



SAR TEST REPORT

No. 25B02Z101619-001

For

Shanghai Sunmi Technology Co.,Ltd.

Handheld Wireless Terminal

Model Name: T8F1C

with

Hardware Version: V00

Software Version: 4.0.0

FCC ID: 2AH25T8F1C

Issued Date: 2025-07-29

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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No. 25B02Z101619-001

REPORT HISTORY

Report Number	Revision	Issue Date	Description
25B02Z101619-001	Rev.0	2025-07-29	Initial creation of test report

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1 Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Location 1: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,

P. R. China 100191

1.3. Testing Environment

Normal Temperature: 18-25°C

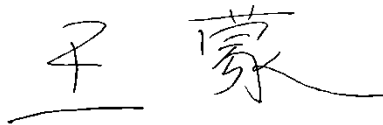
Relative Humidity: 30-70%

1.4. Project data

Testing Start Date: 2025-07-04

Testing End Date: 2025-07-24

1.5. Signature



Wang Meng

(Prepared this test report)



Lin Jun

(Reviewed this test report)



Qi Dianyuan

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Shanghai Sunmi Technology Co.,Ltd. Handheld Wireless Terminal T8F1C are as follows:

Table 2.1: Highest Reported SAR

Band	Antenna	Highest Reported SAR			
		1g SAR Head	1g SAR Hotspot	1g SAR Body-worn	10g SAR Limb
GSM 850	Main ANT	0.30	0.69	0.69	1.02
PCS 1900	Main ANT	0.03	0.62	0.62	0.75
WCDMA1900	Main ANT	0.24	0.69	0.69	1.39
WCDMA1700	Main ANT	0.22	0.79	0.79	1.23
WCDMA850	Main ANT	0.32	0.55	0.55	0.92
LTE Band 7	Main ANT	0.31	0.78	0.78	2.20
LTE Band 12	Main ANT	0.17	0.45	0.45	0.62
LTE Band 13	Main ANT	0.16	0.29	0.29	0.52
LTE Band 14	Main ANT	0.14	0.27	0.27	0.54
LTE Band 25	Main ANT	0.06	0.64	0.64	1.12
LTE Band 26	Main ANT	0.29	0.48	0.48	0.78
LTE Band 30	Main ANT	0.17	0.87	0.87	2.97
LTE Band 40	Main ANT	0.17	0.66	0.66	1.12
LTE Band 41	Main ANT	0.40	0.69	0.69	1.32
LTE Band 66	Main ANT	0.04	0.83	0.83	0.98
LTE Band 71	Main ANT	0.22	0.63	0.63	0.67
WLAN 2.4	GPS/WIFI2.4G/BT ANT	0.82	0.38	0.24	0.89
WLAN 5 GHz	WIFI5G ANT	0.46	0.49	0.17	0.83
BT	GPS/WIFI2.4G/BT ANT	0.05	0.02	0.02	0.07
RFID	RFID ANT	0.04	0.41	0.41	0.43

Note1: The device have similar frequency in some LTE bands : LTE Band12/17, LTE Band 25/2, LTE Band 66/4, LTE Band 26/5, LTE Band 41/38 since the supported frequency spans for the smaller LTE bands are completely cover by the larger LTE bands and the channel bandwidth and other operating parameters for the smaller band be fully supported by the larger band, therefore, only larger LTE bands were required to be tested for SAR.

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

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

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

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

Head: 0.82 W/kg(1g)

Hotspot: 0.87 W/kg(1g)

Body-worn: 0.87 W/kg(1g)

Limb: 2.97 W/kg(10g)

Table 2.2: Simultaneous Transmission-Head

	Position	Main antenna	WiFi	RFID	Sum
Highest SAR value for Head	Left head, Cheek	0.40 (LTE Band41)	0.82 (WiFi2.4G)	0.03	1.25

Note1: the test positions of above tables are for the worse case that have been evaluated.

Table 2.3: Simultaneous Transmission-Body

	Position	Main antenna	WiFi	RFID	Sum
Highest SAR value for Body	Rear 10mm	0.87 (LTE Band30)	0.18 (WiFi2.4G)	0.41	1.46

Note1: the test positions of above tables are for the worse case that have been evaluated.

Table 2.4: Simultaneous Transmission-Limb

	Position	Main antenna	WiFi	RFID	Sum
Highest SAR value for Limb	Rear 10mm	2.97 (LTE Band30)	0.34 (WiFi2.4G)	0.43	3.74

Note1: the test positions of above tables are for the worse case that have been evaluated.

According to the above tables, the highest sum of reported SAR values is **1.46 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 14.

Conclusion:

According to the above tables, the sum of reported SAR values is <1.6W/kg for 1g SAR. So the simultaneous transmission SAR with volume scans is not required.

3 Client Information

3.1 Applicant Information

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3.2 Manufacturer Information

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Contact Email:	fang.lu@sunmi.com
Telephone:	8618501703215
Fax	8618501703215

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

4.1 About EUT

Description:	Handheld Wireless Terminal
Model name:	T8F1C
Tested Band:	GSM85/PCS1900 WCDMA Band II /IV/ V LTE Band FDD: 2/4/5/7/12/13/14/17/25/26/30/66/71 LTE Band TDD: 38/40/41 BT, Wi-Fi(2.4G), Wi-Fi(5G), NFC,RFID
Tx Frequency:	824 – 849 MHz (GSM 850) 1850 - 1910 MHz (PCS 1900) 1850–1910 MHz (WCDMA1900 Band II) 1710 – 1755 MHz (WCDMA 1700 Band IV) 824–849 MHz (WCDMA 850 Band V) 1850 – 1910 MHz(LTE Band 2) 1710 – 1755 MHz (LTE Band 4) 824 – 849 MHz (LTE Band 5) 2500 – 2570 MHz(LTE Band 7) 699 – 716 MHz (LTE Band 12) 777 –787 MHz (LTE Band 13) 788 –798 MHz (LTE Band 14) 704 –716 MHz (LTE Band 17) 1850 –1915 MHz (LTE Band 25) 814 – 849 MHz (LTE Band 26) 2305 – 2315 MHz (LTE Band 30) 2570 – 2620 MHz (LTE Band 38) 2305 – 2315 MHz/2350 – 2360 MHz (LTE Band 40) 2496 – 2690 MHz (LTE Band 41) 1710 – 1780 MHz (LTE Band 66) 663 – 698 MHz (LTE Band 71) 2412 – 2462 MHz (Wi-Fi 2.4G) 5180 – 5240 MHz (UNII-1) 5260 – 5320 MHz (UNII-2A) 5500 – 5700 MHz (UNII-2C) 5745 – 5825 MHz (UNII-3) 2402 – 2480 MHz (Bluetooth) 902.75 – 927.25 MHz (RFID) 13.56 MHz (NFC)
GPRS/EGPRS Multislot Class:	33
Test device production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	862072070057647/862072070057654	V00	4.0.0
EUT2	862072070057688/862072070057696	V00	4.0.0
EUT3	862072070057563/862072070057571	V00	4.0.0

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

Note: It is performed to test SAR with the EUT1~2 and conducted power with the EUT3.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	GYPA	E150140554B7100ND	HUNAN GAOYUAN BATTERY CO.,LTD.
AE2	Battery	GYPA	E1501405553S10396	HUNAN GAOYUAN BATTERY CO.,LTD.

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

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

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

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

It specifies the maximum exposure limit of **4.0 W/kg** as averaged over any 10 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

5.2 Applicable Measurement Standards

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

5.3 KDB and Workshop Procedures

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

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

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

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

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

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

KDB616217 D04 SAR for laptop and tablets v01r02: SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers

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

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

6 Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

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

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

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

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

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

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

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

7 Tissue Simulating Liquids

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid(frequency <3GHz)

Frequency(MHz)	Liquid Type	Conductivity(σ)	$\pm 10\%$ Range	Permittivity(ϵ)	$\pm 10\%$ Range
750	Head	0.89	0.80~0.98	41.94	37.75~46.13
900	Head	0.97	0.87~1.07	41.5	37.35~45.65
1800	Head	1.40	1.26~1.54	40.0	36~44
1900	Head	1.40	1.26~1.54	40.0	36~44
2000	Head	1.40	1.26~1.54	40.0	36~44
2300	Head	1.67	1.50~1.84	39.47	37.5~41.4
2450	Head	1.80	1.62~1.98	39.2	35.28~43.12
2600	Head	1.96	1.76~2.16	39.01	35.11~42.91

Table 7.2: Targets for tissue simulating liquid(frequency >3GHz)

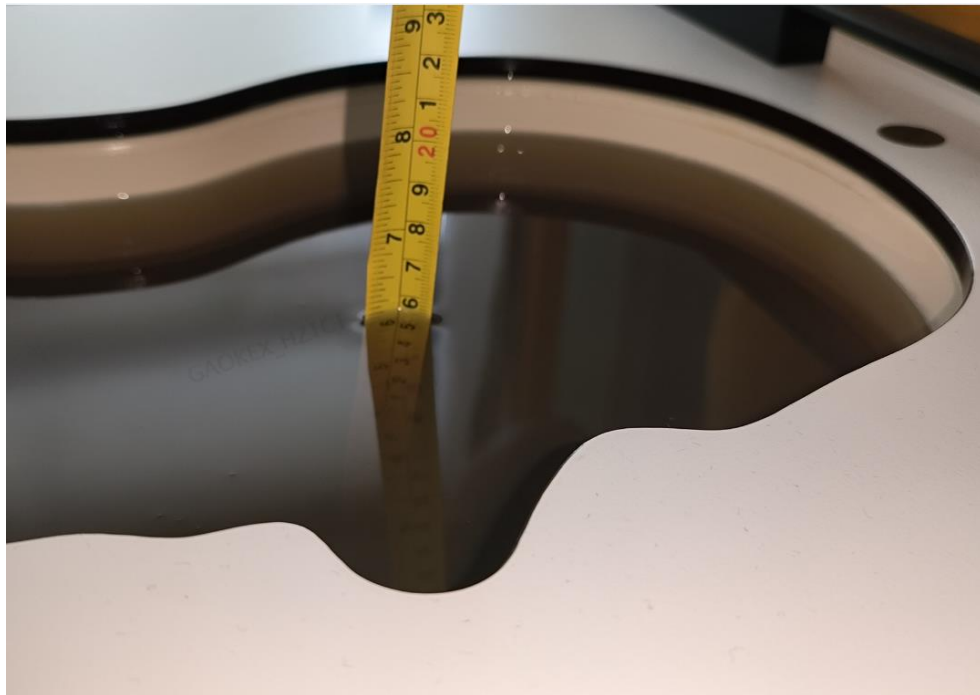
Frequency(MHz)	Liquid Type	Conductivity(σ)	$\pm 5\%$ Range	Permittivity(ϵ)	$\pm 5\%$ Range
3300	Head	2.71	2.57~2.85	38.2	36.29~40.11
3500	Head	2.91	2.76~3.06	37.93	36.03~39.83
3700	Head	3.22	3.06~3.38	37.6	35.72~39.48
3900	Head	3.32	3.15~3.49	37.5	35.63~39.38
4200	Head	3.63	3.45~3.81	37.1	35.25~38.96
5250	Head	4.71	4.47~4.95	35.93	34.13~37.73
5600	Head	5.07	4.82~5.32	35.53	33.8~37.3
5750	Head	5.22	4.96~5.48	35.36	33.59~37.13

7.2 Dielectric Performance

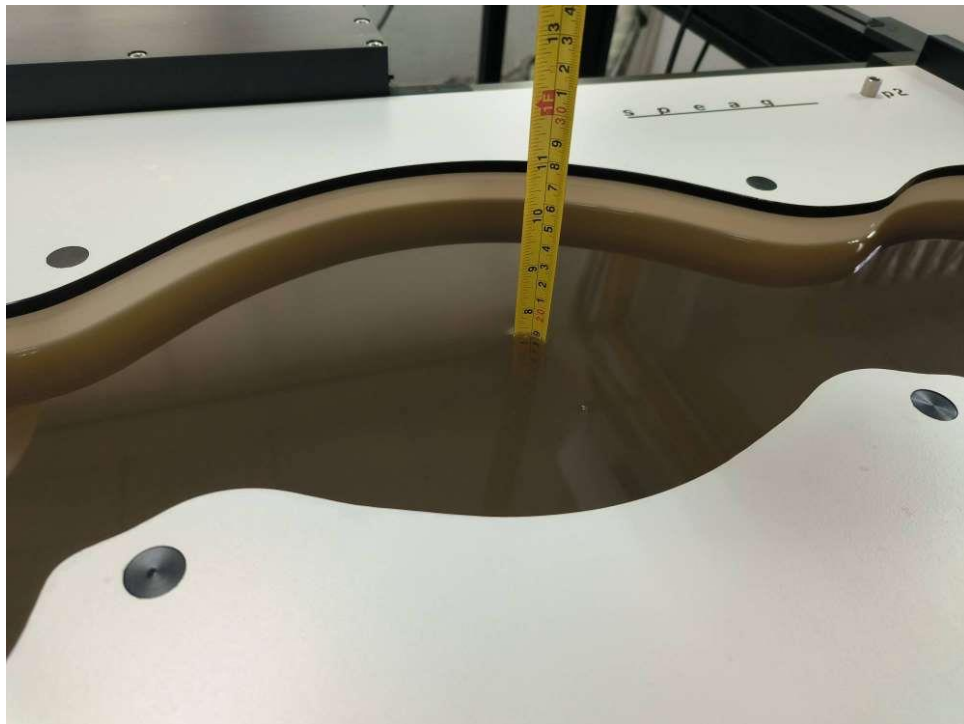
Table 7.3: Dielectric Performance of Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ϵ	Drift (%)	Conductivity σ (S/m)	Drift (%)
2025/7/6	Head	750 MHz	43.17	2.93	0.882	-0.90
2025/7/4	Head	835 MHz	42.88	3.33	0.886	-1.56
2025/7/22	Head	900 MHz	42.67	2.82	0.949	-2.16
2025/7/23	Head	1750 MHz	40.65	1.42	1.350	-1.46
2025/7/9	Head	1900 MHz	40.45	1.13	1.449	3.50
2025/7/24	Head	2300 MHz	39.69	0.56	1.691	1.26
2025/7/15	Head	2450 MHz	39.47	0.69	1.847	2.61
2025/7/14	Head	2600 MHz	39.22	0.54	1.971	0.56
2025/7/16	Head	5250 MHz	35.87	-0.17	4.645	-1.38
2025/7/16	Head	5600 MHz	35.23	-0.84	5.024	-0.91
2025/7/16	Head	5750 MHz	34.98	-1.07	5.190	-0.57

Note: The liquid temperature is 22.0°C



Picture 1 Liquid depth in the Head Phantom

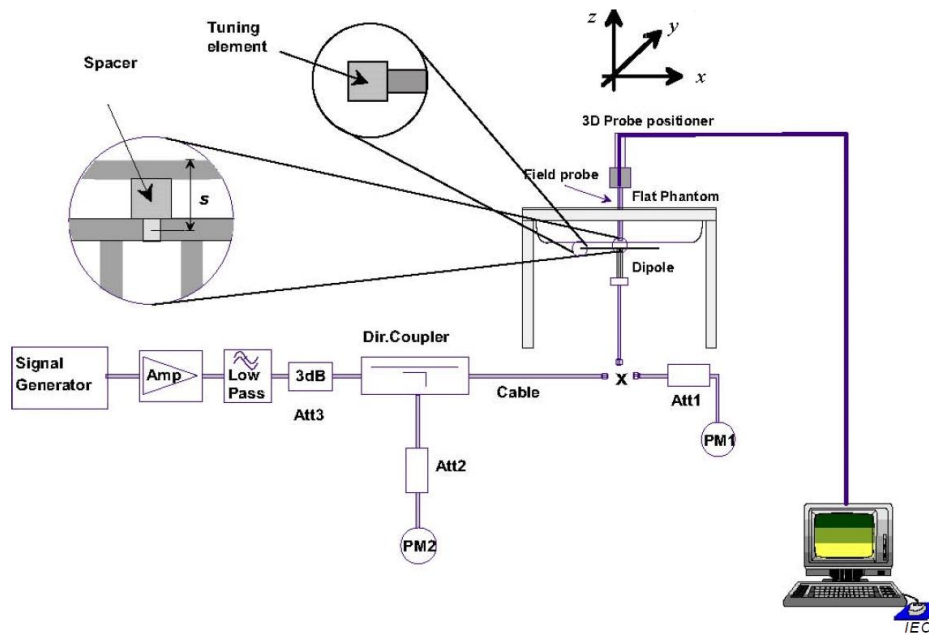


Picture 2 Liquid depth in the Flat Phantom

8 System verification

8.1 System Setup

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



Picture 3 System Setup for System Evaluation



Picture 4 Photo of Dipole Setup

8.2 System Verification

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

Table 8.1: System Verification of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2025/7/6	750 MHz	5.53	8.52	5.72	8.64	3.44%	1.41%
2025/7/4	835 MHz	6.09	9.47	6.36	9.72	4.43%	2.64%
2025/7/22	900 MHz	6.93	10.90	6.96	10.72	0.43%	-1.65%
2025/7/23	1750 MHz	19.8	37.2	19.5	36.4	-1.62%	-2.04%
2025/7/9	1900 MHz	20.6	39.1	21.1	41.2	2.33%	5.37%
2025/7/24	2300 MHz	23.3	48.2	23.3	49.2	0.09%	2.07%
2025/7/15	2450 MHz	24.5	52.2	24.2	52.0	-1.39%	-0.38%
2025/7/14	2600 MHz	24.8	54.9	24.2	54.8	-2.58%	-0.18%
2025/7/16	5250 MHz	22.3	77.8	22.2	77.9	-0.45%	0.13%
2025/7/16	5600 MHz	23.4	81.2	23.3	81.6	-0.43%	0.49%
2025/7/16	5750 MHz	21.7	76.1	22.1	77.9	1.84%	2.37%

9 Measurement Procedures

9.1 Tests to be performed

In order to determine the highest value of the peak spatial-average SAR of a handset, all device positions, configurations and operational modes shall be tested for each frequency band according to steps 1 to 3 below. A flowchart of the test process is shown in picture 5.

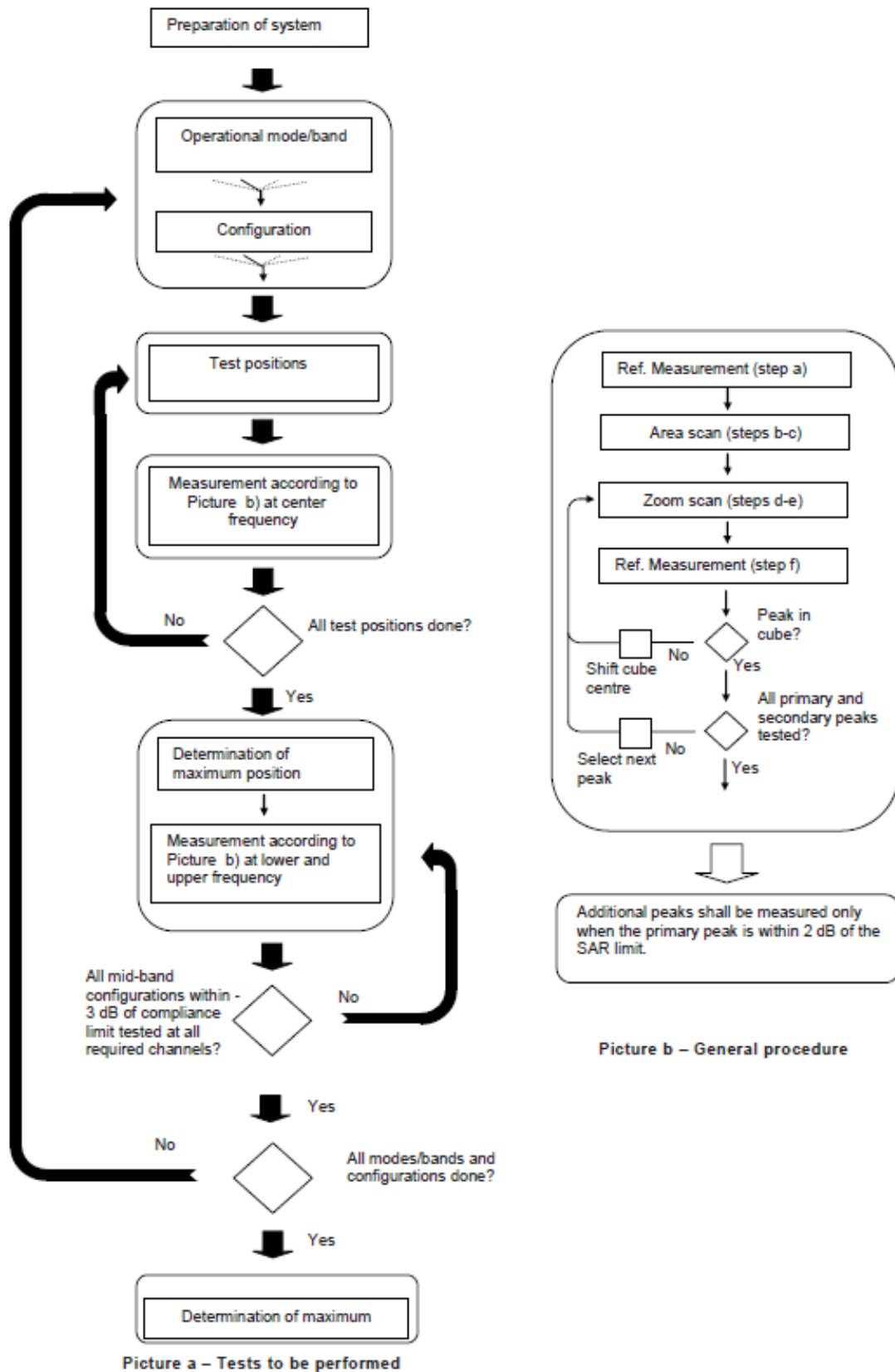
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

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

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

Step 2: For the condition providing highest peak spatial-average SAR determined in Step 1, perform all tests described in 10.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within 3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

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



Picture 5 Block diagram of the tests to be performed

9.2 General Measurement Procedure

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

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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: Δx_{Area} , Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 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: Δx_{Zoom} , Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

9.3 WCDMA Measurement Procedures for SAR

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

For Release 5 HSDPA Data Devices:

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

For Release 6 HSPA Data Devices

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

Rel.8 DC-HSDPA (Cat 24)

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

9.4 SAR Measurement for LTE

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

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

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

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

TDD test:

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

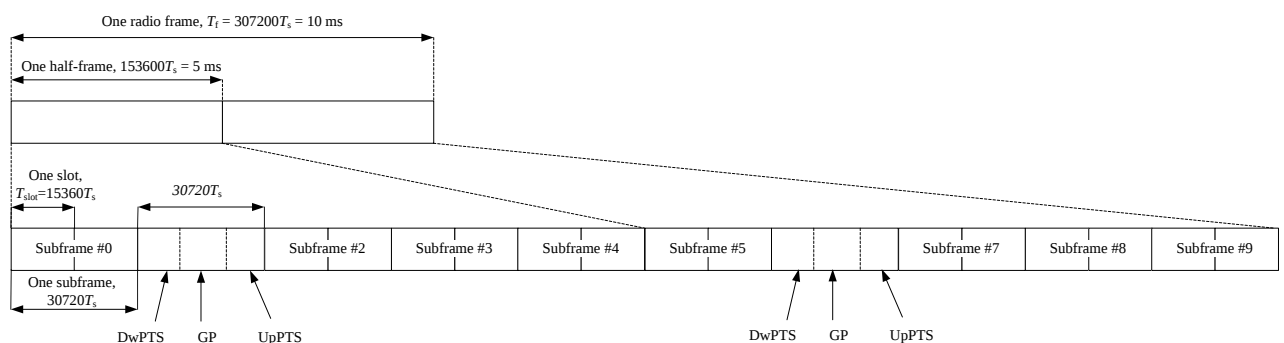


Figure 6: Frame structure type 2 (for 5 ms switch-point periodicity)

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

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

Table 9.2: Uplink-downlink configurations

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

Duty factor is calculated by:

$$\begin{aligned}
 \text{Duty factor} &= \text{uplink frame} \cdot 6 + \text{UpPTS} \cdot 2 / \text{one frame length} \\
 &= (30720 \cdot T_s \cdot 6 + 5120 \cdot T_s \cdot 2) / 307200 \cdot T_s \\
 &= 0.633
 \end{aligned}$$

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

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

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

9.6 Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section 14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10 Conducted Output Power

The device uses proximity sensor to reduce the maximum output power of main transmitting antenna in selected wireless mode and operating configurations to ensure SAR compliance. The procedures in KDB 616217 are applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions.

The following tables summarize the key power reduction information of main transmitting antenna triggered by specific use conditions.

Band	Mode	Full power Maximum Tune up(dBm)	Sensor on Maximum Tune up(dBm)	Power Reduction(dB)
GSM850	CS	33.5	N/A	0.0
	GPRS 1TS	33.5	N/A	0.0
	GPRS 2TS	31.0	N/A	0.0
	GPRS 3TS	29.0	N/A	0.0
	GPRS 4TS	28.0	N/A	0.0
PCS1900	CS	30.5	29.0	1.5
	GPRS 1TS	30.5	29.0	1.5
	GPRS 2TS	28.0	27.0	1.0
	GPRS 3TS	26.0	24.5	1.5
	GPRS 4TS	25.0	22.5	2.5
WCDMA Band II	RMC	24.5	20.5	4.0
WCDMA BandIV	RMC	24.5	17.5	7.0
WCDMA Band V	RMC	24.5	N/A	0.0
LTE Band 2	QPSK	23.5	19.5	4.0
LTE Band 4	QPSK	23.5	18.5	5.0
LTE Band 5	QPSK	23.5	N/A	0.0
LTE Band 7	QPSK	23.5	21.0	2.5
LTE Band 12	QPSK	23.5	N/A	0.0
LTE Band 13	QPSK	23.5	N/A	0.0
LTE Band 14	QPSK	23.5	N/A	0.0
LTE Band 17	QPSK	23.5	N/A	0.0
LTE Band 25	QPSK	23.5	19.5	4.0
LTE Band 26	QPSK	23.5	N/A	0.0
LTE Band 30	QPSK	23.5	20.5	3.0
LTE Band 38	QPSK	23.5	N/A	0.0
LTE Band 40	QPSK	23.5	21.0	2.5
LTE Band 41	QPSK	23.5	N/A	0.0
LTE Band 66	QPSK	23.5	18.5	5.0
LTE Band 71	QPSK	23.5	N/A	0.0
WiFi 2.4G	802.11b	18.0	N/A	0.0
WiFi5G UNII-1	802.11a	16.0	N/A	0.0

WiFi5G UNII-2A	802.11a	16.0	N/A	0.0
WiFi5G UNII-2C	802.11a	15.5	N/A	0.0
WiFi5G UNII-3	802.11a	15.5	N/A	0.0
BT	DH5	11.0	N/A	0.0

10.1 GSM Measurement result

GSM850

Full power											
GSM850			Maximum Conducted Power (dBm)								
Mode	Modulation	Time Slot	Tune up (dBm)	Measure Power(dBm)			Devision Factor (dB)	Tune up Max	Average Power(dBm)		
				128/824.2	190/836.6	251/848.8			128/824.2	190/836.6	251/848.8
GSM	GMSK	1 Tx	33.50	32.75	32.87	32.84	-9.03	24.47	23.72	23.84	23.81
GPRS	GMSK	1 Tx	33.50	32.79	32.88	32.86	-9.03	24.47	23.76	23.85	23.83
		2 Tx	31.00	30.21	30.34	30.38	-6.02	24.98	24.19	24.32	24.36
		3 Tx	29.00	28.61	28.76	28.83	-4.26	24.74	24.35	24.50	24.57
		4 Tx	28.00	26.91	27.12	27.15	-3.01	24.99	23.90	24.11	24.14
EGPRS	8PSK	1 Tx	28.50	27.81	27.84	27.88	-9.03	19.47	18.78	18.81	18.85
		2 Tx	25.50	24.80	24.84	24.96	-6.02	19.48	18.78	18.82	18.94
		3 Tx	23.50	23.02	23.10	23.06	-4.26	19.24	18.76	18.84	18.80
		4 Tx	22.00	21.29	21.37	21.27	-3.01	18.99	18.28	18.36	18.26

GSM1900

Full power											
PCS1900			Maximum Conducted Power (dBm)								
Mode	Modulation	Time Slot	Tune up (dBm)	Measure Power(dBm)			Devision Factor (dB)	Tune up Max	Average Power(dBm)		
				512/1850.2	661/1880	810/1909.8			512/1850.2	661/1880	810/1909.8
GSM	GMSK	1 Tx	30.50	29.89	29.68	29.57	-9.03	21.47	20.86	20.65	20.54
GPRS	GMSK	1 Tx	30.50	29.88	29.66	29.58	-9.03	21.47	20.85	20.63	20.55
		2 Tx	28.00	27.46	27.29	27.22	-6.02	21.98	21.44	21.27	21.20
		3 Tx	26.00	25.83	25.74	25.72	-4.26	21.74	21.57	21.48	21.46
		4 Tx	25.00	24.29	24.21	24.19	-3.01	21.99	21.28	21.20	21.18
EGPRS	8PSK	1 Tx	27.00	26.46	26.61	26.75	-9.03	17.97	17.43	17.58	17.72
		2 Tx	24.50	23.39	23.64	23.86	-6.02	18.48	17.37	17.62	17.84
		3 Tx	22.50	21.57	21.78	22.02	-4.26	18.24	17.31	17.52	17.76
		4 Tx	20.50	19.59	19.73	20.07	-3.01	17.49	16.58	16.72	17.06

Sensor on											
PCS1900			Maximum Conducted Power (dBm)								
Mode	Modulation	Time Slot	Tune up (dBm)	Measure Power(dBm)			Devision Factor (dB)	Tune up Max	Average Power(dBm)		
				512/1850.2	661/1880	810/1909.8			512/1850.2	661/1880	810/1909.8
GSM	GMSK	1 Tx	29.00	28.54	28.32	28.25	-9.03	19.97	19.51	19.29	19.22
GPRS	GMSK	1 Tx	29.00	28.52	28.33	28.27	-9.03	19.97	19.49	19.30	19.24
		2 Tx	27.00	26.24	26.15	26.11	-6.02	20.98	20.22	20.13	20.09
		3 Tx	24.50	24.01	23.91	23.90	-4.26	20.24	19.75	19.65	19.64
		4 Tx	22.50	21.46	21.47	21.51	-3.01	19.49	18.45	18.46	18.50
EGPRS	8PSK	1 Tx	25.50	24.56	24.83	25.01	-9.03	16.47	15.53	15.80	15.98
		2 Tx	23.00	22.16	22.38	22.63	-6.02	16.98	16.14	16.36	16.61
		3 Tx	20.00	19.41	19.64	19.72	-4.26	15.74	15.15	15.38	15.46
		4 Tx	17.50	16.51	16.72	16.91	-3.01	14.49	13.50	13.71	13.90

10.2 WCDMA Measurement result

WCDMA1900

Full power					
WCDMA Band II		Maximum Conducted Power (dBm)			
Mode	Test Mode	Tune up	Channel/Frequency(MHz)		
			9262/1852.4	9400/1880	9538/1907.6
WCDMA	RMC	24.50	23.92	23.71	23.79
HSDPA	Subtest1	24.00	23.48	23.05	23.39
	Subtest2	24.00	23.40	23.21	23.37
	Subtest3	23.50	22.94	22.67	22.87
	Subtest4	23.50	22.92	22.71	22.89
HSUPA	Subtest1	24.00	23.54	23.33	23.13
	Subtest2	23.00	22.54	22.17	22.19
	Subtest3	23.50	22.86	22.59	22.83
	Subtest4	23.00	22.36	22.07	22.19
	Subtest5	24.00	23.30	23.19	23.27
HSPA+	/	23.50	22.90	22.75	22.89
DC-HSDPA	Subtest1	24.00	23.40	23.13	23.31
	Subtest2	24.00	23.34	23.25	23.32
	Subtest3	23.50	22.82	22.84	22.71
	Subtest4	23.50	22.87	22.72	22.89
Sensor on					
WCDMA Band II		Maximum Conducted Power (dBm)			
Mode	Test Mode	Tune up	Channel/Frequency(MHz)		
			9262/1852.4	9400/1880	9538/1907.6
WCDMA	RMC	20.50	19.92	19.72	19.83

