SAR TEST REPORT

Product Name: NickWatch V1

Model Name: NICKW001-2

FCC ID: 2AAI6-NICKW001-2

Issued For	:	Trackimo INC. 680 Central Ave, Cedarhurst, New York 11516, USA
Issued By	:	Shenzhen LGT Test Service Co., Ltd. Room 205, Building 13, Zone B, Chen Hsong Industrial Park, No.177 Renmin West Road, Jinsha Community, Kengzi Street, Pingshan New District, Shenzhen, China
Report Number:		LGT23G120HA01
Sample Received Date:		Aug. 21, 2023
Date of Test:		Aug. 21, 2023 ~ Aug. 27, 2023
Date of Issue:		Aug. 29, 2023
Max. SAR :		Front of face: 1.001 W/kg (1g) Wrist: 2.613 W/kg(10g)

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Revision History

Rev.	Issue Date	Contents
00	Aug. 29, 2023	Initial Issue

TEST REPORT CERTIFICATION

Applicant	Trackimo INC.
Address	680 Central Ave, Cedarhurst, New York 11516, USA
Manufacture	Trackimo INC.
Address	680 Central Ave, Cedarhurst, New York 11516, USA
Product Name	NickWatch V1
Trademark	Trackimo, Tracki, Watchinu
Model Name	NICKW001-2
Sample Status	Normal

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
ANSI/IEEE Std. C95.1-1992 FCC 47 CFR Part 2 (2.1093) IEEE 1528: 2013	PASS

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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	NickWatch V1
Trademark	Trackimo, Tracki, Watchinu
Model Name	NICKW001-2
Series Model	NICKW001-5, NICKW001-6, NICKW001-7, NICKW001-8, NICKW001-9, NICKW001-10
Model Difference	The difference only in the model name and brand name.
Device Category	Portable
Product stage	Production unit
RF Exposure Environment	General Population / Uncontrolled
Hardware Version	UW02 AUO V0.3
Software Version	0.2
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: 1850MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699MHz ~ 716 MHz LTE Band 17: 704MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814MHz ~ 824 MHz;824MHz ~ 849 MHz LTE Band 38: 2570MHz ~ 2620 MHz LTE Band 41: 2555MHz ~ 2655 MHz WLAN 802.11b/g/n20: 2412 MHz ~ 2462 MHz BLE: 2402 MHz to 2480 MHz

Max. Reported SAR	Band	Mode	Front of face-1g (W/kg)	Wrist-10g (W/kg)
	PCT	GSM 850	0.051	0.559
	PCT	GSM 1900	0.510	1.288
	PCT	WCDMA Band II	1.001	2.613
	PCT	WCDMA Band IV	0.085	0.643
	PCT	LTE Band 2	0.641	1.912
	PCT	LTE Band 4	0.310	1.809
	PCT	LTE Band 5	0.155	0.756
	PCT	LTE Band 7	0.629	0.868
	PCT	LTE Band 12	0.034	0.217
	PCT	LTE Band 17	0.041	0.271
	PCT	LTE Band 25	0.766	1.579
	PCT	LTE Band 26	0.090	1.280
	PCT	LTE Band 38	0.290	0.717
	PCT	LTE Band 41	0.234	0.333
	DTS	2.4G WLAN	0.234	0.201
	DTS	BLE Note	0.573	0.573
Sum SAR			1.574	3.186
Limit(W/kg)			1.6	4
FCC Equipment Class	PCS Licensed Transmitter worn on body (PCT) Digital Transmission System (DTS)			
Battery	Rated Voltage:3.85V Charge Limit Voltage:4.4V Capacity: 460mAh			
SIM Card	Support single card			
Operating Mode	GSM:GMSK for GSM/GPRS; GMSK and 8PSK for EDGE WCDMA:QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK LTE:QPSK,16QAM WLAN: 802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g/n(OFDM):BPSK,QPSK,16-QAM,64-QAM BLE: GFSK			
Antenna Specification	GSM/WCDMA/LTE: PIFA Antenna WLAN/BLE: Built-in LDS Antenna			

1.2 Test Environment

Ambient conditions in the SAR laboratory:

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

1.3 Test Factory

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Chen Hsong Industrial Park, No.177 Renmin West Road, Jinsha Community, Kengzi Street, Pingshan New District, Shenzhen, China
Accreditation Certificate	FCC Registration No.: 746540
	A2LA Certificate No.: 6727.01
	IC Registration No.: CN0136

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 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
10	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
PARTIAL WRIST LIMIT
4.0 W/kg(10g)

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:

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

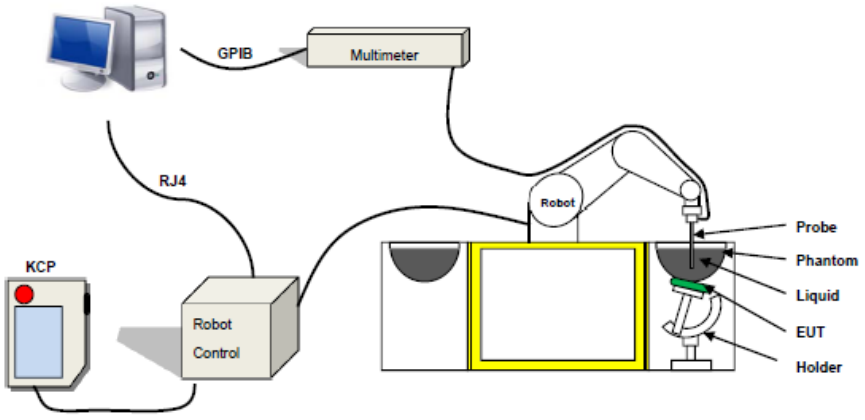
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

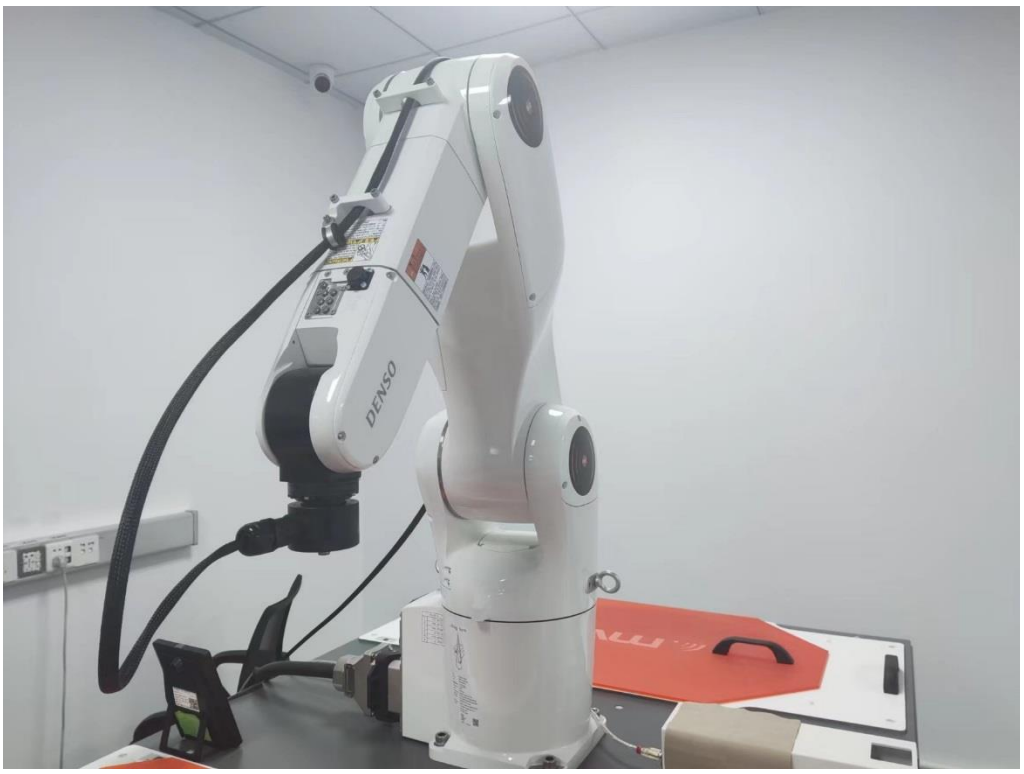
3.2 SAR System

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 OpenSAR software computes the results to give a SAR value in a 1g or 1g mass.

