



FCC SAR TEST REPORT

Report No.: STS2203018H01

Issued for

TickTalk Tech LLC

565 W Lambert Rd, Unit B, Brea, CA 92821

Product Name:	TickTalk 4 Kids Smartwatch
Brand Name:	TickTalk
Model Name:	TickTalk 4
Series Model:	N/A
FCC ID:	2AS8N-TT4
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2013
Max. Report SAR:	Front of face: 0.917W/kg (1g)
	Wrist: 1.074W/kg(10g)

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ShenZhen STS Test Services Co.,Ltd.

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Test Report Certification

Applicant's name : TickTalk Tech LLC

Address : 565 W Lambert Rd, Unit B, Brea, CA 92821

Manufacture's Name : Famous Works Electronics (Shanghai) Co., Ltd

Address : Rm715, 7th Floor, NO.339 North Nu Jiang Rd, Shanghai, China.

Product description

Product name : TickTalk 4 Kids Smartwatch

Brand name : TickTalk

Model name : TickTalk 4

Series Model : N/A

Standards : ANSI/IEEE Std. C95.1-1992
FCC 47 CFR Part 2 (2.1093)
IEEE 1528: 2013

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Date of Test :

Date (s) of performance of tests : 07 Mar. 2022~ 08 Mar. 2022

Date of Issue : 11 Mar. 2022

Test Result : **Pass**

Testing Engineer :

Shi fan-long

((Shifan. Long))

Technical Manager :

Sean She

((Sean she))

Authorized Signatory :

Bovey Yang

((Bovey Yang))





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	11 Mar. 2022	STS2203018H01	ALL	Initial Issue





1. General Information

Environmental evaluation measurements of specific absorption rate (SAR) distributions in emulated human head and body tissues exposed to radio frequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).

1.1 EUT Description

Product Name	TickTalk 4 Kids Smartwatch			
Brand Name	TickTalk			
Model Name	TickTalk 4			
Series Model	N/A			
Model Difference	N/A			
Battery	Rated Voltage: 3.87V Capacity: 500mA			
Device Category	Portable			
Product stage	Production unit			
Exposure Environment	General Population / Uncontrolled			
IMEI	355126870178690			
Hardware Version	N/A			
Software Version	N/A			
Frequency Range	LTE Band 2: 1850MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699MHz ~ 716 MHz LTE Band 17: 700 MHz ~ 720 MHz WLAN 802.11b/g/n20: 2412 MHz ~ 2462 MHz WLAN 802.11n40: 2422 MHz ~ 2452 MHz WLAN 802.11a/n20/n40: 5150 ~ 5250 MHz BLE: 2402 MHz to 2480 MHz			
Max. Reported SAR	Band	Mode	Front of face-1g (W/kg)	Wrist-10g (W/kg)
	PCT	LTE Band 2	0.546	0.827
	PCT	LTE Band 4	0.917	1.074
	PCT	LTE Band 5	0.064	0.103
	PCT	LTE Band 7	0.236	0.303
	PCT	LTE Band 12	0.318	0.424
	PCT	LTE Band 17	0.324	0.390
	DTS	2.4G WLAN	0.464	0.804
	NII	5.2G WLAN	0.030	0.083
			DTS	BLE
Sum SAR			1.381	1.878
Limit(W/kg)			1.6	4
FCC Equipment Class	PCS Licensed Transmitter worn on body (PCT) Digital Transmission System (DTS) Unlicensed National Information Infrastructure(NII)			
Operating Mode	LTE:QPSK,16QAM WLAN: 802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g/a/n(OFDM):BPSK,QPSK,16-QAM,64-QAM BLE: GFSK			
Antenna Specification	LTE: PIFA Antenna WLAN/BLE: PIFA Antenna			



SIM Card	Support single card
Note: 1、 The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power	

1.2 Test Environment

Ambient conditions in the SAR laboratory:

Items	Required
Temperature (°C)	18-25
Humidity (%RH)	30-70

1.3 Test Factory

SHENZHEN STS TEST SERVICES CO.,LTD.

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A

A2LA Certificate No.: 4338.01



2. Test Standards And Limits

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D04 v01	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
5	FCC KDB 865664 D01v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
7	FCC KDB 941225 D05 v02r05	SAR for LTE Devices
8	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
9	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

(A). Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

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

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

Note: Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Population/Uncontrolled Environments:

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

Occupational/Controlled Environments:

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

NOTE

GENERAL POPULATION/UNCONTROLLED EXPOSURE

PARTIAL BODY LIMIT

1.6 W/kg(1g)

PARTIAL WRIST LIMIT

4.0 W/kg(10g)

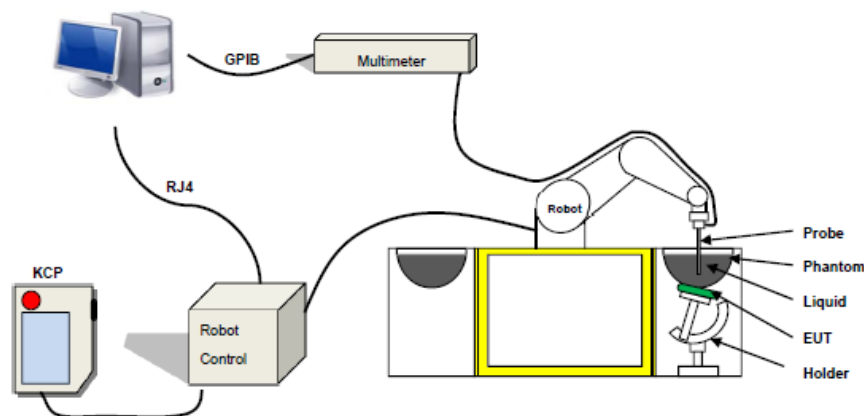
3.1 Definition Of Specific Absorption Rate (SAR)

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 is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

MVG SAR System Diagram:



- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 07/21 EPGO352 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 150 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 1-MVG COMOSAR Dosimetric E field Dipole

3.2.2 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

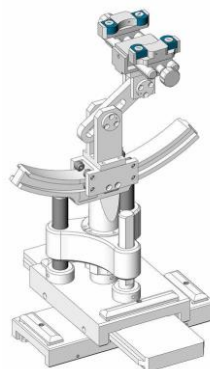


Figure-SN 32/14 SAM115



Figure-SN 32/14 SAM116

3.2.3 Device Holder



The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.



4. Tissue Simulating Liquids

4.1 Simulating Liquids Parameter Check

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 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 and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Head Tissue

Frequency (MHz)	cellulose %	DGBE %	HEC %	NaCl %	Preventol %	Sugar %	X100 %	Water %	Conductivity σ	Permittivity ϵ_r
750	0.2	/	/	1.4	0.2	57.0	/	41.1	0.89	41.9
835	0.2	/	/	1.4	0.2	57.9	/	40.3	0.90	41.5
900	0.2	/	/	1.4	0.2	57.9	/	40.3	0.97	41.5
1800	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
1900	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
2000	/	44.5	/	0.3	/	/	/	55.2	1.4	40.0
2450	/	44.9	/	0.1	/	/	/	55.0	1.80	39.2
2600	/	45.0	/	0.1	/	/	/	54.9	1.96	39.0

Body Tissue

Frequency (MHz)	cellulose %	DGBE %	HEC %	NaCl %	Preventol %	Sugar %	X100 %	Water %	Conductivity σ	Permittivity ϵ_r
750	0.2	/	/	0.9	0.1	47.2	/	51.7	0.96	55.5
835	0.2	/	/	0.9	0.1	48.2	/	50.8	0.97	55.2
900	0.2	/	/	0.9	0.1	48.2	/	50.8	1.05	55.0
1800	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
1900	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
2000	/	29.4	/	0.4	/	/	/	70.2	1.52	53.3
2450	/	31.3	/	0.1	/	/	/	68.6	1.95	52.7
2600	/	31.7	/	0.1	/	/	/	68.2	2.16	52.3

Tissue dielectric parameters for head and body phantoms				
Frequency	ϵ_r		σ S/m	
	Head	Body	Head	Body
300	45.3	58.2	0.87	0.92
450	43.5	56.7	0.87	0.94
835	41.5	55.2	0.90	0.97
900	41.5	55.0	0.97	1.05
1450	40.5	54.0	1.20	1.30
1800	40.0	53.3	1.40	1.52
1900	40.0	53.3	1.40	1.52
2450	39.2	52.7	1.80	1.95
3000	38.5	52.0	2.40	2.73
5800	35.3	48.2	5.27	6.00

**LIQUID MEASUREMENT RESULTS**

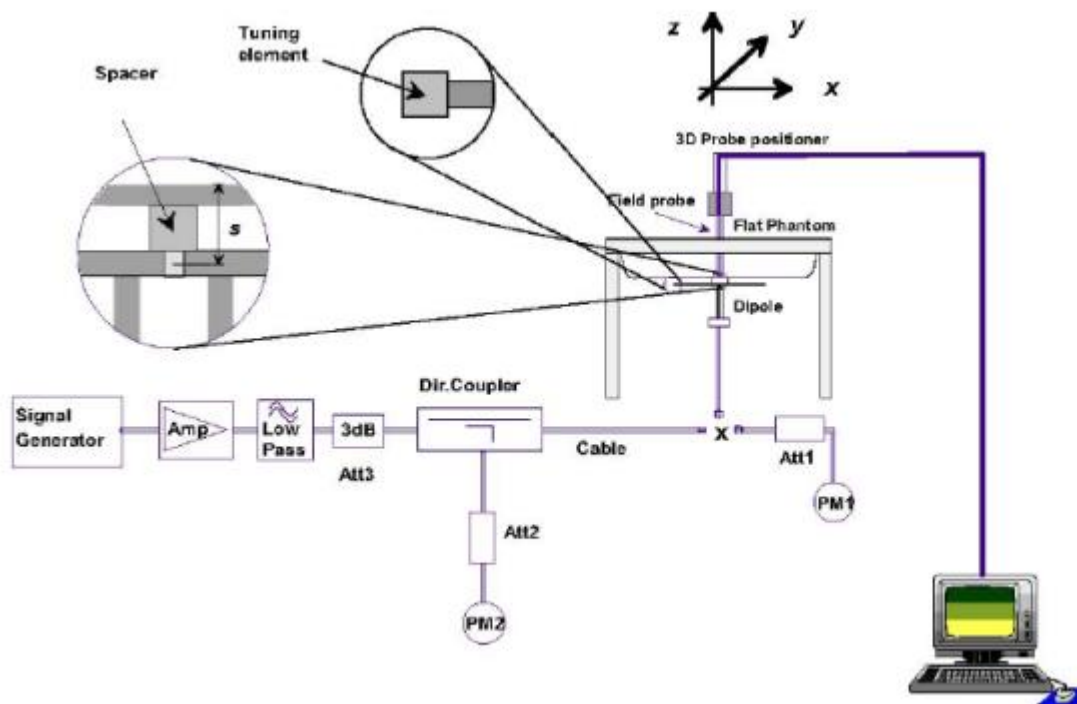
Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency	Temp. [°C]					
2022/03/07	20.2	51	704 MHz	19.9	Permittivity	42.15	42.13	-0.04	±5
					Conductivity	0.89	0.88	-0.50	±5
2022/03/07	23.8	57	709 MHz	23.5	Permittivity	42.12	42.95	1.96	±5
					Conductivity	0.89	0.89	0.25	±5
2022/03/07	22.8	43	750 MHz	22.5	Permittivity	41.90	41.91	0.02	±5
					Conductivity	0.89	0.87	-2.25	±5
2022/03/07	23.3	60	835 MHz	23.0	Permittivity	41.50	42.53	2.49	±5
					Conductivity	0.90	0.88	-2.39	±5
2022/03/07	22.7	40	836.5 MHz	22.4	Permittivity	41.49	40.46	-2.48	±5
					Conductivity	0.90	0.90	0.26	±5
2022/03/07	20.5	40	1720 MHz	20.2	Permittivity	40.11	40.67	1.38	±5
					Conductivity	1.35	1.30	-3.82	±5
2022/03/07	20.1	59	1732.5 MHz	19.8	Permittivity	40.10	40.51	1.04	±5
					Conductivity	1.36	1.39	2.33	±5
2022/03/07	23.4	41	1745 MHz	23.0	Permittivity	40.08	39.89	-0.46	±5
					Conductivity	1.37	1.40	2.56	±5
2022/03/07	20.6	51	1800 MHz	20.4	Permittivity	40.00	40.20	0.49	±5
					Conductivity	1.40	1.48	5.83	±5
2022/03/08	23.9	46	1860 MHz	23.7	Permittivity	40.00	40.47	1.18	±5
					Conductivity	1.40	1.37	-2.15	±5
2022/03/08	22.3	55	1900 MHz	22.0	Permittivity	40.00	41.06	2.66	±5
					Conductivity	1.40	1.36	-2.92	±5
2022/03/08	20.5	59	2437 MHz	20.2	Permittivity	39.22	38.99	-0.10	±5
					Conductivity	1.79	1.77	1.84	±5
2022/03/08	21.2	59	2440 MHz	21.0	Permittivity	39.21	39.62	1.05	±5
					Conductivity	1.79	1.79	0.00	±5
2022/03/08	21.4	59	2450 MHz	21.2	Permittivity	39.20	39.02	-0.45	±5
					Conductivity	1.80	1.83	1.84	±5
2022/03/08	20.5	55	2510 MHz	20.2	Permittivity	39.12	38.80	-0.82	±5
					Conductivity	1.86	1.92	2.93	±5
2022/03/08	22.7	41	2600 MHz	22.3	Permittivity	39.00	40.01	2.58	±5
					Conductivity	1.96	1.93	-1.78	±5
2022/03/08	20.1	57	5200 MHz	19.8	Permittivity	36.00	36.77	2.14	±5
					Conductivity	4.66	4.51	-3.33	±5
2022/03/08	20.8	41	5240 MHz	20.6	Permittivity	35.96	35.81	-0.41	±5
					Conductivity	4.70	4.63	-1.43	±5

5. SAR System Validation

5.1 Validation System

Each MVG system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the MVG software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder.

The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system validation setup is shown as below.



5.2 Validation Result

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of 10 %.

Date	Freq.	Power	Tested Value	Normalized SAR	Target SAR	Tolerance	Limit
	(MHz)	(mW)	(W/Kg)	(W/kg)	1g(W/kg)	(%)	(%)
2022/03/07	750	100	0.822	8.22	8.82	-6.80	10
2022/03/07	835	100	0.967	9.67	9.63	0.42	10
2022/03/07	1800	100	3.739	37.39	38.31	-2.40	10
2022/03/08	1900	100	4.037	40.37	39.84	1.33	10
2022/03/08	2450	100	5.230	52.30	54.70	-4.39	10
2022/03/08	2600	100	5.598	55.98	56.19	-0.37	10
2022/03/08	5200	100	15.418	154.18	163.88	-5.92	10

Note:

1. The tolerance limit of System validation $\pm 10\%$.
2. The dipole input power (forward power) was 100 mW.
3. The results are normalized to 1 W input power.



6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps:

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface.
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

Area Scan& Zoom Scan:

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r01 quoted below.

When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

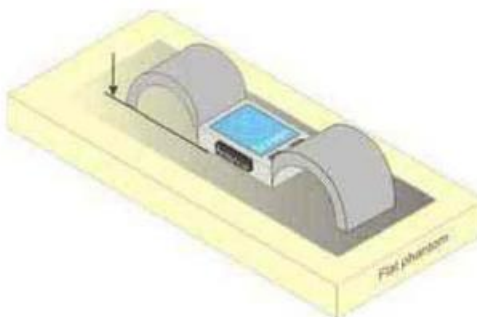
7. EUT Test Position

This EUT was tested in Front Face and Rear Face.

Limb-worn Position Conditions

Transmitters that are built-in within a wrist watch or similar wrist-worn devices typically operate in speaker mode for voice communication, with the device worn on the wrist and positioned next to the mouth. Next to the mouth exposure requires 1-g SAR and the wrist-worn condition requires 10-g extremity SAR

(1) Next to the mouth use is evaluated with the front of the device positioned at 10 mm from a flat phantom filled with head tissue-equivalent medium



Test position for limb-worn devices



8 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Uncertainty Component	Tol. (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System								
Probe calibration	5.86	N	1	1	1	5.86	5.86	∞
Axial Isotropy	0.16	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	0.07	0.07	∞
Hemispherical Isotropy	1.06	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	0.43	0.43	∞
Boundary effect	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	1.27	R	$\sqrt{3}$	1	1	0.73	0.73	∞
System detection limits	1.23	R	$\sqrt{3}$	1	1	0.71	0.71	∞
Modulation response	3.6	R	$\sqrt{3}$	1	1	3.60	3.60	∞
Readout Electronics	0.28	N	1	1	1	0.28	0.28	∞
Response Time	0.19	R	$\sqrt{3}$	1	1	0.11	0.11	∞
Integration Time	1.47	R	$\sqrt{3}$	1	1	0.85	0.85	∞
RF ambient conditions-Noise	3.5	R	$\sqrt{3}$	1	1	2.02	2.02	∞
RF ambient conditions-reflections	3.2	R	$\sqrt{3}$	1	1	1.85	1.85	∞
Probe positioner mechanical tolerance	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Post-processing	2.3	R	$\sqrt{3}$	1	1	1.33	1.33	∞
Test sample Related								
Test sample positioning	3.1	N	1	1	1	3.10	3.10	∞
Device holder uncertainty	3.8	N	1	1	1	3.80	3.80	∞
SAR drift measurement	4.8	R	$\sqrt{3}$	1	1	2.77	2.77	∞
SAR scaling	2	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and tissue parameters								
Phantom uncertainty (shape and thickness uncertainty)	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.95	1.78	∞
Liquid conductivity (measured)	4	N	1	0.78	0.71	0.92	1.04	M
Liquid permittivity (temperature uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	1.95	1.78	∞
Liquid permittivity (measured)	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty		RSS				10.60	10.51	
Expanded Uncertainty (95% Confidence interval)		K=2				21.21	21.03	



9. Conducted Power Measurement

9.1 Test Result

2.4G WLAN

2.4GWIFI				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
802.11b	1	2412	21.06	127.64
	6	2437	22.82	191.43
	11	2462	21.91	155.24
802.11g	1	2412	19.56	90.36
	6	2437	22.6	181.97
	11	2462	21.49	140.93
802.11 n-HT20	1	2412	18.78	75.51
	6	2437	22.07	161.06
	11	2462	21.08	128.23
802.11 n-HT40	3	2422	21.06	127.64
	6	2437	21.79	151.01
	9	2452	21.5	141.25

5.2G WLAN

5.2G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	36	5180	13.05	20.18
	40	5200	12.71	18.66
	48	5240	14.5	28.18
802.11 n-HT20	36	5180	10.89	12.27
	40	5200	11.07	12.79
	48	5240	11.63	14.55
802.11 n-HT40	38	5190	11.06	12.76
	46	5230	13.91	24.60

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	4.81	3.03
	19	2440	6.79	4.78
	39	2480	4.19	2.62



LTE Conducted Power

General Note:

1. Anritsu CMW500 base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05, 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.
4. Per KDB 941225 D05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05, 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 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.
6. Per KDB 941225 D05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.





LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.61	20.92	20.83
1.4	1	2		21.75	21.05	20.98
1.4	1	5		21.61	20.93	20.84
1.4	3	0		21.12	20.99	20.87
1.4	3	1		21.14	20.97	20.92
1.4	3	2		21.12	20.94	20.85
1.4	6	0		20.22	19.99	19.93
1.4	1	0	16-QAM	20.11	20	19.8
1.4	1	2		20.19	20.11	19.93
1.4	1	5		20.08	19.98	19.85
1.4	3	0		20.25	19.98	19.82
1.4	3	1		20.28	19.97	19.8
1.4	3	2		20.27	19.89	19.79
1.4	6	0		19.17	19.01	18.78
3	1	0	QPSK	21.17	20.98	20.87
3	1	7		21.38	21.22	21.15
3	1	14		21.1	20.88	20.95
3	8	0		20.14	19.97	19.86
3	8	4		20.12	19.99	19.91
3	8	7		20.08	19.91	19.85
3	15	0		20.02	19.89	19.82
3	1	0	16-QAM	20.12	20.01	19.87
3	1	7		20.31	20.25	20.18
3	1	14		20.07	19.99	19.92
3	8	0		19.04	18.88	18.77
3	8	4		19.04	18.85	18.81
3	8	7		19.01	18.81	18.76
3	15	0		19	18.77	18.78



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.13	20.95	20.73
5	1	12		21.19	21	20.91
5	1	24		21.06	20.8	20.82
5	12	0		20.02	19.93	19.8
5	12	6		20.09	19.92	19.8
5	12	11		20.03	19.79	19.72
5	25	0		20.02	19.89	19.76
5	1	0	16-QAM	20.39	20.07	19.83
5	1	12		20.47	20.11	19.99
5	1	24		20.33	19.93	19.92
5	12	0		19	18.96	18.66
5	12	6		19.05	18.93	18.7
5	12	11		18.99	18.82	18.6
5	25	0		19	18.9	18.69
10	1	0	QPSK	21.13	21.12	20.82
10	1	24		21.3	21.13	21.06
10	1	49		21.16	20.82	20.99
10	25	0		20.06	20.14	19.78
10	25	12		20.06	20	19.86
10	25	24		20.14	19.82	19.75
10	50	0		20.06	19.96	19.74
10	1	0	16-QAM	20.06	20.16	19.84
10	1	24		20.21	20.23	20.05
10	1	49		20.07	19.84	19.98
10	25	0		19.03	18.99	18.75
10	25	12		19.07	18.87	18.81
10	25	24		19.13	18.67	18.71
10	50	0		19.02	18.87	18.7



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.1	21.11	20.77
15	1	37		21.22	21	20.87
15	1	74		21.08	20.71	20.91
15	36	0		20.15	20.21	19.72
15	36	18		20.2	20.04	19.87
15	36	39		20.29	19.83	19.87
15	75	0		20.22	20.06	19.8
15	1	0	16-QAM	20.16	20.17	19.78
15	1	38		20.24	20.1	19.89
15	1	75		20.11	19.78	19.91
15	36	0		19.08	19.17	18.71
15	36	18		19.11	19.02	18.86
15	36	39		19.22	18.82	18.81
15	75	0		19.1	18.95	18.75
20	1	0	QPSK	21.04	21.03	20.62
20	1	49		21.38	21.15	20.97
20	1	99		21.04	20.55	20.79
20	50	0		19.97	20.11	19.53
20	50	24		20.13	20	19.74
20	50	49		20.19	19.62	19.67
20	100	0		20.1	19.91	19.63
20	1	0	16-QAM	19.81	20.1	19.71
20	1	49		20.24	20.26	20.06
20	1	99		19.85	19.63	19.88
20	50	0		18.88	19.09	18.47
20	50	24		19.06	18.95	18.69
20	50	49		19.13	18.55	18.64
20	100	0		19.02	18.87	18.52



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.71	20.96	21.56
1.4	1	2		21.84	21.12	21.44
1.4	1	5		21.57	20.96	21.34
1.4	3	0		21.27	21.05	21.25
1.4	3	1		21.18	21.04	21.41
1.4	3	2		21.17	21.01	21.35
1.4	6	0		20.26	20.04	20.31
1.4	1	0	16-QAM	20.13	20.02	20.32
1.4	1	2		20.26	20.15	20.58
1.4	1	5		20.13	20.01	20.43
1.4	3	0		20.34	20.04	20.55
1.4	3	1		20.34	20.05	20.48
1.4	3	2		20.33	20	20.52
1.4	6	0		19.28	19.15	19.46
3	1	0	QPSK	21.72	21.16	21.72
3	1	7		21.98	21.34	21.97
3	1	14		21.65	21.07	21.66
3	8	0		20.66	20.04	20.68
3	8	4		20.64	20.08	20.7
3	8	7		20.63	20.2	20.68
3	15	0		20.29	20	20.66
3	1	0	16-QAM	20.17	20.24	20.73
3	1	7		20.41	20.46	20.92
3	1	14		20.11	20.19	20.69
3	8	0		19.16	19.19	19.62
3	8	4		19.18	19.3	19.63
3	8	7		19.16	19.21	19.58
3	15	0		19.24	19.25	19.64



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.68	21.42	21.66
5	1	12		21.78	21.56	21.74
5	1	24		21.61	21.45	21.63
5	12	0		20.58	20.37	20.61
5	12	6		20.64	20.48	20.7
5	12	11		20.58	20.41	20.62
5	25	0		20.6	20.37	20.63
5	1	0	16-QAM	20.99	20.49	20.76
5	1	12		21.08	20.65	20.85
5	1	24		20.93	20.57	20.74
5	12	0		19.6	19.42	19.49
5	12	6		19.66	19.52	19.58
5	12	11		19.59	19.45	19.5
5	25	0		19.56	19.42	19.59
10	1	0	QPSK	21.72	21.45	21.71
10	1	24		21.82	21.62	21.88
10	1	49		21.57	21.51	21.69
10	25	0		20.58	20.37	20.64
10	25	12		20.6	20.43	20.66
10	25	24		20.54	20.45	20.62
10	50	0		20.53	20.39	20.64
10	1	0	16-QAM	20.67	20.48	20.7
10	1	24		20.76	20.59	20.83
10	1	49		20.51	20.57	20.68
10	25	0		19.6	19.26	19.64
10	25	12		19.59	19.31	19.66
10	25	24		19.53	19.32	19.62
10	50	0		19.47	19.31	19.6



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK		21.38	21.6
15	1	37		21.63	21.5	21.76
15	1	74		21.35	21.46	21.62
15	36	0		20.62	20.46	20.69
15	36	18		20.64	20.49	20.76
15	36	39		20.54	20.53	20.69
15	75	0		20.62	20.49	20.71
15	1	0	16-QAM	20.67	20.42	20.58
15	1	38		20.67	20.53	20.76
15	1	75		20.4	20.52	20.63
15	36	0		19.6	19.43	19.67
15	36	18		19.6	19.47	19.72
15	36	39		19.51	19.51	19.68
15	75	0		19.53	19.41	19.66
20	1	0	QPSK	21.54	21.27	21.36
20	1	49		21.74	21.6	21.81
20	1	99		21.28	21.38	21.47
20	50	0		20.49	20.38	20.54
20	50	24		20.52	20.42	20.63
20	50	49		20.36	20.42	20.6
20	100	0		20.47	20.39	20.57
20	1	0	16-QAM	20.33	20.36	20.47
20	1	49		20.5	20.71	20.91
20	1	99		20.08	20.49	20.62
20	50	0		19.45	19.33	19.53
20	50	24		19.49	19.4	19.6
20	50	49		19.34	19.39	19.57
20	100	0		19.44	19.37	19.51



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.81	21.96	21.8
1.4	1	2		21.94	22	21.96
1.4	1	5		21.79	21.83	21.75
1.4	3	0		21.92	21.92	21.91
1.4	3	1		21.88	21.96	21.84
1.4	3	2		21.91	21.9	21.88
1.4	6	0		20.86	20.89	20.87
1.4	1	0	16-QAM	20.82	20.86	20.78
1.4	1	2		20.94	20.93	20.96
1.4	1	5		20.84	20.83	20.74
1.4	3	0		21.1	20.88	21.1
1.4	3	1		21.08	20.9	21.06
1.4	3	2		21.09	20.88	21.03
1.4	6	0		19.92	19.85	19.94
3	1	0	QPSK	21.76	21.86	21.85
3	1	7		22.03	22.09	22.07
3	1	14		21.76	21.82	21.86
3	8	0		20.76	20.85	20.82
3	8	4		20.8	20.92	20.86
3	8	7		20.77	20.85	20.78
3	15	0		20.75	20.84	20.81
3	1	0	16-QAM	20.79	20.97	20.94
3	1	7		21.04	21.23	21.08
3	1	14		20.73	20.97	20.89
3	8	0		19.83	19.84	19.75
3	8	4		19.86	19.9	19.8
3	8	7		19.8	19.86	19.72
3	15	0		19.85	19.82	19.8



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.78	21.81	21.74
5	1	12		21.89	22	21.9
5	1	24		21.78	21.79	21.71
5	12	0		20.67	20.81	20.72
5	12	6		20.79	20.86	20.76
5	12	11		20.77	20.75	20.7
5	25	0		20.79	20.84	20.71
5	1	0	16-QAM	21.12	21.01	20.91
5	1	12		21.28	21.08	21.03
5	1	24		21.18	20.93	20.88
5	12	0		19.79	19.97	19.63
5	12	6		19.91	19.98	19.65
5	12	11		19.86	19.9	19.63
5	25	0		19.84	19.96	19.68
10	1	0	QPSK	21.81	21.86	21.93
10	1	24		21.91	22.02	21.95
10	1	49		21.82	21.79	21.77
10	25	0		20.75	20.89	20.86
10	25	12		20.85	20.89	20.8
10	25	24		20.86	20.81	20.73
10	50	0		20.8	20.87	20.82
10	1	0	16-QAM	20.8	20.95	20.96
10	1	24		20.89	21.06	21.02
10	1	49		20.81	20.89	20.84
10	25	0		19.83	19.84	19.86
10	25	12		19.91	19.84	19.81
10	25	24		19.91	19.78	19.77
10	50	0		19.82	19.87	19.78



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.13	20.63	19.93
5	1	12		21.24	20.3	20.05
5	1	24		21.07	20.11	19.93
5	12	0		20.05	19.11	18.98
5	12	6		20.12	19.17	19.01
5	12	11		20.07	19.09	18.99
5	25	0		20.05	19.1	18.98
5	1	0	16-QAM	20.4	19.17	19.09
5	1	12		20.5	19.3	19.2
5	1	24		20.37	19.17	19.06
5	12	0		19.08	18.13	17.94
5	12	6		19.16	18.2	17.95
5	12	11		19.12	18.15	17.89
5	25	0		19.06	18.13	17.97
10	1	0	QPSK	21.18	20.18	20.11
10	1	24		21.25	20.34	20.22
10	1	49		20.6	20.18	20.07
10	25	0		19.56	19.18	19.08
10	25	12		19.59	19.2	19.1
10	25	24		19.6	19.18	19.02
10	50	0		19.58	19.16	19.05
10	1	0	16-QAM	19.56	19.17	19.11
10	1	24		19.7	19.38	19.25
10	1	49		19.5	19.23	19.06
10	25	0		18.57	18.04	18.11
10	25	12		18.62	18.08	18.13
10	25	24		18.6	18.09	18.04
10	50	0		18.54	18.11	18.08



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.09	20.16	20.15
15	1	37		20.64	20.24	20.16
15	1	74		20.39	20.12	19.97
15	36	0		19.63	19.24	19.19
15	36	18		19.63	19.25	19.16
15	36	39		19.67	19.25	19.06
15	75	0		19.67	19.3	19.16
15	1	0	16-QAM	19.6	19.17	19.16
15	1	38		19.65	19.24	19.18
15	1	75		19.4	19.16	19
15	36	0		18.59	18.23	18.22
15	36	18		18.61	18.24	18.17
15	36	39		18.62	18.24	18.1
15	75	0		18.53	18.18	18.12
20	1	0	QPSK	20.79	19.98	20
20	1	49		20.72	20.29	20.21
20	1	99		20.2	20.01	19.78
20	50	0		19.42	19.08	19.14
20	50	24		19.48	19.17	19.11
20	50	49		19.43	19.11	18.95
20	100	0		19.42	19.11	19.05
20	1	0	16-QAM	19.22	19.08	19.15
20	1	49		19.5	19.41	19.38
20	1	99		18.97	19.15	18.96
20	50	0		18.44	18.06	18.15
20	50	24		18.49	18.16	18.12
20	50	49		18.4	18.1	17.9
20	100	0		18.39	18.12	18.02



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.63	22.36	22.55
1.4	1	2		22.71	22.33	22.71
1.4	1	5		22.54	22.35	22.48
1.4	3	0		22.59	22.65	22.54
1.4	3	1		22.6	22.66	22.53
1.4	3	2		22.58	22.61	22.5
1.4	6	0		21.68	21.69	21.65
1.4	1	0	16-QAM	21.63	21.62	21.58
1.4	1	2		21.75	21.73	21.67
1.4	1	5		21.61	21.62	21.55
1.4	3	0		21.87	21.59	21.76
1.4	3	1		21.84	21.58	21.76
1.4	3	2		21.85	21.56	21.73
1.4	6	0		20.66	20.53	20.61
3	1	0	QPSK	22.68	22.65	22.64
3	1	7		22.85	22.88	22.84
3	1	14		22.62	22.56	22.6
3	8	0		21.7	21.68	21.66
3	8	4		21.7	21.7	21.68
3	8	7		21.66	21.65	21.61
3	15	0		21.63	21.62	21.6
3	1	0	16-QAM	21.73	21.83	21.76
3	1	7		21.9	21.98	22.01
3	1	14		21.7	21.78	21.69
3	8	0		20.65	20.57	20.59
3	8	4		20.65	20.59	20.6
3	8	7		20.6	20.55	20.54
3	15	0		20.62	20.51	20.58



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.67	22.6	22.55
5	1	12		22.72	22.64	22.62
5	1	24		22.61	22.52	22.53
5	12	0		21.59	21.64	21.57
5	12	6		21.68	21.66	21.65
5	12	11		21.63	21.59	21.57
5	25	0		21.65	21.63	21.62
5	1	0	16-QAM	22.03	21.82	21.63
5	1	12		22.11	21.85	21.72
5	1	24		22.05	21.73	21.42
5	12	0		20.64	20.6	20.44
5	12	6		20.68	20.66	20.51
5	12	11		20.64	20.63	20.48
5	25	0		20.63	20.64	20.53
10	1	0	QPSK	22.61	22.61	22.64
10	1	24		22.78	22.7	22.75
10	1	49		22.53	22.51	22.58
10	25	0		21.64	21.69	21.68
10	25	12		21.66	21.65	21.65
10	25	24		21.67	21.62	21.61
10	50	0		21.62	21.64	21.65
10	1	0	16-QAM	21.63	21.76	21.76
10	1	24		21.8	21.87	21.79
10	1	49		21.53	21.71	21.66
10	25	0		20.65	20.53	20.63
10	25	12		20.65	20.53	20.6
10	25	24		20.61	20.48	20.58
10	50	0		20.54	20.55	20.56



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.69	22.54	22.56
5	1	12		22.75	22.65	22.63
5	1	24		22.61	22.47	22.15
5	12	0		21.69	21.61	21.58
5	12	6		21.7	21.66	21.62
5	12	11		21.65	21.58	21.55
5	25	0		21.67	21.64	21.59
5	1	0	16-QAM	22.03	21.78	21.24
5	1	12		22.14	21.87	21.32
5	1	24		22.01	21.62	21.21
5	12	0		20.72	20.64	20.02
5	12	6		20.71	20.7	20.49
5	12	11		20.66	20.6	20.45
5	25	0		20.63	20.65	20.48
10	1	0	QPSK	22.69	22.55	22.21
10	1	24		22.77	22.27	22.33
10	1	49		22.58	22.07	22.07
10	25	0		21.7	21.18	21.16
10	25	12		21.65	21.14	21.12
10	25	24		21.6	21.15	21.1
10	50	0		21.58	21.2	21.13
10	1	0	16-QAM	21.26	21.26	21.26
10	1	24		21.33	21.34	21.37
10	1	49		21.07	21.16	21.23
10	25	0		20.37	20.05	20.13
10	25	12		20.59	20.03	20.08
10	25	24		20.58	20.02	20.06
10	50	0		20.45	20.18	20.06

