



ANTENNA TEST REPORT

SUMMARY OF TEST RESULTS

Item	Specification
Frequency	2.4 - 2.5 GHz
Peak Gain (max.)	-0.92 dBi
Average Gain	-8.40 dBi
V.S.W.R.	3.395 max.
Antenna Type	Printed Monopole Antenna
Polarization	Linear
Impedance	50 ohm

MEASUREMENT EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
S-Parameter Network Analyzer	Agilent	E8358A	US40260243	05/24/04
Signal Generator	Agilent	83630B	3844A01022	01/14/05
Spectrum Analyzer	Agilent	E4446A	MY43360131	01/10/05
Horn antenna	EMCO	3115	00022250	02/26/05
Spectrum Analyzer	Agilent	E4446A	MY43360131	01/10/05

Reviewed by:



James Lee
Section Manager
Compliance Certification Services Inc.

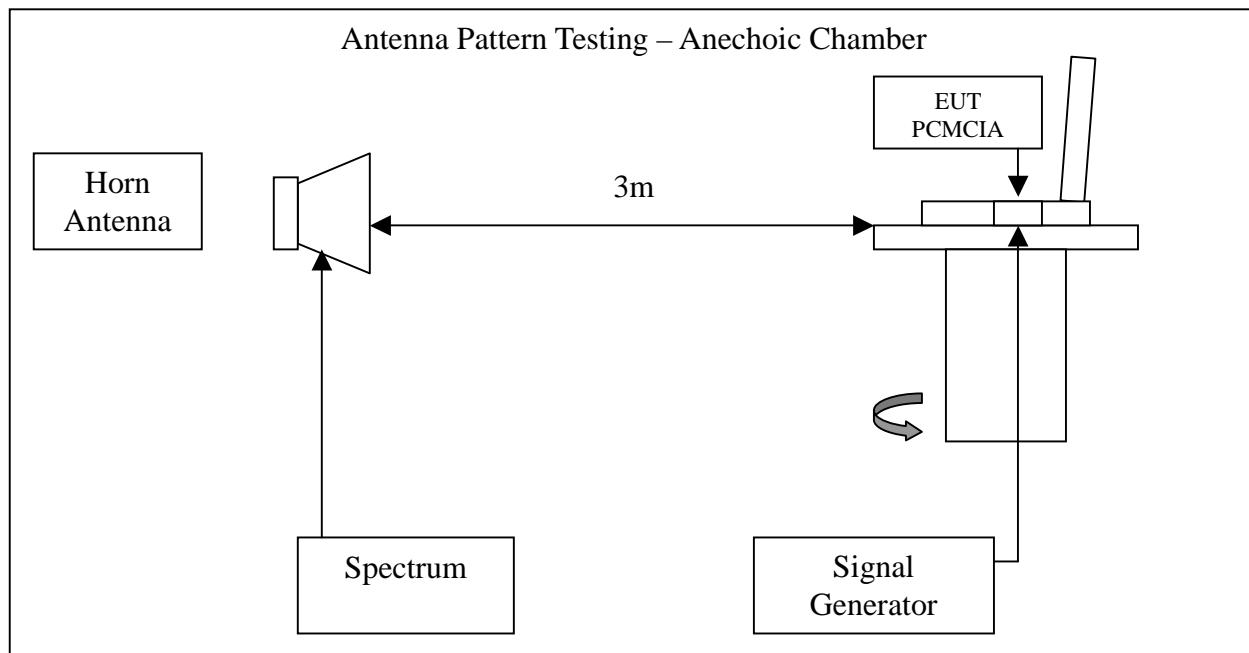
Tested by:



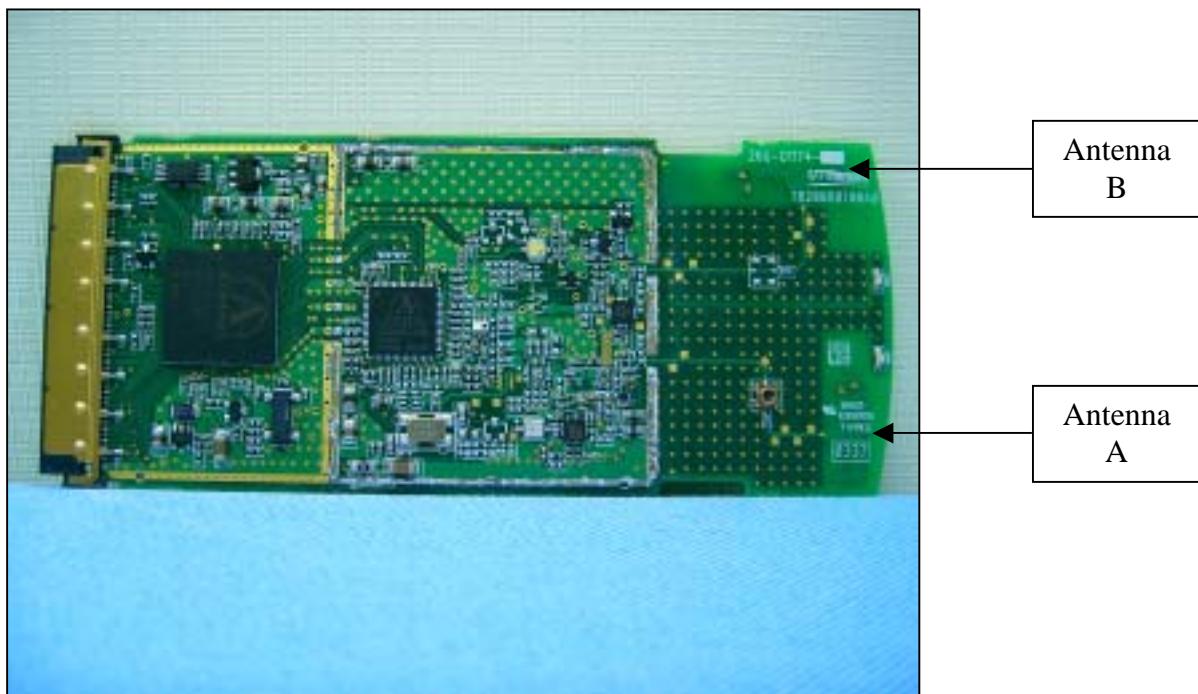
Devin Cheng
Section Manager
Compliance Certification Services Inc.

1. ANTENNA TEST CONDITIONS

Test Setup



EUT Antenna Description





2. ELECTRICAL CHARACTERISTICS

V.S.W.R.

