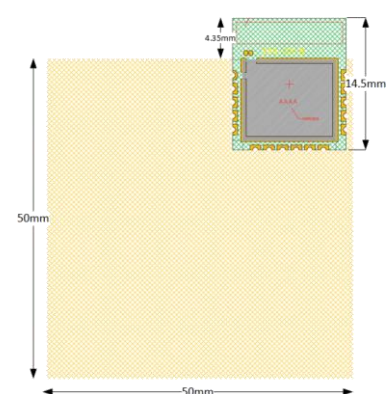


Antenna Manufacturer: Renesas Electronics Corporation

Antenna Efficiency & Antenna Graphs



Antenna Type: PCB Antenna

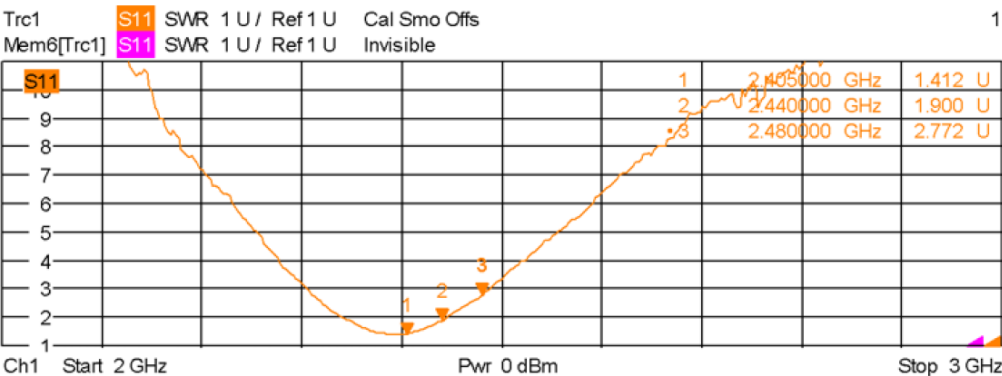
Operation Frequency: 2405~2480 MHz

Peak Gain: -0.5 dBi

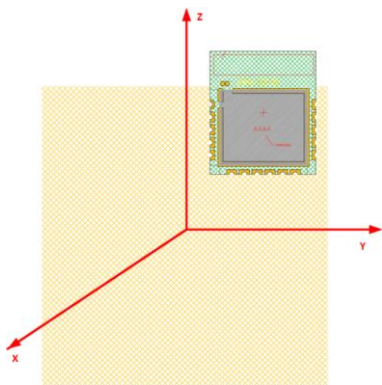
Average Gain: -9.7 dBi

Freq [MHz]	Antenna [%]	efficiency [dB]
2405	52	-2.8
2440	46	-3.4
2480	50	-3.0

The antenna VSWR measurements for the three installation positions are given in the following figures.

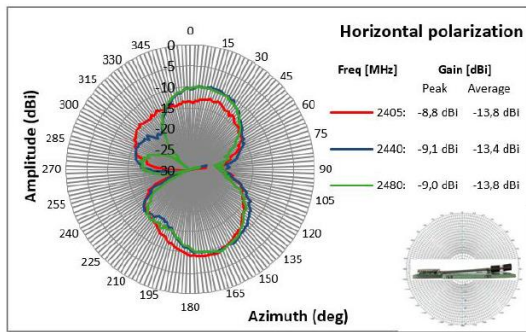


Radiation Pattern



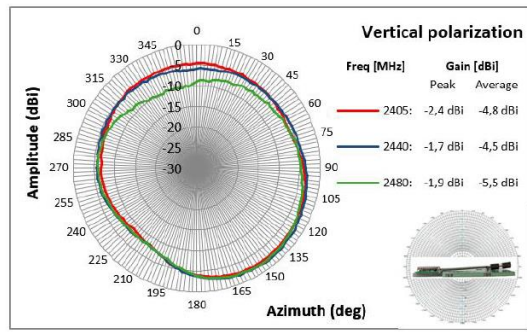
## Radiation Pattern for Antenna Trace

Horizontal polarization

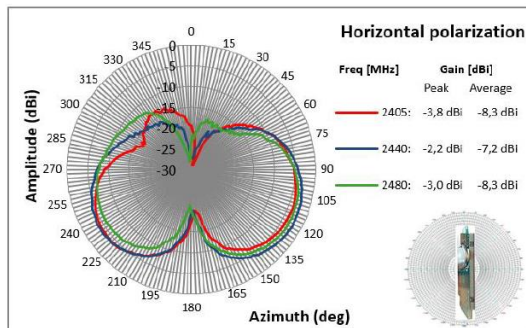


Radiation Pattern for XY-Plane, Horizontal Polarization

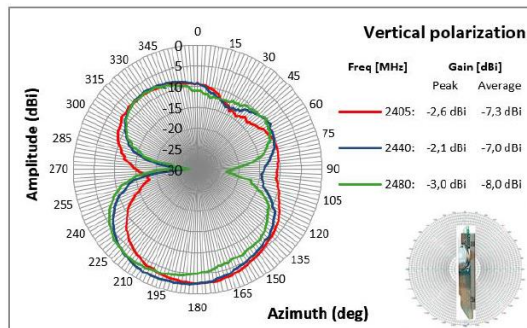
Vertical polarization



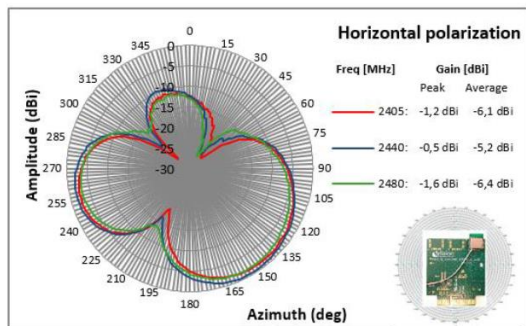
Radiation Pattern for XY-Plane, Vertical Polarization



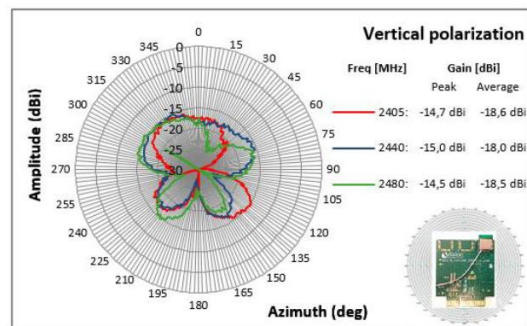
Radiation Pattern for XZ-Plane, Horizontal Polarization



Radiation Pattern for XZ-Plane, Vertical Polarization



Radiation Pattern for YZ-Plane, Horizontal Polarization



Radiation Pattern for YZ-Plane, Vertical Polarization