

IV-4 Management

Information Network Settings Wireless Settings Management Advanced Operation Mode

(Configurable for AP Mode only)

IV-4-1 Admin

You can change the password used to login to the browser-based configuration interface here. It is advised to do so for security purposes.

 ***If you change the administrator password, please make a note of the new password. In the event that you forget this password and are***

unable to login to the browser based configuration interface, see 0

Account to Manage This Device

Administrator Name	admin		
Administrator Password		(4-32Characters)	
		(Confirm)	

Apply

Account to Manage This Device	
Administrator Name	Set the access point’s administrator name. This is used to log in to the browser based configuration interface and must be between 4-16 alphanumeric characters (case sensitive).
Administrator Password	Set the access point’s administrator password. This is used to log in to the browser based configuration interface and must be between 4-32 alphanumeric characters (case sensitive).

Press “Apply” to apply the configuration.

Advanced Settings	
Product Name	AP801F02F1968A
HTTP Port	80 (80, 1024-65535)
HTTPS Port	443 (443, 1024-65535)
Management Protocol	☒ HTTP ☒ HTTPS ☒ TELNET ☐ SSH ☒ SNMP
Login Timeout	5 (mins)
SNMP Version	v1/v2c
SNMP Get Community	public
SNMP Set Community	private
SNMP V3 Name	admin
SNMP V3 Password	
SNMP Trap	Disabled
SNMP Trap Community	public
SNMP Trap Manager	
Apply	

Advanced Settings	
Product Name	Edit the product name according to your preference consisting of 1-32 alphanumeric characters. This name is used for reference purposes.
Management Protocol	Check/uncheck the boxes to enable/disable specified management interfaces (see below). When SNMP is enabled, complete the SNMP fields below.
SNMP Version	Select SNMP version appropriate for your SNMP manager.
SNMP Get Community	Enter an SNMP Get Community name for verification with the SNMP manager for SNMP-GET requests.
SNMP Set Community	Enter an SNMP Set Community name for verification with the SNMP manager for SNMP-SET requests.
SNMP Trap	Enable or disable SNMP Trap to notify SNMP manager of network errors.
SNMP Trap	Enter an SNMP Trap Community name for verification with

Community	the SNMP manager for SNMP-TRAP requests.
SNMP Trap Manager	Specify the IP address or sever name (2-128 alphanumeric characters) of the SNMP manager.

HTTP

Internet browser HTTP protocol management interface

TELNET

Client terminal with telnet protocol management interface

SNMP

Simple Network Management Protocol. SNMPv1, v2 & v3 protocol supported. SNMPv2 can be used with community based authentication. SNMPv3 uses user-based security model (USM) architecture.

Press “Apply” to apply the configuration.

IV-4-2 Date and Time

Configure the date and time settings of the access point here. The date and time of the device can be configured manually or can be synchronized with a time server.

Date and Time Settings

Local Time

▼

Year

Jan

▼

Month

1

▼

Day

0

▼

Hours

00

▼

Minutes

00

▼

Seconds

Acquire Current Time from Your PC

NTP Time Server

Use NTP

☐ Enable

Auto Daylight Saving

☒ Enable

Server Name

User-Defined ▼

Update Interval

24 (Hours)

Time Zone

(GMT+08:00) Taipei, Taiwan ▼

Apply

Cancel

Date and Time Settings	
Local Time	Set the access point’s date and time manually using the drop down menus.
Acquire Current Time from your PC	Click “Acquire Current Time from Your PC” to enter the required values automatically according to your computer’s current time and date.

NTP Time Server	
Use NTP	The access point also supports NTP (Network Time Protocol) for automatic time and date setup.
Server Name	Enter the host name or IP address of the time server if you wish.
Update Interval	Specify a frequency (in hours) for the access point to update/synchronize with the NTP server.

Time Zone	
Time Zone	Select the time zone of your country/region. If your country/region is not listed, please select another country/region whose time zone is the same as yours.

Press “Apply” to apply the configuration, or “Cancel” to forfeit the changes.

IV-4-3 Syslog Server

The system log can be sent to a server.

The screenshot shows two configuration panels. The top panel, 'Syslog Server Settings', has a 'Transfer Logs' link and a checkbox for 'Enable Syslog Server' which is currently unchecked. Below it is a text input field. The bottom panel, 'Syslog E-mail Settings', contains several fields: 'E-mail Logs' (unchecked checkbox), 'E-mail Subject' (text input), 'SMTP Server Address' (text input), 'SMTP Server Port' (text input), 'Sender E-mail' (text input), 'Receiver E-mail' (text input), and 'Authentication' (a dropdown menu currently set to 'Disable'). At the bottom right of the second panel are 'Apply' and 'Cancel' buttons.

Syslog Server Settings	
Transfer Logs	Check the box to enable the use of a syslog server. Enter a host name, domain or IP address for the server, consisting of up to 128 alphanumeric characters.

Syslog E-mail Settings	
E-mail Logs	Check the box to enable/disable e-mail logs.
E-mail Subject	Specify the subject line of log emails.
SMTP Server Address	Specify the SMTP server address used to send log emails.
SMTP Server Port	Specify the SMTP server port used to send log emails.
Sender E-mail	Specify the sender email address.
Receiver E-mail	Specify the email to receive log emails.
Authentication	Disable or select authentication type: SSL or TLS. When using SSL or TLS, enter the username and password.

Press “Apply” to apply the configuration, or “Cancel” to forfeit the changes.

IV-4-4 Ping Test

The access point includes a built-in ping test function. Ping is a computer network administration utility used to test whether a particular host is reachable across an IP network and to measure the round-trip time for sent messages.

Ping Test

Destination Address

Execute

Result

Destination Address	Enter the address of the host.
Execute	Click “Execute” to ping the host.

IV-4-5 I'm Here

The access point features a built-in buzzer which can sound on command using the “I’m Here” page. This is useful for network administrators and engineers working in complex network environments to locate the access point.

I'm Here

Duration of Sound

Duration of Sound

10

(1-300 seconds)

Sound Buzzer



The buzzer is loud!

Duration of Sound	Set the duration for which the buzzer will sound when the “Sound Buzzer” button is clicked.
Sound Buzzer	Activate the buzzer sound for a duration specified above.

IV-5 Advanced

Information

Network Settings

Wireless Settings

Management

Advanced

Operation Mode

IV-5-1 LED Settings

The access point’s LEDs can be manually enabled or disabled according to your preference.

LED Settings

Power LED	☒ On ☐ Off
2.4GHz LED	☒ On ☐ Off
5GHz LED	☒ On ☐ Off
Diag LED	☒ On ☐ Off

Apply

Cancel

Power LED	Select on or off.
2.4GHz LED	Select on or off.
5GHz LED	Select on or off.
Diag LED	Select on or off.

IV-5-2 Update Firmware

The “Firmware” page allows you to update the firmware of the system. Updated firmware versions often offer increased performance and security, as well as bug fixes. Download the latest firmware from the Edimax website.

Firmware Location

Update firmware from

☒ Auto
☐ a file on your PC

Auto Update Firmware

Current Firmware Version0.11.0

Server Firmware Version

Check



Do not switch off or disconnect the access point during a firmware upgrade, as this could damage the device.

Firmware Location: Auto	
Current Firmware Version	Displays current firmware version.
Server Firmware Version	Displays available firmware version on the server.
Status	Displays availability of firmware.
Check	Click to check available firmware version.

Auto Update Firmware

Current Firmware Version0.11.0

Server Firmware Version

StatusNo Internet Connection / No Firmware Matched

Check

Firmware Location: a file on your PC

Firmware Update File	Click “Choose File” to select firmware from your PC.
-----------------------------	--

Update	Click to update the firmware.
---------------	-------------------------------

Update Firmware from PC

Firmware Update File

Choose File

No file chosen

Update

IV-5-3 Save / Restore Settings

The device's "Save / Restore Settings" page enables you to save / backup the device's current settings as a file to your local computer, and restore the device to previously saved settings.

Save/Restore Method

[Using Device](#) ☒ Using your PC

Save Settings to PC

[Save Settings](#) ☐ Encrypt the configuration file with a password.

Restore Settings from PC

[Restore Settings](#) No file chosen
☐ Open file with password.

Save Settings to PC

Save Settings

Encryption: If you wish to encrypt the configuration file with a password, check the "Encrypt the configuration file with a password" box and enter a password. Click "Save" to save current settings. A new window will open to allow you to specify a location to save to.

Restore Settings from PC

Restore Settings

Click the "Choose File" button to find a previously saved settings file on your computer. If your settings file is encrypted with a password, check the "Open file with password" box and enter the password in the following field. Click "Restore" to replace your current settings.

IV-5-4 Factory Default

If the access point malfunctions or is not responding, rebooting the device (IV-5-5 Reboot) maybe an option to consider. If rebooting does not work, try resetting the device back to its factory default settings. You can reset the access point back to its default settings using this feature if the reset button is not readily accessible.

This will restore all settings to factory defaults.

Factory Default

Factory Default	Click “Factory Default” to restore settings to the factory default. A pop-up window will appear and ask you to confirm.
-----------------	---



After resetting to factory defaults, please wait for the access point to reset and restart.

IV-5-5

Reboot

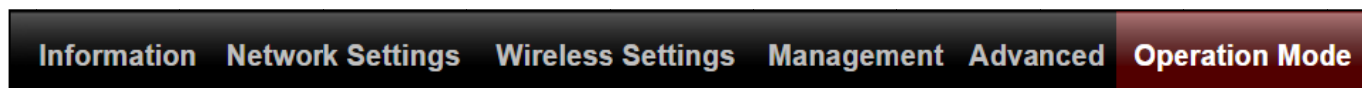
If the access point malfunctions or is not responding, rebooting the device may be an option to consider. You can reboot the access point remotely using this feature.

This will reboot the product. Your settings will not be changed. Click "Reboot" to reboot the product now.

Reboot

Reboot	Click “Reboot” to reboot the device. A countdown will indicate the progress of the reboot.
--------	--

IV-6 Operation Mode



The access point can function in five different modes. Set the operation mode of the access point here.

1. AP Mode: The device acts as a standalone access point
2. Repeater Mode: The device acts as a wireless repeater (also called wireless range extender) that takes an existing signal from a wireless router or wireless access point and rebroadcasts it to create a second network.
3. Managed AP Mode: The device acts as a slave AP within an AP array.
4. Client Bridge Mode: The device is now a client bridge. The client bridge receives wireless signal and provides it to devices connected to the bridge (via Ethernet cable).

Operation Mode	
Operation Mode	AP Mode ▼

Wireless Mode	
2.4GHz Mode	Access Point ▼
5GHz Mode	Access Point ▼

Apply Cancel

- AP Mode ▼
- AP Mode
 - Repeater Mode
 - Managed AP mode
 - Client Bridge Mode



In Managed AP mode some functions of the access point will be disabled in this user interface and must be set using Edimax Pro NMS on the AP Controller.

Press “Apply” to apply the configuration, or “Cancel” to forfeit the changes.

V Appendix

V-1 Configuring your IP address

The access point uses the default IP address **192.168.2.2**. In order to access the browser based configuration interface, you need to modify the IP address of your computer to be in the same IP address subnet e.g. **192.168.2.x (x = 3 – 254)**.

The procedure for modifying your IP address varies across different operating systems; please follow the guide appropriate for your operating system.

In the following examples we use the IP address **192.168.2.10** though you can use any IP address in the range **192.168.2.x (x = 3 – 254)**.



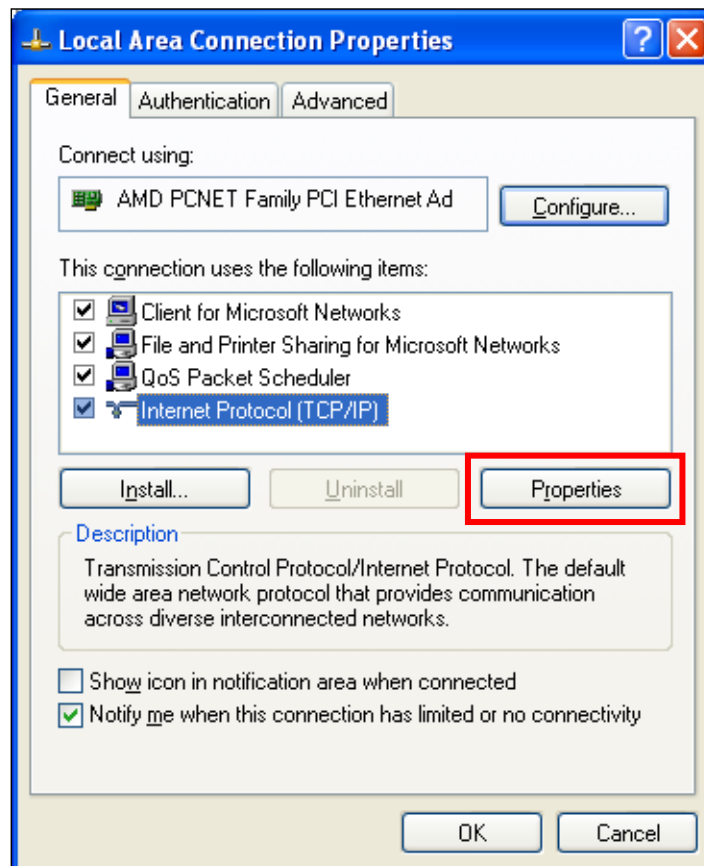
If you've changed the AP Controller's IP address, or if your gateway/router uses a DHCP server, make sure you enter the correct IP address. Refer to your gateway/router's settings. Your computer's IP address must be in the same subnet as the AP Controller.



