note 3 : For subtest 1 the β_o/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$^o</p> <p>Note 4 : For subtest 5 the β_o/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$^o</p> <p>Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g^o</p> <p>Note 6: β_{ed} can not be set directly; it is set by Absolute Grant Value.^o</p>													

Table 8: Subtests for UMTS Release 6 HSUPA

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	10	2SF2&2SF	11484	5.76
	4	4	2	4	20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2SF	22996	?
	4	4	10	4	20000	?
<p>NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM. (TS25.306-7.3.0).</p>						

Table 9: HSUPA UE category

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c) DC-HSDPA

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 Second serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

Table E.5.0: Levels for HSDPA connection setup

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13.

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK.

Parameter	Value
Nominal average inf. bit rate	60 kbit/s
Inter-TTI Distance	1 TTI's
Number of HARQ Processes	6 Processes
Information Bit Payload	120 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	960 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	3200 SMLs
Coding Rate	0.15
Number of Physical Channel Codes	1

Table 10: settings of required H-Set 12 QPSK acc. to 3GPP 34.121

Note:

1. The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
2. Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

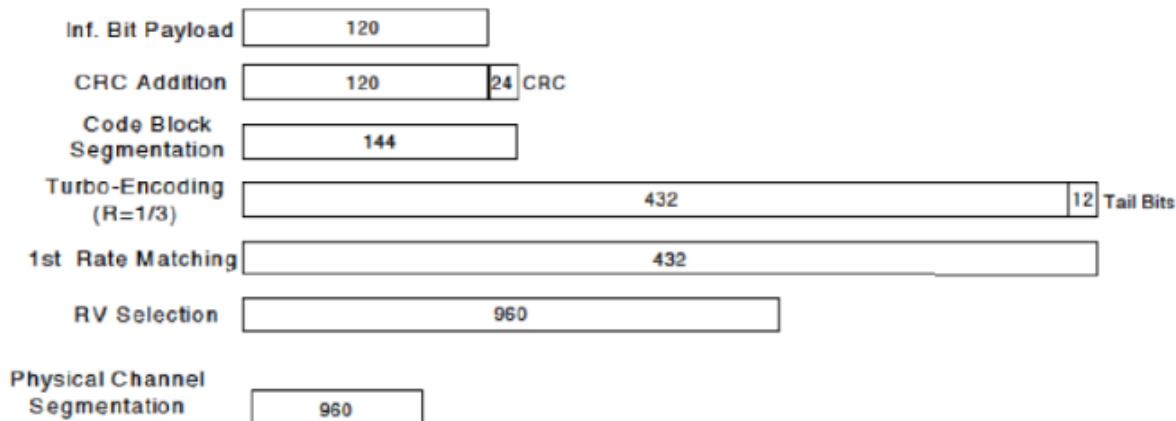


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest settings are illustrated below:

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

Note 1: ΔACK , $\Delta NACK$ and $\Delta CQI = 8$ $A_{hs} = \beta_{hs} / \beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$
 Note 2: CM=1 for $\beta_c / \beta_d = 12/15$, $\beta_{hs} / \beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
 Note 3: For subtest 2 the β_c / β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$

Up commands are set continuously to set the UE to Max power.

Note:

1. The Dual Carriers transmission only applies to HSDPA physical channels
2. The Dual Carriers belong to the same Node and are on adjacent carriers.
3. The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
4. The Dual Carriers operate in the same frequency band.
5. The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
6. The device doesn't support carrier aggregation for it just can operate in Release 8.

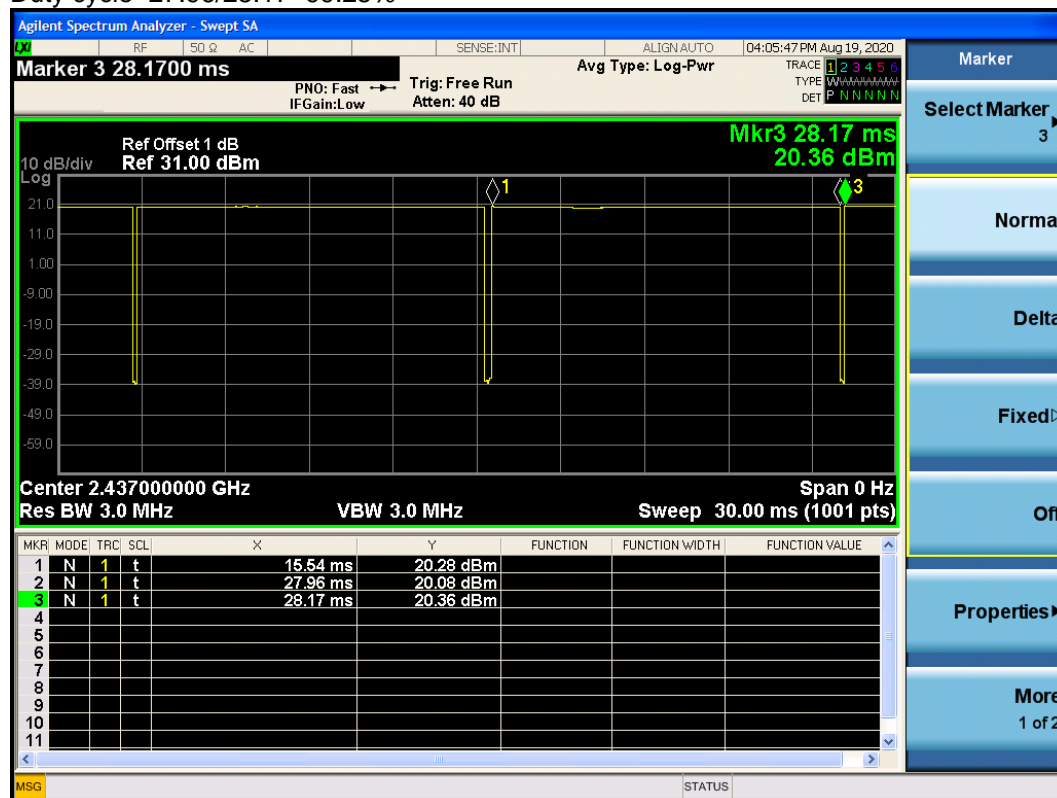
7.2.3 WiFi Test Configuration

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

7.2.3.1 Duty cycle

1) Wi-Fi 2.4GHz 802.11b:

Duty cycle=27.96/28.17=99.25%



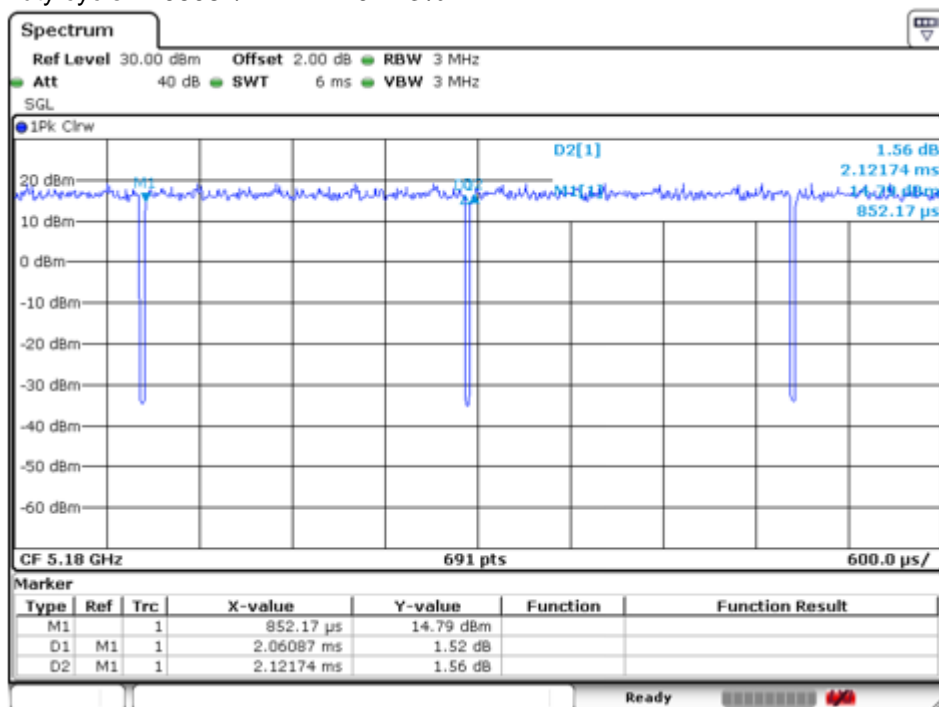
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2) Wi-Fi 5GHz 802.11a:
Duty cycle=2.06087/2.12174=97.13%



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7.2.3.2 Initial Test Position SAR Test Reduction Procedure

DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures. The initial test position procedure is described in the following:

- 1) . When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band. SAR is also not required for that exposure configuration in the subsequent test configuration(s).
- 2) . When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.
- 3) . 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 ≤ 1.2 W/kg or all required channels are tested. a) Additional power measurements may be required for this step, which should be limited to those necessary for identifying the subsequent highest output power channels.

7.2.3.3 Initial Test Configuration Procedures

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required. SAR test reduction for subsequent highest output test channels is determined according to *reported* SAR of the initial test configuration. For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.

When the *reported* SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until *reported* SAR is ≤ 1.2 W/kg or all required channels are tested.

7.2.3.4 Subsequent Test Configuration Procedures

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. The initial test position procedure is applied to next to the ear, UMPC mini-tablet and hotspot mode configurations. When the same maximum output power is specified for multiple transmission modes, additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. The subsequent test configuration and SAR measurement procedures are described in the following.

- 1) . When SAR test exclusion provisions of KDB Publication 447498 are applicable and SAR measurement is not required for the initial test configuration, SAR is also not required for the next highest maximum output power transmission mode subsequent test configuration(s) in that frequency band or aggregated band and exposure configuration.

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- 2) . When the highest *reported* SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.
- 3) . The number of channels in the initial test configuration and subsequent test configuration can be different due to differences in channel bandwidth. When SAR measurement is required for a subsequent test configuration and the channel bandwidth is smaller than that in the initial test configuration, all channels in the subsequent test configuration that overlap with the larger bandwidth channel tested in the initial test configuration should be used to determine the highest maximum output power channel. This step requires additional power measurement to identify the highest maximum output power channel in the subsequent test configuration to determine SAR test reduction.
 - a) SAR should first be measured for the channel with highest measured output power in the subsequent test configuration.
 - b) SAR for subsequent highest measured maximum output power channels in the subsequent test configuration is required only when the *reported* SAR of the preceding higher maximum output power channel(s) in the subsequent test configuration is > 1.2 W/kg or until all required channels are tested. i) For channels with the same measured maximum output power, SAR should be measured using the channel closest to the center frequency of the larger channel bandwidth channel in the initial test configuration.
- 4) . SAR measurements for the remaining highest specified maximum output power OFDM transmission mode configurations that have not been tested in the initial test configuration (highest maximum output) or subsequent test configuration(s) (subsequent next highest maximum output power) is determined by recursively applying the subsequent test configuration procedures in this section to the remaining configurations according to the following:
 - a) replace "subsequent test configuration" with "next subsequent test configuration" (i.e., subsequent next highest specified maximum output power configuration)
 - b) replace "initial test configuration" with "all tested higher output power configurations"

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7.2.3.5 2.4 GHz WiFi SAR Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions. When SAR measurement is required for an OFDM configuration, the initial test configuration, subsequent test configuration and initial test position procedures are applied. The SAR test exclusion requirements for 802.11g/n OFDM configurations are described in following.

- **802.11b DSSS SAR Test Requirements**

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

- 1) . When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) . When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

- **2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements**

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3, including sub-sections). SAR is not required for the following 2.4 GHz OFDM conditions.

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

- **SAR Test Requirements for OFDM configurations**

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

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7.2.3.6 5 GHz WiFi SAR Procedures

- **U-NII-1 and U-NII-2A Bands**

For devices that operate in only one of the U-NII-1 and U-NII-2A bands, the normally required SAR procedures for OFDM configurations are applied. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, both bands are tested independently for SAR.
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, both bands are tested independently for SAR.
- 3) The two U-NII bands may be aggregated to support a 160 MHz channel on channel number 50. Without additional testing, the maximum output power for this is limited to the lower of the maximum output power certified for the two bands. When SAR measurement is required for at least one of the bands and the highest reported SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is > 1.2 W/kg, SAR is required for the 160 MHz channel. This procedure does not apply to an aggregated band with maximum output higher than the standalone band(s); the aggregated band must be tested independently for SAR. SAR is not required when the 160 MHz channel is operating at a reduced maximum power and also qualifies for SAR test exclusion.

- **U-NII-2C and U-NII-3 Bands**

The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. when Terminal Doppler Weather Radar (TDWR) restriction applies, all channels that operate at 5.60 – 5.65 GHz must be included to apply the SAR test reduction and measurement procedures.

When the same transmitter and antenna(s) are used for U-NII-2C band and U-NII-3 band or 5.8 GHz band of §15.247, the bands may be aggregated to enable additional channels with 20, 40 or 80 MHz bandwidth to span across the band gap, as illustrated in Appendix B. The maximum output power for the additional band gap channels is limited to the lower of those certified for the bands. Unless band gap channels are permanently disabled, they must be considered for SAR testing. The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. To maintain SAR measurement accuracy and to facilitate test reduction, the channels in U-NII-2C band above 5.65 GHz may be grouped with the 5.8 GHz channels in U-NII-3 or §15.247 band to enable two SAR probe calibration frequency points to cover the bands, including the band gap channels. When band gap channels are supported and the bands are not aggregated for SAR testing, band gap channels must be considered independently in each band according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

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• **OFDM Transmission Mode SAR Test Configuration and Channel Selection Requirements**

The initial test configuration for 5 GHz OFDM transmission modes is determined by the 802.11 configuration with the highest maximum output power specified for production units, including tune-up tolerance, in each standalone and aggregated frequency band. SAR for the initial test configuration is measured using the highest maximum output power channel determined by the default power measurement procedures. When multiple configurations in a frequency band have the same specified maximum output power, the initial test configuration is determined according to the following steps applied sequentially.

- 1) The largest channel bandwidth configuration is selected among the multiple configurations with the same specified maximum output power.
- 2) If multiple configurations have the same specified maximum output power and largest channel bandwidth, the lowest order modulation among the largest channel bandwidth configurations is selected.
- 3) If multiple configurations have the same specified maximum output power, largest channel bandwidth and lowest order modulation, the lowest data rate configuration among these configurations is selected.
- 4) When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n. After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following. These channel selection procedures apply to both the initial test configuration and subsequent test configuration(s), with respect to the default power measurement procedures or additional power measurements required for further SAR test reduction. The same procedures also apply to subsequent highest output power channel(s) selection.
 - a) The channel closest to mid-band frequency is selected for SAR measurement.
 - b) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

• **SAR Test Requirements for OFDM configurations**

When SAR measurement is required for 802.11 a/n/ac OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. When the same transmitter and antenna(s) are used for U-NII-1 and U-NII-2A bands, additional SAR test reduction applies. When band gap channels between U-NII-2C band and 5.8 GHz U-NII-3 or §15.247 band are supported, the highest maximum output power transmission mode configuration and maximum output power channel across the bands must be used to determine SAR test reduction, according to the initial test configuration and subsequent test configuration requirements. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

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7.2.4 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The Anritsu MT8820C was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

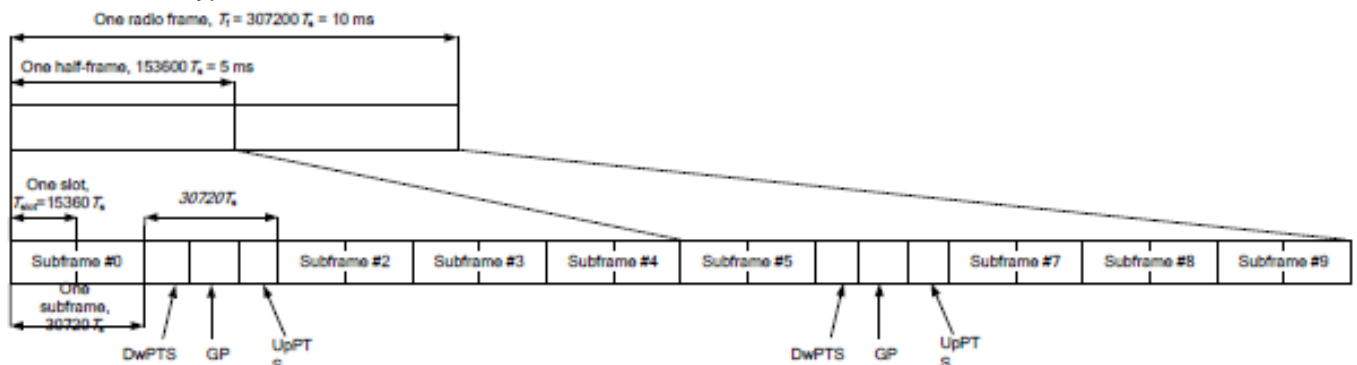
TDD LTE test consideration

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

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

LTE TDD Band support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Frame structure type 2:



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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.Ts	2192.Ts	2560.Ts	7680.Ts	2192.Ts	2560.Ts
1	19760.Ts			20480.Ts		
2	21952.Ts			23040.Ts		
3	24144.Ts			25600.Ts		
4	26336.Ts	4384.Ts	5120.Ts	7680.Ts	4384.Ts	5120.Ts
5	6592.Ts			20480.Ts		
6	19760.Ts			23040.Ts		
7	21952.Ts			25600.Ts		
8	24144.Ts			-	-	-
9	13168.Ts			-	-	-

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]/10ms

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

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A) Spectrum Plots for RB Configurations

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

B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

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
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3

C) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

4) 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 > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) 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 > ½ 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.

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8 Test Result

8.1 Measurement of RF Conducted Power

8.1.1 Conducted Power of Main Antenna(Ant 1)

8.1.1.1 Conducted Power of GSM

GSM 850											
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up	
Channel		128	190	251			128	190	251		
GSM(GMSK)	GSM	33.11	33.06	33.11	34.50	-9.19	23.92	23.87	23.92	25.31	
GPRS/EGPRS (GMSK)	1 TX Slot	33.16	33.12	33.13	34.50	-9.19	23.97	23.93	23.94	25.31	
	2 TX Slots	31.16	31.17	31.16	32.50	-6.18	24.98	24.99	24.98	26.32	
	3 TX Slots	29.08	28.93	28.88	30.50	-4.42	24.66	24.51	24.46	26.08	
	4 TX Slots	27.52	27.28	27.27	29.00	-3.17	24.35	24.11	24.10	25.83	
EGPRS(8PSK)	1 TX Slot	27.58	27.57	27.18	28.50	-9.19	18.39	18.38	17.99	19.31	
	2 TX Slots	25.46	25.34	25.23	26.50	-6.18	19.28	19.16	19.05	20.32	
	3 TX Slots	23.17	23.11	22.91	24.50	-4.42	18.75	18.69	18.49	20.08	
	4 TX Slots	21.44	21.39	21.58	23.00	-3.17	18.27	18.22	18.41	19.83	
GSM 1900											
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up	
Channel		512	661	810			512	698	885		
GSM(GMSK)	GSM	30.34	29.77	29.51	31.50	-9.19	21.15	20.58	20.32	22.31	
GPRS/EGPRS (GMSK)	1 TX Slot	30.44	29.82	29.51	31.50	-9.19	21.25	20.63	20.32	22.31	
	2 TX Slots	28.46	28.32	27.54	29.50	-6.18	22.28	22.14	21.36	23.32	
	3 TX Slots	26.37	26.61	25.95	27.50	-4.42	21.95	22.19	21.53	23.08	
	4 TX Slots	24.63	24.86	24.28	26.00	-3.17	21.46	21.69	21.11	22.83	
EGPRS(8PSK)	1 TX Slot	26.50	26.68	25.77	27.50	-9.19	17.31	17.49	16.58	18.31	
	2 TX Slots	24.25	24.60	24.02	25.50	-6.18	18.07	18.42	17.84	19.32	
	3 TX Slots	22.14	22.44	21.88	23.50	-4.42	17.72	18.02	17.46	19.08	
	4 TX Slots	21.33	21.87	21.40	23.00	-3.17	18.16	18.70	18.23	19.83	

Table 11: Conducted Power of GSM

Note:

1) . CMW500 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	1:4.15	1:2.77	1:2.075
Time based avg. power compared to slotted avg. power	-9.19	-6.18	-4.42	-3.17

2) . The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:

$$\text{Frame-averaged power} = 10 \times \log (\text{Burst-averaged power mW} \times \text{Slot used} / 8)$$

3) . When the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel must be used



8.1.1.2 Conducted Power of WCDMA

Full power					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	22.83	22.88	22.51	24.50
	12.2kbps AMR	22.80	22.81	22.50	24.50
HSDPA	Subtest 1	21.85	21.88	21.89	23.50
	Subtest 2	21.88	21.89	21.75	23.50
	Subtest 3	21.32	21.33	21.26	23.00
	Subtest 4	21.33	21.36	21.34	23.00
HSUPA	Subtest 1	21.88	21.89	21.88	23.50
	Subtest 2	19.88	19.84	19.74	21.50
	Subtest 3	20.89	20.91	20.88	22.50
	Subtest 4	19.84	19.66	19.74	21.50
	Subtest 5	21.88	21.87	21.89	23.50
DC-HSDPA	Subtest 1	21.91	21.84	21.77	23.50
	Subtest 2	21.84	21.86	21.86	23.50
	Subtest 3	21.35	21.36	21.36	23.00
	Subtest 4	21.33	21.34	21.34	23.00

Hotspot/WIFI on(Body)					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	21.84	21.85	21.72	23.50
	12.2kbps AMR	21.81	21.76	21.71	23.50
HSDPA	Subtest 1	20.91	20.99	20.88	22.50
	Subtest 2	20.98	20.98	20.89	22.50
	Subtest 3	20.54	20.61	20.54	22.00
	Subtest 4	20.65	20.45	20.65	22.00
HSUPA	Subtest 1	20.91	20.89	20.99	22.50
	Subtest 2	18.94	18.99	18.97	20.50
	Subtest 3	19.74	19.85	19.74	21.50
	Subtest 4	18.68	18.74	18.80	20.50
	Subtest 5	20.87	20.88	20.74	22.50
DC-HSDPA	Subtest 1	20.99	20.87	20.74	22.50
	Subtest 2	20.98	20.86	20.81	22.50
	Subtest 3	20.45	20.41	20.35	22.00
	Subtest 4	20.66	20.35	20.45	22.00

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Full power					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	22.91	23.35	23.35	24.00
	12.2kbps AMR	22.90	23.30	23.25	24.00
HSDPA	Subtest 1	21.89	21.88	21.91	23.00
	Subtest 2	21.88	21.91	21.98	23.00
	Subtest 3	21.35	21.36	21.37	22.50
	Subtest 4	21.25	21.45	21.36	22.50
HSUPA	Subtest 1	21.88	21.89	21.98	23.00
	Subtest 2	19.88	19.87	19.89	21.00
	Subtest 3	20.89	20.74	20.98	22.00
	Subtest 4	19.74	19.68	19.74	21.00
	Subtest 5	21.86	21.74	21.65	23.00
DC-HSDPA	Subtest 1	21.94	21.86	21.87	23.00
	Subtest 2	21.85	21.84	21.86	23.00
	Subtest 3	21.36	21.36	21.41	22.50
	Subtest 4	21.41	21.45	21.35	22.50

Hotspot/WIFI on(Body)					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	22.01	22.32	22.32	23.00
	12.2kbps AMR	22.00	22.31	22.21	23.00
HSDPA	Subtest 1	21.01	21.06	21.03	22.00
	Subtest 2	21.06	21.03	21.03	22.00
	Subtest 3	20.56	20.61	20.45	21.50
	Subtest 4	20.61	20.41	20.66	21.50
HSUPA	Subtest 1	21.04	21.06	21.08	22.00
	Subtest 2	18.98	19.00	19.01	20.00
	Subtest 3	20.01	19.89	19.99	21.00
	Subtest 4	18.98	18.98	19.01	20.00
	Subtest 5	21.03	21.06	21.05	22.00
DC-HSDPA	Subtest 1	21.03	21.06	21.06	22.00
	Subtest 2	21.05	21.01	21.05	22.00
	Subtest 3	20.61	20.45	20.61	21.50
	Subtest 4	20.55	20.51	20.55	21.50

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WCDMA Band V					
Average Conducted Power(dBm)					
Channel		4132	4182	4233	Tune up
WCDMA	12.2kbps RMC	23.38	23.39	23.41	24.50
	12.2kbps AMR	23.35	23.25	23.40	24.50
HSDPA	Subtest 1	22.32	22.31	22.36	23.50
	Subtest 2	22.33	22.41	22.41	23.50
	Subtest 3	21.89	21.89	21.75	23.00
	Subtest 4	21.75	21.88	21.94	23.00
HSUPA	Subtest 1	22.35	22.36	22.41	23.50
	Subtest 2	20.33	20.14	20.35	21.50
	Subtest 3	21.45	21.35	21.14	22.50
	Subtest 4	20.41	20.35	20.45	21.50
	Subtest 5	22.36	22.45	22.35	23.50
DC-HSDPA	Subtest 1	22.36	22.45	22.41	23.50
	Subtest 2	22.34	22.35	22.34	23.50
	Subtest 3	21.89	21.91	21.85	23.00
	Subtest 4	21.90	21.87	21.86	23.00

Table 12: Conducted Power of WCDMA

Note:

- 1) when the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel must be used.

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8.1.1.3 Conducted Power of LTE

Full power							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	23.05	22.95	22.87	24.70
		1	2	22.83	22.79	22.77	24.70
		1	5	22.97	22.75	22.75	24.70
		3	0	23.14	23.08	22.78	24.70
		3	2	22.90	22.79	22.74	24.70
		3	3	22.81	22.77	22.72	24.70
		6	0	22.00	21.88	21.74	23.70
	16QAM	1	0	22.36	22.53	22.57	23.70
		1	2	22.39	22.20	21.75	23.70
		1	5	21.89	22.02	21.76	23.70
		3	0	21.99	22.05	21.70	23.70
		3	2	22.05	21.90	21.75	23.70
		3	3	21.77	21.70	21.74	23.70
		6	0	20.88	20.93	20.74	22.70
	64QAM	1	0	21.51	21.68	21.72	22.70
		1	2	21.54	21.35	20.90	22.70
		1	5	21.04	21.17	20.91	22.70
		3	0	21.14	21.20	20.85	22.70
		3	2	21.20	21.05	20.90	22.70
		3	3	20.92	20.85	20.89	22.70
		6	0	20.03	20.08	19.89	21.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	23.13	23.04	22.97	24.70
		1	7	22.88	22.87	22.79	24.70
		1	14	22.97	22.79	22.79	24.70
		8	0	22.15	22.14	21.76	23.70
		8	4	22.04	21.83	21.76	23.70
		8	7	21.87	21.77	21.73	23.70
		15	0	22.04	21.99	21.79	23.70
	16QAM	1	0	22.44	22.54	22.68	23.70
		1	7	22.49	22.26	21.89	23.70
		1	14	22.03	22.03	21.79	23.70
		8	0	21.01	21.14	20.77	22.70
		8	4	21.13	20.98	20.74	22.70
		8	7	20.79	20.81	20.74	22.70
		15	0	20.91	20.98	20.79	22.70
	64QAM	1	0	21.84	21.72	21.97	22.70
		1	7	21.75	21.46	21.26	22.70
		1	14	21.28	21.24	21.15	22.70
		8	0	20.43	20.33	20.09	21.70
		8	4	20.33	20.19	20.09	21.70
		8	7	20.10	20.11	19.93	21.70
		15	0	20.24	20.20	19.87	21.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up

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				18625	18900	19175	
5MHz	QPSK	1	0	23.23	23.13	23.06	24.70
		1	13	22.79	22.96	22.79	24.70
		1	24	23.03	22.76	22.72	24.70
		12	0	22.27	22.15	21.72	23.70
		12	6	22.18	21.87	21.76	23.70
		12	13	21.93	21.83	21.75	23.70
		25	0	22.09	22.05	21.71	23.70
	16QAM	1	0	22.55	22.56	22.69	23.70
		1	13	22.51	22.31	21.98	23.70
		1	24	22.13	22.04	21.90	23.70
		12	0	21.14	21.15	20.84	22.70
		12	6	21.14	21.01	20.84	22.70
		12	13	20.85	20.88	21.64	22.70
		25	0	21.02	21.01	21.72	22.70
	64QAM	1	0	21.59	21.69	21.83	22.70
		1	13	21.64	21.41	21.04	22.70
		1	24	21.18	21.18	20.94	22.70
		12	0	20.16	20.29	19.92	21.70
		12	6	20.28	20.13	19.89	21.70
		12	13	19.94	19.96	19.89	21.70
		25	0	20.06	20.13	19.94	21.70
Bandwidth	Modulation	RB size	RB offset	Channel 18650	Channel 18900	Channel 19150	Tune up
10MHz	QPSK	1	0	23.33	23.22	23.11	24.70
		1	25	22.78	23.06	22.81	24.70
		1	49	23.14	22.72	22.75	24.70
		25	0	22.29	22.21	21.79	23.70
		25	13	22.32	22.00	21.82	23.70
		25	25	21.96	21.86	21.78	23.70
		50	0	22.15	22.12	21.73	23.70
	16QAM	1	0	22.69	22.57	22.82	23.70
		1	25	22.60	22.31	22.11	23.70
		1	49	22.13	22.09	22.00	23.70
		25	0	21.28	21.18	20.94	22.70
		25	13	21.18	21.04	20.94	22.70
		25	25	20.95	20.96	20.78	22.70
		50	0	21.09	21.05	20.72	22.70
	64QAM	1	0	21.70	21.71	21.84	22.70
		1	25	21.66	21.46	21.13	22.70
		1	49	21.28	21.19	21.05	22.70
		25	0	20.29	20.30	19.99	21.70
		25	13	20.29	20.16	19.99	21.70
		25	25	20.00	20.03	20.79	21.70
		50	0	20.17	20.16	20.87	21.70
Bandwidth	Modulation	RB size	RB offset	Channel 18675	Channel 18900	Channel 19125	Tune up
15MHz	QPSK	1	0	23.47	23.30	23.18	24.70
		1	38	22.84	23.14	22.81	24.70
		1	74	23.27	22.74	22.79	24.70
		36	0	22.38	22.29	21.90	23.70
		36	18	22.32	22.05	21.90	23.70

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		36	39	22.06	21.95	21.72	23.70
		75	0	22.19	22.13	21.82	23.70
	16QAM	1	0	22.83	22.64	22.89	23.70
		1	38	22.70	22.35	22.16	23.70
		1	74	22.17	22.20	22.06	23.70
		36	0	21.34	21.24	21.00	22.70
		36	18	21.30	21.18	21.02	22.70
		36	39	21.04	21.01	20.79	22.70
		75	0	21.21	21.11	20.77	22.70
		1	0	21.59	21.69	21.83	22.70
	64QAM	1	38	21.64	21.41	21.04	22.70
		1	74	21.18	21.18	20.94	22.70
		36	0	20.16	20.29	19.92	21.70
		36	18	20.28	20.13	19.89	21.70
		36	39	19.94	19.96	19.89	21.70
		75	0	20.06	20.13	19.94	21.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18700	18900	19100	
20MHz	QPSK	1	0	23.53	23.33	23.30	24.70
		1	50	22.98	23.14	22.86	24.70
		1	99	23.33	22.75	22.75	24.70
		50	0	22.39	22.29	22.04	23.70
		50	25	22.38	22.18	21.94	23.70
		50	50	22.11	22.01	21.72	23.70
		100	0	22.20	22.19	21.88	23.70
		1	0	22.85	22.74	22.89	23.70
	16QAM	1	50	22.72	22.48	22.28	23.70
		1	99	22.29	22.32	22.08	23.70
		50	0	21.43	21.38	21.08	22.70
		50	25	21.35	21.22	21.03	22.70
		50	50	21.17	21.07	20.88	22.70
		100	0	21.29	21.18	20.89	22.70
		1	0	21.84	21.72	21.97	22.70
		1	50	21.75	21.46	21.26	22.70
	64QAM	1	99	21.28	21.24	21.15	22.70
		50	0	20.43	20.33	20.09	21.70
		50	25	20.33	20.19	20.09	21.70
		50	50	20.10	20.11	19.93	21.70
		100	0	20.24	20.20	19.87	21.70

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Hotspot/WIFI on(Body)							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 18607	Channel 18900	Channel 19193	Tune up
1.4MHz	QPSK	1	0	19.66	19.50	19.26	21.20
		1	2	19.75	19.49	19.23	21.20
		1	5	19.57	19.39	19.22	21.20
		3	0	19.73	19.37	19.28	21.20
		3	2	19.71	19.46	19.27	21.20
		3	3	19.66	19.60	19.28	21.20
		6	0	19.72	19.41	19.26	21.20
	16QAM	1	0	19.82	19.57	19.45	21.20
		1	2	19.94	19.80	19.22	21.20
		1	5	19.79	19.38	19.39	21.20
		3	0	19.84	19.55	19.21	21.20
		3	2	19.76	19.54	19.20	21.20
		3	3	19.81	19.48	19.26	21.20
		6	0	19.72	19.62	19.52	21.20
	64QAM	1	0	19.72	19.99	19.78	21.20
		1	2	20.00	19.77	19.28	21.20
		1	5	19.72	19.38	19.27	21.20
		3	0	19.70	19.49	19.28	21.20
		3	2	19.67	19.41	19.26	21.20
		3	3	19.41	19.31	19.45	21.20
		6	0	19.41	19.48	19.80	21.20
Bandwidth	Modulation	RB size	RB offset	Channel 18615	Channel 18900	Channel 19185	Tune up
3MHz	QPSK	1	0	19.81	19.63	19.24	21.20
		1	7	19.80	19.47	19.23	21.20
		1	14	19.79	19.58	19.24	21.20
		8	0	19.77	19.51	19.24	21.20
		8	4	19.74	19.52	19.21	21.20
		8	7	19.74	19.49	19.22	21.20
		15	0	19.75	19.49	19.27	21.20
	16QAM	1	0	19.96	20.07	19.27	21.20
		1	7	20.20	19.88	19.23	21.20
		1	14	19.92	20.01	19.63	21.20
		8	0	19.90	19.63	19.25	21.20
		8	4	19.76	19.59	19.26	21.20
		8	7	19.73	19.52	19.29	21.20
		15	0	19.79	19.40	19.31	21.20
	64QAM	1	0	19.70	19.45	19.33	21.20
		1	7	19.82	19.68	19.26	21.20
		1	14	19.67	19.26	19.27	21.20
		8	0	19.72	19.43	19.25	21.20
		8	4	19.64	19.42	19.23	21.20
		8	7	19.69	19.36	19.54	21.20
		15	0	19.60	19.50	19.40	21.20
Bandwidth	Modulation	RB size	RB offset	Channel 18625	Channel 18900	Channel 19175	Tune up

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5MHz	QPSK	1	0	19.80	19.56	19.27	21.20
		1	13	19.67	19.52	19.25	21.20
		1	24	19.75	19.50	19.24	21.20
		12	0	19.73	19.52	19.33	21.20
		12	6	19.70	19.54	19.22	21.20
		12	13	19.72	19.45	19.21	21.20
		25	0	19.77	19.52	19.30	21.20
	16QAM	1	0	19.92	19.89	19.50	21.20
		1	13	19.87	19.77	19.22	21.20
		1	24	20.02	19.47	19.24	21.20
		12	0	19.89	19.59	19.36	21.20
		12	6	19.78	19.52	19.21	21.20
		12	13	19.72	19.48	19.22	21.20
		25	0	19.68	19.50	19.23	21.20
	64QAM	1	0	19.84	19.95	19.77	21.20
		1	13	20.08	19.76	19.47	21.20
		1	24	19.80	19.89	19.59	21.20
		12	0	19.78	19.51	19.52	21.20
		12	6	19.64	19.47	19.48	21.20
		12	13	19.61	19.40	19.77	21.20
		25	0	19.67	19.28	19.92	21.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	19.95	19.77	19.47	21.20
		1	25	19.77	19.88	19.25	21.20
		1	49	19.82	19.48	19.23	21.20
		25	0	19.73	19.56	19.31	21.20
		25	13	19.72	19.51	19.21	21.20
		25	25	19.64	19.56	19.29	21.20
		50	0	19.73	19.51	19.29	21.20
	16QAM	1	0	20.04	19.65	19.47	21.20
		1	25	19.73	20.18	19.61	21.20
		1	49	20.12	19.72	19.25	21.20
		25	0	19.79	19.63	19.38	21.20
		25	13	19.81	19.54	19.24	21.20
		25	25	19.48	19.58	19.21	21.20
		50	0	19.82	19.51	19.27	21.20
	64QAM	1	0	19.80	19.77	19.38	21.20
		1	25	19.75	19.65	19.89	21.20
		1	49	19.90	19.35	19.77	21.20
		25	0	19.77	19.47	19.47	21.20
		25	13	19.66	19.40	19.59	21.20
		25	25	19.60	19.36	19.52	21.20
		50	0	19.56	19.38	19.27	21.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18675	18900	19125	
15MHz	QPSK	1	0	20.00	20.08	19.59	21.20
		1	38	19.65	19.59	19.58	21.20
		1	74	19.82	19.75	19.33	21.20
		36	0	19.74	19.66	19.53	21.20
		36	18	19.60	19.65	19.37	21.20
		36	39	19.63	19.64	19.37	21.20

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Xi'an Branch

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	16QAM	75	0	19.60	19.76	19.42	21.20
		1	0	20.01	20.14	19.85	21.20
		1	38	20.03	19.57	19.96	21.20
		1	74	20.11	20.08	19.45	21.20
		36	0	19.67	19.78	19.32	21.20
		36	18	19.73	19.65	19.43	21.20
		36	39	19.65	19.58	19.34	21.20
		75	0	19.54	19.70	19.45	21.20
	64QAM	1	0	19.92	19.53	19.35	21.20
		1	38	19.61	20.06	19.49	21.20
		1	74	20.00	19.60	19.65	21.20
		36	0	19.67	19.51	19.82	21.20
		36	18	19.69	19.42	19.74	21.20
		36	39	19.36	19.46	19.60	21.20
		75	0	19.70	19.39	19.63	21.20
Bandwidth	Modulation	RB size	RB offset	Channel 18700	Channel 18900	Channel 19100	Tune up
20MHz	QPSK	1	0	20.13	19.74	20.00	21.20
		1	50	19.79	19.60	19.55	21.20
		1	99	19.51	19.27	19.23	21.20
		50	0	19.76	19.75	19.44	21.20
		50	25	19.71	19.61	19.38	21.20
		50	50	19.50	19.43	19.26	21.20
		100	0	19.68	19.65	19.37	21.20
	16QAM	1	0	19.84	20.11	19.90	21.20
		1	50	20.12	19.89	19.92	21.20
		1	99	19.84	19.29	19.21	21.20
		50	0	19.82	19.61	19.61	21.20
		50	25	19.79	19.53	19.43	21.20
		50	50	19.53	19.43	19.26	21.20
		100	0	19.53	19.60	19.31	21.20
	64QAM	1	0	19.89	20.02	19.73	21.20
		1	50	19.91	19.45	19.84	21.20
		1	99	19.99	19.96	19.33	21.20
		50	0	19.55	19.66	19.20	21.20
		50	25	19.61	19.53	19.31	21.20
		50	50	19.53	19.46	19.22	21.20
		100	0	19.42	19.58	19.33	21.20

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Full power							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 19957	Channel 20175	Channel 20393	Tune up
1.4MHz	QPSK	1	0	21.97	22.01	21.96	23.70
		1	2	22.03	21.78	22.14	23.70
		1	5	22.29	22.41	22.43	23.70
		3	0	21.82	21.89	22.04	23.70
		3	2	21.79	22.12	21.92	23.70
		3	3	21.80	22.19	21.98	23.70
		6	0	20.85	20.86	21.27	22.70
	16QAM	1	0	21.44	21.50	21.61	22.70
		1	2	20.92	21.40	21.50	22.70
		1	5	21.37	21.54	21.50	22.70
		3	0	20.88	20.92	21.01	22.70
		3	2	20.82	21.08	20.80	22.70
		3	3	20.80	21.02	21.17	22.70
		6	0	19.84	20.06	20.16	21.70
	64QAM	1	0	20.55	20.61	20.72	21.70
		1	2	20.03	20.51	20.61	21.70
		1	5	20.48	20.65	20.61	21.70
		3	0	19.99	20.03	20.12	21.70
		3	2	19.93	20.19	19.91	21.70
		3	3	19.91	20.13	20.28	21.70
		6	0	18.95	19.17	19.27	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 19965	Channel 20175	Channel 20385	Tune up
3MHz	QPSK	1	0	22.09	22.19	22.04	23.70
		1	7	21.83	21.81	22.27	23.70
		1	14	22.27	22.53	22.45	23.70
		8	0	20.96	21.05	21.10	22.70
		8	4	20.72	21.13	20.92	22.70
		8	7	20.90	21.26	21.07	22.70
		15	0	20.84	20.96	21.35	22.70
	16QAM	1	0	21.51	21.61	21.68	22.70
		1	7	20.98	21.39	21.61	22.70
		1	14	21.42	21.51	21.56	22.70
		8	0	19.98	20.01	20.09	21.70
		8	4	19.91	20.07	19.96	21.70
		8	7	19.88	20.00	20.23	21.70
		15	0	20.00	20.11	20.32	21.70
	64QAM	1	0	20.79	20.65	20.71	21.70
		1	7	20.36	20.70	20.75	21.70
		1	14	20.82	20.72	20.79	21.70
		8	0	19.30	19.48	19.31	20.70
		8	4	19.31	19.39	19.37	20.70
		8	7	19.25	19.47	19.52	20.70
		15	0	19.13	19.39	19.50	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 19975	Channel 20175	Channel 20375	Tune up

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5MHz	QPSK	1	0	22.16	22.28	22.18	23.70
		1	13	21.89	21.80	22.39	23.70
		1	24	22.30	22.56	22.56	23.70
		12	0	20.96	21.04	21.21	22.70
		12	6	20.91	21.08	20.96	22.70
		12	13	20.80	21.24	21.09	22.70
		25	0	20.91	21.04	21.48	22.70
	16QAM	1	0	21.56	21.65	21.75	22.70
		1	13	21.17	21.50	21.67	22.70
		1	24	21.58	21.58	21.68	22.70
		12	0	20.02	20.04	20.14	21.70
		12	6	19.90	20.15	20.02	21.70
		12	13	19.93	20.10	20.23	21.70
		25	0	19.99	20.16	20.37	21.70
	64QAM	1	0	20.62	20.72	20.79	21.70
		1	13	20.09	20.50	20.72	21.70
		1	24	20.53	20.62	20.67	21.70
		12	0	19.09	19.12	19.20	20.70
		12	6	19.02	19.18	19.07	20.70
		12	13	18.99	19.11	19.34	20.70
		25	0	19.11	19.22	19.43	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20000	20175	20350	
10MHz	QPSK	1	0	22.18	22.24	22.10	23.70
		1	25	21.90	21.85	22.39	23.70
		1	49	22.26	22.53	22.45	23.70
		25	0	20.94	21.08	21.22	22.70
		25	13	20.85	21.09	21.01	22.70
		25	25	20.75	21.28	21.23	22.70
		50	0	20.94	21.07	21.40	22.70
	16QAM	1	0	21.48	21.66	21.65	22.70
		1	25	21.05	21.48	21.63	22.70
		1	49	21.63	21.56	21.72	22.70
		25	0	20.04	20.09	20.08	21.70
		25	13	19.95	20.20	20.07	21.70
		25	25	19.95	20.12	20.29	21.70
		50	0	19.94	20.20	20.31	21.70
	64QAM	1	0	20.67	20.76	20.86	21.70
		1	25	20.28	20.61	20.78	21.70
		1	49	20.69	20.69	20.79	21.70
		25	0	19.13	19.15	19.25	20.70
		25	13	19.01	19.26	19.13	20.70
		25	25	19.04	19.21	19.34	20.70
		50	0	19.10	19.27	19.48	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20025	20175	20325	
15MHz	QPSK	1	0	22.26	22.31	22.19	23.70
		1	38	21.97	21.84	22.46	23.70
		1	74	22.27	22.43	22.51	23.70
		36	0	21.00	21.27	21.28	22.70
		36	18	20.84	21.16	21.11	22.70
		36	39	20.90	21.33	21.23	22.70

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Xi'an Branch

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	16QAM	75	0	21.03	21.21	21.44	22.70
		1	0	21.52	21.70	21.60	22.70
		1	38	21.25	21.46	21.56	22.70
		1	74	21.61	21.57	21.66	22.70
		36	0	19.99	20.20	20.20	21.70
		36	18	20.00	20.17	20.11	21.70
		36	39	20.10	20.25	20.37	21.70
		75	0	19.93	20.28	20.34	21.70
	64QAM	1	0	20.59	20.77	20.76	21.70
		1	38	20.16	20.59	20.74	21.70
		1	74	20.74	20.67	20.83	21.70
		36	0	19.15	19.20	19.19	20.70
		36	18	19.06	19.31	19.18	20.70
		36	39	19.06	19.23	19.40	20.70
		75	0	19.05	19.31	19.42	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	22.27	22.36	22.21	23.70
		1	50	22.04	21.94	22.49	23.70
		1	99	22.41	22.61	22.54	23.70
		50	0	20.97	21.37	21.31	22.70
		50	25	20.99	21.15	21.18	22.70
		50	50	20.96	21.36	21.27	22.70
		100	0	21.11	21.27	21.52	22.70
	16QAM	1	0	21.68	21.54	21.60	22.70
		1	50	21.25	21.59	21.64	22.70
		1	99	21.71	21.61	21.68	22.70
		50	0	20.19	20.37	20.20	21.70
		50	25	20.20	20.28	20.26	21.70
		50	50	20.14	20.36	20.41	21.70
		100	0	20.02	20.28	20.39	21.70
	64QAM	1	0	20.63	20.81	20.71	21.70
		1	50	20.36	20.57	20.67	21.70
		1	99	20.72	20.68	20.77	21.70
		50	0	19.10	19.31	19.31	20.70
		50	25	19.11	19.28	19.22	20.70
		50	50	19.21	19.36	19.48	20.70
		100	0	19.04	19.39	19.45	20.70

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Hotspot/WIFI on(Body)							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 19957	Channel 20175	Channel 20393	Tune up
1.4MHz	QPSK	1	0	19.68	19.51	19.95	21.20
		1	2	19.68	19.57	19.96	21.20
		1	5	19.68	19.65	19.71	21.20
		3	0	19.51	19.46	19.82	21.20
		3	2	19.52	19.39	19.97	21.20
		3	3	19.58	19.44	19.72	21.20
		6	0	19.49	19.52	19.78	21.20
	16QAM	1	0	20.01	19.43	20.11	21.20
		1	2	20.16	20.06	20.16	21.20
		1	5	20.17	19.92	19.98	21.20
		3	0	19.52	19.67	19.79	21.20
		3	2	19.61	19.62	19.66	21.20
		3	3	19.63	19.56	19.72	21.20
		6	0	19.52	19.59	19.87	21.20
	64QAM	1	0	19.77	19.52	19.30	21.20
		1	2	19.92	19.89	19.50	21.20
		1	5	19.87	19.77	19.22	21.20
		3	0	20.02	19.47	19.24	21.20
		3	2	19.89	19.59	19.36	21.20
		3	3	19.78	19.52	19.21	21.20
		6	0	19.72	19.48	19.22	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 19965	Channel 20175	Channel 20385	Tune up
3MHz	QPSK	1	0	19.80	19.70	20.06	21.20
		1	7	20.01	19.91	20.00	21.20
		1	14	19.72	19.89	19.72	21.20
		8	0	19.50	19.44	19.67	21.20
		8	4	19.50	19.47	19.76	21.20
		8	7	19.45	19.42	19.79	21.20
		15	0	19.56	19.50	19.69	21.20
	16QAM	1	0	19.69	20.11	20.10	21.20
		1	7	20.15	19.99	20.15	21.20
		1	14	20.16	20.10	19.78	21.20
		8	0	19.43	19.63	19.65	21.20
		8	4	19.51	19.55	19.68	21.20
		8	7	19.50	19.54	19.80	21.20
		15	0	19.51	19.50	19.59	21.20
	64QAM	1	0	19.82	19.61	19.61	21.20
		1	7	19.79	19.53	19.43	21.20
		1	14	19.53	19.43	19.26	21.20
		8	0	19.53	19.60	19.31	20.70
		8	4	19.89	20.02	19.73	20.70
		8	7	19.91	19.45	19.84	20.70
		15	0	19.99	19.96	19.33	20.70

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Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19975	20175	20375	
5MHz	QPSK	1	0	19.83	19.76	19.95	21.20
		1	13	19.56	19.65	19.69	21.20
		1	24	19.58	19.66	19.61	21.20
		12	0	19.55	19.48	19.96	21.20
		12	6	19.39	19.44	19.81	21.20
		12	13	19.53	19.37	19.71	21.20
		25	0	19.50	19.46	19.67	21.20
	16QAM	1	0	19.87	20.11	20.08	21.20
		1	13	19.44	20.07	20.00	21.20
		1	24	19.60	20.06	19.87	21.20
		12	0	19.53	19.46	19.87	21.20
		12	6	19.40	19.49	19.62	21.20
		12	13	19.40	19.52	19.71	21.20
		25	0	19.45	19.44	19.63	21.20
	64QAM	1	0	19.65	19.58	19.34	21.20
		1	13	19.54	19.70	19.45	21.20
		1	24	19.92	19.53	19.35	21.20
		12	0	19.61	20.06	19.49	20.70
		12	6	20.00	19.60	19.65	20.70
		12	13	19.67	19.51	19.82	20.70
		25	0	19.55	19.48	19.96	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20000	20175	20350	
10MHz	QPSK	1	0	19.76	19.73	20.10	21.20
		1	25	19.53	19.53	19.55	21.20
		1	49	19.75	19.78	19.93	21.20
		25	0	19.50	19.43	19.69	21.20
		25	13	19.50	19.49	19.81	21.20
		25	25	19.36	19.49	19.67	21.20
		50	0	19.68	19.49	19.80	21.20
	16QAM	1	0	20.08	19.65	20.16	21.20
		1	25	19.63	19.70	19.80	21.20
		1	49	19.59	20.13	20.07	21.20
		25	0	19.41	19.41	19.71	21.20
		25	13	19.39	19.52	19.51	21.20
		25	25	19.51	19.49	19.66	21.20
		50	0	19.47	19.50	19.70	21.20
	64QAM	1	0	19.50	19.54	19.80	21.20
		1	25	19.51	19.50	19.59	21.20
		1	49	19.82	19.61	19.61	21.20
		25	0	19.79	19.53	19.43	20.70
		25	13	19.53	19.43	19.26	20.70
		25	25	19.75	19.78	19.93	20.70
		50	0	19.50	19.43	19.69	20.70

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Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20025	20175	20325	
15MHz	QPSK	1	0	20.12	20.17	20.13	21.20
		1	38	19.78	20.18	19.88	21.20
		1	74	19.55	20.11	20.11	21.20
		36	0	19.67	19.71	19.94	21.20
		36	18	19.71	19.70	19.95	21.20
		36	39	19.80	19.88	20.17	21.20
		75	0	19.82	19.91	19.95	21.20
	16QAM	1	0	19.85	20.10	20.21	21.20
		1	38	20.05	20.12	20.19	21.20
		1	74	19.90	20.03	19.98	21.20
		36	0	19.54	19.97	19.81	21.20
		36	18	19.61	19.72	19.90	21.20
		36	39	19.62	19.87	19.94	21.20
		75	0	19.74	19.78	19.89	21.20
	64QAM	1	0	19.73	19.52	19.29	21.20
		1	38	19.79	19.40	19.31	21.20
		1	74	19.70	19.45	19.33	21.20
		36	0	19.82	19.68	19.26	20.70
		36	18	19.67	19.26	19.27	20.70
		36	39	19.72	19.43	19.25	20.70
		75	0	19.90	20.03	19.98	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	20.01	19.83	19.91	21.20
		1	50	19.68	19.90	19.96	21.20
		1	99	20.17	20.19	19.98	21.20
		50	0	19.81	20.13	20.07	21.20
		50	25	19.84	19.89	19.86	21.20
		50	50	19.51	20.00	20.12	21.20
		100	0	19.85	19.90	20.11	21.20
	16QAM	1	0	20.06	20.14	19.90	21.20
		1	50	20.07	20.08	20.09	21.20
		1	99	20.07	20.09	20.08	21.20
		50	0	19.79	19.69	19.88	21.20
		50	25	19.62	19.67	19.80	21.20
		50	50	19.63	19.97	19.94	21.20
		100	0	19.70	19.88	20.02	21.20
	64QAM	1	0	19.77	19.88	19.25	21.20
		1	50	19.82	19.48	19.23	21.20
		1	99	19.73	19.56	19.31	21.20
		50	0	19.72	19.51	19.21	20.70
		50	25	19.64	19.56	19.29	20.70
		50	50	20.07	20.09	20.08	20.70
		100	0	19.79	19.69	19.88	20.70