HSDPA	Subtest1	20.00	19.67	19.51	19.54
	Subtest2	20.00	19.56	19.45	19.51
	Subtest3	20.00	19.51	19.42	19.47
	Subtest4	20.00	19.60	19.37	19.43
HSUPA	Subtest1	20.00	19.65	19.43	19.32
	Subtest2	20.00	19.59	19.35	19.48
	Subtest3	20.00	19.54	19.58	19.51
	Subtest4	20.00	19.51	19.47	19.58
	Subtest5	20.00	19.58	19.42	19.59
HSPA+	/	20.00	19.62	19.44	19.61
DC-HSDPA	Subtest1	20.00	19.44	19.51	19.42
	Subtest2	20.00	19.37	19.56	19.41
	Subtest3	20.00	19.56	19.51	19.44
	Subtest4	20.00	19.43	19.41	19.34

WCDMA1700

Full power					
WCDMA BandIV		Maximum Conducted Power (dBm)			
Mode	Test Mode	Tune up	Channel/Frequency(MHz)		
			1312/1712.4	1413/1732.6	1513/1752.6
WCDMA	RMC	24.50	23.39	23.98	23.58
HSDPA	Subtest1	24.00	22.85	23.46	23.13
	Subtest2	24.00	22.91	23.50	23.04
	Subtest3	23.50	22.27	23.10	22.60
	Subtest4	23.50	22.43	23.14	22.62
HSUPA	Subtest1	24.00	23.03	23.44	23.18
	Subtest2	23.00	21.93	22.52	21.92
	Subtest3	23.50	22.31	23.10	22.68
	Subtest4	23.00	21.87	22.54	22.18
	Subtest5	24.00	22.87	23.52	23.04
HSPA+	/	23.50	22.41	23.02	22.65
DC-HSDPA	Subtest1	24.00	22.87	23.13	23.09
	Subtest2	24.00	22.98	23.45	23.01
	Subtest3	23.50	22.34	22.98	22.61
	Subtest4	23.50	22.37	23.02	22.67
Sensor on					
WCDMA BandIV		Maximum Conducted Power (dBm)			
Mode	Test Mode	Tune up	Channel/Frequency(MHz)		

			1312/1712.4	1413/1732.6	1513/1752.6
WCDMA	RMC	17.50	16.43	17.01	16.57
HSDPA	Subtest1	16.50	16.15	16.12	16.06
	Subtest2	16.50	16.11	16.11	15.97
	Subtest3	16.50	16.08	15.95	15.97
	Subtest4	16.50	16.00	15.96	15.92
HSUPA	Subtest1	16.50	15.97	15.94	15.95
	Subtest2	16.50	16.00	16.08	16.03
	Subtest3	16.50	15.91	15.83	15.97
	Subtest4	16.50	15.89	15.98	15.82
	Subtest5	16.50	16.01	16.01	16.00
HSPA+	/	16.50	15.94	15.95	15.94
DC-HSDPA	Subtest1	16.50	15.91	15.95	15.96
	Subtest2	16.50	15.97	16.02	15.89
	Subtest3	16.50	16.02	16.09	15.87
	Subtest4	16.50	15.85	15.91	15.86

WCDMA850

Full power					
WCDMA Band V		Maximum Conducted Power (dBm)			
Mode	Test Mode	Tune up	Channel/Frequency(MHz)		
			4132/826.4	4183/836.6	4233/846.6
WCDMA	RMC	24.50	23.71	23.69	23.73
HSDPA	Subtest1	24.00	23.11	23.19	23.11
	Subtest2	24.00	23.17	23.03	23.17
	Subtest3	23.50	22.73	22.83	22.69
	Subtest4	23.50	22.87	22.65	22.87
HSUPA	Subtest1	24.00	23.19	23.07	23.17
	Subtest2	23.00	22.15	22.27	22.17
	Subtest3	23.50	22.59	22.63	22.61
	Subtest4	23.00	22.37	22.25	22.25
	Subtest5	24.00	23.29	23.29	23.15
HSPA+	/	23.50	22.71	22.78	22.56
DC-HSDPA	Subtest1	24.00	23.01	23.11	23.24
	Subtest2	24.00	23.10	23.14	23.16
	Subtest3	23.50	22.62	22.54	22.81
	Subtest4	23.50	22.78	22.68	22.76

10.3 LTE Measurement result

Table 10.1: The maximum output power(Tune-up Limit)

Band	Mode	Full power Maximum Tune up(dBm)	Sensor on Maximum Tune up(dBm)	Power Reduction(dB)
LTE Band 2	QPSK	23.5	19.5	4.0
LTE Band 4	QPSK	23.5	18.5	5.0
LTE Band 5	QPSK	23.5	N/A	0.0
LTE Band 7	QPSK	23.5	21.0	2.5
LTE Band 12	QPSK	23.5	N/A	0.0
LTE Band 13	QPSK	23.5	N/A	0.0
LTE Band 14	QPSK	23.5	N/A	0.0
LTE Band 17	QPSK	23.5	N/A	0.0
LTE Band 25	QPSK	23.5	19.5	4.0
LTE Band 26	QPSK	23.5	N/A	0.0
LTE Band 30	QPSK	23.5	20.5	3.0
LTE Band 38	QPSK	23.5	N/A	0.0
LTE Band 40	QPSK	23.5	21.0	2.5
LTE Band 41	QPSK	23.5	N/A	0.0
LTE Band 66	QPSK	23.5	18.5	5.0
LTE Band 71	QPSK	23.5	N/A	0.0

Table 10.2: Maximum Power Reduction (MPR) for LTE

Modulation	1.4 MHz	MPR	3 MHz	MPR	5 MHz	MPR	10 MHz	MPR	15 MHz	MPR	20 MHz	MPR
QPSK	≤5	0	≤4	0	≤8	0	≤12	0	≤16	0	≤18	0
QPSK	>5	1	>4	1	>8	1	>12	1	>16	1	>18	1
16 QAM	≤5	1	≤4	1	≤8	1	≤12	1	≤16	1	≤18	1
16 QAM	>5	2	>4	2	>8	2	>12	2	>16	2	>18	2
64 QAM	≤5	2	≤4	2	≤8	2	≤12	2	≤16	2	≤18	2
64 QAM	>5	3	>4	3	>8	3	>12	3	>16	3	>18	3
256 QAM	≤5	5	≤4	5	≤8	5	≤12	5	≤16	5	≤18	5
1256 QAM	>5	5	>4	5	>8	5	>12	5	>16	5	>18	5

LTE Band 2

Full power						
LTE B2			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
QPSK	1	Low	23.50	22.01	22.11	22.02
		Middle		21.75	21.88	21.89
		High		21.71	21.67	21.77
	50%	Low	23.50	21.73	21.72	21.66
		Middle		21.71	21.81	21.81
		High		21.63	21.80	21.77
	100%	/	22.50	20.70	20.93	20.86
16QAM	1	Low	22.50	20.96	21.08	20.95
		Middle		20.98	21.14	21.13
		High		21.07	21.05	21.08
	50%	Low	22.50	20.77	20.52	20.71
		Middle		20.91	20.67	20.69
		High		20.83	20.66	20.71
	100%	/	21.50	19.79	19.57	19.65
64QAM	1	Low	21.50	19.87	19.87	19.85
		Middle		19.86	20.03	19.85
		High		19.65	19.74	19.68
	5	Low	21.50	19.66	19.81	19.63
		Middle		19.68	19.73	19.56
		High		19.74	20.00	19.72
	100%	/	20.50	18.88	18.92	18.81
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
QPSK	1	Low	23.50	22.03	22.02	22.03
		Middle		21.71	21.86	21.94
		High		21.68	21.67	21.79
	50%	Low	22.50	20.79	20.94	20.61
		Middle		20.89	21.05	20.86
		High		20.93	20.85	20.80
	100%	/	22.50	20.83	20.81	20.73
16QAM	1	Low	22.50	21.20	21.10	20.80
		Middle		21.19	21.26	20.97
		High		21.05	21.07	21.05
	50%	Low	21.50	19.80	19.72	19.77

		Middle		19.87	20.02	19.78
		High		19.82	20.00	19.89
	100%	/	21.50	19.73	19.73	19.87
64QAM	1	Low	21.50	19.78	19.89	20.00
		Middle		19.83	19.90	20.03
		High		19.85	19.77	19.84
	50%	Low	20.50	18.93	18.84	18.90
		Middle		18.99	18.80	18.88
		High		19.02	19.00	19.01
	100%	/	20.50	18.95	18.92	18.94
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
QPSK	1	Low	23.50	21.93	22.04	22.11
		Middle		21.76	21.91	21.93
		High		21.79	21.72	21.57
	50%	Low	22.50	20.86	20.89	20.67
		Middle		20.95	21.02	20.79
		High		20.83	20.87	20.93
	100%	/	22.50	20.70	20.82	20.77
16QAM	1	Low	22.50	20.96	21.00	20.85
		Middle		20.98	21.10	21.12
		High		20.98	20.97	21.09
	50%	Low	21.50	19.72	19.70	19.80
		Middle		19.96	19.79	19.77
		High		19.91	19.93	19.78
	100%	/	21.50	19.93	19.69	19.67
64QAM	1	Low	21.50	19.87	19.89	19.68
		Middle		19.92	20.01	19.88
		High		19.86	19.87	19.68
	50%	Low	20.50	18.91	18.92	18.79
		Middle		18.96	18.87	18.72
		High		18.99	19.07	18.85
	100%	/	20.50	18.93	19.00	18.77
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
QPSK	1	Low	23.50	22.04	22.03	22.04
		Middle		21.68	21.88	21.93
		High		21.57	21.68	21.74
	50%	Low	22.50	20.67	20.76	20.69
		Middle		20.86	20.84	20.75

		High		20.69	20.83	20.86
	100%	/	22.50	20.86	20.98	20.61
16QAM	1	Low	22.50	21.06	20.97	20.81
		Middle		21.19	21.08	20.97
		High		21.07	21.07	20.94
	50%	Low	21.50	19.93	19.84	19.64
		Middle		20.01	19.87	19.74
		High		19.82	19.82	19.86
	100%	/	21.50	19.64	19.68	19.75
64QAM	1	Low	21.50	19.77	19.88	19.99
		Middle		19.83	19.89	20.03
		High		19.73	19.77	19.83
	50%	Low	20.50	18.94	18.85	18.91
		Middle		18.98	18.79	18.87
		High		19.02	19.00	19.01
	100%	/	20.50	18.96	18.93	18.93
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
QPSK	1	Low	23.50	22.01	22.12	22.06
		Middle		21.74	21.89	21.96
		High		21.72	21.73	21.77
	50%	Low	22.50	20.81	20.77	20.72
		Middle		20.83	21.02	20.91
		High		20.72	20.86	20.94
	100%	/	22.50	20.72	20.82	20.73
16QAM	1	Low	22.50	21.03	20.95	21.09
		Middle		21.17	21.09	21.19
		High		21.14	21.05	21.10
	50%	Low	21.50	19.90	19.61	19.85
		Middle		19.99	19.88	19.89
		High		19.92	19.96	19.85
	100%	/	21.50	19.83	19.81	19.73
64QAM	1	Low	21.50	19.84	19.98	19.85
		Middle		19.91	20.03	19.89
		High		19.74	19.88	19.72
	50%	Low	20.50	18.81	19.01	18.80
		Middle		18.84	18.88	18.74
		High		18.94	19.08	18.90
	100%	/	20.50	18.68	18.82	18.75
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		

				18700/1860	18900/1880	19100/1900
QPSK	1	Low	23.50	22.08	22.11	22.09
		Middle		21.83	21.93	21.98
		High		21.74	21.74	21.83
	50%	Low	22.50	20.84	20.85	20.76
		Middle		20.93	20.98	20.94
		High		20.87	20.91	20.90
	100%	/	22.50	20.81	20.89	20.82
16QAM	1	Low	22.50	21.02	21.03	21.00
		Middle		21.13	21.23	21.15
		High		21.12	21.14	21.11
	50%	Low	21.50	19.87	19.77	19.82
		Middle		19.92	19.94	19.81
		High		19.89	19.91	19.93
	100%	/	21.50	19.81	19.77	19.82
64QAM	1	Low	21.50	19.82	19.94	19.92
		Middle		19.89	19.96	19.97
		High		19.80	19.82	19.78
	50%	Low	20.50	18.88	18.91	18.85
		Middle		18.92	18.84	18.80
		High		18.97	19.03	18.94
	100%	/	20.50	18.91	18.96	18.86
Sensor on						
LTE B2			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
QPSK	1	Low	19.50	18.26	18.15	18.38
		Middle		18.11	18.27	18.24
		High		18.12	17.90	18.02
	50%	Low	19.50	18.36	17.98	18.14
		Middle		18.28	18.51	18.36
		High		18.43	18.27	18.57
	100%	/	19.50	18.27	18.16	18.19
16QAM	1	Low	19.50	18.26	18.44	18.24
		Middle		18.28	18.16	18.20
		High		18.24	18.27	18.02
	50%	Low	19.50	18.29	18.06	18.08
		Middle		18.44	18.38	18.16
		High		18.30	18.35	18.27
	100%	/	19.50	18.20	18.20	18.12
64QAM	1	Low	19.50	18.09	18.34	18.23

		Middle		18.03	18.35	18.26
		High		18.08	18.28	18.30
		Low		18.16	18.25	18.25
	5	Middle	19.50	18.11	18.19	18.19
		High		18.09	18.11	18.04
		Low		18.09	18.11	18.04
	100%	/	19.50	17.97	17.88	17.95
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
QPSK	1	Low	19.50	18.33	18.19	18.41
		Middle		18.31	18.51	18.46
		High		18.25	18.11	18.28
	50%	Low	19.50	18.41	18.17	18.29
		Middle		18.28	18.49	18.41
		High		18.37	18.23	18.44
	100%	/	19.50	18.15	18.14	18.19
16QAM	1	Low	19.50	18.16	18.31	18.06
		Middle		18.15	18.18	18.16
		High		18.13	18.24	18.00
	50%	Low	19.50	18.17	18.10	18.05
		Middle		18.37	18.41	18.22
		High		18.27	18.30	18.23
	100%	/	19.50	18.29	18.27	18.20
64QAM	1	Low	19.50	18.27	18.41	18.29
		Middle		18.21	18.30	18.24
		High		18.22	18.24	18.26
	50%	Low	19.50	18.31	18.17	18.20
		Middle		18.27	18.26	18.24
		High		18.20	18.17	18.19
	100%	/	19.50	18.28	18.13	18.17
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
QPSK	1	Low	19.50	18.23	18.21	18.49
		Middle		18.36	18.56	18.45
		High		18.27	18.07	18.09
	50%	Low	19.50	18.48	18.12	18.35
		Middle		18.34	18.46	18.34
		High		18.36	18.34	18.54
	100%	/	19.50	18.23	18.24	18.20
16QAM	1	Low	19.50	18.04	18.21	17.99
		Middle		18.06	18.14	18.19

	50%	High	19.50	18.06	18.26	18.04
		Low		18.09	18.20	18.08
		Middle		18.34	18.30	18.21
		High		18.24	18.35	18.24
	100%	/	19.50	18.37	18.23	18.12
64QAM	1	Low	19.50	18.24	18.41	18.09
		Middle		18.18	18.38	18.30
		High		18.23	18.31	18.31
	50%	Low	19.50	18.29	18.22	18.30
		Middle		18.24	18.30	18.29
		High		18.17	18.21	18.24
	100%	/	19.50	18.26	18.18	18.21
	10MHz					
Modulation	RB	RB Offset	Tune up	Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
QPSK	1	Low	19.50	18.34	18.20	18.42
		Middle		18.40	18.53	18.45
		High		18.26	18.12	18.23
	50%	Low	19.50	18.50	18.08	18.34
		Middle		18.46	18.37	18.39
		High		18.25	18.21	18.50
	100%	/	19.50	18.18	18.31	18.07
16QAM	1	Low	19.50	18.02	18.18	18.07
		Middle		18.15	18.00	18.16
		High		18.03	18.24	18.01
	50%	Low	19.50	18.18	18.22	18.04
		Middle		18.30	18.17	18.09
		High		18.18	18.03	18.11
	100%	/	19.50	18.11	18.01	17.99
64QAM	1	Low	19.50	18.26	18.40	18.28
		Middle		18.21	18.38	18.33
		High		18.13	18.24	18.25
	50%	Low	19.50	18.23	18.18	18.21
		Middle		18.17	18.25	18.23
		High		18.11	18.17	18.19
	100%	/	19.50	18.29	18.23	18.25
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
QPSK	1	Low	19.50	18.38	18.28	18.47
		Middle		18.43	18.58	18.50
		High		18.31	18.18	18.32

	50%	Low	19.50	18.46	18.08	18.32
		Middle		18.32	18.42	18.37
		High		18.31	18.29	18.42
	100%	/	19.50	18.13	18.22	18.16
16QAM	1	Low	19.50	18.12	18.24	18.14
		Middle		18.09	18.15	18.22
		High		18.17	18.40	18.15
	50%	Low	19.50	18.21	18.24	18.19
		Middle		18.30	18.33	18.25
		High		18.22	18.21	18.27
	100%	/	19.50	18.25	18.19	18.15
64QAM	1	Low	19.50	18.10	18.25	18.12
		Middle		18.06	18.24	18.18
		High		18.08	18.17	18.20
	50%	Low	19.50	18.17	18.12	18.15
		Middle		18.11	18.18	18.16
		High		18.06	18.08	18.12
	100%	/	19.50	18.24	18.14	18.18
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
QPSK	1	Low	19.50	18.38	18.28	18.47
		Middle		18.43	18.58	18.50
		High		18.31	18.18	18.32
	50%	Low	19.50	18.55	18.17	18.41
		Middle		18.41	18.51	18.46
		High		18.40	18.38	18.51
	100%	/	19.50	18.22	18.31	18.25
16QAM	1	Low	19.50	18.21	18.33	18.23
		Middle		18.18	18.24	18.31
		High		18.17	18.40	18.15
	50%	Low	19.50	18.21	18.24	18.19
		Middle		18.30	18.33	18.25
		High		18.22	18.21	18.27
	100%	/	19.50	18.25	18.19	18.15
64QAM	1	Low	19.50	18.19	18.34	18.21
		Middle		18.15	18.33	18.27
		High		18.17	18.26	18.29
	50%	Low	19.50	18.26	18.21	18.24
		Middle		18.20	18.27	18.25
		High		18.15	18.17	18.21
	100%	/	19.50	18.24	18.14	18.18

LTE Band 4

Full power						
LTE B4			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
QPSK	1	Low	23.50	22.18	22.40	22.35
		Middle		22.32	22.34	22.32
		High		22.12	22.07	22.11
	50%	Low	23.50	22.22	22.16	22.21
		Middle		22.32	22.23	22.31
		High		22.15	22.22	22.26
	100%	/	22.50	21.29	21.31	21.35
16QAM	1	Low	22.50	21.12	21.43	21.36
		Middle		21.14	21.37	21.40
		High		21.16	21.33	21.16
	50%	Low	22.50	21.15	21.22	21.02
		Middle		21.30	21.22	21.05
		High		21.15	21.20	21.11
	100%	/	21.50	20.20	20.23	20.10
64QAM	1	Low	21.50	20.17	20.06	20.10
		Middle		20.13	20.13	20.13
		High		20.05	19.86	20.05
	50%	Low	21.50	19.92	19.80	19.74
		Middle		19.79	19.84	19.87
		High		19.96	19.93	19.81
	100%	/	20.50	19.00	18.89	18.92
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1	Low	23.50	22.20	22.28	22.17
		Middle		22.28	22.40	22.29
		High		22.09	22.15	22.05
	50%	Low	22.50	21.28	21.46	21.20
		Middle		21.38	21.55	21.40
		High		21.41	21.35	21.33
	100%	/	22.50	21.38	21.27	21.26
16QAM	1	Low	22.50	21.32	21.53	21.33
		Middle		21.31	21.37	21.36
		High		21.34	21.15	21.21
	50%	Low	21.50	20.38	20.22	20.16

		Middle		20.38	20.37	20.22
		High		20.26	20.34	20.25
	100%	/	21.50	20.26	20.39	20.28
64QAM	1	Low	21.50	20.20	20.08	20.21
		Middle		20.22	20.20	20.27
		High		20.05	20.09	20.17
	50%	Low	20.50	18.99	19.03	18.97
		Middle		18.90	19.11	19.07
		High		19.04	19.13	18.98
	100%	/	20.50	19.07	19.09	19.05
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
QPSK	1	Low	23.50	22.10	22.30	22.33
		Middle		22.33	22.45	22.36
		High		22.20	22.20	22.03
	50%	Low	22.50	21.35	21.33	21.26
		Middle		21.44	21.44	21.33
		High		21.31	21.29	21.34
	100%	/	22.50	21.29	21.20	21.18
16QAM	1	Low	22.50	21.12	21.35	21.18
		Middle		21.14	21.25	21.31
		High		21.19	21.25	21.17
	50%	Low	21.50	20.22	20.40	20.11
		Middle		20.27	20.34	20.13
		High		20.23	20.47	20.18
	100%	/	21.50	20.34	20.35	20.12
64QAM	1	Low	21.50	20.17	20.08	19.93
		Middle		20.19	20.19	20.16
		High		20.06	20.07	20.05
	50%	Low	20.50	18.97	18.99	18.98
		Middle		18.87	19.06	19.03
		High		19.01	19.08	18.94
	100%	/	20.50	18.97	19.05	19.00
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
QPSK	1	Low	23.50	22.21	22.29	22.26
		Middle		22.37	22.42	22.36
		High		22.10	22.16	22.08
	50%	Low	22.50	21.28	21.28	21.24
		Middle		21.47	21.34	21.37

		High		21.29	21.33	21.47
	100%	/	22.50	21.41	21.44	21.22
16QAM	1	Low	22.50	21.18	21.40	21.34
		Middle		21.31	21.19	21.36
		High		21.16	21.15	21.14
	50%	Low	21.50	20.31	20.34	20.07
		Middle		20.32	20.22	20.10
		High		20.18	20.16	20.14
	100%	/	21.50	20.09	20.14	20.08
64QAM	1	Low	21.50	20.11	19.99	20.12
		Middle		20.22	20.19	20.27
		High		20.13	20.09	20.16
	50%	Low	20.50	19.08	19.04	18.98
		Middle		18.89	19.02	18.98
		High		19.04	19.05	18.90
	100%	/	20.50	19.00	19.02	18.91
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
QPSK	1	Low	23.50	22.18	22.33	22.28
		Middle		22.23	22.35	22.39
		High		22.05	22.13	22.11
	50%	Low	22.50	21.22	21.21	21.27
		Middle		21.36	21.44	21.41
		High		21.24	21.28	21.43
	100%	/	22.50	21.31	21.20	21.22
16QAM	1	Low	22.50	21.19	21.42	21.50
		Middle		21.21	21.24	21.46
		High		21.31	21.33	21.21
	50%	Low	21.50	20.36	20.31	20.16
		Middle		20.38	20.43	20.20
		High		20.24	20.38	20.25
	100%	/	21.50	20.24	20.35	20.18
64QAM	1	Low	21.50	20.14	20.05	20.10
		Middle		20.18	20.21	20.17
		High		20.06	20.08	20.09
	50%	Low	20.50	18.99	19.08	18.91
		Middle		18.87	19.07	18.97
		High		19.08	19.09	18.87
	100%	/	20.50	18.84	18.87	18.98
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		

				20050/1720	20175/1732.5	20300/1745
QPSK	1	Low	23.50	22.25	22.37	22.31
		Middle		22.40	22.47	22.41
		High		22.15	22.22	22.17
	50%	Low	22.50	21.33	21.37	21.31
		Middle		21.42	21.48	21.44
		High		21.35	21.41	21.39
	100%	/	22.50	21.36	21.35	21.31
16QAM	1	Low	22.50	21.37	21.46	21.41
		Middle		21.25	21.34	21.42
		High		21.29	21.30	21.27
	50%	Low	21.50	20.33	20.35	20.21
		Middle		20.31	20.37	20.25
		High		20.21	20.33	20.29
	100%	/	21.50	20.22	20.31	20.23
64QAM	1	Low	21.50	20.12	20.01	20.13
		Middle		20.16	20.14	20.21
		High		20.08	20.02	20.11
	50%	Low	20.50	19.02	18.98	18.92
		Middle		18.91	19.03	18.99
		High		19.07	19.04	18.91
	100%	/	20.50	19.03	19.01	18.97
Sensor on						
LTE B4			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
QPSK	1	Low	18.50	17.62	17.47	17.49
		Middle		17.49	17.56	17.51
		High		17.44	17.34	17.35
	50%	Low	18.50	17.37	17.59	17.41
		Middle		17.61	17.70	17.65
		High		17.45	17.50	17.58
	100%	/	18.50	17.53	17.57	17.44
16QAM	1	Low	18.50	17.34	17.48	17.26
		Middle		17.47	17.39	17.43
		High		17.55	17.42	17.46
	50%	Low	18.50	17.72	17.65	17.46
		Middle		17.72	17.66	17.51
		High		17.61	17.62	17.45
	100%	/	18.50	17.43	17.53	17.54
64QAM	1	Low	18.50	17.38	17.42	17.48

		Middle		17.53	17.49	17.47
		High		17.46	17.43	17.48
	5	Low	18.50	17.45	17.52	17.58
		Middle		17.44	17.57	17.54
		High		17.52	17.63	17.62
	100%	/	18.50	17.47	17.57	17.57
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1	Low	18.50	17.66	17.55	17.54
		Middle		17.58	17.61	17.56
		High		17.55	17.40	17.44
	50%	Low	18.50	17.53	17.68	17.48
		Middle		17.56	17.73	17.61
		High		17.62	17.58	17.50
	100%	/	18.50	17.59	17.59	17.64
16QAM	1	Low	18.50	17.53	17.60	17.44
		Middle		17.57	17.65	17.60
		High		17.71	17.60	17.62
	50%	Low	18.50	17.55	17.58	17.52
		Middle		17.52	17.73	17.52
		High		17.45	17.71	17.46
	100%	/	18.50	17.48	17.73	17.61
64QAM	1	Low	18.50	17.31	17.47	17.41
		Middle		17.47	17.60	17.41
		High		17.52	17.52	17.54
	50%	Low	18.50	17.39	17.35	17.52
		Middle		17.38	17.39	17.47
		High		17.47	17.43	17.55
	100%	/	18.50	17.42	17.37	17.50
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
QPSK	1	Low	18.50	17.56	17.57	17.62
		Middle		17.57	17.66	17.66
		High		17.60	17.45	17.45
	50%	Low	18.50	17.60	17.74	17.60
		Middle		17.62	17.56	17.60
		High		17.52	17.71	17.46
	100%	/	18.50	17.58	17.60	17.40
16QAM	1	Low	18.50	17.41	17.55	17.21
		Middle		17.32	17.66	17.47

	50%	High	18.50	17.53	17.67	17.55
		Low		17.47	17.73	17.55
		Middle		17.49	17.67	17.62
		High		17.53	17.65	17.58
	100%	/	18.50	17.67	17.58	17.69
64QAM	1	Low	18.50	17.39	17.36	17.37
		Middle		17.55	17.43	17.54
		High		17.42	17.34	17.44
	50%	Low	18.50	17.26	17.37	17.47
		Middle		17.24	17.40	17.37
		High		17.33	17.49	17.40
	100%	/	18.50	17.40	17.44	17.34
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
QPSK	1	Low	18.50	17.67	17.56	17.55
		Middle		17.61	17.63	17.55
		High		17.50	17.36	17.39
	50%	Low	18.50	17.58	17.56	17.55
		Middle		17.70	17.58	17.61
		High		17.55	17.62	17.67
	100%	/	18.50	17.67	17.71	17.52
16QAM	1	Low	18.50	17.33	17.36	17.34
		Middle		17.46	17.36	17.49
		High		17.50	17.49	17.52
	50%	Low	18.50	17.67	17.75	17.46
		Middle		17.60	17.63	17.54
		High		17.51	17.58	17.49
	100%	/	18.50	17.45	17.61	17.60
64QAM	1	Low	18.50	17.25	17.40	17.40
		Middle		17.42	17.48	17.41
		High		17.47	17.52	17.53
	50%	Low	18.50	17.35	17.47	17.58
		Middle		17.32	17.49	17.51
		High		17.42	17.54	17.55
	100%	/	18.50	17.38	17.49	17.49
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
QPSK	1	Low	18.50	17.64	17.60	17.57
		Middle		17.55	17.64	17.58
		High		17.53	17.46	17.42

	50%	Low	18.50	17.49	17.51	17.47
		Middle		17.67	17.64	17.65
		High		17.58	17.70	17.63
	100%	/	18.50	17.65	17.60	17.52
16QAM	1	Low	18.50	17.42	17.51	17.50
		Middle		17.44	17.54	17.59
		High		17.57	17.64	17.59
	50%	Low	18.50	17.53	17.53	17.49
		Middle		17.63	17.76	17.69
		High		17.49	17.67	17.60
	100%	/	18.50	17.52	17.69	17.70
64QAM	1	Low	18.50	17.31	17.44	17.49
		Middle		17.49	17.56	17.50
		High		17.48	17.46	17.54
	50%	Low	18.50	17.34	17.46	17.54
		Middle		17.30	17.41	17.45
		High		17.51	17.50	17.39
	100%	/	18.50	17.27	17.26	17.26
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
QPSK	1	Low	18.50	17.71	17.64	17.60
		Middle		17.75	17.79	17.71
		High		17.66	17.58	17.59
	50%	Low	18.50	17.63	17.70	17.62
		Middle		17.65	17.77	17.68
		High		17.61	17.75	17.59
	100%	/	18.50	17.62	17.67	17.61
16QAM	1	Low	18.50	17.52	17.58	17.52
		Middle		17.51	17.67	17.66
		High		17.66	17.72	17.68
	50%	Low	18.50	17.61	17.68	17.57
		Middle		17.56	17.70	17.66
		High		17.51	17.67	17.61
	100%	/	18.50	17.55	17.70	17.72
64QAM	1	Low	18.50	17.34	17.45	17.49
		Middle		17.52	17.54	17.51
		High		17.47	17.45	17.53
	50%	Low	18.50	17.34	17.41	17.52
		Middle		17.31	17.42	17.44
		High		17.42	17.45	17.48
	100%	/	18.50	17.38	17.40	17.42

LTE Band 5

Full power						
LTE B5			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				20407/824.7	20525/836.5	20643/848.3
QPSK	1	Low	23.50	22.34	22.35	22.40
		Middle		22.37	22.41	22.34
		High		22.35	22.15	22.31
	50%	Low	23.50	22.14	22.07	22.17
		Middle		22.23	22.09	22.18
		High		22.07	22.10	22.11
	100%	/	22.50	21.10	21.26	21.16
16QAM	1	Low	22.50	21.13	21.43	21.14
		Middle		21.15	21.41	21.19
		High		21.18	21.43	21.22
	50%	Low	22.50	21.28	21.14	21.10
		Middle		21.40	21.36	21.24
		High		21.36	21.21	21.17
	100%	/	21.50	20.37	20.26	20.21
64QAM	1	Low	21.50	20.38	20.20	20.44
		Middle		20.40	20.27	20.40
		High		20.28	20.06	20.35
	50%	Low	21.50	20.10	19.94	20.03
		Middle		20.02	19.88	20.05
		High		20.10	20.03	20.10
	100%	/	20.50	19.20	18.96	19.04
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				20415/825.5	20525/836.5	20635/847.5
QPSK	1	Low	23.50	22.37	22.24	22.31
		Middle		22.31	22.41	22.27
		High		22.22	22.27	22.17
	50%	Low	22.50	21.09	21.22	21.09
		Middle		21.38	21.23	21.13
		High		21.13	21.24	21.32
	100%	/	22.50	21.25	21.42	21.14
16QAM	1	Low	22.50	21.22	21.32	21.23
		Middle		21.35	21.12	21.26
		High		21.29	21.22	21.31
	50%	Low	21.50	20.44	20.23	20.26