If using a DHCP server on the network, it is advised to use your DHCP server's settings to assign the AP Controller a static IP address.

V-1-1 Windows XP

1. Click the “Start” button (it should be located in the lower-left corner of your computer) → “Control Panel” → “Network and Internet Connections” → “Network Connections” → “Local Area Connection”. The “Local Area Connection Properties” window will appear, select “Internet Protocol (TCP / IP)”, and click “Properties”.

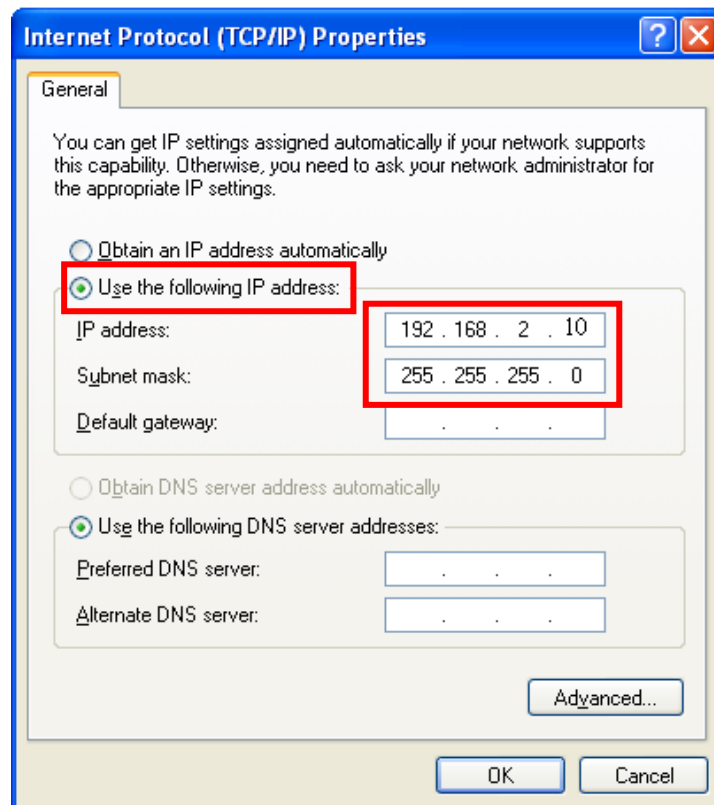


2. Select “Use the following IP address”, then input the following values:

IP address: 192.168.2.10

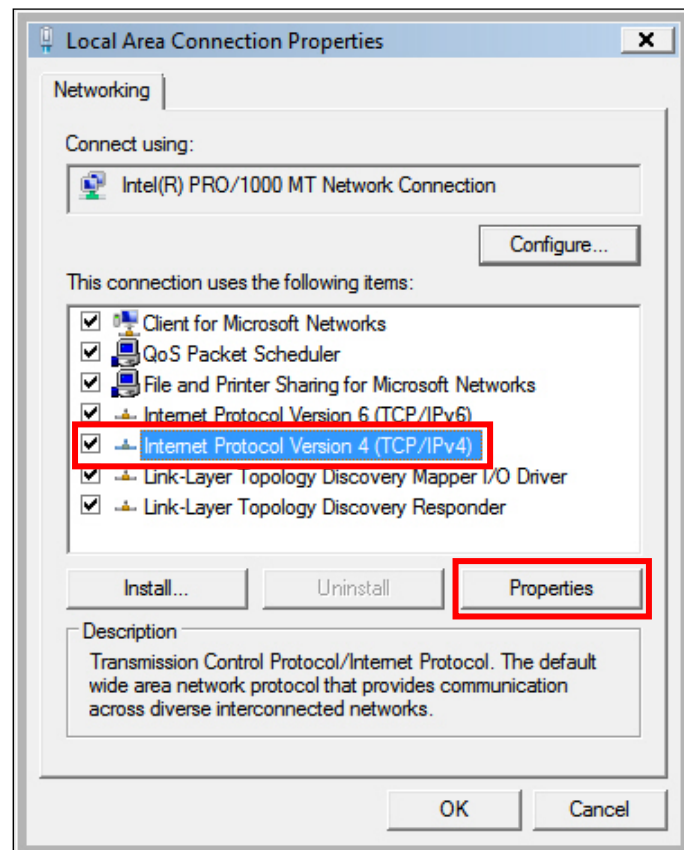
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.



V-1-2 Windows Vista

1. Click the “Start” button (it should be located in the lower-left corner of your computer) → “Control Panel” → “View Network Status and Tasks” → “Manage Network Connections” → “Local Area Network” → “Properties”. The “Local Area Connection Properties” window will appear, select “Internet Protocol Version 4 (TCP / IPv4)”, and then click “Properties”.

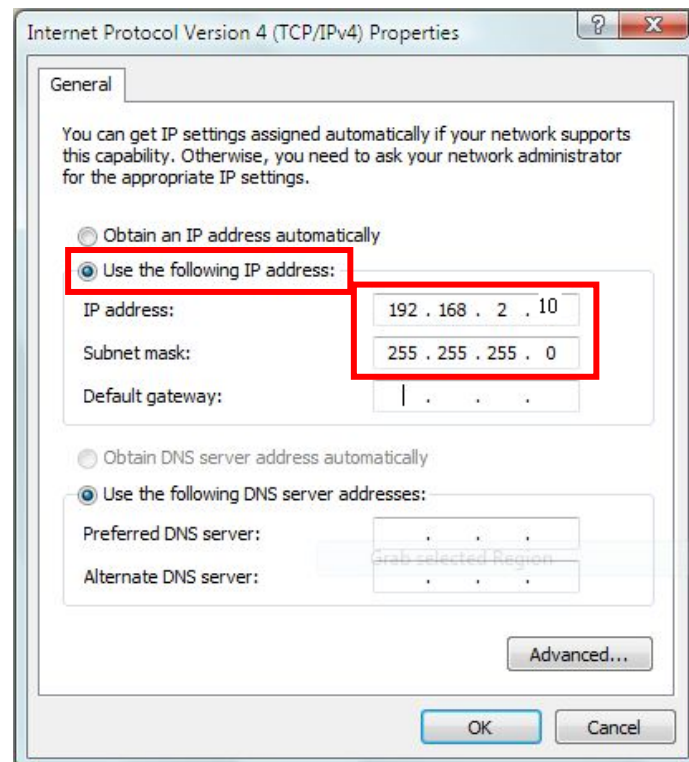


2. Select “Use the following IP address”, then input the following values:

IP address: 192.168.2.10

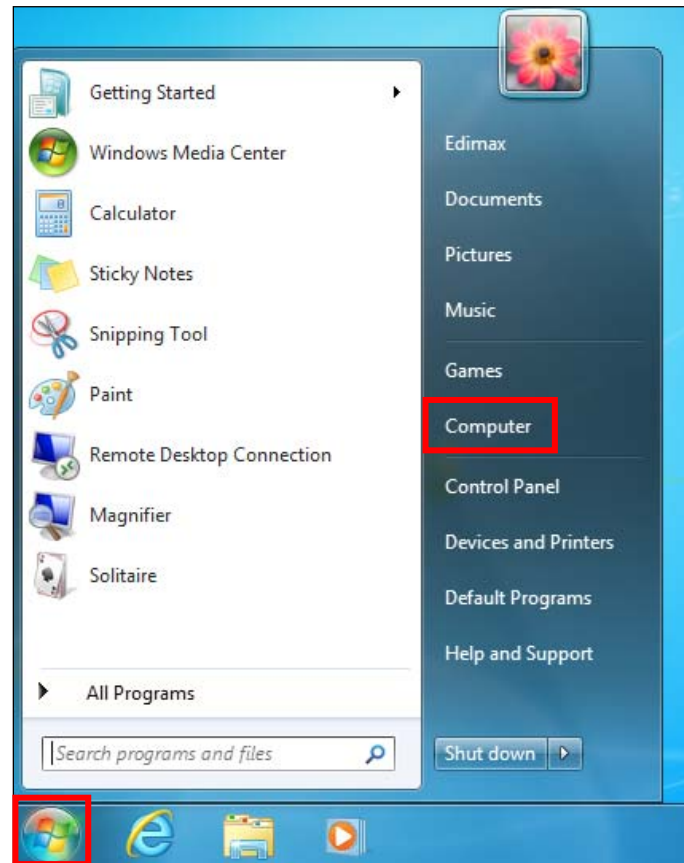
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

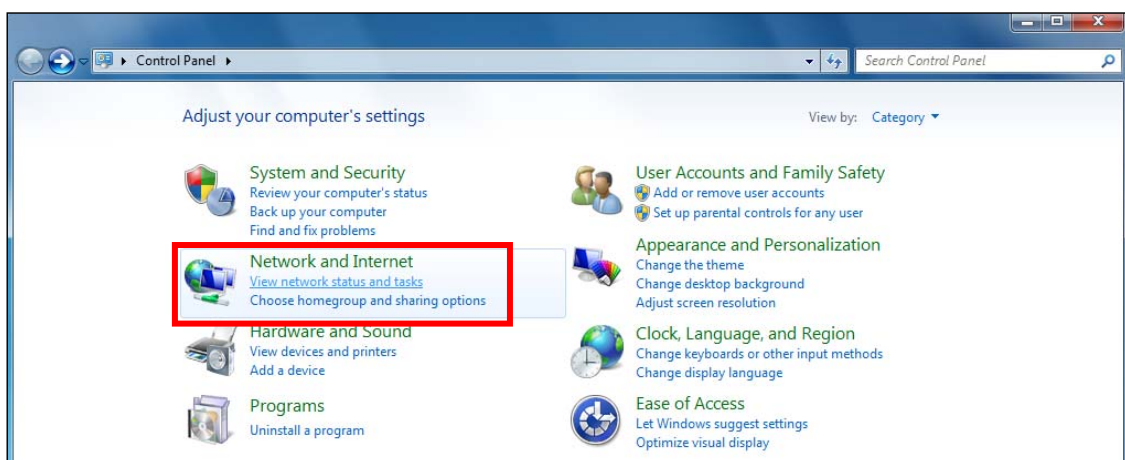


V-1-3 Windows 7

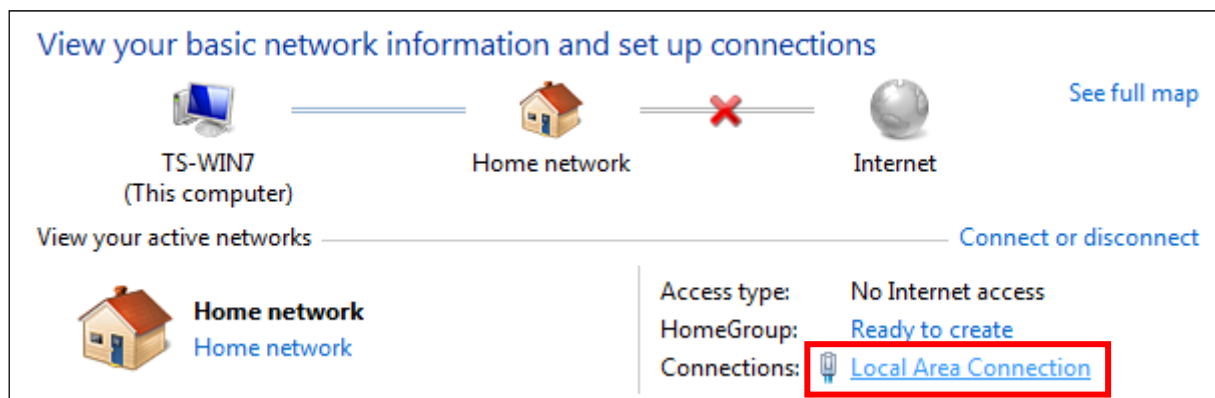
1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”.



