

# **SAR Test Report**

Report No.: AGC02115180501FH01

APPLICATION PURPOSE : Original Equipment

**PRODUCT DESIGNATION**: PARROT SKYCONTROLLER 3

BRAND NAME : PARROT

MODEL NAME : MPP3

**CLIENT**: Parrot Drones

**DATE OF ISSUE** : July 10,2018

IEEE Std. 1528:2013

**STANDARD(S)** : FCC 47CFR § 2.1093

IEEE/ANSI C95.1:2005;

REPORT VERSION : V1.1

## Attestation of Global Compliance (Shenzhen) Co., Ltd.

#### CAUTION:

This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.



The results spound this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a training and the sample (s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a training and the sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is issued by XCC, this document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only. The document is a sample (s) are retained for 30 days only are retained fo

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118
Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Page 2 of 80

**6** 400 089 2118

## **Report Revise Record**

Report Version	Revise Time	Issued Date Valid Version		Notes	
V1.0	Ne Allestation of the	July 03,2018	Invalid	Initial Release	
CV1.1	1 <sup>st</sup>	July 10,2018	Valid	Add the impedance and return loss of the Dipole on page 20	

The results spouroid this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ACC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.

Attestation of Global Compliance

E-mail: agc@agc-cert.com Tel: +86-755 2908 1955 Fax: +86-755 2600 8484  $Add: 2/F.\ , Building\ 2, No.1-4, Chaxi\ Sanwei\ Technical\ Industrial\ Park, Gushu,\ Xixiang,\ Baoan\ District,\ Shenzhen,\ Guangdong\ Chinang Chinangdong\ Ch$ 



Report No.: AGC02115180501FH01 Page 3 of 80

Test Report Certification			
Applicant Name	Parrot Drones		
Applicant Address	174 quai de Jemmapes 75010 Paris, France		
Manufacturer Name	Dashine Electronics Co.		
Manufacturer Address	No.53,Guangtian Road, Yanchuan community,Yanluo street,Bao'an District ShenZhen, China		
Product Designation	PARROT SKYCONTROLLER 3		
Brand Name	PARROT		
Model Name	MPP3		
EUT Voltage	DC 3.6V by Battery		
Applicable Standard	IEEE Std. 1528:2013 FCC 47CFR § 2.1093 IEEE/ANSI C95.1:2005		
Test Date	June 22,2018 to June 27,2018		
Report Template	AGCRT-US-5G/SAR (2018-01-01)		

Note: The results of testing in this report apply to the product/system which was tested only.

	Thea 1 tuang	
Tested By	CC P	
	Thea Huang (Huang Qianqian)	June 27,2018
	O Maria de Caración Como Como Como Como Como Como Como Com	
	Anych li	
Checked By		The Tampion Co
	Angela Li(Li Jiao)	July 10,2018
	CO - mek no	
	Forversto cei	
Authorized By	The formulation of the state of	(8) Sittle Station of condon
	Forrest Lei(Lei Yonggang)  Authorized Officer	July 10,2018

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at although the confirmed at all the confir



Page 4 of 80

## **TABLE OF CONTENTS**

1. SUMMARY OF MAXIMUM SAR VALUE	
2. GENERAL INFORMATION	
2.1. EUT DESCRIPTION	6
3. SAR MEASUREMENT SYSTEM	7
3.1. THE SATIMO SYSTEM USED FOR PERFORMING COMPLIANCE TESTS CONSISTS OF FOLLOWING ITEMS 3.2. COMOSAR E-FIELD PROBE	
4. SAR MEASUREMENT PROCEDURE	
4.1. SPECIFIC ABSORPTION RATE (SAR) 4.2. SAR MEASUREMENT PROCEDURE 4.3. RF EXPOSURE CONDITIONS	12 14
5. TISSUE SIMULATING LIQUID	16
5.1. THE COMPOSITION OF THE TISSUE SIMULATING LIQUID	16 17
6. SAR SYSTEM CHECK PROCEDURE	
6.1. SAR SYSTEM CHECK PROCEDURES	19
7. EUT TEST POSITION	30
7.1. BODY WORN POSITION	
8. SAR EXPOSURE LIMITS	31
9. TEST FACILITY	
10. TEST EQUIPMENT LIST	
11. MEASUREMENT UNCERTAINTY	34
12. CONDUCTED POWER MEASUREMENT	37
13. TEST RESULTS	38
13.1. SAR Test Results Summary	38
APPENDIX A. SAR SYSTEM CHECK DATA	45
APPENDIX B. SAR MEASUREMENT DATA	51
APPENDIX C. TEST SETUP PHOTOGRAPHS	75
APPENDIX D. CAUPPATION PATA	ance

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.



Page 5 of 80

### 1. SUMMARY OF MAXIMUM SAR VALUE

The maximum results of Specific Absorption Rate (SAR) found during testing for EUT are as follows:

**Highest Reported 10g Extremity-SAR** 

Frequency Band	Antenna 0 Body (with 0mm separation)	Antenna 1 Body (with 0mm separation)	SAR Test Result
WIFI 2.4GHz	1.290	0.827	Attestation C.
WIFI 5.2GHz	9 1.136	0.701	30
WIFI 5.8GHz	0.869	0.915	Pass
Simultaneous Reported SAR	2.	117	T dos
SAR Test Limit (W/Kg)	- III 4	1.0 Market Complete	Allestation

**Highest Reported 1g-Body SAR** 

inglicative citation is a conjunt			4/1///
Frequency Band	Antenna 0 Body (with 10mm	Antenna 1 Body (with 10mm	SAR Test Result
	separation)	separation)	
WIFI 2.4GHz	0.934	0.490	
WIFI 5.2GHz	0.614	0.418	III:
WIFI 5.8GHz	0.665	0.619	Pass
Simultaneous Reported SAR	1.42	24 the control of the	© Allestation of Charles
SAR Test Limit (W/Kg)	® # 1.6		

This device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits specified in IEEE Std. 1528:2013; FCC 47CFR § 2.1093; IEEE/ANSI C95.1:2005 and the following specific FCC Test Procedures:

- KDB 447498 D01 General RF Exposure Guidance v06
- KDB 648474 D04 Handset SAR v01r03
- KDB 865664 D01 SAR Measurement 100MHz to 6GHz v01r04
- KDB 248227 D01 802 11 Wi-Fi SAR v02r02
- KDB 941225 D07 UMPC Mini Tablet v01r02

The results spowfill this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a true www.ago.gott.com.



Page 6 of 80

## 2. GENERAL INFORMATION

General Information			
Product Designation	PARROT SKYCONTROLLER 3		
Test Model	MPP3		
Hardware Version	HW02		
Software Version	1.0.1		
Device Category	Portable		
RF Exposure Environment	Uncontrolled		
Antenna Type	Internal		
2.4GHz WIFI	O THE STATE OF THE		
WIFI Specification	□802.11a ⊠802.11b ⊠802.11g ⊠802.11n(20) □802.11n(40)		
Operation Frequency	2412~2462MHz		
EIRP	11b:21.3dBm,11g:23.5dBm,11n(20):23.9dBm		
Antenna Gain	Antenna0:2.55dBi; Antenna1:2.41dBi;		
5GHz WIFI	OF THE STATE OF TH		
WIFI Specification	⊠802.11a       ⊠802.11n20       □802.11ac20       □802.11n40       □802.11ac40         □802.11ac80       □802.11ac20       □802.11n40       □802.11ac40		
Operation Frequency	5.180-5240GHz, 5475-5.825GHz		
Type of modulation	BPSK, QPSK, 16QAM, 64QAM, 128QAM, 256QAM,OFDM		
EIRP ® Management (Section 1)	UNII-1: 802.11a20:22.9dBm; 802.11n(20):23.1dBm; UNII-3: 802.11a20:26.2dBm; 802.11n(20):26.0 dBm		
Antenna Gain	Antenna0: 5.15GHz:3.26dBi; 5.75GHz:3.74dBi; Antenna1: 5.15GHz:3.14dBi; 5.75GHz:2.80 dBi;		
Li-ion Battery			
Brand Name	PARROT		
Model Name	MCBAT00014		
Manufacturer Name	Desay Battery Co.,Ltd		
Manufacturer Address	No.6, ZhongKai, High-Tech Industry DevelopmentZone, HuiZhou, Guangdong China.		
Capacitance	2500mAh		
Rated Voltage/ Charging Voltage	DC3.6V/ DC4.2V		

Note: 1. The sample used for testing is end product.

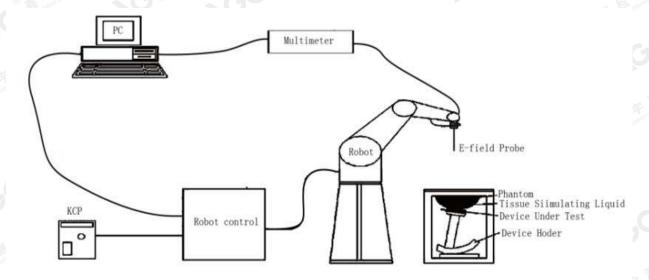
The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a titp://www.agc.gett.com.



Page 7 of 80

## 3. SAR MEASUREMENT SYSTEM

## 3.1. The SATIMO system used for performing compliance tests consists of following items



The COMOSAR system for performing compliance tests consists of the following items:

- The PC. It controls most of the bench devices and stores measurement data. A computer running WinXP and the Opensar software.
- The E-Field probe. The probe is a 3-axis system made of 3 distinct dipoles. Each dipole returns a voltage in function of the ambient electric field.
- The Keithley multimeter measures each probe dipole voltages.
- The SAM phantom simulates a human head. The measurement of the electric field is made inside the phantom.
- The liquids simulate the dielectric properties of the human head tissues.
- The network emulator controls the mobile phone under test.
- The validation dipoles are used to measure a reference SAR. They are used to periodically check the bench to make sure that there is no drift of the system characteristics over time.
- •The phantom, the device holder and other accessories according to the targeted measurement.

The results spowfil this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Page 8 of 80

#### 3.2. COMOSAR E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SATIMO. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. SATIMO conducts the probe calibration in compliance with international and national standards (e.g. IEEE1528 etc.)Under ISO17025.The calibration data are in Appendix D.

## **Isotropic E-Field Probe Specification**

Model	SSE2
Manufacture	MVG
Identification No.	SN 08/16 EPGO282
Frequency	0.7GHz-6GHz Linearity:±0.06dB(700MHz-6GHz)
Dynamic Range	0.01W/Kg-100W/Kg Linearity:±0.06dB
Dimensions	Overall length:330mm Length of individual dipoles:2mm Maximum external diameter:8mm Probe Tip external diameter:2.5mm Distance between dipoles/ probe extremity:1mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

#### 3.3. Robot

The COMOSAR system uses the KUKA robot from SATIMO SA (France). For the 6-axis controller COMOSAR system, the KUKA robot controller version from SATIMO is used.

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

☐ High precision (repeatability 0.02 mm)

☐ High reliability (industrial design)

☐ Jerk-free straight movements

□ Low ELF interference (the closed metallic

construction shields against motor control fields)

6-axis controller



The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 💢 Ĉ, this documate teannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc-cett.com.



Page 9 of 80

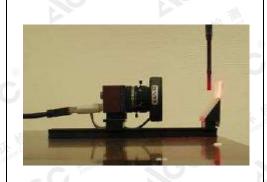
## 3.4. Video Positioning System

The video positioning system is used in OpenSAR to check the probe. Which is composed of a camera, LED, mirror and mechanical parts. The camera is piloted by the main computer with firewire link. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the

horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.

The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be

reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.



#### 3.5. Device Holder

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

Thus the device needs no repositioning when changing the angles. The COMOSAR device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity

 $\epsilon r = 3$  and loss tangent  $\delta = 0.02$ . The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



Page 10 of 80

#### 3.6. SAM Twin Phantom

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

□ Left head

□ Right head

☐ Flat phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

#### **ELLI39 Phantom**

The Flat phantom is a fiberglass shell phantom with 2mm+/- 0.2 mm shell thickness. It has only one measurement area for Flat phantom



The results spowed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XQC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



Page 11 of 80

## 4. SAR MEASUREMENT PROCEDURE

## 4.1. Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in 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 occupational/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 given mass density ( $\rho$ ). 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 can be obtained using either of the following equations:

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

$$SAR = c_h \frac{dT}{dt}\Big|_{t=0}$$

Where

SAR is the specific absorption rate in watts per kilogram;
E is the r.m.s. value of the electric field strength in the tissue in volts per meter;
σ is the conductivity of the tissue in siemens per metre;
ρ is the density of the tissue in kilograms per cubic metre;
ch is the heat capacity of the tissue in joules per kilogram and Kelvin;

 $\frac{dT}{dt}$  | t = 0 is the initial time derivative of temperature in the tissue in kelvins per second

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



Page 12 of 80

#### 4.2. SAR Measurement Procedure

#### Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurement are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface is 2.7mm This distance cannot be smaller than the distance os sensor calibration points to probe tip as `defined in the probe properties,

#### Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in SATIMO software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in db) is specified in the standards for compliance testing. For example, a 2db range is required in IEEE Standard 1528, whereby 3db is a requirement when compliance is assessed in accordance with the ARIB standard (Japan) If one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximum are detected, the number of Zoom Scan has to be increased accordingly.

#### Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100MHz to 6GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
	≤2 GHz: ≤15 mm 2 – 3 GHz: ≤12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
Maximum area scan spatial resolution: $\Delta x_{Area}$ , $\Delta y_{Area}$	When the x or y dimension of measurement plane orientation the measurement resolution in x or y dimension of the test dimeasurement point on the test.	on, is smaller than the above, must be ≤ the corresponding levice with at least one

#### Step 3: Zoom Scan

Zoom Scan are used to assess the peak spatial SAR value within a cubic average volume containing 1g abd 10g of simulated tissue. The Zoom Scan measures points(refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1g and 10g and displays these values next to the job's label.

The results spowfill this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.gent.com.



Page 13 of 80

#### Zoom Scan Parameters extracted from KDB865664 d01 SAR Measurement 100MHz to 6GHz

				Jan Co.
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}$ , $\Delta y_{Zoom}$			$\leq$ 2 GHz: $\leq$ 8 mm 2 – 3 GHz: $\leq$ 5 mm <sup>*</sup>	3 – 4 GHz: ≤ 5 mm <sup>*</sup> 4 – 6 GHz: ≤ 4 mm <sup>*</sup>
uniform ş		grid: Δz <sub>Zoom</sub> (n)	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
Maximum zoom scan spatial resolution, normal to phantom surface	graded	\( \Delta z_{Zoom}(1):\ \text{ between} \)  1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
grid		Δz <sub>Zoom</sub> (n>1): between subsequent points	≤ 1.5·Δz	Zoom(n-1)
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

### Step 4: Power Drift Measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the same settings. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a trp://www.ago.go.tt.com.

When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.



Page 14 of 80

## 4.3. RF Exposure Conditions

Test Configuration and setting:

The device is a wireless remote control which support 2.4GHz & 5G Wifi; and has two antennas (antenna0 is on the Left ,antenna1 is on the Right).

For SAR testing, the EUT is configured with the WLAN continuous TX tool through software.

#### **Antenna Location:**



Edge 3

The results spowfork this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Page 15 of 80

For antenna0(on the left):

Test Configurations	Antenna to edges/surface	SAR required	Note
Body	N S S S S S S S S S S S S S S S S S S S	Globai (R) Fiz	A CO CO
Back	<25mm	Yes	
Front	<25mm	Yes	III The Manager
Edge 1 (Top)	1mm	Yes	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Edge 2 (Right)	58mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D07
Edge 3 (Bottom)	146mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D07
Edge 4 (Left)	18mm	Yes	A 10 ( 12 mm) 0 4 5 mm

For antenna1(on the right):

Test Configurations	Antenna to edges/surface	SAR required	Note
Body			A A A A A A A A A A A A A A A A A A A
Back	<25mm	Yes	A A A A A A A A A A A A A A A A A A A
Front	<25mm	Yes	# \$ C **
Edge 1 (Top)	1mm ®	Yes	interior CO LO
Edge 2 (Right)	18mm	Yes	- 1
Edge 3 (Bottom)	146mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D07
Edge 4 (Left)	58mm	No	SAR is not required for the distance between the antenna and the edge is >25mm as per KDB 941225 D07

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at although the confirmed at all the confirmed a



Page 16 of 80

## 5. TISSUE SIMULATING LIQUID

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15cm. For head SAR testing the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15cm For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in 5.2

5.1. The composition of the tissue simulating liquid

Ingredient (% Weight) Frequency (MHz)	Water	Nacl	Polysorbate 20	DGBE	1,2- Propanediol	Triton X-100	Diethylen glycol monohex ylether
2450 Body	70	1	0.0	9 9 00 Cook	0.0	20	0.0
5000 Body	80	0.0	0.0	10	0.0	10	0.0

## 5.2. Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE 1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in IEEE 1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head

parameters specified in IEEE 1528.

Target Frequency	h	ead	b	ody
(MHz)	εr	σ (S/m)	εr	σ (S/m)
300	45.3	0.87	45.3	0.87
450	43.5	0.87	43.5	0.87
835	41.5	0.90	41.5	0.90
900	41.5	0.97	41.5	0.97
1450	40.5	1.20	40.5	1.20
1800 – 2000	40.0	1.40	40.0	1.40
2450	39.2	1.80	39.2	1.80
3000	38.5	2.40	38.5	2.40
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5600	35.5	5.07	48.5	5.77
5800	35.3	5.27	48.2	6.00

( $\varepsilon r = relative permittivity$ ,  $\sigma = conductivity and <math>\rho = 1000 \text{ kg/m3}$ )

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (60, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



Page 17 of 80

## 5.3. Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using SATIMO Dielectric Probe Kit and R&S Network Analyzer ZVL6.

		Tissue Stimulant Me	asurement for 2450MHz		
حلد	The Er	Dielectric Para	Tissue		
	Fr. (MHz)	εr 52.7(50.065-55.335)	δ[s/m] 1.95(1.8525-2.0475)	Temp [°C]	Test time
Body	2412	54.16	1.88	A TIME	June 22,2018
	2437	53.60	1.90	21.7	
	2450 53.02 2462 52.49	53.02	1.93	21.7	
		52.49	1.95		

		Tissue Stimulant Me	easurement for 5200MHz			
litte:	Fr.	Dielectric Par	ameters (±5%)	Tissue		
obal Compliance	(MHz)	εr 49.0(46.55-51.450)	δ[s/m] 5.30(5.035 -5.565)	Temp [°C]	Test time	
Body	5180	49.52	5.16	EN Compile	Global Coll	
	5200 48.85	5.18	21.3	June 26,2018		
1651	5240	48.19	5.20		20,2010	

		Tissue Stimulant Me	asurement for 5800MHz		
	Er 311	Dielectric Para	ameters (±5%)	Tissue	a.G. Miles
	Fr. (MHz)	εr 48.2 (45.79-50.610)	δ[s/m] 6.00 (5.70-6.30)	Temp [°C]	Test time
Body	5745	49.26	5.92	-till	The Compliance
C	5785	48.69	5.96	04.5	June
	5800	48.03	5.96	21.5	27,2018
	5825 47.43		6.00		
The state of the s	(a) Etc. 10	23			

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.



Page 18 of 80

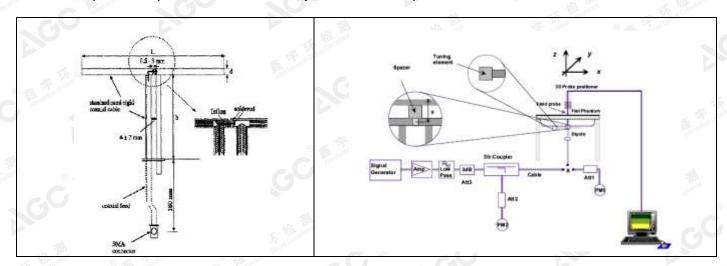
## 6. SAR SYSTEM CHECK PROCEDURE

## 6.1. SAR System Check Procedures

SAR system check is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are remeasured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

Each SATIMO system is equipped with one or more system check kits. These units, together with the predefined measurement procedures within the SATIMO software, enable the user to conduct the system 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 check setup is shown as below.



The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by KGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a true www.agc-gent.com.



Page 19 of 80

# 6.2. SAR System Check 6.2.1. Dipoles



Till I	Frequency	L (mm)	h (mm)	d (mm)
311	2450MHz	51.5	30.4	3.6

1	Frequency	L (mm)	W (mm)	L <sub>f</sub> (mm)	W <sub>f</sub> (mm)
P	5000MHz	40.39	20.19	81.03	61.98

## 6.2.2. System Check Result

System Per	rformance	e Check	at 2450MHz &5000-	-6000MHz for Bo	dy						
Validation	Validation Kit:SN29/15 DIP 2G450-393 &SN 15/15 WGA 36										
Frequency		get W/Kg)	Reference (± 10		Norma to 1W(	78,30 10	Tissue Temp.	Test time			
[MHz]	1g	10g	1g	10g	1g	10g	[°C]				
2450	49.92	23.16	44.928-54.912	20.844-25.476	54.44	21.25	21.7	June 22,2018			
5200	158.49	56.44	142.641-174.339	50.796-62.084	152.73	51.93	21.3	June 26,2018			
5800	176.30	61.30	158.67-193.93	55.17-67.43	166.05	56.04	21.5	June 27,2018			

#### Note:

(1) We use a CW signal for system check, and then all SAR values are normalized to 1W forward power. The result must be within ±10% of target value.

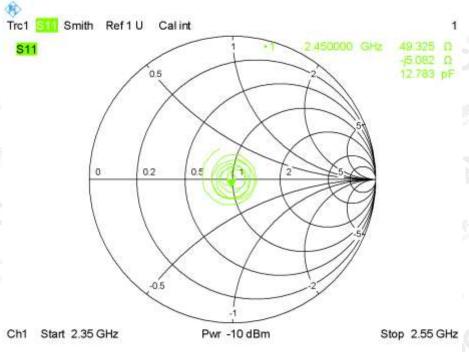
The results spown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Page 20 of 80

## 6.3 Impedance and return loss of the Dipole

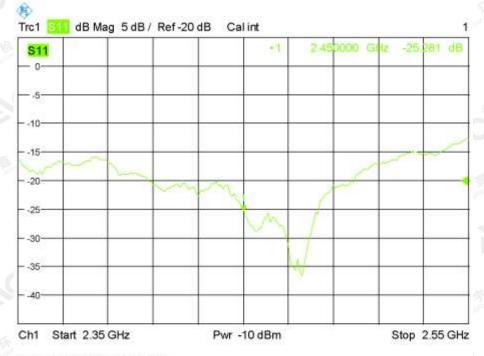
#### Impedance Plot for SN 29/15 DIP 2G450-393 2450 Head

Calibrated impedance:  $47.5 \Omega$ ; Measurement impedance:  $49.325 \Omega$  (within  $5 \Omega$ )



Date: 20.SEP.2017 12:57:51

Calibrated return loss: -24.55dB; Measurement return loss: -25.281dB(within 20%)



Date: 20.SEP.2017 12:57:33

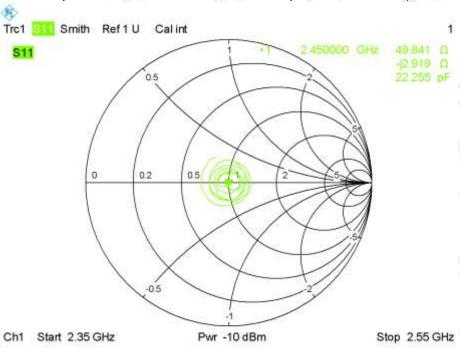
The results spowfork this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

**IGC** 8

Page 21 of 80

## Impedance Plot for SN 29/15 DIP 2G450-393 2450 Body

Calibrated impedance:  $50.5 \Omega$ ; Measurement impedance: 49.841  $\Omega$  (within  $5 \Omega$ )



Date: 20.SEP.2017 12:58:48

Calibrated return loss: -27.41dB; Measurement return loss: -28.908dB(within 20%)



Date: 20.SEP.2017 12:58:35

The results spowfil this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc-gett.com.



Page 22 of 80

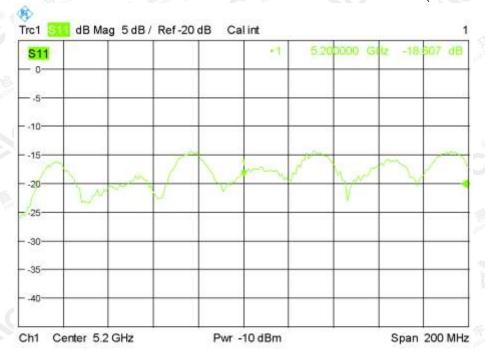
# Impedance Plot for SN15/15 WGA36 5200 Head

Calibrated impedance: 39.91  $\Omega$ ; Measurement impedance: 38.796  $\Omega$  (within 5  $\Omega$ )



Date: 8.0CT.2017 04:48:28

Calibrated return loss: -19.55dB; Measurement return loss: -18.607dB(within 20%)



Date: 8.0CT.2017 04:47:18

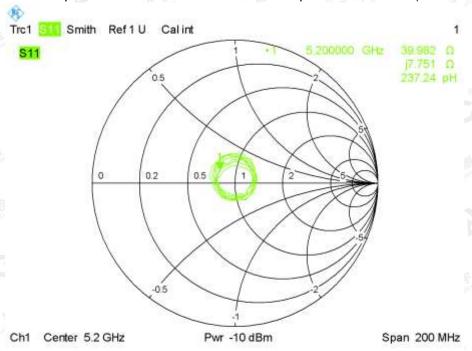
The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.go.tt.com.

