



Test report No.: 2620024R-SAUSV01S-A

SAR Test Report

Product Name	e-bike
Trademark	ALSO
Model and /or type reference	TMB-CON
Applicant's name / address	ALSO INC 450 Lambert Ave, Palo Alto, CA 94306 USA
Manufacturer's name	ALSO INC
FCC ID	2BVBP-TMB-CON
Contains FCC ID	2ANPO00NRF9151
Applicable Standard	IEEE 1528-2013 KDB 447498 D01 v06 KDB 865664 D01 v01r04
Test Result	Max. SAR Measurement (1g) WLAN: 0.267 W/kg WWAN: 0.490 W/kg
Verdict Summary	IN COMPLIANCE
Documented By (Supervisor / Jinn Chen)	<i>Jinn Chen</i>
Tested By (Senior Engineer / Luke Cheng)	<i>Luke Cheng</i>
Approved By (Assistant Manager / San Lin)	<i>San Lin</i>
Date of Receipt	2026/02/02
Date of Issue	2026/04/10
Report Version	V1.0

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2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
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5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Report No.	Version	Description	Issued Date
2620024R-SAUSV01S-A	V1.0	Initial issue of report.	2026/04/10

1. General Information

1.1 EUT Description

Product Name	e-bike
Trademark	ALSO
Model and /or type reference	TMB-CON
FCC ID	2BVBP-TMB-CON
Contains FCC ID	2ANPO00NRF9151
Frequency Range (Cat-M1)	LTE Band 2: 1850-1910MHz LTE Band 4: 1710-1755MHz LTE Band 12: 699-716MHz LTE Band 66: 1710-1780MHz
Frequency Range	WLAN 2.4GHz: 2412-2462MHz BT: 2402-2480MHz
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM BLE: GFSK LTE: QPSK/16QAM
Antenna Type	PIFA
Device Category	Portable
RF Exposure Environment	Uncontrolled
1. The NFC and UWB transmitters qualify for the 1 mW exemption, and estimated SAR cannot be used for simultaneous transmission analysis.	

1.2 Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Hong-Bo (LTE)	290-11601	PIFA	0.51 dBi for 699~716 MHz_B12 4.85 dBi for 1710~1755 MHz_B4 4.85 dBi for 1710~1780 MHz_B66 4.06 dBi for 1850~1915 MHz_B2
2	Hong-Bo (WIFI/BLE)	290-11601	PIFA	3.71 dBi for 2400 MHz

Note: The above EUT information is provided by the host manufacturer.

1.4 Test Environment

Ambient conditions in the laboratory:

Test Date: 2026/02/24 - 2026/03/07

Items	Required	Actual
Temperature (°C)	18-25	23 ± 2
Humidity (%RH)	30-70	50 ± 20

USA	FCC Designation Number: TW0033
Canada	CAB Identifier Number: TW3023 / Company Number: 26930

Site Description	Accredited by TAF
	Accredited Number: 3023

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
	Linkou Laboratory
Address	No. 85, Wenlin St., Linkou Dist., New Taipei City 244017, Taiwan, R.O.C.
Performed Location	No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C.
Phone Number	+886-3-275-7255
Fax Number	+886-3-327-8031

1.5 Measurement procedures

IEEE 1528-2013

47CFR § 2.1093

KDB 248227 D01 v02r02

KDB 447498 D01 v06

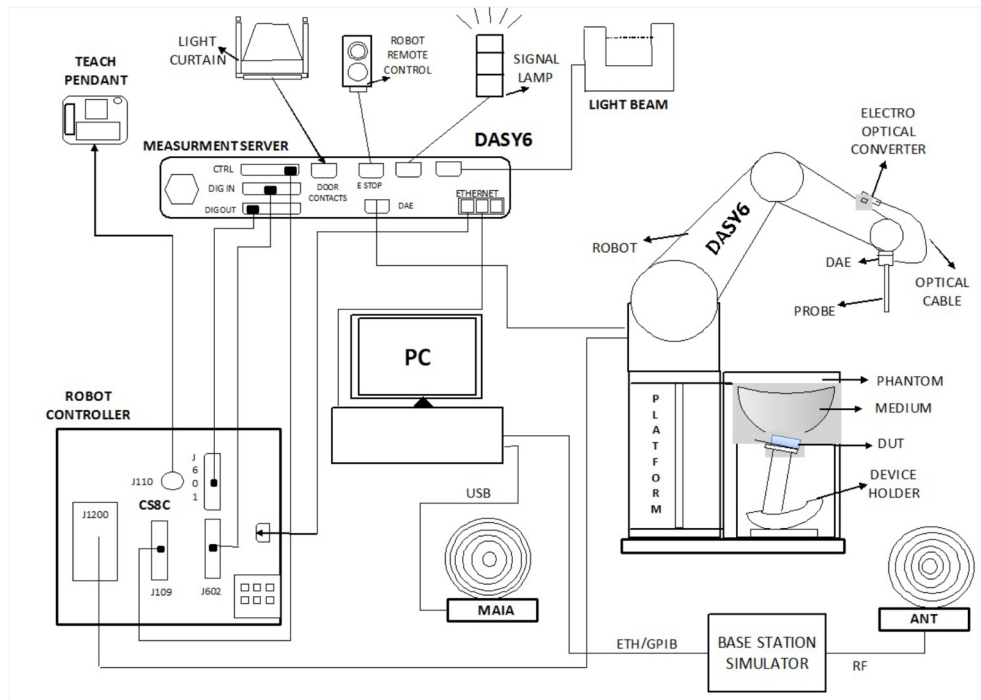
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KDB 941225 D05 v02r05

