



# RF EXPOSURE REPORT

Report No.: 20230717G07506X-W12

**Product Name:** Mobile Computer

Model No.: XT40

FCC ID: UTWXT40WA

IC: 6914A-XT40WA

**Applicant:** Janam Technologies LLC

Address: 100 Crossways Park West Suite 105 Woodbury, NY 11797

**Dates of Testing:** 07/05/2023 - 08/17/2023

**Issued by:** CCIC Southern Testing Co., Ltd.

Electronic Testing Building, No. 43 Shahe Road, Xili Street,

Lab Location: Nanshan District, Shenzhen, Guangdong, China.

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# **Test Report**

Product.....: Mobile Computer

Brand Name....: Janam

Trade Name .....: Janam

Applicant...... Janam Technologies LLC

11797

Manufacturer.....: Janam Technologies LLC

Manufacturer Address.....: 100 Crossways Park West Suite 105 Woodbury, NY

11797

Test Standards....: 47 CFR Part 2.1093

RSS-102 issue 5 Amendment 1, (February 2021)

Test Result.....: Pass

Chuiwang Zhang, Test Engineer

Chris You, Senior Engineer

**Approved by.....:** 2023.09.04

Yang Fan, Manager



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Change History				
Issue	Date	Reason for change		
1.0 2023.09.04		First edition		



# 1. GENERAL INFORMATION

# 1.1. EUT Description

Product Name	Mobile Computer
Model No.	XT40
Hardware Version	SQ51Q_MB
Software Version	XT40_CN_XX_WE_DS_R02_D_20230604
Device Type	Portable Device
EUT supports Radios application	NFC
Frequency Range	13.553~13.567MHz
Modulation Type	ASK
Antenna gain	0 dBi
Antenna Type	Internal Antenna



# 1.2. EUT Description

EUT has been tested according to the following standards.

No.	Identity	Document Title		
1	47 CFR Part 1	Practice and Procedure		
2	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General		
2		Rules and Regulations		
2	KDB 447498 D01 General	RF Exposure Procedures and Equipment Authorization		
3	RF Exposure Guidance v06	Policies for Mobile and Portable Devices		
4	RSS-102 issue 5	Radio Frequency (RF) Exposure Compliance of		
4		Radiocommunication Apparatus (All Frequency Bands)		

### 1.3. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Sep. 30th, 2023.

**ISED Registration: 11185A** 

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Sep. 30th, 2023.

CAB number: CN0064

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

### 1.4. Laboratory Location

Company Name:	CCIC Southern Testing Co., Ltd.
Address:	Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan
Address.	District, Shenzhen, Guangdong, China



# 2. Technical Requirements Specification in CFR Title 47 Part 2.1093

#### 2.1. Evaluation method

According to KDB 447498 D01 General RF Exposure Guidance v06, clause 4.3. General SAR test exclusion guidance:

- c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):
  - 1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by  $[1 + \log(100/f_{(MHz)})]$
  - 2) For test separation distances  $\leq$  50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$
  - 3) SAR measurement procedures are not established below 100 MHz.

#### 2.2. Evaluation Results

Frequency	Field strength	Radiated Power	Conducted power	Exclusion Threshold
(MHz)	$(dB\mu V/m@3m)$	(EIRP)(mW)	(mW)	Level(mW)
13.56	-17.58	0	0	443

#### Notes:

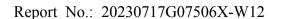
Conducted power = Radiated Power (EIRP) - Antenna Gain.

 $EIRP[dBm] = E[dB\mu V/m] - 95.2 = -17.58dB\mu V/m - 95.2 = -112.78dBm \approx 0mW.$ 

Exclusion Threshold Level =  $[474]*(1+\log(100/f_{(MHz)}))]/2 = 433$ mW.

#### 2.3. Conclusion

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.





# 3. Technical Requirements Specification in RSS-102 issue 5

#### 3.1. Evaluation method

RSAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1.

Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance 4,5

Frequency	Exemption Limits (mW)				
(MHz)	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency	Exemption Limits (mW)				
(MHz)	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW

#### 3.2. Evaluation Results

Frequency	Field strength	Radiated Power	Conducted power	Distance	Exemption
(MHz)	$(dB\mu V/m@3m)$	(EIRP)(mW)	(mW)	(mm)	Limits (mW)
13.56	-17.58	0	0	<u>≤</u> 5	71

Notes:

Conducted power = Radiated Power (EIRP) - Antenna Gain.

 $EIRP[dBm] = E[dB\mu V/m] - 95.2 = -17.58dB\mu V/m - 95.2 = -112.78dBm \approx 0mW.$ 



# 3.3. Conclusion

According to the RSS-102 issue 5 Radio Frequency (RF) Exposure Compliance section 2.5.1 determine the device is exclusion from SAR test.

\*\* END OF REPORT \*\*