

SAR Test Report

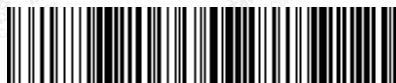
Report No.: AGC00594170805EH01

PRODUCT DESIGNATION : TD-LTE Digital Mobile Phone
BRAND NAME : NOMU
MODEL NAME : T18
MANUFACTURER : Shenzhen Xin Kingbrand Enterprises Co.,Ltd
DATE OF ISSUE : Jan. 12,2018
STANDARD(S) : EN 50360:2017; EN62209-1:2016;
EN62209-2:2010; EN50566:2017
REPORT VERSION : V1.2

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 shown in 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>.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 21,2017	Invalid	Initial Release
V1.1	1 st	Jan. 09,2018	Invalid	Modify the power of 5.2G WIFI
V1.2	2 nd	Jan. 12,2018	Valid	Added the equation on page 55.

The results shown in 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>.

**Attestation of Global Compliance**

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

Test Report Certification

Manufacturer Name	Shenzhen Xin Kingbrand Enterprises Co.,Ltd
Manufacturer Address	KingBrand Industrial Zone, Nanpu Road, Shang Liao Lin Pikeng, Shajing Town, Baoan District, Shenzhen City, Guangdong Province, China
Factory Name	Shenzhen Xin Kingbrand Enterprises Co.,Ltd
Factory Address	KingBrand Industrial Zone, Nanpu Road, Shang Liao Lin Pikeng, Shajing Town, Baoan District, Shenzhen City, Guangdong Province, China
Product Designation	TD-LTE Digital Mobile Phone
Brand Name	NOMU
Model Name	T18
EUT Voltage	DC3.8V by battery
Applicable Standard	EN 50360:2017; EN62209-1:2016; EN62209-2:2010; EN50566:2017
Test Date	Oct. 21,2017 to Nov. 21,2017
Performed Location	Attestation of Global Compliance(Shenzhen) Co., Ltd. 2 F, Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang Street, Bao'an District, Shenzhen, China
Report Template	AGCRT-EC-4G/SAR (2016-01-01)

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

Tested By



Eric Zhou(Zhou Yongkang)

Nov. 21,2017

Checked By



Angela Li(Li Jiao)

Jan. 12,2018

Authorized By

Forrest Lei(Lei Yonggang)

Authorized Officer

Jan. 12,2018

The results shown in 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>.



TABLE OF CONTENTS

1. SUMMARY OF MAXIMUM SAR VALUE	5
2. GENERAL INFORMATION	6
2.1. EUT DESCRIPTION	6
3. SAR MEASUREMENT SYSTEM	8
3.1. THE SATIMO SYSTEM USED FOR PERFORMING COMPLIANCE TESTS CONSISTS OF FOLLOWING ITEMS	8
3.2. COMOSAR E-FIELD PROBE	9
3.3. ROBOT	9
3.4. VIDEO POSITIONING SYSTEM	10
3.5. DEVICE HOLDER	10
4. SAR MEASUREMENT PROCEDURE	12
4.1. SPECIFIC ABSORPTION RATE (SAR)	12
4.2. SAR MEASUREMENT PROCEDURE	13
5. TISSUE SIMULATING LIQUID	16
5.1. THE COMPOSITION OF THE TISSUE SIMULATING LIQUID	16
5.2. TISSUE DIELECTRIC PARAMETERS FOR HEAD AND BODY PHANTOMS	16
5.3. TISSUE CALIBRATION RESULT	17
6. SAR SYSTEM CHECK PROCEDURE	18
6.1. SAR SYSTEM CHECK PROCEDURES	18
6.2. SAR SYSTEM CHECK	19
7. EUT TEST POSITION	21
7.1. DEFINE TWO IMAGINARY LINES ON THE HANDSET	21
7.2. CHEEK POSITION	22
7.3. TILT POSITION	22
7.4. BODY WORN POSITION	23
8. SAR EXPOSURE LIMITS	24
9. TEST EQUIPMENT LIST	25
10. MEASUREMENT UNCERTAINTY	26
11. CONDUCTED POWER MEASUREMENT	29
12. TEST RESULTS	56
12.1. SAR TEST RESULTS SUMMARY	56
APPENDIX A. SAR SYSTEM CHECK DATA	74
APPENDIX B. SAR MEASUREMENT DATA	94
APPENDIX C. TEST SETUP PHOTOGRAPHS	386
APPENDIX D. CALIBRATION DATA	394

The results shown in 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>.



