

Approval Sheet	Part Division	Mechanical Part	Electrical Part	Approval	
Part Number		SW0503T0A			
Model Number		PM150			
Manufacturing Code					

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<b>1. Revision History</b>									
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1									
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## 2. Technical Specifications

### 2.1 General Features

MODEL NUMBER	SW0503T0A
Ass'y Type	Manual Soldering
APPLICATIONS	2.4GHz WIFI

### 2.2 Electrical Specifications

Frequency Range		2400 ~ 2480 MHz	
IMPEDANCE		50 Ω	
V.S.W.R	1st	2400MHz	2480MHz
		2.5:1	2.5:1
RADIATION PATTERN		Omni-directional	
POLARIZATION		Vertical/Linear	

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### 2.3 Mechanical Specifications

Dimensions	13.5 x 12.0 x 2.0T
Operating Temperature	-30 °C ~ + 80 °C
Mounting Type	Manual Soldering
Operation Humidity	10 ~ 90 (%)
Weight	0.5g

### 2.4 Packing Specifications

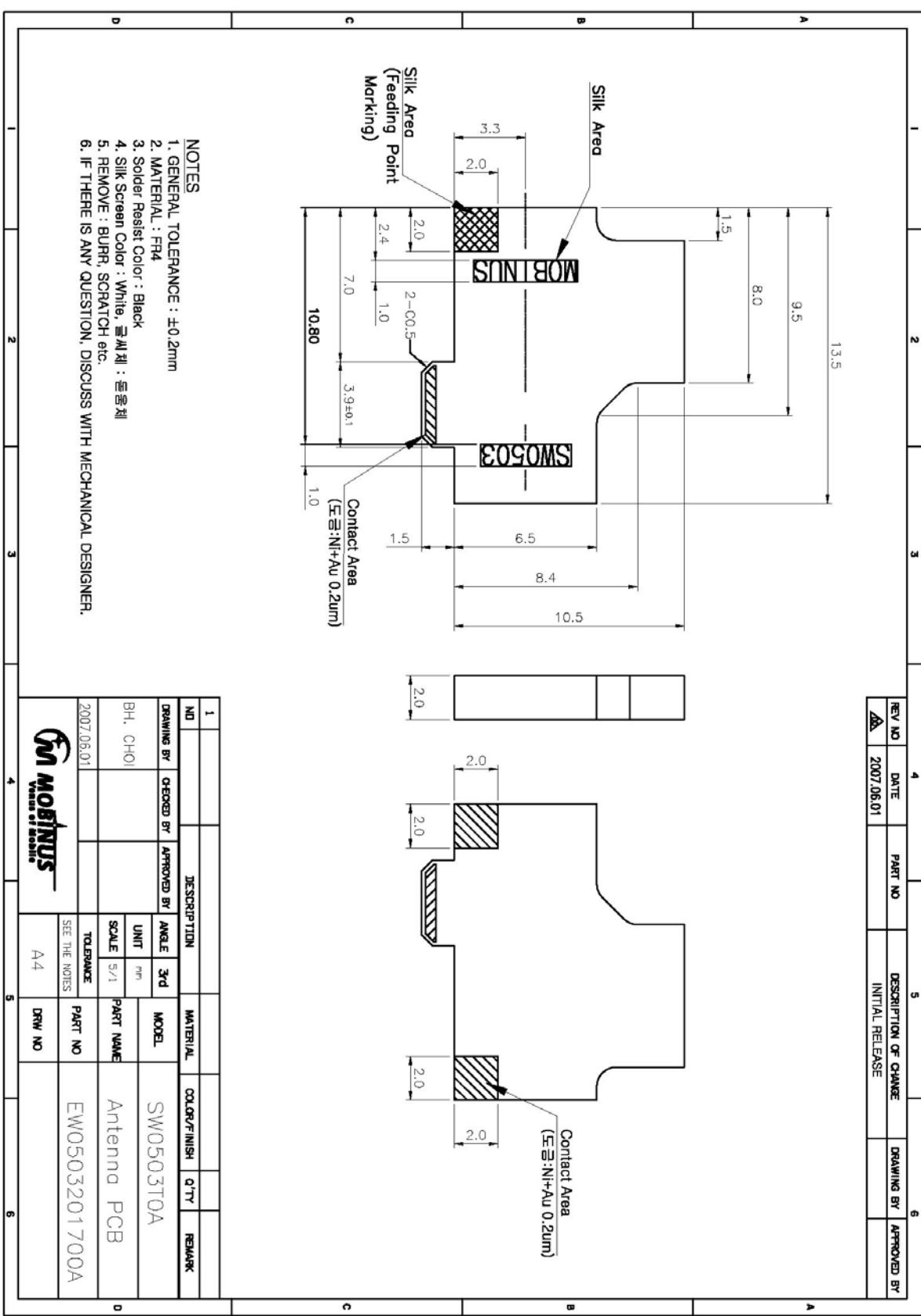
Item	Quantity	Materials	Note
BULK	1,000EA	PP	
CARTON BOX	EA	Double Wall Paper	

