



SAR Test Report

Report No.: STS2605103H01

Issued for

Quanzhou UNIKOO Electronic Technology Co., Ltd.

B1604, Building2, Xiamei Jiayuan Xiamei Town, Nan'an City
Quanzhou, Fujian CHINA

Product Name: 4G Poc Radio

Brand Name: N/A

Model Name: N580

Series Model(s):

N560,N550,N540,N530,N520,N510,N500
,PN400,PN410,PN420,PN430,PN440,PN
450,PN460,PN480,P38,P36,P35,P34,P33
,P32,P31,P30,FP500,FP510,FP520,FP53
0,FP540,FP550,FP560,FP580,MP408,M
P418,MP428,MP438,MP448,MP458,MP4
68,MP488,DP360,DP380,DP370,DP350,
DP340,DP330,DP320,DP300,SK-
600P,SK-610P,SK-620P,SK-630P,SK-
640P,SK-650P,SK-660P,SK-
680P,RC660,RC670,RC660,RC650,RC64
0,RC630,RC620,RC600,C50,C51,C52,C5
3,C54,C55,C56,C57,HK710,HK720,HK73
0,HK740,HK750,HK760,HK770,HK780

FCC ID: 2BQXTP300N

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

Max. Report Face up: 0.297 W/kg

SAR (1g) Back Side: 0.480 W/kg

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

TEST REPORT CERTIFICATION

Applicant's name : Quanzhou UNIKOO Electronic Technology Co., Ltd.

Address : B1604, Building2, Xiamei Jiayuan Xiamei Town, Nan'an City Quanzhou,
Fujian CHINA

Manufacturer's Name..... : Quanzhou UNIKOO Electronic Technology Co., Ltd.

Address : B1604, Building2, Xiamei Jiayuan Xiamei Town, Nan'an City Quanzhou,
Fujian CHINA

Product description

Product name : 4G Poc Radio

Brand name : N/A

Model name : N580

Series Model..... : N560,N550,N540,N530,N520,N510,N500,PN400,PN410,PN420,
PN430,PN440,PN450,PN460,PN480,P38,P36,P35,P34,P33,P32,
P31,P30,FP500,FP510,FP520,FP530,FP540,FP550,FP560,FP580,
MP408,MP418,MP428,MP438,MP448,MP458,MP468,MP488,DP360,
DP380,DP370,DP350,DP340,DP330,DP320,DP300,SK-600P,SK-610P,
SK-620P,SK-630P,SK-640P,SK-650P,SK-660P,SK-680P,RC660,RC670,
RC660,RC650,RC640,RC630,RC620,RC600,C50,C51,C52,C53,C54,C55,
C56,C57,HK710,HK720,HK730,HK740,HK750,HK760,HK770,HK780

Standards..... : ANSI/IEEE Std. C95.1
FCC 47 CFR Part 2 (2.1093)
IEEE Std. 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..... : 17 May.2026~18 May.2026

Date of Issue..... : 28 May.2026

Test Result..... : **Pass**

Testing Engineer :

Xin Liu

(Xin.Liu)

Technical Manager :

Shifan Long

(Shifan. Long)

Authorized Signatory :

Bovey Yang

(Bovey Yang)



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Rev.	Issue Date	Report No.	Effect Page	Contents
00	28 May.2026	STS2605103H01	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	4G Poc Radio			
Brand Name	N/A			
Model Name	N580			
Series Model	N560,N550,N540,N530,N520,N510,N500,PN400,PN410,PN420,PN430,PN440,PN450,PN460,PN480,P38,P36,P35,P34,P33,P32,P31,P30,FP500,FP510,FP520,FP530,FP540,FP550,FP560,FP580,MP408,MP418,MP428,MP438,MP448,MP458,MP468,MP488,DP360,DP380,DP370,DP350,DP340,DP330,DP320,DP300,SK-600P,SK-610P,SK-620P,SK-630P,SK-640P,SK-650P,SK-660P,SK-680P,RC660,RC670,RC660,RC650,RC640,RC630,RC620,RC600,C50,C51,C52,C53,C54,C55,C56,C57,HK710,HK720,HK730,HK740,HK750,HK760,HK770,HK780			
Model Difference	Identical electrical specifications and PCB boards, differing only in model name, trademark, outer plastic shell and button placement.			
Battery	Model:PB400 Brand: N/A Rated Voltage: 3.7V Charge Limit Voltage:4.2V Capacity: 3600mAh			
Sample number	260518016-1			
Device Category	Portable			
Product stage	Production unit			
RF Exposure Environment	General Population / Uncontrolled			
Hardware Version	V1.1			
Software Version	V1.1			
Frequency Range	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 12: 699 MHz ~ 716 MHz LTE Band 17 (704-716 MHz) is covered by LTE Band 12 (699-716 MHz) LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 40: 2305 MHz ~ 2315 MHz / 2350 MHz ~ 2360 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 4 (1710-1755 MHz) is covered by LTE Band 66 (1710-1780 MH)			
Max. Reported SAR(1g): (Limit:1.6W/kg) Test distance: Face up:25mm Body:0mm	Band	Mode	Face up (W/kg)	Back Side (W/kg)
	PCF	LTE Band 2	0.129	0.163
	PCF	LTE Band 5	0.269	0.480
	PCF	LTE Band 7	0.072	0.091
	PCF	LTE Band 12/17	0.110	0.142
	PCF	LTE Band 13	0.123	0.325
	PCF	LTE Band 38	0.031	0.049
	PCF	LTE Band 40	0.035	0.075

	PCF	LTE Band 41	0.034	0.052
	PCF	LTE Band 66/4	0.297	0.121
FCC Equipment Class	Licensed Transmitter (PCF)			
Operating Mode:	LTE: QPSK, 16QAM			
Antenna Specification:	LTE: PIFA Antenna			
SIM Card	Single SIM operation only			
Hotspot Mode	Not 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 (°C)	18-25
Humidity (%RH)	30-70

1.3 Test Factory

ShenZhen STS Test Services Co.,Ltd.

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

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A

A2LA Certificate No.: 4338.01

2. Test Standards and Limits

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	IEEE Std C95.1, 2019	IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz. It specifies the maximum exposure limit of 1.6 W/kg as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.
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 D01 v06	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 D05 v02r05	SAR for LTE Devices
8	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets