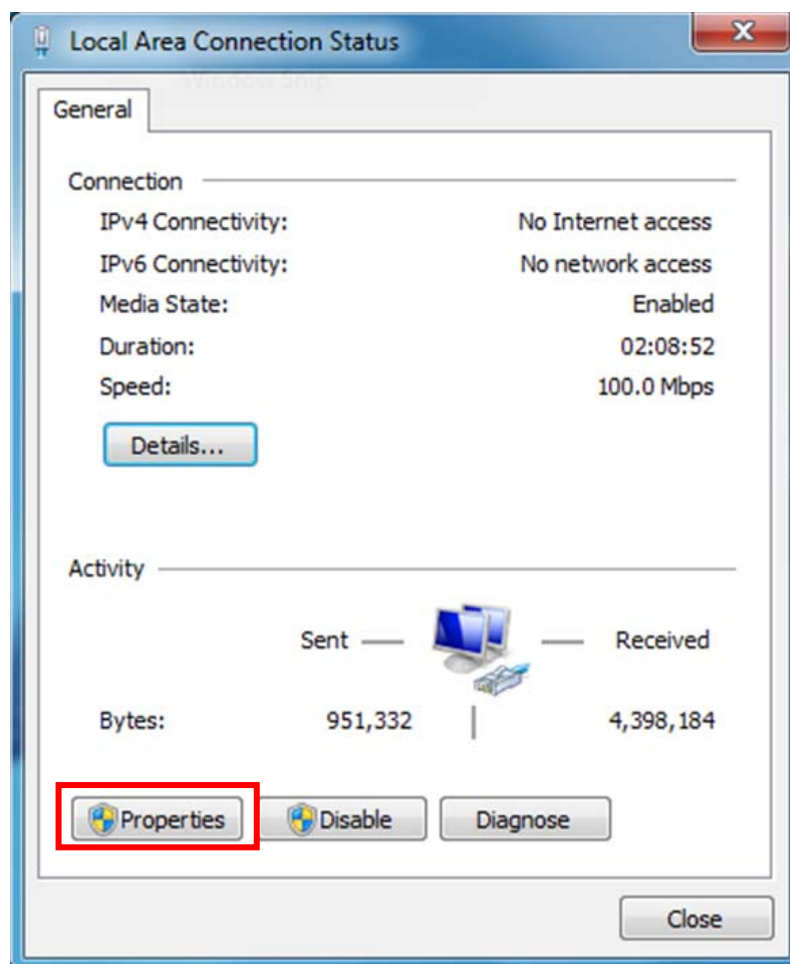
2. Under “Network and Internet” click “View network status and tasks”.



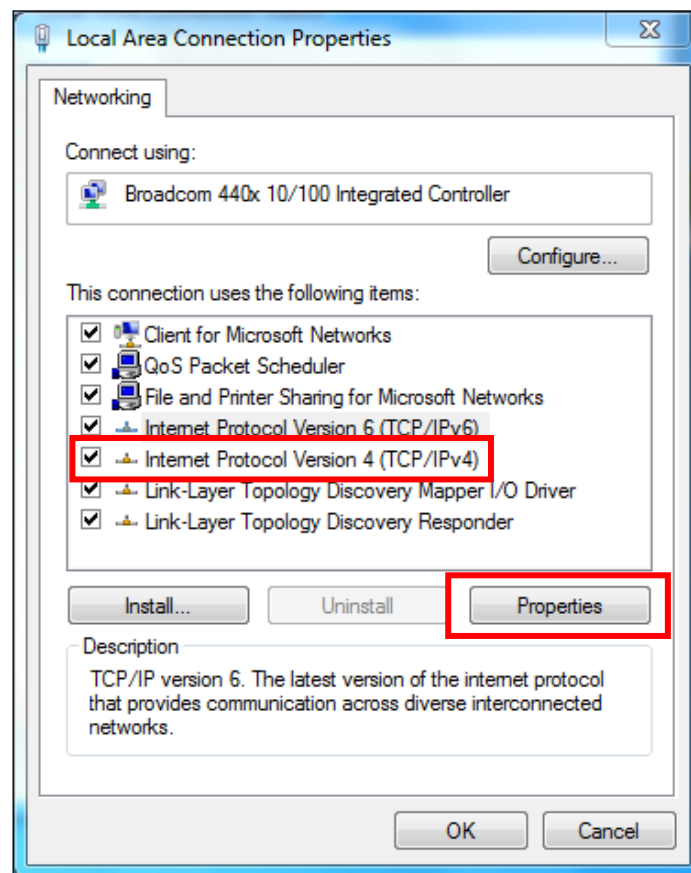
3. Click “Local Area Connection”.



4. Click “Properties”.



5. Select “Internet Protocol Version 4 (TCP/IPv4)” and then click “Properties”.

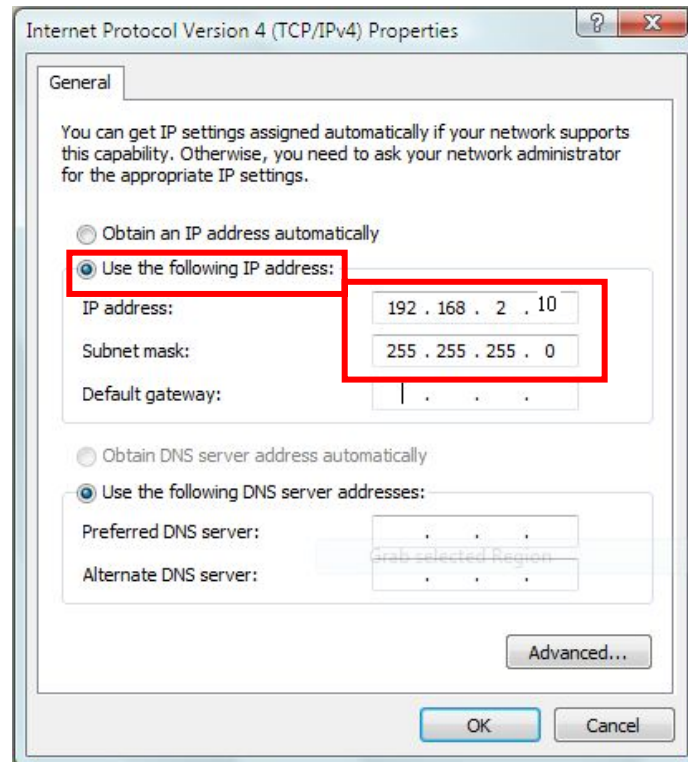


6. Select “Use the following IP address”, then input the following values:

IP address: 192.168.2.10

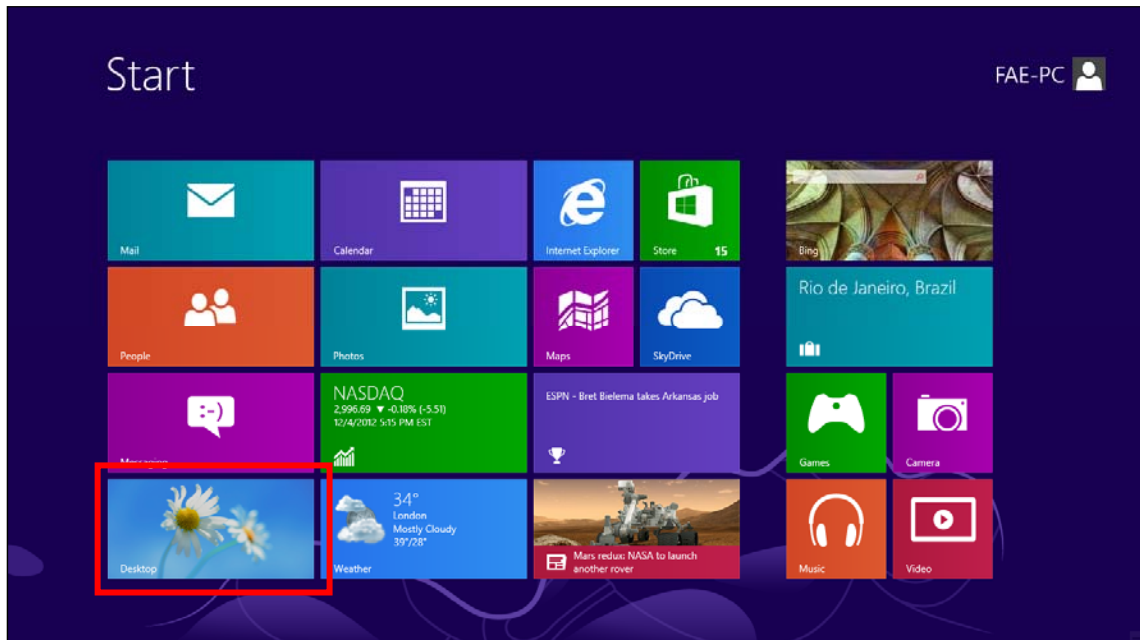
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

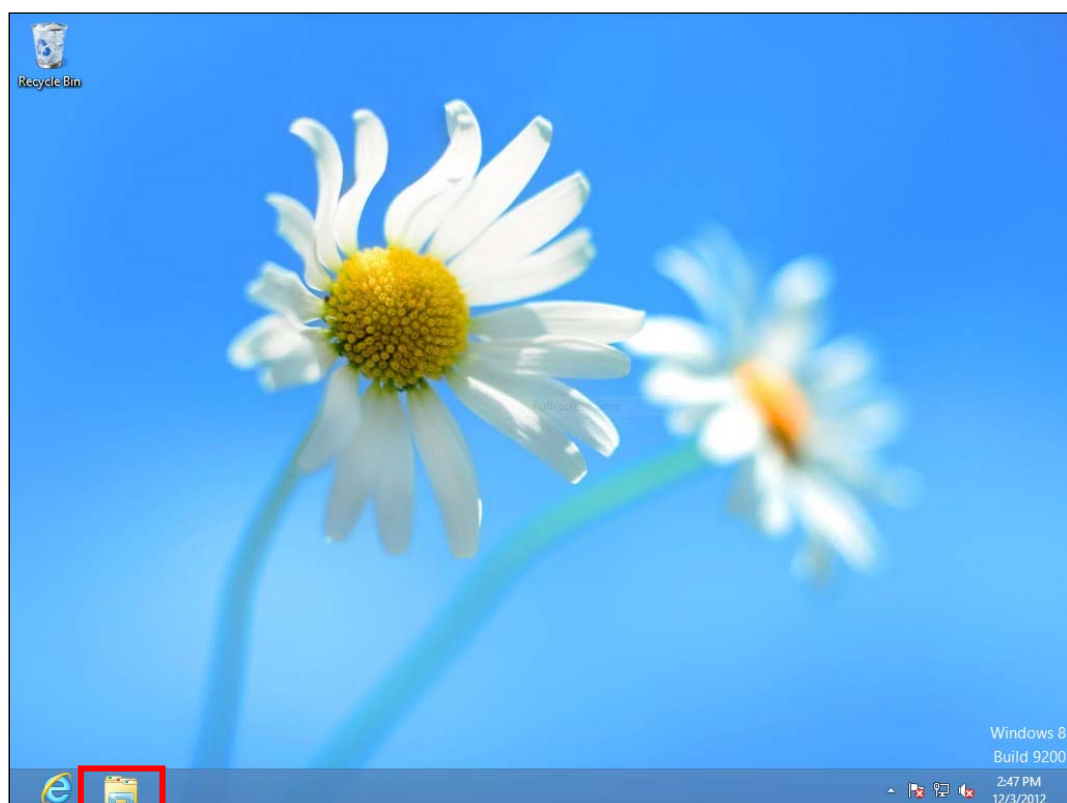


V-1-4 Windows 8

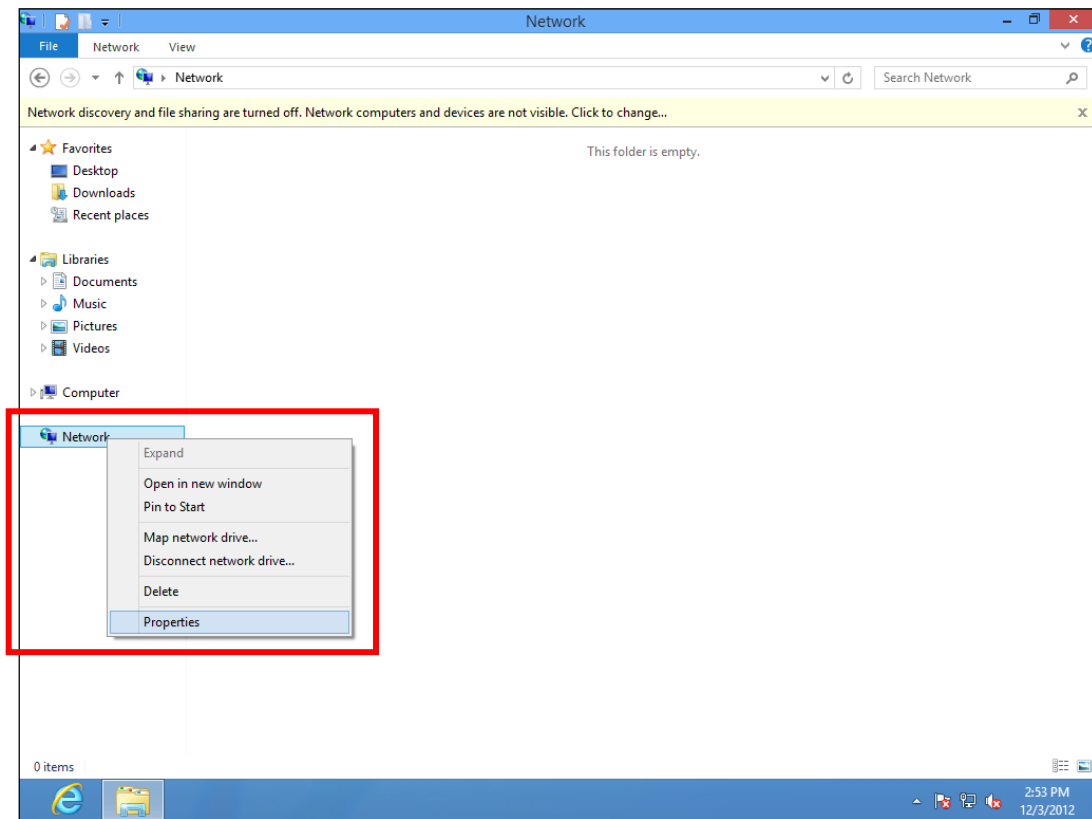
1. From the Windows 8 Start screen, switch to desktop mode by clicking the “Desktop” box.