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LTE Band 5				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20407	20525	20643	
1.4MHz	QPSK	1	0	23.95	23.85	23.91	25.00
		1	2	23.50	23.48	23.81	25.00
		1	5	24.15	23.67	23.70	25.00
		3	0	23.56	23.52	23.56	25.00
		3	2	23.64	23.44	23.36	25.00
		3	3	23.60	23.40	23.54	25.00
		6	0	22.83	22.57	22.55	24.00
	16QAM	1	0	23.26	23.18	23.40	24.00
		1	2	23.14	22.83	22.83	24.00
		1	5	23.22	22.91	23.43	24.00
		3	0	22.62	22.52	22.52	24.00
		3	2	22.75	22.50	22.59	24.00
		3	3	22.59	22.39	22.55	24.00
		6	0	21.69	21.49	21.55	23.00
	64QAM	1	0	22.37	22.29	22.51	23.00
		1	2	22.25	21.94	21.94	23.00
		1	5	22.33	22.02	22.54	23.00
		3	0	21.73	21.63	21.63	23.00
		3	2	21.86	21.61	21.70	23.00
		3	3	21.70	21.50	21.66	23.00
		6	0	20.80	20.60	20.66	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20415	20525	20635	
3MHz	QPSK	1	0	23.96	23.90	23.96	25.00
		1	7	23.58	23.57	23.95	25.00
		1	14	24.20	23.77	23.82	25.00
		8	0	22.69	22.60	22.68	24.00
		8	4	22.67	22.50	22.47	24.00
		8	7	22.73	22.53	22.59	24.00
		15	0	22.83	22.69	22.66	24.00
	16QAM	1	0	23.37	23.28	23.46	24.00
		1	7	23.16	22.93	22.89	24.00
		1	14	23.34	23.04	23.47	24.00
		8	0	21.67	21.62	21.59	23.00
		8	4	21.80	21.60	21.61	23.00
		8	7	21.60	21.52	21.58	23.00
		15	0	21.80	21.57	21.69	23.00
	64QAM	1	0	22.62	22.46	22.62	23.00
		1	7	22.30	22.23	22.14	23.00
		1	14	22.59	22.38	22.69	23.00
		8	0	20.98	20.86	20.92	22.00
		8	4	21.01	20.75	20.93	22.00
		8	7	20.90	20.90	20.87	22.00
		15	0	21.01	20.84	20.86	22.00

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Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20425	20525	20625	
5MHz	QPSK	1	0	24.03	24.04	23.98	25.00
		1	13	23.70	23.65	23.97	25.00
		1	24	24.26	23.83	23.84	25.00
		12	0	22.74	22.62	22.71	24.00
		12	6	22.71	22.62	22.60	24.00
		12	13	22.77	22.62	22.68	24.00
		25	0	22.88	22.76	22.67	24.00
	16QAM	1	0	23.37	23.31	23.47	24.00
		1	13	23.17	22.98	22.97	24.00
		1	24	23.45	23.18	23.52	24.00
		12	0	21.79	21.70	21.72	23.00
		12	6	21.84	21.63	21.71	23.00
		12	13	21.69	21.66	21.68	23.00
		25	0	21.86	21.59	21.74	23.00
	64QAM	1	0	22.48	22.39	22.57	23.00
		1	13	22.27	22.04	22.00	23.00
		1	24	22.45	22.15	22.58	23.00
		12	0	20.78	20.73	20.70	22.00
		12	6	20.91	20.71	20.72	22.00
		12	13	20.71	20.63	20.69	22.00
		25	0	20.91	20.68	20.80	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20450	20525	20600	
10MHz	QPSK	1	0	24.17	24.04	24.03	25.00
		1	25	23.78	23.65	24.02	25.00
		1	49	24.27	23.88	23.92	25.00
		25	0	22.79	22.72	22.71	24.00
		25	13	22.81	22.65	22.70	24.00
		25	25	22.85	22.74	22.69	24.00
		50	0	22.88	22.88	22.78	24.00
	16QAM	1	0	23.51	23.35	23.51	24.00
		1	25	23.19	23.12	23.03	24.00
		1	49	23.48	23.27	23.58	24.00
		25	0	21.87	21.75	21.81	23.00
		25	13	21.90	21.64	21.82	23.00
		25	25	21.79	21.79	21.76	23.00
		50	0	21.90	21.73	21.75	23.00
	64QAM	1	0	22.48	22.42	22.58	23.00
		1	25	22.28	22.09	22.08	23.00
		1	49	22.56	22.29	22.63	23.00
		25	0	20.90	20.81	20.83	22.00
		25	13	20.95	20.74	20.82	22.00
		25	25	20.80	20.77	20.79	22.00
		50	0	20.97	20.70	20.85	22.00

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LTE Band 7				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20775	21100	21425	
5MHz	QPSK	1	0	22.52	22.75	22.84	24.50
		1	13	22.80	22.88	22.53	24.50
		1	24	22.97	22.81	22.72	24.50
		12	0	21.77	21.58	21.57	23.50
		12	6	21.88	21.65	21.54	23.50
		12	13	21.52	21.85	21.64	23.50
		25	0	21.89	21.86	21.50	23.50
	16QAM	1	0	22.17	21.92	22.01	23.50
		1	13	22.28	22.25	21.89	23.50
		1	24	22.31	22.14	22.02	23.50
		12	0	20.77	20.82	20.60	22.50
		12	6	21.00	20.64	20.59	22.50
		12	13	20.72	20.74	20.60	22.50
		25	0	20.85	20.76	20.66	22.50
	64QAM	1	0	21.34	21.23	21.44	22.50
		1	13	21.61	21.52	21.21	22.50
		1	24	21.61	21.56	21.32	22.50
		12	0	20.16	20.13	19.94	21.50
		12	6	20.27	20.06	19.93	21.50
		12	13	20.16	20.07	19.89	21.50
		25	0	20.19	20.08	19.91	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20800	21100	21400	
10MHz	QPSK	1	0	22.64	22.85	22.87	24.50
		1	25	22.89	23.01	22.61	24.50
		1	49	22.99	22.89	22.83	24.50
		25	0	21.85	21.70	21.66	23.50
		25	13	21.88	21.76	21.57	23.50
		25	25	21.53	21.87	21.65	23.50
		50	0	21.93	21.93	21.59	23.50
	16QAM	1	0	22.22	21.94	22.12	23.50
		1	25	22.36	22.35	21.97	23.50
		1	49	22.38	22.23	22.03	23.50
		25	0	20.87	20.90	20.71	22.50
		25	13	21.07	20.73	20.61	22.50
		25	25	20.86	20.77	20.70	22.50
		50	0	20.99	20.79	20.74	22.50
	64QAM	1	0	21.28	21.03	21.12	22.50
		1	25	21.39	21.36	21.00	22.50
		1	49	21.42	21.25	21.13	22.50
		25	0	19.88	19.93	19.71	21.50
		25	13	20.11	19.75	19.70	21.50
		25	25	19.83	19.85	19.71	21.50
		50	0	19.96	19.87	19.77	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20825	21100	21375	
15MHz	QPSK	1	0	22.77	22.90	23.00	24.50

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		1	38	22.95	23.01	22.63	24.50
		1	74	23.04	22.98	22.94	24.50
		36	0	21.95	21.81	21.76	23.50
		36	18	22.01	21.81	21.59	23.50
		36	39	21.66	21.87	21.79	23.50
		75	0	21.95	21.98	21.66	23.50
	16QAM	1	0	22.23	22.06	22.20	23.50
		1	38	22.43	22.35	21.98	23.50
		1	74	22.50	22.35	22.10	23.50
		36	0	20.94	20.97	20.72	22.50
		36	18	21.12	20.83	20.71	22.50
		36	39	20.94	20.88	20.77	22.50
		75	0	20.99	20.85	20.77	22.50
	64QAM	1	0	21.33	21.05	21.23	22.50
		1	38	21.47	21.46	21.08	22.50
		1	74	21.49	21.34	21.14	22.50
		36	0	19.98	20.01	19.82	21.50
		36	18	20.18	19.84	19.72	21.50
		36	39	19.97	19.88	19.81	21.50
		75	0	20.10	19.90	19.85	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20850	21100	21350	
20MHz	QPSK	1	0	22.79	23.04	23.02	24.50
		1	50	23.02	23.02	22.69	24.50
		1	99	23.17	22.98	23.00	24.50
		50	0	22.04	21.93	21.88	23.50
		50	25	22.08	21.92	21.61	23.50
		50	50	21.78	21.93	21.84	23.50
		100	0	22.04	21.98	21.76	23.50
	16QAM	1	0	22.23	22.12	22.33	23.50
		1	50	22.50	22.41	22.10	23.50
		1	99	22.50	22.45	22.21	23.50
		50	0	21.05	21.02	20.83	22.50
		50	25	21.16	20.95	20.82	22.50
		50	50	21.05	20.96	20.78	22.50
		100	0	21.08	20.97	20.80	22.50
	64QAM	1	0	21.34	21.17	21.31	22.50
		1	50	21.54	21.46	21.09	22.50
		1	99	21.61	21.46	21.21	22.50
		50	0	20.05	20.08	19.83	21.50
		50	25	20.23	19.94	19.82	21.50
		50	50	20.05	19.99	19.88	21.50
		100	0	20.10	19.96	19.88	21.50

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LTE Band 38				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37775	38000	38225	
5MHz	QPSK	1	0	22.57	22.66	22.93	24.50
		1	13	22.54	22.85	22.57	24.50
		1	24	23.11	23.11	23.09	24.50
		12	0	21.80	21.62	21.61	23.50
		12	6	21.72	21.60	21.60	23.50
		12	13	21.58	21.66	21.88	23.50
		25	0	21.79	21.90	21.76	23.50
	16QAM	1	0	21.92	21.92	22.03	23.50
		1	13	21.85	21.87	21.62	23.50
		1	24	22.07	22.36	22.06	23.50
		12	0	20.89	20.65	20.64	22.50
		12	6	20.59	20.75	20.76	22.50
		12	13	20.73	20.84	20.64	22.50
		25	0	20.56	20.87	20.87	22.50
	64QAM	1	0	21.18	21.18	21.35	22.50
		1	13	21.05	21.12	21.09	22.50
		1	24	21.49	21.63	21.49	22.50
		12	0	20.16	20.00	19.99	21.50
		12	6	19.89	19.98	19.91	21.50
		12	13	20.07	20.09	20.03	21.50
		25	0	19.96	20.27	20.16	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37800	38000	38200	
10MHz	QPSK	1	0	22.65	22.75	23.02	24.50
		1	25	22.56	22.85	22.58	24.50
		1	49	23.18	23.17	23.12	24.50
		25	0	21.83	21.67	21.67	23.50
		25	13	21.80	21.64	21.71	23.50
		25	25	21.58	21.79	21.90	23.50
		50	0	21.87	21.93	21.85	23.50
	16QAM	1	0	21.94	21.92	22.15	23.50
		1	25	21.86	21.90	21.75	23.50
		1	49	22.15	22.41	22.20	23.50
		25	0	20.90	20.69	20.75	22.50
		25	13	20.51	20.79	20.78	22.50
		25	25	20.87	20.84	20.78	22.50
		50	0	20.67	20.97	20.89	22.50
	64QAM	1	0	21.03	21.03	21.14	22.50
		1	25	20.96	20.98	20.73	22.50
		1	49	21.18	21.47	21.17	22.50
		25	0	20.00	19.76	19.75	21.50
		25	13	19.70	19.86	19.87	21.50
		25	25	19.84	19.95	19.75	21.50
		50	0	19.67	19.98	19.98	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37825	38000	38175	

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15MHz	QPSK	1	0	22.78	22.87	23.07	24.50
		1	38	22.60	22.92	22.64	24.50
		1	74	23.19	23.19	23.17	24.50
		36	0	21.96	21.79	21.80	23.50
		36	18	21.82	21.71	21.82	23.50
		36	39	21.67	21.91	21.98	23.50
		75	0	21.91	21.94	21.99	23.50
	16QAM	1	0	21.95	22.05	22.18	23.50
		1	38	21.92	21.97	21.86	23.50
		1	74	22.24	22.50	22.27	23.50
		36	0	21.04	20.81	20.75	22.50
		36	18	20.64	20.84	20.80	22.50
		36	39	20.90	20.91	20.81	22.50
		75	0	20.74	21.06	20.94	22.50
	64QAM	1	0	21.05	21.03	21.26	22.50
		1	38	20.97	21.01	20.86	22.50
		1	74	21.26	21.52	21.31	22.50
		36	0	20.01	19.80	19.86	21.50
		36	18	19.62	19.90	19.89	21.50
		36	39	19.98	19.95	19.89	21.50
		75	0	19.78	20.08	20.00	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37850	38000	38150	
20MHz	QPSK	1	0	22.86	22.99	23.10	24.50
		1	50	22.67	22.97	22.78	24.50
		1	99	23.27	23.33	23.20	24.50
		50	0	21.97	21.86	21.88	23.50
		50	25	21.94	21.79	21.83	23.50
		50	50	21.67	22.01	21.98	23.50
		100	0	21.92	21.99	21.99	23.50
	16QAM	1	0	22.07	22.07	22.24	23.50
		1	50	21.94	22.01	21.98	23.50
		1	99	22.38	22.52	22.38	23.50
		50	0	21.05	20.89	20.88	22.50
		50	25	20.78	20.87	20.80	22.50
		50	50	20.96	20.98	20.92	22.50
		100	0	20.85	21.16	21.05	22.50
	64QAM	1	0	21.06	21.16	21.29	22.50
		1	50	21.03	21.08	20.97	22.50
		1	99	21.35	21.61	21.38	22.50
		50	0	20.15	19.92	19.86	21.50
		50	25	19.75	19.95	19.91	21.50
		50	50	20.01	20.02	19.92	21.50
		100	0	19.85	20.17	20.05	21.50

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LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40065	40448	40832	41215	
5MHz	QPSK	1	0	22.85	22.54	22.79	22.75	24.50
		1	13	22.52	22.54	22.57	22.63	24.50
		1	24	22.68	22.73	22.59	22.63	24.50
		12	0	21.59	21.66	21.62	21.71	23.50
		12	6	21.54	21.58	21.69	21.52	23.50
		12	13	21.64	21.63	21.53	21.70	23.50
		25	0	21.80	21.74	21.51	21.56	23.50
	16QAM	1	0	21.71	21.69	21.92	21.89	23.50
		1	13	21.68	21.71	21.62	21.81	23.50
		1	24	21.85	21.98	21.69	21.84	23.50
		12	0	20.70	20.71	20.73	20.56	22.50
		12	6	20.62	20.76	20.71	20.54	22.50
		12	13	20.52	20.58	20.68	20.60	22.50
		25	0	20.86	20.60	20.87	20.63	22.50
	64QAM	1	0	21.16	21.05	21.26	21.14	22.50
		1	13	21.17	21.14	21.00	21.00	22.50
		1	24	21.12	21.33	21.18	21.26	22.50
		12	0	20.01	20.10	20.03	19.89	21.50
		12	6	20.00	20.00	19.83	19.85	21.50
		12	13	19.96	20.04	19.85	19.85	21.50
		25	0	20.09	20.02	20.10	19.94	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40090	40457	40823	41190	
10MHz	QPSK	1	0	22.90	22.54	22.86	22.86	24.50
		1	25	22.61	22.51	22.51	22.74	24.50
		1	49	22.80	22.82	22.71	22.63	24.50
		25	0	21.61	21.80	21.71	21.74	23.50
		25	13	21.56	21.69	21.77	21.52	23.50
		25	25	21.71	21.67	21.62	21.80	23.50
		50	0	21.87	21.79	21.50	21.69	23.50
	16QAM	1	0	21.78	21.77	21.96	22.02	23.50
		1	25	21.77	21.74	21.76	21.82	23.50
		1	49	21.94	22.03	21.80	21.94	23.50
		25	0	20.81	20.84	20.79	20.69	22.50
		25	13	20.74	20.84	20.71	20.90	22.50
		25	25	20.62	20.70	20.71	20.63	22.50
		50	0	20.87	20.72	20.90	20.70	22.50
	64QAM	1	0	20.83	20.81	21.04	21.01	22.50
		1	25	20.80	20.83	20.74	20.93	22.50
		1	49	20.97	21.10	20.81	20.96	22.50
		25	0	19.82	19.83	19.85	19.68	21.50
		25	13	19.74	19.88	19.83	19.66	21.50
		25	25	19.64	19.70	19.80	19.72	21.50
		50	0	19.98	19.72	19.99	19.75	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
15MHz	QPSK	1	0	40115	40465	40815	41165	24.50

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		1	38	22.73	22.63	22.62	22.74	24.50
		1	74	22.82	22.85	22.81	22.76	24.50
		36	0	21.74	21.87	21.72	21.75	23.50
		36	18	21.70	21.79	21.78	21.64	23.50
		36	39	21.78	21.79	21.70	21.81	23.50
		75	0	21.89	21.87	21.56	21.73	23.50
	16QAM	1	0	21.91	21.85	22.05	22.02	23.50
		1	38	21.91	21.88	21.82	21.85	23.50
		1	74	21.97	22.12	21.93	22.04	23.50
		36	0	20.85	20.91	20.85	20.73	22.50
		36	18	20.81	20.86	20.71	20.61	22.50
		36	39	20.73	20.81	20.72	20.68	22.50
		75	0	20.92	20.81	20.94	20.76	22.50
	64QAM	1	0	20.90	20.89	21.08	21.14	22.50
		1	38	20.89	20.86	20.88	20.94	22.50
		1	74	21.06	21.15	20.92	21.06	22.50
		36	0	19.93	19.96	19.91	19.81	21.50
		36	18	19.86	19.96	19.83	20.02	21.50
		36	39	19.74	19.82	19.83	19.75	21.50
		75	0	19.99	19.84	20.02	19.82	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40140	40473	40807	41140	
20MHz	QPSK	1	0	23.00	22.80	22.96	22.86	24.50
		1	50	22.85	22.75	22.73	22.74	24.50
		1	99	22.84	22.88	22.91	22.89	24.50
		50	0	21.87	21.94	21.73	21.76	23.50
		50	25	21.84	21.89	21.79	21.76	23.50
		50	50	21.85	21.91	21.78	21.82	23.50
		100	0	21.91	21.95	21.67	21.77	23.50
	16QAM	1	0	22.04	21.93	22.14	22.02	23.50
		1	50	22.05	22.02	21.88	21.88	23.50
		1	99	22.00	22.21	22.06	22.14	23.50
		50	0	20.89	20.98	20.91	20.77	22.50
		50	25	20.88	20.88	20.71	20.73	22.50
		50	50	20.84	20.92	20.73	20.73	22.50
		100	0	20.97	20.90	20.98	20.82	22.50
	64QAM	1	0	21.03	20.97	21.17	21.14	22.50
		1	50	21.03	21.00	20.94	20.97	22.50
		1	99	21.09	21.24	21.05	21.16	22.50
		50	0	19.97	20.03	19.97	19.85	21.50
		50	25	19.93	19.98	19.83	19.73	21.50
		50	50	19.85	19.93	19.84	19.80	21.50
		100	0	20.04	19.93	20.06	19.88	21.50

Table 13: Conducted Power of LTE

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8.1.2 Conducted Power of Second Antenna(Ant 2)

8.1.2.1 Conducted Power of GSM

Full Power										
GSM 850										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		128	190	251			128	190	251	
GSM(GMSK)	GSM	33.36	33.47	33.59	34.50	-9.19	24.17	24.28	24.40	25.31
GPRS/EGPRS (GMSK)	1 TX Slot	33.43	33.55	33.70	34.50	-9.19	24.24	24.36	24.51	25.31
	2 TX Slots	31.15	31.21	31.31	32.50	-6.18	24.97	25.03	25.13	26.32
	3 TX Slots	28.74	28.76	29.00	30.50	-4.42	24.32	24.34	24.58	26.08
	4 TX Slots	27.10	27.09	27.26	29.00	-3.17	23.93	23.92	24.09	25.83
EGPRS(8PSK)	1 TX Slot	27.45	27.14	27.38	28.50	-9.19	18.26	17.95	18.19	19.31
	2 TX Slots	25.08	24.77	25.27	26.50	-6.18	18.90	18.59	19.09	20.32
	3 TX Slots	23.19	22.86	23.01	24.50	-4.42	18.77	18.44	18.59	20.08
	4 TX Slots	21.08	21.44	21.55	23.00	-3.17	17.91	18.27	18.38	19.83

Receiver on+Hotspot/WIFI off(Head)										
GSM 850										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		128	190	251			128	190	251	
GSM(GMSK)	GSM	32.57	32.68	32.76	33.50	-9.19	23.38	23.49	23.57	24.31
GPRS/EGPRS (GMSK)	1 TX Slot	32.56	32.68	32.76	33.50	-9.19	23.37	23.49	23.57	24.31
	2 TX Slots	30.16	30.23	30.34	31.50	-6.18	23.98	24.05	24.16	25.32
	3 TX Slots	27.76	27.74	28.02	29.50	-4.42	23.34	23.32	23.60	25.08
	4 TX Slots	26.08	26.07	26.28	28.00	-3.17	22.91	22.90	23.11	24.83
EGPRS(8PSK)	1 TX Slot	26.95	27.38	27.10	27.50	-9.19	17.76	18.19	17.91	18.31
	2 TX Slots	25.19	25.46	25.31	25.50	-6.18	19.01	19.28	19.13	19.32
	3 TX Slots	23.00	22.92	23.34	23.50	-4.42	18.58	18.50	18.92	19.08
	4 TX Slots	21.58	21.54	21.41	22.00	-3.17	18.41	18.37	18.24	18.83

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Receiver on+Hotspot/WIFI on(Head)										
GSM 850										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		128	190	251			128	190	251	
GSM(GMSK)	GSM	32.57	32.68	32.76	33.50	-9.19	23.38	23.49	23.57	24.31
GPRS/EGPRS (GMSK)	1 TX Slot	32.56	32.68	32.76	33.50	-9.19	23.37	23.49	23.57	24.31
	2 TX Slots	29.15	29.26	29.32	30.50	-6.18	22.97	23.08	23.14	24.32
	3 TX Slots	26.75	26.73	27.04	28.50	-4.42	22.33	22.31	22.62	24.08
	4 TX Slots	26.08	26.07	26.28	28.00	-3.17	22.91	22.90	23.11	24.83
EGPRS(8PSK)	1 TX Slot	26.95	27.38	27.10	27.50	-9.19	17.76	18.19	17.91	18.31
	2 TX Slots	25.19	25.46	25.31	25.50	-6.18	19.01	19.28	19.13	19.32
	3 TX Slots	23.00	22.92	23.34	23.50	-4.42	18.58	18.50	18.92	19.08
	4 TX Slots	21.58	21.54	21.41	22.00	-3.17	18.41	18.37	18.24	18.83

Full Power										
GSM 1900										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		512	661	810			512	698	885	
GSM(GMSK)	GSM	29.54	29.93	29.92	31.50	-9.19	20.35	20.74	20.73	22.31
GPRS/EGPRS (GMSK)	1 TX Slot	29.53	29.91	29.89	31.50	-9.19	20.34	20.72	20.70	22.31
	2 TX Slots	27.73	27.57	27.66	29.50	-6.18	21.55	21.39	21.48	23.32
	3 TX Slots	26.00	25.52	25.51	27.50	-4.42	21.58	21.10	21.09	23.08
	4 TX Slots	24.11	24.02	24.01	26.00	-3.17	20.94	20.85	20.84	22.83
EGPRS(8PSK)	1 TX Slot	25.61	25.52	25.86	27.50	-9.19	16.42	16.33	16.67	18.31
	2 TX Slots	23.85	23.71	23.70	25.50	-6.18	17.67	17.53	17.52	19.32
	3 TX Slots	21.84	21.54	21.72	23.50	-4.42	17.42	17.12	17.30	19.08
	4 TX Slots	21.04	21.05	21.11	23.00	-3.17	17.87	17.88	17.94	19.83

Receiver on+Hotspot/WIFI off(Head)										
GSM 1900										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		512	661	810			512	698	885	
GSM(GMSK)	GSM	23.28	23.35	23.33	24.50	-9.19	14.09	14.16	14.14	15.31
GPRS/EGPRS (GMSK)	1 TX Slot	23.17	23.29	23.24	24.50	-9.19	13.98	14.10	14.05	15.31
	2 TX Slots	20.09	19.93	20.14	21.50	-6.18	13.91	13.75	13.96	15.32
	3 TX Slots	17.72	17.51	17.65	19.00	-4.42	13.30	13.09	13.23	14.58
	4 TX Slots	16.51	16.51	16.64	18.00	-3.17	13.34	13.34	13.47	14.83
EGPRS(8PSK)	1 TX Slot	22.32	21.98	21.83	23.50	-9.19	13.13	12.79	12.64	14.31
	2 TX Slots	19.47	19.04	18.84	20.50	-6.18	13.29	12.86	12.66	14.32
	3 TX Slots	17.43	16.97	16.89	18.50	-4.42	13.01	12.55	12.47	14.08
	4 TX Slots	16.25	15.54	15.89	17.50	-3.17	13.08	12.37	12.72	14.33

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Receiver on+Hotspot/WIFI on(Head)										
GSM 1900										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		512	661	810			512	698	885	
GSM(GMSK)	GSM	21.10	21.08	21.31	22.50	-9.19	11.91	11.89	12.12	13.31
GPRS/EGPRS (GMSK)	1 TX Slot	21.21	21.17	21.42	22.50	-9.19	12.02	11.98	12.23	13.31
	2 TX Slots	18.45	18.26	18.54	20.00	-6.18	12.27	12.08	12.36	13.82
	3 TX Slots	16.52	16.12	16.33	18.00	-4.42	12.10	11.70	11.91	13.58
	4 TX Slots	14.81	14.59	14.81	16.50	-3.17	11.64	11.42	11.64	13.33
EGPRS(8PSK)	1 TX Slot	20.88	20.02	20.02	22.00	-9.19	11.69	10.83	10.83	12.81
	2 TX Slots	18.05	17.54	17.56	19.50	-6.18	11.87	11.36	11.38	13.32
	3 TX Slots	16.25	15.46	15.28	17.00	-4.42	11.83	11.04	10.86	12.58
	4 TX Slots	13.56	13.61	13.62	15.50	-3.17	10.39	10.44	10.45	12.33

Receiver off+Sensor on+Hotspot/WIFI off(Body)										
GSM 1900										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		512	661	810			512	698	885	
GSM(GMSK)	GSM	27.75	27.71	27.94	29.00	-9.19	18.56	18.52	18.75	19.81
GPRS/EGPRS (GMSK)	1 TX Slot	27.74	27.67	27.89	29.00	-9.19	18.55	18.48	18.70	19.81
	2 TX Slots	25.42	25.19	25.62	27.00	-6.18	19.24	19.01	19.44	20.82
	3 TX Slots	20.73	20.70	20.96	22.50	-4.42	16.31	16.28	16.54	18.08
	4 TX Slots	19.35	19.11	19.25	21.00	-3.17	16.18	15.94	16.08	17.83
EGPRS(8PSK)	1 TX Slot	25.28	25.15	24.87	26.50	-9.19	16.09	15.96	15.68	17.31
	2 TX Slots	23.53	23.15	22.63	24.50	-6.18	17.35	16.97	16.45	18.32
	3 TX Slots	20.12	20.02	19.53	21.50	-4.42	15.70	15.60	15.11	17.08
	4 TX Slots	18.29	18.34	18.49	20.00	-3.17	15.12	15.17	15.32	16.83

Receiver off+Sensor on+Hotspot/WIFI on(Body)										
GSM 1900										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		512	661	810			512	698	885	
GSM(GMSK)	GSM	27.75	27.71	27.94	29.00	-9.19	18.56	18.52	18.75	19.81
GPRS/EGPRS (GMSK)	1 TX Slot	27.74	27.67	27.89	29.00	-9.19	18.55	18.48	18.70	19.81
	2 TX Slots	25.42	25.19	25.62	27.00	-6.18	19.24	19.01	19.44	20.82
	3 TX Slots	20.73	20.70	20.96	22.50	-4.42	16.31	16.28	16.54	18.08
	4 TX Slots	18.21	18.00	18.25	20.00	-3.17	15.04	14.83	15.08	16.83
EGPRS(8PSK)	1 TX Slot	25.08	24.92	24.83	26.50	-9.19	15.89	15.73	15.64	17.31
	2 TX Slots	23.54	22.85	22.91	24.50	-6.18	17.36	16.67	16.73	18.32
	3 TX Slots	20.01	19.69	19.54	21.50	-4.42	15.59	15.27	15.12	17.08
	4 TX Slots	18.31	17.24	17.16	19.00	-3.17	15.14	14.07	13.99	15.83

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Receiver off+Sensor off+Hotspot/WIFI on(Body)										
GSM 1900										
Burst Output Power(dBm)					Tune up	Division Factors	Frame-Average Output Power(dBm)			Tune up
Channel		512	661	810			512	698	885	
GSM(GMSK)	GSM	25.48	25.24	25.42	26.50	-9.19	16.29	16.05	16.23	17.31
GPRS/EGPRS (GMSK)	1 TX Slot	25.45	25.24	25.44	26.50	-9.19	16.26	16.05	16.25	17.31
	2 TX Slots	21.72	21.51	21.74	23.00	-6.18	15.54	15.33	15.56	16.82
	3 TX Slots	20.47	20.34	20.65	22.00	-4.42	16.05	15.92	16.23	17.58
	4 TX Slots	19.79	19.63	19.73	21.50	-3.17	16.62	16.46	16.56	18.33
EGPRS(8PSK)	1 TX Slot	24.61	24.35	24.02	26.00	-9.19	15.42	15.16	14.83	16.81
	2 TX Slots	21.14	20.82	20.89	22.50	-6.18	14.96	14.64	14.71	16.32
	3 TX Slots	19.59	19.53	19.55	21.50	-4.42	15.17	15.11	15.13	17.08
	4 TX Slots	19.16	18.57	18.51	20.50	-3.17	15.99	15.40	15.34	17.33

Table 14: Conducted Power of GSM

Note:

1) CMW500 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	1:4.15	1:2.77	1:2.075
Time based avg. power compared to slotted avg. power	-9.19	-6.18	-4.42	-3.17

2) The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:

$$\text{Frame-averaged power} = 10 \times \log (\text{Burst-averaged power mW} \times \text{Slot used} / 8)$$

3) When the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel must be used



8.1.2.2 Conducted Power of WCDMA

Full Power					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	22.58	22.96	22.95	24.50
	12.2kbps AMR	22.55	22.93	22.92	24.50
HSDPA	Subtest 1	21.54	21.65	21.74	23.50
	Subtest 2	21.53	21.66	21.76	23.50
	Subtest 3	21.12	21.12	21.21	23.00
	Subtest 4	21.05	21.06	21.09	23.00
HSUPA	Subtest 1	21.55	21.56	21.54	23.50
	Subtest 2	19.67	19.84	19.74	21.50
	Subtest 3	20.74	20.65	20.70	22.50
	Subtest 4	19.77	19.74	19.67	21.50
	Subtest 5	21.56	21.64	21.66	23.50
DC-HSDPA	Subtest 1	21.55	21.66	21.74	23.50
	Subtest 2	21.50	21.61	21.65	23.50
	Subtest 3	21.02	21.15	21.16	23.00
	Subtest 4	21.01	21.12	21.16	23.00

Receiver on+Hotspot/WIFI off(Head)					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	15.90	15.94	15.92	17.50
	12.2kbps AMR	15.85	15.90	15.84	17.50
HSDPA	Subtest 1	14.76	14.75	14.79	16.50
	Subtest 2	14.77	14.74	14.74	16.50
	Subtest 3	14.25	14.21	14.21	16.00
	Subtest 4	14.21	14.12	14.15	16.00
HSUPA	Subtest 1	14.76	14.66	14.61	16.50
	Subtest 2	12.91	12.89	12.88	14.50
	Subtest 3	13.76	13.88	13.84	15.50
	Subtest 4	12.98	13.10	12.99	14.50
	Subtest 5	14.88	14.74	14.73	16.50
DC-HSDPA	Subtest 1	14.74	14.68	14.61	16.50
	Subtest 2	14.60	14.58	14.59	16.50
	Subtest 3	14.25	14.21	14.21	16.00
	Subtest 4	14.21	14.20	14.32	16.00

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Receiver on+Hotspot/WIFI on(Head)					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	13.65	13.98	13.97	15.50
	12.2kbps AMR	13.62	13.91	13.95	15.50
HSDPA	Subtest 1	12.66	12.65	12.67	14.50
	Subtest 2	12.64	12.66	12.69	14.50
	Subtest 3	12.21	12.24	12.26	14.00
	Subtest 4	12.14	12.26	12.27	14.00
HSUPA	Subtest 1	12.65	12.66	12.67	14.50
	Subtest 2	10.87	10.99	10.89	12.50
	Subtest 3	11.88	11.89	11.91	13.50
	Subtest 4	10.76	10.88	10.89	12.50
	Subtest 5	12.66	12.67	12.66	14.50
DC-HSDPA	Subtest 1	12.69	12.69	12.64	14.50
	Subtest 2	12.65	12.68	12.67	14.50
	Subtest 3	12.21	12.24	12.31	14.00
	Subtest 4	12.26	12.15	12.61	14.00

Receiver off+Sensor on+Hotspot/WIFI off(Body)					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	18.98	19.17	19.17	20.50
	12.2kbps AMR	18.91	19.13	19.12	20.50
HSDPA	Subtest 1	17.81	17.86	17.88	19.50
	Subtest 2	17.83	17.67	17.84	19.50
	Subtest 3	17.34	17.12	17.23	19.00
	Subtest 4	17.35	17.10	17.24	19.00
HSUPA	Subtest 1	17.80	17.91	17.91	19.50
	Subtest 2	15.89	15.91	15.99	17.50
	Subtest 3	16.87	16.80	16.84	18.50
	Subtest 4	15.84	15.66	15.62	17.50
	Subtest 5	17.89	17.88	17.87	19.50
DC-HSDPA	Subtest 1	17.81	17.95	17.84	19.50
	Subtest 2	17.80	17.84	17.77	19.50
	Subtest 3	17.23	17.34	17.31	19.00
	Subtest 4	17.35	17.31	17.26	19.00

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Receiver off+Sensor on+Hotspot/WIFI on(Body)					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	17.38	17.65	17.71	19.00
	12.2kbps AMR	17.35	17.60	17.65	19.00
HSDPA	Subtest 1	16.35	16.65	16.54	18.00
	Subtest 2	16.33	16.54	16.45	18.00
	Subtest 3	15.89	16.01	16.01	17.50
	Subtest 4	15.91	16.00	15.98	17.50
HSUPA	Subtest 1	16.35	16.33	16.64	18.00
	Subtest 2	14.61	14.66	14.54	16.00
	Subtest 3	15.45	15.33	15.41	17.00
	Subtest 4	14.51	14.61	14.55	16.00
	Subtest 5	16.36	16.41	16.60	18.00
DC-HSDPA	Subtest 1	16.33	16.41	16.35	18.00
	Subtest 2	16.35	16.40	16.34	18.00
	Subtest 3	15.88	15.84	15.74	17.50
	Subtest 4	15.90	15.91	15.88	17.50

Receiver off+Sensor off+Hotspot/WIFI on(Body)					
WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	16.66	16.93	16.93	18.50
	12.2kbps AMR	16.54	16.84	16.90	18.50
HSDPA	Subtest 1	15.54	15.61	15.66	17.50
	Subtest 2	15.53	15.66	15.57	17.50
	Subtest 3	15.01	15.02	15.12	17.00
	Subtest 4	15.12	15.06	15.10	17.00
HSUPA	Subtest 1	15.55	15.56	15.61	17.50
	Subtest 2	13.54	13.55	13.56	15.50
	Subtest 3	14.68	14.66	14.74	16.50
	Subtest 4	13.65	13.74	13.74	15.50
	Subtest 5	15.67	15.66	15.60	17.50
DC-HSDPA	Subtest 1	15.61	15.66	15.64	17.50
	Subtest 2	15.54	15.61	15.66	17.50
	Subtest 3	15.01	15.02	15.04	17.00
	Subtest 4	15.03	15.03	15.12	17.00

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Full Power					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	23.62	23.64	23.22	24.00
	12.2kbps AMR	23.60	23.60	23.21	24.00
HSDPA	Subtest 1	22.65	22.66	22.67	23.00
	Subtest 2	22.64	22.64	22.64	23.00
	Subtest 3	22.12	22.06	22.13	22.50
	Subtest 4	22.09	22.14	22.16	22.50
HSUPA	Subtest 1	22.66	22.74	22.64	23.00
	Subtest 2	20.45	20.66	20.67	21.00
	Subtest 3	21.61	21.54	21.74	22.00
	Subtest 4	20.68	20.74	20.88	21.00
	Subtest 5	22.61	22.45	22.65	23.00
DC-HSDPA	Subtest 1	22.66	22.61	22.59	23.00
	Subtest 2	22.59	22.60	22.54	23.00
	Subtest 3	22.12	22.23	22.15	22.50
	Subtest 4	22.09	22.21	22.16	22.50

Receiver on+Hotspot/WIFI off(Head)					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	17.70	17.71	17.68	18.50
	12.2kbps AMR	17.69	17.70	17.61	18.50
HSDPA	Subtest 1	16.74	16.68	16.61	17.50
	Subtest 2	16.76	16.54	16.54	17.50
	Subtest 3	16.23	16.21	16.20	17.00
	Subtest 4	16.24	16.26	16.26	17.00
HSUPA	Subtest 1	16.74	16.74	16.65	17.50
	Subtest 2	14.68	14.84	14.88	15.50
	Subtest 3	15.45	15.61	15.41	16.50
	Subtest 4	14.88	14.87	14.89	15.50
	Subtest 5	16.65	16.45	16.75	17.50
DC-HSDPA	Subtest 1	16.70	16.69	16.74	17.50
	Subtest 2	16.65	16.74	16.60	17.50
	Subtest 3	16.12	16.21	16.21	17.00
	Subtest 4	16.24	16.20	16.23	17.00

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Receiver on+Hotspot/WIFI on(Head)					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	15.77	15.78	15.54	16.50
	12.2kbps AMR	15.65	15.71	15.52	16.50
HSDPA	Subtest 1	14.76	14.77	14.74	15.50
	Subtest 2	14.77	14.84	14.84	15.50
	Subtest 3	14.23	14.32	14.35	15.00
	Subtest 4	14.31	14.22	14.33	15.00
HSUPA	Subtest 1	14.74	14.64	14.55	15.50
	Subtest 2	12.66	12.58	12.65	13.50
	Subtest 3	13.74	13.68	13.66	14.50
	Subtest 4	12.88	12.87	12.64	13.50
	Subtest 5	14.74	14.71	14.65	15.50
DC-HSDPA	Subtest 1	14.75	14.68	14.70	15.50
	Subtest 2	14.68	14.66	14.68	15.50
	Subtest 3	14.25	14.23	14.20	15.00
	Subtest 4	14.21	14.20	14.21	15.00

Receiver off+Sensor on+Hotspot/WIFI off(Body)					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	21.32	21.12	21.07	22.00
	12.2kbps AMR	21.30	21.10	21.05	22.00
HSDPA	Subtest 1	20.32	20.31	20.21	21.00
	Subtest 2	20.24	20.26	20.12	21.00
	Subtest 3	19.74	19.89	19.75	20.50
	Subtest 4	19.76	19.74	19.88	20.50
HSUPA	Subtest 1	20.32	20.33	20.34	21.00
	Subtest 2	18.61	18.45	18.34	19.00
	Subtest 3	19.45	19.33	19.45	20.00
	Subtest 4	18.45	18.66	18.45	19.00
	Subtest 5	20.46	20.35	20.44	21.00
DC-HSDPA	Subtest 1	20.32	20.33	20.31	21.00
	Subtest 2	20.24	20.32	20.20	21.00
	Subtest 3	19.70	19.74	19.77	20.50
	Subtest 4	19.65	19.66	19.61	20.50

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Receiver off+Sensor on+Hotspot/WIFI on(Body)					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	19.32	19.08	18.98	20.00
	12.2kbps AMR	19.30	19.05	18.95	20.00
HSDPA	Subtest 1	18.31	18.19	18.21	19.00
	Subtest 2	18.30	18.20	18.19	19.00
	Subtest 3	17.86	17.88	17.74	18.50
	Subtest 4	17.88	17.86	17.60	18.50
HSUPA	Subtest 1	18.31	18.26	18.33	19.00
	Subtest 2	16.51	16.55	16.45	17.00
	Subtest 3	17.56	17.54	17.61	18.00
	Subtest 4	16.41	16.32	16.54	17.00
	Subtest 5	17.23	17.21	17.32	19.00
DC-HSDPA	Subtest 1	18.33	18.35	18.24	19.00
	Subtest 2	18.31	18.31	18.22	19.00
	Subtest 3	17.84	17.67	17.67	18.50
	Subtest 4	17.88	17.74	17.84	18.50

Receiver off+Sensor off+Hotspot/WIFI on(Body)					
WCDMA Band IV					
Average Conducted Power(dBm)					
Channel		1312	1412	1513	Tune up
WCDMA	12.2kbps RMC	18.25	18.35	18.21	19.00
	12.2kbps AMR	18.21	18.32	18.12	19.00
HSDPA	Subtest 1	17.81	17.80	17.77	18.00
	Subtest 2	17.76	17.88	17.86	18.00
	Subtest 3	17.23	17.21	17.20	17.50
	Subtest 4	17.21	17.23	17.12	17.50
HSUPA	Subtest 1	17.80	17.84	17.74	18.00
	Subtest 2	15.69	15.77	15.67	16.00
	Subtest 3	16.88	16.87	16.87	17.00
	Subtest 4	15.68	15.87	15.88	16.00
	Subtest 5	17.74	17.87	17.88	18.00
DC-HSDPA	Subtest 1	17.80	17.68	17.51	18.00
	Subtest 2	17.74	17.71	17.64	18.00
	Subtest 3	17.25	17.21	17.15	17.50
	Subtest 4	17.21	17.20	17.19	17.50

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Full Power					
WCDMA Band V					
Average Conducted Power(dBm)					
Channel		4132	4182	4233	Tune up
WCDMA	12.2kbps RMC	23.53	23.61	23.58	24.50
	12.2kbps AMR	23.51	23.60	23.54	24.50
HSDPA	Subtest 1	22.45	22.54	22.50	23.50
	Subtest 2	22.35	22.51	22.54	23.50
	Subtest 3	21.89	22.01	22.12	23.00
	Subtest 4	21.88	22.01	22.19	23.00
HSUPA	Subtest 1	22.45	22.51	22.61	23.50
	Subtest 2	20.54	20.45	20.41	21.50
	Subtest 3	21.54	21.36	21.36	22.50
	Subtest 4	20.45	20.36	20.44	21.50
	Subtest 5	22.33	22.47	22.45	23.50
DC-HSDPA	Subtest 1	22.41	22.45	22.49	23.50
	Subtest 2	22.38	22.39	22.41	23.50
	Subtest 3	21.91	21.94	21.89	23.00
	Subtest 4	21.88	21.91	21.90	23.00

Receiver on+Hotspot/WIFI on(Head)					
WCDMA Band V					
Average Conducted Power(dBm)					
Channel		4132	4182	4233	Tune up
WCDMA	12.2kbps RMC	20.59	20.55	20.66	21.50
	12.2kbps AMR	20.55	20.54	20.61	21.50
HSDPA	Subtest 1	19.54	19.55	19.54	20.50
	Subtest 2	19.55	19.50	19.55	20.50
	Subtest 3	19.12	19.09	19.12	20.00
	Subtest 4	19.02	19.12	19.01	20.00
HSUPA	Subtest 1	19.55	19.45	19.61	20.50
	Subtest 2	17.45	17.55	17.65	18.50
	Subtest 3	18.56	18.45	18.35	19.50
	Subtest 4	17.56	17.84	17.66	18.50
	Subtest 5	19.45	19.60	19.45	20.50
DC-HSDPA	Subtest 1	19.61	19.55	19.54	20.50
	Subtest 2	19.54	19.51	19.50	20.50
	Subtest 3	19.12	19.09	19.10	20.00
	Subtest 4	19.09	19.12	19.09	20.00

Table 15: Conducted Power of WCDMA

Note:

1) when the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used.

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8.1.2.3 Conducted Power of LTE

Full Power							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	23.09	23.07	23.10	24.70
		1	2	23.39	23.31	23.35	24.70
		1	5	23.09	23.09	23.09	24.70
		3	0	23.24	23.17	23.20	24.70
		3	2	23.22	23.17	23.20	24.70
		3	3	23.07	23.01	23.32	24.70
		6	0	22.18	22.10	22.25	23.70
	16QAM	1	0	22.57	22.51	22.67	23.70
		1	2	22.21	22.11	22.44	23.70
		1	5	22.26	22.16	22.31	23.70
		3	0	22.04	22.06	22.28	23.70
		3	2	22.11	22.01	22.26	23.70
		3	3	22.08	22.03	22.43	23.70
		6	0	21.41	21.36	21.42	22.70
	64QAM	1	0	21.38	21.21	21.08	22.70
		1	2	21.36	21.38	20.82	22.70
		1	5	21.52	21.13	20.82	22.70
		3	0	21.08	20.81	20.75	22.70
		3	2	21.23	21.12	21.25	22.70
		3	3	21.26	20.83	21.15	22.70
		6	0	20.41	20.00	19.88	21.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	23.06	23.24	23.29	24.70
		1	7	23.07	23.09	23.27	24.70
		1	14	23.01	23.05	23.18	24.70
		8	0	22.06	22.13	22.26	23.70
		8	4	22.09	22.10	22.32	23.70
		8	7	22.03	22.08	22.26	23.70
		15	0	22.04	22.07	22.29	23.70
	16QAM	1	0	22.03	22.63	22.20	23.70
		1	7	22.15	22.19	22.79	23.70
		1	14	22.49	22.07	22.80	23.70
		8	0	22.06	21.29	21.27	22.70
		8	4	22.06	21.18	21.40	22.70
		8	7	22.09	21.15	21.15	22.70
		15	0	22.08	21.04	21.28	22.70
	64QAM	1	0	21.16	21.08	20.80	22.70
		1	7	21.19	20.94	20.95	22.70
		1	14	21.01	21.07	20.94	22.70
		8	0	20.10	19.89	20.12	21.70
		8	4	20.11	19.81	20.00	21.70
		8	7	20.22	20.15	19.87	21.70
		15	0	20.19	19.84	19.73	21.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up

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				18625	18900	19175	
5MHz	QPSK	1	0	23.02	23.05	23.26	24.70
		1	13	23.02	23.21	23.34	24.70
		1	24	23.04	23.05	23.10	24.70
		12	0	22.05	22.20	22.29	23.70
		12	6	22.08	22.09	22.22	23.70
		12	13	22.03	22.09	22.20	23.70
		25	0	22.06	22.10	22.31	23.70
	16QAM	1	0	22.71	22.63	22.49	23.70
		1	13	22.35	22.31	22.41	23.70
		1	24	22.38	22.44	22.50	23.70
		12	0	21.02	21.15	21.34	22.70
		12	6	21.09	21.23	21.31	22.70
		12	13	21.09	21.10	21.31	22.70
		25	0	21.02	21.10	21.35	22.70
	64QAM	1	0	21.35	20.94	21.39	22.70
		1	13	21.25	21.06	21.17	22.70
		1	24	21.24	21.48	20.93	22.70
		12	0	20.01	20.01	19.79	21.70
		12	6	19.97	19.85	19.71	21.70
		12	13	19.89	19.86	19.84	21.70
		25	0	20.09	19.75	19.75	21.70
Bandwidth	Modulation	RB size	RB offset	Channel 18650	Channel 18900	Channel 19150	Tune up
10MHz	QPSK	1	0	23.06	23.07	23.23	24.70
		1	25	23.04	23.20	23.25	24.70
		1	49	23.04	23.37	23.37	24.70
		25	0	22.05	22.14	22.23	23.70
		25	13	22.07	22.05	22.21	23.70
		25	25	22.04	22.13	22.33	23.70
		50	0	22.01	22.10	22.27	23.70
	16QAM	1	0	22.07	22.61	22.72	23.70
		1	25	22.08	22.38	23.01	23.70
		1	49	22.47	22.36	22.16	23.70
		25	0	21.04	21.17	21.35	22.70
		25	13	21.06	21.15	21.24	22.70
		25	25	21.01	21.21	21.11	22.70
		50	0	21.04	21.07	21.24	22.70
	64QAM	1	0	21.35	20.94	21.39	22.70
		1	25	21.25	21.06	21.17	22.70
		1	49	21.24	21.48	20.93	22.70
		25	0	20.01	20.01	19.79	21.70
		25	13	19.97	19.85	19.71	21.70
		25	25	19.89	19.86	19.84	21.70
		50	0	20.09	19.75	19.75	21.70
Bandwidth	Modulation	RB size	RB offset	Channel 18675	Channel 18900	Channel 19125	Tune up
15MHz	QPSK	1	0	23.04	23.60	23.82	24.70
		1	38	23.02	23.21	23.29	24.70
		1	74	23.06	23.51	23.42	24.70
		36	0	22.06	22.23	22.41	23.70
		36	18	22.06	22.27	22.23	23.70

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		36	39	22.07	22.28	22.34	23.70
		75	0	22.03	22.22	22.19	23.70
	16QAM	1	0	22.55	22.98	22.88	23.70
		1	38	22.02	22.45	22.51	23.70
		1	74	22.27	23.23	22.64	23.70
		36	0	21.09	21.26	21.29	22.70
		36	18	21.01	21.20	21.25	22.70
		36	39	21.05	21.23	21.42	22.70
		75	0	21.02	21.20	21.44	22.70
		1	0	21.25	20.94	21.39	22.70
	64QAM	1	38	21.15	21.06	21.17	22.70
		1	74	21.14	21.48	20.93	22.70
		36	0	19.91	20.01	19.79	21.70
		36	18	19.87	19.85	19.71	21.70
		36	39	19.79	19.86	19.84	21.70
		75	0	19.99	19.75	19.75	21.70
		1	0	21.25	20.94	21.39	22.70
		1	38	21.15	21.06	21.17	22.70
	Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
					18700	18900	19100
							Tune up
20MHz	QPSK	1	0	23.07	23.25	23.46	24.70
		1	50	23.03	23.04	23.27	24.70
		1	99	23.01	23.64	23.13	24.70
		50	0	22.02	22.31	22.39	23.70
		50	25	22.09	22.25	22.34	23.70
		50	50	22.05	22.13	22.23	23.70
		100	0	22.00	22.24	22.37	23.70
		1	0	22.68	22.42	22.91	23.70
	16QAM	1	50	22.36	23.15	22.63	23.70
		1	99	22.01	23.38	22.53	23.70
		50	0	21.03	21.33	21.43	22.70
		50	25	21.03	21.27	21.37	22.70
		50	50	21.02	21.19	21.03	22.70
		100	0	21.08	21.16	21.29	22.70
		1	0	21.35	20.94	21.39	22.70
		1	50	21.25	21.06	21.17	22.70
	64QAM	1	99	21.24	21.48	20.93	22.70
		50	0	20.01	20.01	19.79	21.70
		50	25	19.97	19.85	19.71	21.70
		50	50	19.89	19.86	19.84	21.70
		100	0	20.09	19.75	19.75	21.70
		1	0	21.35	20.94	21.39	22.70
		1	50	21.25	21.06	21.17	22.70
		1	99	21.24	21.48	20.93	22.70