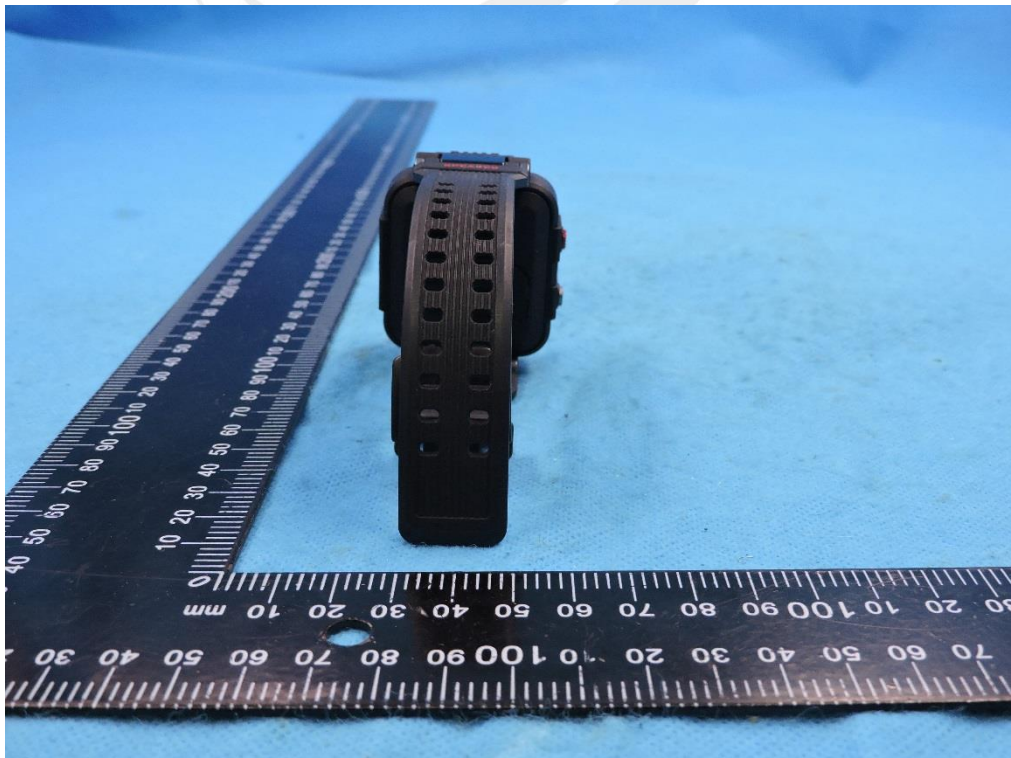
10. EUT And Test Setup Photo

10.1 EUT Photo

Front side



Back side



Top Edge



Bottom Edge



Left Edge

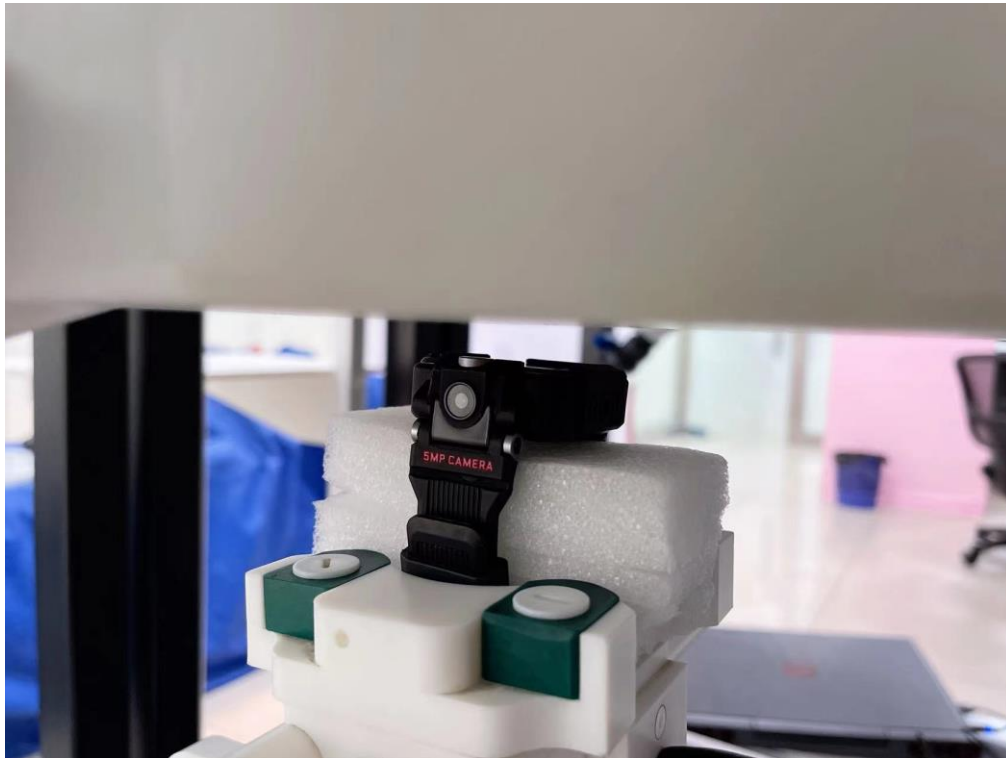


Right Edge

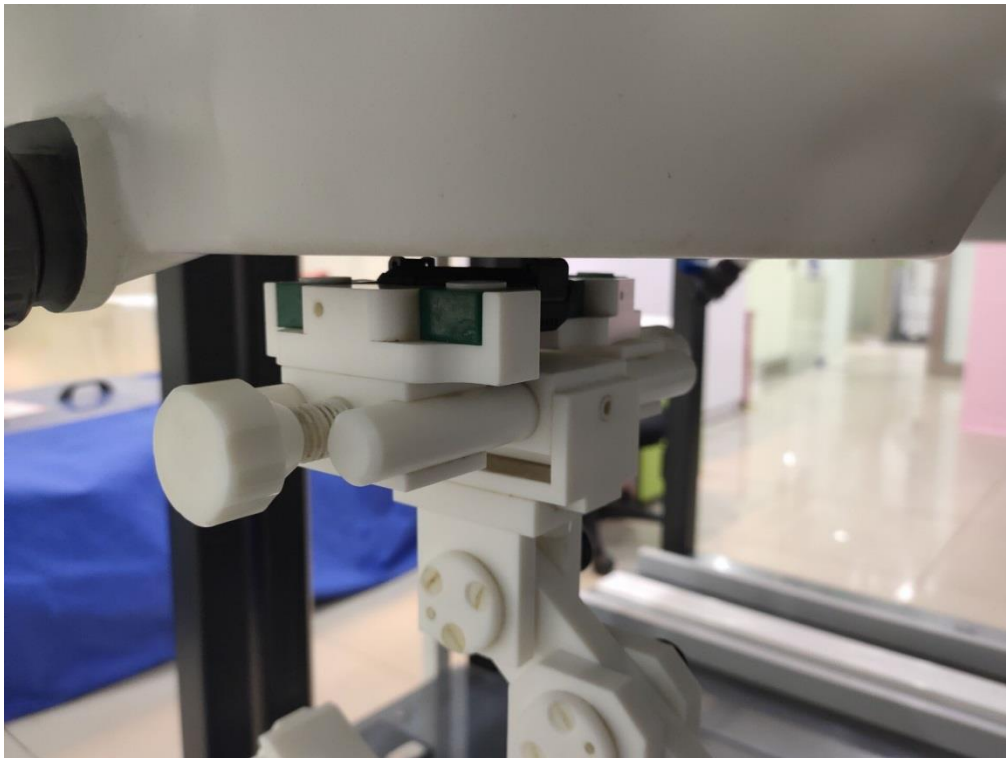


10.2 Setup Photo

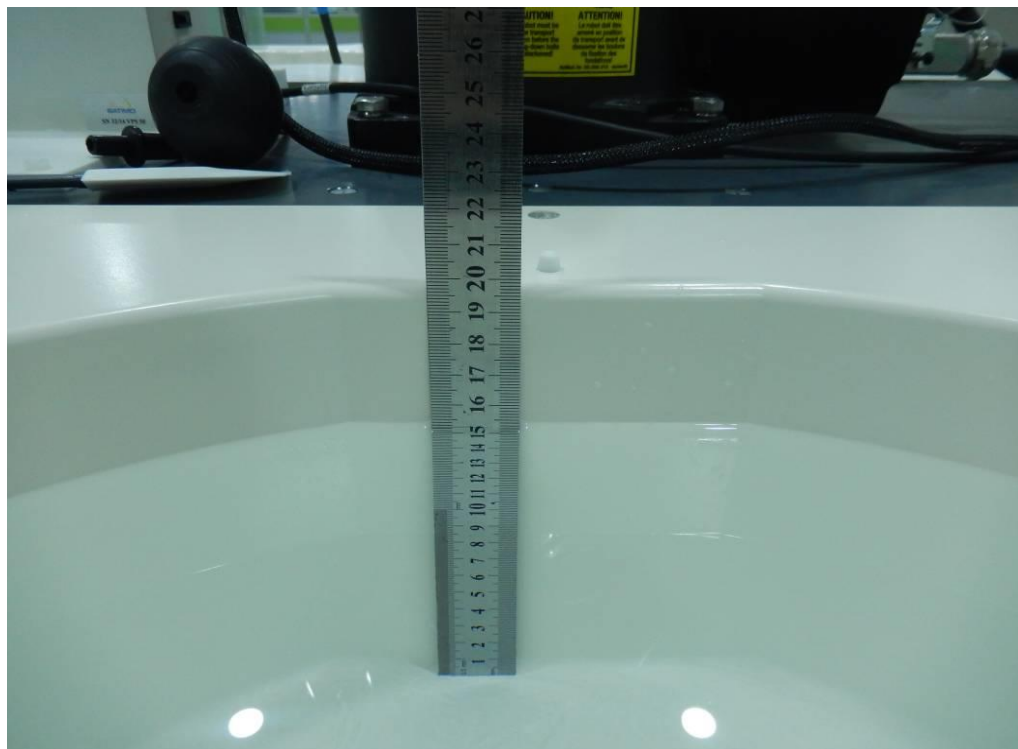
Front of face(separation distance is 10mm)



Wrist(separation distance is 0mm)



Liquid depth (15 cm)





11. SAR Result Summary

11.1 Front of face SAR

Band	BW (MHz)	Mode	RB Size	RB offset	Test Position	Fre.(MHz)	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
LTE BAND 2	20M	QPSK	1	49	Front of face	1860	0.531	-3.40	21.5	21.38	0.546	1
		QPSK	50	49	Front of face	1860	0.435	0.83	21.5	20.19	0.483	/
	1.4M	QPSK	1	2	Front of face	1850.7	0.501	1.35	22	21.75	0.531	/
		QPSK	3	1	Front of face	1850.7	0.417	0.71	22	21.14	0.508	/
LTE BAND 4	20M	QPSK	1	49	Front of face	1720	0.76	1.51	22	21.74	0.807	/
		QPSK	1	49	Front of face	1732.5	0.788	2.02	22	21.60	0.864	/
		QPSK	1	49	Front of face	1745	0.878	-2.30	22	21.81	0.917	3
		QPSK	50	24	Front of face	1745	0.702	1.57	22	20.63	0.787	/
		QPSK	100	0	Front of face	1745	0.681	0.83	22	20.57	0.781	/
LTE BAND 5	10M	QPSK	1	24	Front of face	836.5	0.057	0.04	22.5	22.02	0.064	5
		QPSK	25	12	Front of face	836.5	0.041	-0.93	22.5	20.89	0.059	/
LTE BAND 7	20M	QPSK	1	0	Front of face	2510	0.225	-1.41	21	20.79	0.236	7
		QPSK	50	24	Front of face	2510	0.183	0.57	19.5	19.48	0.184	/
	5M	QPSK	1	12	Front of face	2502.5	0.212	-3.13	21.5	21.25	0.225	/
		QPSK	12	6	Front of face	2502.5	0.165	0.02	20.5	20.05	0.183	/



LTE BAND 12	10M	QPSK	1	24	Front of face	704	0.302	0.95	23	22.78	0.318	9
		QPSK	25	0	Front of face	711	0.251	1.57	22	21.68	0.270	/
LTE BAND 17	10M	QPSK	1	24	Front of face	709	0.307	4.00	23	22.77	0.324	11
		QPSK	25	12	Front of face	709	0.247	2.51	23	21.65	0.266	/

Band	Mode	Test Position	Fre.(MHz)	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
2.4G WLAN	802.11b	Front of face	2442	0.445	1.80	23	22.82	0.464	13
5.2G WLAN	802.11a	Front of face	5240	0.027	3.42	15	14.50	0.030	15
BT	GFSK	Front of face	2440	0.019	1.60	7	6.79	0.020	17

Note:

1. The test separation of all above table is 10mm.
2. Per KDB865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg



11.2 Wrist SAR

Band	BW (MHz)	Mode	RB Size	RB offset	Test Position	Fre.(MHz)	Result 10g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
LTE BAND 2	20M	QPSK	1	49	Wrist	1860	0.804	-3.67	21.5	21.38	0.827	2
		QPSK	50	49	Wrist	1860	0.527	0.23	21.5	20.19	0.713	/
	1.4M	QPSK	1	2	Wrist	1850.7	0.751	-2.74	22	21.75	0.795	/
		QPSK	3	1	Wrist	1850.7	0.512	0.81	22	21.14	0.624	/
LTE BAND 4	20M	QPSK	1	49	Wrist	1720	0.962	0.29	22	21.74	1.021	/
		QPSK	1	49	Wrist	1732.5	0.925	-3.77	22	21.60	1.014	/
		QPSK	1	49	Wrist	1745	1.028	-3.94	22	21.81	1.074	4
		QPSK	50	49	Wrist	1745	0.715	1.75	22	20.63	0.980	/
LTE BAND 5	10M	QPSK	1	24	Wrist	836.5	0.092	0.76	22.5	22.02	0.103	6
		QPSK	25	12	Wrist	836.5	0.065	0.91	22.5	20.89	0.094	/
LTE BAND 7	20M	QPSK	1	0	Wrist	2510	0.289	1.93	21	20.79	0.303	8
		QPSK	50	24	Wrist	2510	0.127	2.67	19.5	19.48	0.128	/
	5M	QPSK	1	12	Wrist	2502.5	0.262	-3.94	21.5	21.25	0.278	/
		QPSK	12	6	Wrist	2502.5	0.114	2.30	20.5	20.05	0.126	/
LTE BAND 12	10M	QPSK	1	24	Wrist	704	0.403	0.48	23	22.78	0.424	10
		QPSK	25	0	Wrist	711	0.301	-1.70	22	21.68	0.324	/
LTE BAND 17	10M	QPSK	1	24	Wrist	709	0.37	-0.01	23	22.77	0.390	12
		QPSK	25	12	Wrist	709	0.271	-0.09	23	21.65	0.370	/

Band	Mode	Test Position	Fre.(MHz)	Result 10g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
2.4G WLAN	802.11b	Wrist	2437	0.771	3.47	23	22.82	0.804	14
5.2G WLAN	802.11a	Wrist	5240	0.074	-1.53	15	14.50	0.083	16
BT	GFSK	Wrist	2440	0.037	2.50	7	6.79	0.039	18

Note:

- The test separation of all above table is 0mm.
- Per KDB865664 D01, Repeated measurement is not required when the original highest measured SAR is <2.00 W/kg

**Repeated SAR**

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Fre. (MHz)	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
LTE BAND 4	20M	QPSK	1	49	Front of face	1720	0.751	1.27	22	21.74	0.797	/
		QPSK	1	49	Front of face	1732.5	0.772	-0.75	22	21.60	0.846	/
		QPSK	1	49	Front of face	1745	0.861	1.64	22	21.81	0.900	/

11.3 repeated SAR measurement

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Fre. (MHz)	Original Measured SAR 1g(mW/g)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(mW/g)	2nd Repeated SAR 1g	Ratio
LTE BAND 4	20M	QPSK	1	49	Front of face	1720	0.76	0.751	1.012	-	-	-
		QPSK	1	49	Front of face	1732.5	0.788	0.772	1.021	-	-	-
		QPSK	1	49	Front of face	1745	0.878	0.861	1.020	-	-	-

Note:

1. Per KDB 865664 D01,for each frequency band ,repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/Kg}$.
2. Per KDB 865664 D01,if the ratio of largest to smallest SAR for the original and first repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/Kg}$, only one repeated measurement is required.
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 $\geq 1.45\text{W/Kg}$
4. The ratio is the difference in percentage between original and repeated measured SAR.

**Simultaneous Multi-band Transmission Evaluation:**

Application Simultaneous Transmission information:

Position	Simultaneous state
Front to face	1. LTE + 2.4G /5GWLAN
	2. LTE + BT
Wrist	1. LTE + 2.4G /5GWLAN
	2. LTE + BT

NOTE:

1. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
2. Bluetooth and WLAN can't simultaneous transmission at the same time.
3. The reported SAR summation is calculated based on the same configuration and test position.

Simultaneous Mode	Position	Mode	Max. SAR	Sum SAR
			(W/kg)	(W/kg)
LTE + 2.4G WLAN	Front of face	LTE	0.917	1.381
		2.4G WLAN	0.464	
	Wrist	LTE	1.074	1.878
		2.4G WLAN	0.804	
LTE + Bluetooth	Front of face	LTE	0.917	0.937
		Bluetooth	0.020	
	Wrist	LTE	0.210	0.249
		Bluetooth	0.039	
LTE + 5G WLAN	Front of face	LTE	0.917	0.948
		5G WLAN	0.030	
	Wrist	LTE	1.074	1.157
		5G WLAN	0.083	

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna.



12. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
750MHz Dipole	MVG	SID750	SN 30/14 DIP0G750-331	2020.07.14	2023.07.13
835MHz Dipole	MVG	SID835	SN 30/14 DIP0G835-332	2020.07.14	2023.07.13
1800MHz Dipole	MVG	SID1800	SN 30/14 DIP1G800-329	2020.07.14	2023.07.13
1900MHz Dipole	MVG	SID1900	SN 30/14 DIP1G900-333	2020.07.14	2023.07.13
2450MHz Dipole	MVG	SID2450	SN 30/14 DIP2G450-335	2020.07.14	2023.07.13
2600MHz Dipole	MVG	SID2600	SN 30/14 DIP2G600-336	2020.07.14	2023.07.13
Waveguide	MVG	SWG5500	SN 13/14 WGA32	2020.07.14	2023.07.13
E-Field Probe	MVG	SSE2	SN 07/21 EPGO352	2022.02.28	2023.03.01
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2021.11.23	2022.11.22
Antenna	MVG	ANTA3	SN 07/13 ZNTA52	N/A	N/A
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom2	MVG	SAM	SN 32/14 SAM116	N/A	N/A
Phone holder	MVG	N/A	SN 32/14 MSH97	N/A	N/A
Laptop holder	MVG	N/A	SN 32/14 LSH29	N/A	N/A
Attenuator	Agilent	99899	DC-18GHz	N/A	N/A
Directional coupler	Narda	4226-20	3305	N/A	N/A
Network Analyzer	Agilent	8753ES	US38432810	2021.09.29	2022.09.28
Multi Meter	Keithley	Multi Meter 2000	4050073	2021.10.08	2022.10.07
Signal Generator	Agilent	N5182A	MY50140530	2021.09.30	2022.09.29
Wireless Communication Test Set	Agilent	8960-E5515C	MY48360751	2021.09.30	2022.09.29
Wireless Communication Test Set	R&S	CMW500	117239	2021.09.30	2022.09.29
Power Amplifier	DESAY	ZHL-42W	9638	2021.10.09	2022.10.08
Power Meter	R&S	NRP	100510	2021.09.29	2022.09.28
Power Sensor	R&S	NRP-Z11	101919	2021.09.29	2022.09.28
Temperature hygrometer	SuWei	SW-108	N/A	2021.10.09	2022.10.08
Thermograph	Elitech	RC-4	S/N EF7176501537	2021.10.09	2022.10.08
Network Analyzer	Agilent	8753ES	US38432810	2021.09.29	2022.09.28
Multi Meter	Keithley	Multi Meter 2000	4050073	2021.10.08	2022.10.07

Note:

Per KDB 865664 D01, Dipole SAR Validation Verification, STS LAB has adopted 3 years calibration intervals. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:



1. There is no physical damage on the dipole
 2. System validation with specific dipole is within 10% of calibrated value
- Return-loss in within 20% of calibrated measurement

Appendix A. System Validation Plots

System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

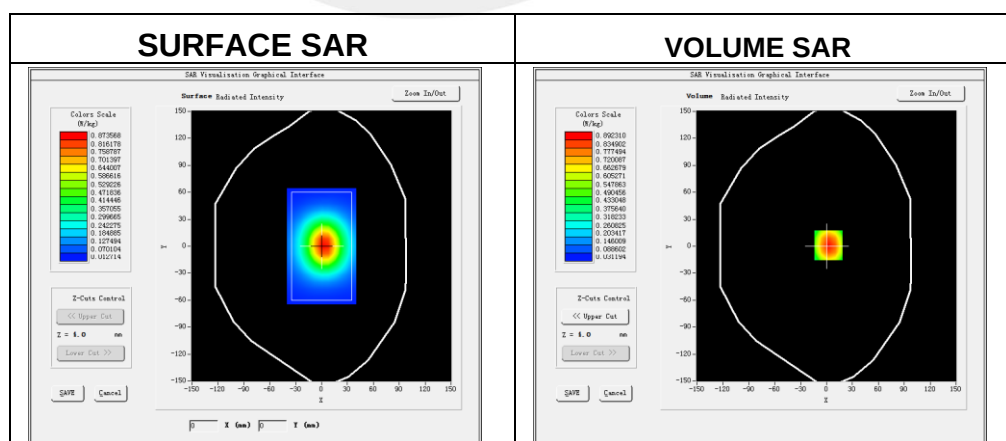
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2022-03-07