		Middle		20.50	20.33	20.40
		High		20.36	20.14	20.31
	100%	/	21.50	20.23	20.14	20.30
64QAM	1	Low	21.50	20.29	20.32	20.35
		Middle		20.38	20.36	20.35
		High		20.25	20.32	20.27
	50%	Low	20.50	19.26	19.21	19.08
		Middle		19.20	19.17	19.13
		High		19.26	19.26	19.16
	100%	/	20.50	19.28	19.20	19.05
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				20425/826.5	20525/836.5	20625/846.5
QPSK	1	Low	23.50	22.34	22.28	22.33
		Middle		22.36	22.42	22.41
		High		22.36	22.32	22.31
	50%	Low	22.50	21.11	21.23	21.23
		Middle		21.24	21.30	21.28
		High		21.05	21.16	21.28
	100%	/	22.50	21.12	21.15	21.14
16QAM	1	Low	22.50	21.20	21.31	21.39
		Middle		21.22	21.25	21.36
		High		21.36	21.32	21.38
	50%	Low	21.50	20.41	20.12	20.35
		Middle		20.48	20.57	20.50
		High		20.45	20.39	20.31
	100%	/	21.50	20.41	20.38	20.29
64QAM	1	Low	21.50	20.35	20.30	20.33
		Middle		20.34	20.38	20.33
		High		20.26	20.31	20.28
	50%	Low	20.50	19.14	19.25	19.09
		Middle		19.07	19.14	19.12
		High		19.19	19.22	19.05
	100%	/	20.50	19.01	18.97	18.98
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20450/829	20525/836.5	20600/844
QPSK	1	Low	23.50	22.41	22.32	22.36
		Middle		22.45	22.46	22.43
		High		22.38	22.33	22.37
	50%	Low	22.50	21.25	21.31	21.27
		Middle		21.33	21.37	21.31

	100%	High		21.19	21.32	21.24
		/	22.50	21.20	21.33	21.23
16QAM	1	Low	22.50	21.21	21.38	21.30
		Middle		21.29	21.38	21.32
		High		21.34	21.40	21.36
	50%	Low	21.50	20.38	20.27	20.32
		Middle		20.41	20.51	20.47
		High		20.42	20.34	20.38
	100%	/	21.50	20.39	20.34	20.37
64QAM	1	Low	21.50	20.33	20.26	20.39
		Middle		20.43	20.31	20.40
		High		20.31	20.25	20.33
	50%	Low	20.50	19.20	19.15	19.13
		Middle		19.14	19.10	19.17
		High		19.21	19.17	19.20
	100%	/	20.50	19.23	19.11	19.09

LTE Band 7

Full power						
LTE B7			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				20775/2502.5	21100/2535	21425/2567.5
QPSK	1	Low	23.50	22.03	22.16	22.10
		Middle		22.34	22.47	22.29
		High		22.24	22.28	21.97
	50%	Low	22.50	21.48	21.48	21.54
		Middle		21.52	21.58	21.46
		High		21.30	21.36	21.45
	100%	/	22.50	21.33	21.34	21.29
16QAM	1	Low	22.50	21.35	21.40	21.29
		Middle		21.37	21.45	21.39
		High		21.48	21.41	21.52
	50%	Low	21.50	20.09	20.01	20.07
		Middle		20.38	20.41	20.40
		High		20.40	20.49	20.25
	100%	/	21.50	20.53	20.41	20.23
64QAM	1	Low	21.50	20.47	20.43	20.15
		Middle		20.42	20.46	20.28
		High		20.55	20.50	20.38
	50%	Low	20.50	19.53	19.52	19.46
		Middle		19.49	19.41	19.40

		High		19.42	19.48	19.42
	100%	/	20.50	19.44	19.40	19.44
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20800/2505	21100/2535	21400/2565
QPSK	1	Low	23.50	22.14	22.15	22.03
		Middle		22.38	22.32	22.29
		High		22.14	22.12	22.02
	50%	Low	22.50	21.41	21.23	21.44
		Middle		21.62	21.35	21.49
		High		21.35	21.27	21.57
	100%	/	22.50	21.49	21.45	21.32
16QAM	1	Low	22.50	21.45	21.49	21.44
		Middle		21.58	21.43	21.43
		High		21.50	21.44	21.49
	50%	Low	21.50	20.18	20.08	19.96
		Middle		20.36	20.42	20.30
		High		20.36	20.31	20.19
	100%	/	21.50	20.29	20.33	20.12
64QAM	1	Low	21.50	20.42	20.42	20.27
		Middle		20.38	20.46	20.24
		High		20.54	20.52	20.34
	50%	Low	20.50	19.56	19.57	19.46
		Middle		19.58	19.52	19.45
		High		19.52	19.60	19.46
	100%	/	20.50	19.54	19.52	19.48
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20825/2507.5	21100/2535	21375/2562.5
QPSK	1	Low	23.50	22.11	22.19	22.05
		Middle		22.32	22.50	22.32
		High		22.17	22.29	22.05
	50%	Low	22.50	21.43	21.24	21.47
		Middle		21.59	21.53	21.48
		High		21.38	21.30	21.48
	100%	/	22.50	21.47	21.29	21.27
16QAM	1	Low	22.50	21.54	21.54	21.55
		Middle		21.56	21.56	21.41
		High		21.57	21.54	21.44
	50%	Low	21.50	20.15	19.97	20.00
		Middle		20.41	20.55	20.40
		High		20.34	20.45	20.30

	100%	/	21.50	20.36	20.46	20.27
64QAM	1	Low	21.50	20.37	20.40	20.37
		Middle		20.34	20.48	20.34
		High		20.48	20.44	20.47
	50%	Low	20.50	19.48	19.54	19.52
		Middle		19.56	19.42	19.49
		High		19.56	19.49	19.42
	100%	/	20.50	19.38	19.22	19.37
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20850/2510	21100/2535	21350/2560
QPSK	1	Low	23.50	22.18	22.23	22.08
		Middle		22.41	22.49	22.34
		High		22.19	22.30	22.11
	50%	Low	22.50	21.46	21.44	21.51
		Middle		21.57	21.61	21.56
		High		21.41	21.47	21.49
	100%	/	22.50	21.44	21.48	21.41
16QAM	1	Low	22.50	21.49	21.55	21.51
		Middle		21.52	21.58	21.49
		High		21.55	21.51	21.54
	50%	Low	21.50	20.12	20.01	20.09
		Middle		20.34	20.49	20.44
		High		20.38	20.40	20.33
	100%	/	21.50	20.41	20.42	20.31
64QAM	1	Low	21.50	20.42	20.36	20.32
		Middle		20.39	20.41	20.30
		High		20.49	20.45	20.41
	50%	Low	20.50	19.50	19.51	19.45
		Middle		19.52	19.45	19.43
		High		19.47	19.51	19.46
	100%	/	20.50	19.49	19.43	19.48
Sensor on						
LTE B7			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				20775/2502.5	21100/2535	21425/2567.5
QPSK	1	Low	21.00	19.87	19.85	19.91
		Middle		20.06	20.15	20.10
		High		19.96	20.00	19.90
	50%	Low	21.00	19.85	20.01	19.98
		Middle		20.12	20.13	20.12

		High		20.05	19.80	20.11
	100%	/	21.00	20.03	19.87	20.01
16QAM	1	Low	21.00	19.97	20.00	19.87
		Middle		19.99	20.09	20.08
		High		19.85	19.96	19.97
	50%	Low	21.00	19.78	20.11	19.75
		Middle		19.87	20.06	19.68
		High		19.82	20.09	19.73
	100%	/	21.00	19.90	20.03	19.83
64QAM	1	Low	21.00	19.96	20.11	19.65
		Middle		19.83	20.07	19.79
		High		19.99	20.03	19.69
	50%	Low	21.00	19.87	19.88	19.74
		Middle		19.82	19.93	19.82
		High		19.78	19.89	19.93
	100%	/	21.00	19.87	19.92	19.90
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20800/2505	21100/2535	21400/2565
QPSK	1	Low	21.00	19.98	19.84	19.84
		Middle		20.10	20.12	20.10
		High		19.90	19.96	19.95
	50%	Low	21.00	19.71	19.88	19.77
		Middle		20.08	19.91	19.93
		High		19.92	19.72	20.01
	100%	/	21.00	19.92	19.99	19.82
16QAM	1	Low	21.00	19.84	19.97	19.84
		Middle		19.97	19.84	19.94
		High		19.82	19.87	19.87
	50%	Low	21.00	19.98	20.17	19.86
		Middle		20.03	20.02	19.76
		High		19.96	19.86	19.80
	100%	/	21.00	19.84	19.90	19.90
64QAM	1	Low	21.00	20.09	20.06	19.95
		Middle		19.93	20.07	19.93
		High		19.94	20.05	19.83
	50%	Low	21.00	19.90	19.97	19.78
		Middle		19.84	19.97	19.85
		High		19.81	19.94	19.97
	100%	/	21.00	19.90	19.97	19.94
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		

				20825/2507.5	21100/2535	21375/2562.5
QPSK	1	Low	21.00	19.95	19.88	19.86
		Middle		20.04	20.13	20.13
		High		19.82	19.90	19.87
	50%	Low	21.00	19.73	19.85	19.80
		Middle		20.09	20.09	20.01
		High		19.99	19.75	20.01
	100%	/	21.00	19.94	19.83	19.86
16QAM	1	Low	21.00	19.93	20.03	20.00
		Middle		19.95	19.97	20.04
		High		20.00	20.08	20.05
	50%	Low	21.00	19.91	20.06	19.95
		Middle		19.97	20.19	19.90
		High		19.90	20.04	19.91
	100%	/	21.00	19.87	20.07	20.00
64QAM	1	Low	21.00	20.00	20.08	19.93
		Middle		19.89	20.09	19.87
		High		19.99	20.04	19.80
	50%	Low	21.00	19.93	19.97	19.75
		Middle		19.86	19.94	19.88
		High		19.89	19.90	19.90
	100%	/	21.00	19.78	19.74	19.80
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20850/2510	21100/2535	21350/2560
QPSK	1	Low	21.00	20.02	19.92	19.89
		Middle		20.13	20.17	20.15
		High		19.95	20.02	20.04
	50%	Low	21.00	19.87	20.08	19.95
		Middle		20.18	20.20	20.15
		High		20.13	19.95	20.08
	100%	/	21.00	20.02	20.05	20.06
16QAM	1	Low	21.00	20.10	20.14	20.02
		Middle		20.02	20.10	20.11
		High		19.98	20.05	20.03
	50%	Low	21.00	19.92	20.10	19.92
		Middle		19.94	20.13	19.87
		High		19.91	19.99	19.91
	100%	/	21.00	19.89	20.03	20.01
64QAM	1	Low	21.00	20.02	20.04	19.92
		Middle		19.91	20.02	19.87
		High		19.93	19.98	19.78

	50%	Low	21.00	19.88	19.91	19.72
		Middle		19.82	19.94	19.82
		High		19.80	19.89	19.94
	100%	/	21.00	19.89	19.92	19.91

LTE Band 12

Full power						
LTE B12			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				23017/699.7	23095/707.5	23173/715.3
QPSK	1	Low	23.50	22.44	22.59	22.61
		Middle		22.53	22.58	22.50
		High		22.45	22.48	22.52
	50%	Low	23.50	22.28	22.34	22.38
		Middle		22.37	22.45	22.47
		High		22.34	22.38	22.36
	100%	/	22.50	21.51	21.54	21.50
16QAM	1	Low	22.50	21.54	21.67	21.51
		Middle		21.56	21.73	21.63
		High		21.57	21.74	21.57
	50%	Low	22.50	21.30	21.42	21.29
		Middle		21.44	21.56	21.39
		High		21.48	21.44	21.39
	100%	/	21.50	20.57	20.39	20.35
64QAM	1	Low	21.50	20.43	20.34	20.42
		Middle		20.23	20.41	20.22
		High		20.22	20.31	20.23
	50%	Low	21.50	20.13	20.24	20.25
		Middle		20.18	20.21	20.29
		High		20.15	20.32	20.29
	100%	/	20.50	19.30	19.27	19.40
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				23025/700.5	23095/707.5	23165/714.5
QPSK	1	Low	23.50	22.47	22.48	22.52
		Middle		22.63	22.58	22.54
		High		22.48	22.49	22.49
	50%	Low	22.50	21.32	21.38	21.41
		Middle		21.50	21.48	21.53
		High		21.38	21.41	21.57
	100%	/	22.50	21.48	21.64	21.37

16QAM	1	Low	22.50	21.52	21.49	21.49
		Middle		21.72	21.48	21.59
		High		21.64	21.57	21.62
	50%	Low	21.50	20.53	20.55	20.46
		Middle		20.61	20.57	20.56
		High		20.66	20.41	20.54
	100%	/	21.50	20.61	20.38	20.40
64QAM	1	Low	21.50	20.52	20.35	20.51
		Middle		20.39	20.39	20.28
		High		20.37	20.46	20.21
	50%	Low	20.50	19.36	19.47	19.29
		Middle		19.43	19.46	19.36
		High		19.38	19.51	19.34
	100%	/	20.50	19.45	19.47	19.40
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				23035/701.5	23095/707.5	23155/713.5
QPSK	1	Low	23.50	22.44	22.52	22.54
		Middle		22.57	22.64	22.57
		High		22.39	22.52	22.52
	50%	Low	22.50	21.29	21.37	21.44
		Middle		21.42	21.64	21.57
		High		21.36	21.42	21.53
	100%	/	22.50	21.48	21.41	21.37
16QAM	1	Low	22.50	21.63	21.59	21.65
		Middle		21.65	21.68	21.69
		High		21.71	21.74	21.62
	50%	Low	21.50	20.50	20.51	20.48
		Middle		20.59	20.77	20.59
		High		20.64	20.62	20.58
	100%	/	21.50	20.68	20.58	20.43
64QAM	1	Low	21.50	20.40	20.40	20.42
		Middle		20.28	20.48	20.33
		High		20.31	20.52	20.29
	50%	Low	20.50	19.35	19.51	19.37
		Middle		19.41	19.43	19.42
		High		19.42	19.47	19.30
	100%	/	20.50	19.29	19.24	19.29
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				23060/704	23095/707.5	23130/711
QPSK	1	Low	23.50	22.51	22.56	22.57

		Middle		22.66	22.68	22.59
		High		22.53	22.60	22.58
		Low		21.44	21.52	21.48
	50%	Middle	22.50	21.52	21.67	21.60
		High		21.51	21.54	21.49
		/		21.50	21.55	21.46
16QAM	1	Low	22.50	21.54	21.62	21.56
		Middle		21.66	21.70	21.65
		High		21.69	21.71	21.67
	50%	Low	21.50	20.47	20.55	20.52
		Middle		20.52	20.71	20.63
		High		20.61	20.57	20.61
	100%	/	21.50	20.66	20.54	20.52
64QAM	1	Low	21.50	20.45	20.36	20.49
		Middle		20.33	20.41	20.34
		High		20.32	20.46	20.28
	50%	Low	20.50	19.30	19.41	19.35
		Middle		19.37	19.39	19.41
		High		19.33	19.42	19.39
	100%	/	20.50	19.40	19.38	19.45

LTE Band 13

Full power						
LTE B13			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				23205/779.5	23230/782	23255/784.5
QPSK	1	Low	23.50	22.51	22.56	22.57
		Middle		22.67	22.63	22.65
		High		22.53	22.60	22.67
	50%	Low	22.50	21.74	21.65	21.67
		Middle		21.77	21.61	21.72
		High		21.67	21.59	21.65
	100%	/	22.50	21.68	21.60	21.63
16QAM	1	Low	22.50	21.51	21.55	21.62
		Middle		21.71	21.65	21.66
		High		21.67	21.62	21.57
	50%	Low	21.50	20.73	20.71	20.52
		Middle		20.81	20.73	20.65
		High		20.78	20.69	20.54
	100%	/	21.50	20.80	20.73	20.74
64QAM	1	Low	21.50	20.72	20.62	20.67

		Middle		20.70	20.59	20.61
		High		20.67	20.61	20.54
		Low		19.34	19.23	19.31
	50%	Middle	20.50	19.31	19.36	19.24
		High		19.36	19.22	19.21
		/		19.28	19.14	19.17
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	23230/782	/
QPSK	1	Low	23.50	/	22.62	/
		Middle		/	22.72	/
		High		/	22.71	/
	50%	Low	22.50	/	21.67	/
		Middle		/	21.74	/
		High		/	21.71	/
	100%	/	22.50	/	21.72	/
16QAM	1	Low	22.50	/	21.72	/
		Middle		/	21.69	/
		High		/	21.75	/
	50%	Low	21.50	/	20.69	/
		Middle		/	20.88	/
		High		/	20.66	/
	100%	/	21.50	/	20.67	/
64QAM	1	Low	21.50	/	20.63	/
		Middle		/	20.61	/
		High		/	20.70	/
	50%	Low	20.50	/	19.32	/
		Middle		/	19.47	/
		High		/	19.41	/
	100%	/	20.50	/	19.52	/

LTE Band 14

Full power						
LTE B14			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				23305/790.5	23330/793	23355/795.5
QPSK	1	Low	23.50	23.11	23.15	23.12
		Middle		23.25	23.24	23.17
		High		23.03	23.08	23.06
	50%	Low	22.50	22.06	22.05	22.04
		Middle		22.14	22.09	22.03

	100%	High	22.50	22.12	22.06	22.03
		/		22.10	22.08	22.00
16QAM	1	Low	22.50	22.09	22.12	22.27
		Middle		22.23	22.22	22.38
		High		22.04	22.10	22.28
	50%	Low	22.50	21.06	21.04	21.17
		Middle		21.15	21.12	21.22
		High		21.16	21.05	21.15
	100%	/	22.50	21.09	21.16	21.05
64QAM	1	Low	22.50	21.33	21.69	22.00
		Middle		21.48	21.84	22.10
		High		21.34	21.78	22.03
	50%	Low	21.50	20.35	20.51	20.37
		Middle		20.43	20.54	20.42
		High		20.48	20.56	20.39
	100%	/	21.50	20.44	20.51	20.42
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	23330/793	/
QPSK	1	Low	23.50	/	23.17	/
		Middle		/	23.12	/
		High		/	23.07	/
	50%	Low	22.50	/	21.97	/
		Middle		/	22.13	/
		High		/	22.03	/
	100%	/	22.50	/	22.04	/
16QAM	1	Low	22.50	/	22.32	/
		Middle		/	22.26	/
		High		/	22.23	/
	50%	Low	22.50	/	20.99	/
		Middle		/	21.14	/
		High		/	21.03	/
	100%	/	22.50	/	21.00	/
64QAM	1	Low	22.50	/	21.42	/
		Middle		/	21.44	/
		High		/	21.48	/
	50%	Low	21.50	/	20.35	/
		Middle		/	20.54	/
		High		/	20.48	/
	100%	/	21.50	/	20.42	/

LTE Band 17

Full power

LTE B17			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				23755/706.5	23790/710	23825/713.5
QPSK	1	Low	23.50	22.44	22.55	22.49
		Middle		22.41	22.56	22.51
		High		22.40	22.37	22.42
	50%	Low	22.50	21.35	21.40	21.39
		Middle		21.55	21.63	21.51
		High		21.46	21.53	21.60
	100%	/	22.50	21.36	21.35	21.37
16QAM	1	Low	22.50	21.48	21.69	21.63
		Middle		21.50	21.51	21.55
		High		21.43	21.60	21.40
	50%	Low	21.50	20.51	20.59	20.46
		Middle		20.72	20.56	20.48
		High		20.59	20.67	20.52
	100%	/	21.50	20.54	20.64	20.54
64QAM	1	Low	21.50	20.30	20.40	20.42
		Middle		20.33	20.48	20.50
		High		20.45	20.51	20.54
	50%	Low	20.50	19.41	19.52	19.54
		Middle		19.45	19.51	19.55
		High		19.37	19.44	19.35
	100%	/	20.50	19.30	19.29	19.18
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				23780/709	23790/710	23800/711
QPSK	1	Low	23.50	22.51	22.59	22.52
		Middle		22.57	22.60	22.53
		High		22.49	22.45	22.48
	50%	Low	22.50	21.45	21.55	21.43
		Middle		21.60	21.62	21.54
		High		21.56	21.61	21.56
	100%	/	22.50	21.33	21.45	21.46
16QAM	1	Low	22.50	21.52	21.68	21.54
		Middle		21.46	21.56	21.51
		High		21.41	21.53	21.45
	50%	Low	21.50	20.48	20.59	20.50
		Middle		20.61	20.46	20.48
		High		20.52	20.58	20.51
	100%	/	21.50	20.55	20.60	20.54

64QAM	1	Low	21.50	20.31	20.36	20.33
		Middle		20.34	20.41	20.49
		High		20.42	20.45	20.51
	50%	Low	20.50	19.39	19.42	19.50
		Middle		19.44	19.47	19.52
		High		19.31	19.39	19.42
	100%	/	20.50	19.37	19.43	19.32

LTE Band 25

Full power						
LTE B25			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				26047/1850.7	26365/1882,5	26683/1914.3
QPSK	1	Low	23.50	21.40	21.55	21.46
		Middle		22.00	22.09	22.01
		High		21.83	21.76	21.63
	50%	Low	23.50	21.71	21.71	21.77
		Middle		21.80	21.86	21.80
		High		21.71	21.76	21.67
	100%	/	22.50	20.85	21.01	20.90
16QAM	1	Low	22.50	20.88	21.10	20.96
		Middle		20.90	21.04	21.05
		High		20.92	20.94	20.86
	50%	Low	22.50	20.91	20.69	20.81
		Middle		21.09	20.88	20.83
		High		20.91	20.76	20.81
	100%	/	21.50	19.87	19.82	19.78
64QAM	1	Low	21.50	19.90	19.94	19.97
		Middle		19.89	20.03	19.91
		High		19.84	19.90	19.92
	50%	Low	21.50	19.75	19.87	19.77
		Middle		19.64	19.78	19.77
		High		19.63	19.75	19.52
	100%	/	20.50	18.69	18.87	18.79
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				26055/1851.5	26365/1882,5	26675/1913.5
QPSK	1	Low	23.50	21.42	21.43	21.36
		Middle		22.01	22.07	22.00
		High		21.80	21.71	21.59
	50%	Low	22.50	20.77	20.88	20.78

	100%	Middle	22.50	20.86	21.05	20.91
		High		20.89	20.76	20.76
		/		20.85	20.89	20.88
16QAM	1	Low	22.50	20.99	21.12	20.93
		Middle		20.98	21.09	21.01
		High		20.96	20.83	20.83
	50%	Low	21.50	20.00	19.76	19.87
		Middle		20.06	20.05	19.87
		High		19.97	19.92	19.82
	100%	/	21.50	19.88	19.92	19.83
64QAM	1	Low	21.50	19.93	19.90	19.95
		Middle		20.03	20.01	19.96
		High		19.91	20.04	19.95
	50%	Low	20.50	18.89	18.96	18.91
		Middle		18.82	18.97	18.96
		High		18.78	18.87	18.68
	100%	/	20.50	18.75	18.99	18.91
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
QPSK	1	Low	23.50	21.32	21.45	21.44
		Middle		22.06	22.12	22.05
		High		21.90	21.75	21.54
	50%	Low	22.50	20.83	20.82	20.89
		Middle		20.91	21.01	20.89
		High		20.78	20.77	20.82
	100%	/	22.50	20.90	20.90	20.86
16QAM	1	Low	22.50	20.88	20.97	20.81
		Middle		20.90	21.00	20.99
		High		20.90	20.86	20.82
	50%	Low	21.50	19.93	19.87	19.85
		Middle		20.09	20.00	19.86
		High		19.94	20.03	19.83
	100%	/	21.50	20.01	19.99	19.80
64QAM	1	Low	21.50	19.89	19.95	19.74
		Middle		19.94	20.00	19.93
		High		19.92	20.02	19.91
	50%	Low	20.50	18.82	18.87	18.87
		Middle		18.74	18.81	18.87
		High		18.76	18.77	18.65
	100%	/	20.50	18.74	18.90	18.87
Modulation	RB	RB Offset	Tune up	10MHz		

				Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
QPSK	1	Low	23.50	21.43	21.44	21.37
		Middle		22.10	22.09	22.05
		High		21.86	21.77	21.65
	50%	Low	22.50	20.82	20.75	20.85
		Middle		21.00	20.83	20.91
		High		20.82	20.73	20.93
	100%	/	22.50	20.94	21.00	20.82
16QAM	1	Low	22.50	20.91	20.93	20.94
		Middle		20.99	20.80	20.96
		High		20.87	20.78	20.79
	50%	Low	21.50	20.02	19.83	19.81
		Middle		20.08	19.96	19.77
		High		19.96	19.85	19.78
	100%	/	21.50	19.78	19.86	19.70
64QAM	1	Low	21.50	19.91	20.00	19.93
		Middle		19.97	20.06	19.96
		High		19.91	20.04	19.94
	50%	Low	20.50	18.96	18.97	18.92
		Middle		18.87	18.90	18.95
		High		18.84	18.81	18.68
	100%	/	20.50	18.82	18.94	18.90
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
QPSK	1	Low	23.50	21.40	21.48	21.39
		Middle		22.04	22.10	22.02
		High		21.83	21.82	21.62
	50%	Low	22.50	20.78	20.76	20.82
		Middle		20.86	21.02	20.84
		High		20.74	20.77	20.78
	100%	/	22.50	20.81	20.85	20.71
16QAM	1	Low	22.50	20.89	21.04	20.99
		Middle		20.96	21.04	21.05
		High		20.99	20.93	20.85
	50%	Low	21.50	20.04	19.77	19.89
		Middle		20.17	20.08	19.98
		High		20.00	19.93	19.95
	100%	/	21.50	19.86	19.88	19.81
64QAM	1	Low	21.50	19.87	19.87	19.92
		Middle		19.94	19.97	19.95

	50%	High	20.50	19.93	19.98	19.90
		Low		18.95	19.01	18.93
		Middle		18.85	18.93	18.94
		High		18.88	18.83	18.57
	100%	/	20.50	18.66	18.77	18.72
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905
QPSK	1	Low	23.50	21.47	21.52	21.42
		Middle		22.13	22.14	22.10
		High		21.91	21.83	21.74
	50%	Low	22.50	20.87	20.84	20.92
		Middle		20.95	21.03	20.98
		High		20.88	20.87	20.85
	100%	/	22.50	20.89	20.97	20.91
16QAM	1	Low	22.50	20.95	21.05	21.01
		Middle		20.98	21.06	21.07
		High		20.97	20.96	20.89
	50%	Low	21.50	20.01	19.87	19.92
		Middle		20.10	20.08	19.95
		High		19.97	19.94	19.91
	100%	/	21.50	19.89	19.95	19.83
64QAM	1	Low	21.50	19.90	19.94	19.92
		Middle		19.97	20.01	19.96
		High		19.92	20.03	19.95
	50%	Low	20.50	18.90	18.97	18.92
		Middle		18.81	18.89	18.94
		High		18.79	18.78	18.67
	100%	/	20.50	18.77	18.91	18.89
Sensor on						
LTE B25			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				26047/1850.7	26365/1882,5	26683/1914.3
QPSK	1	Low	19.50	17.34	17.29	17.49
		Middle		18.36	18.52	18.56
		High		18.15	18.24	18.33
	50%	Low	19.50	18.23	18.37	18.32
		Middle		18.47	18.61	18.48
		High		18.42	18.11	18.24
	100%	/	19.50	18.50	18.33	18.36
16QAM	1	Low	19.50	18.18	18.42	18.38

		Middle		18.29	18.44	18.49
		High		18.34	18.27	18.38
		Low		18.29	18.15	18.29
	50%	Middle	19.50	18.57	18.46	18.35
		High		18.53	18.42	18.36
		/		18.33	18.28	18.25
64QAM	1	Low	19.50	18.19	18.43	18.31
		Middle		18.26	17.47	18.34
		High		18.18	18.42	18.42
	5	Low	19.50	18.32	18.50	18.19
		Middle		18.35	18.50	18.37
		High		18.43	18.26	18.37
	100%	/	19.50	18.14	18.24	18.19
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				26055/1851.5	26365/1882.5	26675/1913.5
QPSK	1	Low	19.50	17.41	17.33	17.52
		Middle		18.36	18.50	18.52
		High		18.08	18.19	18.33
	50%	Low	19.50	18.37	18.44	18.22
		Middle		18.45	18.60	18.51
		High		18.54	18.28	18.32
	100%	/	19.50	18.53	18.49	18.54
16QAM	1	Low	19.50	18.23	18.47	18.38
		Middle		18.22	18.43	18.45
		High		18.32	18.15	18.30
	50%	Low	19.50	18.26	18.10	18.20
		Middle		18.50	18.31	18.26
		High		18.50	18.28	18.26
	100%	/	19.50	18.40	18.24	18.25
64QAM	1	Low	19.50	18.29	18.36	18.23
		Middle		18.36	17.46	18.36
		High		18.24	18.36	18.33
	50%	Low	19.50	18.39	18.40	18.09
		Middle		18.34	18.37	18.19
		High		18.34	18.12	18.32
	100%	/	19.50	18.25	18.38	18.30
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
QPSK	1	Low	19.50	17.31	17.35	17.60
		Middle		18.53	18.64	18.60

	50%	High	19.50	18.31	18.33	18.32
		Low		18.56	18.21	18.28
		Middle		18.63	18.57	18.47
		High		18.47	18.21	18.24
	100%	/	19.50	18.55	18.41	18.37
16QAM	1	Low	19.50	18.25	18.28	18.21
		Middle		18.31	18.33	18.39
		High		18.22	18.15	18.34
	50%	Low	19.50	18.16	18.34	18.23
		Middle		18.35	18.29	18.34
		High		18.35	18.42	18.36
	100%	/	19.50	18.36	18.29	18.26
64QAM	1	Low	19.50	18.14	18.45	18.12
		Middle		18.24	17.45	18.33
		High		18.16	18.43	18.38
	50%	Low	19.50	18.28	18.45	18.19
		Middle		18.22	18.41	18.24
		High		18.31	18.16	18.37
	100%	/	19.50	18.23	18.34	18.25
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
QPSK	1	Low	19.50	17.42	17.34	17.53
		Middle		18.57	18.61	18.60
		High		18.21	18.29	18.37
	50%	Low	19.50	18.37	18.14	18.24
		Middle		18.54	18.36	18.49
		High		18.33	18.14	18.35
	100%	/	19.50	18.50	18.57	18.42
16QAM	1	Low	19.50	18.03	18.25	18.39
		Middle		18.16	18.19	18.45
		High		18.13	18.18	18.40
	50%	Low	19.50	18.15	18.22	18.25
		Middle		18.49	18.16	18.28
		High		18.47	18.10	18.29
	100%	/	19.50	18.28	18.07	18.10
64QAM	1	Low	19.50	18.28	18.47	18.25
		Middle		18.36	17.48	18.30
		High		18.24	18.45	18.35
	50%	Low	19.50	18.40	18.47	18.10
		Middle		18.33	18.42	18.18
		High		18.34	18.18	18.29

	100%	/	19.50	18.26	18.36	18.17
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
QPSK	1	Low	19.50	17.39	17.38	17.55
		Middle		18.51	18.62	18.63
		High		18.24	18.34	18.40
	50%	Low	19.50	18.51	18.18	18.30
		Middle		18.54	18.63	18.56
		High		18.39	18.20	18.34
	100%	/	19.50	18.48	18.41	18.42
16QAM	1	Low	19.50	18.12	18.35	18.55
		Middle		18.23	18.32	18.55
		High		18.29	18.28	18.47
	50%	Low	19.50	18.24	18.14	18.37
		Middle		18.50	18.32	18.41
		High		18.48	18.27	18.43
	100%	/	19.50	18.38	18.23	18.23
64QAM	1	Low	19.50	18.23	18.45	18.23
		Middle		18.32	17.50	18.28
		High		18.25	18.44	18.36
	50%	Low	19.50	18.39	18.54	18.14
		Middle		18.31	18.42	18.20
		High		18.38	18.17	18.30
	100%	/	19.50	18.10	18.16	18.11
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905
QPSK	1	Low	19.50	17.46	17.42	17.58
		Middle		18.60	18.66	18.65
		High		18.26	18.35	18.46
	50%	Low	19.50	18.54	18.26	18.34
		Middle		18.61	18.62	18.59
		High		18.51	18.34	18.30
	100%	/	19.50	18.54	18.57	18.51
16QAM	1	Low	19.50	18.30	18.40	18.46
		Middle		18.19	18.43	18.51
		High		18.27	18.34	18.45
	50%	Low	19.50	18.21	18.27	18.34
		Middle		18.43	18.35	18.38
		High		18.45	18.31	18.39
	100%	/	19.50	18.36	18.28	18.29

64QAM	1	Low	19.50	18.21	18.41	18.27
		Middle		18.30	17.43	18.33
		High		18.19	18.38	18.39
	50%	Low	19.50	18.34	18.44	18.16
		Middle		18.27	18.38	18.23
		High		18.29	18.12	18.34
	100%	/	19.50	18.21	18.30	18.22

