FCC SAR Test Report

Applicant:	Imin Technology Pte Ltd
EUT Description:	POS Device
Model:	I25M01
Brand:	iMin
FCC ID:	2AYD5-I25M01
Standards:	FCC 47CFR §2.1093
Date of Receipt:	2026/03/04
Date of Test:	2026/03/30 to 2026/04/26
Date of Issue:	2026/04/28

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.

Jim Huang
Approved By:

Jack Li
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2026/04/28	Original	Jack Li

Table of Contents

1 Summary of Test Results

Band	Highest SAR(W/kg)
	Body 1g
WCDMA Band II	0.68
WCDMA Band IV	0.83
WCDMA Band V	1.02
LTE Band 2	0.74
LTE Band 5	1.26
LTE Band 12	0.64
LTE Band 13	1.24
LTE Band 14	1.09
LTE Band 66/4	0.70
LTE Band 71	0.69
WIFI 2.4G	0.59
WIFI 5G	0.38
WIFI 6G	0.23
BT	0.02
NFC	0.01
SAR Limited(W/kg)	1.6
Highest Simultaneous Transmission SAR (W/kg)	
Scenario	**Body 1g**
Summed SAR	1.39
SAR Limited(W/kg)	1.6

Remark:
This device supports LTE B2/B4/B5/B12/B13/B14/B66/B71. Since the supported frequency span for LTE B4 falls completely within the support's frequency span for LTE B66, both LTE bands have the same target power, and both LTE bands share the same transmission path, therefore SAR was only assessed for LTE B66.

Band	Highest PD (W/m^2)
WIFI 6G	1.12
Limit	10.0

Highest Simultaneous Transmission with Multiple transmitters	Total Exposure Radio
SAR & Power Density	0.83
Radio Limit	1.0

2 Guidance Applied

FCC 47CFR §2.1093
ANSI/IEEE C95.1-1992
IEC/IEEE 62209-1528:2020
IEC/IEEE 63195-1:2022
IEC 62479:2010
FCC KDB 941225 D01 3G SAR Measurement Procedures v03r01
FCC KDB 941225 D05 SAR for LTE Devices v02r05
FCC KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
FCC KDB 248227 D01 SAR Guidance for IEEE 802 11 Wi-Fi SAR v02r02
FCC KDB 648474 D04 Handset SAR v01r03
FCC KDB 447498 D01 General RF Exposure Guidance v06
FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
FCC KDB 865664 D02 RF Exposure Reporting v01r02
FCC KDB 616217 D04 SAR for laptop and tablets v01r02

3 Lab Information

3.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014
Tel.: +86-755-27212361
Contact Email: info@towewireless.com

3.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)
This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353
Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory.
Designation Number: CN1353.

ISED CAB identifier: CN0152
Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.
CAB identifier: CN0152
Company Number: 31000

3.3 Ambient Condition

Temperature: 18°C~25°C
Relative Humidity: 30%~75%

4 Client Information

4.1 Applicant

Applicant:	Imin Technology Pte Ltd
Address:	11 Bishan street 21 #03-05 Singapore 573943

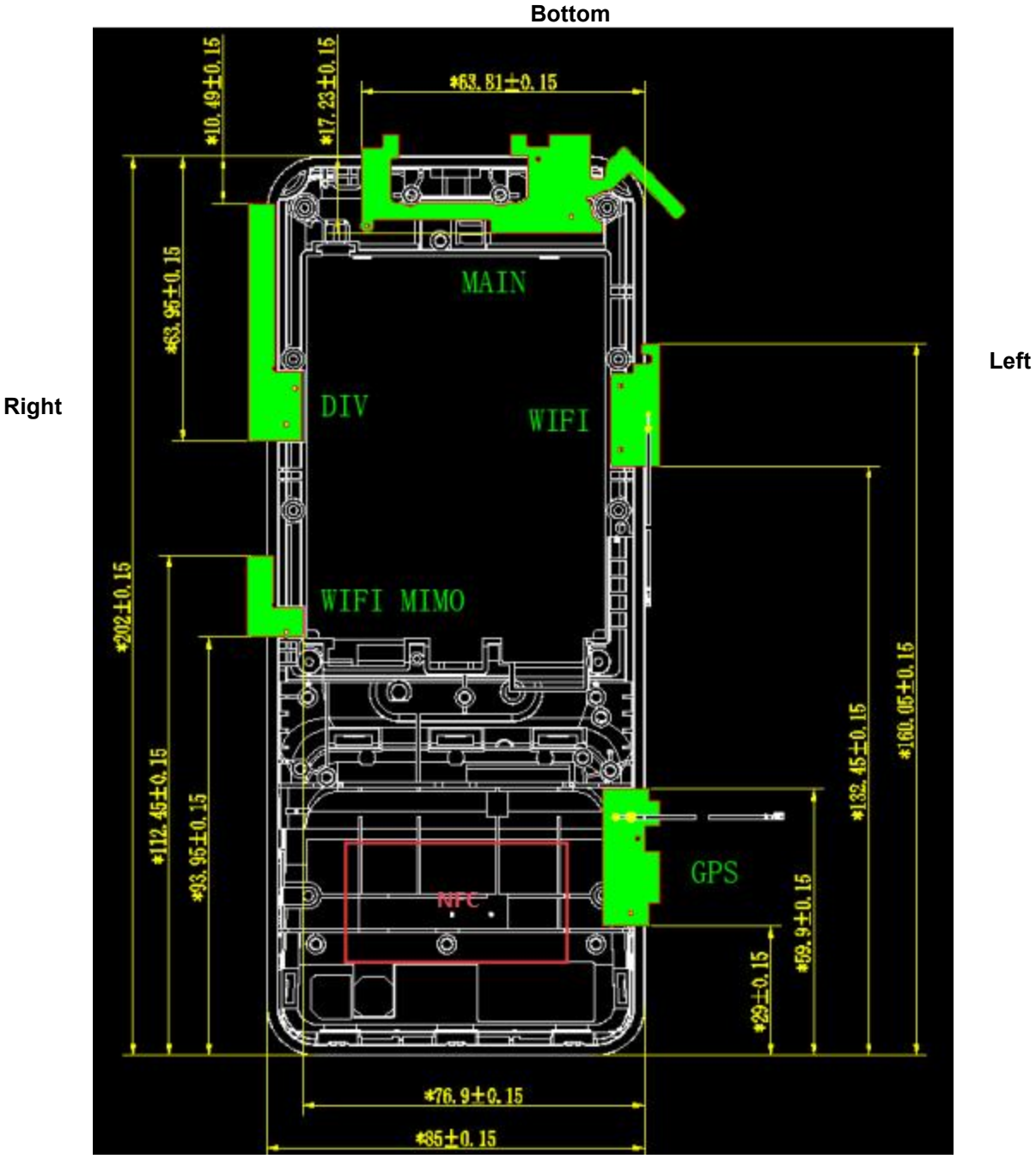
4.2 Manufacturer

Manufacturer:	Imin Technology Pte Ltd
Address:	11 Bishan street 21 #03-05 Singapore 573943

5 Product Information

EUT Description	POS Device	
Model No.	I25M01	
Brand	iMin	
Hardware Version	N/A	
Software Version	N/A	
SN	NMR111NHENGG00002	
Device Capabilities:		
Band	Frequency Range (MHz)	Modulation Type
WCDMA Band II	1850 ~ 1910	RMC, HSDPA, HSUPA, HSPA+
WCDMA Band IV	1710 ~ 1755	
WCDMA Band V	824 ~ 849	
LTE Band 2	1850 ~ 1910	QPSK 16QAM
LTE Band 4	1710 ~ 1755	
LTE Band 5	824 ~ 849	
LTE Band 12	699 ~ 716	
LTE Band 13	777 ~ 787	
LTE Band 14	788 ~ 798	
LTE Band 66	1710 ~ 1780	
LTE Band 71	663 ~ 698	
NFC	13.56	ASK
Bluetooth	2400~2483.5	GFSK, π/4DQPSK, 8DPSK
Wi-Fi 2.4G	2400~2483.5	802.11b/g/n/11ax
Wi-Fi 5G	5150~5250	802.11a/n/ac/ax
	5250~5350	
	5470~5725	
	5725~5850	
Wi-Fi 6G	5925~6425	802.11ac/ax
	6425~6525	
	6525~6875	
	6875~7125	
Antenna Type	☐ External, ☒ Integrated	
Remark: The above EUT's information was declared by applicant, please refer to the specifications or user's manual for more detailed description.		

5.1 Antenna Locations (Front View)



Note:

1) Per KDB 616217, the diagonal length is > 200mm, the device is considered a “tablet” device and needed to test 0mm 1-g body SAR.
2) The Div antenna is only for RX.

6 RF Exposure Limits

Human Exposure	Uncontrolled Environment General Population (W/kg) or (mW/g)	Controlled Environment Occupational (W/kg) or (mW/g)
Spatial Peak SAR[1] (Brain/Trunk)	1.6	8.0
Spatial Average SAR[2] (Whole Body)	0.08	0.4
Spatial Peak SAR[3] (Hands/Feet/Ankle/Wrist)	4.0	20.0

Note:

1, 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.

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

3, 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. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

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). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

7 Introduction

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

7.1 SAR Definition

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

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

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

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

Where:

σ is the conductivity of the tissue material (S/m)

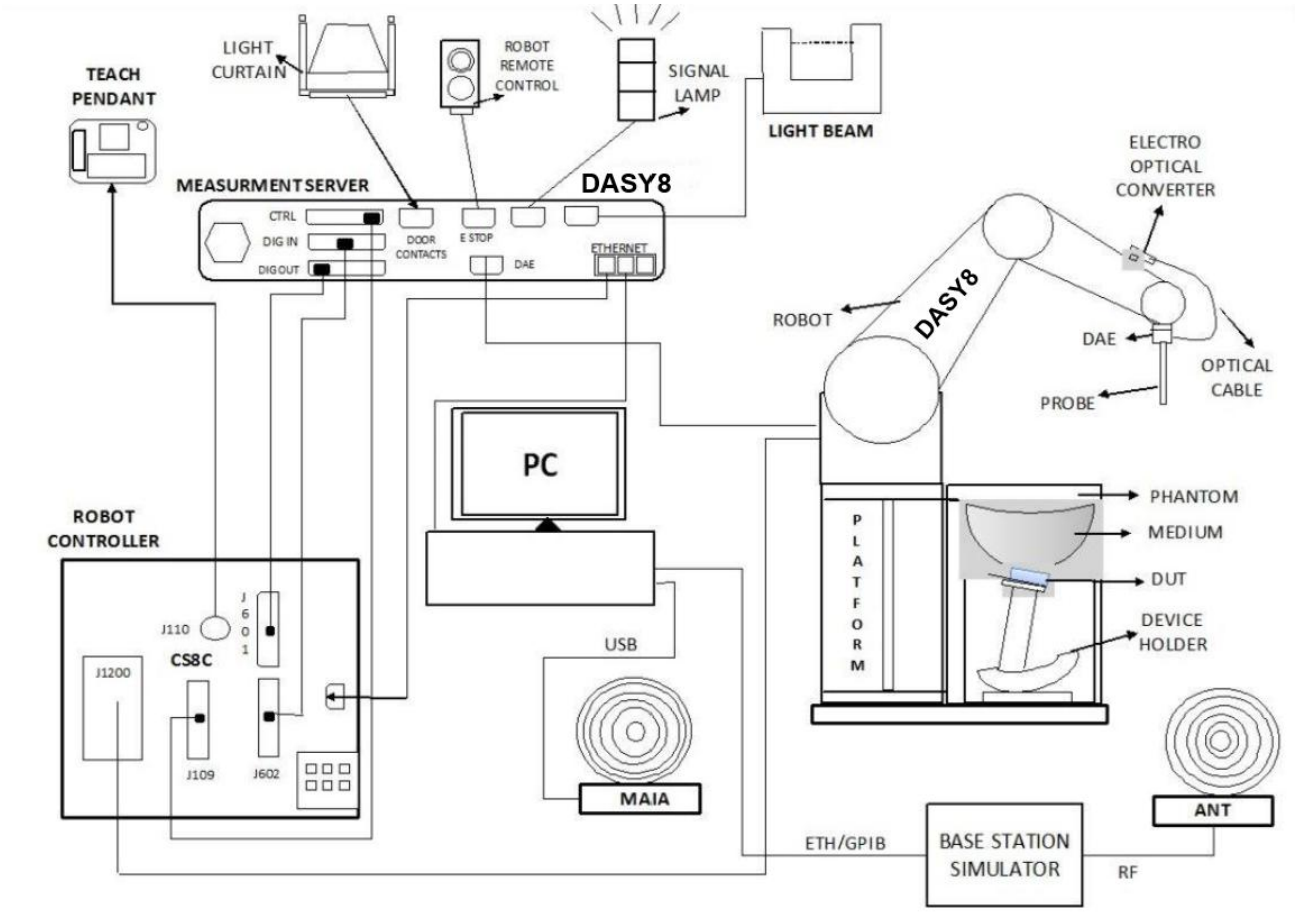
ρ is the mass density of the tissue material (kg/m^3)

E is the RMS electrical field strength (V/m)

8 SAR Measurements System

8.1 The SAR Measurement Set-up

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

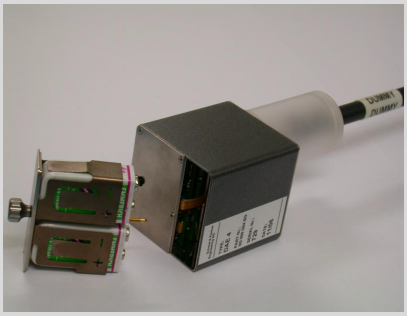


- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Windows 11 and the DASY8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

8.2 E-Field Probe

	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm

8.3 Data Acquisition Electronics (DAE)

	The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock. The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

8.4 Phantom

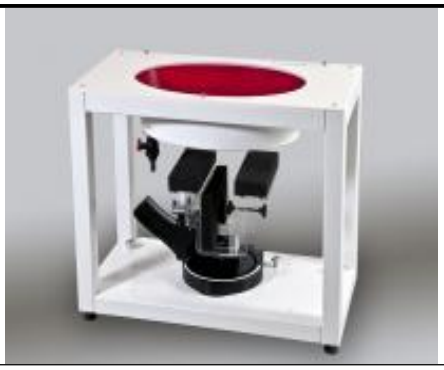
SAM Twin Phantom:

Material	Vinylester, glass fiber reinforced (VE-GF)
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)
Dimensions (incl. Wooden Support)	Length: 1000 mm Width: 500 mm Height: adjustable feet
Filling Volume	Approx. 25 liters
Wooden Support	SPEAG standard phantom table

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

ELI Phantom:

Material	Vinylester, glass fiber reinforced (VE-GF)
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm Minor axis: 400 mm
Filling Volume	approx. 30 liters
Wooden Support	SPEAG standard phantom table



The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

8.5 Device Holder

The SAR measured in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of ± 0.5mm would produce uncertainty in the SAR of ± 20%. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions at which the devices must be measured are defined by the standards. The DASY8 device holder along with the associated adaptors / options is designed to accommodate different types & sizes (laptops, tablets, phones) of test devices and yet provide accurate and repeatable positioning as described in the test standards.

