

# Safety Human Exposure

## 1.1 Radio Frequency Exposure Compliance

### 1.1.1 Electromagnetic Fields

RESULT:

Pass

#### Test Specification

Test item:	TPMS Sensor
Identification / Type No.:	2D000689
FCC ID:	2ALBS2D000689
IC:	27971-S200235500S
HVIN:	HW:1.0
Test standard:	CFR47 FCC Part 2: Section 2.1093 CFR47 FCC Part 1: Section 1.1310 FCC KDB 447498 D04 Interim General RF Exposure Guidance v01 RSS-102 Issue 6

#### ➤ Product Classification

This device defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that the RF source's radiating structure(s) is/are within 20 centimeters of the body of the user.

#### ➤ Radio Frequency Exposure Limit

##### a. For FCC:

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

##### b. For IC:

When the operating frequency of the device is between two frequencies located in table 11, linear interpolation shall be applied for the applicable separation distance. If the separation distance of the device is between two distances located in table 11, linear interpolation may be applied for the applicable frequency. Alternatively, the limit corresponding to the smaller distance may be employed.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

## ➤ EUT RF Exposure Evaluation

### Evaluation for Standalone Transmission Operation

Frequency [MHz]	Measured E field Peak [dB $\mu$ V/m]	E.I.R.P [dBm]	E.I.R.P [mW]	Distance [mm]	FCC exemption [mW]	IC Limit [mW]
433.92	74.7	-20.53	0.01	5	1	32

Note: RF Output Power Refer to CN25MG2F 001

## ➤ Conclusion

Therefore the maximum calculations result of above are meet the requirement of Radio Frequency Exposure limit.