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 04/22 EPGO364 with following specifications is used
- Probe Length: 330 mm
- Length of Individual Dipoles: 2mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 600 MHz to 6 GHz for head & body simulating liquid.
-Angle between probe axis (evaluation axis) and surface normal line: less than 30°

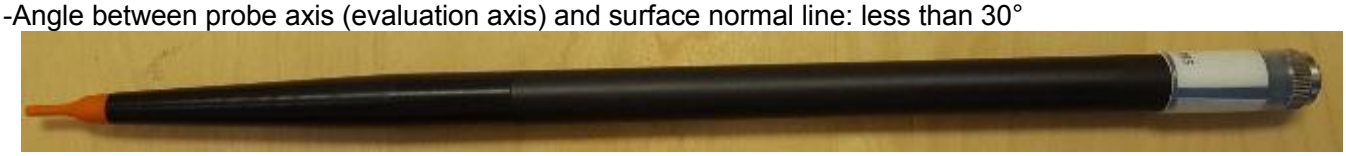


Figure 1-MVG COMOSAR Dosimetric E field Probe

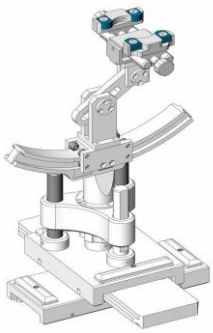
3.2.2 Phantom

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 06/22 SAM 148

Figure-SN 06/22 ELLI 51

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 of 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	εr	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

LIQUID MEASUREMENT RESULTS

Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2023-08-21	24.0	52	704	23.7	Permittivity	42.15	41.92	-0.55	±5
					Conductivity	0.89	0.86	-3.37	±5
2023-08-21	24.1	52	709	23.8	Permittivity	42.12	42.19	0.17	±5
					Conductivity	0.89	0.90	1.12	±5
2023-08-21	24.1	53	711	23.8	Permittivity	42.11	42.76	1.54	±5
					Conductivity	0.89	0.88	-1.12	±5
2023-08-21	24.1	53	750	23.8	Permittivity	41.90	42.12	0.53	±5
					Conductivity	0.89	0.92	3.37	±5
2023-08-21	22.1	43	821.5	21.8	Permittivity	41.56	41.42	-0.34	±5
					Conductivity	0.90	0.87	-3.33	±5
2023-08-21	22.2	43	824.2	21.9	Permittivity	41.55	42.00	1.08	±5
					Conductivity	0.90	0.91	1.11	±5
2023-08-21	22.3	44	826.4	22.0	Permittivity	41.54	42.20	1.59	±5
					Conductivity	0.90	0.93	3.33	±5
2023-08-21	22.2	43	829	21.9	Permittivity	41.53	41.47	-0.14	±5
					Conductivity	0.90	0.87	-3.33	±5
2023-08-21	22.2	44	835	21.9	Permittivity	41.50	40.49	-2.43	±5
					Conductivity	0.90	0.92	2.22	±5
2023-08-26	20.7	46	1720	20.3	Permittivity	40.11	40.70	1.47	±5
					Conductivity	1.35	1.31	-2.96	±5
2023-08-26	20.7	46	1745	20.3	Permittivity	40.08	40.83	1.87	±5
					Conductivity	1.37	1.40	2.19	±5
2023-08-26	20.8	46	1800	20.5	Permittivity	40.00	41.21	3.03	±5
					Conductivity	1.40	1.41	0.71	±5
2023-08-26	20.9	47	1860	20.6	Permittivity	40.00	40.99	2.48	±5
					Conductivity	1.40	1.39	-0.71	±5
2023-08-26	20.9	47	1880	20.6	Permittivity	40.00	40.54	1.35	±5
					Conductivity	1.40	1.42	1.43	±5
2023-08-26	21.4	56	1900	21.0	Permittivity	40.00	40.21	0.53	±5
					Conductivity	1.40	1.39	-0.71	±5
2023-08-26	21.5	56	1907.6	21.2	Permittivity	40.00	40.78	1.95	±5
					Conductivity	1.40	1.36	-2.86	±5
2023-08-27	20.8	46	1800	20.5	Permittivity	40.00	41.34	3.35	±5
					Conductivity	1.40	1.45	3.57	±5
2023-08-27	20.8	47	1850.2	20.5	Permittivity	40.00	40.62	1.55	±5
					Conductivity	1.40	1.38	-1.43	±5
2023-08-27	20.9	47	1852.4	20.6	Permittivity	40.00	40.43	1.08	±5
					Conductivity	1.40	1.36	-2.86	±5

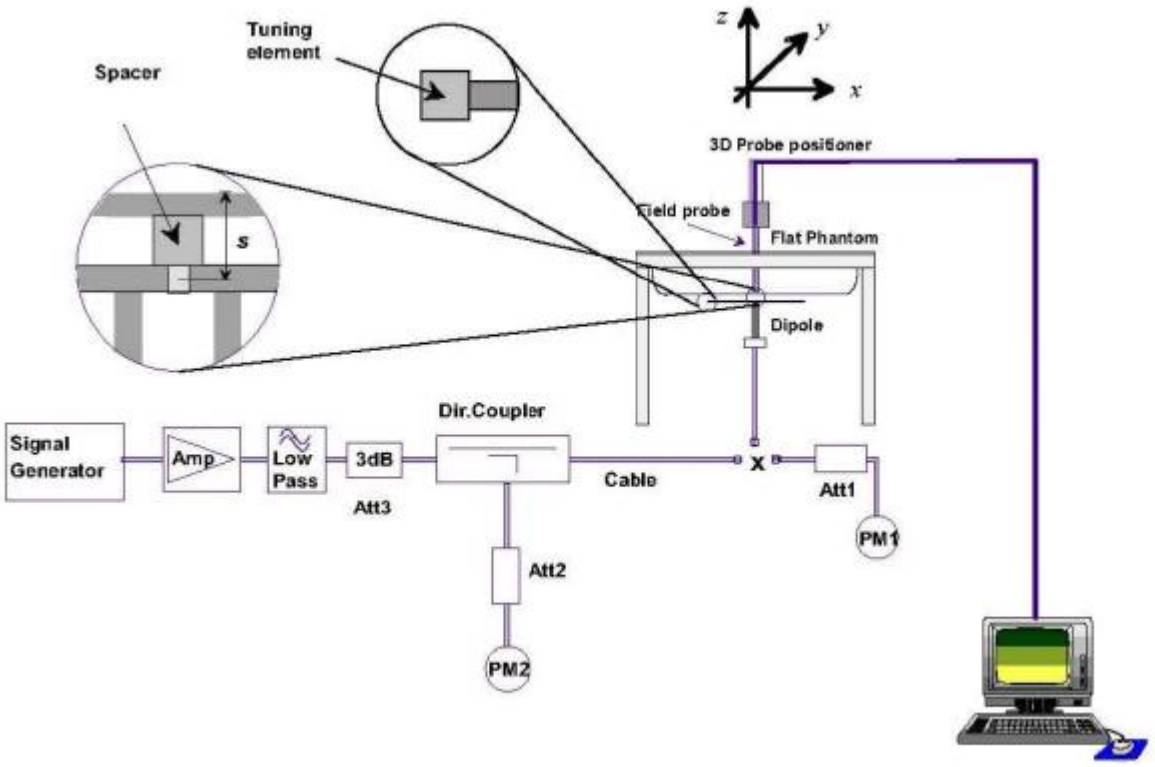
2023-08-27	21.5	57	2450	21.3	Permittivity	39.20	40.33	2.88	±5
					Conductivity	1.80	1.83	1.67	±5
2023-08-27	21.5	57	2462	21.3	Permittivity	39.18	39.78	1.53	±5
					Conductivity	1.81	1.84	1.66	±5
2023-08-27	22.3	54	2510	22.0	Permittivity	39.12	40.29	2.99	±5
					Conductivity	1.86	1.81	-2.69	±5
2023-08-27	22.4	53	2565	22.2	Permittivity	39.01	39.10	0.23	±5
					Conductivity	1.95	2.02	3.59	±5
2023-08-27	22.3	54	2595	22.0	Permittivity	39.01	39.96	2.44	±5
					Conductivity	1.95	1.96	0.51	±5
2023-08-27	22.3	55	2600	22.0	Permittivity	39.00	40.17	3.00	±5
					Conductivity	1.96	1.98	1.02	±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)	(%)	(%)
2023-08-21	750	100	0.829	8.29	8.49	-2.36	10
2023-08-21	835	100	0.945	9.45	9.63	-1.87	10
2023-08-26	1800	100	3.931	39.31	38.31	2.61	10
2023-08-27	1800	100	3.905	39.05	38.31	1.93	10
2023-08-26	1900	100	3.889	38.89	39.84	-2.38	10
2023-08-27	2450	100	5.594	55.94	54.70	2.27	10
2023-08-27	2600	100	5.686	56.86	56.16	1.19	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.