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Receiver on+Hotspot/WIFI off(Head)							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 18607	Channel 18900	Channel 19193	Tune up
1.4MHz	QPSK	1	0	15.86	16.25	16.14	17.20
		1	2	15.92	16.20	16.46	17.20
		1	5	15.91	16.13	16.23	17.20
		3	0	15.84	16.12	16.16	17.20
		3	2	15.92	16.09	16.34	17.20
		3	3	15.79	16.03	16.23	17.20
	16QAM	6	0	15.93	16.10	16.18	17.20
		1	0	16.03	16.65	16.32	17.20
		1	2	16.14	16.33	16.80	17.20
		1	5	15.94	16.32	16.58	17.20
		3	0	16.11	16.31	16.28	17.20
		3	2	16.12	16.31	16.47	17.20
	64QAM	3	3	15.92	16.16	16.34	17.20
		6	0	15.86	16.00	16.09	17.20
		1	0	16.08	16.27	16.33	17.20
		1	2	15.79	15.99	16.28	17.20
		1	5	15.92	16.16	16.21	17.20
		3	0	15.65	16.08	15.91	17.20
3MHz	QPSK	3	2	15.82	16.28	16.37	17.20
		3	3	15.92	16.21	16.20	17.20
		6	0	15.65	16.08	15.91	17.20
	16QAM	1	0	15.87	16.14	16.19	17.20
		1	7	15.83	16.19	16.26	17.20
		1	14	15.73	16.12	16.17	17.20
	64QAM	8	0	15.84	16.10	16.21	17.20
		8	4	15.91	16.07	16.25	17.20
		8	7	15.83	16.09	16.16	17.20
	16QAM	15	0	15.82	16.13	16.18	17.20
		1	0	15.73	16.00	16.56	17.20
		1	7	16.20	16.55	16.68	17.20
		1	14	16.06	16.56	16.59	17.20
		8	0	15.92	16.35	16.23	17.20
	64QAM	8	4	16.08	16.27	16.33	17.20
		8	7	15.79	15.99	16.28	17.20
		15	0	15.92	16.16	16.21	17.20
	16QAM	1	0	15.65	16.08	15.91	17.20
		1	7	15.82	16.28	16.37	17.20
		1	14	15.92	16.21	16.20	17.20
	64QAM	8	0	15.76	16.12	16.08	17.20
		8	4	15.87	16.16	16.26	17.20
		8	7	16.08	16.65	16.42	17.20
		15	0	16.22	16.02	16.45	17.20
Bandwidth	Modulation	RB size	RB offset	Channel 18625	Channel 18900	Channel 19175	Tune up

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5MHz	QPSK	1	0	16.16	16.18	16.25	17.20
		1	13	15.92	16.13	16.26	17.20
		1	24	15.81	16.08	16.23	17.20
		12	0	15.90	16.08	16.23	17.20
		12	6	15.87	16.14	16.18	17.20
		12	13	15.79	16.07	16.13	17.20
		25	0	15.87	16.21	16.16	17.20
	16QAM	1	0	16.45	16.45	16.65	17.20
		1	13	16.23	16.24	16.45	17.20
		1	24	16.14	16.34	16.08	17.20
		12	0	15.83	16.14	16.25	17.20
		12	6	15.75	16.15	16.32	17.20
		12	13	15.91	15.97	16.18	17.20
		25	0	15.87	16.15	16.18	17.20
	64QAM	1	0	16.12	16.19	16.39	17.20
		1	13	15.64	16.21	16.10	17.20
		1	24	16.11	16.35	16.40	17.20
		12	0	15.77	16.15	16.19	17.20
		12	6	15.78	16.10	16.16	17.20
		12	13	15.89	16.12	16.16	17.20
		25	0	15.77	16.17	16.23	17.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	16.16	16.22	16.34	17.20
		1	25	16.01	16.40	16.33	17.20
		1	49	16.01	16.38	16.34	17.20
		25	0	15.77	16.05	16.19	17.20
		25	13	15.87	16.04	16.15	17.20
		25	25	15.77	16.10	16.19	17.20
		50	0	15.85	16.10	16.24	17.20
	16QAM	1	0	16.54	16.62	16.65	17.20
		1	25	16.09	16.28	16.61	17.20
		1	49	16.28	16.78	16.43	17.20
		25	0	15.86	16.10	16.27	17.20
		25	13	15.92	16.14	16.21	17.20
		25	25	15.82	16.06	16.09	17.20
		50	0	15.82	16.04	16.13	17.20
	64QAM	1	0	15.97	16.34	16.30	17.20
		1	25	15.73	16.01	16.15	17.20
		1	49	15.83	16.00	16.11	17.20
		25	0	15.73	16.06	16.15	17.20
		25	13	15.81	16.06	16.20	17.20
		25	25	16.50	16.58	16.61	17.20
		50	0	16.05	16.24	16.57	17.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18675	18900	19125	
15MHz	QPSK	1	0	16.16	16.23	16.43	17.20
		1	38	15.68	16.25	16.14	17.20
		1	74	16.15	16.39	16.44	17.20
		36	0	15.81	16.19	16.23	17.20
		36	18	15.82	16.14	16.20	17.20
		36	39	15.93	16.16	16.20	17.20

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	16QAM	75	0	15.81	16.21	16.27	17.20
		1	0	16.52	16.65	16.75	17.20
		1	38	15.63	16.38	16.39	17.20
		1	74	15.95	16.77	16.81	17.20
		36	0	15.81	16.30	16.26	17.20
		36	18	15.90	16.18	16.14	17.20
		36	39	15.90	16.08	16.22	17.20
		75	0	15.79	16.14	16.27	17.20
	64QAM	1	0	15.88	16.09	16.22	17.20
		1	38	15.77	16.04	16.19	17.20
		1	74	15.86	16.04	16.19	17.20
		36	0	15.83	16.10	16.14	17.20
		36	18	15.75	16.03	16.09	17.20
		36	39	15.83	16.17	16.12	17.20
		75	0	15.75	16.03	16.09	17.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18700	18900	19100	
20MHz	QPSK	1	0	15.99	16.42	16.24	17.20
		1	50	16.42	16.85	16.52	17.20
		1	99	15.69	16.12	15.95	17.20
		50	0	15.86	16.32	16.41	17.20
		50	25	15.96	16.25	16.24	17.20
		50	50	15.80	16.16	16.12	17.20
		100	0	15.91	16.20	16.30	17.20
	16QAM	1	0	16.12	16.69	16.46	17.20
		1	50	16.26	16.84	16.72	17.20
		1	99	15.66	16.82	16.15	17.20
		50	0	15.88	16.16	16.26	17.20
		50	25	15.95	16.37	16.26	17.20
		50	50	15.91	15.98	16.07	17.20
		100	0	15.80	16.12	16.19	17.20
	64QAM	1	0	15.83	16.10	16.15	17.20
		1	50	15.79	16.15	16.22	17.20
		1	99	15.69	16.08	16.13	17.20
		50	0	15.80	16.06	16.17	17.20
		50	25	15.87	16.03	16.21	17.20
		50	50	15.79	16.05	16.12	17.20
		100	0	15.78	16.09	16.14	17.20

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Receiver on+Hotspot/WIFI on(Head)							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	14.88	14.90	15.07	16.20
		1	2	14.81	15.19	15.10	16.20
		1	5	14.78	14.87	15.11	16.20
		3	0	14.95	15.21	15.07	16.20
		3	2	14.85	15.17	15.12	16.20
		3	3	14.89	15.05	15.11	16.20
		6	0	14.91	15.03	15.15	16.20
	16QAM	1	0	15.14	14.99	15.22	16.20
		1	2	15.14	15.00	15.51	16.20
		1	5	15.03	14.69	15.32	16.20
		3	0	14.91	15.06	15.16	16.20
		3	2	15.15	15.28	15.29	16.20
		3	3	14.79	14.98	14.98	16.20
		6	0	15.01	15.05	15.18	16.20
	64QAM	1	0	15.11	15.32	15.20	16.20
		1	2	15.00	15.09	15.33	16.20
		1	5	15.02	15.02	15.12	16.20
		3	0	14.88	15.31	15.18	16.20
		3	2	15.12	15.39	15.41	16.20
		3	3	14.90	15.21	15.21	16.20
		6	0	14.88	15.31	15.18	16.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	14.86	15.17	15.25	16.20
		1	7	15.11	15.24	15.21	16.20
		1	14	14.90	15.03	15.07	16.20
		8	0	14.92	15.15	15.18	16.20
		8	4	14.98	15.10	15.23	16.20
		8	7	14.88	15.12	15.14	16.20
		15	0	14.90	15.09	15.16	16.20
	16QAM	1	0	15.23	15.14	15.60	16.20
		1	7	15.33	15.64	15.49	16.20
		1	14	15.18	15.18	15.41	16.20
		8	0	14.88	15.27	15.15	16.20
		8	4	15.11	15.32	15.20	16.20
		8	7	15.00	15.09	15.33	16.20
		15	0	15.02	15.02	15.12	16.20
	64QAM	1	0	14.88	15.31	15.18	16.20
		1	7	15.12	15.39	15.41	16.20
		1	14	14.90	15.21	15.21	16.20
		8	0	14.84	15.18	15.19	16.20

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		8	4	14.87	15.12	15.19	16.20
		8	7	14.92	15.25	15.26	16.20
		15	0	15.25	15.30	15.60	16.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18625	18900	19175	
5MHz	QPSK	1	0	15.25	15.07	14.81	16.20
		1	13	15.17	15.03	14.84	16.20
		1	24	15.31	15.06	14.81	16.20
		12	0	15.35	15.11	14.89	16.20
		12	6	15.44	15.06	14.79	16.20
		12	13	15.37	15.01	14.83	16.20
		25	0	15.45	15.10	14.81	16.20
	16QAM	1	0	15.65	15.43	14.82	16.20
		1	13	15.46	15.27	14.76	16.20
		1	24	15.72	15.46	15.08	16.20
		12	0	15.44	15.19	14.87	16.20
		12	6	15.48	15.14	14.95	16.20
		12	13	15.45	15.00	14.85	16.20
		25	0	15.38	15.19	14.81	16.20
	64QAM	1	0	14.97	15.10	15.24	16.20
		1	13	15.03	15.33	15.27	16.20
		1	24	14.92	15.04	15.23	16.20
		12	0	14.84	15.10	15.19	16.20
		12	6	14.85	15.15	15.13	16.20
		12	13	14.91	15.11	15.18	16.20
		25	0	15.38	15.10	15.64	16.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	15.03	15.36	15.27	16.20
		1	25	15.01	15.14	15.28	16.20
		1	49	15.07	15.37	15.31	16.20
		25	0	14.96	15.08	15.27	16.20
		25	13	14.88	15.14	15.23	16.20
		25	25	14.89	15.19	15.17	16.20
		50	0	14.95	15.15	15.22	16.20
	16QAM	1	0	15.42	15.14	15.68	16.20
		1	25	14.96	15.51	15.61	16.20
		1	49	15.42	15.32	15.57	16.20
		25	0	14.95	15.15	15.31	16.20
		25	13	14.91	15.15	15.25	16.20
		25	25	14.84	15.15	15.32	16.20
		50	0	14.81	15.11	15.13	16.20
	64QAM	1	0	15.27	15.02	14.77	16.20
		1	25	15.31	15.07	14.85	16.20
		1	49	15.40	15.02	14.75	16.20
		25	0	15.33	14.97	14.79	16.20
		25	13	15.41	15.06	14.77	16.20

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		25	25	15.61	15.39	14.78	16.20
		50	0	15.33	14.97	14.79	16.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18675	18900	19125	
15MHz	QPSK	1	0	15.14	15.27	15.43	16.20
		1	38	14.92	15.35	15.22	16.20
		1	74	15.16	15.43	15.45	16.20
		36	0	14.94	15.25	15.25	16.20
		36	18	14.88	15.22	15.23	16.20
		36	39	14.91	15.16	15.23	16.20
		75	0	14.96	15.29	15.30	16.20
	16QAM	1	0	15.29	15.34	15.64	16.20
		1	38	15.25	15.65	15.47	16.20
		1	74	15.32	15.82	15.82	16.20
		36	0	14.94	15.11	15.39	16.20
		36	18	14.85	15.15	15.29	16.20
		36	39	14.90	15.22	15.31	16.20
		75	0	14.76	15.16	15.29	16.20
	64QAM	1	0	14.86	14.99	15.03	16.20
		1	38	14.88	15.11	15.14	16.20
		1	74	14.94	15.06	15.19	16.20
		36	0	14.84	15.08	15.10	16.20
		36	18	14.86	15.05	15.12	16.20
		36	39	15.19	15.10	15.56	16.20
		75	0	14.94	15.06	15.19	16.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18700	18900	19100	
20MHz	QPSK	1	0	15.04	15.66	15.32	16.20
		1	50	14.83	15.44	15.25	16.20
		1	99	14.81	15.32	15.16	16.20
		50	0	14.87	15.32	15.66	16.20
		50	25	14.91	15.23	15.21	16.20
		50	50	14.85	15.17	15.18	16.20
		100	0	14.85	15.18	15.26	16.20
	16QAM	1	0	15.32	15.52	15.64	16.20
		1	50	15.04	15.61	15.65	16.20
		1	99	15.11	15.23	15.52	16.20
		50	0	14.85	15.18	15.50	16.20
		50	25	15.03	15.10	15.28	16.20
		50	50	14.92	15.11	15.08	16.20
		100	0	14.84	15.31	15.14	16.20
	64QAM	1	0	14.74	14.83	15.07	16.20
		1	50	14.91	15.17	15.03	16.20
		1	99	14.81	15.13	15.08	16.20
		50	0	14.85	15.01	15.07	16.20
		50	25	14.87	14.99	15.11	16.20
		50	50	15.10	14.95	15.18	16.20

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		100	0	15.10	14.96	15.47	16.20
Receiver off+Sensor on+Hotspot/WIFI off(Body)							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	19.83	19.81	20.06	21.20
		1	2	19.85	19.89	20.12	21.20
		1	5	19.85	19.97	20.10	21.20
		3	0	19.78	20.04	20.06	21.20
		3	2	19.89	20.08	20.09	21.20
		3	3	19.87	20.06	20.20	21.20
		6	0	19.76	20.02	20.19	21.20
	16QAM	1	0	20.22	20.04	20.35	21.20
		1	2	19.90	20.22	20.48	21.20
		1	5	20.04	20.32	20.07	21.20
		3	0	19.92	20.26	19.97	21.20
		3	2	19.88	20.17	20.18	21.20
		3	3	19.80	20.20	20.05	21.20
		6	0	19.94	19.93	20.40	21.20
	64QAM	1	0	19.83	20.03	20.17	21.20
		1	2	19.76	20.41	20.22	21.20
		1	5	19.83	20.10	20.24	21.20
		3	0	19.85	20.29	20.16	21.20
		3	2	19.80	20.15	20.15	21.20
		3	3	19.86	20.05	20.08	21.20
		6	0	19.87	20.13	20.24	21.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	19.92	20.06	20.21	21.20
		1	7	19.81	20.12	20.17	21.20
		1	14	19.89	19.97	20.12	21.20
		8	0	19.84	20.07	20.17	21.20
		8	4	19.85	20.05	20.22	21.20
		8	7	19.86	20.05	20.17	21.20
		15	0	19.98	20.08	20.14	21.20
	16QAM	1	0	20.21	20.09	20.61	21.20
		1	7	20.22	20.07	20.16	21.20
		1	14	20.29	20.02	20.51	21.20
		8	0	19.96	20.09	20.09	21.20
		8	4	19.87	20.17	20.21	21.20
		8	7	20.00	20.25	20.07	21.20
		15	0	19.83	20.03	20.17	21.20
	64QAM	1	0	19.76	20.41	20.22	21.20
		1	7	19.83	20.10	20.24	21.20
		1	14	19.85	20.29	20.16	21.20

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		8	0	19.80	20.15	20.15	21.20
		8	4	19.83	20.07	20.20	21.20
		8	7	19.76	20.41	20.22	21.20
		15	0	19.83	20.10	20.24	21.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18625	18900	19175	
5MHz	QPSK	1	0	19.92	20.18	20.23	21.20
		1	13	19.98	20.11	20.12	21.20
		1	24	19.82	20.12	20.04	21.20
		12	0	19.84	20.09	20.30	21.20
		12	6	19.89	20.13	20.18	21.20
		12	13	19.86	20.05	20.08	21.20
		25	0	19.87	20.13	20.24	21.20
	16QAM	1	0	20.20	20.18	20.14	21.20
		1	13	20.12	20.10	20.54	21.20
		1	24	19.90	20.38	20.29	21.20
		12	0	19.88	20.12	20.32	21.20
		12	6	19.89	20.09	20.13	21.20
		12	13	19.93	19.98	20.09	21.20
		25	0	19.81	20.12	20.29	21.20
	64QAM	1	0	19.97	20.34	20.28	21.20
		1	13	19.92	20.00	20.19	21.20
		1	24	19.83	19.97	20.17	21.20
		12	0	19.76	20.12	20.24	21.20
		12	6	19.69	20.00	20.11	21.20
		12	13	19.76	20.12	20.38	21.20
		25	0	19.81	20.12	20.29	21.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	19.91	20.26	20.28	21.20
		1	25	19.75	20.22	20.43	21.20
		1	49	20.01	20.38	20.32	21.20
		25	0	19.96	20.04	20.23	21.20
		25	13	19.87	20.01	20.21	21.20
		25	25	19.80	20.16	20.28	21.20
		50	0	19.73	20.04	20.15	21.20
	16QAM	1	0	20.02	20.65	20.42	21.20
		1	25	20.12	20.49	20.81	21.20
		1	49	20.41	20.78	20.43	21.20
		25	0	19.82	20.18	20.12	21.20
		25	13	19.82	20.09	20.21	21.20
		25	25	19.65	20.12	20.17	21.20
		50	0	19.96	19.98	20.14	21.20
	64QAM	1	0	20.25	19.98	20.47	21.20
		1	25	19.78	20.08	20.00	21.20
		1	49	19.80	20.05	20.26	21.20
		25	0	19.85	20.09	20.14	21.20

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		25	13	19.82	20.01	20.04	21.20
		25	25	19.83	20.09	20.20	21.20
		50	0	20.16	20.14	20.10	21.20
Bandwidth	Modulation	RB size	RB offset	Channel 18675	Channel 18900	Channel 19125	Tune up
15MHz	QPSK	1	0	19.99	20.23	20.38	21.20
		1	38	19.58	20.20	20.19	21.20
		1	74	19.80	20.45	20.26	21.20
		36	0	19.87	20.14	20.28	21.20
		36	18	19.89	20.33	20.20	21.20
		36	39	19.84	20.19	20.19	21.20
		75	0	19.87	20.11	20.24	21.20
	16QAM	1	0	20.25	20.65	20.78	21.20
		1	38	19.92	20.59	20.23	21.20
		1	74	19.88	20.81	20.41	21.20
		36	0	19.76	20.23	20.22	21.20
		36	18	19.97	20.12	20.24	21.20
		36	39	19.92	20.13	20.20	21.20
		75	0	19.88	20.17	20.18	21.20
	64QAM	1	0	19.80	20.03	20.13	21.20
		1	38	19.81	20.01	20.18	21.20
		1	74	19.82	20.01	20.13	21.20
		36	0	19.94	20.04	20.10	21.20
		36	18	20.17	20.05	20.57	21.20
		36	39	20.18	20.03	20.12	21.20
		75	0	19.94	20.04	20.10	21.20
Bandwidth	Modulation	RB size	RB offset	Channel 18700	Channel 18900	Channel 19100	Tune up
20MHz	QPSK	1	0	19.90	20.32	20.42	21.20
		1	50	20.33	20.44	20.68	21.20
		1	99	19.83	20.21	20.00	21.20
		50	0	20.23	20.27	20.34	21.20
		50	25	19.95	20.26	20.20	21.20
		50	50	19.83	20.06	20.10	21.20
		100	0	19.90	20.18	20.25	21.20
	16QAM	1	0	20.27	20.67	20.49	21.20
		1	50	20.11	20.61	20.44	21.20
		1	99	20.19	20.59	19.95	21.20
		50	0	19.81	20.33	20.29	21.20
		50	25	20.03	20.21	20.25	21.20
		50	50	19.83	20.06	20.02	21.20
		100	0	19.80	20.17	20.17	21.20
	64QAM	1	0	19.85	20.04	20.05	21.20
		1	50	19.83	20.02	20.16	21.20
		1	99	19.72	19.98	20.15	21.20
		50	0	20.18	20.00	20.31	21.20
		50	25	19.86	20.18	20.44	21.20

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		50	50	20.00	20.28	20.03	21.20
		100	0	19.88	20.22	19.93	21.20

Receiver off+Sensor on+Hotspot/WIFI on(Body)							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	17.79	17.88	17.99	19.20
		1	2	17.75	18.00	18.49	19.20
		1	5	17.88	18.11	18.10	19.20
		3	0	17.93	18.16	18.14	19.20
		3	2	17.85	18.10	18.21	19.20
		3	3	17.84	18.04	18.23	19.20
		6	0	17.89	18.00	18.17	19.20
	16QAM	1	0	17.98	18.22	18.39	19.20
		1	2	18.15	18.36	18.82	19.20
		1	5	18.25	18.03	18.44	19.20
		3	0	18.02	18.27	18.32	19.20
		3	2	18.07	18.06	18.29	19.20
		3	3	18.08	18.20	18.15	19.20
		6	0	18.01	18.11	18.23	19.20
	64QAM	1	0	17.90	18.12	18.21	19.20
		1	2	17.98	18.09	18.22	19.20
		1	5	17.86	17.99	18.21	19.20
		3	0	17.91	18.03	18.15	19.20
		3	2	18.32	18.39	18.08	19.20
		3	3	17.80	18.00	18.19	19.20
		6	0	17.85	17.96	18.13	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	17.92	18.11	18.21	19.20
		1	7	18.01	18.18	18.28	19.20
		1	14	17.80	18.03	18.10	19.20
		8	0	17.90	18.12	18.21	19.20
		8	4	17.98	18.09	18.22	19.20
		8	7	17.86	17.99	18.21	19.20
		15	0	17.91	18.03	18.15	19.20
	16QAM	1	0	18.32	18.39	18.08	19.20
		1	7	18.12	18.18	18.41	19.20
		1	14	18.05	17.70	18.43	19.20
		8	0	17.92	18.22	18.35	19.20
		8	4	18.06	18.10	18.28	19.20
		8	7	17.83	18.18	18.29	19.20
		15	0	17.90	18.14	18.18	19.20
	64QAM	1	0	17.84	18.07	18.06	19.20
		1	7	17.89	18.12	18.10	19.20
		1	14	17.81	18.06	18.17	19.20
		8	0	17.80	18.00	18.19	19.20
		8	4	17.85	17.96	18.13	19.20

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		8	7	17.94	18.18	18.35	19.20
		15	0	18.01	18.18	18.28	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18625	18900	19175	
5MHz	QPSK	1	0	17.90	18.16	18.24	19.20
		1	13	17.91	17.94	18.25	19.20
		1	24	17.91	18.11	18.20	19.20
		12	0	17.86	18.19	18.31	19.20
		12	6	17.87	18.12	18.24	19.20
		12	13	17.86	18.04	18.14	19.20
		25	0	17.92	18.12	18.23	19.20
	16QAM	1	0	17.84	18.22	18.61	19.20
		1	13	18.32	18.31	18.62	19.20
		1	24	18.32	18.20	18.54	19.20
		12	0	17.87	18.21	18.36	19.20
		12	6	17.79	18.06	18.22	19.20
		12	13	17.89	18.07	18.07	19.20
		25	0	17.85	18.12	18.18	19.20
	64QAM	1	0	17.97	18.14	18.24	19.20
		1	13	17.76	17.99	18.06	19.20
		1	24	17.86	18.08	18.17	19.20
		12	0	17.94	18.05	18.18	19.20
		12	6	17.82	17.95	18.17	19.20
		12	13	17.87	17.99	18.11	19.20
		25	0	18.28	18.35	18.04	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	17.99	18.02	18.34	19.20
		1	25	17.92	18.32	18.39	19.20
		1	49	18.04	18.30	18.46	19.20
		25	0	17.93	18.06	18.26	19.20
		25	13	17.85	18.08	18.09	19.20
		25	25	17.89	18.13	18.20	19.20
		50	0	17.88	18.02	18.18	19.20
	16QAM	1	0	18.34	18.42	18.58	19.20
		1	25	18.31	18.62	18.52	19.20
		1	49	17.82	18.21	18.50	19.20
		25	0	17.95	17.98	18.36	19.20
		25	13	17.87	18.05	18.10	19.20
		25	25	17.77	18.08	18.25	19.20
		50	0	17.90	18.04	18.16	19.20
	64QAM	1	0	17.86	18.12	18.20	19.20
		1	25	17.87	17.90	18.21	19.20
		1	49	17.87	18.07	18.16	19.20
		25	0	17.82	18.15	18.27	19.20
		25	13	17.83	18.08	18.20	19.20
		25	25	17.82	18.00	18.10	19.20
		50	0	17.88	18.08	18.19	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18675	18900	19125	
15MHz	QPSK	1	0	18.16	18.23	18.37	19.20
		1	38	17.72	18.25	18.29	19.20

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Xi'an Branch

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		1	74	18.18	18.53	18.47	19.20
		36	0	17.94	18.15	18.28	19.20
		36	18	17.83	18.23	18.26	19.20
		36	39	17.99	18.22	18.25	19.20
		75	0	17.80	18.26	18.22	19.20
	16QAM	1	0	18.08	18.63	18.48	19.20
		1	38	17.91	18.65	18.56	19.20
		1	74	17.90	18.68	18.86	19.20
		36	0	17.90	18.29	18.26	19.20
		36	18	17.88	18.25	18.37	19.20
		36	39	17.89	18.14	18.23	19.20
		75	0	17.73	18.19	18.29	19.20
	64QAM	1	0	18.12	18.19	18.33	19.20
		1	38	17.68	18.21	18.25	19.20
		1	74	18.14	18.49	18.43	19.20
		36	0	17.90	18.11	18.24	19.20
		36	18	17.79	18.19	18.22	19.20
		36	39	17.95	18.18	18.21	19.20
		75	0	17.76	18.22	18.18	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18700	18900	19100	
20MHz	QPSK	1	0	18.28	18.16	18.34	19.20
		1	50	17.77	18.22	18.20	19.20
		1	99	17.92	17.93	17.95	19.20
		50	0	17.93	18.23	18.34	19.20
		50	25	17.99	18.19	18.18	19.20
		50	50	17.79	18.08	18.07	19.20
		100	0	17.86	18.19	18.15	19.20
	16QAM	1	0	18.68	18.29	18.72	19.20
		1	50	18.10	18.62	18.52	19.20
		1	99	18.23	18.32	18.13	19.20
		50	0	17.94	18.25	18.22	19.20
		50	25	18.07	18.24	18.34	19.20
		50	50	17.76	18.08	18.08	19.20
		100	0	17.76	18.17	18.24	19.20
	64QAM	1	0	18.12	18.19	18.33	19.20
		1	50	17.68	18.21	18.25	19.20
		1	99	18.14	18.49	18.43	19.20
		50	0	17.90	18.11	18.24	19.20
		50	25	17.79	18.19	18.22	19.20
		50	50	17.95	18.18	18.21	19.20
		100	0	17.76	18.22	18.18	19.20

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Receiver off+Sensor off+Hotspot/WIFI on(Body)							
LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	17.27	17.38	17.68	18.70
		1	2	17.51	17.35	17.55	18.70
		1	5	17.46	17.53	17.60	18.70
		3	0	17.30	17.43	17.60	18.70
		3	2	17.32	17.51	17.70	18.70
		3	3	17.27	17.61	17.62	18.70
		6	0	17.34	17.45	17.66	18.70
	16QAM	1	0	17.29	17.58	17.61	18.70
		1	2	17.84	17.55	17.84	18.70
		1	5	17.56	17.73	17.91	18.70
		3	0	17.24	17.68	17.68	18.70
		3	2	17.42	17.89	17.72	18.70
		3	3	17.44	17.41	17.71	18.70
		6	0	17.47	17.38	17.64	18.70
	64QAM	1	0	17.34	17.59	17.76	18.70
		1	2	17.42	17.64	17.68	18.70
		1	5	17.32	17.57	17.69	18.70
		3	0	17.41	17.56	17.65	18.70
		3	2	17.38	17.56	17.88	18.70
		3	3	17.34	17.45	17.66	18.70
		6	0	17.29	17.58	17.61	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	17.46	17.54	17.68	18.70
		1	7	17.30	17.70	17.64	18.70
		1	14	17.42	17.58	17.63	18.70
		8	0	17.34	17.58	17.70	18.70
		8	4	17.36	17.54	17.70	18.70
		8	7	17.35	17.53	17.69	18.70
		15	0	17.38	17.60	17.63	18.70
	16QAM	1	0	17.29	17.90	18.06	18.70
		1	7	17.69	17.81	18.02	18.70
		1	14	17.72	17.18	17.65	18.70
		8	0	17.33	17.68	17.63	18.70
		8	4	17.30	17.42	17.69	18.70
		8	7	17.43	17.55	17.74	18.70
		15	0	17.35	17.80	17.56	18.70
	64QAM	1	0	17.30	17.43	17.60	18.70
		1	7	17.32	17.51	17.70	18.70
		1	14	17.27	17.61	17.62	18.70
		8	0	17.34	17.45	17.66	18.70

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		8	4	17.29	17.58	17.61	18.70
		8	7	17.84	17.55	17.84	18.70
		15	0	17.35	17.80	17.56	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18625	18900	19175	
5MHz	QPSK	1	0	17.52	17.60	17.70	18.70
		1	13	17.45	17.62	17.61	18.70
		1	24	17.34	17.56	17.52	18.70
		12	0	17.34	17.59	17.76	18.70
		12	6	17.42	17.64	17.68	18.70
		12	13	17.32	17.57	17.69	18.70
		25	0	17.41	17.56	17.65	18.70
	16QAM	1	0	17.38	17.96	17.88	18.70
		1	13	17.85	18.00	17.83	18.70
		1	24	17.31	17.69	17.71	18.70
		12	0	17.47	17.56	17.75	18.70
		12	6	17.32	17.64	17.69	18.70
		12	13	17.38	17.55	17.68	18.70
		25	0	17.22	17.61	17.72	18.70
	64QAM	1	0	17.37	17.47	17.77	18.70
		1	13	17.33	17.61	17.94	18.70
		1	24	17.32	17.56	17.62	18.70
		12	0	17.30	17.54	17.58	18.70
		12	6	17.29	17.58	17.61	18.70
		12	13	17.27	17.51	17.65	18.70
		25	0	17.57	17.97	17.80	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	17.25	17.60	17.85	18.70
		1	25	17.41	17.51	17.81	18.70
		1	49	17.37	17.65	17.98	18.70
		25	0	17.36	17.60	17.66	18.70
		25	13	17.34	17.58	17.62	18.70
		25	25	17.33	17.62	17.65	18.70
		50	0	17.31	17.55	17.69	18.70
	16QAM	1	0	17.61	18.01	17.84	18.70
		1	25	17.51	17.85	18.01	18.70
		1	49	17.73	17.94	18.02	18.70
		25	0	17.35	17.57	17.74	18.70
		25	13	17.31	17.48	17.72	18.70
		25	25	17.28	17.62	17.63	18.70
		50	0	17.34	17.64	17.67	18.70
	64QAM	1	0	17.41	17.58	17.57	18.70
		1	25	17.30	17.52	17.48	18.70
		1	49	17.30	17.55	17.72	18.70
		25	0	17.38	17.60	17.64	18.70
		25	13	17.28	17.53	17.65	18.70

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		25	25	17.37	17.52	17.61	18.70
		50	0	17.48	17.56	17.66	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18675	18900	19125	
15MHz	QPSK	1	0	17.71	17.77	17.90	18.70
		1	38	17.35	17.81	17.75	18.70
		1	74	17.55	17.96	17.94	18.70
		36	0	17.42	17.63	17.78	18.70
		36	18	17.32	17.70	17.78	18.70
		36	39	17.42	17.73	17.76	18.70
		75	0	17.40	17.65	17.85	18.70
	16QAM	1	0	18.03	18.12	18.21	18.70
		1	38	17.55	18.02	18.12	18.70
		1	74	17.30	18.32	18.20	18.70
		36	0	17.48	17.72	17.77	18.70
		36	18	17.37	17.73	17.75	18.70
		36	39	17.44	17.61	17.78	18.70
		75	0	17.35	17.64	17.69	18.70
	64QAM	1	0	17.68	17.14	17.61	18.70
		1	38	17.29	17.64	17.59	18.70
		1	74	17.26	17.38	17.65	18.70
		36	0	17.39	17.51	17.70	18.70
		36	18	17.31	17.76	17.52	18.70
		36	39	17.26	17.39	17.56	18.70
		75	0	17.28	17.47	17.66	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18700	18900	19100	
20MHz	QPSK	1	0	17.66	17.71	17.84	18.70
		1	50	17.69	17.76	18.15	18.70
		1	99	17.29	17.72	17.73	18.70
		50	0	17.54	17.77	18.00	18.70
		50	25	17.44	17.63	17.85	18.70
		50	50	17.33	17.61	17.72	18.70
		100	0	17.39	17.70	17.82	18.70
	16QAM	1	0	17.91	18.01	18.12	18.70
		1	50	18.07	17.77	18.14	18.70
		1	99	17.61	18.09	17.90	18.70
		50	0	17.54	17.66	17.95	18.70
		50	25	17.62	17.72	17.86	18.70
		50	50	17.39	17.86	17.86	18.70
		100	0	17.45	17.79	17.80	18.70
	64QAM	1	0	17.31	17.77	17.71	18.70
		1	50	17.51	17.92	17.90	18.70
		1	99	17.38	17.59	17.74	18.70
		50	0	17.28	17.66	17.74	18.70
		50	25	17.38	17.69	17.72	18.70
		50	50	17.36	17.61	17.81	18.70

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		100	0	17.51	17.92	17.90	18.70
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Full Power							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19957	20175	20393	
1.4MHz	QPSK	1	0	22.27	21.75	21.64	23.70
		1	2	22.14	21.84	21.83	23.70
		1	5	22.19	21.72	21.69	23.70
		3	0	22.19	21.84	21.56	23.70
		3	2	22.32	21.70	21.70	23.70
		3	3	22.29	21.74	21.65	23.70
		6	0	21.22	20.75	20.45	22.70
	16QAM	1	0	21.38	21.21	21.08	22.70
		1	2	21.36	21.38	20.82	22.70
		1	5	21.52	21.13	20.82	22.70
		3	0	21.08	20.81	20.75	22.70
		3	2	21.23	20.69	20.59	22.70
		3	3	21.26	20.83	20.59	22.70
		6	0	20.41	20.00	19.88	21.70
	64QAM	1	0	20.53	20.36	20.23	21.70
		1	2	20.51	20.53	19.97	21.70
		1	5	20.67	20.28	19.97	21.70
		3	0	20.23	19.96	19.90	21.70
		3	2	20.38	19.84	19.74	21.70
		3	3	20.41	19.98	19.74	21.70
		6	0	19.56	19.15	19.03	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19965	20175	20385	
3MHz	QPSK	1	0	22.26	21.86	21.78	23.70
		1	7	21.99	21.62	21.45	23.70
		1	14	21.91	21.86	21.62	23.70
		8	0	20.99	20.85	20.74	22.70
		8	4	21.07	20.88	20.61	22.70
		8	7	21.06	20.70	20.64	22.70
		15	0	21.05	20.83	20.60	22.70
	16QAM	1	0	21.16	21.08	20.68	22.70
		1	7	21.19	20.94	20.95	22.70
		1	14	21.01	21.07	20.94	22.70
		8	0	20.10	19.89	19.61	21.70
		8	4	20.11	19.81	19.49	21.70
		8	7	20.22	19.63	19.69	21.70
		15	0	20.19	19.84	19.73	21.70
	64QAM	1	0	20.40	20.09	20.54	21.70
		1	7	20.30	20.21	20.32	21.70
		1	14	20.29	20.63	20.08	21.70
		8	0	19.06	19.16	18.94	20.70
		8	4	19.02	19.00	18.86	20.70
		8	7	18.94	19.01	18.99	20.70

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Bandwidth	Modulation	15 RB size	0 RB offset	19.14 Channel 19975	18.90 Channel 20175	18.90 Channel 20375	20.70 Tune up
5MHz	QPSK	1	0	22.37	22.03	21.76	23.70
		1	13	22.03	21.76	21.73	23.70
		1	24	21.93	21.81	21.51	23.70
		12	0	21.07	20.79	20.86	22.70
		12	6	20.92	20.77	20.62	22.70
		12	13	20.93	20.69	20.61	22.70
		25	0	20.99	20.80	20.70	22.70
	16QAM	1	0	21.35	20.94	21.39	22.70
		1	13	21.25	21.06	21.17	22.70
		1	24	21.24	21.48	20.93	22.70
		12	0	20.01	20.01	19.79	21.70
		12	6	19.97	19.85	19.71	21.70
		12	13	19.89	19.86	19.84	21.70
		25	0	20.09	19.75	19.75	21.70
	64QAM	1	0	20.31	20.23	19.83	21.70
		1	13	20.34	20.09	20.10	21.70
		1	24	20.16	20.22	20.09	21.70
		12	0	19.25	19.04	18.76	20.70
		12	6	19.26	18.96	18.64	20.70
		12	13	19.37	18.78	18.84	20.70
		25	0	19.34	18.99	18.88	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 20000	Channel 20175	Channel 20350	Tune up
10MHz	QPSK	1	0	22.37	22.03	21.76	23.70
		1	25	22.03	21.76	21.73	23.70
		1	49	21.93	21.81	21.51	23.70
		25	0	21.07	20.79	20.86	22.70
		25	13	20.92	20.77	20.62	22.70
		25	25	20.93	20.69	20.61	22.70
		50	0	20.99	20.80	20.70	22.70
	16QAM	1	0	21.35	20.94	21.39	22.70
		1	25	21.25	21.06	21.17	22.70
		1	49	21.24	21.48	20.93	22.70
		25	0	20.01	20.01	19.79	21.70
		25	13	19.97	19.85	19.71	21.70
		25	25	19.89	19.86	19.84	21.70
		50	0	20.09	19.75	19.75	21.70
	64QAM	1	0	20.50	20.09	20.54	21.70
		1	25	20.40	20.21	20.32	21.70
		1	49	20.39	20.63	20.08	21.70
		25	0	19.16	19.16	18.94	20.70
		25	13	19.12	19.00	18.86	20.70
		25	25	19.04	19.01	18.99	20.70
		50	0	19.24	18.90	18.90	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 20025	Channel 20175	Channel 20325	Tune up
15MHz	QPSK	1	0	22.37	22.03	21.76	23.70
		1	38	22.03	21.76	21.73	23.70
		1	74	21.93	21.81	21.51	23.70

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		36	0	21.07	20.79	20.86	22.70
		36	18	20.92	20.77	20.62	22.70
		36	39	20.93	20.69	20.61	22.70
		75	0	20.99	20.80	20.70	22.70
	16QAM	1	0	21.35	20.94	21.39	22.70
		1	38	21.25	21.06	21.17	22.70
		1	74	21.24	21.48	20.93	22.70
		36	0	20.01	20.01	19.79	21.70
		36	18	19.97	19.85	19.71	21.70
		36	39	19.89	19.86	19.84	21.70
		75	0	20.09	19.75	19.75	21.70
	64QAM	1	0	20.50	20.09	20.54	21.70
		1	38	20.40	20.21	20.32	21.70
		1	74	20.39	20.63	20.08	21.70
		36	0	19.16	19.16	18.94	20.70
		36	18	19.12	19.00	18.86	20.70
		36	39	19.04	19.01	18.99	20.70
		75	0	19.24	18.90	18.90	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	22.38	22.03	21.76	23.70
		1	50	21.93	21.76	21.73	23.70
		1	99	21.83	21.81	21.71	23.70
		50	0	20.97	20.99	20.86	22.70
		50	25	20.82	20.77	20.72	22.70
		50	50	20.83	20.79	20.71	22.70
		100	0	20.89	20.80	20.70	22.70
	16QAM	1	0	21.25	20.94	21.39	22.70
		1	50	21.15	21.06	21.17	22.70
		1	99	21.14	21.48	20.93	22.70
		50	0	19.91	20.01	19.79	21.70
		50	25	19.87	19.85	19.71	21.70
		50	50	19.79	19.86	19.84	21.70
		100	0	19.99	19.75	19.75	21.70
	64QAM	1	0	20.50	20.09	20.54	21.70
		1	50	20.40	20.21	20.32	21.70
		1	99	20.39	20.63	20.08	21.70
		50	0	19.16	19.16	18.94	20.70
		50	25	19.12	19.00	18.86	20.70
		50	50	19.04	19.01	18.99	20.70
		100	0	19.24	18.90	18.90	20.70

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Receiver on+Hotspot/WIFI off(Head)							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19957	20175	20393	
1.4MHz	QPSK	1	0	16.06	15.64	15.87	17.70
		1	2	16.13	15.74	15.86	17.70
		1	5	15.93	15.59	15.55	17.70
		3	0	16.10	15.68	15.66	17.70
		3	2	16.07	15.65	15.76	17.70
		3	3	16.21	15.58	15.75	17.70
		6	0	15.96	15.59	15.52	17.70
	16QAM	1	0	16.19	15.85	15.70	17.70
		1	2	16.20	16.11	15.81	17.70
		1	5	16.22	15.80	15.54	17.70
		3	0	16.11	15.70	15.68	17.70
		3	2	16.16	15.66	15.76	17.70
		3	3	16.10	15.70	15.62	17.70
		6	0	15.79	15.67	15.76	17.70
	64QAM	1	0	16.09	15.78	15.87	17.70
		1	2	15.90	15.56	15.52	17.70
		1	5	16.09	15.78	15.87	17.70
		3	0	16.07	15.57	15.72	17.70
		3	2	15.96	15.59	15.52	17.70
		3	3	15.88	15.47	15.59	17.70
		6	0	16.04	15.87	15.72	17.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19965	20175	20385	
3MHz	QPSK	1	0	16.02	15.61	15.85	17.70
		1	7	16.18	15.76	15.82	17.70
		1	14	15.89	15.62	15.59	17.70
		8	0	16.12	15.68	15.61	17.70
		8	4	16.12	15.64	15.78	17.70
		8	7	16.17	15.54	15.70	17.70
		15	0	15.97	15.56	15.52	17.70
	16QAM	1	0	16.20	15.81	15.74	17.70
		1	7	16.25	16.11	15.78	17.70
		1	14	16.27	15.83	15.54	17.70
		8	0	16.15	15.66	15.70	17.70
		8	4	16.16	15.64	15.80	17.70
		8	7	16.14	15.67	15.60	17.70
		15	0	15.81	15.71	15.79	17.70
	64QAM	1	0	16.09	15.60	15.74	17.70
		1	7	16.13	15.74	15.68	17.70
		1	14	15.95	15.58	15.59	17.70
		8	0	15.98	15.60	15.55	17.70
		8	4	16.14	15.56	15.69	17.70
		8	7	16.09	15.54	15.63	17.70
		15	0	15.89	15.51	15.48	17.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19975	20175	20375	

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5MHz	QPSK	1	0	16.05	15.66	15.83	17.70
		1	13	16.18	15.77	15.78	17.70
		1	24	15.94	15.61	15.59	17.70
		12	0	16.10	15.65	15.58	17.70
		12	6	16.17	15.61	15.81	17.70
		12	13	16.15	15.52	15.69	17.70
		25	0	15.93	15.56	15.54	17.70
	16QAM	1	0	16.16	15.78	15.76	17.70
		1	13	16.25	16.10	15.74	17.70
		1	24	16.27	15.82	15.49	17.70
		12	0	16.12	15.65	15.67	17.70
		12	6	16.20	15.67	15.76	17.70
		12	13	16.10	15.64	15.59	17.70
		25	0	15.78	15.68	15.77	17.70
	64QAM	1	0	16.04	15.62	15.79	17.70
		1	13	16.11	15.76	15.72	17.70
		1	24	15.91	15.53	15.54	17.70
		12	0	16.03	15.61	15.58	17.70
		12	6	16.10	15.54	15.73	17.70
		12	13	16.07	15.49	15.65	17.70
		25	0	15.85	15.47	15.49	17.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20000	20175	20350	
10MHz	QPSK	1	0	16.08	15.66	15.83	17.70
		1	25	16.15	15.80	15.76	17.70
		1	49	15.95	15.57	15.58	17.70
		25	0	16.07	15.65	15.62	17.70
		25	13	16.14	15.58	15.77	17.70
		25	25	16.11	15.53	15.69	17.70
		50	0	15.89	15.51	15.53	17.70
	16QAM	1	0	16.20	15.77	15.75	17.70
		1	25	16.20	16.06	15.69	17.70
		1	49	16.31	15.82	15.50	17.70
		25	0	16.09	15.68	15.67	17.70
		25	13	16.16	15.64	15.78	17.70
		25	25	16.05	15.69	15.60	17.70
		50	0	15.83	15.71	15.72	17.70
	64QAM	1	0	16.01	15.62	15.79	17.70
		1	25	16.14	15.73	15.74	17.70
		1	49	15.90	15.57	15.55	17.70
		25	0	16.06	15.61	15.54	17.70
		25	13	16.13	15.57	15.77	17.70
		25	25	16.11	15.48	15.65	17.70
		50	0	15.89	15.52	15.50	17.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20025	20175	20325	
15MHz	QPSK	1	0	16.13	15.64	15.78	17.70
		1	38	16.17	15.78	15.72	17.70
		1	74	15.99	15.62	15.63	17.70
		36	0	16.02	15.64	15.59	17.70
		36	18	16.18	15.60	15.73	17.70
		36	39	16.13	15.58	15.67	17.70

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Xi'an Branch

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	16QAM	75	0	15.93	15.55	15.52	17.70
		1	0	16.20	15.78	15.71	17.70
		1	38	16.24	16.03	15.74	17.70
		1	74	16.27	15.84	15.47	17.70
		36	0	16.05	15.66	15.72	17.70
		36	18	16.20	15.59	15.78	17.70
		36	39	16.03	15.65	15.58	17.70
		75	0	15.86	15.74	15.70	17.70
	64QAM	1	0	15.98	15.57	15.81	17.70
		1	38	16.14	15.72	15.78	17.70
		1	74	15.85	15.58	15.55	17.70
		36	0	16.08	15.64	15.57	17.70
		36	18	16.08	15.60	15.74	17.70
		36	39	16.13	15.50	15.66	17.70
		75	0	15.93	15.52	15.48	17.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	16.35	15.72	15.99	17.70
		1	50	16.13	15.82	15.91	17.70
		1	99	15.94	15.71	15.76	17.70
		50	0	16.39	15.72	15.74	17.70
		50	25	16.11	15.71	15.76	17.70
		50	50	16.30	15.73	15.85	17.70
		100	0	15.92	15.71	15.73	17.70
	16QAM	1	0	16.08	15.91	15.76	17.70
		1	50	16.19	15.99	15.81	17.70
		1	99	16.14	15.81	15.77	17.70
		50	0	16.10	15.78	15.81	17.70
		50	25	16.14	15.78	15.72	17.70
		50	50	16.15	15.81	15.75	17.70
		100	0	15.79	15.80	15.73	17.70
	64QAM	1	0	16.09	15.70	15.82	17.70
		1	50	15.89	15.75	15.71	17.70
		1	99	16.06	15.74	15.72	17.70
		50	0	16.03	15.71	15.72	17.70
		50	25	16.17	15.74	15.71	17.70
		50	50	15.92	15.75	15.78	17.70
		100	0	16.15	15.81	15.76	17.70

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Receiver on+Hotspot/WIFI on(Head)							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19957	20175	20393	
1.4MHz	QPSK	1	0	15.34	15.13	15.31	16.70
		1	2	15.46	15.09	15.04	16.70
		1	5	15.34	15.14	15.17	16.70
		3	0	15.42	15.03	15.33	16.70
		3	2	15.35	15.20	15.17	16.70
		3	3	15.37	15.07	15.08	16.70
		6	0	15.44	15.15	15.03	16.70
	16QAM	1	0	15.35	15.13	15.39	16.70
		1	2	15.35	15.23	15.18	16.70
		1	5	15.41	15.25	15.22	16.70
		3	0	15.35	15.28	15.22	16.70
		3	2	15.41	15.42	15.30	16.70
		3	3	15.33	15.35	15.31	16.70
		6	0	15.38	15.12	15.17	16.70
	64QAM	1	0	15.24	15.11	15.08	16.70
		1	2	15.12	15.02	14.91	16.70
		1	5	15.00	15.07	14.99	16.70
		3	0	15.13	15.09	15.08	16.70
		3	2	15.31	15.31	15.37	16.70
		3	3	15.45	15.09	15.32	16.70
		6	0	15.29	15.37	15.32	16.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19965	20175	20385	
3MHz	QPSK	1	0	15.37	15.39	15.34	16.70
		1	7	15.35	15.23	15.30	16.70
		1	14	15.03	15.20	15.05	16.70
		8	0	15.21	15.19	15.18	16.70
		8	4	15.24	15.26	15.08	16.70
		8	7	15.28	15.11	15.15	16.70
		15	0	15.19	15.20	15.14	16.70
	16QAM	1	0	15.35	15.35	15.33	16.70
		1	7	15.35	15.25	15.24	16.70
		1	14	15.35	15.32	15.27	16.70
		8	0	15.33	15.38	15.24	16.70
		8	4	15.32	15.34	15.09	16.70
		8	7	15.27	15.06	15.10	16.70
		15	0	15.36	15.12	15.23	16.70
	64QAM	1	0	15.35	15.35	15.33	16.70
		1	7	15.35	15.25	15.27	16.70
		1	14	15.37	15.12	15.24	16.70
		8	0	15.40	15.37	15.09	16.70

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		8	4	15.39	15.40	15.10	16.70
		8	7	15.40	15.37	15.23	16.70
		15	0	15.41	15.37	15.33	16.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19975	20175	20375	
5MHz	QPSK	1	0	15.47	15.12	15.41	16.70
		1	13	15.13	15.25	15.31	16.70
		1	24	15.17	15.19	15.09	16.70
		12	0	15.29	15.21	15.29	16.70
		12	6	15.21	15.20	15.17	16.70
		12	13	15.13	15.17	15.17	16.70
		25	0	15.15	15.23	15.18	16.70
	16QAM	1	0	15.45	15.45	15.33	16.70
		1	13	15.39	15.34	15.36	16.70
		1	24	15.24	15.43	15.21	16.70
		12	0	15.31	15.27	15.30	16.70
		12	6	15.18	15.25	15.22	16.70
		12	13	15.19	15.32	15.29	16.70
		25	0	15.41	15.36	15.06	16.70
	64QAM	1	0	15.31	15.27	15.30	16.70
		1	13	15.34	15.17	15.03	16.70
		1	24	15.41	15.14	15.16	16.70
		12	0	15.15	15.23	15.16	16.70
		12	6	15.38	14.97	15.29	16.70
		12	13	15.37	14.84	15.46	16.70
		25	0	15.18	15.21	14.88	16.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20000	20175	20350	
10MHz	QPSK	1	0	15.45	15.55	15.41	16.70
		1	25	15.44	15.24	15.32	16.70
		1	49	15.58	15.47	15.48	16.70
		25	0	15.32	15.27	15.24	16.70
		25	13	15.57	15.21	15.30	16.70
		25	25	15.38	15.21	15.07	16.70
		50	0	15.45	15.18	15.20	16.70
	16QAM	1	0	15.51	15.51	15.52	16.70
		1	25	15.42	15.01	15.33	16.70
		1	49	15.41	14.88	15.50	16.70
		25	0	15.22	15.25	14.92	16.70
		25	13	15.10	15.23	14.83	16.70
		25	25	15.12	15.45	14.84	16.70
		50	0	15.16	15.35	14.92	16.70
	64QAM	1	0	15.29	15.34	15.20	16.70
		1	25	15.13	15.15	15.05	16.70
		1	49	15.25	15.17	15.25	16.70
		25	0	15.17	15.16	15.13	16.70
		25	13	15.09	15.13	15.13	16.70
		25	25	15.09	15.13	15.13	16.70

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		25	25	15.11	15.19	15.14	16.70
		50	0	15.41	15.41	15.29	16.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20025	20175	20325	
15MHz	QPSK	1	0	15.45	15.42	15.41	16.70
		1	38	15.55	15.41	15.44	16.70
		1	74	15.45	15.35	15.35	16.70
		36	0	15.54	15.45	15.45	16.70
		36	18	15.42	15.51	15.44	16.70
		36	39	15.41	15.48	15.51	16.70
		75	0	15.44	15.41	15.51	16.70
	16QAM	1	0	15.43	15.44	15.31	16.70
		1	38	15.53	15.35	15.24	16.70
		1	74	15.45	15.41	15.37	16.70
		36	0	15.12	15.20	15.13	16.70
		36	18	15.30	15.07	15.03	16.70
		36	39	15.20	15.03	15.16	16.70
		75	0	15.19	15.05	14.94	16.70
	64QAM	1	0	15.17	15.15	15.14	16.70
		1	38	15.20	15.22	15.04	16.70
		1	74	15.24	15.07	15.11	16.70
		36	0	15.15	15.16	15.10	16.70
		36	18	15.31	15.31	15.29	16.70
		36	39	15.31	15.21	15.20	16.70
		75	0	15.31	15.28	15.23	16.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	15.59	15.52	15.32	16.70
		1	50	15.15	15.15	15.19	16.70
		1	99	15.27	15.51	15.12	16.70
		50	0	15.28	15.15	15.12	16.70
		50	25	15.16	15.06	14.95	16.70
		50	50	15.04	15.11	15.03	16.70
		100	0	15.17	15.13	15.12	16.70
	16QAM	1	0	15.35	15.35	15.41	16.70
		1	50	15.49	15.13	15.36	16.70
		1	99	15.33	15.41	15.36	16.70
		50	0	15.24	15.17	15.05	16.70
		50	25	15.31	15.11	14.95	16.70
		50	50	15.02	15.09	14.99	16.70
		100	0	15.20	15.11	15.14	16.70
	64QAM	1	0	15.30	15.10	15.13	16.70
		1	50	15.31	15.09	15.35	16.70
		1	99	15.31	15.19	15.14	16.70
		50	0	15.37	15.21	15.18	16.70
		50	25	15.31	15.24	15.18	16.70
		50	50	15.37	15.38	15.26	16.70