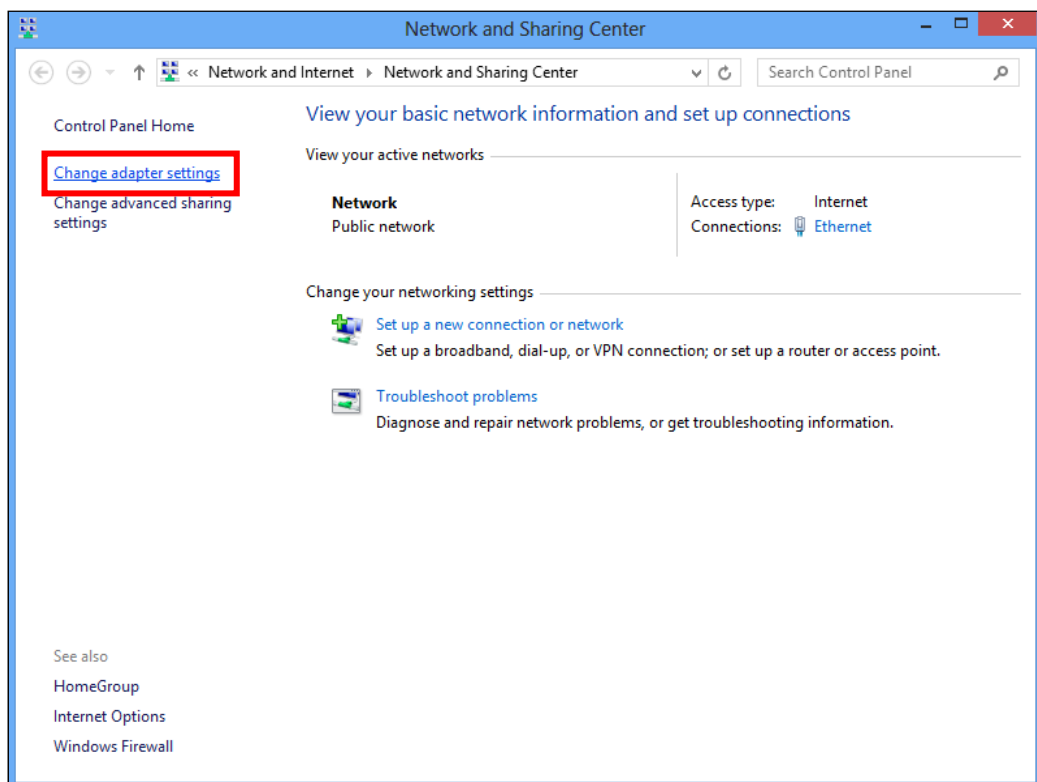
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



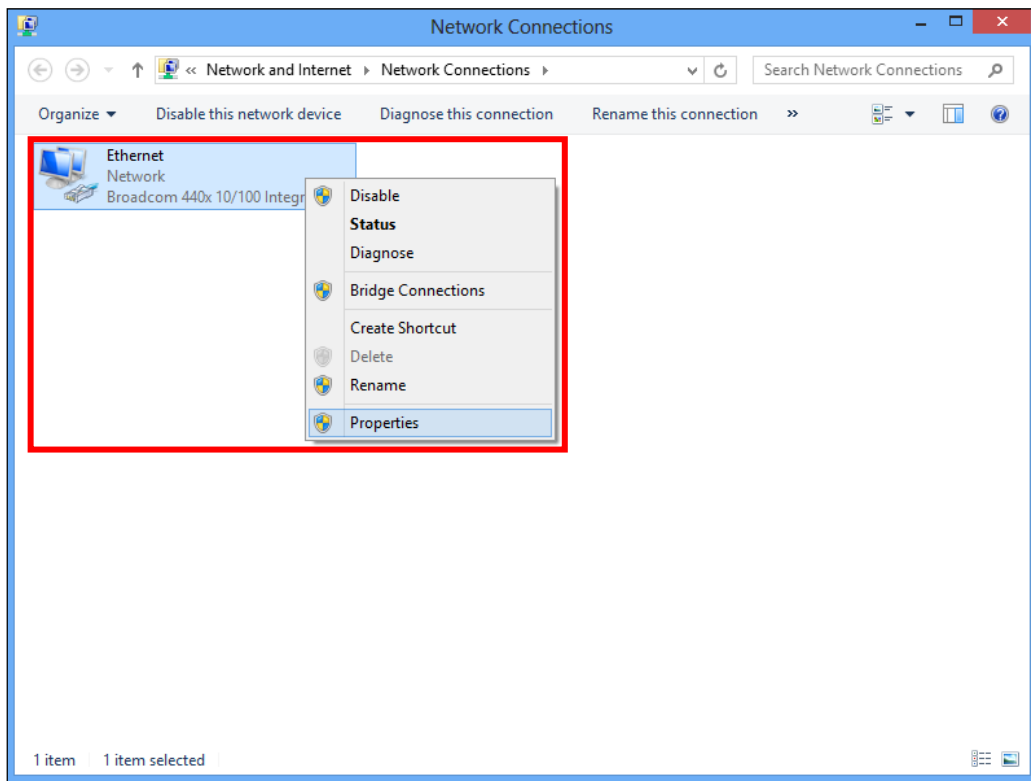
3. Right click “Network” and select “Properties”.



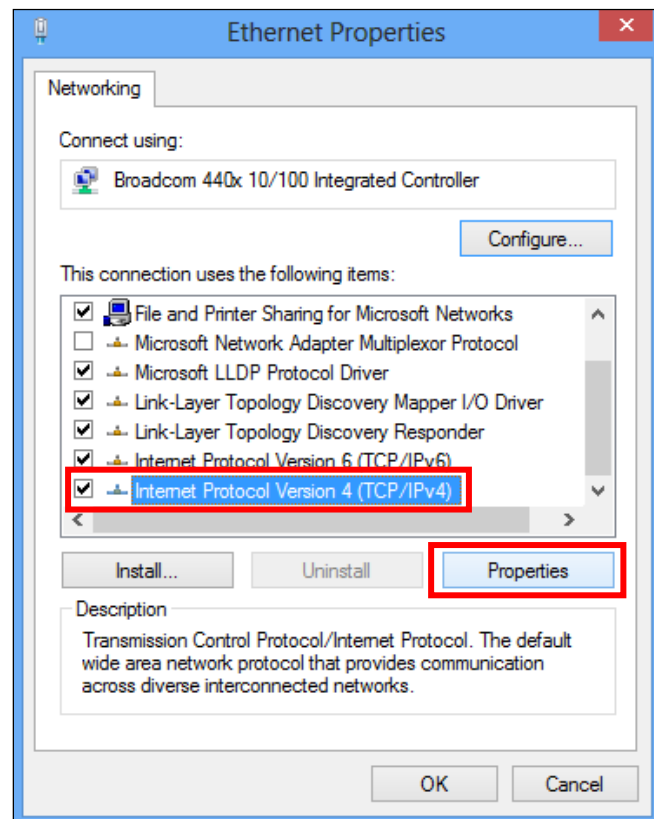
4. In the window that opens, select “Change adapter settings” from the left side.



5. Right click the connection and select “Properties”.



6. Select “Internet Protocol Version 4 (TCP/IPv4)” and then click “Properties”.



7. Select “Use the following IP address”, then input the following values:

IP address: 192.168.2.10

Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address: 192 . 168 . 128 . 10

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

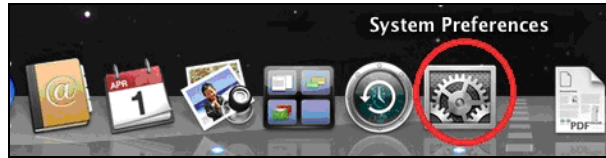
☐ Validate settings upon exit

Advanced...

OK Cancel

V-1-5 Mac

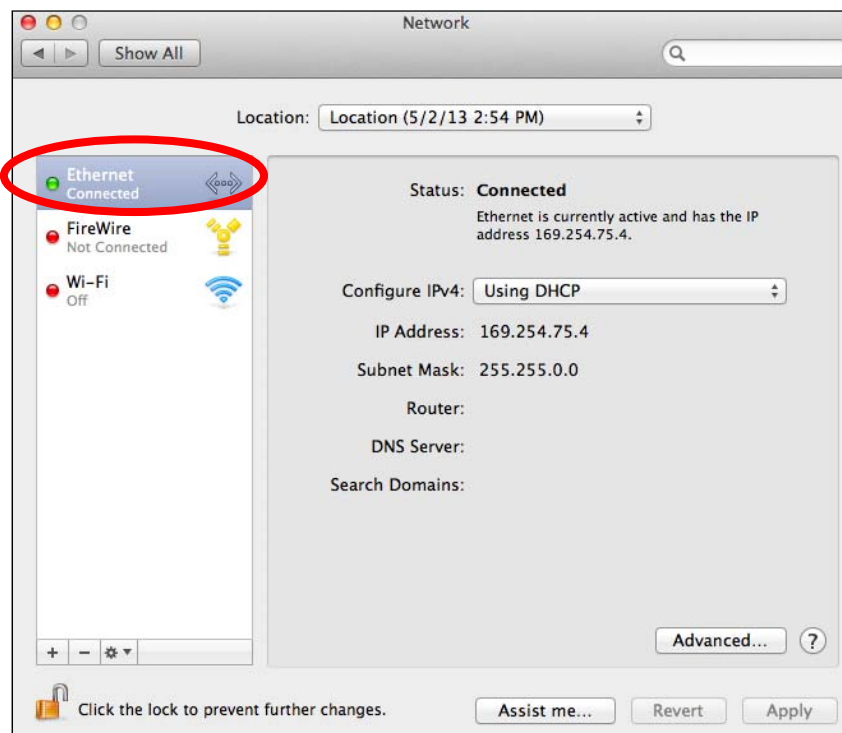
1. Have your Macintosh computer operate as usual, and click on “System Preferences”



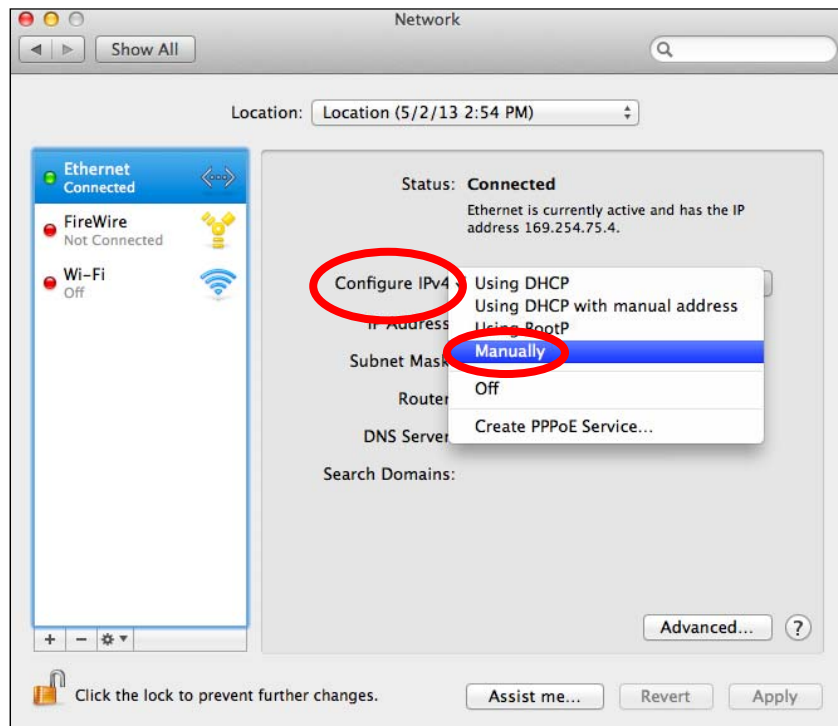
2. In System Preferences, click on “Network”.



