

FCC SAR Compliance Test Report

For

Clover Industrial Co., Ltd

Factory Building 4, Hengchangrong High-tech Industrial Park, Shangnan East

Road, Hongtian, Huangpu Community, Xinqiao Street, Baoan District, Shenzhen

Model: T12

Test Engineer: Liu Yuhao

Report Number: WSCT-A2LA-R&E260800074A-SAR

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FCC ID: 2BCQA-T12

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Modified History

REV.	Modification Description	Issued Date	Remark
REV.1.0	Initial Test Report Release	10 September 2026	Li Huaibi
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1 General information

1.1 Notes

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1.2 Application details

Date of receipt of test item: 2026-08-06
Start of test: 2026-08-10
End of test: 2026-09-10

1.3 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for T12 is as below:

Band	Position Test Points	MAX Reported SAR _{1g} (W/kg)
GSM850	Body & Hotspot 0mm	0.641
GSM1900	Body & Hotspot 0mm	0.280
UMTS Band 2	Body & Hotspot 0mm	0.076
UMTS Band 4	Body & Hotspot 0mm	0.641
UMTS Band 5	Body & Hotspot 0mm	0.618
LTE Band 2	Body & Hotspot 0mm	0.156
LTE Band 4	Body & Hotspot 0mm	0.109
LTE Band 5	Body & Hotspot 0mm	0.940
LTE Band 12	Body & Hotspot 0mm	0.476
LTE Band 25	Body & Hotspot 0mm	0.754
LTE Band 26(814-824)	Body & Hotspot 0mm	1.076
LTE Band 26(824-849)	Body & Hotspot 0mm	0.956
LTE Band 41	Body & Hotspot 0mm	0.700
LTE Band 41(2685)	Body & Hotspot 0mm	0.779
LTE Band 66	Body & Hotspot 0mm	0.078
LTE Band 71	Body & Hotspot 0mm	0.356
BT	Body & Hotspot 0mm	0.184
Wi-Fi 2.4G	Body & Hotspot 0mm	0.380
WIFI5G Band1	Body & Hotspot 0mm	0.024
WIFI5G Band2	Body & Hotspot 0mm	0.017
WIFI5G Band3	Body & Hotspot 0mm	0.022
WIFI5G Band4	Body & Hotspot 0mm	0.041
Maximum Max. SAR Level(s)	LTE Band 26	1.076 W/kg1gBodyTissue
Measured: (Limit: 1.6W/Kg):	WIFI 2.4G	0.380 W/kg1gBodyTissue
The Body highest simultaneous SAR :		1.502W/kg1gBodyTissue

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

1.4 EUT Information

Device Information:	
Product Type:	Tablet PC
Model:	T12
Trade Name:	N/A
Software version:	N/A
Hardware version:	D866K V1.0
Device Type:	Portable device
Exposure Category:	uncontrolled environment / general population
Production Unit or Identical Prototype:	Production Unit
Antenna Type :	Integral Antenna
Device Operating Configurations:	
Supporting Mode(s) :	GSM850, PCS 1900 WCDMA B2/ WCDMA B4/ WCDMA B5 LTE Band 2/ LTE Band 4/ LTE Band 5 LTE Band 12/ LTE Band 25/ LTE Band 26 LTE Band 41/LTE Band 66/ LTE Band 71/Wi-Fi/BT
Modulation:	GSM/GPRS: GMSK;EGPRS: 8PSK WCDMA: QPSK;HSDPA/HSUPA: QPSK /16QAM LTE: QPSK /16QAM; BT: GFSK, $\pi/4$ -DQPSK, 8-DPSK DSSS (DBPSK, DQPSK, CCK) for IEEE 802.11b IEEE 802.11g/n: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) IEEE 802.11a/n/ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Operating Frequency Range(s) :	GSM850: 824-849MHz (TX), 869-894MHz (RX); PCS1900: 1850-1910MHz (TX), 1930-1990MHz (RX); WCDMA Band2: 1850-1910MHz (TX), 1930-1990MHz (RX); WCDMA Band4: 1710-1755MHz (TX), 2110-2155MHz (RX); WCDMA Band5: 824-849MHz (TX), 869-894MHz (RX); LTE Band2: 1850-1910MHz (TX), 1930-1990MHz (RX); LTE Band4: 1710-1755MHz (TX), 2110-2155MHz (RX); LTE Band5: 824-849MHz (TX), 869-894MHz (RX); LTE Band12: 699-716MHz (TX), 729-746MHz (RX); LTE Band25: 1850MHz-1915MHz(TX); LTE Band26: 814-824MHz(TX), 859-869MHz(RX); LTE Band26: 824-849MHz(TX), 869-894MHz(RX); LTE Band41: 2535-2675 MHz(TX); LTE Band66:1710-1780 MHz(TX), 2110-2200 MHz(RX); LTE Band71:663-698MHz(TX); BT: 2402MHz~2480MHz; 2.4GWi-Fi: 2412MHz~2462MHz (802.11b/g/n(HT20)) 2422MHz~2452MHz (802.11n(HT40)) 5GWi-Fi: Band 1: 5180-5240 MHz Band 2: 5260-5320 MHz Band 3: 5500-5700 MHz Band 4: 5745-5825 MHz

Antenna gain:	GSM 850WCDMA B5/LTE B5:0.8dBi; PCS 1900/WCDMA B2/LTE B2: 1.3dBi; WCDMA B4/LTE B4: 1.1dBi; 0.7dBi for LTE band 12; 1.3dBi for LTE band 25; 0.8dBi for LTE band 26; 1.6dBi for LTE band 41; 1.1dBi for LTE band 66; 0.6dBi for LTE band 71; 1.27dBi for BT/2.4G WiFi 2.43dBi for 5G WiFi 1&2; 2.80 dBi for 5G WiFi 3; 2.60 dBi for 5G WiFi 4;
Battery:	DC 3.85V/5000mAh

Note: 1. N/A stand for no applicable.

2 The above-mentioned basic information such as antenna gain was provided by the applicant.

2 Testing laboratory

Test Site	World Standardization Certification & Testing Group (Shenzhen) Co., Ltd.
Laboratory	Building J-7F and Building D, Dongjiang Science & Technology Park, Tangjia Community, Fenghuang Street, Guangming District, Shenzhen City, Guangdong Province, China
Tel:	+86-755-26996192
Fax:	+86-755-86376605

3 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025:2017

China	CNAS (Registration Number: L3732)
USA	A2LA (Certificate Number: 5768.01)
Canada	ISED(CAB identifier:CN0111)

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

4 Test Environment

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

5 Applicant and Manufacturer

Applicant/Client Name:	Clover Industrial Co., Ltd
Applicant Address:	Factory Building 4, Hengchangrong High-tech Industrial Park, Shangnan East Road, Hongtian, Huangpu Community, Xinqiao Street, Baoan District, Shenzhen
Manufacturer Name:	Clover Industrial Co., Ltd
Manufacturer Address:	Factory Building 4, Hengchangrong High-tech Industrial Park, Shangnan East Road, Hongtian, Huangpu Community, Xinqiao Street, Baoan District, Shenzhen

6 Test standards:

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

6.1 RF exposure limits

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

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

Notes:

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

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

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

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

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

6.2 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dW) absorbed by(dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ).

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

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

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

where:

σ = conductivity of the tissue (S/m)

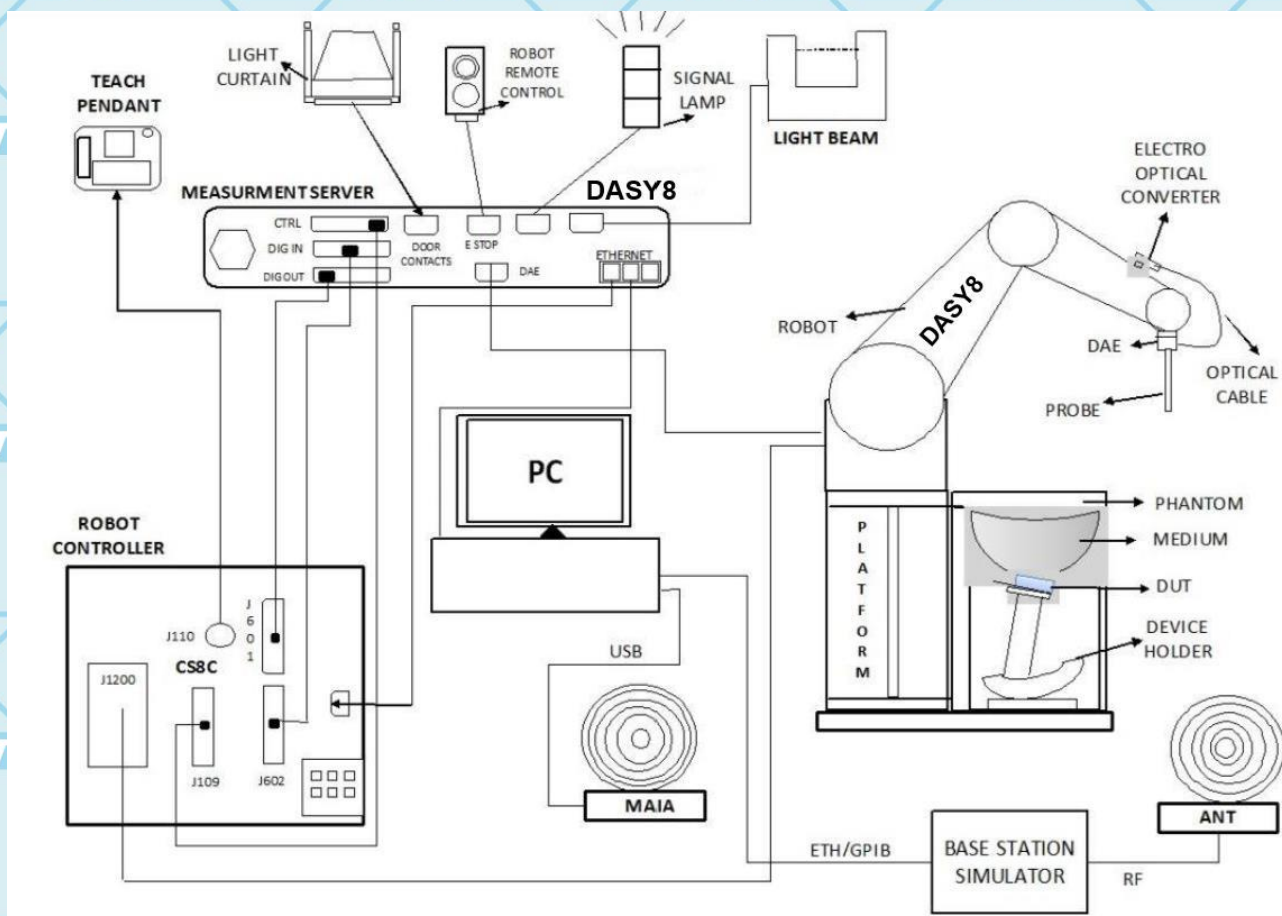
ρ = mass density of the tissue (kg/m³)

E = rms electric field strength (V/m)

7 SAR Measurement System

7.1 The Measurement System

DASY8 is a flexible, high-precision near-field scanner optimized for automated measurements in free-space and tissue simulating liquids (TSL), using the most advanced probes covering the frequency range from 3 kHz to 110 GHz. The software enables point, area, and volume measurements and conformal scanning of complex geometries.



The DASY8 SAR module consists of an isotropic dosimetric probe (SAR) mounted on the TX2 precision robot, which allows field scanning inside anthropomorphic phantoms filled with tissue-simulating liquids. The probes are miniaturized, sensitive, isotropic, linear, stable and calibrated with precise boundary compensation. The spatial accuracy of probe positioning within the phantom is better than 0.2 mm. Scanning is optimized and adaptive to the induced field. The spatial SAR peak is determined without reconstruction.

7.2 Robot

The DASY8 system uses the high-precision industrial robots TX2-60L and TX2-90XL from Stäubli SA (France). The TX2 family of robots provides the ideal combination of speed, rigidity, size, and precision:

- High precision (repeatability 0.03 mm)
- High reliability and low maintenance costs (industrial design)
- ELF interference (motor control fields are shielded by the closed metallic construction)
- Hygienic encapsulated 6-axis arm enabled by a hollow shaft gearbox, no external cables.



7.3 Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG). The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

For the measurements the Specific Dosimetric E-Field Probe EX3DV4 with following specifications is used



Frequency: 4MHz – 10GHz ;

Linearity: ± 0.2 dB (30MHz – 10GHz)

Dynamic Range: 10 μ W/g $\rightarrow$ 100 mW/g

Linearity: ± 0.2 dB (noise: typically <1 μ W/g)

Directivity (typical): ± 0.1 dB in TSL (rotation around probe axis)
 ± 0.3 dB in TSL (rotation normal to probe axis)

Sensor Arrangement	Triangular
Connector Angle	46.9°
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

7.4 DAE

DAE4ip– Data Acquisition Electronics 4 with Integrated Power

Data Acquisition Electronics 4 with an integrated power supply for time unlimited measurements.

Performance:

- Measurement range: -100—+300 mV (16-bit resolution and two range settings: 4 mV, 400 mV)
- Input offset voltage: <5μV (with auto zero)
- Input resistance: 200MΩ
- Input bias current: <50 fA
- Power supply: integrated (from the DASY8 measurement server)
- Dimensions (L × W × H): 60×60×68 mm
- Calibration: ISO/IEC 17025 calibration service available.



7.5 Phantom

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



Material	Vinyl ester, fiberglass reinforced (VE-GF)
Liquid Compatibility	The phantom shell is compatible with SPEAG's tissue-simulating liquids (sugar and oil-based). However, using other liquids may render the phantom warranty void (see note or consult SPEAG support).
Shell Thickness	$2 \pm 0.2\text{mm}$ ($6 \pm 0.2\text{mm}$ at ear point)
Dimensions (incl. Wooden Support)	Length: 1000 mm Width: 500 mm Height: adjustable feet
Filling Volume	approx. 25 liters
Support	DASY6/8: standard-size platform slot DASY52 stand-alone: SPEAG standard phantom table
Accessories	Mounting Device and Adaptors

7.6 Device Holder

The DASY instrument holder is designed to accommodate the various positions specified in the standard. It has two scales for instrument rotation (with respect to the body axis) and instrument tilt (with respect to the line between the ear reference points). The center of rotation for both scales is the Ear Reference Point (ERP). This eliminates the need to reposition the instrument when changing angles.

The DASY instrument holder is made of low-loss POM material with the following dielectric parameters: relative permittivity $\epsilon=3$ and loss tangent $\delta=0.02$. The amount of dielectric material in the immediate vicinity of the device was reduced because measurements indicated that the influence of the clamp on the test results could be reduced.



Device holder

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

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7.7 SAR Scan General Requirement

According to kdb865664 D01 v01r04:

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

		≤ 3 GHz	>3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 mm ± 1 mm	$\frac{1}{2}\delta\ln(2)$ mm ±0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		30° ± 1°	20° ± 1°
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
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: Δz Zoom (n)	≤5 mm	3- 4 GHz: ≤4 mm 4- 5 GHz: ≤ 3 mm 5- 6 GHz: ≤ 2 mm
	graded grid Δz 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
	Δz Zoom (n>1): between subsequent points	≤1.5· Δz Zoom (n-1) mm	
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 IEEE Std 1528-2013 for details.

* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 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.

7.8 Measurement procedure

Power Drift :

All SAR tests were performed with a fully charged battery under the DUT and transmitting at maximum output power. The DASY measurement software uses the power reference measurement and power drift measurement procedures to monitor the power drift of the DUT during SAR testing. Both methods measure the field value at a specified reference position before and after the SAR test. The software calculates the field difference in dB. If the power drift exceeds 5%, the SAR is retested.