The device holder is available in two configurations (see Figure 3.13.1): for hand held transmitters (mobile phones) – MD4HHTV5 – Mounting Device for Hand-Held Transmitters and for Body-Worn transmitters – MD4LAP5 – Mounting Device for laptops and other body worn transmitters.

(a) MD4HHTV5 (b) MD4LAPV5

Figure 3.13.1: Mounting Device for Hand-Held Devices and Laptop / Body-Worn Devices

8.6 Measurement procedure

8.6.1 Power reference measurement

The Power Reference Measurement and Power Drift Measurement jobs are useful jobs for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

8.6.2 Area scan

Measurement procedures for evaluating SAR from wireless handsets typically start with a coarse measurement grid to determine the approximate location of the local peak SAR values. This is known as the area-scan procedure. In addition, identify the positions of any local maxima with SAR values within 2 dB of the maximum value, and that will not be within the zoom scan of other peaks. Additional zoom scans shall be measured for such peaks only when the primary peak is within 2 dB of the SAR compliance limit.

Area scan parameters SAR measurement as below:

Parameter	DUT transmit frequency being tested	
	$f \leq 3$ GHz	3 GHz < $f \leq 10$ GHz
Maximum distance between the measured points (geometric centre of the sensors) and the inner phantom surface (z_{M1} in Figure 20 in mm)	5 ± 1	$\delta \ln(2)/2 \pm 0{,}5$ [a]
Maximum spacing between adjacent measured points in mm (see O.8.3.1)[b]	20, or half of the corresponding zoom scan length, whichever is smaller	$60/f$, or half of the corresponding zoom scan length, whichever is smaller
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)[c]	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Tolerance in the probe angle	1°	1°

[a] δ is the penetration depth for a plane-wave incident normally on a planar half-space.

[b] See Clause O.8 on how Δx and Δy may be selected for individual area scan requirements.

[c] The probe angle relative to the phantom surface normal is restricted due to the degradation in the measurement accuracy in fields with steep spatial gradients. The measurement accuracy decreases with increasing probe angle and increasing frequency. This is the reason for the tighter probe angle restriction at frequencies above 3 GHz.

8.6.3 Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan parameters SAR measurement as below:

Parameter	DUT transmit frequency being tested	
	$f \leq 3$ GHz	3 GHz $< f \leq 10$ GHz
Maximum distance between the closest measured points and the phantom surface (z_{M1} in Figure 20 and Table 3, in mm)	5	$\delta \ln(2)/2$ [a]
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Maximum spacing between measured points in the x- and y-directions (Δx and Δy, in mm)	8	$24/f$ [b]
For uniform grids: Maximum spacing between measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	5	$10/(f-1)$
For graded grids: Maximum spacing between the two closest measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	4	$12/f$
For graded grids: Maximum incremental increase in the spacing between measured points in the direction normal to the phantom shell ($R_z = \Delta z_2/\Delta z_1$ in Figure 20)	1,5	1,5
Minimum edge length of the zoom scan volume in the x- and y-directions (L_z in O.8.3.2, in mm)	30	22
Minimum edge length of the zoom scan volume in the direction normal to the phantom shell (L_h in O.8.3.2 in mm)	30	22
Tolerance in the probe angle	1°	1°

[a] δ is the penetration depth for a plane-wave incident normally on a planar half-space.

[b] This is the maximum spacing allowed, which might not work for all circumstances.

8.6.4 Power Drift Measurement

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. Several drift measurements are possible for one reference measurement. This allows a user to monitor the power drift of the device under test that must remain within a maximum variation of ±5%. Detail power drift measurement refer to appendix B.

9 Test Equipment list

Manufacturer	Equipment Name	Model	Serial Number	Calibration Date	Due Date of calibration
SPEAG	ELI	ELI V8.0	2227	NCR	NCR
SPEAG	Twin Phantom	SAM	2168	NCR	NCR
SPEAG	mmWave Phantom	mmWave	1121	NCR	NCR
SPEAG	E-Field Probe	EX3DV4	7858	2026/02/20	2027/02/19
SPEAG	E-Field Probe	EX3DV4	7812	2026/01/19	2027/01/18
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9455	2025/06/30	2026/06/29
SPEAG	Data Acquisition Electronics	DAE4	1846	2026/01/07	2027/01/06
SPEAG	Data Acquisition Electronics	DAE4	1847	2026/03/17	2027/03/16
SPEAG	Data Acquisition Electronics	DAE4	799	2026/02/26	2027/02/25
SPEAG	System Validation Kits	CLA13	1043	2024/01/03	2027/01/02
SPEAG	System Validation Kits	D750V3	1231	2023/05/04	2026/05/03
SPEAG	System Validation Kits	D1750V2	1115	2026/02/05	2029/02/04
SPEAG	System Validation Kits	D1950V3	1266	2026/02/03	2029/02/02
SPEAG	System Validation Kits	D2450V2	1099	2026/02/05	2029/02/04
SPEAG	System Validation Kits	D5GHzV2	1371	2026/02/09	2029/02/08
SPEAG	System Validation Kits	D6.5GHzV2	1096	2023/05/11	2026/05/10
SPEAG	System Validation Kits	10GHz	1055	2024/09/16	2027/09/15
SPEAG	Dielectric parameter probes	DAK3.5	1341	2025/07/14	2026/07/13
Agilent	Network Analyzer	E5071B	MY42302220	2026/03/05	2027/03/04
Anritsu	Radio Communication Analyzer	MT8821C	6261991091	2026/03/05	2027/03/04
Talent Microwave	Directional Coupler	TC-05180-10S	220420003	NCR	NCR
R&S	Signal Generator	SMR20	100648	2026/03/05	2027/03/04
QiJi	Preamplifier	YX28982302	TOWE-EQ-SR-020	NCR	NCR
QiJi	Preamplifier	YX28982301	TOWE-EQ-SR-021	NCR	NCR
R&S	Power Sensor	NRP-Z21	101651	2026/03/05	2027/03/04
R&S	Power Sensor	NRP-Z21	104189	2026/03/05	2027/03/04
HiSiDiKe	Thermometer	TP300	TOWE-EQ-SR-023	2026/03/09	2027/03/08
BingYu	Temperature and Humidity Indicator	HTC-1	TOWE-EQ-SR-025	2025/06/04	2026/06/03
BingYu	Temperature and Humidity Indicator	HTC-1	TOWE-EQ-SR-024	2026/03/09	2027/03/08

Note:

1. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged or repaired during the interval.

2. The justification data of dipole can be found in Appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

10 SAR measurement variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue equivalent medium.

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

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 or 2 W/kg (1-g or 10-g respectively); steps2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 or 2 W/kg (1-g or 10-g respectively), repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 or 3.6W/kg (~ 10% from the 1-g or 10-g respective SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 or 3.75 W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20

11 Description of Test Position

11.1 Body exposure conditions

The overall diagonal dimension of the display section of a tablet is > 20 cm, Per FCC KDB 616217, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. SAR evaluation for the front surface of tablet display screens is generally not necessary. The SAR Exclusion Threshold in KDB 447498 D04 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.

12 System Verification

12.1 Tissue Verification

The Conductivity (σ) and Permittivity (ρ) are listed in bellow table. The temperature variation of the Tissue Simulate Liquids was 22±2°C, the liquid depth of the ear reference point or the flat phantom was at least 15 cm (which is shown in Figure 12-1).

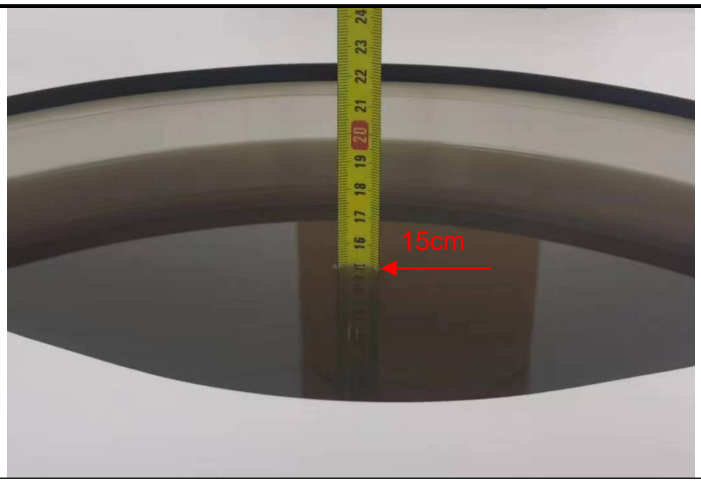


Figure 12-1 Liquid depth in the Flat Phantom

Frequency (MHz)	Tissue Type	Liquid Temp. (℃)	Target Tissue		Measured Tissue		Deviation (Limit ±5%)		Date
			Permittivity ε_r	Conductivity σ(S/m)	Permittivity ε_r	Conductivity σ(S/m)	$\Delta\varepsilon_r$	Δσ	
13	Head	21.9	55.00	0.75	55.700	0.743	1.27%	-0.93%	2026/04/24
750	Head	22.1	41.90	0.89	43.000	0.897	2.63%	0.79%	2026/04/23
835	Head	22.0	41.50	0.90	41.800	0.921	0.72%	2.33%	2026/04/22
1750	Head	21.9	40.10	1.37	40.100	1.370	0.00%	0.00%	2026/04/19
1950	Head	21.9	40.00	1.40	41.300	1.420	3.25%	1.43%	2026/04/19
2450	Head	22.2	39.20	1.80	40.200	1.820	2.55%	1.11%	2026/03/30
5300	Head	22.1	35.90	4.76	35.700	4.770	-0.56%	0.21%	2026/04/20
5600	Head	22.1	35.50	5.07	34.700	5.130	-2.25%	1.18%	2026/04/20
5800	Head	22.1	35.30	5.27	34.600	5.300	-1.98%	0.57%	2026/04/20
6500	Head	22.2	34.50	6.07	34.800	6.120	0.87%	0.82%	2026/04/21

Table 1： Measurement Tissue Parameters

12.2 SAR System Check

Prior to SAR assessment, a SAR system Check measurement was performed to see if the measured SAR was within ±10% from the target SAR values. The System Performance Check Setup in Figure 12-3.