## 2.5 Reliability Specifications

- Standard Temperature Range: IEC Specifications

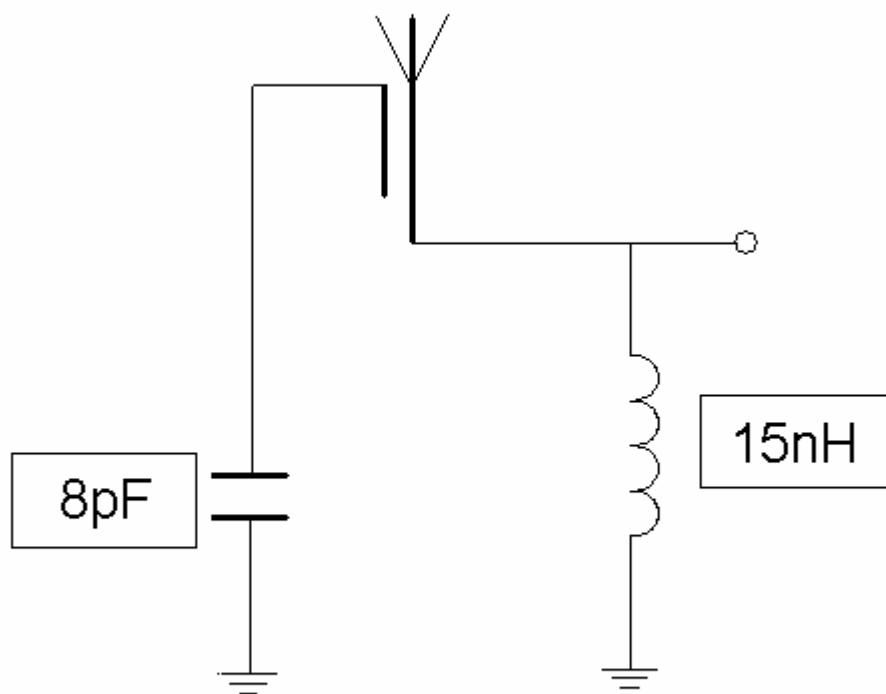
No	Item	Conditions and Method
1	Temperature Shock	<ul style="list-style-type: none"> <li>● Perform 10 cycles as follow           <ul style="list-style-type: none"> <li>■ High Temp.: 30min, + 85°C</li> <li>■ Low Temp.: 30min, -40°C</li> <li>■ Repeat : 10 times</li> </ul> </li> <li>● Stabilize at room temperature for measurement</li> </ul>
2	Dry Heat Test	<ul style="list-style-type: none"> <li>● Dwell in + 85°C chamber for 72 hours</li> <li>● Stabilize at room temperature for measurement</li> </ul>
3	Low Temperature Test	<ul style="list-style-type: none"> <li>● Dwell in -40°C chamber for 72 hours</li> <li>● Stabilize at room temperature for measurement</li> </ul>
4	Humidity Test	<ul style="list-style-type: none"> <li>● Dwell in test chamber at + 50C and 95% RH for 24 hours</li> <li>● Stabilize at room temperature for measurement</li> </ul>
5	Drop Test	<ul style="list-style-type: none"> <li>● Conditions           <ul style="list-style-type: none"> <li>■ Drop height: 1.5 m</li> <li>■ Drop angle: 45 ° / 90 °</li> <li>■ Drop cycle : Each 5 times</li> <li>■ Weight : 150 g</li> </ul> </li> </ul>
6	Salt Spray Test	<ul style="list-style-type: none"> <li>● After exposing to 5% sodium atmosphere at + 35° C for 72 hours and washing pure water, test within 2 hours</li> </ul>

