



# RF Exposure Report

**Report No.** SST240517005EF02-P01-L  
**Applicant:** Mobile Pixels Inc  
**Address of Applicant:** 5268 Rivergrade Road, Irwindale CA 91706, United States of America  
**Product Name:** Tetra Keyboard  
**Trade Mark:** /  
**FCC ID:** 2BKJC-109-760664L  
**Test Report Form No:** SST-RD-7.5-02-E01(A/0)

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC KDB 447498 D04. Test results reported herein relate only to the item(s) tested.

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### 3 RF EXPOSURE EVALUATION MAXIMUM PERMISSIBLE EXPOSURE (MPE)

#### 3.1 Introduction

This document is prepared to show compliance with the RF Exposure requirements as required in §1.1307 of the FCC Rules and Regulations and RSS-102 of Industry Canada.

The limit for maximum permissible exposure(MPE), specific in §1.1307of the FCC Rules and KDB 447498 D04 were list in below

- a) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.
- b) the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula.

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}}(d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and  $f$  is in GHz,  $d$  is the separation distance (cm), and  $ERP_{20 \text{ cm}}$  is per Formula (B.1). The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

| Frequency (MHz) | Distance (mm) |    |    |     |     |     |     |     |     |     |
|-----------------|---------------|----|----|-----|-----|-----|-----|-----|-----|-----|
|                 | 5             | 10 | 15 | 20  | 25  | 30  | 35  | 40  | 45  | 50  |
| 300             | 39            | 65 | 88 | 110 | 129 | 148 | 166 | 184 | 201 | 217 |
| 450             | 22            | 44 | 67 | 89  | 112 | 135 | 158 | 180 | 203 | 226 |
| 835             | 9             | 25 | 44 | 66  | 90  | 116 | 145 | 175 | 207 | 240 |
| 1900            | 3             | 12 | 26 | 44  | 66  | 92  | 122 | 157 | 195 | 236 |
| 2450            | 3             | 10 | 22 | 38  | 59  | 83  | 111 | 143 | 179 | 219 |
| 3600            | 2             | 8  | 18 | 32  | 49  | 71  | 96  | 125 | 158 | 195 |
| 5800            | 1             | 6  | 14 | 25  | 40  | 58  | 80  | 106 | 136 | 169 |

- c) For multiple RF sources

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

### 3.2 MPE Calculation

| Type | Frequency (MHz) | Antenna Gain (dBi) | Output power (dBm) | ERP (dBm) | ERP (mW) | Limit (mW, d=0.5cm) | Ratio (%) | Result |
|------|-----------------|--------------------|--------------------|-----------|----------|---------------------|-----------|--------|
| BT   | 2480            | 2.34               | 2.04               | 2.23      | 1.67     | 2.7                 | 61.5      | PASS   |

### 4 Conclusion

The device meets the mobile RF exposure limit at a minimum separation distance as specified in §2.1093 of the FCC Rules and Regulations and Health Canada Safety Code 6. An appropriate RF exposure compliance statement will be placed in the user's manual.

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