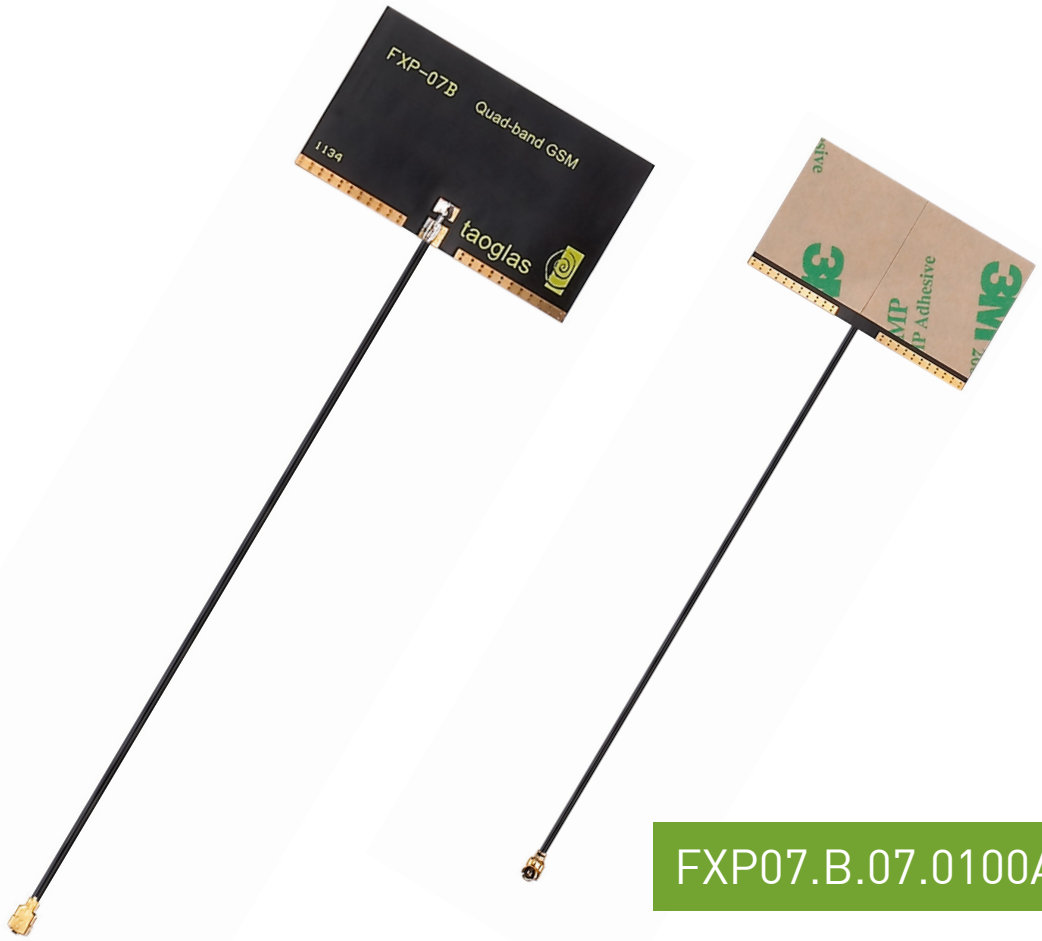
taoglas
antenna solutions



FXP07.B.07.0100A

Specification

Part No.	**FXP07.B.07.0100A**
Product Name	Embedded 2G/3G Flex Monopole Antenna
Features	Very low profile Penta band GSM Adhesive tape for easy mounting 100mm ø1.13 cable IPEX MHFI(U.FL comp) connector Dims:41*24mm RoHS compliant

1. Introduction

FXP07B.07.0100A is a general version of stick-on flexible PCB. It is designed with 100mm 1.13mm coaxial cable and the IPEX connector for easy installation. FXP07B.07.0100A is ideal for small compact applications such as POS (Point of Sale) devices. It can be soldered to the edge of the main device ground-plane to optimize the efficiency.

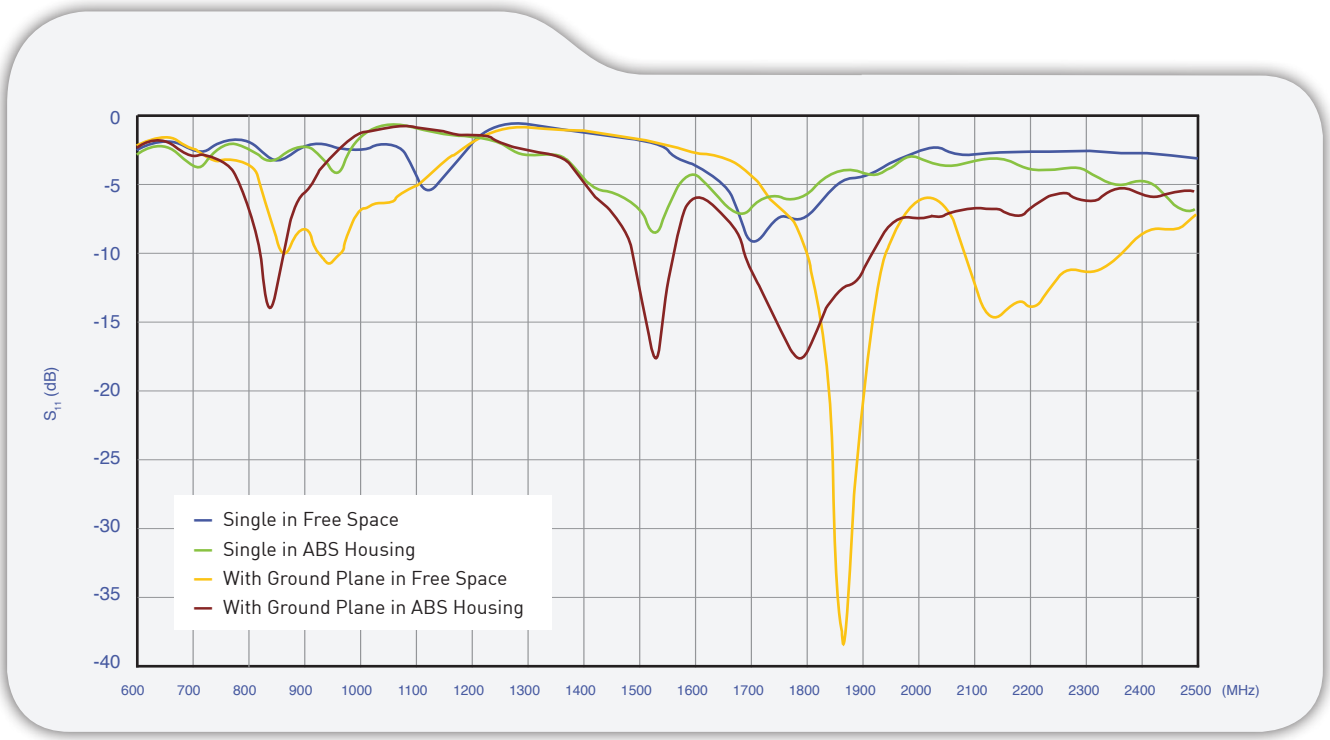
2. Antenna Specification

PENTA-BAND CELLULAR					
Band (MHz)	824~894	880~960	1710~1880	1850~1990	2110~2170
Efficiency (%)	> 30%	> 40%	> 40%	> 40%	> 40%
Peak Gain (dBi)	> 0	> 1	> 1	> 1	> 1
Impedance	50 Ohm				
Radiation Pattern	Omni-directional				
Polarization	Linear				
FPCB	41x24mm				
Connector	IPEX MHFI (U.FL comp)				
Cable	ø1.13 cable				
Cable Length	100mm				
Adhesive Tape	3M 467				
Operation Temperature(°C)	-40°C~+85°C				
Storage Temperature (°C)	-40°C~+85°C				

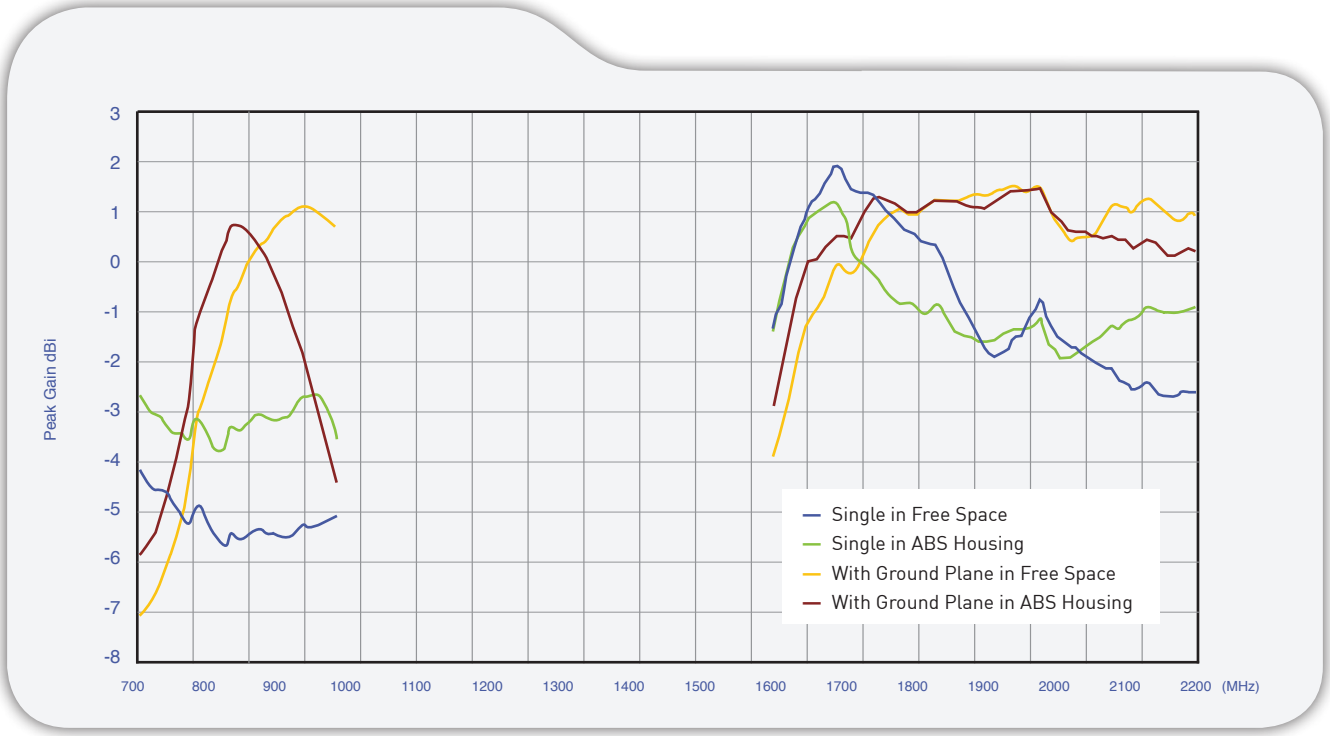
* All measurements are done in free space with standard cables
* The ABS housing size 125x45x2mm
* The Ground plane size 106x45x1mm