Antenna A



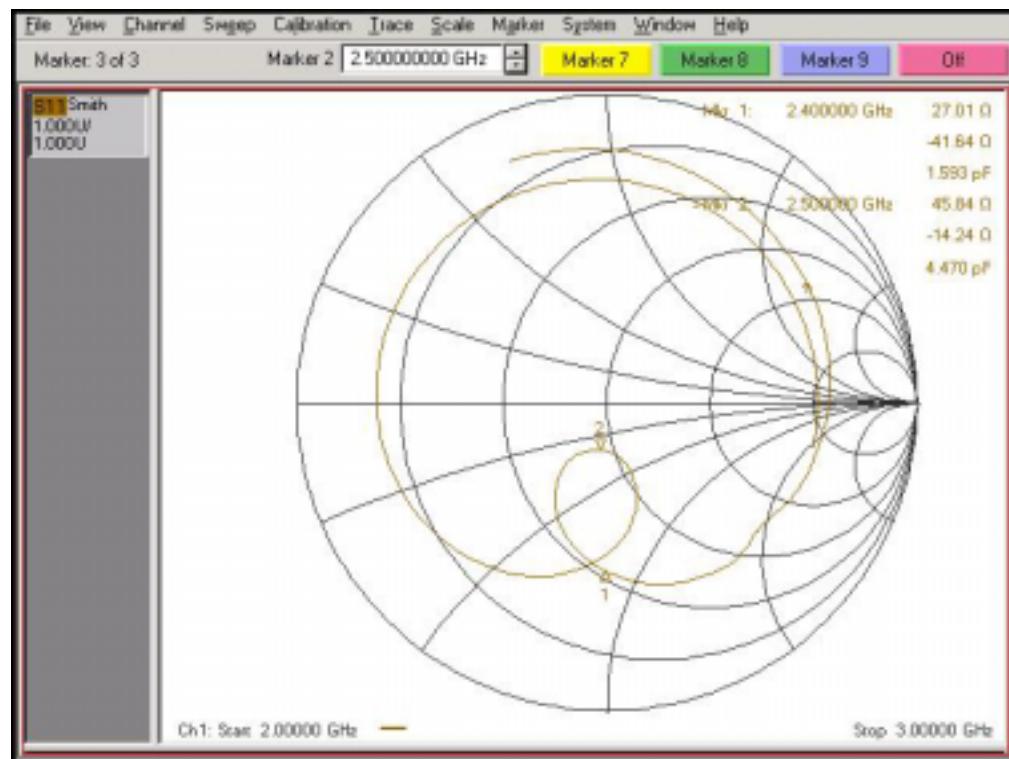
Antenna B



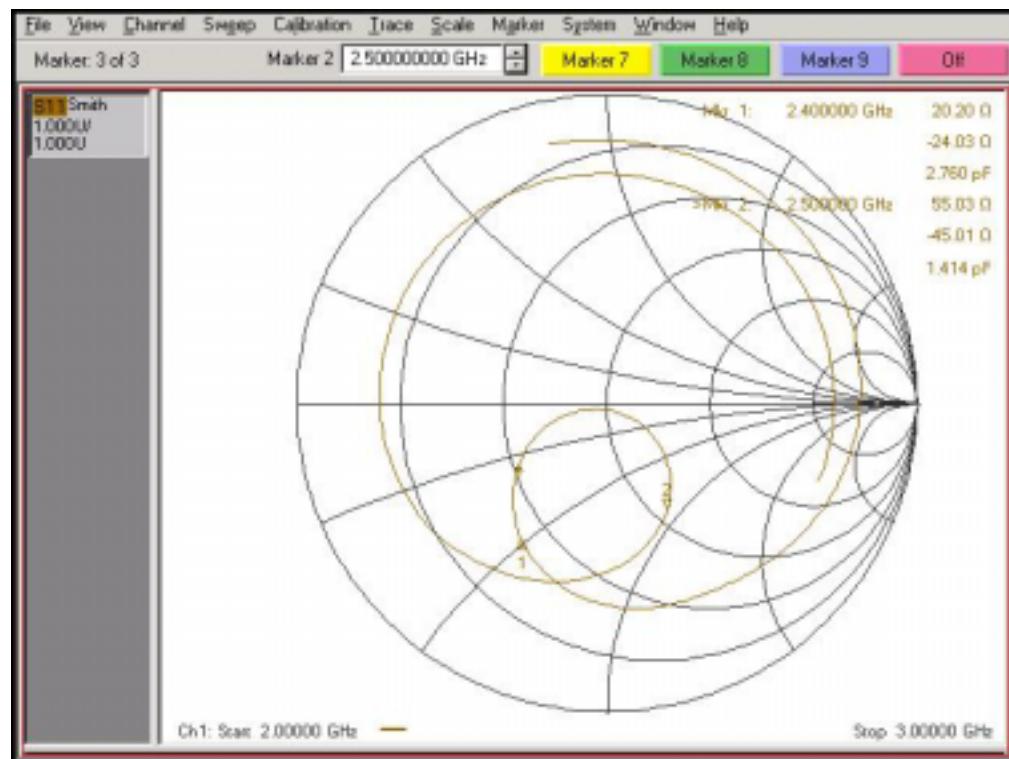


Smith Chart

Antenna A



