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	☒Portable (<5mm separation) ☐Mobile (>20cm separation) ☐Fixed (>20cm separation) ☐Others ___
Antenna Diversity	☒Single antenna ☐Multiple antennas ☐TX diversity ☐RX diversity ☐TX/RX diversity
Antenna Gain (Max)	0dBi

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 = $\{[10^{(75.03/20)}/10^6 \times 3]^2/(30 \times 1)\} \times 1000$ 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.

************************THE END*************************