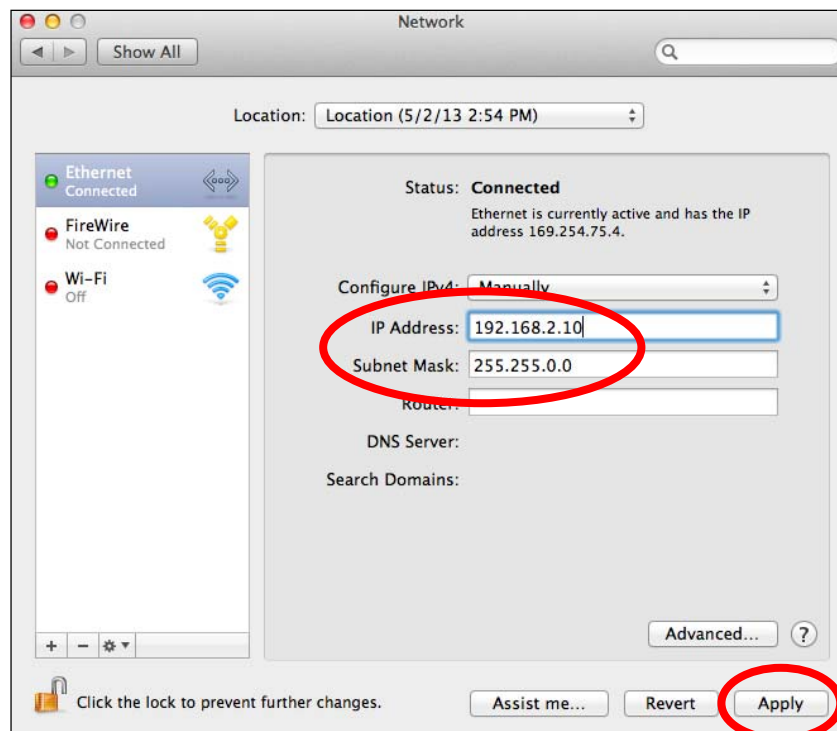
3. Click on “Ethernet” in the left panel.



4. Open the drop-down menu labeled “Configure IPv4” and select “Manually”.



5. Enter the IP address 192.168.2.10 and subnet mask 255.255.255.0. Click on “Apply” to save the changes.



V-2 Setting AP via ManageEngine MibBrowser with SNMPv3 - Example

V-2-1 Setting in Web

1. The length of the password needs to be equal or greater than 8.
2. SNMP Version: V3

The screenshot displays the ManageEngine MibBrowser web interface. The top navigation bar includes tabs for Information, Network Settings, Wireless Settings, Management (selected), Advanced, and Operation Mode. A left sidebar under the 'Management' header lists options: Admin (selected), Date and Time, Syslog Server, Ping Test, and I'm Here.

The main content area is divided into two sections:

- Admin:** Titled 'Account to Manage This Device', it contains fields for 'Administrator Name' (admin) and 'Administrator Password' (masked with dots). The password fields are highlighted with a red box. An 'Apply' button is located below these fields.
- Advanced Settings:** This section contains various configuration fields:
 - 'Product Name': AP74DA3803B620
 - 'HTTP Port': 80 (range: 80, 1024-65535)
 - 'HTTPS Port': 443 (range: 443, 1024-65535)
 - 'Management Protocol': A list of checkboxes for HTTP, HTTPS, TELNET, SSH, and SNMP, all of which are checked.
 - 'Login Timeout': 30 (mins)
 - 'SNMP Version': v3 (highlighted with a red box)
 - 'SNMP Get Community': public
 - 'SNMP Set Community': private
 - 'SNMP V3 Name': admin
 - 'SNMP V3 Password': masked with dots
 - 'SNMP Trap': Disabled
 - 'SNMP Trap Community': public
 - 'SNMP Trap Manager': (empty field)An 'Apply' button is located at the bottom of this section.

V-2-2 Setting Rule

If you want to set Basic Wireless Setting via SNMP, the related variables need to be set together. Please refer to the file

Edimax-7476HPC_private_MIB_20150715_v1.1, for setting Radio or SSID.

Example: Basic Wireless Settings	Settings
snmpset STRING 192.168.2.2 1.3.6.1.4.1.3822.2000.1.3.3 i 2	Auto Channel Disable
snmpset STRING 192.168.2.2 1.3.6.1.4.1.3822.2000.1.2.3 i 3	11b/g/n: band
snmpset STRING 192.168.2.2 1.3.6.1.4.1.3822.2000.1.4.3 i 7	7: channel
snmpset STRING 192.168.2.2 1.3.6.1.4.1.3822.2000.1.6.3 i 1	20M: Bandwidth
snmpset STRING 192.168.2.2 1.3.6.1.4.1.3822.2000.1.7.3 i 5	all: basic rate

STRING: -v3 -l noAuthNoPriv -u admin -a MD5 -x DES

Reference: Radio Related page of

Edimax-7476HPC_private_MIB_20150715_v1.1

V-2-3 Setting in ManageEngine MibBrowser

1. Set the version of SNMP



Figure 1 Step 1:Edit → Settings

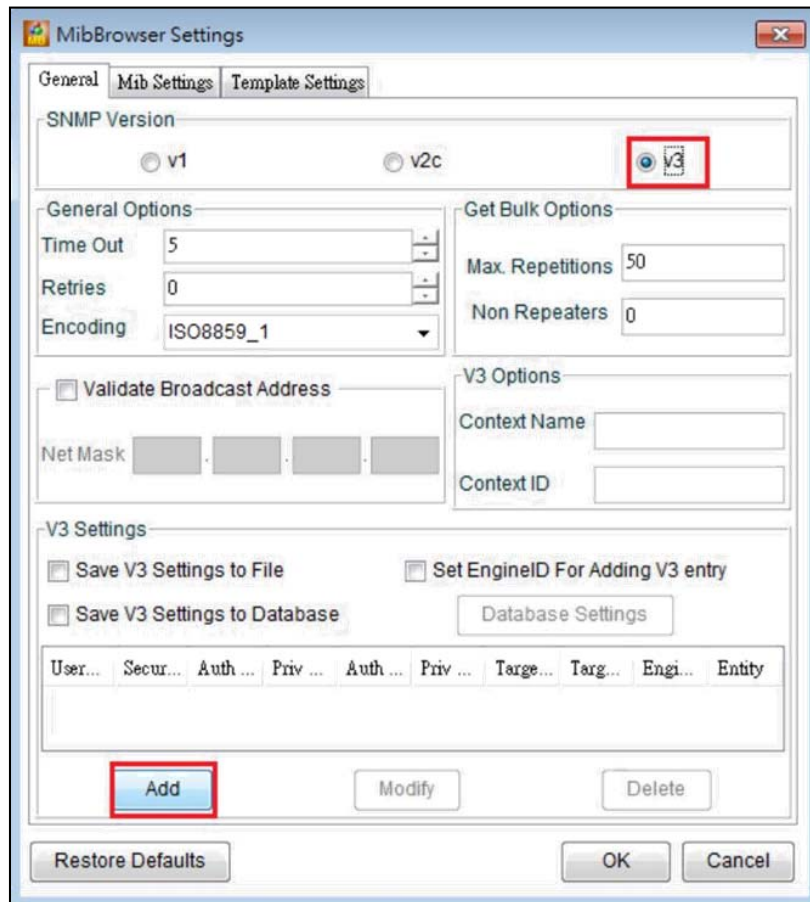


Figure 2 Step 2: Check v3 and click Add

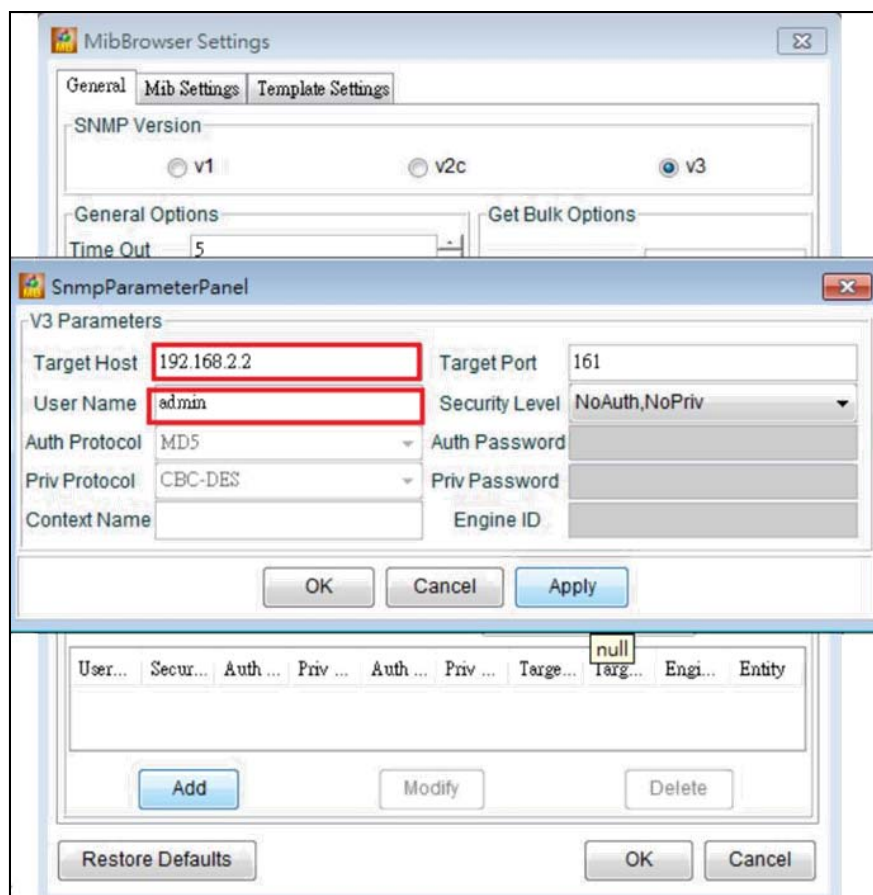


Figure 3 Step 3: Enter AP's IP and Administrator Name (User Name)