### 3. Mechanical Drawings



## 4 Measurement DATA

### 4.1 Matching Circuit



## 4.2 VSWR &amp; Smith Chart

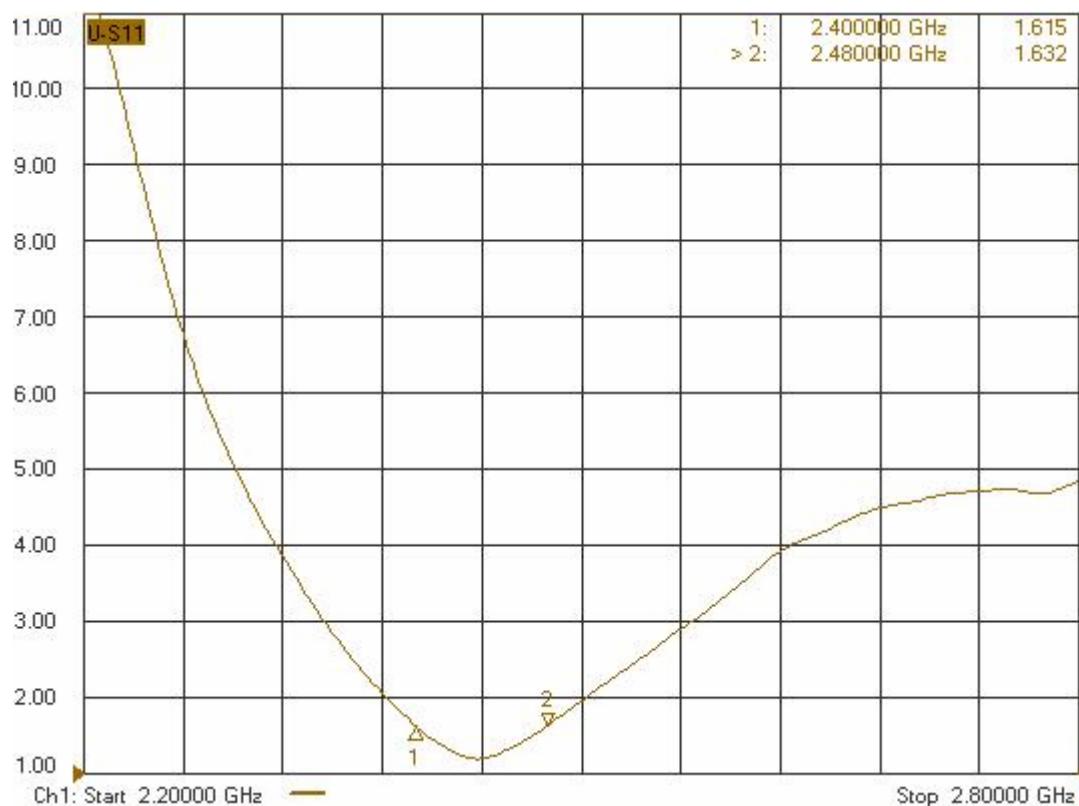


Figure 3 VSWR

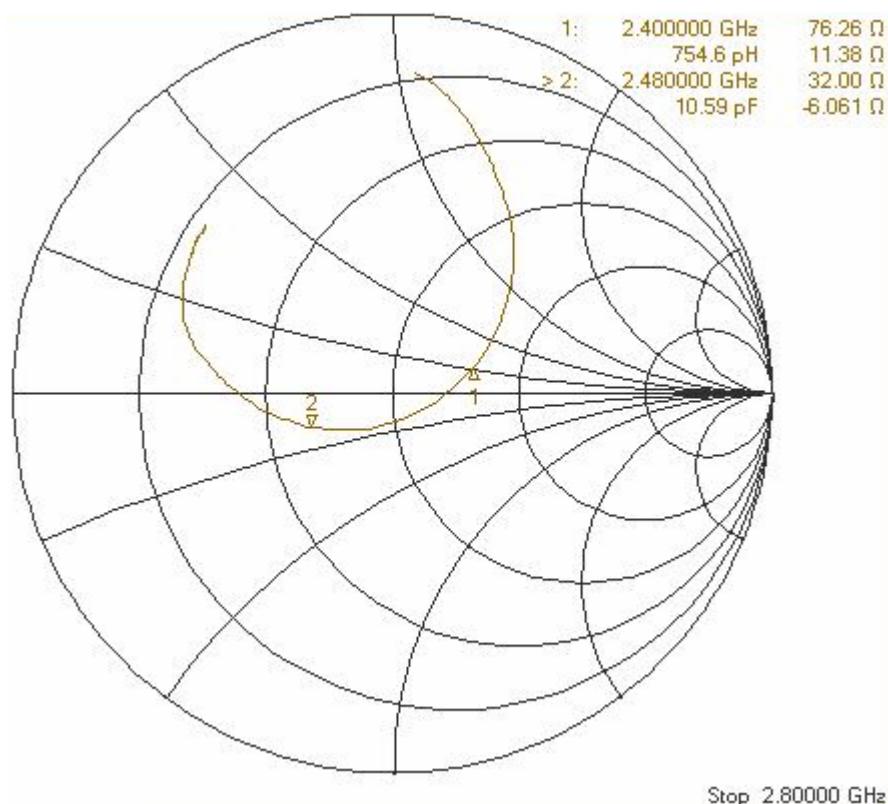