**IGC** 8

Report No.: AGC02115180501FH01 Page 23 of 80

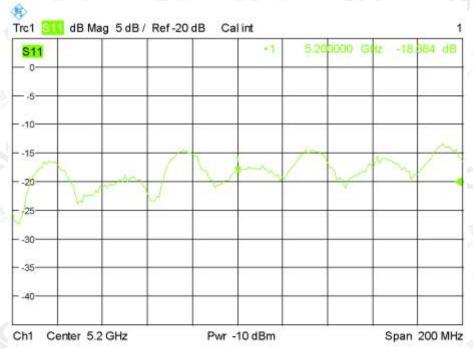
## 5200 Body

Calibrated impedance:  $40.56 \Omega$ ; Measurement impedance:  $39.982 \Omega$  (within  $5 \Omega$ )



Date: 8.0CT.2017 04:48:17

Calibrated return loss: -19.21dB; Measurement return loss: -18.384dB(within 20%)



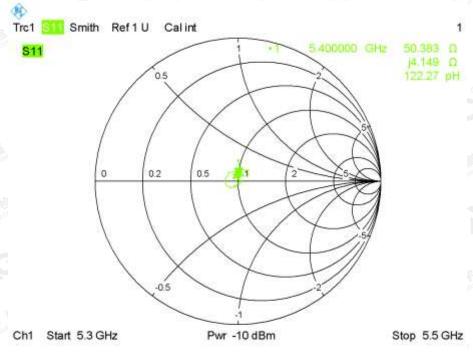
Date: 8.0CT.2017 04:47:32

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Page 24 of 80

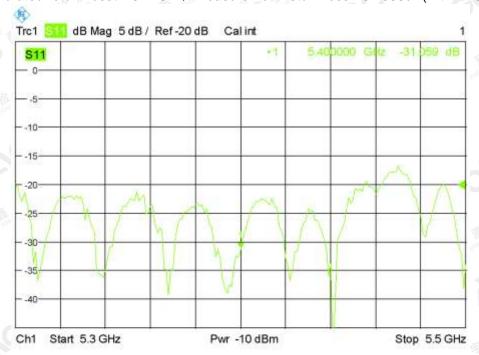
#### 5400 Head

Calibrated impedance:  $50.99 \Omega$ ; Measurement impedance:  $50.383 \Omega$  (within  $5 \Omega$ )



Date: 8.OCT.2017 04:49:25

Calibrated return loss: -32.10dB; Measurement return loss: -31.059dB(within 20%)

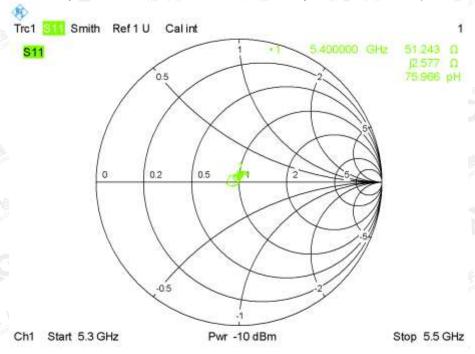


The results shown this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc-cert.com.

Page 25 of 80

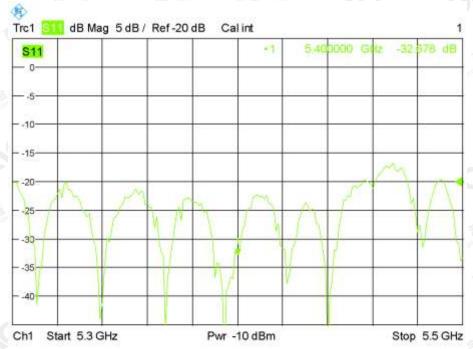
## 5400 Body

Calibrated impedance: 52.12  $\Omega$ ; Measurement impedance: 51.243  $\Omega$  (within 5  $\Omega$ )



Date: 8.0CT.2017 04:49:37

Calibrated return loss: -32.75dB; Measurement return loss: -32.678dB(within 20%)



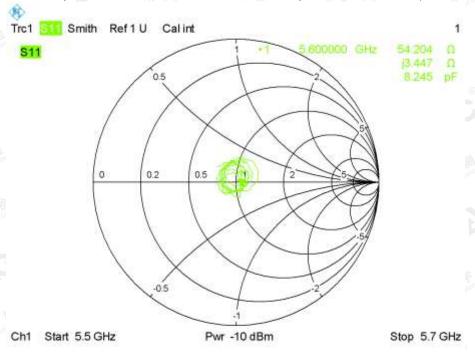
The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (C), this document teannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc-cert.com.

Attestation of Global Compliance

Page 26 of 80

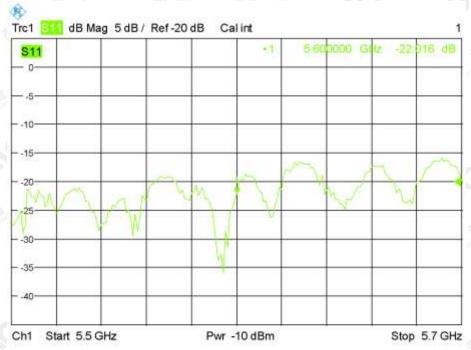
#### 5600 Head

Calibrated impedance: 54.71  $\Omega$ ; Measurement impedance: 54.204  $\Omega$  (within 5  $\Omega$ )



Date: 8.0CT.2017 04:56:08

Calibrated return loss: -21.89dB; Measurement return loss: -22.016dB(within 20%)

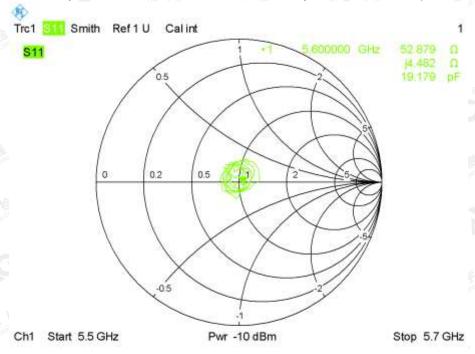


The results shown this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc-cert.com.

Page 27 of 80

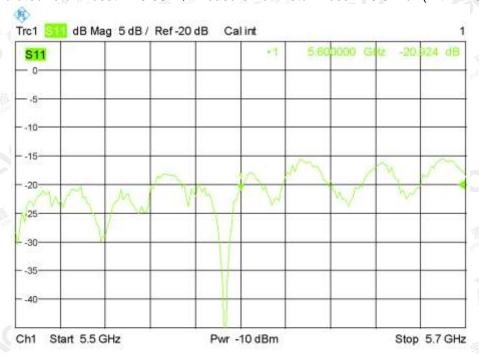
### 5600 Body

Calibrated impedance: 51.74  $\Omega$ ; Measurement impedance: 52.879  $\Omega$  (within 5  $\Omega$ )



Date: 8.0CT.2017 04:56:25

Calibrated return loss: -20.58dB; Measurement return loss: -20.924dB(within 20%)



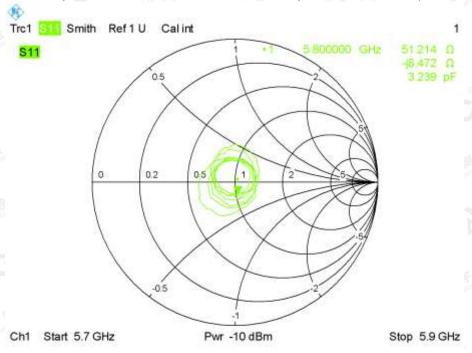
Date: 8.0CT.2017 04:55:16

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gent.com.

Page 28 of 80

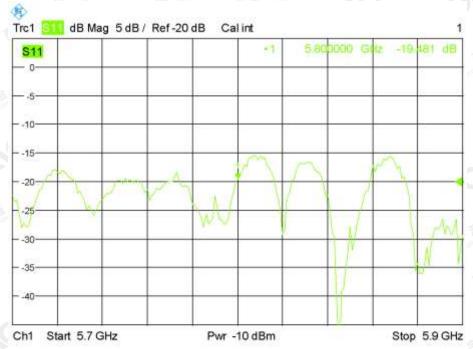
#### 5800 Head

Calibrated impedance: 51.86  $\Omega$ ; Measurement impedance: 51.214  $\Omega$  (within 5  $\Omega$ )



Date: 8.0CT.2017 04:57:27

Calibrated return loss: -20.11dB; Measurement return loss: -19.481dB(within 20%)



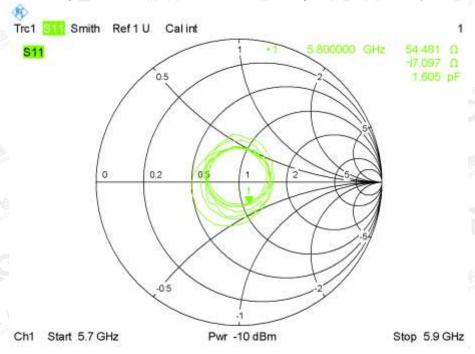
The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (C), this document teannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc-cert.com.

Attestation of Global Compliance

Page 29 of 80

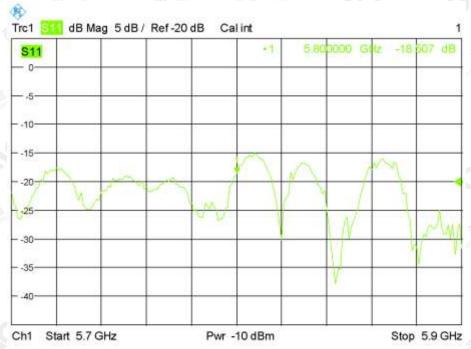
### 5800 Body

Calibrated impedance:  $55.62 \Omega$ ; Measurement impedance:  $54.481 \Omega$  (within  $5 \Omega$ )



Date: 8.OCT.2017 04:57:39

Calibrated return loss: -18.94dB; Measurement return loss: -18.507dB(within 20%)



Date: 8.0CT.2017 04:58:40

The results shown this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (CC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a tittp://www.agc.com.



Page 30 of 80

### 7. EUT TEST POSITION

This EUT was tested in Edge1, Edge2 and Edge4.

## 7.1. Body Worn Position

- (1) To position the EUT parallel to the phantom surface.
- (2) To adjust the EUT parallel to the flat phantom.
- (3) To adjust the distance between the EUT surface and the flat phantom to 0mm for 10-g-extremity SAR and 10mm for 1g-Body SAR.

#### Per FCC Response:

Please follow the following guidance:

- Please conduct 1-g SAR and 10-g SAR per KDB 941225 D07 UMPC Mini Tablet v01r02 as follows:
- a. 1-g (body, 1.6 W/kg limit) SAR at a 10mm test separation distance from phantom on all surfaces and side edges with a transmitting antenna located at  $\leq$  25 mm from that surface or edge.
- b. 10-g (extremity, 4 W/kg limit) SAR at a zero test separation distance from phantom on all surfaces and side edges with a transmitting antenna located at  $\leq$  25 mm from that surface or edge
- In addition, please consider simultaneous transmission operations per KDB 447498 D01 General RF Exposure Guidance v06

The results spowed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.



Page 31 of 80

## 8. SAR EXPOSURE LIMITS

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

Type Exposure	Uncontrolled Environment Limit (W/kg)				
Spatial Peak SAR (1 g cube tissue for brain or body)	1.60				
Spatial Average SAR (Whole body)	0.08				
Spatial Peak SAR (Limbs)	4.0				

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.



Page 32 of 80

## 9. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2F., Bldg.2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District B112-B113, Shenzhen 518012
NVLAP Lab Code	600153-0
Designation Number	CN5028
Test Firm Registration Number	682566
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by National Voluntary Laboratory Accreditation program, NVLAP Code 600153-0

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.



Page 33 of 80

## **10. TEST EQUIPMENT LIST**

Equipment description	Manufacturer/ Model	Identification No.	Current calibration date	Next calibration date
SAR Probe MVG S		SN 08/16 EPGO282	Aug. 08,2017	Aug. 07,2018
Phantom	SATIMO	SN_2316_ELLI39	N/A	N/A
Liquid	SATIMO	For action Committee	Validated. No cal required.	Validated. No cal required.
Multimeter	Keithley 2000	1188656	Mar. 01,2018	Feb. 28,2019
Dipole	SATIMO SID2450	SN29/15 DIP 2G450-393	Jul. 05,2016	Jul. 04,2019
Wave guide	SWG5500	SN 15/15 WGA 36	Jul. 05,2016	Jul. 04,2019
Signal Generator	Agilent-E4438C	US41461365	Mar. 01,2018	Feb. 28,2019
Vector Analyzer	Agilent / E4440A	US41421290	Mar. 01,2018	Feb. 28,2019
Network Analyzer	Rhode & Schwarz ZVL6	SN100132	Mar. 01,2018	Feb. 28,2019
Attenuator	Warison /WATT-6SR1211	N/A	N/A	N/A
Attenuator	Mini-circuits / VAT-10+	N/A	N/A	N/A
Amplifier	EM30180	SN060552	Mar. 01,2018	Feb. 28,2019
Directional Couple	Werlatone/ C5571-10	SN99463	Jun. 12,2018	Jun. 11,2019
Directional Couple	Werlatone/ C6026-10	SN99482	Jun. 12,2018	Jun. 11,2019
Power Sensor	NRP-Z21	1137.6000.02	Oct. 12,2017	Oct. 11,2018
Power Sensor	NRP-Z23	US38261498	Mar. 01,2018	Feb. 28,2019
Power Viewer	R&S	V2.3.1.0	N/A	N/A

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

- 1. There is no physical damage on the dipole;
- 2. System validation with specific dipole is within 10% of calibrated value;
- 3. Return-loss is within 20% of calibrated measurement;
- 4. Impedance is within  $5\Omega$  of calibrated measurement.

The results shows if this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (CC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at a true; //www.agc gatt.com.