LTE Band 26

Full power						
LTE B26			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				26697/814.7	26865/831.5	27033/848.3
QPSK	1	Low	23.50	22.30	22.45	22.35
		Middle		22.50	22.54	22.40
		High		22.41	22.24	22.36
	50%	Low	23.50	22.10	22.25	22.21
		Middle		22.17	22.26	22.22
		High		22.08	22.22	22.19
	100%	/	22.50	21.25	21.38	21.37
16QAM	1	Low	22.50	21.17	21.35	21.23
		Middle		21.26	21.15	21.30
		High		21.30	21.24	21.24
	50%	Low	22.50	21.21	21.14	21.21
		Middle		21.32	21.20	21.24
		High		21.36	21.31	21.18
	100%	/	21.50	20.29	20.30	20.19
64QAM	1	Low	21.50	20.22	20.28	20.16
		Middle		20.16	20.38	20.15
		High		20.11	20.09	20.13
	50%	Low	21.50	20.05	20.07	20.13
		Middle		19.94	19.97	20.14
		High		19.96	20.08	20.09
	100%	/	20.50	18.94	19.09	19.09
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				26705/815.5	26865/831.5	27025/847.5
QPSK	1	Low	23.50	22.22	22.35	22.33
		Middle		22.51	22.57	22.44
		High		22.52	22.29	22.21
	50%	Low	22.50	21.33	21.42	21.27

	100%	Middle	22.50	21.32	21.47	21.25
		High		21.16	21.33	21.35
		/		21.25	21.31	21.28
16QAM	1	Low	22.50	21.14	21.27	21.13
		Middle		21.16	21.11	21.29
		High		21.23	21.16	21.25
	50%	Low	21.50	20.28	20.35	20.30
		Middle		20.37	20.35	20.32
		High		20.44	20.54	20.35
	100%	/	21.50	20.43	20.38	20.28
64QAM	1	Low	21.50	20.22	20.30	19.99
		Middle		20.22	20.36	20.18
		High		20.20	20.22	20.13
	50%	Low	20.50	19.18	19.18	19.29
		Middle		19.10	19.11	19.23
		High		19.09	19.15	19.18
	100%	/	20.50	18.99	19.17	19.13
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				26715/816.5	26865/831.5	27015/846.5
QPSK	1	Low	23.50	22.33	22.34	22.26
		Middle		22.48	22.47	22.37
		High		22.32	22.15	22.23
	50%	Low	22.50	21.16	21.19	21.14
		Middle		21.39	21.19	21.25
		High		21.24	21.32	21.40
	100%	/	22.50	21.39	21.50	21.24
16QAM	1	Low	22.50	21.22	21.34	21.21
		Middle		21.35	21.00	21.26
		High		21.30	21.17	21.22
	50%	Low	21.50	20.37	20.37	20.26
		Middle		20.42	20.31	20.29
		High		20.37	20.28	20.28
	100%	/	21.50	20.16	20.22	20.24
64QAM	1	Low	21.50	20.14	20.26	20.18
		Middle		20.25	20.36	20.24
		High		20.19	20.24	20.19
	50%	Low	20.50	19.25	19.20	19.29
		Middle		19.16	19.12	19.26
		High		19.16	19.17	19.19
	100%	/	20.50	19.09	19.22	19.17
Modulation	RB	RB Offset	Tune up	10MHz		

				Channel/Frequency(MHz)		
				26740/819	26865/831.5	26990/844
QPSK	1	Low	23.50	22.30	22.38	22.28
		Middle		22.42	22.55	22.47
		High		22.35	22.27	22.33
	50%	Low	22.50	21.18	21.27	21.24
		Middle		21.29	21.44	21.29
		High		21.20	21.28	21.36
	100%	/	22.50	21.30	21.27	21.24
16QAM	1	Low	22.50	21.31	21.37	21.37
		Middle		21.33	21.13	21.36
		High		21.37	21.27	21.22
	50%	Low	21.50	20.34	20.26	20.28
		Middle		20.40	20.51	20.32
		High		20.42	20.49	20.32
	100%	/	21.50	20.23	20.42	20.27
64QAM	1	Low	21.50	20.09	20.24	20.16
		Middle		20.18	20.35	20.19
		High		20.20	20.23	20.20
	50%	Low	20.50	19.20	19.27	19.40
		Middle		19.17	19.05	19.35
		High		19.23	19.09	19.18
	100%	/	20.50	18.93	18.92	19.06
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				26765/821.5	26865/831.5	26965/841.5
QPSK	1	Low	23.50	22.37	22.42	22.31
		Middle		22.58	22.59	22.49
		High		22.47	22.31	22.42
	50%	Low	22.50	21.31	21.38	21.31
		Middle		21.37	21.43	21.35
		High		21.30	21.40	21.32
	100%	/	22.50	21.34	21.41	21.33
16QAM	1	Low	22.50	21.32	21.40	21.28
		Middle		21.29	21.22	21.32
		High		21.35	21.31	21.27
	50%	Low	21.50	20.31	20.37	20.32
		Middle		20.33	20.45	20.36
		High		20.42	20.47	20.38
	100%	/	21.50	20.31	20.41	20.34
64QAM	1	Low	21.50	20.17	20.23	20.21
		Middle		20.26	20.31	20.25

	50%	High	20.50	20.21	20.17	20.21
		Low		19.22	19.17	19.33
		Middle		19.13	19.08	19.29
		High		19.14	19.11	19.22
	100%	/	20.50	19.04	19.13	19.17

LTE Band 30

Full power						
LTE B30			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				27685/2307.5	27710/2310	27735/2312.5
QPSK	1	Low	23.50	22.84	22.83	22.81
		Middle		22.92	22.93	22.89
		High		22.78	22.77	22.39
	50%	Low	22.50	21.74	21.79	21.86
		Middle		21.85	21.83	21.82
		High		21.76	21.71	21.67
	100%	/	22.50	21.77	21.76	21.74
16QAM	1	Low	22.50	21.78	21.81	21.96
		Middle		21.89	21.90	22.02
		High		21.76	21.78	21.79
	50%	Low	22.50	20.72	20.79	20.93
		Middle		20.84	20.76	20.88
		High		20.79	20.66	20.74
	100%	/	22.50	20.78	20.80	20.75
64QAM	1	Low	22.50	21.83	22.15	22.35
		Middle		21.89	22.25	22.41
		High		21.77	22.11	22.27
	50%	Low	21.50	20.82	20.99	20.87
		Middle		20.89	20.98	20.86
		High		20.89	20.88	20.72
	100%	/	21.50	20.89	20.86	20.85
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	27710/2310	/
QPSK	1	Low	23.50	/	22.82	/
		Middle		/	22.87	/
		High		/	22.60	/
	50%	Low	22.50	/	21.81	/
		Middle		/	21.79	/
		High		/	21.63	/

	100%	/	22.50	/	21.76	/
16QAM	1	Low	22.50	/	21.90	/
		Middle		/	21.90	/
		High		/	21.74	/
	50%	Low	22.50	/	20.82	/
		Middle		/	20.87	/
		High		/	20.64	/
	100%	/	22.50	/	20.72	/
64QAM	1	Low	22.50	/	21.85	/
		Middle		/	21.89	/
		High		/	21.81	/
	50%	Low	21.50	/	20.91	/
		Middle		/	20.98	/
		High		/	20.81	/
	100%	/	21.50	/	20.81	/
Sensor on						
LTE B30			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				27685/2307.5	27710/2310	27735/2312.5
QPSK	1	Low	20.50	19.45	19.53	19.56
		Middle		19.58	19.56	19.62
		High		19.63	19.56	19.53
	50%	Low	20.50	19.59	19.54	19.52
		Middle		19.57	19.57	19.60
		High		19.48	19.49	19.46
	100%	/	20.50	19.59	19.61	19.63
16QAM	1	Low	20.50	19.53	19.60	19.51
		Middle		19.64	19.71	19.73
		High		19.68	19.72	19.65
	50%	Low	20.50	19.63	19.69	19.72
		Middle		19.55	19.58	19.60
		High		19.49	19.50	19.52
	100%	/	20.50	19.52	19.55	19.48
64QAM	1	Low	20.50	19.54	19.51	19.56
		Middle		19.49	19.48	19.52
		High		19.49	19.49	19.48
	50%	Low	20.50	19.59	19.61	19.62
		Middle		19.62	19.53	19.55
		High		19.62	19.60	19.56
	100%	/	20.50	19.59	19.37	19.53
Modulation	RB	RB Offset	Tune up	10MHz		

				Channel/Frequency(MHz)		
				/	27710/2310	/
QPSK	1	Low	20.50	/	19.60	/
		Middle		/	19.74	/
		High		/	19.67	/
	50%	Low	20.50	/	19.66	/
		Middle		/	19.64	/
		High		/	19.61	/
	100%	/	20.50	/	19.67	/
16QAM	1	Low	20.50	/	19.62	/
		Middle		/	19.67	/
		High		/	19.70	/
	50%	Low	20.50	/	19.66	/
		Middle		/	19.51	/
		High		/	19.56	/
	100%	/	20.50	/	19.62	/
64QAM	1	Low	20.50	/	19.58	/
		Middle		/	19.55	/
		High		/	19.52	/
	50%	Low	20.50	/	19.56	/
		Middle		/	19.58	/
		High		/	19.60	/
	100%	/	20.50	/	19.57	/

LTE Band 38

Full power						
LTE B38			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				37775/2572.5	38000/2595	38225/2617.5
QPSK	1	Low	23.50	21.92	22.02	21.99
		Middle		22.23	22.29	22.07
		High		22.18	21.99	21.89
	50%	Low	22.50	21.06	21.11	21.13
		Middle		21.19	21.19	21.09
		High		21.07	21.05	21.10
	100%	/	22.50	21.16	21.13	21.08
16QAM	1	Low	22.50	21.17	21.11	20.98
		Middle		21.19	21.32	21.22
		High		21.13	21.14	21.22
	50%	Low	21.50	20.05	20.20	20.21
		Middle		20.18	20.20	20.16

		High		20.05	20.28	20.11
	100%	/	21.50	20.25	20.18	20.11
64QAM	1	Low	21.50	20.17	20.26	20.05
		Middle		20.17	20.26	20.19
		High		20.27	20.34	20.30
	50%	Low	20.50	19.16	19.22	19.13
		Middle		19.20	19.26	19.27
		High		19.14	19.18	19.18
	100%	/	20.50	19.12	19.20	19.09
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				37800/2575	38000/2595	38200/2615
QPSK	1	Low	23.50	21.98	22.01	21.92
		Middle		22.27	22.31	22.12
		High		22.08	22.00	21.99
	50%	Low	22.50	20.99	21.03	21.08
		Middle		21.22	21.06	21.10
		High		21.10	21.01	21.20
	100%	/	22.50	21.20	21.24	21.04
16QAM	1	Low	22.50	21.15	21.03	21.06
		Middle		21.28	21.13	21.19
		High		21.10	21.04	21.16
	50%	Low	21.50	20.14	20.19	20.14
		Middle		20.23	20.13	20.10
		High		20.08	20.07	20.04
	100%	/	21.50	20.03	20.10	20.02
64QAM	1	Low	21.50	20.19	20.30	20.24
		Middle		20.20	20.31	20.22
		High		20.26	20.41	20.33
	50%	Low	20.50	19.19	19.27	19.13
		Middle		19.22	19.30	19.30
		High		19.22	19.23	19.22
	100%	/	20.50	19.20	19.25	19.13
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				37825/2577.5	38000/2595	38175/2612.5
QPSK	1	Low	23.50	22.00	22.05	21.94
		Middle		22.21	22.32	22.15
		High		22.11	22.05	21.97
	50%	Low	22.50	21.01	21.04	21.06
		Middle		21.19	21.24	21.09
		High		21.08	21.09	21.16

	100%	/	22.50	21.13	21.13	21.04
16QAM	1	Low	22.50	21.19	21.18	21.22
		Middle		21.21	21.31	21.29
		High		21.17	21.14	21.23
	50%	Low	21.50	20.11	20.08	20.23
		Middle		20.21	20.26	20.20
		High		20.06	20.16	20.15
	100%	/	21.50	20.15	20.18	20.17
64QAM	1	Low	21.50	20.19	20.23	20.27
		Middle		20.21	20.28	20.20
		High		20.32	20.40	20.34
	50%	Low	20.50	19.23	19.31	19.14
		Middle		19.25	19.27	19.29
		High		19.26	19.19	19.11
	100%	/	20.50	19.04	19.02	18.95
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				37850/2580	38000/2595	38150/2610
QPSK	1	Low	23.50	22.07	22.09	21.97
		Middle		22.35	22.36	22.17
		High		22.18	22.06	22.08
	50%	Low	22.50	21.09	21.12	21.15
		Middle		21.22	21.20	21.17
		High		21.16	21.14	21.12
	100%	/	22.50	21.15	21.20	21.13
16QAM	1	Low	22.50	21.08	21.14	21.13
		Middle		21.22	21.33	21.25
		High		21.15	21.16	21.21
	50%	Low	21.50	20.08	20.17	20.20
		Middle		20.14	20.25	20.17
		High		20.03	20.16	20.11
	100%	/	21.50	20.13	20.19	20.14
64QAM	1	Low	21.50	20.17	20.24	20.22
		Middle		20.19	20.26	20.21
		High		20.23	20.31	20.30
	50%	Low	20.50	19.15	19.18	19.09
		Middle		19.18	19.20	19.25
		High		19.14	19.11	19.17
	100%	/	20.50	19.12	19.13	19.08

LTE Band 40

Full power

LTE B40 2305 MHz-2315 MHz			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				38725/2307.5	38750/2310	38775/2312.5
QPSK	1	Low	23.50	22.79	22.71	22.73
		Middle		22.89	22.83	22.83
		High		22.75	22.68	22.69
	50%	Low	22.50	21.69	21.66	21.70
		Middle		21.80	21.76	21.75
		High		21.79	21.74	21.71
	100%	/	22.50	21.77	21.71	21.72
16QAM	1	Low	22.50	21.95	21.67	21.73
		Middle		22.08	21.81	21.84
		High		21.91	21.66	21.70
	50%	Low	22.50	20.75	20.69	20.64
		Middle		20.80	20.74	20.68
		High		20.82	20.70	20.66
	100%	/	22.50	20.70	20.72	20.76
64QAM	1	Low	22.50	21.81	22.10	22.30
		Middle		21.93	22.25	22.40
		High		21.81	22.10	22.26
	50%	Low	21.50	20.78	20.87	20.69
		Middle		20.85	20.93	20.76
		High		20.83	20.91	20.72
	100%	/	21.50	20.85	20.82	20.76
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	38750/2310	/
QPSK	1	Low	23.50	/	22.83	/
		Middle		/	22.88	/
		High		/	22.74	/
	50%	Low	22.50	/	21.70	/
		Middle		/	21.79	/
		High		/	21.75	/
	100%	/	22.50	/	21.75	/
16QAM	1	Low	22.50	/	21.89	/
		Middle		/	21.90	/
		High		/	21.80	/
	50%	Low	22.50	/	20.70	/
		Middle		/	20.78	/
		High		/	20.76	/
	100%	/	22.50	/	20.72	/

64QAM	1	Low	22.50	/	21.81	/
		Middle		/	21.82	/
		High		/	21.73	/
	50%	Low	21.50	/	20.83	/
		Middle		/	20.91	/
		High		/	20.90	/
	100%	/	21.50	/	20.82	/
Sensor on						
LTE B40 2305 MHz-2315 MHz			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				38725/2307.5	38750/2310	38775/2312.5
QPSK	1	Low	21.00	20.12	20.07	20.12
		Middle		20.22	20.18	20.15
		High		20.07	20.03	19.95
	50%	Low	21.00	19.99	20.02	20.09
		Middle		20.06	20.17	20.17
		High		20.20	20.23	20.22
	100%	/	21.00	20.00	20.07	20.11
16QAM	1	Low	21.00	20.09	20.25	20.01
		Middle		20.18	20.28	20.14
		High		20.15	20.22	20.11
	50%	Low	21.00	20.07	20.16	19.97
		Middle		20.19	20.29	20.08
		High		20.17	20.21	20.07
	100%	/	21.00	20.10	20.13	20.00
64QAM	1	Low	21.00	20.21	20.12	19.95
		Middle		20.15	20.06	20.12
		High		20.11	20.12	20.15
	50%	Low	21.00	20.09	20.10	20.16
		Middle		20.12	20.11	20.16
		High		20.11	20.07	20.14
	100%	/	21.00	20.05	19.87	20.01
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	38750/2310	/
QPSK	1	Low	21.00	/	20.23	/
		Middle		/	20.33	/
		High		/	20.22	/
	50%	Low	21.00	/	20.19	/
		Middle		/	20.26	/
		High		/	20.25	/

	100%	/	21.00	/	20.22	/
16QAM	1	Low	21.00	/	20.22	/
		Middle		/	20.30	/
		High		/	20.26	/
	50%	Low	21.00	/	20.19	/
		Middle		/	20.32	/
		High		/	20.30	/
	100%	/	21.00	/	20.23	/
64QAM	1	Low	21.00	/	20.20	/
		Middle		/	20.15	/
		High		/	20.19	/
	50%	Low	21.00	/	20.16	/
		Middle		/	20.18	/
		High		/	20.17	/
	100%	/	21.00	/	20.11	/

Full power						
LTE B40 2350 MHz-2360 MHz			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				39175/2352.5	39200/2355	39225/2357.5
QPSK	1	Low	23.50	22.77	22.79	22.80
		Middle		22.91	22.95	22.95
		High		22.75	22.77	22.83
	50%	Low	22.50	21.76	21.77	21.78
		Middle		21.82	21.82	21.83
		High		21.79	21.80	21.79
	100%	/	22.50	21.79	21.79	21.76
16QAM	1	Low	22.50	21.72	21.81	21.98
		Middle		21.90	21.94	22.13
		High		21.75	21.79	21.99
	50%	Low	22.50	20.79	20.73	20.85
		Middle		20.81	20.78	20.90
		High		20.78	20.73	20.84
	100%	/	22.50	20.77	20.83	20.75
64QAM	1	Low	22.50	21.59	21.95	22.13
		Middle		21.72	22.07	22.26
		High		21.61	21.97	22.11
	50%	Low	21.50	20.61	20.69	20.54
		Middle		20.65	20.75	20.57
		High		20.60	20.73	20.52
	100%	/	21.50	20.65	20.65	20.59

Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	39200/2355	/
QPSK	1	Low	23.50	/	22.68	/
		Middle		/	22.74	/
		High		/	22.62	/
	50%	Low	22.50	/	21.55	/
		Middle		/	21.58	/
		High		/	21.52	/
	100%	/	22.50	/	21.56	/
16QAM	1	Low	22.50	/	21.71	/
		Middle		/	21.73	/
		High		/	21.67	/
	50%	Low	22.50	/	20.56	/
		Middle		/	20.62	/
		High		/	20.58	/
	100%	/	22.50	/	20.55	/
64QAM	1	Low	22.50	/	21.58	/
		Middle		/	21.62	/
		High		/	21.58	/
	50%	Low	21.50	/	20.65	/
		Middle		/	20.73	/
		High		/	20.69	/
	100%	/	21.50	/	20.63	/
Sensor on						
LTE B40 2350 MHz-2360 MHz			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				39175/2352.5	39200/2355	39225/2357.5
QPSK	1	Low	21.00	20.11	20.19	20.22
		Middle		20.17	20.34	20.21
		High		20.16	20.09	20.06
	50%	Low	21.00	20.23	20.18	20.06
		Middle		20.22	20.22	20.25
		High		20.15	20.16	20.13
	100%	/	21.00	20.14	20.16	20.18
16QAM	1	Low	21.00	20.14	20.21	20.12
		Middle		20.16	20.23	20.37
		High		20.18	20.22	20.27
	50%	Low	21.00	20.10	20.16	20.31
		Middle		20.30	20.33	20.47
		High		20.24	20.25	20.39

	100%	/	21.00	20.24	20.14	20.19
64QAM	1	Low	21.00	20.14	20.11	20.16
		Middle		20.12	20.11	20.15
		High		20.19	20.19	20.18
	50%	Low	21.00	20.08	20.10	20.11
		Middle		20.11	20.11	20.13
		High		20.11	20.18	20.14
	100%	/	21.00	20.04	19.91	20.07
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				/	39200/2355	/
QPSK	1	Low	21.00	/	20.26	/
		Middle		/	20.36	/
		High		/	20.23	/
	50%	Low	21.00	/	20.23	/
		Middle		/	20.32	/
		High		/	20.31	/
	100%	/	21.00	/	20.25	/
16QAM	1	Low	21.00	/	20.23	/
		Middle		/	20.31	/
		High		/	20.32	/
	50%	Low	21.00	/	20.25	/
		Middle		/	20.38	/
		High		/	20.34	/
	100%	/	21.00	/	20.24	/
64QAM	1	Low	21.00	/	20.21	/
		Middle		/	20.21	/
		High		/	20.25	/
	50%	Low	21.00	/	20.17	/
		Middle		/	20.19	/
		High		/	20.21	/
	100%	/	21.00	/	20.14	/

LTE Band 41

Full power								
LTE B41			Maximum Conducted Power (dBm)					
Modulation	RB	RB Offset	Tune up	5MHz				
				Channel/Frequency(MHz)				
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5
QPSK	1	Low	23.50	22.14	22.15	22.13	22.01	22.29
		Middle		22.45	22.36	22.51	22.24	22.50
		High		22.45	22.15	22.04	22.22	22.17

	50%	Low	22.50	21.20	21.32	21.49	21.37	21.48
		Middle		21.49	21.43	21.61	21.42	21.57
		High		21.45	21.34	21.19	21.38	21.62
	100%	/	22.50	21.39	21.34	21.05	21.27	21.39
16QAM	1	Low	22.50	20.96	21.12	20.97	21.18	21.07
		Middle		21.06	21.20	21.14	21.23	21.23
		High		21.17	21.12	21.16	21.13	21.15
	50%	Low	21.50	20.08	20.22	20.06	20.19	20.16
		Middle		20.23	20.18	20.20	20.10	20.28
		High		20.20	20.33	20.22	20.29	20.34
	100%	/	21.50	20.28	20.18	20.19	20.15	20.20
64QAM	1	Low	21.50	20.14	20.21	20.11	20.40	20.28
		Middle		20.19	20.18	20.19	20.31	20.29
		High		20.28	20.24	20.27	20.26	20.15
	50%	Low	20.50	19.21	19.13	19.30	19.45	19.47
		Middle		19.32	19.33	19.25	19.38	19.28
		High		19.17	19.18	19.21	19.38	19.19
	100%	/	20.50	19.29	19.17	19.20	19.15	19.37
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685
QPSK	1	Low	23.50	22.25	22.14	22.06	22.00	22.22
		Middle		22.49	22.41	22.43	22.21	22.50
		High		22.35	22.19	22.01	22.21	22.22
	50%	Low	22.50	21.21	21.27	21.28	21.27	21.41
		Middle		21.57	21.33	21.46	21.27	21.56
		High		21.48	21.41	21.29	21.34	21.70
	100%	/	22.50	21.48	21.53	21.06	21.43	21.38
16QAM	1	Low	22.50	20.91	21.04	21.02	21.07	21.18
		Middle		21.04	21.01	21.11	20.98	21.23
		High		21.03	21.02	21.16	21.08	21.12
	50%	Low	21.50	20.09	20.16	20.05	20.21	20.12
		Middle		20.20	20.03	20.12	20.06	20.25
		High		20.18	19.99	20.13	20.06	20.30
	100%	/	21.50	20.14	20.02	20.18	20.13	20.13
64QAM	1	Low	21.50	20.19	20.25	20.25	20.42	20.44
		Middle		20.17	20.26	20.14	20.34	20.37
		High		20.22	20.34	20.22	20.31	20.23
	50%	Low	20.50	19.19	19.26	19.22	19.50	19.52
		Middle		19.34	19.45	19.20	19.39	19.39
		High		19.20	19.31	19.17	19.40	19.31
	100%	/	20.50	19.32	19.30	19.16	19.17	19.41

Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5
QPSK	1	Low	23.50	22.22	22.18	22.08	22.04	22.24
		Middle		22.43	22.42	22.54	22.22	22.53
		High		22.30	22.16	22.04	22.15	22.17
	50%	Low	22.50	21.18	21.20	21.34	21.17	21.33
		Middle		21.57	21.51	21.61	21.42	21.57
		High		21.54	21.41	21.28	21.34	21.63
	100%	/	22.50	21.49	21.34	21.09	21.24	21.35
16QAM	1	Low	22.50	21.11	21.19	21.29	21.25	21.31
		Middle		21.10	21.19	21.29	21.22	21.33
		High		21.18	21.09	21.20	21.21	21.14
	50%	Low	21.50	20.14	20.02	20.11	20.13	20.16
		Middle		20.26	20.19	20.19	20.22	20.30
		High		20.21	20.16	20.21	20.23	20.36
	100%	/	21.50	20.18	20.18	20.25	20.23	20.26
64QAM	1	Low	21.50	20.11	20.26	20.28	20.37	20.45
		Middle		20.10	20.23	20.23	20.33	20.38
		High		20.20	20.25	20.26	20.19	20.16
	50%	Low	20.50	19.15	19.22	19.26	19.43	19.45
		Middle		19.24	19.34	19.22	19.28	19.30
		High		19.24	19.27	19.09	19.28	19.12
	100%	/	20.50	19.16	19.07	18.98	18.86	19.15
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680
QPSK	1	Low	23.50	22.29	22.22	22.11	22.08	22.27
		Middle		22.52	22.46	22.56	22.26	22.55
		High		22.40	22.25	22.18	22.24	22.31
	50%	Low	22.50	21.26	21.36	21.43	21.33	21.45
		Middle		21.52	21.47	21.61	21.38	21.60
		High		21.54	21.46	21.21	21.39	21.59
	100%	/	22.50	21.43	21.41	21.15	21.31	21.44
16QAM	1	Low	22.50	21.09	21.15	21.17	21.18	21.22
		Middle		21.06	21.21	21.25	21.21	21.26
		High		21.16	21.14	21.26	21.23	21.17
	50%	Low	21.50	20.11	20.14	20.16	20.22	20.18
		Middle		20.19	20.18	20.24	20.21	20.32
		High		20.18	20.16	20.25	20.23	20.37
	100%	/	21.50	20.16	20.11	20.22	20.19	20.20
64QAM	1	Low	21.50	20.09	20.19	20.23	20.33	20.37

		Middle		20.16	20.21	20.16	20.26	20.31
		High		20.22	20.27	20.25	20.21	20.18
	50%	Low	20.50	19.18	19.20	19.24	19.41	19.46
		Middle		19.28	19.38	19.21	19.32	19.32
		High		19.15	19.22	19.18	19.31	19.24
	100%	/	20.50	19.27	19.21	19.17	19.08	19.34

LTE Band 66

Full power						
LTE B66			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				131979/1710.7	132322/1745	132665/1779.3
QPSK	1	Low	23.50	22.20	22.24	22.15
		Middle		22.37	22.40	22.32
		High		21.71	21.58	21.66
	50%	Low	23.50	22.21	22.07	22.17
		Middle		22.35	22.41	22.41
		High		22.27	22.13	22.18
	100%	/	22.50	21.41	21.42	21.38
16QAM	1	Low	22.50	21.30	21.46	21.27
		Middle		21.32	21.41	21.38
		High		21.25	21.42	21.35
	50%	Low	22.50	21.13	21.18	21.18
		Middle		21.26	21.14	21.23
		High		21.25	21.24	21.30
	100%	/	21.50	20.18	20.18	20.10
64QAM	1	Low	21.50	20.06	20.14	20.15
		Middle		20.12	20.27	20.15
		High		20.04	20.12	20.05
	50%	Low	21.50	19.92	20.01	19.98
		Middle		19.95	20.08	20.02
		High		19.93	20.06	20.02
	100%	/	20.50	19.08	19.06	19.00
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				131987/1711.5	132322/1745	132657/1778.5
QPSK	1	Low	23.50	22.22	22.12	22.05
		Middle		22.33	22.41	22.40
		High		21.68	21.61	21.71
	50%	Low	22.50	21.27	21.29	21.24
		Middle		21.41	21.56	21.49

	100%	High	22.50	21.45	21.09	21.24
		/		21.42	21.30	21.37
16QAM	1	Low	22.50	21.48	21.54	21.24
		Middle		21.47	21.47	21.34
		High		21.44	21.38	21.32
	50%	Low	21.50	20.31	20.26	20.24
		Middle		20.37	20.40	20.29
		High		20.39	20.52	20.33
	100%	/	21.50	20.27	20.40	20.23
64QAM	1	Low	21.50	20.15	20.22	20.21
		Middle		20.21	20.20	20.24
		High		20.12	20.21	20.18
	50%	Low	20.50	19.13	19.16	19.22
		Middle		19.23	19.27	19.22
		High		19.12	19.18	19.13
	100%	/	20.50	19.18	19.18	19.07
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				131997/1712.5	132322/1745	132647/1777.5
QPSK	1	Low	23.50	22.12	22.14	22.13
		Middle		22.38	22.49	22.42
		High		21.79	21.69	21.64
	50%	Low	22.50	21.34	21.27	21.33
		Middle		21.47	21.59	21.48
		High		21.35	21.17	21.31
	100%	/	22.50	21.35	21.25	21.29
16QAM	1	Low	22.50	21.33	21.38	21.17
		Middle		21.35	21.37	21.37
		High		21.31	21.34	21.36
	50%	Low	21.50	20.17	20.30	20.27
		Middle		20.34	20.29	20.28
		High		20.36	20.54	20.34
	100%	/	21.50	20.32	20.33	20.15
64QAM	1	Low	21.50	20.12	20.22	20.01
		Middle		20.27	20.25	20.21
		High		20.22	20.22	20.08
	50%	Low	20.50	19.14	19.09	19.17
		Middle		19.17	19.16	19.18
		High		19.06	19.07	19.06
	100%	/	20.50	19.13	19.05	18.99
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		

				132022/1715	132322/1745	132622/1775
QPSK	1	Low	23.50	22.23	22.13	22.06
		Middle		22.42	22.46	22.42
		High		21.69	21.65	21.63
	50%	Low	22.50	21.27	21.14	21.17
		Middle		21.44	21.41	21.38
		High		21.27	21.16	21.36
	100%	/	22.50	21.39	21.50	21.25
16QAM	1	Low	22.50	21.28	21.44	21.25
		Middle		21.41	21.32	21.37
		High		21.28	21.41	21.36
	50%	Low	21.50	20.32	20.38	20.26
		Middle		20.39	20.25	20.28
		High		20.39	20.25	20.33
	100%	/	21.50	20.18	20.14	20.11
64QAM	1	Low	21.50	20.14	20.12	20.20
		Middle		20.27	20.16	20.24
		High		20.18	20.21	20.08
	50%	Low	20.50	19.17	19.14	19.17
		Middle		19.22	19.20	19.21
		High		19.12	19.12	19.13
	100%	/	20.50	19.19	19.13	19.06
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				132047/1717.5	132322/1745	132597/1772.5
QPSK	1	Low	23.50	22.20	22.17	22.08
		Middle		22.30	22.47	22.45
		High		21.66	21.70	21.72
	50%	Low	22.50	21.23	21.15	21.26
		Middle		21.41	21.59	21.48
		High		21.33	21.10	21.32
	100%	/	22.50	21.46	21.25	21.25
16QAM	1	Low	22.50	21.46	21.45	21.41
		Middle		21.48	21.36	21.44
		High		21.41	21.42	21.40
	50%	Low	21.50	20.29	20.27	20.26
		Middle		20.34	20.38	20.29
		High		20.34	20.48	20.35
	100%	/	21.50	20.16	20.36	20.15
64QAM	1	Low	21.50	20.03	20.19	20.12
		Middle		20.17	20.27	20.22
		High		20.13	20.29	20.18

	50%	Low	20.50	19.16	19.21	19.24
		Middle		19.20	19.20	19.26
		High		19.16	19.11	19.08
	100%	/	20.50	19.03	18.93	18.94
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				132072/1720	132322/1745	132572/1770
QPSK	1	Low	23.50	22.27	22.21	22.11
		Middle		22.45	22.51	22.47
		High		21.74	21.71	21.78
	50%	Low	22.50	21.32	21.23	21.30
		Middle		21.45	21.55	21.51
		High		21.39	21.21	21.28
	100%	/	22.50	21.40	21.38	21.34
16QAM	1	Low	22.50	21.43	21.47	21.32
		Middle		21.41	21.44	21.40
		High		21.36	21.45	21.38
	50%	Low	21.50	20.23	20.31	20.29
		Middle		20.27	20.32	20.32
		High		20.31	20.40	20.37
	100%	/	21.50	20.20	20.29	20.18
64QAM	1	Low	21.50	20.07	20.12	20.13
		Middle		20.21	20.17	20.18
		High		20.13	20.20	20.09
	50%	Low	20.50	19.08	19.11	19.14
		Middle		19.13	19.16	19.17
		High		19.04	19.06	19.09
	100%	/	20.50	19.11	19.07	19.02
Sensor on						
LTE B66			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				131979/1710.7	132322/1745	132665/1779.3
QPSK	1	Low	18.50	17.70	17.75	17.53
		Middle		17.66	17.82	17.75
		High		17.53	17.48	17.43
	50%	Low	18.50	17.60	17.64	17.54
		Middle		17.74	17.88	17.74
		High		17.75	17.49	17.66
	100%	/	18.50	17.64	17.50	17.55
16QAM	1	Low	18.50	17.62	17.59	17.48
		Middle		17.72	17.58	17.49