3. Antenna Characteristics

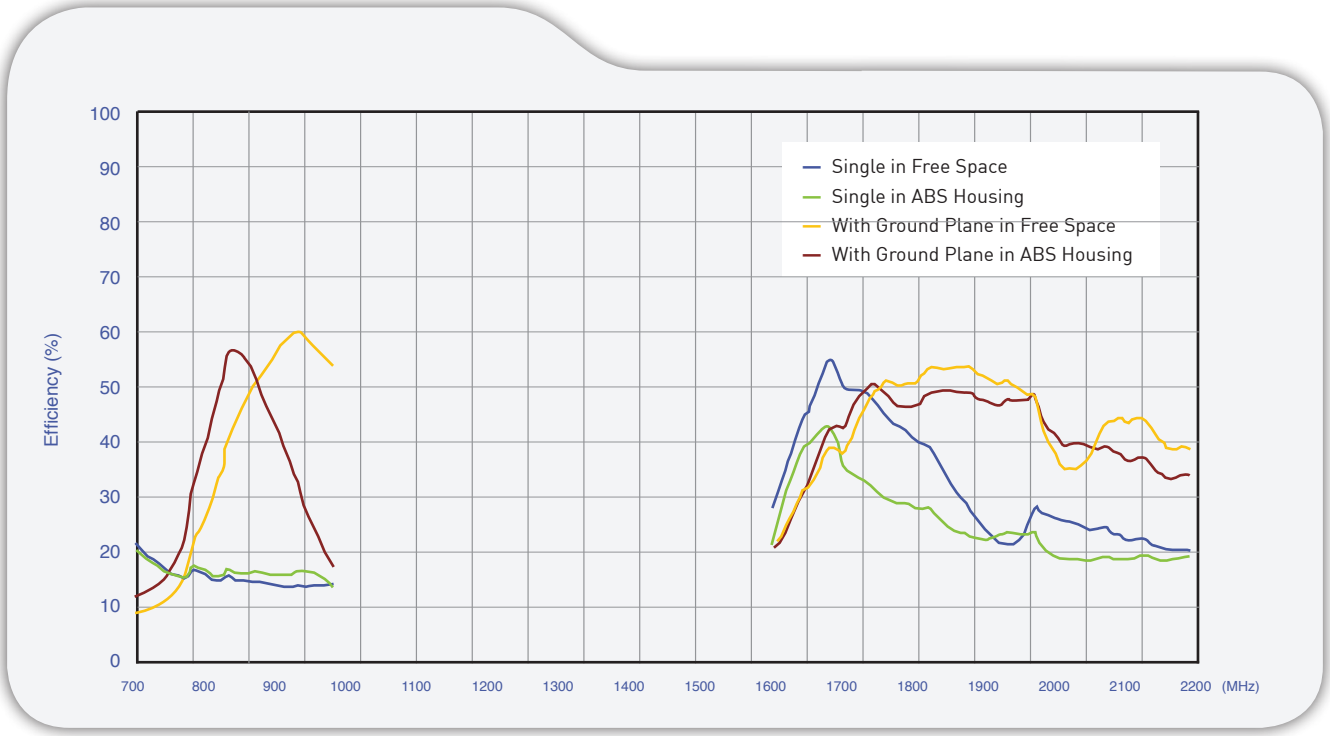
3.1. Return Loss



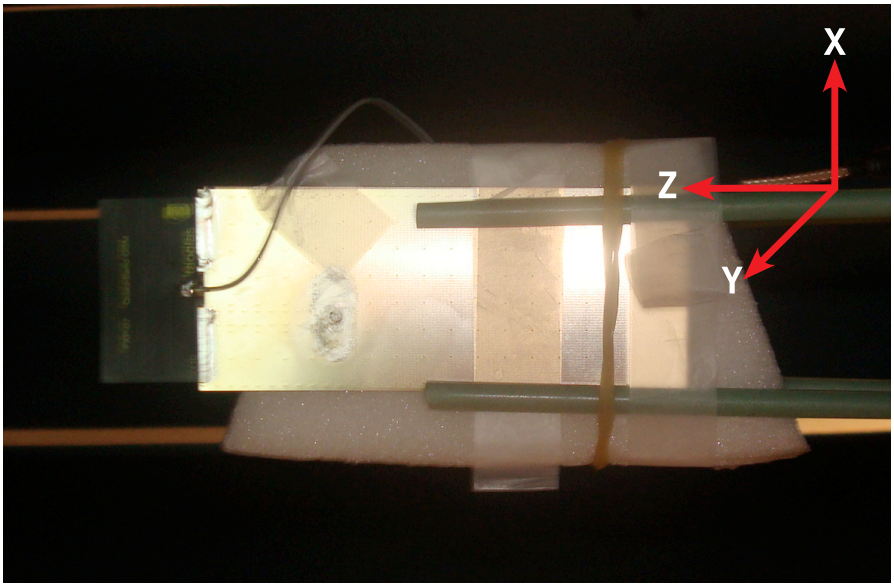
3.2. Peak Gain vs. Frequency



3.3. Efficiency vs. Frequency

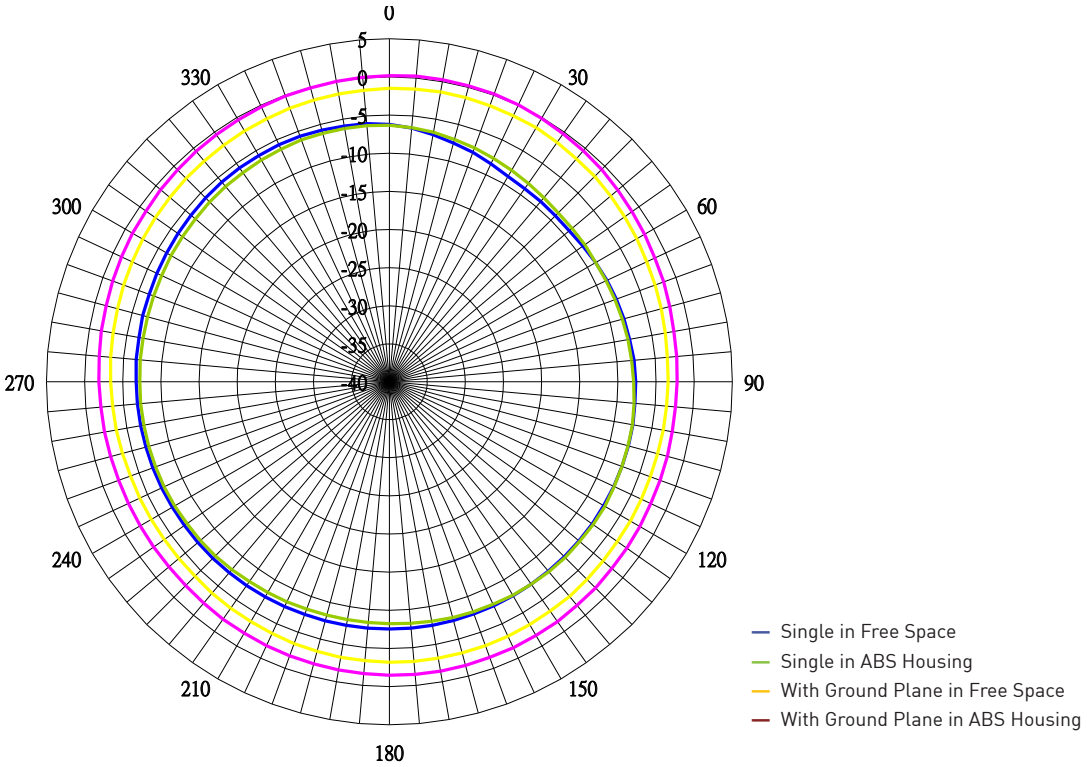


3.4. XYZ Co-ordinate for Reference