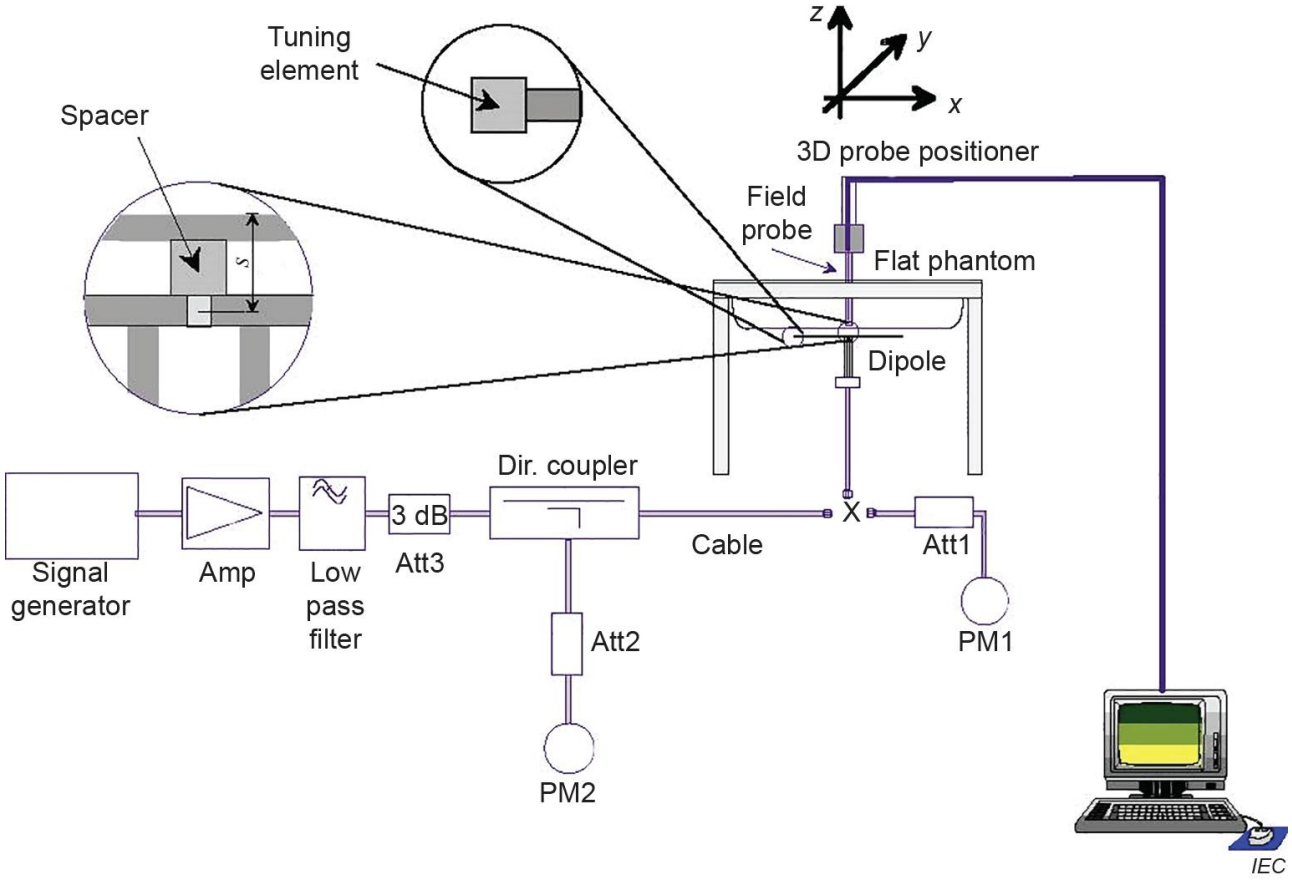


Figure 12-3 System Performance Check Setup

12.2.1 System Check Result

Frequency (MHz)	Tissue Type	Dipole	S/N	Target SAR (1W)		Measured SAR (100mW)		Measured SAR (normalized to 1W)		Deviation (Limit ±10%)		Date
				1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	Δ1g	Δ10g	
13	Head	CLA-13	1043	0.484	0.297	0.045	0.028	0.450	0.280	-7.02%	-5.72%	2026/04/24
750	Head	D750V3	1231	8.67	5.67	0.896	0.581	8.96	5.81	3.34%	2.47%	2026/04/23
835	Head	D835V2	4d302	9.50	6.16	0.976	0.633	9.76	6.33	2.74%	2.76%	2026/04/22
1750	Head	D1750V2	1115	36.70	19.50	3.570	1.950	35.70	19.50	-2.72%	0.00%	2026/04/19
1950	Head	D1950V3	1266	40.40	20.80	3.740	1.990	37.40	19.90	-7.43%	-4.33%	2026/04/19
2450	Head	D2450V2	1099	52.70	24.70	5.290	2.490	52.90	24.90	0.38%	0.81%	2026/03/30
5300	Head	D5GHzV2	1371	79.50	22.50	7.970	2.380	79.70	23.80	0.25%	5.78%	2026/04/20
5600	Head	D5GHzV2	1371	82.10	23.10	8.270	2.450	82.70	24.50	0.73%	6.06%	2026/04/20
5800	Head	D5GHzV2	1371	78.60	22.10	7.920	2.340	79.20	23.40	0.76%	5.88%	2026/04/20
6500	Head	D6.5GHzV2	1096	289.00	53.40	28.100	5.560	281.00	55.60	-2.77%	4.12%	2026/04/21

Table 2： SAR System Check Result

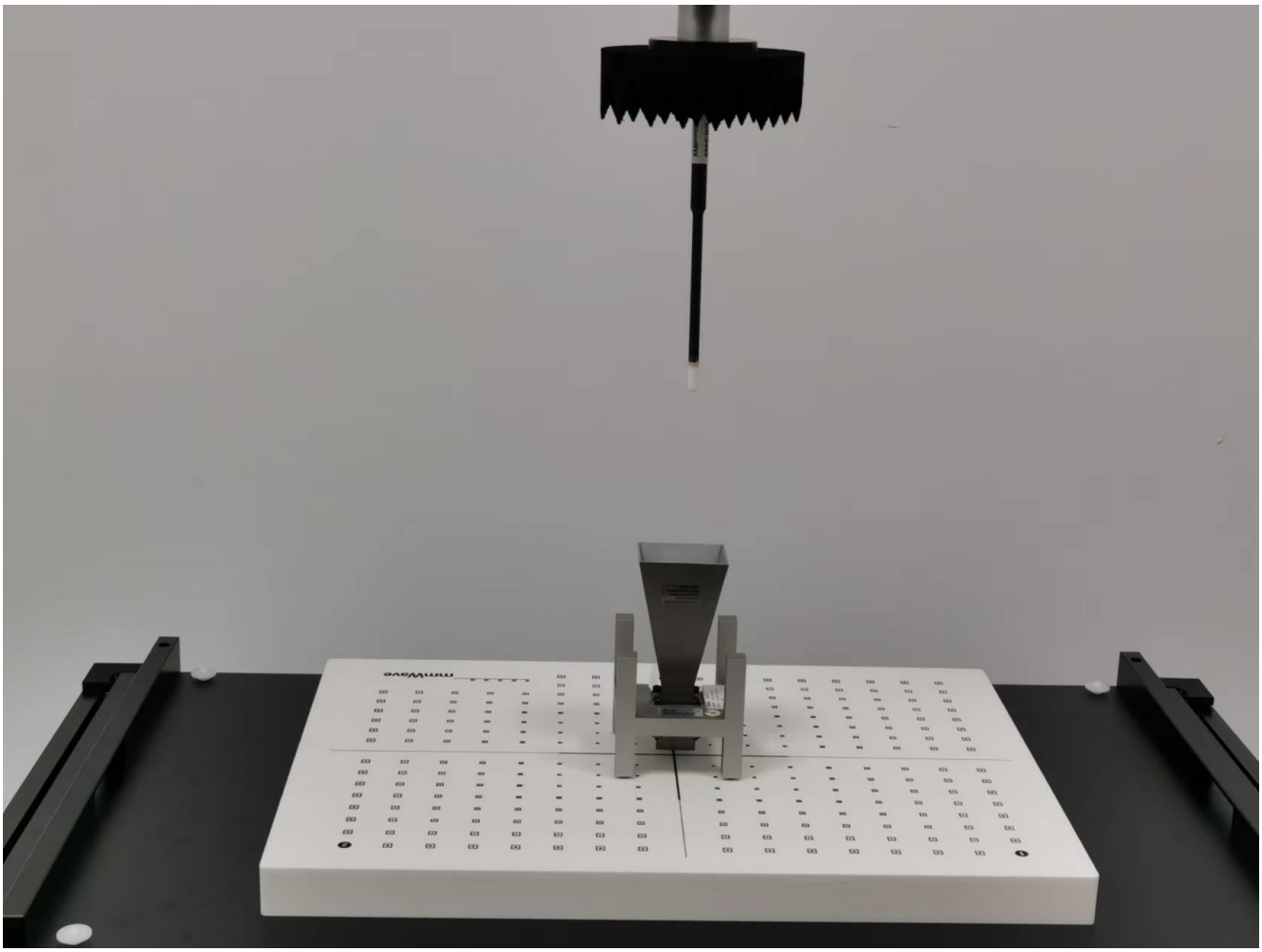
12.2.2 Detailed System Check Result

Please see Appendix A

12.3 PD System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.



System Verification Setup Photo

Frequency (GHz)	PD Verification Source	Distance (mm)	Measured 4cm^2 (W/m^2)	Target 4cm^2 (W/m^2)	Deviation (dB)	Measured Date
10G	10GHz_1055	10	56.60	56.20	0.03	2026/04/25
10G	10GHz_1055	10	61.50	56.20	0.39	2026/04/26

Detailed System Check Results Please see Appendix A.

13 SAR General Measurement Procedures

13.1 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

13.2 SAR Measurement Conditions for UMTS

13.2.1 Output Power Verification

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

13.2.2 Body SAR Measurements

SAR for body configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple $DPDCH_n$ configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spearing code or $DPDCH_n$, for the highest reported SAR configuration in 12.2 kbps RMC.

13.2.3 SAR Measurements with Rel. 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using and FRC with H-SET 1 in Sub-test and a 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to release 6 HSPA test procedures. 8.4.5 SAR Measurement with Rel.6 HSUPA 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, Body SAR for HSPA is measured with E-DCH Sub-test 5, Using H-Set 1 and QPSK for FRC and a 12.2kbps RMC configured in Test Loop Mode 1 and Power Control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

13.2.4 SAR Measurements with Rel. 6 HSUPA

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, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

13.2.5 SAR Measurement Conditions for HSPA+(16QAM)

Per KDB 941225D01, SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode. Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.

Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

13.3 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C/MT8821C simulators are 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 tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

13.3.1 Spectrum Plots for RB Configurations

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

13.3.2 MPR

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

Modulation	Channel bandwidth/Transmission bandwidth						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	2
64QAM	> 5	> 4	> 8	> 12	> 16	> 18	3
256QAM	≥1						5

13.3.3 A-MPR

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

13.3.4 Largest channel bandwidth standalone SAR test requirements

A. 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.

B. QPSK with 50% RB allocation

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

C. QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in A and B 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.

D. Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in A, B, and C to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

13.3.5 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 13.4.4 to determine the channels and RB configurations that need SAR testing, then only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration, or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

13.4 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01 for more details.

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

For WiFi SAR testing, a communication link is set up with some command for WiFi mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Per KDB248227 D01, a minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

13.4.1 Initial Test Position Procedure

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

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

13.4.2 Initial Test Configuration Procedure

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required. SAR test reduction for subsequent highest output test channels is determined according to reported SAR of the initial test configuration.
For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.
When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until reported SAR is ≤ 1.2 W/kg or all required channels are tested.

13.4.3 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency Band and aggregated Band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position on procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg for 1g SAR and ≤ 3.0 W/kg for 10g SAR, no additional SAR tests for the subsequent test configurations are required.

13.4.4 2.4 GHz SAR Procedures

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

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 for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS is 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) 2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3 of of KDB248227 D01). 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.

13.4.5 5 GHz SAR Procedures

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

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

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

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

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

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

13.4.6 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

13.4.7 MIMO SAR Considerations

Per KDB 248227 D01, the simultaneous SAR provisions in KDB 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation.

14 Conducted Power

Note: The detailed conducted power table can refer to Appendix E.

15 SAR Data Summary

General Notes:

1) The Highest Reported SAR Plot refer to Appendix B.

2) Per KDB 447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1g or 10g SAR for the mid-band or highest output power channel is:

- ≤ 0.8W/kg for 1g or 2.0W/kg for 10g respectively, when the transmission band is ≤ 100MHz.
- ≤ 0.6 W/kg or 1.5 W/kg, for 1g or 10g respectively, when the transmission band is between 100 MHz and 200MHz.
- ≤ 0.4 W/kg or 1.0 W/kg, for 1g or 10g respectively, when the transmission band is ≥ 200MHz.

WiFi 5G Notes:

1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is ⩽ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration.
2) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.

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

For NFC:

1) Standalone SAR testing for NFC will be performed with active mode and max power mode by test software with 100% duty cycle at 0mm separation distance.

For WIFI 6G:

1) Absorbed power density (APD) using a 4cm^2 averaging area is reported based on SAR measurements.
2) Per FCC guidance and equipment manufacturer guidance, the power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.67 dB (84.93%) was used to determine the psPD measurement scaling factor.
3) Per April 2021 TCB Workshop, For the highest SAR test configurations also measure incident PD (total) using power-density reconstruction method in 2 mm closest measurement plane.
4) IPD is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.
5) The measurement procedure consists of measuring the PDinc at two different distances: 2 mm (compliance distance) and λ/5. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPDn fulfil the criterion described below. Since iPD ratio between the two distances is ≥ -1dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

$$10 \cdot log_{10} \frac{iPD_n(2mm)}{iPD_n(\lambda/5)} \geq -1$$

15.1 SAR Measurement Result of WCDMA Band II

Test position	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm							
Back side	RMC	9400/1880	0.260	23.64	24.00	1.086	0.282
Left side	RMC	9400/1880	0.539	23.64	24.00	1.086	0.586
Right side	RMC	9400/1880	0.036	23.64	24.00	1.086	0.039
Top side	RMC	9400/1880	0.002	23.64	24.00	1.086	0.002
Bottom Side	RMC	9400/1880	0.221	23.64	24.00	1.086	0.240
Left side	RMC	9262/1852.4	0.497	23.53	24.00	1.114	0.554
Left side	RMC	9538/1907.6	0.596	23.45	24.00	1.135	**0.676**

Table 3： SAR of WCDMA Band II.

15.2 SAR Measurement Result of WCDMA Band IV

Test position	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm							
Back side	RMC	1412/1732.4	0.546	23.56	24.00	1.107	0.604
Left side	RMC	1412/1732.4	0.674	23.56	24.00	1.107	0.746
Right side	RMC	1412/1732.4	0.051	23.56	24.00	1.107	0.056
Top side	RMC	1412/1732.4	0.002	23.56	24.00	1.107	0.002
Bottom Side	RMC	1412/1732.4	0.415	23.56	24.00	1.107	0.459
Left side	RMC	1312/1712.4	0.750	23.56	24.00	1.107	**0.830**
Left side	RMC	1513/1752.6	0.657	23.55	24.00	1.109	0.729

Table 4： SAR of WCDMA Band IV.

15.3 SAR Measurement Result of WCDMA Band V

Test position	Mode	Ch./Freq.(MHz)	SAR (W/kg) 10-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm							
Back side	RMC	4233/846.6	0.752	23.60	24.00	1.096	0.825
Left side	RMC	4233/846.6	0.493	23.60	24.00	1.096	0.541
Right side	RMC	4233/846.6	0.396	23.60	24.00	1.096	0.434
Top side	RMC	4233/846.6	0.003	23.60	24.00	1.096	0.003
Bottom Side	RMC	4233/846.6	0.932	23.60	24.00	1.096	**1.022**
Bottom Side Repeat	RMC	4233/846.6	0.922	23.60	24.00	1.096	1.011
Back side	RMC	4132/826.4	0.919	23.57	24.00	1.104	1.015
Back side	RMC	4182/836.4	0.830	23.50	24.00	1.122	0.931
Bottom Side	RMC	4132/826.4	0.887	23.57	24.00	1.104	0.979
Bottom Side	RMC	4182/836.4	0.891	23.50	24.00	1.122	1.000

Table 5： SAR of WCDMA Band V.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Bottom Side	4233/846.6	0.932	0.932	0.922	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurement was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

15.4 SAR Measurement Result of LTE Band 2

Test position	BW. (MHz)	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	20	QPSK 1_50	19100/1900	0.273	21.96	22.50	1.132	0.309
Left side	20	QPSK 1_50	19100/1900	0.522	21.96	22.50	1.132	0.591
Right side	20	QPSK 1_50	19100/1900	0.020	21.96	22.50	1.132	0.023
Top side	20	QPSK 1_50	19100/1900	0.002	21.96	22.50	1.132	0.002
Bottom side	20	QPSK 1_50	19100/1900	0.277	21.96	22.50	1.132	0.314
Left side	20	QPSK 1_50	18700/1860	0.540	21.85	22.50	1.161	0.627
Left side	20	QPSK 1_50	18900/1880	0.642	21.88	22.50	1.153	**0.741**
Body 0mm 50%RB								
Back side	20	QPSK 50_50	19100/1900	0.214	20.77	21.50	1.183	0.253
Left side	20	QPSK 50_50	19100/1900	0.464	20.77	21.50	1.183	0.549
Right side	20	QPSK 50_50	19100/1900	0.014	20.77	21.50	1.183	0.017
Top side	20	QPSK 50_50	19100/1900	0.002	20.77	21.50	1.183	0.002
Bottom side	20	QPSK 50_50	19100/1900	0.227	20.77	21.50	1.183	0.269

Table 6： SAR of LTE Band 2.

