SAR TEST REPORT

Report No.: STS2205301H01

Issued for

Vasco Electronics Goralski Group S.K.A.

Al. 29 listopada 20, post code: 31-401 city: Krakow, Poland

Product Name:	Vasco Smart Voice Translator
Brand Name:	Vasco
Model Name:	Vasco Translator
Series Model:	M3, M3 PRO, M4, M5, M55, M6
FCC ID:	2A6YYVASCO30
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2013
Max. Report SAR (1g):	Body: 1.085 W/kg

ShenZhen STS Test Services Co.,Ltd.
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TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com

Test Report Certification

Applicant's name ..... :	Vasco Electronics Goralski Group S.K.A.
Address ..... :	Al. 29 listopada 20, post code: 31-401 city: Krakow, Poland
Manufacturer's Name..... :	SHENZHEN SET INNOVATION LIMITED
Address ..... :	B203, Liuwei business center, Yangmei community, Bantian street, Longgang District, Shenzhen, China.

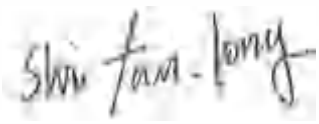
Product description

Product name ..... :	Vasco Smart Voice Translator
Brand name ..... :	Vasco
Model name ..... :	Vasco Translator
Series Model..... :	M3, M3 PRO, M4, M5, M55, M6
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

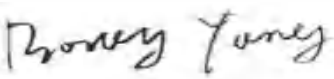
Date (s) of performance of tests..... :	28 Aug. 2021 ~ 04 Sept. 2021
Date of Issue..... :	13 May 2022
Test Result..... :	**Pass**

Testing Engineer : 

(Shifan. Long)

Technical Manager : 

(Sean She)

Authorized Signatory : 

(Bovey Yang)

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Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	13 May 2022	STS2205301H01	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/PMN	Vasco Smart Voice Translator		
Brand Name	Vasco		
Model Name/HVIN	Vasco Translator		
Series Model	M3, M3 PRO, M4, M5, M55, M6		
Model difference	Only different in model name.		
Device Category	Portable		
Product stage	Production unit		
RF Exposure Environment	General Population / Uncontrolled		
IMEI	353585073126529		
Hardware Version	F202_MB_V01		
Software Version/FVIN	V1.0		
Serial Numbers	VEVNMT1701230651		
Frequency Range	GSM 850: 824 MHz ~ 849 MHz PCS1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 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 17: 704 MHz ~ 715 MHz WLAN802.11b/g/n20: 2412 MHz ~ 2462 MHz WLAN 802.11n40: 2422 MHz ~ 2452 MHz Bluetooth: 2402 MHz to 2480 MHz		
Max. Reported SAR(1g): (Limit:1.6W/kg)	Band	Mode	Body(W/kg)
	PCB	GSM 850	0.510
	PCB	GPRS 850	1.010
	PCB	GSM 1900	0.434
	PCB	GPRS 1900	1.085
	PCB	WCDMA Band II	0.752
	PCB	WCDMA Band V	1.053
	PCB	LTE Band 2	0.612
	PCB	LTE Band 4	0.880
	PCB	LTE Band 5	0.915
	PCB	LTE Band 7	0.661
	PCB	LTE Band 17	0.915
	DTS	2.4G WLAN	0.498
	DSS	Bluetooth	0.040
	1-g Sum SAR		1.583
FCC Equipment Class	Licensed Portable Transmitter (PCB) Part 15 Spread Spectrum Transmitter (DSS) Digital Transmission System (DTS)		

Operating Mode:	GSM: GSM Voice; GPRS Class 12 WCDMA: RMC, HSDPA, HSUPA Release 6 LTE: QPSK, 16QAM WLAN: 802.11 a/b/g/n20/n40 Bluetooth: GFSK +π/4DQPSK+8DPSK
Antenna Specification:	GSM/WCDMA/LTE: PIFA Antenna Bluetooth: PIFA Antenna WLAN: PIFA Antenna
SIM Card	Only support single SIM Card.
Hotspot Mode	Support
DTM Mode	Not Support
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 (℃)	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 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
7	FCC KDB 941225 D01 v03r01	SAR Measurement Procedures for 3G Devices
8	FCC KDB 941225 D05 v02r05	SAR for LTE Devices
9	FCC KDB 941225 D06 v02r01	Hotspot Mode SAR
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
11	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 1 gram 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

3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.
The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

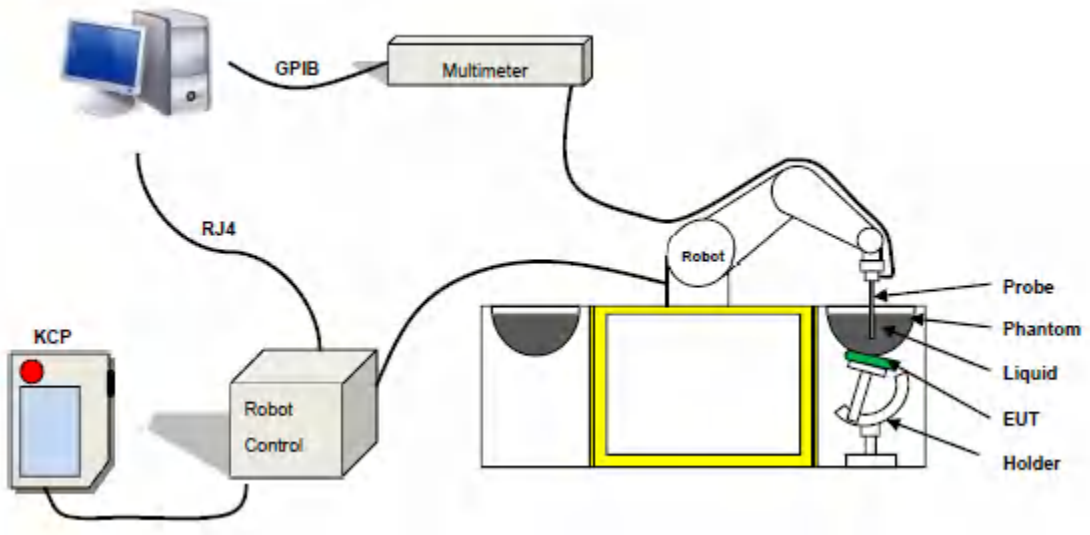
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

3.2 SAR System

MVG SAR System Diagram:



COMOSAR is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The COMOSAR system consists of the following items:

- 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 Open SAR 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: 2 mm
- 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°

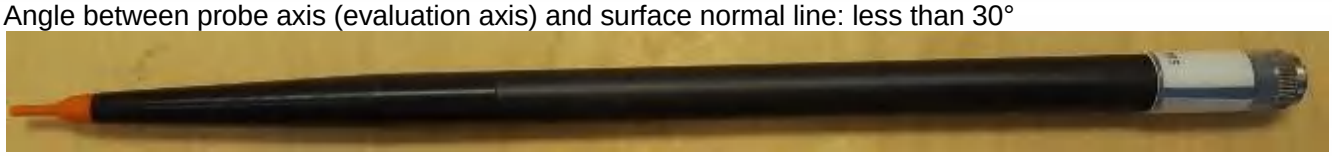


Figure 1-MVG COMOSAR Dosimetric E field Dipole

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	Permittivity
	%	%	%	%	%	%	%	%	σ	εr
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	Permittivity
	%	%	%	%	%	%	%	%	σ	εr
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	εr		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
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
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]					
2021-08-28	24.3	45	709 MHz	24.0	Permittivity	42.12	40.70	-3.37	±5
					Conductivity	0.89	0.88	-0.82	±5
2021-08-28	24.3	45	710 MHz	24.0	Permittivity	42.11	41.68	-1.03	±5
					Conductivity	0.89	0.90	1.43	±5
2021-08-28	24.3	45	711 MHz	24.0	Permittivity	42.11	42.61	1.19	±5
					Conductivity	0.89	0.88	-0.83	±5
2021-08-28	24.3	45	750 MHz	24.0	Permittivity	41.90	41.38	-1.24	±5
					Conductivity	0.89	0.91	2.25	±5
2021-08-28	24.3	45	824.2 MHz	24.0	Permittivity	41.50	42.79	2.98	±5
					Conductivity	0.89	0.91	1.11	±5
2021-08-28	24.3	45	826.4MHz	24.0	Permittivity	41.50	41.65	0.36	±5
					Conductivity	0.89	0.91	2.16	±5
2021-08-28	24.3	45	835 MHz	24.0	Permittivity	41.50	41.39	-0.27	±5
					Conductivity	0.90	0.91	1.11	±5
2021-08-28	24.3	45	836.5 MHz	24.0	Permittivity	41.50	41.74	0.58	±5
					Conductivity	0.90	0.88	-2.41	±5
2021-08-28	24.3	45	836.6 MHz	24.0	Permittivity	41.50	42.03	1.28	±5
					Conductivity	0.90	0.88	-2.41	±5
2021-08-28	24.3	45	844 MHz	24.0	Permittivity	41.50	41.39	-0.27	±5
					Conductivity	0.91	0.92	1.13	±5
2021-08-28	24.3	45	846.6 MHz	24.0	Permittivity	41.50	41.63	0.31	±5
					Conductivity	0.91	0.90	-1.37	±5
2021-08-28	24.3	45	848.8 MHz	24.0	Permittivity	41.50	41.06	-1.06	±5
					Conductivity	0.91	0.92	1.10	±5
2021-08-29	23.8	52	1720 MHz	23.5	Permittivity	40.11	39.64	-1.18	±5
					Conductivity	1.35	1.35	-0.32	±5
2021-08-29	23.8	52	1800 MHz	23.5	Permittivity	40.00	39.50	-1.25	±5
					Conductivity	1.40	1.38	-1.43	±5
2021-08-29	23.8	52	1850.2 MHz	23.5	Permittivity	40.00	39.54	-1.15	±5
					Conductivity	1.40	1.38	-1.43	±5
2021-08-29	23.8	52	1860 MHz	23.5	Permittivity	40.00	38.62	-3.45	±5
					Conductivity	1.40	1.40	0.00	±5
2021-08-29	23.8	52	1880 MHz	23.5	Permittivity	40.00	40.29	0.72	±5
					Conductivity	1.40	1.37	-2.14	±5
2021-08-29	23.8	52	1900 MHz	23.5	Permittivity	40.00	41.71	4.28	±5
					Conductivity	1.40	1.41	0.71	±5
2021-08-29	23.8	52	1907.6 MHz	23.5	Permittivity	40.00	41.38	3.45	±5
					Conductivity	1.40	1.37	-2.14	±5
2021-08-29	23.8	52	1909.8 MHz	23.5	Permittivity	40.00	40.72	1.80	±5
					Conductivity	1.40	1.43	2.14	±5

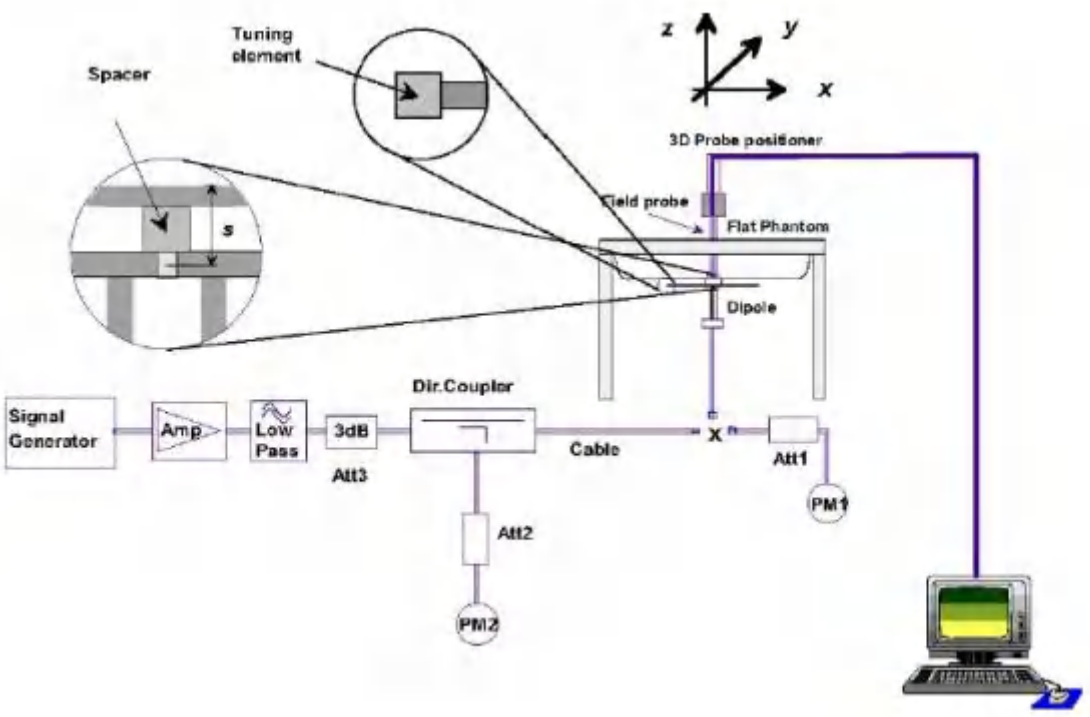
2021-08-30	24.6	48	2437 MHz	24.2	Permittivity	39.21	38.36	-2.17	±5
					Conductivity	1.79	1.79	-0.23	±5
2021-08-30	24.6	48	2450 MHz	24.2	Permittivity	39.20	40.77	4.01	±5
					Conductivity	1.80	1.82	1.11	±5
2021-08-30	24.6	48	2480 MHz	24.2	Permittivity	39.20	39.14	-0.15	±5
					Conductivity	1.80	1.76	-2.22	±5
2021-08-30	24.6	48	2510 MHz	24.2	Permittivity	39.12	39.88	1.94	±5
					Conductivity	1.86	1.80	-3.43	±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)	(%)	(%)
2021-08-28	750	100	0.847	8.47	8.49	0.08	10
2021-08-28	835	100	0.976	9.76	9.56	-1.70	10
2021-08-29	1800	100	3.826	38.26	38.40	0.81	10
2021-08-29	1900	100	4.013	40.13	39.70	-3.40	10
2021-08-30	2450	100	5.133	51.33	52.40	-0.10	10

Note:

1. The tolerance limit of System validation ±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

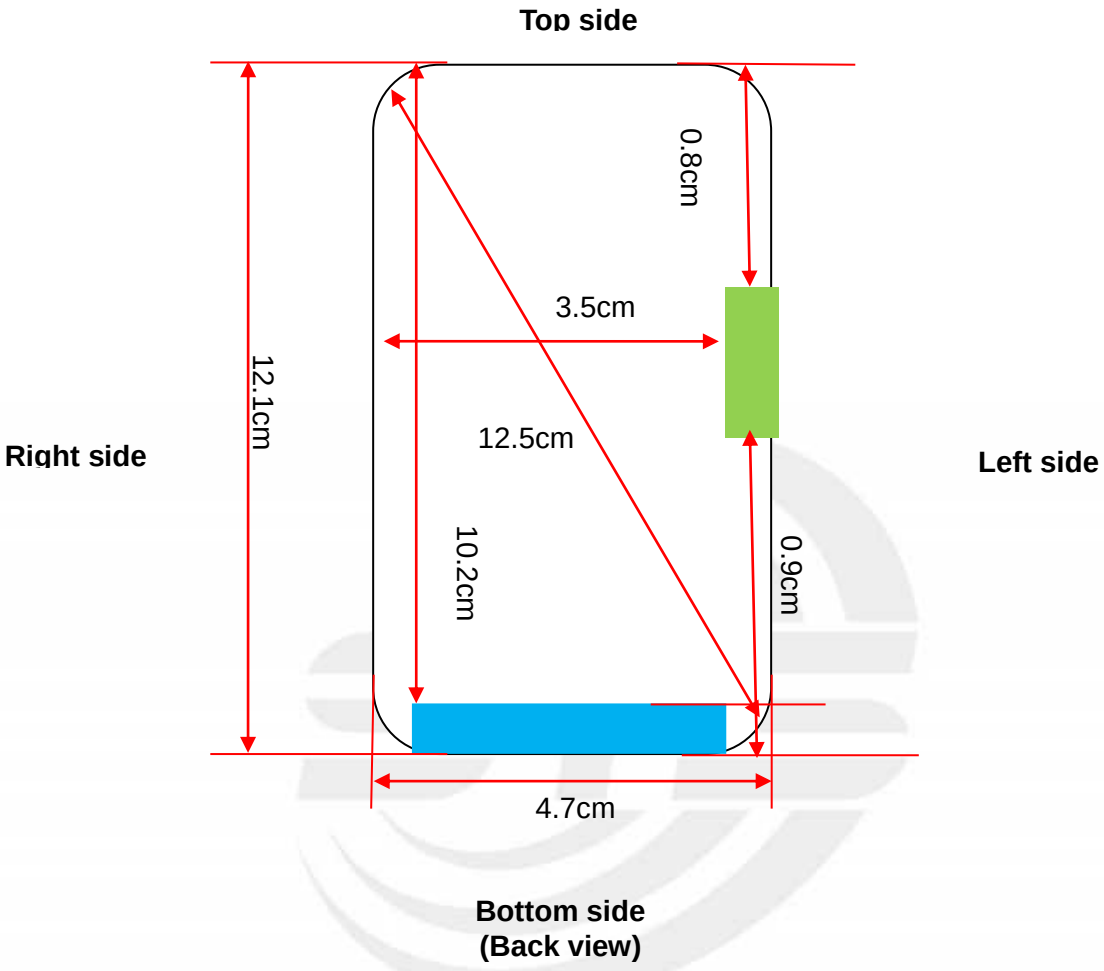
The procedure for assessing the average SAR value consists of the following steps:
The following steps are used for each test position
- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air 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 to16 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 Antenna Location Sketch

It is a Vasco Smart Voice Translator, support GSM/WCDMA/LTE/WLAN/BT mode.



WWAN Antenna

WLAN/BT Antenna

Note 1: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.

7.1 SAR test exclusion consider table

The WWAN/WLAN/BT SAR evaluation of Maximum power (dBm) summing tolerance.