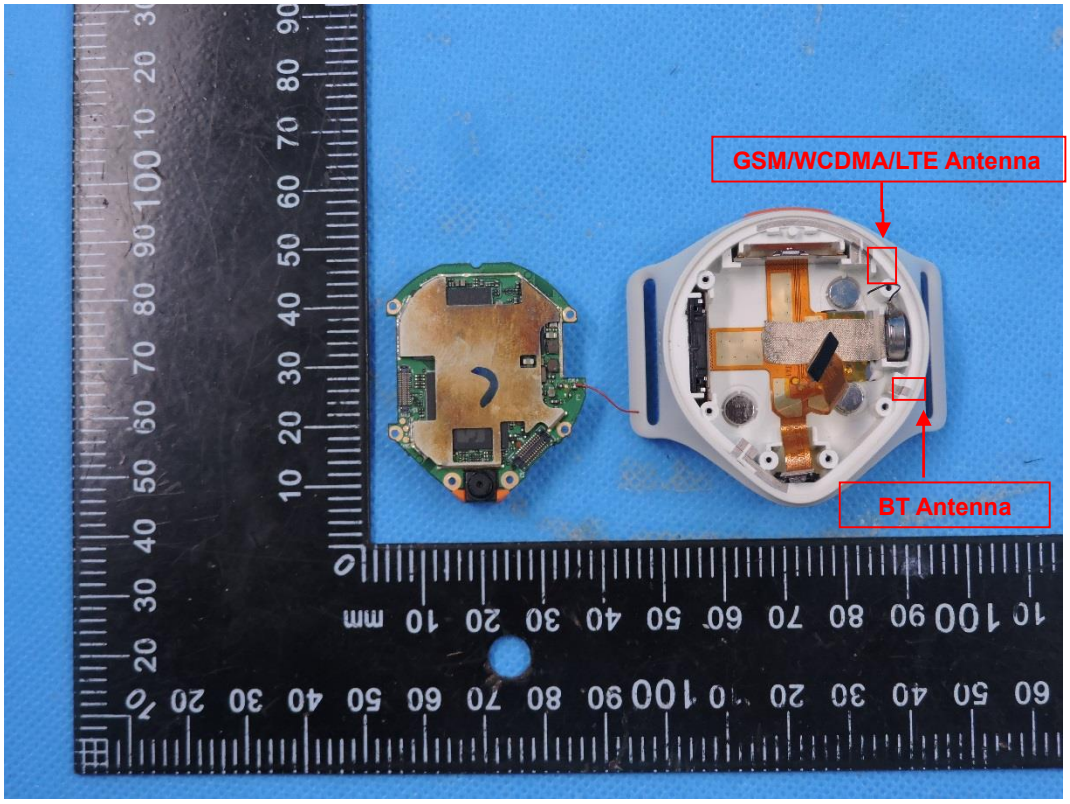
➢ Area Scan& Zoom Scan

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 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 Antenna Location Sketch

It is a NickWatch V1, support Bluetooth/GSM/WCDMA/LTE modes.



7.1 SAR test exclusion consider table

Standalone SAR test exclusion applies 447498 D04 Interim General Radio Frequency Exposure Guidelines v01. 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);

Function	Fre. (GHz)	Separation distance (cm)	Max Turn up power (dBm)	Max Turn up power (mW)	Pth (mW)
BT	2.402	0.5	0	1	2.79

Note: The Maximum power is less than the Pth, complies with the exemption requirements.

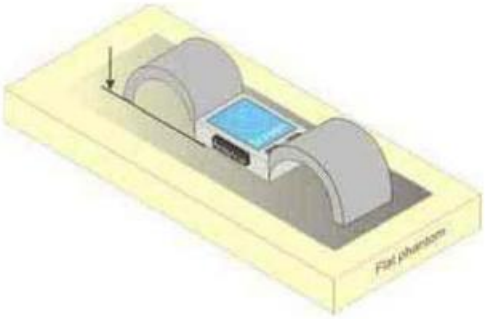
8. EUT Test Position

This EUT was tested in Front Face and Rear Face.

Limb-worn Position Conditions

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

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



Test position for limb-worn devices

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.

Symbol	Uncertainty Component	Prob. Dist.	Unc. $a(x_i)$	Div. q_i	$u(x_i) = a(x_i)/q_i$	C_i	$u(y) = C_i * u(x_i)$	v_i
Measurement system errors								
CF	Probe calibration	N (k = 2)	5.8	2	2.90	1	2.90	∞
CF_{drift}	Probe calibration drift	R	0.12	√3	0.07	1	0.07	∞
LIN	Probe linearity and detection limit	R	1.91	√3	1.10	1	1.10	∞
BBS	Broadband signal	R	0.15	√3	0.09	1	0.09	∞
ISO	Probe isotropy	R	0.18	√3	0.10	1	0.10	∞
DAE	Other probe and data acquisition errors	N	2.7	1	2.70	1	2.70	∞
AMB	RF ambient and noise	N	1.73	1	1.73	1	1.73	∞
Δ_{xyz}	Probe positioning errors	N	0.81	1	0.81	2/δ	0.81	
DAT	Data processing errors	N	2.5	1	2.50	1	2.50	∞
Phantom and device (DUT or validation antenna) errors								
LIQ(σ)	Measurement of phantom conductivity(σ)	N	4.4	1	4.4	cε, cσ	4.40	∞
LIQ(T_c)	Temperature effects (medium)	R	2.9	√3	1.67	cε, cσ	1.67	∞
EPS	Shell permittivity	R	3.4	√3	1.96	See 8.4.2.3	0.49	∞
DIS	Distance between the radiating element of the DUT and the phantom medium	N	0.8	1	0.8	2	1.60	∞
D_{xyz}	Repeatability of positioning the DUT or source against the phantom	N	1.5	1	1.5	1	1.50	5
H	Device holder effects	N	3	1	3	1	3.00	
MOD	Effect of operating mode on probe sensitivity	R	3.59	√3	2.07	1	2.07	∞
TAS	Time-average SAR	R	1.73	√3	1.00	1	1.00	∞
RF_{drift}	Variation in SAR due to drift in output of DUT	N	2.89	1	2.89	1	2.89	
VAL	Validation antenna uncertainty (validation measurement only)	N	1.45	1	1.45	1	1.45	
P_{in}	Uncertainty in accepted power (validation measurement only)	N	2.5	1	2.5	1	2.50	
Corrections to the SAR result (if applied)								
C(ε′,σ)	Phantom deviation from target (ε′,σ))	N	2.31	1	2.31	1	2.31	
C(R)	SAR scaling	R	1.15	√3	0.66	1	0.66	
u(ΔSAR)	Combined uncertainty						9.53	
U	Expanded uncertainty and effective degrees of freedom					U =	19.06	

10. Conducted Power Measurement

10.1 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	1880.0	1909.8
GSM(GMSK, 1-Slot)	32.82	32.78	32.89	29.71	29.80	29.65
GPRS (GMSK, 1-Slot)	32.72	32.67	32.80	29.69	29.72	29.59
GPRS (GMSK, 2-Slot)	30.83	30.65	30.80	27.60	27.53	27.42
GPRS (GMSK, 3-Slot)	28.77	28.61	28.73	25.98	25.92	25.80
GPRS (GMSK, 4-Slot)	26.58	26.43	26.55	23.93	23.86	23.74
EGPRS(8PSK, 1-Slot)	25.55	25.34	25.87	21.54	23.11	23.73
EGPRS(8PSK, 2-Slot)	26.14	25.67	25.48	21.80	22.70	23.07
EGPRS(8PSK, 3-Slot)	25.01	24.29	24.40	20.26	21.72	22.69
EGPRS(8PSK, 4-Slot)	22.15	21.40	21.85	17.56	19.05	19.16
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	1880.0	1909.8
GSM(GMSK, 1-Slot)	23.79	23.75	23.86	20.68	20.77	20.62
GPRS (GMSK, 1-Slot)	23.69	23.64	23.77	20.66	20.69	20.56
GPRS (GMSK, 2-Slot)	24.81	24.63	24.78	21.58	21.51	21.40
GPRS (GMSK, 3-Slot)	24.51	24.35	24.47	21.72	21.66	21.54
GPRS (GMSK, 4-Slot)	23.57	23.42	23.54	20.92	20.85	20.73
EGPRS(8PSK, 1-Slot)	16.52	16.31	16.84	12.51	14.08	14.70
EGPRS(8PSK, 2-Slot)	20.12	19.65	19.46	15.78	16.68	17.05
EGPRS(8PSK, 3-Slot)	20.75	20.03	20.14	16.00	17.46	18.43
EGPRS(8PSK, 4-Slot)	19.14	18.39	18.84	14.55	16.04	16.15
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 2			WCDMA Band 5		
Channel	9262	9400	9538	4132	4183	4233
Frequency (MHz)	1852.4	1880	1907.6	826.4	836.6	846.6
RMC 12.2Kbps	22.36	22.43	22.56	22.54	22.45	22.52
HSDPA Subtest-1	22.42	22.46	22.59	22.56	22.51	22.55
HSDPA Subtest-2	21.93	21.66	21.16	22.02	21.40	21.17
HSDPA Subtest-3	21.43	22.40	22.20	20.89	21.88	21.30
HSDPA Subtest-4	21.92	21.82	22.56	21.17	21.33	21.86
HSUPA Subtest-1	22.46	22.09	21.89	21.49	21.42	21.19
HSUPA Subtest-2	21.77	21.95	21.51	21.75	21.80	21.38
HSUPA Subtest-3	21.98	21.80	22.20	21.80	21.68	21.88
HSUPA Subtest-4	22.37	21.91	22.37	21.80	21.38	21.80
HSUPA Subtest-5	22.12	22.21	22.28	21.59	21.59	21.67