15.5 SAR Measurement Result of LTE Band 5

Test position	BW. (MHz)	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	10	QPSK 1_25	20450/829	0.907	23.27	23.50	1.054	0.956
Left side	10	QPSK 1_25	20450/829	0.591	23.27	23.50	1.054	0.623
Right side	10	QPSK 1_25	20450/829	0.449	23.27	23.50	1.054	0.473
Top side	10	QPSK 1_25	20450/829	0.003	23.27	23.50	1.054	0.003
Bottom side	10	QPSK 1_25	20450/829	0.711	23.27	23.50	1.054	0.750
Back side	10	QPSK 1_0	20525/836.5	1.060	22.75	23.50	1.189	**1.260**
Back side Repeat	10	QPSK 1_0	20525/836.5	1.040	22.75	23.50	1.189	1.236
Back side	10	QPSK 1_49	20600/844	0.804	22.84	23.50	1.164	0.936
Body 0mm 50%RB								
Back side	10	QPSK 25_25	20450/829	0.740	22.05	22.50	1.109	0.821
Left side	10	QPSK 25_25	20450/829	0.464	22.05	22.50	1.109	0.515
Right side	10	QPSK 25_25	20450/829	0.380	22.05	22.50	1.109	0.421
Top side	10	QPSK 25_25	20450/829	0.002	22.05	22.50	1.109	0.002
Bottom side	10	QPSK 25_25	20450/829	0.610	22.05	22.50	1.109	0.677
Back side	10	QPSK 25_0	20525/836.5	0.715	22.03	22.50	1.114	0.797
Back side	10	QPSK 25_0	20600/844	0.660	21.91	22.50	1.146	0.756
Body 0mm 100%RB								
Back side	10	QPSK 50_0	20450/829	0.743	21.95	22.50	1.135	0.843

Table 7： SAR of LTE Band 5.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	20525/836.5	1.060	1.040	1.019	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurement was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

15.6 SAR Measurement Result of LTE Band 12

Test position	BW. (MHz)	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	10	QPSK 1_25	23060/704	0.583	23.19	23.50	1.074	0.626
Left side	10	QPSK 1_25	23060/704	0.418	23.19	23.50	1.074	0.449
Right side	10	QPSK 1_25	23060/704	0.151	23.19	23.50	1.074	0.162
Top side	10	QPSK 1_25	23060/704	0.002	23.19	23.50	1.074	0.002
Bottom side	10	QPSK 1_25	23060/704	0.594	23.19	23.50	1.074	**0.638**
Bottom side	10	QPSK 1_25	23095/707.5	0.503	23.02	23.50	1.117	0.562
Bottom side	10	QPSK 1_25	23130/711	0.487	22.82	23.50	1.169	0.570
Body 0mm 50%RB								
Back side	10	QPSK 25_25	23130/711	0.397	22.04	22.50	1.112	0.441
Left side	10	QPSK 25_25	23130/711	0.306	22.04	22.50	1.112	0.340
Right side	10	QPSK 25_25	23130/711	0.162	22.04	22.50	1.112	0.180
Top side	10	QPSK 25_25	23130/711	0.002	22.04	22.50	1.112	0.002
Bottom side	10	QPSK 25_25	23130/711	0.498	22.04	22.50	1.112	0.554

Table 8： SAR of LTE Band 12.

15.7 SAR Measurement Result of LTE Band 13

Test position	BW. (MHz)	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	10	QPSK 1_25	23230/782	1.040	22.75	23.50	1.189	**1.236**
Back side Repeat	10	QPSK 1_25	23230/782	0.966	22.75	23.50	1.189	1.148
Left side	10	QPSK 1_25	23230/782	0.293	22.75	23.50	1.189	0.348
Right side	10	QPSK 1_25	23230/782	0.354	22.75	23.50	1.189	0.421
Top side	10	QPSK 1_25	23230/782	0.004	22.75	23.50	1.189	0.005
Bottom side	10	QPSK 1_25	23230/782	0.680	22.75	23.50	1.189	0.808
Body 0mm 50%RB								
Back side	10	QPSK 25_25	23230/782	0.522	21.88	22.50	1.153	0.602
Left side	10	QPSK 25_25	23230/782	0.221	21.88	22.50	1.153	0.255
Right side	10	QPSK 25_25	23230/782	0.277	21.88	22.50	1.153	0.320
Top side	10	QPSK 25_25	23230/782	0.002	21.88	22.50	1.153	0.002
Bottom side	10	QPSK 25_25	23230/782	0.509	21.88	22.50	1.153	0.587
Body 0mm 100%RB								
Back side	10	QPSK 50_0	23230/782	0.521	21.86	22.50	1.159	0.604
Bottom side	10	QPSK 50_0	23230/782	0.530	21.86	22.50	1.159	0.614

Table 9： SAR of LTE Band 13.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	23230/782	1.040	0.966	1.077	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurement was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

15.8 SAR Measurement Result of LTE Band 14

Test position	BW. (MHz)	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	10	QPSK 1_25	23330/793	1.040	23.28	23.50	1.052	**1.094**
Back side Repeat	10	QPSK 1_25	23330/793	0.940	23.28	23.50	1.052	0.989
Left side	10	QPSK 1_25	23330/793	0.276	23.28	23.50	1.052	0.290
Right side	10	QPSK 1_25	23330/793	0.370	23.28	23.50	1.052	0.389
Top side	10	QPSK 1_25	23330/793	0.004	23.28	23.50	1.052	0.004
Bottom side	10	QPSK 1_25	23330/793	0.574	23.28	23.50	1.052	0.604
Body 0mm 50%RB								
Back side	10	QPSK 25_13	23330/793	0.756	22.01	22.50	1.119	0.846
Left side	10	QPSK 25_13	23330/793	0.218	22.01	22.50	1.119	0.244
Right side	10	QPSK 25_13	23330/793	0.307	22.01	22.50	1.119	0.344
Top side	10	QPSK 25_13	23330/793	0.002	22.01	22.50	1.119	0.002
Bottom side	10	QPSK 25_13	23330/793	0.419	22.01	22.50	1.119	0.469
Body 0mm 100%RB								
Back side	10	QPSK 50_0	23330/793	0.506	22.00	22.50	1.122	0.568

Table 10：SAR of LTE Band 14.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	23330/793	1.040	0.940	1.106	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurement was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

15.9 SAR Measurement Result of LTE Band 66

Test position	BW. (MHz)	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	20	QPSK 1_50	132572/1770	0.371	22.08	22.50	1.102	0.409
Left side	20	QPSK 1_50	132572/1770	0.637	22.08	22.50	1.102	**0.702**
Right side	20	QPSK 1_50	132572/1770	0.037	22.08	22.50	1.102	0.041
Top side	20	QPSK 1_50	132572/1770	0.002	22.08	22.50	1.102	0.002
Bottom side	20	QPSK 1_50	132572/1770	0.325	22.08	22.50	1.102	0.358
Left side	20	QPSK 1_50	132072/1720	0.567	21.98	22.50	1.127	0.639
Left side	20	QPSK 1_50	132322/1745	0.559	22.03	22.50	1.114	0.623
Body 0mm 50%RB								
Back side	20	QPSK 50_25	132322/1745	0.274	21.01	21.50	1.119	0.307
Left side	20	QPSK 50_25	132322/1745	0.466	21.01	21.50	1.119	0.522
Right side	20	QPSK 50_25	132322/1745	0.035	21.01	21.50	1.119	0.039
Top side	20	QPSK 50_25	132322/1745	0.002	21.01	21.50	1.119	0.002
Bottom side	20	QPSK 50_25	132322/1745	0.304	21.01	21.50	1.119	0.340

Table 11：SAR of LTE Band 66.

15.10 SAR Measurement Result of LTE Band 71

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Back side	20	QPSK 1_50	133372/688	0.591	22.85	23.50	1.161	**0.686**
Left side	20	QPSK 1_50	133372/688	0.449	22.85	23.50	1.161	0.521
Right side	20	QPSK 1_50	133372/688	0.090	22.85	23.50	1.161	0.105
Top side	20	QPSK 1_50	133372/688	0.003	22.85	23.50	1.161	0.003
Bottom side	20	QPSK 1_50	133372/688	0.433	22.85	23.50	1.161	0.503
Back side	20	QPSK 1_50	133222/673	0.504	22.77	23.50	1.183	0.596
Back side	20	QPSK 1_50	133322/683	0.471	22.78	23.50	1.180	0.556
Body 0mm 50%RB								
Back side	20	QPSK 50_50	133322/683	0.352	21.70	22.50	1.202	0.423
Left side	20	QPSK 50_50	133322/683	0.375	21.70	22.50	1.202	0.451
Right side	20	QPSK 50_50	133322/683	0.095	21.70	22.50	1.202	0.114
Top side	20	QPSK 50_50	133322/683	0.002	21.70	22.50	1.202	0.002
Bottom side	20	QPSK 50_50	133322/683	0.258	21.70	22.50	1.202	0.310

Table 12：SAR of LTE Band 71.

15.11 SAR Measurement Result of WIFI 2.4G

Test position	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm									
Back side	802.11b	11/2462	0.029	97.18%	1.029	9.70	10.00	1.072	0.032
Left side	802.11b	11/2462	0.165	97.18%	1.029	9.70	10.00	1.072	0.182
Right side	802.11b	11/2462	0.010	97.18%	1.029	9.70	10.00	1.072	0.011
Top side	802.11b	11/2462	0.001	97.18%	1.029	9.70	10.00	1.072	0.001
Bottom side	802.11b	11/2462	0.005	97.18%	1.029	9.70	10.00	1.072	0.006
Left side	802.11b	1/2412	0.168	97.18%	1.029	8.45	10.00	1.429	**0.247**
Left side	802.11b	6/2437	0.125	97.18%	1.029	9.50	10.00	1.122	0.144
ANT2 Test Results									
Test position	**Mode**	**Ch./Freq. (MHz)**	**SAR (W/kg) 1g**	**Duty Cycle**	**Duty Cycle Scaling Factor**	**Conducted Power (dBm)**	**Tune up Limit (dBm)**	**Scaling Factor**	**Reported 1g SAR (W/kg)**
Body 0mm									
Back side	802.11b	1/2412	0.058	99.52%	1.005	9.30	10.00	1.175	0.068
Left side	802.11b	1/2412	0.011	99.52%	1.005	9.30	10.00	1.175	0.013
Right side	802.11b	1/2412	0.215	99.52%	1.005	9.30	10.00	1.175	0.254
Top side	802.11b	1/2412	0.004	99.52%	1.005	9.30	10.00	1.175	0.005
Bottom side	802.11b	1/2412	0.002	99.52%	1.005	9.30	10.00	1.175	0.002
Right side	802.11b	6/2437	0.299	99.52%	1.005	8.39	10.00	1.449	**0.435**
Right side	802.11b	11/2462	0.208	99.52%	1.005	8.42	10.00	1.439	0.301
MIMO Test Results									
Test position	**Mode**	**Ch./Freq. (MHz)**	**SAR (W/kg) 1g**	**Duty Cycle**	**Duty Cycle Scaling Factor**	**Conducted Power (dBm)**	**Tune up Limit (dBm)**	**Scaling Factor**	**Reported 1g SAR (W/kg)**
Body 0mm									
Back side	802.11n 20M	11/2462	0.115	99.63%	1.004	14.62	15.00	1.091	0.126
Left side	802.11n 20M	11/2462	0.366	99.63%	1.004	14.62	15.00	1.091	0.401
Right side	802.11n 20M	11/2462	0.389	99.63%	1.004	14.62	15.00	1.091	0.426
Top side	802.11n 20M	11/2462	0.002	99.63%	1.004	14.62	15.00	1.091	0.002
Bottom side	802.11n 20M	11/2462	0.006	99.63%	1.004	14.62	15.00	1.091	0.007
Right side	802.11n 20M	1/2412	0.344	99.63%	1.004	14.31	15.00	1.172	0.405
Right side	802.11n 20M	6/2437	0.495	99.63%	1.004	14.28	15.00	1.180	**0.587**

Table 13：SAR of WIFI 2.4G.