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		100	0	15.31	15.19	15.14	16.70
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Receiver off+Sensor on+Hotspot/WIFI off(Body)							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 19957	Channel 20175	Channel 20393	Tune up
1.4MHz	QPSK	1	0	19.74	19.22	19.33	21.20
		1	2	19.33	19.18	19.38	21.20
		1	5	19.49	19.15	19.08	21.20
		3	0	19.62	19.32	19.10	21.20
		3	2	19.71	19.21	19.16	21.20
		3	3	19.45	19.14	19.14	21.20
		6	0	19.60	19.17	19.22	21.20
	16QAM	1	0	19.67	19.11	19.72	21.20
		1	2	19.69	19.48	19.22	21.20
		1	5	19.45	19.54	19.09	21.20
		3	0	19.52	19.29	19.43	21.20
		3	2	19.34	19.28	19.30	21.20
		3	3	19.49	19.26	19.30	21.20
		6	0	19.09	19.07	19.00	21.20
	64QAM	1	0	19.48	19.46	19.38	21.20
		1	2	19.55	19.59	19.44	21.20
		1	5	19.56	19.59	19.59	21.20
		3	0	19.61	19.40	19.57	21.20
		3	2	19.41	19.61	19.62	21.20
		3	3	19.61	19.41	19.55	21.20
		6	0	19.29	19.41	19.06	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 19965	Channel 20175	Channel 20385	Tune up
3MHz	QPSK	1	0	19.72	19.28	19.39	21.20
		1	7	19.45	19.30	19.07	21.20
		1	14	19.38	19.14	19.02	21.20
		8	0	19.61	19.22	19.20	21.20
		8	4	19.52	19.22	19.13	21.20
		8	7	19.55	19.13	19.15	21.20
		15	0	19.62	19.26	19.16	21.20
	16QAM	1	0	19.56	19.57	19.56	21.20
		1	7	19.66	19.45	19.45	21.20
		1	14	19.59	19.52	19.45	21.20
		8	0	19.34	19.00	18.98	21.20
		8	4	19.34	18.99	19.01	21.20
		8	7	19.31	19.10	19.08	21.20
		15	0	19.31	18.98	19.05	21.20
	64QAM	1	0	19.48	19.60	19.40	21.20
		1	7	19.62	19.52	19.37	21.20
		1	14	19.50	19.47	19.38	21.20
		8	0	19.59	19.53	19.31	20.70
		8	4	19.61	19.70	19.62	20.70
		8	7	19.45	19.66	19.65	20.70

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Bandwidth	Modulation	15 RB size	0 RB offset	19.63 Channel 19975	19.41 Channel 20175	19.60 Channel 20375	20.70 Tune up
5MHz	QPSK	1	0	19.85	19.50	19.43	21.20
		1	13	19.48	19.17	19.26	21.20
		1	24	19.35	19.13	19.13	21.20
		12	0	19.62	19.34	19.32	21.20
		12	6	19.50	19.18	19.21	21.20
		12	13	19.43	19.15	19.30	21.20
		25	0	19.54	19.29	19.17	21.20
	16QAM	1	0	19.65	19.36	19.41	21.20
		1	13	19.65	19.49	19.49	21.20
		1	24	19.67	19.46	19.47	21.20
		12	0	19.40	19.01	19.07	21.20
		12	6	19.25	19.01	19.05	21.20
		12	13	19.20	19.05	19.01	21.20
		25	0	19.09	19.03	18.99	21.20
	64QAM	1	0	19.44	19.26	19.26	21.20
		1	13	19.41	19.15	19.31	21.20
		1	24	19.50	19.23	19.13	21.20
		12	0	19.41	19.61	19.41	20.70
		12	6	19.62	19.34	19.45	20.70
		12	13	19.41	19.61	19.21	20.70
		25	0	19.21	19.01	18.96	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 20000	Channel 20175	Channel 20350	Tune up
10MHz	QPSK	1	0	19.79	19.65	19.46	21.20
		1	25	19.49	19.13	19.24	21.20
		1	49	19.80	19.41	19.49	21.20
		25	0	19.55	19.22	19.28	21.20
		25	13	19.48	19.30	19.30	21.20
		25	25	19.45	19.19	19.35	21.20
		50	0	19.54	19.27	19.17	21.20
	16QAM	1	0	19.45	19.65	19.45	21.20
		1	25	19.66	19.38	19.49	21.20
		1	49	19.45	19.65	19.25	21.20
		25	0	19.25	19.05	19.00	21.20
		25	13	19.21	19.06	18.97	21.20
		25	25	19.26	19.07	19.10	21.20
		50	0	19.22	19.00	19.12	21.20
	64QAM	1	0	19.58	19.30	19.28	21.20
		1	25	19.46	19.14	19.17	21.20
		1	49	19.39	19.11	19.26	21.20
		25	0	19.50	19.25	19.13	20.70
		25	13	19.61	19.32	19.37	20.70
		25	25	19.61	19.45	19.45	20.70
		50	0	19.63	19.42	19.43	20.70
Bandwidth	Modulation	RB size	RB offset	Channel 20025	Channel 20175	Channel 20325	Tune up
15MHz	QPSK	1	0	19.78	19.80	19.61	21.20
		1	38	19.46	19.44	19.39	21.20
		1	74	19.76	19.84	19.63	21.20

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		36	0	19.52	19.64	19.44	21.20
		36	18	19.66	19.56	19.41	21.20
		36	39	19.54	19.51	19.42	21.20
		75	0	19.63	19.57	19.35	21.20
	16QAM	1	0	19.65	19.74	19.66	21.20
		1	38	19.81	19.70	19.78	21.20
		1	74	19.67	19.45	19.64	21.20
		36	0	19.33	19.30	19.13	21.20
		36	18	19.27	19.17	19.08	21.20
		36	39	19.25	19.20	19.06	21.20
		75	0	19.34	19.23	19.15	21.20
	64QAM	1	0	19.34	19.10	18.98	21.20
		1	38	19.57	19.18	19.16	21.20
		1	74	19.48	19.18	19.09	21.20
		36	0	19.51	19.09	19.11	20.70
		36	18	19.58	19.22	19.12	20.70
		36	39	19.52	19.53	19.52	20.70
		75	0	19.62	19.41	19.41	20.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	19.78	19.79	19.63	21.20
		1	50	19.62	19.66	19.45	21.20
		1	99	19.72	19.86	19.60	21.20
		50	0	19.63	19.75	19.46	21.20
		50	25	19.52	19.50	19.42	21.20
		50	50	19.59	19.63	19.48	21.20
		100	0	19.60	19.63	19.63	21.20
	16QAM	1	0	19.65	19.44	19.61	21.20
		1	50	19.45	19.65	19.66	21.20
		1	99	19.65	19.45	19.59	21.20
		50	0	19.33	19.45	19.21	21.20
		50	25	19.24	19.32	19.24	21.20
		50	50	19.37	19.35	19.35	21.20
		100	0	19.32	19.28	19.21	21.20
	64QAM	1	0	19.58	19.28	19.26	21.20
		1	50	19.67	19.27	19.22	21.20
		1	99	19.41	19.25	19.23	21.20
		50	0	19.56	19.13	19.18	20.70
		50	25	19.63	19.07	19.68	20.70
		50	50	19.65	19.44	19.18	20.70
		100	0	19.41	19.50	19.05	20.70

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Receiver off+Sensor on+Hotspot/WIFI on(Body)							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 19957	Channel 20175	Channel 20393	Tune up
1.4MHz	QPSK	1	0	17.57	17.15	17.43	19.20
		1	2	17.71	17.15	17.36	19.20
		1	5	17.42	17.15	16.99	19.20
		3	0	17.46	17.13	17.17	19.20
		3	2	17.54	17.18	17.16	19.20
		3	3	17.58	16.94	17.15	19.20
		6	0	17.42	17.08	17.12	19.20
	16QAM	1	0	17.65	17.30	17.37	19.20
		1	2	17.55	17.49	17.30	19.20
		1	5	17.49	17.46	17.23	19.20
		3	0	17.66	17.32	17.27	19.20
		3	2	17.42	16.92	17.26	19.20
		3	3	17.41	17.14	17.04	19.20
		6	0	17.54	17.19	17.22	19.20
	64QAM	1	0	17.53	17.60	17.43	19.20
		1	2	17.58	17.60	17.55	19.20
		1	5	17.49	17.46	17.23	19.20
		3	0	17.61	17.61	17.50	19.20
		3	2	17.42	17.08	17.12	19.20
		3	3	17.65	17.30	17.37	19.20
		6	0	17.62	17.59	17.40	19.20
Bandwidth	Modulation	RB size	RB offset	Channel 19965	Channel 20175	Channel 20385	Tune up
3MHz	QPSK	1	0	17.82	17.37	17.46	19.20
		1	7	17.62	17.20	17.19	19.20
		1	14	17.42	17.25	17.16	19.20
		8	0	17.55	17.09	17.16	19.20
		8	4	17.56	17.14	17.13	19.20
		8	7	17.47	17.16	17.19	19.20
		15	0	17.59	17.10	17.12	19.20
	16QAM	1	0	17.36	17.54	17.56	19.20
		1	7	17.65	17.29	17.42	19.20
		1	14	17.68	17.40	17.28	19.20
		8	0	17.50	17.35	17.18	19.20
		8	4	17.70	17.29	17.21	19.20
		8	7	17.62	17.29	17.11	19.20
		15	0	17.56	17.21	17.15	19.20
	64QAM	1	0	17.39	17.03	17.01	19.20
		1	7	17.43	16.79	17.00	19.20
		1	14	17.27	16.93	16.97	19.20
		8	0	17.50	17.15	17.22	19.20
		8	4	17.40	17.34	17.15	19.20
		8	7	17.34	17.31	17.08	19.20
		15	0	17.51	17.17	17.12	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up

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				19975	20175	20375	
5MHz	QPSK	1	0	17.70	17.49	17.33	19.20
		1	13	17.33	17.23	17.26	19.20
		1	24	17.40	17.18	17.12	19.20
		12	0	17.65	17.20	17.24	19.20
		12	6	17.44	17.09	17.14	19.20
		12	13	17.46	17.20	17.35	19.20
		25	0	17.37	17.15	17.29	19.20
	16QAM	1	0	17.69	17.65	17.67	19.20
		1	13	17.59	17.50	17.65	19.20
		1	24	17.69	17.60	17.54	19.20
		12	0	17.62	17.24	17.43	19.20
		12	6	17.36	17.35	17.30	19.20
		12	13	17.51	17.18	17.15	19.20
		25	0	17.35	17.32	17.15	19.20
	64QAM	1	0	17.41	16.99	16.98	19.20
		1	13	17.32	17.01	17.04	19.20
		1	24	17.44	16.95	16.97	19.20
		12	0	17.21	17.39	17.41	19.20
		12	6	17.50	17.14	17.27	19.20
		12	13	17.53	17.25	17.13	19.20
		25	0	17.35	17.20	17.03	19.20
Bandwidth	Modulation	RB size	RB offset	Channel 20000	Channel 20175	Channel 20350	Tune up
10MHz	QPSK	1	0	17.89	17.73	17.52	19.20
		1	25	17.58	17.28	17.26	19.20
		1	49	17.71	17.61	17.60	19.20
		25	0	17.50	17.26	17.28	19.20
		25	13	17.52	17.38	17.33	19.20
		25	25	17.60	17.37	17.39	19.20
		50	0	17.50	17.28	17.44	19.20
	16QAM	1	0	17.61	17.61	17.76	19.20
		1	25	17.67	17.69	17.60	19.20
		1	49	17.75	17.88	17.84	19.20
		25	0	17.60	17.31	17.37	19.20
		25	13	17.70	17.22	17.23	19.20
		25	25	17.43	17.25	17.45	19.20
		50	0	17.70	17.35	17.22	19.20
	64QAM	1	0	17.50	17.05	17.09	19.20
		1	25	17.29	16.94	16.99	19.20
		1	49	17.31	17.05	17.20	19.20
		25	0	17.22	17.00	17.14	19.20
		25	13	17.54	17.50	17.52	19.20
		25	25	17.44	17.35	17.50	19.20
		50	0	17.54	17.45	17.39	19.20
Bandwidth	Modulation	RB size	RB offset	Channel 20025	Channel 20175	Channel 20325	Tune up
15MHz	QPSK	1	0	17.92	17.75	17.50	19.20
		1	38	17.74	17.53	17.46	19.20
		1	74	17.84	17.82	17.70	19.20
		36	0	17.59	17.70	17.52	19.20
		36	18	17.56	17.52	17.45	19.20

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SGS-CSTC Standards Technical Services Co., Ltd.
Xi'An Branch

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		36	39	17.59	17.48	17.63	19.20
		75	0	17.72	17.56	17.39	19.20
	16QAM	1	0	17.65	17.62	17.65	19.20
		1	38	17.91	17.88	17.87	19.20
		1	74	17.90	17.85	17.88	19.20
		36	0	17.76	17.58	17.52	19.20
		36	18	17.65	17.55	17.35	19.20
		36	39	17.58	17.58	17.53	19.20
		75	0	17.78	17.56	17.52	19.20
		75	0	17.78	17.56	17.52	19.20
	64QAM	1	0	17.35	17.13	17.29	19.20
		1	38	17.46	17.46	17.61	19.20
		1	74	17.52	17.54	17.45	19.20
		36	0	17.60	17.73	17.69	19.20
		36	18	17.45	17.16	17.22	19.20
		36	39	17.55	17.07	17.08	19.20
		75	0	17.28	17.10	17.30	19.20
		75	0	17.28	17.10	17.30	19.20
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	17.98	17.79	17.69	19.20
		1	50	17.81	17.69	17.68	19.20
		1	99	17.65	17.64	17.59	19.20
		50	0	17.71	17.79	17.55	19.20
		50	25	17.63	17.62	17.41	19.20
		50	50	17.57	17.64	17.47	19.20
		100	0	17.62	17.64	17.59	19.20
		100	0	17.62	17.64	17.59	19.20
	16QAM	1	0	17.89	17.85	17.66	19.20
		1	50	17.65	17.65	17.54	19.20
		1	99	17.70	17.56	17.80	19.20
		50	0	17.68	17.69	17.67	19.20
		50	25	17.66	17.63	17.44	19.20
		50	50	17.64	17.69	17.63	19.20
		100	0	17.56	17.62	17.81	19.20
		100	0	17.56	17.62	17.81	19.20
	64QAM	1	0	17.44	17.33	17.48	19.20
		1	50	17.57	17.41	17.24	19.20
		1	99	17.50	17.47	17.50	19.20
		50	0	17.76	17.73	17.72	19.20
		50	25	17.75	17.70	17.73	19.20
		50	50	17.61	17.43	17.37	19.20
		100	0	17.50	17.40	17.20	19.20
		100	0	17.50	17.40	17.20	19.20

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Receiver off+Sensor off+Hotspot/WIFI on(Body)							
LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19957	20175	20393	
1.4MHz	QPSK	1	0	17.11	16.83	17.13	18.70
		1	2	17.28	16.77	17.10	18.70
		1	5	17.23	16.79	16.80	18.70
		3	0	17.10	16.81	16.85	18.70
		3	2	17.22	16.81	16.92	18.70
		3	3	17.28	16.81	16.77	18.70
		6	0	17.12	16.79	16.93	18.70
	16QAM	1	0	16.35	17.11	16.96	18.70
		1	2	17.15	16.87	17.01	18.70
		1	5	17.24	16.86	17.24	18.70
		3	0	17.12	16.86	17.05	18.70
		3	2	17.25	17.23	16.89	18.70
		3	3	17.26	16.91	17.00	18.70
		6	0	17.36	16.85	16.88	18.70
	64QAM	1	0	16.53	16.49	16.53	18.70
		1	2	16.69	16.53	16.49	18.70
		1	5	16.84	16.72	17.01	18.70
		3	0	16.88	17.00	16.52	18.70
		3	2	16.76	16.96	16.99	18.70
		3	3	16.83	16.69	16.51	18.70
		6	0	16.70	16.76	16.54	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19965	20175	20385	
3MHz	QPSK	1	0	17.24	16.89	16.87	18.70
		1	7	16.99	16.74	16.59	18.70
		1	14	16.75	16.50	16.51	18.70
		8	0	17.02	16.68	16.72	18.70
		8	4	16.90	16.57	16.64	18.70
		8	7	17.01	16.69	16.77	18.70
		15	0	16.98	16.76	16.64	18.70
	16QAM	1	0	16.95	16.83	17.19	18.70
		1	7	16.85	16.68	16.89	18.70
		1	14	16.71	16.91	16.93	18.70
		8	0	16.84	16.90	16.80	18.70
		8	4	16.83	16.83	16.89	18.70
		8	7	16.84	16.93	16.68	18.70
		15	0	16.95	16.69	16.61	18.70
	64QAM	1	0	16.86	16.68	16.71	18.70
		1	7	16.90	16.91	16.88	18.70
		1	14	16.95	16.72	16.64	18.70
		8	0	16.93	16.90	16.76	18.70
		8	4	16.73	16.87	16.87	18.70
		8	7	16.90	16.87	16.76	18.70
		15	0	16.86	16.89	16.79	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up

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				19975	20175	20375	
5MHz	QPSK	1	0	16.91	16.98	17.00	18.70
		1	13	16.97	16.67	16.82	18.70
		1	24	17.01	16.63	16.71	18.70
		12	0	17.16	16.83	16.80	18.70
		12	6	17.10	16.79	16.82	18.70
		12	13	16.92	16.65	16.81	18.70
		25	0	17.00	16.87	16.65	18.70
	16QAM	1	0	16.83	16.95	17.11	18.70
		1	13	16.85	17.00	16.95	18.70
		1	24	16.95	16.95	16.92	18.70
		12	0	16.85	16.74	16.93	18.70
		12	6	16.94	16.92	16.72	18.70
		12	13	16.94	16.75	16.85	18.70
		25	0	17.08	16.71	16.68	18.70
	64QAM	1	0	16.86	16.70	16.75	18.70
		1	13	16.74	16.44	16.40	18.70
		1	24	16.68	16.34	16.47	18.70
		12	0	16.77	16.36	16.65	18.70
		12	6	16.83	16.45	16.65	18.70
		12	13	16.98	16.85	17.04	18.70
		25	0	16.94	16.64	16.80	18.70
Bandwidth	Modulation	RB size	RB offset	Channel 20000	Channel 20175	Channel 20350	Tune up
10MHz	QPSK	1	0	17.28	17.03	16.94	18.70
		1	25	16.72	16.43	16.66	18.70
		1	49	17.01	16.85	16.90	18.70
		25	0	16.89	16.59	16.55	18.70
		25	13	16.83	16.49	16.62	18.70
		25	25	16.92	16.51	16.80	18.70
		50	0	16.98	16.60	16.80	18.70
	16QAM	1	0	17.13	17.00	17.19	18.70
		1	25	17.09	16.79	16.95	18.70
		1	49	17.14	17.02	17.26	18.70
		25	0	16.88	16.58	16.69	18.70
		25	13	16.80	16.80	16.64	18.70
		25	25	16.94	16.65	16.82	18.70
		50	0	16.83	16.70	16.68	18.70
	64QAM	1	0	16.75	16.42	16.49	18.70
		1	25	16.86	16.54	16.62	18.70
		1	49	16.83	16.61	16.49	18.70
		25	0	16.80	16.68	17.04	18.70
		25	13	16.70	16.53	16.74	18.70
		25	25	16.56	16.76	16.78	18.70
		50	0	16.69	16.75	16.65	18.70
Bandwidth	Modulation	RB size	RB offset	Channel 20025	Channel 20175	Channel 20325	Tune up
15MHz	QPSK	1	0	17.15	17.05	16.76	18.70
		1	38	17.18	16.89	16.88	18.70
		1	74	17.22	17.13	16.81	18.70
		36	0	16.89	17.01	16.91	18.70
		36	18	17.01	16.83	16.86	18.70

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Xi'an Branch

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		36	39	17.05	17.06	17.03	18.70
		75	0	17.10	16.87	16.79	18.70
	16QAM	1	0	17.08	17.05	16.91	18.70
		1	38	16.88	17.02	17.02	18.70
		1	74	17.05	17.02	16.91	18.70
		36	0	17.01	17.04	16.94	18.70
		36	18	16.98	16.89	16.85	18.70
		36	39	17.04	16.77	16.96	18.70
		75	0	17.02	16.98	16.96	18.70
		1	0	16.77	16.50	16.66	18.70
	64QAM	1	38	16.85	16.72	16.50	18.70
		1	74	16.68	16.80	16.96	18.70
		36	0	16.70	16.85	16.80	18.70
		36	18	16.80	16.80	16.77	18.70
		36	39	16.70	16.59	16.78	18.70
		75	0	16.79	16.77	16.57	18.70
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	16.71	16.76	16.75	18.70
		1	50	17.38	16.84	16.87	18.70
		1	99	16.77	16.74	16.77	18.70
		50	0	16.92	16.83	16.79	18.70
		50	25	16.74	16.71	16.73	18.70
		50	50	16.78	16.74	16.78	18.70
		100	0	16.84	16.78	16.74	18.70
		1	0	16.99	16.87	17.16	18.70
	16QAM	1	50	17.03	17.15	16.77	18.70
		1	99	16.91	17.11	17.14	18.70
		50	0	16.98	16.84	16.76	18.70
		50	25	16.85	16.91	16.79	18.70
		50	50	16.75	16.74	16.87	18.70
		100	0	17.06	16.83	16.78	18.70
		1	0	17.07	16.76	16.77	18.70
		1	50	17.13	16.76	16.72	18.70
	64QAM	1	99	16.97	16.74	16.78	18.70
		50	0	16.72	16.96	16.81	18.70
		50	25	17.00	16.72	16.86	18.70
		50	50	17.09	16.71	17.09	18.70
		100	0	16.97	16.71	16.90	18.70

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Full Power							
LTE Band 5				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20407	20525	20643	
1.4MHz	QPSK	1	0	24.08	23.93	23.93	25.00
		1	2	24.14	23.94	24.05	25.00
		1	5	24.13	23.84	24.13	25.00
		3	0	24.26	23.86	24.00	25.00
		3	2	24.16	23.95	24.27	25.00
		3	3	24.04	23.94	24.11	25.00
	16QAM	6	0	23.20	22.89	22.94	24.00
		1	0	23.54	23.09	23.12	24.00
		1	2	23.10	23.21	23.25	24.00
		1	5	23.19	22.78	23.16	24.00
		3	0	23.34	22.83	23.32	24.00
		3	2	23.16	23.01	23.11	24.00
	64QAM	3	3	23.07	22.90	23.05	24.00
		6	0	22.08	22.05	22.04	23.00
		1	0	22.34	22.34	22.46	23.00
		1	2	22.12	22.18	22.87	23.00
		1	5	22.82	22.07	22.77	23.00
		3	0	22.10	22.12	22.35	23.00
		3	2	22.00	22.10	22.56	23.00
		3	3	22.15	22.19	22.41	23.00
		6	0	21.45	21.45	21.55	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20415	20525	20635	
3MHz	QPSK	1	0	24.21	23.97	24.06	25.00
		1	7	24.18	23.85	24.18	25.00
		1	14	24.07	23.93	24.11	25.00
		8	0	23.16	22.93	23.06	24.00
		8	4	23.23	22.95	23.09	24.00
		8	7	23.20	22.93	23.09	24.00
	16QAM	15	0	23.20	22.95	23.08	24.00
		1	0	23.19	23.34	23.65	24.00
		1	7	23.78	23.54	23.65	24.00
		1	14	23.48	23.55	23.75	24.00
		8	0	22.29	21.96	22.08	23.00
		8	4	22.20	22.01	22.17	23.00
		8	7	22.26	21.94	22.00	23.00
		15	0	22.35	21.92	22.07	23.00
	64QAM	1	0	22.24	22.39	22.70	23.00
		1	7	22.83	22.59	22.70	23.00
		1	14	22.53	22.60	22.80	23.00
		8	0	21.45	21.45	21.61	22.00
		8	4	21.35	21.33	21.45	22.00
		8	7	21.33	21.45	21.55	22.00
		15	0	21.45	21.36	21.54	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20425	20525	20625	

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SGS-CSTC Standards Technical Services Co., Ltd. Xi'an Branch

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5MHz	QPSK	1	0	24.24	24.02	23.95	25.00
		1	13	24.22	23.87	24.19	25.00
		1	24	24.11	23.85	24.04	25.00
		12	0	23.26	22.89	23.05	24.00
		12	6	23.27	22.94	23.10	24.00
		12	13	23.11	22.92	23.07	24.00
		25	0	23.22	22.97	23.12	24.00
	16QAM	1	0	23.76	23.27	23.36	24.00
		1	13	23.39	23.43	23.18	24.00
		1	24	23.30	23.02	23.43	24.00
		12	0	22.29	22.02	22.05	23.00
		12	6	22.36	22.03	22.09	23.00
		12	13	22.12	21.92	22.09	23.00
		25	0	22.46	22.01	21.98	23.00
	64QAM	1	0	22.25	21.94	21.99	23.00
		1	13	22.59	22.14	22.17	23.00
		1	24	22.15	22.26	22.30	23.00
		12	0	21.34	20.93	21.31	22.00
		12	6	21.49	20.98	21.47	22.00
		12	13	21.31	21.16	21.26	22.00
		25	0	21.22	21.05	21.20	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20450	20525	20600	
10MHz	QPSK	1	0	24.28	24.11	24.12	25.00
		1	25	24.36	24.05	24.11	25.00
		1	49	24.46	24.16	24.59	25.00
		25	0	23.13	23.03	23.15	24.00
		25	13	23.21	23.02	22.99	24.00
		25	25	23.28	23.06	23.30	24.00
		50	0	23.27	23.04	23.07	24.00
	16QAM	1	0	23.29	23.29	23.41	24.00
		1	25	23.99	23.13	23.82	24.00
		1	49	23.77	23.02	23.72	24.00
		25	0	22.32	22.08	22.21	23.00
		25	13	22.23	22.01	22.02	23.00
		25	25	22.15	21.99	22.21	23.00
		50	0	22.24	22.02	22.07	23.00
	64QAM	1	0	22.81	22.32	22.41	23.00
		1	25	22.44	22.48	22.23	23.00
		1	49	22.35	22.07	22.48	23.00
		25	0	21.56	21.35	21.35	22.00
		25	13	21.55	21.45	21.45	22.00
		25	25	21.54	21.36	21.36	22.00
		50	0	21.41	21.45	21.35	22.00

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Receiver on+Hotspot/WIFI on(Head)							
LTE Band 5				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 20407	Channel 20525	Channel 20643	Tune up
1.4MHz	QPSK	1	0	23.67	23.39	23.61	24.50
		1	2	23.54	23.65	23.54	24.50
		1	5	23.56	23.39	23.40	24.50
		3	0	23.74	23.27	23.50	24.50
		3	2	23.55	23.36	23.55	24.50
		3	3	23.69	23.41	23.54	24.50
		6	0	23.03	22.81	22.92	24.00
	16QAM	1	0	23.47	23.42	22.95	24.00
		1	2	23.71	23.54	23.21	24.00
		1	5	23.44	22.95	23.54	24.00
		3	0	23.08	22.85	22.82	24.00
		3	2	22.95	22.82	23.18	24.00
		3	3	22.94	22.84	22.89	24.00
		6	0	21.97	21.78	21.93	23.00
	64QAM	1	0	22.09	22.05	21.99	23.00
		1	2	22.13	21.97	21.96	23.00
		1	5	22.14	21.98	22.15	23.00
		3	0	21.18	21.01	21.01	23.00
		3	2	21.79	21.59	21.44	23.00
		3	3	21.33	21.08	21.05	23.00
		6	0	21.53	21.46	21.71	22.00
Bandwidth	Modulation	RB size	RB offset	Channel 20415	Channel 20525	Channel 20635	Tune up
3MHz	QPSK	1	0	23.82	23.53	23.58	24.50
		1	7	23.50	23.59	23.61	24.50
		1	14	23.48	23.46	23.46	24.50
		8	0	23.07	22.87	22.91	24.00
		8	4	23.02	22.92	22.92	24.00
		8	7	23.11	22.92	22.94	24.00
		15	0	23.06	22.89	22.96	24.00
	16QAM	1	0	23.46	23.32	23.05	24.00
		1	7	23.61	23.67	23.35	24.00
		1	14	23.10	23.17	23.25	24.00
		8	0	22.05	22.02	21.99	23.00
		8	4	22.20	21.94	21.91	23.00
		8	7	22.07	21.93	21.98	23.00
		15	0	22.19	21.92	22.10	23.00
	64QAM	1	0	22.74	22.46	22.59	23.00
		1	7	22.08	21.86	21.97	23.00
		1	14	22.52	22.47	22.00	23.00
		8	0	21.86	21.69	21.36	22.00
		8	4	21.59	21.10	21.69	22.00
		8	7	21.23	21.00	20.97	22.00
		15	0	21.10	20.97	21.33	22.00
Bandwidth	Modulation	RB size	RB offset	Channel 20425	Channel 20525	Channel 20625	Tune up

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5MHz	QPSK	1	0	23.56	23.49	23.44	24.50
		1	13	23.54	23.70	23.40	24.50
		1	24	23.32	23.37	23.57	24.50
		12	0	23.07	22.87	22.87	24.00
		12	6	23.04	22.93	22.93	24.00
		12	13	22.96	22.85	22.90	24.00
		25	0	23.04	22.96	22.93	24.00
	16QAM	1	0	23.55	23.66	23.13	24.00
		1	13	23.24	23.30	23.43	24.00
		1	24	23.19	22.76	22.74	24.00
		12	0	22.10	21.89	21.90	23.00
		12	6	22.02	21.87	21.81	23.00
		12	13	21.97	21.89	21.93	23.00
		25	0	22.10	21.88	21.85	23.00
	64QAM	1	0	22.53	22.51	22.51	23.00
		1	13	22.12	21.92	21.96	23.00
		1	24	22.07	21.97	21.97	23.00
		12	0	21.26	21.07	21.09	22.00
		12	6	21.21	21.04	21.11	22.00
		12	13	21.61	21.47	21.20	22.00
		25	0	21.76	21.82	21.50	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20450	20525	20600	
10MHz	QPSK	1	0	23.82	23.59	23.68	24.50
		1	25	23.58	23.56	23.36	24.50
		1	49	23.94	23.62	23.95	24.50
		25	0	23.04	23.00	22.94	24.00
		25	13	23.08	22.92	22.91	24.00
		25	25	23.09	22.93	23.10	24.00
		50	0	23.03	22.86	22.86	24.00
	16QAM	1	0	23.64	23.44	23.29	24.00
		1	25	23.18	22.93	22.90	24.00
		1	49	23.38	23.31	23.56	24.00
		25	0	22.04	21.91	22.02	23.00
		25	13	21.93	21.91	21.84	23.00
		25	25	22.01	21.93	21.88	23.00
		50	0	22.06	21.98	21.88	23.00
	64QAM	1	0	22.01	21.90	21.95	23.00
		1	25	22.09	22.01	21.98	23.00
		1	49	22.60	22.71	22.18	23.00
		25	0	21.39	21.45	21.58	22.00
		25	13	21.34	20.91	20.89	22.00
		25	25	21.13	21.13	21.06	22.00
		50	0	20.93	21.03	21.13	22.00

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Full Power							
LTE Band 7 Full Power				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20775	21100	21425	
5MHz	QPSK	1	0	23.10	23.01	22.92	24.50
		1	13	23.18	22.94	23.11	24.50
		1	24	23.11	22.95	23.07	24.50
		12	0	22.25	22.04	22.16	23.50
		12	6	22.21	22.03	22.13	23.50
		12	13	22.16	22.01	22.17	23.50
	16QAM	25	0	22.23	22.06	22.17	23.50
		1	0	22.41	22.00	22.65	23.50
		1	13	22.24	22.25	22.40	23.50
		1	24	22.17	22.30	22.45	23.50
		12	0	21.26	21.08	21.08	22.50
		12	6	21.33	21.01	21.13	22.50
	64QAM	12	13	21.23	21.04	21.04	22.50
		25	0	21.22	21.01	21.10	22.50
		1	0	21.39	20.96	21.65	22.50
		1	13	21.20	21.23	21.39	22.50
		1	24	21.16	21.25	21.40	22.50
		12	0	20.25	20.04	20.03	21.50
10MHz	QPSK	12	6	20.29	19.98	20.09	21.50
		12	13	20.21	20.02	20.00	21.50
		25	0	20.19	20.00	20.05	21.50
	16QAM	1	0	23.26	23.21	23.01	24.50
		1	25	23.17	23.05	22.94	24.50
		1	49	23.43	23.23	23.31	24.50
	64QAM	25	0	22.26	22.08	22.11	23.50
		25	13	22.13	22.05	22.11	23.50
		25	25	22.26	22.03	22.15	23.50
	16QAM	50	0	22.27	22.07	22.05	23.50
		1	0	22.49	22.80	22.82	23.50
		1	25	22.33	22.29	22.40	23.50
		1	49	22.55	22.59	22.42	23.50
	64QAM	25	0	21.22	21.10	21.23	22.50
		25	13	21.20	21.02	21.15	22.50
		25	25	21.24	21.04	21.10	22.50
	16QAM	50	0	21.29	21.09	21.15	22.50
		1	0	21.47	21.76	21.81	22.50
		1	25	21.32	21.24	21.38	22.50
		1	49	21.53	21.58	21.42	22.50
	64QAM	25	0	20.18	20.10	20.21	21.50
		25	13	20.16	19.97	20.15	21.50
		25	25	20.19	19.99	20.10	21.50
		50	0	20.28	20.04	20.15	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20825	21100	21375	

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15MHz	QPSK	1	0	23.12	23.06	23.12	24.50
		1	38	23.27	23.32	23.14	24.50
		1	74	23.54	23.31	23.33	24.50
		36	0	22.45	22.24	22.10	23.50
		36	18	22.39	22.33	22.23	23.50
		36	39	22.44	22.31	22.17	23.50
		75	0	22.42	22.33	22.09	23.50
	16QAM	1	0	22.76	22.64	22.20	23.50
		1	38	22.49	22.57	22.64	23.50
		1	74	22.90	22.66	22.53	23.50
		36	0	21.49	21.33	21.13	22.50
		36	18	21.40	21.29	21.18	22.50
		36	39	21.51	21.26	21.21	22.50
		75	0	21.42	21.34	21.07	22.50
	64QAM	1	0	21.72	21.63	21.18	22.50
		1	38	21.48	21.54	21.61	22.50
		1	74	21.88	21.65	21.52	22.50
		36	0	20.46	20.30	20.09	21.50
		36	18	20.38	20.27	20.18	21.50
		36	39	20.51	20.23	20.20	21.50
		75	0	20.40	20.29	20.06	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20850	21100	21350	
20MHz	QPSK	1	0	23.27	23.06	23.08	24.50
		1	50	23.39	23.09	23.01	24.50
		1	99	23.43	23.34	23.28	24.50
		50	0	22.47	22.35	22.20	23.50
		50	25	22.36	22.33	22.20	23.50
		50	50	22.46	22.42	22.23	23.50
		100	0	22.34	22.34	22.17	23.50
	16QAM	1	0	22.26	22.56	22.15	23.50
		1	50	22.81	22.72	22.39	23.50
		1	99	22.96	22.66	22.45	23.50
		50	0	21.49	21.26	21.25	22.50
		50	25	21.49	21.32	21.22	22.50
		50	50	21.44	21.42	21.40	22.50
		100	0	21.37	21.26	21.28	22.50
	64QAM	1	0	21.24	21.55	21.13	22.50
		1	50	21.76	21.67	21.37	22.50
		1	99	21.96	21.65	21.45	22.50
		50	0	20.48	20.26	20.21	21.50
		50	25	20.48	20.27	20.19	21.50
		50	50	20.39	20.39	20.35	21.50
		100	0	20.32	20.21	20.24	21.50

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Receiver on+Hotspot/WIFI off(Head)							
LTE Band 7				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 20775	Channel 21100	Channel 21425	Tune up
5MHz	QPSK	1	0	17.22	17.09	17.12	18.50
		1	13	17.21	17.22	17.26	18.50
		1	24	17.36	17.17	17.31	18.50
		12	0	17.38	17.27	17.26	18.50
		12	6	17.35	17.29	17.24	18.50
		12	13	17.35	17.17	17.31	18.50
	16QAM	25	0	17.42	17.21	17.31	18.50
		1	0	17.65	17.45	17.32	18.50
		1	13	17.56	17.13	17.85	18.50
		1	24	17.19	17.80	17.50	18.50
		12	0	17.51	17.22	17.29	18.50
		12	6	17.44	17.29	17.38	18.50
	64QAM	12	13	17.36	17.26	17.31	18.50
		25	0	17.41	17.25	17.24	18.50
		1	0	17.14	17.29	17.21	18.50
		1	13	17.28	17.35	17.05	18.50
		1	24	17.49	17.21	17.25	18.50
		12	0	17.26	17.34	17.36	18.50
10MHz	QPSK	12	6	17.51	17.35	17.24	18.50
		12	13	17.59	17.38	17.16	18.50
		25	0	17.23	17.39	17.22	18.50
	16QAM	1	0	17.34	17.36	17.29	18.50
		1	25	17.39	17.16	17.19	18.50
		1	49	17.49	17.44	17.40	18.50
	64QAM	25	0	17.39	17.26	17.21	18.50
		25	13	17.30	17.20	17.18	18.50
		25	25	17.35	17.15	17.32	18.50
		50	0	17.37	17.18	17.23	18.50
	16QAM	1	0	17.82	17.63	17.96	18.50
		1	25	17.78	17.41	17.33	18.50
		1	49	18.02	17.98	17.59	18.50
		25	0	17.37	17.35	17.25	18.50
		25	13	17.28	17.29	17.22	18.50
	64QAM	25	25	17.30	17.13	17.41	18.50
		50	0	17.42	17.21	17.37	18.50
	16QAM	1	0	17.12	17.14	17.04	18.50
		1	25	17.17	17.17	17.15	18.50
		1	49	17.52	17.27	17.27	18.50
		25	0	17.39	17.19	17.30	18.50
	64QAM	25	13	17.44	17.30	17.05	18.50
		25	25	17.37	17.22	17.35	18.50
		50	0	17.38	17.14	17.34	18.50
Bandwidth	Modulation	RB size	RB offset	Channel 20825	Channel 21100	Channel 21375	Tune up

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15MHz	QPSK	1	0	17.13	17.07	17.20	18.50
		1	38	17.42	17.27	17.31	18.50
		1	74	17.55	17.52	17.45	18.50
		36	0	17.51	17.37	17.27	18.50
		36	18	17.59	17.38	17.35	18.50
		36	39	17.53	17.37	17.28	18.50
		75	0	17.49	17.38	17.17	18.50
	16QAM	1	0	17.38	17.52	17.62	18.50
		1	38	17.79	17.39	17.59	18.50
		1	74	17.92	17.72	17.26	18.50
		36	0	17.56	17.38	17.27	18.50
		36	18	17.63	17.42	17.30	18.50
		36	39	17.59	17.35	17.24	18.50
		75	0	17.48	17.45	17.22	18.50
	64QAM	1	0	17.09	17.02	17.09	18.50
		1	38	17.37	17.08	17.04	18.50
		1	74	17.57	17.43	17.26	18.50
		36	0	17.35	17.20	17.31	18.50
		36	18	17.47	17.18	17.10	18.50
		36	39	17.34	17.55	17.26	18.50
		75	0	17.27	17.15	17.02	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20850	21100	21350	
20MHz	QPSK	1	0	17.28	17.22	17.16	18.50
		1	50	17.72	17.32	17.19	18.50
		1	99	17.60	17.50	17.40	18.50
		50	0	17.51	17.50	17.35	18.50
		50	25	17.51	17.45	17.23	18.50
		50	50	17.52	17.49	17.34	18.50
		100	0	17.49	17.40	17.24	18.50
	16QAM	1	0	17.40	17.60	17.19	18.50
		1	50	17.64	17.37	17.47	18.50
		1	99	17.50	17.45	17.39	18.50
		50	0	17.53	17.47	17.32	18.50
		50	25	17.52	17.42	17.24	18.50
		50	50	17.54	17.46	17.42	18.50
		100	0	17.49	17.34	17.21	18.50
	64QAM	1	0	17.36	17.18	17.04	18.50
		1	50	17.25	17.02	17.06	18.50
		1	99	17.37	17.30	17.15	18.50
		50	0	17.52	17.43	17.24	18.50
		50	25	17.46	17.48	17.24	18.50
		50	50	17.31	17.46	17.37	18.50
		100	0	17.32	17.25	17.33	18.50

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Receiver on+Hotspot/WIFI on(Head)							
LTE Band 7				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 20775	Channel 21100	Channel 21425	Tune up
5MHz	QPSK	1	0	15.24	15.09	15.14	16.50
		1	13	15.34	15.15	15.26	16.50
		1	24	15.18	15.13	15.22	16.50
		12	0	15.46	15.21	15.30	16.50
		12	6	15.46	15.25	15.30	16.50
		12	13	15.36	15.24	15.36	16.50
	16QAM	25	0	15.42	15.26	15.36	16.50
		1	0	15.57	15.40	15.49	16.50
		1	13	15.89	15.50	15.44	16.50
		1	24	15.28	15.64	15.22	16.50
		12	0	15.55	15.24	15.29	16.50
		12	6	15.36	15.32	15.31	16.50
	64QAM	12	13	15.36	15.09	15.31	16.50
		25	0	15.51	15.27	15.23	16.50
		1	0	15.28	15.18	15.49	16.50
		1	13	15.53	15.50	15.17	16.50
		1	24	15.85	15.52	15.53	16.50
		12	0	15.50	15.58	15.52	16.50
10MHz	QPSK	12	6	15.55	15.49	15.42	16.50
		12	13	15.54	15.47	15.33	16.50
		25	0	15.43	15.68	15.34	16.50
	16QAM	1	0	15.44	15.29	15.29	16.50
		1	25	15.42	15.26	15.17	16.50
		1	49	15.65	15.38	15.43	16.50
	64QAM	25	0	15.44	15.27	15.32	16.50
		25	13	15.36	15.21	15.19	16.50
		25	25	15.40	15.24	15.34	16.50
		50	0	15.41	15.29	15.29	16.50
	16QAM	1	0	16.07	15.66	15.57	16.50
		1	25	15.70	15.18	15.68	16.50
		1	49	15.80	15.57	16.01	16.50
	64QAM	25	0	15.40	15.29	15.29	16.50
		25	13	15.29	15.27	15.26	16.50
		25	25	15.44	15.26	15.43	16.50
	QPSK	50	0	15.52	15.26	15.18	16.50
		1	0	15.09	15.42	15.35	16.50
		1	25	15.59	15.46	15.38	16.50
		1	49	15.83	15.64	15.54	16.50
	16QAM	25	0	15.60	15.47	15.40	16.50
		25	13	15.54	15.36	15.35	16.50
	64QAM	25	25	15.55	15.52	15.44	16.50
		50	0	15.47	15.52	15.43	16.50
	QPSK	1	0	15.44	15.29	15.29	16.50
		1	25	15.42	15.26	15.17	16.50
		1	49	15.65	15.38	15.43	16.50
	16QAM	25	0	15.44	15.27	15.32	16.50
		25	13	15.36	15.21	15.19	16.50
	64QAM	25	25	15.40	15.24	15.34	16.50
		50	0	15.41	15.29	15.29	16.50
	QPSK	1	0	16.07	15.66	15.57	16.50
		1	25	15.70	15.18	15.68	16.50
		1	49	15.80	15.57	16.01	16.50
	16QAM	25	0	15.40	15.29	15.29	16.50
		25	13	15.29	15.27	15.26	16.50
	64QAM	25	25	15.44	15.26	15.43	16.50
		50	0	15.52	15.26	15.18	16.50
	QPSK	1	0	15.09	15.42	15.35	16.50
		1	25	15.59	15.46	15.38	16.50
		1	49	15.83	15.64	15.54	16.50
	16QAM	25	0	15.60	15.47	15.40	16.50
		25	13	15.54	15.36	15.35	16.50
	64QAM	25	25	15.55	15.52	15.44	16.50
		50	0	15.47	15.52	15.43	16.50
Bandwidth	Modulation	RB size	RB offset	Channel 20825	Channel 21100	Channel 21375	Tune up

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15MHz	QPSK	1	0	15.17	15.21	15.34	16.50
		1	38	15.38	15.28	15.31	16.50
		1	74	15.53	15.50	15.36	16.50
		36	0	15.56	15.38	15.32	16.50
		36	18	15.63	15.48	15.37	16.50
		36	39	15.60	15.40	15.31	16.50
		75	0	15.55	15.40	15.19	16.50
	16QAM	1	0	16.05	15.45	15.52	16.50
		1	38	15.36	15.52	15.56	16.50
		1	74	15.68	15.89	15.68	16.50
		36	0	15.68	15.38	15.28	16.50
		36	18	15.50	15.38	15.38	16.50
		36	39	15.55	15.43	15.35	16.50
		75	0	15.54	15.43	15.33	16.50
	64QAM	1	0	15.35	15.29	15.33	16.50
		1	38	15.51	15.24	15.09	16.50
		1	74	15.59	15.57	15.34	16.50
		36	0	15.60	15.45	15.31	16.50
		36	18	15.38	15.44	15.42	16.50
		36	39	15.48	15.52	15.44	16.50
		75	0	15.60	15.39	15.29	16.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20850	21100	21350	
20MHz	QPSK	1	0	15.84	15.75	15.42	16.50
		1	50	15.50	15.66	15.65	16.50
		1	99	15.66	15.49	15.44	16.50
		50	0	15.54	15.46	15.58	16.50
		50	25	15.47	15.45	15.34	16.50
		50	50	15.57	15.48	15.34	16.50
		100	0	15.44	15.48	15.35	16.50
	16QAM	1	0	15.56	15.83	15.80	16.50
		1	50	15.83	15.43	15.33	16.50
		1	99	15.45	15.83	15.62	16.50
		50	0	15.63	15.37	15.34	16.50
		50	25	15.53	15.43	15.32	16.50
		50	50	15.57	15.54	15.32	16.50
		100	0	15.51	15.39	15.27	16.50
	64QAM	1	0	15.28	15.29	15.32	16.50
		1	50	15.68	15.23	15.20	16.50
		1	99	15.61	15.50	15.41	16.50
		50	0	15.71	15.49	15.45	16.50
		50	25	15.37	15.61	15.43	16.50
		50	50	15.76	15.52	15.48	16.50
		100	0	15.44	15.63	15.42	16.50

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Receiver off+Sensor on+Hotspot/WIFI off(Body)							
LTE Band 7				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 20775	Channel 21100	Channel 21425	Tune up
5MHz	QPSK	1	0	20.44	20.10	20.20	21.50
		1	13	20.33	20.15	20.31	21.50
		1	24	20.26	20.16	20.30	21.50
		12	0	20.47	20.21	20.32	21.50
		12	6	20.42	20.21	20.30	21.50
		12	13	20.30	20.22	20.25	21.50
		25	0	20.52	20.25	20.33	21.50
	16QAM	1	0	20.61	20.52	20.94	21.50
		1	13	20.87	20.42	20.38	21.50
		1	24	20.69	20.28	20.80	21.50
		12	0	20.42	20.33	20.38	21.50
		12	6	20.41	20.20	20.36	21.50
		12	13	20.29	20.25	20.29	21.50
		25	0	20.48	20.27	20.18	21.50
	64QAM	1	0	20.40	20.66	20.25	21.50
		1	13	20.33	20.37	20.11	21.50
		1	24	20.53	20.14	20.64	21.50
		12	0	20.19	20.17	20.03	21.50
		12	6	20.35	20.26	19.98	21.50
		12	13	20.36	20.34	20.13	21.50
		25	0	20.16	20.18	20.02	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 20800	Channel 21100	Channel 21400	Tune up
10MHz	QPSK	1	0	20.29	20.32	20.23	21.50
		1	25	20.35	20.17	20.21	21.50
		1	49	20.50	20.49	20.46	21.50
		25	0	20.39	20.26	20.29	21.50
		25	13	20.30	20.18	20.25	21.50
		25	25	20.41	20.22	20.22	21.50
		50	0	20.34	20.27	20.23	21.50
	16QAM	1	0	21.16	21.02	20.76	21.50
		1	25	20.45	20.87	20.35	21.50
		1	49	20.73	20.52	21.24	21.50
		25	0	20.34	20.39	20.44	21.50
		25	13	20.43	20.20	20.19	21.50
		25	25	20.40	20.29	20.39	21.50
		50	0	20.40	20.31	20.19	21.50
	64QAM	1	0	20.31	20.67	20.30	21.50
		1	25	20.28	20.47	20.14	21.50
		1	49	20.60	20.17	20.59	21.50
		25	0	20.19	20.12	20.02	21.50
		25	13	20.32	20.26	19.95	21.50
		25	25	20.31	20.32	20.16	21.50
		50	0	20.19	20.22	20.03	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 20825	Channel 21100	Channel 21375	Tune up

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15MHz	QPSK	1	0	20.35	20.18	20.10	21.50
		1	38	20.45	20.44	20.35	21.50
		1	74	20.69	20.57	20.45	21.50
		36	0	20.60	20.36	20.24	21.50
		36	18	20.59	20.45	20.34	21.50
		36	39	20.61	20.36	20.42	21.50
		75	0	20.57	20.47	20.22	21.50
	16QAM	1	0	20.61	20.79	20.60	21.50
		1	38	20.71	20.74	20.78	21.50
		1	74	20.80	20.68	21.00	21.50
		36	0	20.59	20.44	20.25	21.50
		36	18	20.53	20.43	20.48	21.50
		36	39	20.57	20.34	20.46	21.50
		75	0	20.55	20.49	20.34	21.50
	64QAM	1	0	20.39	20.69	20.21	21.50
		1	38	20.32	20.45	20.09	21.50
		1	74	20.59	20.15	20.57	21.50
		36	0	20.24	20.13	20.11	21.50
		36	18	20.33	20.20	19.93	21.50
		36	39	20.35	20.32	20.08	21.50
		75	0	20.24	20.21	20.02	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20850	21100	21350	
20MHz	QPSK	1	0	20.15	20.28	20.31	21.50
		1	50	20.35	20.42	20.22	21.50
		1	99	20.65	20.46	20.56	21.50
		50	0	20.60	20.47	20.35	21.50
		50	25	20.49	20.45	20.31	21.50
		50	50	20.59	20.47	20.31	21.50
		100	0	20.46	20.47	20.40	21.50
	16QAM	1	0	20.60	20.94	20.51	21.50
		1	50	20.57	20.67	20.36	21.50
		1	99	20.81	20.41	20.86	21.50
		50	0	20.44	20.37	20.32	21.50
		50	25	20.56	20.46	20.23	21.50
		50	50	20.56	20.61	20.37	21.50
		100	0	20.46	20.48	20.23	21.50
	64QAM	1	0	20.39	20.67	20.29	21.50
		1	50	20.35	20.41	20.10	21.50
		1	99	20.58	20.19	20.62	21.50
		50	0	20.20	20.15	20.05	21.50
		50	25	20.28	20.18	20.02	21.50
		50	50	20.28	20.35	20.13	21.50
		100	0	20.16	20.18	20.00	21.50