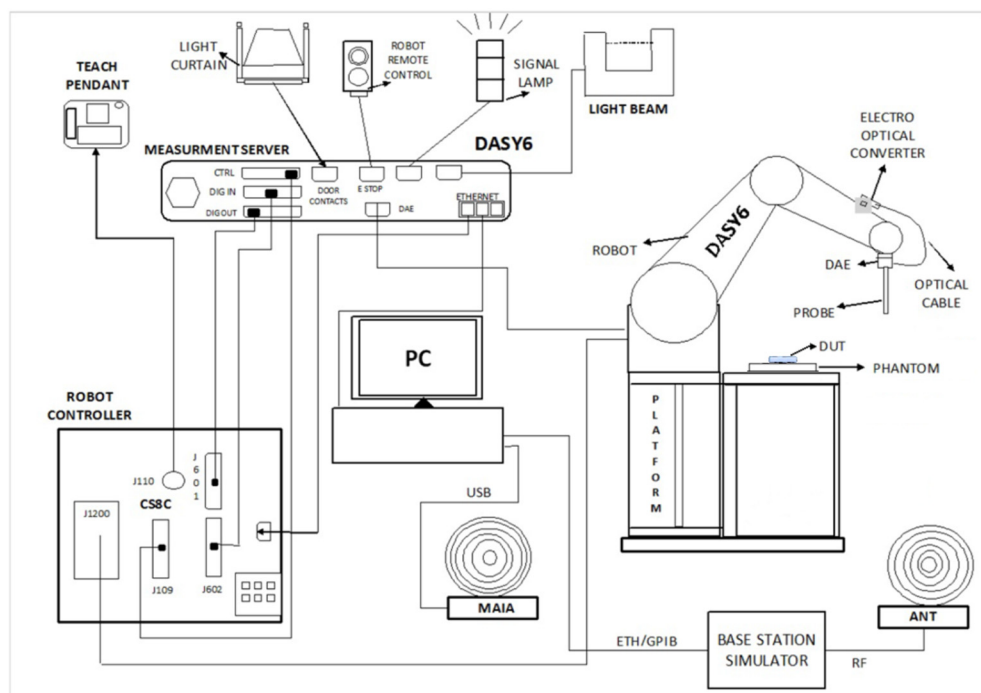
2. SAR Measurement System

2.1 DASY System Description

SAR Configurations is shown below:



Power Density Configurations is shown below:



The DASY system 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).
- 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 Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7/8/10 and the DASY 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.

2.2 Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for utilize a 10mm² step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing.

2.2.1 Zoom Scan (Cube Scan Averaging)

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. A density of 1000 kg/m³ is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications utilize a physical step of 5x5x7 (8mmx8mmx5mm) providing a volume of 32mm in the X & Y axis, and 30mm in the Z axis.

2.2.2 SAR measurement drifts

Before an area scan and after the zoom scan, single point SAR measurements are performed at defined locations to estimate the SAR measurement drift due to device output power variations. If a device is known to drift randomly, additional single point drift reference measurements should be performed at regular intervals throughout the area and zoom scan test durations. The SAR drift shall be kept within $\pm 5\%$, whether there are substantial drifts or not. The field difference will be calculated in dB units in the DASY software.

2.2.3 Uncertainty of Inter-/Extrapolation and Averaging

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions.

2.3 DASY E-Field Probe

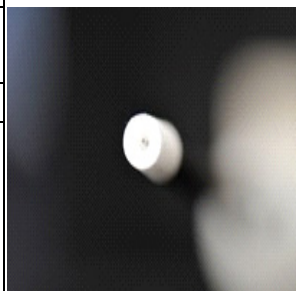
The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.

SPEAG conducts the probe calibration in compliance with international and national standards under ISO 17025. The calibration data are in Appendix D.

Isotropic E-Field Probe Specification

Model	Ex3DV4	
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – 10 GHz Linearity: ± 0.2 dB (30 MHz to 10 GHz)	
Directivity	± 0.1 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

E-Field mm-Wave Probe Specification

Model	EUmmWVx	
Construction	Two dipoles optimally arranged to obtain pseudo-vector information Minimum three measurements/point, 120° rotated around probe axis Sensors (0.8 mm length) printed on glass substrate protected by high density foam	
Frequency	750 MHz to 110 GHz	
Dynamic Range	< 20 V/m to 10000 V/m with PRE-10 (min < 20 V/m to 2000 V/m)	
Position Precision	< 0.2 mm	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: encapsulation 8 mm (internal sensor < 1mm) Distance from probe tip to dipole centers: < 2 mm Sensor displacement to probe's calibration point: < 0.3 mm	
Application	E-field measurements of 5G devices and other mm-wave transmitters operating above 10GHz in < 2 mm distance from device (free-space) Power density, H-field, and far-field analysis using total field reconstruction	

2.4 DATA Acquisition Electronics (DAE) and Measurement Server

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 DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



2.5 Robot

The DASY system uses the high precision robots TX90 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY system, the CS8C robot controller version from Stäubli is used.