Exposure Position	Wireless Interface	GSM850	PCS1900	WCDMA II
	Calculated Frequency(GHz)	0.8366	1.9098	1.9076
	Maximum Turn-up power (dBm)	32	28	24
	Maximum rated power(mW)	1584.89	630.96	251.19
Back Side	Separation distance (cm)	0.5	0.5	0.5
	exclusion threshold(mW)	9.22	3.35	3.35
	Testing required?	YES	YES	YES
Front Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	3.35	3.35
	Testing required?	YES	YES	YES
Left Side	Separation distance (cm)	1	1	1
	exclusion threshold(mW)	24.60	12.06	12.07
	Testing required?	YES	YES	YES
Right Side	Separation distance (cm)	2	2	2
	exclusion threshold(mW)	65.60	43.42	43.44
	Testing required?	YES	YES	YES
Top Side	Separation distance (cm)	14.2	14.2	14.2
	exclusion threshold(mW)	1051.09	1624.94	1625.08
	Testing required?	YES	NO	NO
Bottom Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	3.35	3.35
	Testing required?	YES	YES	YES

Exposure Position	Wireless Interface	WCDMA V	LTE Band 2	LTE Band 4
	Calculated Frequency(GHz)	0.8366	1.86	1.72
	Maximum Turn-up power (dBm)	23.5	23.5	23
	Maximum rated power(mW)	223.87	223.87	199.53
Back Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	3.42	3.64
	Testing required?	YES	YES	YES
Front Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	3.42	3.64
	Testing required?	YES	YES	YES
Left Side	Separation distance (cm)	1	1	1
	exclusion threshold(mW)	24.60	12.27	12.91
	Testing required?	YES	YES	YES
Right Side	Separation distance (cm)	2	2	2
	exclusion threshold(mW)	65.60	43.99	45.75
	Testing required?	YES	YES	YES
Top Side	Separation distance (cm)	14.2	14.2	14.2
	exclusion threshold(mW)	1051.09	1628.14	1637.64
	Testing required?	NO	NO	NO
Bottom Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	3.42	3.64
	Testing required?	YES	YES	YES

Exposure Position	Wireless Interface	LTE Band 5	LTE Band 7	LTE Band 17
	Calculated Frequency(GHz)	0.8365	2.51	0.711
	Maximum Turn-up power (dBm)	23	22	23
	Maximum rated power(mW)	199.53	158.49	199.53
Back Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	2.69	11.59
	Testing required?	YES	YES	YES
Front Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	2.69	11.59
	Testing required?	YES	YES	YES
Left Side	Separation distance (cm)	1	1	1
	exclusion threshold(mW)	24.60	10.10	28.71
	Testing required?	YES	YES	YES
Right Side	Separation distance (cm)	2	2	2
	exclusion threshold(mW)	65.60	37.87	71.16
	Testing required?	YES	YES	YES
Top Side	Separation distance (cm)	14.2	14.2	14.2
	exclusion threshold(mW)	1050.99	1592.25	926.31
	Testing required?	NO	NO	NO
Bottom Side	Separation distance (cm)	≤0.5	≤0.5	≤0.5
	exclusion threshold(mW)	9.22	2.69	11.59
	Testing required?	YES	YES	YES

Exposure Position	Wireless Interface	BT	2.4G WLAN
	Calculated Frequency(GHz)	2.441	2.437
	Maximum Turn-up power (dBm)	2	13
	Maximum rated power(mW)	1.58	19.95
Back Side	Separation distance (cm)	≤0.5	≤0.5
	exclusion threshold(mW)	2.75	2.76
	Testing required?	NO	YES
Front Side	Separation distance (cm)	≤0.5	≤0.5
	exclusion threshold(mW)	2.75	2.76
	Testing required?	NO	YES
Left Side	Separation distance (cm)	5.5	5.5
	exclusion threshold(mW)	262.84	262.96
	Testing required?	NO	NO
Right Side	Separation distance (cm)	0.8	0.8
	exclusion threshold(mW)	6.73	6.73
	Testing required?	NO	YES
Top Side	Separation distance (cm)	≤0.5	≤0.5
	exclusion threshold(mW)	2.75	2.76
	Testing required?	NO	YES
Bottom Side	Separation distance (cm)	14.4	14.4
	exclusion threshold(mW)	1638.55	1638.74
	Testing required?	NO	NO

Note：

1. maximum power is the source-based time-average power and represents the maximum RF output power among production units.
2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D04, if the maximum time-averaged power available does not exceed 1 mW. This stand-alone SAR exemption test.

4. Per KDB 447498 D04, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

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

Where

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

and

$$ERP_{20\ cm}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases}$$

d = the separation distance (cm);

5. Per KDB 447498 D04, An alternative to the SAR-based exemption is using below table and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in below table to apply, R must be at least λ/2π, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of λ/4 or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF Source frequency (MHz)	Threshold ERP(watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band ,testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 1/4db higher than those measured at the lower data rate than 11b mode ,thus the SAR can be excluded.
7. Per KDB 616217 D04, SAR evaluation for the front surface of tablet display screens are generally not necessary.

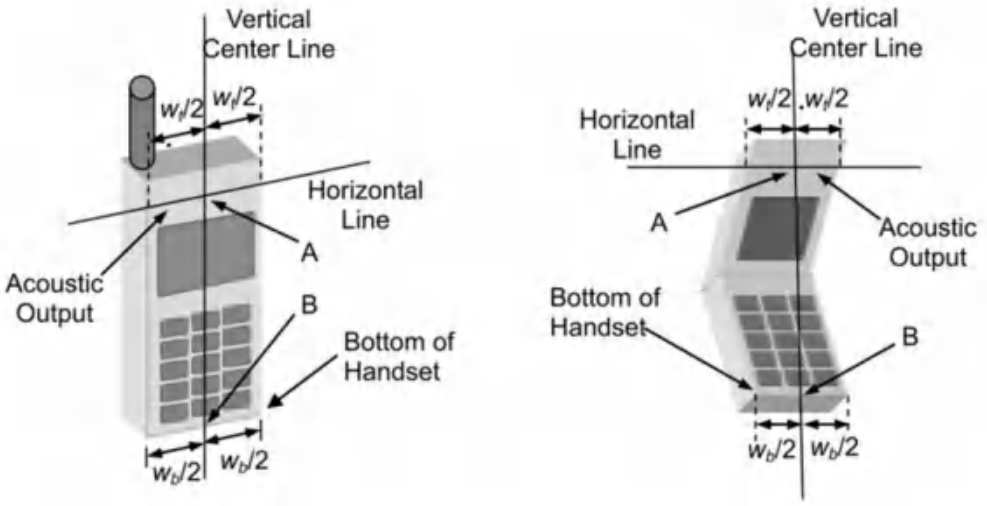
Per KDB 248227, as maximum rated power for U-NII-2A＞U-NII-1, U-NII-2A was chosen for SAR evaluation. Based on the measurements obtained, SAR measurements on U-NII-1 are not required as highest reported SAR from U-NII-2A band is≤1.2W/Kg.

8. EUT Test Position

This EUT was tested in Front Face and Rear Face.

8.1 Define Two Imaginary Lines On The Handset

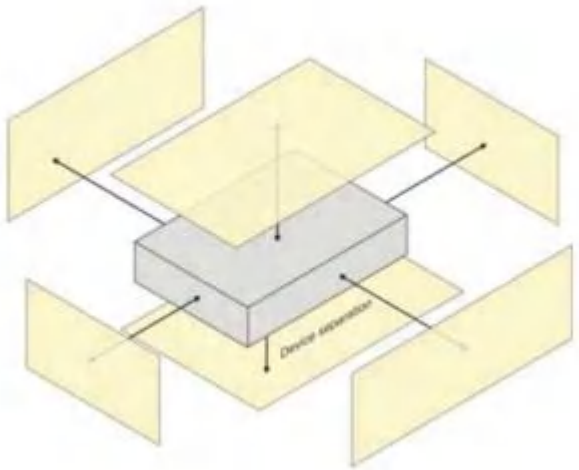
(1) The vertical centerline passes through two points on the front side of the handset the midpoint of the width wt of the handset at the level of the acoustic output, and the midpoint of the width wb of the handset.
(2) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
(3) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



Body-worn Position Conditions:
Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported* SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest *reported* SAR configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.

8.2 Hotspot mode exposure position condition

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing function, the relevant hand and body exposure condition are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surface and edges with a transmitting antenna located within 25 mm form that surface or edge.
When form factor of a handset is smaller than 9cm x 5cm, a test separation distance of 5mm (instead of 10mm)is required for testing hotspot mode. When the separate distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration(surface).



9. Uncertainty

9.1 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	5.831	N	1	1	1	5.83	5.83	∞
Axial Isotropy	0.695	R	$\sqrt{3}$	√0.5	√0.5	0.28	0.28	∞
Hemispherical Isotropy	1.045	R	$\sqrt{3}$	√0.5	√0.5	0.43	0.43	∞
Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	0.685	R	$\sqrt{3}$	1	1	0.40	0.40	∞
System detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Readout Electronics	0.021	N	1	1	1	0.021	0.021	∞
Response Time	0	R	$\sqrt{3}$	1	1	0	0	∞
Integration Time	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF ambient conditions-Noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient conditions-reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
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	2.6	N	1	1	1	2.6	2.6	∞
Device holder uncertainty	3	N	1	1	1	3	3	∞
SAR drift measurement	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
SAR scaling	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
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	1.9	N	1	1	0.84	1.90	1.60	∞
Liquid conductivity(temperature uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	∞
Liquid conductivity(measured)	4	N	1	0.78	0.71	3.12	2.84	M
Liquid permittivity(temperature uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	∞
Liquid permittivity(measured)	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty		RSS				9.79	9.59	
Expanded Uncertainty (95% Confidence interval)		K=2				19.58	19.18	

9.2 System validation Uncertainty

Uncertainty Component	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System								
Probe calibration	5.831	N	1	1	1	5.83	5.83	∞
Axial Isotropy	0.695	R	$\sqrt{3}$	1	1	0.40	0.40	∞
Hemispherical Isotropy	1.045	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	0.685	R	$\sqrt{3}$	1	1	0.40	0.40	∞
System detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Readout Electronics	0.021	N	1	1	1	0.021	0.021	∞
Response Time	0.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Integration Time	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient conditions-reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
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	∞
System validation source								
Deviation of experimental dipole from numerical dipole	5.0	N	1	1	1	5.00	5.00	∞
Input power and SAR drift measurement	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Other source contribution Uncertainty	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and set-up								
Phantom uncertainty(shape and thickness uncertainty)	4.0	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.90	1.60	∞
Liquid conductivity(temperature uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	∞
Liquid conductivity(measured)	4	N	1	0.78	0.71	3.12	2.84	M
Liquid permittivity(temperature uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	∞
Liquid permittivity(measured)	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty		RSS				9.718	9.517	
Expanded Uncertainty (95% Confidence interval)		K=2				19.44	19.04	

10. Output Power Measurement

10.1 Maximum test Result

Burst Average Power (dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880	1909.8
GSM(GMSK, 1-Slot)	32.85	32.97	32.81	28.93	28.97	28.98
GPRS (GMSK, 1-Slot)	32.88	32.99	32.83	28.88	28.91	28.93
GPRS (GMSK, 2-Slot)	32.38	32.53	32.33	28.43	28.42	28.44
GPRS (GMSK, 3-Slot)	31.92	32.03	31.84	28.01	27.94	28.03
GPRS (GMSK, 4-Slot)	31.43	31.62	31.38	27.59	27.54	27.62
EGPRS(8PSK, 1-Slot)	30.12	30.44	30.59	28.84	28.89	28.08
EGPRS(8PSK, 2-Slot)	29.36	29.69	29.81	28.12	28.13	28.33
EGPRS(8PSK, 3-Slot)	28.58	28.90	29.02	27.35	27.41	27.57
EGPRS(8PSK, 4-Slot)	27.81	28.13	28.22	26.65	26.61	26.80
Remark: GPRS, CS4 coding scheme. EGPRS, MCS5 coding scheme. Multi-Slot Class 8, Support Max 4 downlink, 1 uplink, 5 working link Multi-Slot Class 10, Support Max 4 downlink, 2 uplink, 5 working link Multi-Slot Class 12, Support Max 4 downlink, 4 uplink, 5 working link						

Frame- Average Power(dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880	1909.8
GSM(GMSK, 1-Slot)	23.82	23.94	23.78	19.90	19.94	19.95
GPRS (GMSK, 1-Slot)	23.85	23.96	23.80	19.85	19.88	19.90
GPRS (GMSK, 2-Slot)	26.36	26.51	26.31	22.41	22.40	22.42
GPRS (GMSK, 3-Slot)	27.66	27.77	27.58	23.75	23.68	23.77
GPRS (GMSK, 4-Slot)	28.42	28.61	28.37	24.58	24.53	24.61
EGPRS(8PSK, 1-Slot)	21.09	21.41	21.56	19.81	19.86	19.05
EGPRS(8PSK, 2-Slot)	23.34	23.67	23.79	22.10	22.11	22.31
EGPRS(8PSK, 3-Slot)	24.32	24.64	24.76	23.09	23.15	23.31
EGPRS(8PSK, 4-Slot)	24.80	25.12	25.21	23.64	23.60	23.79
Remark : 1. SAR testing was performed on the maximum frame-averaged power mode. 2. The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum Burst - averaged power based on time slots. The calculated method is shown as below: Frame-averaged power = Burst averaged power (1 TX Slot) – 9.03 dB Frame-averaged power = Burst averaged power (2 TX Slots) – 6.02 dB Frame-averaged power = Burst averaged power (3 TX Slots) - 4.26 dB Frame-averaged power = Burst averaged power (4 TX Slots) – 3.01 dB						

WCDMA

Band	WCDMA Band II			WCDMA Band V		
Channel	9262	9400	9538	4132	4183	4233
Frequency (MHz)	1852.4	1880.0	1907.6	826.4	836.6	846.6
RMC 12.2Kbps	23.62	23.54	23.65	22.44	23.15	22.47
HSDPA Subtest-1	23.66	23.59	23.72	22.45	23.20	22.47
HSDPA Subtest-2	23.27	23.39	23.35	22.25	22.43	22.08
HSDPA Subtest-3	22.79	22.93	22.92	21.84	21.99	21.63
HSDPA Subtest-4	22.38	22.46	22.44	21.42	21.57	21.21
HSUPA Subtest-1	22.05	21.98	22.02	21.10	21.13	20.77
HSUPA Subtest-2	22.97	23.08	23.10	22.16	22.30	22.15
HSUPA Subtest-3	22.09	22.08	22.11	21.28	21.35	21.21
HSUPA Subtest-4	21.97	21.59	21.74	21.12	20.91	20.90
HSUPA Subtest-5	21.60	21.24	21.30	20.77	20.53	20.57

According to 3GPP 25.101 sub-clause 6.2.2, the maximum output power is allowed to be reduced by following the table.

Table 6.1A: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	0≤ CM≤3.5	MAX(CM-1,0)
Note: CM=1 for βc/βd=12/15, βhs/ βc=24/15.For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

2.4G WLAN

Mode	Channel Number	Frequency (MHz)	Average Power (dBm)
802.11b	1	2412	12.27
	6	2437	12.93
	11	2462	12.65
802.11g	1	2412	10.21
	6	2437	12.10
	11	2462	11.95
802.11n(HT 20)	1	2412	9.73
	6	2437	11.89
	11	2462	11.31
802.11n(HT 40)	3	2422	11.93
	6	2437	11.67
	9	2452	11.15

Bluetooth

Mode	Channel Number	Frequency (MHz)	Average Power (dBm)
GFSK(1Mbps)	0	2402	0.60
	39	2441	1.66
	78	2480	1.89
π/4-DQPSK(2Mbps)	0	2402	-1.17
	39	2441	-0.63
	78	2480	-0.56
8DPSK(3Mbps)	0	2402	-1.93
	39	2441	-0.61
	78	2480	-0.45

Ble

Mode	Channel Number	Frequency (MHz)	Average Power (dBm)
GFSK(1Mbps)	0	2402	-10.36
	19	2440	-8.96
	39	2480	-11.39

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 $\leqslant$ 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 ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is $\leqslant$ 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 ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is $\leqslant$ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.

LTE Band 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.22	23.24	23.16
1.4	1	2		22.97	23.13	22.94
1.4	1	5		22.74	22.91	22.69
1.4	3	0		22.48	22.63	22.40
1.4	3	1		22.26	22.34	22.11
1.4	3	3		21.99	22.04	21.90
1.4	6	0		21.74	21.80	21.69
1.4	1	0	16-QAM	23.04	23.09	22.96
1.4	1	2		22.77	22.85	22.68
1.4	1	5		22.51	22.56	22.43
1.4	3	0		22.21	22.29	22.17
1.4	3	1		21.97	22.01	21.96
1.4	3	3		21.68	21.75	21.71
1.4	6	0		21.42	21.46	21.50
3	1	0	QPSK	23.16	23.20	23.25
3	1	7		22.90	22.93	22.99
3	1	14		22.63	22.64	22.77
3	8	0		22.39	22.36	22.53
3	8	3		22.16	22.06	22.29
3	8	7		21.95	21.80	22.09
3	15	0		21.66	21.59	21.88
3	1	0	16-QAM	22.95	22.97	23.03
3	1	7		22.68	22.73	22.74
3	1	14		22.39	22.44	22.47
3	8	0		22.17	22.17	22.17
3	8	3		21.96	21.97	21.93
3	8	7		21.69	21.72	21.64
3	15	0		21.41	21.48	21.43

LTE BAND 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.35	23.31	23.01
5	1	12		23.13	23.05	22.78
5	1	24		22.93	22.76	22.56
5	12	0		22.64	22.49	22.27
5	12	6		22.37	22.26	22.06
5	12	13		22.09	22.02	21.81
5	25	0		21.87	21.75	21.61
5	1	0	16-QAM	23.14	23.01	22.78
5	1	12		22.86	22.79	22.54
5	1	24		22.60	22.55	22.24
5	12	0		22.31	22.29	21.97
5	12	6		22.10	22.06	21.73
5	12	13		21.83	21.76	21.47
5	25	0		21.54	21.55	21.26
10	1	0	QPSK	23.04	23.10	23.08
10	1	24		22.74	22.89	22.81
10	1	49		22.52	22.62	22.53
10	25	0		22.29	22.35	22.27
10	25	12		22.03	22.07	22.01
10	25	25		21.80	21.78	21.74
10	50	0		21.52	21.52	21.52
10	1	0	16-QAM	22.74	22.90	22.80
10	1	24		22.48	22.68	22.54
10	1	49		22.20	22.38	22.33
10	25	0		21.90	22.11	22.12
10	25	12		21.64	21.85	21.87
10	25	25		21.41	21.63	21.62
10	50	0		21.19	21.43	21.35

LTE BAND 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.27	23.36	23.29
15	1	37		23.02	23.14	23.06
15	1	74		22.81	22.92	22.83
15	36	0		22.61	22.71	22.60
15	36	18		22.32	22.50	22.35
15	36	39		22.06	22.28	22.14
15	75	0		21.79	22.03	21.90
15	1	0	16-QAM	23.03	23.15	22.99
15	1	38		22.83	22.87	22.78
15	1	74		22.63	22.60	22.54
15	36	0		22.35	22.34	22.32
15	36	18		22.08	22.09	22.11
15	36	39		21.80	21.82	21.83
15	75	0		21.53	21.57	21.60
20	1	0	QPSK	23.43	23.39	23.41
20	1	50		23.17	23.14	23.17
20	1	99		22.90	22.87	22.87
20	50	0		22.61	22.59	22.63
20	50	25		22.33	22.34	22.41
20	50	50		22.11	22.06	22.17
20	100	0		21.85	21.82	21.88
20	1	0	16-QAM	23.19	23.18	23.18
20	1	50		22.96	22.90	22.94
20	1	99		22.68	22.65	22.71
20	50	0		22.41	22.38	22.44
20	50	25		22.16	22.12	22.17
20	50	50		21.87	21.87	21.90
20	100	0		21.65	21.57	21.69

LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.67	22.48	22.51
1.4	1	2		22.45	22.27	22.25
1.4	1	5		22.18	21.99	22.04
1.4	3	0		21.93	21.73	21.74
1.4	3	1		21.69	21.45	21.52
1.4	3	3		21.41	21.18	21.26
1.4	6	0		21.16	20.90	21.05
1.4	1	0	16-QAM	22.44	22.22	22.24
1.4	1	2		22.19	21.93	22.03
1.4	1	5		21.95	21.70	21.77
1.4	3	0		21.71	21.45	21.48
1.4	3	1		21.48	21.20	21.19
1.4	3	3		21.25	20.97	20.90
1.4	6	0		20.97	20.71	20.63
3	1	0	QPSK	22.65	22.48	22.53
3	1	7		22.45	22.22	22.29
3	1	14		22.23	22.01	22.03
3	8	0		21.95	21.71	21.80
3	8	3		21.75	21.50	21.54
3	8	7		21.46	21.30	21.25
3	15	0		21.25	21.05	20.97
3	1	0	16-QAM	22.43	22.24	22.27
3	1	7		22.15	21.97	22.00
3	1	14		21.89	21.72	21.74
3	8	0		21.60	21.43	21.52
3	8	4		21.32	21.22	21.25
3	8	7		21.04	21.01	20.96
3	15	0		20.74	20.73	20.71

LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.76	22.49	22.59
5	1	12		22.51	22.21	22.38
5	1	24		22.31	21.95	22.08
5	12	0		22.09	21.71	21.83
5	12	6		21.86	21.47	21.62
5	12	13		21.63	21.18	21.35
5	25	0		21.34	20.94	21.05
5	1	0	16-QAM	22.49	22.23	22.36
5	1	12		22.21	21.98	22.10
5	1	24		22.01	21.75	21.89
5	12	0		21.79	21.46	21.64
5	12	6		21.55	21.17	21.41
5	12	13		21.28	20.90	21.15
5	25	0		20.98	20.64	20.94
10	1	0	QPSK	22.35	22.40	22.36
10	1	24		22.10	22.15	22.08
10	1	49		21.83	21.94	21.80
10	25	0		21.61	21.68	21.56
10	25	12		21.36	21.40	21.31
10	25	25		21.11	21.19	21.04
10	50	0		20.82	20.94	20.79
10	1	0	16-QAM	22.09	22.11	22.16
10	1	24		21.82	21.88	21.95
10	1	49		21.56	21.60	21.73
10	25	0		21.35	21.32	21.47
10	25	12		21.07	21.11	21.20
10	25	25		20.77	20.84	20.94
10	50	0		20.47	20.64	20.68

LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.53	22.28	22.42
15	1	37		22.29	22.04	22.14
15	1	74		22.05	21.75	21.84
15	36	0		21.82	21.51	21.57
15	36	19		21.62	21.30	21.34
15	36	39		21.33	21.06	21.13
15	75	0		21.05	20.84	20.91
15	1	0	16-QAM	22.29	22.03	22.17
15	1	38		22.06	21.80	21.92
15	1	75		21.85	21.56	21.64
15	36	0		21.61	21.28	21.38
15	36	19		21.41	21.01	21.10
15	36	39		21.11	20.78	20.81
15	75	0		20.84	20.49	20.55
20	1	0	QPSK	22.79	22.58	22.62
20	1	50		22.50	22.36	22.37
20	1	99		22.25	22.09	22.11
20	50	0		21.98	21.81	21.89
20	50	25		21.76	21.58	21.68
20	50	50		21.51	21.29	21.40
20	100	0		21.24	20.99	21.12
20	1	0	16-QAM	22.58	22.29	22.33
20	1	50		22.29	22.07	22.07
20	1	99		22.02	21.78	21.80
20	50	0		21.72	21.55	21.54
20	50	25		21.52	21.30	21.33
20	50	50		21.23	21.06	21.09
20	100	0		20.97	20.76	20.82

LTE BAND 5

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	22.34	22.46	22.40
1.4	1	2		22.12	22.17	22.12
1.4	1	5		21.90	21.90	21.87
1.4	3	0		21.67	21.60	21.67
1.4	3	1		21.41	21.39	21.46
1.4	3	2		21.15	21.15	21.23
1.4	6	0		20.91	20.95	20.98
1.4	1	0	16-QAM	22.04	22.21	22.13
1.4	1	2		21.76	21.99	21.91
1.4	1	5		21.53	21.78	21.68
1.4	3	0		21.30	21.51	21.46
1.4	3	1		21.00	21.21	21.16
1.4	3	2		20.77	20.97	20.93
1.4	6	0		20.51	20.75	20.70
3	1	0	QPSK	22.48	22.35	22.57
3	1	7		22.27	22.07	22.35
3	1	14		21.98	21.84	22.14
3	8	0		21.78	21.59	21.90
3	8	4		21.53	21.37	21.63
3	8	7		21.29	21.15	21.39
3	15	0		21.05	20.86	21.18
3	1	0	16-QAM	22.27	22.08	22.31
3	1	7		22.06	21.82	22.04
3	1	14		21.80	21.60	21.80
3	8	0		21.55	21.34	21.52
3	8	4		21.30	21.13	21.31
3	8	7		21.09	20.93	21.03
3	15	0		20.82	20.69	20.82

LTE BAND 5

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.28	22.41	22.35
5	1	12		21.99	22.14	22.13
5	1	24		21.70	21.92	21.85
5	12	0		21.44	21.66	21.56
5	12	6		21.18	21.44	21.28
5	12	11		20.96	21.17	20.98
5	25	0		20.69	20.97	20.76
5	1	0	16-QAM	22.03	22.21	22.06
5	1	12		21.82	21.98	21.78
5	1	24		21.60	21.77	21.49
5	12	0		21.34	21.52	21.27
5	12	6		21.08	21.23	21.00
5	12	11		20.88	20.95	20.78
5	25	0		20.63	20.69	20.55
10	1	0	QPSK	22.46	22.52	22.48
10	1	24		22.23	22.31	22.24
10	1	49		22.03	22.03	22.04
10	25	0		21.81	21.74	21.77
10	25	12		21.59	21.53	21.51
10	25	24		21.39	21.25	21.24
10	50	0		21.17	20.99	20.95
10	1	0	16-QAM	22.18	22.23	22.21
10	1	24		21.95	22.02	21.97
10	1	49		21.68	21.79	21.74
10	25	0		21.41	21.52	21.50
10	25	12		21.13	21.24	21.26
10	25	24		20.86	21.03	21.06
10	50	0		20.62	20.79	20.77

LTE BAND 7

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.43	21.49	21.36
5	1	12		21.16	21.27	21.07
5	1	24		20.87	21.06	20.86
5	12	0		20.64	20.78	20.61
5	12	6		20.44	20.53	20.39
5	12	13		20.17	20.32	20.13
5	25	0		19.89	20.07	19.90
5	1	0	16-QAM	21.23	21.23	21.15
5	1	12		21.00	20.93	20.86
5	1	24		20.70	20.72	20.60
5	12	0		20.47	20.46	20.39
5	12	6		20.18	20.26	20.12
5	12	13		19.91	20.03	19.83
5	25	0		19.67	19.78	19.56
10	1	0	QPSK	21.51	21.64	21.59
10	1	24		21.28	21.37	21.39
10	1	49		21.03	21.14	21.11
10	25	0		20.79	20.92	20.86
10	25	12		20.54	20.71	20.66
10	25	25		20.30	20.43	20.39
10	50	0		20.02	20.17	20.11
10	1	0	16-QAM	21.28	21.38	21.30
10	1	24		21.05	21.15	21.02
10	1	49		20.84	20.86	20.80
10	25	0		20.60	20.63	20.55
10	25	12		20.38	20.36	20.33
10	25	25		20.11	20.13	20.09
10	50	0		19.91	19.87	19.80

LTE BAND 7

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.56	21.47	21.33
15	1	37		21.27	21.20	21.08
15	1	74		21.00	20.99	20.79
15	36	0		20.76	20.73	20.52
15	36	19		20.53	20.46	20.30
15	36	39		20.32	20.21	20.06
15	75	0		20.02	19.96	19.77
15	1	0	16-QAM	21.32	21.26	21.09
15	1	38		21.02	20.99	20.83
15	1	75		20.76	20.75	20.59
15	36	0		20.52	20.50	20.31
15	36	19		20.27	20.22	20.02
15	36	39		20.00	19.93	19.77
15	75	0		19.71	19.68	19.51
20	1	0	QPSK	21.62	21.58	21.52
20	1	50		21.40	21.29	21.27
20	1	99		21.11	21.01	21.04
20	50	0		20.91	20.73	20.76
20	50	25		20.62	20.50	20.48
20	50	50		20.35	20.20	20.26
20	100	0		20.09	19.95	20.02
20	1	0	16-QAM	21.34	21.30	21.32
20	1	50		21.13	21.05	21.10
20	1	99		20.91	20.82	20.81
20	50	0		20.66	20.57	20.53
20	50	25		20.38	20.36	20.29
20	50	50		20.12	20.16	20.03
20	100	0		19.86	19.87	19.79

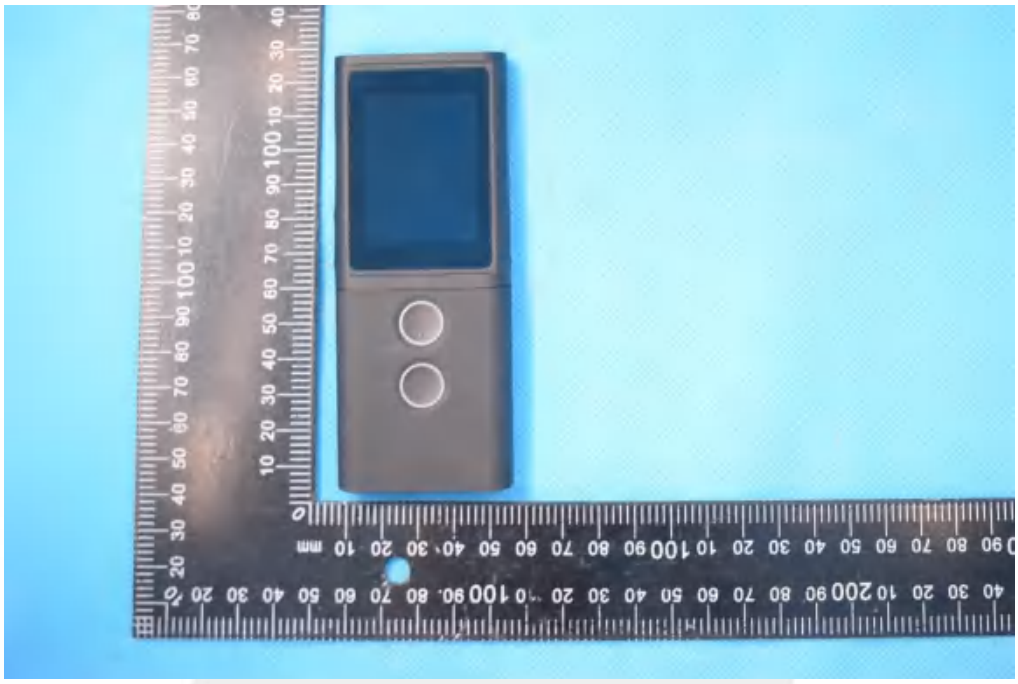
LTE BAND 17

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.48	22.43	22.51
5	1	12		22.26	22.23	22.26
5	1	24		21.98	21.99	22.00
5	12	0		21.75	21.76	21.77
5	12	6		21.49	21.50	21.51
5	12	11		21.29	21.23	21.21
5	25	0		21.02	21.01	20.96
5	1	0	16-QAM	22.26	22.20	22.26
5	1	12		22.03	21.95	21.98
5	1	24		21.74	21.74	21.77
5	12	0		21.44	21.45	21.53
5	12	6		21.19	21.16	21.24
5	12	11		20.96	20.94	21.03
5	25	0		20.75	20.69	20.83
10	1	0	QPSK	22.52	22.49	22.55
10	1	24		22.24	22.25	22.28
10	1	49		21.97	22.02	22.05
10	25	0		21.76	21.80	21.76
10	25	12		21.51	21.56	21.46
10	25	24		21.25	21.30	21.20
10	50	0		20.99	21.04	20.94
10	1	0	16-QAM	22.23	22.28	22.27
10	1	24		22.02	22.04	22.02
10	1	49		21.80	21.80	21.75
10	25	0		21.52	21.55	21.48
10	25	12		21.26	21.28	21.27
10	25	24		21.06	21.05	21.02
10	50	0		20.80	20.76	20.79

