



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



RF EXPOSURE EVALUATION REPORT

Applicant: Feitian Technologies Co., Ltd.

Address: Floor 17th, Tower B, Huizhi Mansion, No.9 Xueqing Road, Haidian District, Beijing, China

FCC ID: ZD3FTM200

Product Name: Android POS Terminal

Standard(s): 47 CFR §1.1307

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR230743940-001

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230743940-00I	Original Report	2023/10/17

1. RF EXPOSURE EVALUATION

1.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2 f$.
1,500-100,000	$19.2 R^2$.

1.2 Measurement Result

Radio	Frequency (MHz)	$\lambda / 2 \Pi$ (mm)	Distance (mm)	Exemption ERP (mW)	Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP	
							dBm	mW
BT/WiFi Module BLE	2402-2480	19.88	200	768	-2	0.82	-3.33	0.46
BT/WiFi Module BDR/EDR	2402-2480	19.88	200	768	3	0.82	1.67	1.47
BT/WiFi Module 2.4G WLAN	2412-2462	19.80	200	768	17	0.82	15.67	36.90
BT/WiFi Module 5.2G WLAN	5180-5240	9.22	200	768	14	-0.61	11.24	13.30
BT/WiFi Module 5.3G WLAN	5260-5320	9.08	200	768	14	0.24	12.09	16.18
BT/WiFi Module 5.6G WLAN	5500-5720	8.68	200	768	14	2.87	14.72	29.65
BT/WiFi Module 5.8G WLAN	5745-5825	8.31	200	768	13	3.40	14.25	26.61
WCDMA B2	1850-1910	25.81	200	768	23	-1.30	19.55	90.16
WCDMA B4	1710-1755	27.92	200	768	22	-1.31	18.54	71.45
WCDMA B5	824-849	57.94	200	422	24	1.36	23.21	209.41
LTE B2	1850-1910	25.81	200	768	23	-1.30	19.55	90.16
LTE B4	1710-1755	27.92	200	768	22	-1.31	18.54	71.45
LTE B5	824-849	57.94	200	422	24	1.36	23.21	209.41
LTE B12	699-716	68.31	200	358	24	2.81	24.66	292.42
LTE B14	788-798	60.59	200	403	25	-1.00	21.85	153.11
LTE B13	777-787	61.45	200	398	24	-1.37	20.48	111.69
LTE B66	1710-1780	27.92	200	768	23	-1.31	19.54	89.95
LTE B71	663-698	72.02	200	339	23	2.81	23.66	232.27

The WiFi and WWAN can transmit simultaneously.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k}$$

$$= P_{WWAN} / P_{th} + P_{BT/WiFi Module 2.4G WLAN} / P_{th}$$

$$= 292.42/358 + 36.90/768$$

$$= 0.86$$

$$< 1.0$$

Result: The device meet FCC MPE at 20 cm distance.

===== END OF REPORT =====