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Receiver off+Hotspot/WIFI on(Body)							
LTE Band 7				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 20775	Channel 21100	Channel 21425	Tune up
5MHz	QPSK	1	0	18.78	18.77	18.80	20.50
		1	13	18.85	18.69	18.88	20.50
		1	24	18.74	18.78	18.82	20.50
		12	0	18.92	18.78	18.81	20.50
		12	6	19.00	18.79	18.82	20.50
		12	13	18.91	18.76	18.85	20.50
	16QAM	25	0	19.04	18.82	18.83	20.50
		1	0	19.47	19.32	19.04	20.50
		1	13	18.94	19.02	19.56	20.50
		1	24	19.33	19.34	19.52	20.50
		12	0	19.11	18.77	18.73	20.50
		12	6	18.92	18.79	18.79	20.50
	64QAM	12	13	18.86	18.77	18.77	20.50
		25	0	19.01	18.74	18.83	20.50
		1	0	19.01	19.12	19.33	20.50
		1	13	19.49	19.09	19.26	20.50
		1	24	19.51	19.40	19.24	20.50
		12	0	19.18	18.74	18.76	20.50
		12	6	18.87	18.97	18.70	20.50
		12	13	19.09	18.92	18.82	20.50
		25	0	18.96	18.83	18.87	20.50
Bandwidth	Modulation	RB size	RB offset	Channel 20800	Channel 21100	Channel 21400	Tune up
10MHz	QPSK	1	0	18.91	18.84	18.81	20.50
		1	25	18.81	18.79	18.78	20.50
		1	49	19.09	19.04	19.06	20.50
		25	0	18.90	18.79	18.79	20.50
		25	13	18.89	18.75	18.76	20.50
		25	25	18.93	18.75	18.93	20.50
	16QAM	50	0	18.93	18.79	18.83	20.50
		1	0	19.33	19.48	18.93	20.50
		1	25	19.04	19.21	19.25	20.50
		1	49	19.13	19.20	19.60	20.50
		25	0	19.05	18.75	18.82	20.50
		25	13	18.84	18.84	18.75	20.50
	64QAM	25	25	18.89	18.75	18.90	20.50
		50	0	18.99	18.84	18.78	20.50
		1	0	19.10	19.14	19.20	20.50
		1	25	19.43	19.33	19.20	20.50
		1	49	19.47	19.38	19.32	20.50
		25	0	19.10	18.64	18.89	20.50
		25	13	19.04	18.89	18.76	20.50
		25	25	18.93	18.92	18.78	20.50
		50	0	19.11	18.95	18.71	20.50
Bandwidth	Modulation	RB size	RB offset	Channel 20825	Channel 21100	Channel 21375	Tune up

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SGS-CSTC Standards Technical Services Co., Ltd. Xi'An Branch

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15MHz	QPSK	1	0	18.69	18.62	18.62	20.50
		1	38	19.10	18.97	18.93	20.50
		1	74	19.20	19.03	18.96	20.50
		36	0	19.08	18.94	18.74	20.50
		36	18	19.06	18.98	18.90	20.50
		36	39	19.09	18.96	18.83	20.50
		75	0	19.04	18.96	18.79	20.50
	16QAM	1	0	19.49	18.91	19.38	20.50
		1	38	19.56	19.44	19.10	20.50
		1	74	19.42	19.16	19.41	20.50
		36	0	19.07	19.01	18.75	20.50
		36	18	19.05	18.96	18.94	20.50
		36	39	19.09	18.89	18.89	20.50
		75	0	19.06	18.91	18.82	20.50
	64QAM	1	0	19.05	19.22	19.14	20.50
		1	38	19.33	19.27	19.31	20.50
		1	74	19.44	19.44	19.46	20.50
		36	0	19.12	18.62	18.76	20.50
		36	18	19.04	18.88	18.79	20.50
		36	39	19.12	18.90	18.95	20.50
		75	0	18.97	18.95	18.75	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20850	21100	21350	
20MHz	QPSK	1	0	19.68	19.23	19.54	20.50
		1	50	18.86	19.01	18.71	20.50
		1	99	19.20	18.99	18.92	20.50
		50	0	19.06	18.94	18.85	20.50
		50	25	19.07	18.96	18.79	20.50
		50	50	18.94	19.06	18.86	20.50
		100	0	19.03	18.96	18.78	20.50
	16QAM	1	0	19.11	19.22	19.33	20.50
		1	50	19.39	19.24	19.34	20.50
		1	99	19.67	19.59	19.44	20.50
		50	0	19.09	18.78	18.82	20.50
		50	25	19.04	18.90	18.76	20.50
		50	50	19.10	18.99	18.86	20.50
		100	0	19.04	18.89	18.79	20.50
	64QAM	1	0	19.07	19.21	19.25	20.50
		1	50	19.42	19.11	19.25	20.50
		1	99	19.66	19.39	19.28	20.50
		50	0	19.18	18.66	18.69	20.50
		50	25	18.92	18.81	18.69	20.50
		50	50	19.16	18.79	18.94	20.50
		100	0	18.85	18.75	18.65	20.50

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Full Power							
LTE Band 38 Full Power				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37775	38000	38225	
5MHz	QPSK	1	0	23.26	23.20	23.35	24.50
		1	13	23.05	23.26	23.55	24.50
		1	24	23.23	23.03	23.28	24.50
		12	0	22.00	22.08	22.30	23.50
		12	6	22.02	22.13	22.36	23.50
		12	13	22.02	22.24	22.32	23.50
		25	0	21.97	22.28	22.22	23.50
	16QAM	1	0	22.36	22.48	22.49	23.50
		1	13	22.33	22.35	22.42	23.50
		1	24	22.24	22.08	22.47	23.50
		12	0	21.21	21.28	21.22	22.50
		12	6	21.03	21.04	21.28	22.50
		12	13	20.93	21.23	21.23	22.50
		25	0	21.24	21.02	21.38	22.50
	64QAM	1	0	21.35	21.45	21.48	22.50
		1	13	21.33	21.32	21.41	22.50
		1	24	21.24	21.08	21.42	22.50
		12	0	20.19	20.27	20.21	21.50
		12	6	19.98	20.04	20.27	21.50
		12	13	19.90	20.21	20.19	21.50
		25	0	20.23	20.02	20.34	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37800	38000	38200	
10MHz	QPSK	1	0	23.48	23.49	23.50	24.50
		1	25	23.29	23.36	23.48	24.50
		1	49	23.73	23.74	23.85	24.50
		25	0	22.36	22.30	22.41	23.50
		25	13	22.30	22.28	22.33	23.50
		25	25	22.50	22.53	22.45	23.50
		50	0	22.23	22.45	22.52	23.50
	16QAM	1	0	22.64	22.63	22.63	23.50
		1	25	22.44	22.35	22.58	23.50
		1	49	22.59	22.63	22.66	23.50
		25	0	21.49	21.27	21.44	22.50
		25	13	21.24	21.19	21.38	22.50
		25	25	21.44	21.45	21.59	22.50
		50	0	21.40	21.46	21.57	22.50
	64QAM	1	0	21.60	21.63	21.61	22.50
		1	25	21.43	21.32	21.56	22.50
		1	49	21.59	21.60	21.65	22.50
		25	0	20.45	20.26	20.43	21.50
		25	13	20.20	20.17	20.37	21.50
		25	25	20.42	20.42	20.57	21.50
		50	0	20.40	20.43	20.57	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up

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				37825	38000	38175	
15MHz	QPSK	1	0	23.53	23.54	23.49	24.50
		1	38	23.24	23.21	23.32	24.50
		1	74	23.78	23.77	23.69	24.50
		36	0	22.39	22.15	22.25	23.50
		36	18	22.16	22.12	22.24	23.50
		36	39	22.52	22.44	22.31	23.50
		75	0	22.16	22.24	22.48	23.50
	16QAM	1	0	22.73	22.64	22.64	23.50
		1	38	22.41	22.38	22.69	23.50
		1	74	22.95	23.05	22.88	23.50
		36	0	21.25	21.13	21.14	22.50
		36	18	21.15	21.10	21.34	22.50
		36	39	21.20	21.35	21.42	22.50
		75	0	21.20	21.36	21.54	22.50
	64QAM	1	0	21.71	21.63	21.64	22.50
		1	38	21.38	21.37	21.68	22.50
		1	74	21.92	22.01	21.86	22.50
		36	0	20.20	20.12	20.09	21.50
		36	18	20.13	20.05	20.29	21.50
		36	39	20.15	20.35	20.39	21.50
		75	0	20.20	20.33	20.51	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37850	38000	38150	
20MHz	QPSK	1	0	23.35	23.35	23.42	24.50
		1	50	23.07	23.17	23.49	24.50
		1	99	23.69	23.80	23.83	24.50
		50	0	22.34	22.21	22.18	23.50
		50	25	22.18	22.14	22.19	23.50
		50	50	22.57	22.63	22.64	23.50
		100	0	22.52	22.29	22.48	23.50
	16QAM	1	0	22.47	22.36	22.65	23.50
		1	50	22.37	22.45	22.43	23.50
		1	99	22.88	22.90	22.96	23.50
		50	0	21.38	21.34	21.41	22.50
		50	25	21.13	21.10	21.44	22.50
		50	50	21.53	21.47	21.60	22.50
		100	0	21.47	21.24	21.53	22.50
	64QAM	1	0	21.42	21.31	21.63	22.50
		1	50	21.34	21.41	21.41	22.50
		1	99	21.83	21.88	21.96	22.50
		50	0	20.33	20.29	20.36	21.50
		50	25	20.13	20.10	20.42	21.50
		50	50	20.52	20.46	20.56	21.50
		100	0	20.47	20.19	20.48	21.50

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Receiver on+Hotspot/WIFI off(Head)							
LTE Band 38				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 37775	Channel 38000	Channel 38225	Tune up
5MHz	QPSK	1	0	18.70	18.85	18.97	20.50
		1	13	18.70	18.82	18.94	20.50
		1	24	18.87	18.64	18.93	20.50
		12	0	18.68	18.98	19.03	20.50
		12	6	18.66	18.79	19.05	20.50
		12	13	18.60	18.97	18.93	20.50
	16QAM	25	0	18.87	18.77	19.03	20.50
		1	0	18.99	18.93	19.22	20.50
		1	13	18.84	18.97	19.26	20.50
		1	24	18.74	18.81	19.01	20.50
		12	0	18.70	18.80	18.95	20.50
		12	6	18.75	18.72	18.89	20.50
	64QAM	12	13	18.84	18.81	18.95	20.50
		25	0	18.73	18.83	19.00	20.50
		1	0	18.84	18.64	18.83	20.50
		1	13	18.70	18.75	19.14	20.50
		1	24	18.59	18.63	18.84	20.50
		12	0	18.55	18.67	18.79	20.50
10MHz	QPSK	12	6	18.69	18.57	18.74	20.50
		12	13	18.55	18.77	18.79	20.50
		25	0	18.76	18.55	18.64	20.50
	16QAM	1	0	18.94	19.05	19.03	20.50
		1	25	18.81	18.87	19.16	20.50
		1	49	19.02	19.36	19.35	20.50
	64QAM	25	0	18.78	18.94	19.12	20.50
		25	13	18.80	18.85	18.97	20.50
		25	25	19.00	18.98	19.08	20.50
		50	0	18.99	18.89	19.07	20.50
	16QAM	1	0	19.08	19.15	19.35	20.50
		1	25	18.84	18.82	19.19	20.50
		1	49	19.26	19.36	19.34	20.50
	64QAM	25	0	18.95	18.90	19.07	20.50
		25	13	18.97	18.87	18.93	20.50
		25	25	18.97	18.86	19.15	20.50
	16QAM	50	0	18.85	18.87	19.11	20.50
		1	0	18.73	18.85	19.21	20.50
		1	25	18.51	18.71	18.80	20.50
		1	49	18.96	19.17	19.18	20.50
	64QAM	25	0	18.85	18.54	18.82	20.50
		25	13	18.79	18.64	18.71	20.50
		25	25	18.79	18.51	18.95	20.50
		50	0	18.68	18.58	18.93	20.50
Bandwidth	Modulation	RB size	RB offset	Channel 37825	Channel 38000	Channel 38175	Tune up

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15MHz	QPSK	1	0	19.08	19.06	19.02	20.50
		1	38	18.88	18.85	18.80	20.50
		1	74	19.41	19.37	19.17	20.50
		36	0	18.74	18.85	18.89	20.50
		36	18	18.86	18.72	18.90	20.50
		36	39	18.86	19.02	18.99	20.50
		75	0	18.84	18.90	18.97	20.50
	16QAM	1	0	19.19	19.16	19.18	20.50
		1	38	19.00	18.73	19.06	20.50
		1	74	19.41	19.30	19.36	20.50
		36	0	18.78	18.68	18.78	20.50
		36	18	18.74	18.66	18.89	20.50
		36	39	18.87	18.94	18.99	20.50
		75	0	18.92	18.78	18.89	20.50
	64QAM	1	0	18.91	18.92	18.83	20.50
		1	38	18.82	18.75	18.67	20.50
		1	74	19.23	18.98	19.14	20.50
		36	0	18.76	18.73	18.52	20.50
		36	18	18.63	18.55	18.74	20.50
		36	39	18.52	18.59	18.60	20.50
		75	0	18.61	18.58	18.62	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37850	38000	38150	
20MHz	QPSK	1	0	18.87	18.96	18.87	20.50
		1	50	18.66	18.83	18.87	20.50
		1	99	19.54	19.27	19.43	20.50
		50	0	18.80	18.81	18.80	20.50
		50	25	18.82	18.90	18.81	20.50
		50	50	19.05	19.05	19.14	20.50
		100	0	18.95	18.92	19.08	20.50
	16QAM	1	0	19.10	18.97	19.24	20.50
		1	50	18.78	18.85	19.16	20.50
		1	99	19.29	19.42	19.53	20.50
		50	0	18.88	18.86	19.00	20.50
		50	25	18.79	18.91	18.94	20.50
		50	50	19.13	19.05	19.11	20.50
		100	0	18.82	18.98	19.12	20.50
	64QAM	1	0	18.75	18.66	19.08	20.50
		1	50	18.57	18.68	18.90	20.50
		1	99	19.03	19.07	19.20	20.50
		50	0	18.75	18.53	18.87	20.50
		50	25	18.56	18.65	18.74	20.50
		50	50	18.85	18.91	18.73	20.50
		100	0	18.76	18.72	18.84	20.50

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Receiver on+Hotspot/WIFI on(Head)							
LTE Band 38				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 37775	Channel 38000	Channel 38225	Tune up
5MHz	QPSK	1	0	16.81	16.84	16.89	18.50
		1	13	16.84	16.97	17.26	18.50
		1	24	16.90	16.76	16.89	18.50
		12	0	16.83	16.91	16.99	18.50
		12	6	16.86	16.78	16.99	18.50
		12	13	16.85	16.98	16.95	18.50
		25	0	16.91	16.83	17.07	18.50
	16QAM	1	0	17.10	17.10	17.20	18.50
		1	13	17.04	17.07	17.28	18.50
		1	24	16.95	16.90	17.16	18.50
		12	0	16.92	16.88	16.95	18.50
		12	6	16.85	16.96	16.96	18.50
		12	13	16.85	16.89	16.82	18.50
		25	0	16.84	16.83	17.07	18.50
	64QAM	1	0	16.63	16.94	16.83	18.50
		1	13	16.82	16.82	16.81	18.50
		1	24	16.86	16.76	16.90	18.50
		12	0	16.75	16.76	16.97	18.50
		12	6	16.66	16.84	16.88	18.50
		12	13	16.81	17.03	16.97	18.50
		25	0	16.91	16.88	16.88	18.50
Bandwidth	Modulation	RB size	RB offset	Channel 37800	Channel 38000	Channel 38200	Tune up
10MHz	QPSK	1	0	17.11	17.04	17.13	18.50
		1	25	16.89	17.03	16.99	18.50
		1	49	17.14	17.18	17.32	18.50
		25	0	16.87	17.03	16.96	18.50
		25	13	16.91	16.86	17.00	18.50
		25	25	17.02	16.98	17.16	18.50
		50	0	16.99	17.01	17.22	18.50
	16QAM	1	0	17.22	17.32	17.49	18.50
		1	25	16.90	16.95	16.96	18.50
		1	49	17.20	17.36	17.29	18.50
		25	0	17.03	17.05	17.12	18.50
		25	13	16.94	16.98	17.02	18.50
		25	25	16.96	16.90	17.01	18.50
		50	0	16.83	16.83	17.09	18.50
	64QAM	1	0	17.01	16.97	17.23	18.50
		1	25	16.91	17.10	16.94	18.50
		1	49	17.06	17.09	17.36	18.50
		25	0	16.72	16.94	16.96	18.50
		25	13	16.75	16.93	16.98	18.50
		25	25	16.84	17.04	17.23	18.50
		50	0	17.02	16.86	17.26	18.50
Bandwidth	Modulation	RB size	RB offset	Channel 37825	Channel 38000	Channel 38175	Tune up

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15MHz	QPSK	1	0	17.15	17.05	17.07	18.50
		1	38	16.87	16.75	16.92	18.50
		1	74	17.40	17.30	17.38	18.50
		36	0	16.91	16.84	17.02	18.50
		36	18	16.97	16.79	16.94	18.50
		36	39	16.98	17.00	17.03	18.50
		75	0	16.98	16.90	16.90	18.50
	16QAM	1	0	17.44	17.30	17.47	18.50
		1	38	17.07	16.92	17.31	18.50
		1	74	17.54	17.50	17.74	18.50
		36	0	16.88	16.80	16.87	18.50
		36	18	16.94	16.87	16.98	18.50
		36	39	16.97	16.88	17.06	18.50
		75	0	16.99	16.82	16.99	18.50
	64QAM	1	0	17.08	17.12	17.03	18.50
		1	38	16.81	16.72	17.02	18.50
		1	74	17.27	17.13	17.47	18.50
		36	0	16.99	16.87	16.87	18.50
		36	18	16.81	16.67	16.98	18.50
		36	39	16.92	16.99	17.05	18.50
		75	0	16.95	16.90	16.92	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37850	38000	38150	
20MHz	QPSK	1	0	17.01	16.91	16.88	18.50
		1	50	16.77	16.93	16.78	18.50
		1	99	17.32	17.61	17.37	18.50
		50	0	16.90	16.84	16.79	18.50
		50	25	17.02	16.87	16.84	18.50
		50	50	17.15	17.30	17.29	18.50
		100	0	17.04	16.99	17.23	18.50
	16QAM	1	0	17.21	17.11	17.38	18.50
		1	50	16.96	16.93	17.42	18.50
		1	99	17.60	17.40	17.45	18.50
		50	0	16.92	16.95	16.96	18.50
		50	25	17.05	16.77	16.92	18.50
		50	50	17.18	17.15	17.17	18.50
		100	0	17.07	16.92	17.09	18.50
	64QAM	1	0	16.88	16.99	16.70	18.50
		1	50	16.60	17.03	16.87	18.50
		1	99	17.23	17.44	17.48	18.50
		50	0	17.09	16.72	16.99	18.50
		50	25	16.98	16.98	16.85	18.50
		50	50	17.23	17.07	17.09	18.50
		100	0	16.84	17.03	17.27	18.50

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Receiver off+Sensor on+Hotspot/WIFI off(Body)							
LTE Band 38				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 37775	Channel 38000	Channel 38225	Tune up
5MHz	QPSK	1	0	21.17	21.11	21.05	22.50
		1	13	21.17	21.02	21.03	22.50
		1	24	21.01	21.03	21.10	22.50
		12	0	21.03	21.05	21.05	22.50
		12	6	21.05	21.03	21.06	22.50
		12	13	21.06	21.01	21.05	22.50
		25	0	20.98	21.03	21.00	22.50
	16QAM	1	0	21.03	21.05	21.05	22.50
		1	13	21.01	21.10	21.00	22.50
		1	24	21.03	21.05	21.05	22.50
		12	0	20.74	20.68	20.61	22.00
		12	6	20.65	20.74	20.60	22.00
		12	13	20.77	20.76	20.65	22.00
		25	0	20.65	20.74	20.64	22.00
	64QAM	1	0	20.74	20.65	20.66	22.00
		1	13	20.65	20.55	20.64	22.00
		1	24	20.75	20.65	20.66	22.00
		12	0	19.74	19.80	19.74	21.00
		12	6	19.65	19.84	19.65	21.00
		12	13	19.71	19.84	19.77	21.00
		25	0	19.65	19.76	19.86	21.00
Bandwidth	Modulation	RB size	RB offset	Channel 37800	Channel 38000	Channel 38200	Tune up
10MHz	QPSK	1	0	21.25	21.03	21.13	22.50
		1	25	20.62	20.79	20.98	22.50
		1	49	20.94	21.03	21.03	22.50
		25	0	20.88	20.65	20.98	22.50
		25	13	20.78	20.63	20.95	22.50
		25	25	20.79	20.87	21.15	22.50
		50	0	20.66	20.89	21.12	22.50
	16QAM	1	0	21.16	21.02	21.01	22.50
		1	25	20.81	20.85	21.09	22.50
		1	49	21.24	21.17	21.00	22.50
		25	0	20.62	20.80	21.01	22.00
		25	13	20.65	20.69	20.83	22.00
		25	25	20.54	20.61	20.89	22.00
		50	0	20.42	20.55	20.83	22.00
	64QAM	1	0	20.68	20.88	20.97	22.00
		1	25	20.42	20.62	20.85	22.00
		1	49	20.84	20.65	20.88	22.00
		25	0	19.82	19.62	19.91	21.00
		25	13	19.77	19.61	19.87	21.00
		25	25	19.79	19.77	20.07	21.00
		50	0	19.64	19.86	20.00	21.00
Bandwidth	Modulation	RB size	RB offset	Channel 37825	Channel 38000	Channel 38175	Tune up

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Xi'An Branch

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15MHz	QPSK	1	0	21.03	21.21	21.12	22.50
		1	38	20.78	20.98	20.84	22.50
		1	74	21.33	21.31	21.25	22.50
		36	0	20.67	20.61	20.77	22.50
		36	18	20.84	20.56	21.00	22.50
		36	39	20.87	20.90	20.93	22.50
		75	0	20.95	20.78	21.11	22.50
	16QAM	1	0	21.26	21.03	21.21	22.50
		1	38	20.96	20.65	21.25	22.50
		1	74	21.05	21.25	21.02	22.50
		36	0	20.58	20.30	20.70	22.00
		36	18	20.54	20.35	20.82	22.00
		36	39	20.57	20.60	20.79	22.00
		75	0	20.50	20.62	20.72	22.00
	64QAM	1	0	20.87	21.02	20.93	22.00
		1	38	20.58	20.86	20.70	22.00
		1	74	21.13	20.65	20.88	22.00
		36	0	19.63	19.55	19.68	21.00
		36	18	19.74	19.48	20.00	21.00
		36	39	19.78	19.84	19.86	21.00
		75	0	19.87	19.73	20.01	21.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37850	38000	38150	
20MHz	QPSK	1	0	20.79	20.89	20.93	22.50
		1	50	20.56	20.69	20.89	22.50
		1	99	21.07	21.39	21.35	22.50
		50	0	20.68	21.12	20.91	22.50
		50	25	20.90	20.76	20.76	22.50
		50	50	21.05	21.04	21.11	22.50
		100	0	20.93	20.99	21.02	22.50
	16QAM	1	0	21.04	21.12	21.07	22.50
		1	50	20.96	20.87	21.20	22.50
		1	99	21.38	21.25	21.37	22.50
		50	0	20.73	20.68	20.84	22.00
		50	25	20.76	20.62	20.55	22.00
		50	50	20.69	20.69	20.93	22.00
		100	0	20.78	20.76	20.86	22.00
	64QAM	1	0	20.62	20.72	20.80	22.00
		1	50	20.44	20.49	20.74	22.00
		1	99	20.94	20.65	20.88	22.00
		50	0	19.63	19.67	19.86	21.00
		50	25	19.82	19.66	19.71	21.00
		50	50	20.01	19.98	20.09	21.00
		100	0	19.86	19.97	19.94	21.00

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Receiver off +Hotspot/WIFI on(Body)							
LTE Band 38				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel 37775	Channel 38000	Channel 38225	Tune up
5MHz	QPSK	1	0	20.29	20.33	20.70	21.50
		1	13	20.30	20.44	20.70	21.50
		1	24	20.35	20.15	20.32	21.50
		12	0	20.36	20.54	20.36	21.50
		12	6	20.17	20.41	20.53	21.50
		12	13	20.17	20.52	20.51	21.50
		25	0	20.22	20.33	20.39	21.50
	16QAM	1	0	20.55	20.57	20.77	21.50
		1	13	20.40	20.43	20.77	21.50
		1	24	20.50	20.41	20.46	21.50
		12	0	20.37	20.36	20.50	21.50
		12	6	20.39	20.42	20.45	21.50
		12	13	20.18	20.33	20.42	21.50
		25	0	20.27	20.48	20.55	21.50
	64QAM	1	0	20.29	20.25	20.66	21.50
		1	13	20.40	20.30	20.56	21.50
		1	24	20.45	19.97	20.18	21.50
		12	0	20.26	20.57	20.43	21.50
		12	6	20.26	20.22	20.36	21.50
		12	13	20.03	20.44	20.40	21.50
		25	0	20.22	20.25	20.43	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 37800	Channel 38000	Channel 38200	Tune up
10MHz	QPSK	1	0	20.50	20.62	20.71	21.50
		1	25	20.33	20.39	20.76	21.50
		1	49	20.56	20.91	20.88	21.50
		25	0	20.29	20.56	20.79	21.50
		25	13	20.52	20.45	20.65	21.50
		25	25	20.51	20.49	20.67	21.50
		50	0	20.51	20.39	20.63	21.50
	16QAM	1	0	20.70	20.77	20.80	21.50
		1	25	20.33	20.37	20.72	21.50
		1	49	20.73	20.95	20.88	21.50
		25	0	20.44	20.38	20.59	21.50
		25	13	20.46	20.28	20.53	21.50
		25	25	20.37	20.52	20.64	21.50
		50	0	20.34	20.55	20.53	21.50
	64QAM	1	0	20.52	20.44	20.57	21.50
		1	25	20.41	20.41	20.86	21.50
		1	49	20.36	20.76	20.76	21.50
		25	0	20.33	20.52	20.81	21.50
		25	13	20.40	20.48	20.55	21.50
		25	25	20.36	20.58	20.70	21.50
		50	0	20.59	20.21	20.43	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 37825	Channel 38000	Channel 38175	Tune up

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15MHz	QPSK	1	0	20.61	20.69	20.66	21.50
		1	38	20.38	20.24	20.46	21.50
		1	74	20.80	20.76	20.81	21.50
		36	0	20.17	20.39	20.38	21.50
		36	18	20.43	20.26	20.38	21.50
		36	39	20.35	20.58	20.63	21.50
		75	0	20.44	20.26	20.61	21.50
	16QAM	1	0	20.67	20.62	20.74	21.50
		1	38	20.26	20.33	20.52	21.50
		1	74	21.00	20.97	20.91	21.50
		36	0	20.34	20.18	20.26	21.50
		36	18	20.31	20.13	20.47	21.50
		36	39	20.34	20.46	20.48	21.50
		75	0	20.48	20.29	20.54	21.50
	64QAM	1	0	20.47	20.78	20.56	21.50
		1	38	20.30	20.32	20.55	21.50
		1	74	20.66	20.61	20.82	21.50
		36	0	20.17	20.36	20.18	21.50
		36	18	20.53	20.25	20.46	21.50
		36	39	20.29	20.63	20.56	21.50
		75	0	20.47	20.13	20.57	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				37850	38000	38150	
20MHz	QPSK	1	0	20.95	20.58	20.53	21.50
		1	50	20.30	20.18	20.55	21.50
		1	99	20.78	20.94	20.77	21.50
		50	0	20.64	20.23	20.51	21.50
		50	25	20.43	20.37	20.32	21.50
		50	50	20.59	20.55	20.63	21.50
		100	0	20.55	20.40	20.53	21.50
	16QAM	1	0	20.60	20.33	20.71	21.50
		1	50	20.29	20.40	20.50	21.50
		1	99	20.87	20.70	20.86	21.50
		50	0	20.45	20.39	20.36	21.50
		50	25	20.27	20.20	20.25	21.50
		50	50	20.50	20.60	20.59	21.50
		100	0	20.29	20.25	20.58	21.50
	64QAM	1	0	20.17	20.43	20.38	21.50
		1	50	20.14	20.03	20.63	21.50
		1	99	20.77	20.76	20.58	21.50
		50	0	20.25	20.25	20.51	21.50
		50	25	20.45	20.28	20.34	21.50
		50	50	20.66	20.60	20.71	21.50
		100	0	20.46	20.50	20.34	21.50

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Full Power								
LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40065	40448	40832	41215	
5MHz	QPSK	1	0	22.67	22.53	22.60	23.15	24.50
		1	13	22.65	22.54	22.72	23.16	24.50
		1	24	22.52	22.52	22.52	22.90	24.50
		12	0	21.55	21.57	21.82	22.11	23.50
		12	6	21.56	21.56	21.84	22.16	23.50
		12	13	21.51	21.57	21.64	22.08	23.50
		25	0	21.53	21.58	21.70	22.08	23.50
	16QAM	1	0	21.76	21.69	21.63	22.26	23.50
		1	13	21.72	21.75	21.94	22.27	23.50
		1	24	21.60	21.52	21.84	22.16	23.50
		12	0	20.50	20.53	20.54	21.07	22.50
		12	6	20.52	20.59	20.68	21.09	22.50
		12	13	20.53	20.51	20.60	21.01	22.50
		25	0	20.60	20.56	20.67	21.08	22.50
	64QAM	1	0	20.72	20.57	20.60	21.18	22.50
		1	13	20.71	20.55	20.79	21.19	22.50
		1	24	20.62	20.56	20.62	20.94	22.50
		12	0	19.61	19.65	19.86	20.17	21.50
		12	6	19.66	19.65	19.91	20.24	21.50
		12	13	19.54	19.57	19.73	20.15	21.50
		25	0	19.56	19.60	19.74	20.11	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40090	40457	40823	41190	
10MHz	QPSK	1	0	22.72	22.60	22.75	23.03	24.50
		1	25	22.67	22.52	22.67	23.05	24.50
		1	49	23.07	22.98	22.93	23.56	24.50
		25	0	21.71	21.62	21.50	22.19	23.50
		25	13	21.51	21.56	21.68	22.17	23.50
		25	25	21.59	21.54	21.81	21.99	23.50
		50	0	21.50	21.55	21.83	22.07	23.50
	16QAM	1	0	21.92	21.77	22.08	22.44	23.50
		1	25	21.71	21.54	21.88	22.06	23.50
		1	49	21.73	21.82	21.91	22.26	23.50
		25	0	20.51	20.59	20.56	20.97	22.50
		25	13	20.69	20.63	20.57	21.04	22.50
		25	25	20.65	20.60	20.62	21.16	22.50
		50	0	20.79	20.60	20.64	21.16	22.50
	64QAM	1	0	20.82	20.63	20.81	21.06	22.50
		1	25	20.71	20.55	20.70	21.14	22.50
		1	49	21.11	21.06	20.97	21.60	22.50
		25	0	19.75	19.71	19.56	20.27	21.50
		25	13	19.55	19.56	19.76	20.17	21.50
		25	25	19.62	19.61	19.82	20.08	21.50
		50	0	19.51	19.64	19.92	20.09	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40115	40465	40815	41165	

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15MHz	QPSK	1	0	22.63	22.58	22.53	22.96	24.50
		1	38	22.66	22.68	22.73	23.10	24.50
		1	74	22.53	22.56	22.54	22.52	24.50
		36	0	21.99	21.85	21.93	22.08	23.50
		36	18	21.91	21.65	21.56	22.28	23.50
		36	39	21.51	21.58	21.51	21.98	23.50
		75	0	21.80	21.54	21.59	22.00	23.50
	16QAM	1	0	21.58	21.62	21.53	21.78	23.50
		1	38	21.96	21.66	21.68	22.18	23.50
		1	74	21.53	21.51	21.55	21.73	23.50
		36	0	20.90	20.65	20.92	21.09	22.50
		36	18	20.76	20.77	20.78	21.22	22.50
		36	39	21.54	21.51	20.54	20.70	22.50
		75	0	20.80	20.62	20.55	21.18	22.50
	64QAM	1	0	20.69	20.67	20.63	20.99	22.50
		1	38	20.76	20.75	20.82	21.13	22.50
		1	74	20.56	20.62	20.60	20.55	22.50
		36	0	19.99	19.92	20.03	20.13	21.50
		36	18	19.91	19.70	19.56	20.28	21.50
		36	39	19.52	19.64	19.55	19.99	21.50
		75	0	19.82	19.57	19.67	20.10	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40140	40473	40807	41140	
20MHz	QPSK	1	0	22.88	22.60	22.92	23.24	24.50
		1	50	22.76	22.92	22.78	22.93	24.50
		1	99	23.07	22.90	22.97	23.40	24.50
		50	0	21.79	21.67	21.93	22.27	23.50
		50	25	21.76	21.69	21.83	22.26	23.50
		50	50	21.70	21.87	21.67	22.16	23.50
		100	0	21.84	21.85	21.65	22.03	23.50
	16QAM	1	0	21.95	22.07	21.94	22.30	23.50
		1	50	21.97	21.83	22.03	22.22	23.50
		1	99	22.05	22.06	22.17	21.98	23.50
		50	0	20.79	20.91	20.65	20.93	22.50
		50	25	20.87	20.81	20.88	21.04	22.50
		50	50	20.71	20.82	20.65	21.13	22.50
		100	0	21.04	20.70	20.97	21.12	22.50
	64QAM	1	0	20.94	20.69	20.95	21.30	22.50
		1	50	20.77	20.99	20.83	20.97	22.50
		1	99	21.09	20.90	21.06	21.45	22.50
		50	0	19.83	19.76	19.99	20.29	21.50
		50	25	19.82	19.76	19.85	20.36	21.50
		50	50	19.72	19.87	19.75	20.24	21.50
		100	0	19.87	19.92	19.75	20.08	21.50

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Receiver on+Hotspot/WIFI off(Head)								
LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40065	40448	40832	41215	
5MHz	QPSK	1	0	18.94	18.96	18.85	18.70	20.50
		1	13	18.45	18.52	18.41	18.28	20.50
		1	24	18.43	18.56	18.21	18.16	20.50
		12	0	18.32	18.62	18.43	18.23	20.50
		12	6	18.53	18.59	18.41	18.29	20.50
		12	13	18.46	18.45	18.35	18.22	20.50
		25	0	18.47	18.64	18.44	18.23	20.50
	16QAM	1	0	19.01	18.99	18.68	18.69	20.50
		1	13	18.77	18.87	18.69	18.56	20.50
		1	24	18.82	18.90	18.58	18.47	20.50
		12	0	18.49	18.51	18.36	18.00	20.50
		12	6	18.53	18.48	18.44	18.16	20.50
		12	13	18.54	18.51	18.37	18.45	20.50
		25	0	18.55	18.54	18.49	18.21	20.50
	64QAM	1	0	18.95	19.00	19.00	18.72	20.50
		1	13	18.68	18.72	18.54	18.65	20.50
		1	24	18.63	18.60	18.61	18.18	20.50
		12	0	18.57	18.54	18.55	18.80	20.50
		12	6	18.89	18.62	18.65	18.65	20.50
		12	13	18.98	18.67	18.65	18.65	20.50
		25	0	18.79	18.57	18.74	18.74	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40090	40457	40823	41190	
10MHz	QPSK	1	0	19.08	19.13	19.14	18.85	20.50
		1	25	18.46	18.37	18.36	18.07	20.50
		1	49	18.70	18.72	18.40	18.46	20.50
		25	0	18.63	18.60	18.41	18.18	20.50
		25	13	18.57	18.54	18.45	18.16	20.50
		25	25	18.68	18.57	18.37	18.23	20.50
		50	0	18.55	18.54	18.49	18.21	20.50
	16QAM	1	0	18.95	19.02	19.09	18.72	20.50
		1	25	18.68	18.72	18.54	18.23	20.50
		1	49	19.04	19.02	18.68	18.54	20.50
		25	0	18.53	18.58	18.45	18.57	20.50
		25	13	18.65	18.62	18.37	18.29	20.50
		25	25	18.56	18.55	18.40	18.39	20.50
		50	0	18.63	18.71	18.53	18.65	20.50
	64QAM	1	0	18.73	18.86	18.51	18.66	20.50
		1	25	18.62	18.92	18.73	18.65	20.50
		1	49	18.83	18.89	18.71	18.66	20.50
		25	0	18.76	18.75	18.65	18.68	20.50
		25	13	18.77	18.94	18.74	18.74	20.50
		25	25	18.83	18.89	18.71	18.99	20.50
		50	0	18.83	18.89	18.71	18.65	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40115	40465	40815	41165	

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15MHz	QPSK	1	0	18.42	18.59	18.55	18.45	20.50
		1	38	18.65	18.79	18.58	18.42	20.50
		1	74	18.12	17.99	17.98	18.02	20.50
		36	0	18.74	19.02	18.81	18.55	20.50
		36	18	19.14	18.98	18.64	18.58	20.50
		36	39	18.48	18.50	18.30	18.27	20.50
		75	0	18.56	18.79	18.46	18.49	20.50
	16QAM	1	0	18.65	18.86	18.64	18.77	20.50
		1	38	19.02	19.13	18.78	18.70	20.50
		1	74	18.41	18.35	18.07	18.34	20.50
		36	0	18.97	18.98	18.69	18.39	20.50
		36	18	18.95	18.79	18.64	18.68	20.50
		36	39	18.48	18.55	18.28	18.35	20.50
		75	0	18.79	18.68	18.56	18.60	20.50
	64QAM	1	0	18.56	18.55	18.95	18.79	20.50
		1	38	18.63	18.71	18.61	18.55	20.50
		1	74	18.73	18.86	18.79	18.68	20.50
		36	0	18.65	18.62	18.56	18.55	20.50
		36	18	18.56	18.55	18.63	18.71	20.50
		36	39	18.81	18.88	18.95	18.58	20.50
		75	0	18.54	18.58	18.65	18.71	20.50
Bandwidth	Modulation	RB size	RB offset	Channel 40140	Channel 40473	Channel 40807	Channel 41140	Tune up
20MHz	QPSK	1	0	18.95	18.76	18.71	18.57	20.50
		1	50	19.20	18.78	18.72	18.59	20.50
		1	99	18.86	18.56	18.54	18.57	20.50
		50	0	18.69	18.55	18.53	18.58	20.50
		50	25	18.71	18.68	18.53	18.56	20.50
		50	50	18.86	18.69	18.57	18.59	20.50
		100	0	18.96	18.63	18.51	18.52	20.50
	16QAM	1	0	19.19	19.13	18.71	18.82	20.50
		1	50	19.03	18.76	18.56	18.52	20.50
		1	99	19.12	18.81	18.79	18.51	20.50
		50	0	18.93	18.71	18.57	18.52	20.50
		50	25	18.89	18.64	18.51	18.56	20.50
		50	50	18.84	18.62	18.55	18.54	20.50
		100	0	18.92	18.58	18.67	18.53	20.50
	64QAM	1	0	19.19	19.13	18.71	18.82	20.50
		1	50	19.03	18.76	18.56	18.52	20.50
		1	99	18.95	18.79	18.64	18.68	20.50
		50	0	18.65	18.55	18.66	18.51	20.50
		50	25	18.79	18.68	18.56	18.60	20.50
		50	50	18.56	18.55	18.95	18.79	20.50
		100	0	18.61	18.66	18.74	18.65	20.50

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Receiver on+Hotspot/WIFI on(Head)								
LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40065	40448	40832	41215	
5MHz	QPSK	1	0	17.38	16.98	16.62	16.39	18.50
		1	13	16.68	16.42	16.22	16.06	18.50
		1	24	16.59	16.33	16.10	15.97	18.50
		12	0	16.71	16.55	16.34	16.02	18.50
		12	6	16.68	16.36	16.14	16.17	18.50
		12	13	16.68	16.32	16.16	16.11	18.50
		25	0	16.69	16.56	16.15	16.11	18.50
	16QAM	1	0	16.82	16.82	16.28	16.44	18.50
		1	13	16.67	16.83	16.58	16.40	18.50
		1	24	16.81	16.68	16.44	16.30	18.50
		12	0	16.67	16.44	16.10	16.01	18.50
		12	6	16.81	16.51	16.10	16.07	18.50
		12	13	16.73	16.39	16.06	16.02	18.50
		25	0	16.66	16.47	16.37	16.20	18.50
	64QAM	1	0	17.38	17.01	16.69	16.43	18.50
		1	13	16.68	16.52	16.26	16.07	18.50
		1	24	16.65	16.34	16.15	16.04	18.50
		12	0	16.76	16.55	16.39	16.09	18.50
		12	6	16.76	16.38	16.14	16.18	18.50
		12	13	16.69	16.37	16.16	16.19	18.50
		25	0	16.79	16.56	16.25	16.20	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40090	40457	40823	41190	
10MHz	QPSK	1	0	17.41	17.12	16.80	16.75	18.50
		1	25	16.56	16.26	16.04	16.06	18.50
		1	49	16.90	16.54	16.15	16.31	18.50
		25	0	16.70	16.49	16.18	16.18	18.50
		25	13	16.71	16.24	16.20	16.05	18.50
		25	25	16.72	16.57	16.13	16.17	18.50
		50	0	16.71	16.43	16.17	16.05	18.50
	16QAM	1	0	17.07	16.91	16.77	16.42	18.50
		1	25	16.98	16.63	16.26	16.15	18.50
		1	49	17.08	16.88	16.47	16.41	18.50
		25	0	16.76	16.49	16.38	16.18	18.50
		25	13	16.88	16.46	16.21	16.07	18.50
		25	25	16.76	16.38	16.15	16.17	18.50
		50	0	16.77	16.42	16.35	16.14	18.50
	64QAM	1	0	17.51	17.14	16.90	16.78	18.50
		1	25	16.65	16.29	16.13	16.16	18.50
		1	49	16.91	16.63	16.15	16.39	18.50
		25	0	16.74	16.51	16.28	16.28	18.50
		25	13	16.79	16.30	16.24	16.11	18.50
		25	25	16.76	16.59	16.15	16.22	18.50
		50	0	16.75	16.48	16.22	16.13	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40115	40465	40815	41165	

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15MHz	QPSK	1	0	16.68	16.59	16.44	16.20	18.50
		1	38	17.03	16.81	16.42	16.42	18.50
		1	74	16.11	16.23	15.83	15.61	18.50
		36	0	17.26	16.94	16.67	16.54	18.50
		36	18	17.16	16.87	16.50	16.51	18.50
		36	39	16.71	16.33	16.16	16.08	18.50
		75	0	17.05	16.71	16.40	16.40	18.50
	16QAM	1	0	16.98	16.76	16.48	16.36	18.50
		1	38	17.32	17.08	16.81	16.82	18.50
		1	74	16.50	16.62	16.15	15.84	18.50
		36	0	17.08	16.79	16.63	16.41	18.50
		36	18	17.16	16.72	16.48	16.46	18.50
		36	39	16.79	16.35	16.12	16.06	18.50
		75	0	17.00	16.69	16.31	16.38	18.50
	64QAM	1	0	16.78	16.69	16.46	16.25	18.50
		1	38	17.11	16.85	16.46	16.48	18.50
		1	74	16.13	16.33	15.92	15.64	18.50
		36	0	17.36	16.98	16.75	16.63	18.50
		36	18	17.19	16.88	16.50	16.60	18.50
		36	39	16.80	16.40	16.24	16.10	18.50
		75	0	17.08	16.81	16.44	16.44	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40140	40473	40807	41140	
20MHz	QPSK	1	0	17.31	17.06	17.12	16.72	18.50
		1	50	17.66	17.23	17.31	16.57	18.50
		1	99	17.29	16.89	16.57	16.52	18.50
		50	0	17.15	16.93	16.61	16.53	18.50
		50	25	17.17	16.81	16.58	16.56	18.50
		50	50	17.18	16.78	16.51	16.57	18.50
		100	0	17.11	16.83	16.61	16.53	18.50
	16QAM	1	0	17.52	17.25	17.08	16.86	18.50
		1	50	17.35	17.02	16.73	16.61	18.50
		1	99	17.65	17.24	16.81	16.76	18.50
		50	0	17.18	16.94	16.63	16.53	18.50
		50	25	17.12	16.89	16.58	16.59	18.50
		50	50	17.15	16.88	16.59	16.58	18.50
		100	0	17.33	16.92	16.58	16.56	18.50
	64QAM	1	0	17.34	17.16	17.18	16.78	18.50
		1	50	17.72	17.30	17.41	16.65	18.50
		1	99	17.31	16.91	16.58	16.59	18.50
		50	0	17.16	16.96	16.71	16.58	18.50
		50	25	17.19	16.87	16.68	16.66	18.50
		50	50	17.20	16.79	16.52	16.60	18.50
		100	0	17.13	16.86	16.70	16.58	18.50

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Receiver off+Sensor on+Hotspot/WIFI off(Body)								
LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel 40065	Channel 40448	Channel 40832	Channel 41215	Tune up
5MHz	QPSK	1	0	22.18	21.91	21.55	21.50	23.00
		1	13	21.81	21.39	21.19	21.21	23.00
		1	24	21.71	21.34	21.03	21.10	23.00
		12	0	21.76	21.34	21.20	21.12	23.00
		12	6	21.71	21.50	21.27	21.28	23.00
		12	13	21.75	21.35	21.19	21.35	23.00
		25	0	21.74	21.62	21.28	21.43	23.00
	16QAM	1	0	22.01	21.68	21.35	21.28	23.00
		1	13	22.04	21.58	21.50	21.25	23.00
		1	24	22.04	21.75	21.26	21.30	23.00
		12	0	20.76	20.46	20.27	20.10	22.50
		12	6	20.80	20.35	20.16	20.18	22.50
		12	13	20.82	20.59	20.26	20.21	22.50
		25	0	20.77	20.50	20.19	20.21	22.50
	64QAM	1	0	21.69	21.43	21.09	21.08	22.50
		1	13	21.33	20.90	20.73	20.79	22.50
		1	24	21.28	20.93	20.54	20.63	22.50
		12	0	20.27	19.86	19.72	19.69	21.50
		12	6	20.24	20.08	19.78	19.86	21.50
		12	13	20.32	19.93	19.69	19.94	21.50
		25	0	20.29	20.13	19.82	20.02	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 40090	Channel 40457	Channel 40823	Channel 41190	Tune up
	QPSK	1	0	22.29	22.03	21.80	21.66	23.00
		1	25	21.82	21.47	21.22	21.11	23.00
		1	49	21.85	21.76	21.32	21.44	23.00
		25	0	21.77	21.66	21.37	21.22	23.00
		25	13	21.81	21.32	21.26	21.19	23.00
		25	25	21.87	21.54	21.26	21.09	23.00
		50	0	21.79	21.40	21.24	21.17	23.00
	16QAM	1	0	22.22	21.90	21.74	21.49	23.00
		1	25	22.16	21.57	21.45	21.45	23.00
		1	49	22.14	21.74	21.45	21.63	23.00
		25	0	20.86	20.60	20.26	20.32	22.50
		25	13	20.89	20.57	20.25	20.19	22.50
		25	25	20.79	20.41	20.25	20.32	22.50
		50	0	20.77	20.46	20.40	20.28	22.50
	64QAM	1	0	21.84	21.61	21.35	21.24	22.50
		1	25	21.42	21.01	20.82	20.66	22.50
		1	49	21.39	21.32	20.86	20.98	22.50
		25	0	20.36	20.25	19.93	19.80	21.50
		25	13	20.36	19.89	19.77	19.69	21.50
		25	25	20.47	20.12	19.83	19.69	21.50
		50	0	20.36	19.92	19.75	19.68	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 40115	Channel 40465	Channel 40815	Channel 41165	Tune up

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15MHz	QPSK	1	0	21.63	21.43	21.21	21.11	23.00
		1	38	21.87	21.74	21.31	21.27	23.00
		1	74	21.28	20.85	20.62	20.59	23.00
		36	0	22.19	21.85	21.60	21.41	23.00
		36	18	22.08	21.59	21.43	21.42	23.00
		36	39	21.65	21.36	20.96	21.09	23.00
		75	0	21.94	21.63	21.23	21.31	23.00
	16QAM	1	0	21.92	21.61	21.53	21.25	23.00
		1	38	22.13	21.87	21.45	21.69	23.00
		1	74	21.65	21.13	20.95	20.84	23.00
		36	0	21.13	20.64	20.44	20.43	22.50
		36	18	21.11	20.58	20.47	20.46	22.50
		36	39	20.60	20.35	19.99	19.95	22.50
		75	0	21.03	20.55	20.30	20.31	22.50
	64QAM	1	0	21.22	21.00	20.77	20.63	22.50
		1	38	21.40	21.25	20.90	20.81	22.50
		1	74	20.82	20.45	20.12	20.18	22.50
		36	0	20.74	20.38	20.13	19.96	21.50
		36	18	20.61	20.09	19.95	20.02	21.50
		36	39	20.17	19.89	19.51	19.67	21.50
		75	0	20.44	20.18	19.81	19.89	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40140	40473	40807	41140	
20MHz	QPSK	1	0	22.22	21.79	21.68	21.45	23.00
		1	50	21.93	21.48	21.21	21.38	23.00
		1	99	21.88	21.57	21.43	21.41	23.00
		50	0	22.11	21.52	21.43	21.43	23.00
		50	25	22.10	21.57	21.38	21.29	23.00
		50	50	22.00	21.58	21.38	21.33	23.00
		100	0	22.12	21.81	21.39	21.18	23.00
	16QAM	1	0	22.42	22.19	21.92	21.66	23.00
		1	50	22.17	21.87	21.53	21.51	23.00
		1	99	22.14	21.84	21.70	21.80	23.00
		50	0	21.00	20.86	20.57	20.51	22.50
		50	25	20.99	20.74	20.55	20.53	22.50
		50	50	20.90	20.64	20.56	20.52	22.50
		100	0	21.12	20.75	20.55	20.56	22.50
	64QAM	1	0	21.73	21.31	21.26	21.02	22.50
		1	50	21.46	21.06	20.81	20.89	22.50
		1	99	21.41	21.17	21.00	20.93	22.50
		50	0	20.66	20.10	19.94	20.01	21.50
		50	25	20.70	20.12	19.94	19.84	21.50
		50	50	20.51	20.10	19.92	19.90	21.50
		100	0	20.64	20.38	19.96	19.69	21.50

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Receiver off+Sensor on+Hotspot/WIFI on(Body)								
LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40065	40448	40832	41215	
5MHz	QPSK	1	0	20.13	19.93	19.53	19.45	21.50
		1	13	19.71	19.42	19.14	19.11	21.50
		1	24	19.67	19.36	19.00	19.11	21.50
		12	0	19.67	19.47	19.36	19.05	21.50
		12	6	19.79	19.54	19.22	19.21	21.50
		12	13	19.73	19.48	19.16	19.15	21.50
		25	0	19.74	19.39	19.25	19.05	21.50
	16QAM	1	0	20.05	19.85	19.38	19.24	21.50
		1	13	20.00	19.74	19.25	19.45	21.50
		1	24	19.88	19.51	19.25	19.36	21.50
		12	0	19.80	19.36	19.11	19.06	21.50
		12	6	19.76	19.61	19.11	19.14	21.50
		12	13	19.68	19.47	19.22	19.15	21.50
		25	0	19.53	19.56	19.14	19.17	21.50
	64QAM	1	0	20.20	19.97	19.55	19.54	21.50
		1	13	19.73	19.42	19.22	19.17	21.50
		1	24	19.68	19.36	19.01	19.12	21.50
		12	0	19.75	19.51	19.42	19.07	21.50
		12	6	19.82	19.58	19.26	19.25	21.50
		12	13	19.82	19.58	19.16	19.20	21.50
		25	0	19.77	19.40	19.35	19.13	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40090	40457	40823	41190	
10MHz	QPSK	1	0	20.30	20.08	19.88	19.72	21.50
		1	25	19.78	19.41	19.22	19.09	21.50
		1	49	20.21	19.77	19.43	19.46	21.50
		25	0	19.83	19.52	19.27	19.39	21.50
		25	13	19.87	19.47	19.37	19.26	21.50
		25	25	19.88	19.60	19.28	19.27	21.50
		50	0	19.88	19.46	19.34	19.26	21.50
	16QAM	1	0	20.22	19.92	19.82	19.86	21.50
		1	25	20.08	19.65	19.46	19.28	21.50
		1	49	20.33	19.92	19.71	19.47	21.50
		25	0	19.91	19.69	19.27	19.33	21.50
		25	13	19.92	19.45	19.36	19.19	21.50
		25	25	19.82	19.58	19.17	19.21	21.50
		50	0	19.81	19.62	19.22	19.27	21.50
	64QAM	1	0	20.36	20.08	19.93	19.78	21.50
		1	25	19.84	19.50	19.28	19.09	21.50
		1	49	20.30	19.82	19.50	19.52	21.50
		25	0	19.88	19.55	19.36	19.43	21.50
		25	13	19.87	19.56	19.41	19.27	21.50
		25	25	19.95	19.67	19.29	19.36	21.50
		50	0	19.96	19.55	19.43	19.35	21.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40115	40465	40815	41165	