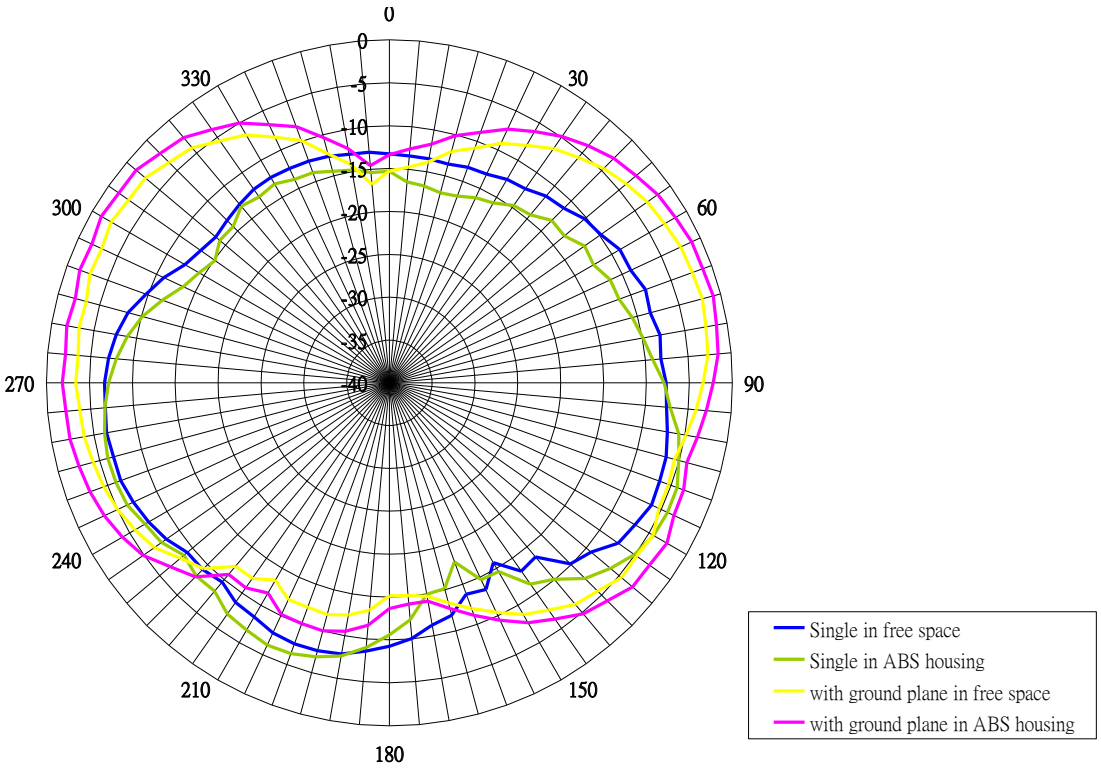


3.5. Radiation pattern

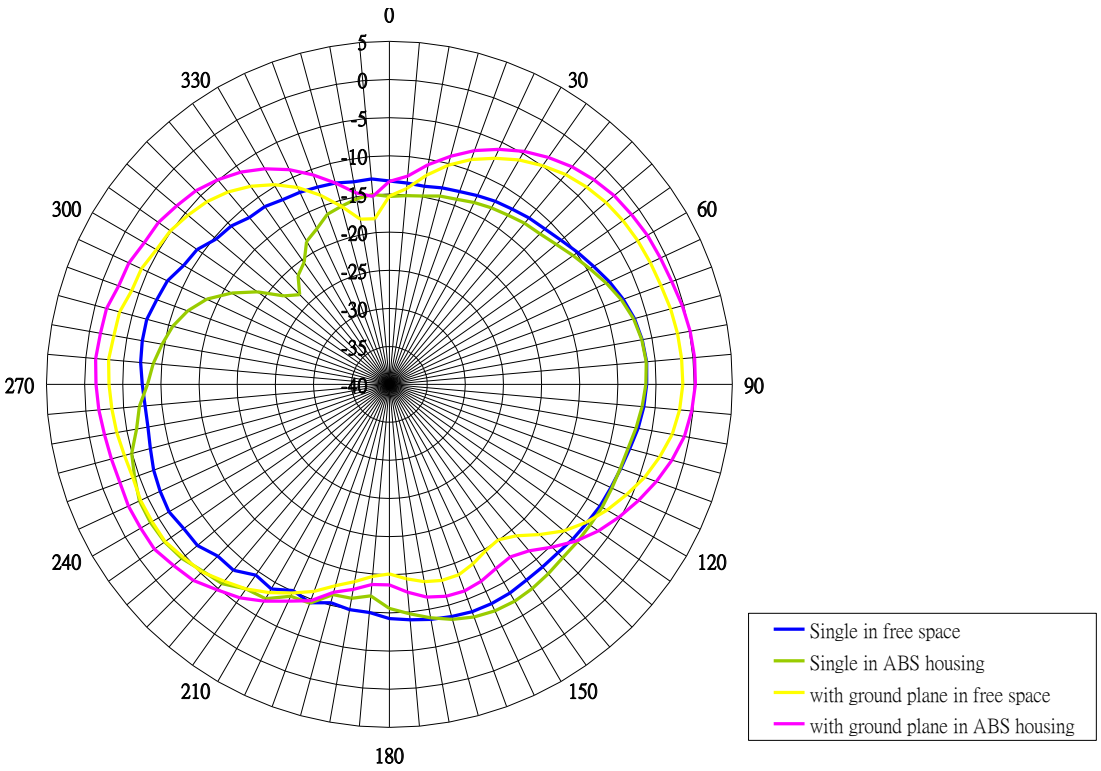
3.5.1. XY Plane @ 825MHz



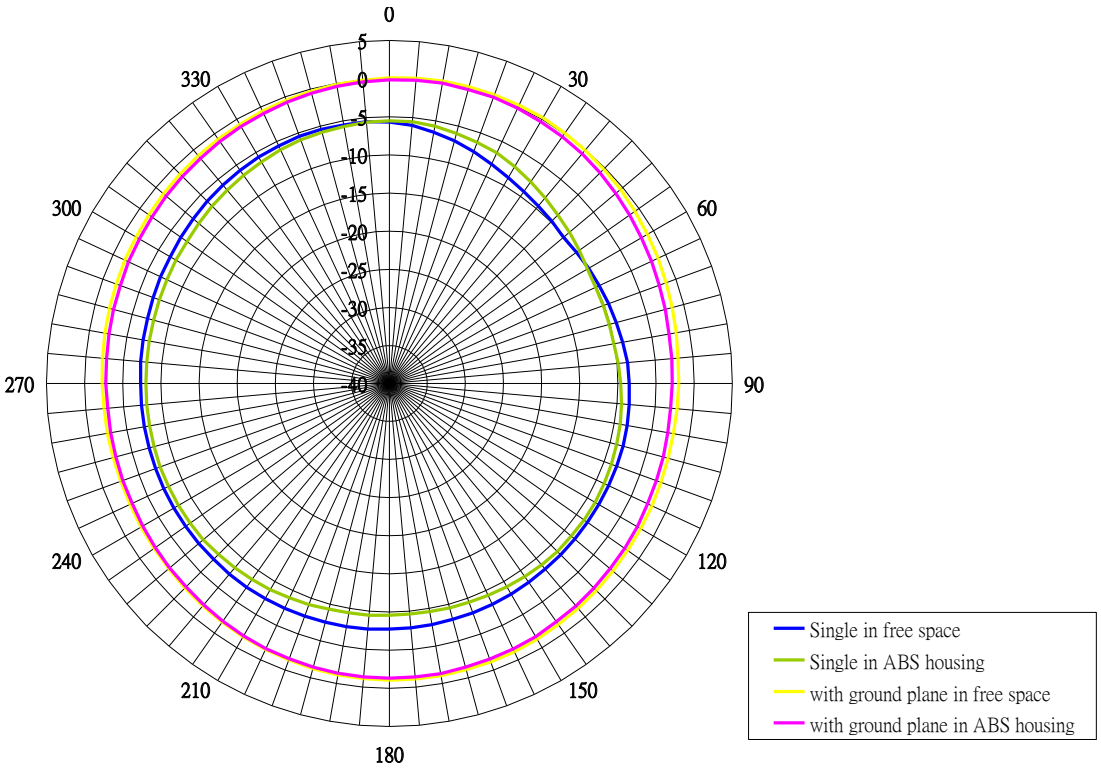
3.5.2. YZ Plane @ 825MHz



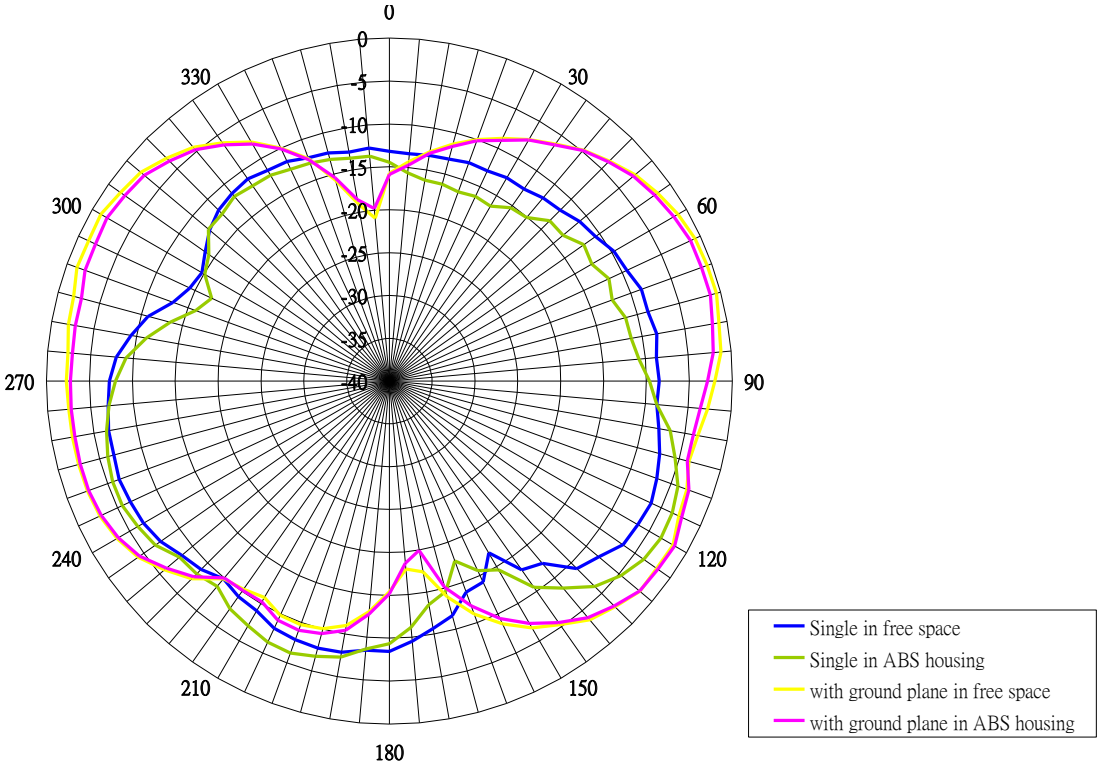
3.5.3. XZ Plane @ 825MHz



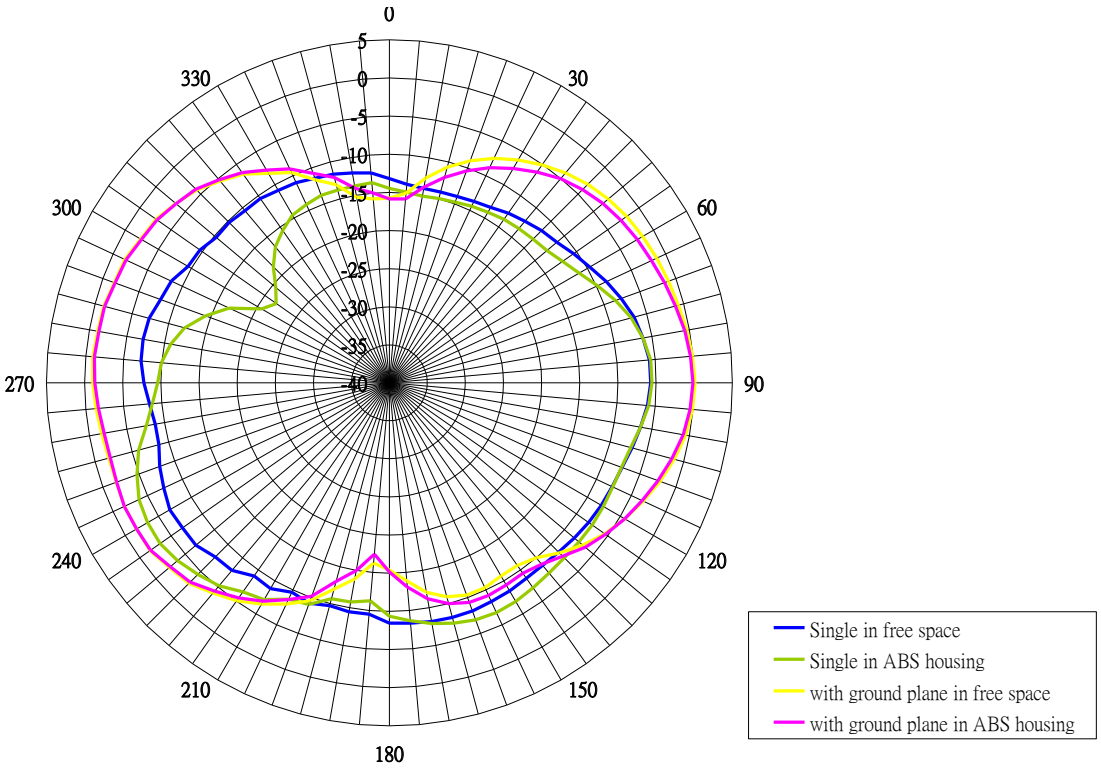