Page 34 of 80

#### 11. MEASUREMENT UNCERTAINTY

Measu	irement u	ncertainty fo	r Dipole a	averaged o	ver 1 gram	/ 10 gram.			
а	b	С	d	e f(d,k)	f	g	h cxf/e	i c×g/e	k
Uncertainty Component	Sec.	Tol (± %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (±%)	10g Ui (±%)	vi
Measurement System			1111			100	<u> </u>	F Toobald	omb.
Probe calibration	E.2.1	5.831	N	1 5	· 1	215K Compile	5.83	5.83	8
Axial Isotropy	E.2.2	0.695	R @	$\sqrt{3}$	√0.5	√0.5	0.28	0.28	00
Hemispherical Isotropy	E.2.2	1.045	R	$\sqrt{3}$	√0.5	√0.5	0.43	0.43	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1 30	1	0.58	0.58	8
Linearity	E.2.4	0.685	R	$\sqrt{3}$	15 Kill Compliant	1 4	0.40	0.40	00
System detection limits	E.2.4	1.0	R	$\sqrt{3}$	1	Attestation	0.58	0.58	00
Modulation response	E2.5	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	oo
Readout Electronics	E.2.6	0.021	N	1	1	1 🚚	0.021	0.021	oo
Response Time	E.2.7	0	R	$\sqrt{3}$	1	1 Compliance	0	0	00
Integration Time	E.2.8	1.4	R	$\sqrt{3}$	1 Allestation	1	0.81	0.81	00
RF ambient conditions-Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	00
RF ambient conditions-reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	œ
Probe positioner mechanical tolerance	E.6.2	1.4	R	√3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.81	0.81	œ
Probe positioning with respect to phantom shell	E.6.3	1.4	R ®	$\sqrt{3}$	1	1	0.81	0.81	00
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	√3	1	1	1.33	1.33	00
Test sample Related	- 11		人格	I mollance	大 横	Hiance	P. F. Tol Gi	(Ballon)	<b>新</b> 等
Test sample positioning	E.4.2	2.6	The Nobal	1 8 🐐	station of 1	1	2.6	2.6	8
Device holder uncertainty	E.4.1	3	N	1	1	1	3	3	00
Output power variation—SAR drift measurement	E.2.9	5	R	√3	1	1	2.89	2.89	00
SAR scaling	E.6.5	5	R	$\sqrt{3}$	hiance 1	The Compli	2.89	2.89	∞
Phantom and tissue parameters		K Compliance	0 4	F of Global Co.	® 45g	ation of Globa	a.C	Mine	36
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4	R	√3		1	2.31	2.31	8
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1	1	0.84	1.90	1.60	8
Liquid conductivity measurement	E.3.3	4	N	10 100	0.78	0.71	3.12	2.84	М
Liquid permittivity measurement	E.3.3	5	N	1	0.23	0.26	1.15	1.30	М
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	√3	0.78	0.71	1.13	1.02	8
Liquid permittivity—temperature uncertainty	E.3.4	2.5	R	√3	0.23	0.26	0.33	0.38	8
Combined Standard Uncertainty	3	Compliance	RSS	oal Compilar	® Mestali	10,	9.79	9.59	
Expanded Uncertainty (95% Confidence interval)	Markestallon of G	(8)	K=2	10	,0	10	19.58	19.18	

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at although the confirmed at all the confirmed a



Page 35 of 80

M. "Monal Glou	60					T KI ollance		極調。	
				averaged o	over 1 gram		h	i	Ι.
a	b	Tol	d Prob.	f(d,k)	f	g	cxf/e 1g Ui	c×g/e 10g Ui	k
Uncertainty Component	Sec.	(± %)	Dist.	Div.	Ci (1g)	Ci (10g)	(±%)	(±%)	Vi
Measurement System			-1111	T	- m			不	ompliano
Probe calibration drift	E.2.1.3	0.5	A Dimplion N	1 恒	pi ance 1	The 165 mplian	0.50	0.50	00
Axial Isotropy	E.2.2	0.695	R	√3	0	0	0.00	0.00	o
Hemispherical Isotropy	E.2.2	1.045	R	√3	0	0	0.00	0.00	o
Boundary effect	E.2.3	1.0	R	√3	0	0	0.00	0.00	8
Linearity	E.2.4	0.685	R	√3	0	0	0.00	0.00	00
System detection limits	E.2.4	1.0	R	$\sqrt{3}$	0	0	0.00	0.00	00
Modulation response	E2.5	3.0	R	√3	0	0	0.00	0.00	o
Readout Electronics	E.2.6	0.021	N	1	0	0	0.00	0.00	ox
Response Time	E.2.7	0	R	$\sqrt{3}$	0	0	0.00	0.00	o
Integration Time	E.2.8	1.4	R	√3	® 0	0	0.00	0.00	o
RF ambient conditions-Noise	E.6.1	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	o
RF ambient conditions-reflections	E.6.1	3.0	R	√3	0	0	0.00	0.00	o
Probe positioner mechanical tolerance	E.6.2	1.4	and R	√3	1 1	1, 1	0.81	0.81	α
Probe positioning with respect to phantom shell	E.6.3	1.4	R	√3	1	1 salono	0.81	0.81	ox
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	√3	0	0	0.00	0.00	ox
System check source (dipole)			7d3	- FILL	不枪	pilance	学玩	ppal Comp.	Est.
Deviation of experimental dipoles	E.6.4	2	N	1 8	Tobal Co	1	2	2	8
Input power and SAR drift measurement	8,6.6.4	5	R	$\sqrt{3}$	1	1	2.89	2.89	ox
Dipole axis to liquid distance	8,E.6.6	2	R	$\sqrt{3}$	1	1	1.15	1.15	α
Phantom and tissue parameters				x/3	-1111	(村)	Buce B	The state of Global	
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4	R	$\sqrt{3}$	18	Find Calbarde	2.31	2.31	ŏ
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1	09	0.84	1.90	1.60	0
Liquid conductivity measurement	E.3.3	4	N	1	0.78	0.71	3.12	2.84	N
Liquid permittivity measurement	E.3.3	5	N	1	0.23	0.26	1.15	1.30	N
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	o
Liquid permittivity—temperature uncertainty	E.3.4	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	o
Combined Standard Uncertainty		still.	RSS	lin:		The Compliance	5.564	5.205	
Expanded Uncertainty (95% Confidence interval)	虱	Compliance	K=2	Compilance	(B) Altestal	of Gib	11.128	10.410	

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by SE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.



Page 36 of 80

System	validation	uncertainty	TOI DIPOR		d over 1 grai	m / To gram			1
a	b	c	d	e f(d,k)	f	g	h cxf/e	c×g/e	k
Uncertainty Component	Sec.	Tol (±%)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (±%)	10g Ui (±%)	vi
Measurement System								- L	. All
Probe calibration	E.2.1	5.831	N	1	1	1, 1	5.83	5.83	8
Axial Isotropy	E.2.2	0.695	R	√3	no ance 1	E Th 1 Compiler	0.40	0.40	8
Hemispherical Isotropy	E.2.2	1.045	R	√3	0	0	0.00	0.00	00
Boundary effect	E.2.3	1.0	R	√3	1	1	0.58	0.58	00
Linearity	E.2.4	0.685	R	$\sqrt{3}$	1 - 1	1	0.40	0.40	00
System detection limits	E.2.4	1.0	R	√3	Th 1 complian	1 4	0.58	0.58	8
Modulation response	E2.5	3.0	R	$\sqrt{3}$	on of O	0	0.00	0.00	00
Readout Electronics	E.2.6	0.021	N	1	1.0	1	0.021	0.021	00
Response Time	E.2.7	0.0	R	√3	0	0	0.00	0.00	∞
Integration Time	E.2.8	1.4	R	√3	0	0	0.00	0.00	00
RF ambient conditions-Noise	E.6.1	3.0	R	√3	1 Attestation	1	1.73	1.73	00
RF ambient conditions-reflections	E.6.1	3.0	R	√3	1	1	1.73	1.73	00
Probe positioner mechanical tolerance	E.6.2	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	oo
Probe positioning with respect to phantom shell	E.6.3	1.4	R	√3	Tomphance 1	© #1 Figure of	0.81	0.81	8
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	√3	10	1	1.33	1.33	8
System check source (dipole)				ari.		lin:	4	校 phance	
Deviation of experimental dipole from numerical dipole	E.6.4	5.0	N	npilance 1	11.	1	5.00	5.00	8
Input power and SAR drift measurement	8,6.6.4	5.0	R	√3	Resizition of 1	1	2.89	2.89	∞
Dipole axis to liquid distance	8,E.6.6	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	00
Phantom and tissue parameters					lline	, F 7	Jill .	<b>三</b> 环。	Combile
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4.0	R	√3	1	Francisco al Compli	2.31	2.31	00
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1		0.84	1.90	1.60	00
Liquid conductivity measurement	E.3.3	4.0	N	1	0.78	0.71	3.12	2.84	М
Liquid permittivity measurement	E.3.3	5.0	N	1	0.23	0.26	1.15	1.30	М
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	8
Liquid permittivity—temperature uncertainty	E.3.4	2.5	R	√3	0.23	0.26	0.33	0.38	oo
Combined Standard Uncertainty			RSS			KET Mance	9.718	9.517	
Expanded Uncertainty (95% Confidence interval)		KET MINOS	K=2	KET JUI	® 5	Cu of Chopal Con.	19.437	19.035	r,C

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by SE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.



Page 37 of 80

## 12. CONDUCTED POWER MEASUREMENT

## 2.4GHz WIFI

Mode	Data Rate (Mbps)	Channel	Frequency(MHz)	EIRP (dBm)	
bal Control	Alles Alles	01	2412	21.3	
802.11b	S	06	2437	20.9	
		11	2462	20.7	
	T. 6	01	2412	23.5	
802.11g		06	2437	22.9	
	alion of Globa	11	2462	22.6	
CC AU		01	2412	23.9	
802.11n (20)	6.5	06	2437	23.7	
	unitage Age Man	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2462	23.4	

#### **5GHz WIFI**

JGHZ WIFT	THE STATE OF THE S			lline
Band	Mode	Channel	Frequency (MHz)	EIRP (dBm)
		36	5180	22.9
	802.11a20	40	5200	22.4
LINII 1 - T	Tompianu ®	48	5240	22.3
UNII-1	,(G	36	5180	23.1
	802.11n (20)	40	5200	22.8
		48	5240	22.9
litir-	TIME .	149	5745	26.2
	802.11a	157	5785	26.1
LINILO	© The stone of clobs	165	5825	25.3
UNII-3	Willeam C	149	5745	26.0
	802.11n (20)	157	5785	25.8
	ATTE: INTE	165	5825	25.3



Page 38 of 80

## 13. TEST RESULTS

# 13.1. SAR Test Results Summary 13.1.1. Test position and configuration

- 1. The EUT is a wireless remote control;
- Per FCC Response: We used the test procedures in KDB 941225 D07 and test all surfaces and side edges
  with a transmitting antenna located at ≤ 25 mm from that surface or edge.
- 3. Test procedure:
  - (1). Using a Flat phantom flied with body tissue simulating liquid for test;
  - (2). Using a separation distance of 0mm for 10-g-Extremity SAR and 10mm for 1g-Body SAR test;
- 4. For SAR testing, the device was controlled by software to test at reference fixed frequency points.

## 13.1.2. Operation Mode

- 1. Per KDB 447498 D01 v06 ,for each exposure position, if the highest 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional.
- 2. Per KDB 865664 D01 v01r04,for each frequency band, if the measured SAR is ≥0.8W/Kg, testing for repeated SAR measurement is required, that the highest measured SAR is only to be tested. When the SAR results are near the limit, the following procedures are required for each device to verify these types of SAR measurement related variation concerns by repeating the highest measured SAR configuration in each frequency band.
  - (1) When the original highest measured SAR is ≥0.8W/Kg, repeat that measurement once.
  - (2) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is >1.20 or when the original or repeated measurement is ≥1.45 W/Kg.
  - (3) Perform a third repeated measurement only if the original, first and second repeated measurement is ≥1.5 W/Kg and ratio of largest to smallest SAR for the original, first and second measurement is ≥ 1.20
- Per KDB 248227 D01 v02r02 Chapter 5.2.2, when SAR measurement is required for 2.4GHz 802.11g/n
  OFDM configurations, the measurement and test reducing procedures for OFDM are applied. SAR is not
  required for the following 2.4 GHz OFDM conditions.
  - (1) When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
  - (2) When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is≤1.2 W/Kg,
- 4. Per KDB 248227 D01 v02r02 Chapter 5.3.4, SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. The initial test position procedure is applied to next to the ear, UMPC mini-tablet and hotspot mode configurations. When the same maximum output power is specified for multiple transmission modes, the procedures in 5.3.2 are applied to determine the test configuration. Additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. The subsequent test configuration and SAR measurement procedures are described in the following.
  - (1) When SAR test exclusion provisions of KDB Publication 447498 D01 are applicable and SAR



Page 39 of 80

measurement is not required for the initial test configuration, SAR is also not required for the next highest maximum output power transmission mode subsequent test configuration(s) in that frequency band or aggregated band and exposure configuration.