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15MHz	QPSK	1	0	19.88	19.49	19.03	19.18	21.50
		1	38	19.96	19.70	19.32	19.25	21.50
		1	74	19.22	18.96	18.62	18.62	21.50
		36	0	20.10	19.82	19.62	19.48	21.50
		36	18	20.19	19.66	19.45	19.52	21.50
		36	39	19.70	19.39	19.01	18.99	21.50
		75	0	20.06	19.70	19.36	19.33	21.50
	16QAM	1	0	19.92	19.63	19.43	19.25	21.50
		1	38	20.17	19.95	19.66	19.53	21.50
		1	74	19.60	19.17	18.97	18.95	21.50
		36	0	20.09	19.63	19.47	19.44	21.50
		36	18	19.98	19.87	19.49	19.49	21.50
		36	39	19.77	19.45	19.12	18.97	21.50
		75	0	20.00	19.48	19.33	19.31	21.50
	64QAM	1	0	19.97	19.54	19.09	19.22	21.50
		1	38	20.06	19.70	19.32	19.29	21.50
		1	74	19.28	19.02	18.67	18.66	21.50
		36	0	20.18	19.84	19.64	19.57	21.50
		36	18	20.23	19.70	19.54	19.62	21.50
		36	39	19.73	19.47	19.06	19.04	21.50
		75	0	20.06	19.73	19.41	19.34	21.50
Bandwidth	Modulation	RB size	RB offset	Channel 40140	Channel 40473	Channel 40807	Channel 41140	Tune up
20MHz	QPSK	1	0	20.22	19.87	19.77	19.68	21.50
		1	50	19.97	19.56	19.56	19.54	21.50
		1	99	19.99	19.71	19.54	19.57	21.50
		50	0	19.96	19.82	19.58	19.55	21.50
		50	25	20.06	19.58	19.53	19.56	21.50
		50	50	19.99	19.77	19.54	19.51	21.50
		100	0	20.18	19.54	19.54	19.54	21.50
	16QAM	1	0	20.45	20.10	19.97	19.79	21.50
		1	50	20.35	19.80	19.86	19.65	21.50
		1	99	20.32	20.07	19.65	19.70	21.50
		50	0	20.10	19.90	19.56	19.55	21.50
		50	25	20.00	19.66	19.53	19.55	21.50
		50	50	19.91	19.75	19.52	19.51	21.50
		100	0	20.12	19.79	19.53	19.50	21.50
	64QAM	1	0	20.28	19.87	19.80	19.76	21.50
		1	50	20.04	19.63	19.62	19.64	21.50
		1	99	20.08	19.75	19.54	19.57	21.50
		50	0	20.01	19.88	19.65	19.58	21.50
		50	25	20.16	19.67	19.60	19.58	21.50
		50	50	20.09	19.78	19.55	19.53	21.50
		100	0	20.28	19.63	19.55	19.57	21.50

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Receiver off+Sensor off+Hotspot/WIFI on(Body)								
LTE Band 41				Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40065	40448	40832	41215	
5MHz	QPSK	1	0	19.10	18.88	18.56	18.59	20.50
		1	13	18.82	18.36	18.15	18.13	20.50
		1	24	18.71	18.30	18.03	17.87	20.50
		12	0	18.79	18.52	18.18	18.18	20.50
		12	6	18.84	18.59	18.35	18.15	20.50
		12	13	18.86	18.54	18.09	18.08	20.50
		25	0	18.87	18.43	18.18	18.28	20.50
	16QAM	1	0	19.00	18.90	18.46	18.47	20.50
		1	13	18.95	18.65	18.36	18.34	20.50
		1	24	18.91	18.67	18.40	18.17	20.50
		12	0	18.83	18.52	17.98	18.13	20.50
		12	6	18.79	18.60	18.30	18.11	20.50
		12	13	18.80	18.54	18.21	18.05	20.50
		25	0	18.83	18.64	18.24	18.15	20.50
	64QAM	1	0	19.17	18.93	18.57	18.60	20.50
		1	13	18.83	18.41	18.17	18.15	20.50
		1	24	18.72	18.31	18.10	17.95	20.50
		12	0	18.86	18.55	18.28	18.27	20.50
		12	6	18.86	18.66	18.41	18.24	20.50
		12	13	18.96	18.59	18.11	18.17	20.50
		25	0	18.97	18.51	18.20	18.37	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40090	40457	40823	41190	
10MHz	QPSK	1	0	19.34	19.15	18.90	18.65	20.50
		1	25	18.84	18.39	18.12	18.08	20.50
		1	49	19.17	18.65	18.31	18.31	20.50
		25	0	18.98	18.69	18.44	18.36	20.50
		25	13	18.85	18.54	18.37	18.25	20.50
		25	25	18.85	18.47	18.19	18.20	20.50
		50	0	18.93	18.44	18.24	18.16	20.50
	16QAM	1	0	19.20	19.14	18.67	18.58	20.50
		1	25	19.04	18.75	18.40	18.36	20.50
		1	49	19.26	18.72	18.55	18.45	20.50
		25	0	18.96	18.61	18.31	18.25	20.50
		25	13	18.89	18.46	18.41	18.14	20.50
		25	25	18.81	18.58	18.23	18.24	20.50
		50	0	18.78	18.64	18.19	18.20	20.50
	64QAM	1	0	19.38	19.18	18.98	18.69	20.50
		1	25	18.92	18.47	18.13	18.15	20.50
		1	49	19.23	18.68	18.38	18.39	20.50
		25	0	19.04	18.75	18.45	18.45	20.50
		25	13	18.94	18.64	18.41	18.30	20.50
		25	25	18.95	18.54	18.29	18.20	20.50
		50	0	18.94	18.45	18.32	18.23	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40115	40465	40815	41165	

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15MHz	QPSK	1	0	18.70	18.58	18.20	17.98	20.50
		1	38	18.96	18.69	18.41	18.26	20.50
		1	74	18.09	18.07	17.63	17.54	20.50
		36	0	19.19	18.91	18.60	18.49	20.50
		36	18	19.19	18.74	18.47	18.44	20.50
		36	39	18.73	18.51	18.20	18.10	20.50
		75	0	18.91	18.69	18.37	18.34	20.50
	16QAM	1	0	19.00	18.84	18.59	18.27	20.50
		1	38	19.25	19.06	18.81	18.55	20.50
		1	74	18.45	18.22	17.90	17.82	20.50
		36	0	19.18	18.75	18.60	18.48	20.50
		36	18	19.09	18.89	18.45	18.36	20.50
		36	39	18.57	18.44	18.19	18.03	20.50
		75	0	19.01	18.59	18.37	18.36	20.50
	64QAM	1	0	18.72	18.59	18.20	18.05	20.50
		1	38	18.97	18.74	18.48	18.29	20.50
		1	74	18.16	18.11	17.67	17.63	20.50
		36	0	19.28	18.91	18.63	18.54	20.50
		36	18	19.24	18.80	18.55	18.47	20.50
		36	39	18.81	18.59	18.23	18.15	20.50
		75	0	18.97	18.72	18.42	18.43	20.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Tune up
				40140	40473	40807	41140	
20MHz	QPSK	1	0	19.16	18.98	18.86	18.55	20.50
		1	50	19.54	19.09	19.20	18.60	20.50
		1	99	19.14	18.83	18.66	18.53	20.50
		50	0	19.32	19.14	19.06	18.66	20.50
		50	25	19.24	18.83	18.70	18.52	20.50
		50	50	19.31	19.01	18.67	18.59	20.50
		100	0	19.30	18.90	18.75	18.62	20.50
	16QAM	1	0	19.45	19.31	19.17	18.85	20.50
		1	50	19.40	19.15	18.95	18.87	20.50
		1	99	19.53	19.01	18.90	18.87	20.50
		50	0	19.23	19.05	18.77	18.59	20.50
		50	25	19.30	18.82	18.82	18.56	20.50
		50	50	19.02	18.80	18.64	18.55	20.50
		100	0	19.31	19.04	18.96	18.59	20.50
	64QAM	1	0	19.23	18.99	18.87	18.59	20.50
		1	50	19.60	19.18	19.29	18.66	20.50
		1	99	19.18	18.88	18.76	18.63	20.50
		50	0	19.32	19.14	19.13	18.76	20.50
		50	25	19.24	18.87	18.77	18.61	20.50
		50	50	19.40	19.09	18.76	18.65	20.50
		100	0	19.30	18.94	18.76	18.68	20.50

Table 16: Conducted Power of LTE

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8.1.3 Conducted Power of WIFI and BT

Receiver on						
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11b	1	2412	1	15.50	15.07	No
	6	2437		15.50	14.96	No
	11	2462		15.50	15.23	Yes
802.11g	1	2412	6	14.50	14.28	No
	6	2437		14.50	14.19	No
	11	2462		14.50	14.38	No
802.11n HT20 SISO	1	2412	6.5	13.00	12.75	No
	6	2437		13.00	12.65	No
	11	2462		13.00	12.88	No
802.11n HT40 SISO	3	2422	13.5	13.00	12.95	No
	6	2437		13.00	12.91	No
	9	2452		13.00	12.94	No

Receiver off						
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11b	1	2412	1	19.50	18.09	No
	6	2437		19.50	18.87	No
	11	2462		19.50	19.32	Yes
802.11g	1	2412	6	18.50	18.35	No
	6	2437		18.50	18.28	No
	11	2462		18.50	18.47	No
802.11n HT20 SISO	1	2412	6.5	17.00	16.95	No
	6	2437		17.00	16.93	No
	11	2462		17.00	16.95	No
802.11n HT40 SISO	3	2422	13.5	17.00	16.98	No
	6	2437		17.00	16.95	No
	9	2452		17.00	16.97	No

Receiver off+WWAN						
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11b	1	2412	1	17.50	16.95	No
	6	2437		17.50	16.86	No
	11	2462		17.50	17.03	Yes
802.11g	1	2412	6	16.50	16.17	No
	6	2437		16.50	16.08	No
	11	2462		16.50	16.24	No
802.11n HT20 SISO	1	2412	6.5	15.00	14.64	No
	6	2437		15.00	14.55	No
	11	2462		15.00	14.78	No
802.11n HT40 SISO	3	2422	13.5	15.00	14.94	No
	6	2437		15.00	14.92	No
	9	2452		15.00	14.96	No

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SGS-CSTC Standards Technical Services Co., Ltd. Xi'an Branch

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Receiver on							
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11a	U-NII-1	36	5180	6	15.5	15.48	No
		40	5200		15.5	15.46	No
		44	5220		15.5	15.44	No
		48	5240		15.5	15.45	No
	U-NII-2A	52	5260		15.5	15.48	Yes
		56	5280		15.5	15.37	No
		60	5300		15.5	15.42	No
		64	5320		15.5	15.34	No
	U-NII-2C	100	5500		15.5	14.59	No
		104	5520		15.5	14.36	No
		108	5540		15.5	14.08	No
		112	5560		15.5	14.09	No
		116	5580		15.5	14.1	No
		120	5600		15.5	14.56	No
		124	5620		15.5	14.68	No
		128	5640		15.5	15.07	No
		132	5660		15.5	15.38	No
		136	5680		15.5	15.37	No
		140	5700		15.5	15.42	Yes
		144	5720		15.5	15.4	No
	U-NII-3	149	5745		15.5	15.46	No
		153	5765		15.5	15.48	No
		157	5785		15.5	15.45	No
		161	5805		15.5	15.49	Yes
		165	5825		15.5	15.46	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11n-HT20	U-NII-1	36	5180	MCS0	15	14.87	No
		40	5200		15	14.95	No
		44	5220		15	14.96	No
		48	5240		15	14.96	No
	U-NII-2A	52	5260		15	14.93	No
		56	5280		15	14.92	No
		60	5300		15	14.94	No
		64	5320		15	14.91	No
	U-NII-2C	100	5500		15	13.94	No
		104	5520		15	13.66	No
		108	5540		15	13.48	No
		112	5560		15	13.45	No
		116	5580		15	13.52	No
		120	5600		15	13.85	No
		124	5620		15	14.04	No
		128	5640		15	14.4	No
		132	5660		15	14.85	No
		136	5680		15	14.96	No
		140	5700		15	14.94	No
		144	5720		15	14.93	No
	U-NII-3	149	5745		15	14.95	No
		153	5765		15	14.94	No

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		157	5785		15	14.82	No
		161	5805		15	14.8	No
		165	5825		15	14.91	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11n-HT40	U-NII-1	38	5190	MCS0	15	14.96	No
		46	5230		15	14.95	No
	U-NII-2A	54	5270		15	14.93	No
		62	5310		15	14.92	No
	U-NII-2C	102	5510		15	14.17	No
		110	5550		15	13.82	No
		118	5590		15	13.85	No
		126	5630		15	14.48	No
		134	5670		15	14.98	No
		142	5710		15	14.95	No
		151	5755		15	14.96	No
		159	5795		15	14.96	No
	U-NII-3						
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 20M	U-NII-1	36	5180	MCS0	14	13.98	No
		40	5200		14	13.91	No
		44	5220		14	13.84	No
		48	5240		14	13.86	No
	U-NII-2A	52	5260		14	13.85	No
		56	5280		14	13.88	No
		60	5300		14	13.82	No
		64	5320		14	13.87	No
	U-NII-2C	100	5500		14	12.98	No
		104	5520		14	12.69	No
		108	5540		14	12.84	No
		112	5560		14	12.85	No
		116	5580		14	12.58	No
		120	5600		14	12.94	No
		124	5620		14	13.13	No
		128	5640		14	13.49	No
		132	5660		14	13.96	No
		136	5680		14	13.81	No
		140	5700		14	13.98	No
		144	5720		14	13.99	No
	U-NII-3	149	5745		14	13.92	No
		153	5765		14	13.83	No
		157	5785		14	13.85	No
		161	5805		14	13.79	No
		165	5825		14	13.97	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 40M	U-NII-1	38	5190	MCS0	14	13.96	No
		46	5230		14	13.95	No
	U-NII-2A	54	5270		14	13.94	No
		62	5310		14	13.91	No
	U-NII-2C	102	5510		14	13.16	No
		110	5550		14	12.98	No

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		118	5590		14	13	No
		126	5630		14	13.66	No
		134	5670		14	13.92	No
		142	5710		14	13.96	No
	U-NII-3	151	5755		14	13.96	No
		159	5795		14	13.89	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 80M	U-NII-1	42	5210	MCS0	13	12.95	No
	U-NII-2A	58	5290		13	12.96	No
	U-NII-2C	106	5530		13	11.8	No
		122	5610		13	12.31	No
		138	5690		13	12.95	No
	U-NII-3	155	5775		13	12.91	No

Receiver off									
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test		
802.11a	U-NII-1	36	5180	6	17.5	17.41	No		
		40	5200		17.5	17.46	No		
		44	5220		17.5	17.48	No		
		48	5240		17.5	17.43	No		
	U-NII-2A	52	5260		17.5	17.45	No		
		56	5280		17.5	17.42	No		
		60	5300		17.5	17.47	Yes		
		64	5320		17.5	17.46	No		
	U-NII-2C	100	5500		17.5	16.48	No		
		104	5520		17.5	16.28	No		
		108	5540		17.5	16.14	No		
		112	5560		17.5	16.24	No		
		116	5580		17.5	16.26	No		
		120	5600		17.5	16.61	No		
		124	5620		17.5	16.82	No		
		128	5640		17.5	17.17	No		
		132	5660		17.5	17.49	Yes		
		136	5680		17.5	17.46	No		
		140	5700		17.5	17.48	No		
		144	5720		17.5	17.47	No		
	U-NII-3	149	5745		17.5	17.48	Yes		
		153	5765		17.5	17.46	No		
		157	5785		17.5	17.47	No		
		161	5805		17.5	17.47	No		
		165	5825		17.5	17.45	No		
	5GHz	mode	Channel		Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
	802.11n-HT20	U-NII-1	36		5180	MCS0	17	16.98	No
40			5200	17	16.95		No		
44			5220	17	16.87		No		
48			5240	17	16.97		No		
U-NII-2A		52	5260	17	16.9		No		
		56	5280	17	16.96		No		

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		60	5300		17	16.98	No
		64	5320		17	16.99	No
	U-NII-2C	100	5500		17	16.04	No
		104	5520		17	15.8	No
		108	5540		17	15.65	No
		112	5560		17	15.67	No
		116	5580		17	15.72	No
		120	5600		17	16.06	No
		124	5620		17	16.25	No
		128	5640		17	16.58	No
		132	5660		17	16.94	No
		136	5680		17	16.91	No
		140	5700		17	16.96	No
		144	5720		17	16.94	No
	U-NII-3	149	5745		17	16.98	No
		153	5765		17	16.97	No
		157	5785		17	16.84	No
		161	5805		17	16.81	No
		165	5825		17	16.98	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11n-HT40	U-NII-1	38	5190	MCS0	17	16.96	No
		46	5230		17	16.87	No
	U-NII-2A	54	5270		17	16.94	No
		62	5310		17	16.95	No
	U-NII-2C	102	5510		17	16.16	No
		110	5550		17	15.97	No
		118	5590		17	16.04	No
		126	5630		17	16.65	No
		134	5670		17	16.92	No
		142	5710		17	16.93	No
	U-NII-3	151	5755		17	16.95	No
		159	5795		17	16.86	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 20M	U-NII-1	36	5180	MCS0	16	15.75	No
		40	5200		16	15.67	No
		44	5220		16	15.4	No
		48	5240		16	15.78	No
	U-NII-2A	52	5260		16	15.66	No
		56	5280		16	15.64	No
		60	5300		16	15.6	No
		64	5320		16	15.64	No
	U-NII-2C	100	5500		16	14.92	No
		104	5520		16	14.68	No
		108	5540		16	14.51	No
		112	5560		16	14.59	No
		116	5580		16	14.61	No
		120	5600		16	14.98	No
		124	5620		16	15.55	No
		128	5640		16	15.54	No
		132	5660		16	15.93	No

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		136	5680		16	15.96	No
		140	5700		16	15.97	No
		144	5720		16	15.99	No
	U-NII-3	149	5745		16	15.98	No
		153	5765		16	15.86	No
		157	5785		16	15.84	No
		161	5805		16	15.81	No
		165	5825		16	15.95	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 40M	U-NII-1	38	5190	MCS0	16	15.82	No
		46	5230		16	15.48	No
	U-NII-2A	54	5270		16	15.86	No
		62	5310		16	15.87	No
	U-NII-2C	102	5510		16	14.55	No
		110	5550		16	14.35	No
		118	5590		16	14.44	No
		126	5630		16	15.11	No
		134	5670		16	15.84	No
		142	5710		16	15.98	No
	U-NII-3	151	5755		16	15.98	No
		159	5795		16	15.89	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 80M	U-NII-1	42	5210	MCS0	15	14.34	No
	U-NII-2A	58	5290		15	14.56	No
		106	5530		15	13.13	No
	U-NII-2C	122	5610		15	13.62	No
		138	5690		15	14.78	No
	U-NII-3	155	5775		15	14.93	No

Receiver off+WWAN							
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11a	U-NII-1	36	5180	6	16.5	16.43	No
		40	5200		16.5	16.48	Yes
		44	5220		16.5	16.42	No
		48	5240		16.5	16.44	No
	U-NII-2A	52	5260		16.5	16.43	No
		56	5280		16.5	16.45	No
		60	5300		16.5	16.42	No
		64	5320		16.5	16.41	No
	U-NII-2C	100	5500		16.5	15.41	No
		104	5520		16.5	15.18	No
		108	5540		16.5	14.88	No
		112	5560		16.5	14.99	No
		116	5580		16.5	14.95	No
		120	5600		16.5	15.42	No
		124	5620		16.5	15.57	No
		128	5640		16.5	15.94	No
		132	5660		16.5	16.34	No

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		136	5680		16.5	16.45	No
		140	5700		16.5	16.43	No
		144	5720		16.5	16.42	No
	U-NII-3	149	5745		16.5	16.43	No
		153	5765		16.5	16.45	No
		157	5785		16.5	16.47	Yes
		161	5805		16.5	16.48	Yes
		165	5825		16.5	16.45	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11n-HT20	U-NII-1	36	5180	MCS0	16	15.97	No
		40	5200		16	15.83	No
		44	5220		16	15.79	No
		48	5240		16	15.92	No
	U-NII-2A	52	5260		16	15.86	No
		56	5280		16	15.86	No
		60	5300		16	15.84	No
		64	5320		16	15.98	No
	U-NII-2C	100	5500		16	14.82	No
		104	5520		16	14.46	No
		108	5540		16	14.28	No
		112	5560		16	14.28	No
		116	5580		16	14.34	No
		120	5600		16	14.75	No
		124	5620		16	14.9	No
		128	5640		16	15.28	No
		132	5660		16	15.65	No
		136	5680		16	15.81	No
		140	5700		16	15.91	No
		144	5720		16	15.93	No
	U-NII-3	149	5745		16	15.98	No
		153	5765		16	15.92	No
		157	5785		16	15.84	No
		161	5805		16	15.86	No
		165	5825		16	15.98	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11n-HT40	U-NII-1	38	5190	MCS0	16	15.97	No
		46	5230		16	15.82	No
	U-NII-2A	54	5270		16	15.95	No
		62	5310		16	15.93	No
	U-NII-2C	102	5510		16	15	No
		110	5550		16	14.7	No
		118	5590		16	14.69	No
		126	5630		16	15.36	No
		134	5670		16	15.81	No
		142	5710		16	15.92	No
		151	5755		16	15.92	No
	U-NII-3	159	5795		16	15.97	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac	U-NII-1	36	5180	MCS0	15	14.92	No

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20M		40	5200		15	14.81	No
		44	5220		15	14.94	No
		48	5240		15	14.75	No
	U-NII-2A	52	5260		15	14.99	No
		56	5280		15	14.9	No
		60	5300		15	14.86	No
		64	5320		15	14.87	No
	U-NII-2C	100	5500		15	13.78	No
		104	5520		15	13.49	No
		108	5540		15	13.67	No
		112	5560		15	13.68	No
		116	5580		15	13.43	No
		120	5600		15	13.75	No
		124	5620		15	14.03	No
		128	5640		15	14.34	No
		132	5660		15	14.83	No
		136	5680		15	14.82	No
		140	5700		15	14.93	No
		144	5720		15	14.95	No
	U-NII-3	149	5745		15	14.93	No
		153	5765		15	14.85	No
		157	5785		15	14.89	No
		161	5805		15	14.82	No
		165	5825		15	14.96	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 40M	U-NII-1	38	5190	MCS0	15	14.95	No
		46	5230		15	14.97	No
	U-NII-2A	54	5270		15	14.96	No
		62	5310		15	14.95	No
	U-NII-2C	102	5510		15	14	No
		110	5550		15	13.82	No
		118	5590		15	13.81	No
		126	5630		15	14.56	No
		134	5670		15	14.92	No
		142	5710		15	14.96	No
	U-NII-3	151	5755		15	13.94	No
		159	5795		15	13.91	No
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Tune up	Average Power (dBm)	SAR Test
802.11ac 80M	U-NII-1	42	5210	MCS0	14	13.92	No
	U-NII-2A	58	5290		14	13.9	No
	U-NII-2C	106	5530		14	12.63	No
		122	5610		14	13.2	No
		138	5690		14	13.93	No
	U-NII-3	155	5775		14	12.89	No

Table 17: Conducted Power of WiFi

Note:

a) Power must be measured at each transmit antenna port according to the DSSS and OFDM transmission configurations in each standalone and aggregated frequency band.

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- b) Power measurement is required for the transmission mode configuration with the highest maximum output power specified for production units.
- 1) When the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured.
 - 2) When the same highest maximum output power is specified for multiple largest channel bandwidth configurations with the same lowest order modulation or lowest order modulation and lowest data rate, power measurement is required for all equivalent 802.11 configurations with the same maximum output power.
- c) For each transmission mode configuration, power must be measured for the highest and lowest channels; and at the mid-band channel(s) when there are at least 3 channels. For configurations with multiple mid-band channels, due to an even number of channels, both channels should be measured.

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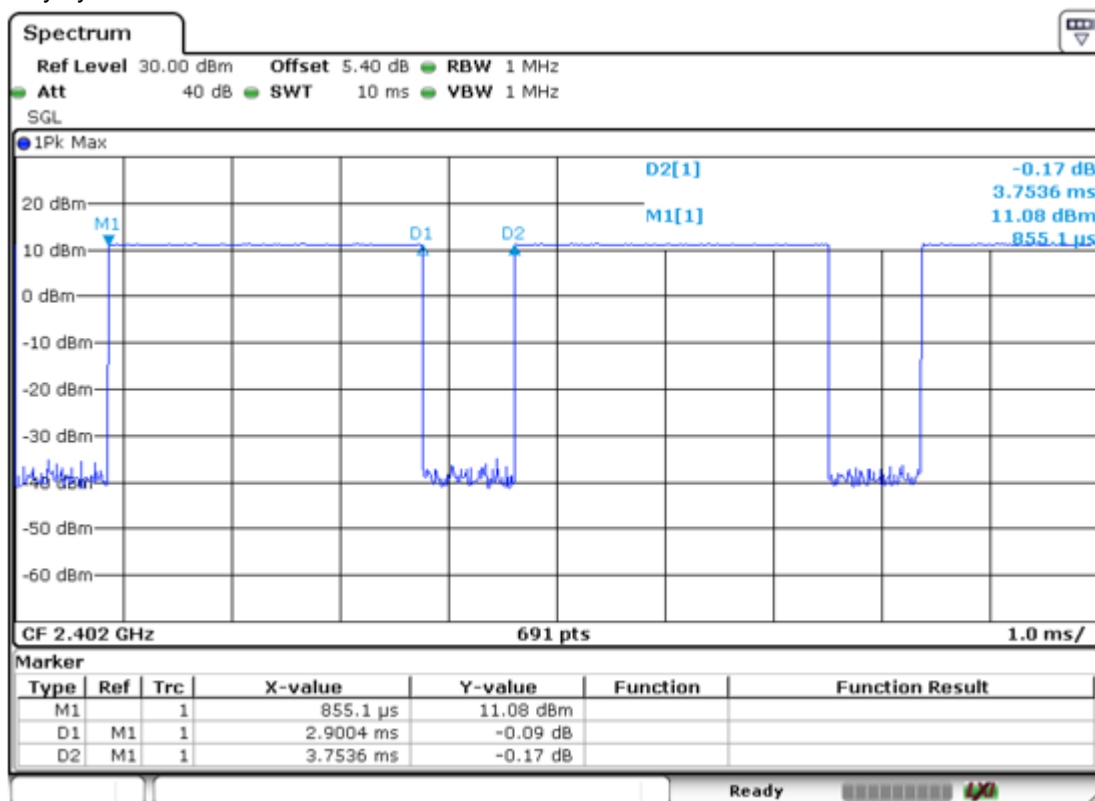
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BT			Tune up (dBm)	Average Conducted Power(dBm)
Modulation	Channel	Frequency(MHz)		
GFSK	0	2402	13.50	11.55
	39	2441	13.50	11.84
	78	2480	13.50	11.51
π/4DQPSK	0	2402	13.50	10.02
	39	2441	13.50	10.34
	78	2480	13.50	10.12
8DPSK	0	2402	13.50	10.01
	39	2441	13.50	10.33
	78	2480	13.50	10.10
BLE			Tune up (dBm)	Average Conducted Power(dBm)
Modulation	Channel	Frequency(MHz)		
GFSK	0	2402	5.50	2.84
	19	2440	5.50	3.70
	39	2480	5.50	4.02

Table 18: Conducted Power of BT

Bluetooth DH5(GFSK):

Duty cycle=2.9004/3.7536=77.27%



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8.2 Stand-alone SAR test evaluation

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and Product specific 10g SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

Freq. Band	Frequency (GHz)	Position	Average Power		Test Separation (mm)	Calculate Value	Exclusion Threshold	Exclusion (Y/N)
			dBm	mW				
Wi-Fi	2.45	Head	15.5	35.5	0	11.1	3	N
		Body-worn	19.5	89.1	15	9.3	3	N
		hotspot	17.5	56.2	10	8.8	3	N
Wi-Fi	5	Head	15.5	35.5	0	15.9	3	N
		Body-worn	17.5	56.2	15	8.4	3	N
		hotspot	16.5	44.7	10	10.0	3	N
Bluetooth	2.48	Head	13.5	22.4	0	7.1	3	N
		Body-worn	13.5	22.4	15	2.4	3	Y
		hotspot	13.5	22.4	10	3.5	3	N

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

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

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Estimated SAR Result:

Freq. Band	Frequency (GHz)	Test Position	max. power(dBm)	Test Separation (mm)	Estimated
					1g SAR (W/kg)
Bluetooth	2.48	Body-worn	13.5	15	0.313

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8.3 Measurement of SAR Data

8.3.1 SAR Result of GSM850

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	GSM	190/836.6	1:8.3	0.141	0.02	33.06	34.50	1.393	0.196	22.1
Left tilted	GSM	190/836.6	1:8.3	0.072	-0.03	33.06	34.50	1.393	0.100	22.1
Right cheek	GSM	190/836.6	1:8.3	0.138	-0.06	33.06	34.50	1.393	0.192	22.1
Right tilted	GSM	190/836.6	1:8.3	0.069	0.02	33.06	34.50	1.393	0.096	22.1
Head Test data at the worst case with Battery 2#										
Left cheek	GSM	190/836.6	1:8.3	0.132	0.03	33.06	34.50	1.393	0.184	22.1
Head Test data at the worst case with Battery 3#										
Left cheek	GSM	190/836.6	1:8.3	0.126	0.05	33.06	34.50	1.393	0.176	22.1
Head Test Data at the worst case with Sample 2										
Left cheek	GSM	190/836.6	1:8.3	0.138	0.02	33.06	34.50	1.393	0.192	22.1
Body worn Test data(Separate 15mm)										
Front side	GSM	190/836.6	1:8.3	0.070	-0.02	33.06	34.50	1.393	0.097	22.1
Back side	GSM	190/836.6	1:8.3	0.138	0.06	33.06	34.50	1.393	0.192	22.1
Body worn Test data at the worst case with Battery 2#										
Back side	GSM	190/836.6	1:8.3	0.134	-0.11	33.06	34.50	1.393	0.187	22.1
Body worn Test data at the worst case with Battery 3#										
Back side	GSM	190/836.6	1:8.3	0.127	-0.02	33.06	34.50	1.393	0.177	22.1
Body worn Test data at the worst case with Sample 2										
Back side	GSM	190/836.6	1:8.3	0.135	0.06	33.06	34.50	1.393	0.188	22.1
Hotspot Test data(Separate 10mm)										
Front side	GPRS 2TS	190/836.6	1:4.15	0.111	0.02	31.17	32.50	1.358	0.151	22.1
Back side	GPRS 2TS	190/836.6	1:4.15	0.282	0.04	31.17	32.50	1.358	0.383	22.1
Left side	GPRS 2TS	190/836.6	1:4.15	0.190	0.12	31.17	32.50	1.358	0.258	22.1
Right side	GPRS 2TS	190/836.6	1:4.15	0.117	-0.07	31.17	32.50	1.358	0.159	22.1
Bottom side	GPRS 2TS	190/836.6	1:4.15	0.215	0.12	31.17	32.50	1.358	0.292	22.1
Hotspot Test data at the worst case with Battery 2#										
Back side	GPRS 2TS	190/836.6	1:4.15	0.275	0.01	31.17	32.50	1.358	0.374	22.1
Hotspot Test data at the worst case with Battery 3#										
Back side	GPRS 2TS	190/836.6	1:4.15	0.265	-0.01	31.17	32.50	1.358	0.360	22.1
Hotspot Test data at the worst case with Sample 2										
Back side	GPRS 2TS	190/836.6	1:4.15	0.276	0.03	31.17	32.50	1.358	0.375	22.1

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Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	GSM	190/836.6	1:8.3	0.316	-0.10	32.68	33.50	1.208	0.382	22.1
Left tilted	GSM	190/836.6	1:8.3	0.296	-0.01	32.68	33.50	1.208	0.358	22.1
Right cheek	GSM	190/836.6	1:8.3	0.448	-0.07	32.68	33.50	1.208	0.541	22.1
Right tilted	GSM	190/836.6	1:8.3	0.469	-0.13	32.68	33.50	1.208	0.566	22.1
Head Test data at the worst case with Battery 2#										
Right tilted	GSM	190/836.6	1:8.3	0.451	-0.02	32.68	33.50	1.208	0.545	22.1
Head Test data at the worst case with Battery 3#										
Right tilted	GSM	190/836.6	1:8.3	0.444	-0.03	32.68	33.50	1.208	0.536	22.1
Head Test Data at the worst case with Sample 2										
Right tilted	GSM	190/836.6	1:8.3	0.435	-0.01	32.68	33.50	1.208	0.525	22.1
Body worn Test data(Separate 15mm)										
Front side	GSM	190/836.6	1:8.3	0.047	0.02	33.47	34.50	1.268	0.060	22.1
Back side	GSM	190/836.6	1:8.3	0.080	0.03	33.47	34.50	1.268	0.101	22.1
Body worn Test data at the worst case with Battery 2#										
Back side	GSM	190/836.6	1:8.3	0.077	0.05	33.47	34.50	1.268	0.097	22.1
Body worn Test data at the worst case with Battery 3#										
Back side	GSM	190/836.6	1:8.3	0.076	0.07	33.47	34.50	1.268	0.096	22.1
Body worn Test data at the worst case with Sample 2										
Back side	GSM	190/836.6	1:8.3	0.078	0.03	33.47	34.50	1.268	0.098	22.1
Hotspot Test data(Separate 10mm)										
Front side	GPRS 2TS	190/836.6	1:4.15	0.085	0.01	31.21	32.50	1.346	0.114	22.1
Back side	GPRS 2TS	190/836.6	1:4.15	0.154	-0.13	31.21	32.50	1.346	0.207	22.1
Left side	GPRS 2TS	190/836.6	1:4.15	0.033	0.06	31.21	32.50	1.346	0.044	22.1
Right side	GPRS 2TS	190/836.6	1:4.15	0.047	-0.05	31.21	32.50	1.346	0.064	22.1
Top side	GPRS 2TS	190/836.6	1:4.15	0.098	0.03	31.21	32.50	1.346	0.132	22.1
Hotspot Test data at the worst case with Battery 2#										
Back side	GPRS 2TS	190/836.6	1:4.15	0.148	-0.08	31.21	32.50	1.346	0.199	22.1
Hotspot Test data at the worst case with Battery 3#										
Back side	GPRS 2TS	190/836.6	1:4.15	0.145	-0.02	31.21	32.50	1.346	0.195	22.1
Hotspot Test data at the worst case with Sample 2										
Back side	GPRS 2TS	190/836.6	1:4.15	0.147	0.03	31.21	32.50	1.346	0.198	22.1

Table 19: SAR of GSM850 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Left cheek	GSM	190/836.6	1:8.3	0.091	0.01	33.06	34.50	1.393	0.127	22.1
Body worn Test data at the worst case (Separate 15mm)										
Back side	GSM	190/836.6	1:8.3	0.096	-0.08	33.06	34.50	1.393	0.134	22.1
Hotspot Test data at the worst case (Separate 10mm)										
Back side	GPRS 2TS	190/836.6	1:4.15	0.237	0.04	31.17	32.50	1.358	0.322	22.1
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Right tilted	GSM	190/836.6	1:8.3	0.395	0.01	32.68	33.50	1.208	0.477	22.1
Body worn Test data at the worst case (Separate 15mm)										
Back side	GSM	190/836.6	1:8.3	0.075	0.02	33.47	34.50	1.268	0.095	22.1
Hotspot Test data at the worst case (Separate 10mm)										
Back side	GPRS 2TS	190/836.6	1:4.15	0.148	-0.01	31.21	32.50	1.346	0.199	22.1

Table 20: SAR of GSM850 for Head and Body(Variant)

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.2 SAR Result of GSM1900

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	GSM	661/1880	1:8.3	0.060	-0.06	29.77	31.50	1.489	0.089	22.3
Left tilted	GSM	661/1880	1:8.3	0.031	0.01	29.77	31.50	1.489	0.046	22.3
Right cheek	GSM	661/1880	1:8.3	0.052	-0.07	29.77	31.50	1.489	0.077	22.3
Right tilted	GSM	661/1880	1:8.3	0.036	0.07	29.77	31.50	1.489	0.054	22.3
Head Test data at the worst case with Battery 2#										
Left cheek	GSM	661/1880	1:8.3	0.054	0.08	29.77	31.50	1.489	0.081	22.3
Head Test data at the worst case with Battery 3#										
Left cheek	GSM	661/1880	1:8.3	0.053	0.03	29.77	31.50	1.489	0.080	22.3
Head Test Data at the worst case with Sample 2										
Left cheek	GSM	661/1880	1:8.3	0.058	0.01	29.77	31.50	1.489	0.087	22.3
Body worn Test data(Separate 15mm)										
Front side	GSM	661/1880	1:8.3	0.086	0.02	29.77	31.50	1.489	0.127	22.3
Back side	GSM	661/1880	1:8.3	0.134	0.04	29.77	31.50	1.489	0.200	22.3
Body worn Test data at the worst case with Battery 2#										
Back side	GSM	661/1880	1:8.3	0.129	-0.04	29.77	31.50	1.489	0.192	22.3
Body worn Test data at the worst case with Battery 3#										
Back side	GSM	661/1880	1:8.3	0.127	-0.04	29.77	31.50	1.489	0.189	22.3
Body worn Test data at the worst case with Sample 2										
Back side	GSM	661/1880	1:8.3	0.125	0.02	29.77	31.50	1.489	0.186	22.3
Hotspot Test data(Separate 10mm)										
Front side	GPRS 2TS	661/1880	1:4.15	0.076	0.06	28.32	29.50	1.312	0.099	22.3
Back side	GPRS 2TS	661/1880	1:4.15	0.196	-0.05	28.32	29.50	1.312	0.257	22.3
Left side	GPRS 2TS	661/1880	1:4.15	0.033	0.02	28.32	29.50	1.312	0.043	22.3
Right side	GPRS 2TS	661/1880	1:4.15	0.063	0.01	28.32	29.50	1.312	0.082	22.3
Bottom side	GPRS 2TS	661/1880	1:4.15	0.597	0.03	28.32	29.50	1.312	0.783	22.3
Hotspot Test data at the worst case with Battery 2#										
Bottom side	GPRS 2TS	661/1880	1:4.15	0.588	0.02	28.32	29.50	1.312	0.772	22.3
Hotspot Test data at the worst case with Battery 3#										
Bottom side	GPRS 2TS	661/1880	1:4.15	0.575	0.06	28.32	29.50	1.312	0.755	22.3
Hotspot Test data at the worst case with Sample 2										
Bottom side	GPRS 2TS	661/1880	1:4.15	0.566	0.03	28.32	29.50	1.312	0.743	22.3
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	GSM	661/1880	1:8.3	0.424	0.11	23.35	24.50	1.303	0.553	22.3
Left tilted	GSM	661/1880	1:8.3	0.513	0.02	23.35	24.50	1.303	0.669	22.3
Right cheek	GSM	661/1880	1:8.3	0.600	0.05	23.35	24.50	1.303	0.782	22.3
Right tilted	GSM	661/1880	1:8.3	0.752	0.07	23.35	24.50	1.303	0.980	22.3
Right tilted	GSM	512/1850.2	1:8.3	0.688	-0.04	23.28	24.50	1.324	0.911	22.3
Right tilted	GSM	810/1909.8	1:8.3	0.738	-0.02	23.33	24.50	1.309	0.966	22.3
Head Test data at the worst case with Battery 2#										

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Right tilted	GSM	661/1880	1:8.3	0.746	-0.01	23.35	24.50	1.303	0.972	22.3
Head Test data at the worst case with Battery 3#										
Right tilted	GSM	661/1880	1:8.3	0.725	-0.02	23.35	24.50	1.303	0.945	22.3
Head Test Data at the worst case with Sample 2										
Right tilted	GSM	661/1880	1:8.3	0.719	-0.04	23.35	24.50	1.303	0.937	22.3
Body worn Test data(Separate 15mm)										
Front side	GSM	661/1880	1:8.3	0.298	0.06	29.93	31.50	1.435	0.428	22.3
Back side	GSM	661/1880	1:8.3	0.317	0.00	29.93	31.50	1.435	0.455	22.3
Body worn Test data at the worst case with Battery 2#										
Back side	GSM	661/1880	1:8.3	0.307	0.01	29.93	31.50	1.435	0.441	22.3
Body worn Test data at the worst case with Battery 3#										
Back side	GSM	661/1880	1:8.3	0.301	-0.02	29.93	31.50	1.435	0.432	22.3
Body worn Test data at the worst case with Sample 2										
Back side	GSM	661/1880	1:8.3	0.298	-0.01	29.93	31.50	1.435	0.428	22.3
Hotspot Test data(Separate 10mm)										
Front side	GPRS 4TS	661/1880	1:2.075	0.288	0.02	19.63	21.50	1.538	0.443	22.3
Back side	GPRS 4TS	661/1880	1:2.075	0.328	-0.01	19.63	21.50	1.538	0.505	22.3
Left side	GPRS 4TS	661/1880	1:2.075	0.072	0.06	19.63	21.50	1.538	0.110	22.3
Right side	GPRS 4TS	661/1880	1:2.075	0.042	0.03	19.63	21.50	1.538	0.065	22.3
Top side	GPRS 4TS	661/1880	1:2.075	0.473	0.02	19.63	21.50	1.538	0.728	22.3
Hotspot Test data at the worst case with Battery 2#										
Top side	GPRS 4TS	661/1880	1:2.075	0.463	0.10	19.63	21.50	1.538	0.712	22.3
Hotspot Test data at the worst case with Battery 3#										
Top side	GPRS 4TS	661/1880	1:2.075	0.453	-0.01	19.63	21.50	1.538	0.697	22.3
Hotspot Test data at the worst case with Sample 2										
Top side	GPRS 4TS	661/1880	1:2.075	0.459	0.03	19.63	21.50	1.538	0.706	22.3
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data(Separate 0mm) Sensor on										
Front side	GPRS 2TS	661/1880	1:4.15	0.586	0.00	25.19	27.00	1.517	0.889	22.3
Back side	GPRS 2TS	661/1880	1:4.15	0.517	-0.03	25.19	27.00	1.517	0.784	22.3
Top side	GPRS 2TS	661/1880	1:4.15	0.826	0.05	25.19	27.00	1.517	1.253	22.3
Product specific 10gSAR Test data Sensor off										
Front side-4mm	GPRS 2TS	661/1880	1:4.15	0.782	0.01	27.57	29.50	1.560	1.220	22.3
Back side-8mm	GPRS 2TS	661/1880	1:4.15	0.546	0.01	27.57	29.50	1.560	0.852	22.3
Top side-10mm	GPRS 2TS	661/1880	1:4.15	0.662	0.03	27.57	29.50	1.560	1.032	22.3
Product specific 10gSAR Test data at the worst case with Battery 2#										
Top side	GPRS 2TS	661/1880	1:4.15	0.786	-0.02	25.19	27.00	1.517	1.192	22.2
Product specific 10gSAR Test data at the worst case with Battery 3#										
Top side	GPRS 2TS	661/1880	1:4.15	0.773	-0.06	25.19	27.00	1.517	1.173	22.2
Product specific 10gSAR Test data at the worst case with Sample 2										
Top side	GPRS 2TS	661/1880	1:4.15	0.790	0.02	25.19	27.00	1.517	1.198	22.2
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	GSM	661/1880	1:8.3	0.252	0.06	21.08	22.50	1.387	0.349	22.3
Left tilted	GSM	661/1880	1:8.3	0.306	0.03	21.08	22.50	1.387	0.424	22.3

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Right cheek	GSM	661/1880	1:8.3	0.379	-0.08	21.08	22.50	1.387	0.526	22.3
Right tilted	GSM	661/1880	1:8.3	0.453	0.17	21.08	22.50	1.387	0.628	22.3

Table 21: SAR of GSM1900 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Left cheek	GSM	661/1880	1:8.3	0.051	0.08	29.77	31.50	1.489	0.076	22.3
Body worn Test data at the worst case(Separate 15mm)										
Back side	GSM	661/1880	1:8.3	0.101	0.08	29.77	31.50	1.489	0.150	22.3
Hotspot Test data at the worst case(Separate 10mm)										
Bottom side	GPRS 2TS	661/1880	1:4.15	0.567	0.07	28.32	29.50	1.312	0.744	22.3
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Right tilted	GSM	661/1880	1:8.3	0.505	-0.05	23.35	24.50	1.303	0.658	22.3
Body worn Test data at the worst case(Separate 15mm)										
Back side	GSM	661/1880	1:8.3	0.201	-0.08	29.93	31.50	1.435	0.289	22.3
Hotspot Test data at the worst case(Separate 10mm)										
Top side	GPRS 4TS	661/1880	1:2.075	0.217	0.02	19.63	21.50	1.538	0.334	22.3
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data at the worst case(Separate 0mm)										
Top side	GPRS 2TS	661/1880	1:4.15	1.080	0.08	25.19	27.00	1.517	1.638	22.3

Table 22: SAR of GSM1900 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.3 SAR Result of WCDMA Band II

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	9400/1880	1:1	0.071	0.01	22.88	24.50	1.452	0.103	22.3
Left tilted	RMC	9400/1880	1:1	0.040	0.04	22.88	24.50	1.452	0.058	22.3
Right cheek	RMC	9400/1880	1:1	0.076	0.03	22.88	24.50	1.452	0.110	22.3
Right tilted	RMC	9400/1880	1:1	0.055	0.01	22.88	24.50	1.452	0.080	22.3
Head Test data at the worst case with Battery 2#										
Right cheek	RMC	9400/1880	1:1	0.074	0.03	22.88	24.50	1.452	0.108	22.3
Head Test data at the worst case with Battery 3#										
Right cheek	RMC	9400/1880	1:1	0.073	0.06	22.88	24.50	1.452	0.106	22.3
Head Test Data at the worst case with Sample 2										
Right cheek	RMC	9400/1880	1:1	0.073	0.01	22.88	24.50	1.452	0.105	22.3
Body worn Test data(Separate 15mm)										
Front side	RMC	9400/1880	1:1	0.135	0.01	22.88	24.50	1.452	0.196	22.3
Back side	RMC	9400/1880	1:1	0.205	0.05	22.88	24.50	1.452	0.298	22.3
Body worn Test data at the worst case with Battery 2#										
Back side	RMC	9400/1880	1:1	0.199	-0.02	22.88	24.50	1.452	0.289	22.3
Body worn Test data at the worst case with Battery 3#										
Back side	RMC	9400/1880	1:1	0.196	-0.02	22.88	24.50	1.452	0.285	22.3
Body worn Test data at the worst case with Sample 2										
Back side	RMC	9400/1880	1:1	0.201	0.05	22.88	24.50	1.452	0.292	22.3
Hotspot Test data(Separate 10mm)										
Front side	RMC	9400/1880	1:1	0.233	0.01	21.85	23.50	1.462	0.341	22.3
Back side	RMC	9400/1880	1:1	0.400	0.07	21.85	23.50	1.462	0.585	22.3
Left side	RMC	9400/1880	1:1	0.063	0.01	21.85	23.50	1.462	0.093	22.3
Right side	RMC	9400/1880	1:1	0.184	0.03	21.85	23.50	1.462	0.269	22.3
Bottom side	RMC	9400/1880	1:1	0.618	0.08	21.85	23.50	1.462	0.904	22.3
Bottom side	RMC	9262/1852.4	1:1	0.729	-0.05	21.84	23.50	1.466	1.068	22.3
Bottom side	RMC	9538/1907.6	1:1	0.622	0.08	21.72	23.50	1.507	0.937	22.3
Hotspot Test data at the worst case with Battery 2#										
Bottom side	RMC	9262/1852.4	1:1	0.609	0.08	21.84	23.50	1.466	0.893	22.3
Hotspot Test data at the worst case with Battery 3#										
Bottom side	RMC	9262/1852.4	1:1	0.600	0.07	21.84	23.50	1.466	0.879	22.3
Hotspot Test data at the worst case with Sample 2										
Bottom side	RMC	9262/1852.4	1:1	0.575	-0.02	21.84	23.50	1.466	0.843	22.3
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	9400/1880	1:1	0.377	0.02	15.94	17.50	1.432	0.540	22.3
Left tilted	RMC	9400/1880	1:1	0.527	0.01	15.94	17.50	1.432	0.755	22.3
Right cheek	RMC	9400/1880	1:1	0.573	0.02	15.94	17.50	1.432	0.821	22.3
Right tilted	RMC	9400/1880	1:1	0.622	0.03	15.94	17.50	1.432	0.891	22.3
Right cheek	RMC	9262/1852.4	1:1	0.547	0.01	15.90	17.50	1.445	0.791	22.3

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Right cheek	RMC	9538/1907.6	1:1	0.584	0.02	15.92	17.50	1.439	0.840	22.3
Right tilted	RMC	9262/1852.4	1:1	0.611	-0.04	15.90	17.50	1.445	0.883	22.3
Right tilted	RMC	9538/1907.6	1:1	0.665	0.07	15.92	17.50	1.439	0.957	22.3
Head Test data at the worst case with Battery 2#										
Right tilted	RMC	9538/1907.6	1:1	0.651	0.02	15.92	17.50	1.439	0.937	22.3
Head Test data at the worst case with Battery 3#										
Right tilted	RMC	9538/1907.6	1:1	0.641	0.03	15.92	17.50	1.439	0.922	22.3
Head Test Data at the worst case with Sample 2										
Right tilted	RMC	9538/1907.6	1:1	0.632	0.07	15.92	17.50	1.439	0.909	22.3
Body worn Test data(Separate 15mm)										
Front side	RMC	9400/1880	1:1	0.394	-0.06	22.96	24.50	1.426	0.562	22.3
Back side	RMC	9400/1880	1:1	0.463	0.01	22.96	24.50	1.426	0.660	22.3
Body worn Test data at the worst case with Battery 2#										
Back side	RMC	9400/1880	1:1	0.454	0.02	22.96	24.50	1.426	0.647	22.3
Body worn Test data at the worst case with Battery 3#										
Back side	RMC	9400/1880	1:1	0.444	-0.08	22.96	24.50	1.426	0.633	22.3
Body worn Test data at the worst case with Sample 2										
Back side	RMC	9400/1880	1:1	0.437	0.01	22.96	24.50	1.426	0.623	22.3
Hotspot Test data(Separate 10mm)										
Front side	RMC	9400/1880	1:1	0.197	0.11	16.93	18.50	1.435	0.283	22.3
Back side	RMC	9400/1880	1:1	0.243	-0.08	16.93	18.50	1.435	0.349	22.3
Left side	RMC	9400/1880	1:1	0.049	0.03	16.93	18.50	1.435	0.070	22.3
Right side	RMC	9400/1880	1:1	0.035	0.03	16.93	18.50	1.435	0.050	22.3
Top side	RMC	9400/1880	1:1	0.331	0.06	16.93	18.50	1.435	0.475	22.3
Hotspot Test data at the worst case with Battery 2#										
Top side	RMC	9400/1880	1:1	0.315	-0.02	16.93	18.50	1.435	0.452	22.3
Hotspot Test data at the worst case with Battery 3#										
Top side	RMC	9400/1880	1:1	0.320	0.06	16.93	18.50	1.435	0.459	22.3
Hotspot Test data at the worst case with Sample 2										
Top side	RMC	9400/1880	1:1	0.315	0.06	16.93	18.50	1.435	0.452	22.3
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data(Separate 0mm) Sensor on										
Back side	RMC	9400/1880	1:1	1.080	0.04	19.17	20.50	1.358	1.467	22.3
Top side	RMC	9400/1880	1:1	1.740	-0.03	19.17	20.50	1.358	2.363	22.3
Top side	RMC	9262/1852.4	1:1	1.640	0.06	18.98	20.50	1.419	2.327	22.3
Top side	RMC	9538/1907.6	1:1	1.760	-0.09	19.17	20.50	1.358	2.391	22.3
Product specific 10gSAR Test data Sensor off										
Back side-8mm	RMC	9400/1880	1:1	0.721	0.03	22.96	24.50	1.426	1.028	22.3
Top side-10mm	RMC	9400/1880	1:1	0.670	0.07	22.96	24.50	1.426	0.955	22.3
Product specific 10gSAR Test data at the worst case with Battery 2#										
Top side	RMC	9538/1907.6	1:1	1.700	-0.14	19.17	20.50	1.358	2.309	22.2
Product specific 10gSAR Test data at the worst case with Battery 3#										
Top side	RMC	9538/1907.6	1:1	1.680	0.03	19.17	20.50	1.358	2.282	22.2
Product specific 10gSAR Test data at the worst case with Sample 2										
Top side	RMC	9538/1907.6	1:1	1.730	-0.09	19.17	20.50	1.358	2.350	22.2
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))										

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Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	9400/1880	1:1	0.241	-0.03	13.98	15.50	1.419	0.342	22.3
Left tilted	RMC	9400/1880	1:1	0.301	0.01	13.98	15.50	1.419	0.427	22.3
Right cheek	RMC	9400/1880	1:1	0.416	0.03	13.98	15.50	1.419	0.590	22.3
Right tilted	RMC	9400/1880	1:1	0.427	0.14	13.98	15.50	1.419	0.606	22.3