3.5.4. XY Plane @ 880MHz



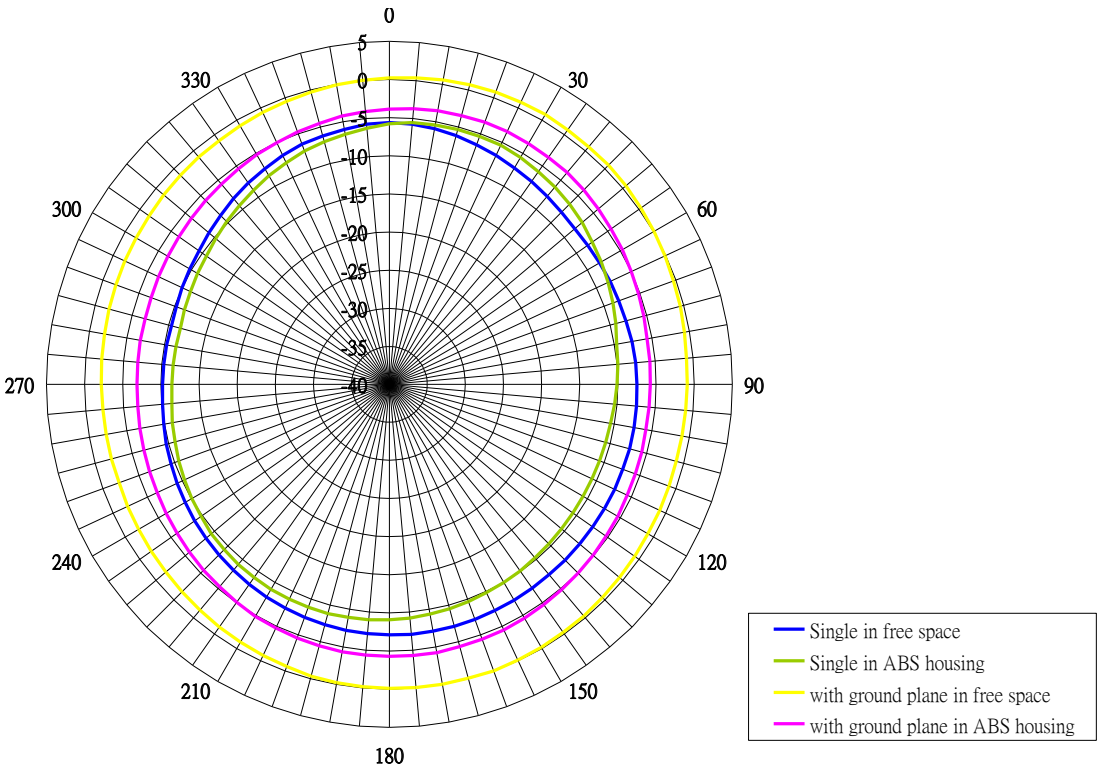
3.5.5. YZ Plane @ 880MHz



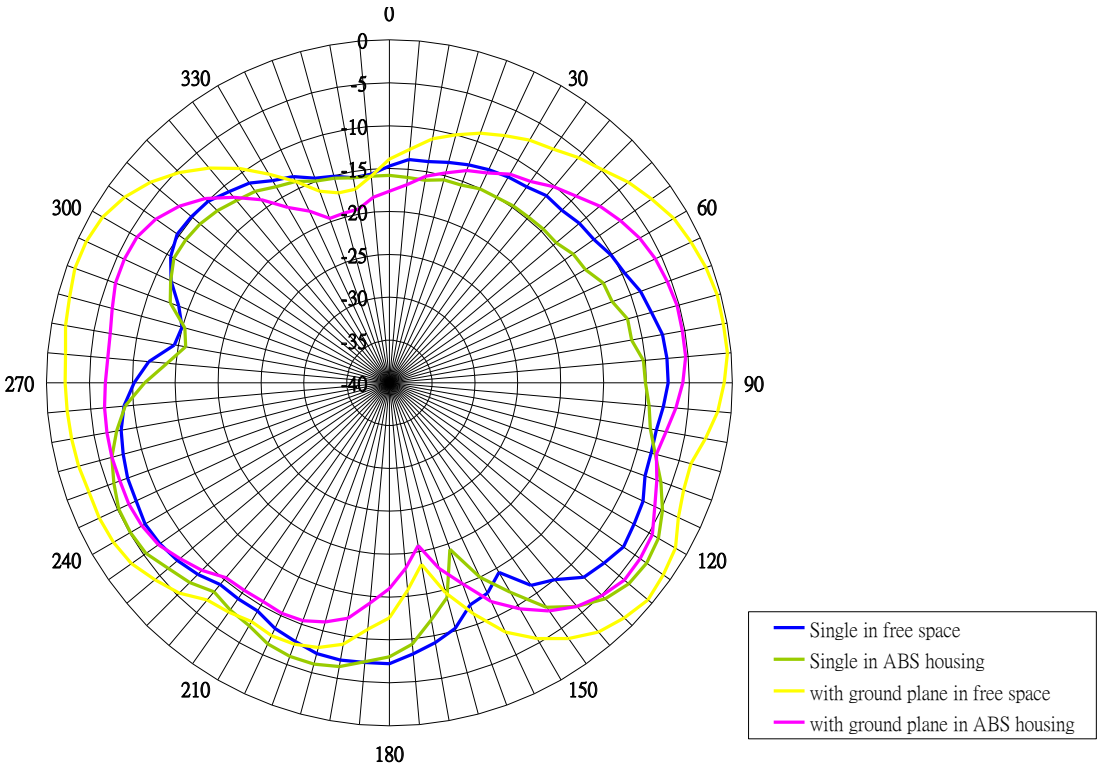
3.5.6. XZ Plane @ 880MHz



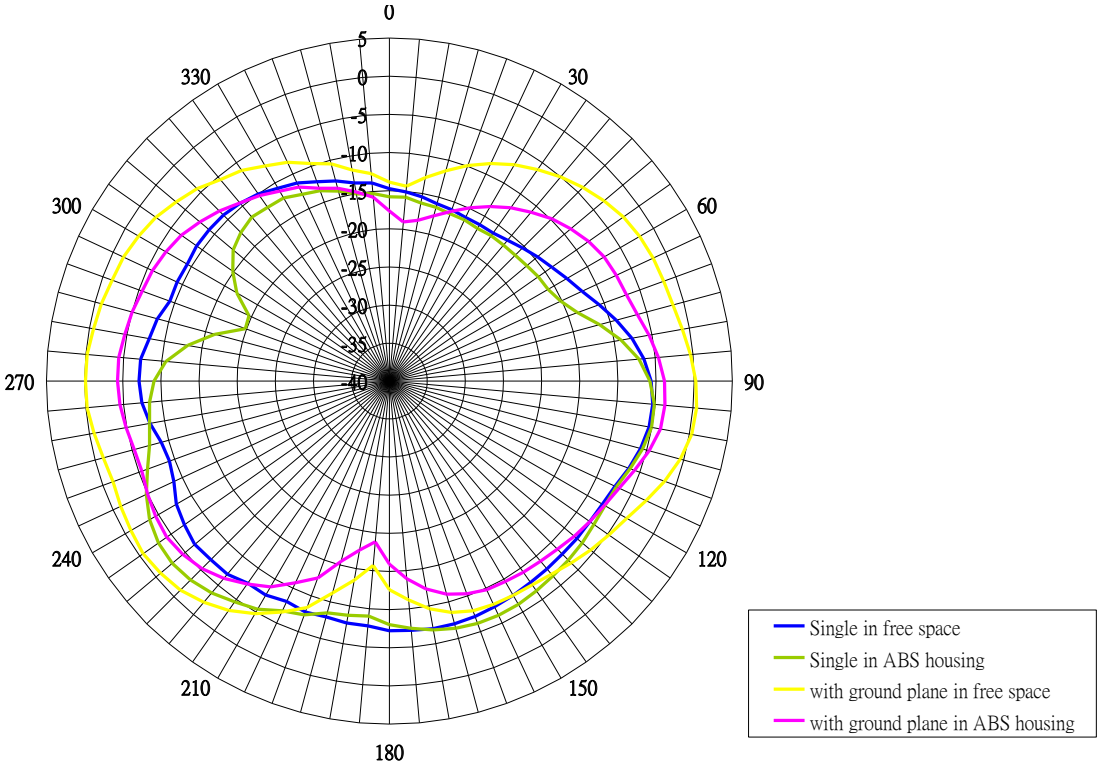
3.5.7. XY Plane @ 960MHz



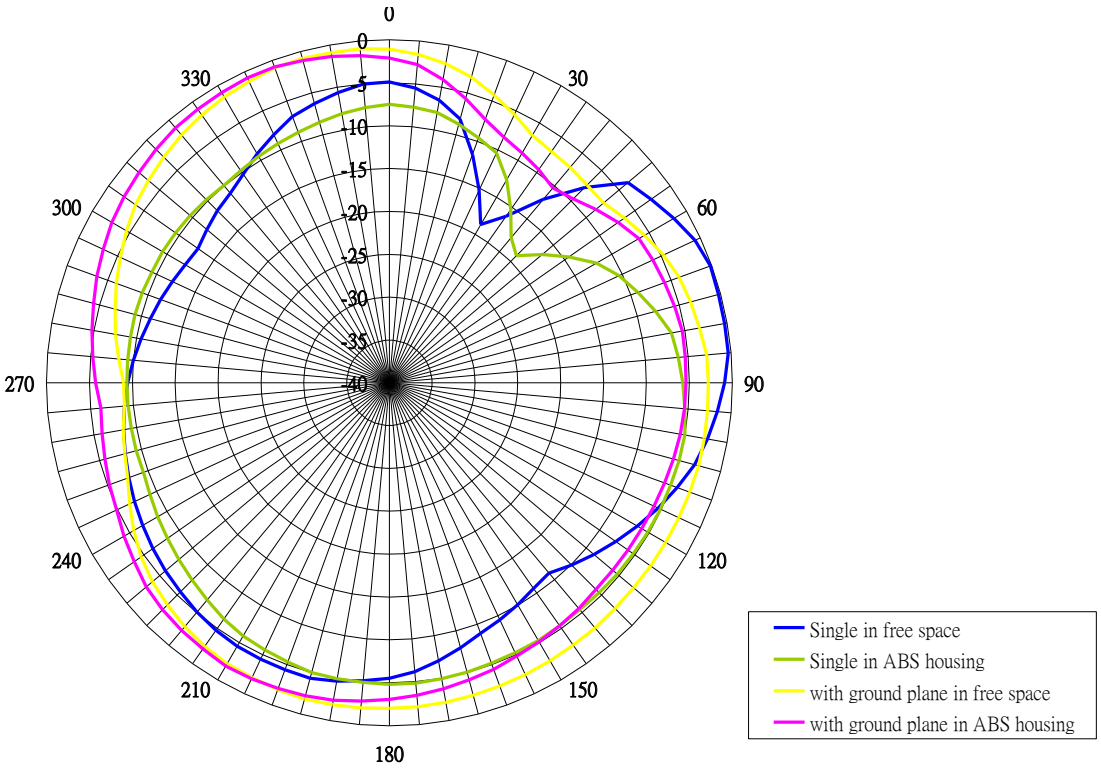