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

2.4GWIFI				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
802.11b	1	2412	11.39	13.77
	7	2437	12.18	16.52
	11	2462	13	19.95
802.11g	1	2412	12.45	17.58
	7	2437	13.58	22.80
	11	2462	14.07	25.53
802.11 n-HT20	1	2412	11.82	15.21
	7	2437	12.81	19.10
	11	2462	13.54	22.59

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK	0	2402	-1.01	0.79
	19	2440	-2.04	0.63
	39	2480	-2.96	0.51

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 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.00	23.19	23.11
1.4	1	2		23.03	23.22	23.10
1.4	1	5		23.00	23.36	23.10
1.4	3	0		22.92	23.03	23.23
1.4	3	1		22.95	23.11	23.34
1.4	3	2		23.02	23.12	23.28
1.4	6	0		22.06	22.19	22.27
1.4	1	0	16-QAM	22.31	22.41	22.78
1.4	1	2		22.35	22.40	22.82
1.4	1	5		22.27	22.46	22.69
1.4	3	0		22.39	22.15	22.35
1.4	3	1		22.34	22.14	22.38
1.4	3	2		22.30	22.22	22.30
1.4	6	0		21.36	21.43	21.11
3	1	0	QPSK	22.91	23.02	23.21
3	1	7		22.94	23.13	23.38
3	1	14		23.00	23.11	23.38
3	8	0		21.96	22.20	22.30
3	8	4		22.03	22.08	22.23
3	8	7		22.16	22.11	22.26
3	15	0		21.98	22.16	22.25
3	1	0	16-QAM	23.00	22.26	22.74
3	1	7		22.97	22.24	22.58
3	1	14		23.06	22.26	22.47
3	8	0		21.16	21.40	21.47
3	8	4		21.08	21.28	21.30
3	8	7		20.97	21.32	21.24
3	15	0		21.31	21.21	21.36

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.92	23.20	23.28
5	1	12		23.04	23.14	23.14
5	1	24		23.04	23.16	23.22
5	12	0		22.11	22.19	22.40
5	12	6		22.12	22.02	22.33
5	12	11		22.19	22.20	22.33
5	25	0		22.11	22.17	22.41
5	1	0	16-QAM	22.26	21.80	22.27
5	1	12		22.33	21.75	22.39
5	1	24		22.40	21.86	22.26
5	12	0		21.20	21.10	21.46
5	12	6		21.00	21.03	21.52
5	12	11		21.03	21.06	21.29
5	25	0		21.19	21.22	21.39
10	1	0	QPSK	23.01	23.12	23.51
10	1	24		23.04	23.05	23.33
10	1	49		23.11	23.15	23.38
10	25	0		22.22	22.14	22.20
10	25	12		22.16	22.05	22.25
10	25	24		22.24	22.13	22.45
10	50	0		22.16	22.19	22.20
10	1	0	16-QAM	23.10	22.85	22.35
10	1	24		23.14	22.84	22.31
10	1	49		23.13	22.85	22.29
10	25	0		21.06	21.40	21.41
10	25	12		21.03	21.30	21.37
10	25	24		21.16	21.26	21.52
10	50	0		21.12	21.30	21.34

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.99	23.08	23.40
15	1	37		23.09	23.05	23.41
15	1	74		23.16	23.11	23.34
15	36	0		22.16	22.17	22.34
15	36	18		22.22	22.10	22.36
15	36	39		22.22	22.15	22.43
15	75	0		22.09	22.06	22.30
15	1	0	16-QAM	23.09	22.30	23.13
15	1	38		23.08	22.25	22.95
15	1	75		23.17	22.35	23.06
15	36	0		21.11	21.39	21.49
15	36	18		21.20	21.27	21.35
15	36	39		21.28	21.34	21.43
15	75	0		21.20	21.15	21.52
20	1	0	QPSK	23.10	23.32	23.42
20	1	49		23.36	23.30	23.62
20	1	99		23.41	23.35	23.53
20	50	0		22.20	22.27	22.52
20	50	24		22.30	22.19	22.47
20	50	49		22.36	22.29	22.20
20	100	0		22.20	22.16	22.44
20	1	0	16-QAM	21.80	22.18	22.19
20	1	49		22.05	21.78	22.31
20	1	99		22.02	22.18	22.19
20	50	0		21.26	21.21	21.47
20	50	24		21.35	21.23	21.46
20	50	49		21.30	21.36	21.42
20	100	0		21.21	21.26	21.44

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.93	22.59	22.95
1.4	1	2		22.93	22.59	23.04
1.4	1	5		22.90	22.65	23.01
1.4	3	0		22.81	22.74	22.78
1.4	3	1		22.84	22.81	22.82
1.4	3	2		22.81	22.77	22.74
1.4	6	0		21.86	21.73	21.91
1.4	1	0	16-QAM	22.63	22.20	22.15
1.4	1	2		22.58	22.29	22.23
1.4	1	5		22.69	22.32	22.29
1.4	3	0		21.96	21.86	21.97
1.4	3	1		21.96	21.86	22.11
1.4	3	2		21.97	21.82	22.06
1.4	6	0		20.77	20.81	21.00
3	1	0	QPSK	22.62	22.62	23.04
3	1	7		22.66	22.65	23.03
3	1	14		22.67	22.63	23.04
3	8	0		21.77	21.69	21.77
3	8	4		21.73	21.77	21.78
3	8	7		21.81	21.79	21.92
3	15	0		21.68	21.75	21.85
3	1	0	16-QAM	22.61	22.20	22.18
3	1	7		22.72	22.33	22.21
3	1	14		22.69	22.30	22.25
3	8	0		20.62	20.92	20.88
3	8	4		20.65	21.15	20.81
3	8	7		20.68	21.07	20.95
3	15	0		20.85	21.00	20.84

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.69	22.79	22.57
5	1	12		22.67	22.76	22.61
5	1	24		22.77	22.80	22.66
5	12	0		21.88	21.63	21.83
5	12	6		21.85	21.71	21.67
5	12	11		21.84	21.67	21.82
5	25	0		21.72	21.74	21.77
5	1	0	16-QAM	21.96	21.36	21.97
5	1	12		21.94	21.42	22.01
5	1	24		22.01	21.39	22.09
5	12	0		20.72	20.53	20.77
5	12	6		20.70	20.76	20.84
5	12	11		20.80	20.73	20.72
5	25	0		20.88	20.92	20.76
10	1	0	QPSK	22.65	22.65	22.88
10	1	24		22.74	22.68	23.01
10	1	49		22.76	22.72	23.05
10	25	0		21.75	21.72	21.72
10	25	12		21.88	21.73	21.71
10	25	24		21.93	21.73	21.67
10	50	0		21.80	21.86	21.69
10	1	0	16-QAM	22.75	21.78	21.92
10	1	24		22.75	21.81	21.86
10	1	49		22.80	21.77	21.97
10	25	0		20.80	20.68	20.71
10	25	12		20.74	20.94	20.81
10	25	24		20.79	20.70	20.79
10	50	0		20.81	20.94	20.81

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.68	22.70	22.95
15	1	37		22.72	22.73	22.96
15	1	74		22.75	22.75	23.10
15	36	0		21.74	21.82	21.71
15	36	18		21.84	21.67	21.69
15	36	39		21.91	21.61	21.72
15	75	0		21.88	21.65	21.61
15	1	0	16-QAM	22.72	21.82	22.29
15	1	38		22.75	21.84	22.29
15	1	75		22.77	21.77	22.47
15	36	0		20.80	20.89	20.67
15	36	18		20.83	21.05	20.67
15	36	39		20.73	20.81	20.74
15	75	0		20.86	20.89	20.80
20	1	0	QPSK	22.91	22.79	22.90
20	1	49		22.99	22.79	22.94
20	1	99		22.93	22.84	23.11
20	50	0		21.79	21.83	21.71
20	50	24		21.89	21.79	21.86
20	50	49		21.75	21.62	21.79
20	100	0		21.87	21.70	21.74
20	1	0	16-QAM	21.51	22.05	21.69
20	1	49		21.62	22.02	21.89
20	1	99		21.50	21.95	21.82
20	50	0		20.87	20.79	20.67
20	50	24		20.89	20.94	20.70
20	50	49		20.91	20.72	20.87
20	100	0		20.78	20.88	20.70

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.62	22.94	23.06
1.4	1	2		22.75	22.96	22.97
1.4	1	5		22.73	22.98	23.04
1.4	3	0		22.83	22.76	22.80
1.4	3	1		22.84	22.84	22.79
1.4	3	2		22.79	22.78	22.86
1.4	6	0		21.78	21.87	21.88
1.4	1	0	16-QAM	22.35	22.68	23.04
1.4	1	2		22.29	22.57	23.09
1.4	1	5		22.33	22.69	23.10
1.4	3	0		21.84	22.33	22.20
1.4	3	1		21.81	22.22	22.19
1.4	3	2		21.82	22.17	22.18
1.4	6	0		20.84	20.96	21.08
3	1	0	QPSK	22.69	22.76	22.94
3	1	7		22.76	22.69	22.96
3	1	14		22.86	22.68	22.98
3	8	0		21.75	21.77	21.87
3	8	4		21.81	21.84	21.77
3	8	7		21.88	21.84	21.79
3	15	0		21.75	21.99	21.96
3	1	0	16-QAM	22.55	22.37	22.76
3	1	7		22.54	22.35	22.74
3	1	14		22.54	22.35	22.78
3	8	0		20.84	20.94	20.79
3	8	4		20.90	20.94	20.81
3	8	7		20.74	20.85	20.90
3	15	0		21.03	20.72	20.78

