Antenna Information: DWAM83-TB

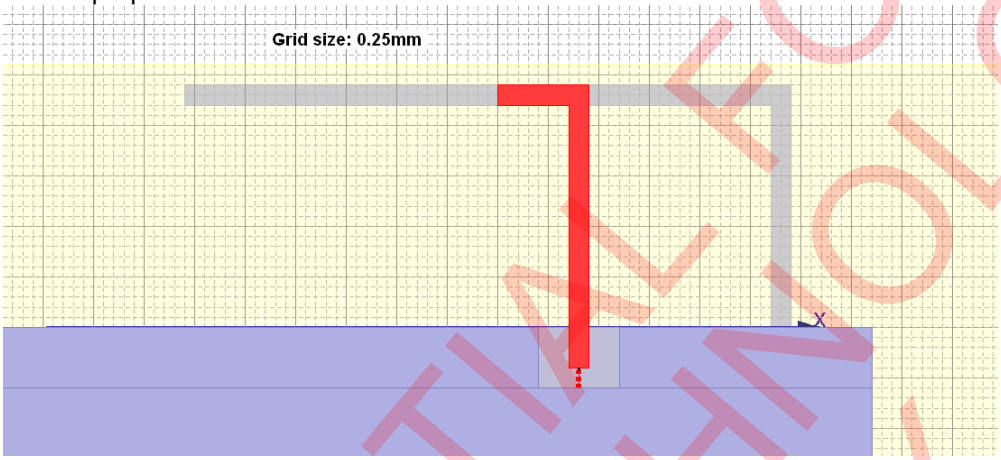
Date: 08-07-2010

Revision History

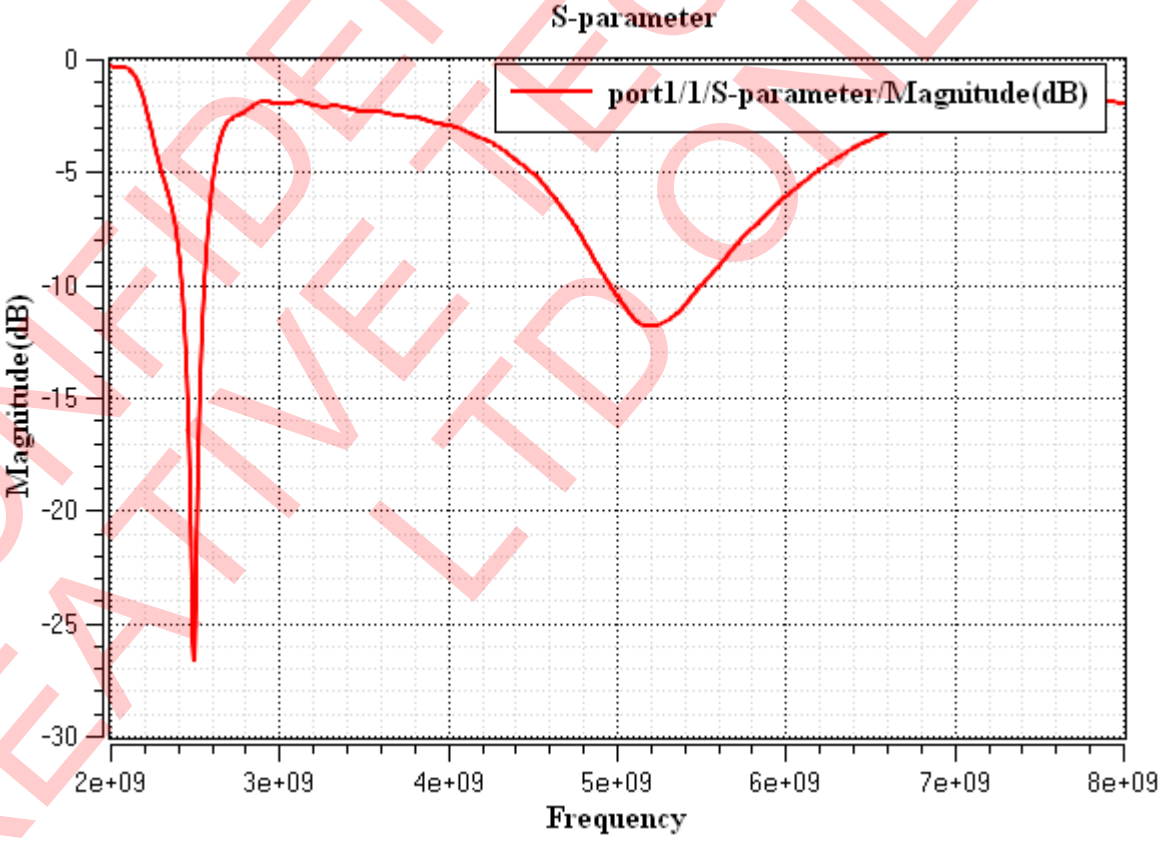
Date	Revision	Change	Author
08-07-2011	0.0	1st Version	SM

