

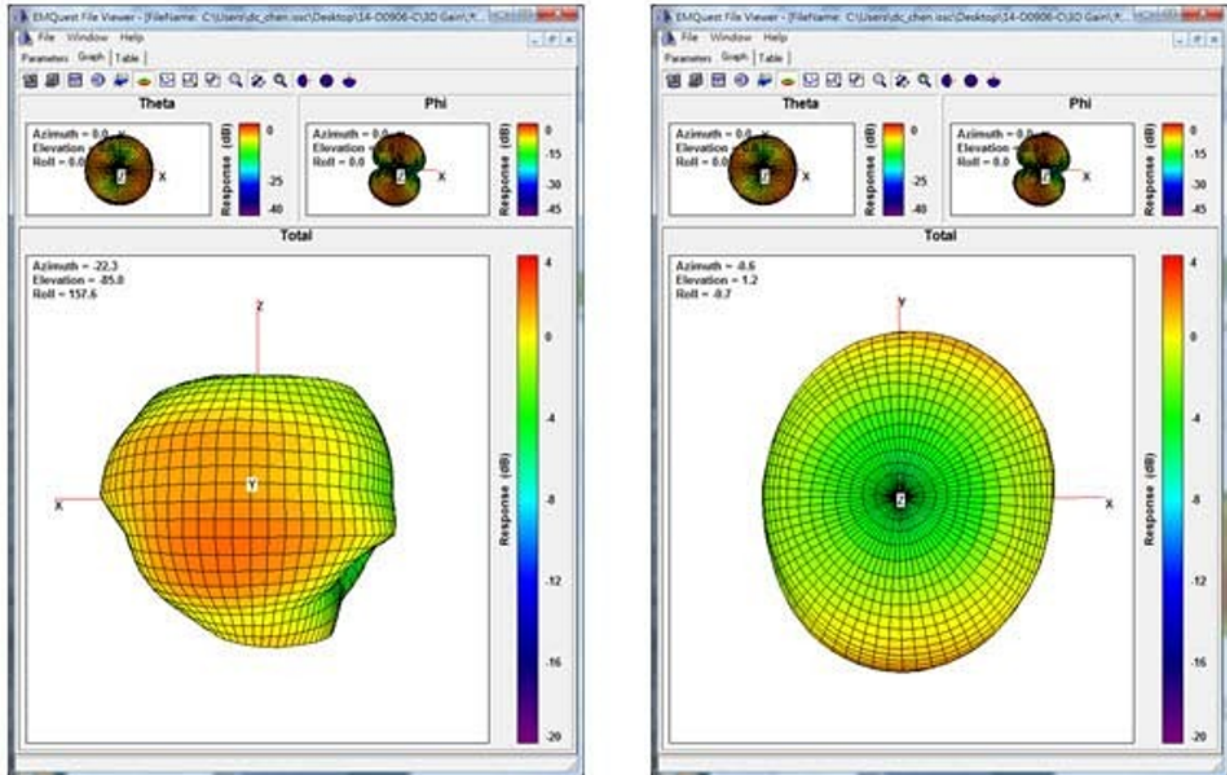
7. PCB Antenna Information

The BM83 module is integrated with a PCB antenna. This chapter provides the radiation pattern, its orientation, and characteristics.

7.1 Antenna Radiation Pattern

The following figure illustrates the 3D radiation pattern of the PCB antenna at 2438 MHz.

Figure 7-1. PCB Antenna 3D Radiation Pattern At 2438 MHz⁽¹⁾



1. The preceding figure illustrates the typical radiation pattern with BM83 module on the 45 mm x 45 mm BM83 Carrier Board.

The following figure illustrates the module orientation for antenna radiation pattern.

Figure 7-2. Module Orientation for Radiation Pattern

Elevation Cut (Phi Axis = 90°)