The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller

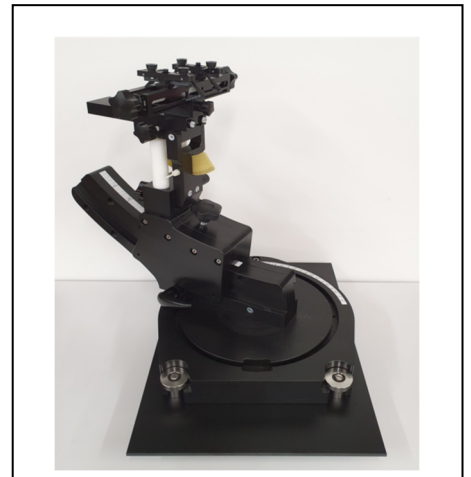


2.6 Device Holder

The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

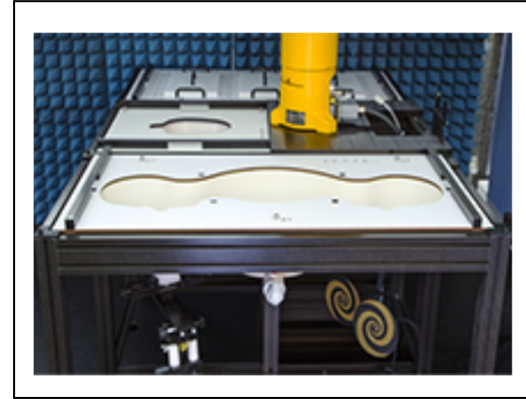


2.7 Phantom

2.7.1 SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left head
- Right head
- Flat phantom



The device holder positions are adjusted to the standard measurement positions in the three sections. A 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.

2.7.2 mmWave Phantom

The mmWave Phantom approximates free-space conditions, allowing to evaluate not only the antenna side of the device but also the front (screen) side or any opposite-radiating side of wireless devices operating above 10 GHz without distorting the RF field. It consists of a 40 mm thick Rohacell plate used as a test bed, which has a loss tangent ($\tan \delta$) ≤ 0.05 and a relative permittivity (ϵ_r) ≤ 1.2 . High-performance RF absorbers are placed below the foam.



3. Tissue Simulating Liquid

3.1 The composition of the tissue simulating liquid

Description: Aqueous solution with surfactants and inhibitors

Declarable, or hazardous components:

CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-0000	Ethenediol STOT RE 2, H373; Acute Tox. 4, H302	< 5.2%
CAS: 68608-26-4 EINECS: 271-781-5 Reg.nr.: 01-2119527859-22-0000	Sodium petroleum sulfonate Eye Irrit. 2, H319	< 2.9%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35-0000	Hexylene Glycol / 2-Methyl-pentane-2,4-diol Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.9%
CAS: 68920-66-1 NLP: 500-236-9 Reg.nr.: 01-2119489407-26-0000	Alkoxylated alcohol, > C₁₆ Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.0%

3.2 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using Dielectric Probe Kit and Vector Network Analyzer.

Date	Tissue Type	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)			Tissue Temp. (°C)
			Measured	Target	Delta (%)	Measured	Target	Delta (%)	
2026/2/24	Head	750	41.90	41.90	0.00	0.91	0.89	2.25	21.9
2026/2/24	Head	704	42.23	42.15	0.19	0.87	0.89	-2.25	21.9
2026/2/24	Head	707.5	42.21	42.13	0.19	0.87	0.89	-2.25	21.9
2026/2/24	Head	711	42.18	42.11	0.17	0.88	0.89	-1.12	21.9
2026/2/26	Head	1750	40.88	40.10	1.95	1.39	1.37	1.46	22.1
2026/2/26	Head	1720	42.04	40.13	4.76	1.35	1.35	0.00	22.1
2026/2/26	Head	1732.5	41.65	40.12	3.81	1.36	1.36	0.00	22.1
2026/2/26	Head	1745	41.07	40.10	2.42	1.38	1.37	0.73	22.1
2026/2/26	Head	1770	40.71	40.06	1.62	1.41	1.38	2.17	22.1
2026/3/4	Head	1950	41.07	40.00	2.68	1.42	1.40	1.43	21.8
2026/3/4	Head	1860	41.43	40.00	3.58	1.39	1.40	-0.71	21.8
2026/3/4	Head	1880	41.31	40.00	3.28	1.41	1.40	0.71	21.8
2026/3/4	Head	1900	41.27	40.00	3.18	1.42	1.40	1.43	21.8
2026/3/7	Head	2450	40.51	39.20	3.34	1.81	1.80	0.56	21.8
2026/3/7	Head	2402	40.72	39.30	3.61	1.75	1.76	-0.57	22.1
2026/3/7	Head	2412	40.66	39.28	3.51	1.76	1.77	-0.56	22.1
2026/3/7	Head	2437	40.56	39.23	3.39	1.80	1.79	0.56	22.1
2026/3/7	Head	2440	40.53	39.22	3.34	1.80	1.79	0.56	22.1
2026/3/7	Head	2462	40.47	39.18	3.29	1.82	1.81	0.55	22.1
2026/3/7	Head	2480	40.33	39.16	2.99	1.85	1.83	1.09	22.1

3.3 Tissue Dielectric Parameters for Phantoms

The head tissue dielectric parameters recommended by the IEC/IEEE 62209-1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head tissue parameters that have not been specified are interpolated according to the head parameters specified in IEC/IEEE 62209-1528.

Target Frequency (MHz)	Head	
	ϵ_r	σ (S/m)
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1640	40.2	1.31
1750	40.1	1.37
1800 – 2000	40.0	1.40
2450	39.2	1.80
3000	38.5	2.40
5000	36.2	4.45
5200	36.0	4.66
5400	35.8	4.86
5600	35.5	5.07
5800	35.3	5.27
6000	35.1	5.48
6500	34.5	6.07
7000	33.9	6.65
7500	33.3	7.24

4. Measurement Procedure

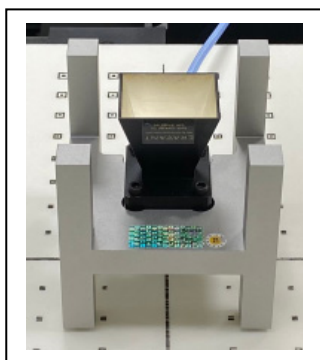
4.1 SAR System Check

4.1.1 Dipoles



The SAR dipoles are optimized symmetrical dipole with $\lambda/4$ balun matched to a Flat phantom section filled with tissue simulating liquids. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC signals. They are available for the variety of frequencies between 300MHz and 10 GHz. The provided tripod is used to hold the dipole below the phantom. As the distance between the dipole center and the TSL is critical, a spacer is placed between the dipole and the phantom. The spacing distance is frequency dependent.

