1. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

1.1 General Information

Client Information

Applicant:	eMoMo Technology Co., Ltd
Address of applicant:	4th, Floor, Yong He Building ,Tai Wan Industrial Park ,Shi Yan Town ,Bao'an District ,Shen Zhen, 518108, Guangdong, China
Manufacturer:	eMoMo Technology Co., Ltd
Address of manufacturer:	4th, Floor, Yong He Building ,Tai Wan Industrial Park ,Shi Yan Town ,Bao'an District ,Shen Zhen, 518108, Guangdong, China

General Description of EUT:

Product Name:	Dream Temp
Trade Name	eMoMo
Model No.:	E602H4F2
Adding Model(s):	/
Rated Voltage:	DC24V
Battery Capacity	/
Power Adapter:	/
FCC ID:	A4E-E602H4F2
Equipment Type:	Mobile device

Technical Characteristics of EUT:

Frequency Range:	2432MHz
RF Output Power:	1.11dBm (Conducted)
Modulation:	GFSK
Quantity of Channels:	1
Channel Separation:	/
Type of Antenna:	PCB Antenna
Antenna Gain:	2.07dBi

1.2 Standard Applicable

According to §1.1307(b)(1) and KDB 447498 D01 General RF Exposure Guidance v06, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

(a) Limits for Occupational / Controlled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	F/300	6
1500-100000	/	/	5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	F/1500	30
1500-100000	/	/	1	30

Note: f = frequency in MHz: * = Plane-wave equivalents power density

1.3 MPE Calculation Method

$S = (30*P*G) / (377*R^2)$
S = power density (in appropriate units, e.g., mw/cm^2)
P = power input to the antenna (in appropriate units, e.g., mw)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor is normally numeric gain.
R = distance to the center of radiation of the antenna (in appropriate units, e.g., cm)

1.4 MPE Calculation Result

For SRD
Maximum Tune-Up output power: 2(dBm)
Maximum peak output power at antenna input terminal: 1.58(mW)
Prediction distance: >20(cm)
Prediction frequency: 2432 (MHz)
Antenna gain: 2.07 (dBi)
Directional gain (numeric gain): 1.61
The worst case is power density at prediction frequency at 20cm: 0.0005 (mw/cm^2)
MPE limit for general population exposure at prediction frequency: 1.6213 (mw/cm^2)

For Wi-Fi & Bluetooth Internet of Things Module:
Wi-Fi:
The worst case is power density at prediction frequency at 20cm: 0.0837 (mw/cm^2)
Bluetooth:
The worst case is power density at prediction frequency at 20cm: 0.0014 (mw/cm^2)

Mode for Simultaneous Multi-band Transmission
The worst case is SRD+ Wi-Fi
Evaluation Result: 0.0005/1.6213+0.0837/1=0.0840

The worst case is SRD+ Bluetooth
Evaluation Result: 0.0005/1.6213+0.0014/1=0.0017

Limit: 1
Result: Pass