(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

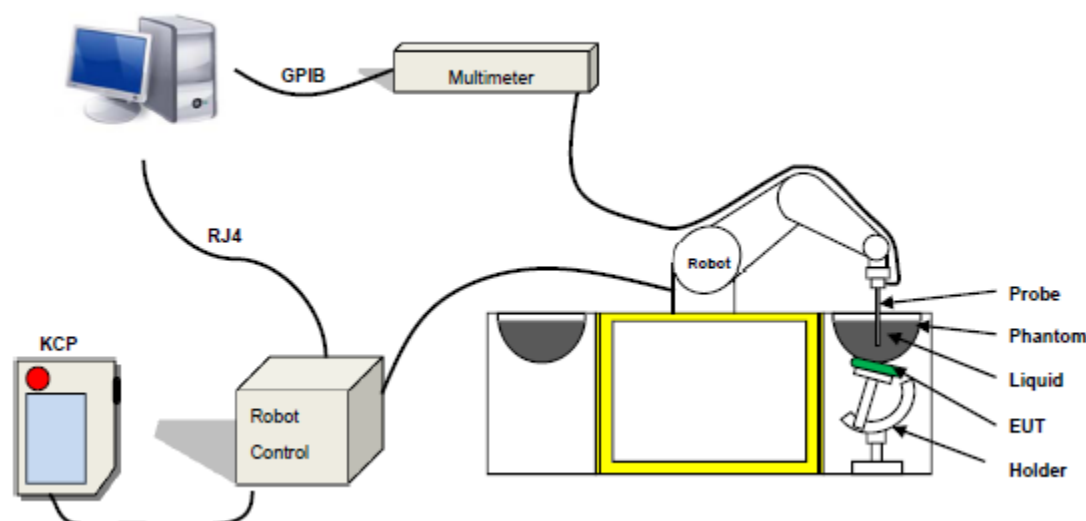
$$SAR = \frac{\sigma E^2}{\rho}$$

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 08/21 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 $\pm$ 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.

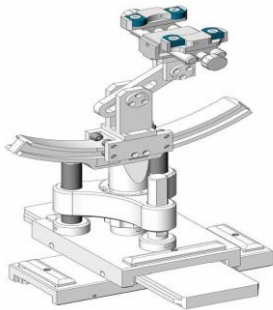
SN 32/14 SAM115



Figure-SN 21/21 ELLI48



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 simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values

The uncertainty due to the liquid conductivity and permittivity arises from two different sources. The first source of error is the deviation of the liquid conductivity from its target value (max _ 5 %) and the second source of error arises from the measurement procedures used to assess conductivity. The uncertainty shall be assessed using a rectangular probability For 1 g averaging, the maximum weighting coefficient for SAR is 0,5.

IEEE SCC-34/SC-2 RECOMMENDED TISSUE DIELECTRIC PARAMETERS

The head and body tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 have been incorporated in the following table.

Frequency	ϵ_r	σ 10g S/m
300	45.3	0.87
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1800 to 2000	40.0	1.40
2100	39.8	1.49
2450	39.2	1.80
2600	39.0	1.96
3000	38.5	2.40
3500	37.9	2.91
4000	37.4	3.43
4500	36.8	3.94
5000	36.2	4.45
5200	36.0	4.66
5400	35.8	4.86
5600	35.5	5.07
5800	35.3	5.27

The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ϵ
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency (MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity σ (S/m)	Permittivity ϵ
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ϵ
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
Frequency(MHz)	Water	DGBE (%)			Salt (%)		Conductivity σ (S/m)	Permittivity ϵ
5200	78.60	21.40			/		5.30	49.00
5800	78.50	21.40			0.1		6.00	48.20

LIQUID MEASUREMENT RESULTS

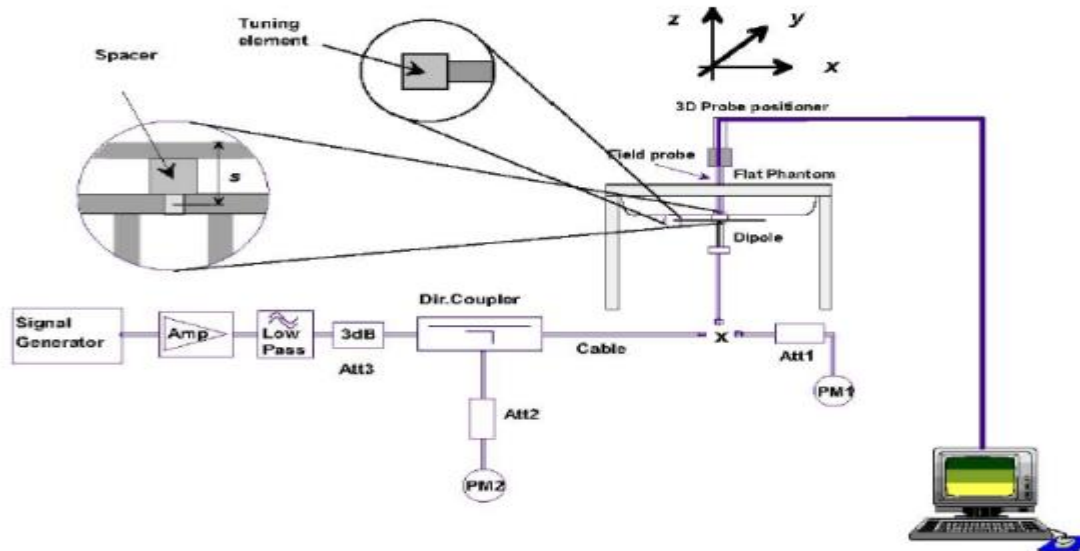
Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2026-05-17	23.9	56	704	23.6	Permittivity	42.15	42.40	0.60	±5
					Conductivity	0.89	0.92	3.73	±5
2026-05-17	23.9	56	782	23.6	Permittivity	41.73	42.63	2.16	±5
					Conductivity	0.89	0.89	-0.24	±5
2026-05-17	23.9	56	829	23.6	Permittivity	41.53	41.42	-0.26	±5
					Conductivity	0.90	0.91	1.19	±5
2026-05-17	23.9	56	835	23.6	Permittivity	41.50	41.66	0.39	±5
					Conductivity	0.90	0.91	1.11	±5
2026-05-17	23.9	56	836.5	23.6	Permittivity	41.49	41.56	0.16	±5
					Conductivity	0.90	0.88	-2.24	±5
2026-05-17	23.9	56	1720	23.6	Permittivity	40.11	40.25	0.34	±5
					Conductivity	1.35	1.34	-1.05	±5
2026-05-17	23.9	56	1800	23.6	Permittivity	40.00	40.02	0.05	±5
					Conductivity	1.40	1.39	-0.71	±5
2026-05-18	22.5	47	1860	22.1	Permittivity	40.00	40.65	1.63	±5
					Conductivity	1.40	1.37	-2.14	±5
2026-05-18	22.6	47	2350	22.3	Permittivity	39.38	39.40	0.06	±5
					Conductivity	1.71	1.73	1.10	±5
2026-05-18	22.6	47	2450	22.3	Permittivity	39.20	39.14	-0.15	±5
					Conductivity	1.80	1.78	-1.11	±5
2026-05-18	22.6	47	2506	22.3	Permittivity	39.13	39.05	-0.19	±5
					Conductivity	1.86	1.86	0.01	±5
2026-05-18	22.6	47	2510	22.3	Permittivity	39.12	38.99	-0.33	±5
					Conductivity	1.86	1.83	-1.82	±5
2026-05-18	22.6	47	2560	22.3	Permittivity	39.05	39.41	0.91	±5
					Conductivity	1.92	1.95	1.70	±5
2026-05-18	22.6	47	2600	22.3	Permittivity	39.00	39.41	1.05	±5
					Conductivity	1.96	1.91	-2.55	±5
2026-05-18	22.6	47	2610	22.3	Permittivity	38.99	38.94	-0.12	±5
					Conductivity	1.97	1.90	-3.59	±5
2026-05-18	22.6	47	2680	22.3	Permittivity	38.89	39.11	0.56	±5
					Conductivity	2.05	2.10	2.67	±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