1. Antenna Information:

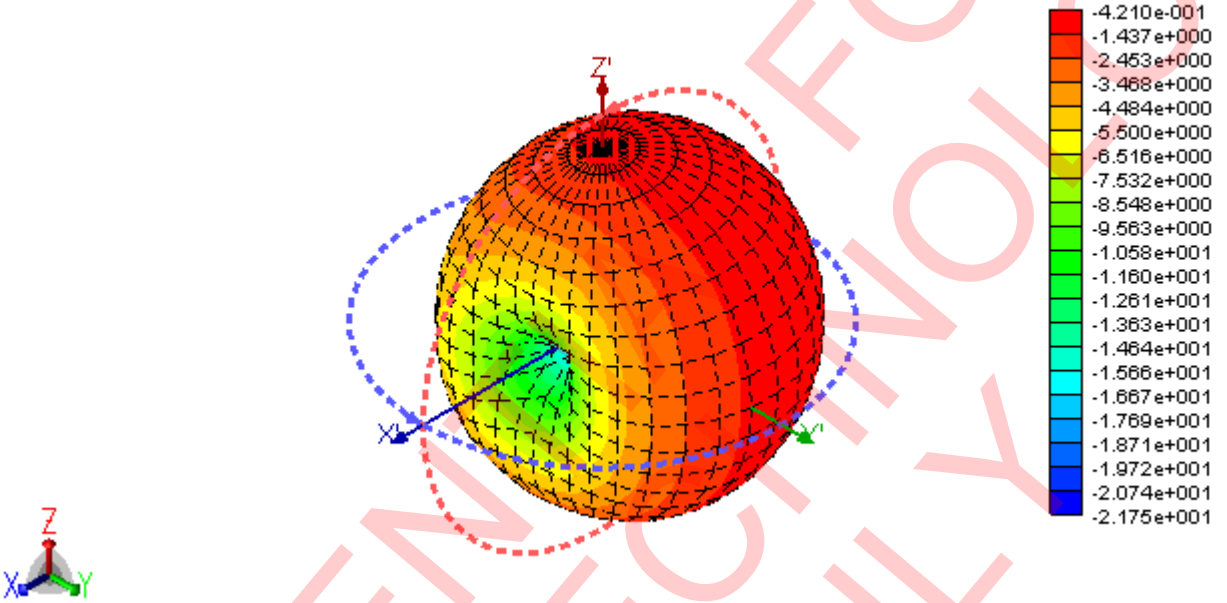
This document describes the antenna proposal for the DWAM83-TB module. A diversity antenna configuration is proposed.



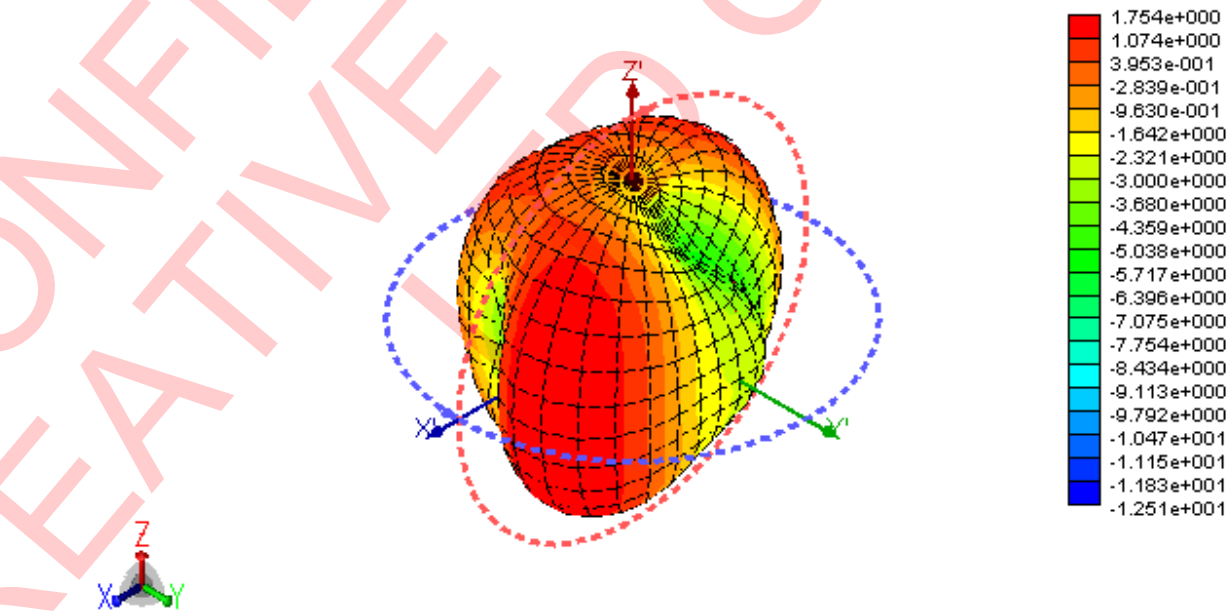
Here below the simulation results of the proposed antenna configuration are depicted:



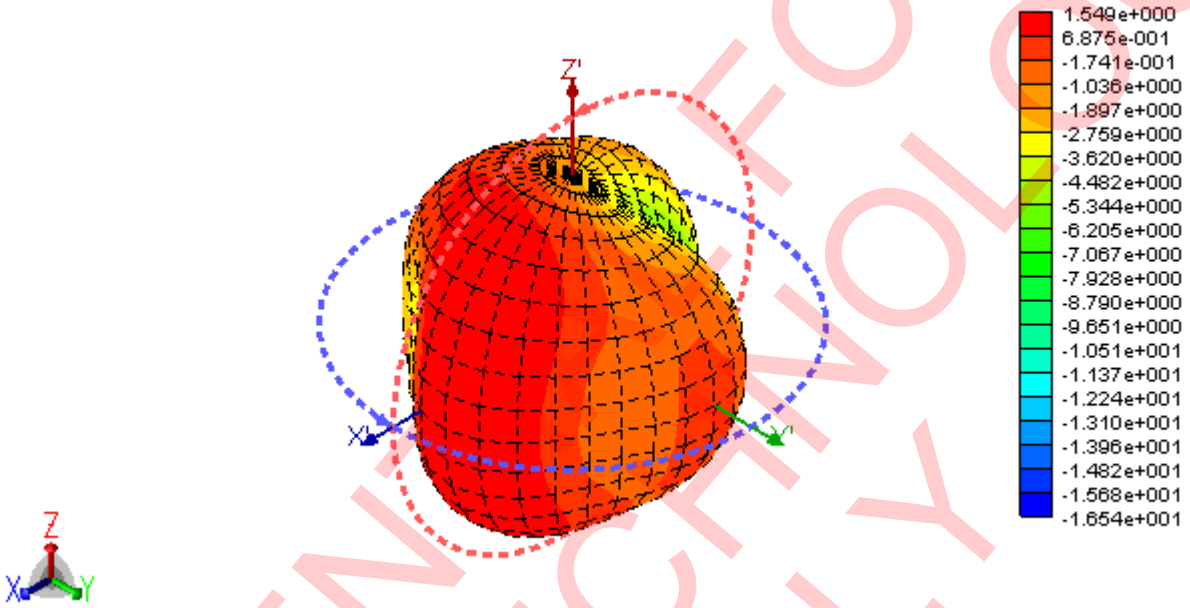
Radiation Pattern: 2.4GHz



Radiation Pattern: 5.2GHz

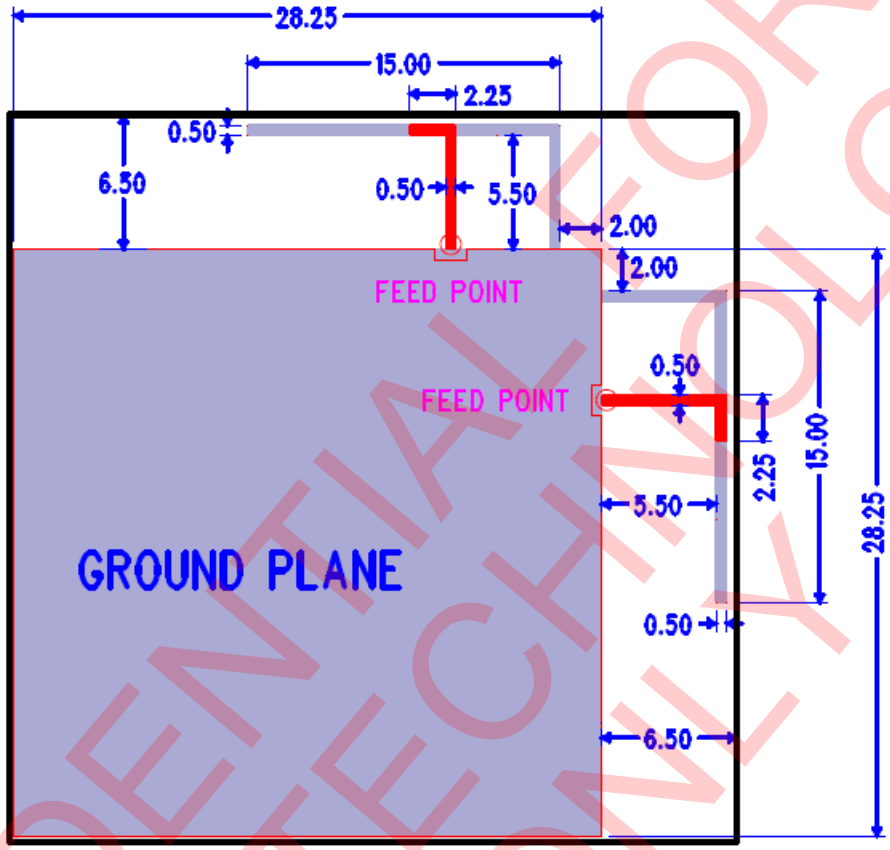


Radiation Pattern: 5.8GHz

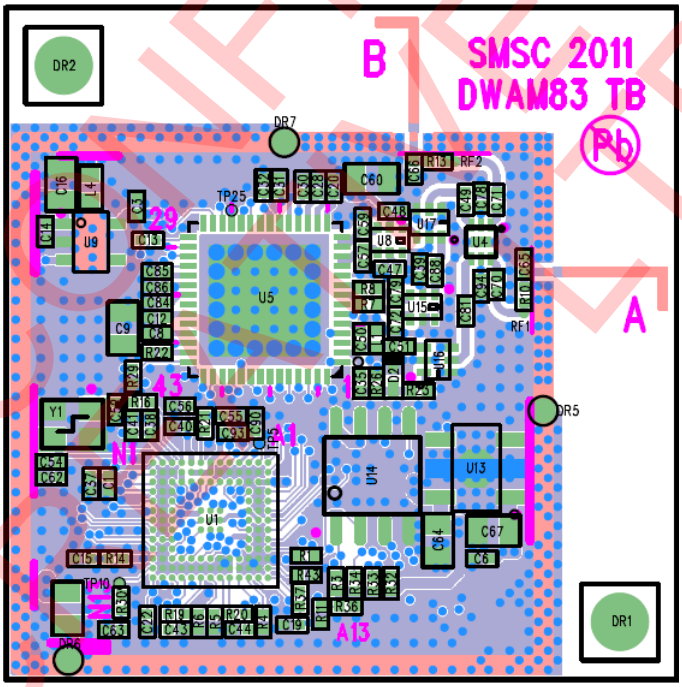


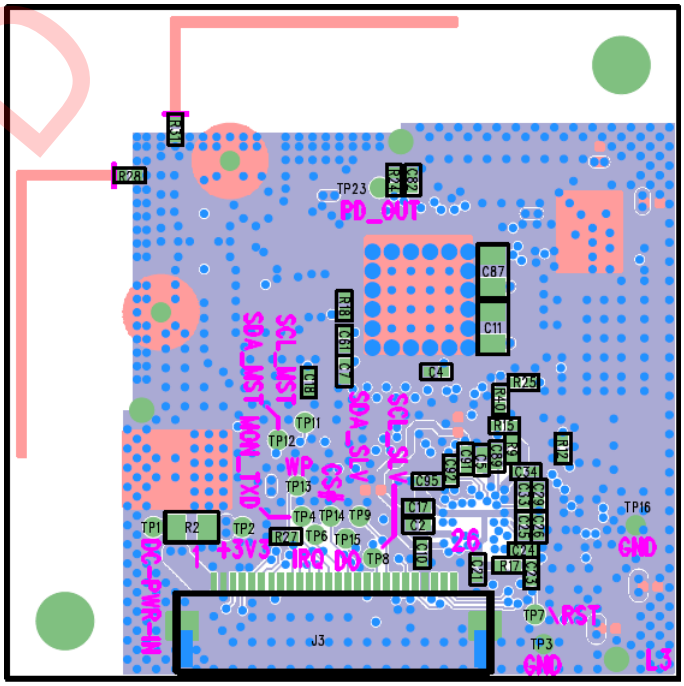