Experimental conditions

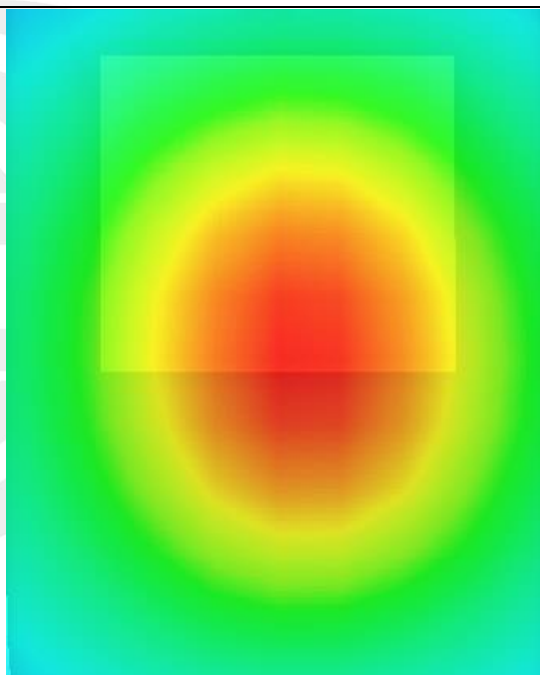
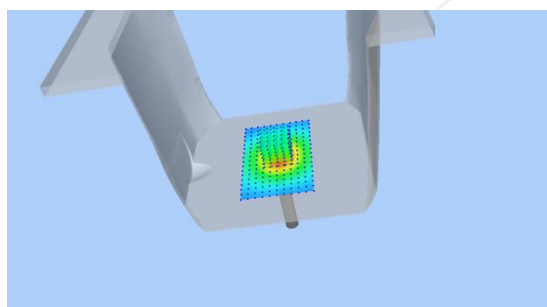
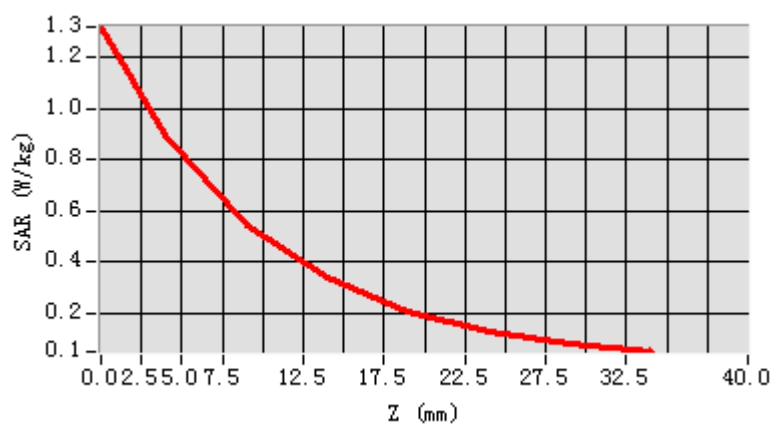
Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity	41.91
Conductivity (S/m)	0.87
Probe	SN 07/21 EPGO352
ConvF	1.43
Crest factor	1:1



Maximum location: X=2.00, Y=1.00

SAR 10g (W/Kg)	0.576480
SAR 1g (W/Kg)	0.849507

Z Axis Scan





System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

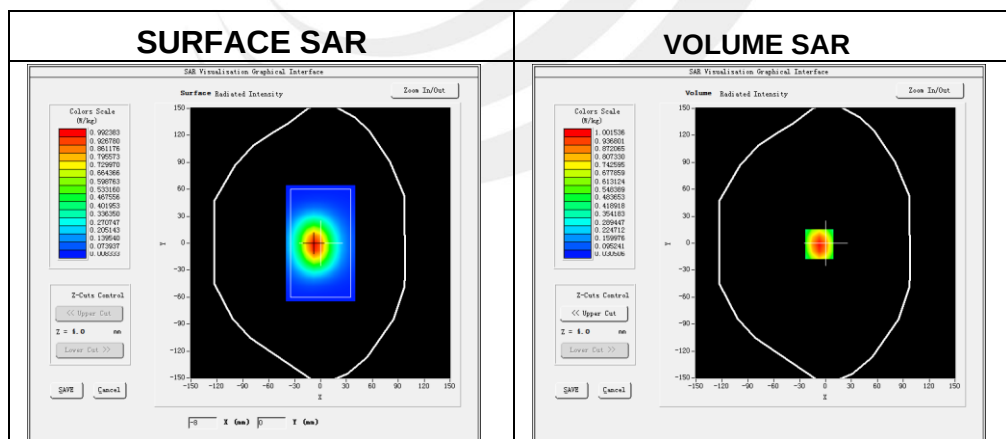
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2022-03-07

Experimental conditions

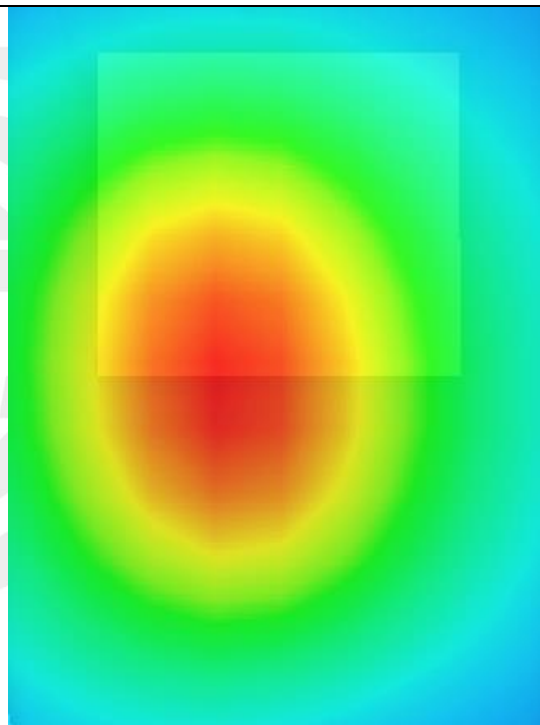
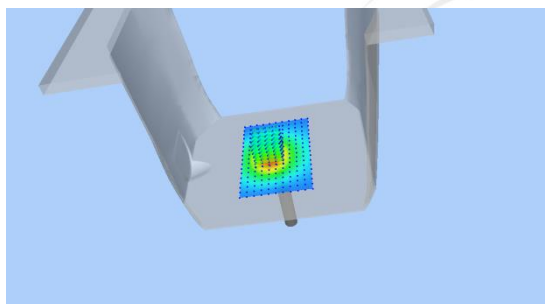
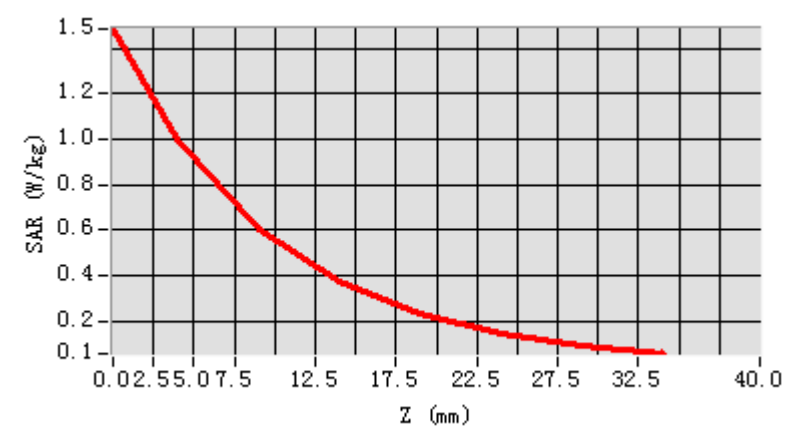
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	42.53
Conductivity (S/m)	0.88
Probe	SN 07/21 EPGO352
ConvF:	1.48
Crest factor:	1:1



Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.634206
SAR 1g (W/Kg)	0.969043

Z Axis Scan



**System Performance Check Data (1800MHz)**

Type: Phone measurement (Complete)

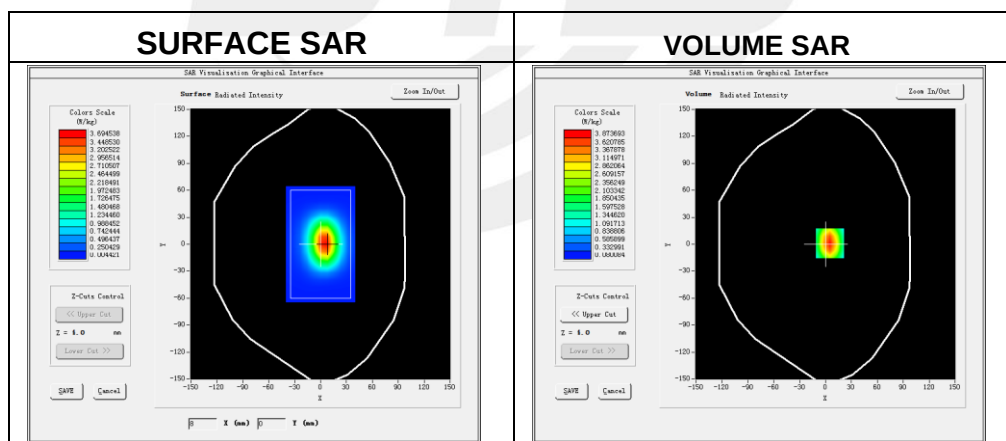
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2022-03-07

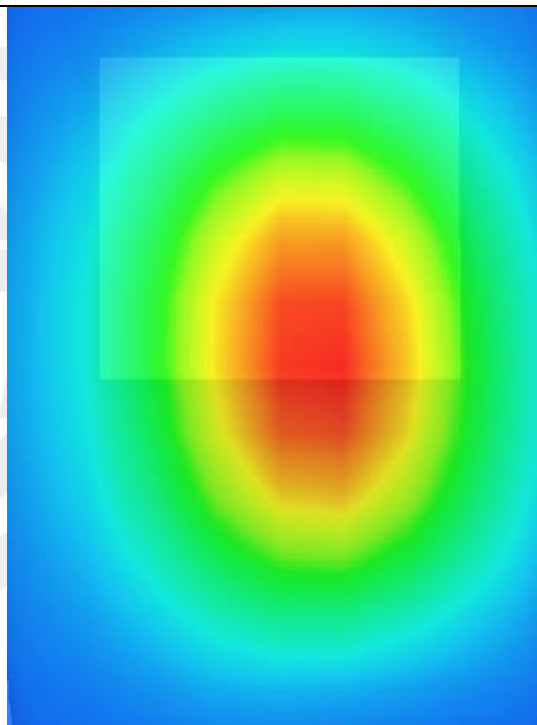
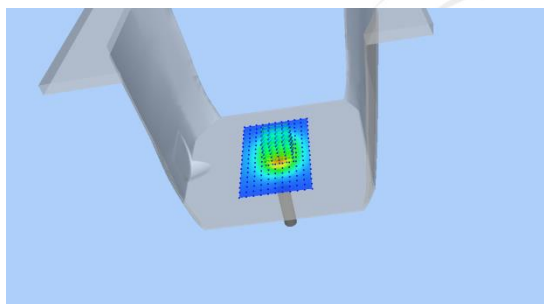
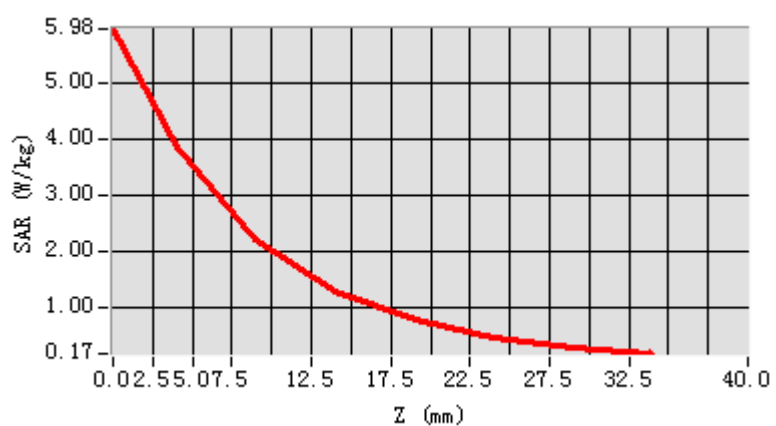
Experimental conditions.

Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	40.20
Conductivity (S/m)	1.48
Probe	SN 07/21 EPGO352
ConvF	1.60
Crest factor:	1:1

**Maximum location: X=5.00, Y=1.00**

SAR 10g (W/Kg)	1.977519
SAR 1g (W/Kg)	3.676271

Z Axis Scan



**System Performance Check Data (1900MHz)**

Type: Phone measurement (Complete)

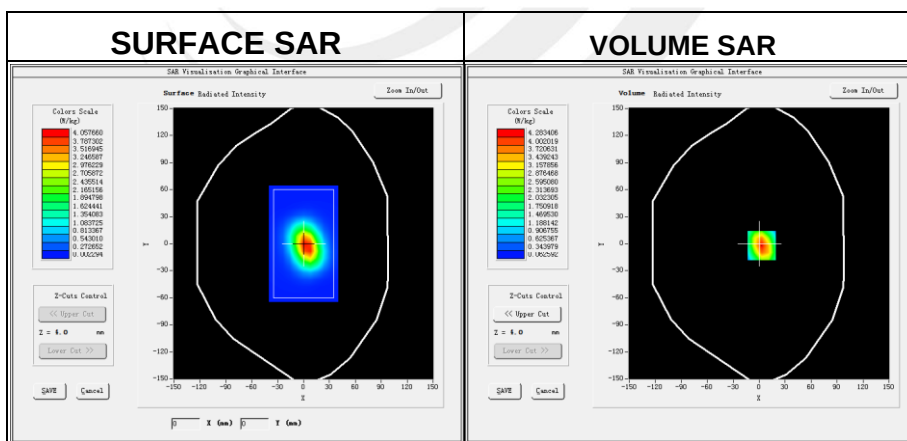
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2022-03-08

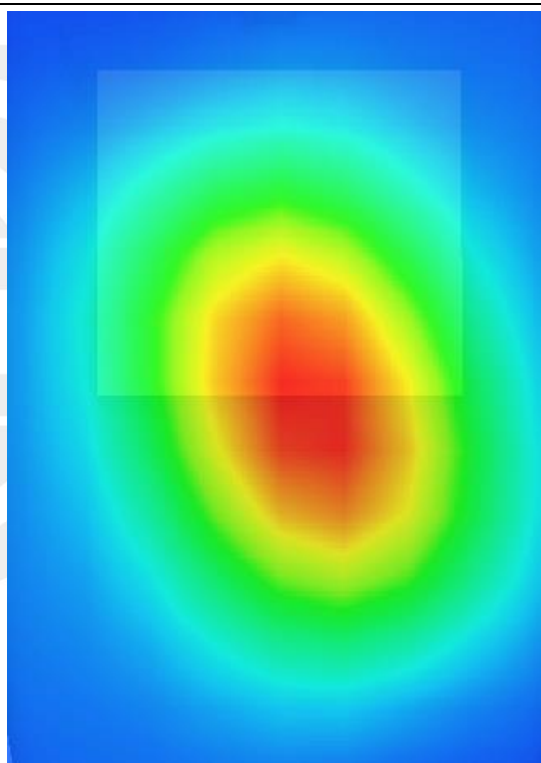
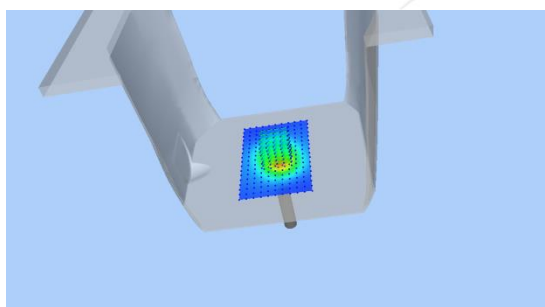
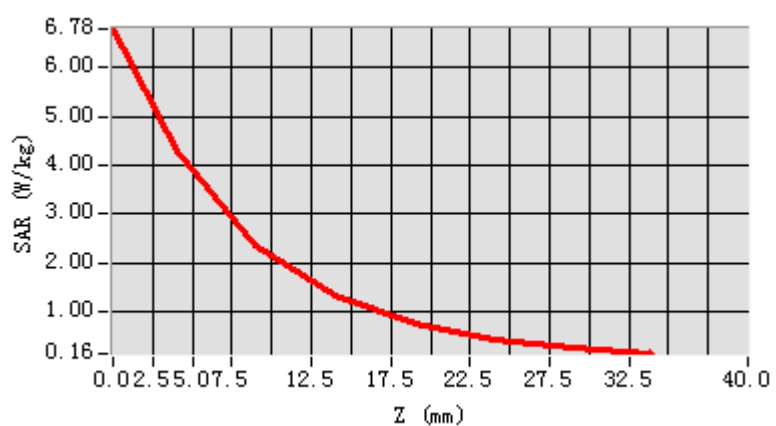
Experimental conditions.

Phantom	Validation plane
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity	41.06
Conductivity (S/m)	1.36
Probe	SN 07/21 EPGO352
ConvF:	1.84
Crest factor:	1:1

**Maximum location: X=3.00, Y=-2.00**

SAR 10g (W/Kg)	1.988947
SAR 1g (W/Kg)	3.908739

Z Axis Scan





System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)

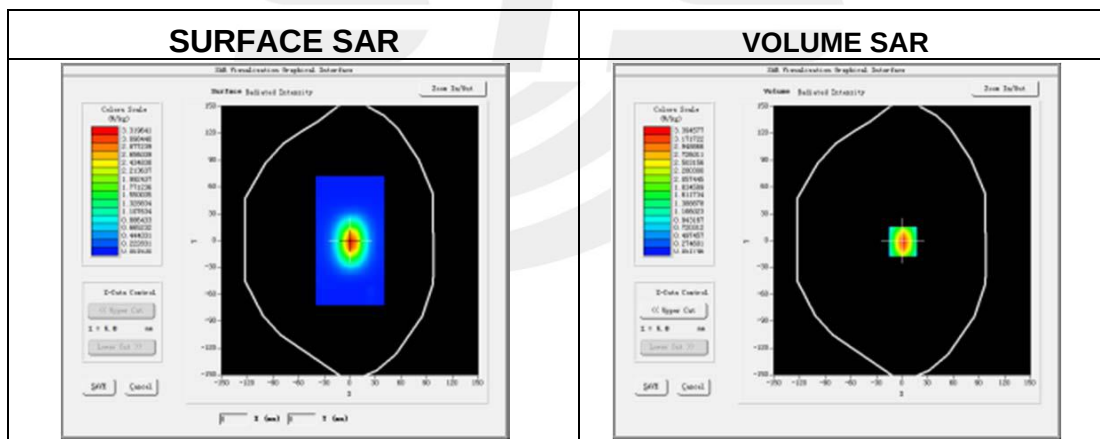
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2022-03-08

Experimental conditions.