11. EUT And Test Setup Photo

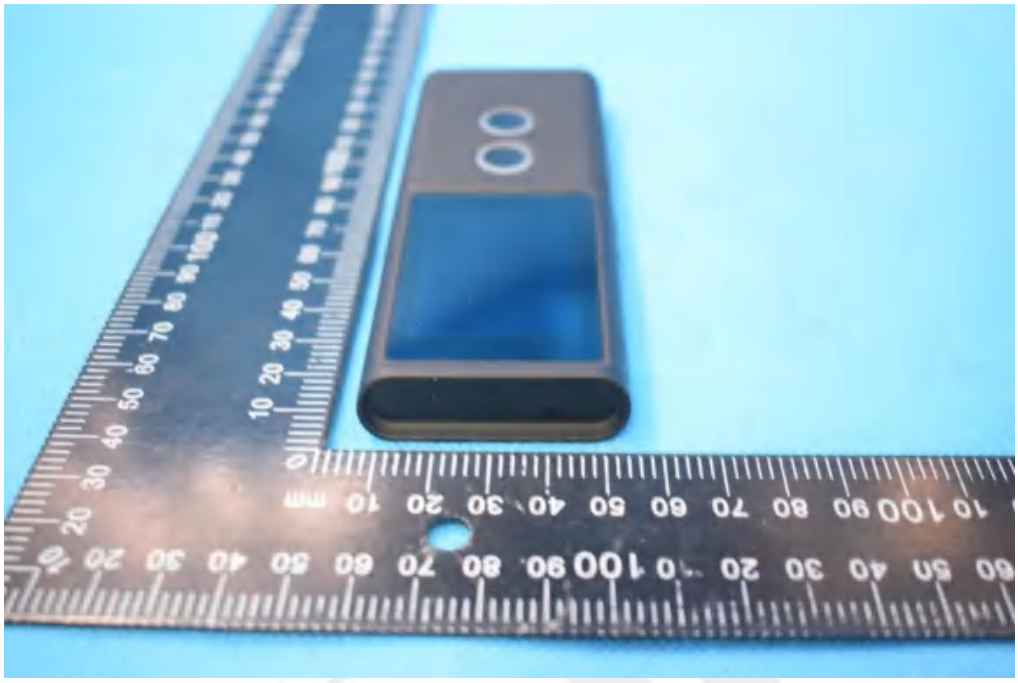
11.1 EUT Photos

Front side

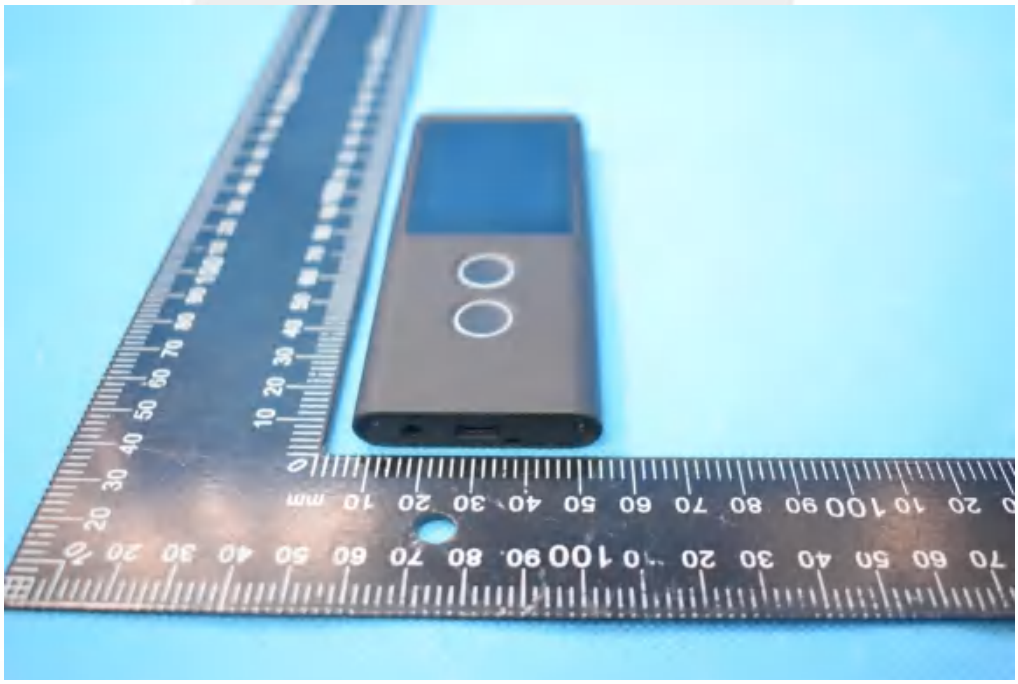


Back side

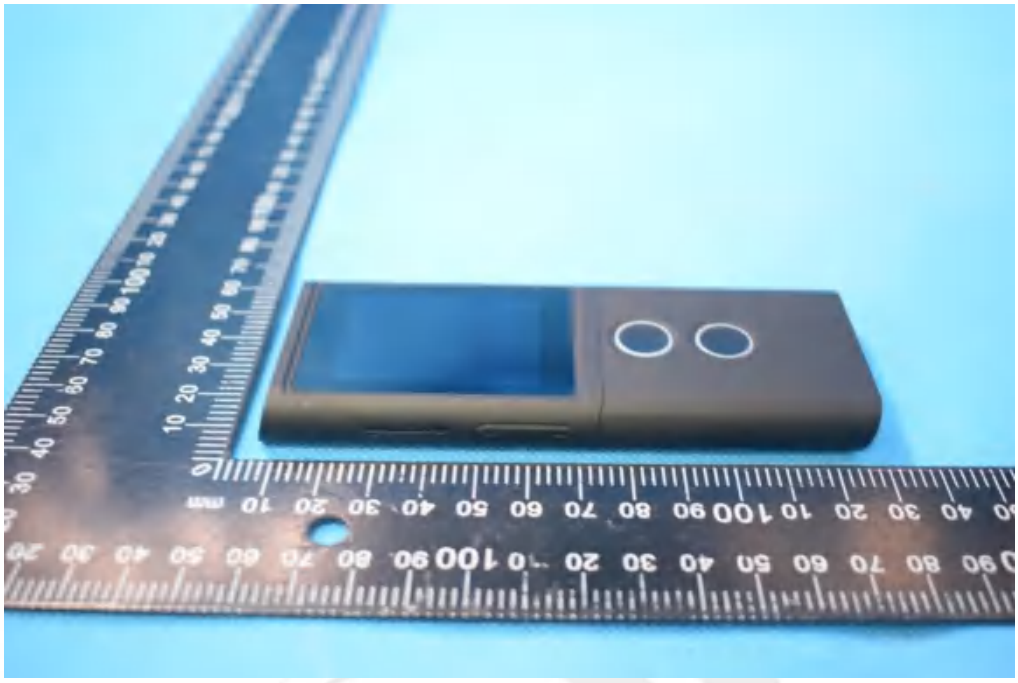
Top side



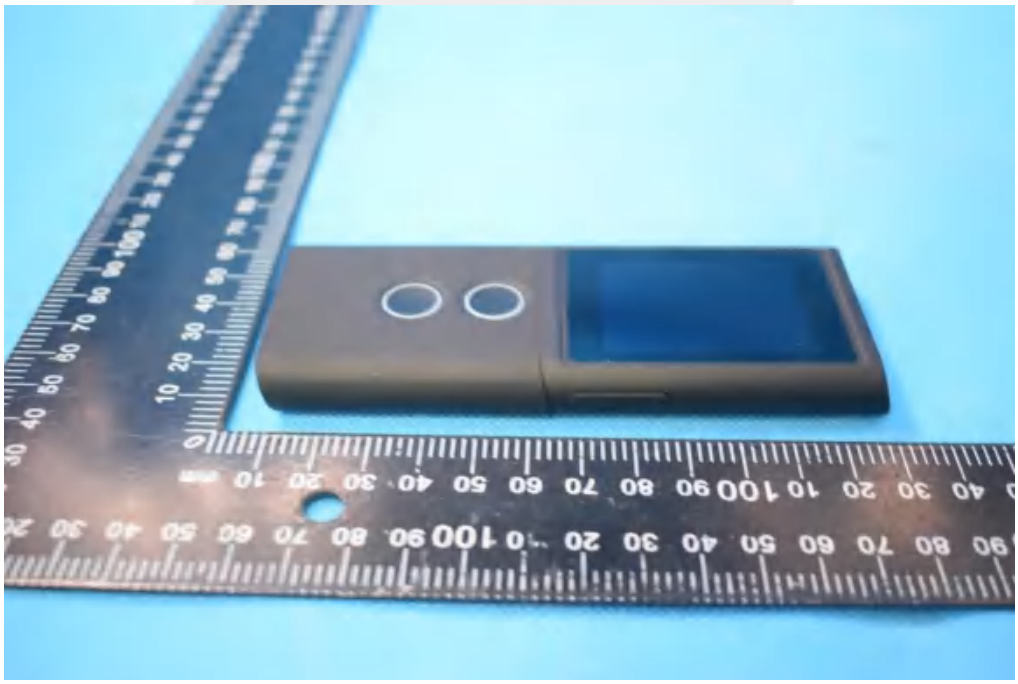
Bottom side



Left side



Right side

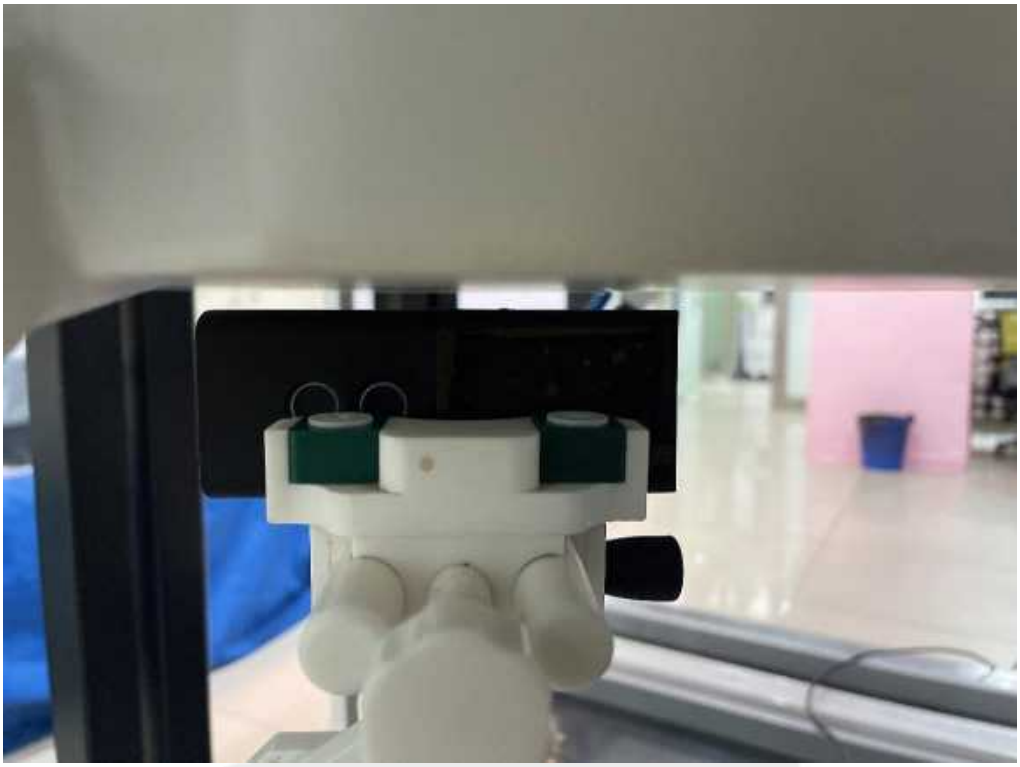


11.2 Setup Photos

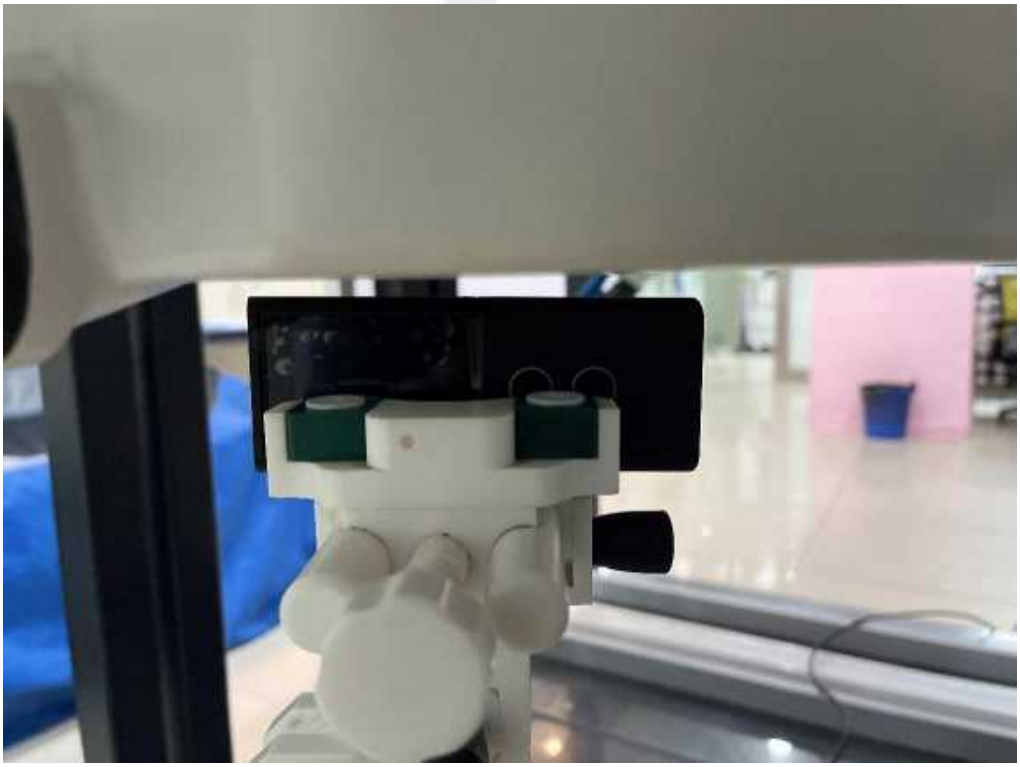
Front Side(Test separation is 5mm)

Back Side(Test separation is 5mm)

Left Edge(Test separation is 5mm)



Right Edge(Test separation is 5mm)



Bottom Edge(Test separation is 5mm)

Top Edge(Test separation is 5mm)

Liquid depth (15 cm)

12. SAR Result Summary

12.1 Body-worn and Hotspot SAR

Band	Model	Test Position	Fre.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
GSM850	GSM(GMSK, 1-Slot)	Front Side	836.6	0.253	0.55	33.00	32.97	0.255	/
		Back Side	836.6	0.506	0.72	33.00	32.97	**0.510**	**1**
		Left Edge	836.6	0.352	2.27	33.00	32.97	0.354	/
		Right Edge	836.6	0.100	0.48	33.00	32.97	0.101	/
		Top Edge	836.6	0.006	-0.70	33.00	32.97	0.006	/
		Bottom Edge	836.6	0.256	0.79	33.00	32.97	0.258	/
GPRS850	GPRS Data-4 Slot	Front Side	836.6	0.419	-2.32	32.00	31.62	0.457	/
		Back Side	824.2	0.850	3.88	32.00	31.43	0.969	/
		Back Side	836.6	0.925	-3.78	32.00	31.62	**1.010**	**2**
		Back Side	848.8	0.861	-1.54	32.00	31.38	0.993	/
		Left Edge	836.6	0.684	3.26	32.00	31.62	0.747	/
		Right Edge	836.6	0.098	0.48	32.00	31.62	0.107	/
		Top Edge	836.6	0.052	0.08	32.00	31.62	0.057	/
		Bottom Edge	836.6	0.523	-0.30	32.00	31.62	0.571	/
GPRS1900	GSM(GMSK, 1-Slot)	Front Side	1909.8	0.210	-0.27	29.00	28.98	0.211	/
		Back Side	1909.8	0.432	2.73	29.00	28.98	**0.434**	**3**
		Left Edge	1909.8	0.365	1.29	29.00	28.98	0.367	/
		Right Edge	1909.8	0.085	0.08	29.00	28.98	0.085	/
		Top Edge	1909.8	0.021	3.39	29.00	28.98	0.021	/
		Bottom Edge	1909.8	0.251	0.59	29.00	28.98	0.252	/
GPRS1800	GPRS Data-4 Slot	Front Side	1909.8	0.352	2.71	28.00	27.62	0.384	/
		Back Side	1850.2	0.950	2.65	28.00	27.59	1.044	/
		Back Side	1880	0.965	-0.64	28.00	27.54	1.073	/
		Back Side	1909.8	0.994	2.78	28.00	27.62	**1.085**	**4**
		Left Edge	1909.8	0.698	-0.95	28.00	27.62	0.762	/
		Right Edge	1909.8	0.156	-2.90	28.00	27.62	0.170	/
		Top Edge	1909.8	0.025	-1.07	28.00	27.62	0.027	/
		Bottom Edge	1909.8	0.456	3.77	28.00	27.62	0.498	/

WCDMA Band II	RMC	Front Side	1907.6	0.213	2.57	24.00	23.72	0.227	/
		Back Side	1907.6	0.705	-1.89	24.00	23.72	**0.752**	**5**
		Left Edge	1907.6	0.521	3.60	24.00	23.72	0.556	/
		Right Edge	1907.6	0.175	-0.35	24.00	23.72	0.187	/
		Top Edge	1907.6	0.021	1.15	24.00	23.72	0.022	/
		Bottom Edge	1907.6	0.193	3.04	24.00	23.72	0.206	/
WCDMA Band V	RMC	Front Side	836.6	0.791	-0.07	23.50	23.20	0.848	/
		Back Side	826.4	0.798	0.82	23.50	22.45	1.016	/
		Back Side	836.6	0.983	-3.14	23.50	23.20	**1.053**	**6**
		Back Side	846.6	0.786	0.46	23.50	22.47	0.996	/
		Left Edge	836.6	0.659	-0.84	23.50	23.20	0.706	/
		Right Edge	836.6	0.230	0.81	23.50	23.20	0.246	/
		Top Edge	836.6	0.008	-3.17	23.50	23.20	0.009	/
		Bottom Edge	836.6	0.100	-2.60	23.50	23.20	0.107	/
2.4GHz WLAN	802.11b	Front Side	2437	0.147	0.23	13.00	12.93	0.149	/
		Back Side	2437	0.490	-2.68	13.00	12.93	**0.498**	**7**
		Right Edge	2437	0.309	1.07	13.00	12.93	0.314	/
		Top Edge	2437	0.140	1.37	13.00	12.93	0.142	/

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Fre.	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	0	Front side	1860	0.365	1.39	23.5	23.43	0.371	/
			50	0	Front side	1860	0.325	-1.36	23	22.61	0.356	/
			1	0	Back Side	1860	0.602	1.75	23.5	23.43	**0.612**	**8**
			50	0	Back Side	1860	0.547	-1.09	23	22.61	0.598	/
			1	0	Left Side	1860	0.462	2.42	23.5	23.43	0.470	/
			50	0	Left Side	1860	0.442	0.12	23	22.61	0.484	/
			1	0	Right Side	1860	0.210	-3.56	23.5	23.43	0.213	/
			50	0	Right Side	1860	0.192	-1.50	23	22.61	0.210	/
			1	0	Bottom Side	1860	0.251	3.56	23.5	23.43	0.255	/
			50	0	Bottom Side	1860	0.302	-0.03	23	22.61	0.330	/
LTE Band 4	20M	QPSK	1	0	Front side	1720	0.118	3.46	23.0	22.79	0.124	/
			50	0	Front side	1720	0.103	-2.22	22.0	21.98	0.103	/
			1	0	Back Side	1720	0.838	3.04	23.0	22.79	**0.880**	**9**
			50	0	Back Side	1720	0.801	3.61	22.0	21.98	0.805	/
			100	0	Back Side	1720	0.755	3.17	21.5	21.24	0.802	/
			1	0	Back Side	1732.5	0.765	3.04	23.0	22.58	0.843	/
			50	0	Back Side	1732.5	0.753	3.61	22.0	21.81	0.787	/
			100	0	Back Side	1732.5	0.741	3.17	21.5	20.99	0.833	/
			1	0	Back Side	1745	0.773	3.04	23.0	22.62	0.844	/
			50	0	Back Side	1745	0.751	3.61	22.0	21.68	0.808	/
			100	0	Back Side	1745	0.748	3.17	21.5	21.12	0.816	/
			1	0	Left Side	1720	0.251	3.93	23.0	22.79	0.263	/
			50	0	Left Side	1720	0.241	0.02	22.0	21.98	0.242	/
			1	0	Right Side	1720	0.020	-1.05	23.0	22.79	0.021	/
			50	0	Right Side	1720	0.018	0.36	22.0	21.98	0.018	/
			1	0	Bottom Side	1720	0.220	-0.61	23.0	22.79	0.231	/
			50	0	Bottom Side	1720	0.214	1.08	22.0	21.98	0.215	/

LTE Band 5	10M	QPSK	1	0	Front side	836.5	0.690	3.45	23.0	22.52	0.771	/
			25	0	Front side	836.5	0.652	1.47	22.0	21.74	0.692	/
			1	0	Back Side	829	0.808	0.69	23.0	22.46	0.915	/
			25	0	Back Side	829	0.802	0.64	22.0	21.81	0.838	/
			50	0	Back Side	829	0.783	0.64	21.5	21.17	0.845	/
			1	0	Back Side	836.5	0.833	-2.54	23.0	22.52	**0.930**	**10**
			25	0	Back Side	836.5	0.798	-1.53	22.0	21.74	0.847	/
			50	0	Back Side	836.5	0.785	-3.12	21.5	20.99	0.883	/
			1	0	Back Side	844	0.798	1.27	23.0	22.48	0.900	/
			25	0	Back Side	844	0.765	0.01	22.0	21.77	0.807	/
			50	0	Back Side	844	0.779	1.24	21.5	20.95	0.884	/
			1	0	Left Side	836.5	0.652	2.05	23.0	22.52	0.728	/
			25	0	Left Side	836.5	0.625	2.40	22.0	21.74	0.664	/
			1	0	Right Side	836.5	0.321	3.50	23.0	22.52	0.359	/
			25	0	Right Side	836.5	0.031	0.74	22.0	21.74	0.033	/
			1	0	Top Edge	836.5	0.083	3.50	23.0	22.52	0.093	/
			25	0	Top Edge	836.5	0.071	0.74	22.0	21.74	0.075	/
			1	0	Bottom Side	836.5	0.220	1.17	23.0	22.52	0.246	/
			25	0	Bottom Side	836.5	0.215	-2.46	22.0	21.74	0.228	/
LTE Band 7	20M	QPSK	1	0	Front side	2510	0.354	0.19	22.0	20.91	0.455	/
			50	0	Front side	2510	0.362	-1.01	21.0	21.62	0.314	/
			1	0	Back Side	2510	0.514	-2.36	22.0	20.91	**0.661**	**11**
			50	0	Back Side	2510	0.496	-3.87	21.0	21.62	0.430	/
			1	0	Left Side	2510	0.365	-2.88	22.0	20.91	0.469	/
			50	0	Left Side	2510	0.359	0.64	21.0	21.62	0.311	/
			1	0	Right Side	2510	0.103	0.55	22.0	20.91	0.132	/
			50	0	Right Side	2510	0.098	3.81	21.0	21.62	0.085	/
			1	0	Top Edge	2510	0.041	-0.02	22.0	20.91	0.053	/
			50	0	Top Edge	2510	0.035	3.32	21.0	21.62	0.030	/
			1	0	Bottom Side	2510	0.263	-0.02	22.0	20.91	0.338	/
			50	0	Bottom Side	2510	0.215	3.32	21.0	21.62	0.186	/