- (2) When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.
- (3) When the specified maximum output power is same for both UNII 1 and UNII 2A,begin SAR measuremengs in UNII 2A with the channel with the highest measured output power. If the report SAR for UNII 2A is <1.2W/Kg,SAR is nor required for UNII 1;otherwise treat the remaining bands separately and test them independently for SAR.
- (4) When the specified maximum output power different between UNII 1 and UNII 2A,begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤1.2W/Kg,testing for the band with the lower specicied output power is not required;otherwise test is remaining separately for SAR;
- 5. Per KDB 941225 D07 v01r02, UMPC mini-tablet devices must be tested for 1-g SAR on all surfaces and side edges with a transmitting antenna located at ≤ 25 mm from that surface or edge. Depending on the device form factor, antenna locations, operating configurations and exposure conditions, a test separation distance up to 10 mm may be considered for some devices; for example, certain game controllers and dual display smart phones. Under such circumstances, 10-g extremity SAR must also be measured at zero test separation for all measured 1-g (10 mm) SAR configurations to address hand exposure.
- 6. Maximum Scaling SAR in order to calculate the Maximum SAR values to test under the standard Peak Power, Calculation method is as follows:

  Maximum Scaling SAR =tested SAR (Max.) ×[maximum turn-up power (mw)/ maximum measurement output power(mw)]



0.049

Page 40 of 80

## 13.1.3. SAR Test Results Summary

SAR WEASUREW	IEN I								
Depth of Liquid (cr	m):>15			Rela	tive Humidity	· (%): 53.3			
Product: PARROT	SKYCONTRO	LLER 3							
Test model:MPP3									
Test Mode: 2.4GH	lz 802.11b								
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	10(g)-Ex tremity SAR (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit W/kg
Antenna 0	Attestation of Gill	10						all	ΣÍν.
Edge 1 (Top)	DTS	01	2412	-0.03	1.261	21.4	21.3	1.290	4.0
Edge 4 (Left)	DTS	01	2412	0.02	0.110	21.4	21.3	0.113	4.0
Antenna 1	nobal Com.	The Comp.	® A Jon of Glob		Allesto	40	Pro-		
Edge 1 (Top)	DTS	01	2412	0.10	0.808	21.4	21.3	0.827	4.0

-0.06

0.048

Note:

Edge 2 (Right)

SAR MEASUREMENT
Depth of Liquid (cm):>15

• The separation distance of 0mm for 10-g extremity SAR.

DTS

· Plots are only shown for the bold markered worst case SAR results

01

2412

Depth of Liquid (cm):>15 Relative Humidity (%): 53.3											
Product: PARROT S	SKYCONTRO	LLER 3									
Test model:MPP3											
Test Mode: 2.4GHz 802.11b											
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit W/kg		
Antenna 0	® Alte	lation of	CO						THE STATE OF		
Edge 1 (Top)	DTS	1	2412	-0.01	0.786	21.4	21.3	0.804	1.6		
Edge 1 (Top)	DTS	6	2437	0.25	0.781	21.4	20.9	0.876	1.6		
Edge 1 (Top)	DTS	11 %	2462	-0.10	0.795	21.4	20.7	0.934	1.6		
Edge 4 (Left)	DTS	C 1 Priestant	2412	0.06	0.090	21.4	21.3	0.092	1.6		
Antenna 1	10					45 mm	不怕	ubliance -Mai	THE HOLD		
Edge 1 (Top)	DTS	1 1	2412	-0.05	0.479	21.4	21.3	0.490	1.6		
Edge 2 (Right)	DTS	The 10 maries	2412	0.11	0.048	21.4	21.3	0.049	1.6		
Note:	(C) 48.	onorGiv	Alfestation C								

Note

• The separation distance of 10mm for 1-g-SAR.

• Plots are only shown for the bold markered worst case SAR results.



23.1

23.1

23.4

0.701

0.129

4.0

Page 41 of 80

SAR MEASURE	MENT							
Depth of Liquid (	cm):>15			Relative Hur	midity (%): 53.8	3		
Product: PARRC	T SKYCONTR	OLLER 3						
Depth of Liquid (cm):>15  Product: PARROT SKYCONTROLLER 3  Test model:MPP3  Test Mode: 5.2GHz 802.11n20  Position  Ch.  Fr.  (MHz)  Power Drift (<±5%)  Power (dBm)  Relative Humidity (%): 53.8  Relative Humidity (%): 53.8  Relative Humidity (%): 53.8  Relative Humidity (%): 53.8  Meas. Tune-up Power (dBm)  Scaled SAR (W/Kg)  Li (W/Kg)  Antenna0								
Test Mode: 5.2G	Hz 802.11n20							
Position	Ch.		Drift	mity SAR	Tune-up Power	output Power	SAR	Limit (W/kg)
Antenna0	F Kaloni Com	E.C	Affesto	Allestation	-C			
Edge 1 (Top)	36	5180	-0.31	1.060	23.4	23.1	1.136	4.0
Edge 4 (Left)	36	5180	0.01	0.138	23.4	23.1	0.148	4.0

0.654

0.120

0.17

0.10

#### Note:

Antenna1

Edge 1 (Top)

Edge 2 (Right)

**SAR MEASUREMENT** 

• The separation distance of 0mm for 10-g extremity SAR.

36

· Plots are only shown for the bold markered worst case SAR results

5180

5180

Depth of Liquid (c	m):>15			Relative Hur	Relative Humidity (%): 53.8					
Product: PARROT	F SKYCONTR	OLLER 3								
Test model:MPP3										
Test Mode: 5.2GH	Hz 802.11n20									
Position	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)		
Antenna0	bal Compliance	F KGlobal Company	Altestation	CC T	Hesto.	C	10			
Edge 1 (Top)	36	5180	0.07	0.573	23.4	23.1	0.614	1.6		
Edge 4 (Left)	36	5180	0.12	0.189	23.4	23.1	0.203	1.6		
Antenna1	W.	All T	KE HIM	F Clobal Con	® ## jon	of Global Co.	ATTESTA	G		
Edge 1 (Top)	36	5180	0.23	0.390	23.4	23.1	0.418	1.6		
Edge 2 (Right)	36	5180	0.08	0.128	23.4	23.1	0.137	1.6		

#### Note:

- The separation distance of 10mm for 1-g-SAR.
- Plots are only shown for the bold markered worst case SAR results.



Page 42 of 80

SAR MEASUREM	MENT										
Depth of Liquid (c	m):>15			Relative Hur	nidity (%): 52.2	2					
Product: PARROT	SKYCONTR	OLLER 3									
Test model:MPP3											
Test Mode: 5.8GH	lz 802.11a										
Position	Ch.	Fr. (MHz)	Power Drift (<±5%)	10(g)-Extre mity SAR (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)			
Antenna0	I IN Global Com	E.C.	Allesta	Attestant	- G AM						
Edge 1 (Top)	149	5745	0.06	0.849	26.3	26.2	0.869	4.0			
Edge 4 (Left)	149	5745	-0.18	0.284	26.3	26.2	0.291	4.0			
Antenna1	KET WHITE	KE plance	红 Kan	illance ®	ion of Globa	® Affestation of C	- G				
Edge 1 (Top)	149	5745	-0.10	0.894	26.3	26.2	0.915	4.0			
Edge 2 (Right)	149	5745	0.09	0.202	26.3	26.2	0.207	4.0			

#### Note:

**SAR MEASUREMENT** 

- The separation distance of 0mm for 10-g extremity SAR.
- · Plots are only shown for the bold markered worst case SAR results

Depth of Liquid (cr	m):>15			Relative Humidity (%): 52.2						
Product: PARROT	SKYCONTR	ROLLER 3								
Test model:MPP3										
Test Mode: 5.8GH	lz 802.11a									
Position	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit (W/kg)		
Antenna0	hal compliance	F Global Comp.	Altestation	a.C *	Hesti	C	10			
Edge 1 (Top)	149	5745	0.22	0.650	26.3	26.2	0.665	1.6		
Edge 4 (Left)	149	5745	-0.15	0.183	26.3	26.2	0.187	1.6		
Antenna1	W.	FILL)	KE Maliance	F Global Con	(S) THE STORY	of Global Co.	C AND STATE	- (4		
Edge 1 (Top)	149	5745	0.13	0.605	26.3	26.2	0.619	1.6		
Edge 2 (Right)	149	5745	0.05	0.135	26.3	26.2	0.138	1.6		

#### Note:

- The separation distance of 10mm for 1-g-SAR.
- Plots are only shown for the bold markered worst case SAR results.

The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at although the confirmed at all the confir



Page 43 of 80

## **Simultaneous Multi-band Transmission Evaluation:**

**Application Simultaneous Transmission information:** 

NO	Simultaneous state	Portable Handset Body-worn
1 🔞	WLAN 2.4GHz (Antenna0)+WLAN 2.4GHz (Antenna1)	Yes
2	WLAN 5.2GHz (Antenna0)+WLAN 5.2GHz (Antenna1)	Yes
3	WLAN 5.8GHz (Antenna0)+WLAN 5.8GHz (Antenna1)	Yes

#### NOTE:

- 1. Simultaneous with every transmitter must be the same test position.
- 2. According to KDB 447498 D01 4.3.1, Standalone SAR test exclusion is as follow:

For 100 MHz to 6 GHz and test separation distances  $\leq$  50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • [ $\sqrt{(GHz)}$ ]  $\leq 3.0$  for 1-g SAR, and  $\leq 7.5$  for 10-g extremity SAR<sup>30</sup>, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation<sup>31</sup>
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

- 3. According to KDB 447498 D01 4.3.2, simultaneous transmission SAR test exclusion is as follow:
  - (1) Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna.
  - (2) Any transmitters and antennas should be considered when calculating simultaneous mode.
  - (3) For mobile phone and PC, it's the sum of all transmitters and antennas at the same mode with same position in each applicable exposure condition
  - (4)When the standalone SAR test exclusion of section 4.3.2 is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to det

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[ $\sqrt{f(GHz)/x}$ ] W/kg for test separation distances  $\leq$  50 mm;

where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.

4. When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion. The ratio is determined by (SAR1 + SAR2)1.5/Ri, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.



Page 44 of 80

## Sum of the SAR for Antenna0&Antenna1:

Band	Test		Transmission nario	Σ1-g SAR	SPLSR (Yes/No)	
	Position	WIFI Antenna0	WIFI Antenna1	(W/Kg)		
0mm for 10-g ex	tremity SAR	Allestall			TILL STATE OF THE	
2412-2462	Edge 1 (Top)	1.290	0.827	2.117	No	
5180-5240	Edge 1 (Top)	1.136	0.701	1.837	No No	
5745-5825	Edge 1 (Top)	0.869	0.915	1.784	No	
0mm for 1-g SAF	R Kinnilaice	Autostation (S)	Milestation of The Control of the Co	ites and		
2412-2462	Edge 1 (Top)	0.934	0.490	1.424	No	
5180-5240	Edge 1 (Top)	0.614	0.418	1.032	No 🦽	
5745-5825	Edge 1 (Top)	0.665	0.619	1.284	No	



Page 45 of 80

## APPENDIX A. SAR SYSTEM CHECK DATA

Test Laboratory: AGC Lab Date: June 22,2018

System Check Body 2450 MHz

DUT: Dipole 2450 MHz Type: SID 2450

Communication System CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=2.58 Frequency: 2450 MHz; Medium parameters used: f = 2450 MHz;  $\sigma = 1.93$  mho/m;  $\epsilon r = 53.02$ ;  $\rho = 1000$  kg/m³;

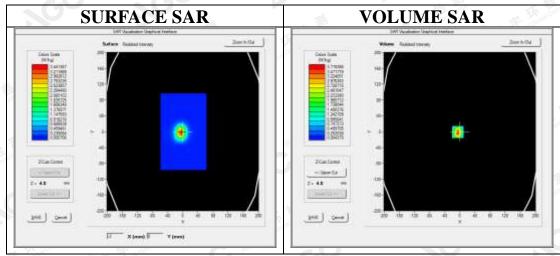
Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (°C):22.1, Liquid temperature (°C): 21.7

## **SATIMO Configuration**

- Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- · Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4\_02\_35

Configuration/System Check 2450MHz Body/Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/System Check 2450MHz Body/Zoom Scan: Measurement grid: dx=5mm,dy=5mm, dz=5mm



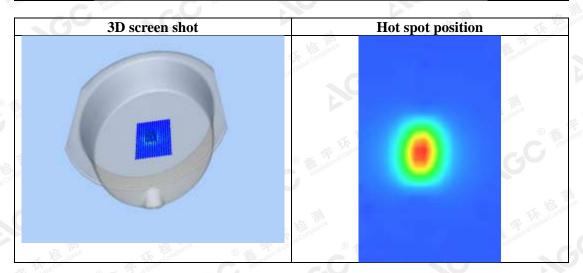
Maximum location: X=-4.00, Y=-2.00 SAR Peak: 7.66 W/kg

SAR 10g (W/Kg)	1.341025
SAR 1g (W/Kg)	3.435243



Report No.: AGC02115180501FH01 Page 46 of 80

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	7.7556	3.7129	1.1485	0.3633	0.1179	0.0385	0.0122
子 天 校 河川	7.76 - 7.00 -	<del>\                                    </del>		+			
tation of	6.00- \$ 5.00-	$\downarrow \downarrow \downarrow$					
mphance	% 4.00 % 8S 3.00						
® Allestation of	2.00	++		+++			
拉测	0.01-	2.5 5.0 7.51	0.0 15.0	20.0 25.0	30.0 35	5.0 40.0	
Find of Global Company	©	2.5 5.0 7.5 1	0.0 15.0	Z (mm)	50.0 50	7.0 40.0	





