

FCC ID: 2AX5VHUBPNA2ULA

Maximum Permissible Exposure (MPE)

According to FCC 2.1091, FCC 1.1310 and KDB 447498 D04 Interim General RF Exposure Guidance v01: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 * P * G}}{d}$$

$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Average RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 * P * G}{377 * D^2}$$

From the EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

Measurement Result

SRD JWL:

JWL vertical Ant 3: -1.5 dBi

JWL horizontal Ant 4: -0.7 dBi

External Ant:-4dBi

R=20cm

Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density Limits
		(dBm)		tune-up power		Gain		(mW/cm2)	(mW/cm2)
				(dBm)	(mW)	(dBi)	Numeric		
905.00	GFSK	16.602	16±1	17	50.119	-0.60	0.87	0.0087	0.60
915.85	GFSK	16.548	16±1	17	50.119	-0.60	0.87	0.0087	0.61
926.50	GFSK	16.494	16±1	17	50.119	-0.60	0.87	0.0087	0.62

SRD WNG:

WING vertical Ant 1: -1,3 dBi

WING horizontal Ant 2: -0.6 dBi

External Ant:-4dBi

R=20cm

Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density Limits
		(dBm)		tune-up power		Gain			
				(dBm)	(mW)	(dBi)	Numeric		
905.00	GFSK	16.467	16±1	17	50.119	-0.70	0.85	0.0085	0.60
915.85	GFSK	16.437	16±1	17	50.119	-0.70	0.85	0.0085	0.61
926.50	GFSK	16.398	16±1	17	50.119	-0.70	0.85	0.0085	0.62

GSM<E:

Antenna type: FPC antenna,

Band	Frequency Band (MHz)	maximum output power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	R(cm)	S (mW/cm ²)	MPE Limit (mW/cm ²)	Conclusion
GSM850	824 ~ 849	27	-2.3	24.7	295.121	20.00	0.0587	0.5493	Pass
PCS1900	1850 ~ 1910	23	-2	21	125.893	20.00	0.0250	1.0000	
LTE B2	1850 ~ 1910	25.7	-2	23.7	234.423	20.00	0.0466	1.0000	
LTE B4	1710 ~ 1755	25.7	-2	23.7	234.4229	20.00	0.04664	1.000	
LTE B5	824 ~ 849	25.7	-2.3	23.4	218.776	20.00	0.04352	0.54933	
LTE B7	2500 ~ 2570	25.7	-2.55	23.15	206.5380	20.00	0.04109	1.0000	
LTE B66	1710 ~ 1780	25.7	-2	23.7	234.42	20.00	0.04664	1.00	

Antenna type: External antenna,

Band	Frequency Band (MHz)	maximum output power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	R(cm)	S (mW/cm ²)	MPE Limit (mW/cm ²)	Conclusion
GSM850	824 ~ 849	27	-4	23	199.526	20.00	0.0397	0.5493	Pass
PCS1900	1850 ~ 1910	23	-1	22	158.489	20.00	0.0315	1.0000	
LTE B2	1850 ~ 1910	25.7	-1	24.7	295.121	20.00	0.0587	1.0000	
LTE B4	1710 ~ 1755	25.7	-1	24.7	295.1209	20.00	0.05871	1.000	
LTE B5	824 ~ 849	25.7	-4	21.7	147.911	20.00	0.02943	0.54933	
LTE B7	2500 ~ 2570	25.7	0	25.7	371.5352	20.00	0.07391	1.0000	
LTE B66	1710 ~ 1780	25.7	-1	24.7	295.12	20.00	0.05871	1.00	

Note1: WWAN Test data reference to FCC ID: XMR202111EG915ULA

SIMULTANEOUS TRANSMISSIONS

When a number of sources at different frequencies, and/or broadband sources, contribute to the total exposure, it becomes necessary to weigh each contribution relative to the MPE. To comply with the MPE, the fraction of the MPE in terms of E^2 , H^2 (or power density) incurred within each frequency interval should be determined and the sum of all such fractions should not exceed unity. In order to ensure compliance with the MPE for a controlled environment, the sum of the ratios of the power density to the corresponding MPE should not exceed unity. That is

$$\sum_{i=1}^n \frac{S_i}{MPE_i} \leq 1$$

Band	S (mW/cm ²)	MPE Limit (mW/cm ²)	Calculation result	Conclusion
WWAN	0.0587	0.5493	0.12136	Pass
SRD	0.0087	0.60		

Worse case: $0.12136 < 1$

Note1: Max Calculation result = 0.12136 < 1

Note2: For SRD Module, only one module and one single antenna are active at any given time

Conclusion: Pass

Signature: 

Date: 2026-08-25

NAME AND TITLE (Please print or type): alex li/Manager

COMPANY (Please print or type): Shenzhen NTEK Testing Technology Co., Ltd./ No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China