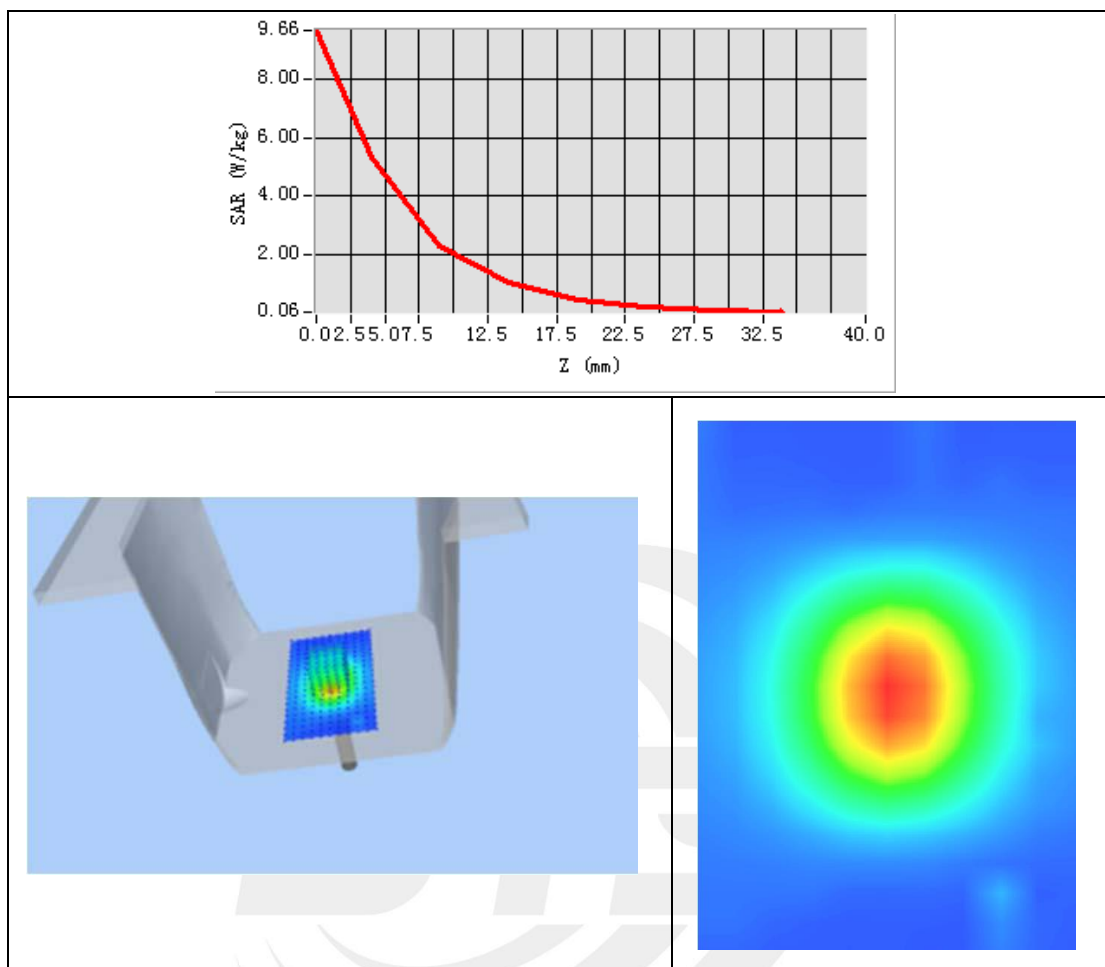
Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	39.02
Conductivity (S/m)	1.83
Probe	SN 07/21 EPG0352
ConvF	1.97
Crest factor:	1:1



Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	2.343287
SAR 1g (W/Kg)	5.271183

Z Axis Scan





System Performance Check Data (2600MHz)

Type: Phone measurement (Complete)

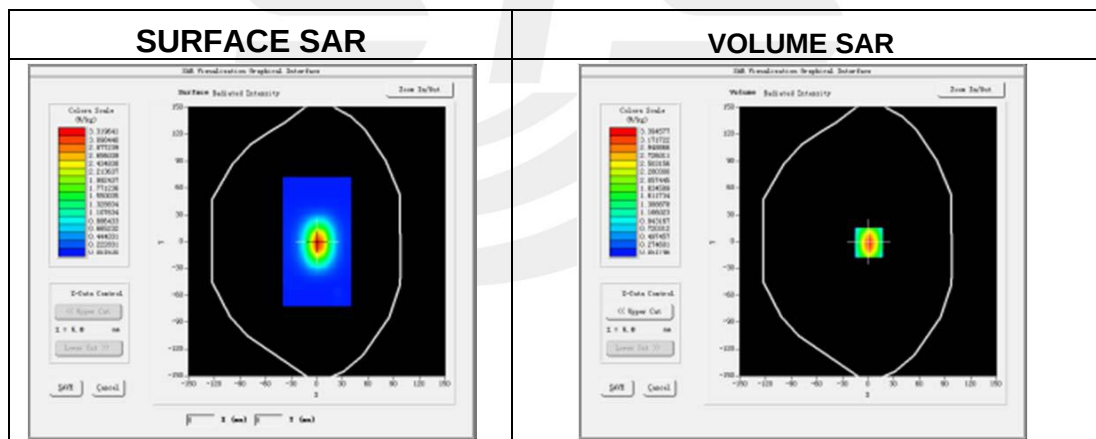
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2022-03-08

Experimental conditions.

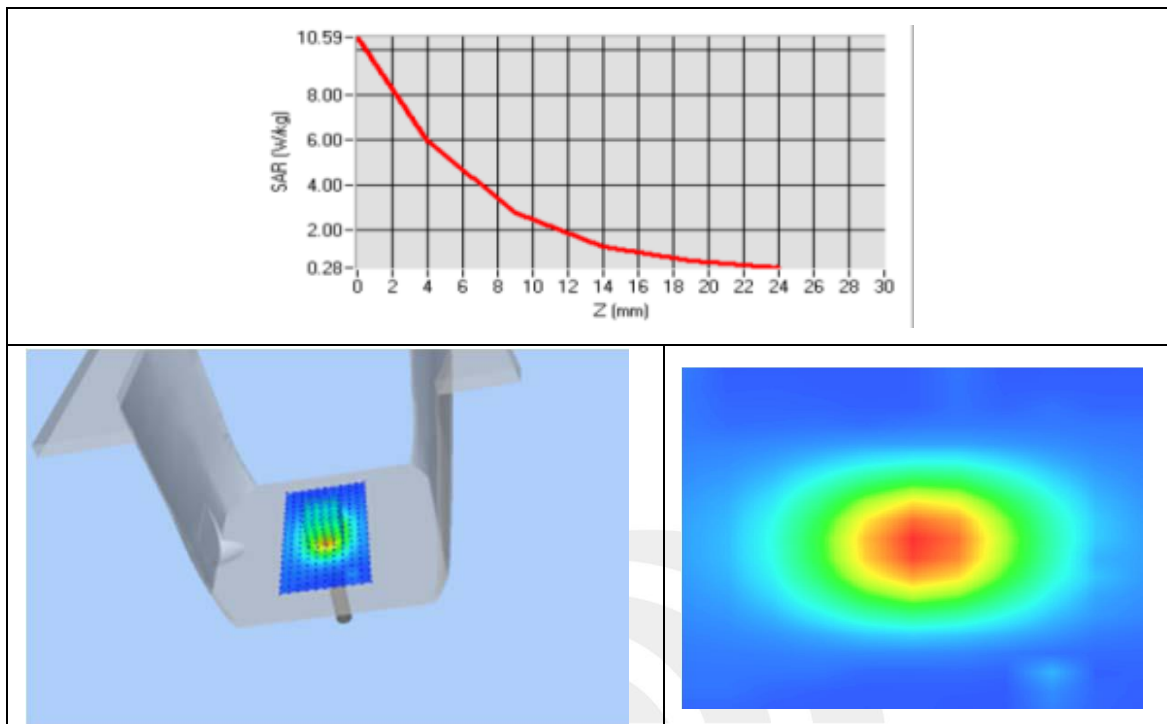
Device Position	Validation plane
Band	2600 MHz
Channels	-
Signal	CW
Frequency (MHz)	2600
Relative permittivity	40.01
Conductivity (S/m)	1.93
Probe	SN 07/21 EPGO352
ConvF	1.85
Crest factor:	1:1



Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	2.469072
SAR 1g (W/Kg)	5.514005

Z Axis Scan



**System Performance Check Data (5200MHz)**

Type: Dipole measurement (Complete)

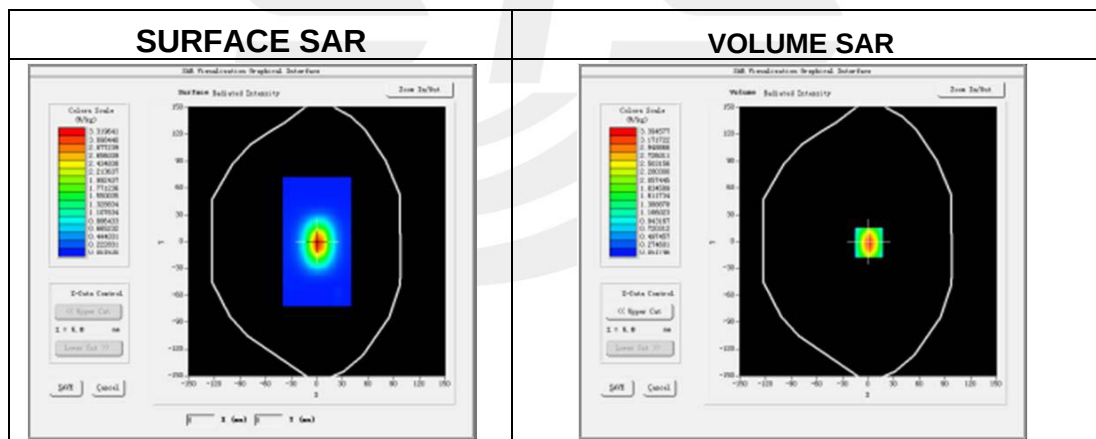
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2022-03-08

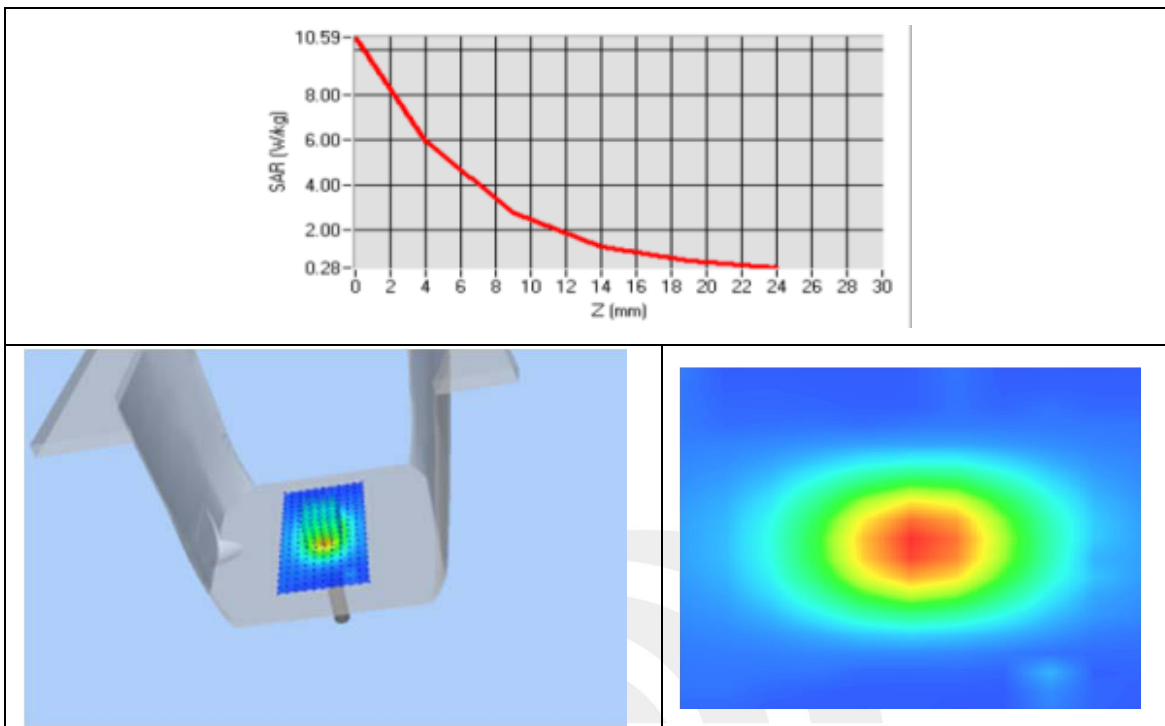
Experimental conditions.

Device Position	Validation plane
Band	5200 MHz
Channels	-
Signal	CW
Frequency (MHz)	5200
Relative permittivity	36.77
Conductivity (S/m)	4.51
Probe	SN 07/21 EPGO352
ConvF	1.85
Crest factor:	1:1

**Maximum location: X=3.00, Y=1.00**

SAR 10g (W/Kg)	5.588711
SAR 1g (W/Kg)	16.014305

Z Axis Scan



Appendix B. SAR Test Plots

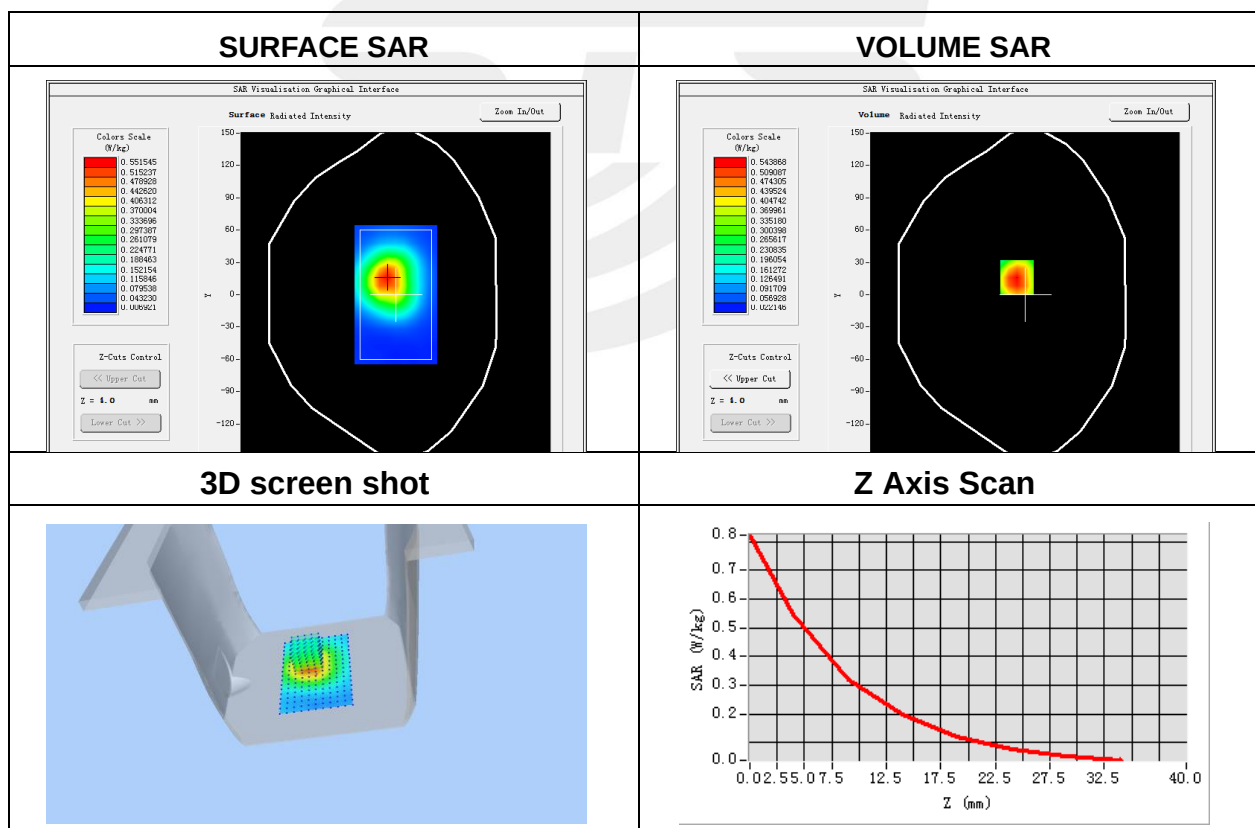
Plot 1: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPG0352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	LTE Band 2
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1860

Maximum location: X=-8.00, Y=16.00

SAR Peak: 0.87 W/kg

SAR 10g (W/Kg)	0.301894
SAR 1g (W/Kg)	0.531018



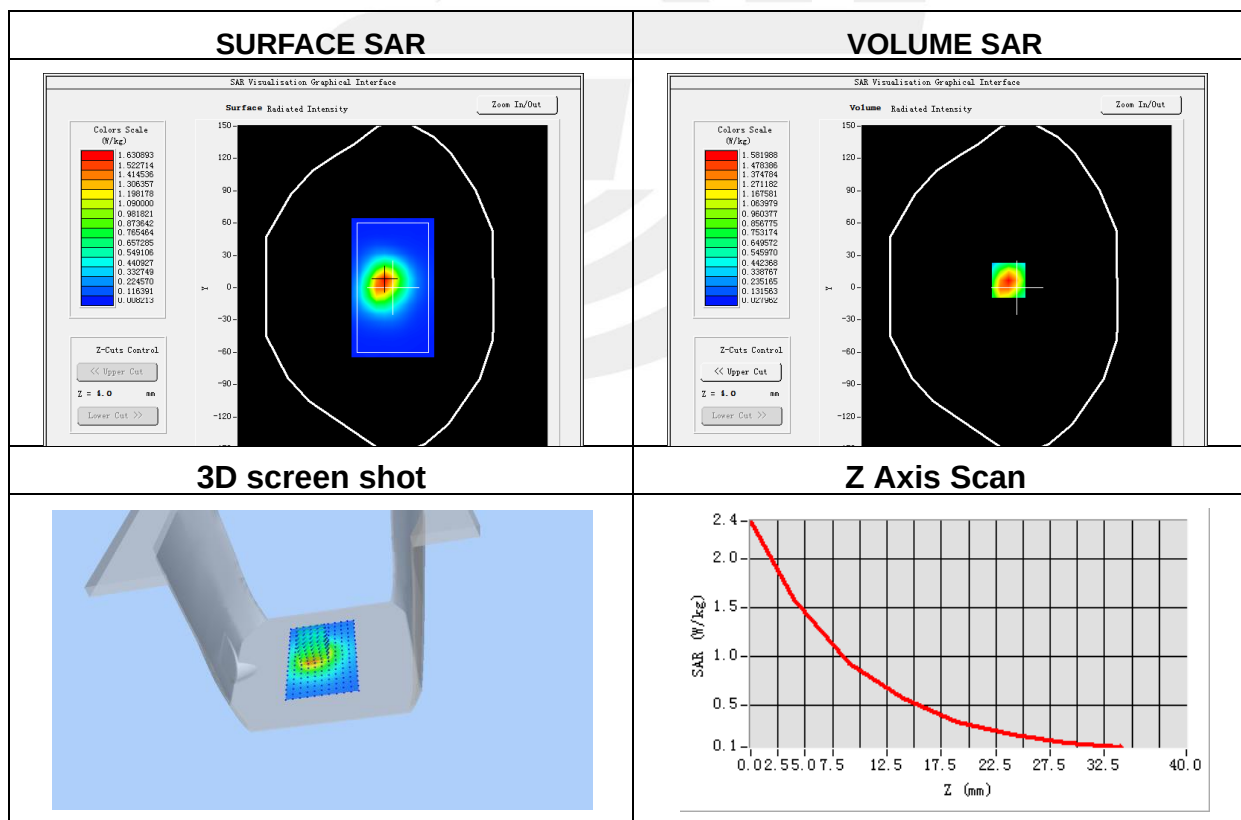
Plot 2: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 2
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1860

