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 : **IDRO900F**
FCC ID : **XVY-IDRO900F-V2**

Antenna Gain(dBic) : **8.65**
Antenna Gain(dBi) : **5.65**
Separation distance (R) : **20.0 cm**

Modulation	Frequency (MHz)	Measured Maximum Output 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	902.75	29.54	± 1.00	30.54	1132.40	5.65	3.67	0.8274	1.00	**PASS**
	915.25	29.53		30.53	1129.80	5.65	3.67	0.8255	1.00	**PASS**
	927.25	29.53		30.53	1129.80	5.65	3.67	0.8255	1.00	**PASS**

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