



FCC TEST REPORT

FCC ID: 2ART3-BT100

Product	:	BT 100
Model Name	:	BT 100
Brand	:	LONSDOR
Report No.	:	PTC25111402101E-FC03
Prepared for		
Shenzhen Lonsdor Technology Co.,Ltd.		
No.201-203,Block B3,Fuhai B3 Industrial Zone,Fuhai Ave,FuyongSt.,Bao'an,Shenzhen		
Prepared by		
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TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Lonsdor Technology Co.,Ltd.
Address : No.201-203,Block B3,Fuhai B3 Industrial Zone,Fuhai Ave,FuyongSt.,Bao'an,Shenzhen
Manufacture's name : Shenzhen Lonsdor Technology Co.,Ltd.
Address : No.201-203,Block B3,Fuhai B3 Industrial Zone,Fuhai Ave,FuyongSt.,Bao'an,Shenzhen
Product name : BT 100
Model name : BT 100
Test procedure : FCC CFR47 Part 1.1307(b)(1)
Test Date : Dec 06, 2025 to April 21, 2026
Date of Issue : April 21, 2026
Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read 'Jack Zhou'.

Jack Zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read 'Simon Pu'.

Simon Pu / Manager



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Report No.: PTC25111402101E-FC03

2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	FCC CFR47 Part 1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		



3 General Information

3.1 General Description of E.U.T.

Product Name	:	BT 100
Model Name	:	BT 100
Specification	:	BDR+ EDR BLE
Operation Frequency	:	2402-2480MHz
Number of Channel	:	79 channels for BDR+EDR 40 channels for BLE
Type of Modulation	:	GFSK, $\pi/4$ -DQPSK
Antenna installation	:	PCB antenna
Antenna Gain	:	0.02 dBi
Power supply	:	Input: DC 12V/300mA
Hardware Version	:	V2.4
Software Version	:	V10005



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Result
2480_2DH5	1.01	3.51	3.51±1	2.824880	0.000566	1	Pass
2480_BLE_2M	1.01	2.81	2.81±1	2.404400	0.000482	1	Pass

Note: BR+EDR and BLE can't Simultaneous transmission.

*****THE END REPORT*****