LTE Band 17	10M	QPSK	1	0	Front side	711	0.293	-1.16	23.0	22.55	0.325	/
			25	0	Front side	711	0.285	-3.81	22.0	21.76	0.301	/
			1	0	Back Side	709	0.803	3.38	23.0	22.52	0.897	/
			25	0	Back Side	709	0.812	-2.00	22.0	21.76	0.858	/
			50	0	Back Side	709	0.812	-2.00	21.5	20.99	0.913	/
			1	0	Back Side	710	0.786	-2.11	23.0	22.49	0.884	/
			25	0	Back Side	710	0.779	1.57	22.0	21.8	0.816	/
			50	0	Back Side	710	0.798	1.36	21.5	21.04	0.887	/
			1	0	Back Side	711	0.825	2.08	23.0	22.55	**0.915**	**12**
			25	0	Back Side	711	0.801	-2.92	22.0	21.76	0.847	/
			50	0	Back Side	711	0.764	-2.92	21.5	20.94	0.869	/
			1	0	Left Side	711	0.654	-2.15	23.0	22.55	0.725	/
			25	0	Left Side	711	0.625	1.81	22.0	21.76	0.661	/
			1	0	Right Side	711	0.112	-2.23	23.0	22.55	0.124	/
			25	0	Right Side	711	0.132	-2.96	22.0	21.76	0.139	/
			1	0	Top Edge	711	0.074	-2.23	23.0	22.55	0.082	/
			25	0	Top Edge	711	0.051	-2.96	22.0	21.76	0.054	/
			1	0	Bottom Side	711	0.087	-2.86	23.0	22.55	0.096	/
			25	0	Bottom Side	711	0.085	-2.96	22.0	21.76	0.090	/

Band	Model	Test Position	Ch.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
BT	GFSK	Front Side	2480	0.026	-2.98	2.00	1.98	0.026	/
		Back Side	2480	0.040	-1.80	2.00	1.98	0.040	13
		Left Edge	2480	0.021	0.40	2.00	1.98	0.021	/
		Right Edge	2480	0.012	2.19	2.00	1.98	0.012	/
		Top Edge	2480	0.025	-3.84	2.00	1.98	0.025	/

Note:

1. The test separation of all above table is 5mm.
2. Per KDB 447498 D04, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
3. Per KDB 248227- 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 $\leqslant$ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.411** W/Kg for Body)
4. When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The “Portable Hotspot” feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

Repeated SAR

Band	Mode	Test Position	Fre.	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR(W/Kg)	Meas. No.
GSM 850	GPRS Data-4 Slot	Back Side	824.2	0.841	-1.43	32	31.43	0.959	-
		Back Side	836.6	0.914	0.48	32	31.62	0.998	-
		Back Side	848.8	0.821	-1.53	32	31.38	0.947	-
GPRS1900	GPRS Data-4 Slot	Back Side	1850.2	0.926	1.49	28	27.59	1.018	-
		Back Side	1880	0.918	-1.08	28	27.54	1.021	-
		Back Side	1909.8	0.946	-2.08	28	27.62	1.033	-
WCDMA Band V	RMC	Back Side	826.4	0.783	-0.72	23.5	22.45	0.997	-
		Back Side	836.6	0.971	-3.31	23.5	23.2	1.040	-
		Back Side	846.6	0.765	2.26	23.5	22.47	0.970	-
LTE Band 4	QPSK	Back Side	1720	0.834	0.20	23	22.79	0.875	-
		Back Side	1720	0.788	-1.80	22	21.98	0.792	-
		Back Side	1720	0.745	-0.25	21.5	21.24	0.791	-
		Back Side	1732.5	0.748	-3.40	23	22.58	0.824	-
		Back Side	1732.5	0.731	2.38	21.5	20.99	0.822	-
		Back Side	1745	0.736	3.77	23	22.62	0.803	-
		Back Side	1745	0.739	3.85	22	21.68	0.796	-
		Back Side	1745	0.714	-2.54	21.5	21.12	0.779	-
LTE Band 5	QPSK	Back Side	829	0.780	2.36	23	22.46	0.883	-
		Back Side	829	0.797	2.58	22	21.81	0.833	-
		Back Side	829	0.763	1.42	21.5	21.17	0.823	-
		Back Side	836.5	0.814	-2.51	23	22.52	0.909	-
		Back Side	836.5	0.762	1.27	22	21.74	0.809	-
		Back Side	836.5	0.776	1.21	21.5	20.99	0.873	-
		Back Side	844	0.791	3.10	23	22.48	0.892	-
		Back Side	844	0.753	-1.17	22	21.77	0.794	-
		Back Side	844	0.757	-0.21	21.5	20.95	0.859	-
LTE Band 17	QPSK	Back Side	709	0.794	2.40	23	22.52	0.887	-
		Back Side	709	0.805	-0.06	22	21.76	0.851	-
		Back Side	709	0.785	-0.73	21.5	20.99	0.883	-
		Back Side	710	0.753	-0.14	23	22.49	0.847	-
		Back Side	710	0.778	-0.85	22	21.8	0.815	-
		Back Side	710	0.771	2.78	21.5	21.04	0.857	-
		Back Side	711	0.816	-2.05	23	22.55	0.905	-
		Back Side	711	0.782	-0.55	22	21.76	0.826	-
		Back Side	711	0.744	-1.14	21.5	20.94	0.846	-

12.2 repeated SAR measurement

Band	Mode	Test Position	Fre.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(W/kg)	2nd Repeated SAR 1g	Ratio
GSM 850	GPRS Data-4 Slot	Back Side	824	0.85	0.841	1.011	-	-	-
		Back Side	837	0.925	0.914	1.012	-	-	-
		Back Side	849	0.861	0.821	1.049	-	-	-
GPRS1900	GPRS Data-4 Slot	Back Side	1850	0.95	0.926	1.026	-	-	-
		Back Side	1880	0.965	0.918	1.051	-	-	-
		Back Side	1910	0.994	0.946	1.051	-	-	-
WCDMA Band V	RMC	Back Side	826	0.798	0.783	1.019	-	-	-
		Back Side	837	0.983	0.971	1.012	-	-	-
		Back Side	847	0.786	0.765	1.027	-	-	-
LTE Band 4	QPSK	Back Side	1720	0.838	0.834	1.005	-	-	-
		Back Side	1720	0.801	0.788	1.016	-	-	-
		Back Side	1720	0.755	0.745	1.013	-	-	-
		Back Side	1732.5	0.765	0.748	1.023	-	-	-
		Back Side	1732.5	0.741	0.731	1.014	-	-	-
		Back Side	1745	0.773	0.736	1.050	-	-	-
		Back Side	1745	0.751	0.739	1.016	-	-	-
		Back Side	1745	0.748	0.714	1.048	-	-	-
LTE Band 5	QPSK	Back Side	829	0.808	0.780	1.036	-	-	-
		Back Side	829	0.802	0.797	1.006	-	-	-
		Back Side	829	0.783	0.763	1.026	-	-	-
		Back Side	837	0.833	0.814	1.023	-	-	-
		Back Side	837	0.798	0.762	1.047	-	-	-
		Back Side	837	0.785	0.776	1.012	-	-	-
		Back Side	844	0.798	0.791	1.009	-	-	-
		Back Side	844	0.765	0.753	1.016	-	-	-
		Back Side	844	0.779	0.757	1.029	-	-	-
LTE Band 17	QPSK	Back Side	709	0.803	0.794	1.011	-	-	-
		Back Side	709	0.812	0.805	1.009	-	-	-
		Back Side	709	0.812	0.785	1.034	-	-	-
		Back Side	710	0.786	0.753	1.044	-	-	-
		Back Side	710	0.779	0.778	1.001	-	-	-
		Back Side	710	0.798	0.771	1.035	-	-	-
		Back Side	711	0.825	0.816	1.011	-	-	-
		Back Side	711	0.801	0.782	1.024	-	-	-
		Back Side	711	0.764	0.744	1.027	-	-	-

Note:

1. Per KDB 865664 D01,for each frequency band ,repeated SAR measurement is required only when the measured SAR is≥0.8W/Kg.
2. Per KDB 865664 D01,if the ratio of largest to smallest SAR for the original and first repeated measurement is≤1.2and the measured SAR＜1.45W/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 ≥ 1.45W/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
Body	1. GSM + 2.4GHz WLAN
	2. GSM + Bluetooth
	3. WCDMA + 2.4GHz WLAN
	4. WCDMA + Bluetooth
	5. LTE + 2.4GHz WLAN
	6. LTE + Bluetooth

NOTE:

1. Bluetooth and WLAN can't simultaneous transmission at the same time.
2. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
3. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
4. KDB 447498 Appendix E, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
   SAR_{est} =1.6 · Pant / Pth [W/kg].
   P_{ant} is maximum time-averaged power or effective radiated power (ERP), whichever is greater, and P_{th} is defined in Formula KDB 447498 (B.2).

Simultaneous Mode	Position	Mode	Max. 1-g SAR (W/kg)	1-g Sum SAR (W/kg)
GSM + 2.4G WLAN	Body	GSM	1.085	1.583
		2.4G WLAN	0.498	
GSM + Bluetooth	Body	GSM	1.085	1.125
		Bluetooth	0.040	
WCDMA + 2.4G WLAN	Body	WCDMA	1.053	1.551
		2.4G WLAN	0.498	
WCDMA + Bluetooth	Body	WCDMA	1.053	1.093
		Bluetooth	0.040	
LTE + 2.4G WLAN	Body	LTE	0.915	1.413
		2.4G WLAN	0.498	
LTE + Bluetooth	Body	LTE	0.915	0.955
		Bluetooth	0.040	

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.

When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR-1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR-1g 1.6 W/kg), SAR test exclusion is determined by the SPLSR.

13. 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
2450MHzDipole	MVG	SID2450	SN 30/14 DIP2G450-335	2020.07.14	2023.07.13
E-Field Probe	MVG	SSE5	SN 07/21 EPGO352	2021.03.01	2022.02.28
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2020.11.24	2021.11.23
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	2020.10.12	2021.10.11
Multi Meter	Keithley	Multi Meter 2000	4050073	2020.10.10	2021.10.09
Signal Generator	Agilent	N5182A	MY50140530	2020.10.10	2021.10.09
Test Platform for DECT	RTX	RTX2012 HS	1138-6122	2020.10.10	2021.10.09
Power Amplifier	DESAY	ZHL-42W	9638	2020.10.10	2021.10.09
Power Meter	R&S	NRP	100510	2020.10.12	2021.10.11
Power Meter	Agilent	E4418B	GB43312526	2020.10.10	2021.10.09
Power Sensor	R&S	NRP-Z11	101919	2020.10.10	2021.10.09
Power Sensor	Agilent	E9301A	MY41497725	2020.10.10	2021.10.09
Temperature hygrometer	SuWei	SW-108	N/A	2020.10.10	2021.10.09
Thermograph	Elitech	RC-4	S/N EF7176501537	2020.10.12	2021.10.11

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

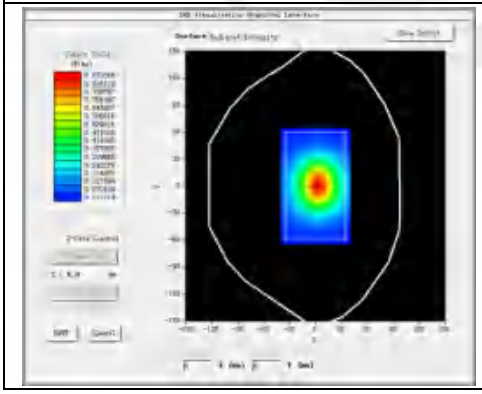
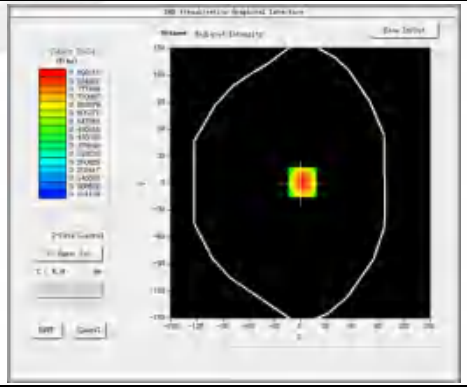
Appendix A. System Validation Plots

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: 2021-08-28

Experimental conditions

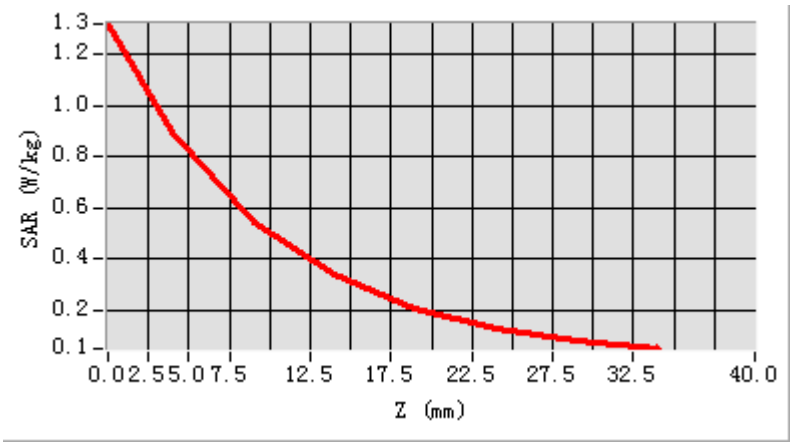
Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity	41.38
Conductivity (S/m)	0.91
Probe	SN 07/21 EPGO352
ConvF	1.43
Crest factor	1:1

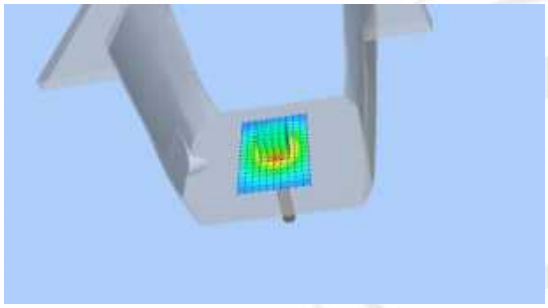
SURFACE SAR	VOLUME SAR
	

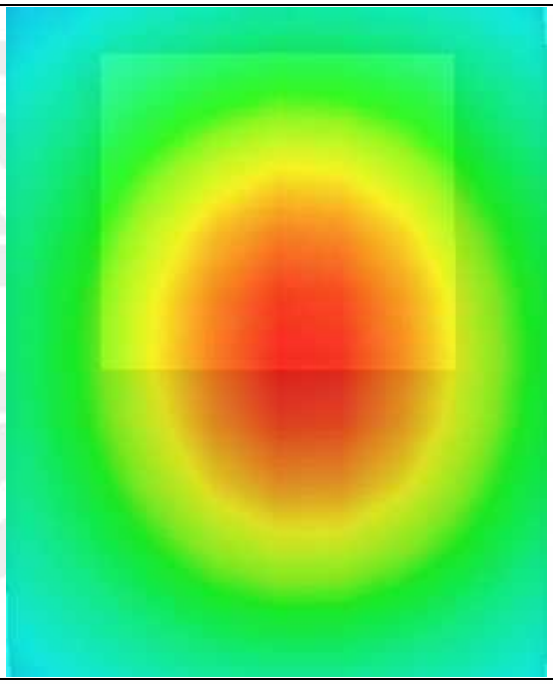
Maximum location: X=2.00, Y=1.00

SAR 10g (W/Kg)	0.555710
SAR 1g (W/Kg)	0.847275

Z Axis Scan


1.3
1.2
1.0
0.8
0.6
0.4
0.2
0.1
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)





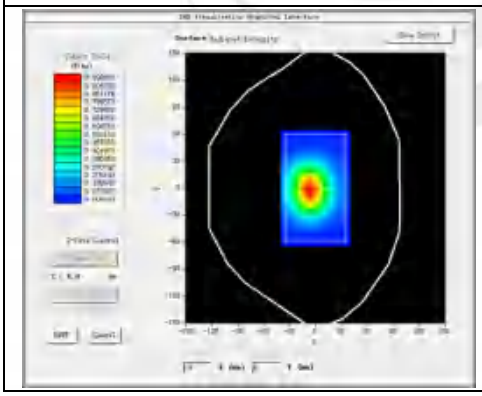
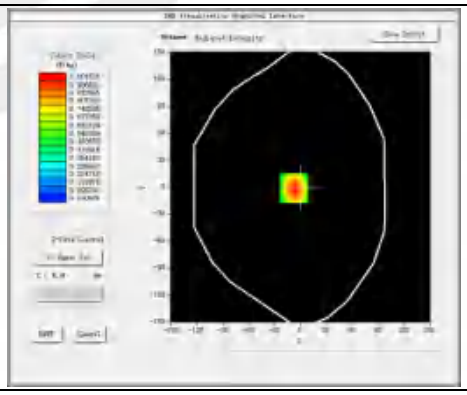
System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2021-08-28

Experimental conditions

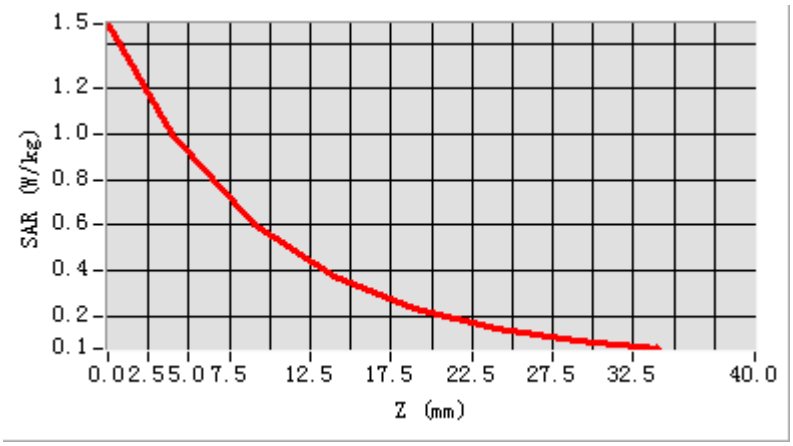
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	41.39
Conductivity (S/m)	0.91
Probe	SN 07/21 EPGO352
ConvF:	1.48
Crest factor:	1:1

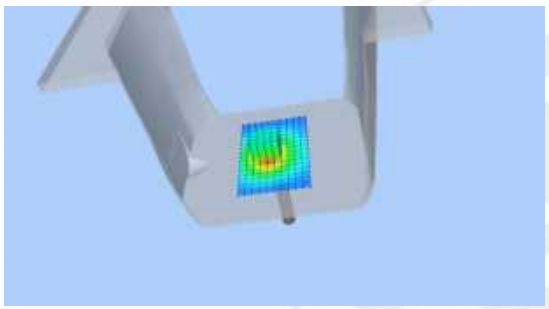
SURFACE SAR	VOLUME SAR
	

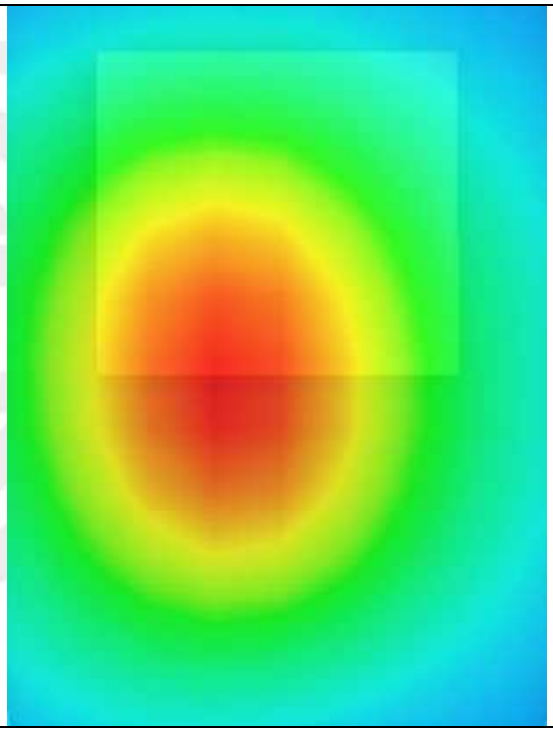
Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.627475
SAR 1g (W/Kg)	0.976240

Z Axis Scan


1.5
1.2
1.0
0.8
0.6
0.4
0.2
0.1
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



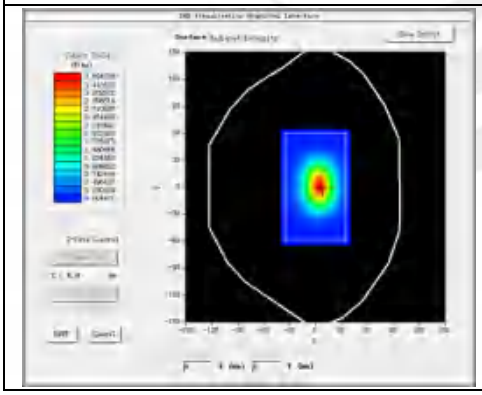
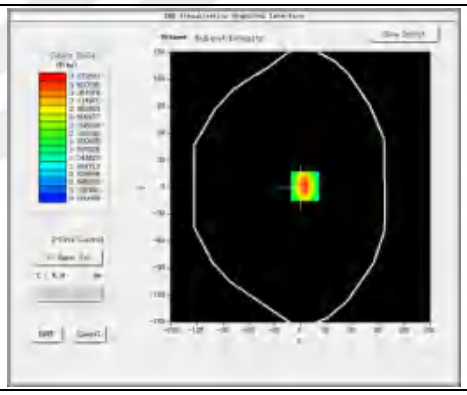


System Performance Check Data(1800MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2021-08-29

Experimental conditions.