Maximum location: X=-8.00, Y=7.00

SAR Peak: 2.47 W/kg

SAR 10g (W/Kg)	0.804427
SAR 1g (W/Kg)	1.503455



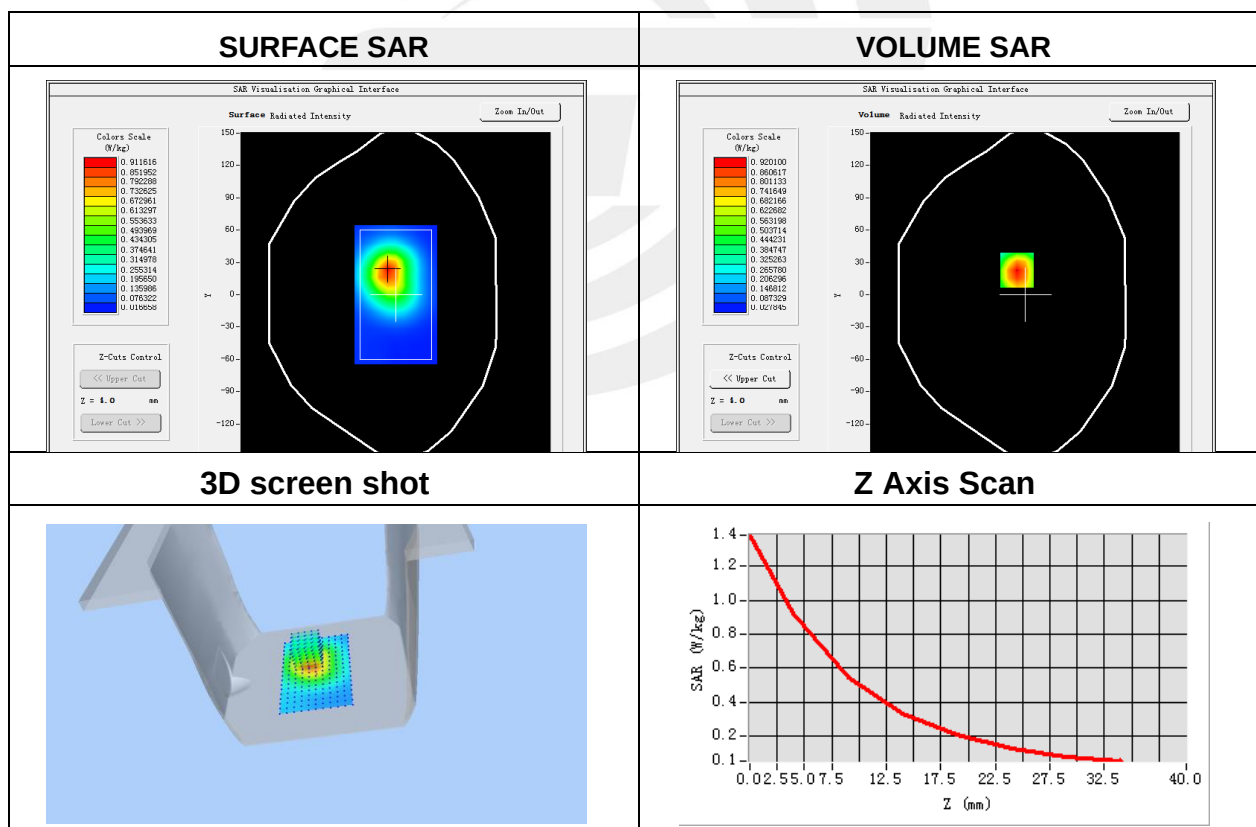
Plot 3: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	LTE Band 4
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1745

Maximum location: X=-8.00, Y=23.00

SAR Peak: 1.37 W/kg

SAR 10g (W/Kg)	0.510476
SAR 1g (W/Kg)	0.878489



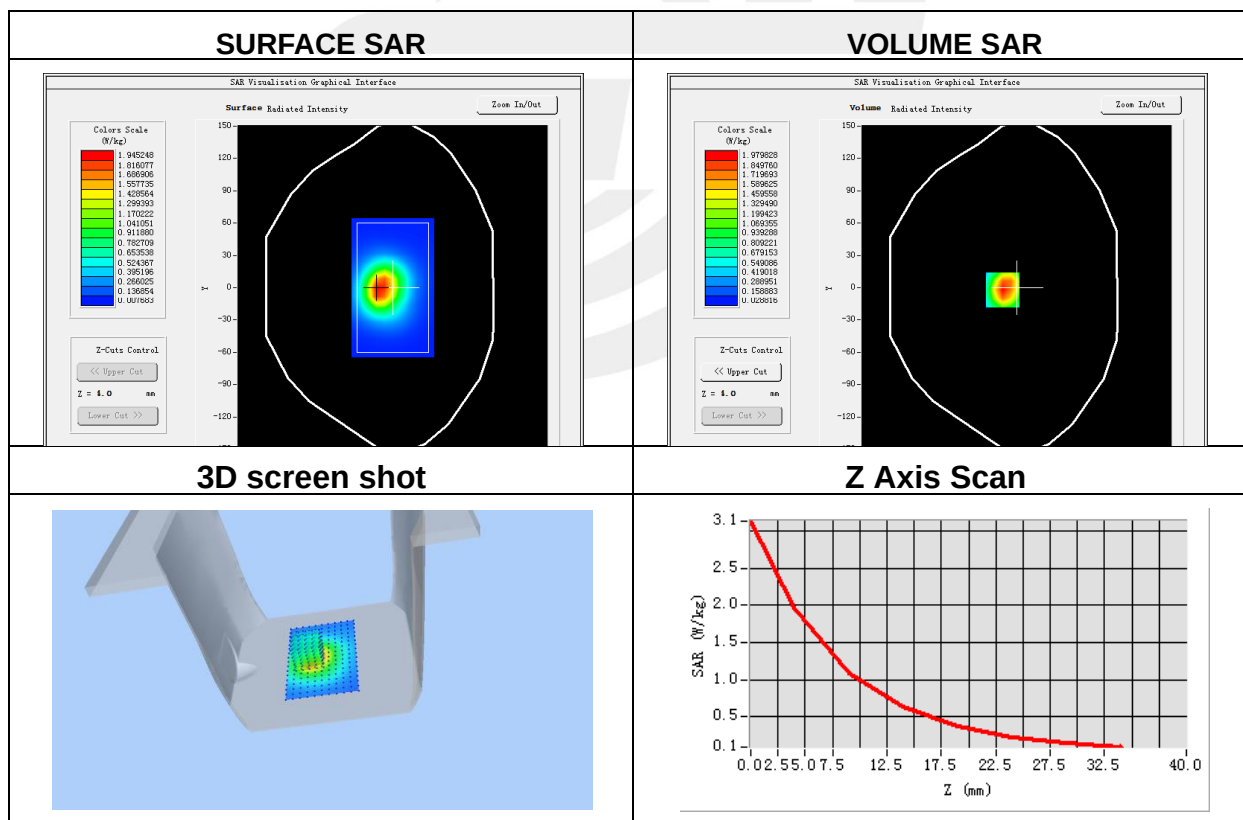
Plot 4: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 4
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1745

Maximum location: X=-14.00, Y=-2.00

SAR Peak: 3.14 W/kg

SAR 10g (W/Kg)	1.027979
SAR 1g (W/Kg)	1.885244



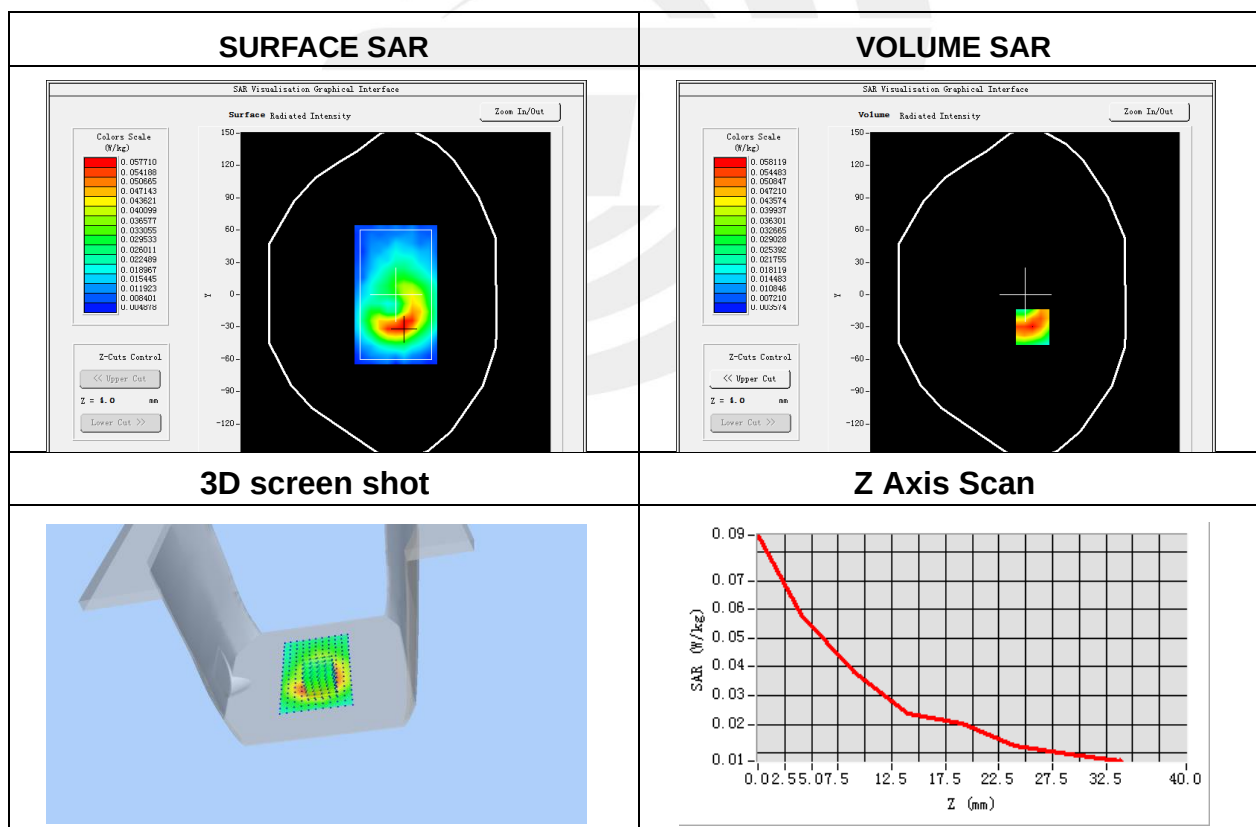
Plot 5: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPG0352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	LTE Band 5
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	836.5

Maximum location: X=7.00, Y=-30.00

SAR Peak: 0.09 W/kg

SAR 10g (W/Kg)	0.033834
SAR 1g (W/Kg)	0.056593



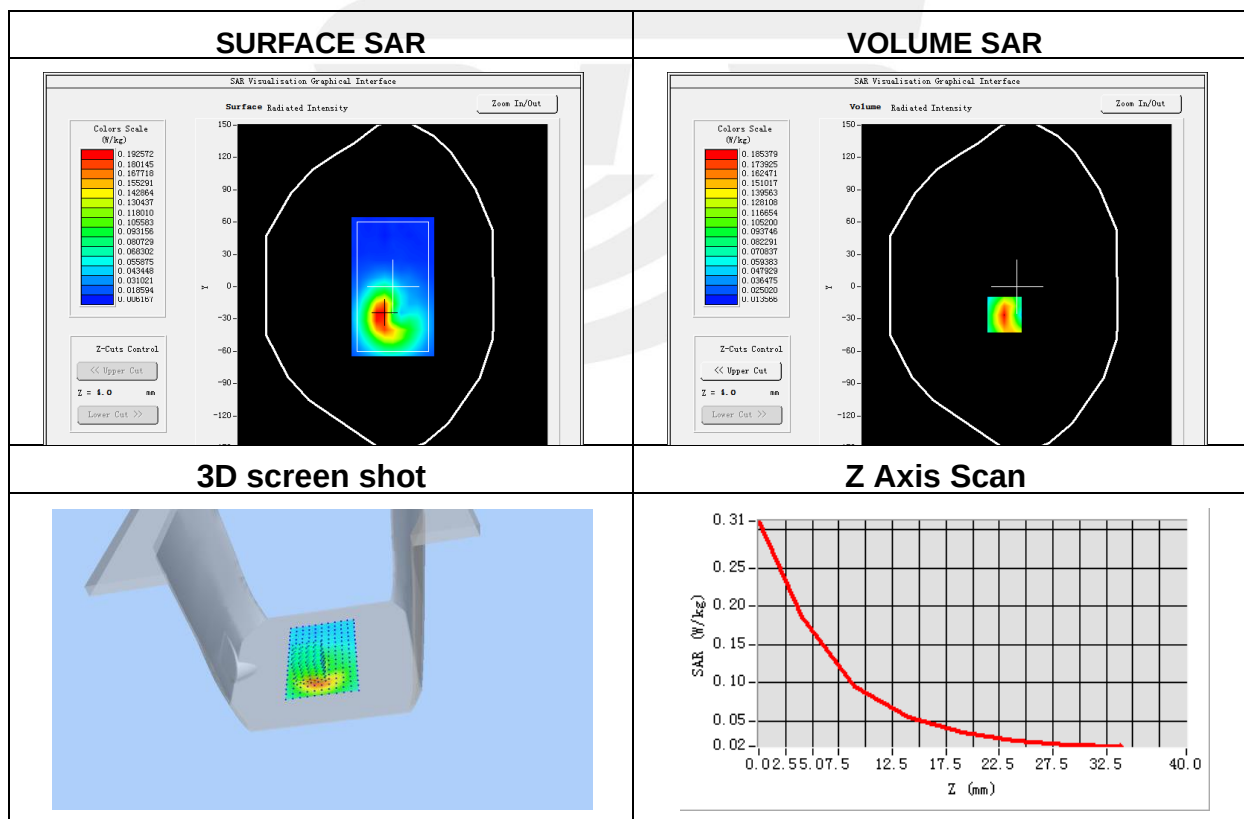
Plot 6: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 5
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	836.5

Maximum location: X=-12.00, Y=-26.00

SAR Peak: 0.31 W/kg

SAR 10g (W/Kg)	0.091841
SAR 1g (W/Kg)	0.174572



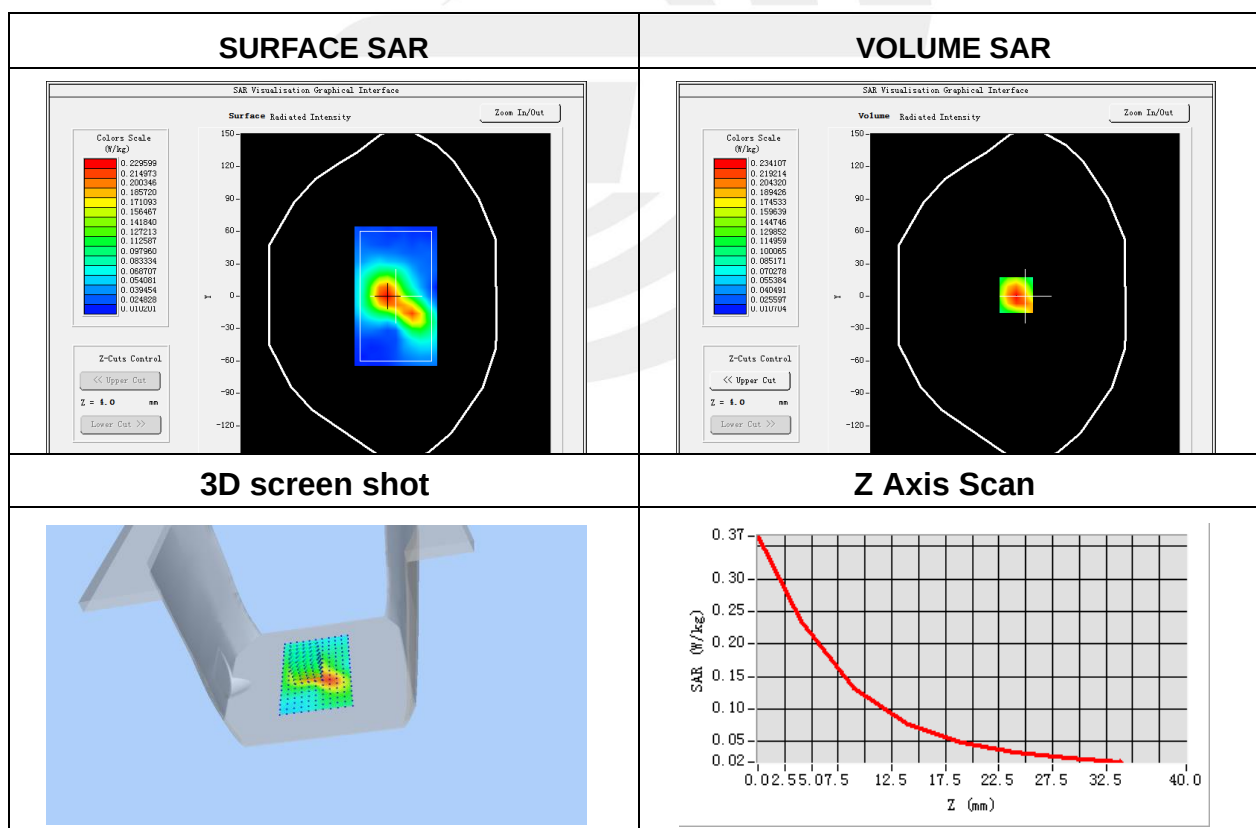
Plot 7: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	LTE Band 7
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2510

Maximum location: X=-9.00, Y=1.00

SAR Peak: 0.37 W/kg

SAR 10g (W/Kg)	0.122788
SAR 1g (W/Kg)	0.225126



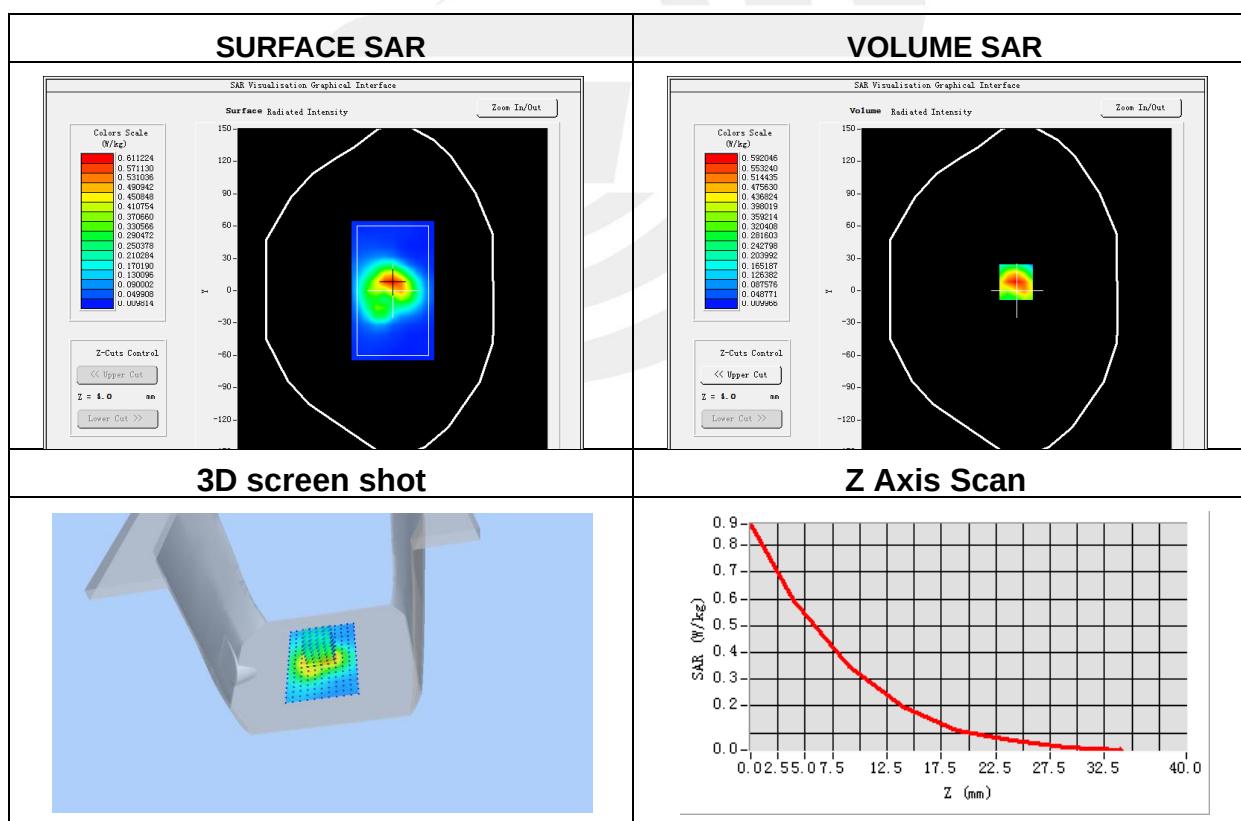
Plot 8: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 7
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2510