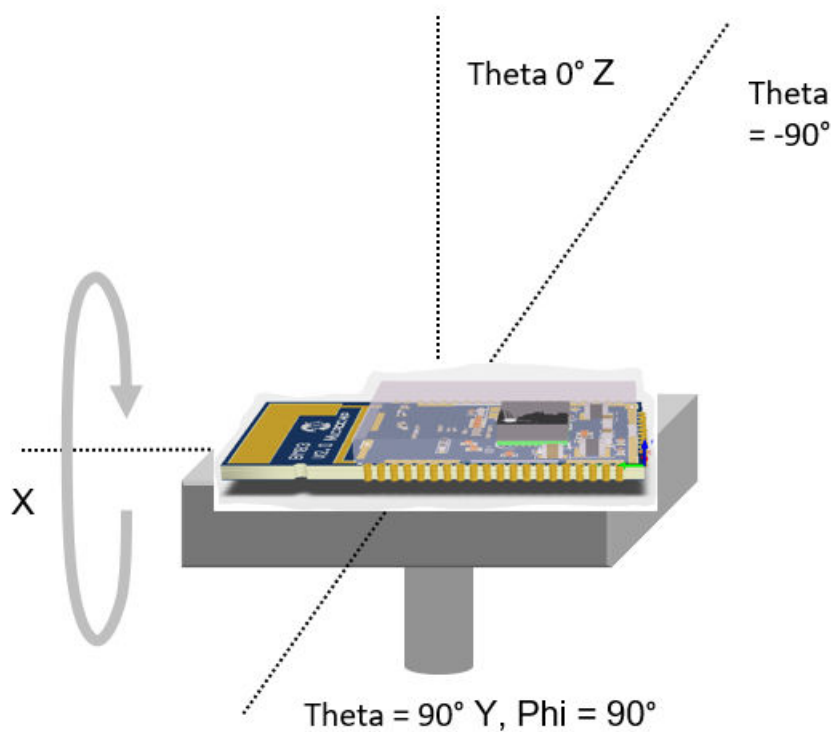
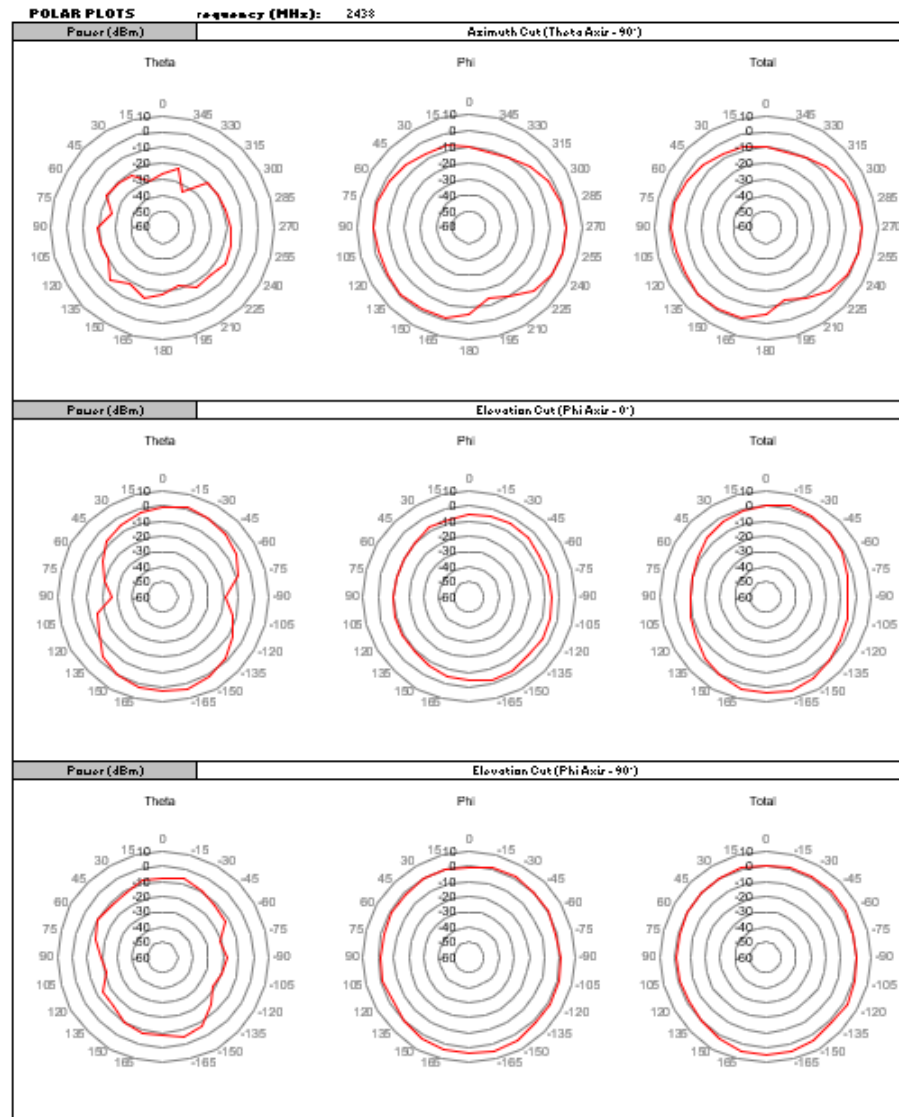


Figure 7-3. Polar Plots⁽¹⁾



1. The preceding figure illustrates the typical radiation pattern with BM83 module on the 45 mm x 45 mm BM83 Carrier Board.

The following table provides the characteristics of PCB antenna with BM83 Module mounted on BM83 Carrier Board, plugged into BM83 EVB.

Table 7-1. BM83 PCB Antenna Characteristics

Parameter	Value
Frequency	2400 MHz to 2480 MHz
Peak Gain	3.5 dBi
Efficiency	80%

BM3 PCB Antenna
Manufacturer: Microchip Technology Inc.
Type: PCB antenna for BM83