Figure 4 SMITH CHART

## 4.3 Test Environment and Radiation Pattern

### 4.3.1 Test System

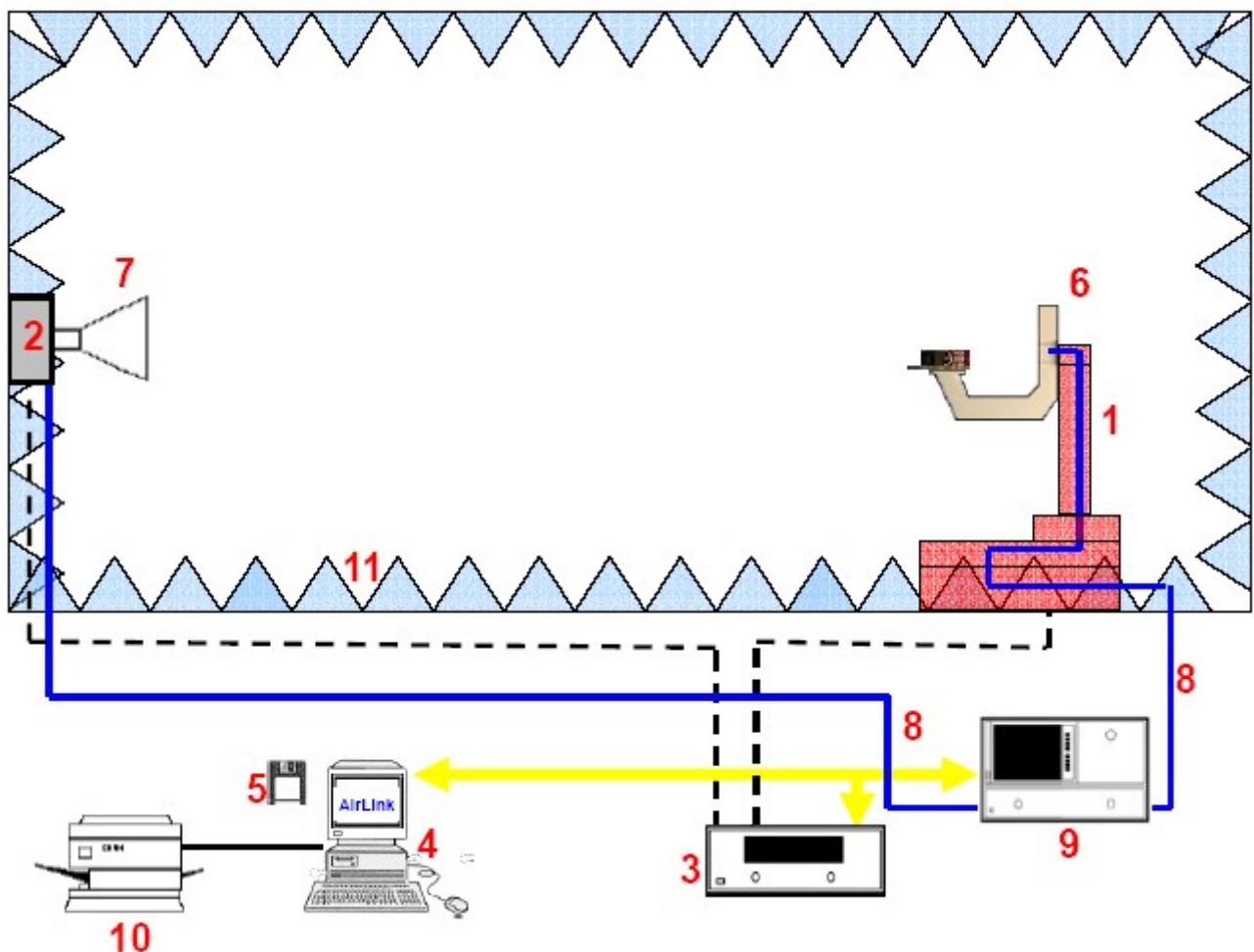
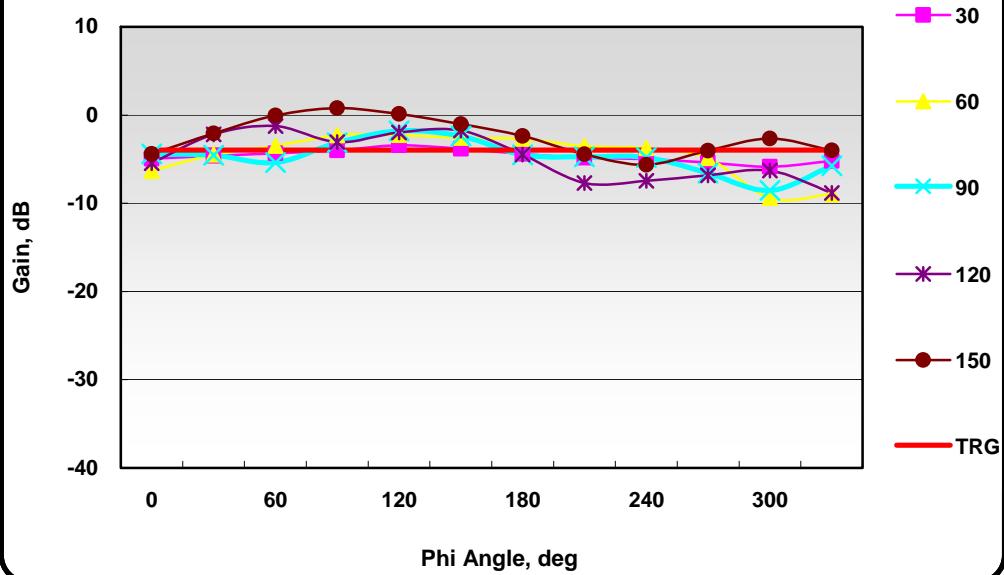