Date	Frequency (MHz)	Power	SAR _{1g} (W/Kg)	SAR _{10g} (W/Kg)	Drift (%)	1W Target		Difference percentage		Limited %
						SAR _{1g} (W/Kg)	SAR _{10g} (W/Kg)	1g	10g	
2026-05-17	750	100 mW	0.855	0.556	0.32	8.49	5.53	0.71%	0.54%	10
		Normalize to 1 Watt	8.55	5.56						
2026-05-17	835	100 mW	0.967	0.577	0.65	9.63	6.15	0.42%	-6.18%	10
		Normalize to 1 Watt	9.67	5.77						
2026-05-17	1800	100 mW	3.774	2.018	-0.23	37.95	20.49	-0.55%	-1.51%	10
		Normalize to 1 Watt	37.74	20.18						
2026-05-18	1900	100 mW	4.031	2.031	-1.30	39.84	20.20	1.18%	0.54%	10
		Normalize to 1 Watt	40.31	20.31						
2026-05-18	2450	100 mW	5.502	2.417	-1.54	54.70	24.11	0.59%	0.25%	10
		Normalize to 1 Watt	55.02	24.17						
2026-05-18	2600	100 mW	5.587	2.404	0.64	56.19	24.08	-0.57%	-0.17%	10
		Normalize to 1 Watt	55.87	24.04						

Note:

(1) We use a CW signal of 20dBm(750/835/1800/1900/2450/2600MHz) and 10dBm(5000-6000MHz) for system check, and then all SAR values are normalized to 1W forward power. The result must be within $\pm 10\%$ of target value.

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 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

➤ Area Scan& Zoom Scan

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below. When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

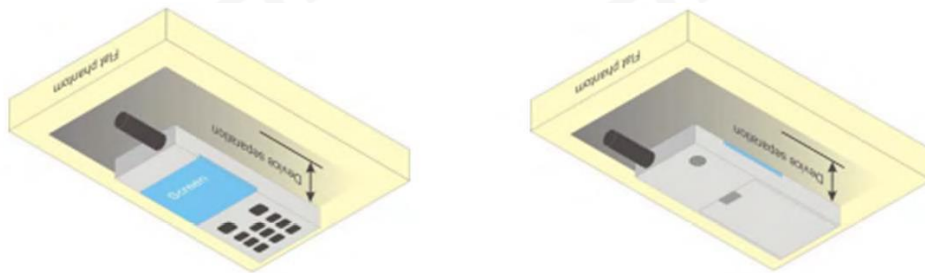
7. EUT Test Position

This EUT was tested in Face up, Back Side.

7.1 Body-worn Position Conditions

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 D04 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 $> 1.2 \text{ W/kg}$, 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. Uncertainty

8.1 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 $k=2$.

SATIMO Uncertainty- SN 08/21 EPG0352									
Measurement uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+- %)	vi
Measurement System									
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	0.71	0.71	0.07	0.07	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.71	0.71	0.42	0.42	∞
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	∞
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	∞
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Modulation response	E.2.5	3.42	R	1.73	1.00	1.00	1.97	1.97	∞
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	∞
Response Time	E.2.7	0.17	R	1.73	1.00	1.00	0.10	0.10	∞
Integration Time	E.2.8	1.43	R	1.73	1.00	1.00	0.83	0.83	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	∞
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	∞
Test sample Related									
Test sample positioning	E.4.2	3.10	N	1.00	1.00	1.00	3.10	3.10	∞
Device holder uncertainty	E.4.1	3.80	N	1.00	1.00	1.00	3.80	3.80	∞
Output power variation—SAR drift measurement	E.2.9	4.50	R	1.73	1.00	1.00	2.60	2.60	∞
SAR scaling	E.6.5	1.80	R	1.73	1.00	1.00	1.04	1.04	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	M
Liquid permittivity measurement	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	M
Liquid conductivity—temperature uncertainty	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity—temperature uncertainty	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	∞
Combined Standard Uncertainty			RSS				10.08	9.59	
Expanded Uncertainty (95% Confidence interval)			K=2				19.58	19.18	

SATIMO Uncertainty- SN 08/21 EPG0352									
System Validation uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+ - %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+- %)	vi
Measurement System									
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	1.00	1.00	0.10	0.10	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	∞
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	∞
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	∞
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Modulation response	E.2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	∞
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	∞
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	∞
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	∞
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	∞
System validation source									
Deviation of experimental dipole from numerical dipole	E.6.4	4.80	N	1.00	1.00	1.00	4.80	4.80	∞
Input power and SAR drift measurement	8,6.6.4	5.10	R	1.73	1.00	1.00	2.94	2.94	∞
Dipole axis to liquid distance	8,E.6.6	2.40	R	1.73	1.00	1.00	1.39	1.39	∞
Phantom and set-up									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity (temperature uncertainty)	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	∞
Liquid conductivity (measured)	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	M
Liquid permittivity (temperature uncertainty)	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity (measured)	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	M
Combined Standard Uncertainty			RSS				9.72	9.52	
Expanded Uncertainty (95% Confidence interval)			K=2				19.44	19.03	

SATIMO Uncertainty- SN 08/21 EPGO352									
。 System Check uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
		(+-%)							
Measurement System									
Probe calibration drift	E.2.1.3	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	0.00	0.00	0.00	0.00	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	∞
Boundary effect	E.2.3	0.8	R	1.73	0.00	0.00	0.00	0.00	∞
Linearity	E.2.4	1.25	R	1.73	0.00	0.00	0.00	0.00	∞
System detection limits	E.2.4	1.20	R	1.73	0.00	0.00	0.00	0.00	∞
Modulation response	E.2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	∞
Readout Electronics	E.2.6	0.26	N	1.00	0.00	0.00	0.00	0.00	∞
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	∞
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	0.00	0.00	0.00	0.00	∞
Probe positioner mechanical tolerance	E.6.2	1.2	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.4	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	3.9	R	1.73	0.00	0.00	0.00	0.00	∞
System check source (dipole)									
Deviation of experimental dipoles	E.6.4	4.8	N	1.00	1.00	1.00	4.80	4.80	∞
Input power and SAR drift measurement	8,6.6.4	5.1	R	1.73	1.00	1.00	2.94	2.94	∞
Dipole axis to liquid distance	8,E.6.6	2.4	R	1.73	1.00	1.00	1.39	1.39	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.7	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	2.4	R	1.73	0.78	0.71	1.08	0.98	∞
Liquid permittivity measurement	E.3.3	4.1	N	1.00	0.78	0.71	3.20	2.91	M
Liquid conductivity—temperature uncertainty	E.3.4	2.7	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity—temperature uncertainty	E.3.4	4.8	N	1.00	0.23	0.26	1.10	1.25	M
Combined Standard Uncertainty			RSS				5.56	5.20	
Expanded Uncertainty (95% Confidence interval)			K=2				11.12	10.41	

9. Conducted Power Measurement

9.1 Test Result

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.
3. Per KDB 941225 D05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.