Area scan:

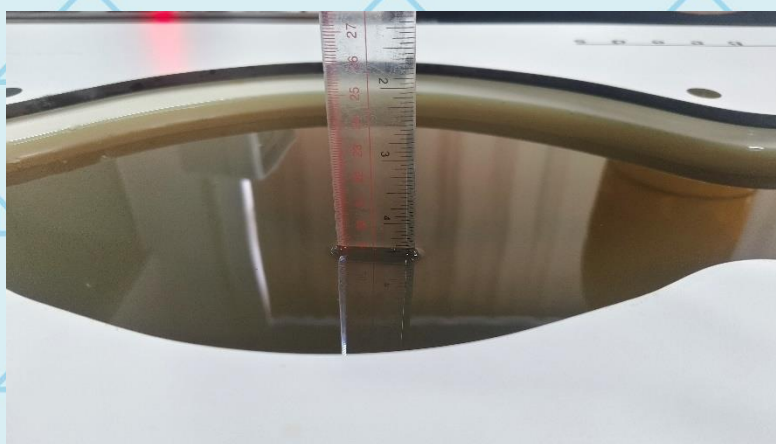
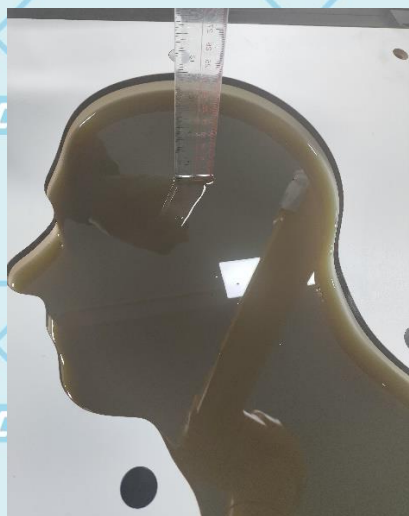
All antennas and radiating structures that may contribute to the measured SAR or influence the SAR distribution must be included in the area scan. The areas of the transmitter(s), antenna(s) and host device, when projected onto the phantom, must be within the area scan measurement region. The area scan measurement resolution must enable the extrapolation algorithms of the SAR system to correctly identify the peak SAR location(s) for subsequent zoom scan measurements to correctly determine the 1-g SAR. Area scans are performed at a constant distance from the phantom surface, determined by the measurement frequencies.

Zoom Scan:

Except when area scan based 1-g SAR estimation applies, a zoom scan measurement is required at the highest peak SAR location determined in the area scan to determine the 1-g SAR. When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR. The zoom scan volume must be larger than the required minimum dimensions described 7.7. There must be at least one measurement point within the first 5 mm from the phantom surface for measurements ≤ 3 GHz, two measurement points for measurements ≤ 5 GHz and three measurement points for measurements above 5 GHz. When graded grids are used, which only applies in the direction normal to the phantom surface the initial grid separation closest to the phantom surface and subsequent graded grid increment ratios must satisfy the required protocols in 7.7. The 1-g SAR averaging volume must be fully contained within the zoom scan measurement volume boundaries; otherwise, the measurement must be repeated by shifting or expanding the zoom scan volume. The similar requirements also apply to 10-g SAR measurements.

7.9 Tissue simulating liquids: dielectric properties

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 10\%$ of the target values.



Simulating Head Liquid for 5G(HBBL600-10000MHz V6), Manufactured by SPEAG:

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

7.10 Tissue simulating liquids: parameters

Used Target Frequency	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
	ϵ_r (+/-10%)	σ (S/m) (+/-10%)	ϵ_r	σ (S/m)		
750MHz Head	41.90 (37.71~46.09)	0.89 (0.81~0.97)	43.90	0.885	21.6°C	2026-08-10
835MHz Head	41.50 (37.35~45.65)	0.91 (0.82~1.00)	43.60	0.914	21.6°C	2026-08-12
1750MHz Head	40.10 (36.09~44.11)	1.37 (1.24~1.50)	41.90	1.34	21.6°C	2026-08-14
1900MHz Head	40.00 (36.00~44.00)	1.40 (1.26~1.54)	41.70	1.44	21.6°C	2026-08-17
2450MHz Head	39.20 (35.28~43.12)	1.80 (1.62~1.98)	41.00	1.82	21.6°C	2026-08-19
2550MHz Head	39.10 (35.19~43.01)	1.91 (1.72~2.1)	40.80	1.90	21.6°C	2026-08-20
2600MHz Head	39.00 (35.10~42.90)	1.96 (1.77~2.15)	40.70	1.94	21.6°C	2026-08-20
5200MHz Head	36.00 (32.40~39.60)	4.66 (4.20~5.12)	36.30	4.54	21.6°C	2026-08-24
5500MHz Head	35.60 (32.04~39.16)	4.96 (4.47~5.45)	35.80	4.88	21.6°C	2026-08-25
5800MHz Head	35.30 (31.77~38.83)	5.27 (4.75~5.79)	35.30	5.23	21.6°C	2026-08-26

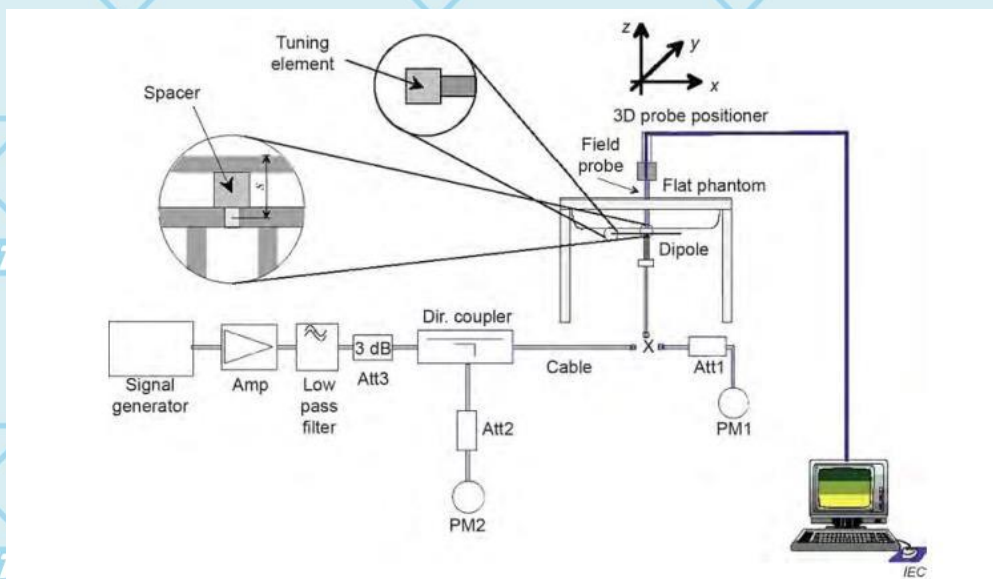
 ϵ_r = Relative permittivity, σ = Conductivity

8 System Check

8.1 System check procedure

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

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



8.2 System check results

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

System Check	Target SAR (1W) (+/-10%)		Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/kg)	10-g (W/kg)	1-g (W/kg)	10-g (W/kg)		
D750V3 Body	8.46 (7.62~9.30)	5.70 (5.13~6.27)	8.58	5.70	21.6°C	2026-08-10
D835V2 Body	9.68 (8.72~10.64)	6.44 (5.80~7.08)	9.81	6.42	21.6°C	2026-08-12
D1750V2 Body	36.40 (32.76~40.04)	19.60 (17.64~21.56)	36.10	19.60	21.6°C	2026-08-14
D1900V2 Body	39.70 (35.73~43.67)	21.00 (18.90~23.10)	40.40	21.10	21.6°C	2026-08-17
D2450V2 Body	52.70 (47.16~57.64)	24.00 (21.60~26.40)	53.60	25.20	21.6°C	2026-08-19
D2550V2 Body	54.10 (48.69~59.51)	24.70 (22.23~27.17)	55.80	25.60	21.6°C	2026-08-20
D2600V2 Body	55.90 (49.77~60.83)	24.60 (22.14~27.06)	55.90	25.60	21.6°C	2026-08-20
D5200V2 Body	76.00 (68.40~83.60)	22.00 (19.80~24.20)	71.70	20.70	21.6°C	2026-08-24
D5300V2 Body	80.60 (72.54~88.66)	23.30 (20.97~25.63)	80.80	23.10	21.6°C	2026-08-24
D5500V2 Body	85.60 (77.04~94.16)	24.50 (22.05~26.95)	79.00	22.50	21.6°C	2026-08-25
D5600V2 Body	83.30 (74.97~91.63)	24.10 (21.69~26.51)	78.70	22.40	21.6°C	2026-08-25
D5800V2 Body	79.00 (71.10~86.90)	22.70 (20.43~24.97)	77.60	22.00	21.6°C	2026-08-26

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

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

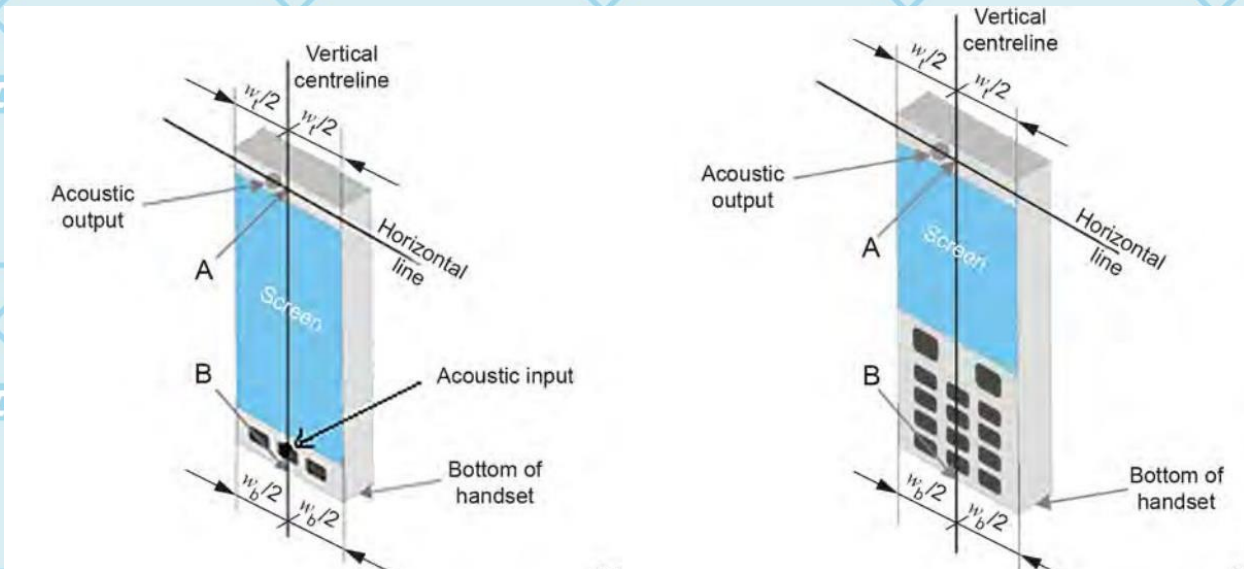
9 Test Position Configurations

9.1 Head Exposure Conditions

According to the IEEE-1528, the head phantom needs to test both "Cheek" and "Tilt" positions. Configure the DUT for voice operation, if necessary. For example, for a DUT with a flip, swivel, or slide cover piece, open the cover if this is consistent with voice operation. If the DUT can also be used with the cover closed, both configurations shall be tested.

Define two imaginary lines on the DUT, the vertical centreline and the horizontal line, relative to the DUT in vertical orientation as shown in Figure

The vertical centreline passes through two points on the front side of the DUT: the midpoint of the width w_t of the DUT at the level of the acoustic output (Point A in Figure), and the midpoint of the width w_b at the bottom of the DUT (Point B). The horizontal line is perpendicular to the vertical centerline, and passes through the centre of the acoustic output (Figure). The two lines intersect at Point A. Note that for many DUTs, Point A coincides with the centre of the acoustic output. However, the acoustic output could be located elsewhere on the horizontal line. Also note that the vertical centreline is not necessarily parallel to the front face of the DUT, especially for clamshell DUTs, DUTs with flip cover pieces, and other irregularly shaped DUTs.



Vertical and horizontal reference lines and reference points A and B on two example device types: a full touch-screen smart phone (left) and a DUT with a keypad (right)

w_t Width of the DUT at the level of the acoustic output

w_b Width of the bottom of the DUT

A Midpoint of the width w_t of the DUT at the level of the acoustic output

B Midpoint of the width w_b of the bottom of the DUT

Cheek position:

Position the DUT close to the surface of the phantom such that Point A is on the (virtual) extension of the line passing through points RE (right-ear ear reference point) and LE (left-ear ear reference point) on the phantom. The plane determined by the vertical centreline and the horizontal line of the DUT shall be parallel to the sagittal plane of the phantom.



Tilt position:

Place the DUT in the cheek position. While maintaining the orientation of the DUT, move the DUT away from the pinna along the line passing through RE and LE far enough to allow a rotation of the DUT away from the cheek by 15° . Rotate the DUT around the horizontal line by 15° .

While maintaining the orientation of the DUT, move the DUT towards the phantom on a line passing through RE and LE until any part of the DUT touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g. an extended antenna in contact with the back of the head phantom, the angle of the DUT shall be reduced. In this case, the tilt position is obtained if any part of the DUT is in contact with the pinna and a second point on the DUT is in contact with the phantom, e.g. the antenna in contact with the back of the head.

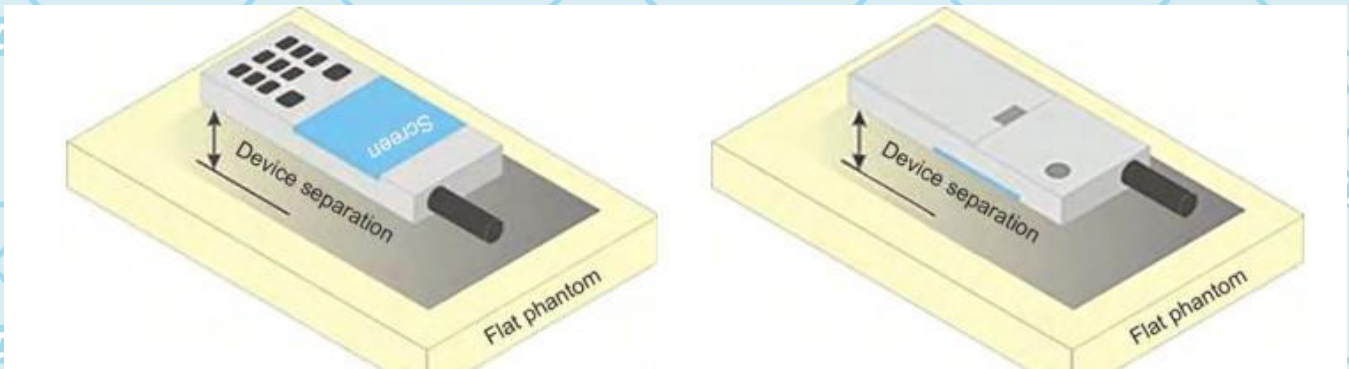


9.2 Body Exposure Condition

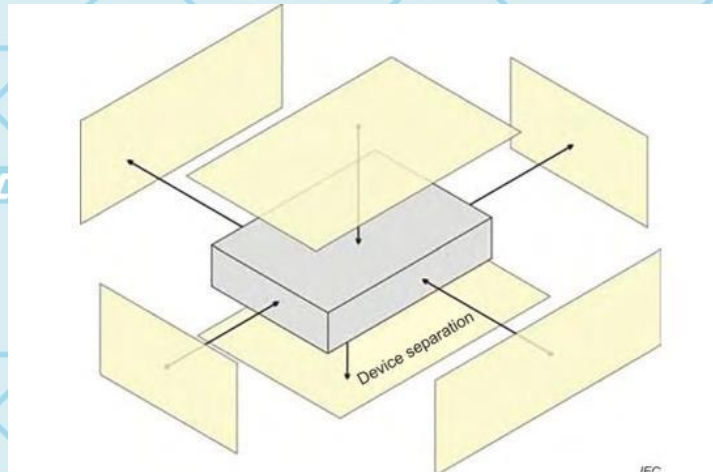
According to 447498 D04

Devices that support transmission while used with body-worn accessories must be tested for SAR compliance related to each body-worn condition of use. SAR evaluation is required for body-worn accessories supplied with the device they are attached to.

The general informing principle is that the selected test configurations must conservatively capture the various body-worn accessory use conditions expected by users. For instance, devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, must be tested for SAR compliance using a conservative minimum test separation distance not to exceed 5 mm for all use conditions required by the device.



Test positions for body-worn devices



Possible test positions for a generic device

Testing of all six faces of the DUT (see Figure) might not be required; justification shall be provided when omitting testing of some faces.

10 SAR Test Configuration

10.1 GSM Test Configurations

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

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

10.2 UMTS Test Configuration

1) Output Power Verification

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

2) WCDMA

a. Head SAR Measurements

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

b. Body SAR Measurements

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

3) HSDPA

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

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

Per KDB941225 D01, the 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures for the highest reported SAR body exposure configuration in 12.2 kbps RMC. HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The β_c and β_d gain factors for DPCCH and DPDCH were set according to the values in the below table, β_s for HS-DPCCH is set automatically to the correct value when ΔACK , $\Delta NACK$, $\Delta CQI = 8$. The variation of the β_c / β_d ratio causes a power reduction at sub-tests 2 - 4.

