FCC ID : A5JC35621

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)

According to KDB447498 D01 General RF Exposure Guidance V06

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 (R=20cm)

Pd the limit of MPE, 1mW/cm^2. If we know the maximum gain of the nd total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

11.2 Measurement Result

WIFI

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max tune-up power (dBm)	Antenna Gain Numeric	Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
2.412	11b	15.24	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.437	11b	13.05	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.462	11b	14.82	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.412	11g	14.86	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.437	11g	14.63	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.462	11g	14.75	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.412	11n HT20	14.85	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.437	11n HT20	14.62	13.5dBm to 15.5dBm	15.5	1.41	0.01	1
2.462	11n HT20	14.79	13.5dBm to 15.5dBm	15.5	1.41	0.01	1

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