LTE Band 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.18	22.58	23.59
1.4	1	2		23.15	22.55	22.96
1.4	1	5		23.15	22.58	23.31
1.4	3	0		23.16	22.54	23.43
1.4	3	1		23.12	22.51	22.98
1.4	3	2		23.11	22.50	22.98
1.4	6	0		22.17	21.61	22.19
1.4	1	0	16-QAM	22.35	21.52	22.66
1.4	1	2		22.33	21.51	22.13
1.4	1	5		22.42	21.58	22.52
1.4	3	0		22.10	21.43	22.27
1.4	3	1		22.09	21.43	21.90
1.4	3	2		22.09	21.43	21.89
1.4	6	0		21.19	20.58	21.10
3	1	0	QPSK	23.10	22.42	23.45
3	1	7		23.05	22.49	22.53
3	1	14		23.20	22.56	22.91
3	8	0		22.11	21.51	22.03
3	8	4		22.08	21.56	21.59
3	8	7		22.06	21.56	21.59
3	15	0		22.11	21.60	21.71
3	1	0	16-QAM	22.19	21.65	22.31
3	1	7		22.22	21.78	21.43
3	1	14		22.36	21.81	21.82
3	8	0		21.14	20.61	21.10
3	8	4		21.07	20.64	20.70
3	8	7		21.07	20.64	20.70
3	15	0		20.98	20.60	20.68

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.39	22.61	23.61
5	1	12		23.27	22.72	22.30
5	1	24		23.33	22.71	22.69
5	12	0		22.23	21.48	21.76
5	12	6		22.14	21.56	21.24
5	12	11		22.13	21.55	21.23
5	25	0		22.17	21.58	21.67
5	1	0	16-QAM	22.51	21.65	22.77
5	1	12		22.35	21.76	21.69
5	1	24		22.36	21.76	22.04
5	12	0		21.22	20.52	20.81
5	12	6		21.12	20.58	20.46
5	12	11		21.12	20.58	20.37
5	25	0		21.12	20.68	20.73
10	1	0	QPSK	23.13	22.10	22.81
10	1	24		22.82	22.37	22.40
10	1	49		23.10	22.35	21.93
10	25	0		21.94	21.08	21.10
10	25	12		21.59	21.19	20.97
10	25	24		21.59	21.18	20.97
10	50	0		21.81	21.20	21.06
10	1	0	16-QAM	22.14	21.33	21.97
10	1	24		21.79	21.61	21.76
10	1	49		22.06	21.61	21.21
10	25	0		20.98	20.08	20.23
10	25	12		20.63	20.21	20.07
10	25	24		20.63	20.22	20.09
10	50	0		N/A	N/A	N/A

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.46	22.49	22.85
15	1	37		22.98	22.77	23.37
15	1	74		23.28	22.48	22.19
15	36	0		22.07	21.53	21.51
15	36	18		22.11	21.55	21.48
15	36	39		22.09	21.54	21.47
15	75	0		22.11	21.51	21.49
15	1	0	16-QAM	22.68	21.42	22.14
15	1	38		22.16	21.71	22.73
15	1	75		22.52	21.43	21.59
15	36	0		N/A	N/A	N/A
15	36	18		N/A	N/A	N/A
15	36	39		N/A	N/A	N/A
15	75	0		N/A	N/A	N/A
20	1	0	QPSK	23.14	22.59	22.62
20	1	49		22.90	22.81	22.99
20	1	99		23.49	22.45	22.74
20	50	0		22.26	21.36	21.16
20	50	24		22.03	21.45	22.21
20	50	49		22.07	21.44	22.21
20	100	0		22.02	21.56	21.44
20	1	0	16-QAM	22.19	21.75	21.88
20	1	49		22.00	21.94	22.28
20	1	99		22.52	21.60	22.04
20	50	0		N/A	N/A	N/A
20	50	24		N/A	N/A	N/A
20	50	49		N/A	N/A	N/A
20	100	0		N/A	N/A	N/A

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	23.92	23.31	23.41
1.4	1	2		23.93	23.35	23.31
1.4	1	5		23.89	23.32	23.36
1.4	3	0		23.91	23.32	23.43
1.4	3	1		23.84	23.35	23.39
1.4	3	2		23.82	23.34	23.39
1.4	6	0		22.76	22.38	22.47
1.4	1	0	16-QAM	23.13	22.62	22.43
1.4	1	2		23.06	22.66	22.32
1.4	1	5		23.13	22.71	22.47
1.4	3	0		22.90	22.29	22.33
1.4	3	1		22.82	22.31	22.26
1.4	3	2		22.91	22.31	22.26
1.4	6	0		21.89	21.56	21.72
3	1	0	QPSK	23.83	23.29	23.26
3	1	7		23.86	23.29	23.35
3	1	14		23.92	23.35	23.30
3	8	0		22.91	22.38	22.49
3	8	4		22.88	22.40	22.53
3	8	7		22.87	22.40	22.53
3	15	0		22.84	22.36	22.52
3	1	0	16-QAM	22.99	22.53	22.38
3	1	7		23.02	22.55	22.37
3	1	14		23.12	22.58	22.41
3	8	0		22.05	21.56	21.73
3	8	4		22.00	21.57	21.73
3	8	7		22.01	21.57	21.74
3	15	0		21.94	21.50	21.61

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.00	23.45	23.50
5	1	12		24.11	23.63	23.48
5	1	24		24.08	23.58	23.48
5	12	0		23.00	22.45	22.55
5	12	6		22.92	22.36	22.55
5	12	11		22.95	22.41	22.55
5	25	0		22.91	22.34	22.57
5	1	0	16-QAM	23.09	22.56	22.78
5	1	12		23.10	22.62	22.79
5	1	24		23.12	22.63	22.80
5	12	0		22.07	21.51	21.71
5	12	6		22.09	21.55	21.77
5	12	11		22.09	21.55	21.77
5	25	0		22.12	21.53	21.76
10	1	0	QPSK	23.47	23.14	23.31
10	1	24		23.85	23.42	23.11
10	1	49		23.72	23.24	23.29
10	25	0		22.53	22.03	22.30
10	25	12		22.55	22.16	22.17
10	25	24		22.63	22.15	22.17
10	50	0		22.49	22.08	22.30
10	1	0	16-QAM	22.80	22.33	22.39
10	1	24		22.99	22.66	22.17
10	1	49		23.02	22.52	22.39
10	25	0		21.70	21.19	21.56
10	25	12		21.77	21.30	21.34
10	25	24		21.78	21.31	21.34
10	50	0		N/A	N/A	N/A