Sub-test ^a	β_c ^a	β_d ^a	β_s (SF) ^a	β_c / β_d ^a	β_{hs} (1) ^a	CM(dB)(2) ^a	MPR (dB) ^a
1 ^a	2/15 ^a	15/15 ^a	64 ^a	2/15 ^a	4/15 ^a	0.0 ^a	0 ^a
2 ^a	12/15(3) ^a	15/15(3) ^a	64 ^a	12/15(3) ^a	24/15 ^a	1.0 ^a	0 ^a
3 ^a	13/15 ^a	8/15 ^a	64 ^a	15/8 ^a	30/15 ^a	1.5 ^a	0.5 ^a
4 ^a	15/15 ^a	4/15 ^a	64 ^a	15/4 ^a	30/15 ^a	1.5 ^a	0.5 ^a

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

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

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

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

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

4) HSUPA

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

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

10.3 LTE Test Configuration

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

1) Spectrum Plots for RB configurations

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

2) MPR

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

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

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

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

3) A-MPR

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

4) LTE procedures for SAR testing

A) Largest channel bandwidth standalone SAR test requirements

i) QPSK with 1 RB allocation

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

ii) QPSK with 50% RB allocation

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

iii) QPSK with 100% RB allocation

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

iv) Higher order modulations

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

B) Other channel bandwidth standalone SAR test requirements

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

5) TDD LTE test configuration

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

10.4 Wi-Fi Test Configuration

For the 802.11b/g SAR tests, a communication link is set up with the test mode software for Wi-Fi mode test. The Absolute Radio Frequency Channel Number(ARFCN) is allocated to 1,6 and 11 respectively in the case of 2450 MHz.During the test,at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Each channel should be tested at the lowest data rate.

802.11b/g operating modes are tested independently according to the service requirements in each frequency band. 802.11b/g modes are tested on channel 1, 6, 11; however,if output power reduction is necessary for channels 1 and/or 11 to meet restricted band requirements the highest output channel closest to each of these channels must be tested instead.

Per KDB248227 D01, When the extrapolated maximum peak SAR for the maximum output channel is < 1.6 W/kg and the l-g averaged SAR is < 0.8 W/kg testing of other channels in the "default test channels" or "required test channels" configuration is optional.

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

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

Notes:

√ = "default test channels"

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

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

802.11 Test Channels per FCC Requirements

10.5 WiFi 2.4G SAR Test Procedures

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

A) 802.11b DSSS SAR Test Requirements

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

- 1) When the reported SAR of the highest measured maximum output power channel (section 3.1 of of KDB 248227D01v02) for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

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

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

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

C) SAR Test Requirements for OFDM configurations

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

11 Detailed Test Results

11.1 Conducted Power measurements

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

11.1.1 Conducted Power of GSM

Mode: GSM850		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH128	CH190	CH251		CH128	CH190	CH251
			824.2MHz	836.6MHz	848.8MHz		824.2MHz	836.6MHz	848.8MHz
GPRS (GMSK)	1Tx slot	32.00	31.79	31.67	31.39	-9.03	22.76	22.64	22.36
	2Tx slots	31.50	31.14	31.03	30.75	-9.03	22.11	22.00	21.72
	3Tx slots	30.00	29.55	29.47	29.22	-6.02	23.53	23.45	23.20
	4Tx slots	31.50	28.46	28.40	28.19	-4.26	24.20	24.14	23.93
Mode: GSM1900		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH512	CH661	CH810		CH512	CH661	CH810
			1850.2MHz	1880.0MHz	1909.8MHz		1850.2MHz	1880.0MHz	1909.8MHz
GPRS (GMSK)	1Tx slot	29.00	28.69	28.76	28.80	-9.03	19.66	19.73	19.77
	2Tx slots	28.50	28.00	28.10	28.14	-9.03	18.97	19.07	19.11
	3Tx slots	27.00	26.35	26.45	26.54	-6.02	20.33	20.43	20.52
	4Tx slots	25.50	25.24	25.35	25.44	-4.26	20.98	21.09	21.18

Note:

Division Factors

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

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

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

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

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

11.1.2 Conducted Power of WCDMA

Mode		Maximum Tune-up(dBm)	WCDMA Band 2		
			Conducted Power (dBm)		
			CH9262	CH9400	CH9538
			1852.4	1880.0	1907.6
HSDPA	Subtest-1	21.50	21.03	19.50	18.21
	Subtest-2	21.00	17.04	20.90	19.69
	Subtest-3	21.00	17.60	17.70	20.74
	Subtest-4	19.50	19.15	18.72	17.54
Mode		Maximum Tune-up(dBm)	WCDMA Band 4		
			Conducted Power (dBm)		
			CH1312	CH1413	CH1513
			1712.4	1732.6	1752.6
HSDPA	Subtest-1	21.00	20.88	19.58	18.91
	Subtest-2	21.00	18.19	20.84	19.26
	Subtest-3	21.00	17.47	17.48	20.81
	Subtest-4	20.00	19.95	17.60	17.94
Mode		Maximum Tune-up(dBm)	WCDMA Band 5		
			Conducted Power (dBm)		
			CH4132	CH4183	CH4233
			826.4	836.6	846.6
HSDPA	Subtest-1	22.00	21.53	20.24	18.83
	Subtest-2	21.50	19.11	21.49	20.13
	Subtest-3	22.00	18.83	17.68	21.51
	Subtest-4	20.00	19.90	18.99	18.00

Per KDB 941225 D01, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/2$ dB higher than the primary mode (RMC12.2kbps) or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

11.1.3 Conducted Power of LTE Band 2

LTE-FDD Band 2					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
1.4MHz	QPSK	1	0	23.50	23.33	22.69	22.46
			2	23.50	23.49	22.83	22.61
			5	23.50	23.30	22.62	22.49
		3	0	23.50	23.28	22.83	22.60
			2	23.50	23.30	22.79	22.55
			3	23.50	23.32	22.80	22.56
	16QAM	6	0	22.50	22.29	21.71	21.47
			0	22.50	22.45	21.97	21.39
			2	23.00	22.63	22.04	21.55
		3	5	22.50	22.45	21.97	21.38
			0	23.00	22.57	22.04	21.70
			2	23.00	22.59	22.06	21.70
3MHz	QPSK	1	3	23.00	22.52	22.07	21.68
			0	21.50	21.47	20.93	20.69
			0	21.50	21.47	20.93	20.69
		8	0	23.50	23.27	22.76	22.59
			7	24.00	23.58	23.10	23.02
			14	23.50	23.21	22.72	22.57
	16QAM	8	0	22.50	22.29	21.75	21.53
			4	22.50	22.25	21.76	21.55
			7	22.50	22.24	21.73	21.53
		15	0	22.50	22.20	21.74	21.52
			0	23.00	22.77	22.04	21.48
			7	23.50	23.06	22.29	21.77
5MHz	QPSK	1	14	23.00	22.69	21.95	21.38
			0	21.50	21.34	20.78	20.55
			4	21.50	21.34	20.79	20.56
	16QAM	8	7	21.50	21.29	20.73	20.54
			0	21.50	21.31	20.67	20.60
			0	21.50	21.31	20.67	20.60
5MHz	QPSK	1	0	23.50	23.21	22.70	22.43
			13	24.00	23.59	23.13	22.81
			24	23.50	23.15	22.66	22.34
	16QAM	12	0	22.50	22.25	21.79	21.56
			6	22.50	22.32	21.83	21.63
			13	22.50	22.26	21.74	21.56
5MHz	QPSK	25	0	22.50	22.28	21.82	21.58
			0	23.00	22.83	22.05	21.83
			13	23.50	23.15	22.43	22.23
	16QAM	1	24	23.00	22.77	22.04	21.76
			0	21.50	21.23	20.73	20.59
			6	21.50	21.35	20.79	20.67
5MHz	QPSK	12	13	21.50	21.26	20.68	20.60
			0	21.50	21.25	20.82	20.55
			0	21.50	21.25	20.82	20.55
	16QAM	25	0	21.50	21.25	20.82	20.55
			0	21.50	21.25	20.82	20.55
			0	21.50	21.25	20.82	20.55

LTE-FDD Band 2				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		18650 1855.0MHz	18900 1880.0MHz	19150 1905.0MHz
10MHz	QPSK	1	0	23.50	23.28	22.87	22.64
			25	23.50	23.32	22.86	22.75
			49	23.50	23.18	22.74	22.55
		25	0	22.50	22.32	21.87	21.60
			13	22.50	22.24	21.85	21.65
			25	22.50	22.31	21.73	21.65
	16QAM	1	0	22.50	22.31	21.82	21.61
			0	23.00	22.72	22.06	21.55
			25	23.00	22.87	22.08	21.60
		25	49	23.00	22.64	21.95	21.37
			0	21.50	21.36	20.90	20.62
			13	21.50	21.27	20.83	20.65
15MHz	QPSK	1	25	21.50	21.31	20.78	20.65
			0	21.50	21.32	20.90	20.60
			0	23.00	22.65	22.08	21.72
		36	38	23.00	22.97	22.30	21.93
			74	22.50	22.47	21.85	21.54
			0	21.50	21.30	20.94	20.60
	16QAM	36	18	21.50	21.27	20.91	20.60
			39	21.50	21.30	20.74	20.57
			0	21.50	21.28	20.79	20.66
		75	0	21.50	21.28	20.79	20.66
			0	23.00	22.65	22.08	21.72
			38	23.00	22.97	22.30	21.93
20MHz	QPSK	1	74	23.50	23.01	22.57	22.44
			0	22.50	22.29	21.89	21.65
			18	22.50	22.26	21.86	21.66
		36	39	22.50	22.30	21.72	21.61
			0	22.50	22.30	21.86	21.66
			0	23.00	22.65	22.08	21.72
	16QAM	1	38	23.00	22.97	22.30	21.93
			74	22.50	22.47	21.85	21.54
			0	21.50	21.30	20.94	20.60
		36	18	21.50	21.27	20.91	20.60
			39	21.50	21.30	20.74	20.57
			0	21.50	21.28	20.79	20.66
20MHz	QPSK	50	0	23.00	22.99	22.83	22.45
			50	23.50	23.24	22.96	22.76
			99	23.00	22.74	22.46	22.27
		50	0	22.50	22.21	21.83	21.68
			25	22.50	22.22	21.84	21.63
			50	22.50	22.26	21.55	21.66
	16QAM	100	0	22.50	22.25	21.74	21.69
			0	22.50	22.39	21.99	21.78
			50	23.00	22.63	22.16	22.03
		50	99	22.50	22.12	21.74	21.60
			0	21.50	21.26	20.86	20.72
			25	21.50	21.25	20.85	20.70
20MHz	QPSK	50	50	21.50	21.33	20.59	20.76
			0	21.50	21.21	20.76	20.70
			0	23.00	22.63	22.16	22.03
		100	99	22.50	22.12	21.74	21.60
			0	21.50	21.26	20.86	20.72
			25	21.50	21.25	20.85	20.70
20MHz	16QAM	50	50	21.50	21.33	20.59	20.76
			0	21.50	21.21	20.76	20.70
			0	23.00	22.63	22.16	22.03
		100	99	22.50	22.12	21.74	21.60
			0	21.50	21.26	20.86	20.72
			25	21.50	21.25	20.85	20.70

11.1.4 Conducted Power of LTE Band 4

LTE-FDD Band 4					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	19957 1710.7MHz	20175 1732.5MHz	20393 1754.3MHz
1.4MHz	QPSK	1	0	23.50	23.07	22.82	23.24
			2	23.50	23.23	23.03	23.35
			5	23.50	23.09	22.78	23.00
		3	0	23.50	23.06	22.88	23.09
			2	23.50	22.91	22.89	23.02
			3	23.50	22.75	22.74	23.10
	16QAM	6	0	22.50	21.77	21.77	22.18
			0	22.00	21.82	21.90	21.87
			2	22.50	22.01	22.06	22.03
		1	5	22.50	21.86	22.04	21.79
			0	22.50	21.86	22.07	22.22
			2	22.50	21.91	22.31	22.34
3MHz	QPSK	3	3	22.50	21.75	22.21	22.24
			0	21.50	21.09	21.06	21.49
			0	21.50	21.09	21.06	21.49
	16QAM	6	0	21.50	21.09	21.06	21.49
			0	21.50	21.09	21.06	21.49
			0	21.50	21.09	21.06	21.49
	QPSK	1	0	23.50	23.04	23.00	23.40
			7	24.00	23.39	23.39	23.66
			14	23.50	23.00	23.09	23.41
		8	0	22.50	22.03	22.11	22.34
			4	22.50	22.02	22.11	22.37
			7	22.50	22.07	22.11	22.32
5MHz	QPSK	15	0	22.50	21.91	22.09	22.30
			0	22.50	22.37	22.31	22.16
			7	23.00	22.50	22.62	22.46
	16QAM	1	14	22.50	22.12	22.29	22.13
			0	21.50	20.94	21.11	21.34
			4	21.50	20.74	21.15	21.33
5MHz	QPSK	8	7	21.50	20.79	21.07	21.33
			0	21.50	20.95	21.06	21.37
			0	21.50	20.95	21.06	21.37
	16QAM	15	0	21.50	20.95	21.06	21.37
			0	21.50	20.95	21.06	21.37
			0	21.50	20.95	21.06	21.37
5MHz	QPSK	1	0	23.50	22.94	23.03	23.15
			13	24.00	23.25	23.47	23.51
			24	23.50	22.99	23.01	23.16
	16QAM	12	0	22.50	22.07	22.09	22.32
			6	22.50	22.12	22.15	22.40
			13	22.50	22.07	22.13	22.31
5MHz	QPSK	25	0	22.50	22.11	22.16	22.32
			0	22.50	22.11	22.16	22.32
			0	22.50	22.11	22.16	22.32
	16QAM	1	0	22.50	22.47	22.37	22.45
			13	23.00	22.89	22.77	22.84
			24	23.00	22.57	22.34	22.51
5MHz	QPSK	12	0	21.50	21.05	21.06	21.34
			6	21.50	21.02	21.11	21.40
			13	21.50	21.03	21.05	21.31
	16QAM	25	0	21.50	21.13	21.16	21.32
			0	21.50	21.13	21.16	21.32
			0	21.50	21.13	21.16	21.32

LTE-FDD Band 4				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20000 1715.0MHz	20175 1732.5MHz	20350 1750.0MHz
10MHz	QPSK	1	0	23.50	23.03	23.13	23.22
			25	23.50	23.24	23.10	23.46
			49	23.50	23.15	23.03	23.30
		25	0	22.50	22.09	22.19	22.31
			13	22.50	22.20	22.19	22.31
			25	22.50	22.21	22.21	22.37
	16QAM	1	0	22.50	22.46	22.25	22.06
			25	23.00	22.66	22.32	22.19
			49	23.00	22.61	22.24	22.06
		25	0	21.50	21.19	21.20	21.33
			13	21.50	21.22	21.19	21.35
			25	21.50	21.30	21.17	21.34
15MHz	QPSK	1	0	23.50	22.93	23.08	23.09
			38	24.00	23.17	23.30	23.60
			74	23.50	22.97	22.87	23.19
		36	0	22.50	22.09	22.03	22.18
			18	22.50	22.17	22.17	22.34
			39	22.50	22.20	22.03	22.23
	16QAM	1	0	22.50	22.39	22.21	22.18
			38	23.00	22.80	22.53	22.59
			74	22.50	22.27	22.07	22.28
		36	0	21.50	21.13	21.18	21.20
			18	21.50	21.19	21.20	21.25
			39	21.50	21.23	21.19	21.22
20MHz	QPSK	1	0	23.00	22.82	22.95	22.87
			50	23.50	23.23	23.14	23.24
			99	23.00	22.80	22.71	22.91
		50	0	22.50	22.08	21.96	22.13
			25	22.50	22.19	22.01	22.22
			50	22.50	22.17	21.92	22.19
	16QAM	100	0	22.50	22.14	22.10	22.17
			0	22.50	22.16	22.11	21.90
			50	22.50	22.48	22.20	22.40
		1	99	22.50	22.13	21.90	22.01
			0	21.50	21.12	21.02	21.10
			25	21.50	21.13	21.14	21.27
20MHz	QPSK	50	50	21.50	21.17	21.04	21.22
			0	21.50	21.15	21.14	21.21
			100	21.50	21.15	21.14	21.21
	16QAM	100	0	21.50	21.15	21.14	21.21
			0	21.50	21.15	21.14	21.21
			100	21.50	21.15	21.14	21.21

