MPE Calculation

S = EIRP/(4R2π)

S = Maximum power density (mW/cm2)
P = Power input to the antenna (mW)
G = Numeric power gain of the antenna
R = Distance to the center of the radiation of the antenna
EIRP = Equivalent Isotropic Radiated Power(mW) (=P*G)

Frequency range (MHz)			Electric Field strength (V/m)	Magnetic field strength (A/m)	Power Density (mW/cm2)	Averageing time (minutes)
0.3	~	1.34	614	1.63	*100	30
1.34	~	30	824 / f	2.19 / f	*180 / f2	30
30	~	300	27.5	0.073	0.2	30
300	~	1,500			f / 1500	30
1,500	~	100,000			1	30

Model Name : **a313**

FCC ID : **2AWMDA313**

Separation distance (R) : **20.0 cm**

Modulation	Frequency (MHz)	Measured Maximum Average power	Tune-up tolerance	Max. Power with tune-up tolerance (P)		Antenna Gain (G)		Power Density (S)	Limit of Power Density (S)	Result
		(dBm)	(dB)	(dBm)	(mW)	(dBi)	(numeric)	(mW/cm2)	(mW/cm2)	
RFID	903	27.45	± 1.00	28.45	699.84	5.34	3.42	0.4761	0.60	**PASS**
	916	26.93		27.93	620.87	5.34	3.42	0.4224	0.61	**PASS**
	927	26.90		27.90	616.60	5.34	3.42	0.4195	0.61	**PASS**

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user.