Figure 5 Test System

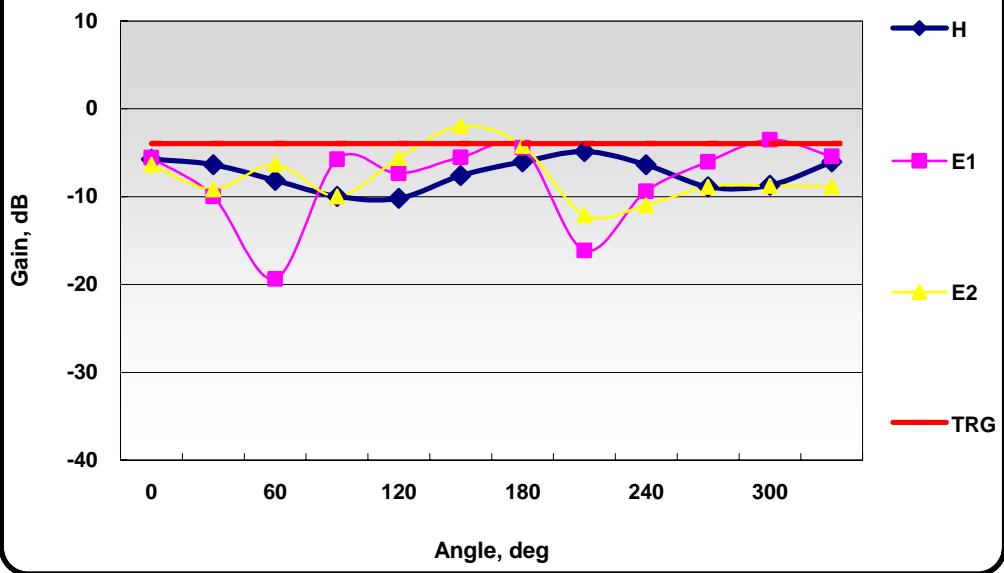
01. Azimuth
02. Polarization Rotator
03. Rotator Controller
04. System Controller
05. ANT Passive (Antenna Pattern) Measurement Software
06. Bracket
07. Diagonal Dual Polarized Horn Antenna
08. Low Loss Coaxial Cable
09. Network Analyzer
10. Printer
11. Absorber & Others (Shielding, VSWR Testing and etc.)

Accessories Amplifier, Coaxial Adapters and GPIB Cables

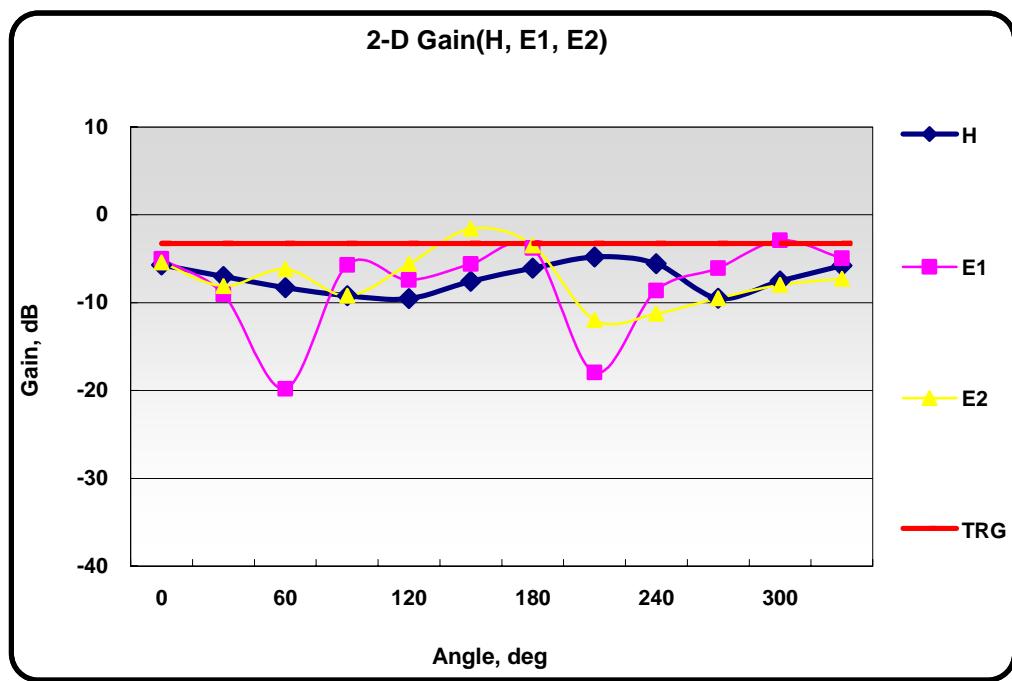
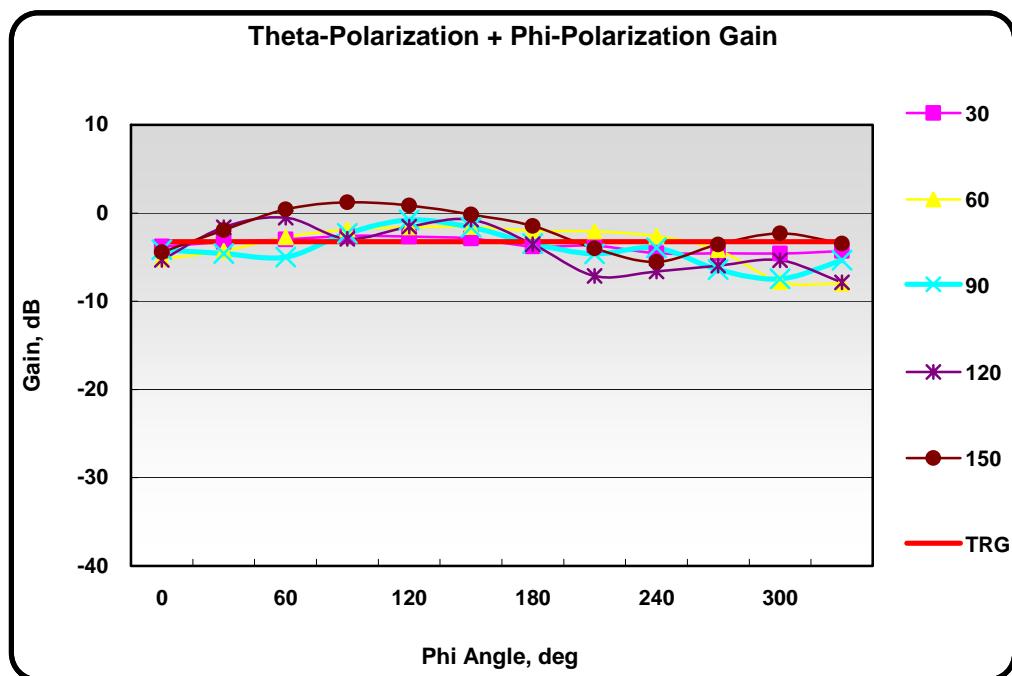
## Theta-Polarization + Phi-Polarization Gain