11.1.5 Conducted Power of LTE Band 5

LTE-FDD Band 5				Maximum Tune- up(dBm)	Conducted Power(dBm)			
Bandwidth	Modulation	RB allocation	RB offset		20407	20525	20643	
					824.7MHz	836.5MHz	848.3MHz	
1.4MHz	QPSK	1	0	23.50	23.03	23.14	22.83	
			2	23.50	23.20	23.30	22.96	
			5	23.50	23.10	23.15	22.87	
		3	0	23.50	23.07	23.04	22.97	
			2	23.50	23.08	23.10	22.98	
			3	23.50	23.04	23.12	22.99	
	16QAM	6	0	22.50	22.03	22.07	21.93	
			1	0	22.50	21.81	22.23	22.08
				2	22.50	21.90	22.37	22.19
		16QAM		3	5	22.50	21.90	22.24
			0		22.50	22.20	22.33	22.16
			2		22.50	22.22	22.32	22.22
6	3		22.50	22.20	22.30	22.22		
	0		21.50	21.20	21.21	21.12		
	Bandwidth		Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	20415	20525
825.5MHz		836.5MHz					847.5MHz	
3MHz	QPSK	1	0	23.50	23.01	23.10	23.00	
			7	23.50	23.25	23.43	23.31	
			14	23.50	23.03	23.04	23.04	
		8	0	22.50	22.00	22.09	21.92	
			4	22.50	22.05	22.08	21.94	
			7	22.50	22.07	22.10	21.87	
		15	0	22.50	21.96	22.07	21.90	
			1	0	22.50	22.42	22.32	21.77
				7	23.00	22.69	22.68	22.08
	16QAM	1		14	22.50	22.40	22.25	21.78
			8	0	21.50	21.01	21.11	20.91
				4	21.50	21.07	21.11	20.95
		15		7	21.50	21.05	21.09	20.88
			0	21.50	21.01	21.02	20.98	

LTE-FDD Band 5				Maximum Tune- up(dBm)	Conducted Power(dBm)				
Bandwidth	Modulation	RB allocation	RB offset		20425	20525	20625		
					826.5MHz	836.5MHz	846.5MHz		
5MHz	QPSK	1	0	23.50	22.94	23.03	22.78		
			13	24.00	23.45	23.53	23.11		
			24	23.00	22.99	23.00	22.75		
		12	0	22.50	22.00	22.09	22.05		
			6	22.50	22.09	22.16	22.00		
			13	22.50	21.96	22.14	21.84		
	16QAM	25	0	22.50	22.04	22.16	21.93		
			1	0	22.50	22.42	22.36	22.11	
				13	23.00	22.77	22.78	22.43	
		24		22.50	22.45	22.29	22.15		
		12	0	21.50	21.01	21.02	21.06		
			6	21.50	21.06	21.13	20.99		
13	21.50		20.98	21.06	20.84				
25	0	21.50	20.99	21.17	20.95				
	Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	20450	20525	20600	
						829.0MHz	836.5MHz	844.0MHz	
10MHz	QPSK	1	0	23.50	22.96	23.09	23.10		
			25	23.50	23.16	23.20	23.15		
			49	23.50	23.08	22.97	23.00		
		25	0	22.50	22.18	22.12	22.15		
			13	22.50	22.11	22.07	21.95		
			25	22.50	22.08	22.15	21.75		
		50	0	22.50	22.11	22.13	21.95		
			16QAM	1	0	22.50	22.36	22.24	21.90
					25	23.00	22.51	22.36	21.88
	49	23.00			22.53	22.17	21.81		
	25	0		21.50	21.18	21.13	21.15		
		13		21.50	21.10	21.11	20.98		
		25		21.50	21.11	21.19	20.78		
	50	0	21.50	21.15	21.21	20.96			

11.1.6 Conducted Power of LTE Band 12

LTE-FDD Band 12					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23017	23095	23173
					699.7MHz	707.5MHz	715.5MHz
1.4MHz	QPSK	1	0	23.50	23.42	23.23	23.35
			2	24.00	23.56	23.38	23.51
			5	23.50	23.36	23.15	23.36
		3	0	23.50	23.40	23.35	23.43
			2	23.50	23.40	23.34	23.47
			3	23.50	23.39	23.34	23.41
	16QAM	6	0	22.50	22.37	22.24	22.40
			0	23.00	22.51	22.48	22.25
			2	23.00	22.66	22.57	22.35
		3	5	22.50	22.50	22.47	22.23
			0	23.00	22.60	22.58	22.54
			2	23.00	22.62	22.60	22.65
3MHz	QPSK	1	3	23.00	22.57	22.60	22.60
			6	22.00	21.56	21.50	21.62
			0	22.00	21.56	21.50	21.62
		8	0	22.50	22.31	22.24	22.34
			4	22.50	22.35	22.27	22.39
			7	22.50	22.30	22.28	22.37
		15	0	22.50	22.29	22.26	22.36
			0	23.00	22.85	22.52	22.28
			7	23.50	23.09	22.67	22.46
	16QAM	1	14	23.00	22.79	22.45	22.24
			0	21.50	21.43	21.32	21.42
			4	21.50	21.45	21.33	21.43
		8	7	21.50	21.41	21.28	21.42
			0	21.50	21.40	21.27	21.50
			0	21.50	21.40	21.27	21.50
		15	0	21.50	21.40	21.27	21.50
			0	21.50	21.40	21.27	21.50
			0	21.50	21.40	21.27	21.50

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23035	23095	23155
					701.5MHz	707.5MHz	713.5MHz
5MHz	QPSK	1	0	23.50	23.25	23.20	23.26
			13	24.00	23.67	23.58	23.69
			24	23.50	23.20	23.18	23.27
		12	0	22.50	22.36	22.24	22.35
			6	22.50	22.41	22.34	22.36
			13	22.50	22.31	22.27	22.33
	16QAM	25	0	22.50	22.38	22.28	22.43
			0	23.00	22.65	22.76	22.54
			13	23.50	23.00	23.14	23.04
		12	24	23.00	22.63	22.78	22.66
			0	21.50	21.45	21.31	21.33
			6	21.50	21.45	21.42	21.36
10MHz	QPSK	25	13	21.50	21.43	21.35	21.35
			0	21.50	21.40	21.32	21.47
			25	22.50	22.50	23095	23130
	16QAM	1	0	23.50	23.29	23.29	23.28
			25	23.50	23.37	23.37	23.50
			49	23.50	23.21	23.27	23.44
		25	0	22.50	22.39	22.28	22.31
			13	22.50	22.32	22.32	22.34
			25	22.50	22.35	22.32	22.32
10MHz	QPSK	50	0	22.50	22.37	22.28	22.33
			0	23.00	22.79	22.50	22.19
			25	23.00	22.86	22.50	22.32
	16QAM	1	49	23.00	22.71	22.46	22.27
			0	21.50	21.45	21.29	21.39
			13	21.50	21.35	21.36	21.39
	25	25	25	21.50	21.45	21.39	21.40
			0	21.50	21.45	21.38	21.40
			50	21.50	21.45	21.38	21.40

11.1.7 Conducted Power of LTE Band 25

LTE-FDD Band 25				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26047 1850.7MHz	26365 1882.5MHz	26683 1914.3MHz
1.4MHz	QPSK	1	0	23.50	23.15	22.53	22.33
			13	23.50	23.26	22.71	22.48
			24	23.50	23.12	22.47	22.35
		12	0	23.50	23.10	22.63	22.38
			6	23.50	23.11	22.62	22.38
			13	23.50	23.12	22.59	22.35
	16QAM	25	0	22.50	22.05	21.56	21.33
			0	22.50	22.28	21.75	21.20
			13	22.50	22.44	21.87	21.34
		12	24	22.50	22.29	21.76	21.15
			0	22.50	22.36	21.90	21.54
			6	22.50	22.35	21.88	21.57
3MHz	QPSK	1	13	22.50	22.50	21.90	21.52
			25	21.50	21.27	20.73	20.53
		25	0	23.50	23.10	22.63	22.42
			25	23.50	23.37	22.90	22.73
			49	23.50	23.05	22.62	22.43
		50	0	22.50	22.12	21.59	21.38
			13	22.50	22.14	21.62	21.38
			25	22.50	22.10	21.58	21.34
			0	22.50	22.10	21.56	21.34
	16QAM	1	0	23.00	22.62	21.86	21.32
			25	23.00	22.96	22.16	21.71
			49	23.00	22.55	21.82	21.24
		25	0	21.50	21.16	20.65	20.39
			13	21.50	21.20	20.64	20.37
			25	21.50	21.13	20.58	20.36
		50	0	21.50	21.15	20.56	20.43

LTE-FDD Band 25				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26065 1852.5MHz	26365 1882.5MHz	26665 1912.5MHz
5MHz	QPSK	1	0	23.50	23.09	22.57	22.23
			13	23.50	23.50	22.90	22.78
			24	23.50	23.03	22.49	22.20
		12	0	22.50	22.17	21.69	21.48
			6	22.50	22.15	21.65	21.44
			13	22.50	22.07	21.59	21.29
	16QAM	25	0	22.50	22.10	21.68	21.35
		1	0	23.00	22.60	21.92	21.60
			13	23.50	23.01	22.29	22.00
			24	23.00	22.60	21.91	21.58
		12	0	21.50	21.12	20.59	20.52
			6	21.50	21.12	20.64	20.48
			13	21.50	21.08	20.52	20.32
		25	0	21.50	21.06	20.73	20.40
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	26090 1855.0MHz	26365 1882.5MHz	26640 1910.0MHz
10MHz	QPSK	1	0	23.50	23.11	22.63	22.41
			25	23.50	23.13	22.66	22.52
			49	23.00	22.99	22.52	22.37
		25	0	22.50	22.11	21.70	21.40
			13	22.50	22.13	21.67	21.38
			25	22.50	22.12	21.54	21.24
	16QAM	50	0	22.50	22.11	21.65	21.34
		1	0	23.00	22.57	21.89	21.27
			25	23.00	22.61	21.92	21.39
			49	22.50	22.31	21.80	21.20
		25	0	21.50	21.11	20.70	20.41
			13	21.50	21.10	20.66	20.43
			25	21.50	21.18	20.58	20.28
		50	0	21.00	20.86	20.68	20.35

LTE-FDD Band 25				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26115 1857.5MHz	26365 1882.5MHz	26615 1907.5MHz
15MHz	QPSK	1	0	23.50	23.04	22.62	22.43
			13	23.50	23.28	22.89	22.69
			24	23.00	22.85	22.43	22.25
		12	0	22.50	22.13	21.70	21.43
			6	22.50	22.13	21.67	21.43
			13	22.50	22.14	21.54	21.31
	16QAM	25	0	22.50	22.11	21.64	21.38
		1	0	23.00	22.52	21.84	21.57
			13	23.00	22.74	22.08	21.71
			24	22.50	22.34	21.70	21.35
		12	0	21.50	21.04	20.77	20.35
			6	21.50	21.08	20.70	20.37
			13	21.50	21.16	20.60	20.24
		25	0	21.50	21.13	20.63	20.39
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	26140 1860.0MHz	26365 1882.5MHz	26590 1905.0MHz
20MHz	QPSK	1	0	23.00	22.87	22.66	22.28
			25	23.50	23.11	22.81	22.50
			49	23.00	22.61	22.35	22.15
		25	0	22.50	22.06	21.73	21.36
			13	22.50	22.03	21.66	21.49
			25	22.50	22.12	21.45	21.32
	16QAM	50	0	22.50	22.12	21.59	21.32
		1	0	22.50	22.13	21.84	21.55
			25	22.50	22.45	22.03	21.77
			49	22.00	21.96	21.61	21.32
		25	0	21.00	20.95	20.72	20.38
			13	21.50	21.06	20.67	20.53
			25	21.50	21.21	20.43	20.25
		50	0	21.50	21.12	20.59	20.35

11.1.8 Conducted Power of LTE Band 26(814-824)

LTE-TDD Band 26				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26697 814.7 MHz	26740 819 MHz	26783 823.3 MHz
1.4MHz	QPSK	1	0	23.50	23.26	23.07	23.23
			2	23.50	23.35	23.26	23.37
			5	23.50	23.21	23.06	23.27
		3	0	23.50	23.08	23.21	23.29
			2	23.50	23.12	23.21	23.26
			3	23.50	23.10	23.19	23.25
	16QAM	6	0	22.50	22.21	22.14	22.21
			0	22.50	22.08	22.25	22.03
			2	22.50	22.25	22.41	22.16
		1	5	22.50	22.10	22.28	22.02
			0	22.50	22.22	22.37	22.39
			2	22.50	22.20	22.39	22.40
3MHz	QPSK	3	3	22.50	22.17	22.41	22.37
			6	21.50	21.23	21.29	21.38
		1	0	23.50	23.17	23.14	23.28
			7	24.00	23.37	23.39	23.53
			14	23.50	23.10	23.15	23.32
		8	0	22.50	22.17	22.15	22.15
			4	22.50	22.16	22.16	22.19
			7	22.50	22.15	22.16	22.17
		15	0	22.50	22.09	22.11	22.16
	16QAM	1	0	22.50	22.41	22.34	22.06
			7	23.00	22.76	22.71	22.32
			14	22.50	22.42	22.30	22.06
		8	0	21.50	21.12	21.16	21.18
			4	21.50	21.12	21.15	21.17
			7	21.50	21.10	21.13	21.18
		15	0	21.50	21.08	21.09	21.26

LTE-TDD Band 26				Maximum Tune- up(dBm)	Conducted Power(dBm)			
Bandwidth	Modulation	RB allocation	RB offset		26715	26740	26765	
					816.5 MHz	819 MHz	821.5 MHz	
5MHz	QPSK	1	0	23.50	23.09	23.08	23.00	
			13	24.00	23.40	23.54	23.41	
			24	23.50	23.07	23.13	23.11	
		12	0	22.50	22.07	22.05	22.13	
			6	22.50	22.16	22.19	22.23	
			13	22.50	22.13	22.16	22.12	
	16QAM	25	0	22.50	22.09	22.16	22.20	
			0	22.50	22.43	22.30	22.34	
			13	23.00	22.81	22.69	22.77	
		1	24	23.00	22.54	22.41	22.38	
			12	0	21.50	21.05	21.02	21.17
				6	21.50	21.10	21.13	21.26
		13		21.50	21.07	21.12	21.22	
			25	0	21.50	21.06	21.18	21.21
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	26740			
					819 MHz			
10MHz	QPSK	1	0	23.50	23.14			
			25	23.50	23.25			
			49	23.50	23.19			
		25	0	22.50	22.15			
			13	22.50	22.13			
			25	22.50	22.25			
	16QAM	50	0	22.50	22.21			
			0	22.50	22.39			
			25	23.00	22.64			
		1	49	23.00	22.60			
			25	0	21.50	21.19		
				13	21.50	21.17		
		25		21.50	21.27			
		50	0	21.50	21.22			

11.1.9 Conducted Power of LTE Band 26(824-849)

LTE-FDD Band 26					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26797	26915	27033
					824.7 MHz	836.5 MHz	848.3 MHz
1.4MHz	QPSK	1	0	23.50	23.26	23.27	23.22
			2	23.50	23.43	23.43	23.31
			5	23.50	23.32	23.25	23.18
		3	0	23.50	23.19	23.40	23.25
			2	23.50	23.26	23.35	23.23
			3	23.50	23.28	23.35	23.23
	16QAM	6	0	22.50	22.26	22.31	22.18
			0	23.00	22.32	22.52	22.01
			2	23.00	22.41	22.60	22.14
		3	5	22.50	22.35	22.48	22.02
			0	23.00	22.43	22.60	22.34
			2	23.00	22.43	22.63	22.36
3MHz	QPSK	6	3	23.00	22.40	22.59	22.40
			0	21.50	21.38	21.46	21.37
			0	23.50	23.22	23.36	23.22
		8	7	24.00	23.53	23.58	23.48
			14	23.50	23.27	23.28	23.24
			0	22.50	22.22	22.30	22.23
	16QAM	8	4	22.50	22.30	22.34	22.23
			7	22.50	22.27	22.31	22.16
			0	22.50	22.22	22.29	22.18
		15	0	23.00	22.57	22.57	22.07
			7	23.00	22.90	22.83	22.37
			14	23.00	22.64	22.49	22.06
5MHz	QPSK	8	0	21.50	21.25	21.34	21.21
			4	21.50	21.32	21.36	21.21
			7	21.50	21.27	21.32	21.17
		15	0	21.50	21.27	21.24	21.27
			0	23.50	23.08	23.27	23.13
			13	24.00	23.39	23.61	23.45
	16QAM	12	24	23.50	23.20	23.19	23.15
			0	22.50	22.26	22.35	22.29
			6	22.50	22.29	22.37	22.20
		25	13	22.50	22.17	22.33	22.10
			0	22.50	22.22	22.35	22.23
			0	23.00	22.40	22.78	22.42
5MHz	QPSK	1	13	23.50	22.83	23.20	22.80
			24	23.00	22.52	22.74	22.41
			0	21.50	21.32	21.36	21.21
	16QAM	12	6	21.50	21.31	21.40	21.18
			13	21.50	21.24	21.31	21.05
			0	21.50	21.25	21.36	21.25