	50%	High	18.50	17.59	17.48	17.49
		Low		17.62	17.47	17.50
		Middle		17.58	17.64	17.47
		High		17.61	17.59	17.58
	100%	/	18.50	17.63	17.66	17.66
64QAM	1	Low	18.50	17.62	17.61	17.58
		Middle		17.72	17.71	17.57
		High		17.56	17.62	17.63
	5	Low	18.50	17.61	17.61	17.60
		Middle		17.62	17.44	17.57
		High		17.71	17.48	17.42
	100%	/	18.50	17.44	17.49	17.39
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				131987/1711.5	132322/1745	132657/1778.5
QPSK	1	Low	18.50	17.77	17.79	17.56
		Middle		17.75	17.86	17.77
		High		17.47	17.41	17.41
	50%	Low	18.50	17.63	17.72	17.58
		Middle		17.72	17.84	17.77
		High		17.78	17.54	17.62
	100%	/	18.50	17.61	17.57	17.64
16QAM	1	Low	18.50	17.69	17.63	17.47
		Middle		17.68	17.60	17.45
		High		17.71	17.45	17.47
	50%	Low	18.50	17.61	17.46	17.45
		Middle		17.67	17.58	17.42
		High		17.61	17.54	17.52
	100%	/	18.50	17.61	17.62	17.63
64QAM	1	Low	18.50	17.67	17.64	17.53
		Middle		17.70	17.64	17.53
		High		17.63	17.59	17.59
	50%	Low	18.50	17.56	17.51	17.55
		Middle		17.62	17.57	17.53
		High		17.66	17.59	17.48
	100%	/	18.50	17.55	17.63	17.52
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				131997/1712.5	132322/1745	132647/1777.5
QPSK	1	Low	18.50	17.67	17.81	17.64
		Middle		17.72	17.83	17.68
		High		17.58	17.44	17.31

	50%	Low	18.50	17.70	17.65	17.64
		Middle		17.73	17.79	17.70
		High		17.76	17.62	17.71
	100%	/	18.50	17.62	17.64	17.64
16QAM	1	Low	18.50	17.57	17.51	17.40
		Middle		17.59	17.54	17.48
		High		17.71	17.45	17.51
	50%	Low	18.50	17.53	17.54	17.48
		Middle		17.66	17.45	17.41
		High		17.58	17.57	17.53
	100%	/	18.50	17.69	17.58	17.55
64QAM	1	Low	18.50	17.64	17.64	17.33
		Middle		17.67	17.65	17.50
		High		17.64	17.59	17.53
	50%	Low	18.50	17.54	17.49	17.54
		Middle		17.57	17.54	17.47
		High		17.63	17.56	17.42
	100%	/	18.50	17.53	17.61	17.45
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				132022/1715	132322/1745	132622/1775
QPSK	1	Low	18.50	17.78	17.80	17.57
		Middle		17.84	17.88	17.76
		High		17.48	17.42	17.36
	50%	Low	18.50	17.63	17.54	17.54
		Middle		17.81	17.63	17.66
		High		17.66	17.50	17.68
	100%	/	18.50	17.64	17.72	17.52
16QAM	1	Low	18.50	17.47	17.40	17.40
		Middle		17.68	17.40	17.45
		High		17.68	17.43	17.48
	50%	Low	18.50	17.62	17.56	17.44
		Middle		17.71	17.41	17.38
		High		17.63	17.36	17.49
	100%	/	18.50	17.54	17.45	17.51
64QAM	1	Low	18.50	17.68	17.63	17.52
		Middle		17.70	17.65	17.53
		High		17.63	17.61	17.56
	50%	Low	18.50	17.57	17.54	17.56
		Middle		17.59	17.58	17.52
		High		17.64	17.61	17.48
	100%	/	18.50	17.54	17.66	17.51

Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				132047/1717.5	132322/1745	132597/1772.5
QPSK	1	Low	18.50	17.75	17.84	17.59
		Middle		17.78	17.89	17.79
		High		17.51	17.47	17.39
	50%	Low	18.50	17.65	17.55	17.57
		Middle		17.78	17.81	17.70
		High		17.67	17.55	17.64
	100%	/	18.50	17.60	17.58	17.52
16QAM	1	Low	18.50	17.62	17.60	17.64
		Middle		17.64	17.55	17.55
		High		17.73	17.53	17.55
	50%	Low	18.50	17.57	17.45	17.55
		Middle		17.67	17.54	17.50
		High		17.61	17.48	17.62
	100%	/	18.50	17.61	17.56	17.63
64QAM	1	Low	18.50	17.63	17.59	17.52
		Middle		17.68	17.67	17.53
		High		17.66	17.60	17.57
	50%	Low	18.50	17.58	17.58	17.55
		Middle		17.59	17.55	17.49
		High		17.70	17.57	17.35
	100%	/	18.50	17.40	17.43	17.31
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				132072/1720	132322/1745	132572/1770
QPSK	1	Low	18.50	17.82	17.88	17.62
		Middle		17.87	17.93	17.81
		High		17.61	17.56	17.53
	50%	Low	18.50	17.76	17.71	17.69
		Middle		17.84	17.85	17.81
		High		17.80	17.68	17.68
	100%	/	18.50	17.67	17.73	17.69
16QAM	1	Low	18.50	17.52	17.56	17.55
		Middle		17.62	17.57	17.51
		High		17.73	17.52	17.53
	50%	Low	18.50	17.56	17.51	17.52
		Middle		17.62	17.50	17.47
		High		17.58	17.45	17.58
	100%	/	18.50	17.59	17.54	17.60
64QAM	1	Low	18.50	17.61	17.57	17.47

		Middle		17.66	17.60	17.49
		High		17.60	17.54	17.53
	50%	Low	18.50	17.53	17.48	17.50
		Middle		17.55	17.51	17.45
		High		17.61	17.52	17.41
	100%	/	18.50	17.51	17.57	17.44

LTE Band 71

Full power						
LTE B71			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				133147/665.5	133297/680.5	133447/695.5
QPSK	1	Low	23.50	21.83	21.94	21.97
		Middle		22.09	22.22	22.09
		High		22.10	22.05	21.86
	50%	Low	22.50	21.10	21.14	21.12
		Middle		21.16	21.09	21.04
		High		21.10	21.21	21.24
	100%	/	22.50	21.10	21.17	21.15
16QAM	1	Low	22.50	21.26	21.32	21.16
		Middle		21.28	21.48	21.46
		High		21.41	21.37	21.35
	50%	Low	21.50	20.25	20.18	20.17
		Middle		20.42	20.16	20.21
		High		20.27	20.32	20.26
	100%	/	21.50	20.34	20.19	20.13
64QAM	1	Low	21.50	20.28	20.31	20.05
		Middle		20.39	20.41	20.35
		High		20.35	20.34	20.29
	50%	Low	20.50	19.31	19.28	19.24
		Middle		19.37	19.25	19.38
		High		19.37	19.47	19.33
	100%	/	20.50	19.30	19.37	19.30
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				133172/668	133297/680.5	133422/693
QPSK	1	Low	23.50	21.94	21.93	21.90
		Middle		22.19	22.19	22.09
		High		22.06	22.07	21.97
	50%	Low	22.50	21.07	21.07	21.08
		Middle		21.23	20.91	21.06

		High		21.14	21.09	21.29
	100%	/	22.50	21.20	21.25	21.11
16QAM	1	Low	22.50	21.24	21.21	21.24
		Middle		21.39	21.28	21.43
		High		21.40	21.37	21.32
	50%	Low	21.50	20.40	20.28	20.11
		Middle		20.53	20.20	20.18
		High		20.36	20.17	20.22
	100%	/	21.50	20.17	20.12	20.09
64QAM	1	Low	21.50	20.22	20.22	20.16
		Middle		20.34	20.39	20.44
		High		20.28	20.36	20.38
	50%	Low	20.50	19.28	19.33	19.30
		Middle		19.39	19.29	19.41
		High		19.40	19.52	19.37
	100%	/	20.50	19.33	19.42	19.34
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				133197/670.5	133297/680.5	133397/690.5
QPSK	1	Low	23.50	21.91	21.97	21.92
		Middle		22.13	22.20	22.12
		High		22.09	22.06	22.00
	50%	Low	22.50	21.11	21.02	21.11
		Middle		21.22	21.09	21.10
		High		21.19	21.12	21.25
	100%	/	22.50	21.20	21.15	21.11
16QAM	1	Low	22.50	21.35	21.37	21.40
		Middle		21.37	21.47	21.53
		High		21.41	21.45	21.39
	50%	Low	21.50	20.31	20.15	20.26
		Middle		20.43	20.33	20.28
		High		20.26	20.31	20.33
	100%	/	21.50	20.22	20.25	20.19
64QAM	1	Low	21.50	20.21	20.26	20.14
		Middle		20.36	20.41	20.36
		High		20.33	20.33	20.31
	50%	Low	20.50	19.31	19.35	19.23
		Middle		19.37	19.20	19.40
		High		19.44	19.42	19.26
	100%	/	20.50	19.17	19.13	19.16
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		

				133222/673	133322/683	133372/688
QPSK	1	Low	23.50	21.98	22.01	21.95
		Middle		22.22	22.24	22.14
		High		22.11	22.13	22.06
	50%	Low	22.50	21.14	21.16	21.15
		Middle		21.20	21.11	21.13
		High		21.22	21.25	21.21
	100%	/	22.50	21.17	21.24	21.20
16QAM	1	Low	22.50	21.21	21.35	21.31
		Middle		21.33	21.51	21.49
		High		21.45	21.44	21.37
	50%	Low	21.50	20.34	20.21	20.25
		Middle		20.44	20.27	20.33
		High		20.31	20.26	20.37
	100%	/	21.50	20.28	20.21	20.24
64QAM	1	Low	21.50	20.21	20.22	20.17
		Middle		20.34	20.40	20.38
		High		20.27	20.33	20.31
	50%	Low	20.50	19.26	19.31	19.22
		Middle		19.31	19.20	19.32
		High		19.33	19.41	19.28
	100%	/	20.50	19.26	19.31	19.25

10.5 Wi-Fi and BT Measurement result

WIFI2.4G Tune up

Mode	BW	Channel/Frequency(MHz)	Tune up(dBm)
802.11b	20M	1/2412	18.00
		6/2437	18.00
		11/2462	18.00
802.11g	20M	1/2412	16.50
		6/2437	16.50
		11/2462	16.50
802.11n	20M	1/2412	16.50
		6/2437	16.50
		11/2462	16.50
	40M	3/2422	16.50
		6/2437	16.50
		9/2452	16.50

WIFI5G Tune up

Wi-Fi 5G	Mode	BW	Channel/Frequency(MHz)	Tune up
U-NII-1	802.11a	20M	36/5180	16.00
			40/5200	16.00
			48/5240	16.00
	802.11n	20M	36/5180	15.50
			40/5200	15.50
			48/5240	15.50
		40M	38/5190	15.50
			46/5230	15.50
	802.11ac	20M	36/5180	15.50
			40/5200	15.50
			48/5240	15.50
		40M	38/5190	14.00
			46/5230	14.00
		80M	42/5210	14.00
U-NII-2A	802.11a	20M	52/5260	16.00
			56/5280	16.00
			64/5320	14.00
	802.11n	20M	52/5260	15.50
			56/5280	15.50
			64/5320	14.00
		40M	54/5270	15.00
			62/5310	15.00
	802.11ac	20M	52/5260	14.50
			56/5280	14.50
			64/5320	13.00
		40M	54/5270	13.50
			62/5310	13.50
		80M	58/5290	13.50
U-NII-2C	802.11a	20M	100/5500	15.00
			116/5580	15.50
			140/5700	15.00

	802.11n	20M	100/5500	15.00
			116/5580	15.00
			140/5700	15.00
		40M	102/5510	13.50
			110/5550	15.50
			134/5670	15.00
	802.11ac	20M	100/5500	14.50
			116/5580	14.50
			140/5700	14.50
		40M	102/5510	12.50
			110/5550	14.00
			134/5670	13.00
		80M	106/5530	12.00
			122/5610	13.00
U-NII-3	802.11a	20M	149/5745	15.50
			157/5785	15.50
			165/5825	15.50
	802.11n	20M	149/5745	15.50
			157/5785	15.50
			165/5825	14.50
		40M	151/5755	15.00
			159/5795	15.00
	802.11ac	20M	149/5745	14.50
			157/5785	14.50
			165/5825	13.50
		40M	151/5755	13.50
			159/5795	13.50
		80M	155/5775	13.50

The maximum output power for WiFi 2.4G

Wi-Fi 2.4G			Maximum Conducted Power (dBm)	
Mode	BW	Channel/Frequency(MHz)	Tune up(dBm)	Output Power(dBm)
802.11b	20M	1/2412	18.00	17.17

		6/2437	18.00	16.85
		11/2462	18.00	16.53
802.11g	20M	1/2412	16.50	15.34
		6/2437	16.50	15.31
		11/2462	16.50	15.50
802.11n	20M	1/2412	16.50	15.39
		6/2437	16.50	15.85
		11/2462	16.50	15.39
	40M	3/2422	16.50	15.92
		6/2437	16.50	15.28
		9/2452	16.50	14.86

The maximum output power for WiFi 5G

Wi-Fi 5G				Maximum Conducted Power (dBm)	
	Mode	BW	Channel/Frequency(MHz)	Tune up	Output Power
U-NII-1	802.11a	20M	36/5180	16.00	15.38
			40/5200	16.00	15.05
			48/5240	16.00	15.02
	802.11n	20M	36/5180	15.50	14.80
			40/5200	15.50	14.62
			48/5240	15.50	15.03
		40M	38/5190	15.50	14.35
			46/5230	15.50	14.29
	802.11ac	20M	36/5180	15.50	13.63
			40/5200	15.50	14.51
			48/5240	15.50	13.52
		40M	38/5190	14.00	12.67
			46/5230	14.00	12.98
		80M	42/5210	14.00	12.51
U-NII-2A	802.11a	20M	52/5260	16.00	14.76
			56/5280	16.00	14.85
			64/5320	14.00	13.21
	802.11n	20M	52/5260	15.50	14.36

		40M	56/5280	15.50	14.48
			64/5320	14.00	12.90
			54/5270	15.00	14.20
			62/5310	15.00	13.32
	802.11ac	20M	52/5260	14.50	13.35
			56/5280	14.50	13.47
			64/5320	13.00	11.84
		40M	54/5270	13.50	12.86
			62/5310	13.50	12.08
		80M	58/5290	13.50	12.41
U-NII-2C	802.11a	20M	100/5500	15.00	14.24
			116/5580	15.50	14.74
			140/5700	15.00	14.06
	802.11n	20M	100/5500	15.00	14.30
			116/5580	15.00	14.66
			140/5700	15.00	13.98
		40M	102/5510	13.50	12.42
			110/5550	15.50	14.93
			134/5670	15.00	13.83
	802.11ac	20M	100/5500	14.50	13.28
			116/5580	14.50	13.71
			140/5700	14.50	13.25
		40M	102/5510	12.50	11.52
			110/5550	14.00	13.01
			134/5670	13.00	12.09
		80M	106/5530	12.00	10.71
			122/5610	13.00	12.28
U-NII-3	802.11a	20M	149/5745	15.50	14.65
			157/5785	15.50	14.99
			165/5825	15.50	13.80
	802.11n	20M	149/5745	15.50	14.49
			157/5785	15.50	14.84
			165/5825	14.50	13.67

		40M	151/5755	15.00	14.26
			159/5795	15.00	14.58
	802.11ac	20M	149/5745	14.50	13.30
			157/5785	14.50	13.66
			165/5825	13.50	12.65
		40M	151/5755	13.50	12.07
			159/5795	13.50	12.56
		80M	155/5775	13.50	12.30

The maximum output power for BT

BT	Maximum Conducted Power (dBm)					
Channel/Frequency(MHz)	0/2402		39/2441		78/2480	
Mode	Tune up	Output Power	Tune up	Output Power	Tune up	Output Power
DH5	10.00	8.75	11.00	10.03	10.00	9.21
2DH5	10.00	8.01	10.00	9.22	10.00	8.81
3DH5	10.00	8.03	10.00	9.17	10.00	8.79
Mode	Channel/Frequency(MHz)		Tune up		Output Power	
BLE 1M	0/2402		-1.00		-2.66	
	19/2440		-1.00		-1.86	
	39/2480		-2.00		-3.64	
	0/2402		-1.00		-2.81	

10.6 NFC and RFID Measurement result

The maximum output power for NFC

Frequency(MHz)	dB μ V/m @3m	EIRP(dBm)	Tune up(dBm)
13.56	67.372	-27.856	-26.50
Note: EIRP(dBm)=Radiated field strength(dB μ V/m)+20Log(3)-104.77.			

The maximum output power for RFID

RFID	Maximum Conducted Power (dBm)	
Channel/Frequency(MHz)	Tune up(dBm)	Output Power(dBm)
1/902.75	30.00	29.98
25/914.75	30.00	29.86
50/927.25	30.00	29.71

11 SAR Test Result

Note:

KDB 447498 D01 General RF Exposure Guidance:

For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor

For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz

≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

KDB 648474 D04 Handset SAR:

With headset attached, when the reported SAR for body-worn accessory, measured without a headset connected to the handset, is > 1.2 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.

KDB 941225 D01 SAR test for 3G devices:

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.

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.

When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.

Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.

Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.

Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the

group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

KDB 248227 D01 SAR meas for 802.11:

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for the initial test position is:

≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
> 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions are tested.

- For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.

- When it is unclear, all equivalent conditions must be tested.

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

- The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.

When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with

the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

Table 15.1: Duty Cycle

Mode	Duty Cycle
Speech for GSM	1:8.3
GPRS&EGPRS 1 Slot	1:8.3
GPRS&EGPRS 2 Slot	1:4
GPRS&EGPRS 3 Slot	1:2.67
GPRS&EGPRS 4 Slot	1:2
WCDMA<E FDD	1:1
TDD PC3	1:1.58
TDD PC2	1:2.31

11.1 SAR results for 2G/3G/4G

GSM850

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
								Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR										
Left Touch	Full power	GSM	190	836.6	32.87	33.50	0.07	0.152	1.16	0.176
Left Tilt 15°	Full power	GSM	190	836.6	32.87	33.50	0.08	0.100	1.16	0.115
Right Touch	Full power	GSM	190	836.6	32.87	33.50	0.10	0.195	1.16	0.225
Right Tilt 15°	Full power	GSM	190	836.6	32.87	33.50	0.00	0.102	1.16	0.118
Right Touch	Full power	GSM	128	824.2	32.75	33.50	0.00	0.166	1.19	0.197
Right Touch	Full power	GSM	251	848.8	32.84	33.50	0.08	0.260	1.16	0.303
Body SAR (Body-worn 10mm)										
Front Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.01	0.140	1.22	0.171
Back Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.05	0.382	1.22	0.468
Back Side	Full power	GPRS 4TS	128	824.2	26.91	28.00	0.03	0.359	1.29	0.461
Back Side	Full power	GPRS 4TS	251	848.8	27.15	28.00	-0.06	0.568	1.22	0.691
Body SAR (Hotspot 10mm)										
Front Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.01	0.140	1.22	0.171
Back Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.05	0.382	1.22	0.468
Left Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	0.02	0.104	1.22	0.127
Right Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.10	0.222	1.22	0.272
Bottom Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.02	0.275	1.22	0.337
Back Side	Full power	GPRS 4TS	128	824.2	26.91	28.00	0.03	0.359	1.29	0.461
Back Side	Full power	GPRS 4TS	251	848.8	27.15	28.00	-0.06	0.568	1.22	0.691
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
								Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)										
Front Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.04	0.352	1.22	0.431
Back Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.02	0.675	1.22	0.827
Left Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	0.02	0.290	1.22	0.355
Right Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	0.03	0.212	1.22	0.260
Bottom Side	Full power	GPRS 4TS	190	836.6	27.12	28.00	-0.02	0.716	1.22	0.877
Bottom Side	Full power	GPRS 4TS	128	824.2	26.91	28.00	0.02	0.655	1.29	0.842
Bottom Side	Full power	GPRS 4TS	251	848.8	27.15	28.00	0.07	0.837	1.22	1.018

PCS1900

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
								Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR										
Left Touch	Full power	GSM	661	1880	29.68	30.50	-0.02	0.019	1.21	0.023
Left Tilt 15°	Full power	GSM	661	1880	29.68	30.50	-0.15	0.014	1.21	0.017
Right Touch	Full power	GSM	661	1880	29.68	30.50	0.04	0.012	1.21	0.014
Right Tilt 15°	Full power	GSM	661	1880	29.68	30.50	-0.15	0.009	1.21	0.011
Left Touch	Full power	GSM	512	1850.2	29.89	30.50	0.10	0.024	1.15	0.028
Left Touch	Full power	GSM	810	1909.8	29.57	30.50	0.05	0.019	1.24	0.023
Body SAR (Body-worn 10mm)										
Front Side	Full power	GPRS 4TS	661	1880	24.21	25.00	-0.10	0.100	1.20	0.119
Back Side	Sensor on	GPRS 2TS	661	1880	26.15	27.00	0.00	0.442	1.22	0.538
Back Side	Sensor on	GPRS 2TS	512	1850.2	26.24	27.00	0.03	0.524	1.19	0.624
Back Side	Sensor on	GPRS 2TS	810	1909.8	26.11	27.00	0.01	0.327	1.23	0.401
Body SAR (Hotspot 10mm)										
Front Side	Full power	GPRS 4TS	661	1880	24.21	25.00	-0.10	0.100	1.20	0.119
Back Side	Sensor on	GPRS 2TS	661	1880	26.15	27.00	0.00	0.442	1.22	0.538
Left Side	Full power	GPRS 4TS	661	1880	24.21	25.00	0.01	0.187	1.20	0.224
Right Side	Full power	GPRS 4TS	661	1880	24.21	25.00	0.05	0.010	1.20	0.012
Bottom Side	Sensor on	GPRS 2TS	661	1880	26.15	27.00	0.02	0.138	1.22	0.168
Back Side	Sensor on	GPRS 2TS	512	1850.2	26.24	27.00	0.03	0.524	1.19	0.624
Back Side	Sensor on	GPRS 2TS	810	1909.8	26.11	27.00	0.01	0.327	1.23	0.401
Body SAR Define (Back Side:29mm,Bottom Side:19mm)										
Back Side	Full power	GPRS 4TS	661	1880	24.21	25.00	0.00	0.218	1.20	0.261
Bottom Side	Full power	GPRS 4TS	661	1880	24.21	25.00	0.03	0.142	1.20	0.170
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
								Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)										
Front Side	Full power	GPRS 4TS	661	1880	24.21	25.00	-0.02	0.168	1.20	0.202
Back Side	Sensor on	GPRS 2TS	661	1880	26.15	27.00	0.00	0.255	1.22	0.310
Left Side	Full power	GPRS 4TS	661	1880	24.21	25.00	0.02	0.558	1.20	0.669
Right Side	Full power	GPRS 4TS	661	1880	24.21	25.00	-0.03	0.015	1.20	0.018
Bottom Side	Sensor on	GPRS 2TS	661	1880	26.15	27.00	0.03	0.262	1.22	0.319
Left Side	Full power	GPRS 4TS	512	1850.2	24.29	25.00	-0.17	0.635	1.18	0.748
Left Side	Full power	GPRS 4TS	810	1909.8	24.19	25.00	0.17	0.560	1.21	0.675

WCDMA Band II

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
								Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR										
Left Touch	Full power	RMC12.2k	9400	1880	23.71	24.50	0.05	0.174	1.20	0.209
Left Tilt 15°	Full power	RMC12.2k	9400	1880	23.71	24.50	-0.03	0.094	1.20	0.113
Right Touch	Full power	RMC12.2k	9400	1880	23.71	24.50	0.00	0.069	1.20	0.083
Right Tilt 15°	Full power	RMC12.2k	9400	1880	23.71	24.50	-0.07	0.048	1.20	0.057
Left Touch	Full power	RMC12.2k	9262	1852.4	23.92	24.50	0.00	0.185	1.14	0.211
Left Touch	Full power	RMC12.2k	9538	1907.6	23.79	24.50	0.11	0.201	1.18	0.237
Body SAR (Body-worn 10mm)										
Front Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.00	0.138	1.20	0.166
Back Side	Sensor on	RMC12.2k	9400	1880	19.72	20.50	-0.10	0.573	1.20	0.686
Back Side	Sensor on	RMC12.2k	9262	1852.4	19.92	20.50	0.19	0.607	1.14	0.694
Back Side	Sensor on	RMC12.2k	9538	1907.6	19.83	20.50	-0.07	0.578	1.17	0.674
Body SAR (Hotspot 10mm)										
Front Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.00	0.138	1.20	0.166
Back Side	Sensor on	RMC12.2k	9400	1880	19.72	20.50	-0.10	0.573	1.20	0.686
Left Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.19	0.326	1.20	0.391
Right Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.02	0.028	1.20	0.034
Bottom Side	Sensor on	RMC12.2k	9400	1880	19.72	20.50	0.09	0.245	1.20	0.293
Back Side	Sensor on	RMC12.2k	9262	1852.4	19.92	20.50	0.19	0.607	1.14	0.694
Back Side	Sensor on	RMC12.3k	9538	1907.6	19.83	20.50	-0.07	0.578	1.17	0.674
Body SAR Define (Back Side:29mm,Bottom Side:19mm)										
Back Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.07	0.390	1.20	0.468
Bottom Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.03	0.332	1.20	0.398
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
								Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)										
Front Side	Full power	RMC12.2k	9400	1880	23.71	24.50	-0.01	0.280	1.20	0.336
Back Side	Sensor on	RMC12.2k	9400	1880	19.72	20.50	0.01	0.774	1.20	0.926
Left Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.03	1.080	1.20	1.295
Right Side	Full power	RMC12.2k	9400	1880	23.71	24.50	0.03	0.055	1.20	0.066
Bottom Side	Sensor on	RMC12.2k	9400	1880	19.72	20.50	0.06	0.649	1.20	0.777
Left Side	Full power	RMC12.2k	9262	1852.4	23.92	24.50	0.06	1.060	1.14	1.211
Left Side	Full power	RMC12.3k	9538	1907.6	23.79	24.50	0.05	1.180	1.18	1.390

WCDMA Band IV

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
								Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR										
Left Touch	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.05	0.123	1.13	0.139
Left Tilt 15°	Full power	RMC12.2k	1413	1732.6	23.98	24.50	0.02	0.058	1.13	0.065
Right Touch	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.10	0.048	1.13	0.054
Right Tilt 15°	Full power	RMC12.2k	1413	1732.6	23.98	24.50	0.02	0.037	1.13	0.042
Left Touch	Full power	RMC12.2k	1312	1712.4	23.39	24.50	0.03	0.090	1.29	0.116
Left Touch	Full power	RMC12.2k	1513	1752.6	23.58	24.50	0.11	0.177	1.24	0.219
Body SAR (Body-worn 10mm)										
Front Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.08	0.122	1.13	0.138
Back Side	Sensor on	RMC12.2k	1413	1732.6	17.01	17.50	0.07	0.558	1.12	0.625
Back Side	Sensor on	RMC12.2k	1312	1712.4	16.43	17.50	-0.08	0.463	1.28	0.592
Back Side	Sensor on	RMC12.2k	1513	1752.6	16.57	17.50	0.15	0.641	1.24	0.794
Body SAR (Hotspot 10mm)										
Front Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.08	0.122	1.13	0.138
Back Side	Sensor on	RMC12.2k	1413	1732.6	17.01	17.50	0.07	0.558	1.12	0.625
Left Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	0.10	0.251	1.13	0.283
Right Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	0.02	0.039	1.13	0.044
Bottom Side	Sensor on	RMC12.2k	1413	1732.6	17.01	17.50	0.02	0.260	1.12	0.291
Back Side	Sensor on	RMC12.2k	1312	1712.4	16.43	17.50	-0.08	0.463	1.28	0.592
Back Side	Sensor on	RMC12.3k	1513	1752.6	16.57	17.50	0.15	0.641	1.24	0.794
Body SAR Define (Back Side:29mm,Bottom Side:19mm)										
Back Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.03	0.521	1.13	0.587
Bottom Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	0.04	0.427	1.13	0.481
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
								Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)										
Front Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.11	0.236	1.13	0.266
Back Side	Sensor on	RMC12.2k	1413	1732.6	17.01	17.50	-0.02	0.529	1.12	0.592
Left Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	0.07	0.809	1.13	0.912
Right Side	Full power	RMC12.2k	1413	1732.6	23.98	24.50	-0.14	0.044	1.13	0.050
Bottom Side	Sensor on	RMC12.2k	1413	1732.6	17.01	17.50	0.10	0.586	1.12	0.656
Left Side	Full power	RMC12.2k	1312	1712.4	23.39	24.50	0.05	0.665	1.29	0.859
Left Side	Full power	RMC12.3k	1513	1752.6	23.58	24.50	0.05	0.993	1.24	1.227

WCDMA Band V

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
								Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR										
Left Touch	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.02	0.184	1.21	0.222
Left Tilt 15°	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.10	0.115	1.21	0.139
Right Touch	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.19	0.268	1.21	0.323
Right Tilt 15°	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.00	0.125	1.21	0.151
Right Touch	Full power	RMC12.2k	4132	826.4	23.71	24.50	-0.11	0.236	1.20	0.283
Right Touch	Full power	RMC12.2k	4233	846.6	23.73	24.50	0.00	0.221	1.19	0.264
Body SAR (Body-worn 10mm)										
Front Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.00	0.187	1.21	0.225
Back Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.16	0.305	1.21	0.368
Back Side	Full power	RMC12.2k	4132	826.4	23.71	24.50	-0.16	0.458	1.20	0.549
Back Side	Full power	RMC12.2k	4233	846.6	23.73	24.50	-0.01	0.300	1.19	0.358
Body SAR (Hotspot 10mm)										
Front Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.00	0.187	1.21	0.225
Back Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.16	0.305	1.21	0.368
Left Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.19	0.162	1.21	0.195
Right Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.01	0.252	1.21	0.304
Bottom Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.01	0.301	1.21	0.363
Back Side	Full power	RMC12.2k	4132	826.4	23.71	24.50	-0.16	0.458	1.20	0.549
Back Side	Full power	RMC12.3k	4233	846.6	23.73	24.50	-0.01	0.300	1.19	0.358
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
								Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)										
Front Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.06	0.442	1.21	0.533
Back Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	-0.10	0.422	1.21	0.509
Left Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.02	0.302	1.21	0.364
Right Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.00	0.220	1.21	0.265
Bottom Side	Full power	RMC12.2k	4183	836.6	23.69	24.50	0.03	0.705	1.21	0.850
Bottom Side	Full power	RMC12.2k	4132	826.4	23.71	24.50	0.01	0.764	1.20	0.916
Bottom Side	Full power	RMC12.3k	4233	846.6	23.73	24.50	-0.06	0.759	1.19	0.906