3.5.8. YZ Plane @ 960MHz



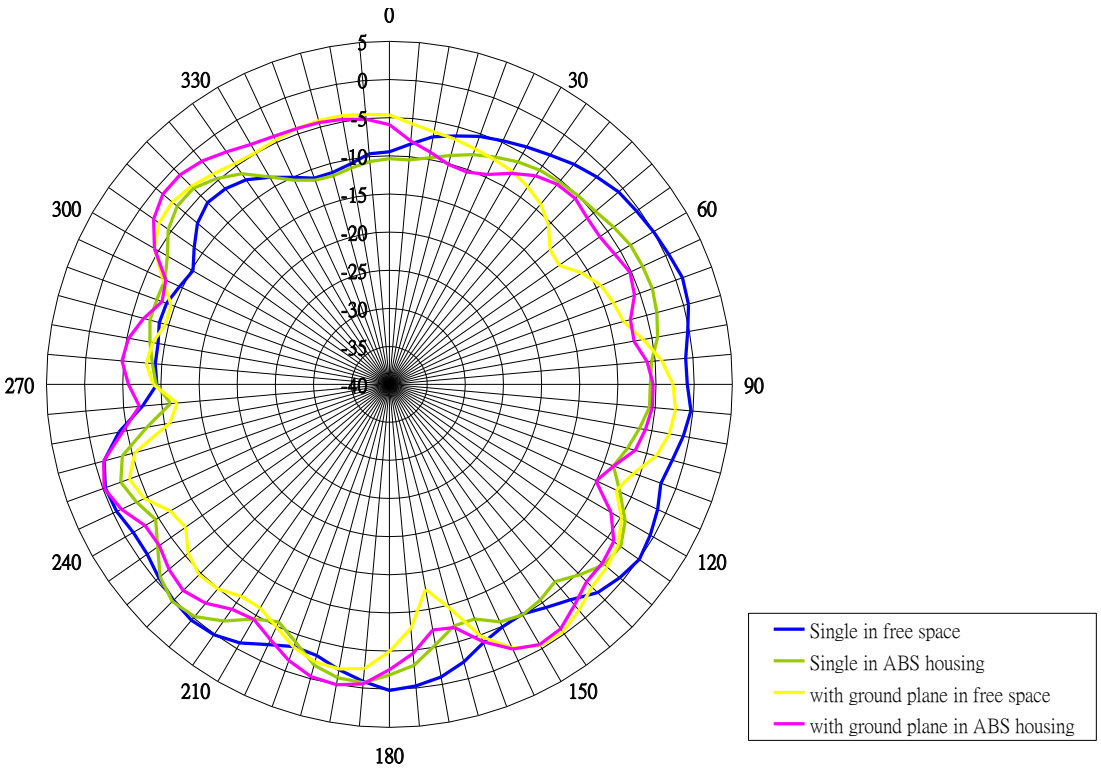
3.5.9. XZ Plane @ 960MHz



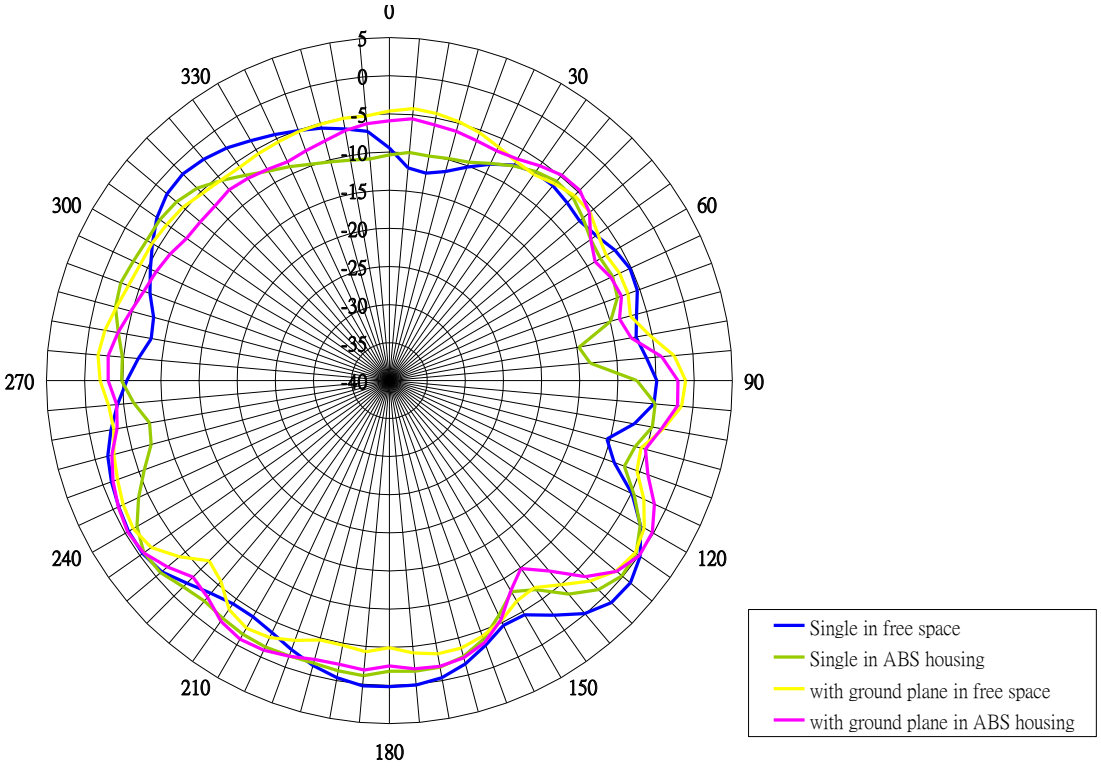
3.5.10. XY Plane @ 1710MHz



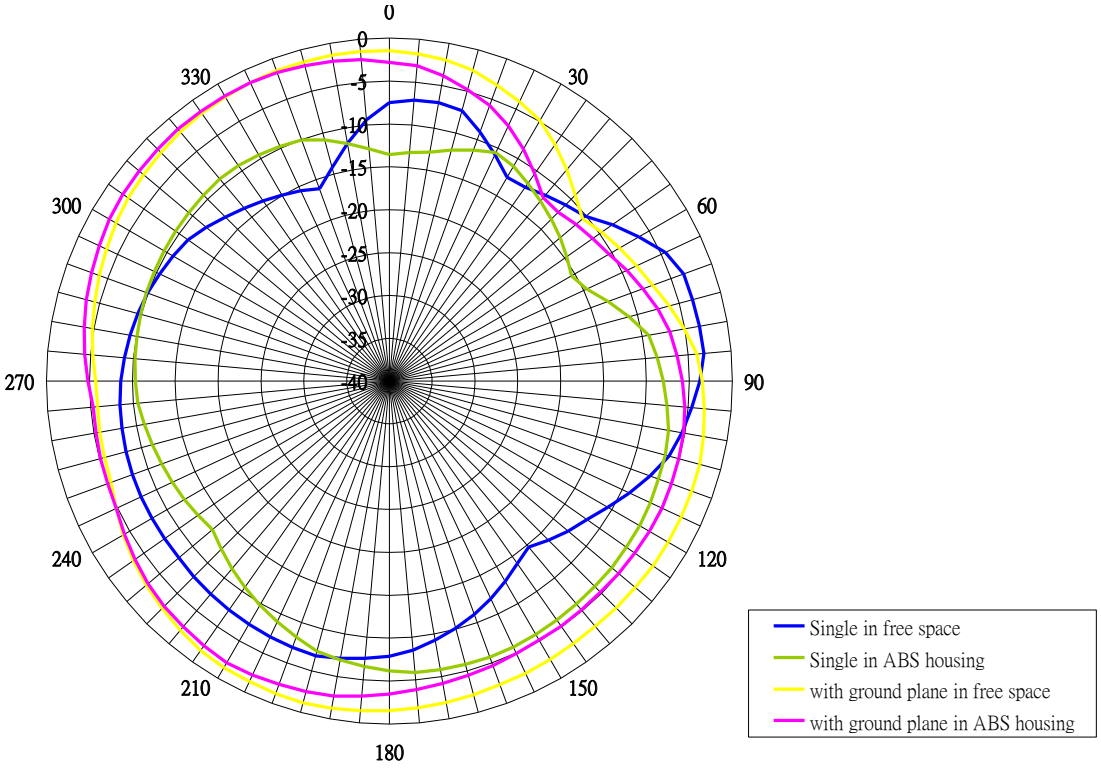
3.5.11. YZ Plane @ 1710MHz



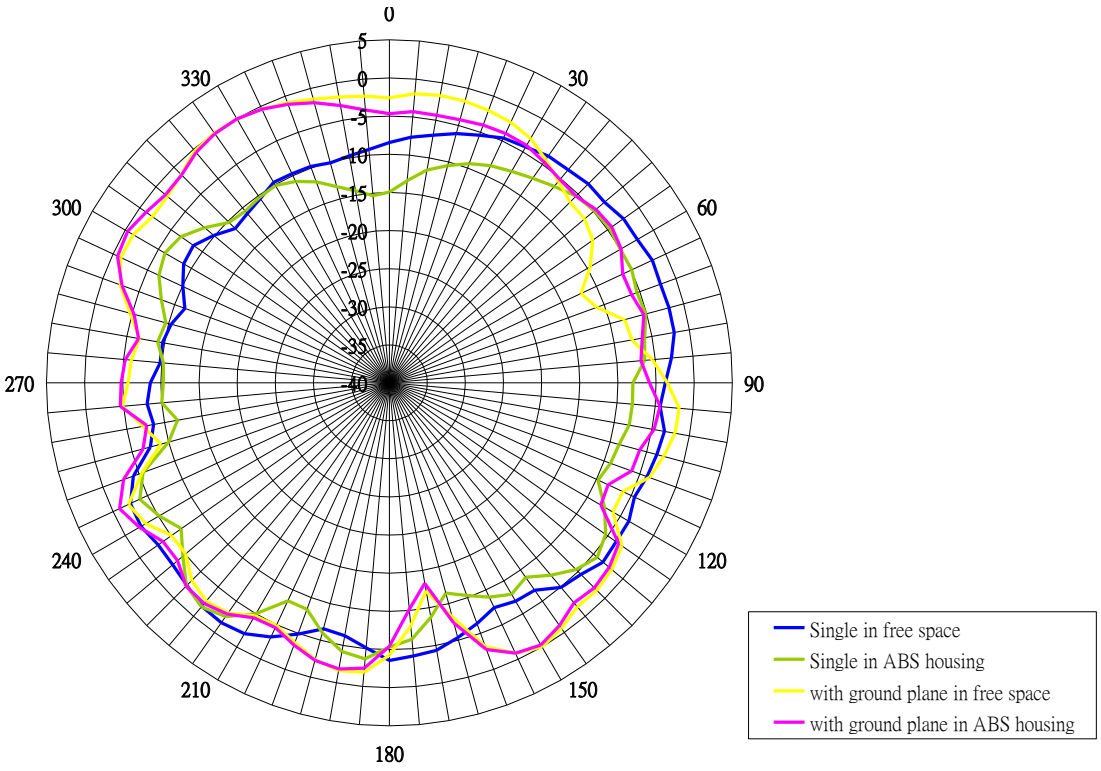