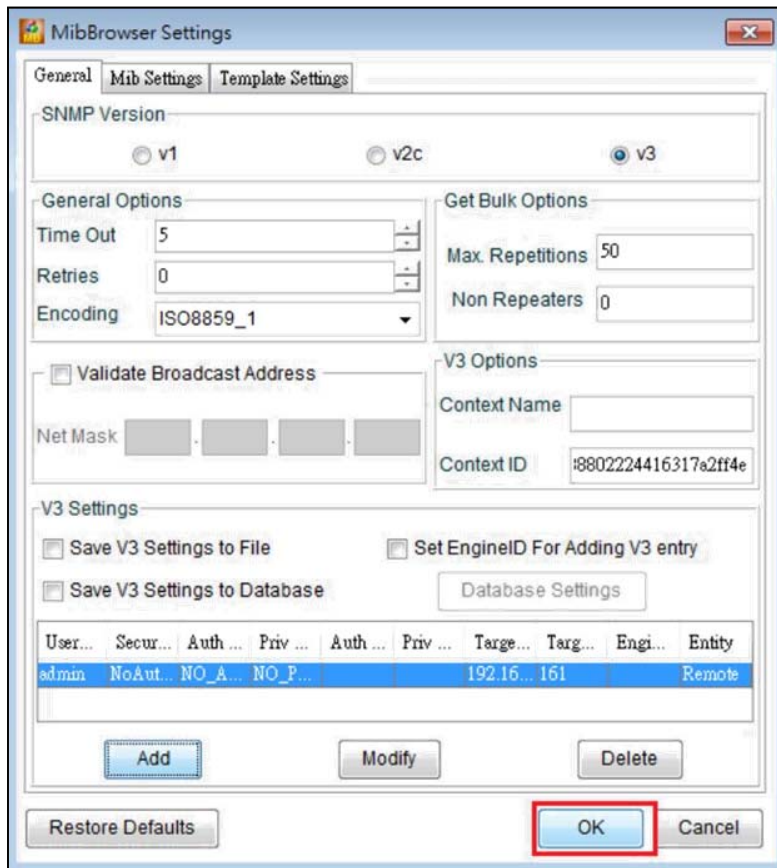


Figure 4 Step 4: Click OK

2. Load MIB Module

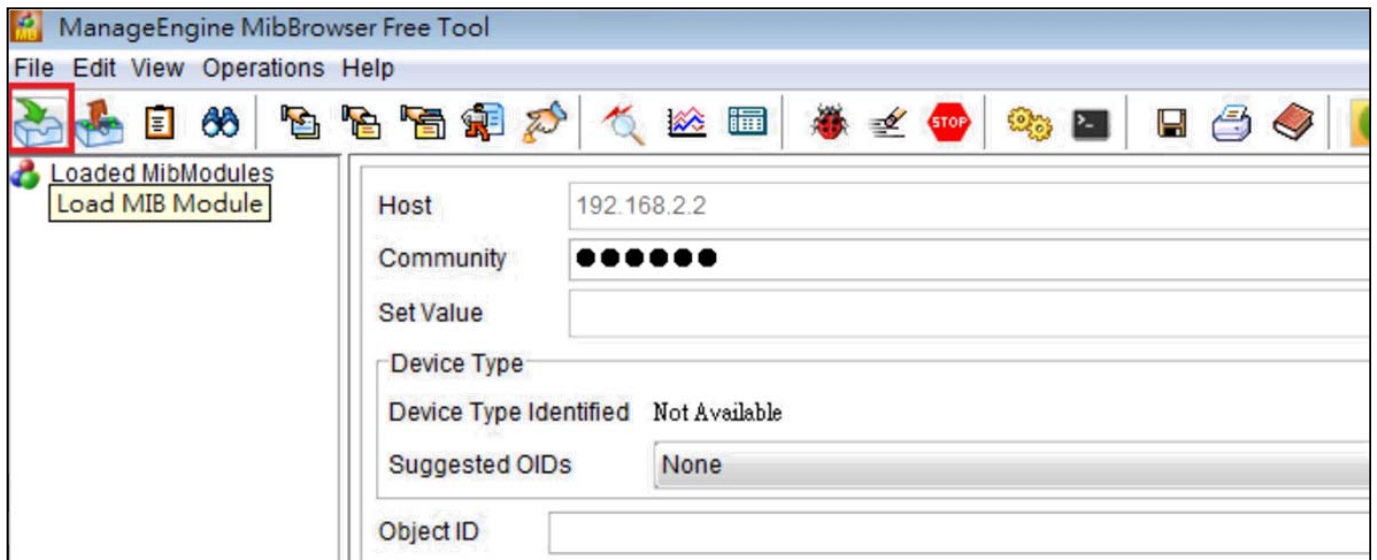


Figure 5 Click Load MIB Module and choose the file, *edimax_20150728.txt* (MIB file)

3. Add variables

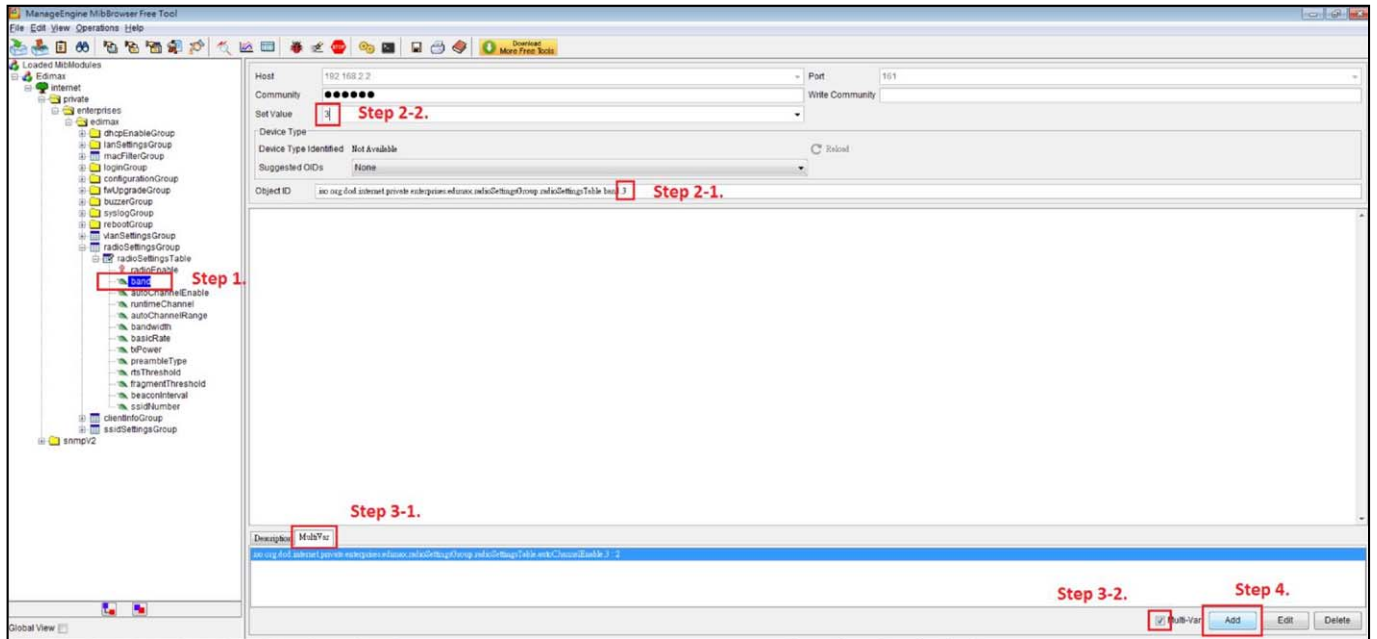


Figure 6 Example of setting the variable

Step 1.: Select the OID.

Step 2-1.: Enter the index of Radio (2.4G).

Step 2-2.: Enter the Set Value.

Step 3-1.: Click MultiVar.

Step 3-2.: Check Multi-Var.

Step 4.: Add this Variable

4. Set SNMP variables

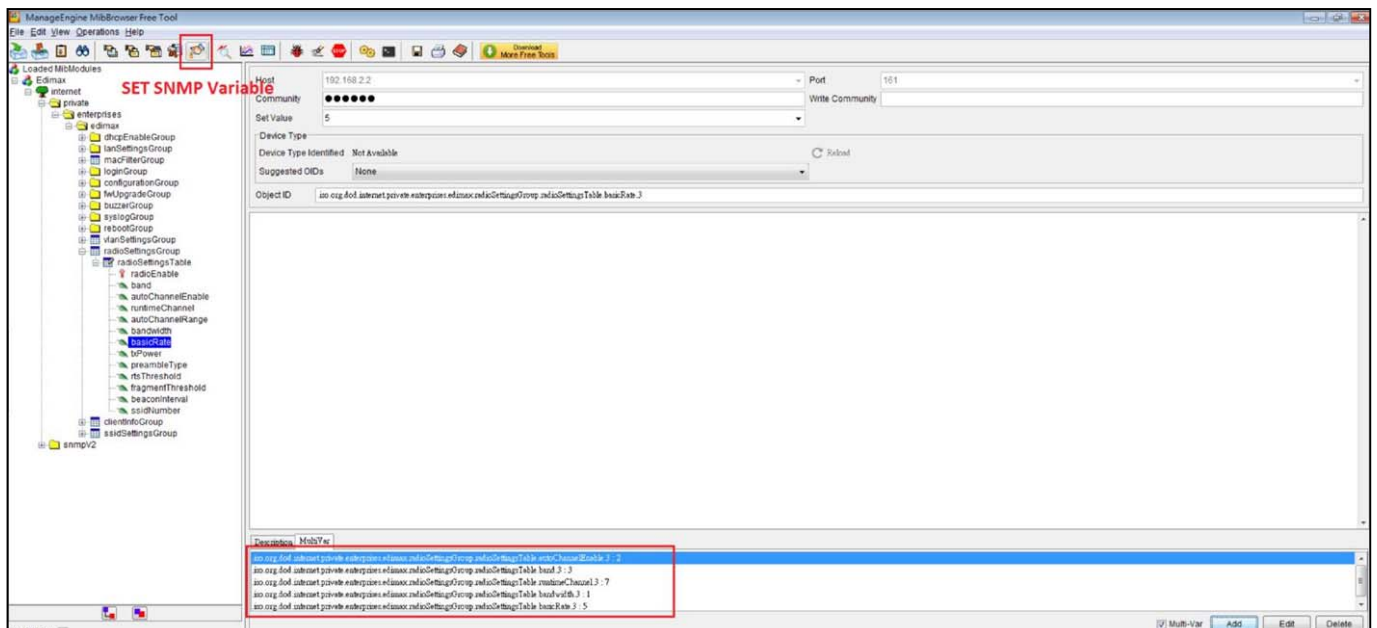


Figure 7 All the variables have been added. Click SET SNMP Variables

VI Best Practice

VI-1 How to Create and Link WLAN & Access Point Groups

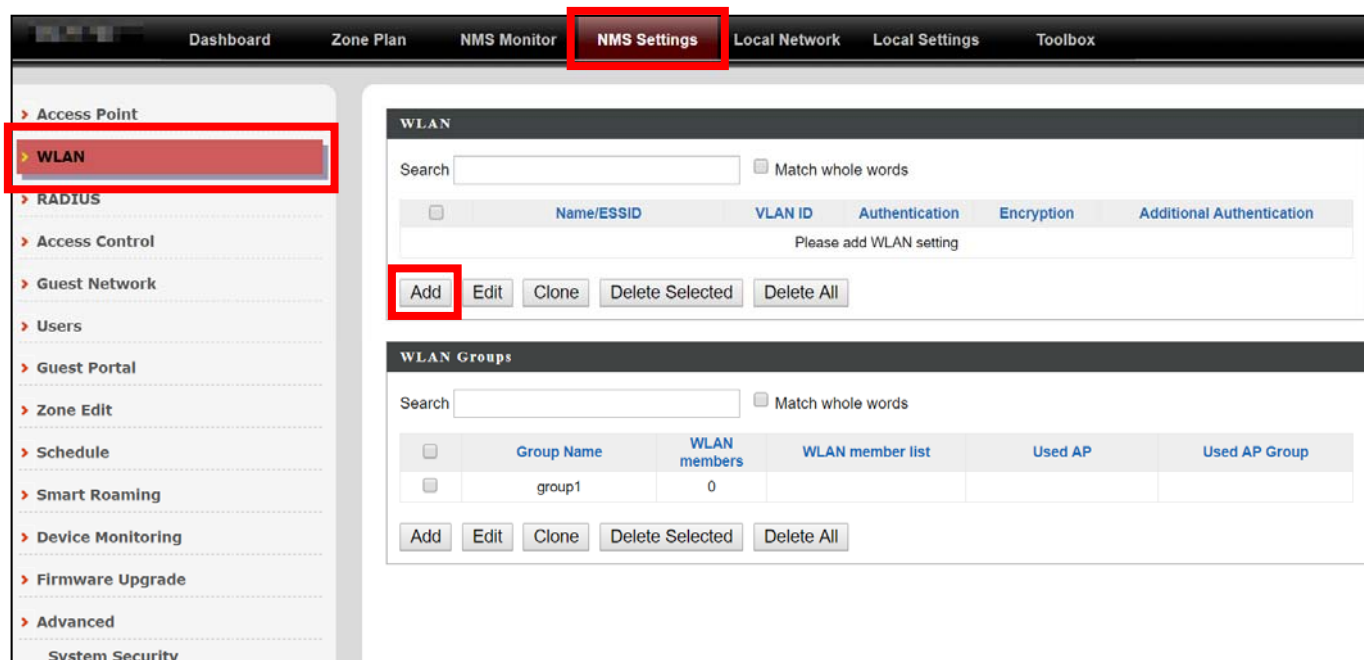
NMS can be used to create individual SSIDs and group multiple SSIDs together into WLAN groups. You can then assign individual access points to use those WLAN group settings and/or group multiple access points together into access point groups, which you can also assign to use WLAN group settings.

Follow the example below to:

- A.** Create a WLAN group.
- B.** Create an access point group.
- C.** Assign the access point group to use the SSID group settings.

VI-1-1 Create WLAN Group

- 1.** Go to **NMS Settings** → **WLAN** and click “**Add**” in the **WLAN** panel:



2. Enter an SSID **name** and set **authentication/encryption** and click “**Save & Apply**”:

WLAN Settings

Name/ESSID	
Description	
VLAN ID	1
Broadcast SSID	Enable ▼
Wireless Client Isolation	Disable ▼
802.11k	Disable ▼
Load Balancing	50 /50
Authentication Method	No Authentication ▼
Additional Authentication	No additional authentication ▼

WLAN Access Policy

Traffic Shaping Settings

Traffic Shaping	By SSID ▼
Downlink	44 Mbps
Uplink	44 Mbps

WLAN Advanced Settings

Smart Handover Settings

Smart Handover	☐ Enable ☒ Disable
RSSI Threshold	-80 ▼ dB

Active WLAN Schedule Settings

Schedule Group	Disable ▼
----------------	-----------

Save Cancel **Save & Apply**

3. The new SSID will be displayed in the **WLAN** panel. **Repeat** to add additional SSIDs according to your preference.