Date: June 26,2018

Page 47 of 80

Test Laboratory: AGC Lab System Check Body 5200 MHz

DUT: Dipole 5000MHz Type: SWG5500

Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=2.41 Frequency: 5200 MHz; Medium parameters used: f = 5200 MHz;  $\sigma = 5.18$  mho/m;  $\epsilon r = 48.85$ ;  $\rho = 1000$  kg/m³;

Phantom section: Flat Section; Input Power=15dBm

Ambient temperature ( $^{\circ}$ C): 21.9, Liquid temperature ( $^{\circ}$ C): 21.3

## SATIMO Configuration:

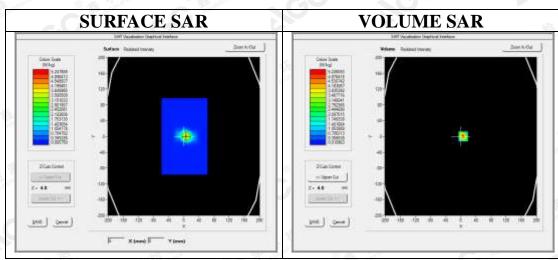
Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/System Check 5200 MHz Body/Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/System Check 5200 MHz Body/Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm



Maximum location: X=4.00, Y=0.00 SAR Peak: 13.00 W/kg

SAR 10g (W/Kg)	1.642109
SAR 1g (W/Kg)	4.829775

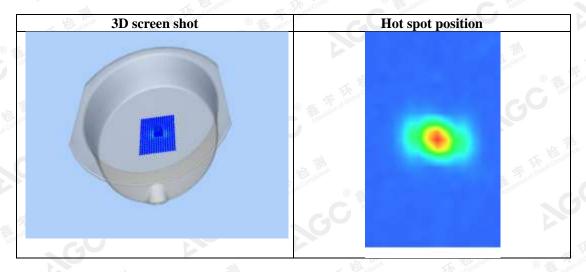
The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance



Page 48 of 80

Z (mm )	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0 0	18.0	20.0	22.0	24.0
SAR (W/ Kg)	13.0 021	5.21 76	2.93 55	1.63 16	0.90	0.50 15	0.27 49	0.14 88	0.08 37	0.05	63	0.01 96
		13.00 12.00 10.00 8.00 6.00 4.00 2.00	0-								GC Commission	
	3C	0.0		4	6 8	10 12 Z(	14 16 mm)	18 2	0 22	24 26	3 m.	





Date: June 27,2018

Page 49 of 80

Test Laboratory: AGC Lab System Check Body 5800 MHz

DUT: Dipole 5000MHz Type: SWG5500

Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=2.53 Frequency: 5800 MHz; Medium parameters used: f = 5800 MHz;  $\sigma = 5.96$ mho/m;  $\epsilon r = 48.03$ ;  $\rho = 1000$  kg/m³;

Phantom section: Flat Section; Input Power=15dBm

Ambient temperature ( $^{\circ}$ C): 22.1, Liquid temperature ( $^{\circ}$ C): 21.5

## SATIMO Configuration:

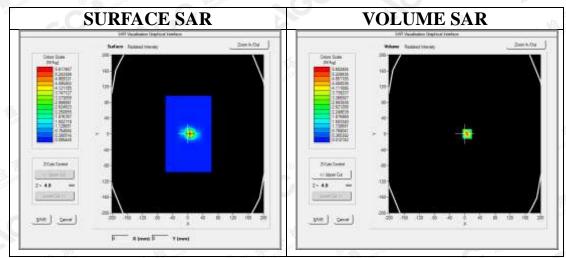
Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/System Check 5800 MHz Body/Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/System Check 5800 MHz Body/Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm



Maximum location: X=5.00, Y=1.00 SAR Peak: 14.05 W/kg

SAR 10g (W/Kg)	1.772153
SAR 1g (W/Kg)	5.250849

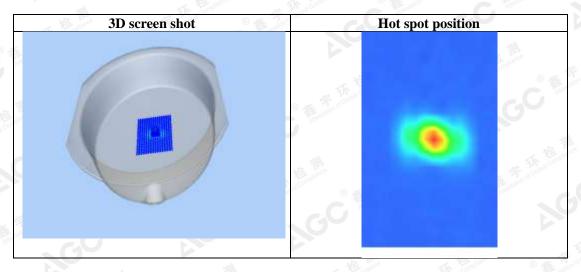
The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance



Page 50 of 80

Z (mm )	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0
SAR (W/ Kg)	14.0 957	5.61 01	3.16 93	1.75 77	0.99 95	0.55 01	0.32 26	0.18 95	0.11 73	0.08 11	0.05	0.04 29
		14.10 12.00	0-\									
		SAR (W/kg) 0.09 8.00	0-								9	
		6.00 4.00		1							A KE Compil	
		0.03		4	6 8	10 12 Z(	14 16	18 2	0 22	24 26		





Date: June 22,2018

Page 51 of 80

## APPENDIX B. SAR MEASUREMENT DATA

2.4GHz 802.11b for Antenna0-10-g extremity SAR:

Test Laboratory: AGC Lab

802.11b Mid- Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=2.58; Frequency: 2437 MHz; Medium parameters used: f = 2450 MHz; σ= 1.90mho/m; εr =53.60; ρ= 1000 kg/m³

Phantom section: Flat Section

Ambient temperature (°C):22.1, Liquid temperature (°C): 21.7

## **SATIMO Configuration:**

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

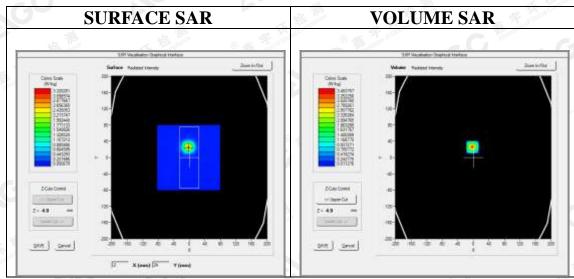
· Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11b Mid- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11b Mid- Edge1 /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

dy=8mm, h= 5.00 mm					
a, o, o.o					
5x5x7,dx=8mm dy=8mm dz=5mm					
ELLI					
Edge1					
2450MHz					
Middle					
Crest factor: 1.0					



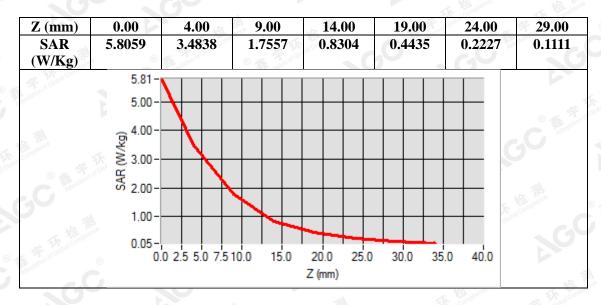
**Maximum location: X=-2.00, Y=25.00** 

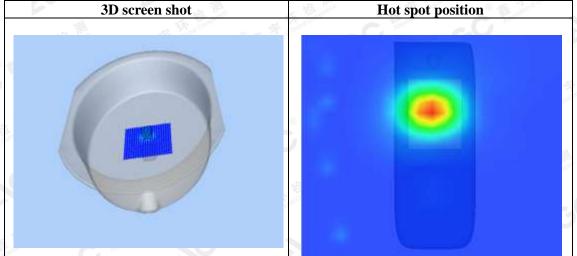
SAR Peak: 5.82 W/kg

SAR 10g (W/Kg)	1.261099
SAR 1g (W/Kg)	3.045288











Page 53 of 80

2.4GHz 802.11b for Antenna1-10-g extremity SAR:

Test Laboratory: AGC Lab Date: June 22,2018

802.11b Mid- Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=2.58; Frequency: 2437 MHz; Medium parameters used: f = 2450 MHz;  $\sigma = 1.90 \text{mho/m}$ ;  $\epsilon r = 53.60$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature (°C):22.1, Liquid temperature (°C): 21.7

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

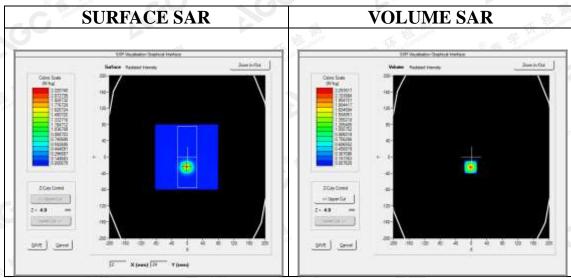
Sensor-Surface: 4mm (Mechanical Surface Detection)

Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11b Mid- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/802.11b Mid- Edge1 /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

dx=8mm dy=8mm, h= 5.00 mm
5x5x7,dx=8mm dy=8mm dz=5mm
ELLI
Edge1
2450MHz
Middle
Crest factor: 1.0



Maximum location: X=-2.00, Y=-24.00 SAR Peak: 3.82 W/kg

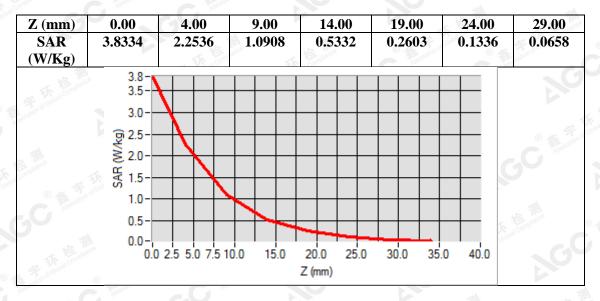
SAR 10g (W/Kg)	0.807968
SAR 1g (W/Kg)	1.975357

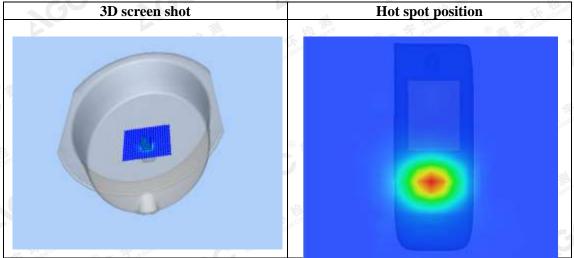
The results spowed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 40°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance



Page 54 of 80







Page 55 of 80

2.4GHz 802.11b for Antenna0 1-g SAR:

Test Laboratory: AGC Lab Date: June 22,2018

802.11b High- Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=2.58; Frequency: 2462 MHz; Medium parameters used: f = 2450 MHz;  $\sigma = 1.95 \text{mho/m}$ ;  $\epsilon r = 52.49$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature (°C):22.1, Liquid temperature (°C): 21.7

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

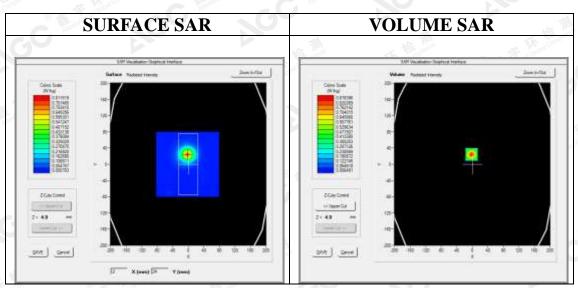
Sensor-Surface: 4mm (Mechanical Surface Detection)

• Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11b High- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/802.11b High- Edge1 /Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	ELLI C
Device Position	Edge1
Band	2450MHz
Channels	High Management
Signal	Crest factor: 1.0

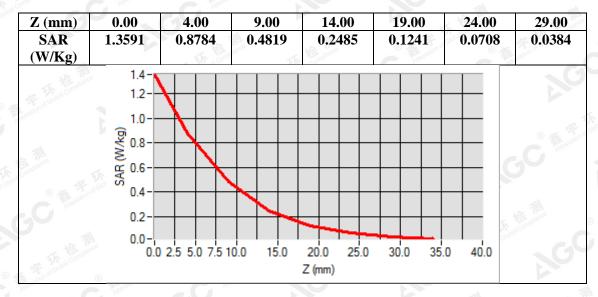


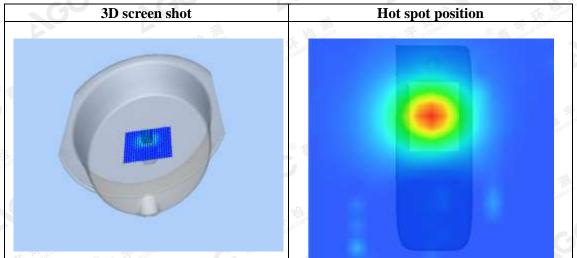
Maximum location: X=-2.00, Y=24.00 SAR Peak: 1.38 W/kg

SAR 10g (W/Kg)	0.385869
SAR 1g (W/Kg)	0.794553



Page 56 of 80







Page 57 of 80

2.4GHz 802.11b for Antenna1 1-g SAR:

Test Laboratory: AGC Lab Date: June 22,2018

802.11b Mid- Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=2.58; Frequency: 2437 MHz; Medium parameters used: f = 2450 MHz; σ= 1.90mho/m; εr =53.60; ρ= 1000 kg/m³