Ant1

Mode	Tune-up (dBm)	Tune-up (mw)	Highest Reported SAR1-g(W/kg)	Adjusted SAR1-g(W/kg)	SAR test
802.11b	10.00	10.00	0.247	/	Yes
802.11g	13.50	22.39	/	0.553	No
802.1n 20M	12.00	15.85	/	0.391	No
802.11n 40M	11.00	12.59	/	0.311	No
802.1ax 20M	12.50	17.78	/	0.439	No
802.11ax 40M	11.50	14.13	/	0.349	No

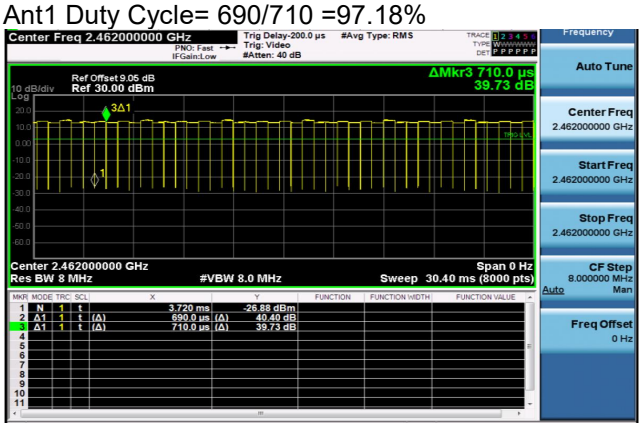
Ant2

Mode	Tune-up (dBm)	Tune-up (mw)	Highest Reported SAR1-g(W/kg)	Adjusted SAR1-g(W/kg)	SAR test
802.11b	10.00	10.00	0.435	/	Yes
802.11g	13.00	19.95	/	0.868	No
802.1n 20M	12.00	15.85	/	0.689	No
802.11n 40M	11.00	12.59	/	0.548	No
802.1ax 20M	11.50	14.13	/	0.614	No
802.11ax 40M	11.50	14.13	/	0.614	No

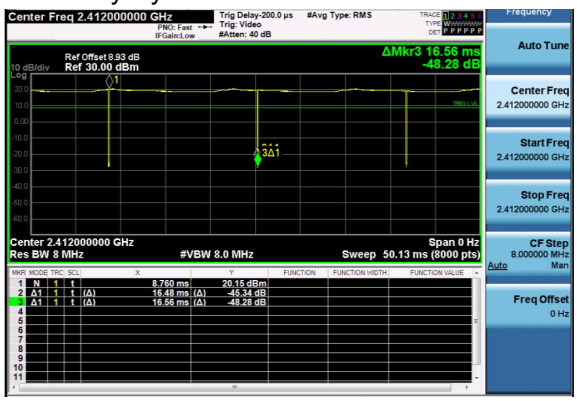
MIMO

Mode	Tune-up (dBm)	Tune-up (mw)	Highest Reported SAR1-g(W/kg)	Adjusted SAR1-g(W/kg)	SAR test
802.1n 20M	15.00	31.62	0.587	/	Yes
802.11n 40M	14.00	25.12	/	0.466	No
802.1ax 20M	15.00	31.62	/	0.587	No
802.11ax 40M	14.50	28.18	/	0.523	No

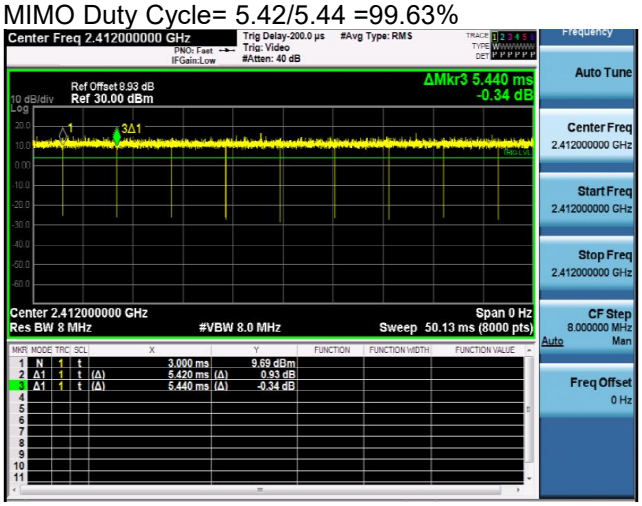
Ant1 Duty Cycle= 690/710 =97.18%



Ant2 Duty Cycle= 16.48/16.56 =99.52%



MIMO Duty Cycle= 5.42/5.44 =99.63%



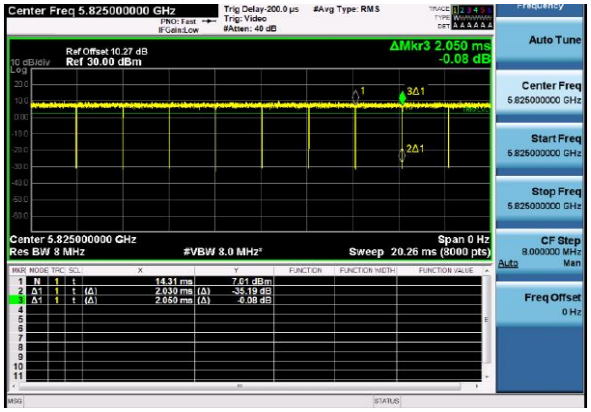
15.12 SAR Measurement Result of WIFI 5G

ANT1 Test Results									
Test position	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
U-NII-2A Body 0mm									
Back side	802.11a	52/5260	0.071	99.02%	1.010	13.24	14.0	1.191	0.085
Left side	802.11a	52/5260	0.223	99.02%	1.010	13.24	14.0	1.191	0.268
Right side	802.11a	52/5260	0.064	99.02%	1.010	13.24	14.0	1.191	0.077
Top side	802.11a	52/5260	0.003	99.02%	1.010	13.24	14.0	1.191	0.004
Bottom side	802.11a	52/5260	0.007	99.02%	1.010	13.24	14.0	1.191	0.008
Left side	802.11a	56/5280	0.220	99.02%	1.010	12.64	14.0	1.368	0.304
Left side	802.11a	64/5320	0.275	99.02%	1.010	12.66	14.0	1.361	**0.378**
U-NII-2C Body 0mm									
Back side	802.11a	140/5700	0.109	99.02%	1.010	14.11	14.5	1.094	0.120
Left side	802.11a	140/5700	0.225	99.02%	1.010	14.11	14.5	1.094	0.249
Right side	802.11a	140/5700	0.064	99.02%	1.010	14.11	14.5	1.094	0.071
Top side	802.11a	140/5700	0.014	99.02%	1.010	14.11	14.5	1.094	0.015
Bottom side	802.11a	140/5700	0.009	99.02%	1.010	14.11	14.5	1.094	0.010
Left side	802.11a	100/5500	0.260	99.02%	1.010	13.75	14.5	1.189	0.312
Left side	802.11a	120/5600	0.291	99.02%	1.010	11.58	12.0	1.102	**0.324**
U-NII-3 Body 0mm									
Back side	802.11ac 20M	157/5785	0.094	99.02%	1.010	14.00	14.5	1.122	0.107
Left side	802.11ac 20M	157/5785	0.195	99.02%	1.010	14.00	14.5	1.122	0.221
Right side	802.11ac 20M	157/5785	0.053	99.02%	1.010	14.00	14.5	1.122	0.060
Top side	802.11ac 20M	157/5785	0.018	99.02%	1.010	14.00	14.5	1.122	0.020
Bottom side	802.11ac 20M	157/5785	0.013	99.02%	1.010	14.00	14.5	1.122	0.015
Left side	802.11ac 20M	149/5745	0.201	99.02%	1.010	13.25	14.5	1.334	**0.271**
Left side	802.11ac 20M	165/5825	0.196	99.02%	1.010	13.90	14.5	1.148	0.227
ANT2 Test Results									
Test position	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
U-NII-2A Body 0mm									
Back side	802.11a	64/5320	0.022	99.05%	1.010	13.32	14.0	1.169	0.026
Left side	802.11a	64/5320	0.010	99.05%	1.010	13.32	14.0	1.169	0.012
Right side	802.11a	64/5320	0.115	99.05%	1.010	13.32	14.0	1.169	**0.136**
Top side	802.11a	64/5320	0.008	99.05%	1.010	13.32	14.0	1.169	0.009
Bottom side	802.11a	64/5320	0.011	99.05%	1.010	13.32	14.0	1.169	0.013
Right side	802.11a	52/5260	0.111	99.05%	1.010	13.29	14.0	1.178	0.132
Right side	802.11a	56/5280	0.104	99.05%	1.010	12.94	14.0	1.276	0.134
U-NII-2C Body 0mm									
Back side	802.11a	140/5700	0.023	99.05%	1.010	13.71	14.0	1.069	0.025
Left side	802.11a	140/5700	0.012	99.05%	1.010	13.71	14.0	1.069	0.013
Right side	802.11a	140/5700	0.067	99.05%	1.010	13.71	14.0	1.069	**0.072**
Top side	802.11a	140/5700	0.004	99.05%	1.010	13.71	14.0	1.069	0.004
Bottom side	802.11a	140/5700	0.011	99.05%	1.010	13.71	14.0	1.069	0.012
Right side	802.11a	100/5500	0.039	99.05%	1.010	12.58	14.0	1.387	0.055
Right side	802.11a	120/5600	0.053	99.05%	1.010	10.48	11.0	1.127	0.060
U-NII-3 Body 0mm									
Back side	802.11a	149/5745	0.028	99.05%	1.010	11.74	12.0	1.062	0.030
Left side	802.11a	149/5745	0.008	99.05%	1.010	11.74	12.0	1.062	0.009
Right side	802.11a	149/5745	0.079	99.05%	1.010	11.74	12.0	1.062	0.085
Top side	802.11a	149/5745	0.009	99.05%	1.010	11.74	12.0	1.062	0.010
Bottom side	802.11a	149/5745	0.005	99.05%	1.010	11.74	12.0	1.062	0.005
Right side	802.11a	157/5785	0.141	99.05%	1.010	11.36	12.0	1.159	0.165
Right side	802.11a	165/5825	0.146	99.05%	1.010	10.34	12.0	1.466	**0.216**
MIMO Test Results									
Test position	Mode	Ch./Freq.(MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
U-NII-2A Body 0mm									
Back side	802.11n 20M	52/5260	0.042	99.63%	1.004	16.17	17.0	1.211	0.051
Left side	802.11n 20M	52/5260	0.152	99.63%	1.004	16.17	17.0	1.211	0.185
Right side	802.11n 20M	52/5260	0.130	99.63%	1.004	16.17	17.0	1.211	0.158
Top side	802.11n 20M	52/5260	0.036	99.63%	1.004	16.17	17.0	1.211	0.044
Bottom side	802.11n 20M	52/5260	0.024	99.63%	1.004	16.17	17.0	1.211	0.029
Left side	802.11n 20M	56/5280	0.159	99.63%	1.004	15.76	17.0	1.330	0.212

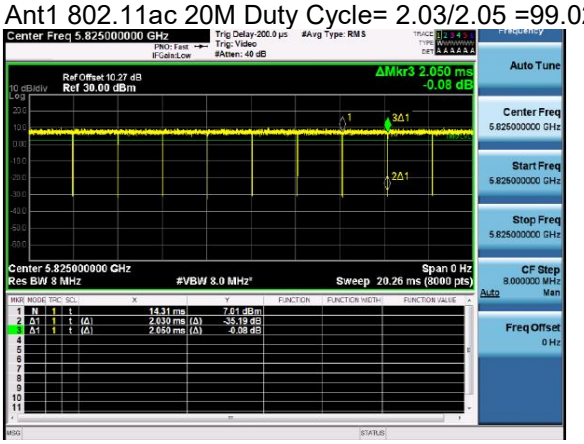
Left side	802.11n 20M	64/5320	0.237	99.63%	1.004	15.87	17.0	1.297	**0.309**
U-NII-2C Body 0mm									
Back side	802.11n 20M	140/5700	0.082	99.63%	1.004	16.71	17.3	1.146	0.094
Left side	802.11n 20M	140/5700	0.219	99.63%	1.004	16.71	17.3	1.146	0.252
Right side	802.11n 20M	140/5700	0.096	99.63%	1.004	16.71	17.3	1.146	0.110
Top side	802.11n 20M	140/5700	0.029	99.63%	1.004	16.71	17.3	1.146	0.033
Bottom side	802.11n 20M	140/5700	0.035	99.63%	1.004	16.71	17.3	1.146	0.040
Left side	802.11n 20M	100/5500	0.227	99.63%	1.004	16.07	17.3	1.327	**0.303**
Left side	802.11n 20M	120/5600	0.222	99.63%	1.004	13.73	14.5	1.194	0.266
U-NII-3 Body 0mm									
Back side	802.11ac 20M	157/5785	0.070	99.63%	1.004	15.73	16.4	1.167	0.082
Left side	802.11ac 20M	157/5785	0.194	99.63%	1.004	15.73	16.4	1.167	0.227
Right side	802.11ac 20M	157/5785	0.103	99.63%	1.004	15.73	16.4	1.167	0.121
Top side	802.11ac 20M	157/5785	0.030	99.63%	1.004	15.73	16.4	1.167	0.035
Bottom side	802.11ac 20M	157/5785	0.022	99.63%	1.004	15.73	16.4	1.167	0.026
Left side	802.11ac 20M	149/5745	0.195	99.63%	1.004	15.55	16.4	1.216	0.238
Left side	802.11ac 20M	165/5825	0.196	99.63%	1.004	15.53	16.4	1.222	**0.240**

Table 14：SAR of WIFI 5G.