WLAN

Search ☐ Match whole words

☐	Name/ESSID	VLAN ID	Authentication	Encryption	Additional Authentication
☐	WLAN 1	1	OPEN	NONE	No additional authentication
☐	WLAN 2	1	OPEN	NONE	No additional authentication
☐	WLAN 3	1	OPEN	NONE	No additional authentication
☐	WLAN 4	1	OPEN	NONE	No additional authentication

WLAN Groups

Search ☐ Match whole words

☐	Group Name	WLAN members	WLAN member list	Used AP	Used AP Group
☐	group1	0			

4. Click **“Add”** in the **WLAN Groups** panel:

WLAN Groups

Search ☐ Match whole words

☐	Group Name	WLAN members	WLAN member list	Used AP	Used AP Group
☐	group1	0			

5. Enter a **name** for the **SSID group** and **check the boxes** to select which SSIDs to include in the group. Click **“Save and Apply”** when done.

WLAN Group Settings

Name

Description

Search ☐ Match whole words

☐	Name/ESSID	VLAN ID	Schedule Group
☐	WLAN 1	1	☐ Override Disable
☐	WLAN 2	1	☐ Override Disable
☐	WLAN 3	1	☐ Override Disable
☐	WLAN 4	1	☐ Override Disable

6. The new **WLAN group** will be displayed in the **WLAN Group** panel.
Repeat to add additional WLAN groups according to your preference:

WLAN
Search ☐ Match whole words

☐	Name/ESSID	VLAN ID	Authentication	Encryption	Additional Authentication
☐	WLAN 1	1	OPEN	NONE	No additional authentication
☐	WLAN 2	1	OPEN	NONE	No additional authentication
☐	WLAN 3	1	OPEN	NONE	No additional authentication
☐	WLAN 4	1	OPEN	NONE	No additional authentication

Add Edit Clone Delete Selected Delete All

WLAN Groups
Search ☐ Match whole words

☐	Group Name	WLAN members	WLAN member list	Used AP	Used AP Group
☐	WLAN Group 1	2	WLAN 1 WLAN 2		
☐	group1	0			

Add Edit Clone Delete Selected Delete All

VI-1-2 Create Access Point Group

1. Go to **NMS Settings** → **Access Point** and click “Add” in the Access Point Group panel:

Dashboard Zone Plan NMS Monitor **NMS Settings** Local Network Local Settings Toolbox

Access Point

WLAN

RADIUS

Access Control

Guest Network

Users

Guest Portal

Zone Edit

Schedule

Smart Roaming

Device Monitoring

Firmware Upgrade

Advanced

System Security

Date and Time

Google Maps

Access Point
Search ☐ Match whole words

☐	Index	MAC Address	Device Name	Model	AP Group	2.4G Channel	5G Channel	2.4G Tx Power	5G Tx Power	Status	Action
☐	1	74.DA.38.1F.48.40	AP74DA381F4840	CAP300	System Default	N/A	N/A	N/A	N/A		

Refresh Edit Delete Selected Delete All

Access Point Group
Search ☐ Match whole words

☐	Group Name	AP Members	2.4G WLAN Profile	5G WLAN Profile	2.4G Guest Network Profile	5G Guest Network Profile	RADIUS Profile	Access Control Profile
☐	System Default	1	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled

Add Edit Clone Delete Selected Delete All

Access Point Settings

Auto Approve ☒ Enable ☐ Disable

Apply

2. Enter a **Name** and then scroll down to the **Group Settings** panel and use the << button to **add** selected access points into your group from the box on the right side. Click “**Save & Apply**” when done.

Basic Group Settings

Name

Access Point Group 1

Description

Please enter a new group description

IGMP Snooping

☐ Override Default Setting

Disable ▾

Group Settings

Members

Search

Group Name : Access Point Group 1

☐ MAC Address ▲

Device Name ▼ ▲

No Access Point

Search

Group Name : System Default ▾

☐ MAC Address ▲

Device Name ▼ ▾

☒ 74-DA-38-1F-46-40

AP74DA381F4640

<<

>>

3. The new group will be displayed in the **Access Point Group** panel. **Repeat** to add additional access point groups according to your preference:

Access Point Group

Search

☐ Match whole words

☐	Group Name	AP Members	2.4G WLAN Profile	5G WLAN Profile	2.4G Guest Network Profile	5G Guest Network Profile	RADIUS Profile	Access Control Profile
☐	System Default	0						
☐	Access Point Group 1	1						

Add

Edit

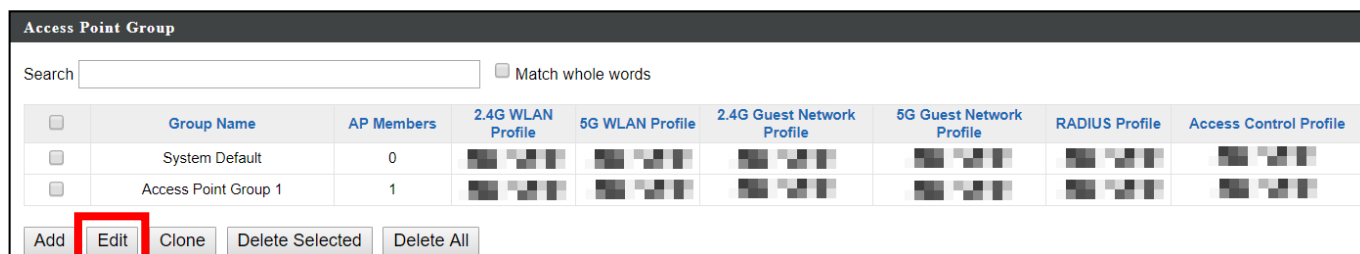
Clone

Delete Selected

Delete All

VI-1-3 Assign Access Point Group to use the SSID group settings

1. Go to **NMS Settings** → **Access Point** and select an access point group using the checkboxes in the **Access Point Group** panel. Click **“Edit”**:

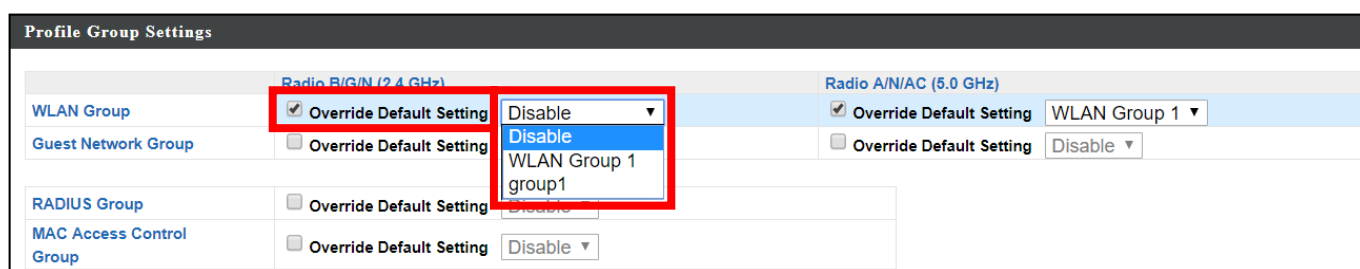


Access Point Group

Search ☐ Match whole words

☐	Group Name	AP Members	2.4G WLAN Profile	5G WLAN Profile	2.4G Guest Network Profile	5G Guest Network Profile	RADIUS Profile	Access Control Profile
☐	System Default	0						
☐	Access Point Group 1	1						

2. Scroll down to the **Profile Group Settings** panel and check the **“Override Group Settings”** box for **WLAN Group (2.4GHz and/or 5GHz)**. Select your **WLAN group** from the drop-down menu and click **“Apply”**:



Profile Group Settings

Radio B/G/N (2.4 GHz)

WLAN Group ☒ Override Default Setting

Guest Network Group ☐ Override Default Setting

RADIUS Group ☐ Override Default Setting

MAC Access Control Group ☐ Override Default Setting

Radio A/N/A/C (5.0 GHz)

☒ Override Default Setting

☐ Override Default Setting

3. Repeat for other access point groups according to your preference.

Professional installation warning:

This device is point-to-multi-point device. The general user should not attempt to install or change settings, it needs to be installed by a qualified personal who has RF exposure and related rule knowledge or technology.

The installation position and output power does not exceed the limit set forth in US Rule CFR 47 part 15 section 15.247 & 15.407. If violate the rule, could lead to serious federal penalty.

It is complies with §15.407 (a)(1)(i) requirement that the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

About TDWR 5600-5650 MHz, installation and operation should with a minimum distance of 20 centimeters between the radiator and your body or nearby persons.

Use two type antenna specifications. One type antenna model name is 98623PRSX000, antenna type is dipole antenna with peak gain 4.58dBi for 2.4GHz; 6.18dBi for 5150-5250MHz; 6.22dBi for 5250-5350MHz; 6.12dBi for 5470-5725MHz; 6.05dBi for 5725-5850MHz. Other type antenna model name is C095-510399-A, antenna type is dipole antenna with peak gain 3dBi for 2.4GHz; 4dBi for 5150-5850MHz. Only use manufacturer approved antenna type of antenna.

COPYRIGHT

Copyright © Edimax Technology Co., Ltd. all rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission from Edimax Technology Co., Ltd.

Edimax Technology Co., Ltd. makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability, or fitness for any particular purpose. Any software described in this manual is sold or licensed as is. Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Edimax Technology Co., Ltd. reserves the right to revise this publication and to make changes from time to time in the contents hereof without the obligation to notify any person of such revision or changes.

The product you have purchased and the setup screen may appear slightly different from those shown in this QIG. The software and specifications are subject to change without notice. Please visit our website www.edimax.com for updates. All brand and product names mentioned in this manual are trademarks and/or registered trademarks of their respective holders.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio technician for help.

FCC Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or nearby persons.

RED Compliance Statement

Compliance with 2014/53/EU Radio Equipment Directive (RED)

In accordance with Article 10.8(a) and 10.8(b) of the RED, the following table provides information on the frequency bands used and the maximum RF transmit power of the product for sale in the EU:

Frequency range (MHz)	Max. Transmit Power (dBm)
2412-2472	19.66 dBm
5500-5700	27.73 dBm

A simplified DoC shall be provided as follows: Article 10(9)

Hereby, Edimax Technology Co., Ltd. declares that the radio equipment type **AC1300 Outdoor AP** is in compliance with Directive 2014/53/EU

The full text of the EU declaration of conformity is available at the following internet address: <http://www.edimax.com/edimax/global/>

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

EU Countries Intended for Use

The ETSI version of this device is intended for home and office use in Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, and United Kingdom. The ETSI version of this device is also authorized for use in EFTA member states: Iceland, Liechtenstein, Norway, and Switzerland.

EU Countries Not Intended for Use

None

EU Declaration of Conformity

- English:** This equipment is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU, 2014/35/EU.
- Français:** Cet équipement est conforme aux exigences essentielles et autres dispositions de la directive 2014/53/EU, 2014/35/EU.
- Čeština:** Toto zařízení je v souladu se základními požadavky a ostatními příslušnými ustanoveními směrnic 2014/53/EU, 2014/35/EU.
- Polski:** Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE 2014/53/EU, 2014/35/EU.
- Română:** Acest echipament este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 2014/53/UE, 2014/35/UE.
- Русский:** Это оборудование соответствует основным требованиям и положениям Директивы 2014/53/EU, 2014/35/EU.
- Magyar:** Ez a berendezés megfelel az alapvető követelményeknek és más vonatkozó irányelveknek (2014/53/EU, 2014/35/EU).
- Türkçe:** Bu cihaz 2014/53/EU, 2014/35/EU direktifleri zorunlu istekler ve diğer hükümlerle ile uyumludur.
- Українська:** Обладнання відповідає вимогам і умовам директиви 2014/53/EU, 2014/35/EU.
- Slovenčina:** Toto zariadenie spĺňa základné požiadavky a ďalšie príslušné ustanovenia smerníc 2014/53/EU, 2014/35/EU.
- Deutsch:** Dieses Gerät erfüllt die Voraussetzungen gemäß den Richtlinien 2014/53/EU, 2014/35/EU.
- Español:** El presente equipo cumple los requisitos esenciales de la Directiva 2014/53/EU, 2014/35/EU.
- Italiano:** Questo apparecchio è conforme ai requisiti essenziali e alle altre disposizioni applicabili della Direttiva 2014/53/EU, 2014/35/UE.
- Nederlands:** Dit apparaat voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen van richtlijn 2014/53/EU, 2014/35/EU.
- Português:** Este equipamento cumpre os requisitos essenciais da Directiva 2014/53/EU, 2014/35/EU.
- Norsk:** Dette utstyret er i samsvar med de viktigste kravene og andre relevante regler i Direktiv 2014/53/EU, 2014/35/EU.
- Svenska:** Denna utrustning är i överensstämmelse med de väsentliga kraven och övriga relevanta bestämmelser i direktiv 2014/53/EU, 2014/35/EU.
- Dansk:** Dette udstyr er i overensstemmelse med de væsentligste krav og andre relevante forordninger i direktiv 2014/53/EU, 2014/35/EU.
- suomen kieli:** Tämä laite täyttää direktiivien 2014/53/EU, 2014/35/EU. oleelliset vaatimukset ja muut asiaankuuluvat määräykset.