3.5.12. XZ Plane @ 1710MHz



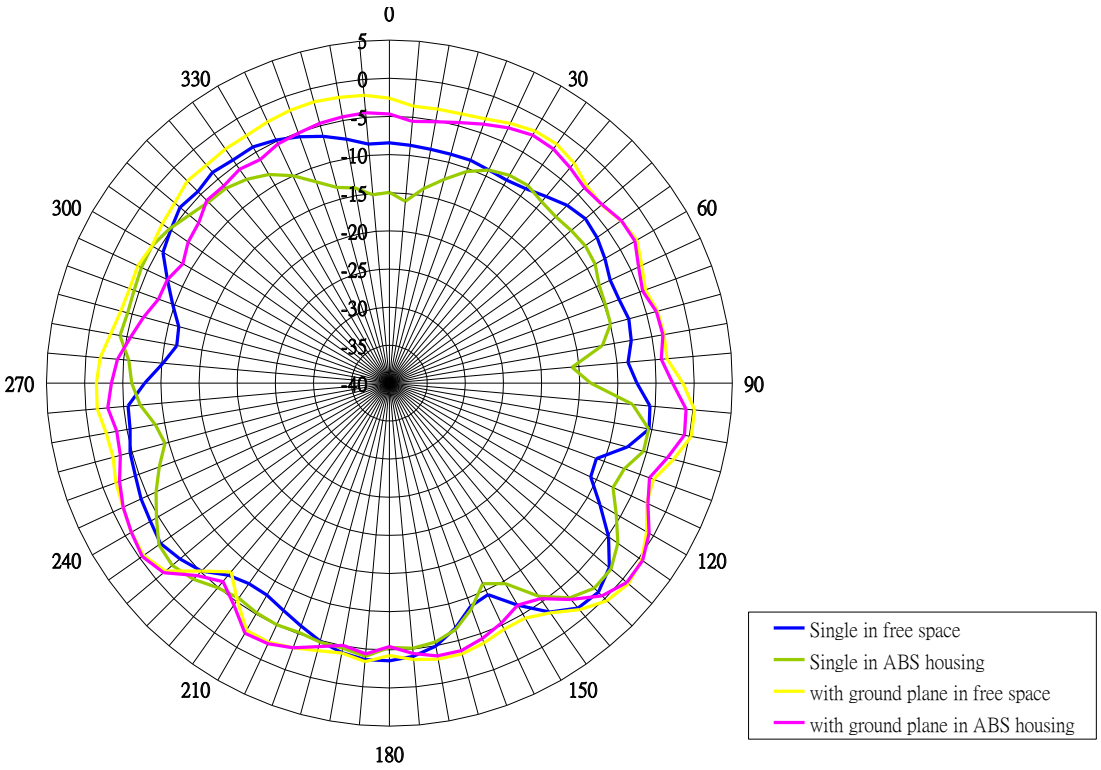
3.5.13. XY Plane @ 1880MHz



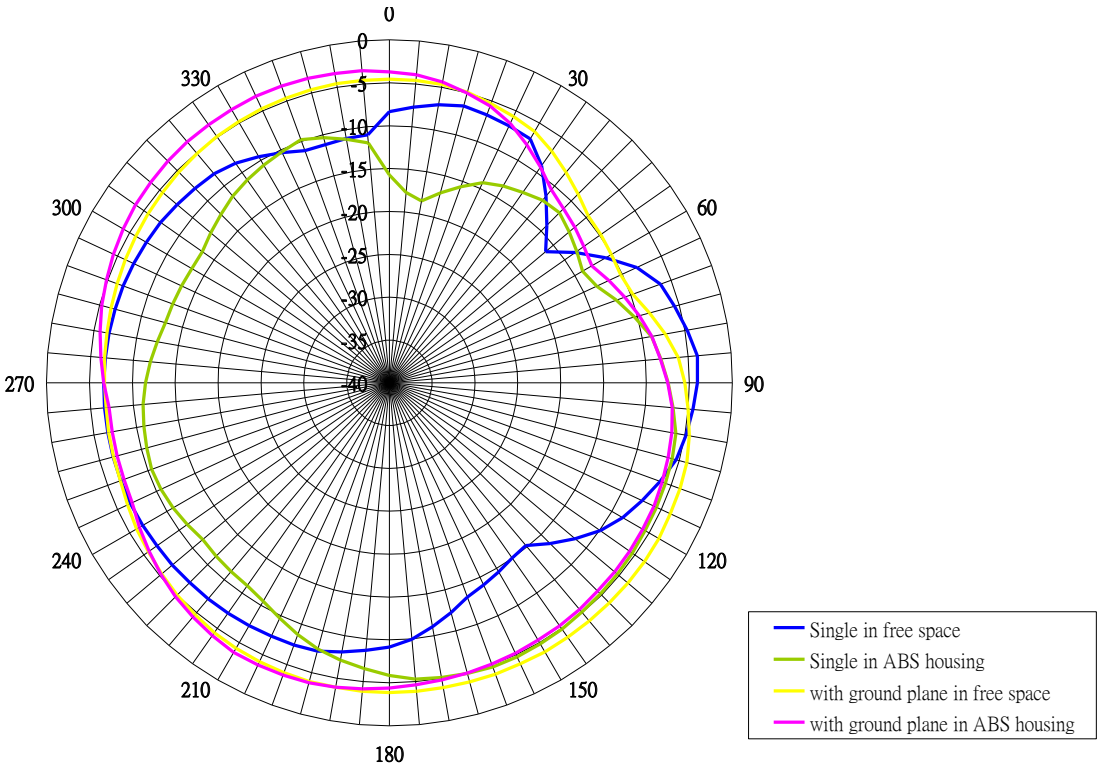
3.5.14. YZ Plane @ 1880MHz



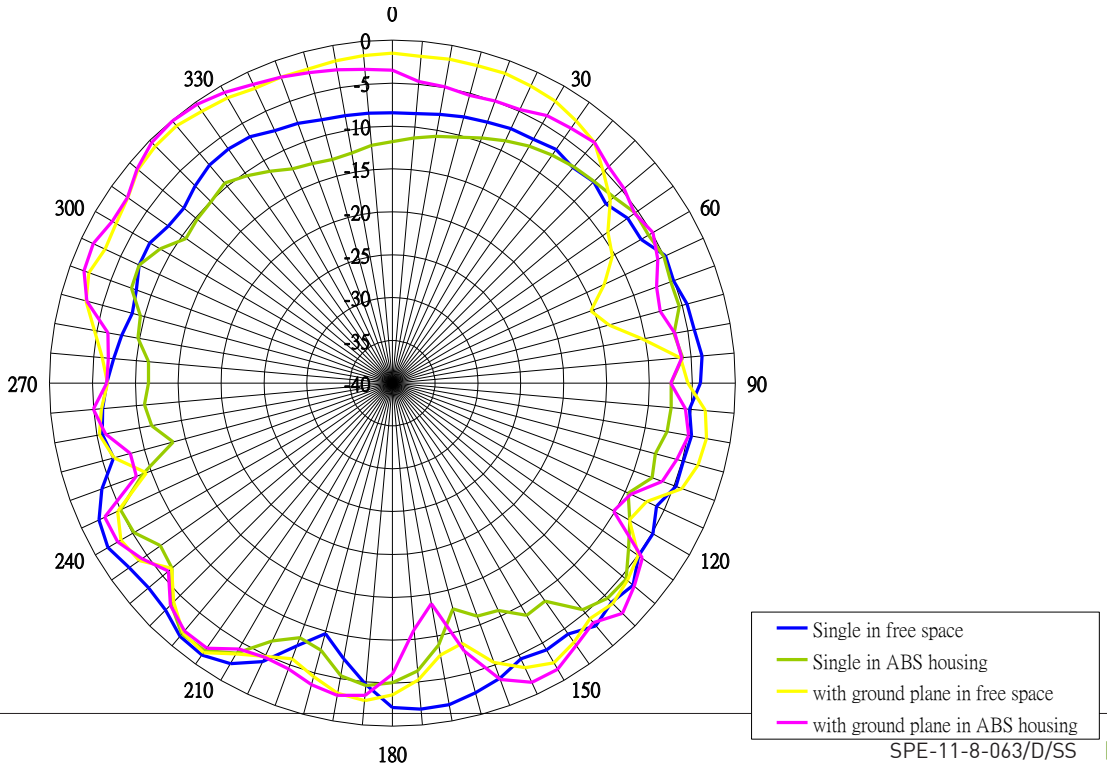
3.5.15. XZ Plane @ 1880MHz



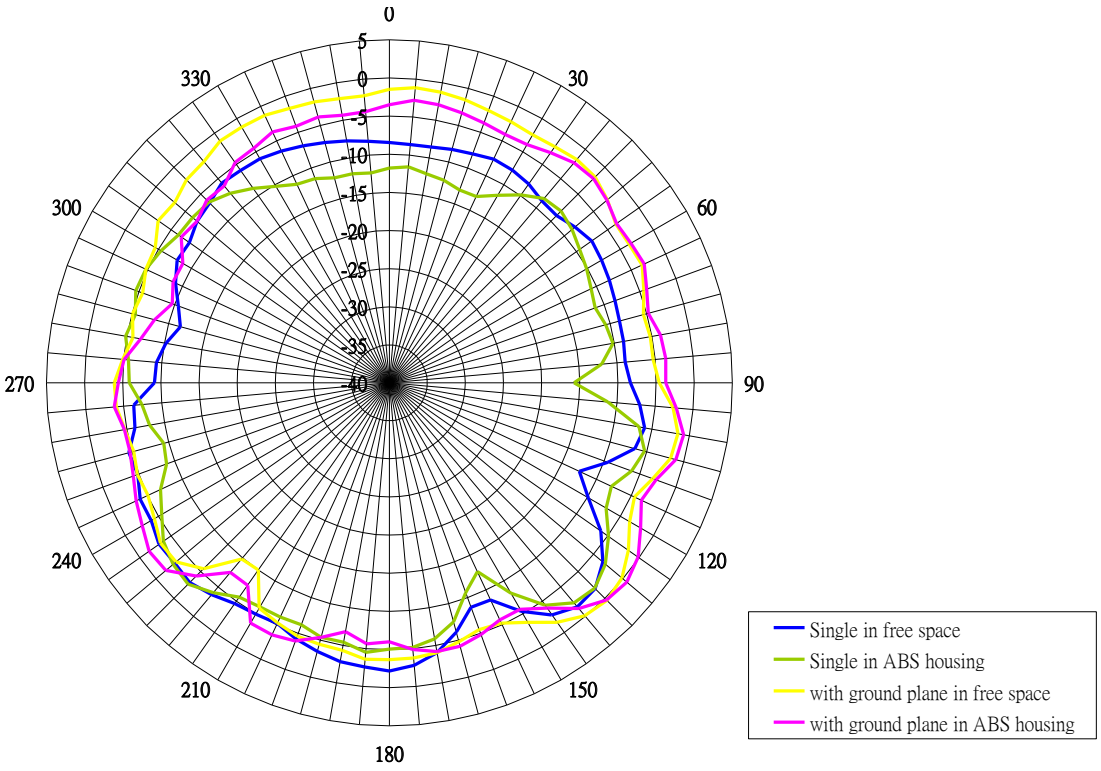