Antenna B

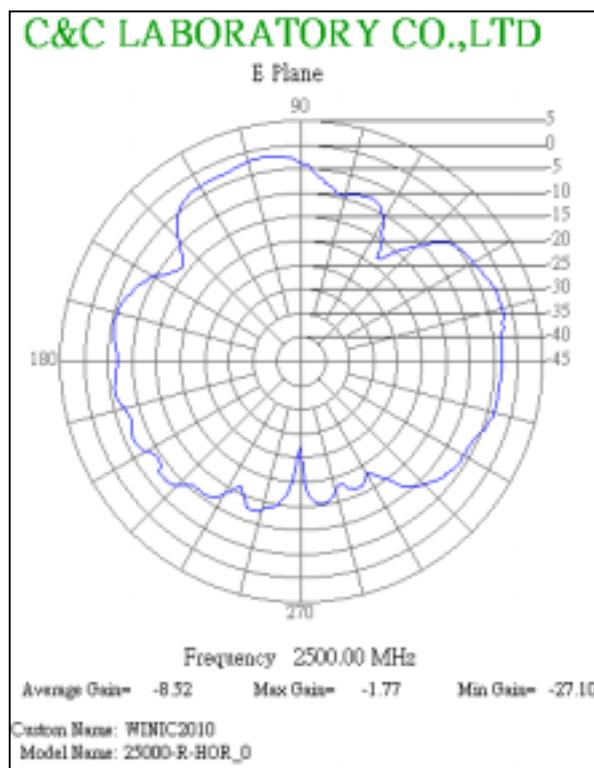
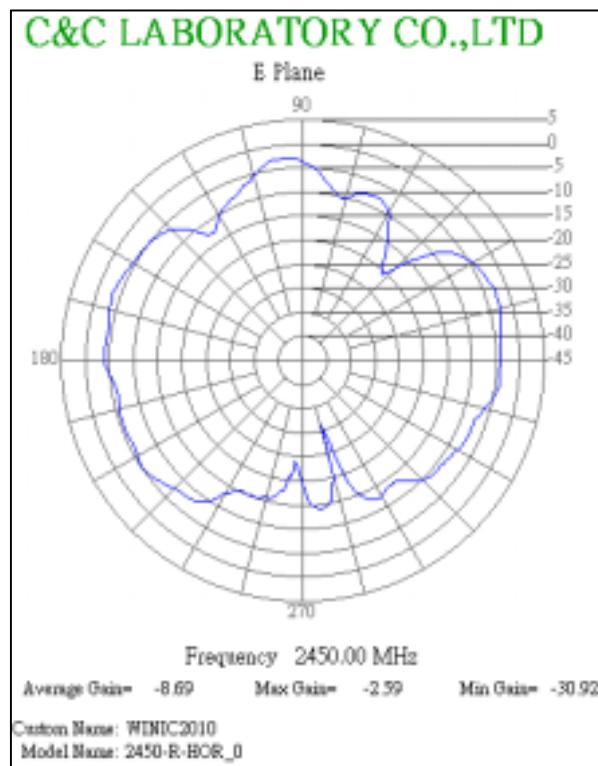
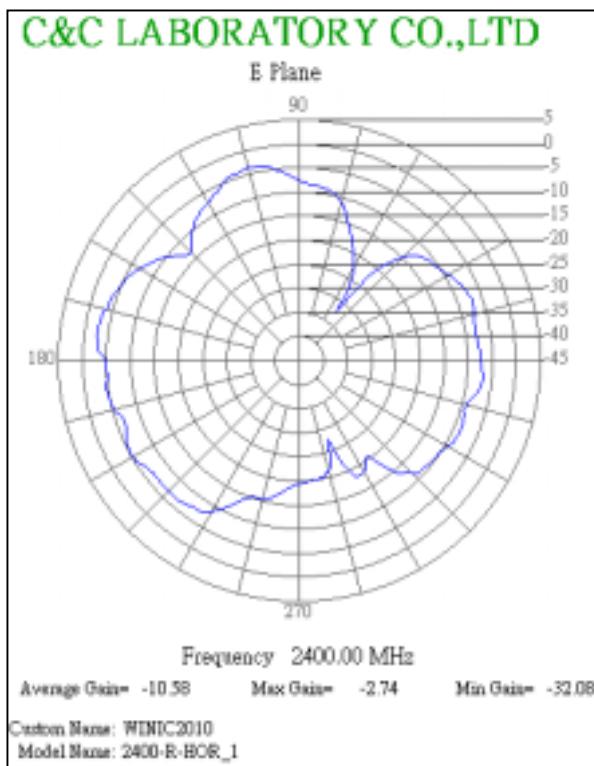