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.65	22.80	22.77
5	1	12		22.67	22.79	22.67
5	1	24		22.69	22.78	22.84
5	12	0		21.71	21.74	21.78
5	12	6		21.88	21.96	21.83
5	12	11		21.93	21.87	21.80
5	25	0		21.72	21.82	21.80
5	1	0	16-QAM	21.90	21.58	21.82
5	1	12		21.95	21.52	21.74
5	1	24		21.94	21.48	21.79
5	12	0		20.89	20.71	20.84
5	12	6		20.74	20.57	20.75
5	12	11		20.79	20.51	20.73
5	25	0		20.82	20.75	20.67
10	1	0	QPSK	23.05	22.83	22.84
10	1	24		23.08	22.96	22.75
10	1	49		23.12	22.94	22.87
10	25	0		22.65	21.88	21.72
10	25	12		21.90	21.93	21.78
10	25	24		21.84	21.73	21.78
10	50	0		21.85	21.91	21.92
10	1	0	16-QAM	22.79	21.79	21.72
10	1	24		22.79	21.87	21.88
10	1	49		22.86	21.91	21.80
10	25	0		20.71	20.84	20.84
10	25	12		20.74	20.67	20.78
10	25	24		20.80	20.96	20.72
10	50	0		20.86	20.79	20.90

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	21.98	21.56	21.75
5	1	12		22.35	21.68	22.02
5	1	24		22.29	21.28	21.45
5	12	0		21.41	21.06	21.24
5	12	6		21.30	21.09	21.22
5	12	11		21.37	21.17	21.16
5	25	0		21.27	21.23	21.25
5	1	0	16-QAM	21.15	21.20	21.19
5	1	12		21.13	21.18	21.18
5	1	24		21.10	21.17	21.22
5	12	0		20.24	20.28	20.17
5	12	6		20.28	20.21	20.12
5	12	11		20.28	20.16	20.17
5	25	0		20.42	20.17	20.35
10	1	0	QPSK	21.78	21.66	21.74
10	1	24		22.12	21.55	22.09
10	1	49		22.15	21.52	21.90
10	25	0		21.43	21.14	21.21
10	25	12		21.37	21.09	21.25
10	25	24		21.26	21.09	21.29
10	50	0		21.38	21.11	21.22
10	1	0	16-QAM	21.71	21.19	21.37
10	1	24		22.18	21.19	21.34
10	1	49		22.24	21.17	21.38
10	25	0		20.33	20.28	20.29
10	25	12		20.32	20.24	20.29
10	25	24		20.29	20.26	20.36
10	50	0		20.38	20.29	20.24

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	21.80	21.85	21.70
15	1	37		22.19	21.49	21.94
15	1	74		22.17	21.26	21.65
15	36	0		21.17	21.04	21.14
15	36	18		21.26	21.15	21.20
15	36	39		21.36	21.04	21.12
15	75	0		21.20	21.18	21.20
15	1	0	16-QAM	21.72	21.15	21.56
15	1	38		22.19	21.19	21.81
15	1	75		22.24	21.17	21.54
15	36	0		20.43	20.28	20.23
15	36	18		20.32	20.32	20.28
15	36	39		20.38	20.23	20.21
15	75	0		20.35	20.20	20.31
20	1	0	QPSK	21.84	22.11	21.43
20	1	49		22.37	21.57	21.85
20	1	99		22.24	21.75	21.98
20	50	0		21.36	21.22	21.23
20	50	24		21.20	21.12	21.20
20	50	49		21.11	21.14	21.21
20	100	0		21.32	21.19	21.34
20	1	0	16-QAM	21.26	21.48	21.13
20	1	49		21.05	21.41	21.21
20	1	99		21.05	21.53	21.27
20	50	0		20.41	20.23	20.27
20	50	24		20.37	20.31	20.36
20	50	49		20.44	20.13	20.26
20	100	0		20.34	20.25	20.30

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	23.23	22.83	22.92
1.4	1	2		23.21	22.88	22.97
1.4	1	5		23.27	22.89	22.92
1.4	3	0		23.05	23.07	22.88
1.4	3	1		22.98	23.12	22.97
1.4	3	2		23.03	23.03	22.87
1.4	6	0		22.09	21.98	21.80
1.4	1	0	16-QAM	23.12	22.60	22.89
1.4	1	2		23.11	22.52	22.82
1.4	1	5		23.07	22.45	22.81
1.4	3	0		22.15	22.07	22.32
1.4	3	1		22.12	21.98	22.37
1.4	3	2		22.13	21.97	22.29
1.4	6	0		21.16	21.00	21.17
3	1	0	QPSK	23.00	22.86	22.99
3	1	7		23.10	22.91	22.92
3	1	14		23.08	22.89	22.97
3	8	0		22.18	22.00	21.99
3	8	4		22.11	22.01	21.81
3	8	7		22.12	21.99	21.80
3	15	0		22.08	22.00	21.92
3	1	0	16-QAM	22.98	22.57	22.99
3	1	7		22.91	22.44	22.90
3	1	14		22.95	22.50	22.84
3	8	0		20.94	21.09	20.73
3	8	4		20.95	21.27	20.69
3	8	7		21.04	21.22	20.95
3	15	0		21.13	21.17	20.69

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.86	23.02	22.95
5	1	12		23.07	22.94	22.79
5	1	24		23.01	22.98	22.77
5	12	0		22.09	22.07	21.92
5	12	6		21.93	21.95	22.02
5	12	11		22.07	21.99	21.94
5	25	0		21.98	22.00	22.03
5	1	0	16-QAM	22.16	21.68	21.90
5	1	12		22.21	21.67	21.89
5	1	24		22.27	21.68	21.86
5	12	0		20.94	20.82	20.92
5	12	6		20.99	20.95	20.81
5	12	11		21.06	20.91	20.71
5	25	0		21.12	21.12	20.71
10	1	0	QPSK	22.97	23.08	23.30
10	1	24		23.05	22.96	23.11
10	1	49		22.98	22.87	23.13
10	25	0		21.96	21.97	22.03
10	25	12		22.19	22.09	21.91
10	25	24		21.98	21.95	22.03
10	50	0		22.04	21.98	21.82
10	1	0	16-QAM	23.02	22.16	22.03
10	1	24		22.99	22.05	21.86
10	1	49		22.93	21.97	21.84
10	25	0		20.98	20.90	21.03
10	25	12		21.02	21.02	20.98
10	25	24		20.89	21.07	20.76
10	50	0		21.11	21.07	20.93

LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.08	22.79	22.87
5	1	12		22.99	22.77	22.84
5	1	24		22.93	22.69	22.81
5	12	0		22.03	22.05	21.85
5	12	6		22.02	21.94	22.05
5	12	11		22.03	21.91	21.98
5	25	0		22.14	21.99	21.90
5	1	0	16-QAM	21.74	22.25	22.06
5	1	12		21.80	22.12	22.10
5	1	24		21.60	22.14	22.03
5	12	0		20.81	20.93	20.79
5	12	6		20.84	21.03	20.79
5	12	11		20.98	20.89	20.66
5	25	0		21.04	21.02	20.92
10	1	0	QPSK	23.03	22.97	23.16
10	1	24		22.88	22.99	23.12
10	1	49		22.95	22.86	23.07
10	25	0		22.07	21.96	22.05
10	25	12		21.98	21.94	21.87
10	25	24		22.02	21.83	22.03
10	50	0		22.04	21.90	21.84
10	1	0	16-QAM	23.01	22.14	22.05
10	1	24		22.93	21.96	21.80
10	1	49		23.07	21.92	21.84
10	25	0		20.77	21.10	21.01
10	25	12		20.88	21.03	20.98
10	25	24		20.89	20.88	20.83
10	50	0		20.92	21.06	20.95

LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	23.21	23.02	21.83
1.4	1	2		23.24	23.02	21.72
1.4	1	5		23.22	22.97	21.19
1.4	3	0		23.11	23.09	21.64
1.4	3	1		23.16	23.18	21.56
1.4	3	2		23.13	23.18	21.31
1.4	6	0		22.12	22.10	20.91
1.4	1	0	16-QAM	23.10	22.19	20.88
1.4	1	2		23.09	22.22	20.87
1.4	1	5		23.09	22.15	20.38
1.4	3	0		22.28	22.14	21.20
1.4	3	1		22.36	22.23	21.11
1.4	3	2		22.33	22.14	20.84
1.4	6	0		21.26	21.14	20.16
3	1	0	QPSK	23.08	23.10	22.81
3	1	7		23.08	23.09	22.17
3	1	14		23.09	23.09	21.20
3	8	0		22.39	22.08	21.76
3	8	4		22.30	22.12	21.43
3	8	7		22.16	22.15	20.88
3	15	0		22.18	22.11	21.38
3	1	0	16-QAM	23.31	22.20	21.73
3	1	7		23.27	22.20	21.30
3	1	14		23.31	22.25	20.22
3	8	0		21.19	21.31	20.90
3	8	4		21.12	21.20	20.57
3	8	7		21.14	21.29	20.01
3	15	0		21.37	21.14	20.57

LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.10	23.18	22.37
5	1	12		23.15	23.23	21.53
5	1	24		23.16	23.22	19.53
5	12	0		22.29	22.30	21.43
5	12	6		22.31	22.31	20.91
5	12	11		22.20	22.15	19.87
5	25	0		22.33	22.23	20.71
5	1	0	16-QAM	22.56	21.89	21.40
5	1	12		22.56	21.91	20.62
5	1	24		22.59	21.99	18.54
5	12	0		21.17	21.11	20.43
5	12	6		21.14	21.15	19.90
5	12	11		21.23	21.16	18.83
5	25	0		21.38	21.38	19.69
10	1	0	QPSK	23.25	23.23	22.82
10	1	24		23.27	23.16	22.57
10	1	49		23.29	23.20	19.96
10	25	0		22.40	22.27	21.67
10	25	12		22.39	22.34	21.53
10	25	24		22.50	22.31	20.69
10	50	0		22.43	22.36	21.61
10	1	0	16-QAM	23.38	22.35	21.91
10	1	24		23.40	22.36	21.59
10	1	49		23.36	22.40	19.04
10	25	0		21.21	21.34	20.83
10	25	12		21.36	21.39	20.53
10	25	24		21.31	21.34	19.77
10	50	0		21.35	21.43	20.55

LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	23.24	23.27	23.33
15	1	37		23.30	23.22	22.74
15	1	74		23.31	23.21	20.37
15	36	0		22.41	22.30	21.87
15	36	18		22.40	22.33	21.75
15	36	39		22.40	22.40	21.34
15	75	0		22.39	22.37	21.68
15	1	0	16-QAM	23.40	22.47	23.07
15	1	38		23.36	22.36	22.35
15	1	75		23.40	22.43	19.88
15	36	0		21.35	21.48	21.09
15	36	18		21.41	21.49	20.71
15	36	39		21.43	21.40	20.58
15	75	0		21.39	21.32	20.81
20	1	0	QPSK	23.35	23.41	23.49
20	1	49		23.51	23.24	23.03
20	1	99		23.60	23.41	22.15
20	50	0		22.33	22.18	22.40
20	50	24		22.43	22.31	21.97
20	50	49		22.57	22.29	21.54
20	100	0		22.47	22.19	21.92
20	1	0	16-QAM	22.07	22.18	22.20
20	1	49		22.24	21.83	21.81
20	1	99		22.19	22.23	21.12
20	50	0		21.54	21.27	21.41
20	50	24		21.56	21.25	21.01
20	50	49		21.51	21.25	20.58
20	100	0		21.48	21.27	21.04

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LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	23.49	23.20	23.01
1.4	1	2		23.53	23.08	23.01
1.4	1	5		23.47	23.07	23.04
1.4	3	0		23.30	23.28	22.97
1.4	3	1		23.37	23.34	22.95
1.4	3	2		23.38	23.28	23.01
1.4	6	0		22.40	22.19	22.06
1.4	1	0	16-QAM	23.44	22.89	23.02
1.4	1	2		23.34	22.82	23.05
1.4	1	5		23.39	22.77	23.07
1.4	3	0		22.58	22.34	22.53
1.4	3	1		22.61	22.28	22.53
1.4	3	2		22.57	22.24	22.54
1.4	6	0		21.51	21.18	21.17
3	1	0	QPSK	23.25	23.11	23.06
3	1	7		23.30	23.12	23.04
3	1	14		23.20	23.10	23.14
3	8	0		22.38	22.34	21.90
3	8	4		22.46	22.32	21.86
3	8	7		22.38	22.17	21.88
3	15	0		22.47	22.25	21.91
3	1	0	16-QAM	23.20	22.93	22.91
3	1	7		23.26	22.83	22.95
3	1	14		23.24	22.74	23.01
3	8	0		21.25	21.45	20.87
3	8	4		21.21	21.45	20.88
3	8	7		21.20	21.40	20.98
3	15	0		21.52	21.25	20.86

LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.17	23.32	22.86
5	1	12		23.32	23.19	22.76
5	1	24		23.28	23.06	22.93
5	12	0		22.46	22.36	21.87
5	12	6		22.40	22.21	21.92
5	12	11		22.37	22.13	21.84
5	25	0		22.34	22.31	21.88
5	1	0	16-QAM	22.46	22.05	21.84
5	1	12		22.53	21.93	21.83
5	1	24		22.60	21.74	21.88
5	12	0		21.30	21.17	20.91
5	12	6		21.37	21.15	20.82
5	12	11		21.32	21.08	20.81
5	25	0		21.51	21.27	20.79
10	1	0	QPSK	23.29	23.39	23.06
10	1	24		23.39	23.28	23.01
10	1	49		23.48	23.15	22.93
10	25	0		22.50	22.26	21.91
10	25	12		22.51	22.17	21.98
10	25	24		22.45	22.04	21.84
10	50	0		22.43	22.27	21.97
10	1	0	16-QAM	23.34	22.32	22.07
10	1	24		23.52	22.25	21.89
10	1	49		23.42	22.02	21.92
10	25	0		21.31	21.39	21.01
10	25	12		21.39	21.26	20.94
10	25	24		21.39	21.17	20.92
10	50	0		21.35	21.24	20.94

LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	23.58	23.43	23.37
15	1	37		23.38	23.42	23.01
15	1	74		23.17	23.07	23.02
15	36	0		22.44	22.38	22.18
15	36	18		22.45	22.25	22.04
15	36	39		22.37	22.01	21.95
15	75	0		22.38	22.17	21.98
15	1	0	16-QAM	23.35	22.48	22.90
15	1	38		23.56	22.26	22.56
15	1	75		23.48	21.90	22.51
15	36	0		21.35	21.43	21.13
15	36	18		21.39	21.37	21.09
15	36	39		21.32	21.18	20.92
15	75	0		21.45	21.21	21.12

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LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	23.34	23.20	23.34
1.4	1	2		23.35	23.27	23.43
1.4	1	5		23.35	23.19	23.51
1.4	3	0		23.09	23.31	23.10
1.4	3	1		23.14	23.21	23.33
1.4	3	2		23.16	23.23	23.32
1.4	6	0		22.26	22.18	22.31
1.4	1	0	16-QAM	23.20	22.61	23.08
1.4	1	2		23.22	22.70	23.02
1.4	1	5		23.14	22.67	23.03
1.4	3	0		22.32	22.33	22.70
1.4	3	1		22.38	22.39	22.64
1.4	3	2		22.27	22.31	22.69
1.4	6	0		21.27	21.17	21.47
3	1	0	QPSK	23.17	23.19	23.47
3	1	7		23.20	23.20	23.48
3	1	14		23.18	23.25	23.47
3	8	0		22.22	22.22	22.22
3	8	4		22.21	22.09	22.27
3	8	7		22.13	22.20	22.26
3	15	0		22.17	22.14	22.33
3	1	0	16-QAM	23.20	22.73	23.09
3	1	7		23.08	22.69	23.09
3	1	14		23.07	22.71	23.12
3	8	0		21.13	21.39	21.28
3	8	4		21.03	21.47	21.23
3	8	7		21.08	21.40	21.35
3	15	0		21.26	21.23	21.33

LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.18	23.14	23.19
5	1	12		23.12	23.12	23.11
5	1	24		23.20	23.25	23.26
5	12	0		22.13	22.15	22.25
5	12	6		22.26	22.22	22.26
5	12	11		22.29	22.25	22.36
5	25	0		22.21	22.18	22.23
5	1	0	16-QAM	22.48	21.85	22.15
5	1	12		22.55	21.89	22.16
5	1	24		22.53	21.92	22.33
5	12	0		21.01	21.05	21.20
5	12	6		21.04	21.06	21.22
5	12	11		21.08	21.10	21.26
5	25	0		21.24	21.28	21.16
10	1	0	QPSK	N/A	23.13	N/A
10	1	24		N/A	23.13	N/A
10	1	49		N/A	23.26	N/A
10	25	0		N/A	22.14	N/A
10	25	12		N/A	22.15	N/A
10	25	24		N/A	22.23	N/A
10	50	0		N/A	22.20	N/A
10	1	0	16-QAM	N/A	23.21	N/A
10	1	24		N/A	23.26	N/A
10	1	49		N/A	23.56	N/A
10	25	0		N/A	21.08	N/A
10	25	12		N/A	21.15	N/A
10	25	24		N/A	21.16	N/A
10	50	0		N/A	21.20	N/A

