

1. S-parameters (or scattering parameters) are used to describe how energy can propagate through an electric network. S-Parameters are used to describe the relationship between different ports, when it becomes especially important to describe a network in terms of amplitude and phase versus frequencies, rather than voltages and currents.
2. VSWR (Voltage Standing Wave Ratio) is a measure of how efficiently radio-frequency power is transmitted from a power source, through a transmission line, into a load
3. The radiation pattern or antenna pattern is the graphical representation of the radiation properties of the antenna as a function of space.  
3db beam width: Antenna 3dB Beam width is the angle between the half-power of an antenna pattern or beam over which the relative power is at or above 50% of the peak power.  
beam width: The beamwidth is the angular separation at which the magnitude of the directivity pattern decreases by a certain value from the peak of the main beam.
4. Gain(dBi): Gain (dBi) The ratio of the signal received or transmitted by a given antenna as compared to an isotropic or dipole antenna.
5. Current density ( $A/m^2$ ): The amount of electric current traveling per unit cross-section area. Current densities are strongly affected by the structure and the shape of antenna.

in comparing results, we can see decrease in current density in 2-1 antenna because as the structure and area of antenna is increased which decrease the antenna current density.