4.1.2 Verification Source



The verification sources apply to system check or verification at specific mmWave frequencies. The sources comprise horn-antennas and very stable signal generators.

4.1.3 SAR System Check Result

1. Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %.
2. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Date	Frequency (MHz)	Input Power (mW)	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Delta 1g ±10 (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Delta 10g ±10 (%)	Tissue Temp. (°C)
2026/2/24	750	250	2.20	8.52	8.8	3.29	1.48	5.56	5.92	6.47	21.9
2026/2/26	1750	250	8.61	36.30	34.44	-5.12	4.76	19.20	19.04	-0.83	22.1
2026/3/4	1950	250	10.40	40.20	41.6	3.48	5.53	21.10	22.12	4.83	21.8
2026/3/7	2450	250	12.30	52.50	49.2	-6.29	6.00	24.70	24	-2.83	22.1

4.2 SAR Measurement Procedure

The Dasy calculates SAR using the following equation,

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

Where :

σ : represents the simulated tissue conductivity

ρ : represents the tissue density

E :RMS electric field strength (V/m)

The SAR / APD measurements for the EUT should be performed on the channel that produces the highest rated output power of each transmitting antenna.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR / APD distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR / APD location (interpolated resolution set at 1mm²) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at 1mm³).

4.3 Absorbed Power Density (APD)

Absorbed Power Density (APD) is defined as the energy flow per unit area directly under the body surface that based on Poynting vector. The equation description is as below:

$$S_{ab} = \iint_A \text{Re}[S] \cdot \frac{ds}{A} = \iint_A \text{Re}[E \times H^*] \cdot \frac{ds}{A}$$

Where:

E = electric field strength (V/m)

H = magnetic field strength (A/m)

S = power density (W/m² or mW/cm²)

APD is expressed in units of Watts per square meter or units of milliwatt per square centimeter.

4.4 Power Density Measurement Procedure

The power density for an electromagnetic field represents the rate of energy transfer per unit area. The local power density (i.e. Poynting vector) at a given spatial point is deduced from electromagnetic fields by the following formula:

$$S = \frac{1}{2} \text{Re}[E \times H^*] \cdot \vec{n}$$

Where: E is the complex electric field peak phasor and H is the complex conjugate magnetic field peak phasor.

The spatial-average power density distribution on the evaluation surface is determined per the IEC TR 63170. The spatial area, A is specified by the applicable exposure limit or regulatory requirements. The circular shape was used.

$$S_{av} = \frac{1}{2A} \Re(\int E \times H \cdot \hat{n} dA)$$

5. RF Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, RSS-102 Issue 6, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	1.60 W/kg
Spatial Average SAR (whole body)	0.08 W/kg
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	4.00 W/kg
Power density ¹	1 mW/cm²

Note: 1 mW/cm² = 10 W/m²

6. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Last Calibration	Next Calibration
Reference Dipole 750MHz	Speag	D750V3	1031	2023/05/16	2026/05/15
Reference Dipole 1750MHz	Speag	D1750V2	1113	2025/11/12	2028/11/11
Reference Dipole 1950MHz	Speag	D1950V3	1213	2025/11/12	2028/11/11
Reference Dipole 2450MHz	Speag	D2450V2	1053	2024/02/19	2027/02/18
Device Holder	Speag	N/A	N/A	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	910	2025/07/14	2026/07/13
E-Field Probe	Speag	EX3DV4	3975	2025/08/06	2026/08/05
SAR Software	Speag	DASY52	V52.10.4.1535	N/A	N/A
Power Amplifier	Mini-Circuit	ZHL-42	D051404-20	N/A	N/A
Directional Coupler	Agilent	87300C	MY44300353	N/A	N/A ¹
Attenuator	Woken	WATT-218FS-10	N/A	N/A	N/A ¹
Attenuator	Mini-Circuit	BW-S20W2+	N/A	N/A	N/A ¹
Universal Radio Communication	R&S	CMW500	157304	2025/03/13	2026/03/12
Vector Network Analyzer	Agilent	E5071C	MY46108013	2025/03/28	2026/03/27
Signal Generator	Anritsu	MG3694A	041902	2025/08/16	2026/08/15
Power Meter	Anritsu	ML2487A	6K00001447	2025/10/16	2026/10/15
Power Sensor	Anritsu	MA2411B	1339194	2025/10/17	2026/10/16

Note: 1. System Check, the path loss measured by the network analyzer, includes the signal generator, amplifier, cable, attenuator and directional coupler.

Note:

Per requirements for dipole calibration, the following are recommended procedures for SAR dipole calibration.

1. After a dipole is damaged and properly repaired to meet required specifications.
2. When the measured SAR deviates from the calibrated SAR value by more than 10% due to changes in physical, mechanical, electrical or other relevant dipole conditions.
3. When the most recent return-loss, measured at least annually, deviates by more than 20% from the previous measurement (i.e. 0.2 of the dB value) or not meeting the required -20 dB return-loss specification.