3.5.16. XY Plane @ 1990MHz



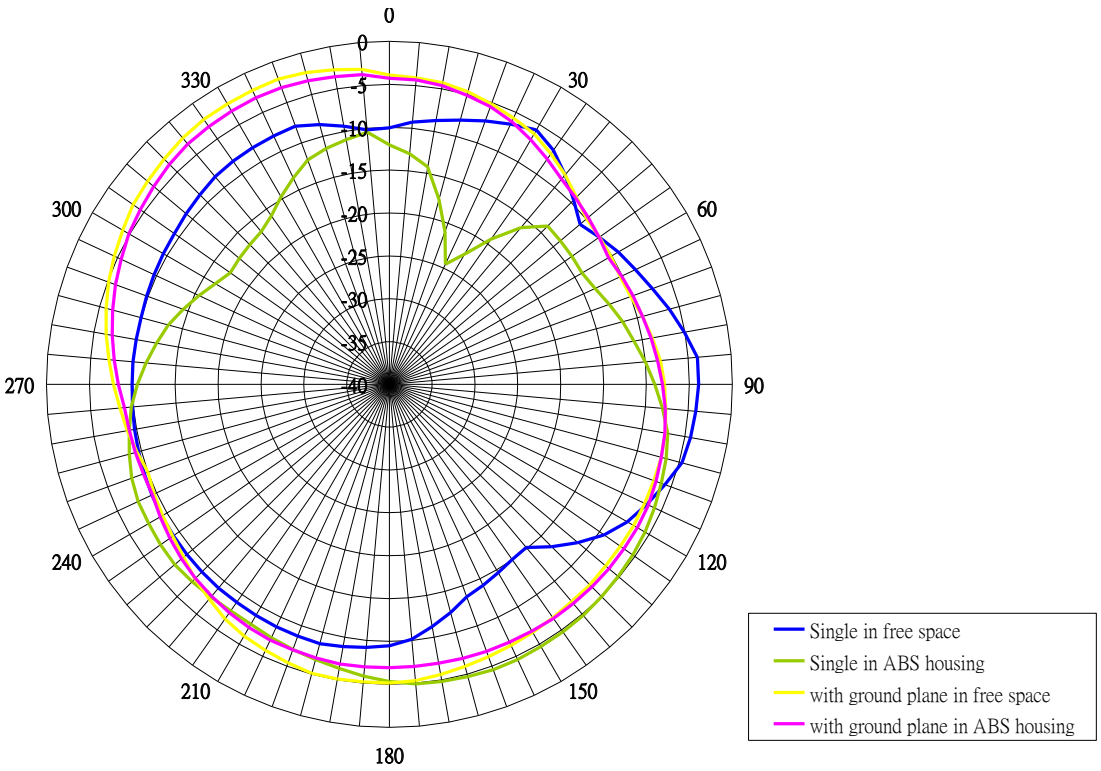
3.5.17. YZ Plane @ 1990MHz



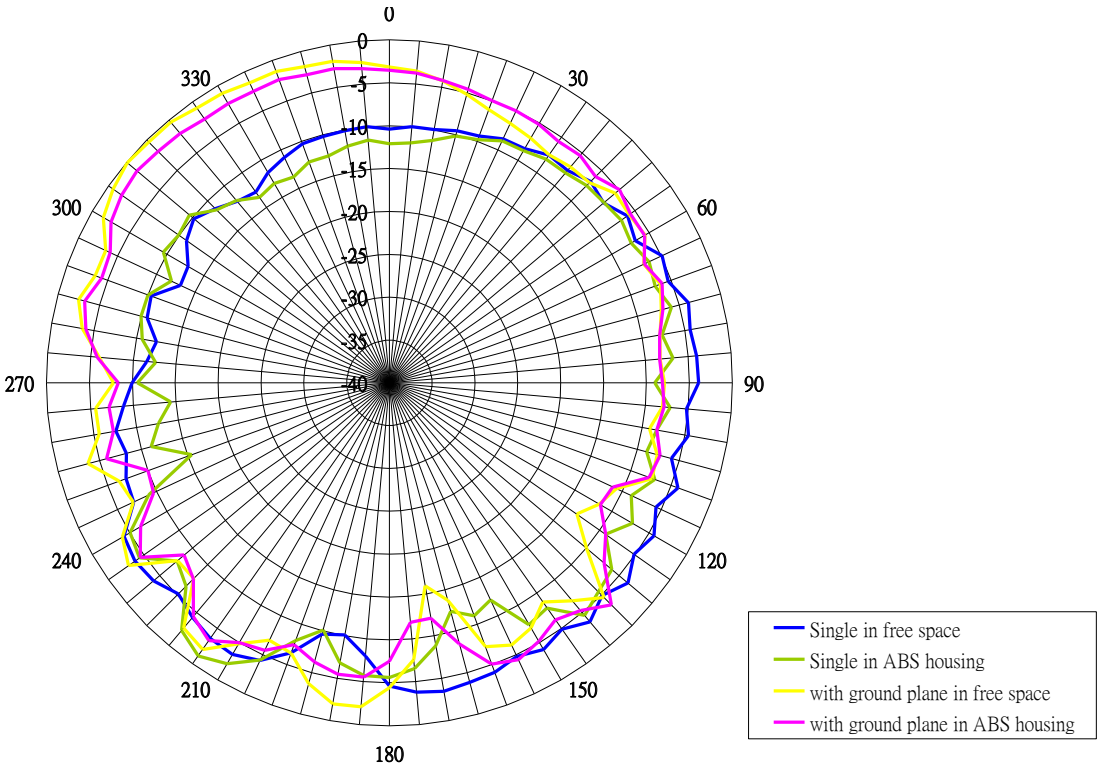
3.5.18. XZ Plane @ 1990MHz



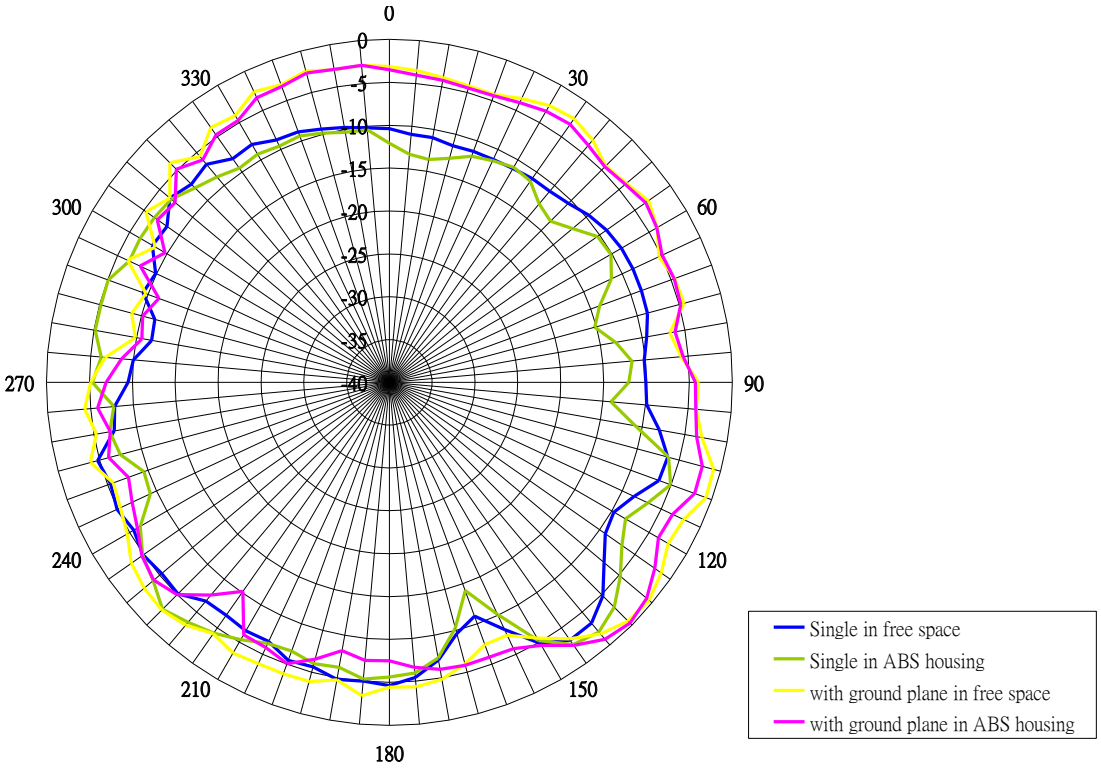
3.5.19. XY Plane @ 2170MHz



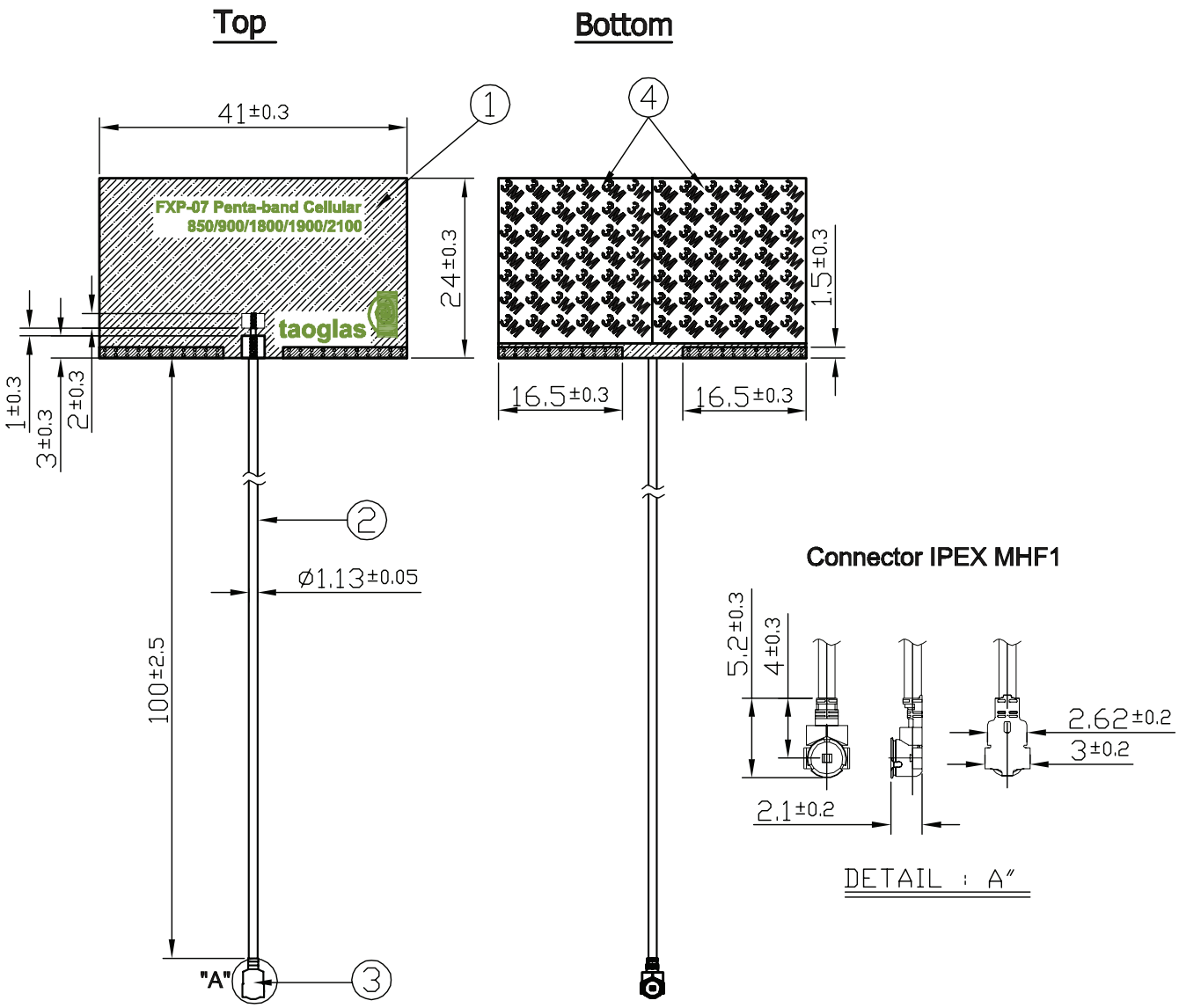
3.5.20. YZ Plane @ 2170MHz