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.20	22.08	21.85
5	1	12		22.30	22.19	21.89
5	1	24		22.31	22.14	21.87
5	12	0		21.16	21.22	21.05
5	12	6		21.26	21.14	20.96
5	12	11		21.23	21.11	20.95
5	25	0		21.14	21.19	21.03
5	1	0	16-QAM	20.76	20.87	21.32
5	1	12		20.83	20.85	21.41
5	1	24		20.86	20.89	21.34
5	12	0		20.16	20.11	20.07
5	12	6		20.13	20.05	19.95
5	12	11		20.09	20.04	19.98
5	25	0		20.40	20.27	20.15
10	1	0	QPSK	22.32	22.16	21.93
10	1	24		22.28	22.23	21.94
10	1	49		22.23	22.22	21.95
10	25	0		21.03	21.14	20.98
10	25	12		21.07	21.18	21.02
10	25	24		21.06	21.22	21.04
10	50	0		21.04	21.19	21.02
10	1	0	16-QAM	21.94	20.49	21.30
10	1	24		21.93	20.50	21.23
10	1	49		21.87	20.55	21.35
10	25	0		20.17	20.15	20.15
10	25	12		20.10	20.21	20.19
10	25	24		20.11	20.11	20.20
10	50	0		20.17	20.23	20.05

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	22.26	22.06	22.15
15	1	37		22.19	22.19	22.09
15	1	74		22.19	22.15	21.95
15	36	0		21.20	21.17	21.14
15	36	18		21.19	21.10	21.06
15	36	39		21.18	21.10	21.04
15	75	0		21.20	21.09	21.04
15	1	0	16-QAM	21.98	20.60	21.12
15	1	38		21.90	20.55	21.12
15	1	75		21.81	20.47	21.20
15	36	0		20.21	20.32	20.02
15	36	18		20.21	20.36	19.95
15	36	39		20.18	20.27	20.00
15	75	0		20.15	20.30	20.19
20	1	0	QPSK	22.18	22.35	22.10
20	1	49		22.09	22.14	22.06
20	1	99		22.13	22.20	22.10
20	50	0		21.17	21.21	21.09
20	50	24		21.12	21.12	21.12
20	50	49		21.15	21.12	21.09
20	100	0		21.12	21.10	21.10
20	1	0	16-QAM	21.24	20.90	20.89
20	1	49		21.28	20.82	20.82
20	1	99		21.24	20.80	20.34
20	50	0		20.33	20.19	20.15
20	50	24		20.27	20.16	20.11
20	50	49		20.35	20.07	20.12
20	100	0		21.21	20.18	20.10

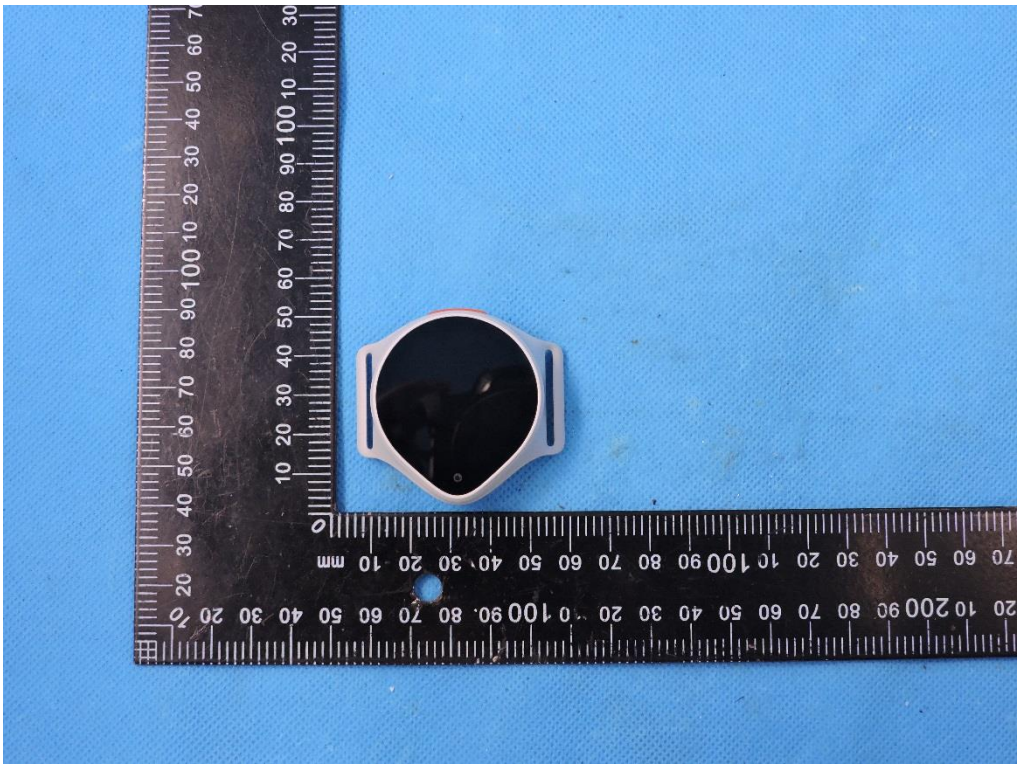
LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.15	22.27	22.02
5	1	12		22.06	22.24	22.15
5	1	24		22.10	22.28	22.08
5	12	0		21.21	21.20	21.12
5	12	6		21.16	21.25	21.09
5	12	11		21.16	21.19	21.21
5	25	0		21.17	21.12	21.11
5	1	0	16-QAM	21.48	20.77	20.75
5	1	12		21.47	20.91	20.89
5	1	24		21.60	20.87	20.88
5	12	0		20.25	20.16	20.07
5	12	6		20.29	20.10	19.98
5	12	11		20.24	20.18	20.14
5	25	0		20.40	20.39	20.25
10	1	0	QPSK	22.40	22.19	22.11
10	1	24		22.30	22.25	22.18
10	1	49		22.39	22.28	22.13
10	25	0		21.24	21.23	21.16
10	25	12		21.22	21.29	21.05
10	25	24		21.31	21.25	21.08
10	50	0		21.29	21.23	21.05
10	1	0	16-QAM	21.73	20.60	21.78
10	1	24		21.86	20.54	21.77
10	1	49		21.75	20.47	21.59
10	25	0		20.25	20.27	20.12
10	25	12		20.28	20.27	20.17
10	25	24		20.33	20.28	20.20
10	50	0		20.39	20.29	20.15

LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	22.34	22.18	21.96
15	1	37		22.36	22.27	21.98
15	1	74		22.37	22.33	21.98
15	36	0		21.24	21.26	21.08
15	36	18		21.26	21.19	21.06
15	36	39		21.29	21.09	21.00
15	75	0		21.16	21.21	21.12
15	1	0	16-QAM	21.66	20.62	21.29
15	1	38		21.82	20.56	21.13
15	1	75		21.84	20.49	21.26
15	36	0		20.37	20.46	20.01
15	36	18		20.34	20.47	20.01
15	36	39		20.41	20.37	20.05
15	75	0		20.27	20.40	20.23
20	1	0	QPSK	22.30	22.24	22.08
20	1	49		22.36	22.21	21.99
20	1	99		22.46	22.22	22.18
20	50	0		21.21	21.21	21.03
20	50	24		21.31	21.26	21.07
20	50	49		21.37	21.22	21.05
20	100	0		21.28	21.22	21.03
20	1	0	16-QAM	20.91	20.96	21.04
20	1	49		21.01	20.84	20.33
20	1	99		21.04	20.75	20.41
20	50	0		20.49	20.14	20.13
20	50	24		20.46	20.26	20.19
20	50	49		20.54	20.13	20.18
20	100	0		20.39	20.31	20.11