D750V3-1031

	Frequency	Tissue	Return loss	Limit	Date
Calibration	750 MHz	Head	-27.0	Within 20%	2023/5/16
Measurement	750 MHz	Head	-27.06		2024/5/12
Measurement	750 MHz	Head	-27.04		2025/5/11

D2450V2-1053

	Frequency	Tissue	Return loss	Limit	Date
Calibration	2450 MHz	Head	-24.3	Within 20%	2024/2/19
Measurement	2450 MHz	Head	-24.57		2025/2/18

4. When the most recent measurement of the real or imaginary parts of the impedance, measured at least annually, deviates by more than 5 Ω from the previous measurement.

D750V3-1031

	Frequency	Tissue	Impedance	Limit	Date
Calibration	750 MHz	Head	54.5	Within 5 Ω	2023/5/16
Measurement	750 MHz	Head	54.46		2024/5/12
Measurement	750 MHz	Head	54.46		2025/5/11

D2450V2-1053

	Frequency	Tissue	Impedance	Limit	Date
Calibration	2450 MHz	Head	51.4	Within 5 Ω	2024/2/19
Measurement	2450 MHz	Head	52.25		2025/2/18

7. Measurement Uncertainty

Measurement uncertainty for 300 MHz to 3 GHz							
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors							
Probe Calibration	±13.3%	N	2	1	1	±6.7%	±6.7%
Probe Calibration Drift	±1.7%	R	1.732	1	1	±1.0%	±1.0%
Probe Linearity	±4.7%	R	1.732	1	1	±2.7%	±2.7%
Broadband Signal	±2.8%	R	1.732	1	1	±1.6%	±1.6%
Probe Isotropy	±7.6%	R	1.732	1	1	±4.4%	±4.4%
Other Probe+Electronic	±0.8%	N	1	1	1	±0.8%	±0.8%
RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Probe Positioning	±0.006 mm	N	1	0.14	0.14	±0.1%	±0.1%
Data Processing	±1.2%	N	1	1	1	±1.2%	±1.2%
Phantom and Device Errors							
Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
Conductivity (temp.)	±3.3%	R	1.732	0.78	0.71	±1.5%	±1.4%
Phantom Permittivity	±14.0%	R	1.732	0	0	±0.0%	±0.0%
Distance DUT - TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
DUT Modulation	±2.4%	R	1.732	1	1	±1.4%	±1.4%
Time-average SAR	±1.7%	R	1.732	1	1	±1.0%	±1.0%
DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.	±0.0%	N	1	1	1	±0.0%	±0.0%
Unc. Input Power	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
SAR scaling	±0.0%	R	1.732	1	1	±0.0%	±0.0%
Combined Uncertainty						±11.3%	±11.2%
Expanded Uncertainty						±22.7%	±22.5%

Measurement uncertainty for 3 GHz to 6 GHz

Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors							
Probe Calibration	±13.1%	N	2	1	1	±6.6%	±6.6%
Probe Calibration Drift	±1.7%	R	1.732	1	1	±1.0%	±1.0%
Probe Linearity	±4.7%	R	1.732	1	1	±2.7%	±2.7%
Broadband Signal	±2.6%	R	1.732	1	1	±1.5%	±1.5%
Probe Isotropy	±7.6%	R	1.732	1	1	±4.4%	±4.4%
Other Probe+Electronic	±1.2%	N	1	1	1	±1.2%	±1.2%
RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Probe Positioning	±0.005 mm	N	1	0.29	0.29	±0.2%	±0.2%
Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors							
Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
Conductivity (temp.)	±3.4%	R	1.732	0.78	0.71	±1.5%	±1.4%
Phantom Permittivity	±14.0%	R	1.732	0.25	0.25	±2.0%	±2.0%
Distance DUT - TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
DUT Modulation	±2.4%	R	1.732	1	1	±1.4%	±1.4%
Time-average SAR	±1.7%	R	1.732	1	1	±1.0%	±1.0%
DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.	±0.0%	N	1	1	1	±0.0%	±0.0%
Unc. Input Power	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
SAR scaling	±0.0%	R	1.732	1	1	±0.0%	±0.0%
Combined Uncertainty						±11.7%	±11.6%
Expanded Uncertainty						±23.3%	±23.1%

Measurement uncertainty for 6 GHz to 10 GHz

Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors							
Probe Calibration	±18.6%	N	2	1	1	±9.3%	±9.3%
Probe Calibration Drift	±1.7%	R	1.732	1	1	±1.0%	±1.0%
Probe Linearity	±4.7%	R	1.732	1	1	±2.7%	±2.7%
Broadband Signal	±2.6%	R	1.732	1	1	±1.5%	±1.5%
Probe Isotropy	±7.6%	R	1.732	1	1	±4.4%	±4.4%
Other Probe+Electronic	±2.4%	N	1	1	1	±2.4%	±2.4%
RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Probe Positioning	±0.005 mm	N	1	0.5	0.5	±0.3%	±0.3%
Data Processing	±3.5%	N	1	1	1	±3.5%	±3.5%
Phantom and Device Errors							
Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
Conductivity (temp.)	±2.4%	R	1.732	0.78	0.71	±1.1%	±1.0%
Phantom Permittivity	±14.0%	R	1.732	0.5	0.5	±4.0%	±4.0%
Distance DUT - TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
DUT Modulation	±2.4%	R	1.732	1	1	±1.4%	±1.4%
Time-average SAR	±1.7%	R	1.732	1	1	±1.0%	±1.0%
DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.	±0.0%	N	1	1	1	±0.0%	±0.0%
Unc. Input Power	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
SAR scaling	±0.0%	R	1.732	1	1	±0.0%	±0.0%
Combined Uncertainty						±14.2%	±14.1%
Expanded Uncertainty						±28.4%	±28.3%