Phantom section: Flat Section

Ambient temperature (°C):22.1, Liquid temperature (°C): 21.7

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

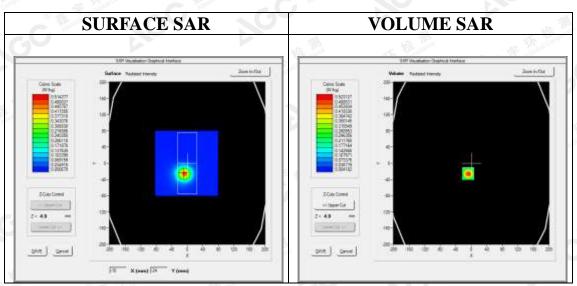
Sensor-Surface: 4mm (Mechanical Surface Detection)

• Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11b Mid- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/802.11b Mid- Edge1 /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm			
Phantom	ELLI			
Device Position Edge1				
Band	2450MHz			
Channels	Middle			
Signal	Crest factor: 1.0			

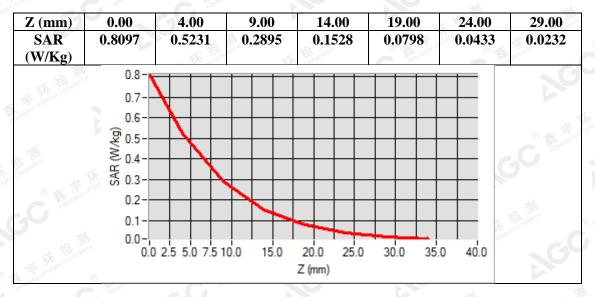


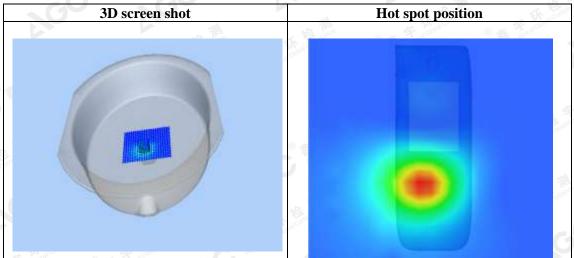
Maximum location: X=-8.00, Y=-25.00 SAR Peak: 0.85 W/kg

SAR 10g (W/Kg)	0.233708
SAR 1g (W/Kg)	0.478801



Page 58 of 80







Page 59 of 80

5.2GHz 802.11n20 for Antenna 0- 10-g extremity SAR:

Test Laboratory: AGC Lab Date: June 26,2018

802.11n20 Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11n20; Duty Cycle: 1:1; Conv.F=2.41; Frequency: 5180MHz; Medium parameters used: f = 5200 MHz;  $\sigma = 5.16 \text{mho/m}$ ;  $\epsilon r = 49.52$ ;  $\rho = 1000 \text{ kg/m}^3$ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.9, Liquid temperature (°C): 21.3

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

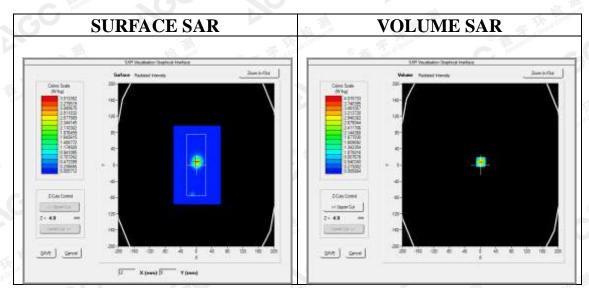
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11n20 Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11n20 Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm					
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm					
Phantom	ELLI					
Device Position	Edge1					
Band	5200MHz					
Channels	Low					
Signal	Crest factor: 1.0					



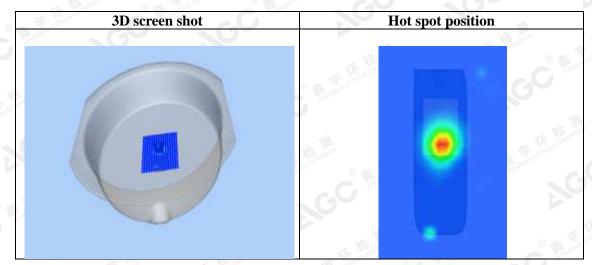
Maximum location: X=1.00, Y=7.00 SAR Peak: 10.44 W/kg

SAR 10g (W/Kg)	1.060198
SAR 1g (W/Kg)	3.694562



Report No.: AGC02115180501FH01 Page 60 of 80

Z (m m)	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0 0	18.0 0	20.0	22.0	24.0
SA R	10.7 027	4.01 57	2.14 51	1.08 42	0.48 37	0.22 02	0.11 32	0.05 36	0.02 24	0.00 74	0.00 69	0.00 69
(W/ Kg)			, 01	G								13
		10.7	70-								a.C	
		8.0	00-									
		SAR (W/kg)	00-	ackslash							大 校 河	
		SA 4.0	00-	$\overline{}$							Clon	
		2 (	00-		$\leftarrow$	++	+			_		
		2.0										
			01-	2 4	6 8	10 12	14 16	18 2	0 22 2	24 26		





Page 61 of 80

5.2GHz 802.11n20 for Antenna 1-10-g extremity SAR:

Test Laboratory: AGC Lab Date: June 26,2018

802.11n20 Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11n20; Duty Cycle: 1:1; Conv.F=2.41; Frequency: 5180MHz; Medium parameters used: f = 5200 MHz;  $\sigma = 5.16$ mho/m;  $\epsilon r = 49.52$ ;  $\rho = 1000$  kg/m³;

Phantom section: Flat Section

Ambient temperature ( $^{\circ}$ ): 21.9, Liquid temperature ( $^{\circ}$ ): 21.3

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

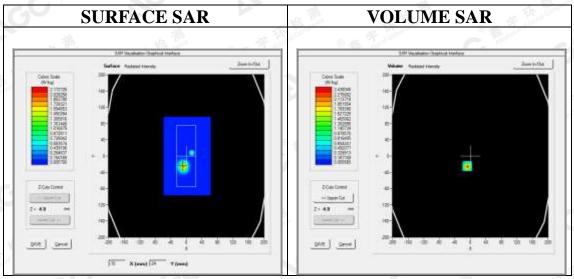
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11n20 Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11n20 Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm				
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm				
Phantom	ELLI				
Device Position	Edge1				
Band	5200MHz				
Channels	Low				
Signal	Crest factor: 1.0				



**Maximum location: X=-8.00, Y=-25.00** 

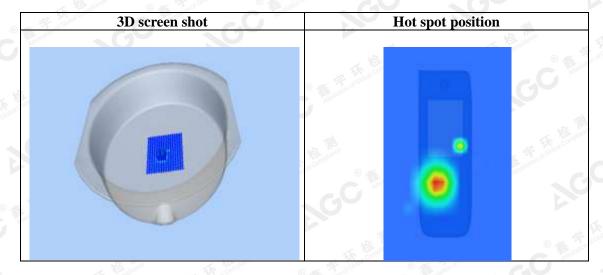
SAR Peak: 6.71 W/kg

SAR 10g (W/Kg)	0.654115
SAR 1g (W/Kg)	2.266486



۰	· ·	000	, ,		0.	
	Pa	age	62	of	80	

Z (m m)	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0 0	18.0 0	20.0	22.0	24.0
SA R	6.79 31	2.43 80	1.26 19	0.59 98	0.23 70	0.15 38	0.07 98	0.04 27	0.01 86	0.00 69	0.00 69	0.00 69
(W/ Kg)	31			G		30	70	<b>2</b> ,	J			
		6.79 6.00	<b>\</b>								a.C	
		5.00	<b>\</b>			++	++	+				
		SAR (W/kg)		$\forall$		++	+				K Kinguan	
		3.00 2.00									Glopal	
		1.00				$\perp \perp$						
		0.01	0 2	4 6	8	10 12	14 16	18 20	22 2	24 26	20.	
			0 2	- (		Z (n		10 20	, ,,	- 20	3 The station	





Page 63 of 80

5.2GHz 802.11n20 for Antenna 0-1-g SAR:

Test Laboratory: AGC Lab Date: June 26,2018

802.11n20 Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11n20; Duty Cycle: 1:1; Conv.F=2.41; Frequency: 5180MHz; Medium parameters used: f = 5200 MHz;  $\sigma = 5.16 \text{mho/m}$ ;  $\epsilon r = 49.52$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient temperature (°C): 21.9, Liquid temperature (°C): 21.3

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

• Sensor-Surface: 4mm (Mechanical Surface Detection)

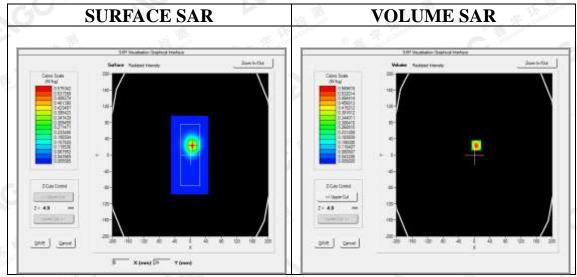
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11n20 Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11n20 Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm					
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm					
Phantom	ELLI					
Device Position	Edge1					
Band	5200MHz					
Channels	© Standard Low					
Signal	Crest factor: 1.0					



Maximum location: X=5.00, Y=24.00

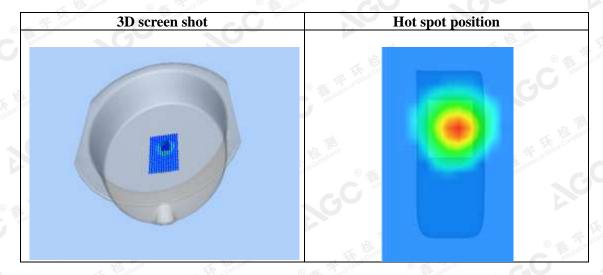
SAR Peak: 1.53 W/kg

SAR 10g (W/Kg)	0.212177
SAR 1g (W/Kg)	0.573034



101000	,,,		01
Page	64	of	80

Z (m m)	0.00	4.00	6.00	8.00	10.0 0	12.0	14.0	16.0 0 0.00	18.0	20.0	22.0	24.0
SA R (W/ Kg)	49	0.56 96	0.29 36	0.13 96	97	0.03 26	0.00 75	69	0.00 69	69	0.00 69	69
-JIII ompilance	学玩	1.5- 1.4- 1.2-	+								CC	Attestation
		SAR (W/kg)									大 相 利	
		0.4										
		0.0	0 2	4 6	8 1	0 12 Z (m	14 16 m)	18 20	) 22 2	24 26	3 The F	The Title





Page 65 of 80

5.2GHz 802.11n20 for Antenna 1-1-g SAR:

Test Laboratory: AGC Lab Date: June 26,2018

802.11n20 Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11n20; Duty Cycle: 1:1; Conv.F=2.41; Frequency: 5180MHz; Medium parameters used: f = 5200 MHz;  $\sigma = 5.16 \text{mho/m}$ ;  $\epsilon r = 49.52$ ;  $\rho = 1000 \text{ kg/m}^3$ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.9, Liquid temperature (°C): 21.3

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

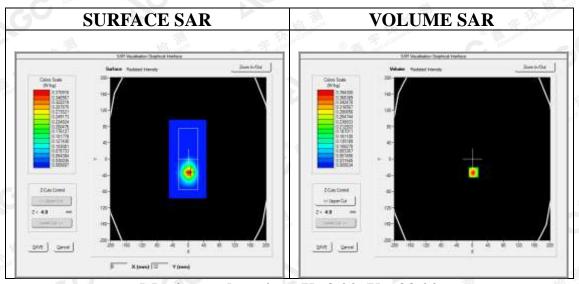
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/802.11n20Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/802.11n20Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm
Phantom	ELLI
Device Position	Edge1
Band	5200MHz
Channels	Low
Signal	Crest factor: 1.0



Maximum location: X=3.00, Y=-33.00

SAR Peak: 1.01 W/kg

SAR 10g (W/Kg) 0.148736

SAR 1g (W/Kg) 0.389907

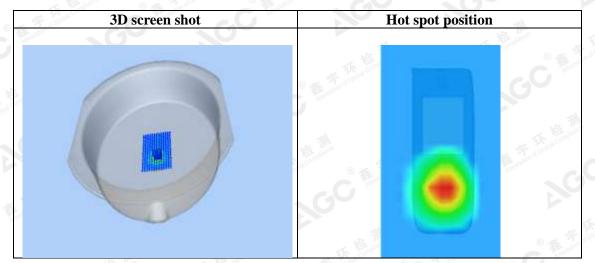
The results spound this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attraction.