3.5.21. XZ Plane @ 2170MHz

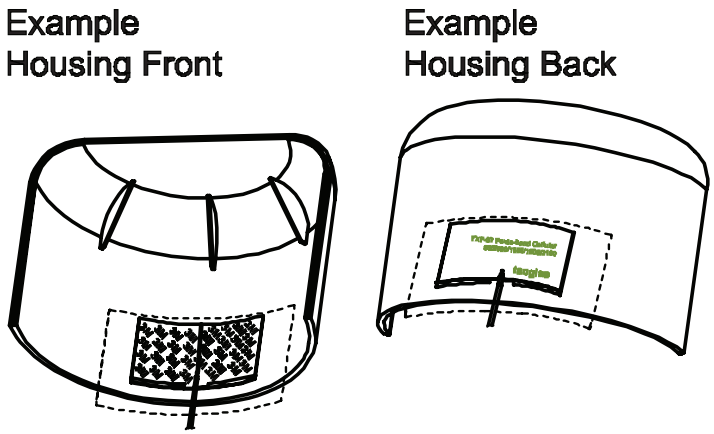


4. Mechanical Drawing

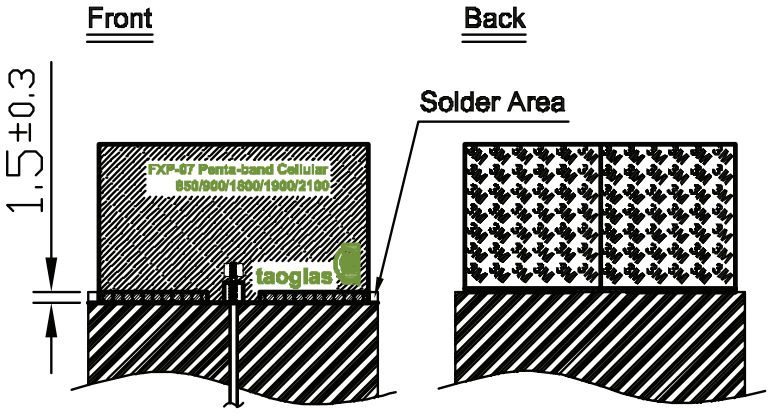
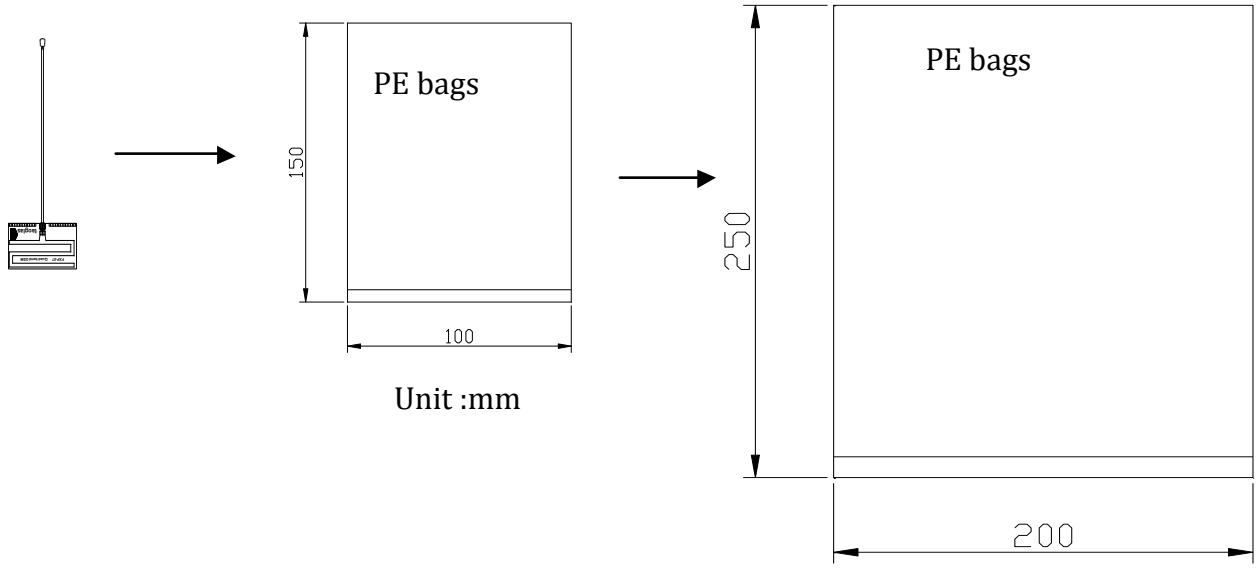


5. Installation

1: Adhesive Mount on Plastic



2: Solder Mount on PCB Footprint



6. Packaging