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.61	23.22	23.35
15	1	37		23.88	23.57	23.22
15	1	74		23.70	23.30	23.22
15	36	0		22.62	22.28	22.35
15	36	18		22.59	22.24	22.35
15	36	39		22.59	22.28	22.35
15	75	0		22.58	22.25	22.35
15	1	0	16-QAM	22.99	22.51	22.43
15	1	38		23.15	22.91	22.20
15	1	75		23.07	22.60	22.30
15	36	0		N/A	N/A	N/A
15	36	18		N/A	N/A	N/A
15	36	39		N/A	N/A	N/A
15	75	0		N/A	N/A	N/A
20	1	0	QPSK	23.34	23.24	23.15
20	1	49		23.82	23.60	23.02
20	1	99		23.61	23.41	23.13
20	50	0		22.55	22.22	22.43
20	50	24		22.62	22.43	22.22
20	50	49		22.63	22.42	22.22
20	100	0		22.24	22.24	22.35
20	1	0	16-QAM	22.64	22.29	22.37
20	1	49		23.01	22.72	22.21
20	1	99		22.85	22.56	22.38
20	50	0		N/A	N/A	N/A
20	50	24		N/A	N/A	N/A
20	50	49		N/A	N/A	N/A
20	100	0		N/A	N/A	N/A

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	25.23	25.08	24.66
1.4	1	2		24.97	24.95	24.63
1.4	1	5		25.06	24.96	24.66
1.4	3	0		25.21	25.07	24.63
1.4	3	1		24.94	24.92	24.72
1.4	3	2		24.92	24.96	24.70
1.4	6	0		24.10	24.08	23.76
1.4	1	0	16-QAM	24.37	24.29	23.62
1.4	1	2		24.07	24.22	23.70
1.4	1	5		24.28	24.30	23.67
1.4	3	0		24.13	24.01	23.51
1.4	3	1		23.94	23.99	23.61
1.4	3	2		23.94	23.99	23.61
1.4	6	0		23.08	23.22	22.82
3	1	0	QPSK	24.98	25.05	24.56
3	1	7		24.79	25.04	24.78
3	1	14		25.25	25.09	24.75
3	8	0		24.27	24.15	23.73
3	8	4		24.15	24.11	23.81
3	8	7		24.15	24.11	23.81
3	15	0		24.29	24.09	23.81
3	1	0	16-QAM	24.28	24.05	23.80
3	1	7		24.03	24.04	23.99
3	1	14		24.44	24.05	23.96
3	8	0		23.41	23.22	22.86
3	8	4		23.32	23.19	22.95
3	8	7		23.32	23.20	22.96
3	15	0		23.39	23.08	22.82

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	25.22	25.02	24.76
5	1	12		25.01	25.12	25.01
5	1	24		25.21	25.19	24.88
5	12	0		24.19	24.08	23.78
5	12	6		24.20	24.13	23.93
5	12	11		24.23	24.13	23.93
5	25	0		24.13	24.08	23.83
5	1	0	16-QAM	24.51	24.08	23.84
5	1	12		24.27	24.24	24.04
5	1	24		24.58	24.22	23.98
5	12	0		23.30	23.15	22.90
5	12	6		23.37	23.20	23.03
5	12	11		23.38	23.20	23.04
5	25	0		23.14	23.15	22.86
10	1	0	QPSK	25.00	25.10	24.63
10	1	24		24.95	25.03	25.20
10	1	49		25.06	24.91	24.88
10	25	0		23.92	24.03	23.73
10	25	12		23.94	23.93	24.00
10	25	24		23.98	23.93	24.00
10	50	0		23.91	23.90	23.87
10	1	0	16-QAM	24.20	24.32	23.52
10	1	24		24.10	24.14	24.04
10	1	49		24.41	24.24	23.97
10	25	0		23.00	23.09	22.84
10	25	12		23.02	22.98	23.07
10	25	24		23.03	22.99	23.09
10	50	0		N/A	N/A	N/A

LTE Band 7

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.88	22.00	21.71
5	1	12		22.50	22.07	22.44
5	1	24		22.78	22.07	22.20
5	12	0		21.68	21.00	21.00
5	12	6		21.44	20.98	21.36
5	12	11		21.43	21.07	21.36
5	25	0		21.53	21.05	21.22
5	1	0	16-QAM	21.99	21.36	20.92
5	1	12		21.56	21.38	21.59
5	1	24		21.85	21.39	21.36
5	12	0		20.64	20.05	20.13
5	12	6		20.39	20.06	20.42
5	12	11		20.39	20.06	20.43
5	25	0		20.55	19.91	20.31
10	1	0	QPSK	22.79	22.05	21.61
10	1	24		22.35	22.04	22.78
10	1	49		22.88	21.97	22.36
10	25	0		21.75	20.93	21.04
10	25	12		21.40	20.91	21.56
10	25	24		21.37	20.90	21.56
10	50	0		21.62	20.93	21.32
10	1	0	16-QAM	22.11	21.07	20.96
10	1	24		21.61	21.04	22.10
10	1	49		22.07	21.02	21.69
10	25	0		20.66	19.94	20.25
10	25	12		20.36	19.88	20.56
10	25	24		20.36	19.89	20.58
10	50	0		N/A	N/A	N/A

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.95	22.28	21.81
15	1	37		22.52	22.26	23.06
15	1	74		23.03	22.15	22.70
15	36	0		21.90	21.14	21.68
15	36	18		21.90	21.16	21.68
15	36	39		21.87	21.15	21.68
15	75	0		21.91	21.15	21.68
15	1	0	16-QAM	22.20	21.26	21.27
15	1	37		21.84	21.28	22.40
15	1	74		22.31	21.16	22.10
15	36	0		N/A	N/A	N/A
15	36	18		N/A	N/A	N/A
15	36	39		N/A	N/A	N/A
15	75	0		N/A	N/A	N/A
20	1	0	QPSK	22.63	22.17	21.78
20	1	49		22.51	22.17	22.80
20	1	99		23.16	22.06	23.09
20	50	0		21.91	21.15	21.45
20	50	24		21.89	21.16	21.96
20	50	49		21.86	21.16	21.95
20	100	0		21.80	21.22	21.75
20	1	0	16-QAM	21.73	21.39	21.17
20	1	49		21.55	21.36	22.04
20	1	99		22.30	21.27	22.40
20	50	0		N/A	N/A	N/A
20	50	24		N/A	N/A	N/A
20	50	49		N/A	N/A	N/A
20	100	0		N/A	N/A	N/A

LTE Band 12

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	24.75	24.20	24.22
1.4	1	2		24.61	24.37	24.31
1.4	1	5		24.66	24.18	24.26
1.4	3	0		24.72	24.19	24.25
1.4	3	1		24.62	24.24	24.30
1.4	3	2		24.62	24.33	24.30
1.4	6	0		23.70	23.30	23.29
1.4	1	0	16-QAM	23.92	23.47	23.24
1.4	1	2		23.75	23.62	23.29
1.4	1	5		23.92	23.55	23.30
1.4	3	0		23.69	23.26	23.19
1.4	3	1		23.60	23.34	23.22
1.4	3	2		23.60	23.33	23.22
1.4	6	0		22.76	22.55	22.54
3	1	0	QPSK	24.64	24.25	24.15
3	1	7		24.48	24.40	24.28
3	1	14		24.69	24.25	24.34
3	8	0		23.84	23.42	23.34
3	8	4		23.69	23.50	23.38
3	8	7		23.73	23.50	23.38
3	15	0		23.75	23.42	23.40
3	1	0	16-QAM	23.89	23.31	23.34
3	1	7		23.72	23.39	23.49
3	1	14		23.93	23.33	23.49
3	8	0		22.99	22.54	22.57
3	8	4		22.92	22.63	22.50
3	8	7		22.92	22.63	22.51
3	15	0		22.95	22.46	22.45