LTE Band 7

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.11	0.218	1.26	0.275
Left Tilt 15°	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.00	0.119	1.26	0.150
Right Touch	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	-0.03	0.137	1.26	0.173
Right Tilt 15°	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.02	0.132	1.26	0.167
Left Touch	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	0.05	0.174	1.23	0.214
Left Tilt 15°	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	0.00	0.097	1.23	0.118
Right Touch	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	0.02	0.108	1.23	0.133
Right Tilt 15°	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.01	0.101	1.23	0.124
Left Touch	Full power	QPSK	20	1	mid	20850	2510	22.41	23.50	0.16	0.243	1.29	0.312
Left Touch	Full power	QPSK	20	1	mid	21350	2560	22.34	23.50	0.03	0.206	1.31	0.269
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	-0.04	0.399	1.26	0.503
Back Side	Sensor on	QPSK	20	1	mid	21100	2535	20.17	21.00	0.02	0.588	1.21	0.712
Front Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.07	0.323	1.23	0.396
Back Side	Sensor on	QPSK	20	50%	mid	21100	2535	20.20	21.00	-0.01	0.601	1.20	0.723
Back Side	Sensor on	QPSK	20	50%	mid	20850	2510	20.18	21.00	0.11	0.642	1.21	0.775
Back Side	Sensor on	QPSK	20	50%	mid	21350	2560	20.15	21.00	-0.14	0.490	1.22	0.596
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	-0.04	0.399	1.26	0.503
Back Side	Sensor on	QPSK	20	1	mid	21100	2535	20.17	21.00	0.02	0.588	1.21	0.712
Left Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.01	0.532	1.26	0.671
Right Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.02	0.046	1.26	0.057
Bottom Side	Sensor on	QPSK	20	1	mid	21100	2535	20.17	21.00	-0.03	0.241	1.21	0.292
Front Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.07	0.323	1.23	0.396
Back Side	Sensor on	QPSK	20	50%	mid	21100	2535	20.20	21.00	-0.01	0.601	1.20	0.723
Left Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.02	0.432	1.23	0.530
Right Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.02	0.041	1.23	0.050
Bottom Side	Sensor on	QPSK	20	50%	mid	21100	2535	20.20	21.00	-0.02	0.232	1.20	0.279
Back Side	Sensor on	QPSK	20	50%	mid	20850	2510	20.18	21.00	0.11	0.642	1.21	0.775
Back Side	Sensor on	QPSK	20	50%	mid	21350	2560	20.15	21.00	-0.14	0.490	1.22	0.596
Body SAR Define (Back Side:29mm,Bottom Side:19mm)													
Back Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.14	0.198	1.26	0.250
Bottom Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.01	0.166	1.26	0.209
Back Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.03	0.157	1.23	0.193
Bottom Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	-0.01	0.129	1.23	0.158
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.03	0.592	1.26	0.747
Back Side	Sensor on	QPSK	20	1	mid	21100	2535	20.17	21.00	0.04	1.170	1.21	1.416
Left Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.07	1.650	1.26	2.082
Right Side	Full power	QPSK	20	1	mid	21100	2535	22.49	23.50	0.10	0.198	1.26	0.250
Bottom Side	Sensor on	QPSK	20	1	mid	21100	2535	20.17	21.00	0.01	0.458	1.21	0.554
Front Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	0.00	0.484	1.23	0.594
Back Side	Sensor on	QPSK	20	50%	mid	21100	2535	20.20	21.00	0.01	1.230	1.20	1.479
Left Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	0.07	1.650	1.23	2.025
Right Side	Full power	QPSK	20	50%	mid	21100	2535	21.61	22.50	0.01	0.160	1.23	0.196
Bottom Side	Sensor on	QPSK	20	50%	mid	21100	2535	20.20	21.00	0.01	0.468	1.20	0.563
Left Side	Full power	QPSK	20	1	mid	20850	2510	22.41	23.50	-0.14	1.710	1.29	2.198
Left Side	Full power	QPSK	20	1	mid	21350	2560	22.34	23.50	0.17	1.670	1.31	2.181

LTE Band 12

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.17	0.140	1.21	0.169
Left Tilt 15°	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.02	0.043	1.21	0.051
Right Touch	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.11	0.067	1.21	0.081
Right Tilt 15°	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.00	0.041	1.21	0.050
Left Touch	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.01	0.068	1.21	0.082
Left Tilt 15°	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.00	0.031	1.21	0.038
Right Touch	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.04	0.079	1.21	0.095
Right Tilt 15°	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.02	0.031	1.21	0.037
Left Touch	Full power	QPSK	10	1	mid	23060	704	22.66	23.50	-0.12	0.087	1.21	0.105
Left Touch	Full power	QPSK	10	1	mid	23130	711	22.59	23.50	0.05	0.086	1.23	0.106
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.01	0.077	1.21	0.093
Back Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	-0.10	0.374	1.21	0.452
Front Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.08	0.060	1.21	0.072
Back Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	-0.02	0.254	1.21	0.307
Back Side	Full power	QPSK	10	1	mid	23060	704	22.66	23.50	-0.03	0.291	1.21	0.353
Back Side	Full power	QPSK	10	1	mid	23130	711	22.59	23.50	-0.03	0.297	1.23	0.366
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.01	0.077	1.21	0.093
Back Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	-0.10	0.374	1.21	0.452
Left Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.00	0.078	1.21	0.094
Right Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.06	0.114	1.21	0.138
Bottom Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	-0.10	0.103	1.21	0.124
Front Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.08	0.060	1.21	0.072
Back Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	-0.02	0.254	1.21	0.307
Left Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.02	0.060	1.21	0.073
Right Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.06	0.087	1.21	0.106
Bottom Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.01	0.079	1.21	0.095
Back Side	Full power	QPSK	10	1	mid	23060	704	22.66	23.50	-0.03	0.291	1.21	0.353
Back Side	Full power	QPSK	10	1	mid	23130	711	22.59	23.50	-0.03	0.297	1.23	0.366
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	-0.01	0.215	1.21	0.260
Back Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	-0.06	0.448	1.21	0.541
Left Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.04	0.109	1.21	0.132
Right Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.02	0.146	1.21	0.176
Bottom Side	Full power	QPSK	10	1	mid	23095	707.5	22.68	23.50	0.09	0.318	1.21	0.384
Front Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	-0.06	0.167	1.21	0.202
Back Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	-0.07	0.424	1.21	0.513
Left Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.08	0.083	1.21	0.100
Right Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.02	0.114	1.21	0.138
Bottom Side	Full power	QPSK	10	50%	mid	23095	707.5	21.67	22.50	0.01	0.246	1.21	0.298
Back Side	Full power	QPSK	10	1	mid	23060	704	22.66	23.50	-0.01	0.511	1.21	0.620
Back Side	Full power	QPSK	10	1	mid	23130	711	22.59	23.50	-0.03	0.447	1.23	0.551

LTE Band 13

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.15	0.126	1.20	0.151
Left Tilt 15°	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.16	0.058	1.20	0.069
Right Touch	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.05	0.132	1.20	0.158
Right Tilt 15°	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	-0.01	0.073	1.20	0.087
Left Touch	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.02	0.090	1.19	0.107
Left Tilt 15°	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.02	0.045	1.19	0.054
Right Touch	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.01	0.127	1.19	0.151
Right Tilt 15°	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.09	0.057	1.19	0.068
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.10	0.089	1.20	0.107
Back Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	-0.02	0.242	1.20	0.290
Front Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.03	0.071	1.19	0.084
Back Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.04	0.124	1.19	0.148
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.10	0.089	1.20	0.107
Back Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	-0.02	0.242	1.20	0.290
Left Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.10	0.083	1.20	0.099
Right Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.04	0.184	1.20	0.220
Bottom Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	-0.08	0.198	1.20	0.237
Front Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.03	0.071	1.19	0.084
Back Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.04	0.124	1.19	0.148
Left Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.02	0.067	1.19	0.080
Right Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.07	0.147	1.19	0.175
Bottom Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.04	0.158	1.19	0.188
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.00	0.292	1.20	0.349
Back Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.02	0.436	1.20	0.522
Left Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.02	0.180	1.20	0.215
Right Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.02	0.185	1.20	0.221
Bottom Side	Full power	QPSK	10	1	mid	23230	782	22.72	23.50	0.08	0.432	1.20	0.517
Front Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.03	0.197	1.19	0.235
Back Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	-0.07	0.426	1.19	0.507
Left Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.02	0.142	1.19	0.169
Right Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.02	0.148	1.19	0.176
Bottom Side	Full power	QPSK	10	50%	mid	23230	782	21.74	22.50	0.07	0.350	1.19	0.417

LTE Band 14

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	10	1	low	23330	793	23.17	23.50	-0.01	0.114	1.08	0.123
Left Tilt 15°	Full power	QPSK	10	1	low	23330	793	23.17	23.50	-0.01	0.059	1.08	0.064
Right Touch	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.18	0.131	1.08	0.141
Right Tilt 15°	Full power	QPSK	10	1	low	23330	793	23.17	23.50	-0.06	0.068	1.08	0.073
Left Touch	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.06	0.082	1.09	0.089
Left Tilt 15°	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.05	0.048	1.09	0.052
Right Touch	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.06	0.118	1.09	0.128
Right Tilt 15°	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.00	0.054	1.09	0.059
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.05	0.080	1.08	0.087
Back Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	-0.17	0.248	1.08	0.268
Front Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.03	0.063	1.09	0.069
Back Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	-0.06	0.245	1.09	0.267
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.05	0.080	1.08	0.087
Back Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	-0.17	0.248	1.08	0.268
Left Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.11	0.065	1.08	0.070
Right Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.06	0.150	1.08	0.162
Bottom Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.00	0.169	1.08	0.182
Front Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.03	0.063	1.09	0.069
Back Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	-0.06	0.245	1.09	0.267
Left Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.00	0.054	1.09	0.058
Right Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.00	0.120	1.09	0.131
Bottom Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	-0.10	0.136	1.09	0.148
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.02	0.203	1.08	0.219
Back Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	-0.10	0.502	1.08	0.542
Left Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.00	0.153	1.08	0.165
Right Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.02	0.148	1.08	0.160
Bottom Side	Full power	QPSK	10	1	low	23330	793	23.17	23.50	0.08	0.364	1.08	0.393
Front Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.03	0.162	1.09	0.176
Back Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	-0.01	0.350	1.09	0.381
Left Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.04	0.121	1.09	0.132
Right Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.02	0.116	1.09	0.126
Bottom Side	Full power	QPSK	10	50%	mid	23330	793	22.13	22.50	0.07	0.290	1.09	0.316

LTE Band 25

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	-0.04	0.034	1.37	0.046
Left Tilt 15°	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.07	0.016	1.37	0.021
Right Touch	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	-0.17	0.022	1.37	0.030
Right Tilt 15°	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.06	0.013	1.37	0.018
Left Touch	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	0.02	0.030	1.40	0.042
Left Tilt 15°	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.03	0.016	1.40	0.022
Right Touch	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.04	0.014	1.40	0.019
Right Tilt 15°	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.18	0.011	1.40	0.015
Left Touch	Full power	QPSK	20	1	mid	26140	1860	22.13	23.50	-0.18	0.034	1.37	0.047
Left Touch	Full power	QPSK	20	1	mid	26590	1905	22.10	23.50	0.13	0.041	1.38	0.057
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	-0.11	0.284	1.37	0.388
Back Side	Sensor on	QPSK	20	1	mid	26365	1882.5	18.66	19.50	-0.06	0.441	1.21	0.535
Front Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	0.03	0.228	1.40	0.320
Back Side	Sensor on	QPSK	20	50%	mid	26365	1882.5	18.62	19.50	-0.03	0.415	1.22	0.508
Back Side	Sensor on	QPSK	20	1	mid	26140	1860	18.60	19.50	-0.18	0.516	1.23	0.635
Back Side	Sensor on	QPSK	20	1	mid	26590	1905	18.65	19.50	-0.04	0.444	1.22	0.540
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	-0.11	0.284	1.37	0.388
Back Side	Sensor on	QPSK	20	1	mid	26365	1882.5	18.66	19.50	-0.06	0.441	1.21	0.535
Left Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.02	0.348	1.37	0.476
Right Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.01	0.026	1.37	0.036
Bottom Side	Sensor on	QPSK	20	1	mid	26365	1882.5	18.66	19.50	0.11	0.391	1.21	0.474
Front Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	0.03	0.228	1.40	0.320
Back Side	Sensor on	QPSK	20	50%	mid	26365	1882.5	18.62	19.50	-0.03	0.415	1.22	0.508
Left Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.01	0.261	1.40	0.366
Right Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	0.00	0.024	1.40	0.034
Bottom Side	Sensor on	QPSK	20	50%	mid	26365	1882.5	18.62	19.50	0.13	0.390	1.22	0.478
Back Side	Sensor on	QPSK	20	1	mid	26140	1860	18.60	19.50	-0.18	0.516	1.23	0.635
Back Side	Sensor on	QPSK	20	1	mid	26590	1905	18.65	19.50	-0.04	0.444	1.22	0.540
Body SAR Define (Back Side:29mm,Bottom Side:19mm)													
Back Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	-0.03	0.208	1.37	0.284
Bottom Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.07	0.317	1.37	0.434
Back Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.12	0.153	1.40	0.215
Bottom Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	0.02	0.258	1.40	0.362
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.11	0.303	1.37	0.414
Back Side	Sensor on	QPSK	20	1	mid	26365	1882.5	18.66	19.50	0.00	0.531	1.21	0.644
Left Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.13	0.723	1.37	0.989
Right Side	Full power	QPSK	20	1	mid	26365	1882.5	22.14	23.50	0.11	0.020	1.37	0.028
Bottom Side	Sensor on	QPSK	20	1	mid	26365	1882.5	18.66	19.50	0.01	0.673	1.21	0.817
Front Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.08	0.239	1.40	0.335
Back Side	Sensor on	QPSK	20	50%	mid	26365	1882.5	18.62	19.50	-0.02	0.528	1.22	0.647
Left Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.14	0.518	1.40	0.727
Right Side	Full power	QPSK	20	50%	mid	26365	1882.5	21.03	22.50	-0.08	0.016	1.40	0.023
Bottom Side	Sensor on	QPSK	20	50%	mid	26365	1882.5	18.62	19.50	0.00	0.683	1.22	0.836
Left Side	Full power	QPSK	20	1	mid	26140	1860	22.13	23.50	0.12	0.803	1.37	1.101
Left Side	Full power	QPSK	20	1	mid	26590	1905	22.10	23.50	0.01	0.810	1.38	1.118

LTE Band 26

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.07	0.160	1.23	0.197
Left Tilt 15°	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.02	0.085	1.23	0.105
Right Touch	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.17	0.232	1.23	0.286
Right Tilt 15°	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.00	0.081	1.23	0.100
Left Touch	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.02	0.122	1.28	0.156
Left Tilt 15°	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.01	0.064	1.28	0.081
Right Touch	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.03	0.139	1.28	0.178
Right Tilt 15°	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.02	0.060	1.28	0.077
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.00	0.165	1.23	0.203
Back Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.09	0.390	1.23	0.481
Front Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.04	0.119	1.28	0.152
Back Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.03	0.288	1.28	0.368
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.00	0.165	1.23	0.203
Back Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.09	0.390	1.23	0.481
Left Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.03	0.136	1.23	0.168
Right Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.00	0.246	1.23	0.303
Bottom Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	-0.01	0.274	1.23	0.338
Front Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.04	0.119	1.28	0.152
Back Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.03	0.288	1.28	0.368
Left Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.00	0.103	1.28	0.132
Right Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.01	0.182	1.28	0.233
Bottom Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.14	0.200	1.28	0.256
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.02	0.352	1.23	0.434
Back Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.01	0.408	1.23	0.503
Left Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.06	0.241	1.23	0.297
Right Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.00	0.241	1.23	0.297
Bottom Side	Full power	QPSK	15	1	mid	26865	831.5	22.59	23.50	0.03	0.633	1.23	0.781
Front Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.03	0.257	1.28	0.329
Back Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	-0.05	0.327	1.28	0.418
Left Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.10	0.177	1.28	0.226
Right Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.05	0.178	1.28	0.228
Bottom Side	Full power	QPSK	15	50%	mid	26865	831.5	21.43	22.50	0.03	0.536	1.28	0.686

LTE Band 30

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	0.17	0.143	1.16	0.165
Left Tilt 15°	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.02	0.055	1.16	0.063
Right Touch	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.03	0.096	1.16	0.110
Right Tilt 15°	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.03	0.078	1.16	0.090
Left Touch	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.15	0.139	1.17	0.163
Left Tilt 15°	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.08	0.044	1.17	0.052
Right Touch	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.06	0.079	1.17	0.092
Right Tilt 15°	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.09	0.064	1.17	0.075
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	0.08	0.194	1.16	0.224
Back Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.11	0.732	1.19	0.872
Front Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.13	0.157	1.17	0.184
Back Side	Sensor on	QPSK	10	50%	low	27710	2310	19.66	20.50	-0.02	0.700	1.21	0.849
Back Side	Sensor on	QPSK	10	100%	low	27710	2310	19.67	20.50	-0.12	0.699	1.21	0.846
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	0.08	0.194	1.16	0.224
Back Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.11	0.732	1.19	0.872
Left Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	0.02	0.422	1.16	0.488
Right Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.05	0.013	1.16	0.015
Bottom Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.02	0.283	1.19	0.337
Front Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.13	0.157	1.17	0.184
Back Side	Sensor on	QPSK	10	50%	low	27710	2310	19.66	20.50	-0.02	0.700	1.21	0.849
Left Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.01	0.311	1.17	0.365
Right Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	0.00	0.005	1.17	0.006
Bottom Side	Sensor on	QPSK	10	50%	low	27710	2310	19.66	20.50	0.14	0.211	1.21	0.256
Back Side	Sensor on	QPSK	10	100%	low	27710	2310	19.67	20.50	-0.12	0.699	1.21	0.846
SIM 2													
Back Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.00	0.687	1.19	0.818
Body SAR Define (Back Side:29mm,Bottom Side:19mm)													
Back Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.08	0.154	1.16	0.178
Bottom Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.07	0.061	1.16	0.070
Back Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.03	0.125	1.17	0.147
Bottom Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.08	0.063	1.17	0.073
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	-0.09	0.467	1.16	0.540
Back Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.16	2.490	1.19	2.966
Left Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	0.02	1.020	1.16	1.179
Right Side	Full power	QPSK	10	1	mid	27710	2310	22.87	23.50	0.00	0.005	1.16	0.005
Bottom Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.11	0.281	1.19	0.335
Front Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	-0.04	0.387	1.17	0.454
Back Side	Sensor on	QPSK	10	50%	low	27710	2310	19.66	20.50	-0.07	1.800	1.21	2.184
Left Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	0.02	0.753	1.17	0.883
Right Side	Full power	QPSK	10	50%	low	27710	2310	21.81	22.50	0.00	0.001	1.17	0.001
Bottom Side	Sensor on	QPSK	10	50%	low	27710	2310	19.66	20.50	-0.05	0.276	1.21	0.335
SIM 2													
Back Side	Sensor on	QPSK	10	1	mid	27710	2310	19.74	20.50	0.01	2.380	1.19	2.835

LTE Band 40

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.15	0.151	1.15	0.174
Left Tilt 15°	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.07	0.038	1.15	0.044
Right Touch	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.00	0.049	1.15	0.057
Right Tilt 15°	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.03	0.033	1.15	0.038
Left Touch	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.11	0.061	1.18	0.072
Left Tilt 15°	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.03	0.030	1.18	0.036
Right Touch	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.07	0.035	1.18	0.041
Right Tilt 15°	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	-0.01	0.029	1.18	0.034
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.02	0.070	1.15	0.081
Back Side	Sensor on	QPSK	10	1	mid	38750	2310	20.33	21.00	0.10	0.496	1.17	0.579
Front Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	-0.01	0.049	1.18	0.058
Back Side	Sensor on	QPSK	10	50%	mid	38750	2310	20.26	21.00	-0.05	0.308	1.19	0.365
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.02	0.070	1.15	0.081
Back Side	Sensor on	QPSK	10	1	mid	38750	2310	20.33	21.00	0.10	0.496	1.17	0.579
Left Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.02	0.233	1.15	0.269
Right Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.06	0.005	1.15	0.005
Bottom Side	Sensor on	QPSK	10	1	mid	38750	2310	20.33	21.00	-0.03	0.165	1.17	0.193
Front Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	-0.01	0.049	1.18	0.058
Back Side	Sensor on	QPSK	10	50%	mid	38750	2310	20.26	21.00	-0.05	0.308	1.19	0.365
Left Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.04	0.168	1.18	0.198
Right Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.07	0.001	1.18	0.001
Bottom Side	Sensor on	QPSK	10	50%	mid	38750	2310	20.26	21.00	0.07	0.124	1.19	0.147
Body SAR Define (Back Side:29mm,Bottom Side:19mm)													
Back Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	-0.06	0.103	1.15	0.119
Bottom Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.04	0.061	1.15	0.071
Back Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	-0.06	0.079	1.18	0.093
Bottom Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	-0.05	0.048	1.18	0.056
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.07	0.183	1.15	0.211
Back Side	Sensor on	QPSK	10	1	mid	38750	2310	20.33	21.00	0.10	0.963	1.17	1.124
Left Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.03	0.553	1.15	0.638
Right Side	Full power	QPSK	10	1	mid	38750	2310	22.88	23.50	0.00	0.011	1.15	0.013
Bottom Side	Sensor on	QPSK	10	1	mid	38750	2310	20.33	21.00	0.02	0.413	1.17	0.482
Front Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	-0.14	0.135	1.18	0.159
Back Side	Sensor on	QPSK	10	50%	mid	38750	2310	20.26	21.00	-0.02	0.682	1.19	0.809
Left Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.02	0.428	1.18	0.504
Right Side	Full power	QPSK	10	50%	mid	38750	2310	21.79	22.50	0.00	0.004	1.18	0.005
Bottom Side	Sensor on	QPSK	10	50%	mid	38750	2310	20.26	21.00	0.03	0.318	1.19	0.377

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	0.18	0.082	1.19	0.098
Left Tilt 15°	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	0.01	0.051	1.19	0.061
Right Touch	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	-0.01	0.059	1.19	0.070
Right Tilt 15°	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	-0.17	0.054	1.19	0.064
Left Touch	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	0.01	0.078	1.24	0.097
Left Tilt 15°	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	0.08	0.037	1.24	0.045
Right Touch	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.03	0.042	1.24	0.052
Right Tilt 15°	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	0.01	0.041	1.24	0.051
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	-0.01	0.112	1.19	0.133
Back Side	Sensor on	QPSK	10	1	mid	39200	2355	20.36	21.00	0.15	0.572	1.16	0.663
Front Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.04	0.079	1.24	0.097
Back Side	Sensor on	QPSK	10	50%	mid	39200	2355	20.32	21.00	-0.13	0.409	1.17	0.478
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	-0.01	0.112	1.19	0.133
Back Side	Sensor on	QPSK	10	1	mid	39200	2355	20.36	21.00	0.15	0.572	1.16	0.663
Left Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	0.02	0.248	1.19	0.295
Right Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	-0.02	0.006	1.19	0.007
Bottom Side	Sensor on	QPSK	10	1	mid	39200	2355	20.36	21.00	-0.04	0.185	1.16	0.214
Front Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.04	0.079	1.24	0.097
Back Side	Sensor on	QPSK	10	50%	mid	39200	2355	20.32	21.00	-0.13	0.409	1.17	0.478
Left Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	0.05	0.189	1.24	0.234
Right Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.10	0.004	1.24	0.005
Bottom Side	Sensor on	QPSK	10	50%	mid	39200	2355	20.32	21.00	-0.01	0.126	1.17	0.147
Body SAR Define (Back Side:29mm,Bottom Side:19mm)													
Back Side	Full power	QPSK	10	1	mid	39200	2355	22.88	23.50	-0.07	0.098	1.15	0.113
Bottom Side	Full power	QPSK	10	1	mid	39200	2355	22.88	23.50	-0.05	0.056	1.15	0.064
Back Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.13	0.088	1.24	0.109
Bottom Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.10	0.044	1.24	0.054
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	-0.08	0.254	1.19	0.303
Back Side	Sensor on	QPSK	10	1	mid	39200	2355	20.36	21.00	0.12	0.869	1.16	1.007
Left Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	0.02	0.774	1.19	0.922
Right Side	Full power	QPSK	10	1	mid	39200	2355	22.74	23.50	0.00	0.023	1.19	0.027
Bottom Side	Sensor on	QPSK	10	1	mid	39200	2355	20.36	21.00	0.06	0.397	1.16	0.460
Front Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	-0.03	0.181	1.24	0.224
Back Side	Sensor on	QPSK	10	50%	mid	39200	2355	20.32	21.00	-0.08	0.786	1.17	0.919
Left Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	0.01	0.511	1.24	0.632
Right Side	Full power	QPSK	10	50%	mid	39200	2355	21.58	22.50	0.00	0.017	1.24	0.021
Bottom Side	Sensor on	QPSK	10	50%	mid	39200	2355	20.32	21.00	0.10	0.266	1.17	0.311

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Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.03	0.171	1.24	0.212
Left Tilt 15°	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.02	0.063	1.24	0.078
Right Touch	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.11	0.085	1.24	0.106
Right Tilt 15°	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.02	0.082	1.24	0.102
Left Touch	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.01	0.126	1.23	0.155
Left Tilt 15°	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.03	0.044	1.23	0.054
Right Touch	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	-0.04	0.058	1.23	0.071
Right Tilt 15°	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.08	0.059	1.23	0.073
Left Touch	Full power	QPSK	20	1	mid	39750	2506	22.52	23.50	0.02	0.166	1.25	0.208
Left Touch	Full power	QPSK	20	1	mid	40185	2549.5	22.46	23.50	0.03	0.156	1.27	0.198
Left Touch	Full power	QPSK	20	1	mid	41055	2636.5	22.26	23.50	0.04	0.209	1.33	0.278
Left Touch	Full power	QPSK	20	1	mid	41490	2680	22.55	23.50	0.19	0.322	1.24	0.401
SIM 2													
Left Touch	Full power	QPSK	20	1	mid	41490	2680	22.55	23.50	0.07	0.297	1.24	0.370
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.03	0.192	1.24	0.238
Back Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.02	0.415	1.24	0.515
Front Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	-0.01	0.139	1.23	0.171
Back Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.10	0.285	1.23	0.350
Back Side	Full power	QPSK	20	1	mid	39750	2506	22.52	23.50	-0.12	0.551	1.25	0.690
Back Side	Full power	QPSK	20	1	mid	40185	2549.5	22.46	23.50	-0.02	0.529	1.27	0.672
Back Side	Full power	QPSK	20	1	mid	41055	2636.5	22.26	23.50	-0.04	0.319	1.33	0.424
Back Side	Full power	QPSK	20	1	mid	41490	2680	22.55	23.50	-0.06	0.361	1.24	0.449
Back Side	Full power	QPSK	20	100%	low	41490	2680	21.44	22.50	-0.17	0.261	1.28	0.333
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.03	0.192	1.24	0.238
Back Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.02	0.415	1.24	0.515
Left Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.13	0.322	1.24	0.400
Right Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.04	0.034	1.24	0.042
Bottom Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.07	0.258	1.24	0.320
Front Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	-0.01	0.139	1.23	0.171
Back Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.10	0.285	1.23	0.350
Left Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.07	0.229	1.23	0.281
Right Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.12	0.024	1.23	0.029
Bottom Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.04	0.144	1.23	0.177
Back Side	Full power	QPSK	20	1	mid	39750	2506	22.52	23.50	-0.12	0.551	1.25	0.690
Back Side	Full power	QPSK	20	1	mid	40185	2549.5	22.46	23.50	-0.02	0.529	1.27	0.672
Back Side	Full power	QPSK	20	1	mid	41055	2636.5	22.26	23.50	-0.04	0.319	1.33	0.424
Back Side	Full power	QPSK	20	1	mid	41490	2680	22.55	23.50	-0.06	0.361	1.24	0.449
Back Side	Full power	QPSK	20	100%	low	41490	2680	21.44	22.50	-0.17	0.261	1.28	0.333
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	-0.03	0.410	1.24	0.509
Back Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.02	0.819	1.24	1.017
Left Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.01	1.030	1.24	1.279
Right Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.02	0.069	1.24	0.085
Bottom Side	Full power	QPSK	20	1	mid	40620	2593	22.56	23.50	0.02	0.642	1.24	0.797
Front Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.02	0.291	1.23	0.357
Back Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.04	0.593	1.23	0.728
Left Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.03	0.754	1.23	0.925
Right Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	-0.02	0.051	1.23	0.063
Bottom Side	Full power	QPSK	20	50%	mid	40620	2593	21.61	22.50	0.14	0.481	1.23	0.590
Left Side	Full power	QPSK	20	1	mid	39750	2506	22.52	23.50	0.08	1.040	1.25	1.303
Left Side	Full power	QPSK	20	1	mid	40185	2549.5	22.46	23.50	0.04	0.944	1.27	1.199
Left Side	Full power	QPSK	20	1	mid	41055	2636.5	22.26	23.50	0.15	0.990	1.33	1.317
Left Side	Full power	QPSK	20	1	mid	41490	2680	22.55	23.50	-0.14	1.060	1.24	1.319

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Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.03	0.028	1.26	0.035
Left Tilt 15°	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.04	0.023	1.26	0.029
Right Touch	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.09	0.022	1.26	0.027
Right Tilt 15°	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.03	0.015	1.26	0.019
Left Touch	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.05	0.022	1.24	0.027
Left Tilt 15°	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.02	0.019	1.24	0.024
Right Touch	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.01	0.018	1.24	0.023
Right Tilt 15°	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.06	0.012	1.24	0.015
Left Touch	Full power	QPSK	20	1	mid	132072	1720	22.45	23.50	-0.01	0.026	1.27	0.033
Left Touch	Full power	QPSK	20	1	mid	132572	1770	22.47	23.50	0.13	0.031	1.27	0.039
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.11	0.031	1.26	0.038
Back Side	Sensor on	QPSK	20	1	mid	132322	1745	17.93	18.50	-0.06	0.657	1.14	0.749
Front Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.09	0.027	1.24	0.034
Back Side	Sensor on	QPSK	20	50%	mid	132322	1745	17.85	18.50	-0.03	0.653	1.16	0.758
Back Side	Sensor on	QPSK	20	50%	mid	132072	1720	17.84	18.50	-0.09	0.675	1.16	0.786
Back Side	Sensor on	QPSK	20	50%	mid	132572	1770	17.81	18.50	0.17	0.706	1.17	0.828
Back Side	Sensor on	QPSK	20	100%	low	132322	1745	17.73	18.50	-0.03	0.679	1.19	0.811
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.11	0.031	1.26	0.038
Back Side	Sensor on	QPSK	20	1	mid	132322	1745	17.93	18.50	-0.06	0.657	1.14	0.749
Left Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.03	0.234	1.26	0.294
Right Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.08	0.024	1.26	0.030
Bottom Side	Sensor on	QPSK	20	1	mid	132322	1745	17.93	18.50	0.02	0.373	1.14	0.425
Front Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.09	0.027	1.24	0.034
Back Side	Sensor on	QPSK	20	50%	mid	132322	1745	17.85	18.50	-0.03	0.653	1.16	0.758
Left Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	0.01	0.198	1.24	0.246
Right Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	0.04	0.020	1.24	0.025
Bottom Side	Sensor on	QPSK	20	50%	mid	132322	1745	17.85	18.50	0.03	0.376	1.16	0.437
Back Side	Sensor on	QPSK	20	50%	mid	132072	1720	17.84	18.50	-0.09	0.675	1.16	0.786
Back Side	Sensor on	QPSK	20	50%	mid	132572	1770	17.81	18.50	0.17	0.706	1.17	0.828
Back Side	Sensor on	QPSK	20	100%	low	132322	1745	17.73	18.50	-0.03	0.679	1.19	0.811
Body SAR Define (Back Side:29mm,Bottom Side:19mm)													
Back Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.04	0.310	1.26	0.389
Bottom Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	0.03	0.376	1.26	0.472
Back Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.05	0.244	1.24	0.304
Bottom Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	0.09	0.289	1.24	0.360
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	-0.07	0.235	1.26	0.295
Back Side	Sensor on	QPSK	20	1	mid	132322	1745	17.93	18.50	-0.02	0.468	1.14	0.534
Left Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	0.02	0.706	1.26	0.887
Right Side	Full power	QPSK	20	1	mid	132322	1745	22.51	23.50	0.05	0.026	1.26	0.032
Bottom Side	Sensor on	QPSK	20	1	mid	132322	1745	17.93	18.50	0.03	0.607	1.14	0.692
Front Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	-0.02	0.189	1.24	0.235
Back Side	Sensor on	QPSK	20	50%	mid	132322	1745	17.85	18.50	-0.05	0.466	1.16	0.541
Left Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	0.01	0.603	1.24	0.750
Right Side	Full power	QPSK	20	50%	mid	132322	1745	21.55	22.50	0.03	0.022	1.24	0.027
Bottom Side	Sensor on	QPSK	20	50%	mid	132322	1745	17.85	18.50	0.02	0.621	1.16	0.721
Left Side	Full power	QPSK	20	1	mid	132072	1720	22.45	23.50	0.07	0.701	1.27	0.893
Left Side	Full power	QPSK	20	1	mid	132572	1770	22.47	23.50	0.03	0.769	1.27	0.975

LTE Band 71

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.05	0.074	1.34	0.099
Left Tilt 15°	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.03	0.054	1.34	0.072
Right Touch	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.05	0.082	1.34	0.109
Right Tilt 15°	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.07	0.048	1.34	0.064
Left Touch	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.03	0.057	1.33	0.076
Left Tilt 15°	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.05	0.042	1.33	0.056
Right Touch	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.08	0.068	1.33	0.090
Right Tilt 15°	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.11	0.039	1.33	0.051
Right Touch	Full power	QPSK	20	1	mid	133222	673	22.22	23.50	0.11	0.163	1.34	0.219
Right Touch	Full power	QPSK	20	1	mid	133372	688	22.14	23.50	0.02	0.094	1.37	0.129
Body SAR (Body-worn 10mm)													
Front Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.01	0.120	1.34	0.160
Back Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.05	0.321	1.34	0.429
Front Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.02	0.097	1.33	0.130
Back Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.02	0.162	1.33	0.216
Back Side	Full power	QPSK	20	1	mid	133222	673	22.22	23.50	-0.03	0.468	1.34	0.628
Back Side	Full power	QPSK	20	1	mid	133372	688	22.14	23.50	-0.07	0.318	1.37	0.435
Body SAR (Hotspot 10mm)													
Front Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.01	0.120	1.34	0.160
Back Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.05	0.321	1.34	0.429
Left Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.01	0.055	1.34	0.074
Right Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.15	0.074	1.34	0.099
Bottom Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.12	0.065	1.34	0.087
Front Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.02	0.097	1.33	0.130
Back Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.02	0.162	1.33	0.216
Left Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.06	0.049	1.33	0.066
Right Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.10	0.069	1.33	0.092
Bottom Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.04	0.057	1.33	0.075
Back Side	Full power	QPSK	20	1	mid	133222	673	22.22	23.50	-0.03	0.468	1.34	0.628
Back Side	Full power	QPSK	20	1	mid	133372	688	22.14	23.50	-0.07	0.318	1.37	0.435
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.06	0.144	1.34	0.192
Back Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.02	0.436	1.34	0.583
Left Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.02	0.060	1.34	0.080
Right Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	0.01	0.076	1.34	0.102
Bottom Side	Full power	QPSK	20	1	mid	133322	683	22.24	23.50	-0.06	0.201	1.34	0.269
Front Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.05	0.116	1.33	0.155
Back Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	-0.05	0.320	1.33	0.427
Left Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.03	0.054	1.33	0.071
Right Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.03	0.070	1.33	0.093
Bottom Side	Full power	QPSK	20	50%	high	133322	683	21.25	22.50	0.03	0.176	1.33	0.235
Back Side	Full power	QPSK	20	1	mid	133222	673	22.22	23.50	-0.04	0.462	1.34	0.620
Back Side	Full power	QPSK	20	1	mid	133372	688	22.14	23.50	-0.13	0.489	1.37	0.669

11.2 SAR results for WLAN

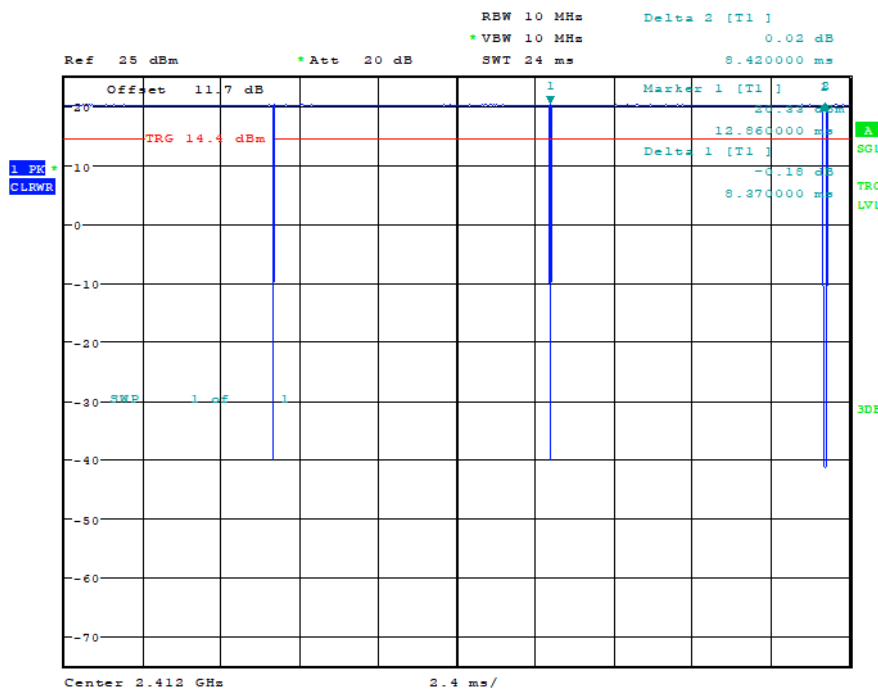
The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.