- The simulation results are based on a PCB thickness of 0.8mm; any deviation from this may result in significant antenna performance differences

2. Actual size and dimension:



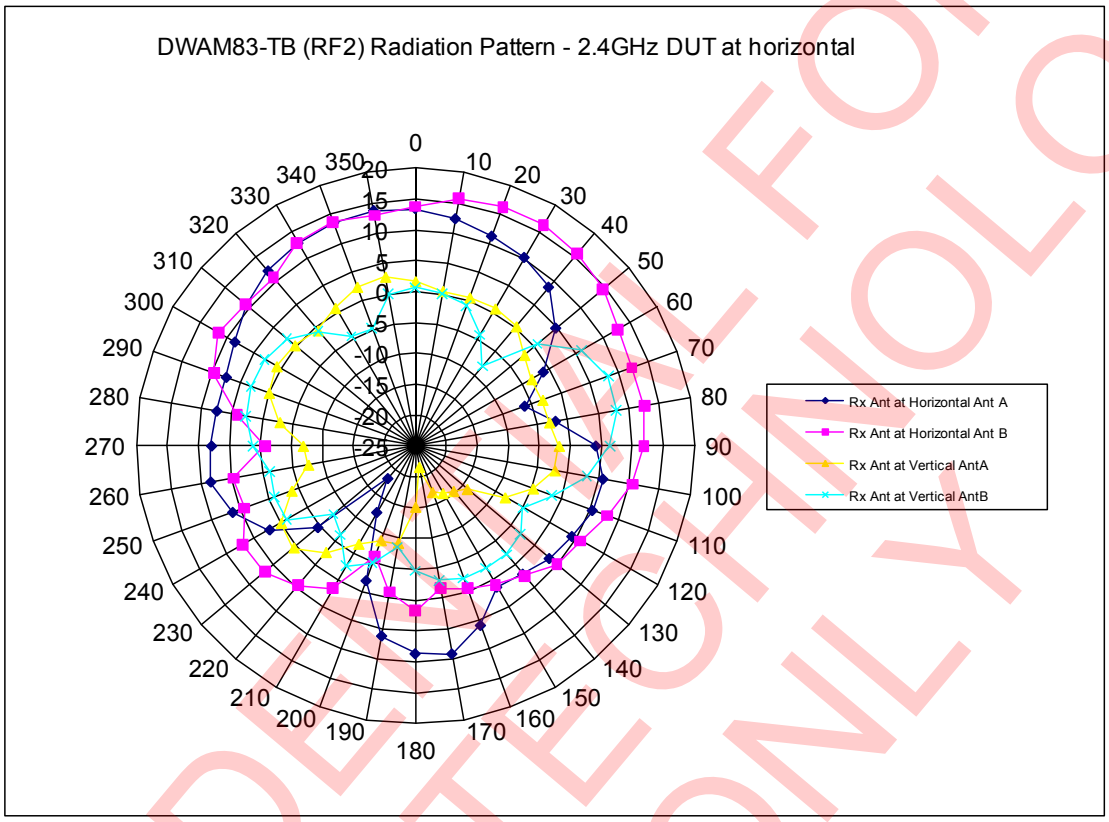
Note:
RED colour is Top layer
GREY colour is Bottom layer

