

## **RF Exposure Evaluation**

## FCC ID: XUJCRT511SV2

According to KDB 447498 D04 Interim General RF Exposure Guidance V01 . and part 2.1093.

## **EUT Specification**

Product Name:	SMART TPMS DIAGNOSTIC SYSTEM
Trade Mark:	LAUNCH
Model/Type Reference:	Creader TPMS 511S V2
Listed Model(s):	Creader TPMS 5011 V2
Model Differences:	All these models are identical in the same PCB, layout, electrical circuit and enclosure. The difference is the color of the plastic sleeve.
Frequency Band (Operating)	RF ID: 125kHz
Device Category	<ul> <li>Portable (&lt;5mm separation)</li> <li>Mobile (&gt;20cm separation)</li> <li>Fixed (&gt;20cm separation)</li> <li>Others</li> </ul>
Antenna Diversity	Single antenna Multiple antennas TX diversity RX diversity TX/RX diversity
Antenna Gain (Max)	0dBi

CTC Laboratories, Inc. Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



## **Measurement Result**

eirp = pt x gt =  $(E \times d)^2/30$ where: pt = transmitter output power in watts, gt = numeric gain of the transmitting antenna (unitless), E = electric field strength in V/m, ---  $10^{((dBuV/m)/20)}/10^6$ d = measurement distance in meters (m), --- 3m So pt =  $(E \times d)^2/(30 \times gt)$ 

125kHz Field strength = 75.03 dBuV/m @3m Ant gain 0dBi, Ant numeric gain = 1

So pt = { $[10^{(75.03/20)}/10^6 \times 3]^2/(30 \times 1)$ } × 1000 mW = 0.01 mW

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

CTC Laboratories, Inc. Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

For anti-fake verification, please visit the official website of China Inspection And Testing Society : <u>yz.cnca.cn</u>