3. ANTENNA PATTERNS

Antenna A

● Co-plane (E-plane)

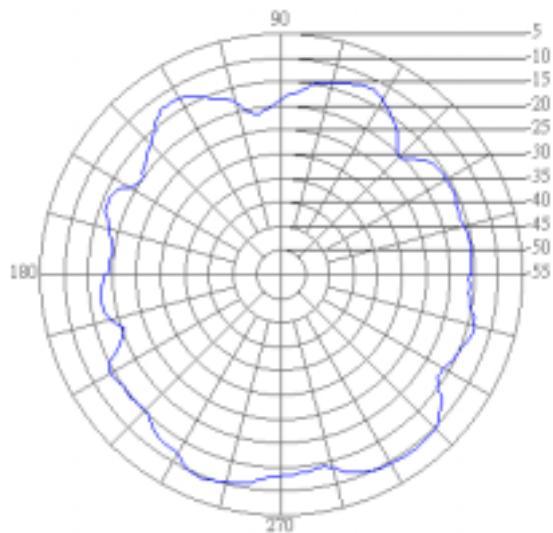




- Cross-plane (H-plane)

C&C LABORATORY CO.,LTD

H Plane

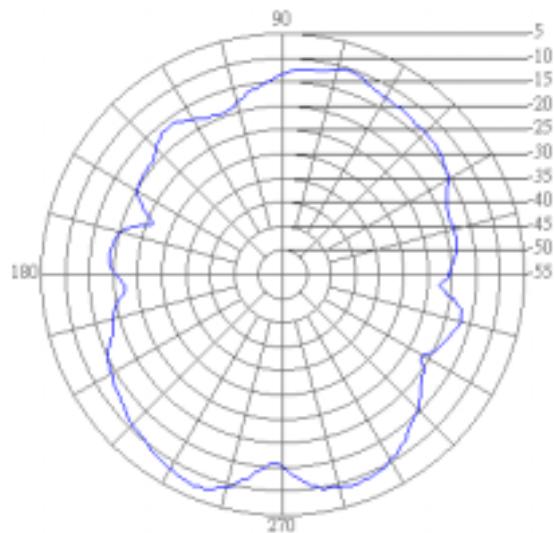


Frequency 2500.00 MHz

Average Gain= -15.02 Max Gain= -9.44 Min Gain= -21.44

Custom Name: WINIC2010
Model Name: 2500-R-VER_0**C&C LABORATORY CO.,LTD**

H Plane

