FCC ID:2AIT9-PN602

RF EXPOSURE EVALUATION

According to FCC 1.1310: 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)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	**--**	**--**	**F/300**	**6**
1500-100000	**--**	**--**	**5**	**6**
(B) Limits for General Population/Uncontrol Exposures				
300-1500	**--**	**--**	**F/1500**	**6**
1500-100000	**--**	**--**	**1**	**30**

11.1 Friis transmission formula: Pd= (Pout*G)\ (4*pi*R^2)

Where
Pd= Power density in mW/cm^2
Pout=output power to antenna in mW
G= Numeric gain of the antenna relative to isotropic antenna
Pi=3.1416
R= distance between observation point and center of the radiator in cm(20cm)
Pd the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.
mW=10^(dBm/10)

11.2 Measurement Result

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,
802.11n HT40: 2422-2452MHz,
Power density limited: 1mW/ cm^2
Antenna Type: PCB Antenna
Antenna gain: 1.0dBi,
R=20cm
mW=10^(dBm/10)
802.11b/g/n:

Channe l Freq. (MHz)	modulation	conducted power (mW)	conducted power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Antenna Gain Numeric	Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
2412	802.11b	25.59	14.08	14±1	15	1.26	0.007920	1
2437	802.11b	26.61	14.25	14±1	15	1.26	0.007920	1
2462	802.11b	26.67	14.26	14±1	15	1.26	0.007920	1
2412	802.11g	10.12	10.05	10±1	11	1.26	0.003153	1
2437	802.11g	10.89	10.37	10±1	11	1.26	0.003153	1
2462	802.11g	11.14	10.47	10±1	11	1.26	0.003153	1
2412	802.11n H20	10.50	10.21	10±1	11	1.26	0.003153	1
2437	802.11n H20	11.78	10.71	10±1	11	1.26	0.003153	1
2462	802.11n H20	11.19	10.49	10±1	11	1.26	0.003153	1
2422	802.11n H40	10.52	10.22	10±1	11	1.26	0.003153	1
2437	802.11n H40	10.19	10.08	10±1	11	1.26	0.003153	1
2452	802.11n H40	10.59	10.25	10±1	11	1.26	0.003153	1

Operation Frequency: 824.2MHz~848.8MHz
Power density limited: 0.5495~0.5659mW/ cm^2
Antenna Type: FPCB Antenna
Antenna gain: 1.0dBi,
R=50cm
mW=10^(dBm/10)
GSM 850/GPRS 850:

Channel Freq. (MHz)	modulation	conducted power (mW)	conducted power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Antenna Gain Numeric	Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
824.2	GMSK	1706.08	32.32	31.5±1	32.5	1.26	0.071259	0.5495
836.4		1655.77	32.19	31.5±1	32.5	1.26	0.071259	0.5576
848.8		1674.94	32.24	31.5±1	32.5	1.26	0.071259	0.5659

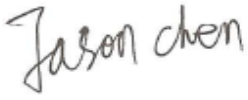
Operation Frequency: 1850.2MHz~1909.8MHz
Power density limited: 1mW/ cm2
Antenna Type: FPCB Antenna
Antenna gain: 1.0dBi,
R=50cm mW=10^(dBm/10)
GSM 1900/GPRS 1900:

Channel Freq. (MHz)	modulation	conducted power (mW)	conducted power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Antenna Gain Numeric	Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
1850.2	8PSK	801.68	29.04	29.5±1	30.5	1.26	0.044961	1
1880.0		827.94	29.18	29.5±1	30.5	1.26	0.044961	1
1909.8		977.24	29.90	29.5±1	30.5	1.26	0.044961	1

simultaneous emission

Power density Limits (mW/cm2) WIFI	Power density Limits (mW/cm2) GSM 850/GPRS 850	Power density Limits (mW/cm2) GSM 1900/GPRS 1900	Calculate Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
0.003153	0.012968	0.044961	0.061239	0.5495

Conclusion:
For the max result : 0.061239≤ 0.5495 for 1g SAR, No SAR is required.



Signature: **Date:** 2017-01-06

NAME AND TITLE (Please print or type): Jason Chen/Manager

COMPANY (Please print or type): Shenzhen NTEK Testing Technology Co., Ltd./ 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen P.R. China.