Maximum location: X=-1.00, Y=8.00

SAR Peak: 0.89 W/kg

SAR 10g (W/Kg)	0.289472
SAR 1g (W/Kg)	0.549251



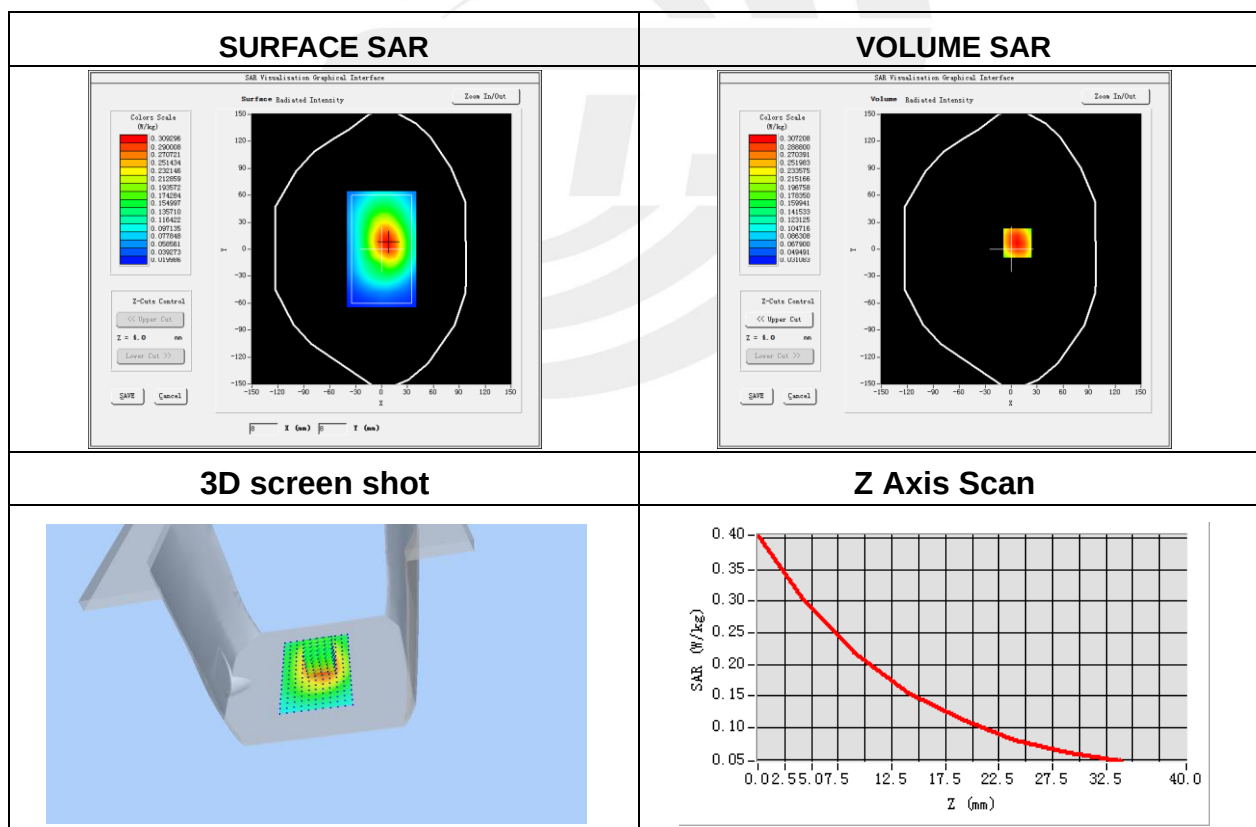
Plot 9: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	LTE Band 12
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	704

Maximum location: X=7.00, Y=7.00

SAR Peak: 0.40W/kg

SAR 10g (W/Kg)	0.204444
SAR 1g (W/Kg)	0.301759



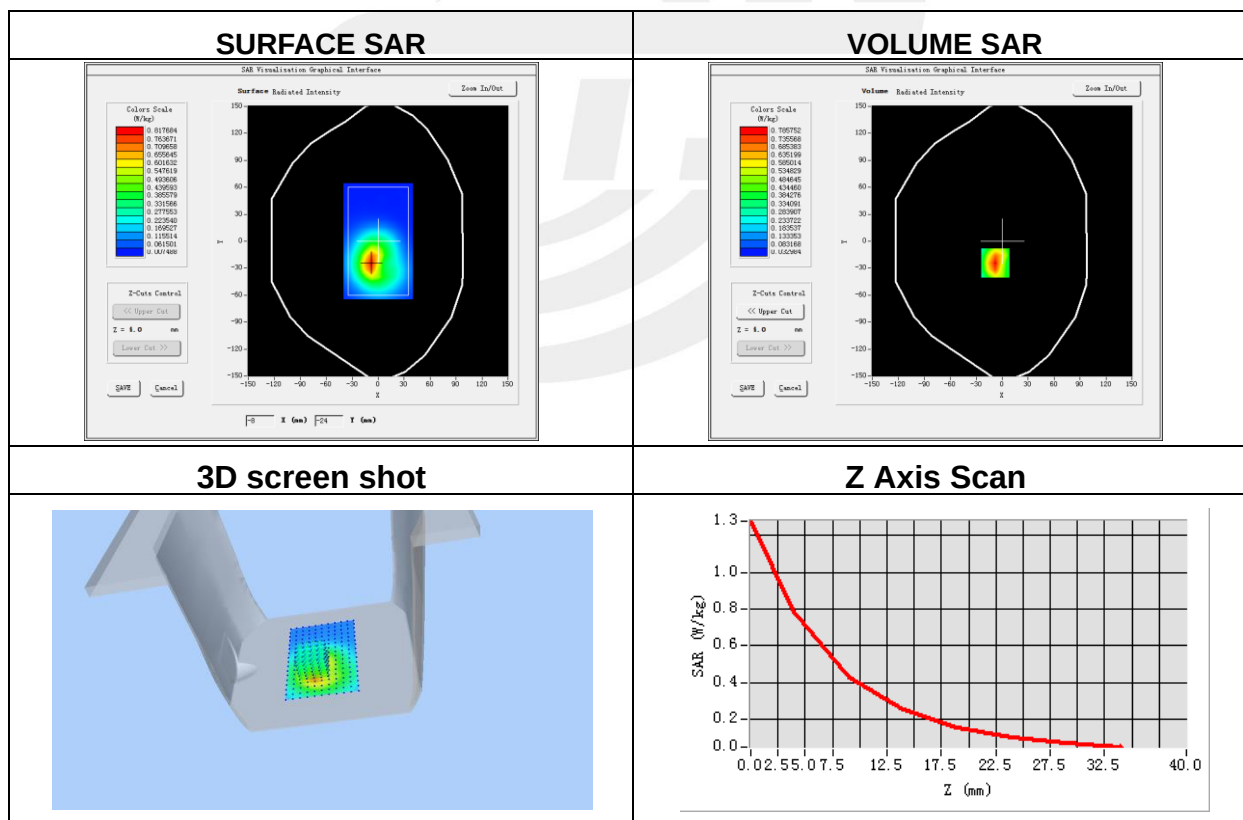
Plot 10: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPG0352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 12
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	704

Maximum location: X=-8.00, Y=-24.00

SAR Peak: 1.28 W/kg

SAR 10g (W/Kg)	0.403165
SAR 1g (W/Kg)	0.758994



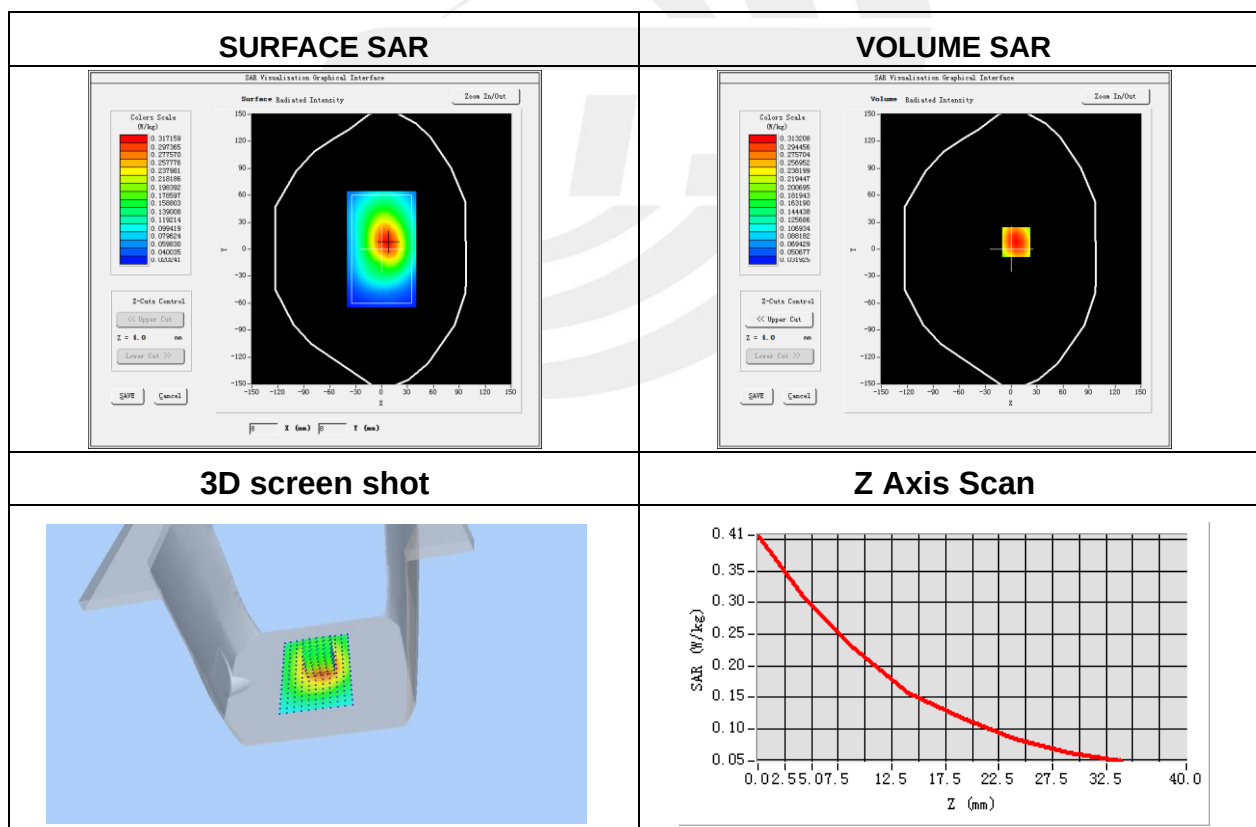
Plot 11: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	LTE Band 17
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	709

Maximum location: X=6.00, Y=8.00

SAR Peak: 0.41W/kg

SAR 10g (W/Kg)	0.209263
SAR 1g (W/Kg)	0.307058



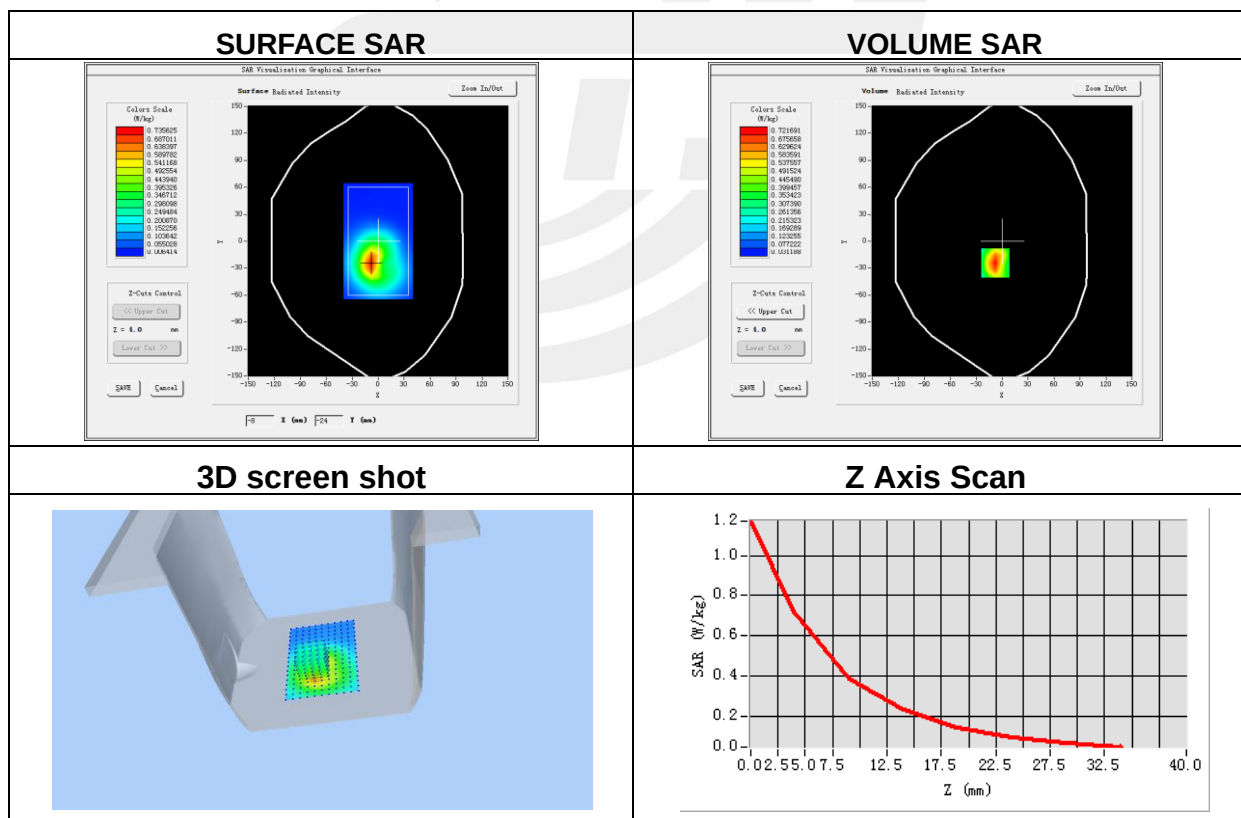
Plot 12: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-07
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 17
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	709

Maximum location: X=8.00, Y=-24.00

SAR Peak: 1.17 W/kg

SAR 10g (W/Kg)	0.369903
SAR 1g (W/Kg)	0.694360



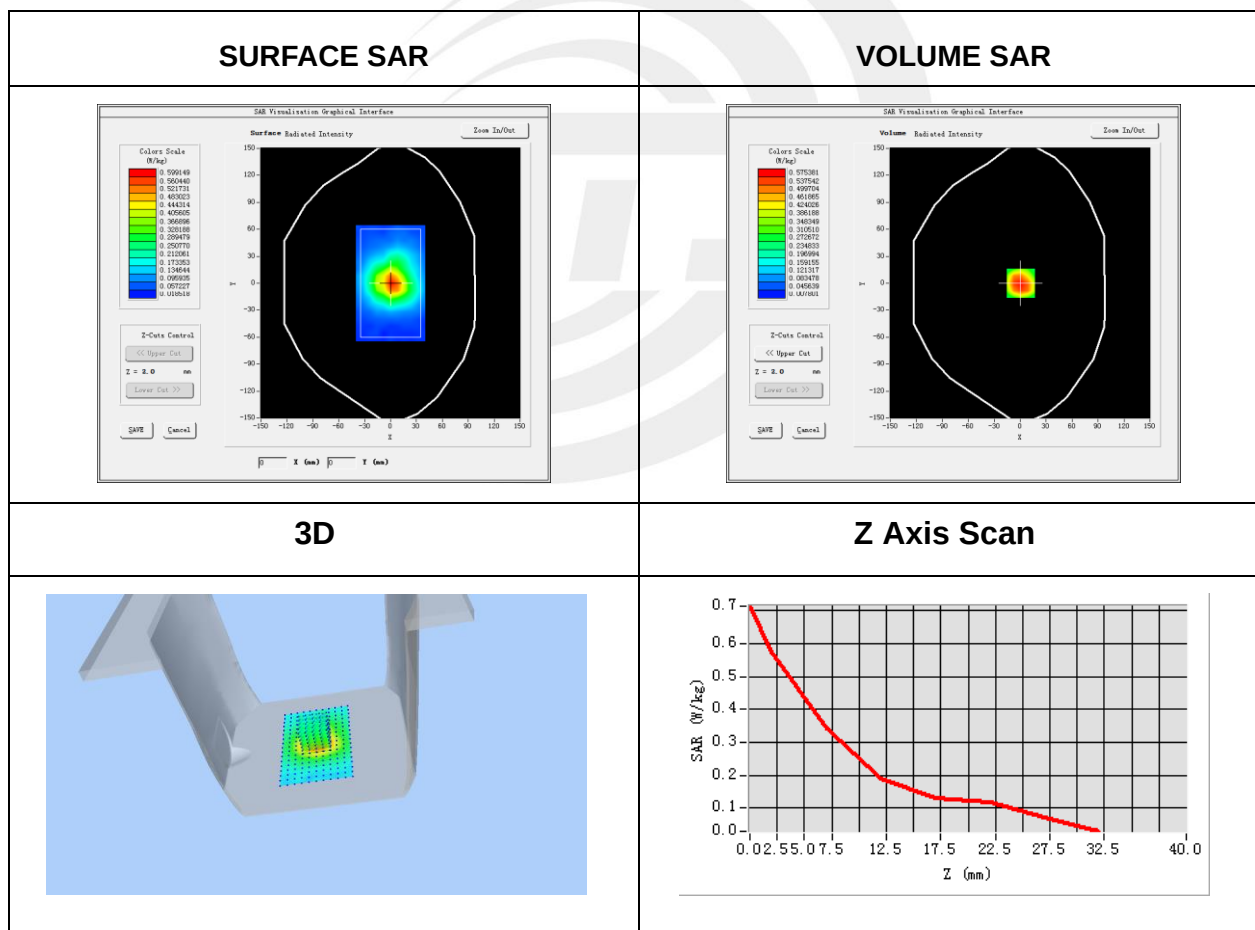
Plot 13: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437