## 2-D Gain(H, E1, E2)

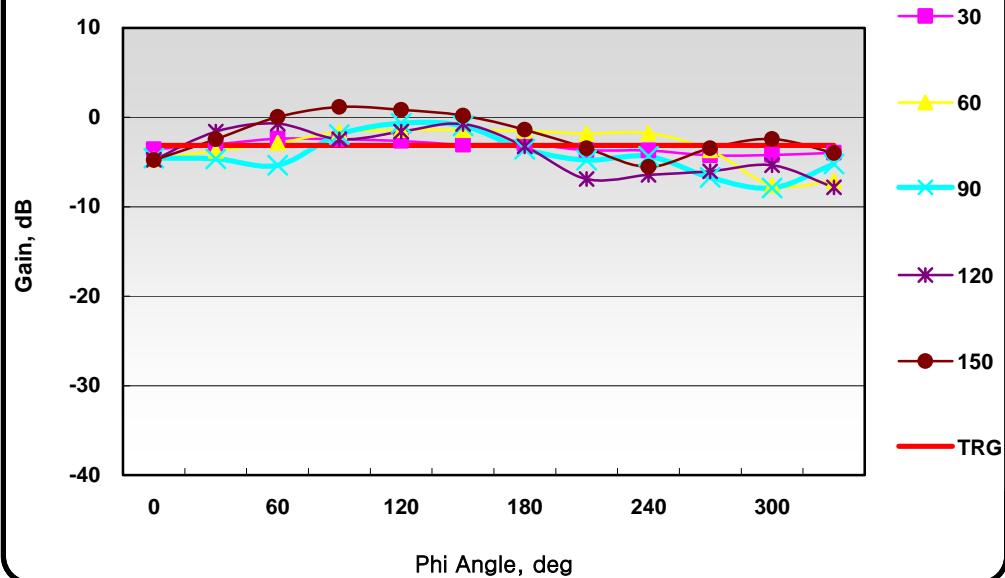


2400 MHz

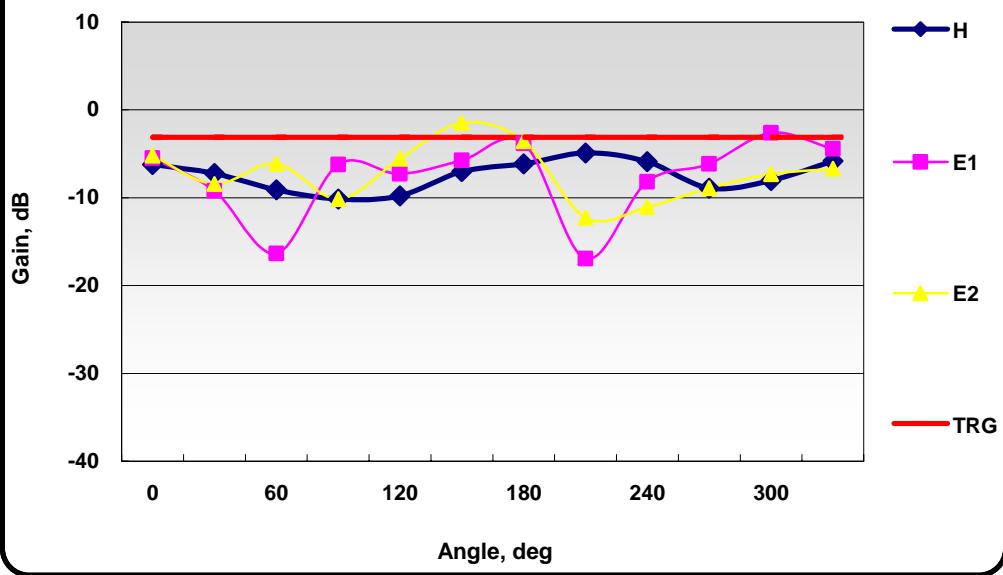


2420 MHz