8. Conducted Power Measurement (Including tolerance allowed for production unit)

WLAN 2.4G 1TX SISO						
DSSS/OFDM mode specified maximum output power at an antenna port	Frequency	Mode	BW	SISO		
				CH	Avg. Power	Tune-Up Power
	WLAN 2.4GHz	b	20	1	12.70	13
				6	12.64	13
				11	12.50	13
		g	20	1	12.50	13
				6	12.45	13
				11	12.38	13
		n (HT)	20	1	12.43	13
				6	12.40	13
				11	12.38	13

BT						
Bluetooth mode maximum output power	Frequency	Mode	Modulation	SISO		
				CH	Avg. Power	Tune-Up Power
	BT 2.4GHz	BLE	GFSK	0	4.39	4.5
				19	3.56	4.5
				39	2.69	4.5

Mode (Cat-M1)		Maximum Output Power (dBm) (Including tolerance)
LTE Band 2	QPSK	24
LTE Band 4	QPSK	24
LTE Band 12	QPSK	24
LTE Band 66	QPSK	24

LTE Band 2 (Cat-M1)

BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				18607	18900	19193					18615	18900	19185
				1850.7	1880	1909.3					1851.5	1880	1908.5
1.4M	QPSK	1	0	23.03	22.98	22.91	3M	QPSK	1	0	23.02	23.04	23.00
		1	5	22.88	22.91	22.96			1	5	22.92	22.98	22.97
		3	0	22.58	22.58	22.57			3	0	22.64	22.66	22.65
		3	3	22.54	22.55	22.45			3	3	22.49	22.59	22.52
		6	0	22.26	22.23	22.21			6	0	22.26	22.32	22.27
	16QAM	1	0	22.67	22.60	22.53		16QAM	1	0	22.61	22.68	22.62
		1	5	22.44	22.36	22.31			1	5	22.36	22.45	22.36
		3	0	22.53	22.45	22.40			3	0	22.52	22.54	22.44
		3	3	22.27	22.29	22.24			3	3	22.27	22.35	22.25
		5	0	22.27	22.32	22.19			5	0	22.25	22.33	22.29
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				18625	18900	19175					18650	18900	19150
				1852.5	1880	1907.5					1855	1880	1905
5M	QPSK	1	0	23.02	23.09	23.06	10M	QPSK	1	0	23.10	23.16	23.13
		1	5	22.96	23.04	23.03			1	5	23.06	23.11	23.02
		3	0	22.85	22.92	22.89			3	0	23.07	23.09	23.08
		3	3	22.78	22.85	22.76			3	3	23.01	23.05	23.03
		6	0	22.86	22.91	22.90			6	0	22.11	22.18	22.10
	16QAM	1	0	23.04	23.05	22.99		16QAM	1	0	23.03	23.05	23.01
		1	5	22.97	23.02	22.94			1	5	22.93	23.03	22.95
		3	0	22.96	23.00	22.93			3	0	23.05	23.06	23.05
		3	3	22.93	22.98	22.93			3	3	22.88	22.98	22.94
		5	0	21.97	22.06	22.00			5	0	22.04	22.09	22.07
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				18675	18900	19125					18700	18900	19100
				1857.5	1880	1902.5					1860	1880	1900
15M	QPSK	1	0	23.07	23.05	23.00	20M	QPSK	1	0	23.34	23.37	23.31
		1	5	22.97	23.05	23.02			1	5	23.21	23.26	23.19
		3	0	23.04	23.03	22.95			3	0	23.25	23.32	23.23
		3	3	22.92	23.01	22.95			3	3	23.22	23.29	23.28
		6	0	22.91	23.03	22.99			6	0	23.23	23.25	23.22
	16QAM	1	0	23.01	23.05	23.01		16QAM	1	0	23.30	23.31	23.27
		1	5	22.93	23.03	22.98			1	5	23.18	23.24	23.20
		3	0	22.92	23.01	22.97			3	0	23.17	23.19	23.18
		3	3	22.91	23.08	22.99			3	3	23.19	23.16	23.18
		5	0	22.91	23.03	22.95			5	0	23.18	23.24	23.20

LTE Band 4 (Cat-M1)

BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				19957	20175	20393					19965	20175	20385
				1710.7	1732.5	1754.3					1711.5	1732.5	1753.5
1.4M	QPSK	1	0	22.91	22.98	22.88	3M	QPSK	1	0	22.98	23.04	23.01
		1	5	22.87	22.95	22.89			1	5	22.94	22.98	22.92
		3	0	22.62	22.71	22.67			3	0	22.60	22.67	22.66
		3	3	22.62	22.69	22.66			3	3	22.59	22.65	22.60
		6	0	21.80	21.84	21.82			6	0	21.92	21.98	21.90
	16QAM	1	0	22.64	22.70	22.64		16QAM	1	0	22.50	22.54	22.52
		1	5	22.46	22.56	22.50			1	5	22.42	22.51	22.42
		3	0	22.21	22.27	22.17			3	0	22.11	22.18	22.11
		3	3	22.24	22.29	22.25			3	3	22.10	22.12	22.04
		5	0	22.14	22.18	22.12			5	0	22.08	22.09	22.07
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				19975	20175	20375					20000	20175	20350
				1712.5	1732.5	1752.5					1715	1732.5	1750
5M	QPSK	1	0	22.98	23.01	22.98	10M	QPSK	1	0	23.00	23.05	23.02
		1	5	22.91	22.96	22.94			1	5	22.94	23.01	22.99
		3	0	22.70	22.79	22.72			3	0	22.97	23.01	22.96
		3	3	22.70	22.72	22.65			3	3	22.97	22.99	22.93
		6	0	22.75	22.76	22.68			6	0	22.67	22.72	22.69
	16QAM	1	0	22.96	22.99	22.95		16QAM	1	0	23.00	23.08	23.00
		1	5	22.86	22.96	22.91			1	5	23.03	23.04	23.02
		3	0	22.56	22.64	22.55			3	0	22.95	22.99	22.89
		3	3	22.51	22.61	22.55			3	3	22.93	22.96	22.90
		5	0	22.15	22.25	22.16			5	0	22.59	22.68	22.67
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				20025	20175	20325					20050	20175	20300
				1717.5	1732.5	1747.5					1720	1732.5	1745
15M	QPSK	1	0	23.01	23.05	22.97	20M	QPSK	1	0	23.19	23.23	23.20
		1	5	23.04	23.02	23.01			1	5	23.12	23.21	23.20
		3	0	22.97	22.94	23.04			3	0	23.18	23.19	23.14
		3	3	22.95	22.88	22.98			3	3	23.03	23.11	23.10
		6	0	23.02	22.98	23.06			6	0	23.09	23.14	23.11
	16QAM	1	0	22.94	22.99	22.96		16QAM	1	0	23.13	23.18	23.12
		1	5	22.91	22.95	23.00			1	5	23.07	23.15	23.10
		3	0	22.93	22.93	22.97			3	0	23.01	23.07	23.09
		3	3	22.86	22.89	22.93			3	3	23.02	23.05	23.00
		5	0	22.93	22.88	22.97			5	0	23.04	23.08	23.08

