FCC ID : 2AJNW-BL800

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 (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 DTS

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	14.32	12.5dBm to 14.5dBm	14.5	1.995	0.0112	1
2.437	11b	12.68	12.5dBm to 14.5dBm	14.5	1.995	0.0112	1
2.462	11b	12.52	12.5dBm to 14.5dBm	14.5	1.995	0.0112	1
2.412	11g	17.46	15.5dBm to 17.5dBm	17.5	1.995	0.0223	1
2.437	11g	16.16	15.5dBm to 17.5dBm	17.5	1.995	0.0223	1
2.462	11g	15.56	15.5dBm to 17.5dBm	17.5	1.995	0.0223	1
2.412	11n HT20	17.69	17dBm to 19dBm	19	1.995	0.0315	1
2.437	11n HT20	17.94	17dBm to 19dBm	19	1.995	0.0315	1
2.462	11n HT20	17.60	17dBm to 19dBm	19	1.995	0.0315	1