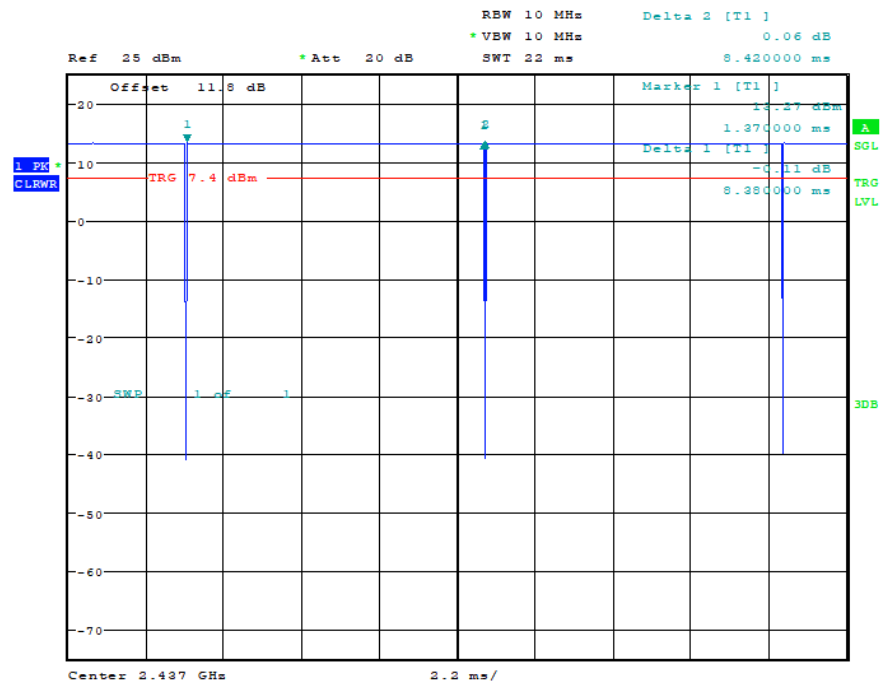
SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

Duty factor plot

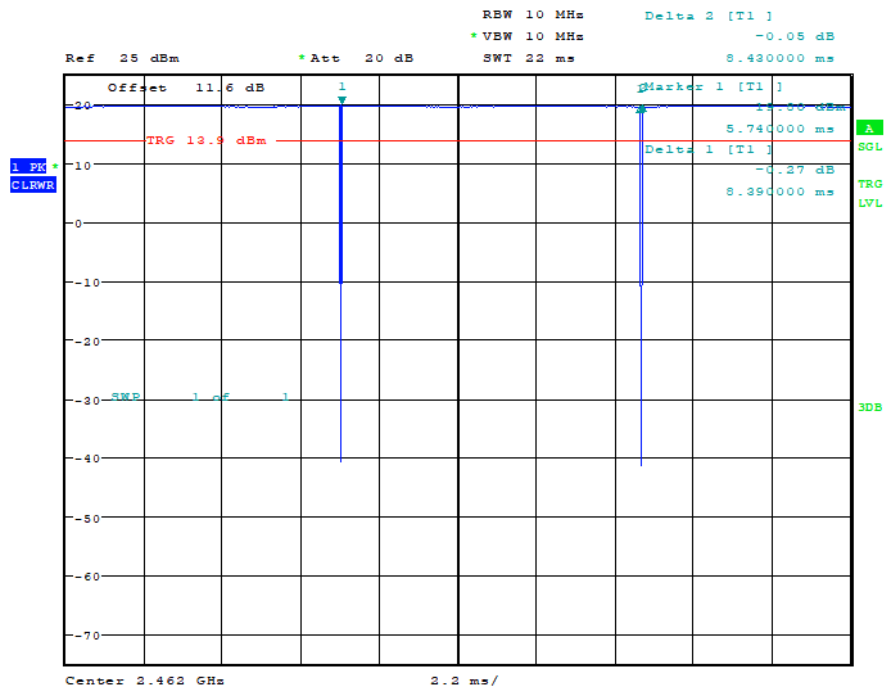
CH1



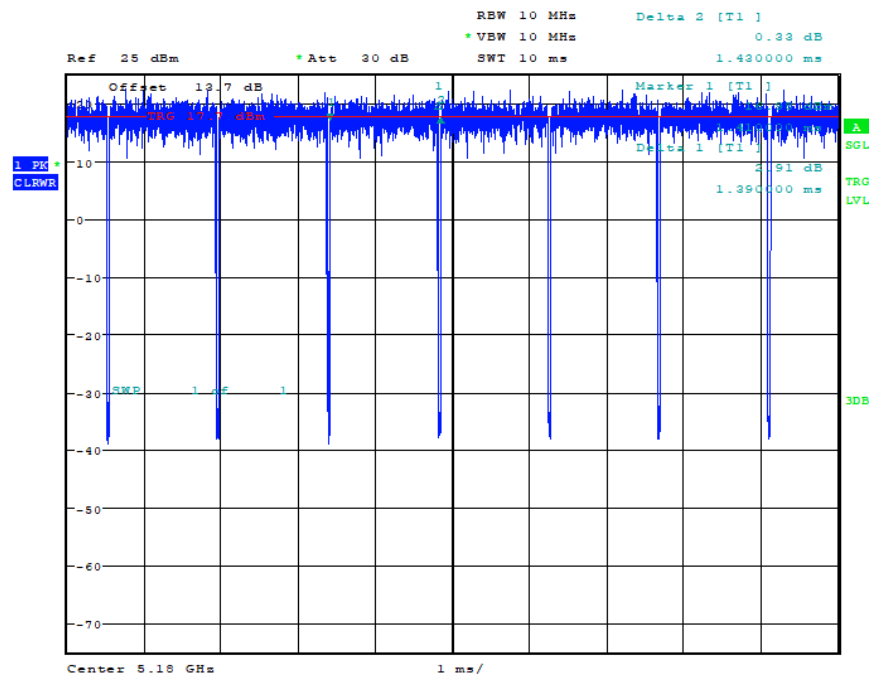
CH6



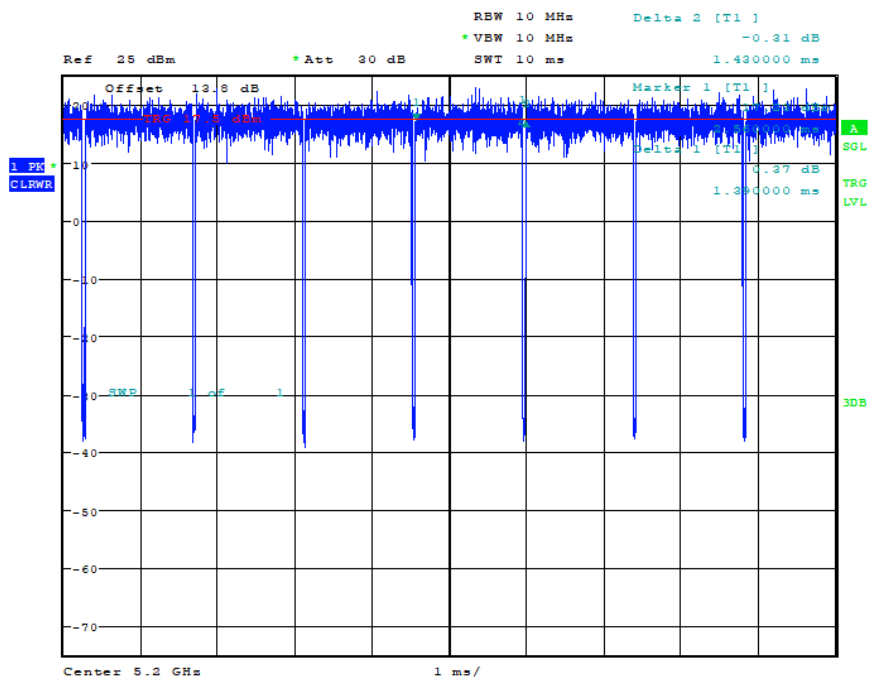
CH11



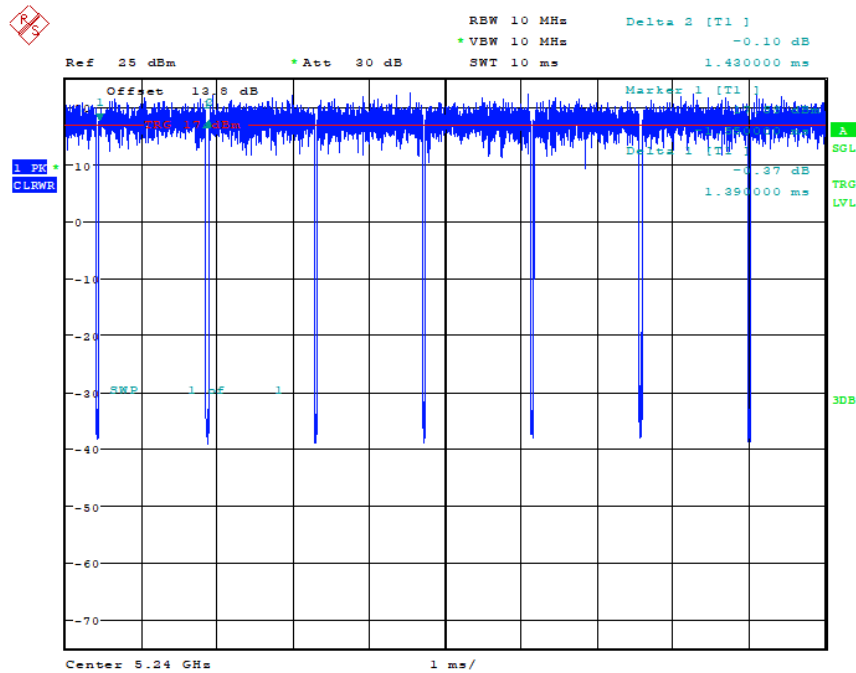
CH36



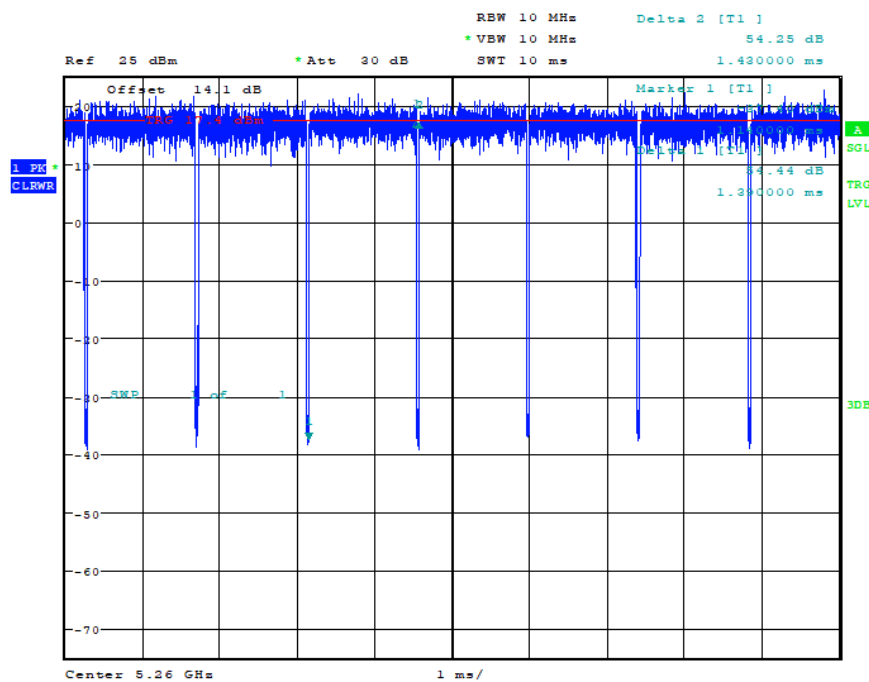
CH40



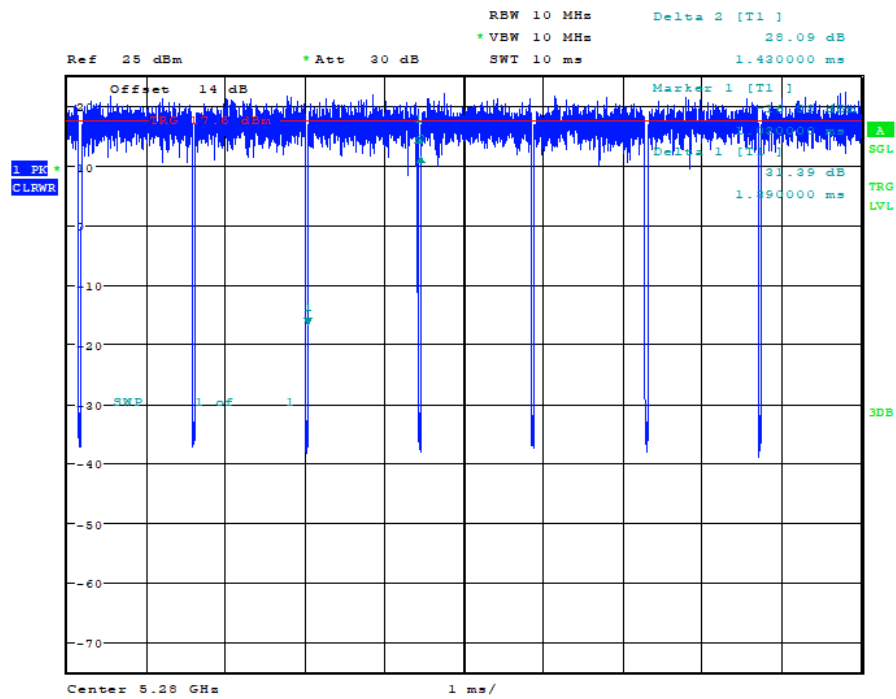
CH48



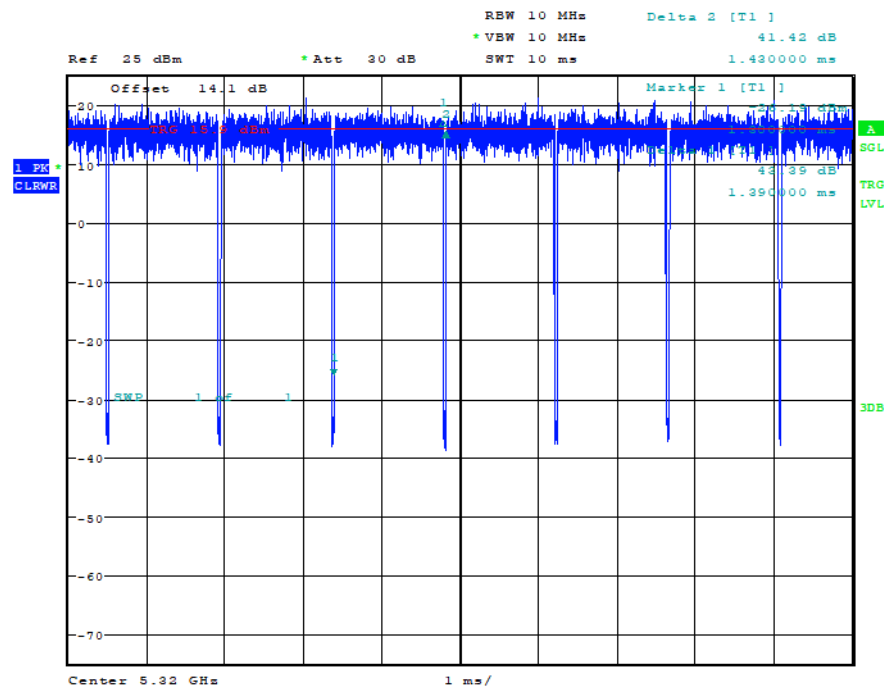
CH52



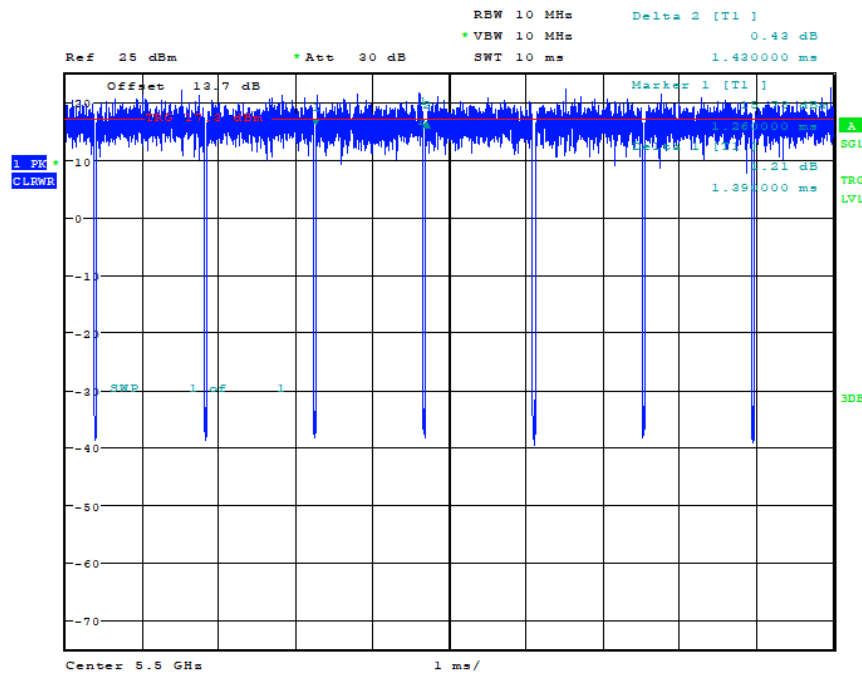
CH56



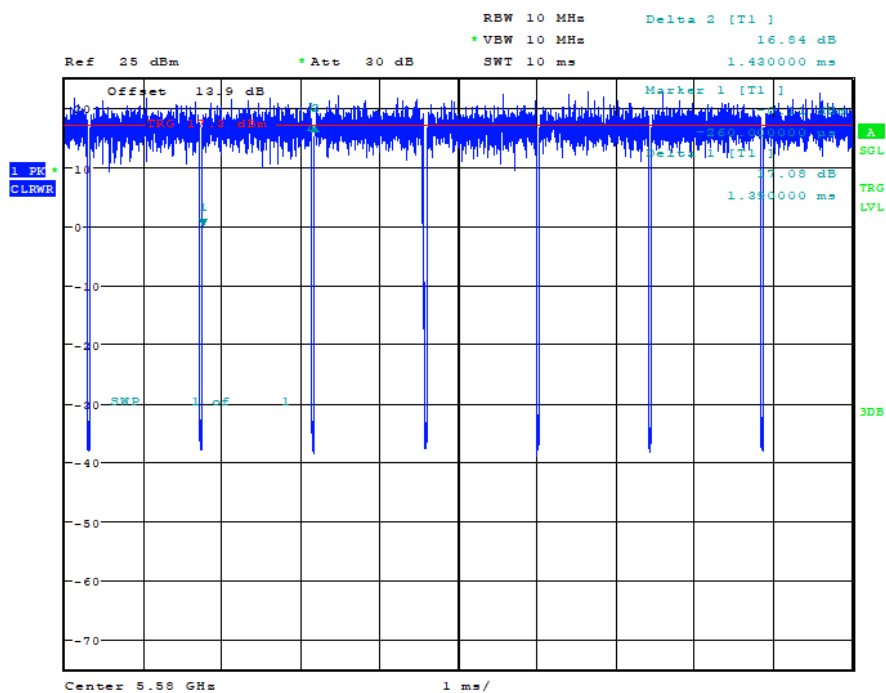
CH64



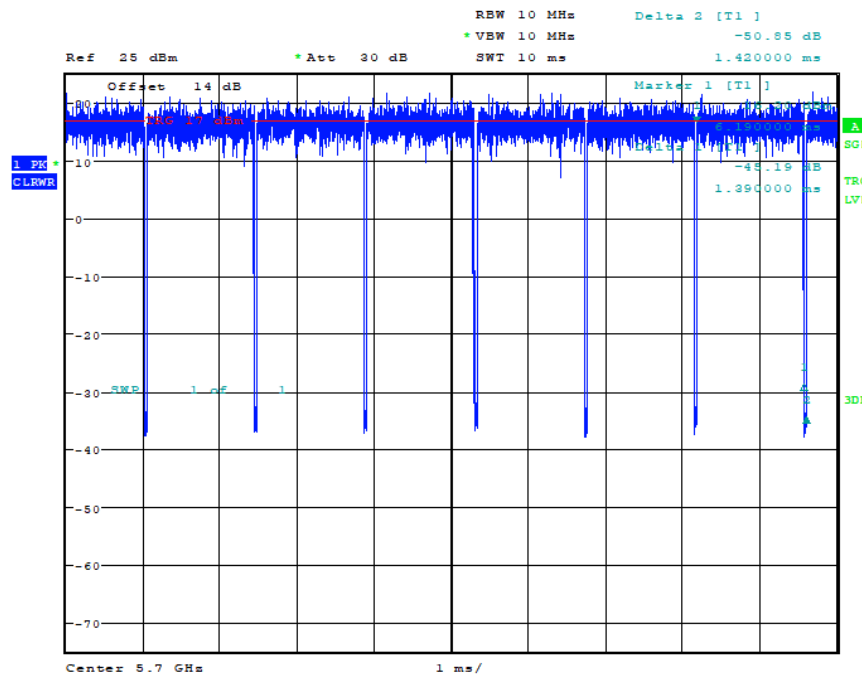
CH100



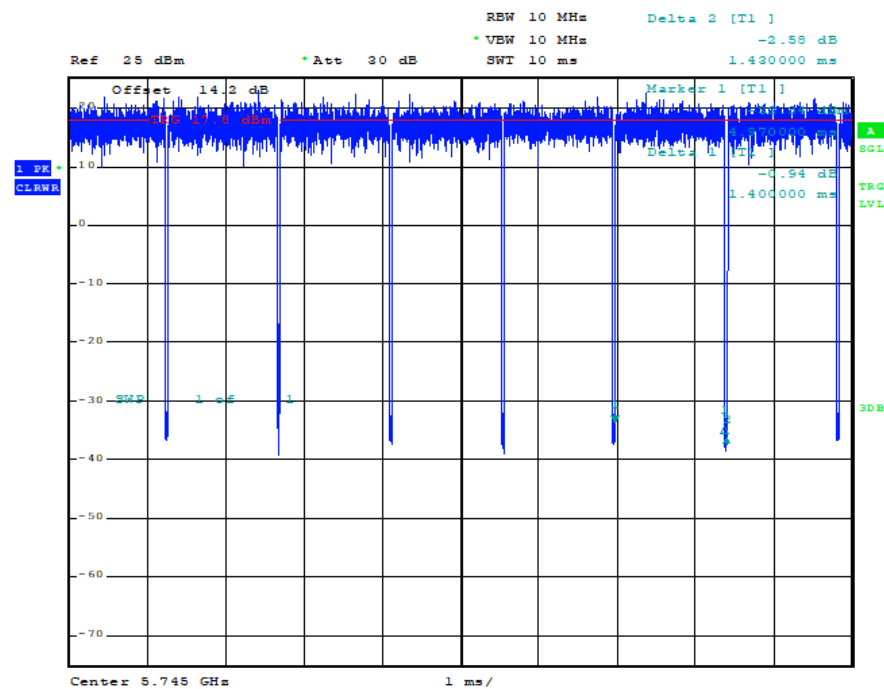
CH116



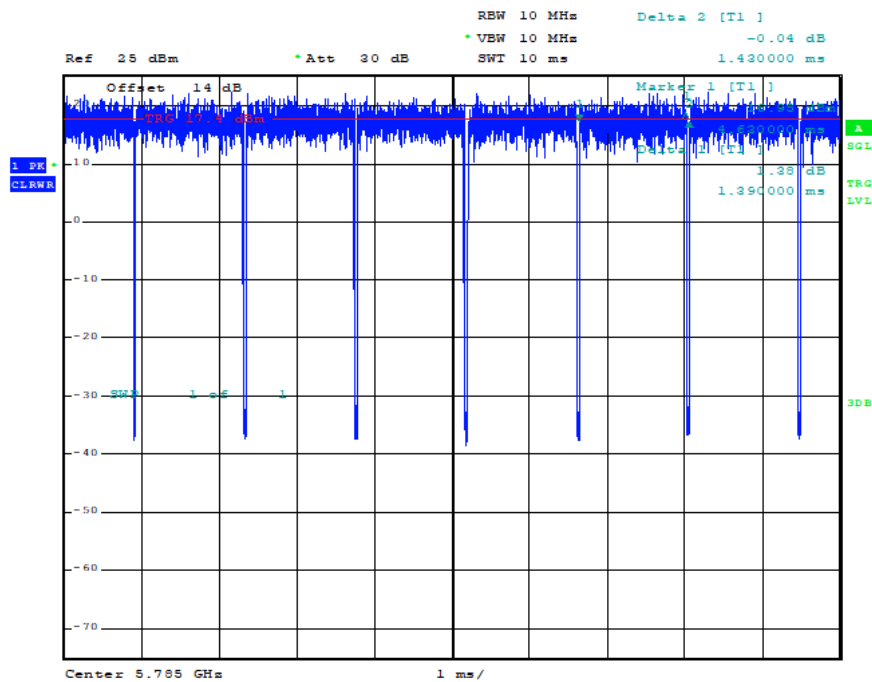
CH140



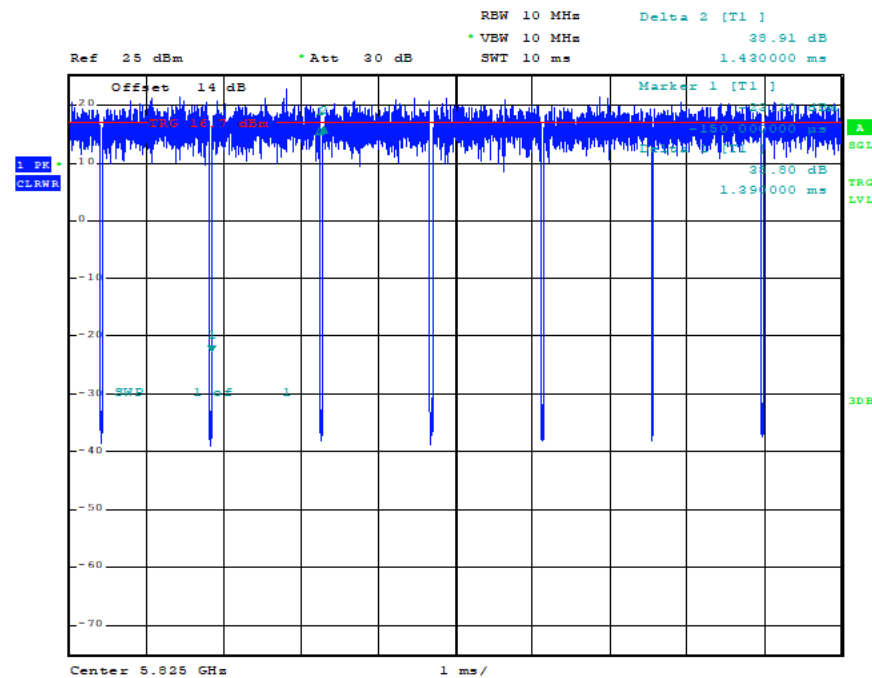
CH149



CH157



CH165



WLAN 2.4G

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	0.12	0.625	1.00	1.30	0.818
Left Tilt 15°	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.01	0.547	1.00	1.30	0.716
Right Touch	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.03	0.307	1.00	1.30	0.402
Right Tilt 15°	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.06	0.301	1.00	1.30	0.394
Left Touch	Full power	802.11b	20	99.41%	1	2412	17.17	18.00	0.03	0.623	1.01	1.21	0.759
Left Touch	Full power	802.11b	20	99.53%	11	2462	16.53	18.00	-0.08	0.493	1.00	1.40	0.695
Body SAR (Body-worn 10mm)													
Front Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.07	0.166	1.00	1.30	0.217
Back Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.04	0.135	1.00	1.30	0.177
Front Side	Full power	802.11b	20	99.41%	1	2412	17.17	18.00	-0.09	0.141	1.01	1.21	0.172
Front Side	Full power	802.11b	20	99.53%	11	2462	16.53	18.00	0.13	0.167	1.00	1.40	0.235
Body SAR (Hotspot 10mm)													
Front Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.07	0.166	1.00	1.30	0.217
Back Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.04	0.135	1.00	1.30	0.177
Left Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	0.03	0.045	1.00	1.30	0.059
Right Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	0.12	0.253	1.00	1.30	0.331
Top Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.05	0.258	1.00	1.30	0.338
Top Side	Full power	802.11b	20	99.41%	1	2412	17.17	18.00	-0.17	0.219	1.01	1.21	0.267
Top Side	Full power	802.11b	20	99.53%	11	2462	16.53	18.00	0.11	0.267	1.00	1.40	0.376
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.07	0.455	1.00	1.30	0.596
Back Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	-0.03	0.261	1.00	1.30	0.342
Left Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	0.02	0.067	1.00	1.30	0.088
Right Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	0.02	0.523	1.00	1.30	0.685
Top Side	Full power	802.11b	20	99.52%	6	2437	16.85	18.00	0.15	0.681	1.00	1.30	0.892
Top Side	Full power	802.11b	20	99.41%	1	2412	17.17	18.00	-0.03	0.657	1.01	1.21	0.800
Top Side	Full power	802.11b	20	99.53%	11	2462	16.53	18.00	-0.03	0.629	1.00	1.40	0.887