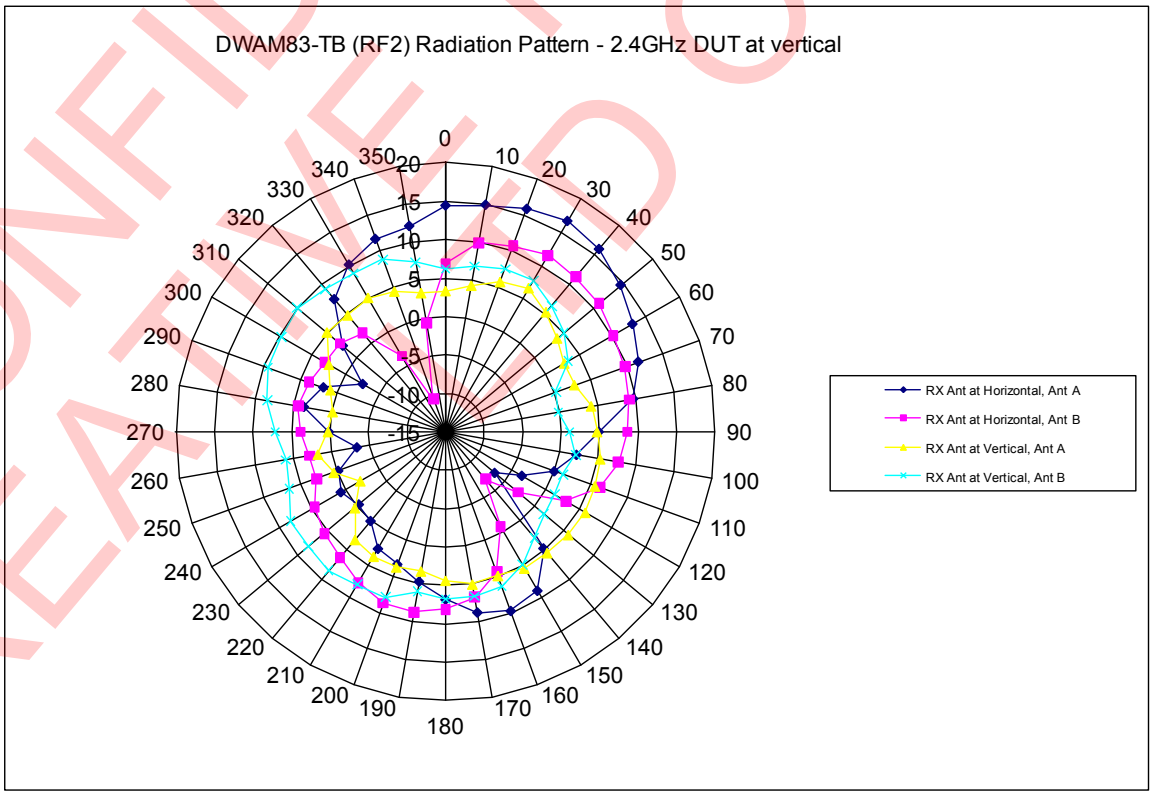




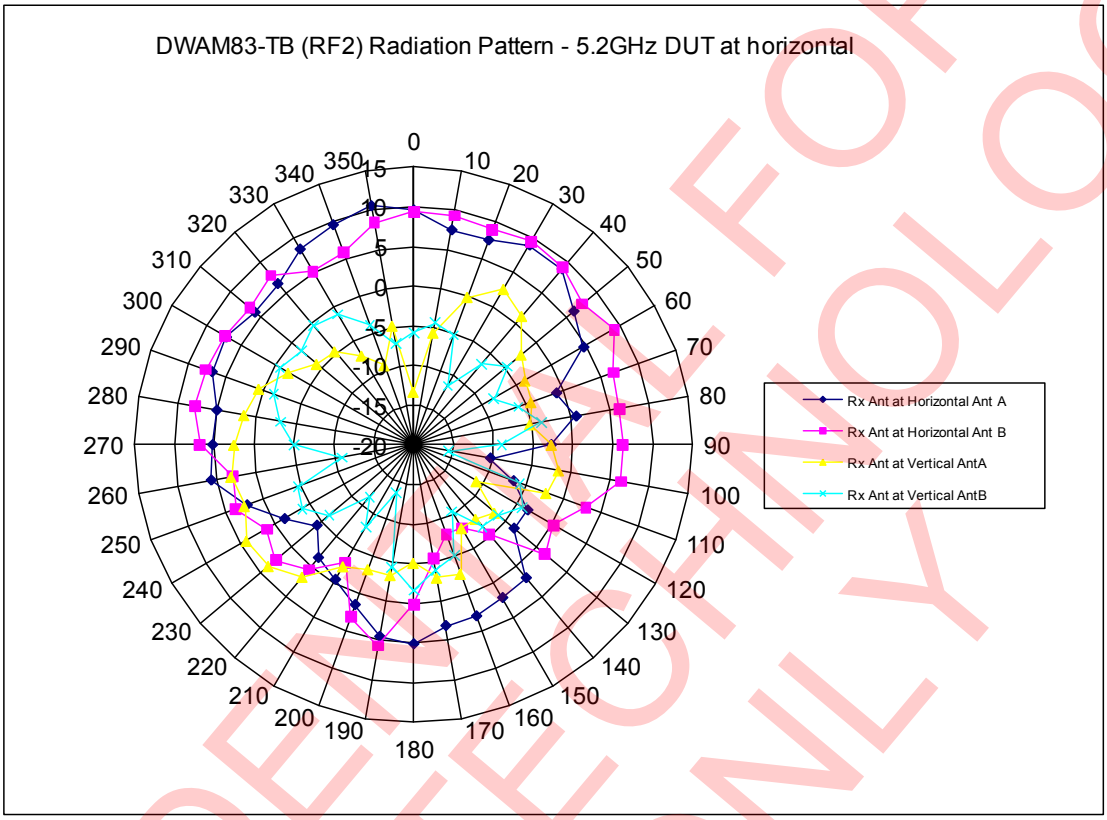
3. Radiation pattern based on DUT in Horizontal and Vertical