Table 23: SAR of WCDMA Band II for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Right cheek	RMC	9400/1880	1:1	0.059	0.06	22.88	24.50	1.452	0.086	22.3
Body worn Test data at the worst case(Separate 15mm)										
Back side	RMC	9400/1880	1:1	0.165	0.02	22.88	24.50	1.452	0.240	22.3
Hotspot Test data at the worst case(Separate 10mm)										
Bottom side	RMC	9262/1852.4	1:1	0.620	-0.08	21.84	23.50	1.466	0.909	22.3
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Right tilted	RMC	9538/1907.6	1:1	0.634	0.04	15.92	17.50	1.439	0.912	22.3
Body worn Test data at the worst case(Separate 15mm)										
Back side	RMC	9400/1880	1:1	0.265	0.07	22.96	24.50	1.426	0.378	22.3
Hotspot Test data at the worst case(Separate 10mm)										
Top side	RMC	9400/1880	1:1	0.158	-0.01	16.93	18.50	1.435	0.227	22.3
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data at the worst case(Separate 0mm)										
Top side	RMC	9538/1907.6	1:1	0.836	0.07	19.17	20.50	1.358	1.136	22.3

Table 24: SAR of WCDMA Band II for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.4 SAR Result of WCDMA Band IV

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	1412/1732.4	1:1	0.049	0.09	23.35	24.00	1.161	0.056	22.2
Left tilted	RMC	1412/1732.4	1:1	0.029	0.01	23.35	24.00	1.161	0.033	22.2
Right cheek	RMC	1412/1732.4	1:1	0.038	0.01	23.35	24.00	1.161	0.044	22.2
Right tilted	RMC	1412/1732.4	1:1	0.026	0.03	23.35	24.00	1.161	0.031	22.2
Head Test data at the worst case with Battery 2#										
Left cheek	RMC	1412/1732.4	1:1	0.044	0.01	23.35	24.00	1.161	0.051	22.2
Head Test data at the worst case with Battery 3#										
Left cheek	RMC	1412/1732.4	1:1	0.044	0.09	23.35	24.00	1.161	0.051	22.2
Head Test Data at the worst case with Sample 2										
Left cheek	RMC	1412/1732.4	1:1	0.048	0.09	23.35	24.00	1.161	0.055	22.2
Body worn Test data(Separate 15mm)										
Front side	RMC	1412/1732.4	1:1	0.115	0.01	23.35	24.00	1.161	0.134	22.2
Back side	RMC	1412/1732.4	1:1	0.173	0.02	23.35	24.00	1.161	0.201	22.2
Body worn Test data at the worst case with Battery 2#										
Back side	RMC	1412/1732.4	1:1	0.172	0.02	23.35	24.00	1.161	0.200	22.2
Body worn Test data at the worst case with Battery 3#										
Back side	RMC	1412/1732.4	1:1	0.169	0.05	23.35	24.00	1.161	0.196	22.2
Body worn Test data at the worst case with Sample 2										
Back side	RMC	1412/1732.4	1:1	0.167	0.02	23.35	24.00	1.161	0.194	22.2
Hotspot Test data(Separate 10mm)										
Front side	RMC	1412/1732.4	1:1	0.202	0.01	22.32	23.00	1.169	0.236	22.2
Back side	RMC	1412/1732.4	1:1	0.347	-0.01	22.32	23.00	1.169	0.406	22.2
Left side	RMC	1412/1732.4	1:1	0.051	0.04	22.32	23.00	1.169	0.059	22.2
Right side	RMC	1412/1732.4	1:1	0.228	0.03	22.32	23.00	1.169	0.267	22.2
Bottom side	RMC	1412/1732.4	1:1	0.608	0.13	22.32	23.00	1.169	0.711	22.2
Hotspot Test data at the worst case with Battery 2#										
Bottom side	RMC	1412/1732.4	1:1	0.603	0.03	22.32	23.00	1.169	0.705	22.2
Hotspot Test data at the worst case with Battery 3#										
Bottom side	RMC	1412/1732.4	1:1	0.597	0.03	22.32	23.00	1.169	0.698	22.2
Hotspot Test data at the worst case with Sample 2										
Bottom side	RMC	1412/1732.4	1:1	0.603	0.02	22.32	23.00	1.169	0.705	22.2
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	1412/1732.4	1:1	0.360	0.02	17.71	18.50	1.199	0.432	22.2
Left tilted	RMC	1412/1732.4	1:1	0.690	0.03	17.71	18.50	1.199	0.828	22.2
Right cheek	RMC	1412/1732.4	1:1	0.684	0.03	17.71	18.50	1.199	0.820	22.2
Right tilted	RMC	1412/1732.4	1:1	0.770	-0.07	17.71	18.50	1.199	0.924	22.2
Left tilted	RMC	1312/1712.4	1:1	0.681	0.02	17.70	18.50	1.202	0.819	22.2
Left tilted	RMC	1513/1752.6	1:1	0.748	0.02	17.68	18.50	1.208	0.903	22.2
Right cheek	RMC	1312/1712.4	1:1	0.612	0.01	17.70	18.50	1.202	0.736	22.2

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Right cheek	RMC	1513/1752.6	1:1	0.362	0.02	17.68	18.50	1.208	0.437	22.2
Right tilted	RMC	1312/1712.4	1:1	0.704	0.05	17.70	18.50	1.202	0.846	22.2
Right tilted	RMC	1513/1752.6	1:1	0.741	0.00	17.68	18.50	1.208	0.895	22.2
Head Test data at the worst case with Battery 2#										
Right tilted	RMC	1412/1732.4	1:1	0.756	-0.04	17.71	18.50	1.199	0.907	22.2
Head Test data at the worst case with Battery 3#										
Right tilted	RMC	1412/1732.4	1:1	0.763	-0.02	17.71	18.50	1.199	0.915	22.2
Head Test Data at the worst case with Sample 2										
Right tilted	RMC	1412/1732.4	1:1	0.756	-0.07	17.71	18.50	1.199	0.907	22.2
Body worn Test data(Separate 15mm)										
Front side	RMC	1412/1732.4	1:1	0.265	-0.19	23.64	24.00	1.086	0.288	22.2
Back side	RMC	1412/1732.4	1:1	0.307	0.03	23.64	24.00	1.086	0.334	22.2
Body worn Test data at the worst case with Battery 2#										
Back side	RMC	1412/1732.4	1:1	0.300	-0.01	23.64	24.00	1.086	0.326	22.2
Body worn Test data at the worst case with Battery 3#										
Back side	RMC	1412/1732.4	1:1	0.298	-0.04	23.64	24.00	1.086	0.324	22.2
Body worn Test data at the worst case with Sample 2										
Back side	RMC	1412/1732.4	1:1	0.296	0.01	23.64	24.00	1.086	0.322	22.2
Hotspot Test data(Separate 10mm)										
Front side	RMC	1412/1732.4	1:1	0.194	0.12	18.35	19.00	1.161	0.225	22.2
Back side	RMC	1412/1732.4	1:1	0.229	-0.02	18.35	19.00	1.161	0.266	22.2
Left side	RMC	1412/1732.4	1:1	0.056	0.01	18.35	19.00	1.161	0.065	22.2
Right side	RMC	1412/1732.4	1:1	0.040	0.02	18.35	19.00	1.161	0.046	22.2
Top side	RMC	1412/1732.4	1:1	0.290	0.02	18.35	19.00	1.161	0.337	22.2
Hotspot Test data at the worst case with Battery 2#										
Top side	RMC	1412/1732.4	1:1	0.286	0.01	18.35	19.00	1.161	0.332	22.2
Hotspot Test data at the worst case with Battery 3#										
Top side	RMC	1412/1732.4	1:1	0.289	0.06	18.35	19.00	1.161	0.336	22.2
Hotspot Test data at the worst case with Sample 2										
Top side	RMC	1412/1732.4	1:1	0.286	0.01	18.35	19.00	1.161	0.332	22.2
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	1412/1732.4	1:1	0.241	-0.03	15.78	16.50	1.180	0.284	22.2
Left tilted	RMC	1412/1732.4	1:1	0.301	0.01	15.78	16.50	1.180	0.355	22.2
Right cheek	RMC	1412/1732.4	1:1	0.416	0.03	15.78	16.50	1.180	0.491	22.2
Right tilted	RMC	1412/1732.4	1:1	0.427	0.14	15.78	16.50	1.180	0.504	22.2

Table 25: SAR of WCDMA Band IV for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Left cheek	RMC	1412/1732.4	1:1	0.066	0.05	23.35	24.00	1.161	0.077	22.2
Body worn Test data at the worst case(Separate 15mm)										
Back side	RMC	1412/1732.4	1:1	0.145	0.09	23.35	24.00	1.161	0.168	22.2
Hotspot Test data at the worst case(Separate 10mm)										
Bottom side	RMC	1412/1732.4	1:1	0.442	0.06	22.32	23.00	1.169	0.517	22.2
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Right tilted	RMC	1412/1732.4	1:1	0.579	0.06	17.71	18.50	1.199	0.695	22.2
Body worn Test data at the worst case(Separate 15mm)										
Back side	RMC	1412/1732.4	1:1	0.149	0.04	23.64	24.00	1.086	0.162	22.2
Hotspot Test data at the worst case(Separate 10mm)										
Top side	RMC	1412/1732.4	1:1	0.132	0.12	18.35	19.00	1.161	0.153	22.2

Table 26: SAR of WCDMA Band IV for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.5 SAR Result of WCDMA Band V

Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	4182/836.4	1:1	0.112	0.07	23.39	24.50	1.291	0.145	22.1
Left tilted	RMC	4182/836.4	1:1	0.064	0.05	23.39	24.50	1.291	0.083	22.1
Right cheek	RMC	4182/836.4	1:1	0.107	0.03	23.39	24.50	1.291	0.138	22.1
Right tilted	RMC	4182/836.4	1:1	0.053	0.04	23.39	24.50	1.291	0.068	22.1
Head Test data at the worst case with Battery 2#										
Left cheek	RMC	4182/836.4	1:1	0.110	0.06	23.39	24.50	1.291	0.142	22.1
Head Test data at the worst case with Battery 3#										
Left cheek	RMC	4182/836.4	1:1	0.107	-0.03	23.39	24.50	1.291	0.138	22.1
Head Test Data at the worst case with Sample 2										
Left cheek	RMC	4182/836.4	1:1	0.111	0.06	23.39	24.50	1.291	0.143	22.1
Body worn Test data(Separate 15mm)										
Front side	RMC	4182/836.4	1:1	0.090	0.03	23.39	24.50	1.291	0.116	22.1
Back side	RMC	4182/836.4	1:1	0.107	-0.06	23.39	24.50	1.291	0.138	22.1
Body worn Test data at the worst case with Battery 2#										
Back side	RMC	4182/836.4	1:1	0.106	0.03	23.39	24.50	1.291	0.137	22.1
Body worn Test data at the worst case with Battery 3#										
Back side	RMC	4182/836.4	1:1	0.102	0.01	23.39	24.50	1.291	0.132	22.1
Body worn Test data at the worst case with Sample 2										
Back side	RMC	4182/836.4	1:1	0.097	-0.07	23.39	24.50	1.291	0.125	22.1
Hotspot Test data(Separate 10mm)										
Front side	RMC	4182/836.4	1:1	0.089	-0.03	23.39	24.50	1.291	0.115	22.1
Back side	RMC	4182/836.4	1:1	0.189	0.04	23.39	24.50	1.291	0.244	22.1
Left side	RMC	4182/836.4	1:1	0.143	0.03	23.39	24.50	1.291	0.185	22.1
Right side	RMC	4182/836.4	1:1	0.085	0.01	23.39	24.50	1.291	0.110	22.1
Bottom side	RMC	4182/836.4	1:1	0.147	0.02	23.39	24.50	1.291	0.190	22.1
Hotspot Test data at the worst case with Battery 2#										
Back side	RMC	4182/836.4	1:1	0.185	-0.02	23.39	24.50	1.291	0.239	22.1
Hotspot Test data at the worst case with Battery 3#										
Back side	RMC	4182/836.4	1:1	0.177	0.01	23.39	24.50	1.291	0.229	22.1
Hotspot Test data at the worst case with Sample 2										
Back side	RMC	4182/836.4	1:1	0.187	0.02	23.39	24.50	1.291	0.241	22.1

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Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data										
Left cheek	RMC	4182/836.4	1:1	0.326	0.07	20.55	21.50	1.245	0.406	22.1
Left tilted	RMC	4182/836.4	1:1	0.305	0.06	20.55	21.50	1.245	0.380	22.1
Right cheek	RMC	4182/836.4	1:1	0.480	-0.08	20.55	21.50	1.245	0.597	22.1
Right tilted	RMC	4182/836.4	1:1	0.449	0.03	20.55	21.50	1.245	0.559	22.1
Head Test data at the worst case with Battery 2#										
Right cheek	RMC	4182/836.4	1:1	0.471	0.08	20.55	21.50	1.245	0.586	22.1
Head Test data at the worst case with Battery 3#										
Right cheek	RMC	4182/836.4	1:1	0.461	0.09	20.55	21.50	1.245	0.574	22.1
Head Test Data at the worst case with Sample 2										
Right cheek	RMC	4182/836.4	1:1	0.454	0.05	20.55	21.50	1.245	0.565	22.1
Body worn Test data(Separate 15mm)										
Front side	RMC	4182/836.4	1:1	0.050	0.01	23.61	24.50	1.227	0.062	22.1
Back side	RMC	4182/836.4	1:1	0.074	0.13	23.61	24.50	1.227	0.091	22.1
Body worn Test data at the worst case with Battery 2#										
Back side	RMC	4182/836.4	1:1	0.072	0.02	23.61	24.50	1.227	0.089	22.1
Body worn Test data at the worst case with Battery 3#										
Back side	RMC	4182/836.4	1:1	0.070	0.01	23.61	24.50	1.227	0.086	22.1
Body worn Test data at the worst case with Sample 2										
Back side	RMC	4182/836.4	1:1	0.073	0.03	23.61	24.50	1.227	0.089	22.1
Hotspot Test data(Separate 10mm)										
Front side	RMC	4182/836.4	1:1	0.104	-0.03	23.61	24.50	1.227	0.128	22.1
Back side	RMC	4182/836.4	1:1	0.142	0.06	23.61	24.50	1.227	0.174	22.1
Left side	RMC	4182/836.4	1:1	0.045	0.05	23.61	24.50	1.227	0.055	22.1
Right side	RMC	4182/836.4	1:1	0.065	0.02	23.61	24.50	1.227	0.079	22.1
Top side	RMC	4182/836.4	1:1	0.126	-0.05	23.61	24.50	1.227	0.155	22.1
Hotspot Test data at the worst case with Battery 2#										
Back side	RMC	4182/836.4	1:1	0.139	0.06	23.61	24.50	1.227	0.171	22.1
Hotspot Test data at the worst case with Battery 3#										
Back side	RMC	4182/836.4	1:1	0.137	0.05	23.61	24.50	1.227	0.168	22.1
Hotspot Test data at the worst case with Sample 2										
Back side	RMC	4182/836.4	1:1	0.135	0.01	23.61	24.50	1.227	0.166	22.1

Table 27: SAR of WCDMA Band V for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Ant 1 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Left cheek	RMC	4182/836.4	1:1	0.085	0.11	23.39	24.50	1.291	0.110	22.1
Body worn Test data at the worst case(Separate 15mm)										
Back side	RMC	4182/836.4	1:1	0.088	-0.03	23.39	24.50	1.291	0.114	22.1
Hotspot Test data at the worst case(Separate 10mm)										
Back side	RMC	4182/836.4	1:1	0.183	-0.01	23.39	24.50	1.291	0.236	22.1
Ant 2 Test Record										
Test position	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case										
Right cheek	RMC	4182/836.4	1:1	0.344	-0.07	20.55	21.50	1.245	0.428	22.1
Body worn Test data at the worst case(Separate 15mm)										
Back side	RMC	4182/836.4	1:1	0.081	0.01	23.61	24.50	1.227	0.100	22.1
Hotspot Test data at the worst case(Separate 10mm)										
Back side	RMC	4182/836.4	1:1	0.176	-0.04	23.61	24.50	1.227	0.216	22.1

Table 28: SAR of WCDMA Band V for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.6 SAR Result of LTE Band 2

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_0	18700/1860	1:1	0.081	0.07	23.53	24.70	1.309	0.106	22.3
Left tilted	20	QPSK 1RB_0	18700/1860	1:1	0.042	0.02	23.53	24.70	1.309	0.054	22.3
Right cheek	20	QPSK 1RB_0	18700/1860	1:1	0.066	0.04	23.53	24.70	1.309	0.087	22.3
Right tilted	20	QPSK 1RB_0	18700/1860	1:1	0.048	0.05	23.53	24.70	1.309	0.063	22.3
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_0	18700/1860	1:1	0.049	0.04	22.39	23.70	1.352	0.066	22.3
Left tilted	20	QPSK 50RB_0	18700/1860	1:1	0.035	0.08	22.39	23.70	1.352	0.047	22.3
Right cheek	20	QPSK 50RB_0	18700/1860	1:1	0.055	0.01	22.39	23.70	1.352	0.074	22.3
Right tilted	20	QPSK 50RB_0	18700/1860	1:1	0.039	0.07	22.39	23.70	1.352	0.052	22.3
Head Test data at the worst case with Battery 2#											
Left cheek	20	QPSK 1RB_0	18700/1860	1:1	0.073	0.07	23.53	24.70	1.309	0.095	22.3
Head Test data at the worst case with Battery 3#											
Left cheek	20	QPSK 1RB_0	18700/1860	1:1	0.072	0.01	23.53	24.70	1.309	0.094	22.3
Head Test Data at the worst case with Sample 2											
Left cheek	20	QPSK 1RB_0	18700/1860	1:1	0.071	0.09	23.53	24.70	1.309	0.092	22.3
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_0	18700/1860	1:1	0.155	0.02	23.53	24.70	1.309	0.203	22.3
Back side	20	QPSK 1RB_0	18700/1860	1:1	0.263	-0.15	23.53	24.70	1.309	0.344	22.3
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	18700/1860	1:1	0.124	0.07	22.39	23.70	1.352	0.168	22.3
Back side	20	QPSK 50RB_0	18700/1860	1:1	0.208	0.06	22.39	23.70	1.352	0.281	22.3
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_0	18700/1860	1:1	0.257	-0.04	23.53	24.70	1.309	0.336	22.3
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_0	18700/1860	1:1	0.251	-0.04	23.53	24.70	1.309	0.329	22.3
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_0	18700/1860	1:1	0.247	-0.03	23.53	24.70	1.309	0.323	22.3
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_0	18700/1860	1:1	0.116	0.07	20.13	21.20	1.279	0.148	22.3
Back side	20	QPSK 1RB_0	18700/1860	1:1	0.195	0.01	20.13	21.20	1.279	0.249	22.3
Left side	20	QPSK 1RB_0	18700/1860	1:1	0.021	0.03	20.13	21.20	1.279	0.026	22.3
Right side	20	QPSK 1RB_0	18700/1860	1:1	0.087	0.08	20.13	21.20	1.279	0.111	22.3
Bottom side	20	QPSK 1RB_0	18700/1860	1:1	0.389	0.01	20.13	21.20	1.279	0.498	22.3
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	18700/1860	1:1	0.113	0.05	19.76	21.20	1.393	0.157	22.3
Back side	20	QPSK 50RB_0	18700/1860	1:1	0.192	0.07	19.76	21.20	1.393	0.267	22.3
Left side	20	QPSK 50RB_0	18700/1860	1:1	0.021	0.01	19.76	21.20	1.393	0.029	22.3
Right side	20	QPSK 50RB_0	18700/1860	1:1	0.086	0.02	19.76	21.20	1.393	0.120	22.3
Bottom side	20	QPSK 50RB_0	18700/1860	1:1	0.383	0.02	19.76	21.20	1.393	0.534	22.3
Hotspot Test data at the worst case with Battery 2#											
Bottom side	20	QPSK 50RB_0	18700/1860	1:1	0.382	-0.07	19.76	21.20	1.393	0.532	22.3
Hotspot Test data at the worst case with Battery 3#											
Bottom side	20	QPSK 50RB_0	18700/1860	1:1	0.378	-0.03	19.76	21.20	1.393	0.527	22.3
Hotspot Test data at the worst case with Sample 2											
Bottom side	20	QPSK 50RB_0	18700/1860	1:1	0.372	-0.06	19.76	21.20	1.393	0.518	22.3

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Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_50	18900/1880	1:1	0.369	0.02	16.85	17.20	1.084	0.400	22.3
Left tilted	20	QPSK 1RB_50	18900/1880	1:1	0.466	0.03	16.85	17.20	1.084	0.505	22.3
Right cheek	20	QPSK 1RB_50	18900/1880	1:1	0.528	0.03	16.85	17.20	1.084	0.572	22.3
Right tilted	20	QPSK 1RB_50	18900/1880	1:1	0.655	0.06	16.85	17.20	1.084	0.710	22.3
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_0	19100/1900	1:1	0.391	0.03	16.41	17.20	1.199	0.469	22.3
Left tilted	20	QPSK 50RB_0	19100/1900	1:1	0.510	0.02	16.41	17.20	1.199	0.612	22.3
Right cheek	20	QPSK 50RB_0	19100/1900	1:1	0.560	0.02	16.41	17.20	1.199	0.672	22.3
Right tilted	20	QPSK 50RB_0	19100/1900	1:1	0.727	0.01	16.41	17.20	1.199	0.872	22.3
Right tilted	20	QPSK 50RB_25	18700/1860	1:1	0.606	-0.09	15.96	17.20	1.330	0.806	22.3
Right tilted	20	QPSK 50RB_0	18900/1880	1:1	0.614	0.01	16.32	17.20	1.225	0.752	22.3
Head Test data(100%RB)											
Right tilted	20	QPSK 100RB_0	19100/1900	1:1	0.619	0.03	16.30	17.20	1.230	0.762	22.3
Head Test data at the worst case with Battery 2#											
Right tilted	20	QPSK 50RB_0	19100/1900	1:1	0.711	-0.05	16.41	17.20	1.199	0.853	22.3
Head Test data at the worst case with Battery 3#											
Right tilted	20	QPSK 50RB_0	19100/1900	1:1	0.690	-0.08	16.41	17.20	1.199	0.828	22.3
Head Test Data at the worst case with Sample 2											
Right tilted	20	QPSK 50RB_0	19100/1900	1:1	0.680	-0.05	16.41	17.20	1.199	0.816	22.3
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	18900/1880	1:1	0.419	0.01	23.64	24.70	1.276	0.535	22.3
Back side	20	QPSK 1RB_99	18900/1880	1:1	0.473	0.07	23.64	24.70	1.276	0.604	22.3
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	19100/1900	1:1	0.365	0.02	22.39	23.70	1.352	0.494	22.3
Back side	20	QPSK 50RB_0	19100/1900	1:1	0.412	-0.01	22.39	23.70	1.352	0.557	22.3
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	18900/1880	1:1	0.459	-0.06	23.64	24.70	1.276	0.586	22.3
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	18900/1880	1:1	0.408	-0.04	23.64	24.70	1.276	0.521	22.3
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	18900/1880	1:1	0.402	-0.07	23.64	24.70	1.276	0.513	22.3
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_50	19100/1900	1:1	0.199	0.03	18.15	18.70	1.135	0.226	22.3
Back side	20	QPSK 1RB_50	19100/1900	1:1	0.247	0.14	18.15	18.70	1.135	0.280	22.3
Left side	20	QPSK 1RB_50	19100/1900	1:1	0.064	-0.04	18.15	18.70	1.135	0.072	22.3
Right side	20	QPSK 1RB_50	19100/1900	1:1	0.036	0.06	18.15	18.70	1.135	0.041	22.3
Top side	20	QPSK 1RB_50	19100/1900	1:1	0.369	-0.03	18.15	18.70	1.135	0.419	22.3
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	19100/1900	1:1	0.207	0.01	18.00	18.70	1.175	0.243	22.3
Back side	20	QPSK 50RB_0	19100/1900	1:1	0.254	0.03	18.00	18.70	1.175	0.298	22.3
Left side	20	QPSK 50RB_0	19100/1900	1:1	0.066	-0.05	18.00	18.70	1.175	0.078	22.3
Right side	20	QPSK 50RB_0	19100/1900	1:1	0.038	-0.02	18.00	18.70	1.175	0.044	22.3
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.381	0.14	18.00	18.70	1.175	0.448	22.3
Hotspot Test data at the worst case with Battery 2#											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.370	-0.06	18.00	18.70	1.175	0.435	22.3
Hotspot Test data at the worst case with Battery 3#											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.375	-0.02	18.00	18.70	1.175	0.441	22.3
Hotspot Test data at the worst case with Sample 2											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.375	-0.02	18.00	18.70	1.175	0.441	22.3

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Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data(Separate 0mm 1RB) Sensor on											
Top side	20	QPSK 1RB_50	19100/1900	1:1	2.170	0.01	20.68	21.20	1.127	2.446	22.3
Top side	20	QPSK 1RB_50	18700/1860	1:1	1.870	0.03	20.33	21.20	1.222	2.285	22.3
Top side	20	QPSK 1RB_50	18900/1880	1:1	1.980	0.05	20.44	21.20	1.191	2.359	22.3
Product specific 10gSAR Test data(Separate 0mm 50%RB) Sensor on											
Top side	20	QPSK 50RB_0	19100/1900	1:1	1.990	0.01	20.34	21.20	1.219	2.426	22.3
Top side	20	QPSK 50RB_0	18700/1860	1:1	1.820	0.03	20.23	21.20	1.250	2.275	22.3
Top side	20	QPSK 50RB_0	18900/1880	1:1	1.940	0.05	20.27	21.20	1.239	2.403	22.3
Product specific 10gSAR Test data(Separate 0mm 100%RB) Sensor on											
Top side	20	QPSK 100RB_0	19100/1900	1:1	1.970	0.05	20.25	21.20	1.245	2.452	22.3
Product specific 10gSAR Test data Sensor off											
Top side-10mm	20	QPSK 1RB_99	18900/1880	1:1	0.939	0.04	23.64	24.70	1.276	1.199	22.3
Product specific 10gSAR Test data at the worst case with Battery 2#											
Top side	20	QPSK 100RB_0	19100/1900	1:1	1.880	0.06	20.25	21.20	1.245	2.340	22.3
Product specific 10gSAR Test data at the worst case with Battery 3#											
Top side	20	QPSK 100RB_0	19100/1900	1:1	1.910	-0.02	20.25	21.20	1.245	2.377	22.3
Product specific 10gSAR Test data at the worst case with Sample 2											
Top side	20	QPSK 100RB_0	19100/1900	1:1	1.940	0.05	20.25	21.20	1.245	2.414	22.3
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_0	18900/1880	1:1	0.333	0.06	15.66	16.20	1.132	0.377	22.3
Left tilted	20	QPSK 1RB_0	18900/1880	1:1	0.409	0.05	15.66	16.20	1.132	0.463	22.3
Right cheek	20	QPSK 1RB_0	18900/1880	1:1	0.460	0.05	15.66	16.20	1.132	0.521	22.3
Right tilted	20	QPSK 1RB_0	18900/1880	1:1	0.595	0.07	15.66	16.20	1.132	0.674	22.3
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_0	19100/1900	1:1	0.354	0.02	15.66	16.20	1.132	0.401	22.3
Left tilted	20	QPSK 50RB_0	19100/1900	1:1	0.426	0.04	15.66	16.20	1.132	0.482	22.3
Right cheek	20	QPSK 50RB_0	19100/1900	1:1	0.509	0.11	15.66	16.20	1.132	0.576	22.3
Right tilted	20	QPSK 50RB_0	19100/1900	1:1	0.621	0.08	15.66	16.20	1.132	0.703	22.3

Table 29: SAR of LTE Band 2 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Left cheek	20	QPSK 1RB_0	18700/1860	1:1	0.064	0.01	23.53	24.70	1.309	0.084	22.3
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_0	18700/1860	1:1	0.187	0.14	23.53	24.70	1.309	0.245	22.3
Hotspot Test data at the worst case(Separate 10mm)											
Bottom side	20	QPSK 50RB_0	18700/1860	1:1	0.417	0.04	19.76	21.20	1.393	0.581	22.3
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right tilted	20	QPSK 50RB_0	19100/1900	1:1	0.617	0.06	16.41	17.20	1.199	0.740	22.3
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	18900/1880	1:1	0.261	0.01	23.64	24.70	1.276	0.333	22.3
Hotspot Test data at the worst case(Separate 10mm)											
Top side	20	QPSK 50RB_0	19100/1900	1:1	0.195	0.14	18.00	18.70	1.175	0.229	22.3
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)10-g	Power Drift(dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data at the worst case(Separate 0mm)											
Top side	20	QPSK 100RB_0	19100/1900	1:1	1.000	0.01	20.25	21.20	1.245	1.245	22.3

Table 30: SAR of LTE Band 2 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).



8.3.7 SAR Result of LTE Band 4

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_99	20175/1732.5	1:1	0.047	0.03	22.61	23.70	1.285	0.061	22.3
Left tilted	20	QPSK 1RB_99	20175/1732.5	1:1	0.035	0.01	22.61	23.70	1.285	0.045	22.3
Right cheek	20	QPSK 1RB_99	20175/1732.5	1:1	0.036	0.04	22.61	23.70	1.285	0.046	22.3
Right tilted	20	QPSK 1RB_99	20175/1732.5	1:1	0.027	0.06	22.61	23.70	1.285	0.035	22.3
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_0	20175/1732.5	1:1	0.029	0.05	21.37	22.70	1.358	0.040	22.3
Left tilted	20	QPSK 50RB_0	20175/1732.5	1:1	0.024	0.08	21.37	22.70	1.358	0.032	22.3
Right cheek	20	QPSK 50RB_0	20175/1732.5	1:1	0.026	0.04	21.37	22.70	1.358	0.035	22.3
Right tilted	20	QPSK 50RB_0	20175/1732.5	1:1	0.020	0.03	21.37	22.70	1.358	0.027	22.3
Head Test data at the worst case with Battery 2#											
Left cheek	20	QPSK 1RB_99	20175/1732.5	1:1	0.041	0.03	22.61	23.70	1.285	0.053	22.3
Head Test data at the worst case with Battery 3#											
Left cheek	20	QPSK 1RB_99	20175/1732.5	1:1	0.040	0.01	22.61	23.70	1.285	0.052	22.3
Head Test Data at the worst case with Sample 2											
Left cheek	20	QPSK 1RB_99	20175/1732.5	1:1	0.038	0.01	22.61	23.70	1.285	0.049	22.3
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	20175/1732.5	1:1	0.106	0.06	22.61	23.70	1.285	0.136	22.3
Back side	20	QPSK 1RB_99	20175/1732.5	1:1	0.175	0.02	22.61	23.70	1.285	0.225	22.3
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	20175/1732.5	1:1	0.079	0.07	21.37	22.70	1.358	0.107	22.3
Back side	20	QPSK 50RB_0	20175/1732.5	1:1	0.128	0.03	21.37	22.70	1.358	0.174	22.3
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	20175/1732.5	1:1	0.171	-0.05	22.61	23.70	1.285	0.220	22.3
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	20175/1732.5	1:1	0.170	-0.01	22.61	23.70	1.285	0.218	22.3
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	20175/1732.5	1:1	0.168	-0.05	22.61	23.70	1.285	0.216	22.3
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_99	20175/1732.5	1:1	0.135	0.08	20.19	21.20	1.262	0.170	22.3
Back side	20	QPSK 1RB_99	20175/1732.5	1:1	0.244	0.07	20.19	21.20	1.262	0.308	22.3
Left side	20	QPSK 1RB_99	20175/1732.5	1:1	0.032	0.04	20.19	21.20	1.262	0.041	22.3
Right side	20	QPSK 1RB_99	20175/1732.5	1:1	0.105	0.04	20.19	21.20	1.262	0.132	22.3
Bottom side	20	QPSK 1RB_99	20175/1732.5	1:1	0.358	0.02	20.19	21.20	1.262	0.452	22.3
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	20175/1732.5	1:1	0.137	0.09	20.13	21.20	1.279	0.175	22.3
Back side	20	QPSK 50RB_0	20175/1732.5	1:1	0.227	0.09	20.13	21.20	1.279	0.290	22.3
Left side	20	QPSK 50RB_0	20175/1732.5	1:1	0.030	0.05	20.13	21.20	1.279	0.038	22.3
Right side	20	QPSK 50RB_0	20175/1732.5	1:1	0.093	0.09	20.13	21.20	1.279	0.118	22.3
Bottom side	20	QPSK 50RB_0	20175/1732.5	1:1	0.454	0.07	20.13	21.20	1.279	0.581	22.3
Hotspot Test data at the worst case with Battery 2#											
Bottom side	20	QPSK 50RB_0	20175/1732.5	1:1	0.451	-0.09	20.13	21.20	1.279	0.577	22.3

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Hotspot Test data at the worst case with Battery 3#											
Bottom side	20	QPSK 50RB_0	20175/1732.5	1:1	0.447	0.07	20.13	21.20	1.279	0.572	22.3
Hotspot Test data at the worst case with Sample 2											
Bottom side	20	QPSK 50RB_0	20175/1732.5	1:1	0.444	-0.01	20.13	21.20	1.279	0.568	22.3
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)-1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_0	20050/1720	1:1	0.316	-0.03	16.35	17.70	1.365	0.431	22.3
Left tilted	20	QPSK 1RB_0	20050/1720	1:1	0.417	0.02	16.35	17.70	1.365	0.569	22.3
Right cheek	20	QPSK 1RB_0	20050/1720	1:1	0.395	0.11	16.35	17.70	1.365	0.539	22.3
Right tilted	20	QPSK 1RB_0	20050/1720	1:1	0.564	0.01	16.35	17.70	1.365	0.770	22.3
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_0	20050/1720	1:1	0.328	0.02	16.39	17.70	1.352	0.443	22.3
Left tilted	20	QPSK 50RB_0	20050/1720	1:1	0.428	-0.05	16.39	17.70	1.352	0.579	22.3
Right cheek	20	QPSK 50RB_0	20050/1720	1:1	0.413	-0.01	16.39	17.70	1.352	0.558	22.3
Right tilted	20	QPSK 50RB_0	20050/1720	1:1	0.588	0.01	16.39	17.70	1.352	0.795	22.3
Head Test data at the worst case with Battery 2#											
Right tilted	20	QPSK 50RB_0	20050/1720	1:1	0.565	-0.01	16.39	17.70	1.352	0.764	22.3
Head Test data at the worst case with Battery 3#											
Right tilted	20	QPSK 50RB_0	20050/1720	1:1	0.556	-0.02	16.39	17.70	1.352	0.752	22.3
Head Test Data at the worst case with Sample 2											
Right tilted	20	QPSK 50RB_0	20050/1720	1:1	0.552	-0.05	16.39	17.70	1.352	0.746	22.3
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_0	20050/1720	1:1	0.230	0.01	22.38	23.70	1.355	0.312	22.3
Back side	20	QPSK 1RB_0	20050/1720	1:1	0.276	0.08	22.38	23.70	1.355	0.374	22.3
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	20175/1732.5	1:1	0.192	-0.03	20.99	22.70	1.483	0.285	22.3
Back side	20	QPSK 50RB_0	20175/1732.5	1:1	0.230	-0.06	20.99	22.70	1.483	0.341	22.3
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_0	20050/1720	1:1	0.268	-0.07	22.38	23.70	1.355	0.363	22.3
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_0	20050/1720	1:1	0.259	-0.03	22.38	23.70	1.355	0.351	22.3
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_0	20050/1720	1:1	0.261	-0.03	22.38	23.70	1.355	0.354	22.3
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_50	20050/1720	1:1	0.131	-0.02	17.38	18.70	1.355	0.178	22.3
Back side	20	QPSK 1RB_50	20050/1720	1:1	0.170	0.12	17.38	18.70	1.355	0.230	22.3
Left side	20	QPSK 1RB_50	20050/1720	1:1	0.049	-0.07	17.38	18.70	1.355	0.066	22.3
Right side	20	QPSK 1RB_50	20050/1720	1:1	0.031	0.04	17.38	18.70	1.355	0.042	22.3
Top side	20	QPSK 1RB_50	20050/1720	1:1	0.224	0.10	17.38	18.70	1.355	0.304	22.3
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	20050/1720	1:1	0.134	-0.06	16.92	18.70	1.507	0.202	22.3
Back side	20	QPSK 50RB_0	20050/1720	1:1	0.177	0.06	16.92	18.70	1.507	0.267	22.3
Left side	20	QPSK 50RB_0	20050/1720	1:1	0.051	-0.01	16.92	18.70	1.507	0.077	22.3
Right side	20	QPSK 50RB_0	20050/1720	1:1	0.032	0.05	16.92	18.70	1.507	0.048	22.3
Top side	20	QPSK 50RB_0	20050/1720	1:1	0.234	0.03	16.92	18.70	1.507	0.353	22.3

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Hotspot Test data at the worst case with Battery 2#											
Top side	20	QPSK 50RB_0	20050/1720	1:1	0.229	-0.03	16.92	18.70	1.507	0.345	22.3
Hotspot Test data at the worst case with Battery 3#											
Top side	20	QPSK 50RB_0	20050/1720	1:1	0.223	-0.01	16.92	18.70	1.507	0.336	22.3
Hotspot Test data at the worst case with Sample 2											
Top side	20	QPSK 50RB_0	20050/1720	1:1	0.220	-0.01	16.92	18.70	1.507	0.331	22.3
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left tilted	20	QPSK 1RB_0	20050/1720	1:1	0.276	-0.09	15.59	16.70	1.291	0.356	22.3
Right tilted	20	QPSK 1RB_0	20050/1720	1:1	0.378	-0.13	15.59	16.70	1.291	0.488	22.3
Head Test data(50%RB)											
Left tilted	20	QPSK 50RB_0	20050/1720	1:1	0.288	-0.06	15.28	16.70	1.387	0.399	22.3
Right tilted	20	QPSK 50RB_0	20050/1720	1:1	0.396	-0.04	15.28	16.70	1.387	0.549	22.3

Table 31: SAR of LTE Band 4 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Left cheek	20	QPSK 1RB_99	20175/1732.5	1:1	0.042	0.07	22.61	23.70	1.285	0.054	22.3
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	20175/1732.5	1:1	0.146	-0.07	22.61	23.70	1.285	0.188	22.3
Hotspot Test data at the worst case(Separate 10mm)											
Bottom side	20	QPSK 50RB_0	20175/1732.5	1:1	0.295	0.08	20.13	21.20	1.279	0.377	22.3
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right tilted	20	QPSK 50RB_0	20050/1720	1:1	0.479	0.03	16.39	17.70	1.352	0.648	22.3
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_0	20050/1720	1:1	0.113	0.11	22.38	23.70	1.355	0.153	22.3
Hotspot Test data at the worst case(Separate 10mm)											
Top side	20	QPSK 50RB_0	20050/1720	1:1	0.109	0.12	16.92	18.70	1.507	0.164	22.3

Table 32: SAR of LTE Band 4 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).



8.3.8 SAR Result of LTE Band 5

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	10	QPSK 1RB_49	20450/829	1:1	0.124	0.04	24.27	25.00	1.183	0.147	22.1
Left tilted	10	QPSK 1RB_49	20450/829	1:1	0.058	0.01	24.27	25.00	1.183	0.069	22.1
Right cheek	10	QPSK 1RB_49	20450/829	1:1	0.122	0.04	24.27	25.00	1.183	0.144	22.1
Right tilted	10	QPSK 1RB_49	20450/829	1:1	0.057	0.03	24.27	25.00	1.183	0.067	22.1
Head Test data(50%RB)											
Left cheek	10	QPSK 25RB_25	20450/829	1:1	0.091	0.04	22.85	24.00	1.303	0.119	22.1
Left tilted	10	QPSK 25RB_25	20450/829	1:1	0.042	0.05	22.85	24.00	1.303	0.055	22.1
Right cheek	10	QPSK 25RB_25	20450/829	1:1	0.083	0.03	22.85	24.00	1.303	0.108	22.1
Right tilted	10	QPSK 25RB_25	20450/829	1:1	0.042	0.01	22.85	24.00	1.303	0.054	22.1
Head Test data at the worst case with Battery 2#											
Left cheek	10	QPSK 1RB_49	20450/829	1:1	0.121	0.03	24.27	25.00	1.183	0.143	22.1
Head Test data at the worst case with Battery 3#											
Left cheek	10	QPSK 1RB_49	20450/829	1:1	0.115	-0.01	24.27	25.00	1.183	0.136	22.1
Head Test Data at the worst case with Sample 2											
Left cheek	10	QPSK 1RB_49	20450/829	1:1	0.114	0.04	24.27	25.00	1.183	0.135	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	10	QPSK 1RB_49	20450/829	1:1	0.105	0.01	24.27	25.00	1.183	0.124	22.1
Back side	10	QPSK 1RB_49	20450/829	1:1	0.123	-0.01	24.27	25.00	1.183	0.146	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	10	QPSK 25RB_25	20450/829	1:1	0.077	0.03	22.85	24.00	1.303	0.101	22.1
Back side	10	QPSK 25RB_25	20450/829	1:1	0.090	-0.01	22.85	24.00	1.303	0.117	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.119	-0.03	24.27	25.00	1.183	0.141	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.115	0.01	24.27	25.00	1.183	0.136	22.1
Body worn Test data at the worst case with Sample 2											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.114	-0.01	24.27	25.00	1.183	0.135	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	10	QPSK 1RB_49	20450/829	1:1	0.105	0.01	24.27	25.00	1.183	0.124	22.1
Back side	10	QPSK 1RB_49	20450/829	1:1	0.206	-0.12	24.27	25.00	1.183	0.244	22.1
Left side	10	QPSK 1RB_49	20450/829	1:1	0.152	0.03	24.27	25.00	1.183	0.180	22.1
Right side	10	QPSK 1RB_49	20450/829	1:1	0.092	0.01	24.27	25.00	1.183	0.109	22.1
Bottom side	10	QPSK 1RB_49	20450/829	1:1	0.151	-0.03	24.27	25.00	1.183	0.179	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	10	QPSK 25RB_25	20450/829	1:1	0.078	0.03	22.85	24.00	1.303	0.101	22.1
Back side	10	QPSK 25RB_25	20450/829	1:1	0.149	-0.03	22.85	24.00	1.303	0.194	22.1
Left side	10	QPSK 25RB_25	20450/829	1:1	0.110	0.12	22.85	24.00	1.303	0.143	22.1
Right side	10	QPSK 25RB_25	20450/829	1:1	0.074	-0.03	22.85	24.00	1.303	0.096	22.1
Bottom side	10	QPSK 25RB_25	20450/829	1:1	0.110	0.02	22.85	24.00	1.303	0.143	22.1
Hotspot Test data at the worst case with Battery 2#											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.194	-0.02	24.27	25.00	1.183	0.230	22.1

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Hotspot Test data at the worst case with Battery 3#											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.190	-0.01	24.27	25.00	1.183	0.225	22.1
Hotspot Test data at the worst case with Sample 2											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.192	-0.01	24.27	25.00	1.183	0.227	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	10	QPSK 1RB_49	20600/844	1:1	0.416	-0.10	24.59	25.00	1.099	0.457	22.1
Left tilted	10	QPSK 1RB_49	20600/844	1:1	0.390	0.02	24.59	25.00	1.099	0.429	22.1
Right cheek	10	QPSK 1RB_49	20600/844	1:1	0.575	-0.06	24.59	25.00	1.099	0.632	22.1
Right tilted	10	QPSK 1RB_49	20600/844	1:1	0.530	0.01	24.59	25.00	1.099	0.582	22.1
Head Test data(50%RB)											
Left cheek	10	QPSK 25RB_25	20600/844	1:1	0.335	-0.05	23.30	24.00	1.175	0.394	22.1
Left tilted	10	QPSK 25RB_25	20600/844	1:1	0.385	-0.01	23.30	24.00	1.175	0.452	22.1
Right cheek	10	QPSK 25RB_25	20600/844	1:1	0.403	-0.02	23.30	24.00	1.175	0.473	22.1
Right tilted	10	QPSK 25RB_25	20600/844	1:1	0.376	0.05	23.30	24.00	1.175	0.442	22.1
Head Test data at the worst case with Battery 2#											
Right cheek	10	QPSK 1RB_49	20600/844	1:1	0.556	0.02	24.59	25.00	1.099	0.611	22.1
Head Test data at the worst case with Battery 3#											
Right cheek	10	QPSK 1RB_49	20600/844	1:1	0.530	0.07	24.59	25.00	1.099	0.582	22.1
Head Test Data at the worst case with Sample 2											
Right cheek	10	QPSK 1RB_49	20600/844	1:1	0.536	0.06	24.59	25.00	1.099	0.589	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	10	QPSK 1RB_49	20600/844	1:1	0.059	0.03	24.59	25.00	1.099	0.065	22.1
Back side	10	QPSK 1RB_49	20600/844	1:1	0.101	-0.06	24.59	25.00	1.099	0.111	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	10	QPSK 25RB_25	20600/844	1:1	0.040	-0.05	23.30	24.00	1.175	0.047	22.1
Back side	10	QPSK 25RB_25	20600/844	1:1	0.062	0.03	23.30	24.00	1.175	0.073	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.091	-0.07	24.59	25.00	1.099	0.100	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.092	0.07	24.59	25.00	1.099	0.101	22.1
Body worn Test data at the worst case with Sample 2											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.093	0.07	24.59	25.00	1.099	0.102	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	10	QPSK 1RB_49	20600/844	1:1	0.124	0.08	24.59	25.00	1.099	0.136	22.1
Back side	10	QPSK 1RB_49	20600/844	1:1	0.272	-0.07	24.59	25.00	1.099	0.299	22.1
Left side	10	QPSK 1RB_49	20600/844	1:1	0.058	0.04	24.59	25.00	1.099	0.063	22.1
Right side	10	QPSK 1RB_49	20600/844	1:1	0.082	0.02	24.59	25.00	1.099	0.090	22.1
Top side	10	QPSK 1RB_49	20600/844	1:1	0.200	0.04	24.59	25.00	1.099	0.220	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	10	QPSK 25RB_25	20600/844	1:1	0.082	0.02	23.3	24.00	1.175	0.096	22.1
Back side	10	QPSK 25RB_25	20600/844	1:1	0.176	0.02	23.3	24.00	1.175	0.207	22.1
Left side	10	QPSK 25RB_25	20600/844	1:1	0.041	0.02	23.3	24.00	1.175	0.048	22.1
Right side	10	QPSK 25RB_25	20600/844	1:1	0.059	0.03	23.3	24.00	1.175	0.070	22.1
Top side	10	QPSK 25RB_25	20600/844	1:1	0.140	0.04	23.3	24.00	1.175	0.164	22.1

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Hotspot Test data at the worst case with Battery 2#											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.267	0.01	24.59	25.00	1.099	0.293	22.1
Hotspot Test data at the worst case with Battery 3#											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.252	-0.06	24.59	25.00	1.099	0.277	22.1
Hotspot Test data at the worst case with Sample 2											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.249	-0.04	24.59	25.00	1.099	0.274	22.1
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	10	QPSK 1RB_49	20600/844	1:1	0.487	-0.03	23.95	24.50	1.135	0.553	22.1
Head Test data(50%RB)											
Left cheek	10	QPSK 25RB_25	20600/844	1:1	0.384	0.1	23.10	24.00	1.230	0.472	22.1

Table 33: SAR of LTE Band 5 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Left cheek	10	QPSK 1RB_49	20450/829	1:1	0.093	0.09	24.27	25.00	1.183	0.110	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.111	-0.07	24.27	25.00	1.183	0.131	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Back side	10	QPSK 1RB_49	20450/829	1:1	0.198	0.01	24.27	25.00	1.183	0.234	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right cheek	10	QPSK 1RB_49	20600/844	1:1	0.570	0.04	24.59	25.00	1.099	0.626	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.106	0.06	24.59	25.00	1.099	0.116	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Back side	10	QPSK 1RB_49	20600/844	1:1	0.228	0.03	24.59	25.00	1.099	0.251	22.1

Table 34: SAR of LTE Band 5 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).