1. SUMMARY OF MAXIMUM SAR VALUE

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

Frequency Band	Highest Reported 10g-SAR(W/Kg)		SAR Test Limit (W/Kg)
	Head	Body-worn (with 5mm separation)	
GSM 900	0.014	0.162	2.0
DCS 1800	0.192	0.555	
WCDMA Band I	0.195	0.405	
WCDMA Band VIII	0.026	0.199	
LTE Band 1	0.350	0.548	
LTE Band 3	0.465	0.918	
LTE Band 7	0.208	0.627	
LTE Band 8	0.042	0.189	
LTE Band 20	0.121	0.329	
LTE Band 38	0.053	0.201	
LTE Band 40	0.086	0.155	
WIFI 2.4G	0.097	0.076	
Simultaneous Reported SAR	0.973		
SAR Test Result	PASS		

This device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (2.0W/Kg).

The results shown in 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>.



2. GENERAL INFORMATION

2.1. EUT Description

General Information	
Product Designation	TD-LTE Digital Mobile Phone
Test Model	T18
Hardware Version	T18_MB_V1.0
Software Version	smartphone_V1.0.3_2017.09.05
Device Category	Portable
RF Exposure Environment	Uncontrolled
Antenna Type	Internal
GSM and GPRS&EGPRS	
Support Band	<input checked="" type="checkbox"/> GSM 900 <input type="checkbox"/> DCS 1800 (EU Frequency) <input checked="" type="checkbox"/> GSM 850 <input checked="" type="checkbox"/> PCS 1900 (none EU Frequency)
GPRS & EGPRS Type	Class B
GPRS & EGPRS Class	Class 12(1Tx+4Rx, 2Tx+3Rx, 3Tx+2Rx, 4Tx+1Rx)
TX Frequency Range	GSM900:880-915MHz ; DCS1800:1710-1785MHz
RX Frequency Range	GSM900:925-960MHz ; DCS1800:1805-1880MHz
Release Version	R99
Type of modulation	GMSK for GSM/GPRS; GMSK & 8-PSK for EGPRS
Antenna Gain	GSM900:0.32dBi; DCS1800:0.56dBi
Max. Average Power	GSM900:31.62dBm; DCS1800:28.83dBm
Bluetooth	
Bluetooth Version	<input type="checkbox"/> V2.0 <input type="checkbox"/> V2.1 <input type="checkbox"/> V2.1+EDR <input checked="" type="checkbox"/> V3.0 <input type="checkbox"/> V3.0+HS <input checked="" type="checkbox"/> V4.0 <input type="checkbox"/> V4.1
Operation Frequency	2402~2480MHz
Type of modulation	<input checked="" type="checkbox"/> GFSK <input checked="" type="checkbox"/> π/4-DQPSK <input checked="" type="checkbox"/> 8-DPSK
EIRP	0.99dBm
Antenna Gain	1dBi
WIFI	
WIFI Specification	<input type="checkbox"/> 802.11a <input checked="" type="checkbox"/> 802.11b <input checked="" type="checkbox"/> 802.11g <input checked="" type="checkbox"/> 802.11n(20) <input checked="" type="checkbox"/> 802.11n(40)
Operation Frequency	2412~2472MHz
EIRP	11b:13.15dBm, 11g:9.00dBm, 11n(20):9.18dBm, 11n(40):9.87dBm
Antenna Gain	1dBi
5.2G WIFI	
WIFI Specification	<input checked="" type="checkbox"/> 802.11a20 <input checked="" type="checkbox"/> 802.11n(20) <input checked="" type="checkbox"/> 802.11ac20 <input checked="" type="checkbox"/> 802.11n(40) <input checked="" type="checkbox"/> 802.11ac40
Operation Frequency	5.180 GHz~5.250GHz
EIRP	11a20:9.48dBm, 11n(20):9.60dBm, 11ac(20):9.70dBm, 11n(40):9.38dBm, 11ac(40): 9.39dBm

The results shown in 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>.