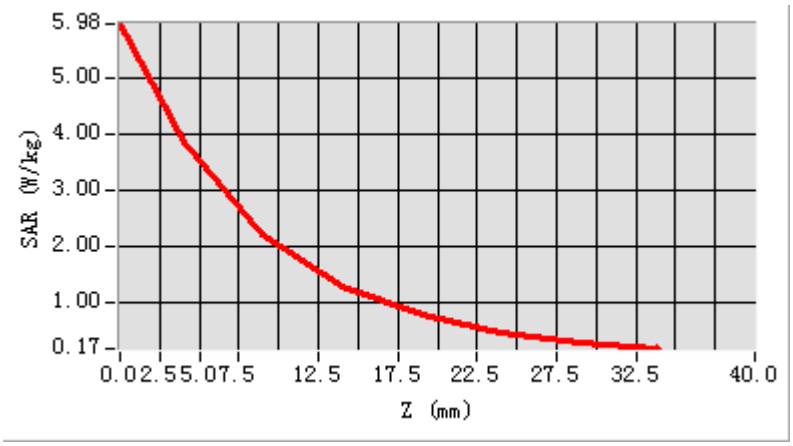
Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	39.50
Conductivity (S/m)	1.38
Probe	SN 07/21 EPGO352
ConvF	1.60
Crest factor:	1:1

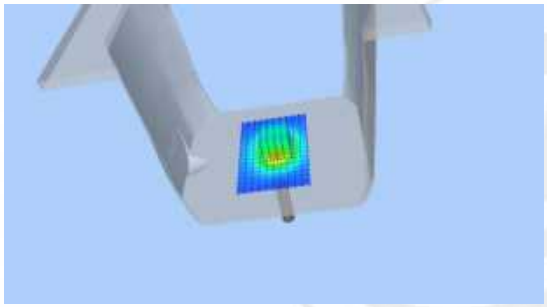
SURFACE SAR	VOLUME SAR
	

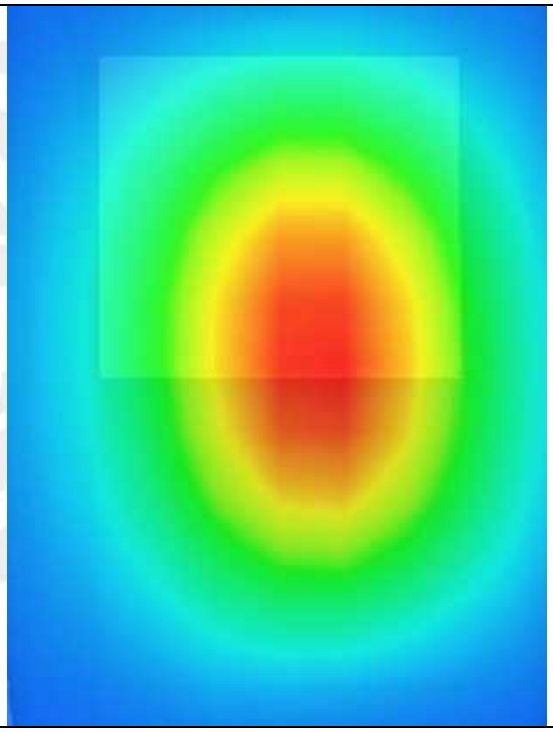
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	2.078210
SAR 1g (W/Kg)	3.826741

Z Axis Scan


5.98
5.00
4.00
3.00
2.00
1.00
0.17
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



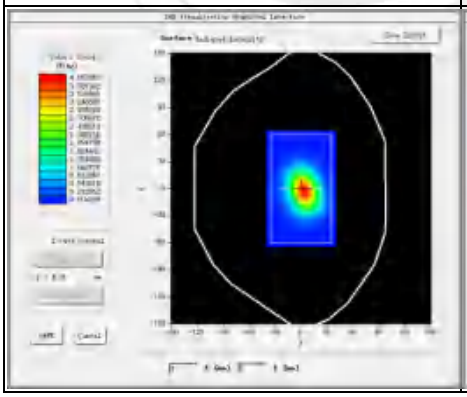
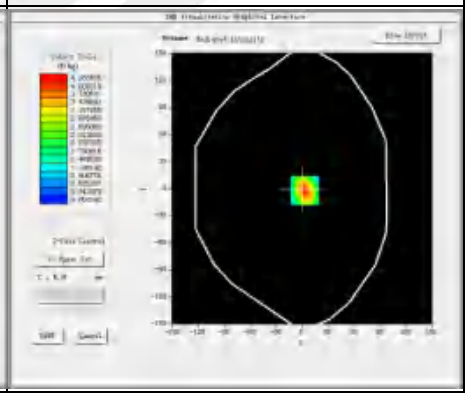


System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2021-08-29

Experimental conditions.

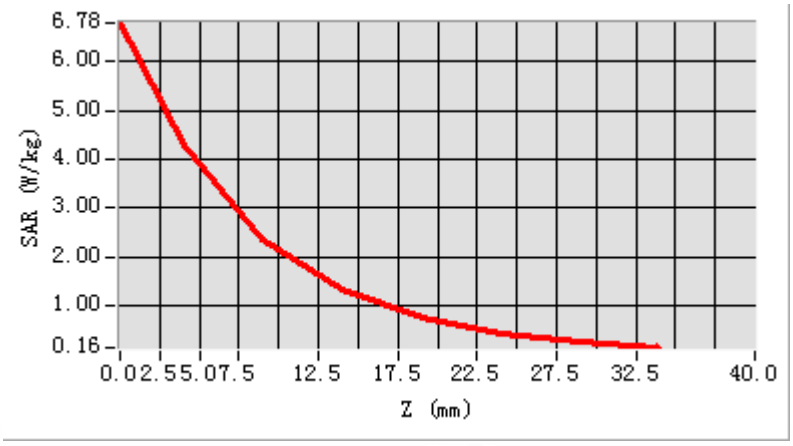
Phantom	Validation plane
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity	41.71
Conductivity (S/m)	1.41
Probe	SN 07/21 EPGO352
ConvF:	1.84
Crest factor:	1:1

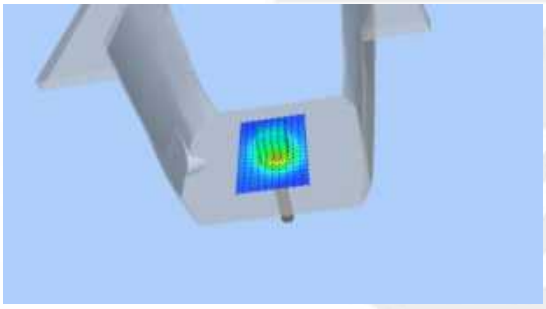
SURFACE SAR	VOLUME SAR
	

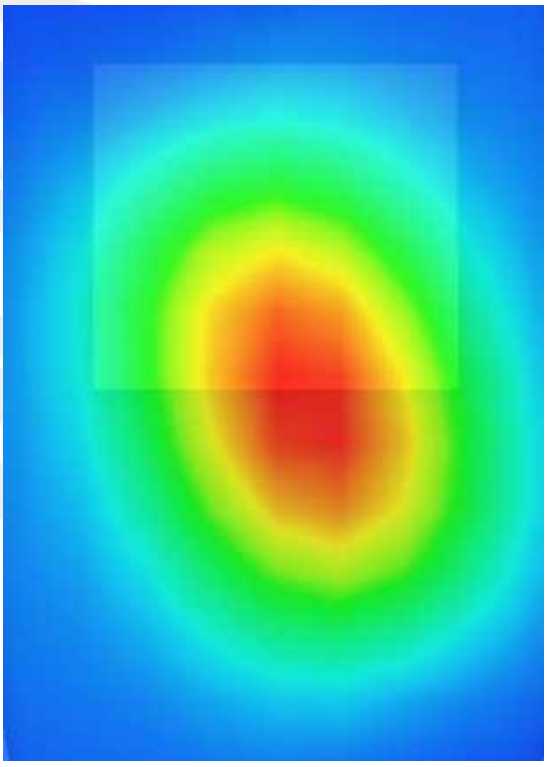
Maximum location: X=3.00, Y=-2.00

SAR 10g (W/Kg)	2.02710
SAR 1g (W/Kg)	4.013121

Z Axis Scan


6.78
6.00
5.00
4.00
3.00
2.00
1.00
0.16
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



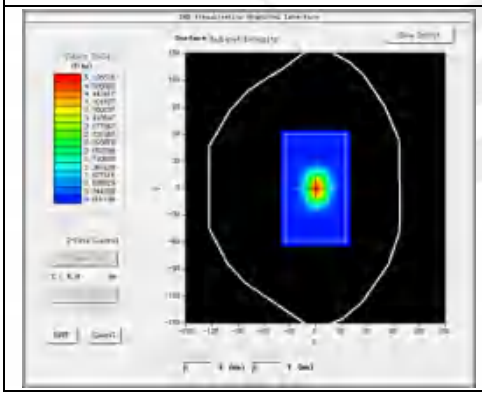
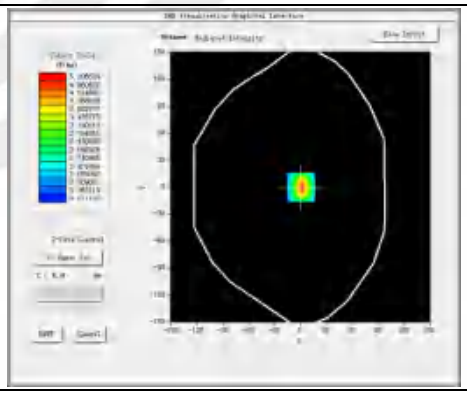


System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2021-08-30

Experimental conditions.

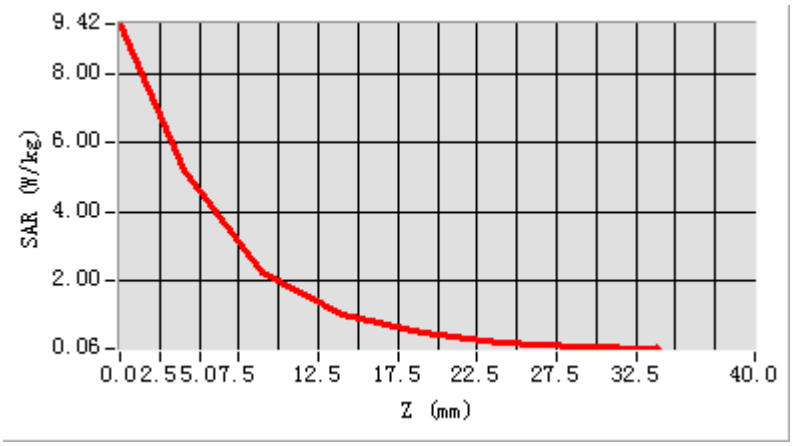
Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	40.77
Conductivity (S/m)	1.82
Probe	SN 07/21 EPGO352
ConvF	1.97
Crest factor:	1:1

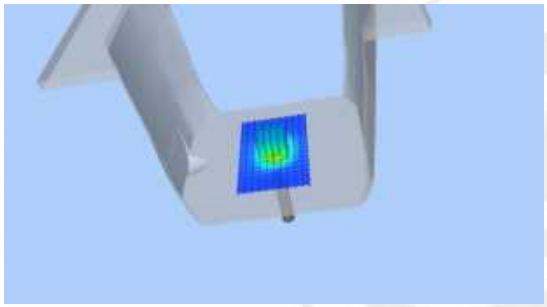
SURFACE SAR	VOLUME SAR
	

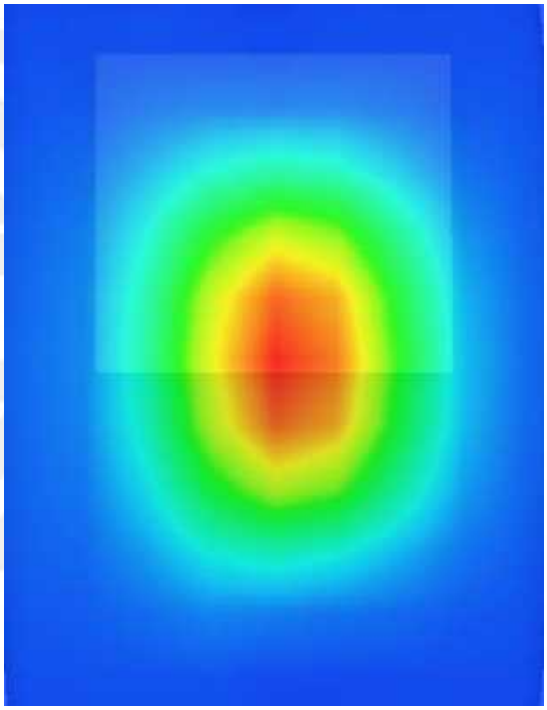
Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	2.37310
SAR 1g (W/Kg)	5.133421

Z Axis Scan


9.42
8.00
6.00
4.00
2.00
0.06
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)





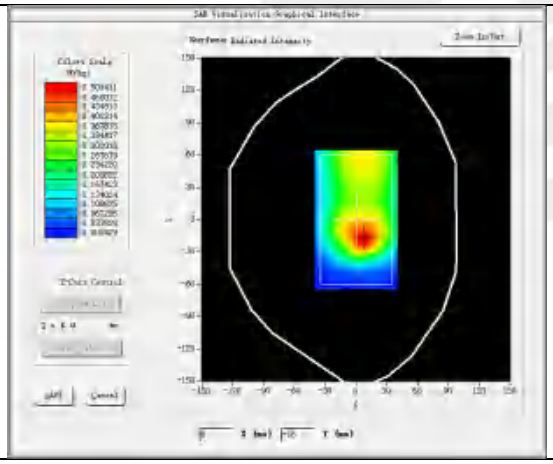
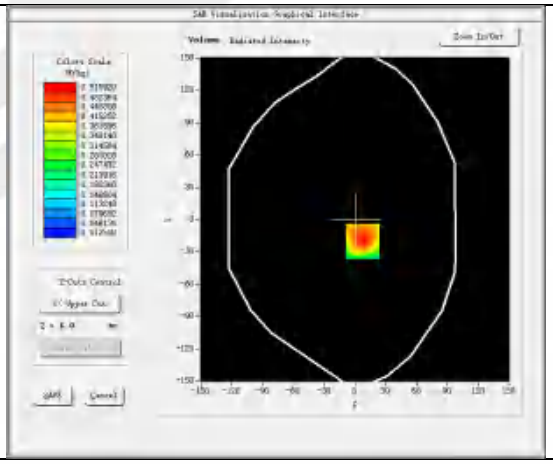
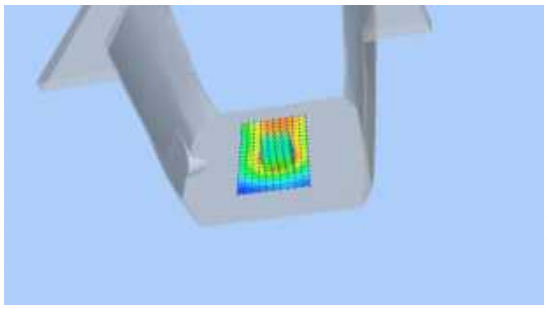
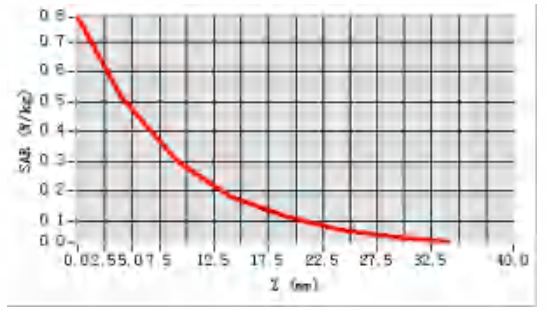
Appendix B. SAR Test Plots

Plot 1: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-28
Probe	SN 07/21 EPGO352
ConvF	1.57
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	Back Side
Band	GSM 850
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	42.40
Conductivity (S/m)	0.89