LTE Band 12 (Cat-M1)

BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				23017	23095	23173					23025	23095	23165
				699.7	707.5	715.3					700.5	707.5	714.5
1.4M	QPSK	1	0	22.95	23.01	22.93	3M	QPSK	1	0	23.06	23.09	23.03
		1	5	23.01	23.02	22.97			1	5	22.97	23.02	22.98
		3	0	22.68	22.71	22.65			3	0	22.67	22.68	22.65
		3	3	22.64	22.65	22.63			3	3	22.59	22.62	22.59
		6	0	22.11	22.21	22.20			6	0	22.00	22.08	22.01
	16QAM	1	0	22.73	22.78	22.71		16QAM	1	0	22.67	22.74	22.66
		1	5	22.80	22.81	22.76			1	5	22.64	22.67	22.60
		3	0	22.22	22.29	22.20			3	0	22.17	22.19	22.09
		3	3	22.14	22.24	22.17			3	3	22.13	22.23	22.16
		5	0	22.18	22.19	22.14			5	0	21.89	21.92	21.84
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				23035	23095	23155					23060	23095	23130
				701.5	707.5	713.5					704	707.5	711
5M	QPSK	1	0	23.06	23.11	23.06	10M	QPSK	1	0	23.24	23.28	23.19
		1	5	23.07	23.10	23.04			1	5	23.18	23.26	23.16
		3	0	22.70	22.79	22.72			3	0	23.21	23.25	23.19
		3	3	22.62	22.72	22.71			3	3	23.17	23.23	23.19
		6	0	22.64	22.74	22.71			6	0	22.84	22.89	22.81
	16QAM	1	0	22.96	23.03	23.00		16QAM	1	0	23.23	23.26	23.23
		1	5	22.94	23.01	22.93			1	5	23.17	23.24	23.18
		3	0	22.69	22.71	22.63			3	0	23.17	23.19	23.13
		3	3	22.63	22.69	22.64			3	3	23.15	23.17	23.15
		5	0	22.11	22.19	22.11			5	0	22.74	22.78	22.73

LTE Band 66 (Cat-M1)

BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				131979	132322	132665					131987	132322	132657
				1710.7	1745	1779.3					1711.5	1745	1778.5
1.4M	QPSK	1	0	22.98	23.04	22.97	3M	QPSK	1	0	23.02	23.05	22.95
		1	5	22.91	23.02	22.92			1	5	22.88	22.96	22.89
		3	0	22.70	22.62	22.68			3	0	22.68	22.73	22.63
		3	3	22.55	22.71	22.62			3	3	22.54	22.64	22.61
		6	0	22.12	22.15	22.13			6	0	22.15	22.20	22.19
	16QAM	1	0	22.64	22.72	22.55		16QAM	1	0	22.57	22.65	22.55
		1	5	22.54	22.75	22.53			1	5	22.52	22.56	22.52
		3	0	22.07	22.28	22.05			3	0	22.10	22.15	22.14
		3	3	22.06	22.29	22.08			3	3	22.04	22.11	22.09
		5	0	22.00	22.24	22.04			5	0	22.02	22.08	22.02
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				131997	132322	132647					132022	132322	132622
				1712.5	1745	1777.5					1715	1745	1775
5M	QPSK	1	0	22.96	23.02	22.95	10M	QPSK	1	0	23.05	23.06	23.02
		1	5	22.95	23.05	22.98			1	5	23.04	23.02	22.95
		3	0	22.64	22.67	22.58			3	0	23.05	23.09	23.01
		3	3	22.61	22.64	22.61			3	3	23.06	23.07	22.98
		6	0	22.65	22.68	22.60			6	0	22.60	22.64	22.54
	16QAM	1	0	22.97	22.98	22.90		16QAM	1	0	23.05	23.08	23.01
		1	5	22.89	22.99	22.98			1	5	23.01	23.06	23.05
		3	0	22.65	22.72	22.64			3	0	22.97	23.02	22.98
		3	3	22.59	22.68	22.60			3	3	22.95	23.01	23.00
		5	0	22.27	22.29	22.25			5	0	22.49	22.58	22.41
BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch	BW	Modulation	RB No.	RB Offset	Low Ch	Middle Ch	High Ch
				132047	132322	132597					132072	132322	132572
				1717.5	1745	1772.5					1720	1745	1770
15M	QPSK	1	0	23.02	23.07	22.91	20M	QPSK	1	0	23.26	23.27	23.23
		1	5	23.01	23.06	22.94			1	5	23.23	23.25	23.21
		3	0	22.94	23.04	22.95			3	0	23.21	23.24	23.18
		3	3	22.97	23.05	22.96			3	3	23.19	23.20	23.16
		6	0	22.93	22.91	22.97			6	0	23.25	23.23	23.19
	16QAM	1	0	22.92	23.01	22.93		16QAM	1	0	23.19	23.24	23.17
		1	5	22.91	22.95	22.91			1	5	23.16	23.19	23.09
		3	0	22.94	22.93	22.90			3	0	23.12	23.13	23.06
		3	3	22.93	22.94	22.93			3	3	23.05	23.12	23.09
		5	0	22.94	22.91	22.91			5	0	23.00	23.03	22.95