Maximum location: X=1.00, Y=0.00

SAR Peak: 0.75W/kg

SAR 10g (W/Kg)	0.253361
SAR 1g (W/Kg)	0.444668



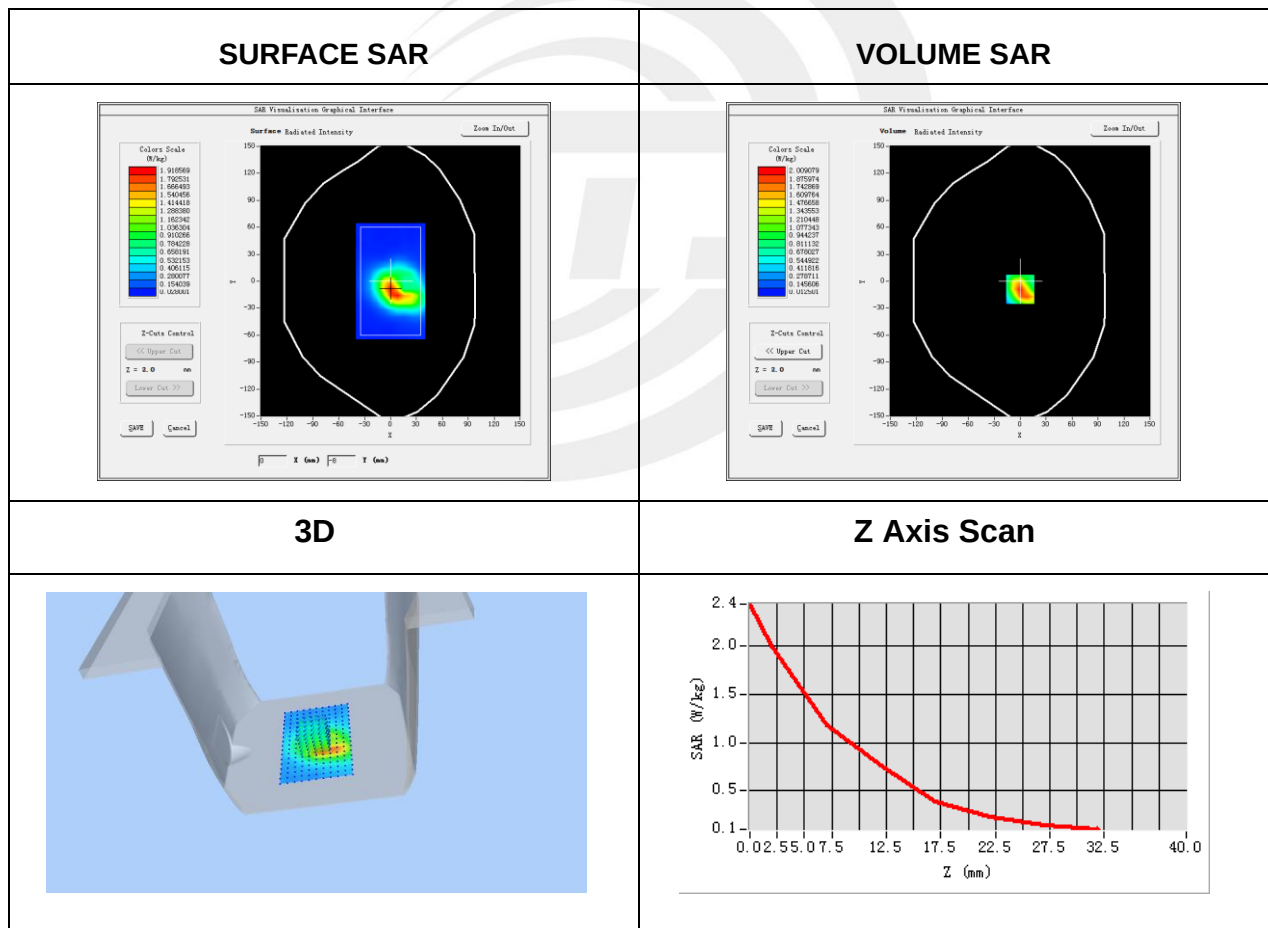
Plot 14: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437

Maximum location: X=0.00, Y=-9.00

SAR Peak: 2.61W/kg

SAR 10g (W/Kg)	0.770969
SAR 1g (W/Kg)	1.532008



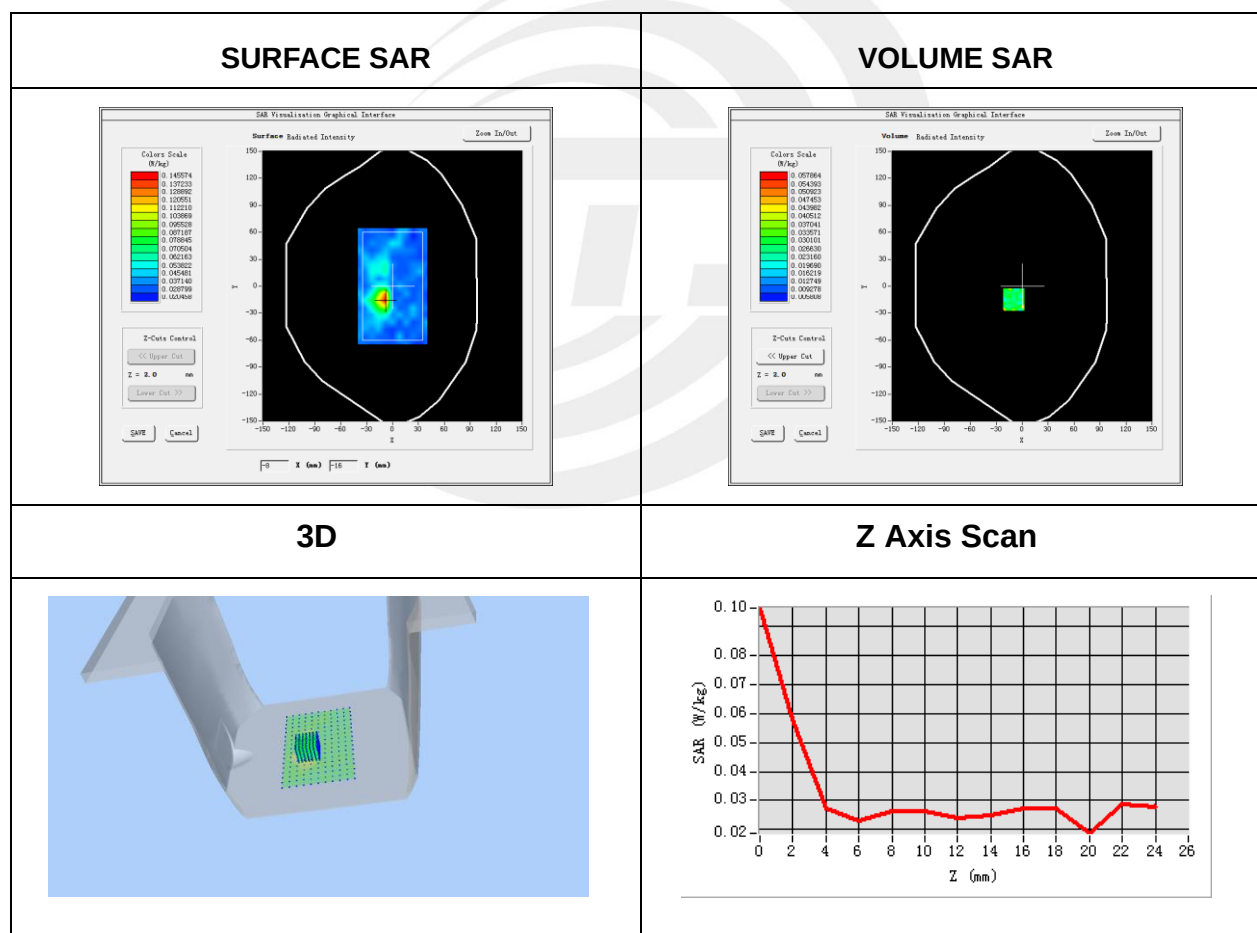
Plot 15: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	7x7x12, dx=4mm dy=4mm dz=2mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	5.2GHz WLAN
Channels	Middle
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5240

Maximum location: X=-10.00, Y=-15.00

SAR Peak: 0.11W/kg

SAR 10g (W/Kg)	0.025921
SAR 1g (W/Kg)	0.027060



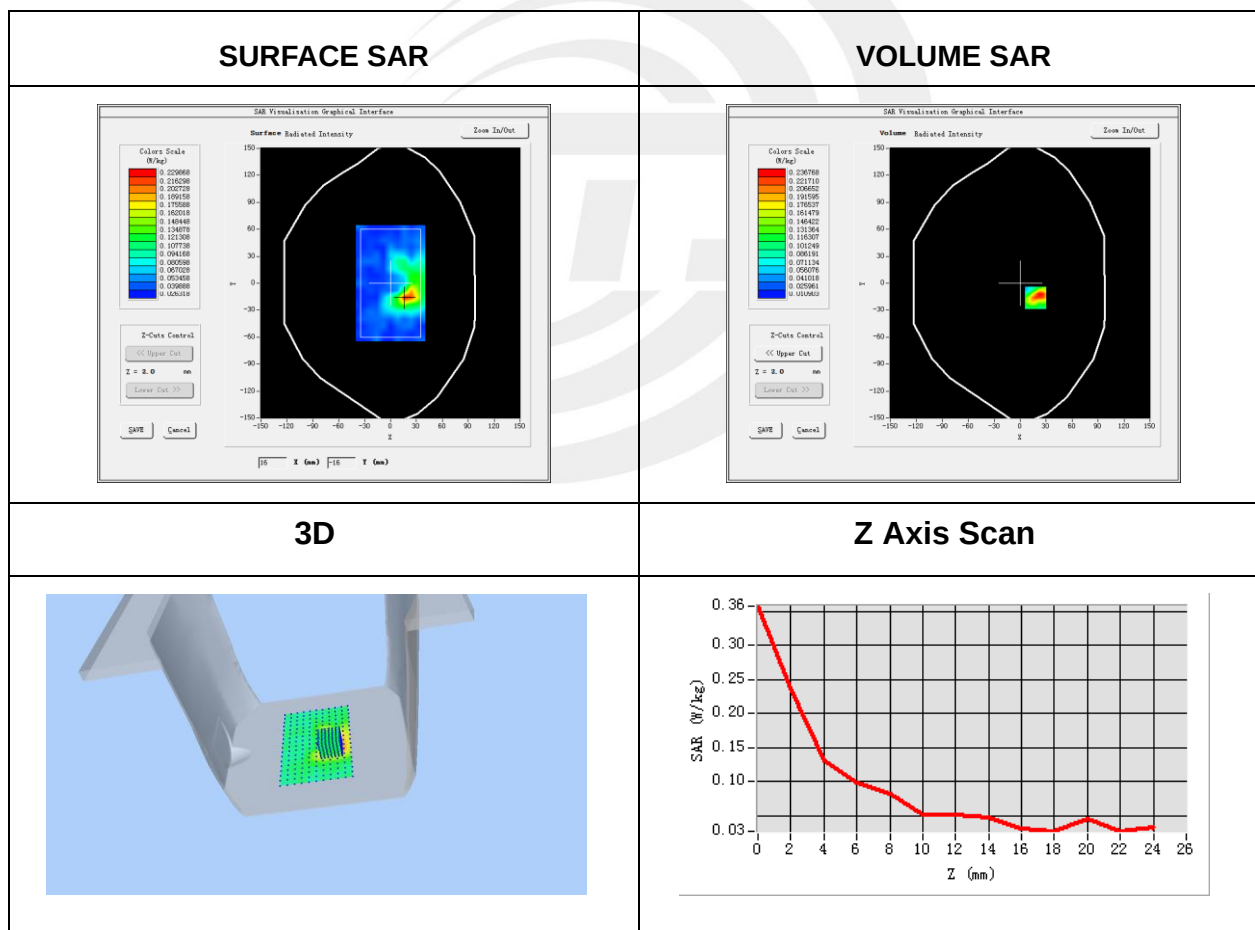
Plot 16: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	5.2GHz WLAN
Channels	Middle
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5240

Maximum location: X=18.00, Y=-16.00

SAR Peak: 0.38W/kg

SAR 10g (W/Kg)	0.073561
SAR 1g (W/Kg)	0.148543



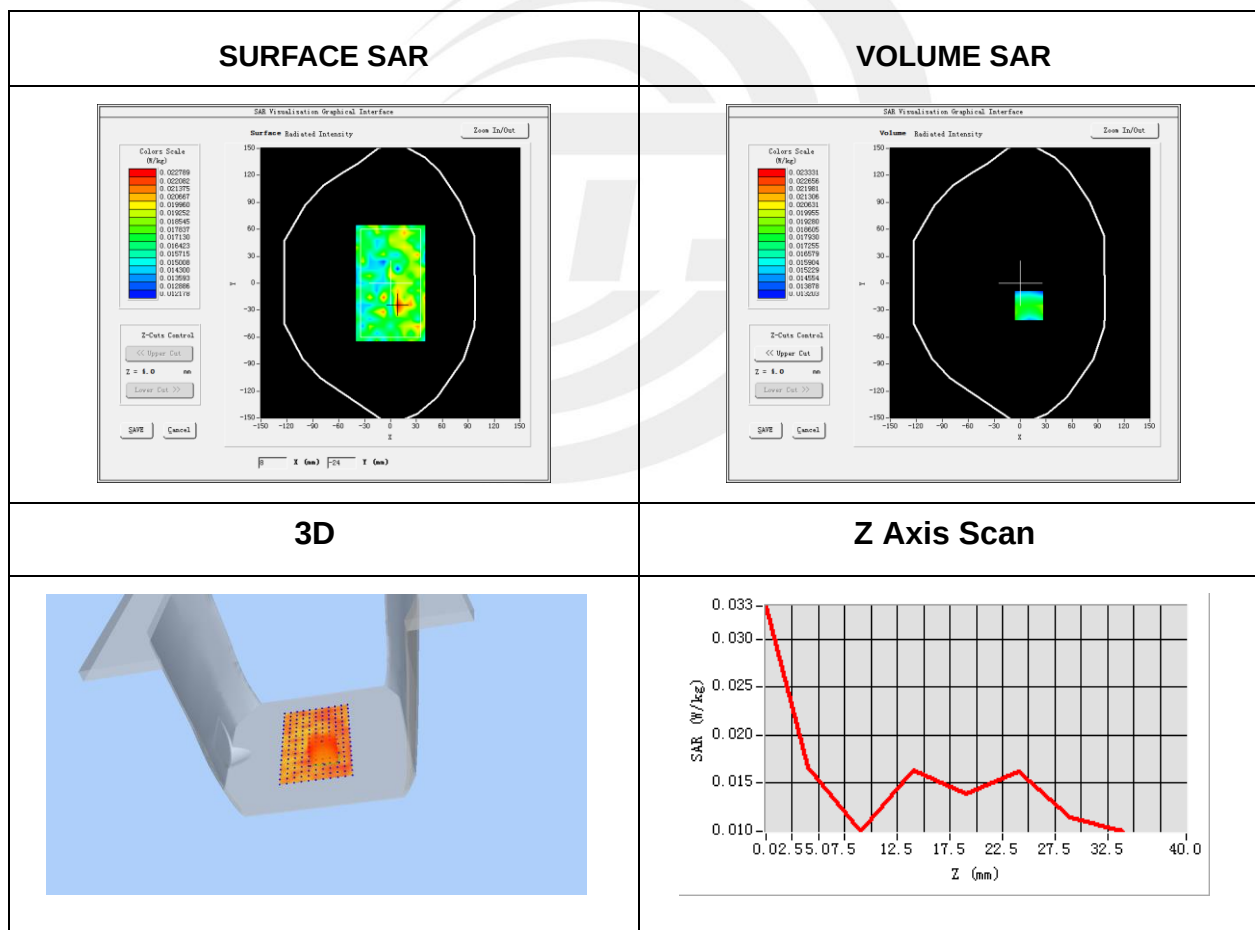
Plot 17: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front of face
Band	Bluetooth
Channels	Middle
Signal	GFSK (Crest factor: 1.0)
Frequency (MHz)	2440

Maximum location: X=10.00, Y=-25.00

SAR Peak: 0.02W/kg

SAR 10g (W/Kg)	0.018339
SAR 1g (W/Kg)	0.019238



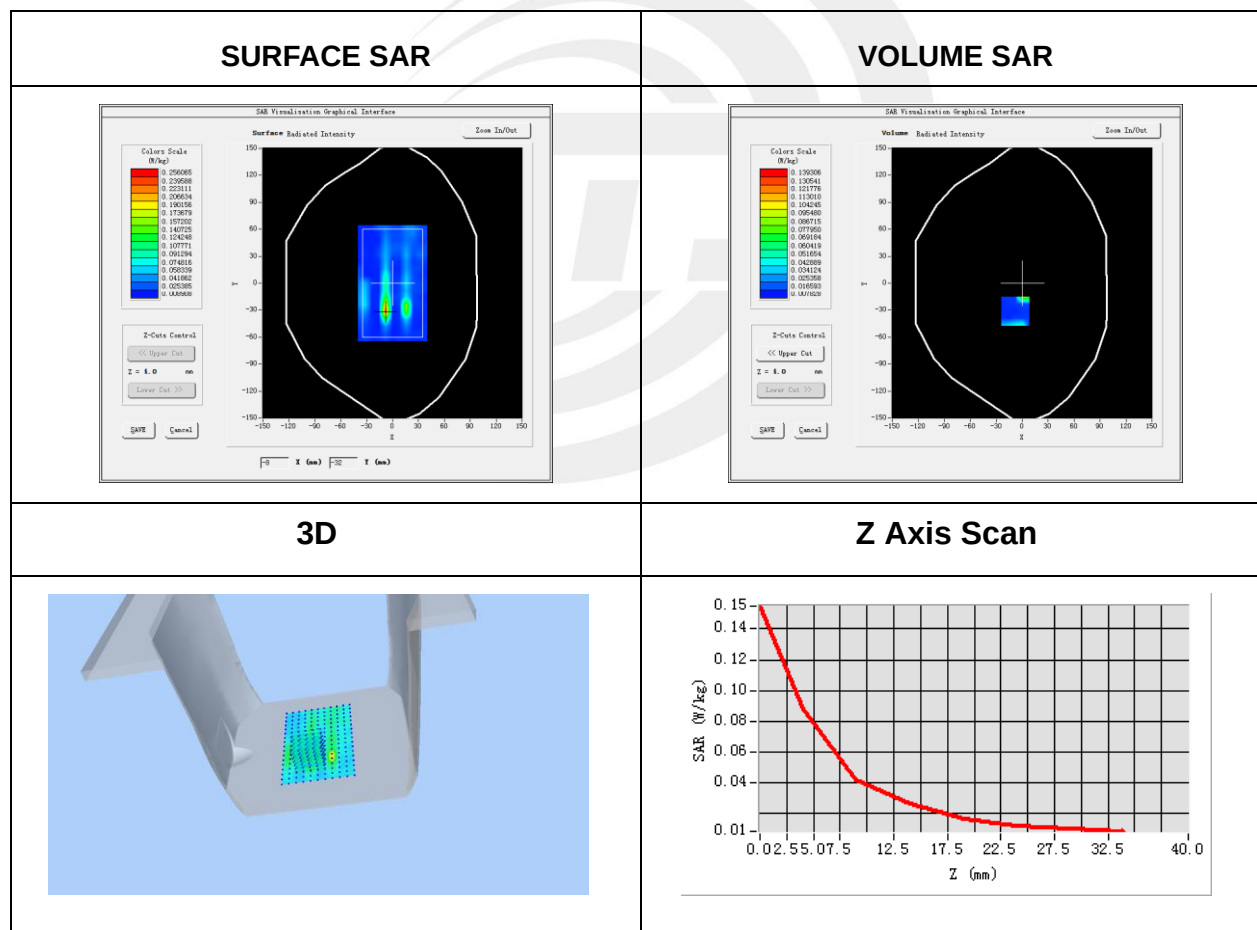
Plot 18: DUT: TickTalk 4 Kids Smartwatch; EUT Model: TickTalk 4

Test Date	2022-03-08
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	Bluetooth
Channels	Middle
Signal	GFSK (Crest factor: 1.0)
Frequency (MHz)	2440

Maximum location: X=-8.00, Y=-31.00

SAR Peak: 0.14W/kg

SAR 10g (W/Kg)	0.036958
SAR 1g (W/Kg)	0.066105





Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※END OF THE REPORT※※※※

