RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	3G, 2G Tracking Device
Model Name	T11012850
FCC ID	SRMT11012820

Date of Test .....

Date (s) of performance of tests ..... July 25, 2018~Aug. 22, 2018

Date of Issue ..... Aug. 27, 2018

Test Result ..... **Pass**

Testing Engineer : 

(Gary Qian)

Technical Manager : 

(Eden Hu)

Authorized Signatory : 

(Jason Zhou)

2. EVALUATION METHOD AND LIMIT

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	($180/f^2$)*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

*Note:

1. f= Frequency in MHz * Plane-wave Equivalent Power Density
2. The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirement for mobile and portable transmitters.

$S=PG/4\pi R^2$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

3. CALCULATION

A minimum test separation distance ≥ 30 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits. The distance must be at least 30 cm and fully supported by the operating and installation configurations of the transmitter and its antenna(s), according to the source-based time-averaged maximum power requirements of § 2.1091(d)(2). In cases where cable losses or other attenuations are applied to determine compliance, the most conservative operating configurations and exposure conditions must be evaluated.

GSM/WCDMA

Test Mode	Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	Power Density (mW/cm^2)	Limit (mW/cm^2)
GSM850	824.2	34.40	2754.23	0	1.00	0.2437	0.55
	836.6	35.09	3228.49	0	1.00	0.2856	0.56
	848.8	34.79	3013.01	0	1.00	0.2665	0.57
GSM1900	1850.2	29.41	872.97	0	1.00	0.0772	1.00
	1880	29.47	885.12	0	1.00	0.0783	1.00
	1909.8	29.28	847.23	0	1.00	0.0749	1.00
WCDMA 850 (RMC)	826.6	21.06	127.64	0	1.00	0.0113	0.55
	836.4	21.09	128.53	0	1.00	0.0114	0.56
	846.4	20.49	111.94	0	1.00	0.0099	0.56
WCDMA 850 (AMR)	826.4	21.11	129.12	0	1.00	0.0114	0.55
	836.4	21.05	127.35	0	1.00	0.0113	0.56
	846.6	20.72	118.03	0	1.00	0.0104	0.56
WCDMA 1900 （RMC）	1852.4	21.12	129.42	0	1.00	0.0114	1.00
	1880	21.49	140.93	0	1.00	0.0125	1.00
	1907.6	21.59	144.21	0	1.00	0.0128	1.00
WCDMA 1900 （AMR）	1852.4	21.08	128.23	0	1.00	0.0113	1.00
	1880	21.37	137.09	0	1.00	0.0121	1.00
	1907.6	21.55	142.89	0	1.00	0.0126	1.00

Note:
1. Only the worst case was recorded in the test report.