Maximum location: X=7.00, Y=-20.00
SAR Peak: 0.79 W/kg

SAR 10g (W/Kg)	0.300189
SAR 1g (W/Kg)	0.505543

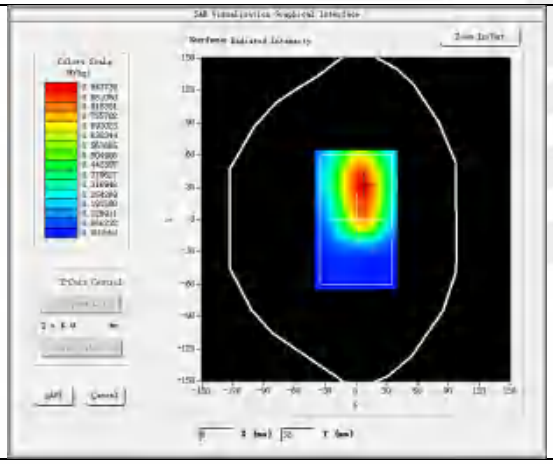
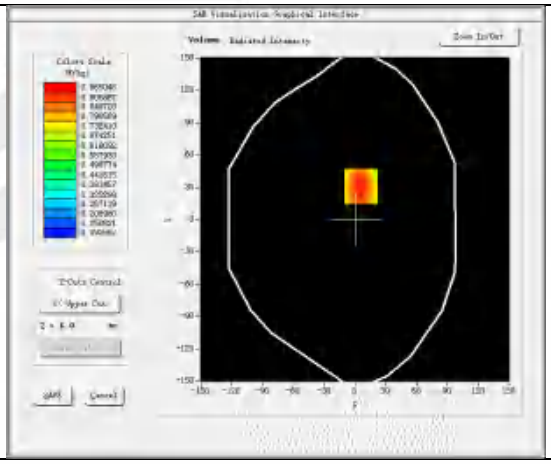
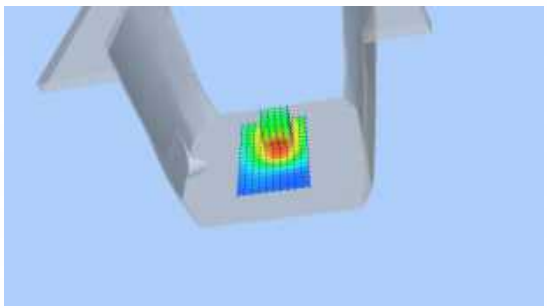
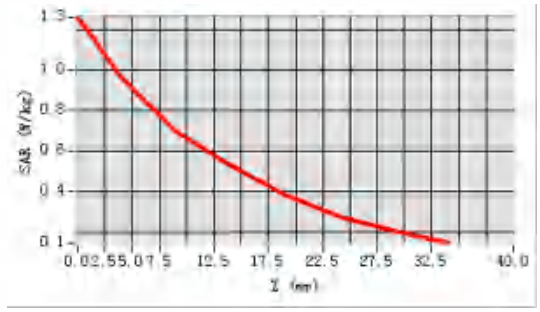
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 2: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-28
Probe	SN 07/21 EPGO352
ConvF	1.57
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	Back Side
Band	GPRS 850
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	42.40
Conductivity (S/m)	0.89

Maximum location: X=6.00, Y=31.00
SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.636394
SAR 1g (W/Kg)	0.925496

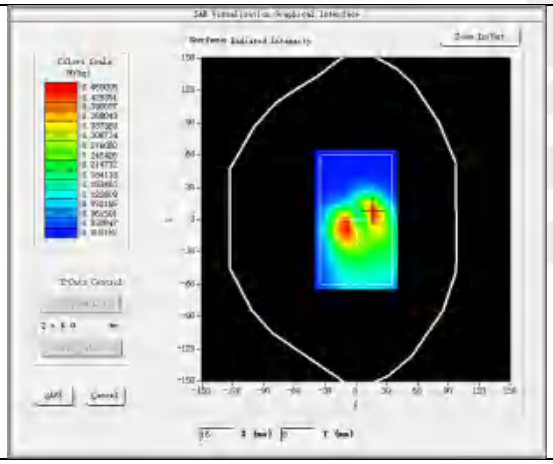
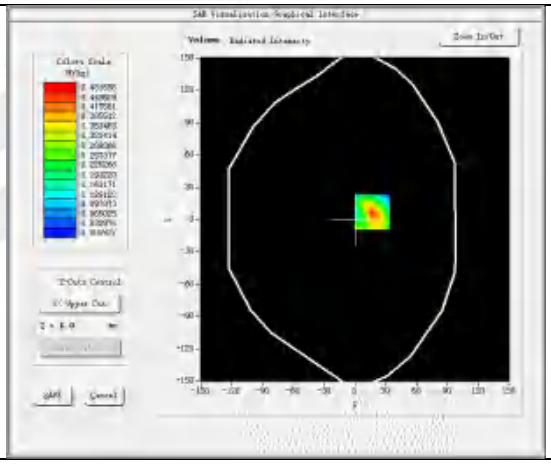
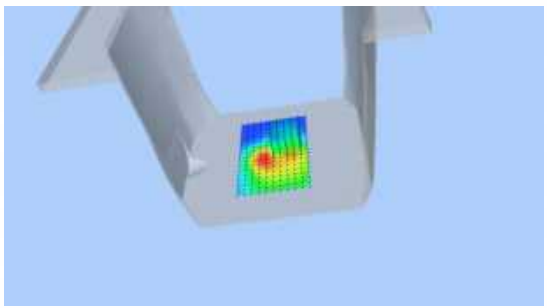
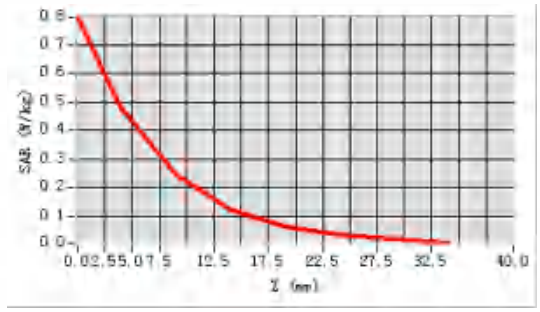
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 3: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-29
Probe	SN 07/21 EPGO352
ConvF	1.78
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	Back Side
Band	GSM 1900
Channels	High
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1909.8
Relative permittivity (real part)	40.10
Conductivity (S/m)	1.37

Maximum location: X=17.00, Y=7.00
SAR Peak: 0.79 W/kg

SAR 10g (W/Kg)	0.208606
SAR 1g (W/Kg)	0.431974

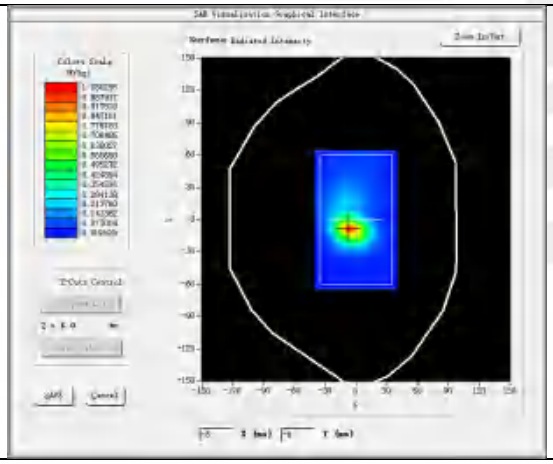
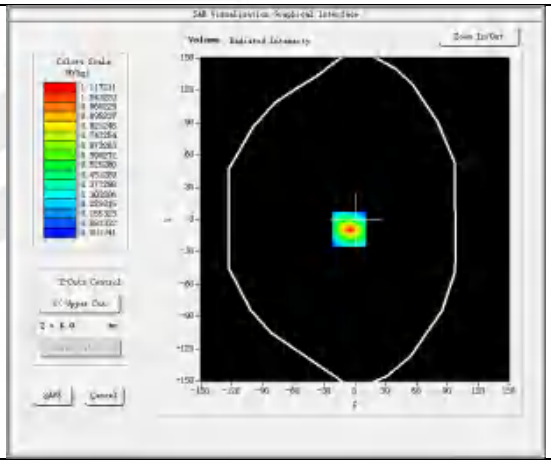
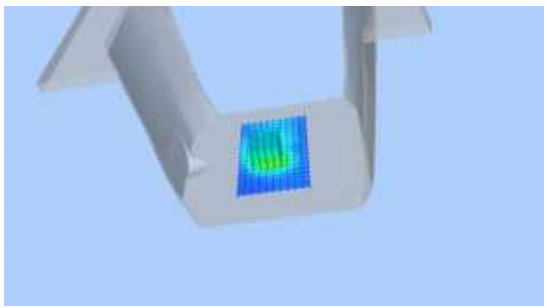
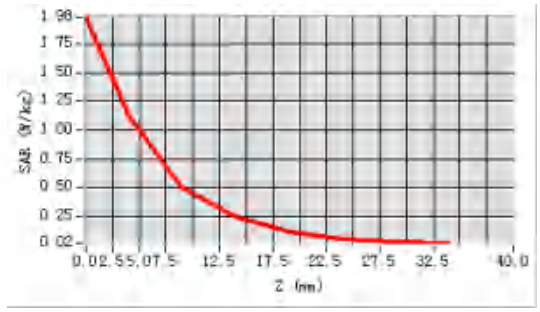
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 4: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-29
Probe	SN 07/21 EPGO352
ConvF	1.78
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	Back Side
Band	GPRS 1900
Channels	High
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1909.8
Relative permittivity (real part)	40.10
Conductivity (S/m)	1.37

Maximum location: X=-6.00, Y=-9.00
SAR Peak: 1.95 W/kg

SAR 10g (W/Kg)	0.417008
SAR 1g (W/Kg)	0.993716

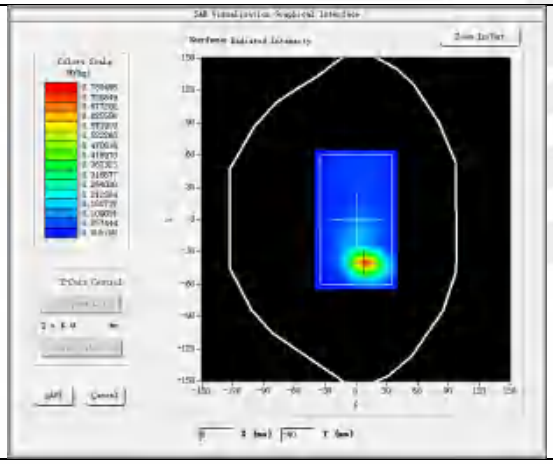
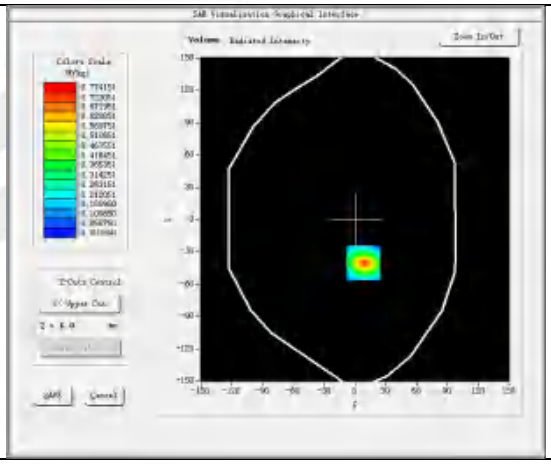
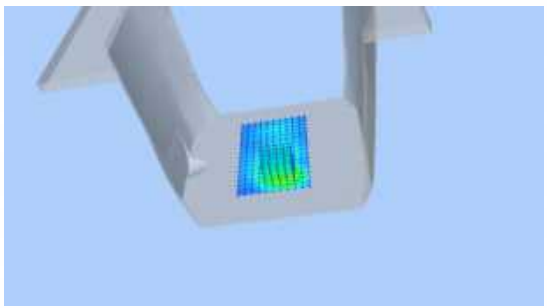
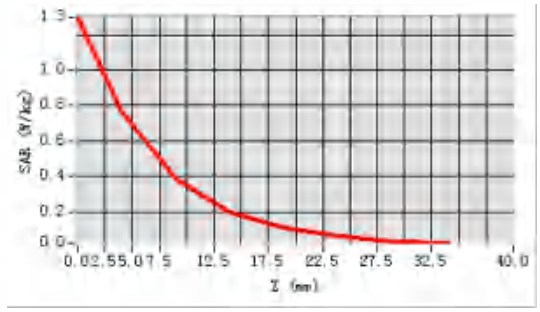
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 5: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-29
Probe	SN 07/21 EPGO352
ConvF	1.78
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	Back Side
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	39.57
Conductivity (S/m)	1.43

Maximum location: X=8.00, Y=-40.00
SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.311687
SAR 1g (W/Kg)	0.704614

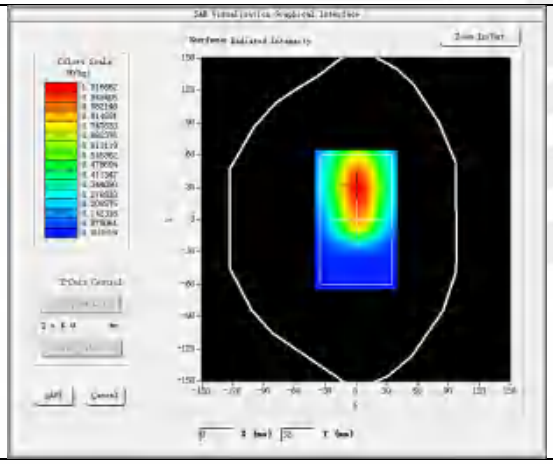
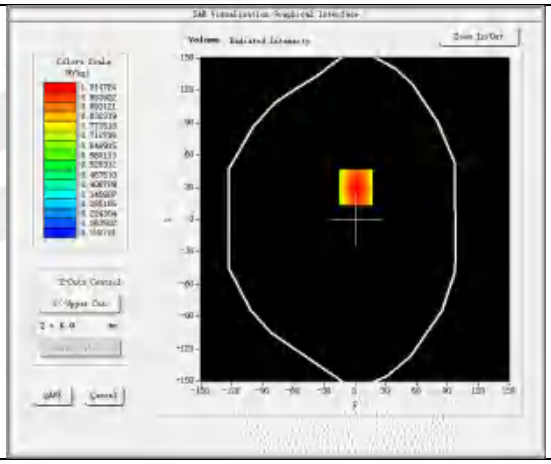
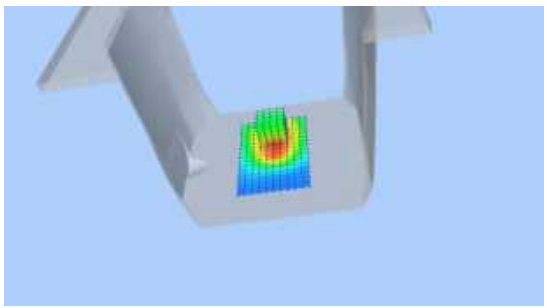
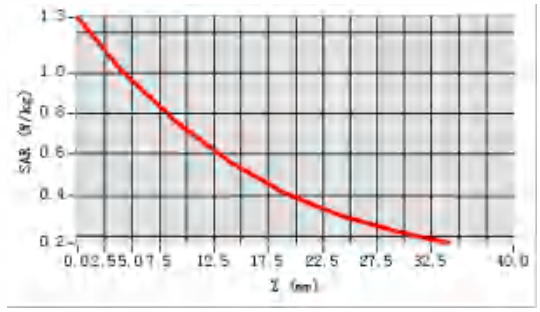
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 6: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-28
Probe	SN 07/21 EPGO352
ConvF	1.57
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	Back Side
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	43.39
Conductivity (S/m)	0.92

Maximum location: X=1.00, Y=30.00
SAR Peak: 1.28 W/kg

SAR 10g (W/Kg)	0.692125
SAR 1g (W/Kg)	0.982865

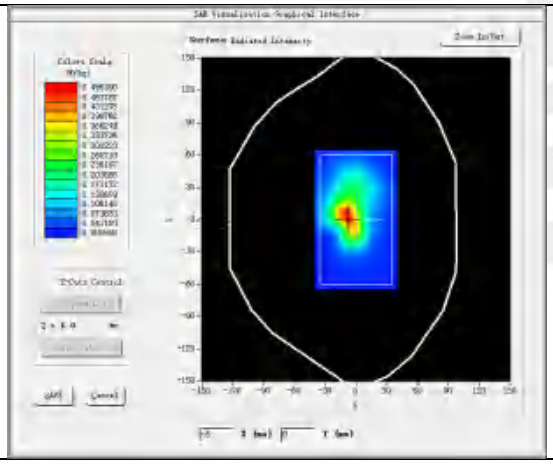
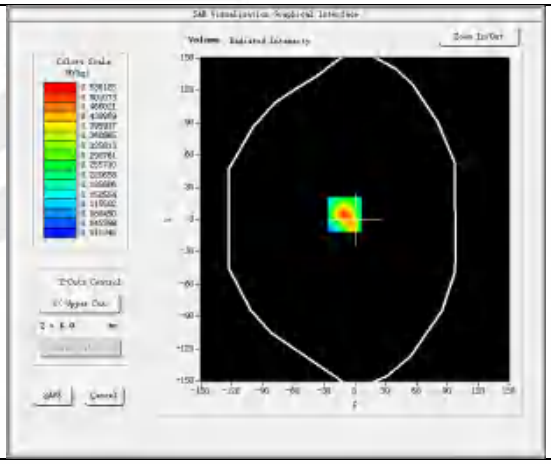
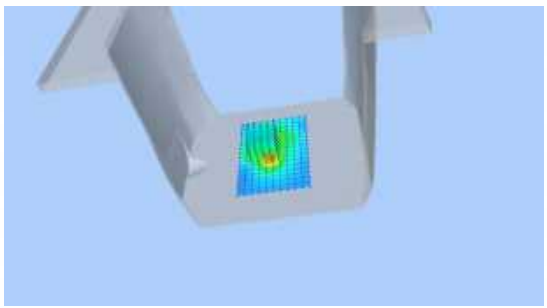
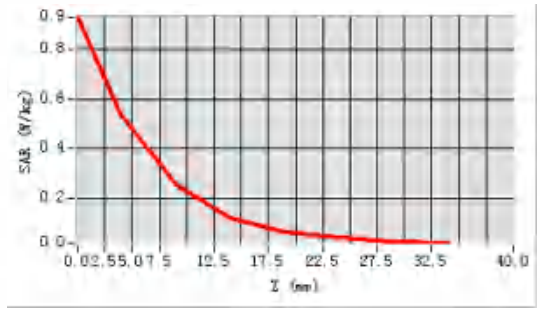
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 7: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-30
Probe	SN 07/21 EPGO352
ConvF	1.75
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	Back Side
Band	2.4G WLAN
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=-10.00, Y=5.00
SAR Peak: 0.92 W/kg