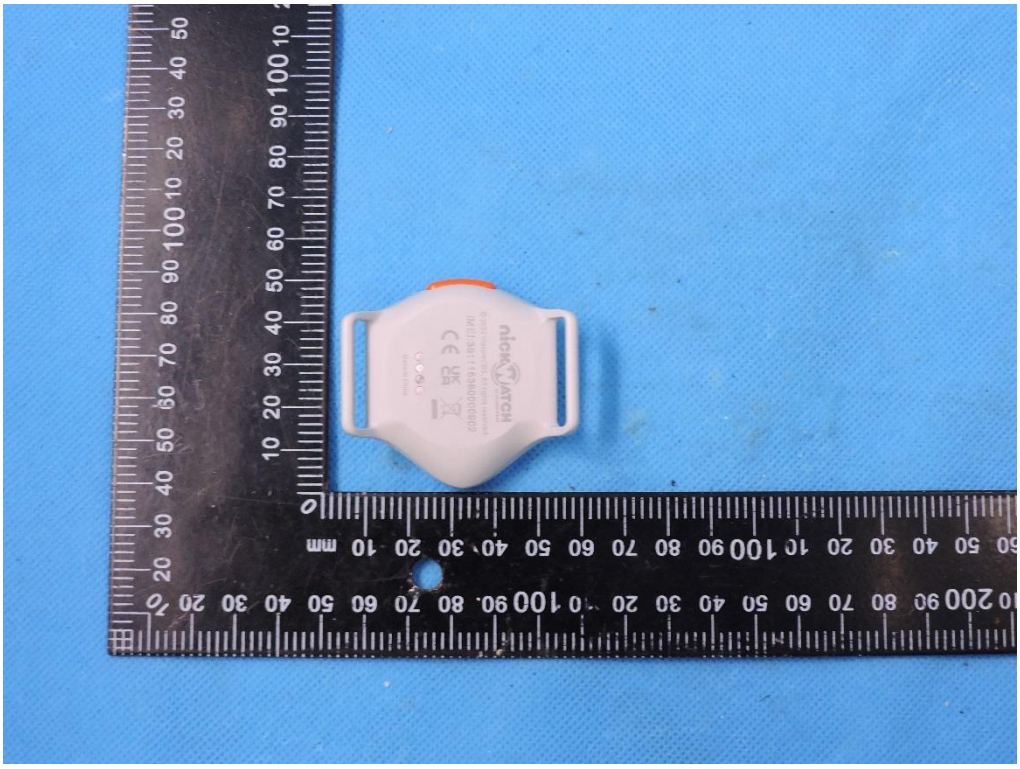
11. EUT and Test Setup Photo

11.1 EUT Photos

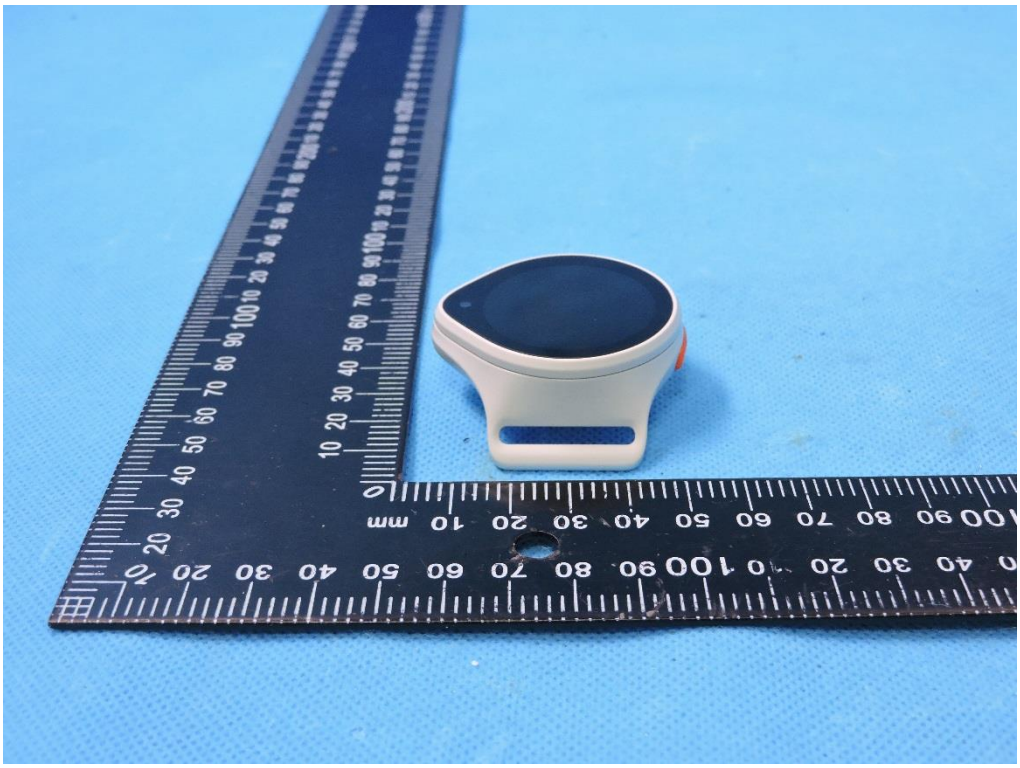
Front side



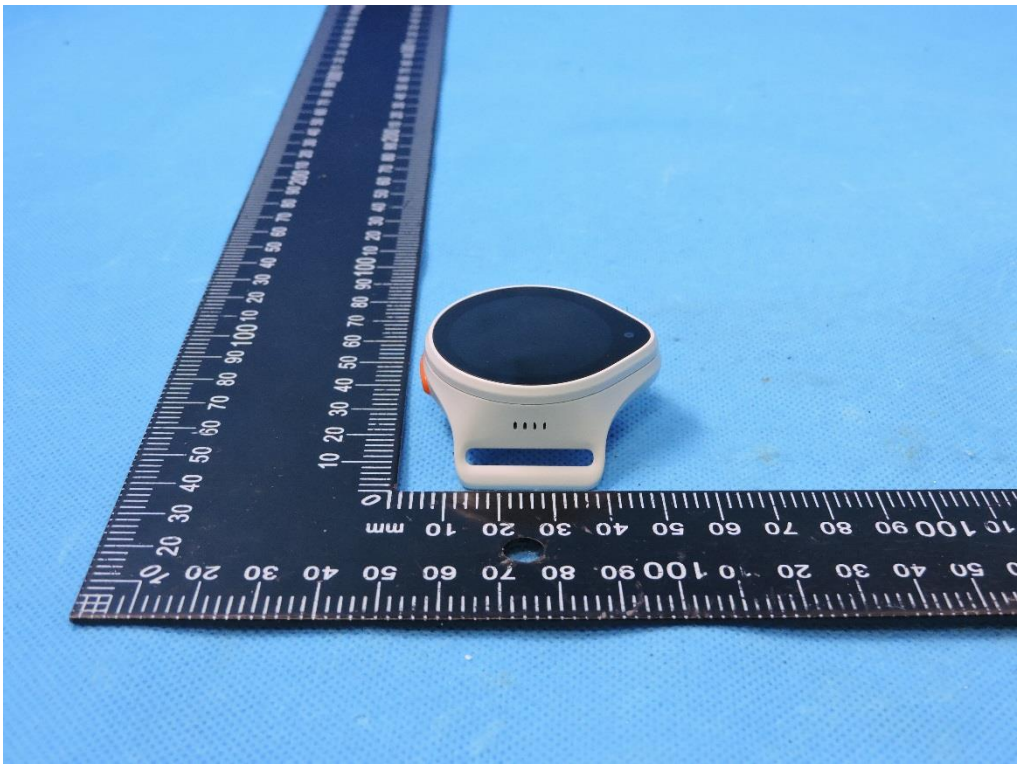
Back side



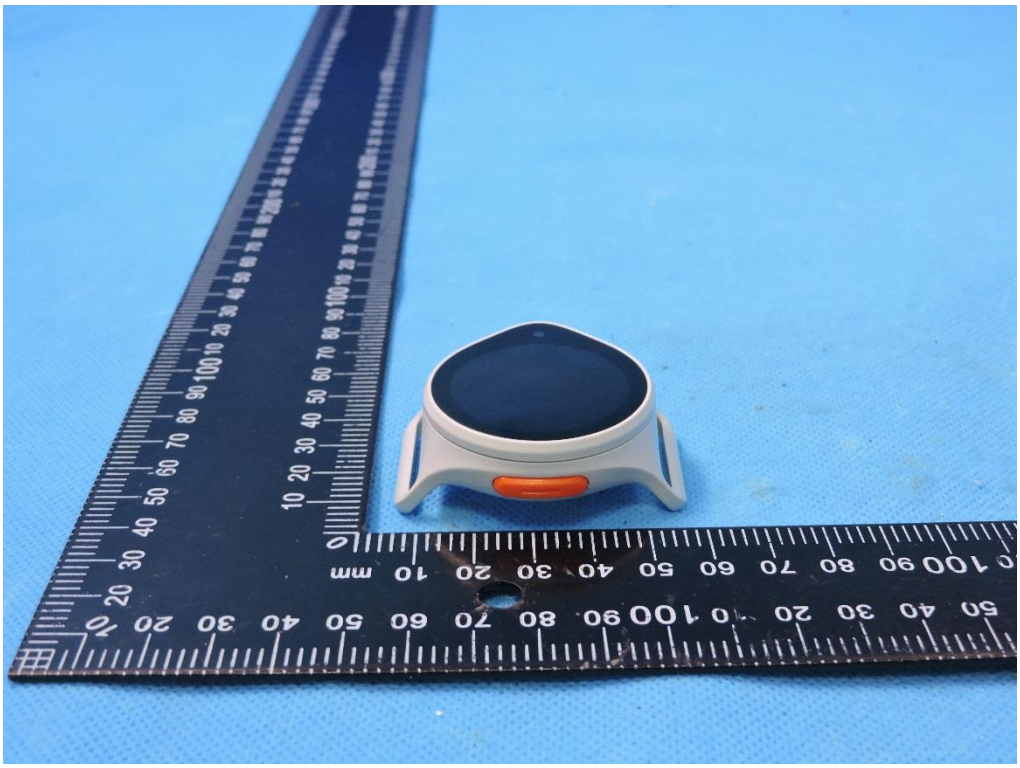
Top Edge



Bottom Edge



Left Edge



Right Edge