LTE-FDD Band 26				Maximum Tune- up(dBm)	Conducted Power(dBm)			
Bandwidth	Modulation	RB allocation	RB offset		26840	26915	26990	
					829MHz	836.5MHz	844MHz	
10MHz	QPSK	1	0	23.50	23.21	23.30	23.31	
			25	23.50	23.40	23.42	23.38	
			49	23.50	23.34	23.21	23.27	
		25	0	22.50	22.41	22.42	22.36	
			13	22.50	22.32	22.35	22.22	
			25	22.50	22.35	22.32	22.05	
	16QAM	1	0	22.50	22.36	22.41	22.23	
			25	23.00	22.58	22.48	22.13	
			49	23.00	22.76	22.62	22.15	
		25	0	21.50	21.45	21.44	21.38	
			13	21.50	21.33	21.44	21.20	
			25	21.50	21.37	21.35	21.08	
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune- up(dBm)	26865	26915	26965	
					831.5MHz	836.5MHz	841.5MHz	
15MHz	QPSK	1	0	23.50	23.15	23.22	23.28	
			38	24.00	23.62	23.66	23.43	
			74	23.50	23.15	23.13	23.18	
		36	0	22.50	22.45	22.43	22.27	
			18	22.50	22.44	22.39	22.29	
			39	22.50	22.46	22.26	22.13	
	16QAM	75	0	22.50	22.46	22.40	22.28	
			1	0	23.00	22.55	22.41	22.36
			38	23.00	22.98	22.84	22.56	
		36	74	23.00	22.62	22.35	22.19	
			0	21.50	21.42	21.48	21.17	
			18	21.50	21.41	21.43	21.26	
75	39	21.50	21.43	21.27	21.06			
	0	21.50	21.44	21.35	21.26			

11.1.10 Conducted Power of LTE Band 41

LTE-TDD Band 41				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		40065 2537.5MHz	40740 2605.0MHz	41415 2672.5MHz
5MHz	QPSK	1	0	25.00	24.98	24.27	24.56
			13	25.50	25.28	24.54	24.84
			24	25.00	24.99	24.30	24.57
		12	0	25.50	25.04	24.27	24.65
			6	25.50	25.11	24.42	24.75
			13	25.50	25.07	24.37	24.69
	16QAM	25	0	25.50	25.05	24.36	24.69
			0	25.50	25.45	24.54	24.89
			13	26.00	25.74	24.81	25.16
		1	24	25.50	25.49	24.57	24.89
			0	25.00	24.98	24.25	24.65
			6	25.50	25.02	24.36	24.76
10MHz	QPSK	12	13	25.00	24.98	24.31	24.71
			0	25.00	24.95	24.39	24.64
			25	25.00	24.95	24.39	24.64
		1	0	25.50	25.03	24.36	24.69
			25	25.50	25.28	24.52	24.85
			49	25.50	25.07	24.40	24.67
		25	0	25.50	25.12	24.35	24.72
			13	25.50	25.12	24.40	24.72
			25	25.50	25.09	24.46	24.78
	16QAM	50	0	25.50	25.09	24.43	24.74
			0	25.50	25.44	24.50	24.64
			25	26.00	25.64	24.67	24.80
		1	49	25.50	25.50	24.53	24.64
			0	25.50	25.08	24.39	24.71
			13	25.50	25.10	24.40	24.73
		25	25	25.50	25.08	24.46	24.78
			0	25.50	25.05	24.46	24.71
			50	25.50	25.05	24.46	24.71

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	40115	40740	41365
					2542.5MHz	2605.0MHz	2667.5MHz
15MHz	QPSK	1	0	25.00	24.96	24.28	24.67
			38	25.50	25.31	24.61	25.00
			74	25.00	24.66	24.29	24.62
		36	0	25.50	25.19	24.36	24.72
			18	25.50	25.25	24.45	24.78
			39	25.50	25.08	24.46	24.79
		75	0	25.50	25.15	24.44	24.78
	16QAM	1	0	25.50	25.37	24.40	24.80
			38	26.00	25.71	24.75	25.13
			74	25.50	25.08	24.44	24.80
		36	0	25.50	25.13	24.40	24.66
			18	25.50	25.19	24.50	24.71
			39	25.50	25.03	24.52	24.71
		75	0	25.50	25.07	24.43	24.78
20MHz	QPSK	1	0	25.00	24.80	24.10	24.46
			50	25.50	25.31	24.56	24.91
			99	24.50	24.07	24.21	24.46
			0	25.50	25.10	24.27	24.70
		50	25	25.00	24.99	24.40	24.72
			50	25.00	24.71	24.43	24.73
			0	25.00	24.88	24.37	24.71
		100	0	25.00	24.88	24.37	24.71
	16QAM	1	0	25.50	25.01	24.30	24.62
			50	25.50	25.47	24.74	25.05
			99	25.00	24.33	24.39	24.64
		50	0	25.50	25.10	24.27	24.72
			25	25.00	24.99	24.39	24.77
			50	25.00	24.71	24.42	24.77
		100	0	25.00	24.85	24.38	24.72

11.1.11 Conducted Power of LTE Band 66

LTE-FDD Band 66					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	131979	132322	132665
					1710.7MHz	1755.0MHz	1779.3MHz
1.4MHz	QPSK	1	0	22.50	22.19	22.22	22.39
			2	23.00	22.30	22.39	22.51
			5	22.50	22.16	22.21	22.36
		3	0	22.50	22.14	22.35	22.40
			2	22.50	22.15	22.35	22.42
			3	22.50	22.21	22.35	22.41
	16QAM	6	0	21.50	21.13	21.28	21.33
			0	21.50	21.27	21.46	21.22
			2	22.00	21.41	21.53	21.37
		1	5	21.50	21.29	21.44	21.19
			0	22.00	21.35	21.55	21.54
			2	22.00	21.36	21.58	21.53
3MHz	QPSK	3	3	22.00	21.39	21.56	21.34
			0	21.00	20.37	20.51	20.50
			0	22.50	22.11	22.25	22.42
		8	7	23.00	22.43	22.51	22.83
			14	22.50	22.14	22.31	22.43
			0	21.50	21.11	21.26	21.35
	16QAM	8	4	21.50	21.12	21.30	21.40
			7	21.50	21.11	21.26	21.37
			0	21.50	21.12	21.25	21.35
		15	0	22.00	21.60	21.46	21.27
			7	22.50	22.18	21.62	21.68
			14	22.00	21.64	21.45	21.27
5MHz	QPSK	8	0	20.50	20.22	20.33	20.43
			4	20.50	20.21	20.37	20.44
			7	20.50	20.23	20.32	20.42
	16QAM	15	0	20.50	20.22	20.30	20.47
			0	22.50	22.05	22.16	22.20
			13	23.00	22.48	22.75	22.57
1.4MHz	QPSK	1	24	22.50	22.08	22.21	22.22
			0	21.50	21.14	21.26	21.35
			6	21.50	21.27	21.34	21.38
	16QAM	12	13	21.50	21.22	21.26	21.35
			0	21.50	21.22	21.33	21.37
			0	22.00	21.59	21.50	21.58
3MHz	QPSK	1	13	22.50	22.06	21.98	22.01
			24	22.00	21.72	21.57	21.57
			0	20.50	20.17	20.27	20.46
	16QAM	12	6	20.50	20.31	20.36	20.45
			13	20.50	20.26	20.27	20.43
			0	20.50	20.21	20.39	20.41

LTE-FDD Band 66					Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	132022	132322	132622
					1715.0MHz	1755.0MHz	1775.0MHz
10MHz	QPSK	1	0	22.50	22.11	22.22	22.40
			25	23.00	22.35	22.40	22.52
			49	22.50	22.24	22.29	22.44
		25	0	21.50	21.21	21.33	21.41
			13	21.50	21.22	21.35	21.39
			25	21.50	21.32	21.38	21.37
	16QAM	50	0	21.50	21.32	21.38	21.41
			0	22.00	21.59	21.41	21.26
			25	22.00	21.76	21.56	21.35
		1	49	22.00	21.71	21.52	21.26
			0	20.50	20.29	20.38	20.50
			13	20.50	20.34	20.39	20.45
15MHz	QPSK	25	25	20.50	20.39	20.40	20.42
			0	20.50	20.39	20.41	20.44
		50	0	20.50	20.39	20.41	20.44
	16QAM	1	0	22.50	22.06	22.15	22.36
			38	23.00	22.52	22.54	22.61
			74	22.50	22.08	22.20	22.30
	16QAM	36	0	21.50	21.18	21.35	21.49
			18	21.50	21.34	21.41	21.44
			39	21.50	21.28	21.37	21.37
	16QAM	75	0	21.50	21.22	21.33	21.44
			0	22.00	21.55	21.37	21.45
			38	22.00	21.98	21.73	21.80
20MHz	QPSK	1	74	22.00	21.63	21.42	21.37
			0	20.50	20.28	20.44	20.45
			0	20.50	20.41	20.44	20.42
	16QAM	36	39	20.50	20.41	20.45	20.37
			0	20.50	20.31	20.34	20.49
			0	20.50	20.31	20.34	20.49
20MHz	QPSK	1	0	22.50	21.84	21.98	22.16
			50	22.50	22.35	22.49	22.43
			99	22.50	21.92	22.18	22.13
	16QAM	50	0	21.50	21.25	21.31	21.47
			25	21.50	21.25	21.38	21.40
			50	21.50	21.26	21.31	21.27
20MHz	16QAM	100	0	21.50	21.19	21.29	21.41
			0	21.50	21.25	21.30	21.50
			50	22.00	21.74	21.67	21.74
	16QAM	1	99	21.50	21.32	21.41	21.38
			0	21.00	20.34	20.33	20.58
			25	21.00	20.44	20.41	20.53
20MHz	16QAM	50	50	20.50	20.41	20.38	20.40
			0	20.50	20.33	20.36	20.47
			0	20.50	20.33	20.36	20.47
	16QAM	100	0	20.50	20.33	20.36	20.47
			0	20.50	20.33	20.36	20.47
			0	20.50	20.33	20.36	20.47

11.1.12 Conducted Power of LTE Band 71

LTE-TDD Band 71				Maximum Tune- up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		133147 665.5MHz	133297 680.5MHz	133447 695.5MHz
5MHz	QPSK	1	0	23.00	22.72	22.62	22.61
			13	23.50	23.06	23.11	23.01
			24	23.00	22.57	22.70	22.47
		12	0	22.00	21.62	21.79	21.73
			6	22.00	21.81	21.84	21.70
			13	22.00	21.84	21.78	21.74
	16QAM	25	0	22.00	21.81	21.84	21.71
			0	22.50	22.36	22.07	22.06
			13	23.00	22.80	22.55	22.42
		1	24	22.50	22.25	22.13	21.86
			0	21.00	20.69	20.76	20.78
			6	21.00	20.78	20.81	20.75
10MHz	QPSK	12	13	21.00	20.86	20.77	20.77
			25	21.00	20.82	20.90	20.73
		25	0	21.00	20.82	20.90	20.73
			0	22.50	22.28	22.02	21.71
			25	22.50	22.27	22.13	21.77
			49	22.50	22.15	22.03	21.52
	16QAM	1	0	21.00	20.51	20.85	20.94
			13	21.00	20.74	20.89	20.78
			25	21.00	20.82	20.88	20.87
		25	0	21.00	20.61	20.96	20.86
			0	21.00	20.61	20.96	20.86
			0	21.00	20.61	20.96	20.86

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	133197	133297	133397
					670.5MHz	680.5MHz	678.5MHz
15MHz	QPSK	1	0	23.00	22.66	22.65	22.89
			38	23.50	22.84	23.08	23.14
			74	23.00	22.64	22.70	22.61
		36	0	22.00	21.46	21.82	21.97
			18	22.00	21.69	21.87	21.85
			39	22.00	21.71	21.81	21.81
	16QAM	75	0	22.00	21.57	21.80	21.89
			0	22.50	22.19	21.86	22.05
			38	22.50	22.36	22.38	22.18
		1	74	22.50	22.20	21.93	21.69
			0	21.00	20.47	20.89	20.90
			18	21.00	20.74	20.90	20.81
		36	39	21.00	20.68	20.85	20.78
			0	21.00	20.59	20.82	20.90
			75	21.00	20.59	20.82	20.90
20MHz	QPSK	1	0	23.00	22.39	22.46	22.52
			50	23.00	22.74	22.97	22.97
			99	23.00	22.50	22.65	22.45
			0	22.00	21.37	21.96	21.92
		50	25	22.00	21.73	21.86	21.85
			50	22.00	21.91	21.74	21.77
			100	22.00	21.59	21.87	21.87
	16QAM	1	0	22.00	21.79	21.77	21.89
			50	22.50	22.14	22.27	22.27
			99	22.00	21.95	21.90	21.80
		50	0	21.50	20.46	20.98	21.02
			25	21.00	20.81	20.89	20.92
			50	21.00	20.89	20.75	20.83
		100	0	21.00	20.64	20.87	20.93

11.1.13 Conducted Power of Wi-Fi 2.4G

Mode	802.11b			Tune-up(dBm)
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)	12.50
Average Power(dBm)	12.44	12.48	12.42	
Mode	802.11g			
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)	12.50
Average Power(dBm)	12.26	12.36	12.27	
Mode	802.11n(HT20)			
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)	12.50
Average Power(dBm)	12.16	12.21	12.21	
Mode	802.11n(HT40)			
Channel/Frequency(MHz)	3(2422)	6(2437)	9 (2452)	12.50
Average Power(dBm)	12.32	12.29	12.36	

11.1.14 Conducted Power of Wi-Fi 5G

Band	Mode	Channel	Frequency(MHz)	Tune-up(dBm)	Average Power(dBm)	SAR Test(Yes/No)
U-NII-1 (5150-5250)	802.11a	36	5180	12.50	12.20	No
		48	5240	13.00	12.79	Yes
	802.11n-HT20	36	5180	12.50	12.20	No
		48	5240	13.00	12.68	No
	802.11n-HT40	38	5190	12.50	12.42	No
		46	5230	13.00	12.60	No
	802.11ac-VHT20	36	5180	12.50	12.27	No
		48	5240	13.00	12.58	No
	802.11ac-VHT40	38	5190	12.50	12.37	No
		46	5230	12.50	12.47	No
Band	Mode	Channel	Frequency (MHz)	Tune-up(dBm)	Average Power(dBm)	SAR Test(Yes/No)
U-NII-2a (5250-5350)	802.11a	52	5260	12.50	12.36	No
		64	5320	12.50	12.33	No
	802.11n-HT20	52	5260	12.50	12.14	No
		64	5320	13.00	12.97	Yes
	802.11n-HT40	54	5270	12.50	12.41	No
		62	5310	13.00	12.86	No
	802.11ac-VHT20	52	5260	12.50	12.19	No
		64	5320	12.50	12.02	No
	802.11ac-VHT40	54	5270	12.50	12.39	No
		62	5310	13.00	12.92	No

Band	Mode	Channel	Frequency (MHz)	Tune-up(dBm)	Average Power(dBm)	SAR Test(Yes/No)
U-NII-2c (5470-5725)	802.11a	100	5500	12.50	12.34	No
		140	5700	13.00	12.81	No
	802.11n-HT20	100	5500	13.00	12.61	No
		140	5700	13.00	12.51	No
	802.11n-HT40	102	5510	12.50	12.25	No
		134	5670	12.50	12.23	No
	802.11ac-VHT20	100	5500	13.00	12.65	No
		140	5700	12.50	12.46	No
	802.11ac-VHT40	102	5510	13.00	12.82	Yes
		134	5670	12.50	12.20	No
Band	Mode	Channel	Frequency (MHz)	Tune-up(dBm)	Average Powe(dBm)	SAR Test(Yes/No)
U-NII-3 (5725-5825)	802.11a	149	5745	12.50	12.46	No
		165	5825	12.50	12.17	No
	802.11n-HT20	149	5745	13.00	12.68	No
		165	5825	12.50	12.09	No
	802.11n-HT40	151	5755	13.00	12.68	No
		159	5795	13.00	12.66	No
	802.11ac-VHT20	149	5745	13.00	12.77	Yes
		165	5825	12.50	12.50	No
	802.11ac-VHT40	151	5755	13.00	12.75	No
		159	5795	13.00	12.58	No

<KDB 248227 D01, SAR Guidance for Wi-Fi Transmitters>

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

11.1.15 Conducted Power of BT

EDR	Mode	Maximum Tune-up(dBm)	Average Conducted Output Power (dBm)		
			0	39	78
			2402MHz	2441MHz	2480MHz
	GFSK	4.50	3.97	4.50	3.70
	π/4QPSK	4.00	3.09	3.71	2.90
	8DPSK	4.00	3.12	3.80	2.89
BLE	Mode	Maximum Tune-up(dBm)	Average Conducted Output Power (dBm)		
			0	19	39
			2402MHz	2440MHz	2480MHz
	1Mbps	2.00	1.59	0.93	-0.02

Note

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

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

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

where

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

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).*When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine estimated SAR.