WLAN 5G

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.02	0.319	1.03	1.24	0.408
Left Tilt 15°	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.06	0.190	1.03	1.24	0.243
Right Touch	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.08	0.182	1.03	1.24	0.233
Right Tilt 15°	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.03	0.161	1.03	1.24	0.206
Left Touch	Full power	802.11a	20	97.20%	36	5180	15.38	16.00	-0.17	0.380	1.03	1.15	0.451
Left Touch	Full power	802.11a	20	97.90%	48	5240	15.02	16.00	0.17	0.350	1.02	1.25	0.448
Body SAR (Body-worn 10mm)													
Front Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.04	0.100	1.03	1.24	0.128
Back Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.10	0.094	1.03	1.24	0.120
Front Side	Full power	802.11a	20	97.20%	36	5180	15.38	16.00	0.10	0.077	1.03	1.15	0.091
Front Side	Full power	802.11a	20	97.90%	48	5240	15.02	16.00	0.05	0.094	1.02	1.25	0.120
Body SAR (Hotspot 10mm)													
Front Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.04	0.100	1.03	1.24	0.128
Back Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.10	0.094	1.03	1.24	0.120
Left Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.06	0.025	1.03	1.24	0.032
Right Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.08	0.285	1.03	1.24	0.365
Top Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.08	0.185	1.03	1.24	0.237
Right Side	Full power	802.11a	20	97.20%	36	5180	15.38	16.00	0.03	0.292	1.03	1.15	0.347
Right Side	Full power	802.11a	20	97.90%	48	5240	15.02	16.00	0.05	0.332	1.02	1.25	0.425
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.10	0.211	1.03	1.24	0.270
Back Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.02	0.134	1.03	1.24	0.172
Left Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.02	0.014	1.03	1.24	0.018
Right Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	0.07	0.510	1.03	1.24	0.653
Top Side	Full power	802.11a	20	97.20%	40	5200	15.05	16.00	-0.09	0.175	1.03	1.24	0.224
Right Side	Full power	802.11a	20	97.20%	36	5180	15.38	16.00	0.17	0.610	1.03	1.15	0.724
Right Side	Full power	802.11a	20	97.90%	48	5240	15.02	16.00	0.07	0.531	1.02	1.25	0.680

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.05	0.344	1.03	1.30	0.461
Left Tilt 15°	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.14	0.277	1.03	1.30	0.371
Right Touch	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.05	0.271	1.03	1.30	0.363
Right Tilt 15°	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.07	0.270	1.03	1.30	0.362
Left Touch	Full power	802.11a	20	97.20%	52	5260	14.76	16.00	0.05	0.248	1.03	1.33	0.339
Left Touch	Full power	802.11a	20	97.20%	64	5320	13.21	14.00	0.11	0.374	1.03	1.20	0.462
Body SAR (Body-worn 10mm)													
Front Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	0.10	0.124	1.03	1.30	0.166
Back Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.10	0.085	1.03	1.30	0.114
Front Side	Full power	802.11a	20	97.20%	52	5260	14.76	16.00	-0.03	0.092	1.03	1.33	0.126
Front Side	Full power	802.11a	20	97.20%	64	5320	13.21	14.00	-0.04	0.095	1.03	1.20	0.117
Body SAR (Hotspot 10mm)													
Front Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	0.10	0.124	1.03	1.30	0.166
Back Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.10	0.085	1.03	1.30	0.114
Left Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.04	0.031	1.03	1.30	0.041
Right Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	0.16	0.368	1.03	1.30	0.493
Top Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	0.05	0.334	1.03	1.30	0.448
Right Side	Full power	802.11a	20	97.20%	52	5260	14.76	16.00	0.12	0.292	1.03	1.33	0.400
Right Side	Full power	802.11a	20	97.20%	64	5320	13.21	14.00	-0.07	0.294	1.03	1.20	0.363
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.10	0.365	1.03	1.30	0.489
Back Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.02	0.204	1.03	1.30	0.274
Left Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.07	0.023	1.03	1.30	0.031
Right Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	0.15	0.565	1.03	1.30	0.757
Top Side	Full power	802.11a	20	97.20%	56	5280	14.85	16.00	-0.14	0.263	1.03	1.30	0.353
Right Side	Full power	802.11a	20	97.20%	52	5260	14.76	16.00	0.10	0.606	1.03	1.33	0.829
Right Side	Full power	802.11a	20	97.20%	64	5320	13.21	14.00	-0.08	0.554	1.03	1.20	0.684

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.03	0.351	1.02	1.19	0.427
Left Tilt 15°	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	0.02	0.314	1.02	1.19	0.382
Right Touch	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.02	0.241	1.02	1.19	0.293
Right Tilt 15°	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.01	0.322	1.02	1.19	0.392
Left Touch	Full power	802.11a	20	97.20%	100	5500	14.24	15.00	-0.04	0.280	1.03	1.19	0.343
Left Touch	Full power	802.11a	20	97.90%	140	5700	14.06	15.00	-0.12	0.289	1.02	1.24	0.367
Body SAR (Body-worn 10mm)													
Front Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.02	0.133	1.02	1.19	0.162
Back Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.10	0.127	1.02	1.19	0.155
Front Side	Full power	802.11a	20	97.20%	100	5500	14.24	15.00	-0.16	0.121	1.03	1.19	0.148
Front Side	Full power	802.11a	20	97.90%	140	5700	14.06	15.00	-0.08	0.088	1.02	1.24	0.112
Body SAR (Hotspot 10mm)													
Front Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.02	0.133	1.02	1.19	0.162
Back Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.10	0.127	1.02	1.19	0.155
Left Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.07	0.033	1.02	1.19	0.040
Right Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	0.01	0.247	1.02	1.19	0.301
Top Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.02	0.248	1.02	1.19	0.302
Right Side	Full power	802.11a	20	97.20%	100	5500	14.24	15.00	-0.05	0.300	1.03	1.19	0.368
Right Side	Full power	802.11a	20	97.90%	140	5700	14.06	15.00	-0.05	0.353	1.02	1.24	0.448
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.10	0.311	1.02	1.19	0.378
Back Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.10	0.145	1.02	1.19	0.176
Left Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.15	0.015	1.02	1.19	0.019
Right Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.01	0.461	1.02	1.19	0.561
Top Side	Full power	802.11a	20	97.90%	116	5580	14.74	15.50	-0.07	0.279	1.02	1.19	0.339
Right Side	Full power	802.11a	20	97.20%	100	5500	14.24	15.00	-0.08	0.668	1.03	1.19	0.819
Right Side	Full power	802.11a	20	97.90%	140	5700	14.06	15.00	0.05	0.439	1.02	1.24	0.557

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g
Head SAR													
Left Touch	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.03	0.349	1.02	1.12	0.401
Left Tilt 15°	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.06	0.215	1.02	1.12	0.247
Right Touch	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.04	0.151	1.02	1.12	0.173
Right Tilt 15°	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.15	0.116	1.02	1.12	0.133
Left Touch	Full power	802.11a	20	97.90%	149	5745	14.65	15.50	0.04	0.314	1.02	1.22	0.390
Left Touch	Full power	802.11a	20	97.89%	165	5825	13.80	15.50	-0.15	0.254	1.02	1.48	0.384
Body SAR (Body-worn 10mm)													
Front Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	0.08	0.131	1.02	1.12	0.150
Back Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.10	0.062	1.02	1.12	0.071
Front Side	Full power	802.11a	20	97.90%	149	5745	14.65	15.50	-0.01	0.123	1.02	1.22	0.153
Front Side	Full power	802.11a	20	97.89%	165	5825	13.80	15.50	0.09	0.080	1.02	1.48	0.121
Body SAR (Hotspot 10mm)													
Front Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	0.08	0.131	1.02	1.12	0.150
Back Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.10	0.062	1.02	1.12	0.071
Left Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.02	0.017	1.02	1.12	0.020
Right Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	0.05	0.413	1.02	1.12	0.474
Top Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	0.02	0.172	1.02	1.12	0.198
Right Side	Full power	802.11a	20	97.90%	149	5745	14.65	15.50	0.12	0.317	1.02	1.22	0.394
Right Side	Full power	802.11a	20	97.89%	165	5825	13.80	15.50	0.13	0.270	1.02	1.48	0.408
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g
Limb SAR (0mm)													
Front Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.01	0.269	1.02	1.12	0.309
Back Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	0.00	0.121	1.02	1.12	0.139
Left Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.10	0.012	1.02	1.12	0.014
Right Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	-0.03	0.396	1.02	1.12	0.455
Top Side	Full power	802.11a	20	97.90%	157	5785	14.99	15.50	0.13	0.221	1.02	1.12	0.254
Right Side	Full power	802.11a	20	97.90%	149	5745	14.65	15.50	0.05	0.490	1.02	1.22	0.609
Right Side	Full power	802.11a	20	97.89%	165	5825	13.80	15.50	0.10	0.486	1.02	1.48	0.734

11.4 SAR results for BT/RFID

BT

Test Position	Power Reduction	Mode	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			
									Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g
Head SAR												
Left Touch	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.05	0.015	1.30	1.25	0.024
Left Tilt 15°	Full power	DH5	76.80%	39	2441	10.03	11.00	0.04	0.007	1.30	1.25	0.011
Right Touch	Full power	DH5	76.80%	39	2441	10.03	11.00	0.04	0.012	1.30	1.25	0.020
Right Tilt 15°	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.06	0.018	1.30	1.25	0.029
Left Touch	Full power	DH5	76.60%	0	2402	8.75	10.00	0.10	0.030	1.31	1.33	0.052
Left Touch	Full power	DH5	76.80%	78	2480	9.21	10.00	-0.01	0.021	1.30	1.20	0.032
Body SAR (Body-worn 10mm)												
Front Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.05	0.009	1.30	1.25	0.015
Back Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.10	0.009	1.30	1.25	0.014
Front Side	Full power	DH5	76.60%	0	2402	8.75	10.00	0.03	0.007	1.31	1.33	0.013
Front Side	Full power	DH5	76.80%	78	2480	9.21	10.00	0.09	0.007	1.30	1.20	0.011
Body SAR (Hotspot 10mm)												
Front Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.05	0.009	1.30	1.25	0.015
Back Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.10	0.009	1.30	1.25	0.014
Left Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.06	0.006	1.30	1.25	0.010
Right Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.04	0.008	1.30	1.25	0.013
Top Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.05	0.007	1.30	1.25	0.011
Top Side	Full power	DH5	76.60%	0	2402	8.75	10.00	0.10	0.012	1.31	1.33	0.021
Top Side	Full power	DH5	76.80%	78	2480	9.21	10.00	0.08	0.011	1.30	1.20	0.018
Test Position	Power Reduction	Mode	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			
									Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g
Limb SAR (0mm)												
Front Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.10	0.009	1.30	1.25	0.014
Back Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.06	0.006	1.30	1.25	0.009
Left Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.06	0.006	1.30	1.25	0.010
Right Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.04	0.008	1.30	1.25	0.014
Top Side	Full power	DH5	76.80%	39	2441	10.03	11.00	-0.15	0.026	1.30	1.25	0.042
Top Side	Full power	DH5	76.60%	0	2402	8.75	10.00	0.15	0.038	1.31	1.33	0.066
Top Side	Full power	DH5	76.80%	78	2480	9.21	10.00	-0.03	0.027	1.30	1.20	0.043

RFID

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)		
								Measured SAR1g	Scaling Factor	Report SAR1g
Head SAR										
Left Touch	Full power	RFID	25	914.75	29.86	30.00	-0.03	0.032	1.03	0.033
Left Tilt 15°	Full power	RFID	25	914.75	29.86	30.00	0.15	0.041	1.03	0.042
Right Touch	Full power	RFID	25	914.75	29.86	30.00	-0.08	0.005	1.03	0.005
Right Tilt 15°	Full power	RFID	25	914.75	29.86	30.00	-0.02	0.024	1.03	0.025
Left Tilt 15°	Full power	RFID	1	902.75	29.98	30.00	0.12	0.029	1.00	0.029
Left Tilt 15°	Full power	RFID	50	927.25	29.71	30.00	0.10	0.032	1.07	0.034
Body SAR (Body-worn 10mm)										
Front Side	Full power	RFID	25	914.75	29.86	30.00	0.09	0.028	1.03	0.029
Back Side	Full power	RFID	25	914.75	29.86	30.00	0.09	0.393	1.03	0.406
Back Side	Full power	RFID	1	902.75	29.98	30.00	-0.04	0.089	1.00	0.089
Back Side	Full power	RFID	50	927.25	29.71	30.00	-0.02	0.094	1.07	0.100
Body SAR (Hotspot 10mm)										
Front Side	Full power	RFID	25	914.75	29.86	30.00	0.09	0.028	1.03	0.029
Back Side	Full power	RFID	25	914.75	29.86	30.00	0.09	0.393	1.03	0.406
Left Side	Full power	RFID	25	914.75	29.86	30.00	0.06	0.018	1.03	0.019
Right Side	Full power	RFID	25	914.75	29.86	30.00	-0.15	0.018	1.03	0.018
Top Side	Full power	RFID	25	914.75	29.86	30.00	0.10	0.072	1.03	0.074
Back Side	Full power	RFID	1	902.75	29.98	30.00	0.02	0.211	1.00	0.212
Back Side	Full power	RFID	50	927.25	29.71	30.00	0.02	0.165	1.07	0.176
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)		
								Measured SAR10g	Scaling Factor	Report SAR10g
Limb SAR (0mm)										
Front Side	Full power	RFID	25	914.75	29.86	30.00	-0.10	0.010	1.03	0.011
Back Side	Full power	RFID	25	914.75	29.86	30.00	0.04	0.415	1.03	0.429
Left Side	Full power	RFID	25	914.75	29.86	30.00	-0.01	0.016	1.03	0.016
Right Side	Full power	RFID	25	914.75	29.86	30.00	0.00	0.018	1.03	0.018
Top Side	Full power	RFID	25	914.75	29.86	30.00	0.07	0.092	1.03	0.095
Back Side	Full power	RFID	1	902.75	29.98	30.00	0.02	0.117	1.00	0.118
Back Side	Full power	RFID	50	927.25	29.71	30.00	0.04	0.108	1.07	0.115

11.5 SAR results for Phablet

According to the KDB648474 D04, for smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance.

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 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. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Extremity 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode 10-g extremity SAR.
3. The simultaneous transmission operating configurations applicable to voice and data transmissions for both phone and mini-tablet modes must be taken into consideration separately for 1-g and 10-g SAR to determine the simultaneous transmission SAR test exclusion and measurement requirements for the relevant wireless modes and exposure conditions

The 10g extremity SAR is not required for this DUT, because all the hotspot mode 1g reported SAR is less than 1.2 W/kg.

12 SAR Measurement Variability

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. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 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

13 Simultaneous TX SAR Considerations

13.1 Transmit Antenna Separation Distances

The detail for transmit antenna separation distances is described in the additional document:

Appendix to test report No.25B02Z101619-001

The photos of SAR test

13.2 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

Antenna/Sensor-to- DUT sides separation distances						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
Main ANT	<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
WIFI5G ANT	<25mm	<25mm	>25mm	<25mm	<25mm	>25mm
GPS/WIFI2.4G/BT ANT	<25mm	<25mm	>25mm	<25mm	<25mm	>25mm
RFID ANT	<25mm	<25mm	<25mm	<25mm	<25mm	>25mm

Low Power Transmitters SAR Consideration:

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation for low power transmitters is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

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

$$\frac{(\text{max. power of channel, including tune - up tolerance, mW})}{(\text{min. test separation distance, mm})} \times \sqrt{\text{Frequency(GHz)}} \leq 3.0$$

Where:

- Frequency (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

According to the KDB447498 appendix A, the SAR test exclusion threshold for 2450MHz at 5mm test separation distances is 10mW. That means the transmitters with tune-up power below 10mW are excluded for SAR measurement.

SAR test exclusion for NFC separation < 50mm = $[474 \times (1 + \log(100/f(\text{MHz})))]/2 = 443$ mW, the maximum tune up power of NFC is -26.50 dBm(0.002mW), NFC can be exempted.

13.3 Simultaneous Transmission

13.3.1 Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as WLAN and Bluetooth devices which may simultaneously transmit with the licensed transmitter. KDB 447498 D01 provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR and SAR to Peak Location Ratio (SPLSR)

13.3.2 Sum of SAR

To qualify for simultaneous transmission SAR test exclusion based upon Sum of SAR the sum of the reported standalone SARs for all simultaneously transmitting antennas shall be below the applicable standalone SAR limit. If the sum of the SARs is above the applicable limit then simultaneous transmission SAR test exclusion may still apply if the requirements of the SAR to Peak Location Ratio (SPLSR) evaluation are met.

13.3.3 SAR to Peak Location Ratio (SPLSR)

KDB 447498 D01 General RF Exposure Guidance explains how to calculate the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

$$SPLSR = (SAR1 + SAR2)^{1.5} / Ri$$

Where:

SAR1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.

SAR2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first .

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$$[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$$(SAR1 + SAR2)^{1.5} / Ri \leq 0.04$$

When an individual antenna transmits at on two bands simultaneously, the sum of the highest reported SAR for the frequency bands should be used to determine *SAR1* or *SAR2*. When SPLSR is necessary, the smallest distance between the peak SAR locations for the antenna pair with respect to the peaks from each antenna should be used.

13.3.4 Simultaneous Transmission Capabilities

The simultaneous transmission possibilities for this device are listed as below:

Capable Transmit Configurations	Head	Body	Limb 10-g (0mm)
WWAN + BT	Yes	Yes	Yes
WWAN + Wi-Fi 2.4G	Yes	Yes	Yes
WWAN + Wi-Fi 5G	Yes	Yes	Yes
WWAN + RFID	Yes	Yes	Yes
Wi-Fi 2.4G + RFID	Yes	Yes	Yes
Wi-Fi 5G + RFID	Yes	Yes	Yes
BT + RFID	Yes	Yes	Yes
WWAN + Wi-Fi 2.4G + RFID	Yes	Yes	Yes
WWAN + BT + RFID	Yes	Yes	Yes
WWAN + Wi-Fi 5G + RFID	Yes	Yes	Yes

Note:

1. The reported SAR summation is calculated based on the same configuration and test position.
2. For the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR, we determined the SAR of this edges were less than 0.01. For the convenience of simultaneous transmission calculation, all SAR values less than 0.01 are uniformly written as 0.00

13.3.5 Evaluation of Simultaneous

Simultaneous Transmission Table	Test Position	Report SAR _{avg} (W/kg)	Cellular																Max.Report SAR _{avg} GSM/WCDMA/LTE
			GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE B7	LTE B12	LTE B13	LTE B14	LTE B25	LTE B26	LTE B30	LTE B40	LTE B41	LTE B66	LTE B71	
Head	Left Touch	0.176	0.028	0.237	0.219	0.222	0.312	0.169	0.151	0.123	0.057	0.197	0.165	0.174	0.098	0.401	0.039	0.099	0.401
	Left Tilt 15°	0.115	0.017	0.113	0.065	0.139	0.150	0.051	0.069	0.064	0.022	0.105	0.063	0.044	0.061	0.078	0.029	0.072	0.150
	Right Touch	0.303	0.014	0.083	0.054	0.323	0.173	0.095	0.158	0.141	0.030	0.286	0.110	0.057	0.070	0.106	0.027	0.219	0.323
	Right Tilt 15°	0.118	0.011	0.057	0.042	0.151	0.167	0.050	0.087	0.073	0.018	0.100	0.090	0.038	0.064	0.102	0.019	0.064	0.167
Body SAR (Body-worn 10mm)	Front Side	0.171	0.119	0.166	0.138	0.225	0.503	0.093	0.107	0.087	0.388	0.203	0.224	0.081	0.133	0.238	0.038	0.160	0.503
	Back Side	0.691	0.624	0.694	0.794	0.549	0.775	0.452	0.290	0.268	0.635	0.481	0.872	0.579	0.663	0.690	0.828	0.628	0.872
Body SAR (Hotspot 10mm)	Front Side	0.171	0.119	0.166	0.138	0.225	0.503	0.093	0.107	0.087	0.388	0.203	0.224	0.081	0.133	0.238	0.038	0.160	0.503
	Back Side	0.691	0.624	0.694	0.794	0.549	0.775	0.452	0.290	0.268	0.635	0.481	0.872	0.579	0.663	0.690	0.828	0.628	0.872
	Left Side	0.127	0.224	0.391	0.283	0.195	0.671	0.094	0.099	0.070	0.476	0.168	0.488	0.269	0.295	0.400	0.294	0.074	0.671
	Right Side	0.272	0.012	0.034	0.044	0.304	0.057	0.138	0.220	0.162	0.036	0.303	0.015	0.005	0.007	0.042	0.030	0.099	0.304
	Top Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000
	Bottom Side	0.337	0.168	0.293	0.291	0.363	0.292	0.124	0.237	0.182	0.478	0.338	0.337	0.193	0.214	0.320	0.437	0.087	0.478
Body SAR Define	Back Side(29mm)	N/A	0.261	0.468	0.587	N/A	0.250	N/A	N/A	N/A	0.284	N/A	0.178	0.119	0.113	N/A	0.389	N/A	0.587
	Bottom Side(19mm)	N/A	0.170	0.398	0.481	N/A	0.209	N/A	N/A	N/A	0.434	N/A	0.073	0.071	0.064	N/A	0.472	N/A	0.481
Simultaneous Transmission Table	Test Position	Report SAR _{avg} (W/kg)	Cellular																Max.Report SAR _{avg} GSM/WCDMA/LTE
			GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE B7	LTE B12	LTE B13	LTE B14	LTE B25	LTE B26	LTE B30	LTE B40	LTE B41	LTE B66	LTE B71	
Limb SAR(0mm)	Front Side	0.431	0.202	0.336	0.266	0.533	0.747	0.260	0.349	0.219	0.414	0.434	0.540	0.211	0.303	0.509	0.295	0.192	0.747
	Back Side	0.827	0.310	0.926	0.592	0.509	1.479	0.620	0.522	0.542	0.647	0.503	2.966	1.124	1.007	1.017	0.541	0.669	2.966
	Left Side	0.355	0.748	1.390	1.227	0.364	2.198	0.132	0.215	0.165	1.118	0.297	1.179	0.638	0.922	1.319	0.975	0.080	2.198
	Right Side	0.260	0.018	0.066	0.050	0.265	0.250	0.176	0.221	0.160	0.028	0.297	0.005	0.013	0.027	0.085	0.032	0.102	0.297
	Top Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000
	Bottom Side	1.018	0.319	0.777	0.656	0.916	0.563	0.384	0.517	0.393	0.836	0.781	0.335	0.482	0.460	0.797	0.721	0.269	1.018

Simultaneous Transmission Table	Test Position	Report SAR _{avg} (W/kg)	Non-Cellular						RFID
			Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Wi-Fi 5G			Max.Report SAR _{10g} Wi-Fi 5G	
Head	Left Touch	0.052	0.818	0.451	0.462	0.427	0.401	0.462	0.033
	Left Tilt 15°	0.011	0.716	0.243	0.371	0.382	0.247	0.382	0.042
	Right Touch	0.020	0.402	0.233	0.363	0.293	0.173	0.363	0.005
	Right Tilt 15°	0.029	0.394	0.206	0.362	0.392	0.133	0.392	0.025
Body SAR (Body-worn 10mm)	Front Side	0.015	0.235	0.128	0.166	0.162	0.153	0.166	0.029
	Back Side	0.014	0.177	0.120	0.114	0.155	0.071	0.155	0.406
Body SAR (Hotspot 10mm)	Front Side	0.015	0.235	0.128	0.166	0.162	0.153	0.166	0.029
	Back Side	0.014	0.177	0.120	0.114	0.155	0.071	0.155	0.406
	Left Side	0.010	0.059	0.032	0.041	0.040	0.020	0.041	0.019
	Right Side	0.013	0.331	0.425	0.493	0.448	0.474	0.493	0.018
	Top Side	0.021	0.376	0.237	0.448	0.302	0.198	0.448	0.074
	Bottom Side	N/A	N/A	N/A	N/A	N/A	N/A	0.000	N/A
Body SAR Define	Back Side(29mm)	0.014	0.177	0.120	0.114	0.155	0.071	0.155	N/A
	Bottom Side(19mm)	N/A	N/A	N/A	N/A	N/A	N/A	0.000	N/A
Simultaneous Transmission Table	Test Position	Report SAR _{avg} (W/kg)	Non-Cellular						RFID
			Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Wi-Fi 5G			Max.Report SAR _{10g} Wi-Fi 5G	
Limb SAR(0mm)	Front Side	0.014	0.596	0.270	0.489	0.378	0.309	0.489	0.011
	Back Side	0.009	0.342	0.172	0.274	0.176	0.139	0.274	0.429
	Left Side	0.010	0.088	0.018	0.031	0.019	0.014	0.031	0.016
	Right Side	0.014	0.685	0.724	0.829	0.819	0.734	0.829	0.018
	Top Side	0.066	0.892	0.224	0.353	0.339	0.254	0.353	0.095
	Bottom Side	N/A	N/A	N/A	N/A	N/A	N/A	0.000	N/A

Simultaneous Transmission Table	Test Position	Report SAR _{avg} (W/kg)	Non-Cellular			RFID	WWAN+Wi-Fi										Max.E SAR _{10g}
			Max.Report SAR _{10g} GSM/WCDMA/LTE	Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Max.Report SAR _{10g} Wi-Fi 5G	WWAN+BT	WWAN+Wi-Fi 2.4G	WWAN+Wi-Fi 5G	WWAN+RFID	Wi-Fi 2.4G+RFID	Wi-Fi 5G+RFID	BT+RFID	WWAN+Wi-Fi 2.4G+RFID	WWAN+BT+RFID	WWAN+Wi-Fi 5G+RFID	
Head	Left Touch	0.401	0.052	0.818	0.462	0.033	0.453	1.219	0.863	0.434	0.851	0.495	0.085	1.252	0.486	0.896	1.25
	Left Tilt 15°	0.150	0.011	0.716	0.382	0.042	0.161	0.866	0.532	0.192	0.798	0.424	0.053	0.908	0.203	0.574	0.91
	Right Touch	0.323	0.020	0.402	0.363	0.005	0.343	0.725	0.686	0.328	0.407	0.388	0.025	0.730	0.348	0.691	0.73
	Right Tilt 15°	0.167	0.029	0.394	0.392	0.025	0.196	0.561	0.559	0.192	0.419	0.417	0.054	0.586	0.221	0.584	0.59
Body SAR (Body-worn 10mm)	Front Side	0.503	0.015	0.235	0.166	0.029	0.518	0.738	0.669	0.532	0.264	0.195	0.044	0.767	0.547	0.698	0.77
	Back Side	0.872	0.014	0.177	0.155	0.406	0.886	1.049	1.027	1.278	0.583	0.561	0.420	1.455	1.292	1.433	1.46
Body SAR (Hotspot 10mm)	Front Side	0.503	0.015	0.235	0.166	0.029	0.518	0.738	0.669	0.532	0.264	0.195	0.044	0.767	0.547	0.698	0.77
	Back Side	0.872	0.014	0.177	0.155	0.406	0.886	1.049	1.027	1.278	0.583	0.561	0.420	1.455	1.292	1.433	1.46
	Left Side	0.671	0.010	0.059	0.041	0.019	0.681	0.730	0.712	0.690	0.078	0.060	0.029	0.749	0.700	0.731	0.75
	Right Side	0.304	0.013	0.331	0.493	0.018	0.317	0.635	0.797	0.322	0.349	0.511	0.031	0.653	0.335	0.815	0.82
	Top Side	0.000	0.021	0.376	0.448	0.074	0.021	0.376	0.448	0.074	0.450	0.522	0.095	0.450	0.095	0.522	0.52
	Bottom Side	0.478	N/A	N/A	0.000	N/A	0.478	0.478	0.478	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.48
Body SAR Define	Back Side(29mm)	0.587	0.014	0.177	0.155	N/A	0.601	0.764	0.742	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.76
	Bottom Side(19mm)	0.481	N/A	N/A	0.000	N/A	0.481	0.481	0.481	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.48
Simultaneous Transmission Table	Test Position	Report SAR _{avg} (W/kg)	Non-Cellular			RFID	WWAN+Wi-Fi										Max.E SAR _{10g}
			Max.Report SAR _{10g} GSM/WCDMA/LTE	Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Max.Report SAR _{10g} Wi-Fi 5G	WWAN+BT	WWAN+Wi-Fi 2.4G	WWAN+Wi-Fi 5G	WWAN+RFID	Wi-Fi 2.4G+RFID	Wi-Fi 5G+RFID	BT+RFID	WWAN+Wi-Fi 2.4G+RFID	WWAN+BT+RFID	WWAN+Wi-Fi 5G+RFID	
Limb SAR(0mm)	Front Side	0.747	0.014	0.596	0.489	0.011	0.761	1.343	1.236	0.758	0.607	0.500	0.025	1.354	0.772	1.247	1.35
	Back Side	2.966	0.009	0.342	0.274	0.429	2.975	3.308	3.240	3.395	0.771	0.703	0.438	3.737	3.404	3.669	3.74
	Left Side	2.198	0.010	0.088	0.031	0.016	2.208	2.286	2.229	2.214	0.104	0.047	0.026	2.302	2.224	2.245	2.30
	Right Side	0.297	0.014	0.685	0.829	0.018	0.311	0.882	1.126	0.515	0.703	0.847	0.032	1.000	0.329	1.144	1.14
	Top Side	0.000	0.066	0.892	0.353	0.095	0.066	0.892	0.353	0.095	0.987	0.448	0.161	0.987	0.161	0.448	0.99
	Bottom Side	1.018	N/A	N/A	0.000	N/A	1.018	1.018	1.018	N/A	0.000	N/A	N/A	N/A	N/A	N/A	1.02

Conclusion:

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

14 Measurement Uncertainty

14.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c' = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					9.55	9.43	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$					19.1	18.9	

14.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞

21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						10.7	10.6	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						21.4	21.1	

15 MAIN TEST INSTRUMENTS

Table 15.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	N5239A	MY55491241	May 15, 2025	One year
02	Power sensor	NRP50S	101488	May 30, 2025	One year
03	Power sensor	NRP50S	101489		
04	Signal Generator	E4438C	MY49071430	December 19 2024	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	172116	April 2, 2025	One year
07	DAE	DAE4	1745	September 13,2024	One year
08	E-field Probe	EX3DV4	7600	January 06,2025	One year
09	Dipole Validation Kit	D750V3	1017	July 9,2024	Three year
10	Dipole Validation Kit	D835V2	4d069	July 9,2024	Three year
11	Dipole Validation Kit	D900V2	1d051	July 9,2024	Three year
12	Dipole Validation Kit	D1750V2	1003	July 11,2024	Three year
13	Dipole Validation Kit	D1900V2	5d101	July 8,2024	Three year
14	Dipole Validation Kit	D2300V2	1018	July 10,2024	Three year
15	Dipole Validation Kit	D2450V2	853	July 10,2024	Three year
16	Dipole Validation Kit	D2600V2	1012	July 10,2024	Three year
17	Dipole Validation Kit	D5GHzV2	1262	January 17,2025	One year

END OF REPORT BODY

Appendixes

Refer to separated files for the following appendixes

ANNEX A Graph Results

ANNEX B System Verification Results

ANNEX C SAR Measurement Setup

ANNEX D Position of the wireless device in relation to the phantom

ANNEX E Equivalent Media Recipes

ANNEX F System Validation

ANNEX G Probe Calibration Certificate

ANNEX H Dipole Calibration Certificate

ANNEX I Extended Calibration SAR Dipole

ANNEX J SAR Sensor Triggering Data Summary

ANNEX K Accreditation Certificate