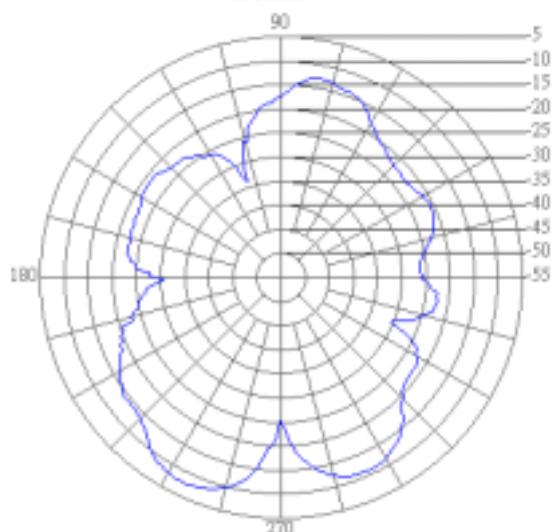


Frequency 2450.00 MHz

Average Gain= -15.49 Max Gain= -7.42 Min Gain= -25.76

Custom Name: WINIC2010
Model Name: 2450-R-VER_0**C&C LABORATORY CO.,LTD**

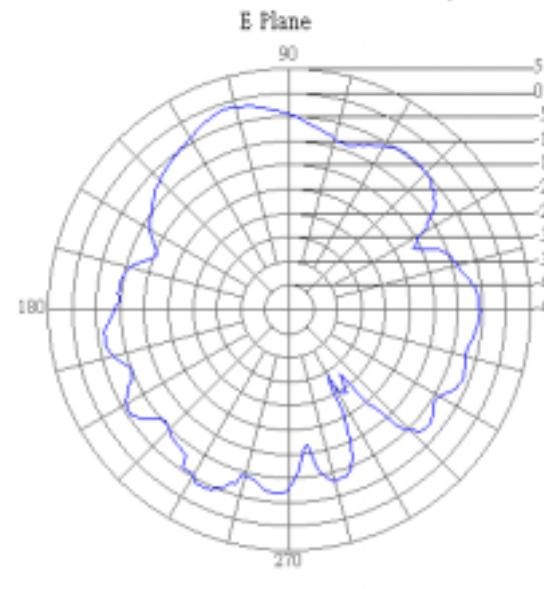
H Plane



Frequency 2400.00 MHz

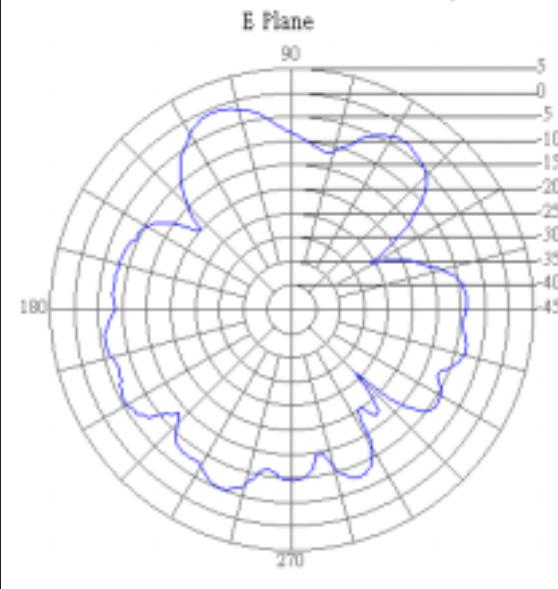
Average Gain= -19.55 Max Gain= -7.91 Min Gain= -33.75