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.84	24.38	24.33
5	1	12		24.70	24.62	24.55
5	1	24		24.87	24.31	24.49
5	12	0		23.79	23.34	23.33
5	12	6		23.65	23.49	23.37
5	12	11		23.64	23.49	23.37
5	25	0		23.78	23.37	23.31
5	1	0	16-QAM	24.06	23.45	23.46
5	1	12		23.93	23.70	23.58
5	1	24		24.10	23.41	23.58
5	12	0		22.99	22.40	22.56
5	12	6		22.90	22.61	22.62
5	12	11		22.90	22.61	22.63
5	25	0		22.87	22.51	22.57
10	1	0	QPSK	24.18	24.27	24.24
10	1	24		24.51	24.55	24.30
10	1	49		24.66	24.14	24.39
10	25	0		23.30	23.15	23.18
10	25	12		23.53	23.41	23.12
10	25	24		23.52	23.40	23.12
10	50	0		23.45	23.23	23.18
10	1	0	16-QAM	23.40	23.54	23.16
10	1	24		23.74	23.83	23.24
10	1	49		23.92	23.44	23.37
10	25	0		22.52	22.29	22.40
10	25	12		22.73	22.51	22.20
10	25	24		22.73	22.51	22.21
10	50	0		N/A	N/A	N/A

LTE Band 13

LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.23	24.33	24.34
5	1	12		24.35	24.27	24.26
5	1	24		24.34	24.41	24.44
5	12	0		23.10	23.17	23.23
5	12	6		23.11	23.08	23.18
5	12	11		23.09	23.08	23.18
5	25	0		23.12	23.16	23.24
5	1	0	16-QAM	23.27	23.35	23.51
5	1	12		23.29	23.29	23.43
5	1	24		23.28	23.38	23.62
5	12	0		22.14	22.23	22.31
5	12	6		22.18	22.13	22.26
5	12	11		22.18	22.13	22.26
5	25	0		22.13	22.20	22.23
10	1	0	QPSK	N/A	24.11	N/A
10	1	24		N/A	24.16	N/A
10	1	49		N/A	24.20	N/A
10	25	0		N/A	23.01	N/A
10	25	12		N/A	22.90	N/A
10	25	24		N/A	22.96	N/A
10	50	0		N/A	22.98	N/A
10	1	0	16-QAM	N/A	23.33	N/A
10	1	24		N/A	23.38	N/A
10	1	49		N/A	23.40	N/A
10	25	0		N/A	22.05	N/A
10	25	12		N/A	21.98	N/A
10	25	24		N/A	21.98	N/A
10	50	0		N/A	N/A	N/A

LTE Band 17

LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.34	24.43	24.37
5	1	12		24.36	24.27	24.45
5	1	24		24.39	24.48	24.35
5	12	0		23.32	23.43	23.34
5	12	6		23.34	23.33	23.39
5	12	11		23.33	23.33	23.39
5	25	0		23.34	23.34	23.38
5	1	0	16-QAM	23.46	23.54	23.67
5	1	12		23.48	23.32	23.78
5	1	24		23.51	23.55	23.74
5	12	0		22.45	22.56	22.57
5	12	6		22.50	22.50	22.65
5	12	11		22.50	22.50	22.66
5	25	0		22.47	22.51	22.50
10	1	0	QPSK	24.25	24.18	24.25
10	1	24		24.06	24.15	24.10
10	1	49		24.30	24.32	24.30
10	25	0		23.25	23.22	23.25
10	25	12		23.09	23.10	23.21
10	25	24		23.07	23.09	23.20
10	50	0		23.19	23.09	23.16
10	1	0	16-QAM	23.45	23.17	23.40
10	1	24		23.36	23.12	23.30
10	1	49		23.58	23.37	23.58
10	25	0		22.31	22.40	22.40
10	25	12		22.20	22.30	22.31
10	25	24		22.21	22.31	22.31
10	50	0		N/A	N/A	N/A

LTE Band 38

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.28	21.44	21.59
5	1	12		21.29	21.48	21.54
5	1	24		21.29	21.54	21.66
5	12	0		20.25	20.43	20.66
5	12	6		20.24	20.39	20.65
5	12	11		20.24	20.39	20.62
5	25	0		20.27	20.41	20.65
5	1	0	16-QAM	20.35	20.57	20.96
5	1	12		20.36	20.57	20.90
5	1	24		20.42	20.69	21.07
5	12	0		19.22	19.45	19.70
5	12	6		19.20	19.46	19.63
5	12	11		19.21	19.46	19.62
5	25	0		19.24	19.50	19.57
10	1	0	QPSK	21.29	21.48	21.70
10	1	24		21.30	21.53	21.65
10	1	49		21.37	21.62	21.72
10	25	0		20.26	20.46	20.64
10	25	12		20.25	20.40	20.65
10	25	24		20.24	20.40	20.65
10	50	0		20.18	20.43	20.60
10	1	0	16-QAM	20.67	20.45	20.84
10	1	24		20.62	20.51	20.78
10	1	49		20.75	20.62	20.95
10	25	0		19.20	19.49	19.62
10	25	12		19.17	19.42	19.67
10	25	24		19.18	19.43	19.68
10	50	0		N/A	N/A	N/A

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.52	21.60	21.78
15	1	37		21.49	21.61	21.67
15	1	74		21.57	21.73	21.88
15	36	0		20.48	20.63	20.84
15	36	18		20.48	20.63	20.84
15	36	39		20.48	20.63	20.84
15	75	0		20.48	20.63	20.84
15	1	0	16-QAM	20.82	20.65	21.08
15	1	38		20.76	20.62	21.01
15	1	75		20.84	20.75	21.22
15	36	0		N/A	N/A	N/A
15	36	18		N/A	N/A	N/A
15	36	39		N/A	N/A	N/A
15	75	0		N/A	N/A	N/A
20	1	0	QPSK	21.41	21.41	21.64
20	1	49		21.34	21.40	21.50
20	1	99		21.57	21.67	21.87
20	50	0		20.45	20.60	20.68
20	50	24		20.40	20.50	20.63
20	50	49		20.40	20.50	20.63
20	100	0		20.43	20.57	20.72
20	1	0	16-QAM	20.56	20.55	20.97
20	1	49		20.48	20.48	20.85
20	1	99		20.73	20.76	21.22
20	50	0		N/A	N/A	N/A
20	50	24		N/A	N/A	N/A
20	50	49		N/A	N/A	N/A
20	100	0		N/A	N/A	N/A

