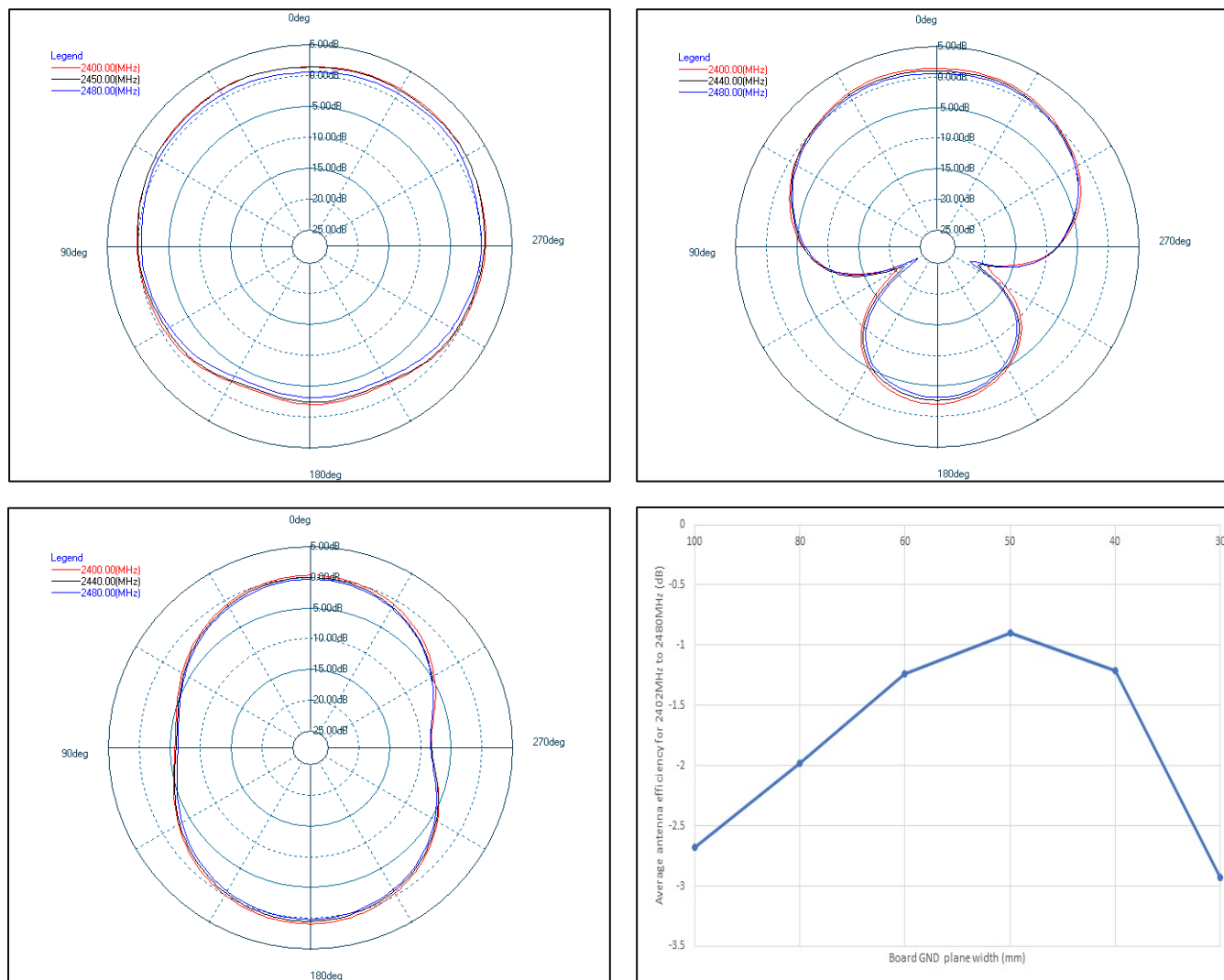


AMA01 - Antenna Specs				
Brand	Model	Type	Peak gain	Impedance
Silicon Labs	MGM210PA32JIA2	Built-in antenna Connectorized Coaxial Dipole	1.86 dBi	50 $\Omega$

### 4.17.1 Antenna Radiation and Efficiency

Typical MGM210P radiation patterns and efficiency for the on-board chip antenna under optimal operating conditions are plotted in the figures that follow. Antenna gain and radiation patterns have a strong dependence on the size and shape of the application PCB the module is mounted on, as well as on the proximity of any mechanical design to the antenna.



**Figure 4.1. Typical 2D Antenna Radiation Patterns and Efficiency**

Top Left:  $\Phi = 0^\circ$ , Top Right:  $\Phi = 90^\circ$ , Bottom Left:  $\Theta = 90^\circ$ , Bottom Right: Radiation Efficiency vs Application Board GND Plane Width