FCC ID : 2AOU8-Z1518B

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 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

Channel Freq. (MHz)	modulation	conducted power (mW)	EIRP (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	73.45	18.66	18dBm to 20dBm	20	1.58	0.03143	1
2.437	11b	77.80	18.91	18dBm to 20dBm	20	1.58	0.03143	1
2.462	11b	68.39	18.35	18dBm to 20dBm	20	1.58	0.03143	1
2.412	11g	76.74	18.85	18dBm to 20dBm	20	1.58	0.03143	1
2.437	11g	84.14	19.25	18dBm to 20dBm	20	1.58	0.03143	1
2.462	11g	78.89	18.97	18dBm to 20dBm	20	1.58	0.03143	1
2.412	11n HT20	80.72	19.07	18dBm to 20dBm	20	1.58	0.03143	1
2.437	11n HT20	83.75	19.23	18dBm to 20dBm	20	1.58	0.03143	1
2.462	11n HT20	78.16	18.93	18dBm to 20dBm	20	1.58	0.03143	1
2.422	11n HT40	68.23	18.34	18dBm to 20dBm	20	1.58	0.03143	1
2.437	11n HT40	69.34	18.41	18dBm to 20dBm	20	1.58	0.03143	1
2.452	11n HT40	70.15	18.46	18dBm to 20dBm	20	1.58	0.03143	1