

# TEST REPORT

of

## FCC MPE REQUIREMENT

Product : **TPMS Programming Tool**  
Brand Name: **Mobiletron**  
Model: **TX-PT004**  
Model Difference: **N/A**  
Applicant: **Mobiletron Electronics Co., Ltd.**  
Address: **85, Sec.4, Chung-Ching Rd., Ta-Ya District, Taichung  
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Test Performed by:

**International Standards Laboratory Corp. LT Lab.**



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Report No.: **ISL-21LR278FMPE**  
Issue Date :**2022/03/02**



Test results given in this report apply only to the specific sample(s) tested and are traceable to national or international standard through calibration of the equipment and evaluating measurement uncertainty herein.

The uncertainty of the measurement does not include in consideration of the test result unless the customer required the determination of uncertainty via the agreement, regulation or standard document specification.

This test report shall not be reproduced except in full, without the written approval of International Standards Laboratory Corp.

## VERIFICATION OF COMPLIANCE

**Applicant:** Mobiletron Electronics Co., Ltd.  
**Product Description:** TPMS Programming Tool  
**Brand Name:** Mobiletron  
**Model No.:** TX-PT004  
**Model Difference:** N/A  
**Date of test:** 2021/11/24 ~ 2022/02/26  
**Date of EUT Received:** 2021/11/24

### We hereby certify that:

All the tests in this report have been performed and recorded in accordance with the standards described above and performed by an independent electromagnetic compatibility consultant, International Standards Laboratory Corp.

The test results contained in this report accurately represent the measurements of the characteristics and the energy generated by sample equipment under test at the time of the test. The sample equipment tested as described in this report is in compliance with the limits of above standards.

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*Weitin Chen / Senior Engineer*

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## 1. Description of Equipment under Test (EUT)

### General:

Product Name:	TPMS Programming Tool
Brand Name:	Mobiletron
Model Name:	TX-PT004
Model Difference:	N/A
Power Supply:	3Vdc from AAA Battery

### BLE:

Bluetooth Version	V4.2
Frequency Range	2402MHz-2480MHz
Tune-up Power	3.837 dBm Peak
Modulation Type	GFSK
Channel Number	40 channels, 2MHz step
Antenna Designation	Chip Antenna: 1.69dBi

## 2. Maximum Permissible Exposure (MPE)

### 2.1 Standard Applicable

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

**FCC: According to §1.1310 and §2.1091 RF exposure is calculated.**

Limits for Maximum Permissive Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	F/1500	30
1500-15000	/	/	1.0	30

F = frequency in MHz

\* = Plane-wave equipment power density

### 3. Evaluation Result:

20 cm

Frequency band	Conducted power (dBm)	Antenna gain (dBi)	Tune-Up Tolerance (dB)	EIRP (dBm)	MPE (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2402-2480	3.837	1.69	2	7.527	0.00112572	1

Max Power(mW) =  $10^{((\text{Max Power}(\text{dBm}) + \text{Tune-up tolerance}(\text{dB})) / 10)}$

Result = Max Power (mW) / min. distance(mm) \*  $\sqrt{f(\text{GHz})}$

~ End ~