SAR 10g (W/Kg)	0.229256
SAR 1g (W/Kg)	0.490212

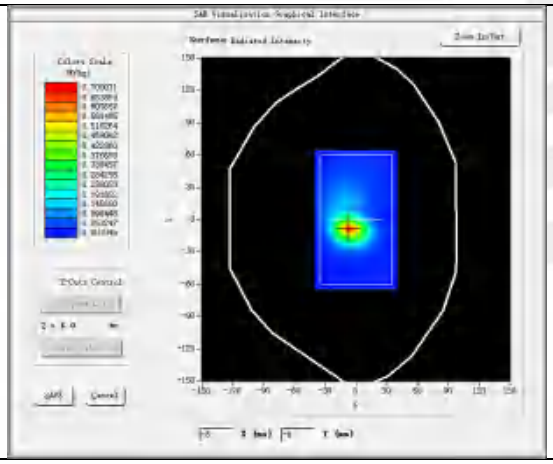
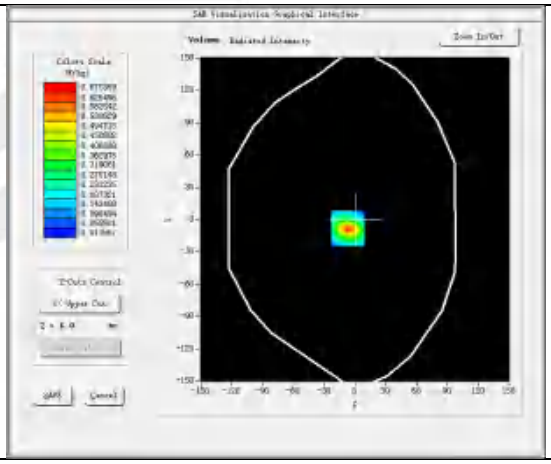
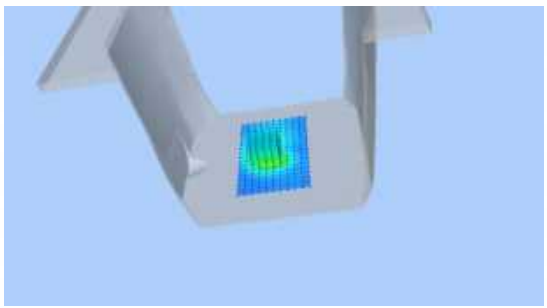
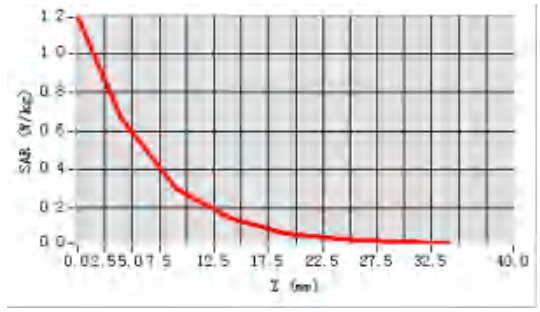
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 8: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-29
Probe	SN 07/21 EPGO352
ConvF	1.78
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	Back Side
Band	LTE B2
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1860
Relative permittivity (real part)	40.10
Conductivity (S/m)	1.37

Maximum location: X=-7.00, Y=-8.00
SAR Peak: 1.17 W/kg

SAR 10g (W/Kg)	0.254077
SAR 1g (W/Kg)	0.602152

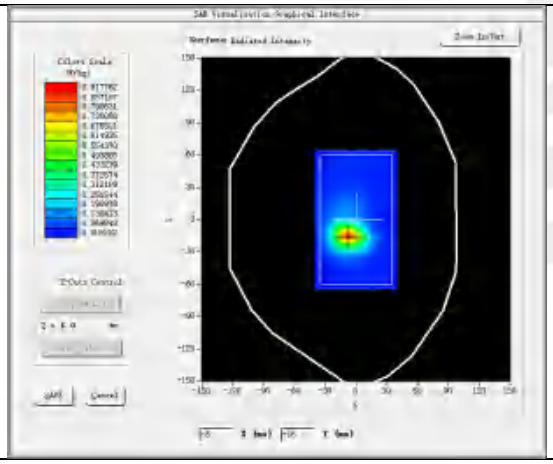
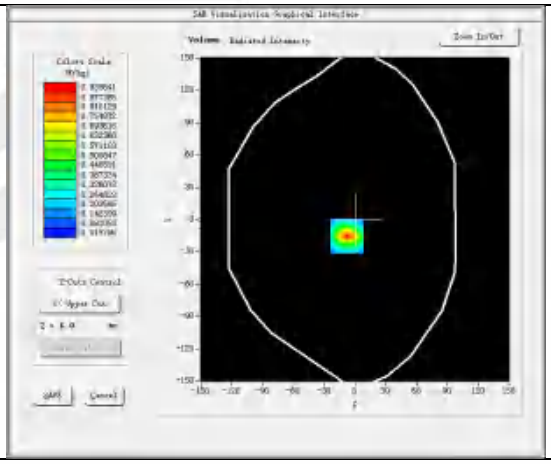
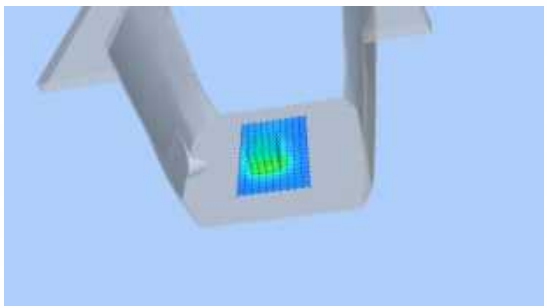
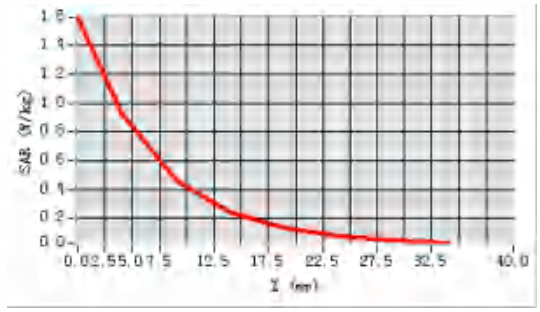
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 9: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-29
Probe	SN 07/21 EPGO352
ConvF	1.60
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	Back Side
Band	LTE B4
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.12
Conductivity (S/m)	1.36

Maximum location: X=-8.00, Y=-15.00
SAR Peak: 1.58 W/kg

SAR 10g (W/Kg)	0.367135
SAR 1g (W/Kg)	0.837766

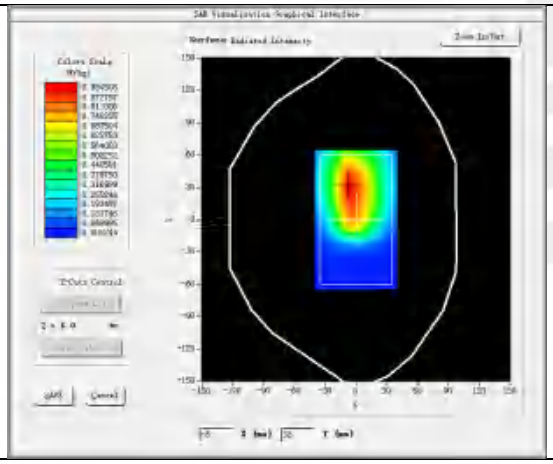
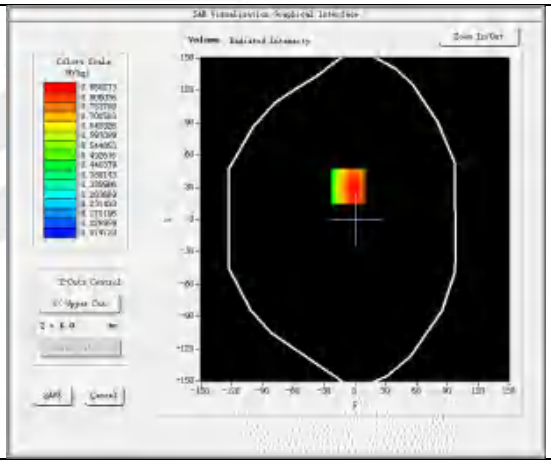
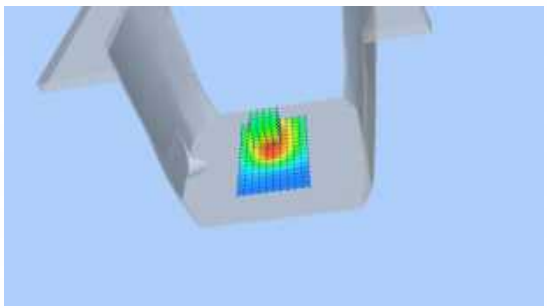
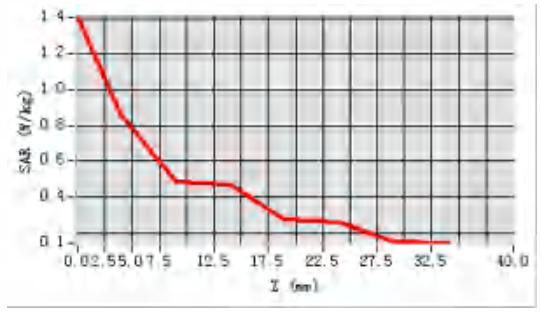
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 10: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-28
Probe	SN 07/21 EPGO352
ConvF	1.57
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	Back Side
Band	LTE B5
Channels	Mid
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.5
Relative permittivity (real part)	43.39
Conductivity (S/m)	0.92

Maximum location: X=-7.00, Y=-31.00
SAR Peak: 1.09 W/kg

SAR 10g (W/Kg)	0.585460
SAR 1g (W/Kg)	0.832986

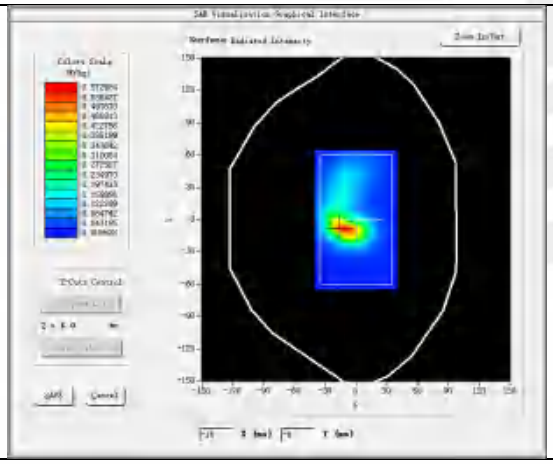
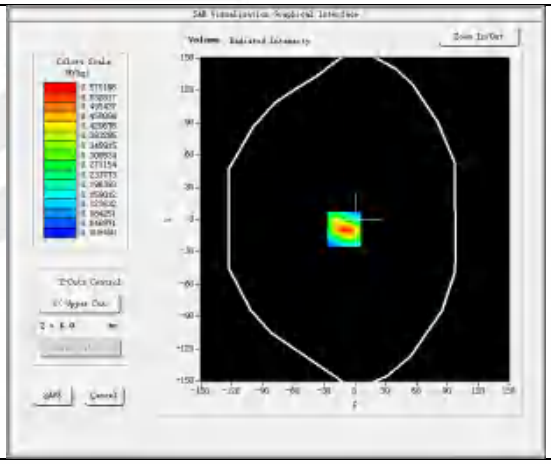
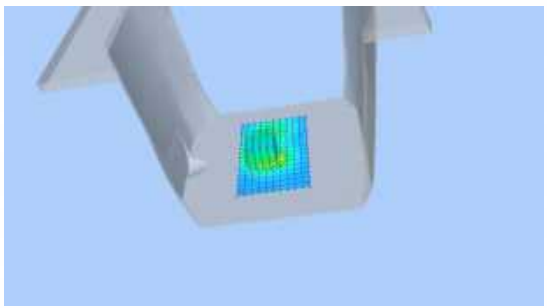
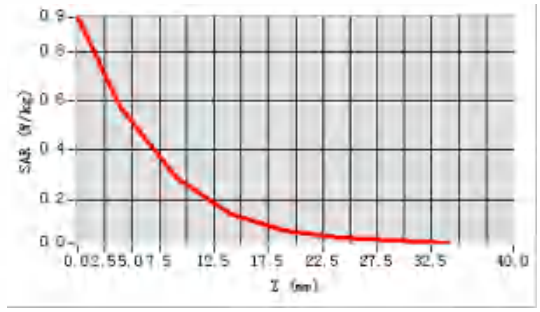
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 11: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-30
Probe	SN 07/21 EPGO352
ConvF	1.60
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	Back Side
Band	LTE B7
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	2510
Relative permittivity (real part)	39.09
Conductivity (S/m)	1.89

Maximum location: X=-11.00, Y=-9.00
SAR Peak: 0.94 W/kg

SAR 10g (W/Kg)	0.233297
SAR 1g (W/Kg)	0.514075

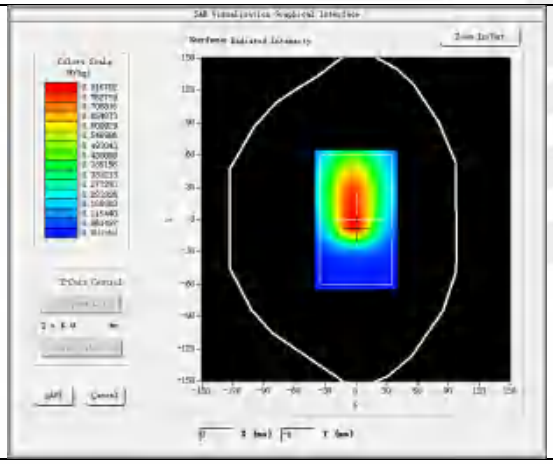
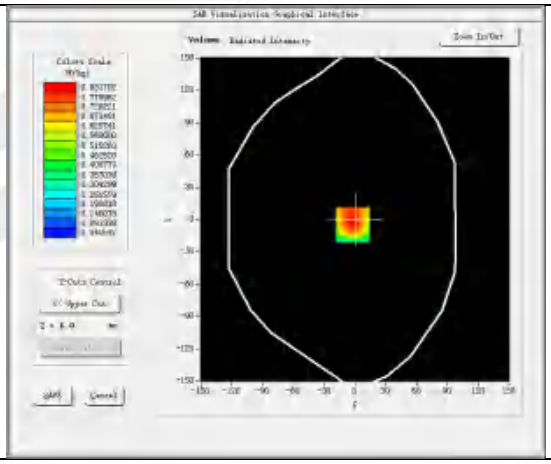
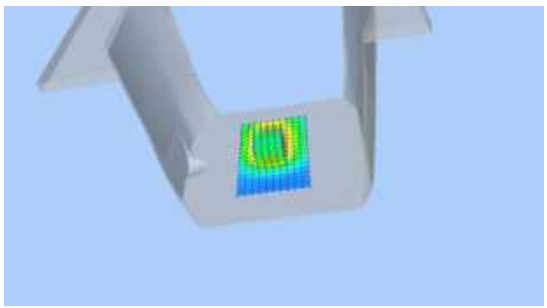
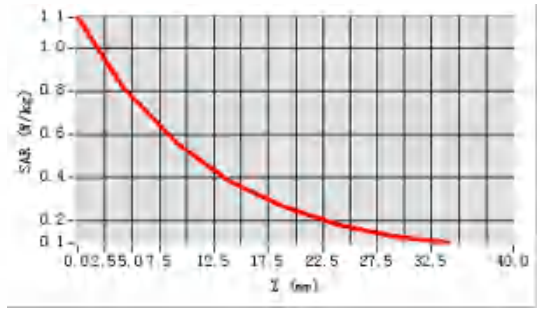
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 12: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-30
Probe	SN 07/21 EPGO352
ConvF	1.60
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	Back Side
Band	LTE B17
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	711
Relative permittivity (real part)	42.11
Conductivity (S/m)	0.91

Maximum location: X=-2.00, Y=-5.00
SAR Peak: 1.17 W/kg

SAR 10g (W/Kg)	0.537139
SAR 1g (W/Kg)	0.824687

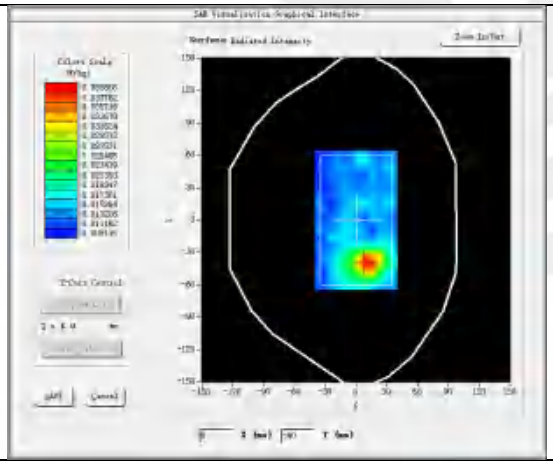
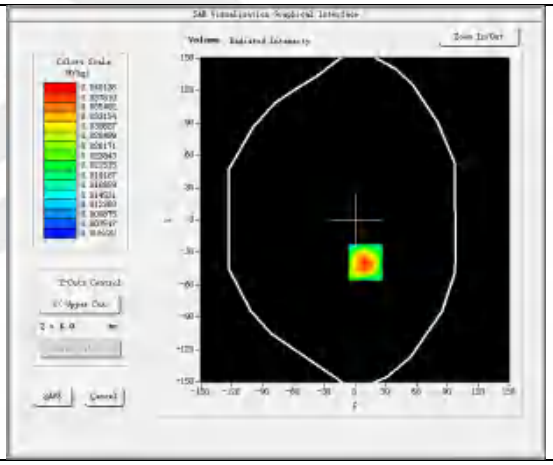
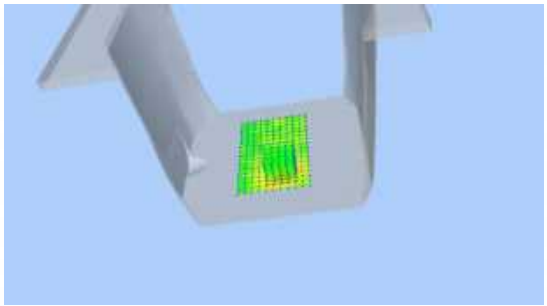
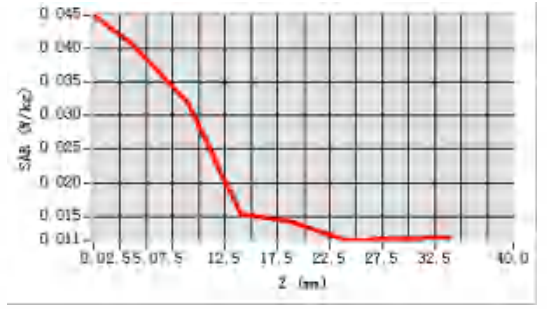
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 13: DUT: Vasco Smart Voice Translator; EUT Model: Vasco Translator

Test Date	2021-08-30
Probe	SN 07/21 EPGO352
ConvF	1.60
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	Back Side
Band	BT
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	2480
Relative permittivity (real part)	39.14
Conductivity (S/m)	1.76

Maximum location: X=10.00, Y=-39.00
SAR Peak: 0.08 W/kg

SAR 10g (W/Kg)	0.021941
SAR 1g (W/Kg)	0.039994

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※※END OF THE REPORT※※※※※