LTE Band 40 2305-2315

LTE Band 40 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.39	22.45	22.49
5	1	12		22.41	22.46	22.50
5	1	24		22.45	22.42	22.50
5	12	0		21.46	21.41	21.45
5	12	6		21.36	21.44	21.44
5	12	11		21.39	21.44	21.44
5	25	0		21.36	21.44	21.43
5	1	0	16-QAM	21.56	21.54	21.82
5	1	12		21.51	21.59	21.81
5	1	24		21.60	21.64	21.86
5	12	0		20.55	20.65	20.66
5	12	6		20.48	20.57	20.68
5	12	11		20.48	20.57	20.68
5	25	0		20.55	20.55	20.57
10	1	0	QPSK	N/A	22.42	N/A
10	1	24		N/A	22.49	N/A
10	1	49		N/A	22.48	N/A
10	25	0		N/A	21.34	N/A
10	25	12		N/A	21.34	N/A
10	25	24		N/A	21.32	N/A
10	50	0		N/A	21.41	N/A
10	1	0	16-QAM	N/A	21.70	N/A
10	1	24		N/A	21.73	N/A
10	1	49		N/A	21.85	N/A
10	25	0		N/A	20.55	N/A
10	25	12		N/A	20.52	N/A
10	25	24		N/A	20.52	N/A
10	50	0		N/A	N/A	N/A

LTE Band 40 2350-2360

LTE Band 40 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.16	22.10	22.13
5	1	12		22.28	22.23	22.20
5	1	24		22.29	22.24	22.16
5	12	0		21.13	21.03	21.00
5	12	6		21.14	21.09	21.07
5	12	11		21.14	21.09	21.07
5	25	0		21.18	21.05	21.02
5	1	0	16-QAM	21.24	21.23	21.36
5	1	12		21.31	21.27	21.46
5	1	24		21.33	21.29	21.44
5	12	0		20.27	20.21	20.20
5	12	6		20.23	20.27	20.21
5	12	11		20.23	20.27	20.22
5	25	0		20.23	20.26	20.12
10	1	0	QPSK	N/A	22.12	N/A
10	1	24		N/A	22.33	N/A
10	1	49		N/A	22.29	N/A
10	25	0		N/A	21.02	N/A
10	25	12		N/A	21.11	N/A
10	25	24		N/A	21.11	N/A
10	50	0		N/A	21.05	N/A
10	1	0	16-QAM	N/A	21.36	N/A
10	1	24		N/A	21.52	N/A
10	1	49		N/A	21.50	N/A
10	25	0		N/A	20.10	N/A
10	25	12		N/A	20.13	N/A
10	25	24		N/A	20.14	N/A
10	50	0		N/A	N/A	N/A

LTE Band 41

LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.89	21.26	21.73
5	1	12		20.91	21.34	21.74
5	1	24		20.99	21.45	21.84
5	12	0		19.84	20.24	20.71
5	12	6		19.80	20.20	20.68
5	12	11		19.79	20.20	20.68
5	25	0		19.84	20.22	20.70
5	1	0	16-QAM	20.28	20.39	20.88
5	1	12		20.29	20.37	20.88
5	1	24		20.33	20.49	20.90
5	12	0		18.96	19.32	19.82
5	12	6		18.90	19.28	19.79
5	12	11		18.89	19.28	19.79
5	25	0		18.84	19.33	19.82
10	1	0	QPSK	21.05	21.36	21.79
10	1	24		21.01	21.42	21.87
10	1	49		21.16	21.55	21.94
10	25	0		19.89	20.33	20.72
10	25	12		19.89	20.27	20.69
10	25	24		19.88	20.27	20.69
10	50	0		19.88	20.30	20.69
10	1	0	16-QAM	20.34	20.33	20.98
10	1	24		20.34	20.35	20.99
10	1	49		20.40	20.50	21.02
10	25	0		18.94	19.36	19.83
10	25	12		18.92	19.29	19.78
10	25	24		18.93	19.29	19.79
10	50	0		N/A	N/A	N/A

LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.31	21.56	21.96
15	1	37		21.16	21.53	21.93
15	1	74		21.36	21.69	22.03
15	36	0		20.14	20.54	20.87
15	36	18		20.15	20.54	20.86
15	36	39		20.14	20.54	20.87
15	75	0		20.14	20.54	20.86
15	1	0	16-QAM	20.59	20.57	21.22
15	1	38		20.52	20.49	21.21
15	1	75		20.61	20.67	21.23
15	36	0		N/A	N/A	N/A
15	36	18		N/A	N/A	N/A
15	36	39		N/A	N/A	N/A
15	75	0		N/A	N/A	N/A
20	1	0	QPSK	21.16	21.37	21.86
20	1	49		21.08	21.32	21.90
20	1	99		21.37	21.63	22.07
20	50	0		20.18	20.45	20.82
20	50	24		20.04	20.41	20.80
20	50	49		20.03	20.41	20.80
20	100	0		20.10	20.46	20.82
20	1	0	16-QAM	20.30	20.40	21.14
20	1	49		20.21	20.34	21.11
20	1	99		20.46	20.67	21.32
20	50	0		N/A	N/A	N/A
20	50	24		N/A	N/A	N/A
20	50	49		N/A	N/A	N/A
20	100	0		N/A	N/A	N/A

LTE Band 66

LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.46	23.03	23.02
1.4	1	2		23.45	23.04	23.08
1.4	1	5		23.42	23.06	23.02
1.4	3	0		23.41	22.97	23.03
1.4	3	1		23.37	23.01	23.05
1.4	3	2		23.40	23.00	23.04
1.4	6	0		22.29	21.84	21.80
1.4	1	0	16-QAM	22.56	21.89	22.00
1.4	1	2		22.59	21.86	21.99
1.4	1	5		22.64	21.93	22.07
1.4	3	0		22.35	21.79	21.78
1.4	3	1		22.39	21.80	21.79
1.4	3	2		22.38	21.80	21.79
1.4	6	0		21.52	21.14	21.06
3	1	0	QPSK	23.56	23.01	22.94
3	1	7		23.48	23.12	23.07
3	1	14		23.69	23.10	23.12
3	8	0		22.57	22.03	21.87
3	8	4		22.51	22.01	21.89
3	8	7		22.50	22.01	21.89
3	15	0		22.57	22.02	21.89
3	1	0	16-QAM	22.69	21.89	21.90
3	1	7		22.67	21.91	22.00
3	1	14		22.80	22.01	22.06
3	8	0		21.68	21.21	21.26
3	8	4		21.64	21.18	21.26
3	8	7		21.65	21.19	21.26
3	15	0		21.68	21.12	21.15

LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.75	23.19	23.11
5	1	12		23.78	23.18	23.22
5	1	24		23.85	23.22	23.27
5	12	0		22.55	22.02	21.90
5	12	6		22.60	22.02	21.82
5	12	11		22.59	22.01	21.82
5	25	0		22.60	22.05	21.92
5	1	0	16-QAM	22.72	22.19	22.21
5	1	12		22.78	22.11	22.22
5	1	24		22.83	22.24	22.31
5	12	0		21.70	21.23	21.27
5	12	6		21.63	21.22	21.22
5	12	11		21.64	21.23	21.22
5	25	0		21.67	21.26	21.14
10	1	0	QPSK	23.25	23.08	22.92
10	1	24		23.56	22.88	22.95
10	1	49		23.61	23.11	23.08
10	25	0		22.29	21.83	21.67
10	25	12		22.36	21.72	21.71
10	25	24		22.35	21.72	21.71
10	50	0		22.27	21.81	21.57
10	1	0	16-QAM	22.43	21.95	22.04
10	1	24		22.77	21.81	21.97
10	1	49		22.75	21.93	21.96
10	25	0		21.40	21.04	20.95
10	25	12		21.39	21.00	20.88
10	25	24		21.40	20.93	20.83
10	50	0		N/A	N/A	N/A

LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.48	23.35	23.13
15	1	37		23.69	23.02	23.10
15	1	74		23.67	23.18	22.97
15	36	0		22.33	22.04	21.96
15	36	18		22.34	22.04	21.97
15	36	39		22.33	22.04	21.96
15	75	0		22.36	22.05	21.98
15	1	0	16-QAM	22.66	22.25	22.29
15	1	38		22.82	21.94	22.25
15	1	75		22.78	22.08	22.44
15	36	0		N/A	N/A	N/A
15	36	18		N/A	N/A	N/A
15	36	39		N/A	N/A	N/A
15	75	0		N/A	N/A	N/A
20	1	0	QPSK	23.18	23.14	23.03
20	1	49		23.69	22.78	23.10
20	1	99		23.64	23.12	23.06
20	50	0		22.20	22.13	21.79
20	50	24		22.47	22.00	22.01
20	50	49		22.46	21.99	22.02
20	100	0		21.98	22.06	22.05
20	1	0	16-QAM	22.17	22.16	22.16
20	1	49		22.67	21.91	22.17
20	1	99		22.47	22.18	22.43
20	50	0		N/A	N/A	N/A
20	50	24		N/A	N/A	N/A
20	50	49		N/A	N/A	N/A
20	100	0		N/A	N/A	N/A

10. EUT and Test Setup Photo

10.1 EUT Photo

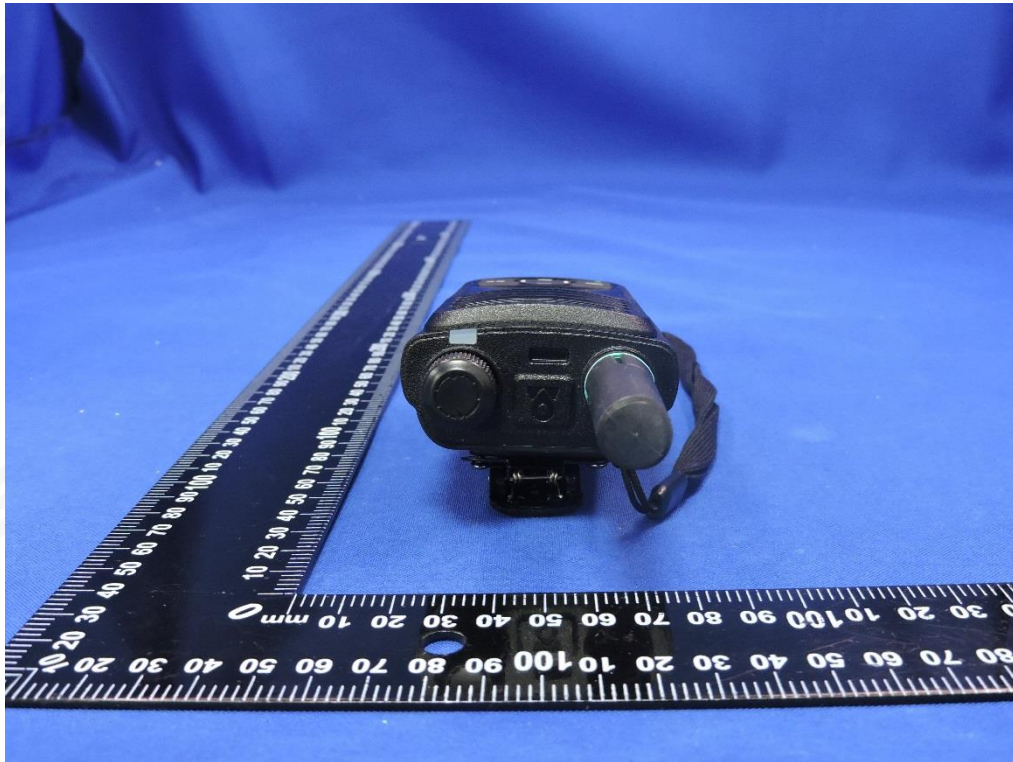
Front side



Back side



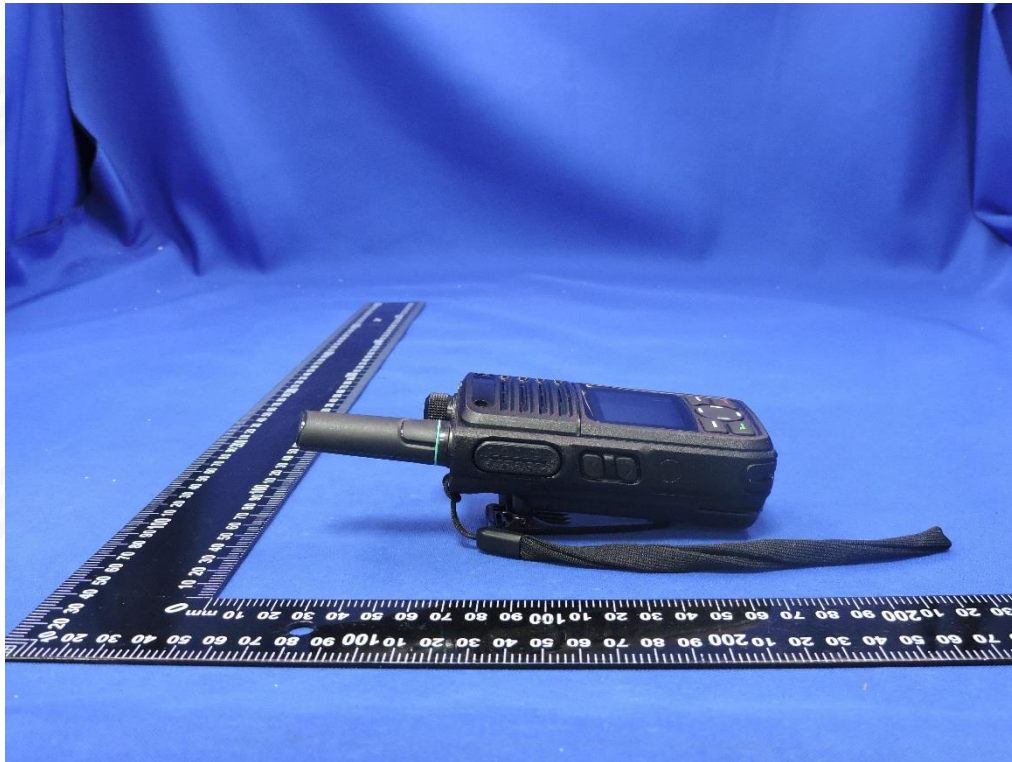
Top side



Bottom side



Left side



Right side



10.2 Setup Photo

Body Face up (separation distance is 25mm)



Body Back side(separation distance is 0mm)



Liquid depth (15 cm)