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

11.1.16 Tune-up power tolerance

Band	Tune-up power tolerance(dBm)	
GSM850	1TXslots	Max output power =32.00
	2TXslots	Max output power =31.50
	3TXslots	Max output power =30.00
	4TXslots	Max output power =31.50
GSM1900	1TXslots	Max output power =29.00
	2TXslots	Max output power =28.50
	3TXslots	Max output power =27.00
	4TXslots	Max output power =25.50
WCDMA 2		Max output power =21.50
WCDMA 4		Max output power =21.00
WCDMA 5		Max output power =22.00
LTE B2		Max output power =24.00
LTE B4		Max output power =24.00
LTE B5		Max output power =24.00
LTE B12		Max output power =24.00
LTE B25		Max output power =23.50
LTE B26(814-824)		Max output power =24.00
LTE B26(824-849)		Max output power =24.00
LTE B41		Max output power =25.50
LTE B66		Max output power =23.00
LTE B71		Max output power =23.50

Band	Tune-up power tolerance(dBm)	
WIFI	2.4G	802.11b Max output power =12.50
		802.11g Max output power =12.50
		802.11n (HT20) Max output power =12.50
		802.11n (HT40) Max output power =12.50
	U-NII-1(5150-5250)	802.11a Max output power =13.00
		802.11n-HT20 Max output power =13.00
		802.11n-HT40 Max output power =13.00
		802.11ac-VHT20 Max output power =13.00
	U-NII-2a(5250-5350)	802.11ac-VHT40 Max output power =12.50
		802.11a Max output power =12.50
		802.11n-HT20 Max output power =13.00
		802.11n-HT40 Max output power =13.00
	U-NII-2c(5470-5725)	802.11ac-VHT20 Max output power =12.50
		802.11ac-VHT40 Max output power =13.00
		802.11a Max output power =13.00
		802.11n-HT20 Max output power =13.00
	U-NII-3(5725-5825)	802.11n-HT40 Max output power =12.50
		802.11ac-VHT20 Max output power =13.00
		802.11ac-VHT40 Max output power =13.00
		802.11a Max output power =12.50
BT	BT	GFSK mode Max output power =4.50
		Pi/4DQPSK mode Max output power =4.00
		8DPSK mode Max output power =4.00
BLE	BLE	1Mbps Power Max output power =2.00

11.2 SAR test results

Notes:

- 1) Per KDB447498, the SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the scaled SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8 \text{ W/kg}$), testing at the high and low channels is optional.
- 2) Per KDB447498, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is: $\leq 0.8 \text{ W/kg}$ or 2.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\leq 100 \text{ MHz}$. When the maximum output power variation across the required test channels is $> \frac{1}{2} \text{ dB}$, instead of the middle channel, the highest output power channel must be used.
- 3) Per KDB447498, All measurement SAR result is scaled-up to account for tune-up tolerance is compliant.
- 4) Per KDB648474 D04v01r02, body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn with headset SAR.
- 5) Per KDB248227 D01v01r02, the procedures required to establish specific device operating configurations for testing the SAR of 802.11 a/b/g transmitters.
 - (1) For Headsets operating next to ear, hotspot mode or mini-tablet configurations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When the reported SAR of initial test position is $\leq 0.4 \text{ W/kg}$, SAR testing for remaining test positions is not required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is $\leq 0.8 \text{ W/kg}$ or all test positions are measured.
 - (2) For WLAN 2.4 GHz, the highest measured maximum output power channel for DSSS was selected for SAR measurement. When the reported SAR is $\leq 0.8 \text{ W/kg}$, no further SAR testing is required. Otherwise, SAR is evaluated at the next highest measured output power channel. When any reported SAR is $> 1.2 \text{ W/kg}$, SAR is required for the third channel. For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is $\leq 1.2 \text{ W/kg}$.

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

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

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

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

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

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

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

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

(2) QPSK with 100% RB allocation

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

tested.

(3) Higher order modulations

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

(4) Other channel bandwidth

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

11.3 Test Result

11.3.1 Results overview of GSM

Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
EGPRS 850+1slots	Front	128	824.2	0.010	0.566	100	1.00	31.79	32.00	1.050	0.594
	Back	128	824.2	-0.080	0.611	100	1.00	31.79	32.00	1.050	0.641
	Left	128	824.2	-0.150	0.010	100	1.00	31.79	32.00	1.050	0.010
	right	128	824.2	0.010	0.143	100	1.00	31.79	32.00	1.050	0.150
	Top	128	824.2	0.110	0.302	100	1.00	31.79	32.00	1.050	0.317

Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
EGPRS 1900+1slots	Front	810	1909.8	-0.010	0.227	100	1.00	28.80	29.00	1.047	0.238
	Back	810	1909.8	-0.010	0.267	100	1.00	28.80	29.00	1.047	0.280
	Left	810	1909.8	0.080	0.004	100	1.00	28.80	29.00	1.047	0.004
	right	810	1909.8	0.030	0.027	100	1.00	28.80	29.00	1.047	0.028
	Top	810	1909.8	0.050	0.253	100	1.00	28.80	29.00	1.047	0.265

11.3.2 Results overview of WCDMA

Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
WCDMA Band 2 (RMC*)	Front	9262	1852.4	0.010	0.057	100	1.00	21.03	21.50	1.114	0.064
	Back	9262	1852.4	-0.050	0.068	100	1.00	21.03	21.50	1.114	0.076
	Left	9262	1852.4	0.140	0.002	100	1.00	21.03	21.50	1.114	0.002
	right	9262	1852.4	-0.020	0.009	100	1.00	21.03	21.50	1.114	0.010
	Top	9262	1852.4	0.110	0.060	100	1.00	21.03	21.50	1.114	0.067

Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
WCDMA Band 4 (RMC*)	Front	1312	1712.4	0.100	0.479	100	1.00	20.88	21.00	1.028	0.492
	Back	1312	1712.4	-0.020	0.624	100	1.00	20.88	21.00	1.028	0.641
	Left	1312	1712.4	-0.030	0.002	100	1.00	20.88	21.00	1.028	0.002
	right	1312	1712.4	0.020	0.005	100	1.00	20.88	21.00	1.028	0.005
	Top	1312	1712.4	0.150	0.302	100	1.00	20.88	21.00	1.028	0.310

Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
WCDMA Band 5 (RMC*)	Front	4132	826.4	0.130	0.417	100	1.00	21.53	22.00	1.114	0.465
	Back	4132	826.4	-0.020	0.555	100	1.00	21.53	22.00	1.114	0.618
	Left	4132	826.4	0.170	0.006	100	1.00	21.53	22.00	1.114	0.007
	right	4132	826.4	-0.030	0.063	100	1.00	21.53	22.00	1.114	0.070
	Top	4132	826.4	-0.030	0.275	100	1.00	21.53	22.00	1.114	0.306

11.3.3 Results overview of LTE

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 2 (BW: 20MHz)	1RB	Front	18625	1852.5	0.080	0.107	100	1.00	23.59	24.00	1.099	0.118
		Back	18625	1852.5	0.020	0.142	100	1.00	23.59	24.00	1.099	0.156
		Left	18625	1852.5	-0.010	0.002	100	1.00	23.59	24.00	1.099	0.002
		right	18625	1852.5	0.090	0.028	100	1.00	23.59	24.00	1.099	0.031
		Top	18625	1852.5	0.110	0.116	100	1.00	23.59	24.00	1.099	0.127
	50%RB	Front	18625	1852.5	-0.010	0.106	100	1.00	23.59	24.00	1.099	0.116
		Back	18625	1852.5	0.060	0.140	100	1.00	23.59	24.00	1.099	0.154
		Left	18625	1852.5	0.080	0.002	100	1.00	23.59	24.00	1.099	0.002
		right	18625	1852.5	-0.150	0.029	100	1.00	23.59	24.00	1.099	0.032
		Top	18625	1852.5	0.010	0.112	100	1.00	23.59	24.00	1.099	0.123

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 4 (BW: 20MHz)	1RB	Front	20385	1753.5	0.010	0.081	100	1.00	23.66	24.00	1.081	0.088
		Back	20385	1753.5	-0.170	0.101	100	1.00	23.66	24.00	1.081	0.109
		Left	20385	1753.5	0.030	0.002	100	1.00	23.66	24.00	1.081	0.002
		right	20385	1753.5	0.140	0.011	100	1.00	23.66	24.00	1.081	0.012
		Top	20385	1753.5	-0.050	0.055	100	1.00	23.66	24.00	1.081	0.059
	50%RB	Front	20385	1753.5	0.050	0.081	100	1.00	23.66	24.00	1.081	0.088
		Back	20385	1753.5	0.000	0.100	100	1.00	23.66	24.00	1.081	0.108
		Left	20385	1753.5	-0.010	0.002	100	1.00	23.66	24.00	1.081	0.002
		right	20385	1753.5	-0.080	0.012	100	1.00	23.66	24.00	1.081	0.013
		Top	20385	1753.5	0.110	0.053	100	1.00	23.66	24.00	1.081	0.057

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 5 (BW: 10MHz)	1RB	Front	20525	836.5	0.070	0.844	100	1.00	23.53	24.00	1.114	0.940
		Back	20525	836.5	0.010	0.231	100	1.00	23.53	24.00	1.114	0.257
		Left	20525	836.5	-0.190	0.002	100	1.00	23.53	24.00	1.114	0.002
		Right	20525	836.5	-0.030	0.017	100	1.00	23.53	24.00	1.114	0.019
		Top	20525	836.5	0.010	0.082	100	1.00	23.53	24.00	1.114	0.091
	50%RB	Front	20525	836.5	-0.100	0.816	100	1.00	23.53	24.00	1.114	0.909
		Back	20525	836.5	0.020	0.838	100	1.00	23.53	24.00	1.114	0.934
		Left	20525	836.5	-0.010	0.228	100	1.00	23.53	24.00	1.114	0.254
		Right	20525	836.5	0.050	0.002	100	1.00	23.53	24.00	1.114	0.002
		Top	20525	836.5	0.170	0.016	100	1.00	23.53	24.00	1.114	0.018
		Front	20525	836.5	0.010	0.081	100	1.00	23.53	24.00	1.114	0.090
		Back	20525	836.5	0.100	0.801	100	1.00	23.53	24.00	1.114	0.893

Band	Ch.	EUT Position	Measure SAR(W/kg)		
			Original	Repeated	SAR ratio
LTE Band 5	20525	Front	0.844	0.806	1.03
		Front	0.838	0.801	1.05

Note: the ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20 , so second repeated measurement is not required

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 12 (BW: 10MHz)	1RB	Front	23165	714.5	-0.110	0.223	100	1.00	23.76	24.00	1.057	0.236
		Back	23165	714.5	-0.010	0.450	100	1.00	23.76	24.00	1.057	0.476
		Left	23165	714.5	0.100	0.002	100	1.00	23.76	24.00	1.057	0.002
		Right	23165	714.5	0.030	0.023	100	1.00	23.76	24.00	1.057	0.024
		Top	23165	714.5	-0.010	0.112	100	1.00	23.76	24.00	1.057	0.118
	50%RB	Front	23165	714.5	0.050	0.221	100	1.00	23.76	24.00	1.057	0.234
		Back	23165	714.5	0.070	0.447	100	1.00	23.76	24.00	1.057	0.472
		Left	23165	714.5	-0.120	0.002	100	1.00	23.76	24.00	1.057	0.002
		Right	23165	714.5	0.000	0.021	100	1.00	23.76	24.00	1.057	0.022
		Top	23165	714.5	0.130	0.113	100	1.00	23.76	24.00	1.057	0.119

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 25 (BW: 20MHz)	1RB	Front	26065	1852.5	0.080	0.651	100	1.00	23.50	23.50	1.000	0.651
		Back	26065	1852.5	0.000	0.754	100	1.00	23.50	23.50	1.000	0.754
		Left	26065	1852.5	-0.120	0.007	100	1.00	23.50	23.50	1.000	0.007
		Right	26065	1852.5	0.070	0.113	100	1.00	23.50	23.50	1.000	0.113
		Top	26065	1852.5	-0.110	0.650	100	1.00	23.50	23.50	1.000	0.650
	50%RB	Front	26065	1852.5	0.010	0.647	100	1.00	23.50	23.50	1.000	0.647
		Back	26065	1852.5	-0.130	0.751	100	1.00	23.50	23.50	1.000	0.751
		Left	26065	1852.5	0.060	0.008	100	1.00	23.50	23.50	1.000	0.008
		Right	26065	1852.5	0.110	0.115	100	1.00	23.50	23.50	1.000	0.115
		Top	26065	1852.5	0.070	0.643	100	1.00	23.50	23.50	1.000	0.643

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 26 (814-824) (BW: 15MHz)	1RB	Front	26740	819.5	0.010	0.952	100	1.00	23.54	24.00	1.112	1.058
		Back	26740	819.5	0.000	0.968	100	1.00	23.54	24.00	1.112	1.076
		Left	26740	819.5	-0.030	0.004	100	1.00	23.54	24.00	1.112	0.004
		Right	26740	819.5	0.150	0.062	100	1.00	23.54	24.00	1.112	0.069
		Top	26740	819.5	0.070	0.277	100	1.00	23.54	24.00	1.112	0.308
	50%RB	Front	26740	819.5	-0.030	0.922	100	1.00	23.54	24.00	1.112	1.025
		Back	26740	819.5	0.100	0.910	100	1.00	23.54	24.00	1.112	1.012
		Front	26740	819.5	0.010	0.948	100	1.00	23.54	24.00	1.112	1.054
		Back	26740	819.5	-0.020	0.964	100	1.00	23.54	24.00	1.112	1.072
		Left	26740	819.5	0.110	0.005	100	1.00	23.54	24.00	1.112	0.006
		Right	26740	819.5	-0.080	0.060	100	1.00	23.54	24.00	1.112	0.067
		Top	26740	819.5	0.140	0.279	100	1.00	23.54	24.00	1.112	0.310
		Front	26740	819.5	-0.020	0.915	100	1.00	23.54	24.00	1.112	1.017
		Back	26740	819.5	-0.010	0.937	100	1.00	23.54	24.00	1.112	1.042

Band	Ch.	EUT Position	Measure SAR(W/kg)		
			Original	Repeated	SAR ratio
LTE Band 26	26740	Front	0.952	0.922	1.03
		Back	0.968	0.910	1.06
		Front	0.948	0.915	1.04
		Back	0.964	0.937	1.03

Note: the ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20, so second repeated measurement is not required.