9. Test Results

9.1 Test Results Summary

SAR MEASUREMENT									
Ambient Temperature (°C): 23.4 ±2					Relative Humidity (%): 54%				
Liquid Temperature (°C): 22.1±2					Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: WLAN2.4GHz_802.11b-1M									
Front	5	1	2412	12.70	13	98	0.198	0.216	
Front	5	6	2437	12.64	13	98	0.199	0.221	
Front	5	11	2462	12.50	13	98	0.233	0.267	7
Left-side	5	1	2412	12.70	13	98	0.023	0.025	
Right-side	5	1	2412	12.70	13	98	0.029	0.032	
Test Mode: Bluetooth_BLE-1M									
Front	5	0	2402	4.39	4.5	98	0.022	0.023	
Front	5	19	2440	3.56	4.5	98	0.025	0.031	
Front	5	39	2480	2.69	4.5	98	0.033	0.051	18
Left-side	5	0	2402	4.39	4.5	98	0.006	0.006	
Right-side	5	0	2402	4.39	4.5	98	0.009	0.010	

Note:

- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required.
- 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 in that exposure configuration.

SAR MEASUREMENT											
Ambient Temperature (°C): 22.9±2							Relative Humidity (%): 52%				
Liquid Temperature (°C): 21.8±2							Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: LTE Band 2_20M_QPSK											
Front	5	1	0	18700	1860	23.34	24	-	0.306	0.356	
Front	5	1	0	18900	1880	23.37	24	-	0.361	0.417	1
Front	5	1	0	19100	1900	23.31	24	-	0.295	0.346	
Front	5	3	0	18900	1880	23.32	24	-	0.356	0.416	
Left-side	5	1	0	18900	1880	23.37	24	-	0.027	0.031	
Right-side	5	1	0	18900	1880	23.37	24	-	0.041	0.047	

Note:

- When the reported SAR of the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channels.

SAR MEASUREMENT											
Ambient Temperature (°C): 22.6±2							Relative Humidity (%): 52%				
Liquid Temperature (°C): 21.9±2							Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: LTE Band 12_10M_QPSK											
Front	5	1	0	23060	704	23.24	24	-	0.204	0.243	
Front	5	1	0	23095	707.5	23.28	24	-	0.226	0.267	3
Front	5	1	0	23130	711	23.19	24	-	0.195	0.235	
Front	5	3	0	23095	707.5	23.25	24	-	0.218	0.259	
Left-side	5	1	0	23095	707.5	23.28	24	-	0.059	0.070	
Right-side	5	1	0	23095	707.5	23.28	24	-	0.031	0.037	

Note:

- When the reported SAR of the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channels.

SAR MEASUREMENT											
Ambient Temperature (°C): 23.3±2							Relative Humidity (%): 54%				
Liquid Temperature (°C): 22.1±2							Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: LTE Band 66_20M_QPSK											
Front	5	1	0	132072	1720	23.26	24	-	0.347	0.411	
Front	5	1	0	132322	1745	23.27	24	-	0.414	0.490	4
Front	5	1	0	132572	1770	23.23	24	-	0.381	0.455	
Front	5	3	0	132322	1745	23.24	24	-	0.405	0.482	
Left-side	5	1	0	132322	1745	23.27	24	-	0.040	0.047	
Right-side	5	1	0	132322	1745	23.27	24	-	0.052	0.062	

Note:

1. When the reported SAR of the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channels.
2. LTE Band 4 (1710-1755 MHz) is covered by LTE Band 66 (1710-1780 MHz).

9.2 Simultaneous Transmission

Simultaneous Transmission Configurations	
1	WWAN + Bluetooth
2	WLAN 2.4 GHz + Bluetooth

9.2.1 Simultaneous transmission test exclusion considerations

Test Position	Worst Case WWAN Band	1	2	3	1 + 3	2 + 3
		WWAN (W/kg)	WLAN2.4GHz (W/kg)	Bluetooth (W/kg)	Σ 1-g SAR	Σ 1-g SAR
Front at 5 mm	LTE Band 66	0.490	0.267	0.051	0.541	0.318
Left-side at 5 mm	LTE Band 12	0.070	0.025	0.006	0.076	0.031
Right-side at 5 mm	LTE Band 66	0.062	0.032	0.010	0.072	0.042

When the sum of SAR is larger than the limit, The ratio is determined by $(SAR1 + SAR2)^{1.5/R_i}$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

Appendix

Appendix A. System Check Data

Appendix B. Highest measurement Data

Appendix C. Test Setup Photographs

Appendix D. Probe Calibration Data

Appendix E. Dipole Calibration Data

Appendix F. Product Photos-Please refer to the file: 2620024R-Product Photos