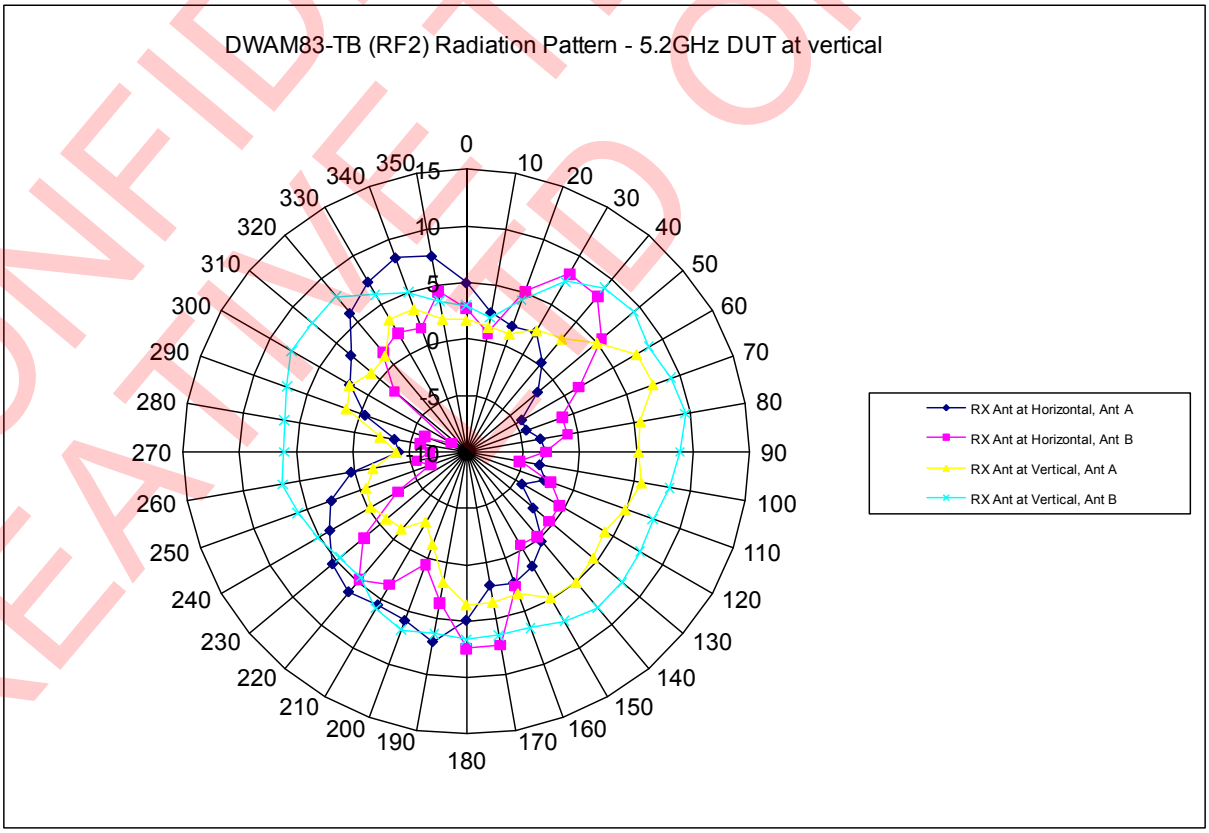
2.4GHz band



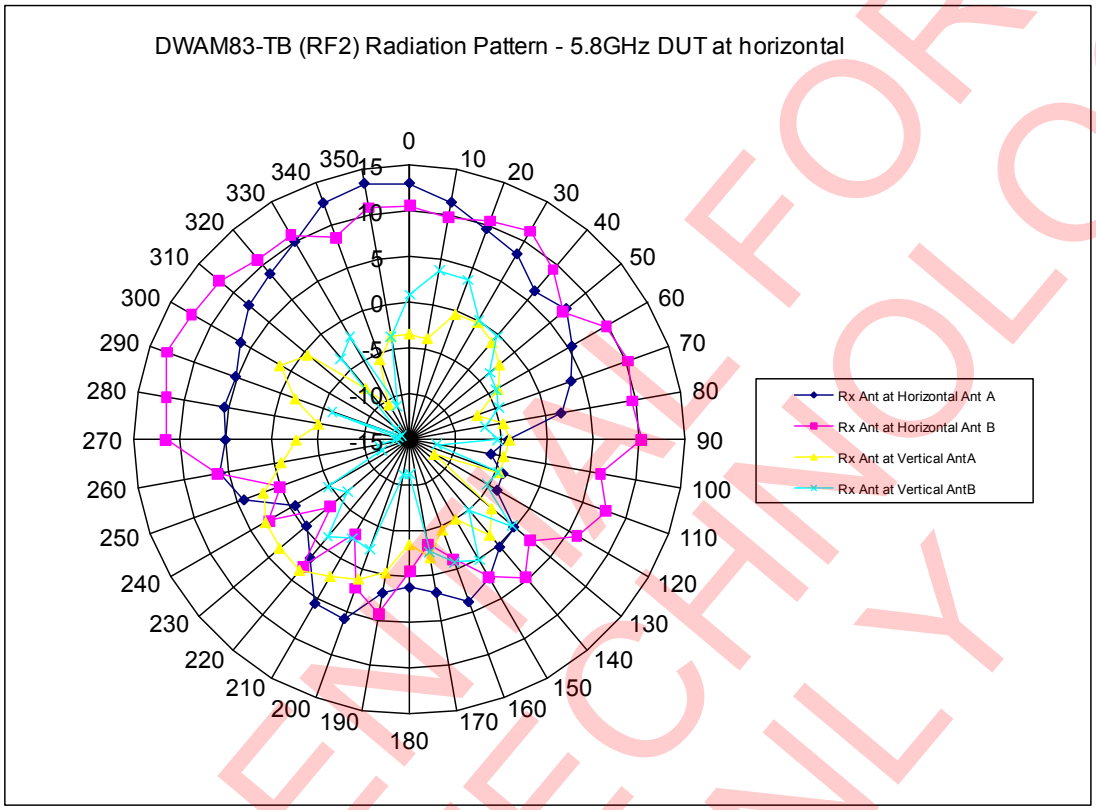


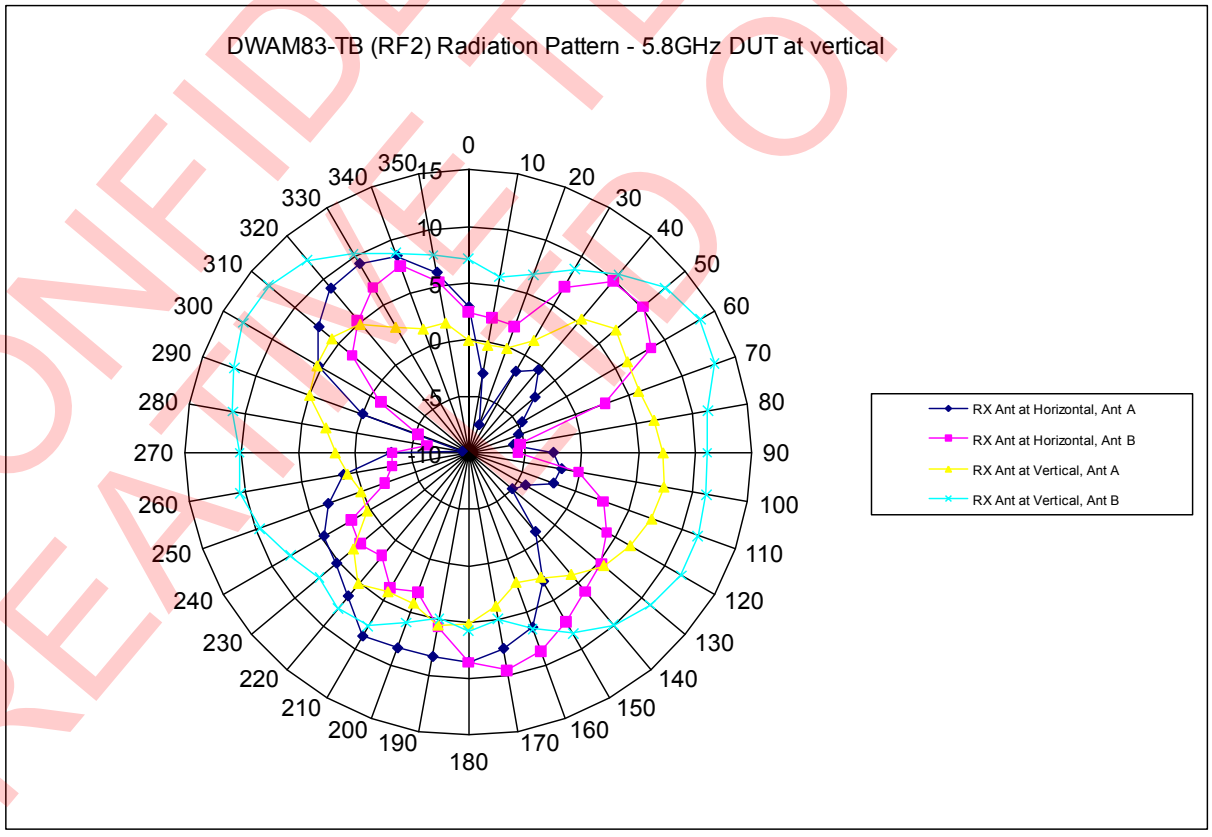
5.2GHz band



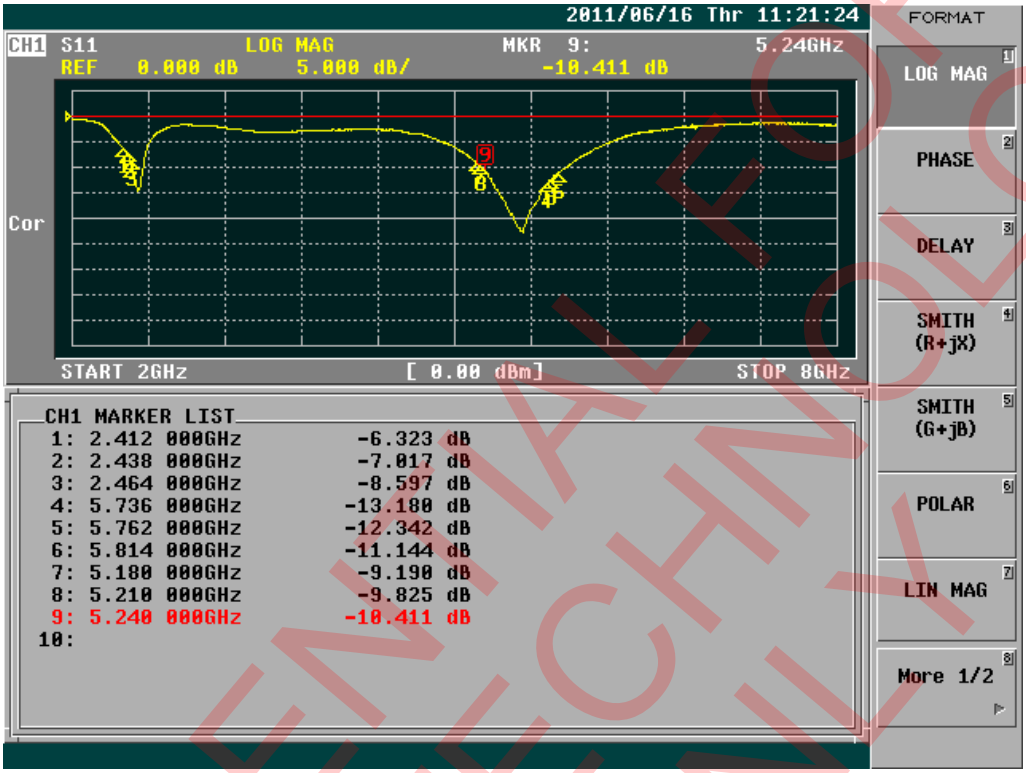


5.8GHz band





4. Return Loss (S11) with shield can mounted



5. Antenna isolation (S21) with shield can mounted

6. Parameters (Summary):

Antenna Gain	:	2dBi (2.4GHz), 2dBi (5.2GHz band); 3dBi (5.8GHz band)
VSWR	:	< 2.85:1 (2.4GHz) < 2.0:1 (5.2GHz and 5.8 GHz band)
Antenna Isolation	:	-8dB (2.4GHz) -14dB (5.2GHz and 5.8 GHz band)