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 26 (824-849) (BW: 15MHz)	1RB	Front	26915	836.5	0.030	0.884	100	1.00	23.66	24.00	1.081	0.956
		Back	26915	836.5	0.110	0.742	100	1.00	23.66	24.00	1.081	0.802
		Left	26915	836.5	0.080	0.012	100	1.00	23.66	24.00	1.081	0.013
		Right	26915	836.5	-0.020	0.125	100	1.00	23.66	24.00	1.081	0.135
		Top	26915	836.5	-0.080	0.423	100	1.00	23.66	24.00	1.081	0.457
		Front	26915	836.5	-0.050	0.852	100	1.00	23.66	24.00	1.081	0.921
	50%RB	Front	26915	836.5	0.010	0.882	100	1.00	23.66	24.00	1.081	0.954
		Back	26915	836.5	-0.050	0.739	100	1.00	23.66	24.00	1.081	0.799
		Left	26915	836.5	0.140	0.014	100	1.00	23.66	24.00	1.081	0.015
		Right	26915	836.5	0.030	0.122	100	1.00	23.66	24.00	1.081	0.132
		Top	26915	836.5	0.110	0.420	100	1.00	23.66	24.00	1.081	0.454
		Front	26915	836.5	-0.060	0.850	100	1.00	23.66	24.00	1.081	0.922

Band	Ch.	EUT Position	Measure SAR(W/kg)		
			Original	Repeated	SAR ratio
LTE Band 5	20525	Front	0.884	0.852	1.04
		Front	0.882	0.853	1.03

Note: the ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20 , so second repeated measurement is not required

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 41 (BW: 20MHz)	1RB	Front	40740	2605.0	0.160	0.670	100	1.00	25.31	25.50	1.045	0.700
		Back	40740	2605.0	-0.020	0.549	100	1.00	25.31	25.50	1.045	0.574
		Left	40740	2605.0	0.000	0.004	100	1.00	25.31	25.50	1.045	0.004
		Right	40740	2605.0	0.070	0.049	100	1.00	25.31	25.50	1.045	0.051
		Top	40740	2605.0	-0.070	0.372	100	1.00	25.31	25.50	1.045	0.389
		Front	39750	2506.0	-0.020	0.550	100	1.00	25.31	25.50	1.045	0.575
		Front	40185	2549.5	0.080	0.208	100	1.00	25.31	25.50	1.045	0.217
		Front	41055	2636.5	0.010	0.514	100	1.00	25.31	25.50	1.045	0.537
Band 41 (BW: 20MHz)	50%RB	Front	41490	2680.0	0.130	0.485	100	1.00	25.31	25.50	1.045	0.507
		Front	40740	2605.0	0.040	0.665	100	1.00	25.31	25.50	1.045	0.695
		Back	40740	2605.0	0.150	0.545	100	1.00	25.31	25.50	1.045	0.569
		Left	40740	2605.0	-0.030	0.005	100	1.00	25.31	25.50	1.045	0.005
		Right	40740	2605.0	0.160	0.051	100	1.00	25.31	25.50	1.045	0.053
		Top	40740	2605.0	0.080	0.370	100	1.00	25.31	25.50	1.045	0.387
		Front	39750	2506.0	0.030	0.549	100	1.00	25.31	25.50	1.045	0.574
		Front	40185	2549.5	-0.020	0.211	100	1.00	25.31	25.50	1.045	0.220
		Front	41055	2636.5	0.120	0.510	100	1.00	25.31	25.50	1.045	0.533
		Front	41490	2680.0	0.000	0.482	100	1.00	25.31	25.50	1.045	0.504

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 41 (BW: 20MHz)	1RB	Front	41540	2685.0	-0.120	0.746	100	1.00	25.31	25.50	1.045	0.779
		Back	41540	2685.0	-0.030	0.546	100	1.00	25.31	25.50	1.045	0.570
		Left	41540	2685.0	-0.070	0.007	100	1.00	25.31	25.50	1.045	0.007
		Right	41540	2685.0	0.020	0.066	100	1.00	25.31	25.50	1.045	0.069
		Top	41540	2685.0	-0.010	0.390	100	1.00	25.31	25.50	1.045	0.407
Band 41 (BW: 20MHz)	50%RB	Front	41540	2685.0	0.050	0.742	100	1.00	25.31	25.50	1.045	0.775
		Back	41540	2685.0	0.160	0.545	100	1.00	25.31	25.50	1.045	0.569
		Left	41540	2685.0	-0.030	0.008	100	1.00	25.31	25.50	1.045	0.008
		Right	41540	2685.0	0.010	0.063	100	1.00	25.31	25.50	1.045	0.066
		Top	41540	2685.0	0.050	0.385	100	1.00	25.31	25.50	1.045	0.402

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 66 (BW: 20MHz)	1RB	Front	132657	1778.5	0.090	0.053	100	1.00	22.83	23.00	1.040	0.055
		Back	132657	1778.5	-0.040	0.075	100	1.00	22.83	23.00	1.040	0.078
		Left	132657	1778.5	-0.010	0.002	100	1.00	22.83	23.00	1.040	0.002
		Right	132657	1778.5	0.020	0.010	100	1.00	22.83	23.00	1.040	0.010
		Top	132657	1778.5	0.140	0.046	100	1.00	22.83	23.00	1.040	0.048
	50%RB	Front	132657	1778.5	0.020	0.055	100	1.00	22.83	23.00	1.040	0.057
		Back	132657	1778.5	0.130	0.073	100	1.00	22.83	23.00	1.040	0.076
		Left	132657	1778.5	-0.050	0.003	100	1.00	22.83	23.00	1.040	0.003
		Right	132657	1778.5	-0.090	0.011	100	1.00	22.83	23.00	1.040	0.011
		Top	132657	1778.5	0.020	0.044	100	1.00	22.83	23.00	1.040	0.046

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 71 (BW: 20MHz)	1RB	Front	133397	678.5	-0.020	0.328	100	1.00	23.14	23.50	1.086	0.356
		Back	133397	678.5	0.140	0.256	100	1.00	23.14	23.50	1.086	0.278
		Left	133397	678.5	-0.080	0.002	100	1.00	23.14	23.50	1.086	0.002
		Right	133397	678.5	0.010	0.037	100	1.00	23.14	23.50	1.086	0.040
		Top	133397	678.5	0.020	0.167	100	1.00	23.14	23.50	1.086	0.181
	50%RB	Front	133397	678.5	0.050	0.324	100	1.00	23.14	23.50	1.086	0.352
		Back	133397	678.5	-0.070	0.254	100	1.00	23.14	23.50	1.086	0.276
		Left	133397	678.5	0.150	0.003	100	1.00	23.14	23.50	1.086	0.003
		Right	133397	678.5	-0.030	0.035	100	1.00	23.14	23.50	1.086	0.038
		Top	133397	678.5	0.070	0.162	100	1.00	23.14	23.50	1.086	0.176

11.3.4 Results overview of WIFI&BT

Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
2.4gWi-Fi 802.11n(HT20)	Front	6	2437	0.050	0.335	100	1.00	12.48	12.50	1.005	0.337
	Back	6	2437	-0.010	0.298	100	1.00	12.48	12.50	1.005	0.299
	Left	6	2437	0.160	0.035	100	1.00	12.48	12.50	1.005	0.035
	Right	6	2437	0.030	0.041	100	1.00	12.48	12.50	1.005	0.041
	Top	6	2437	-0.060	0.378	100	1.00	12.48	12.50	1.005	0.380

Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
5g Band1 802.11n(HT20)	Front	48	5240	0.040	0.018	100	1.00	12.79	13.00	1.050	0.019
	Back	48	5240	-0.010	0.013	100	1.00	12.79	13.00	1.050	0.014
	Left	48	5240	0.160	0.002	100	1.00	12.79	13.00	1.050	0.002
	Right	48	5240	0.140	0.006	100	1.00	12.79	13.00	1.050	0.006
	Top	48	5240	-0.050	0.023	100	1.00	12.79	13.00	1.050	0.024

Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
5g Band2 802.11ac-VHT20	Front	64	5320	0.010	0.012	100	1.00	12.97	13.00	1.007	0.012
	Back	64	5320	-0.050	0.008	100	1.00	12.97	13.00	1.007	0.008
	Left	64	5320	0.150	0.002	100	1.00	12.97	13.00	1.007	0.002
	Right	64	5320	-0.030	0.005	100	1.00	12.97	13.00	1.007	0.005
	Top	64	5320	0.000	0.017	100	1.00	12.97	13.00	1.007	0.017

Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
5g Band3 802.11n-HT40	Front	102	5510	-0.080	0.015	100	1.00	12.82	13.00	1.042	0.016
	Back	102	5510	0.070	0.008	100	1.00	12.82	13.00	1.042	0.008
	Left	102	5510	0.150	0.002	100	1.00	12.82	13.00	1.042	0.002
	Right	102	5510	-0.120	0.004	100	1.00	12.82	13.00	1.042	0.004
	Top	102	5510	0.070	0.021	100	1.00	12.82	13.00	1.042	0.022

Mode	Position	Ch.	Freq. (MHz)	Power Drift (%)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
5g Band4 802.11n-HT40	Front	149	5745	0.050	0.026	100	1.00	12.77	13.00	1.054	0.027
	Back	149	5745	-0.110	0.015	100	1.00	12.77	13.00	1.054	0.016
	Left	149	5745	0.170	0.002	100	1.00	12.77	13.00	1.054	0.002
	Right	149	5745	0.050	0.007	100	1.00	12.77	13.00	1.054	0.007
	Top	149	5745	0.010	0.039	100	1.00	12.77	13.00	1.054	0.041

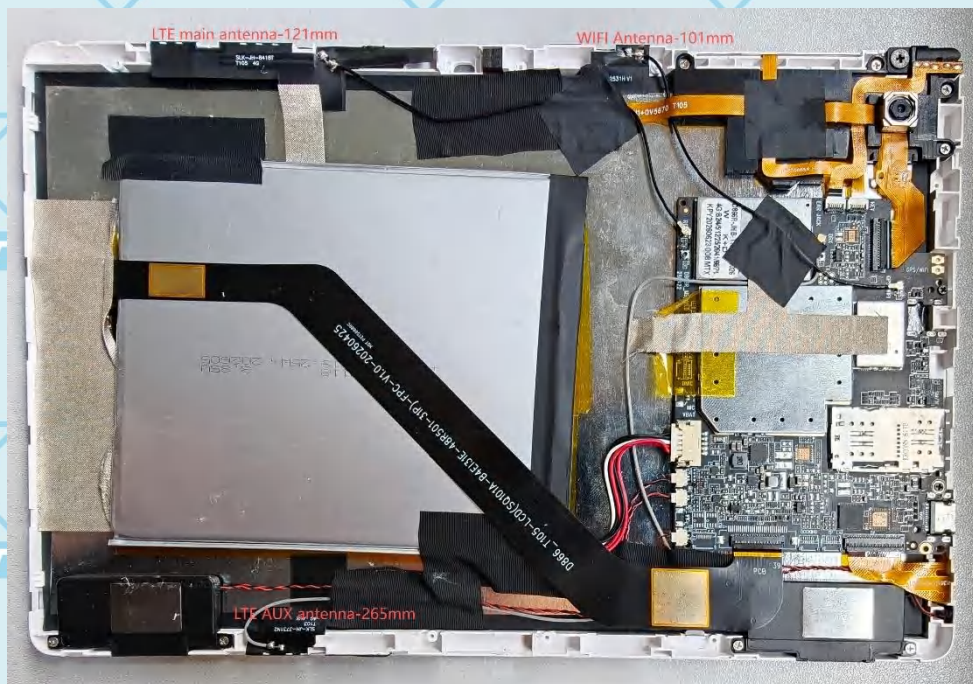
Mode	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Bluetooth	Front	39	2441	0.020	0.107	100	1.00	4.50	4.50	1.000	0.107
	Back	39	2441	0.000	0.112	100	1.00	4.50	4.50	1.000	0.112
	Left	39	2441	-0.010	0.002	100	1.00	4.50	4.50	1.000	0.002
	Right	39	2441	0.070	0.020	100	1.00	4.50	4.50	1.000	0.020
	Top	39	2441	-0.020	0.184	100	1.00	4.50	4.50	1.000	0.184

Note:

- 1.The maximum SAR Value of each test band is marked bold.
- 2.SAR plot is provided only for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.
- 3.Per KDB 447498 D01 v06, for each exposure position, if the highest output power channel Reported SAR $\leq 0.8\text{W/kg}$, other channels SAR testing is not necessary.
- 4.Per KDB 447498 D01 v06, head/body-worn use is evaluated with the device positioned at 0mm/10 mm from a head/flat phantom respectively filled with head tissue-equivalent medium.
- 5.Per KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9\text{ cm} \times 5\text{ cm}$) are based on a composite test separation distance of 10 mm from the front, back and edges of the device with antennas 2.5 cm or closer to the edge of the device, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.
- 6.Per KDB 447498 D01 v06, the report SAR is measured SAR value adjusted for maximum tune-up tolerance. Scaling Factor= $10^{[(\text{tune-up limit power(dBm)} - \text{Ave.power power (dBm)})/10]}$, where tune-up limit is the maximum rated power among all production units.
- 7.Reported SAR(W/kg)=Measured SAR (W/kg)*Scaling Factor.

11.4 Multiple Transmitter Information

The SAR measurement positions of each side are as below:



< Rear Side >

Mode	Front side	Rear side	Left side	Right side	Top side	Bottom side
2G/3G/4G Antenna	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi/BT Antenna	Yes	Yes	Yes	Yes	Yes	Yes

- 1) Per KDB941225 D06v01r01, The diagonal size of the entire tablet is approximately 28 cm (greater than 20 cm), so 0mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.

11.5 Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities are as below:

Simultaneous Transmission Possibilities			
Simultaneous Tx Combination	Configuration	Body	Hotspot
1	WWAN +BT	YES	YES
2	WWAN+2.4GWi-Fi	YES	YES
3	WWAN+5GWi-Fi	YES	YES
4	WWAN+5GWi-Fi+BT	YES	YES
5	WWAN+2.4GWi-Fi+BT	YES	YES

Note: The relevant synchronous transmission technical specification materials are provided by the applicant.

11.6 SAR Summation Scenario

Hotspot(body-worn 0mm)

Band	Test Position	Scaled SAR				WWAN+ WIFI2.4G +BT Σ SAR (W/kg)	WWAN+ WIFI5G Σ SAR (W/kg)	WWAN+ WIFI5G +BT Σ SAR (W/kg)	Llimit (W/kg)
		WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)	WIFI5G MAX SAR 1g(W/kg)	BT SAR 1g(W/kg)				
GSM850 (EGPRS 1slots)	Front	0.594	0.337	0.027	0.107	1.038	0.621	0.728	1.6
	Back	0.641	0.299	0.016	0.112	1.052	0.657	0.769	
	Left	0.010	0.035	0.002	0.002	0.047	0.012	0.014	
	Right	0.150	0.041	0.007	0.020	0.211	0.157	0.177	
	Top	0.317	0.380	0.041	0.184	0.881	0.358	0.542	
GSM1900 (EGPRS 1slots)	Front	0.238	0.337	0.027	0.107	0.682	0.265	0.372	
	Back	0.280	0.299	0.016	0.112	0.691	0.296	0.408	
	Left	0.004	0.035	0.002	0.002	0.041	0.006	0.008	
	Right	0.028	0.041	0.007	0.020	0.089	0.035	0.055	
	Top	0.265	0.380	0.041	0.184	0.829	0.306	0.490	
WCDMA Band 2	Front	0.064	0.337	0.027	0.107	0.508	0.091	0.198	
	Back	0.076	0.299	0.016	0.112	0.487	0.092	0.204	
	Left	0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right	0.010	0.041	0.007	0.020	0.071	0.017	0.037	
	Top	0.067	0.380	0.041	0.184	0.631	0.108	0.292	
WCDMA Band 4	Front	0.492	0.337	0.027	0.107	0.936	0.519	0.626	
	Back	0.641	0.299	0.016	0.112	1.052	0.657	0.769	
	Left	0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right	0.005	0.041	0.007	0.020	0.066	0.012	0.032	
	Top	0.310	0.380	0.041	0.184	0.874	0.351	0.535	
WCDMA Band 5	Front	0.465	0.337	0.027	0.107	0.909	0.492	0.599	
	Back	0.618	0.299	0.016	0.112	1.029	0.634	0.746	
	Left	0.007	0.035	0.002	0.002	0.044	0.009	0.011	
	Right	0.070	0.041	0.007	0.020	0.131	0.077	0.097	
	Top	0.306	0.380	0.041	0.184	0.870	0.347	0.531	

Band	Test Position	RB allocation	Scaled SAR				WWAN+ WIFI2.4G Σ SAR (W/kg)	WWAN+ WIFI5G Σ SAR (W/kg)	WWAN+ BT Σ SAR (W/kg)	Llimit (W/kg)
			WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)	WIFI5G MAX SAR 1g(W/kg)	BT SAR 1g(W/kg)				
LTE Band 2	Front	1RB	0.118	0.337	0.027	0.107	0.562	0.145	0.252	1.6
	Back		0.156	0.299	0.016	0.112	0.567	0.172	0.284	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.031	0.041	0.007	0.020	0.092	0.038	0.058	
	Top	50%RB	0.127	0.380	0.041	0.184	0.691	0.168	0.352	
	Front		0.116	0.337	0.027	0.107	0.560	0.143	0.250	
	Back		0.154	0.299	0.016	0.112	0.565	0.170	0.282	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.032	0.041	0.007	0.020	0.093	0.039	0.059	
	Top		0.123	0.380	0.041	0.184	0.687	0.164	0.348	
	Front	1RB	0.088	0.337	0.027	0.107	0.532	0.115	0.222	
	Back		0.109	0.299	0.016	0.112	0.520	0.125	0.237	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.012	0.041	0.007	0.020	0.073	0.019	0.039	
LTE Band 4	Top	1RB	0.059	0.380	0.041	0.184	0.623	0.100	0.284	
	Front		0.088	0.337	0.027	0.107	0.532	0.115	0.222	
	Back		0.108	0.299	0.016	0.112	0.519	0.124	0.236	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right	50%RB	0.013	0.041	0.007	0.020	0.074	0.020	0.040	
	Top		0.057	0.380	0.041	0.184	0.621	0.098	0.282	
	Front		0.940	0.337	0.027	0.107	1.384	0.967	1.074	
	Back		0.257	0.299	0.016	0.112	0.668	0.273	0.385	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.019	0.041	0.007	0.020	0.080	0.026	0.046	
	Top		0.091	0.380	0.041	0.184	0.655	0.132	0.316	
	Front	1RB	0.934	0.337	0.027	0.107	1.378	0.961	1.068	
	Back		0.254	0.299	0.016	0.112	0.665	0.270	0.382	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.018	0.041	0.007	0.020	0.079	0.025	0.045	
LTE Band 5	Top	1RB	0.090	0.380	0.041	0.184	0.654	0.131	0.315	
	Front		0.236	0.337	0.027	0.107	0.680	0.263	0.370	
	Back		0.476	0.299	0.016	0.112	0.887	0.492	0.604	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right	50%RB	0.024	0.041	0.007	0.020	0.085	0.031	0.051	
	Top		0.118	0.380	0.041	0.184	0.682	0.159	0.343	
	Front		0.234	0.337	0.027	0.107	0.678	0.261	0.368	
	Back		0.472	0.299	0.016	0.112	0.883	0.488	0.600	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.022	0.041	0.007	0.020	0.083	0.029	0.049	
	Top		0.119	0.380	0.041	0.184	0.683	0.160	0.344	
	Front	1RB	0.236	0.337	0.027	0.107	0.680	0.263	0.370	
	Back		0.476	0.299	0.016	0.112	0.887	0.492	0.604	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.024	0.041	0.007	0.020	0.085	0.031	0.051	
LTE Band 12	Top	1RB	0.118	0.380	0.041	0.184	0.682	0.159	0.343	
	Front		0.234	0.337	0.027	0.107	0.678	0.261	0.368	
	Back		0.472	0.299	0.016	0.112	0.883	0.488	0.600	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right	50%RB	0.022	0.041	0.007	0.020	0.083	0.029	0.049	
	Top		0.119	0.380	0.041	0.184	0.683	0.160	0.344	
	Front		0.236	0.337	0.027	0.107	0.680	0.263	0.370	
	Back		0.476	0.299	0.016	0.112	0.887	0.492	0.604	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.024	0.041	0.007	0.020	0.085	0.031	0.051	
	Top		0.118	0.380	0.041	0.184	0.682	0.159	0.343	
	Front		0.234	0.337	0.027	0.107	0.678	0.261	0.368	
	Back		0.472	0.299	0.016	0.112	0.883	0.488	0.600	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.022	0.041	0.007	0.020	0.083	0.029	0.049	