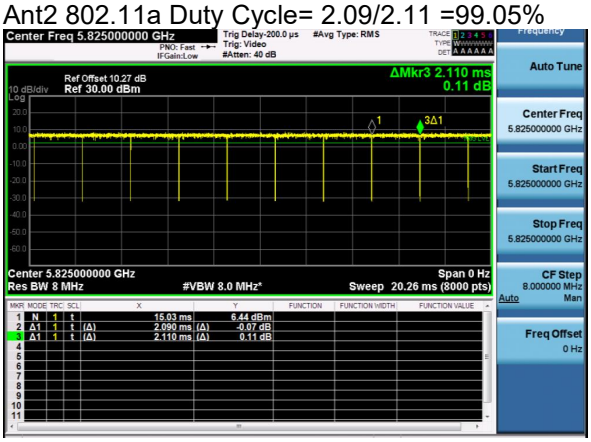
Ant1 802.11a Duty Cycle= 2.03/2.05 =99.02%



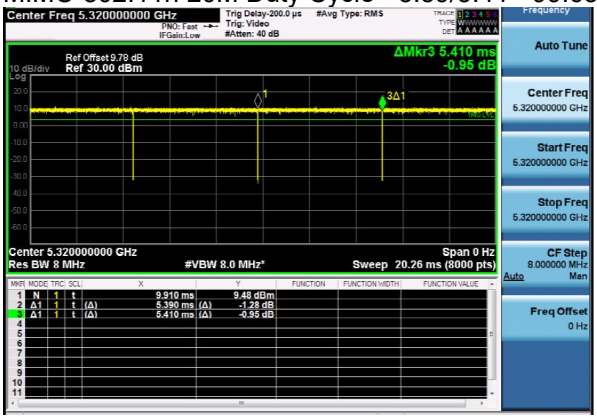
Ant1 802.11ac 20M Duty Cycle= 2.03/2.05 =99.02%



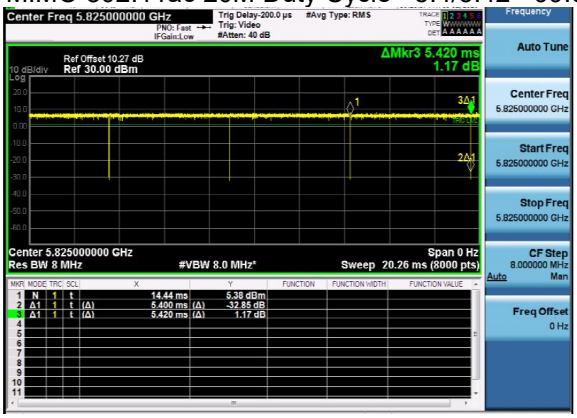
Ant2 802.11a Duty Cycle= 2.09/2.11 =99.05%



MIMO 802.11n 20M Duty Cycle= 5.39/5.41 =99.63%



MIMO 802.11ac 20M Duty Cycle= 5.4/5.42 =99.63%

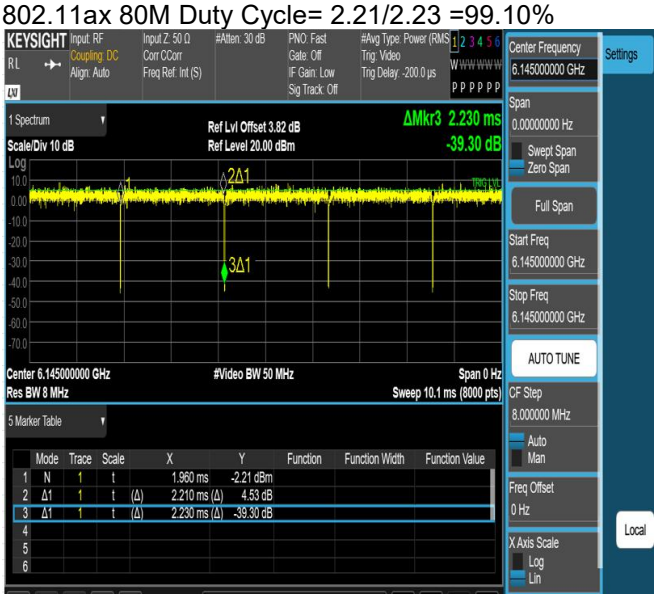


15.13 SAR Measurement Result of WIFI 6G

Ant1 Test Results											
Test position	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
Body 0mm											
Back side	802.11ax 80M	103/6465	0.021	99.10%	1.009	8.98	9.50	1.127	0.024	0.041	0.047
Left side	802.11ax 80M	103/6465	0.078	99.10%	1.009	8.98	9.50	1.127	0.089	0.282	0.321
Right side	802.11ax 80M	103/6465	0.029	99.10%	1.009	8.98	9.50	1.127	0.033	0.052	0.059
Top side	802.11ax 80M	103/6465	0.001	99.10%	1.009	8.98	9.50	1.127	0.001	0.008	0.009
Bottom side	802.11ax 80M	103/6465	0.002	99.10%	1.009	8.98	9.50	1.127	0.002	0.110	0.125
Left side	802.11ax 80M	7/5985	0.187	99.10%	1.009	8.72	9.50	1.197	**0.226**	0.936	1.130
Left side	802.11ax 80M	39/6145	0.162	99.10%	1.009	8.81	9.50	1.172	0.192	0.712	0.842
Left side	802.11ax 80M	151/6705	0.067	99.10%	1.009	6.83	7.50	1.167	0.079	0.181	0.213
Left side	802.11ax 80M	215/7025	0.056	99.10%	1.009	7.63	9.00	1.371	0.077	0.090	0.124
Ant2 Test Results											
Test position	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
Body 0mm											
Back side	802.11ax 80M	103/6465	0.040	99.10%	1.009	9.20	10.00	1.202	0.049	0.121	0.147
Left side	802.11ax 80M	103/6465	0.031	99.10%	1.009	9.20	10.00	1.202	0.038	0.101	0.123
Right side	802.11ax 80M	103/6465	0.059	99.10%	1.009	9.20	10.00	1.202	0.072	0.147	0.178
Top side	802.11ax 80M	103/6465	0.003	99.10%	1.009	9.20	10.00	1.202	0.004	0.013	0.016
Bottom side	802.11ax 80M	103/6465	0.001	99.10%	1.009	9.20	10.00	1.202	0.001	0.009	0.011
Right side	802.11ax 80M	7/5985	0.041	99.10%	1.009	8.98	9.50	1.127	0.047	0.128	0.146
Right side	802.11ax 80M	39/6145	0.019	99.10%	1.009	8.58	9.50	1.236	0.024	0.037	0.046
Right side	802.11ax 80M	151/6705	0.092	99.10%	1.009	8.86	9.50	1.159	**0.108**	0.367	0.429
Right side	802.11ax 80M	215/7025	0.059	99.10%	1.009	7.86	9.00	1.300	0.077	0.146	0.192
MIMO Test Results											
Test position	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
Body 0mm											
Back side	802.11ax 80M	103/6465	0.025	99.10%	1.009	12.10	12.50	1.096	0.028	0.043	0.048
Left side	802.11ax 80M	103/6465	0.093	99.10%	1.009	12.10	12.50	1.096	0.103	0.413	0.457
Right side	802.11ax 80M	103/6465	0.050	99.10%	1.009	12.10	12.50	1.096	0.055	0.125	0.138
Top side	802.11ax 80M	103/6465	0.003	99.10%	1.009	12.10	12.50	1.096	0.003	0.012	0.013
Bottom side	802.11ax 80M	103/6465	0.002	99.10%	1.009	12.10	12.50	1.096	0.002	0.010	0.011
Left side	802.11ax 80M	7/5985	0.178	99.10%	1.009	11.86	12.50	1.159	**0.208**	0.850	0.994
Left side	802.11ax 80M	39/6145	0.156	99.10%	1.009	11.71	12.50	1.199	0.189	0.737	0.892
Left side	802.11ax 80M	151/6705	0.070	99.10%	1.009	10.97	11.60	1.156	0.082	0.267	0.311
Left side	802.11ax 80M	215/7025	0.053	99.10%	1.009	10.76	12.00	1.330	0.071	0.135	0.181

Table 15：SAR of WIFI 6G.

802.11ax 80M Duty Cycle= 2.21/2.23 =99.10%



15.14 PD Measurement Result of WIFI 6G

Test position	Mode	Ch./Freq. (MHz)	Gap (mm)	Grid Step (λ)	Conducted Power(dBm)	Tune up Limit(dBm)	iPDn	iPD ratio (≥ -1)
Right side	802.11ax 80M	151/6705	2.0	0.0625	10.97	11.60	2.88	1.249
Right side	802.11ax 80M	151/6705	8.9	0.125	10.97	11.60	2.16	

ANT1 Test Results														
Test position	Mode	Ch./Freq. (MHz)	Gap (mm)	Grid Step (λ)	Normal psPD (W/m^2)	Total psPD (W/m^2)	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Scaling Factor for Measurement Uncertainty	Reported Normal psPD (W/m^2)	Reported Total psPD (W/m^2)
Back side	802.11ax 80M	103/6465	2.000	0.0625	0.088	0.136	99.10%	1.009	8.98	9.50	1.127	1.5493	0.155	0.240
Left side	802.11ax 80M	103/6465	2.000	0.0625	0.196	0.289	99.10%	1.009	8.98	9.50	1.127	1.5493	0.345	0.509
Right side	802.11ax 80M	103/6465	2.000	0.0625	0.077	0.100	99.10%	1.009	8.98	9.50	1.127	1.5493	0.136	0.176
Top side	802.11ax 80M	103/6465	2.000	0.0625	0.029	0.098	99.10%	1.009	8.98	9.50	1.127	1.5493	0.051	0.173
Bottom side	802.11ax 80M	103/6465	2.000	0.0625	0.126	0.298	99.10%	1.009	8.98	9.50	1.127	1.5493	0.222	0.525
Left side	802.11ax 80M	7/5985	2.000	0.0625	0.313	0.561	99.10%	1.009	8.72	9.50	1.197	1.5493	0.586	1.050
Left side	802.11ax 80M	39/6145	2.000	0.0625	0.356	0.613	99.10%	1.009	8.81	9.50	1.172	1.5493	0.652	**1.123**
Left side	802.11ax 80M	151/6705	2.000	0.0625	0.108	0.183	99.10%	1.009	6.83	7.50	1.167	1.5493	0.197	0.334
Left side	802.11ax 80M	215/7025	2.000	0.0625	0.201	0.324	99.10%	1.009	7.63	9.00	1.371	1.5493	0.431	0.694
ANT2 Test Results														
Test position	Mode	Ch./Freq. (MHz)	Gap (mm)	Grid Step (λ)	Normal psPD (W/m^2)	Total psPD (W/m^2)	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Scaling Factor for Measurement Uncertainty	Reported Normal psPD (W/m^2)	Reported Total psPD (W/m^2)
Back side	802.11ax 80M	103/6465	2.000	0.0625	0.106	0.165	99.10%	1.009	9.20	10.00	1.202	1.5493	0.199	0.310
Left side	802.11ax 80M	103/6465	2.000	0.0625	0.017	0.025	99.10%	1.009	9.20	10.00	1.202	1.5493	0.032	0.047
Right side	802.11ax 80M	103/6465	2.000	0.0625	0.143	0.255	99.10%	1.009	9.20	10.00	1.202	1.5493	0.269	**0.479**
Top side	802.11ax 80M	103/6465	2.000	0.0625	0.058	0.124	99.10%	1.009	9.20	10.00	1.202	1.5493	0.109	0.233
Bottom side	802.11ax 80M	103/6465	2.000	0.0625	0.010	0.032	99.10%	1.009	9.20	10.00	1.202	1.5493	0.019	0.060
Right side	802.11ax 80M	7/5985	2.000	0.0625	0.128	0.231	99.10%	1.009	8.98	9.50	1.127	1.5493	0.226	0.407
Right side	802.11ax 80M	39/6145	2.000	0.0625	0.134	0.242	99.10%	1.009	8.58	9.50	1.236	1.5493	0.259	0.468
Right side	802.11ax 80M	151/6705	2.000	0.0625	0.103	0.189	99.10%	1.009	8.86	9.50	1.159	1.5493	0.187	0.342
Right side	802.11ax 80M	215/7025	2.000	0.0625	0.101	0.176	99.10%	1.009	7.86	9.00	1.300	1.5493	0.205	0.358
MIMO Test Results														
Test position	Mode	Ch./Freq. (MHz)	Gap (mm)	Grid Step (λ)	Normal psPD (W/m^2)	Total psPD (W/m^2)	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Scaling Factor for Measurement Uncertainty	Reported Normal psPD (W/m^2)	Reported Total psPD (W/m^2)
Back side	802.11ax 80M	103/6465	2.000	0.0625	0.092	0.144	99.10%	1.009	12.10	12.80	1.175	1.5493	0.169	0.264
Left side	802.11ax 80M	103/6465	2.000	0.0625	0.130	0.164	99.10%	1.009	12.10	12.80	1.175	1.5493	0.239	0.301
Right side	802.11ax 80M	103/6465	2.000	0.0625	0.281	0.443	99.10%	1.009	12.10	12.80	1.175	1.5493	0.516	**0.814**
Top side	802.11ax 80M	103/6465	2.000	0.0625	0.065	0.149	99.10%	1.009	12.10	12.80	1.175	1.5493	0.119	0.274
Bottom side	802.11ax 80M	103/6465	2.000	0.0625	0.009	0.035	99.10%	1.009	12.10	12.80	1.175	1.5493	0.017	0.064
Right side	802.11ax 80M	7/5985	2.000	0.0625	0.102	0.234	99.10%	1.009	11.86	12.50	1.159	1.5493	0.185	0.424
Right side	802.11ax 80M	39/6145	2.000	0.0625	0.113	0.244	99.10%	1.009	11.71	12.50	1.199	1.5493	0.212	0.458
Right side	802.11ax 80M	151/6705	2.000	0.0625	0.125	0.231	99.10%	1.009	10.97	11.60	1.156	1.5493	0.226	0.417
Right side	802.11ax 80M	215/7025	2.000	0.0625	0.095	0.186	99.10%	1.009	10.76	12.00	1.330	1.5493	0.198	0.387

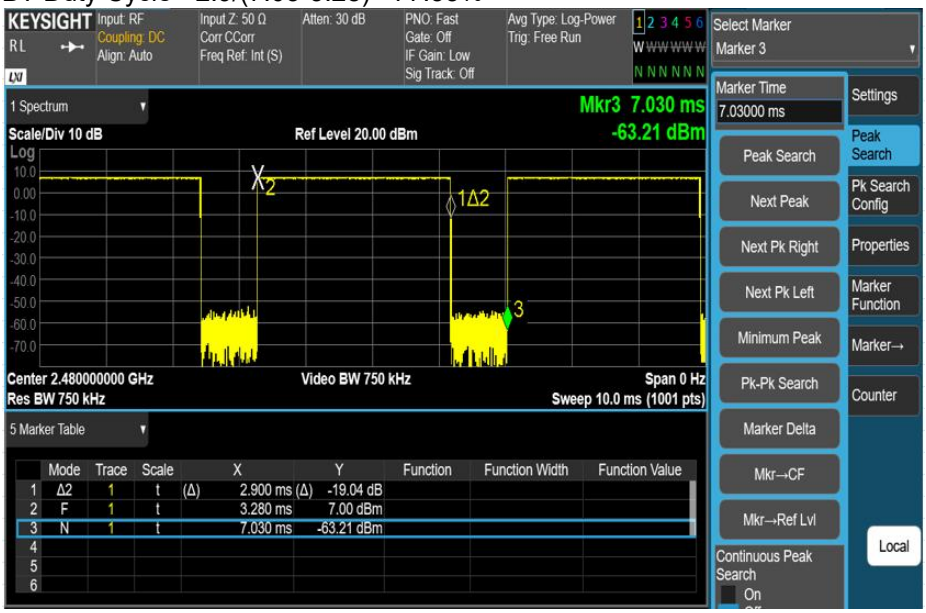
Table 16：PD of WIFI 6G.