Attestation of Global Compliance



Page 66 of 80

Z (m m)	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0 0	18.0	20.0	22.0	24.0
SA R	1.02 44	0.39	0.20 77	0.11 30	0.05 20	0.02 20	0.00 69	0.00 69	0.00 69	0.00 69	0.00 69	0.00 69
(W/ Kg)				G				litt:			<b>0</b> 2	il.
		1.0	T								c,C	
		0.8	<b>\</b>								-mil	
		SAR (W/kg)		ackslash							K KE THE	
		O.2										
					1							
		0.0	0 2	4 6	8 1	0 12 Z(m	14 16	18 20	22 2	24 26	3 A. F	





Page 67 of 80

5.8GHz 802.11a for Antenna 0-10-g extremity SAR:

Test Laboratory: AGC Lab Date: June 27,2018

802.11a Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 1:1; Conv.F=2.53; Frequency: 5745MHz; Medium parameters used: f = 5800 MHz;  $\sigma = 5.92\text{mho/m}$ ;  $\epsilon r = 49.26$ ;  $\rho = 1000 \text{ kg/m}^3$ ;

Phantom section: Flat Section

Ambient temperature (°C): 22.1, Liquid temperature (°C): 21.5

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

• Sensor-Surface: 4mm (Mechanical Surface Detection)

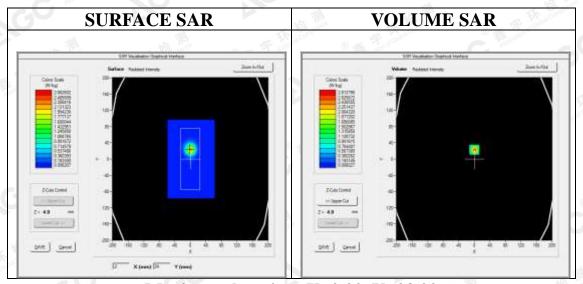
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/ 802.11a Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/ 802.11a Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm					
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm					
Phantom	ELLI					
Device Position	Edge1					
Band	5800MHz					
Channels	Low					
Signal	Crest factor: 1.0					



Maximum location: X=0.00, Y=23.00

SAR 10g (W/Kg)

SAR 10g (W/Kg)	0.848837
SAR 1g (W/Kg)	2.767307

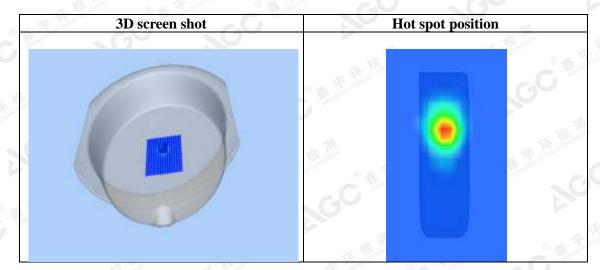
The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance



13100	JU 1	1 1	IU I
Page	68	of	80

Z (m m)	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0 0	18.0 0	20.0	22.0	24.0
SA R (W/	8.19 02	2.81 28	1.32 24	0.57 39	0.25 59	0.11 45	0.05 36	0.02 02	0.00 74	0.00 74	0.00 74	0.00 74
Kg)	· 学。	8.19 7.00 6.00	)- <del>                                     </del>								GC	Altestation
		05.00 3.00 3.00 8.00		$\bigvee$							Clobal Compian	
		2.00										





Page 69 of 80

5.8GHz 802.11a for Antenna 1 10-g extremity SAR:

Test Laboratory: AGC Lab Date: June 27,2018

802.11a Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 1:1; Conv.F=2.53; Frequency: 5745MHz; Medium parameters used: f = 5800 MHz;  $\sigma = 5.92mho/m$ ;  $\epsilon r = 49.26$ ;  $\rho = 1000 kg/m^3$ ;

Phantom section: Flat Section

Ambient temperature (°C): 22.1, Liquid temperature (°C): 21.5

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

• Sensor-Surface: 4mm (Mechanical Surface Detection)

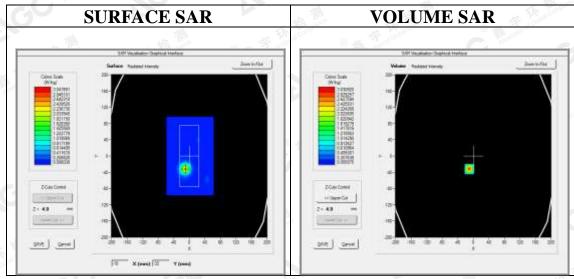
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/ 802.11a Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/ 802.11a Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm					
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm					
Phantom	ELLI					
Device Position	Edge1					
Band	5800MHz					
Channels	© Management Low					
Signal	Crest factor: 1.0					



**Maximum location: X=-10.00, Y=-32.00** 

SAR Peak: 9.37 W/kg

SAR 10g (W/Kg)	0.893681
SAR 1g (W/Kg)	2.997083

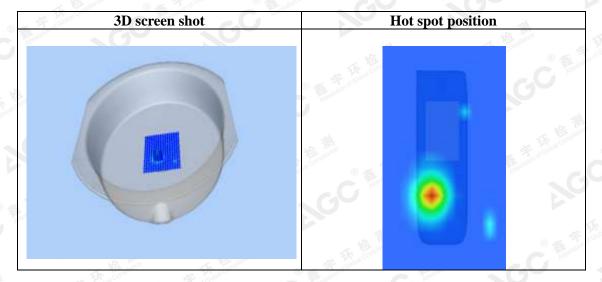
The results spoured this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by XCC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.ago.go.tt.com.

Attestation of Global Compliance



Page 70 of 80

3.03 09 9.7 8.0	0-	0.63	0.28 21	0.12 55	0.00 73	0.70 67	0.00	0.00	0.00 73	0.00
8.0	0-		Po					3472	GC	Arties tailo
S 6.0	0-								不 格 河	
2.0	0-								Good S	
	2.0	2.00- 0.01- 0 2	2.00	2.00 -	2.00- 0.01- 0 2 4 6 8 10 12	2.00-	2.00- 0.01- 0 2 4 6 8 10 12 14 16 18 20	0.01 - 0 2 4 6 8 10 12 14 16 18 20 22 2	2.00 - 0.01 - 0 2 4 6 8 10 12 14 16 18 20 22 24 26	2.00 - 0.01 - 0 2 4 6 8 10 12 14 16 18 20 22 24 26





Page 71 of 80

5.8GHz 802.11a forAntenna 0- 1-g SAR:

Test Laboratory: AGC Lab Date: June 27,2018

802.11a Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 1:1; Conv.F=2.53; Frequency: 5745MHz; Medium parameters used: f = 5800 MHz;  $\sigma = 5.92mho/m$ ;  $\epsilon r = 49.26$ ;  $\rho = 1000 kg/m^3$ ;

Phantom section: Flat Section

Ambient temperature (°C): 22.1, Liquid temperature (°C): 21.5

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

• Sensor-Surface: 4mm (Mechanical Surface Detection)

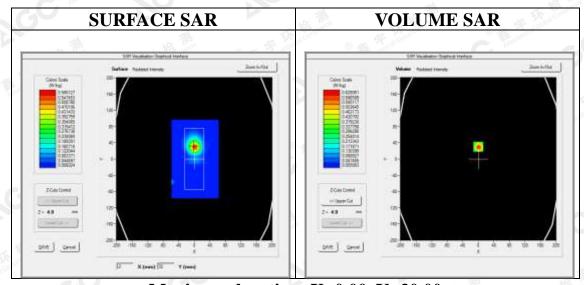
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/ 802.11a Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/ 802.11a Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm					
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm					
Phantom	ELLI					
Device Position	Edge1					
Band	5800MHz					
Channels	© Managed Low					
Signal	Crest factor: 1.0					



Maximum location: X=0.00, Y=30.00

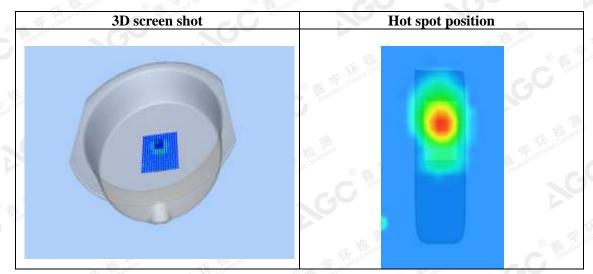
SAR Peak: 1.80 W/kg

SAR 10g (W/Kg)	0.235170
SAR 1g (W/Kg)	0.650278



Page 72 of 80

Z (m m)	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0
SA	1.84	0.62	0.28	0.12	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00
R (W/ Kg)	33	81	91	59	34	30	79	73	73	73	73	73
		1.84									c.C	
		1.50 a 1.25	<b>N</b>									
		(6) 1.25 (7) 1.00		$\vdash$		++	++	+			下 校 · · ·	
		₩ 0.75 0.50									Glov	
		0.25					$\perp$					
		0.01	0 2	4 6	8	10 12	14 16	18 20	22 2	24 26	th.	
						Z (n					8 Attestation	





Page 73 of 80

5.8GHz 802.11a for Antenna 1-1-g SAR:

Test Laboratory: AGC Lab Date: June 27,2018

802.11a Low-Edge1

DUT: PARROT SKYCONTROLLER 3; Type: MPP3

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 1:1; Conv.F=2.53; Frequency: 5745MHz; Medium parameters used: f = 5800 MHz;  $\sigma = 5.92mho/m$ ;  $\epsilon r = 49.26$ ;  $\rho = 1000 kg/m^3$ ;

Phantom section: Flat Section

Ambient temperature (°C): 22.1, Liquid temperature (°C): 21.5

## SATIMO Configuration:

Probe: SSE2; Calibrated: Aug. 08,2017; Serial No.: SN 08/16 EPGO282

Sensor-Surface: 4mm (Mechanical Surface Detection)

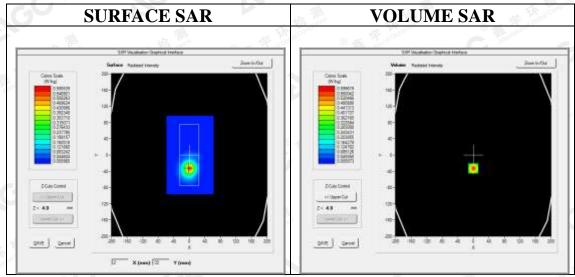
Phantom: ELLI39 Phantom

Measurement SW: OpenSAR V4\_02\_35

Configuration/ 802.11a Low- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/ 802.11a Low- Edge1 /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

Area Scan	dx=8mm dy=8mm, h= 5.00 mm					
ZoomScan	8x8x13 dx=4mm dy=4mm dz=2mm					
Phantom	ELLI					
Device Position	Edge1					
Band	5800MHz					
Channels	Low					
Signal	Crest factor: 1.0					



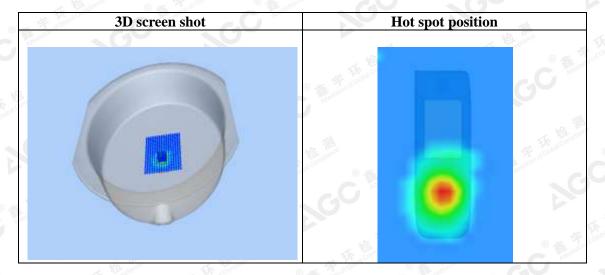
Maximum location: X=0.00, Y=-33.00 SAR Peak: 1.70 W/kg

SAR 10g (W/Kg)	0.218714
SAR 1g (W/Kg)	0.604602



Page 74 of 80

Z (m m)	0.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0 0	18.0	20.0	22.0	24.0
SA	1.74 75	0.59 96	0.28 12	0.11 95	0.05	0.02 37	0.00	0.00 73	0.00 73	0.00 73	0.00	0.00
R (W/ Kg)	· /3	90	12	95	03	31	73	13	73	13	73	73
1911)		1.75 1.50	<b>\</b>								a.C	Attestation
		1.25	<b>1</b>									
		(N) 1.00		$\forall \exists$			++				K Kanglan	
		W 0.75		$\mathbf{I}$							(Bloppa,	
		0.25			$\downarrow$	$\vdash$	++	+				
		0.01	0 2	4 6	8	10 12	14 16	18 20	22 2	24 26	- 4	
	-1111					Z (n	nm)				Attestation	.0.





Page 75 of 80

## **APPENDIX C. TEST SETUP PHOTOGRAPHS**

Edge1(Top) 0mm



Edge2(Right) 0mm



The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Page 76 of 80



The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at http://www.agc.gett.com.

Tel: +86-755 2908 1955

Fax: +86-755 2600 8484

E-mail: agc@agc-cert.com

**6** 400 089 2118

Add: 2/F. , Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Page 77 of 80





The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 100°C, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at alther.//www.agc.gett.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E-mail: agc@agc-cert.com @ 400 089 2118 Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Page 78 of 80

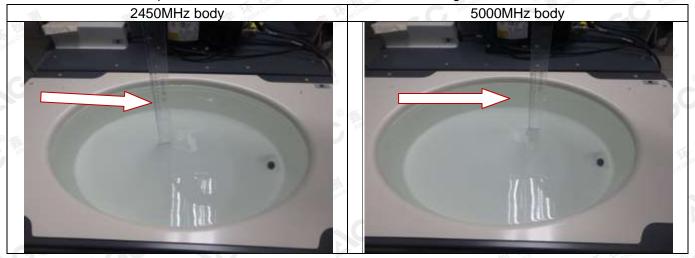




Page 79 of 80

## DEPTH OF THE LIQUID IN THE PHANTOM—ZOOM IN

Note: The position used in the measurement were according to IEEE Std. 1528:2013



The results showed this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by 1000, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at attp://www.agc.gett.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484 E

E-mail: agc@agc-cert.com

**6** 400 089 2118

Add: 2/F., Building 2, No.1-4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Baoan District, Shenzhen, Guangdong China



Page 80 of 80

## **APPENDIX D. CALIBRATION DATA**

Refer to Attached files.

The results showing this jest report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by (SE), this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed et attp://www.agc.gett.com.

Attestation of Global Compliance

Tel: +86-755 2908 1955 Fax: +86-755 2600 8484

E-mail: agc@agc-cert.com

**6** 400 089 2118