Custom Name: WINIC2010
Model Name: 2400-R-VER_0

**Antenna B****● Co-plane (E-plane)****C&C LABORATORY CO.,LTD**

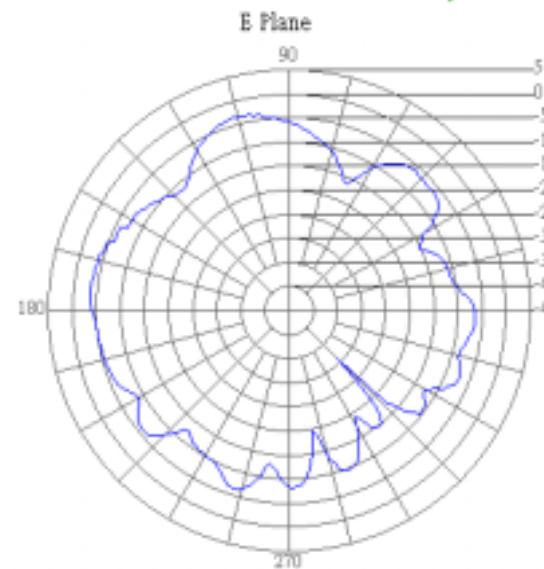
Frequency 2400.00 MHz

Average Gain= -8.40 Max Gain= -1.41 Min Gain= -29.08

Custom Name: WINIC2010
Model Name: 2400-L-HOR_0**C&C LABORATORY CO.,LTD**

Frequency 2450.00 MHz

Average Gain= -9.52 Max Gain= -0.92 Min Gain= -26.92

Custom Name: WINIC2010
Model Name: 2450-L-HOR_0**C&C LABORATORY CO.,LTD**

Frequency 2500.00 MHz

Average Gain= -8.95 Max Gain= -3.44 Min Gain= -31.10

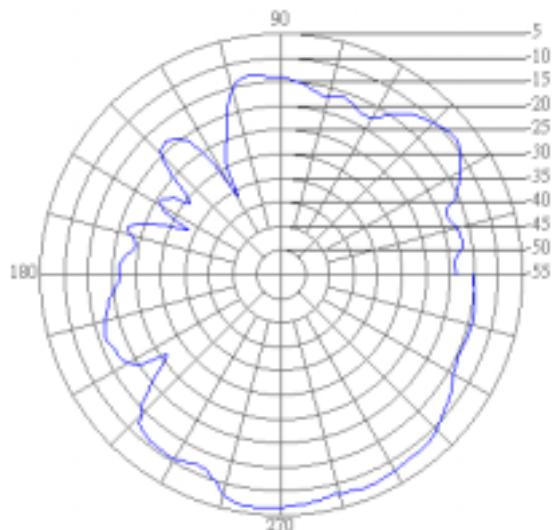
Custom Name: WINIC2010
Model Name: 2500-L-HOR_0



- Cross-plane (H-plane)

C&C LABORATORY CO.,LTD

H Plane



Frequency 2400.00 MHz

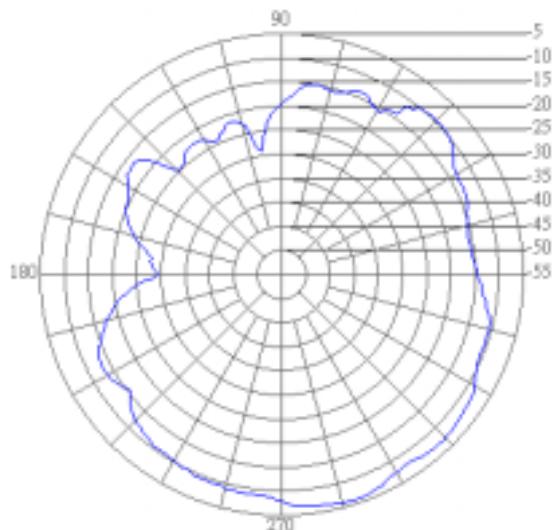
Average Gain= -15.68 Max Gain= -6.25 Min Gain= -36.41

Custom Name: WINIC2010

Model Name: 2400-L-VER_0

C&C LABORATORY CO.,LTD

H Plane



Frequency 2450.00 MHz

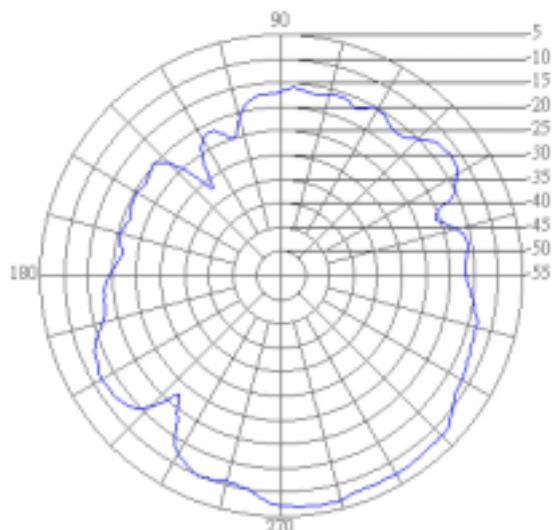
Average Gain= -14.62 Max Gain= -5.76 Min Gain= -29.26

Custom Name: WINIC2010

Model Name: 2450-L-VER_0

C&C LABORATORY CO.,LTD

H Plane



Frequency 2500.00 MHz

Average Gain= -15.30 Max Gain= -6.60 Min Gain= -31.94

Custom Name: WINIC2010

Model Name: 2500-L-VER_0