15.15 SAR Measurement Result of BT

Test position	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Back side	DH5	78/2480	0.010	77.33%	1.000	7.39	7.50	1.026	0.010
Left side	DH5	78/2480	0.017	77.33%	1.000	7.39	7.50	1.026	**0.017**
Right side	DH5	78/2480	0.002	77.33%	1.000	7.39	7.50	1.026	0.002
Top side	DH5	78/2480	0.001	77.33%	1.000	7.39	7.50	1.026	0.001
Bottom side	DH5	78/2480	0.001	77.33%	1.000	7.39	7.50	1.026	0.001
Left side	DH5	0/2402	0.016	77.33%	1.000	5.93	6.00	1.016	0.016
Left side	DH5	39/2441	0.013	77.33%	1.000	4.97	6.00	1.268	0.016

Table 17：SAR of BT.

BT Duty Cycle= 2.9/(7.03-3.28) =77.33%



15.16 SAR Measurement Result of NFC

Test position	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	SAR (W/kg) 10-g
Body 0mm				
Back side	NFC	13.56MHz	0.002	0.001
Left side	NFC	13.56MHz	0.004	0.001
Right side	NFC	13.56MHz	0.004	0.001
Top side	NFC	13.56MHz	**0.009**	0.003
Bottom side	NFC	13.56MHz	0.000	0.000

Table 18：SAR of NFC.

16 Simultaneous Transmission Analysis

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous Tx Combination	Body
1	WWAN+WIFI 2.4G Ant1	Y
2	WWAN+WIFI 2.4G Ant2	Y
3	WWAN+WIFI 2.4G MIMO	Y
4	WWAN+WIFI 5G Ant1	Y
5	WWAN+WIFI 5G Ant2	Y
6	WWAN+WIFI 5G MIMO	Y
7	WWAN+WIFI 6G Ant1	Y
8	WWAN+WIFI 6G Ant2	Y
9	WWAN+WIFI 6G MIMO	Y
10	WWAN+BT	Y
11	WWAN+NFC	Y
12	WWAN+WIFI 2.4G Ant2 +BT	Y
13	WWAN+WIFI 5G Ant1 + BT	Y
14	WWAN+WIFI 5G Ant2 + BT	Y
15	WWAN+WIFI 5G MIMO + BT	Y
16	WWAN+WIFI 6G Ant1 + BT	Y
17	WWAN+WIFI 6G Ant2 + BT	Y
18	WWAN+WIFI 6G MIMO + BT	Y
19	WWAN+WIFI 2.4G Ant2 +BT + NFC	Y
20	WWAN+WIFI 5G Ant1 + BT + NFC	Y
21	WWAN+WIFI 5G Ant2 + BT + NFC	Y
22	WWAN+WIFI 5G MIMO + BT + NFC	Y
23	WWAN+WIFI 6G Ant1 + BT + NFC	Y
24	WWAN+WIFI 6G Ant2 + BT + NFC	Y
25	WWAN+WIFI 6G MIMO + BT + NFC	Y

Summed SAR Analysis：

Test position		SARmax (W/kg)												Summed SAR																
		Main Ant	WiFi 2.4G (Ant1)	WiFi 2.4G (Ant2)	WiFi 2.4G (MIMO)	WiFi 5G (Ant1)	WiFi 5G (Ant2)	WiFi 5G (MIMO)	WiFi 6G (Ant1)	WiFi 6G (Ant2)	WiFi 6G (MIMO)	BT (Ant1)	NFC	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11	1+12	1+3+11+12	1+5+11+12	1+6+11+12	1+7+11+12	1+8+11+12	1+9+11+12	1+10+11+12
		1	2	3	4	5	6	7	8	9	10	11	12																	
WCDMA B2	Back side	0.282	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	0.314	0.350	0.408	0.402	0.312	0.376	0.306	0.331	0.310	0.292	0.284	0.362	0.414	0.324	0.388	0.318	0.343	0.322
	Left side	0.676	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.923	0.689	1.077	1.054	0.689	0.928	0.902	0.714	0.884	0.693	0.680	0.710	1.075	0.710	0.949	0.923	0.735	0.905
	Right side	0.039	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.050	0.474	0.626	0.116	0.255	0.197	0.072	0.147	0.094	0.041	0.043	0.480	0.122	0.261	0.203	0.078	0.153	0.100
	Top side	0.002	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.003	0.007	0.004	0.022	0.012	0.046	0.003	0.006	0.005	0.003	0.011	0.017	0.032	0.022	0.056	0.013	0.016	0.015
	Bottom side	0.240	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.246	0.242	0.247	0.255	0.253	0.280	0.242	0.241	0.242	0.241	0.240	0.243	0.256	0.254	0.281	0.243	0.242	0.243
WCDMA B4	Back side	0.604	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	0.636	0.672	0.730	0.724	0.634	0.698	0.628	0.653	0.632	0.614	0.606	0.684	0.736	0.646	0.710	0.640	0.665	0.644
	Left side	0.830	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	1.077	0.843	1.231	1.208	0.843	1.082	1.056	0.868	1.038	0.847	0.834	0.864	1.229	0.864	1.103	1.077	0.889	1.059
	Right side	0.056	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.067	0.491	0.643	0.133	0.272	0.214	0.089	0.164	0.111	0.058	0.060	0.497	0.139	0.278	0.220	0.095	0.170	0.117
	Top side	0.002	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.003	0.007	0.004	0.022	0.012	0.046	0.003	0.006	0.005	0.003	0.011	0.017	0.032	0.022	0.056	0.013	0.016	0.015
	Bottom side	0.459	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.465	0.461	0.466	0.474	0.472	0.499	0.461	0.460	0.461	0.460	0.459	0.462	0.475	0.473	0.500	0.462	0.461	0.462
WCDMA B5	Back side	1.015	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	1.047	1.083	1.141	1.135	1.045	1.109	1.039	1.064	1.043	1.025	1.017	1.095	1.147	1.057	1.121	1.051	1.076	1.055
	Left side	0.541	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.788	0.554	0.942	0.919	0.554	0.793	0.767	0.579	0.749	0.558	0.545	0.575	0.940	0.575	0.814	0.788	0.600	0.770
	Right side	0.434	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.445	0.869	1.021	0.511	0.650	0.592	0.467	0.542	0.489	0.436	0.438	0.875	0.517	0.656	0.598	0.473	0.548	0.495
	Top side	0.003	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.004	0.008	0.005	0.023	0.013	0.047	0.004	0.007	0.006	0.004	0.012	0.018	0.033	0.023	0.057	0.014	0.017	0.016
	Bottom side	1.022	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	1.028	1.024	1.029	1.037	1.035	1.062	1.024	1.023	1.024	1.023	1.022	1.025	1.038	1.036	1.063	1.025	1.024	1.025
LTE B2	Back side	0.309	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	0.341	0.377	0.435	0.429	0.339	0.403	0.333	0.358	0.337	0.319	0.311	0.389	0.441	0.351	0.415	0.345	0.370	0.349
	Left side	0.741	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.988	0.754	1.142	1.119	0.754	0.993	0.967	0.779	0.949	0.758	0.745	0.775	1.140	0.775	1.014	0.988	0.800	0.970
	Right side	0.023	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.034	0.458	0.610	0.100	0.239	0.181	0.056	0.131	0.078	0.025	0.027	0.464	0.106	0.245	0.187	0.062	0.137	0.084
	Top side	0.002	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.003	0.007	0.004	0.022	0.012	0.046	0.003	0.006	0.005	0.003	0.011	0.017	0.032	0.022	0.056	0.013	0.016	0.015
	Bottom side	0.314	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.320	0.316	0.321	0.329	0.327	0.354	0.316	0.315	0.316	0.315	0.314	0.317	0.330	0.328	0.355	0.317	0.316	0.317
LTE B5	Back side	1.260	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	1.292	1.328	1.386	1.380	1.290	1.354	1.284	1.309	1.288	1.270	1.262	1.340	1.392	1.302	1.366	1.296	1.321	1.300
	Left side	0.623	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.870	0.636	1.024	1.001	0.636	0.875	0.849	0.661	0.831	0.640	0.627	0.657	1.022	0.657	0.896	0.870	0.682	0.852
	Right side	0.473	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.484	0.908	1.060	0.550	0.689	0.631	0.506	0.581	0.528	0.475	0.477	0.914	0.556	0.695	0.637	0.512	0.587	0.534
	Top side	0.003	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.004	0.008	0.005	0.023	0.013	0.047	0.004	0.007	0.006	0.004	0.012	0.018	0.033	0.023	0.057	0.014	0.017	0.016

	Bottom side	0.750	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.756	0.752	0.757	0.765	0.763	0.790	0.752	0.751	0.752	0.751	0.750	0.753	0.766	0.764	0.791	0.753	0.752	0.753
LTE B12	Back side	0.626	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	0.658	0.694	0.752	0.746	0.656	0.720	0.650	0.675	0.654	0.636	0.628	0.706	0.758	0.668	0.732	0.662	0.687	0.666
	Left side	0.449	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.696	0.462	0.850	0.827	0.462	0.701	0.675	0.487	0.657	0.466	0.453	0.483	0.848	0.483	0.722	0.696	0.508	0.678
	Right side	0.180	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.191	0.615	0.767	0.257	0.396	0.338	0.213	0.288	0.235	0.182	0.184	0.621	0.263	0.402	0.344	0.219	0.294	0.241
	Top side	0.002	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.003	0.007	0.004	0.022	0.012	0.046	0.003	0.006	0.005	0.003	0.011	0.017	0.032	0.022	0.056	0.013	0.016	0.015
	Bottom side	0.638	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.644	0.640	0.645	0.653	0.651	0.678	0.640	0.639	0.640	0.639	0.638	0.641	0.654	0.652	0.679	0.641	0.640	0.641
LTE B13	Back side	1.236	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	1.268	1.304	1.362	1.356	1.266	1.330	1.260	1.285	1.264	1.246	1.238	1.316	1.368	1.278	1.342	1.272	1.297	1.276
	Left side	0.348	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.595	0.361	0.749	0.726	0.361	0.600	0.574	0.386	0.556	0.365	0.352	0.382	0.747	0.382	0.621	0.595	0.407	0.577
	Right side	0.421	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.432	0.856	1.008	0.498	0.637	0.579	0.454	0.529	0.476	0.423	0.425	0.862	0.504	0.643	0.585	0.460	0.535	0.482
	Top side	0.005	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.006	0.010	0.007	0.025	0.015	0.049	0.006	0.009	0.008	0.006	0.014	0.020	0.035	0.025	0.059	0.016	0.019	0.018
	Bottom side	0.808	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.814	0.810	0.815	0.823	0.821	0.848	0.810	0.809	0.810	0.809	0.808	0.811	0.824	0.822	0.849	0.811	0.810	0.811
LTE B14	Back side	1.094	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	1.126	1.162	1.220	1.214	1.124	1.188	1.118	1.143	1.122	1.104	1.096	1.174	1.226	1.136	1.200	1.130	1.155	1.134
	Left side	0.290	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.537	0.303	0.691	0.668	0.303	0.542	0.516	0.328	0.498	0.307	0.294	0.324	0.689	0.324	0.563	0.537	0.349	0.519
	Right side	0.389	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.400	0.824	0.976	0.466	0.605	0.547	0.422	0.497	0.444	0.391	0.393	0.830	0.472	0.611	0.553	0.428	0.503	0.450
	Top side	0.004	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.005	0.009	0.006	0.024	0.014	0.048	0.005	0.008	0.007	0.005	0.013	0.019	0.034	0.024	0.058	0.015	0.018	0.017
	Bottom side	0.604	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.610	0.606	0.611	0.619	0.617	0.644	0.606	0.605	0.606	0.605	0.604	0.607	0.620	0.618	0.645	0.607	0.606	0.607
LTE B66/4	Back side	0.409	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	0.441	0.477	0.535	0.529	0.439	0.503	0.433	0.458	0.437	0.419	0.411	0.489	0.541	0.451	0.515	0.445	0.470	0.449
	Left side	0.702	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.949	0.715	1.103	1.080	0.715	0.954	0.928	0.740	0.910	0.719	0.706	0.736	1.101	0.736	0.975	0.949	0.761	0.931
	Right side	0.041	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.052	0.476	0.628	0.118	0.257	0.199	0.074	0.149	0.096	0.043	0.045	0.482	0.124	0.263	0.205	0.080	0.155	0.102
	Top side	0.002	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.003	0.007	0.004	0.022	0.012	0.046	0.003	0.006	0.005	0.003	0.011	0.017	0.032	0.022	0.056	0.013	0.016	0.015
	Bottom side	0.358	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.364	0.360	0.365	0.373	0.371	0.398	0.360	0.359	0.360	0.359	0.358	0.361	0.374	0.372	0.399	0.361	0.360	0.361
LTE B71	Back side	0.686	0.032	0.068	0.126	0.120	0.030	0.094	0.024	0.049	0.028	0.010	0.002	0.718	0.754	0.812	0.806	0.716	0.780	0.710	0.735	0.714	0.696	0.688	0.766	0.818	0.728	0.792	0.722	0.747	0.726
	Left side	0.521	0.247	0.013	0.401	0.378	0.013	0.252	0.226	0.038	0.208	0.017	0.004	0.768	0.534	0.922	0.899	0.534	0.773	0.747	0.559	0.729	0.538	0.525	0.555	0.920	0.555	0.794	0.768	0.580	0.750
	Right side	0.114	0.011	0.435	0.587	0.077	0.216	0.158	0.033	0.108	0.055	0.002	0.004	0.125	0.549	0.701	0.191	0.330	0.272	0.147	0.222	0.169	0.116	0.118	0.555	0.197	0.336	0.278	0.153	0.228	0.175
	Top side	0.003	0.001	0.005	0.002	0.020	0.010	0.044	0.001	0.004	0.003	0.001	0.009	0.004	0.008	0.005	0.023	0.013	0.047	0.004	0.007	0.006	0.004	0.012	0.018	0.033	0.023	0.057	0.014	0.017	0.016
	Bottom side	0.503	0.006	0.002	0.007	0.015	0.013	0.040	0.002	0.001	0.002	0.001	0.000	0.509	0.505	0.510	0.518	0.516	0.543	0.505	0.504	0.505	0.504	0.503	0.506	0.519	0.517	0.544	0.506	0.505	0.506

Total Exposure Radio Analysis：

The fields generated by the antennas can be correlated or uncorrelated. At different frequencies, fields are always uncorrelated, and the aggregate power density contributions can be summed according to spatially averaged values of corresponding sources at any point in space, r, to determine the total exposure ratio (TER). Assuming I sources, the TER at each point in space is equal to

$$TER^{uncorr}(r) = \sum_{i=1}^{I} ER_i = \sum_{i=1}^{I} \frac{S_{av,i}(r, f_i)}{S_{lim}(f_i)}$$

Where S_{av},i is the power density for the source I operating at a frequency fi and Slim is the power density limit as specified by the relevant standard.