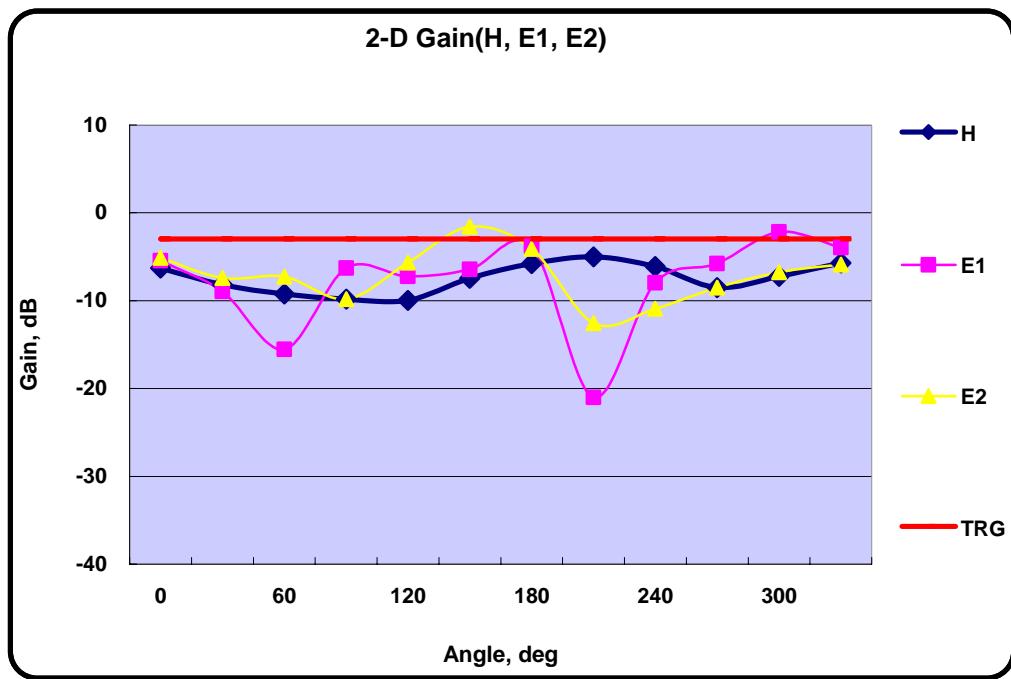
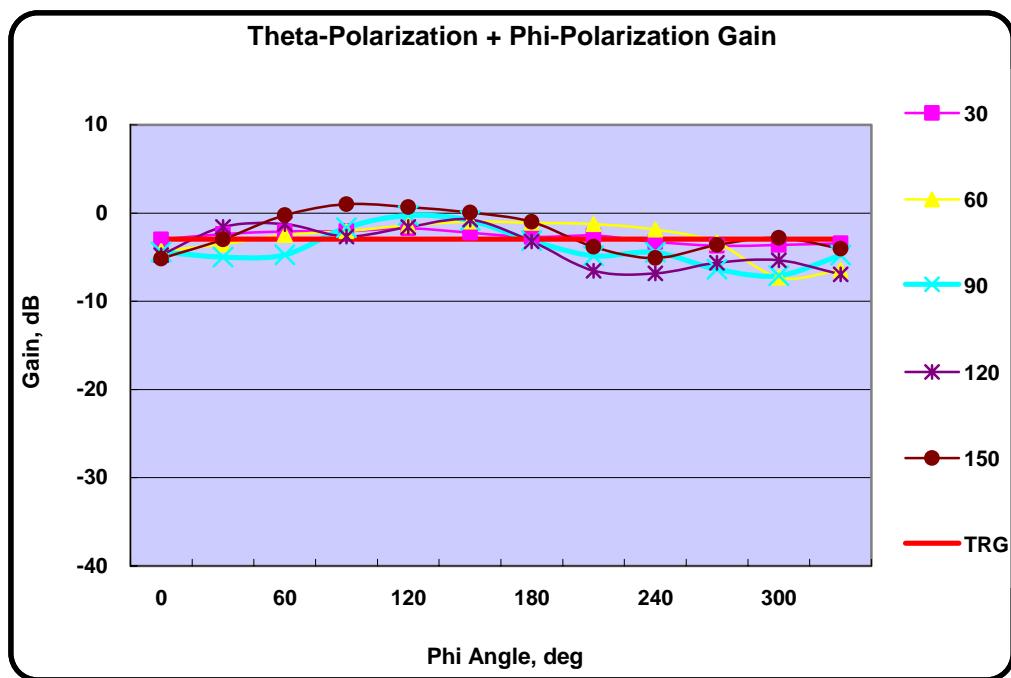
## Theta-Polarization + Phi-Polarization Gain