Band	Test Position	RB allocation	Scaled SAR				WWAN+ WIFI2.4G Σ SAR (W/kg)	WWAN+ WIFI5G Σ SAR (W/kg)	WWAN+ BT Σ SAR (W/kg)	Llimit (W/kg)
			WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)	WIFI5G Band 4 SAR 1g(W/kg)	BT SAR 1g(W/kg)				
LTE Band 25	Front	1RB	0.651	0.337	0.027	0.107	1.095	0.678	0.785	1.6
	Back		0.754	0.299	0.016	0.112	1.165	0.770	0.882	
	Left		0.007	0.035	0.002	0.002	0.044	0.009	0.011	
	Right		0.113	0.041	0.007	0.020	0.174	0.120	0.140	
	Top	50%RB	0.650	0.380	0.041	0.184	1.214	0.691	0.875	
	Front		0.647	0.337	0.027	0.107	1.091	0.674	0.781	
	Back		0.751	0.299	0.016	0.112	1.162	0.767	0.879	
	Left		0.008	0.035	0.002	0.002	0.045	0.010	0.012	
	Right		0.115	0.041	0.007	0.020	0.176	0.122	0.142	
	Top		0.643	0.380	0.041	0.184	1.207	0.684	0.868	
	Front	1RB	1.058	0.337	0.027	0.107	1.502	1.085	1.192	
	Back		1.076	0.299	0.016	0.112	1.487	1.092	1.204	
	Left		0.004	0.035	0.002	0.002	0.041	0.006	0.008	
	Right		0.069	0.041	0.007	0.020	0.130	0.076	0.096	
LTE Band 26 (814-824)	Top	50%RB	0.308	0.380	0.041	0.184	0.872	0.349	0.533	
	Front		1.054	0.337	0.027	0.107	1.498	1.081	1.188	
	Back		1.072	0.299	0.016	0.112	1.483	1.088	1.200	
	Left		0.006	0.035	0.002	0.002	0.043	0.008	0.010	
	Right		0.067	0.041	0.007	0.020	0.128	0.074	0.094	
	Top		0.310	0.380	0.041	0.184	0.874	0.351	0.535	
	Front	1RB	0.956	0.337	0.027	0.107	1.400	0.983	1.090	
	Back		0.802	0.299	0.016	0.112	1.213	0.818	0.930	
	Left		0.013	0.035	0.002	0.002	0.050	0.015	0.017	
	Right		0.135	0.041	0.007	0.020	0.196	0.142	0.162	
LTE Band 26 (824-849)	Top	50%RB	0.457	0.380	0.041	0.184	1.021	0.498	0.682	
	Front		0.954	0.337	0.027	0.107	1.398	0.981	1.088	
	Back		0.799	0.299	0.016	0.112	1.210	0.815	0.927	
	Left		0.015	0.035	0.002	0.002	0.052	0.017	0.019	
	Right		0.132	0.041	0.007	0.020	0.193	0.139	0.159	
	Top		0.454	0.380	0.041	0.184	1.018	0.495	0.679	

Band	Test Position	RB allocation	Scaled SAR				WWAN+ WIFI2.4G Σ SAR (W/kg)	WWAN+ WIFI5G Σ SAR (W/kg)	WWAN+ BT Σ SAR (W/kg)	Llimit (W/kg)
			WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)	WIFI5G Band 4 SAR 1g(W/kg)	BT SAR 1g(W/kg)				
LTE Band 41	Front	1RB	0.700	0.337	0.027	0.107	1.144	0.727	0.834	1.6
	Back		0.574	0.299	0.016	0.112	0.985	0.590	0.702	
	Left		0.004	0.035	0.002	0.002	0.041	0.006	0.008	
	Right		0.051	0.041	0.007	0.020	0.112	0.058	0.078	
	Top	50%RB	0.389	0.380	0.041	0.184	0.953	0.430	0.614	
	Front		0.695	0.337	0.027	0.107	1.139	0.722	0.829	
	Back		0.569	0.299	0.016	0.112	0.980	0.585	0.697	
	Left		0.005	0.035	0.002	0.002	0.042	0.007	0.009	
	Right		0.053	0.041	0.007	0.020	0.114	0.060	0.080	
	Top		0.387	0.380	0.041	0.184	0.951	0.428	0.612	
	Front	1RB	0.779	0.337	0.027	0.107	1.223	0.806	0.913	
	Back		0.570	0.299	0.016	0.112	0.981	0.586	0.698	
	Left		0.007	0.035	0.002	0.002	0.044	0.009	0.011	
	Right		0.069	0.041	0.007	0.020	0.130	0.076	0.096	
LTE Band 41	Top	1RB	0.407	0.380	0.041	0.184	0.971	0.448	0.632	
	Front		0.775	0.337	0.027	0.107	1.219	0.802	0.909	
	Back		0.569	0.299	0.016	0.112	0.980	0.585	0.697	
	Left		0.008	0.035	0.002	0.002	0.045	0.010	0.012	
	Right	50%RB	0.066	0.041	0.007	0.020	0.127	0.073	0.093	
	Top		0.402	0.380	0.041	0.184	0.966	0.443	0.627	
	Front		0.055	0.337	0.027	0.107	0.499	0.082	0.189	
	Back		0.078	0.299	0.016	0.112	0.489	0.094	0.206	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right		0.010	0.041	0.007	0.020	0.071	0.017	0.037	
	Top		0.048	0.380	0.041	0.184	0.612	0.089	0.273	
	Front	1RB	0.057	0.337	0.027	0.107	0.501	0.084	0.191	
	Back		0.076	0.299	0.016	0.112	0.487	0.092	0.204	
	Left		0.003	0.035	0.002	0.002	0.040	0.005	0.007	
	Right		0.011	0.041	0.007	0.020	0.072	0.018	0.038	
LTE Band 66	Top	1RB	0.046	0.380	0.041	0.184	0.610	0.087	0.271	
	Front		0.356	0.337	0.027	0.107	0.800	0.383	0.490	
	Back		0.278	0.299	0.016	0.112	0.689	0.294	0.406	
	Left		0.002	0.035	0.002	0.002	0.039	0.004	0.006	
	Right	50%RB	0.040	0.041	0.007	0.020	0.101	0.047	0.067	
	Top		0.181	0.380	0.041	0.184	0.745	0.222	0.406	
	Front		0.352	0.337	0.027	0.107	0.796	0.379	0.486	
	Back		0.276	0.299	0.016	0.112	0.687	0.292	0.404	
	Left		0.003	0.035	0.002	0.002	0.040	0.005	0.007	
	Right		0.038	0.041	0.007	0.020	0.099	0.045	0.065	
	Top		0.176	0.380	0.041	0.184	0.740	0.217	0.401	

11.7 Measurement uncertainty evaluation

11.7.1 Measurement uncertainty evaluation for SAR test

The following table includes the uncertainty table of the IEEE 1528. The values are determined by SPEAG. The breakdown of the individual uncertainties is as follows:

DASY8 Uncertainty Budget								
According to IEC/IEEE 62209-1528 (Frequency band: 300MHz-3GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c _i) (1g)	(c _i) (10g)	Std. Unc (1g)	Std. Unc (10g)
Measurement System Errors								
CF	Probe Calibration	±13.3%	N	2	1	1	±6.7%	±6.7%
CF _{drift}	Probe Calibration Drift	±1.7%	R	√3	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±2.8%	R	√3	1	1	±1.6%	±1.6%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Other Probe+Electronic	±0.8%	N	1	1	1	±0.8%	±0.8%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ _{sys}	Probe Positioning	±0.006 mm	N	1	0.14	0.14	±0.10%	±0.10%
DAT	Data Processing	±1.2%	N	1	1	1	±1.2%	±1.2%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)DAK	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T _σ)	Conductivity (temp.)BB	±3.3%	R	√3	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0	0	±0%	±0%
DIS	Distance DUT – TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
D _{xyz}	Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
H	Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
MOD	DUT Modulation ^m	±2.4%	R	√3	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±1.7%	R	√3	1	1	±1.0%	±1.0%
RF _{drift}	DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
VAL	Val Antenna Unc. ^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
RF _{in}	Unc.Input Power ^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling ^p	±0.0%	R	√3	1	1	±0.0%	±0.0%
u(ΔSAR)	Combined Uncertainty						±11.3%	±11.2%
U	Expanded Uncertainty						±22.6%	±22.5%

DASY8 Uncertainty Budget

According to IEC/IEEE 62209-1528
(Frequency band: 3GHz-6GHz range)

Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c <i>f</i>) (1g)	(c <i>f</i>) (10g)	Std. Unc (1g)	Std. Unc (10g)
Measurement System Errors								
CF	Probe Calibration	±13.1%	N	2	1	1	±6.55%	±6.55%
CF _{drift}	Probe Calibration Drift	±1.7%	R	$\sqrt{3}$	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%
ISO	Probe Isotropy	±7.6%	R	$\sqrt{3}$	1	1	±4.4%	±4.4%
DAE	Other Probe+Electronic	±1.2%	N	1	1	1	±1.2%	±1.2%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ _{sys}	Probe Positioning	±0.005 mm	N	1	0.29	0.29	±0.2%	±0.20%
DAT	Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)DAK	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T _σ)	Conductivity (temp.)BB	±3.4%	R	$\sqrt{3}$	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	$\sqrt{3}$	0.25	0.25	±2.0%	±2.0%
DIS	Distance DUT – TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
D _{xyz}	Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
H	Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
MOD	DUT Modulation ^m	±2.4%	R	$\sqrt{3}$	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±1.7%	R	$\sqrt{3}$	1	1	±1.0%	±1.0%
RF _{drift}	DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
VAL	Val Antenna Unc. ^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
RF _{in}	Unc.Input Power ^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling ^p	±0.0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%
u(ΔSAR)	Combined Uncertainty						±11.6%	±11.6%
U	Expanded Uncertainty						±23.3%	±23.1%

11.7.2 Measurement uncertainty evaluation for system check

The following table includes the uncertainty table of the IEEE 1528. The values are determined by SPEAG. The breakdown of the individual uncertainties is as follows:

Uncertainty For System Performance Check								
Uncertainty Component	Tol. (±%)	Prob. Dist.	Div.	C _i 1g	C _i 10g	1g U _i (±%)	10g U _i (±%)	V _i
measurement system								
Probe Calibration	6.7	N	1	1	1	6.70	6.70	∞
Axial Isotropy	4.7	R	$\sqrt{3}$	0.7	0.7	1.90	1.90	∞
Hemispherical Isotropy	9.6	R	$\sqrt{3}$	0.7	0.7	3.88	3.88	∞
Boundary Effect	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	4.7	R	$\sqrt{3}$	1	1	2.71	2.71	∞
system detection Limits	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	0	N	1	1	1	0.00	0.00	∞
Readout Electronics	0.3	N	1	1	1	0.30	0.30	∞
Response Time	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
RF ambient Conditions - Noise	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
RF ambient Conditions – Reflections	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Probe positioned Mechanical Tolerance	0.8	R	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe positioning with respect to Phantom Shell	6.7	R	$\sqrt{3}$	1	1	3.87	3.87	∞
Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Dipole								
Deviation of experimental source from numerical source	5.5	N	1	1	1	3.18	3.18	∞
Input power and SAR drift measurement	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Dipole axis to liquid Distance	3.4	R	$\sqrt{3}$	1	1	1.96	1.96	∞
Phantom and Tissue Parameters								
Phantom Uncertainty (shape and thickness tolerances)	4.0	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviation (in permittivity and conductivity)	2	N	1	1	0.84	2.0	1.68	∞
Liquid conductivity (meas.)	2.5	N	1	0.78	0.71	1.13	1.03	5
Liquid conductivity (target.)	5	R	$\sqrt{3}$	0.78	0.71	3.90	3.55	5
Liquid Permittivity (meas.)	2.5	N	1	0.23	0.26	0.33	0.38	∞
Liquid Permittivity (target.)	5	R	$\sqrt{3}$	0.23	0.26	1.15	1.30	∞
Combined Standard Uncertainty		Rss				11.29	11.18	
Expanded Uncertainty (95% Confidence interval)		k				20.57	19.95	

11.8 Test equipment and ancillaries used for tests

To simplify the identification of the test equipment and/or ancillaries which were used, the reporting of the relevant test cases only refer to the test item number as specified in the table below.

	Manufacturer	Device Type	Type(Model)	Serial number	calibration	
					Last Cal.	Due Date
☒	SPEAG	E-Field PROBE	EX3DV4	7956	2025-09-30	2026-09-29
☒	SPEAG	Validation Kits	D750V3	1151	2024-08-19	2027-08-18
☒	SPEAG	Validation Kits	D835V2	4d203	2024-08-20	2027-08-19
☒	SPEAG	Validation Kits	D1750V2	1143	2024-08-20	2027-08-19
☒	SPEAG	Validation Kits	D1900V2	5d211	2024-08-19	2027-08-18
☒	SPEAG	Validation Kits	D2450V2	1099	2026-03-05	2029-03-04
☒	SPEAG	Validation Sources	D2550V2	1015	2024-08-16	2027-08-15
☒	SPEAG	Validation Kits	D2600V2	1094	2026-03-04	2029-03-03
☐	SPEAG	Validation Sources	D3500V2	1164	2024-10-17	2027-10-16
☐	SPEAG	Validation Sources	D3700V2	1139	2024-10-17	2027-10-16
☐	SPEAG	Validation Sources	D3900V2	1106	2024-10-17	2027-10-16
☐	SPEAG	Validation Sources	D4600V2	1097	2024-10-17	2027-10-16
☐	SPEAG	Validation Sources	D4900V2	1093	2024-10-08	2027-10-07
☒	SPEAG	Validation Sources	D5GHzV2	1412	2024-10-17	2027-10-16
☐	SPEAG	Validation Sources	D6.5GHzV2	1116	2024-10-14	2027-10-13
☒	SPEAG	DAE	DAE4ip	1925	2025-10-15	2026-10-04
☒	R & S	Universal Radio Communication Tester	CMU 200	119733	2025-11-27	2026-11-26
☒	R & S	Universal Radio Communication Tester	CMW500	144459	2025-11-27	2026-11-26
☒	R & S	UXM5G Wireless Test Platform	E7515B	MY60192341	2025-11-27	2026-11-26
☒	HP	Network Analyser	8753D	3410A08889	2025-11-27	2026-11-26
☒	HP	Signal Generator	E4421B	GB39340770	2025-11-27	2026-11-26
☒	Keithley	Multimeter	Keithley 2000	4014539	2025-11-27	2026-11-26
☒	SATIMO	Amplifier	Power Amplifier	MODU-023-A-0004	2025-11-27	2026-11-26
☒	Agilent	Power Meter	E4418B	GB43312909	2025-11-27	2026-11-26
☒	Agilent	Power Meter Sensor	E4412A	MY41500046	2025-11-27	2026-11-26

Annex A: System Check

(Please See the SAR Measurement Plots of annex A.)

Annex B: Measurement Results

(Please See the SAR Measurement Plots of annex B.)

Annex C: Calibration Reports

(Please See the Calibration reports of annex C.)

Annex D: Test Photographs

(Please see SAR test setup photos.)