Exposure from transmitters operating above and below 6GHz, where 6GHz denotes the transmission frequency where the basic restrictions change from being defined in terms of SAR to being defined in terms of power density, therefore uncorrelated and the TER is determined as

$$TER^{uncorr}(r) = \sum_{i=1}^{I} ER_i = \sum_{i=1}^{I} \frac{S_{av,i}(r, f_i)}{S_{lim}(f_i)}$$

According to the FCC guidance in TCBC workshop and IEC TR 63170, the total exposure ratio calculated by taking ratio of maximum reported SAR divided by SAR limit and adding it to maximum measured power density by its limit. Numerical sum of the ratios should be less 1. Therefore the simultaneous transmission should be follows:

$$TER = \sum_{n=1}^{N} \frac{SAR_n}{SAR_{n,limit}} + \sum_{n=1}^{N} \frac{S_{m,avg}}{S_{m,limit}} < 1$$

For transmitters operating above 6000 MHz, it is necessary to perform an assessment against the PD (basic restriction up to 10 GHz and reference levels beyond). The exposure ratio for the m-th transmitter is given by:

$$max\left[\frac{SAR_m}{SAR_{limit}},\frac{APD_m}{APD_{limit}}\right] \qquad 5925\ MHz < f_m \leq 10\ GHz$$

Where:
SAR_m is the SAR value for the n-th transmitter/test frequency.
SAR_{limit} is the basic restriction limit that is applicable to the n-th transmitter/test frequency.
APD is the APD value for the m-th transmitter/test frequency.
APD_{limit} is the basic restriction limit that is applicable for the m-th transmitter/test frequency.

Total Exposure Ratio:

Test position		Main Ant		WiFi 6G (Ant1)		WiFi 6G (Ant2)		WiFi 6G (MIMO)		BT (Ant1)		NFC		Total Exposure Ratio						Exposure Ratio Limit
		SARmax (W/kg)	Exposure Ratio	Power Density (mW/cm2)	Exposure Ratio	Power Density (mW/cm2)	Exposure Ratio	Power Density (mW/cm2)	Exposure Ratio	SARmax (W/kg)	Exposure Ratio	SARmax (W/kg)	Exposure Ratio							
		1	1a	8	8a	9	9a	10	10a	11	11a	12	12a	1a+8a	1a+9a	1a+10a	1a+8a+11a+12a	1a+9a+11a+12a	1a+10a+11a+12a	
WCDMA B2	Back side	0.282	0.176	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.200	0.207	0.203	0.208	0.215	0.210	1.0
	Left side	0.676	0.423	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.535	0.427	0.453	0.548	0.440	0.466	
	Right side	0.039	0.024	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.042	0.072	0.106	0.046	0.076	0.110	
	Top side	0.002	0.001	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.035	
	Bottom side	0.240	0.150	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.203	0.156	0.156	0.203	0.157	0.157	
WCDMA B4	Back side	0.604	0.378	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.402	0.409	0.404	0.409	0.416	0.411	
	Left side	0.830	0.519	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.631	0.523	0.549	0.644	0.537	0.562	
	Right side	0.056	0.035	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.053	0.083	0.116	0.056	0.087	0.120	
	Top side	0.002	0.001	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.035	
	Bottom side	0.459	0.287	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.339	0.293	0.293	0.340	0.294	0.294	
WCDMA B5	Back side	1.015	0.634	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.658	0.665	0.661	0.666	0.673	0.668	
	Left side	0.541	0.338	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.450	0.343	0.368	0.464	0.356	0.381	
	Right side	0.434	0.271	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.289	0.319	0.353	0.293	0.323	0.356	
	Top side	0.003	0.002	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.036	
	Bottom side	1.022	0.639	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.691	0.645	0.645	0.692	0.645	0.646	
LTE B2	Back side	0.309	0.193	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.217	0.224	0.220	0.225	0.232	0.227	
	Left side	0.741	0.463	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.575	0.468	0.493	0.589	0.481	0.506	
	Right side	0.023	0.014	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.032	0.062	0.096	0.036	0.066	0.100	
	Top side	0.002	0.001	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.035	
	Bottom side	0.314	0.196	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.249	0.202	0.203	0.249	0.203	0.203	
LTE B5	Back side	1.260	0.788	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.812	0.819	0.814	0.819	0.826	0.821	
	Left side	0.623	0.389	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.502	0.394	0.419	0.515	0.407	0.433	
	Right side	0.473	0.296	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.313	0.344	0.377	0.317	0.347	0.381	
	Top side	0.003	0.002	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.036	
	Bottom side	0.750	0.469	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.521	0.475	0.475	0.522	0.475	0.476	
LTE B12	Back side	0.626	0.391	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.415	0.422	0.418	0.423	0.430	0.425	
	Left side	0.449	0.281	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.393	0.285	0.311	0.406	0.298	0.324	
	Right side	0.180	0.113	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.130	0.160	0.194	0.134	0.164	0.198	
	Top side	0.002	0.001	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.035	
	Bottom side	0.638	0.399	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.451	0.405	0.405	0.452	0.405	0.406	
LTE B13	Back side	1.236	0.773	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.797	0.804	0.799	0.804	0.811	0.806	
	Left side	0.348	0.218	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.330	0.222	0.248	0.343	0.235	0.261	
	Right side	0.421	0.263	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.281	0.311	0.345	0.284	0.315	0.348	
	Top side	0.005	0.003	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.020	0.026	0.031	0.027	0.033	0.037	
	Bottom side	0.808	0.505	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.558	0.511	0.511	0.558	0.512	0.512	
LTE B14	Back side	1.094	0.684	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.708	0.715	0.710	0.715	0.722	0.718	
	Left side	0.290	0.181	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.294	0.186	0.211	0.307	0.199	0.224	
	Right side	0.389	0.243	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.261	0.291	0.325	0.264	0.295	0.328	
	Top side	0.004	0.003	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.020	0.026	0.030	0.026	0.032	0.036	
	Bottom side	0.604	0.378	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.430	0.384	0.384	0.431	0.384	0.385	
LTE B66/4	Back side	0.409	0.256	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.280	0.287	0.282	0.287	0.294	0.290	
	Left side	0.702	0.439	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.551	0.443	0.469	0.564	0.457	0.482	
	Right side	0.041	0.026	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.043	0.074	0.107	0.047	0.077	0.111	
	Top side	0.002	0.001	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.035	
	Bottom side	0.358	0.224	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.276	0.230	0.230	0.277	0.230	0.231	
LTE B71	Back side	0.686	0.429	0.240	0.024	0.310	0.031	0.264	0.026	0.010	0.006	0.002	0.001	0.453	0.460	0.455	0.460	0.467	0.463	
	Left side	0.521	0.326	1.123	0.112	0.047	0.005	0.301	0.030	0.017	0.011	0.004	0.003	0.438	0.330	0.356	0.451	0.343	0.369	
	Right side	0.114	0.071	0.176	0.018	0.479	0.048	0.814	0.081	0.002	0.001	0.004	0.003	0.089	0.119	0.153	0.093	0.123	0.156	
	Top side	0.003	0.002	0.173	0.017	0.233	0.023	0.274	0.027	0.001	0.001	0.009	0.006	0.019	0.025	0.029	0.025	0.031	0.036	
	Bottom side	0.503	0.314	0.525	0.053	0.060	0.006	0.064	0.006	0.001	0.001	0.000	0.000	0.367	0.320	0.321	0.368	0.321	0.321	

17 Measurement Uncertainty

The expanded SAR measurement uncertainty must be ≤ 30%, for a confidence interval of k = 2.

Input quantity X_i (source of uncertainty)	Unc. (±)	Prob. Dist. PDF_i	Unc. $a(x_i)$	c_i (1g)	c_i (10g)	U_i (1g) (%)	U_i (10g) (%)
Measurement system errors							
Probe calibration	18.6	N (k = 2)	2	1	1	9.3	9.3
Probe calibration drift	1.7	R	√3	1	1	1.0	1.0
Probe linearity and detection limit	0.9	R	√3	1	1	0.5	0.5
Broadband signal	0.5	R	√3	1	1	0.3	0.3
Probe isotropy	3.2	R	√3	1	1	1.8	1.8
Other probe and data acquisition errors	0.6	N	1	1	1	0.6	0.6
RF ambient and noise	3.0	R	√3	1	1	1.7	1.7
Probe positioning errors	0.5	N	1	0.33	0.33	0.2	0.2
Data processing errors	4.0	R	√3	1	1	2.3	2.3
Phantom and device (DUT or validation antenna) errors							
Measurement of phantom conductivity(σ)	2.5	N	1	0.78	0.71	2.0	1.8
Temperature effects (medium)	2.7	R	√3	0.78	0.71	1.2	1.1
Shell permittivity	14.0	R	√3	0.5	0.5	4.0	4.0
Distance between the radiating element of the DUT and the phantom medium	2.0	N	1	2	2	4.0	4.0
Repeatability of positioning the DUT or source against the phantom	2.9	N	1	1	1	2.9	2.9
Device holder effects	3.6	N	1	1	1	3.6	3.6
Effect of operating mode on probe sensitivity	2.4	R	√3	1	1	1.4	1.4
Time-average SAR	0.0	R	√3	1	1	0.0	0.0
Variation in SAR due to drift in output of DUT	2.5	N	1	1	1	2.5	2.5
Validation antenna uncertainty (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Uncertainty in accepted power (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Corrections to the SAR result (if applied)							
Phantom deviation from target (ε',σ)	1.9	N	1	1	0.84	1.9	1.6
SAR scaling	0.0	R	√3	1	1	0.0	0.0
Combined uncertainty	\					14.30	14.20
Expanded uncertainty and effective degrees of freedom （k = 2）	\					28.59	28.39

Applicable for Power Density Measurements						
a	b	c	d	e	f=b*e/d	g
Error Description	Uncertainty Value (±dB)	Probability	Div.	Ci	Standard Uncertainty (±dB)	Vi (Veff)
Uncertainty terms dependent on the measurement system						
Probe Calibration	0.49	N	1	1	0.49	∞
Probe correction	0.00	R	1.732	1	0.00	∞
Frequency response (BW ≤1 GHz)	0.20	R	1.732	1	0.12	∞
Sensor cross coupling	0.00	R	1.732	1	0.00	∞
Isotropy	0.50	R	1.732	1	0.29	∞
Linearity	0.20	R	1.732	1	0.12	∞
Probe scattering	0.00	R	1.732	1	0.00	∞
Probe positioning offset	0.30	R	1.732	1	0.17	∞
Probe positioning repeatability	0.04	R	1.732	1	0.02	∞
Sensor mechanical offset	0.00	R	1.732	1	0.00	∞
Probe spatial resolution	0.00	R	1.732	1	0.00	∞
Field impedance dependance	0.00	R	1.732	1	0.00	∞
Amplitude and phase drift	0.00	R	1.732	1	0.00	∞
Amplitude and phase noise	0.04	R	1.732	1	0.02	∞
Measurement area truncation	0.00	R	1.732	1	0.00	∞
Data acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	R	1.732	1	0.00	∞
Field reconstruction	2.00	R	1.732	1	1.15	∞
Forward transformation	0.00	R	1.732	1	0.00	∞
Power density scaling	0.00	R	1.732	1	0.00	∞
Spatial averaging	0.10	R	1.732	1	0.06	∞
System detection limit	0.04	R	1.732	1	0.02	∞
Uncertainty terms dependent on the DUT and environmental factors						
Probe coupling with DUT	0.00	R	1.732	1	0.00	∞
Modulation response	0.40	R	1.732	1	0.23	∞
Integration time	0.00	R	1.732	1	0.00	∞
Response time	0.00	R	1.732	1	0.00	∞
Device holder influence	0.10	R	1.732	1	0.06	∞
DUT alignment	0.00	R	1.732	1	0.00	∞
RF ambient conditions	0.04	R	1.732	1	0.02	∞
Ambient reflections	0.04	R	1.732	1	0.02	∞
Immunity / secondary reception	0.00	R	1.732	1	0.00	∞
Drift of the DUT		R	1.732	1	0.00	∞
Combined Std. Uncertainty					1.33	
Expanded STD Uncertainty (95%)，K=2					2.67	

18 Calibration Certificate

Please see the Appendix C

19 Test Setup Photos

Please see the Appendix D

Appendix A: System Check Plots

Appendix B: SAR Test Plots

Appendix C: Calibration certificate

Appendix D: Test Setup Photos

Appendix E: Conducted RF Output Power

--- The End ---