## 2-D Gain(H, E1, E2)

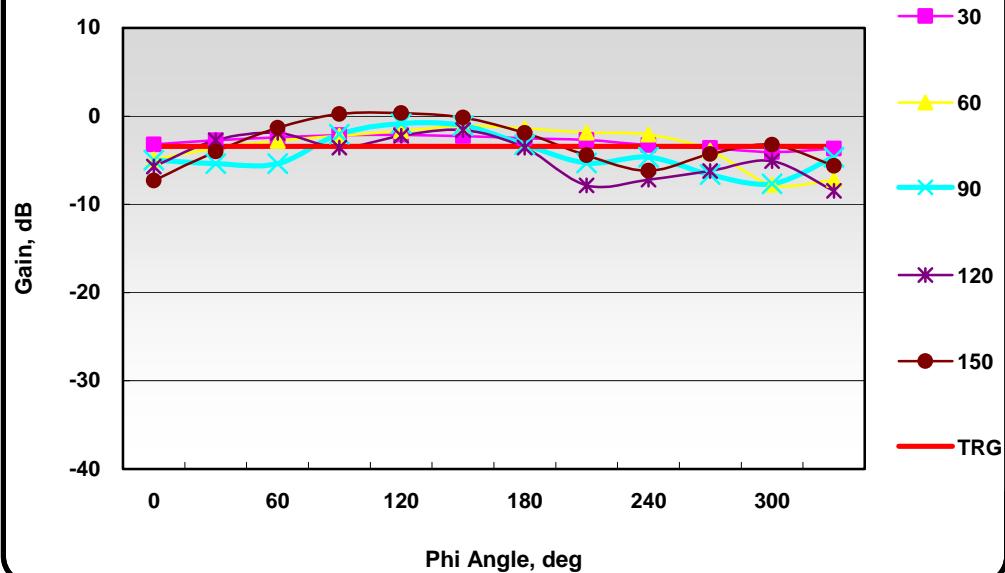


2440 MHz

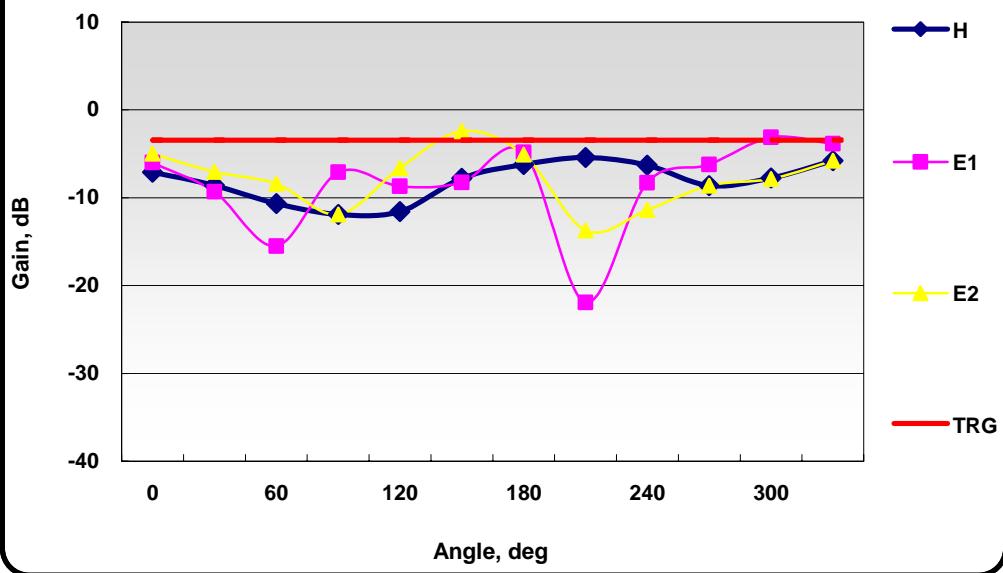


2460 MHz

## Theta-Polarization + Phi-Polarization Gain



## 2-D Gain(H, E1, E2)



2480 MHz