8.3.9 SAR Result of LTE Band 7

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_99	20850/2510	1:1	0.126	0.06	23.17	24.50	1.358	0.171	22.1
Left tilted	20	QPSK 1RB_99	20850/2510	1:1	0.130	0.01	23.17	24.50	1.358	0.177	22.1
Right cheek	20	QPSK 1RB_99	20850/2510	1:1	0.244	0.06	23.17	24.50	1.358	0.331	22.1
Right tilted	20	QPSK 1RB_99	20850/2510	1:1	0.099	0.02	23.17	24.50	1.358	0.134	22.1
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_25	20850/2510	1:1	0.097	0.03	22.08	23.50	1.387	0.135	22.1
Left tilted	20	QPSK 50RB_25	20850/2510	1:1	0.094	-0.02	22.08	23.50	1.387	0.130	22.1
Right cheek	20	QPSK 50RB_25	20850/2510	1:1	0.196	0.09	22.08	23.50	1.387	0.272	22.1
Right tilted	20	QPSK 50RB_25	20850/2510	1:1	0.072	0.01	22.08	23.50	1.387	0.100	22.1
Head Test data at the worst case with Battery 2#											
Right cheek	20	QPSK 1RB_99	20850/2510	1:1	0.237	-0.06	23.17	24.50	1.358	0.322	22.1
Head Test data at the worst case with Battery 3#											
Right cheek	20	QPSK 1RB_99	20850/2510	1:1	0.202	-0.09	23.17	24.50	1.358	0.274	22.1
Head Test Data at the worst case with Sample 2											
Right cheek	20	QPSK 1RB_99	20850/2510	1:1	0.203	-0.05	23.17	24.50	1.358	0.276	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	20850/2510	1:1	0.184	0.02	23.17	24.50	1.358	0.250	22.1
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.222	0.05	23.17	24.50	1.358	0.302	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_25	20850/2510	1:1	0.144	0.03	22.08	23.50	1.387	0.200	22.1
Back side	20	QPSK 50RB_25	20850/2510	1:1	0.185	-0.01	22.08	23.50	1.387	0.257	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.210	-0.09	23.17	24.50	1.358	0.285	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.216	-0.02	23.17	24.50	1.358	0.293	22.1
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.217	-0.07	23.17	24.50	1.358	0.295	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_99	20850/2510	1:1	0.352	0.01	23.17	24.50	1.358	0.478	22.1
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.432	0.05	23.17	24.50	1.358	0.587	22.1
Left side	20	QPSK 1RB_99	20850/2510	1:1	0.063	-0.01	23.17	24.50	1.358	0.086	22.1
Right side	20	QPSK 1RB_99	20850/2510	1:1	0.201	-0.05	23.17	24.50	1.358	0.273	22.1
Bottom side	20	QPSK 1RB_99	20850/2510	1:1	0.366	-0.03	23.17	24.50	1.358	0.497	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_25	20850/2510	1:1	0.277	0.05	22.08	23.50	1.387	0.384	22.1
Back side	20	QPSK 50RB_25	20850/2510	1:1	0.355	0.03	22.08	23.50	1.387	0.492	22.1
Left side	20	QPSK 50RB_25	20850/2510	1:1	0.052	-0.02	22.08	23.50	1.387	0.072	22.1
Right side	20	QPSK 50RB_25	20850/2510	1:1	0.190	0.07	22.08	23.50	1.387	0.263	22.1
Bottom side	20	QPSK 50RB_25	20850/2510	1:1	0.314	-0.02	22.08	23.50	1.387	0.435	22.1
Hotspot Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.404	0.09	23.17	24.50	1.358	0.549	22.1

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Hotspot Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.416	0.06	23.17	24.50	1.358	0.565	22.1
Hotspot Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.347	-0.09	23.17	24.50	1.358	0.471	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_50	20850/2510	1:1	0.239	0.04	17.72	18.50	1.197	0.286	22.1
Left tilted	20	QPSK 1RB_50	20850/2510	1:1	0.333	-0.02	17.72	18.50	1.197	0.399	22.1
Right cheek	20	QPSK 1RB_50	20850/2510	1:1	0.528	-0.02	17.72	18.50	1.197	0.632	22.1
Right tilted	20	QPSK 1RB_50	20850/2510	1:1	0.661	-0.04	17.72	18.50	1.197	0.791	22.1
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_50	20850/2510	1:1	0.250	0.03	17.52	18.50	1.253	0.313	22.1
Left tilted	20	QPSK 50RB_50	20850/2510	1:1	0.325	-0.01	17.52	18.50	1.253	0.407	22.1
Right cheek	20	QPSK 50RB_50	20850/2510	1:1	0.518	-0.06	17.52	18.50	1.253	0.649	22.1
Right tilted	20	QPSK 50RB_50	20850/2510	1:1	0.655	-0.09	17.52	18.50	1.253	0.821	22.1
Right tilted	20	QPSK 50RB_0	21100/2535.5	1:1	0.717	-0.05	17.50	18.50	1.259	0.903	22.1
Right tilted	20	QPSK 50RB_0	21350/2560	1:1	0.716	-0.04	17.35	18.50	1.303	0.933	22.1
Head Test data(100%RB)											
Right tilted	20	QPSK 100RB_0	20850/2510	1:1	0.695	0.02	17.49	18.50	1.262	0.877	22.1
Head Test data at the worst case with Battery 2#											
Right tilted	20	QPSK 50RB_0	21350/2560	1:1	0.694	-0.06	17.35	18.50	1.303	0.904	22.1
Head Test data at the worst case with Battery 3#											
Right tilted	20	QPSK 50RB_0	21350/2560	1:1	0.711	-0.02	17.35	18.50	1.303	0.927	22.1
Head Test Data at the worst case with Sample 2											
Right tilted	20	QPSK 50RB_0	21350/2560	1:1	0.707	-0.01	17.35	18.50	1.303	0.921	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	20850/2510	1:1	0.189	-0.04	23.43	24.50	1.279	0.242	22.1
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.358	-0.07	23.43	24.50	1.279	0.458	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	20850/2510	1:1	0.148	-0.03	22.47	23.50	1.268	0.188	22.1
Back side	20	QPSK 50RB_0	20850/2510	1:1	0.278	-0.01	22.47	23.50	1.268	0.352	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.352	-0.02	23.43	24.50	1.279	0.450	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.342	0.00	23.43	24.50	1.279	0.438	22.1
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.337	-0.04	23.43	24.50	1.279	0.431	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_0	20850/2510	1:1	0.132	0.02	19.68	20.50	1.208	0.159	22.1
Back side	20	QPSK 1RB_0	20850/2510	1:1	0.273	0.12	19.68	20.50	1.208	0.330	22.1
Left side	20	QPSK 1RB_0	20850/2510	1:1	0.126	0.04	19.68	20.50	1.208	0.152	22.1
Right side	20	QPSK 1RB_0	20850/2510	1:1	0.009	0.06	19.68	20.50	1.208	0.011	22.1
Top side	20	QPSK 1RB_0	20850/2510	1:1	0.366	-0.08	19.68	20.50	1.208	0.442	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_25	20850/2510	1:1	0.132	0.06	19.07	20.50	1.390	0.183	22.1

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Back side	20	QPSK 50RB_25	20850/2510	1:1	0.303	0.01	19.07	20.50	1.390	0.421	22.1
Left side	20	QPSK 50RB_25	20850/2510	1:1	0.137	0.02	19.07	20.50	1.390	0.190	22.1
Right side	20	QPSK 50RB_25	20850/2510	1:1	0.011	0.02	19.07	20.50	1.390	0.015	22.1
Top side	20	QPSK 50RB_25	20850/2510	1:1	0.363	-0.03	19.07	20.50	1.390	0.505	22.1
Hotspot Test data at the worst case with Battery 2#											
Top side	20	QPSK 50RB_25	20850/2510	1:1	0.359	-0.08	19.07	20.50	1.390	0.499	22.1
Hotspot Test data at the worst case with Battery 3#											
Top side	20	QPSK 50RB_25	20850/2510	1:1	0.356	-0.01	19.07	20.50	1.390	0.495	22.1
Hotspot Test data at the worst case with Sample 2											
Top side	20	QPSK 50RB_25	20850/2510	1:1	0.354	0.02	19.07	20.50	1.390	0.492	22.1
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Right tilted	20	QPSK 1RB_0	20850/2510	1:1	0.455	-0.05	15.84	16.50	1.164	0.530	22.1
Head Test data(50%RB)											
Right tilted	20	QPSK 50RB_0	21350/2560	1:1	0.488	-0.01	15.58	16.50	1.236	0.603	22.1

Table 35: SAR of LTE Band 7 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right cheek	20	QPSK 1RB_99	20850/2510	1:1	0.304	0.04	23.17	24.50	1.358	0.413	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.251	-0.08	23.17	24.50	1.358	0.341	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.491	0.10	23.17	24.50	1.358	0.667	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right tilted	20	QPSK 50RB_0	21350/2560	1:1	0.683	0.09	17.35	18.50	1.303	0.890	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	20850/2510	1:1	0.296	-0.08	23.43	24.50	1.279	0.379	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Top side	20	QPSK 50RB_25	20850/2510	1:1	0.371	-0.07	19.07	20.50	1.390	0.516	22.1

Table 36: SAR of LTE Band 7 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.10 SAR Result of LTE Band 38

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_99	38000/2595	1:1.58	0.103	0.02	23.33	24.50	1.309	0.135	22.1
Left tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.140	0.06	23.33	24.50	1.309	0.183	22.1
Right cheek	20	QPSK 1RB_99	38000/2595	1:1.58	0.226	-0.03	23.33	24.50	1.309	0.296	22.1
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.101	-0.03	23.33	24.50	1.309	0.132	22.1
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_50	38000/2595	1:1.58	0.078	0.03	22.01	23.50	1.409	0.110	22.1
Left tilted	20	QPSK 50RB_50	38000/2595	1:1.58	0.106	-0.01	22.01	23.50	1.409	0.149	22.1
Right cheek	20	QPSK 50RB_50	38000/2595	1:1.58	0.166	0.02	22.01	23.50	1.409	0.234	22.1
Right tilted	20	QPSK 50RB_50	38000/2595	1:1.58	0.074	-0.05	22.01	23.50	1.409	0.104	22.1
Head Test data at the worst case with Battery 2#											
Right cheek	20	QPSK 1RB_99	38000/2595	1:1.58	0.203	-0.07	23.33	24.50	1.309	0.266	22.1
Head Test data at the worst case with Battery 3#											
Right cheek	20	QPSK 1RB_99	38000/2595	1:1.58	0.214	-0.02	23.33	24.50	1.309	0.280	22.1
Head Test Data at the worst case with Sample 2											
Right cheek	20	QPSK 1RB_99	38000/2595	1:1.58	0.212	-0.03	23.33	24.50	1.309	0.278	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	38000/2595	1:1.58	0.161	0.03	23.33	24.50	1.309	0.211	22.1
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.193	0.03	23.33	24.50	1.309	0.253	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_50	38000/2595	1:1.58	0.118	-0.05	22.01	23.50	1.409	0.166	22.1
Back side	20	QPSK 50RB_50	38000/2595	1:1.58	0.150	0.03	22.01	23.50	1.409	0.211	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.190	-0.02	23.33	24.50	1.309	0.249	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.186	0.01	23.33	24.50	1.309	0.244	22.1
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.182	0.01	23.33	24.50	1.309	0.238	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_99	38000/2595	1:1.58	0.295	0.03	23.33	24.50	1.309	0.386	22.1
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.373	0.05	23.33	24.50	1.309	0.488	22.1
Left side	20	QPSK 1RB_99	38000/2595	1:1.58	0.019	0.02	23.33	24.50	1.309	0.025	22.1
Right side	20	QPSK 1RB_99	38000/2595	1:1.58	0.198	0.01	23.33	24.50	1.309	0.259	22.1
Bottom side	20	QPSK 1RB_99	38000/2595	1:1.58	0.208	0.11	23.33	24.50	1.309	0.272	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_50	38000/2595	1:1.58	0.224	0.03	22.01	23.50	1.409	0.316	22.1
Back side	20	QPSK 50RB_50	38000/2595	1:1.58	0.286	0.05	22.01	23.50	1.409	0.403	22.1
Left side	20	QPSK 50RB_50	38000/2595	1:1.58	0.015	0.01	22.01	23.50	1.409	0.021	22.1
Right side	20	QPSK 50RB_50	38000/2595	1:1.58	0.147	0.03	22.01	23.50	1.409	0.207	22.1
Bottom side	20	QPSK 50RB_50	38000/2595	1:1.58	0.157	-0.02	22.01	23.50	1.409	0.221	22.1
Hotspot Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.336	0.09	23.33	24.50	1.309	0.440	22.1

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Hotspot Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.354	0.01	23.33	24.50	1.309	0.463	22.1
Hotspot Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.349	0.03	23.33	24.50	1.309	0.457	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_99	37850/2580	1:1.58	0.276	-0.05	19.54	20.50	1.247	0.344	22.1
Left tilted	20	QPSK 1RB_99	37850/2580	1:1.58	0.325	-0.02	19.54	20.50	1.247	0.405	22.1
Right cheek	20	QPSK 1RB_99	37850/2580	1:1.58	0.603	0.03	19.54	20.50	1.247	0.752	22.1
Right tilted	20	QPSK 1RB_99	37850/2580	1:1.58	0.674	-0.04	19.54	20.50	1.247	0.841	22.1
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.681	-0.05	19.27	20.50	1.327	0.904	22.1
Right tilted	20	QPSK 1RB_99	38150/2610	1:1.58	0.642	-0.07	19.43	20.50	1.279	0.821	22.1
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_50	37850/2580	1:1.58	0.217	0.03	19.05	20.50	1.396	0.303	22.1
Left tilted	20	QPSK 50RB_50	37850/2580	1:1.58	0.296	-0.01	19.05	20.50	1.396	0.413	22.1
Right cheek	20	QPSK 50RB_50	37850/2580	1:1.58	0.473	-0.04	19.05	20.50	1.396	0.660	22.1
Right tilted	20	QPSK 50RB_50	37850/2580	1:1.58	0.644	-0.01	19.05	20.50	1.396	0.899	22.1
Right tilted	20	QPSK 50RB_50	38000/2595	1:1.58	0.593	0.04	19.05	20.50	1.396	0.828	22.1
Right tilted	20	QPSK 50RB_50	38150/2610	1:1.58	0.659	0.09	19.14	20.50	1.368	0.901	22.1
Head Test data(100%RB)											
Right tilted	20	QPSK 100RB_0	38150/2610	1:1.58	0.619	0.03	19.08	20.50	1.387	0.858	22.1
Head Test data at the worst case with Battery 2#											
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.647	-0.12	19.27	20.50	1.327	0.859	22.1
Head Test data at the worst case with Battery 3#											
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.613	0.04	19.27	20.50	1.327	0.814	22.1
Head Test Data at the worst case with Sample 2											
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.637	-0.03	19.27	20.50	1.327	0.846	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	38150/2610	1:1.58	0.188	0.03	23.83	24.50	1.167	0.219	22.1
Back side	20	QPSK 1RB_99	38150/2610	1:1.58	0.253	-0.01	23.83	24.50	1.167	0.295	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_50	38150/2610	1:1.58	0.148	-0.01	22.64	23.50	1.219	0.180	22.1
Back side	20	QPSK 50RB_50	38150/2610	1:1.58	0.200	-0.06	22.64	23.50	1.219	0.244	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	38150/2610	1:1.58	0.240	-0.01	23.83	24.50	1.167	0.280	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	38150/2610	1:1.58	0.228	-0.05	23.83	24.50	1.167	0.266	22.1
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	38150/2610	1:1.58	0.228	0.00	23.83	24.50	1.167	0.266	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_0	37850/2580	1:1.58	0.157	0.06	20.95	21.50	1.135	0.178	22.1
Back side	20	QPSK 1RB_0	37850/2580	1:1.58	0.258	0.03	20.95	21.50	1.135	0.293	22.1
Left side	20	QPSK 1RB_0	37850/2580	1:1.58	0.176	0.04	20.95	21.50	1.135	0.200	22.1
Right side	20	QPSK 1RB_0	37850/2580	1:1.58	0.012	0.02	20.95	21.50	1.135	0.014	22.1
Top side	20	QPSK 1RB_0	37850/2580	1:1.58	0.328	0.06	20.95	21.50	1.135	0.372	22.1

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Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	37850/2580	1:1.58	0.150	0.03	20.64	21.50	1.219	0.183	22.1
Back side	20	QPSK 50RB_0	37850/2580	1:1.58	0.250	0.04	20.64	21.50	1.219	0.305	22.1
Left side	20	QPSK 50RB_0	37850/2580	1:1.58	0.167	0.01	20.64	21.50	1.219	0.204	22.1
Right side	20	QPSK 50RB_0	37850/2580	1:1.58	0.012	0.04	20.64	21.50	1.219	0.015	22.1
Top side	20	QPSK 50RB_0	37850/2580	1:1.58	0.318	-0.07	20.64	21.50	1.219	0.388	22.1
Hotspot Test data at the worst case with Battery 2#											
Top side	20	QPSK 50RB_0	37850/2580	1:1.58	0.305	-0.02	20.64	21.50	1.219	0.372	22.1
Hotspot Test data at the worst case with Battery 3#											
Top side	20	QPSK 50RB_0	37850/2580	1:1.58	0.302	0.04	20.64	21.50	1.219	0.368	22.1
Hotspot Test data at the worst case with Sample 2											
Top side	20	QPSK 50RB_0	37850/2580	1:1.58	0.315	-0.04	20.64	21.50	1.219	0.384	22.1
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT)											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.509	-0.01	17.61	18.50	1.227	0.625	22.1
Head Test data(50%RB)											
Right tilted	20	QPSK 50RB_50	38000/2595	1:1.58	0.476	-0.05	17.30	18.50	1.318	0.627	22.1

Table 37: SAR of LTE Band 38 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right cheek	20	QPSK 1RB_99	38000/2595	1:1.58	0.245	0.02	23.33	24.50	1.309	0.321	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.186	0.02	23.33	24.50	1.309	0.244	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Back side	20	QPSK 1RB_99	38000/2595	1:1.58	0.353	0.04	23.33	24.50	1.309	0.462	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right tilted	20	QPSK 1RB_99	38000/2595	1:1.58	0.656	0.06	19.27	20.50	1.327	0.871	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	38150/2610	1:1.58	0.195	0.05	23.83	24.50	1.167	0.228	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Top side	20	QPSK 50RB_0	37850/2580	1:1.58	0.349	-0.11	20.64	21.50	1.219	0.425	22.1

Table 38: SAR of LTE Band 38 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).



8.3.11 SAR Result of LTE Band 41

Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_0	40140/2545	1:1.58	0.074	0.01	23.00	24.50	1.413	0.104	22.1
Left tilted	20	QPSK 1RB_0	40140/2545	1:1.58	0.091	0.05	23.00	24.50	1.413	0.128	22.1
Right cheek	20	QPSK 1RB_0	40140/2545	1:1.58	0.167	-0.08	23.00	24.50	1.413	0.236	22.1
Right tilted	20	QPSK 1RB_0	40140/2545	1:1.58	0.068	-0.07	23.00	24.50	1.413	0.096	22.1
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.066	-0.03	21.94	23.50	1.432	0.095	22.1
Left tilted	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.095	0.01	21.94	23.50	1.432	0.135	22.1
Right cheek	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.155	0.03	21.94	23.50	1.432	0.222	22.1
Right tilted	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.066	-0.02	21.94	23.50	1.432	0.095	22.1
Head Test data at the worst case with Battery 2#											
Right cheek	20	QPSK 1RB_0	40140/2545	1:1.58	0.158	0.06	23.00	24.50	1.413	0.223	22.1
Head Test data at the worst case with Battery 3#											
Right cheek	20	QPSK 1RB_0	40140/2545	1:1.58	0.154	0.03	23.00	24.50	1.413	0.218	22.1
Head Test Data at the worst case with Sample 2											
Right cheek	20	QPSK 1RB_0	40140/2545	1:1.58	0.165	-0.04	23.00	24.50	1.413	0.233	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_0	40140/2545	1:1.58	0.119	0.03	23.00	24.50	1.413	0.168	22.1
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.150	-0.04	23.00	24.50	1.413	0.212	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.107	0.06	21.94	23.50	1.432	0.153	22.1
Back side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.136	0.03	21.94	23.50	1.432	0.195	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.145	-0.05	23.00	24.50	1.413	0.205	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.140	0.02	23.00	24.50	1.413	0.198	22.1
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.149	-0.02	23.00	24.50	1.413	0.210	22.1
Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_0	40140/2545	1:1.58	0.230	-0.04	23.00	24.50	1.413	0.325	22.1
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.348	-0.07	23.00	24.50	1.413	0.492	22.1
Left side	20	QPSK 1RB_0	40140/2545	1:1.58	0.034	0.02	23.00	24.50	1.413	0.047	22.1
Right side	20	QPSK 1RB_0	40140/2545	1:1.58	0.185	-0.03	23.00	24.50	1.413	0.261	22.1
Bottom side	20	QPSK 1RB_0	40140/2545	1:1.58	0.204	0.01	23.00	24.50	1.413	0.288	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.203	0.08	21.94	23.50	1.432	0.291	22.1
Back side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.257	-0.01	21.94	23.50	1.432	0.368	22.1
Left side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.019	-0.06	21.94	23.50	1.432	0.027	22.1
Right side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.177	0.02	21.94	23.50	1.432	0.253	22.1
Bottom side	20	QPSK 50RB_0	40473/2578.3	1:1.58	0.157	0.03	21.94	23.50	1.432	0.225	22.1
Hotspot Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.281	-0.01	23.00	24.50	1.413	0.397	22.1

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Hotspot Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.298	0.03	23.00	24.50	1.413	0.421	22.1
Hotspot Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.344	-0.02	23.00	24.50	1.413	0.486	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left cheek	20	QPSK 1RB_50	40140/2545	1:1.58	0.289	0.02	19.20	20.50	1.349	0.390	22.1
Left tilted	20	QPSK 1RB_50	40140/2545	1:1.58	0.382	-0.04	19.20	20.50	1.349	0.515	22.1
Right cheek	20	QPSK 1RB_50	40140/2545	1:1.58	0.442	-0.01	19.20	20.50	1.349	0.596	22.1
Right tilted	20	QPSK 1RB_50	40140/2545	1:1.58	0.533	-0.08	19.20	20.50	1.349	0.719	22.1
Right tilted	20	QPSK 1RB_50	40473/2578.3	1:1.58	0.550	0.03	18.78	20.50	1.486	0.817	22.1
Right tilted	20	QPSK 1RB_50	40807/2611.7	1:1.58	0.533	-0.02	18.72	20.50	1.507	0.803	22.1
Right tilted	20	QPSK 1RB_50	41140/2645	1:1.58	0.484	-0.02	18.59	20.50	1.552	0.751	22.1
Head Test data(50%RB)											
Left cheek	20	QPSK 50RB_50	40140/2545	1:1.58	0.249	0.01	18.86	20.50	1.459	0.363	22.1
Left tilted	20	QPSK 50RB_50	40140/2545	1:1.58	0.267	-0.03	18.86	20.50	1.459	0.390	22.1
Right cheek	20	QPSK 50RB_50	40140/2545	1:1.58	0.449	-0.06	18.86	20.50	1.459	0.655	22.1
Right tilted	20	QPSK 50RB_50	40140/2545	1:1.58	0.535	-0.03	18.86	20.50	1.459	0.780	22.1
Right cheek	20	QPSK 50RB_50	40473/2578.3	1:1.58	0.442	-0.08	18.69	20.50	1.517	0.671	22.1
Right cheek	20	QPSK 50RB_50	40807/2611.7	1:1.58	0.466	-0.06	18.57	20.50	1.560	0.727	22.1
Right cheek	20	QPSK 50RB_50	41140/2645	1:1.58	0.471	0.06	18.59	20.50	1.552	0.731	22.1
Right tilted	20	QPSK 50RB_50	40473/2578.3	1:1.58	0.558	-0.06	18.69	20.50	1.517	0.847	22.1
Right tilted	20	QPSK 50RB_50	40807/2611.7	1:1.58	0.540	-0.10	18.57	20.50	1.560	0.842	22.1
Right tilted	20	QPSK 50RB_50	41140/2645	1:1.58	0.488	-0.02	18.59	20.50	1.552	0.758	22.1
Head Test data(100%RB)											
Right cheek	20	QPSK 100RB_0	40140/2545	1:1.58	0.438	0.04	18.96	20.50	1.426	0.624	22.1
Right tilted	20	QPSK 100RB_0	40140/2545	1:1.58	0.522	0.01	18.96	20.50	1.426	0.744	22.1
Head Test data at the worst case with Battery 2#											
Right tilted	20	QPSK 50RB_50	40473/2578.3	1:1.58	0.520	-0.02	18.69	20.50	1.517	0.789	22.1
Head Test data at the worst case with Battery 3#											
Right tilted	20	QPSK 50RB_50	40473/2578.3	1:1.58	0.514	0.11	18.69	20.50	1.517	0.780	22.1
Head Test Data at the worst case with Sample 2											
Right tilted	20	QPSK 50RB_50	40473/2578.3	1:1.58	0.529	-0.01	18.69	20.50	1.517	0.803	22.1
Body worn Test data(Separate 15mm 1RB)											
Front side	20	QPSK 1RB_99	41140/2645	1:1.58	0.183	-0.01	23.40	24.50	1.288	0.236	22.1
Back side	20	QPSK 1RB_99	41140/2645	1:1.58	0.258	-0.04	23.40	24.50	1.288	0.332	22.1
Body worn Test data (Separate 15mm 50%RB)											
Front side	20	QPSK 50RB_0	41140/2645	1:1.58	0.140	-0.02	22.27	23.50	1.327	0.186	22.1
Back side	20	QPSK 50RB_0	41140/2645	1:1.58	0.220	0.02	22.27	23.50	1.327	0.292	22.1
Body worn Test data at the worst case with Battery 2#											
Back side	20	QPSK 1RB_99	41140/2645	1:1.58	0.251	0.01	23.40	24.50	1.288	0.323	22.1
Body worn Test data at the worst case with Battery 3#											
Back side	20	QPSK 1RB_99	41140/2645	1:1.58	0.249	0.03	23.40	24.50	1.288	0.321	22.1
Body worn Test data at the worst case with Sample 2											
Back side	20	QPSK 1RB_99	41140/2645	1:1.58	0.232	-0.01	23.40	24.50	1.288	0.299	22.1

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Hotspot Test data(Separate 10mm 1RB)											
Front side	20	QPSK 1RB_50	40140/2545	1:1.58	0.110	-0.02	19.54	20.50	1.247	0.137	22.1
Back side	20	QPSK 1RB_50	40140/2545	1:1.58	0.222	0.03	19.54	20.50	1.247	0.277	22.1
Left side	20	QPSK 1RB_50	40140/2545	1:1.58	0.126	-0.01	19.54	20.50	1.247	0.157	22.1
Right side	20	QPSK 1RB_50	40140/2545	1:1.58	0.015	0.01	19.54	20.50	1.247	0.018	22.1
Top side	20	QPSK 1RB_50	40140/2545	1:1.58	0.276	-0.09	19.54	20.50	1.247	0.344	22.1
Hotspot Test data (Separate 10mm 50%RB)											
Front side	20	QPSK 50RB_0	40140/2545	1:1.58	0.110	-0.03	19.32	20.50	1.312	0.144	22.1
Back side	20	QPSK 50RB_0	40140/2545	1:1.58	0.220	0.02	19.32	20.50	1.312	0.289	22.1
Left side	20	QPSK 50RB_0	40140/2545	1:1.58	0.125	0.01	19.32	20.50	1.312	0.164	22.1
Right side	20	QPSK 50RB_0	40140/2545	1:1.58	0.011	0.02	19.32	20.50	1.312	0.015	22.1
Top side	20	QPSK 50RB_0	40140/2545	1:1.58	0.272	-0.15	19.32	20.50	1.312	0.357	22.1
Hotspot Test data at the worst case with Battery 2#											
Top side	20	QPSK 50RB_0	40140/2545	1:1.58	0.270	-0.04	19.32	20.50	1.312	0.354	22.1
Hotspot Test data at the worst case with Battery 3#											
Top side	20	QPSK 50RB_0	40140/2545	1:1.58	0.267	-0.05	19.32	20.50	1.312	0.350	22.1
Hotspot Test data at the worst case with Sample 2											
Top side	20	QPSK 50RB_0	40140/2545	1:1.58	0.269	-0.03	19.32	20.50	1.312	0.353	22.1
Ant 2 Additional Test data(simultaneous transmission with (WWAN+WLAN/BT))											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data(1RB)											
Left tilted	20	QPSK 1RB_50	40140/2545	1:1.58	0.166	-0.08	17.66	18.50	1.213	0.201	22.1
Right tilted	20	QPSK 1RB_50	40140/2545	1:1.58	0.371	-0.15	17.66	18.50	1.213	0.450	22.1
Head Test data(50%RB)											
Left tilted	20	QPSK 50RB_50	40140/2545	1:1.58	0.172	-0.07	17.18	18.50	1.355	0.233	22.1
Right tilted	20	QPSK 50RB_50	40140/2545	1:1.58	0.378	0.05	17.18	18.50	1.355	0.512	22.1

Table 39: SAR of LTE Band 41 for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Ant 1 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right cheek	20	QPSK 1RB_0	40140/2545	1:1.58	0.197	0.01	23.00	24.50	1.413	0.278	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.160	0.03	23.00	24.50	1.413	0.226	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Back side	20	QPSK 1RB_0	40140/2545	1:1.58	0.321	0.03	23.00	24.50	1.413	0.453	22.1
Ant 2 Test Record											
Test position	BW.	Test mode	Test Ch./Freq.	Duty Cycle	SAR (W/kg)1-g	Power Drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Right tilted	20	QPSK 50RB_50	40473/2578.3	1:1.58	0.560	-0.02	18.69	20.50	1.517	0.850	22.1
Body worn Test data at the worst case(Separate 15mm)											
Back side	20	QPSK 1RB_99	41140/2645	1:1.58	0.173	-0.01	23.40	24.50	1.288	0.223	22.1
Hotspot Test data at the worst case(Separate 10mm)											
Top side	20	QPSK 50RB_0	40140/2545	1:1.58	0.282	-0.10	19.32	20.50	1.312	0.370	22.1

Table 40: SAR of LTE Band 41 for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

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8.3.12 SAR Result of WIFI 2.4G

Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)1-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data											
Left cheek	802.11b	11/2462	99.25%	1.008	0.369	0.00	15.23	15.50	1.064	0.396	22
Left tilted	802.11b	11/2462	99.25%	1.008	0.330	0.02	15.23	15.50	1.064	0.354	22
Right cheek	802.11b	11/2462	99.25%	1.008	0.151	-0.04	15.23	15.50	1.064	0.162	22
Right tilted	802.11b	11/2462	99.25%	1.008	0.185	-0.01	15.23	15.50	1.064	0.198	22
Head Test data at the worst case with Battery 2#											
Left cheek	802.11b	11/2462	99.25%	1.008	0.367	-0.05	15.23	15.50	1.064	0.393	22
Head Test data at the worst case with Battery 3#											
Left cheek	802.11b	11/2462	99.25%	1.008	0.356	-0.06	15.23	15.50	1.064	0.382	22
Head Test Data at the worst case with Sample 2											
Left cheek	802.11b	11/2462	99.25%	1.008	0.365	-0.04	15.23	15.50	1.064	0.391	22
Body worn Test data(Separate 15mm)											
Front side	802.11b	11/2462	99.25%	1.008	0.130	0.02	19.32	19.50	1.042	0.137	22
Back side	802.11b	11/2462	99.25%	1.008	0.189	-0.07	19.32	19.50	1.042	0.198	22
Body worn Test data at the worst case with Battery 2#											
Back side	802.11b	11/2462	99.25%	1.008	0.184	-0.03	19.32	19.50	1.042	0.193	22
Body worn Test data at the worst case with Battery 3#											
Back side	802.11b	11/2462	99.25%	1.008	0.177	-0.01	19.32	19.50	1.042	0.186	22
Body worn Test data at the worst case with Sample 2											
Back side	802.11b	11/2462	99.25%	1.008	0.187	-0.09	19.32	19.50	1.042	0.196	22
Hotspot Test data (Separate 10mm)											
Front side	802.11b	11/2462	99.25%	1.008	0.129	0.03	17.03	17.50	1.114	0.145	22
Back side	802.11b	11/2462	99.25%	1.008	0.141	-0.03	17.03	17.50	1.114	0.158	22
Right side	802.11b	11/2462	99.25%	1.008	0.114	-0.06	17.03	17.50	1.114	0.128	22
Top side	802.11b	11/2462	99.25%	1.008	0.157	-0.06	17.03	17.50	1.114	0.176	22
Hotspot Test data at the worst case with Battery 2#											
Top side	802.11b	11/2462	99.25%	1.008	0.152	-0.05	17.03	17.50	1.114	0.171	22
Hotspot Test data at the worst case with Battery 3#											
Top side	802.11b	11/2462	99.25%	1.008	0.147	-0.04	17.03	17.50	1.114	0.165	22
Hotspot Test data at the worst case with Sample 2											
Top side	802.11b	11/2462	99.25%	1.008	0.155	-0.02	17.03	17.50	1.114	0.174	22

Table 41: SAR of WIFI 2.4G for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)1-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Left cheek	802.11b	11/2462	99.25%	1.008	0.328	-0.01	15.23	15.50	1.064	0.352	22
Body worn Test data at the worst case(Separate 15mm)											
Back side	802.11b	11/2462	99.25%	1.008	0.154	0.17	19.32	19.50	1.042	0.162	22
Hotspot Test data at the worst case(Separate 10mm)											
Top side	802.11b	11/2462	99.25%	1.008	0.147	0.02	17.03	17.50	1.114	0.165	22

Table 42: SAR of WIFI 2.4G for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).
- 3) Per KDB 648474 D04, Product Specific 10-g SAR test is not required for this frequency band since hotspot mode 1-g reported SAR < 1.2 W/kg.

Mode	Tune-up (dBm)	Tune-up (mW)	Max Reported SAR(W/kg)	Adjusted SAR(W/kg)	SAR Test (Yes/No)
802.11b	15.50	35.48	0.396	/	Yes
802.11g	14.50	28.18	/	0.315	No
802.11n-HT20	13.00	19.95	/	0.223	No
802.11n-HT40	13.00	19.95	/	0.223	No

- 4) When the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR test for the other 802.11 modes are not required.

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8.3.13 SAR Result of WIFI 5G

Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)1-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data of U-NII-2A											
Left cheek	802.11a	52/5260	97.13%	1.030	0.712	-0.02	15.48	15.50	1.005	0.736	22.2
Left tilted	802.11a	52/5260	97.13%	1.030	0.689	0.09	15.48	15.50	1.005	0.713	22.2
Right cheek	802.11a	52/5260	97.13%	1.030	0.349	0.03	15.48	15.50	1.005	0.361	22.2
Right tilted	802.11a	52/5260	97.13%	1.030	0.397	0.01	15.48	15.50	1.005	0.411	22.2
Head Test data of U-NII-2C											
Left cheek	802.11a	140/5700	97.13%	1.030	0.446	0.00	15.42	15.50	1.019	0.468	22.2
Left tilted	802.11a	140/5700	97.13%	1.030	0.272	0.03	15.42	15.50	1.019	0.285	22.2
Right cheek	802.11a	140/5700	97.13%	1.030	0.183	0.00	15.42	15.50	1.019	0.192	22.2
Right tilted	802.11a	140/5700	97.13%	1.030	0.182	0.02	15.42	15.50	1.019	0.191	22.2
Head Test data of U-NII-3											
Left cheek	802.11a	161/5805	97.13%	1.030	0.672	0.03	15.49	15.50	1.002	0.693	22.2
Left tilted	802.11a	161/5805	97.13%	1.030	0.551	0.02	15.49	15.50	1.002	0.569	22.2
Right cheek	802.11a	161/5805	97.13%	1.030	0.335	0.00	15.49	15.50	1.002	0.346	22.2
Right tilted	802.11a	161/5805	97.13%	1.030	0.354	0.01	15.49	15.50	1.002	0.365	22.2
Head Test data at the worst case with Battery 2#											
Left cheek	802.11a	52/5260	97.13%	1.030	0.708	-0.02	15.48	15.50	1.005	0.732	22.2
Head Test data at the worst case with Battery 3#											
Left cheek	802.11a	52/5260	97.13%	1.030	0.703	-0.06	15.48	15.50	1.005	0.727	22.2
Head Test Data at the worst case with Sample 2											
Left cheek	802.11a	52/5260	97.13%	1.030	0.706	-0.01	15.48	15.50	1.005	0.730	22.2
Body worn Test data of U-NII-2A (Separate 15mm)											
Front side	802.11a	60/5300	97.13%	1.030	0.131	0.04	17.47	17.50	1.007	0.136	22.2
Back side	802.11a	60/5300	97.13%	1.030	0.208	-0.01	17.47	17.50	1.007	0.216	22.2
Body worn Test data of U-NII-2C(Separate 15mm)											
Front side	802.11a	132/5660	97.13%	1.030	0.014	0.06	17.49	17.50	1.002	0.015	22.2
Back side	802.11a	132/5660	97.13%	1.030	0.129	0.01	17.49	17.50	1.002	0.133	22.2
Body worn Test data of U-NII-3(Separate 15mm)											
Front side	802.11a	149/5745	97.13%	1.030	0.071	0.02	17.48	17.50	1.005	0.074	22.2
Back side	802.11a	149/5745	97.13%	1.030	0.269	-0.07	17.48	17.50	1.005	0.278	22.2
Body worn Test data at the worst case with Battery 2#											
Back side	802.11a	149/5745	97.13%	1.030	0.238	-0.02	17.48	17.50	1.005	0.246	22.2
Body worn Test data at the worst case with Battery 3#											
Back side	802.11a	149/5745	97.13%	1.030	0.236	-0.03	17.48	17.50	1.005	0.244	22.2
Body worn Test data at the worst case with Sample 2											
Back side	802.11a	149/5745	97.13%	1.030	0.267	-0.04	17.48	17.50	1.005	0.276	22.2
Hotspot Test data of U-NII-1(Separate 10mm)											
Front side	802.11a	40/5200	97.13%	1.030	0.148	0.02	16.48	16.50	1.005	0.153	22.2
Back side	802.11a	40/5200	97.13%	1.030	0.210	-0.03	16.48	16.50	1.005	0.217	22.2
Right side	802.11a	40/5200	97.13%	1.030	0.177	-0.08	16.48	16.50	1.005	0.183	22.2
Top side	802.11a	40/5200	97.13%	1.030	0.068	-0.08	16.48	16.50	1.005	0.070	22.2

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Hotspot Test data of U-NII-3 (Separate 10mm)											
Front side	802.11a	161/5805	97.13%	1.030	0.187	0.02	16.48	16.50	1.005	0.193	22.2
Back side	802.11a	161/5805	97.13%	1.030	0.500	-0.02	16.48	16.50	1.005	0.517	22.2
Right side	802.11a	161/5805	97.13%	1.030	0.892	-0.01	16.48	16.50	1.005	0.923	22.2
Right side-Repeat	802.11a	161/5805	97.13%	1.030	0.846	0.05	16.48	16.50	1.005	0.875	22.2
Top side	802.11a	161/5805	97.13%	1.030	0.156	-0.06	16.48	16.50	1.005	0.161	22.2
Right side	802.11a	157/5785	97.13%	1.030	0.877	0.02	16.47	16.50	1.007	0.909	22.2
Hotspot Test data at the worst case with Battery 2#											
Right side	802.11a	161/5805	97.13%	1.030	0.842	-0.05	16.48	16.50	1.005	0.871	22.2
Hotspot Test data at the worst case with Battery 3#											
Right side	802.11a	161/5805	97.13%	1.030	0.837	-0.08	16.48	16.50	1.005	0.866	22.2
Hotspot Test data at the worst case with Sample 2											
Right side	802.11a	161/5805	97.13%	1.030	0.884	-0.02	16.48	16.50	1.005	0.914	22.2
Test position	Test mode	Test Ch/Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)10-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data of U-NII-2A(Separate 0mm)											
Front side	802.11a	60/5300	97.13%	1.030	0.358	-0.02	17.47	17.50	1.007	0.371	22.2
Back side	802.11a	60/5300	97.13%	1.030	0.563	0.02	17.47	17.50	1.007	0.584	22.2
Right side	802.11a	60/5300	97.13%	1.030	0.362	0.06	17.47	17.50	1.007	0.375	22.2
Top side	802.11a	60/5300	97.13%	1.030	0.508	-0.09	17.47	17.50	1.007	0.527	22.2
Product specific 10gSAR Test data of U-NII-2C(Separate 0mm)											
Front side	802.11a	132/5660	97.13%	1.030	0.184	0.03	17.49	17.50	1.002	0.190	22.2
Back side	802.11a	132/5660	97.13%	1.030	0.255	-0.04	17.49	17.50	1.002	0.263	22.2
Right side	802.11a	132/5660	97.13%	1.030	0.472	0.01	17.49	17.50	1.002	0.487	22.2
Top side	802.11a	132/5660	97.13%	1.030	0.193	-0.05	17.49	17.50	1.002	0.199	22.2
Product specific 10gSAR Test data at the worst case with Battery 2#											
Back side	802.11a	60/5300	97.13%	1.030	0.559	-0.07	17.47	17.50	1.007	0.580	22.2
Product specific 10gSAR Test data at the worst case with Battery 3#											
Back side	802.11a	60/5300	97.13%	1.030	0.552	-0.08	17.47	17.50	1.007	0.572	22.2
Product specific 10gSAR Test data at the worst case with Sample 2											
Back side	802.11a	60/5300	97.13%	1.030	0.503	-0.03	17.47	17.50	1.007	0.521	22.2

Table 43: SAR of WIFI 5G for Head and Body of Original Report(Report No.: ZR/2020/8001707).

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Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)1-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Left cheek	802.11a	52/5260	97.13%	1.030	0.597	-0.04	15.48	15.50	1.005	0.617	22.2
Body worn Test data at the worst case(Separate 15mm)											
Back side	802.11a	149/5745	97.13%	1.030	0.255	-0.01	17.48	17.50	1.005	0.264	22.2
Hotspot Test data at the worst case(Separate 10mm)											
Right side	802.11a	161/5805	97.13%	1.030	0.746	0.01	16.48	16.50	1.005	0.772	22.2
Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)10-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Product specific 10gSAR Test data at the worst case(Separate 0mm)											
Back side	802.11a	60/5300	97.13%	1.030	0.362	-0.07	17.47	17.50	1.007	0.375	22.2

Table 44: SAR of WIFI 5G for Head and Body(Variant).

Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Right side	802.11a	0.892	0.846	1.054	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

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

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

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

Note:

1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.

2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

8.3.14 SAR Result of BT

Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)1-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data											
Left cheek	GFSK	39/2441	77.27%	1.294	0.108	-0.05	11.84	13.50	1.466	0.205	22
Left tilted	GFSK	39/2441	77.27%	1.294	0.085	0.01	11.84	13.50	1.466	0.161	22
Right cheek	GFSK	39/2441	77.27%	1.294	0.042	0.02	11.84	13.50	1.466	0.079	22
Right tilted	GFSK	39/2441	77.27%	1.294	0.052	0.04	11.84	13.50	1.466	0.098	22
Head Test Data at the worst case with Battery 2#											
Left cheek	GFSK	39/2441	77.27%	1.294	0.085	0.06	11.84	13.50	1.466	0.161	22
Head Test Data at the worst case with Battery 3#											
Left cheek	GFSK	39/2441	77.27%	1.294	0.083	0.04	11.84	13.50	1.466	0.157	22
Head Test Data at the worst case with Sample 2											
Left cheek	GFSK	39/2441	77.27%	1.294	0.107	0.04	11.84	13.50	1.466	0.203	22
Hotspot Test data (Separate 10mm)											
Front side	GFSK	39/2441	77.27%	1.294	0.020	0.08	11.84	13.50	1.466	0.038	22
Back side	GFSK	39/2441	77.27%	1.294	0.030	0.01	11.84	13.50	1.466	0.057	22
Right side	GFSK	39/2441	77.27%	1.294	0.020	0.04	11.84	13.50	1.466	0.038	22
Top side	GFSK	39/2441	77.27%	1.294	0.032	0.06	11.84	13.50	1.466	0.061	22
Hotspot Test Data at the worst case with Battery 2#											
Top side	GFSK	39/2441	77.27%	1.294	0.031	-0.03	11.84	13.50	1.466	0.059	22
Hotspot Test Data at the worst case with Battery 3#											
Top side	GFSK	39/2441	77.27%	1.294	0.030	-0.05	11.84	13.50	1.466	0.057	22
Hotspot Test data at the worst case with Sample 2											
Top side	GFSK	39/2441	77.27%	1.294	0.029	-0.05	11.84	13.50	1.466	0.055	22

Table 45: SAR of BT for Head and Body of Original Report(Report No.: ZR/2020/8001707).

Test position	Test mode	Test Ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg)1-g	Power drift(dB)	Conducted power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR(W/kg)	Liquid Temp
Head Test data at the worst case											
Left cheek	GFSK	39/2441	77.27%	1.294	0.141	0.17	11.84	13.50	1.466	0.267	22
Hotspot Test data at the worst case(Separate 10mm)											
Top side	GFSK	39/2441	77.27%	1.294	0.027	-0.02	11.84	13.50	1.466	0.050	22

Table 46: SAR of BT for Head and Body(Variant).

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).



8.4 Multiple Transmitter Evaluation

8.4.1 Simultaneous SAR test evaluation

- Simultaneous Transmission Possibilities

NO.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Product Specific 10-g SAR
1	GSM Voice(Ant 1) + BT	N/A	Yes	Yes	Yes
2	GSM DATA(Ant 1) + BT	N/A	Yes	Yes	Yes
3	GSM Voice(Ant 2) + BT	N/A	Yes	Yes	Yes
4	GSM DATA (Ant 2)+ BT	N/A	Yes	Yes	Yes
5	GSM Voice(Ant 1) + WiFi 2.4G	Yes	Yes	Yes	Yes
6	GSM DATA(Ant 1) + WiFi 2.4G	N/A	Yes	Yes	Yes
7	GSM Voice(Ant 2) + WiFi 2.4G	Yes	Yes	Yes	Yes
8	GSM DATA(Ant 2) + WiFi 2.4G	N/A	Yes	Yes	Yes
9	UMTS Voice(Ant 1) + BT	N/A	Yes	Yes	Yes
10	UMTS Data(Ant 1) + BT	N/A	Yes	Yes	Yes
11	UMTS Voice(Ant 2) + BT	N/A	Yes	Yes	Yes
12	UMTS Data(Ant 2) + BT	N/A	Yes	Yes	Yes
13	UMTS Voice(Ant 1) + WiFi 2.4G	Yes	Yes	Yes	Yes
14	UMTS Data (Ant 1) + WiFi 2.4G	N/A	Yes	Yes	Yes
15	UMTS Voice (Ant 2) + WiFi 2.4G	Yes	Yes	Yes	Yes
16	UMTS Data (Ant 2)+ WiFi 2.4G	N/A	Yes	Yes	Yes
17	LTE (Ant 1) + WiFi 2.4G	Yes	Yes	Yes	Yes
18	LTE(Ant 1) + BT	N/A	Yes	Yes	Yes
19	LTE (Ant 2) + WiFi 2.4G	Yes	Yes	Yes	Yes
20	LTE (Ant 2) + BT	N/A	Yes	Yes	Yes
21	GSM Voice(Ant 1) + WiFi 5G	Yes	Yes	Yes	Yes
22	GSM DATA(Ant 1) + WiFi 5G	N/A	Yes	Yes	Yes
23	GSM Voice(Ant 2) + WiFi 5G	Yes	Yes	Yes	Yes
24	GSM DATA(Ant 2) + WiFi 5G	N/A	Yes	Yes	Yes
25	UMTS Voice(Ant 1) + WiFi 5G	Yes	Yes	Yes	Yes
26	UMTS Data (Ant 1) + WiFi 5G	N/A	Yes	Yes	Yes
27	UMTS Voice (Ant 2) + WiFi 5G	Yes	Yes	Yes	Yes
28	UMTS Data (Ant 2)+ WiFi 5G	N/A	Yes	Yes	Yes
29	LTE (Ant 1) + WiFi 5G	Yes	Yes	Yes	Yes
30	LTE (Ant 2) + WiFi 5G	Yes	Yes	Yes	Yes

Note:

- 1) WiFi 2.4G and Bluetooth can't transmit simultaneously.
- 2) WiFi 5G and Bluetooth can't transmit simultaneously.
- 3) WiFi 2.4G and 5G can't transmit simultaneously.
- 4) 2G&3G&4G Ant1 and Ant 2 can't transmit simultaneously
- 5) The device does not support DTM function.

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8.4.2 Simultaneous Transmission SAR Summation Scenario

Test position		Main Antenna SARmax (W/kg)											WiFi Antenna SARmax (W/kg)			Summed 1g SARmax (W/kg)
		GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 38	LTE Band 41	WLAN 2.4G	WLAN 5G	BT	
Head	Left Touch	0.196	0.089	0.103	0.077	0.145	0.106	0.061	0.147	0.171	0.135	0.104	0.396	0.736	0.267	0.932
	Left Tilt	0.100	0.046	0.058	0.033	0.083	0.054	0.045	0.069	0.177	0.183	0.135	0.354	0.713	0.161	0.896
	Right Touch	0.192	0.077	0.110	0.044	0.138	0.087	0.046	0.144	0.413	0.321	0.278	0.162	0.361	0.079	0.774
	Right Tilt	0.096	0.054	0.080	0.031	0.068	0.063	0.035	0.067	0.134	0.132	0.096	0.198	0.411	0.098	0.545
Body-worn	Front	0.097	0.127	0.196	0.134	0.116	0.203	0.136	0.124	0.250	0.211	0.168	0.137	0.136	0.313	0.563
	Back	0.192	0.200	0.298	0.201	0.138	0.344	0.225	0.146	0.341	0.253	0.226	0.198	0.278	0.313	0.657
Hotspot	Front	0.151	0.099	0.341	0.236	0.115	0.157	0.175	0.124	0.478	0.386	0.325	0.145	0.193	0.038	0.671
	Back	0.383	0.257	0.585	0.406	0.244	0.267	0.308	0.244	0.667	0.488	0.492	0.158	0.517	0.057	1.184
	Left	0.258	0.043	0.093	0.059	0.185	0.029	0.041	0.180	0.086	0.025	0.047	/	/	/	0.258
	Right	0.159	0.082	0.269	0.267	0.110	0.120	0.132	0.109	0.273	0.259	0.261	0.128	0.923	0.038	1.196
	Top	/	/	/	/	/	/	/	/	/	/	/	0.176	0.161	0.061	0.176
	Bottom	0.292	0.783	1.068	0.711	0.190	0.581	0.581	0.179	0.497	0.272	0.288	/	/	/	1.068
Test position		Main Antenna SARmax (W/kg)											WiFi Antenna SARmax (W/kg)			Summed 10g SARmax
		GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 38	LTE Band 41	WLAN 2.4G	WLAN 5G	BT	
Product Specific 10-g SAR	Front	/	/	/	/	/	/	/	/	/	/	/	/	0.371	/	0.371
	Back	/	/	/	/	/	/	/	/	/	/	/	/	0.584	/	0.584
	Left	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.000
	Right	/	/	/	/	/	/	/	/	/	/	/	/	0.487	/	0.487
	Top	/	/	/	/	/	/	/	/	/	/	/	/	0.527	/	0.527
	Bottom	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.000
Test position		Second Antenna SARmax (W/kg)											WiFi Antenna SARmax (W/kg)			Summed 1g SARmax (W/kg)
		GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 38	LTE Band 41	WLAN 2.4G	WLAN 5G	BT	
Head	Left Touch	0.382	0.349	0.342	0.284	0.406	0.401	0.443	0.457	0.313	0.344	0.390	0.396	0.736	0.267	1.193
	Left Tilt	0.358	0.424	0.427	0.355	0.380	0.482	0.399	0.452	0.407	0.413	0.233	0.354	0.713	0.161	1.195
	Right Touch	0.541	0.526	0.590	0.491	0.597	0.576	0.558	0.632	0.649	0.752	0.731	0.162	0.361	0.079	1.113
	Right Tilt	0.566	0.628	0.606	0.504	0.559	0.703	0.549	0.582	0.603	0.627	0.512	0.198	0.411	0.098	1.114
Body-worn	Front	0.060	0.428	0.562	0.288	0.062	0.535	0.312	0.065	0.242	0.219	0.236	0.137	0.136	0.313	0.875
	Back	0.101	0.455	0.660	0.334	0.100	0.604	0.374	0.116	0.458	0.295	0.332	0.198	0.278	0.313	0.973
Hotspot	Front	0.114	0.443	0.283	0.225	0.128	0.243	0.202	0.136	0.183	0.183	0.144	0.145	0.193	0.038	0.636
	Back	0.207	0.505	0.349	0.266	0.216	0.298	0.267	0.299	0.421	0.305	0.289	0.158	0.517	0.057	1.022
	Left	0.044	0.110	0.070	0.065	0.055	0.078	0.077	0.063	0.190	0.204	0.164	/	/	/	0.204
	Right	0.064	0.065	0.050	0.046	0.079	0.044	0.048	0.090	0.015	0.015	0.018	0.128	0.923	0.038	1.013
	Top	0.132	0.728	0.475	0.337	0.155	0.448	0.353	0.220	0.516	0.425	0.370	0.176	0.161	0.061	0.904
	Bottom	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.000
Test position		Second Antenna SARmax (W/kg)											WiFi Antenna SARmax (W/kg)			Summed 10g SARmax (W/kg)
		GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 38	LTE Band 41	WLAN 2.4G	WLAN 5G	BT	
Product Specific 10-g SAR	Front	/	1.220	/	/	/	/	/	/	/	/	/	/	0.371	/	1.591
	Back	/	0.852	1.467	/	/	/	/	/	/	/	/	/	0.584	/	2.051
	Left	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.000
	Right	/	/	/	/	/	/	/	/	/	/	/	/	0.487	/	0.487
	Top	/	1.638	2.391	/	/	2.452	/	/	/	/	/	/	0.527	/	2.979
	Bottom	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.000

Note:

- 1) MAX. ΣSAR_{10g} = Unlicensed SAR_{MAX} + Licensed SAR_{MAX}
- 2) The value in blue is the result of the actual test simultaneous transmission.

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9 Equipment list

Test Platform		SPEAG DASY5 Professional				
Description		SAR Test System (Frequency range 300MHz-6GHz)				
Software Reference		DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)				
Hardware Reference						
Equipment		Manufacturer	Model	Serial Number	Calibration Date	Due date of calibration
<input checked="" type="checkbox"/>	Twin Phantom	SPEAG	SAM 5	1481	NCR	NCR
<input checked="" type="checkbox"/>	Twin Phantom	SPEAG	SAM 6	1824	NCR	NCR
<input checked="" type="checkbox"/>	DAE	SPEAG	DAE3	414	2019-12-17	2020-12-16
<input checked="" type="checkbox"/>	DAE	SPEAG	DAE4	1374	2019-09-24	2020-09-23
<input checked="" type="checkbox"/>	E-Field Probe	SPEAG	EX3DV4	3789	2020-06-16	2021-06-15
<input checked="" type="checkbox"/>	E-Field Probe	SPEAG	EX3DV4	3748	2020-07-29	2021-07-28
<input checked="" type="checkbox"/>	Validation Kits	SPEAG	D835V2	4d105	2019-12-17	2022-12-16
<input checked="" type="checkbox"/>	Validation Kits	SPEAG	D1750V2	1149	2019-05-21	2022-05-20
<input checked="" type="checkbox"/>	Validation Kits	SPEAG	D1900V2	5d028	2019-12-17	2022-12-16
<input checked="" type="checkbox"/>	Validation Kits	SPEAG	D2450V2	733	2019-12-17	2022-12-16
<input checked="" type="checkbox"/>	Validation Kits	SPEAG	D2600V2	1125	2019-05-20	2022-05-19
<input checked="" type="checkbox"/>	Validation Kits	SPEAG	D5GHzV2	1165	2019-12-20	2022-12-19
<input checked="" type="checkbox"/>	Agilent Network Analyzer	Agilent	E5071C	MY46523590	2020-04-02	2021-04-01
<input checked="" type="checkbox"/>	Dielectric Probe Kit	Agilent	85070E	US01440210	NCR	NCR
<input checked="" type="checkbox"/>	Radio Communication Analyzer	Anritsu Corporation	MT8820C	6201010267	2020-04-02	2021-04-01
<input checked="" type="checkbox"/>	Universal Radio Communication Tester	R&S	CMW500	124587	2020-04-02	2021-04-01
<input checked="" type="checkbox"/>	RF Bi-Directional Coupler	Agilent	86205-60001	MY31400031	NCR	NCR
<input checked="" type="checkbox"/>	Signal Generator	Agilent	N5171B	MY53050736	2020-04-15	2021-04-14
<input checked="" type="checkbox"/>	Preamplifier	Mini-Circuits	ZHL-42W	15542	NCR	NCR
<input checked="" type="checkbox"/>	Preamplifier	Compliance Directions Systems Inc.	AMP28-3W	073501433	NCR	NCR
<input checked="" type="checkbox"/>	Power Meter	Agilent	E4416A	GB41292095	2020-04-15	2021-04-14
<input checked="" type="checkbox"/>	Power Sensor	Agilent	8481H	MY41091234	2020-04-15	2021-04-14
<input checked="" type="checkbox"/>	Power Sensor	R&S	NRP-Z92	100025	2020-04-16	2021-04-15
<input checked="" type="checkbox"/>	Speed reading thermometer	MingGao	T809	NA	2020-04-15	2021-04-14

Note: All the equipments are within the valid period when the tests are performed.

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10 Calibration certificate

Please see the Appendix C

11 Photographs

Please see the Appendix D

Appendix A: Detailed System Check Results

Appendix B: Detailed Test Results

Appendix C: Calibration certificate

Appendix D: Photographs

---END---

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