FOR USE IN

AT	BE	CY	CZ	DK	EE	FI	FR	DE	GR	HU		
IE	IT	LV	LT	LU	MT	NL	PL	PT	SK	SI	ES	SE
GB	IS	LI	NO	CH	BG	RO	RU	TR	UA			



WEEE Directive & Product Disposal



At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

Declaration of Conformity

We, Edimax Technology Co., Ltd., declare under our sole responsibility, that the equipment described below complies with the requirements of the European Radio Equipment directives.

Equipment: AC1300 Outdoor AP
Model No.: GAP-429HOB

The following European standards for essential requirements have been followed:

Directives 2014/53/EU

Spectrum : EN 300 328 V2.1.1 (2016-11)
EN 301 893 V2.1.1 (2017-05)
EMC : EN 301 489-1 V2.1.1 (2017-02)
EN 301 489-17 V3.2.0 (2017-03)
EN 55032: 2012 / AC:2013
EN 55024: 2010
EMF : EN 62311:2008

Directives 2014/35/EU

Safety (LVD) : IEC 60950-1:2005 (2nd Edition)+Am 1:2009+Am 2:2013
EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

Edimax Technology Europe B.V.
Fijenhof 2,
5652 AE Eindhoven,
The Netherlands

a company of :
Edimax Technology Co., Ltd.
No. 278, Xinhua 1st Rd.,
Neihu Dist., Taipei City,
Taiwan

Signature:

Printed Name: Vivian Ma
Title: Director
Edimax Technology Europe B.V.



Date of Signature: March, 2018

Signature:

A handwritten signature in black ink, appearing to read 'Albert Chang', written over a horizontal line.

Printed Name:

Albert Chang

Title:

Director

Edimax Technology Co., Ltd.

Notice According to GNU General Public License Version 2

This product includes software that is subject to the GNU General Public License version 2. The program is free software and distributed without any warranty of the author. We offer, valid for at least three years, to give you, for a charge no more than the costs of physically performing source distribution, a complete machine-readable copy of the corresponding source code.

Das Produkt beinhaltet Software, die den Bedingungen der GNU/GPL-Version 2 unterliegt. Das Programm ist eine sog. „Free Software“, der Autor stellt das Programm ohne irgendeine Gewährleistungen zur Verfügung. Wir bieten Ihnen für einen Zeitraum von drei Jahren an, eine vollständige maschinenlesbare Kopie des Quelltextes der Programme zur Verfügung zu stellen – zu nicht höheren Kosten als denen, die durch den physikalischen Kopiervorgang anfallen.

GNU GENERAL PUBLIC LICENSE Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep

intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

RF Antenna Assembly

Specification

1. Electrical Properties :

- 1.1 Frequency Range..... 2.4~2.5GHz&4.9~5.825Hz
- 1.2 Impedance 50Ω Nominal
- 1.3 VSWR 1.92:1Max.
- 1.4 Return Loss..... -10 dB Max.
- 1.5 Radiation Omni-directional
- 1.6 Gain(peak)..... 3dBi @2.4~2.5GHz
4dBi @4.9~5.825GHz
- 1.7 Polarization..... Linear; Vertical
- 1.8 Admitted Power..... 1W
- 1.9 Cable..... RG-178 Cable,透明棕,50Ω.

2. Physical Properties :

- 2.1 Antenna Body..... PC
- 2.2 Operating Temp. -10 ~ +60
- 2.3 Storage Temp. -10 ~ +70
- 2.4 Color White

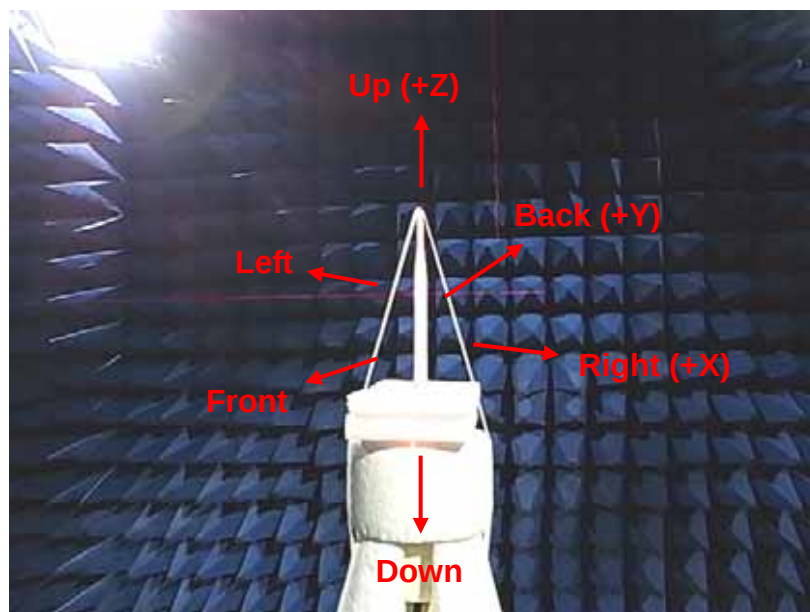
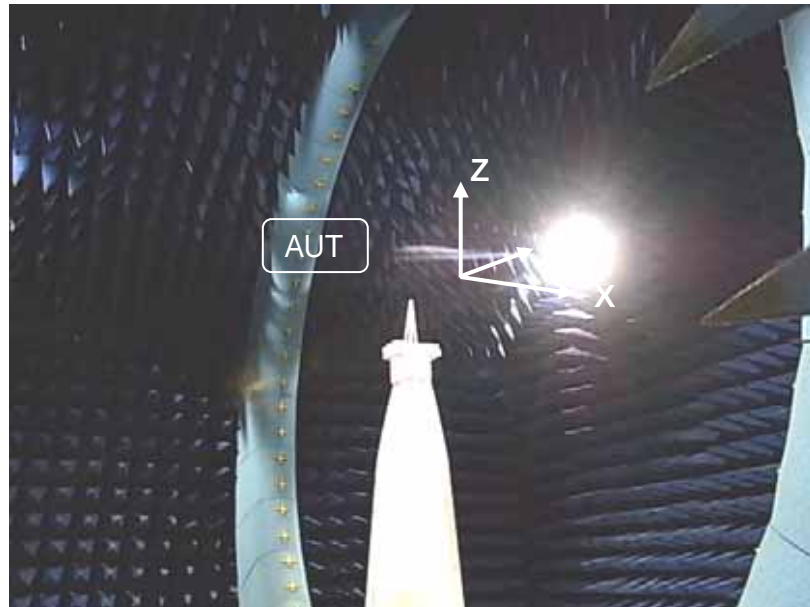
1. S-parameter test results

1.1 S11 Test Report

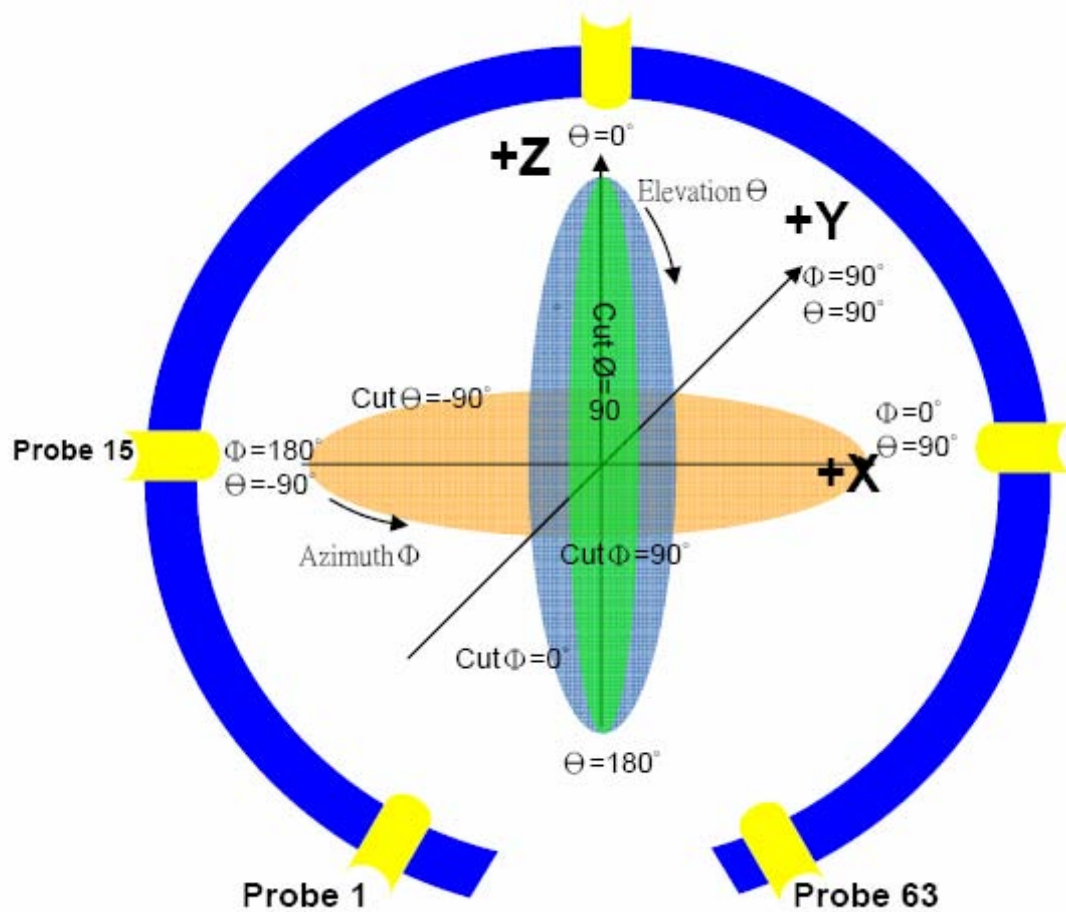


2. Gain & Patterns test results

2.1 Measurement setting

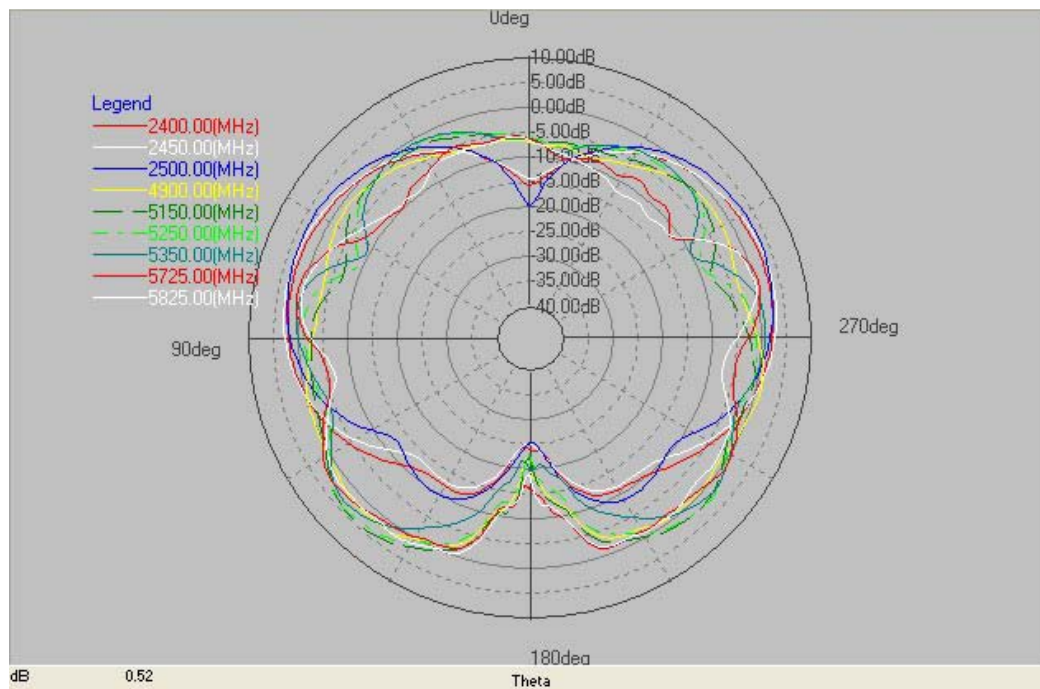


	XY	YZ	XZ
0°	Right	Up	Up
90°	Back	Back	Right
180°	Left	Down	Down
270°	Front	Front	Left

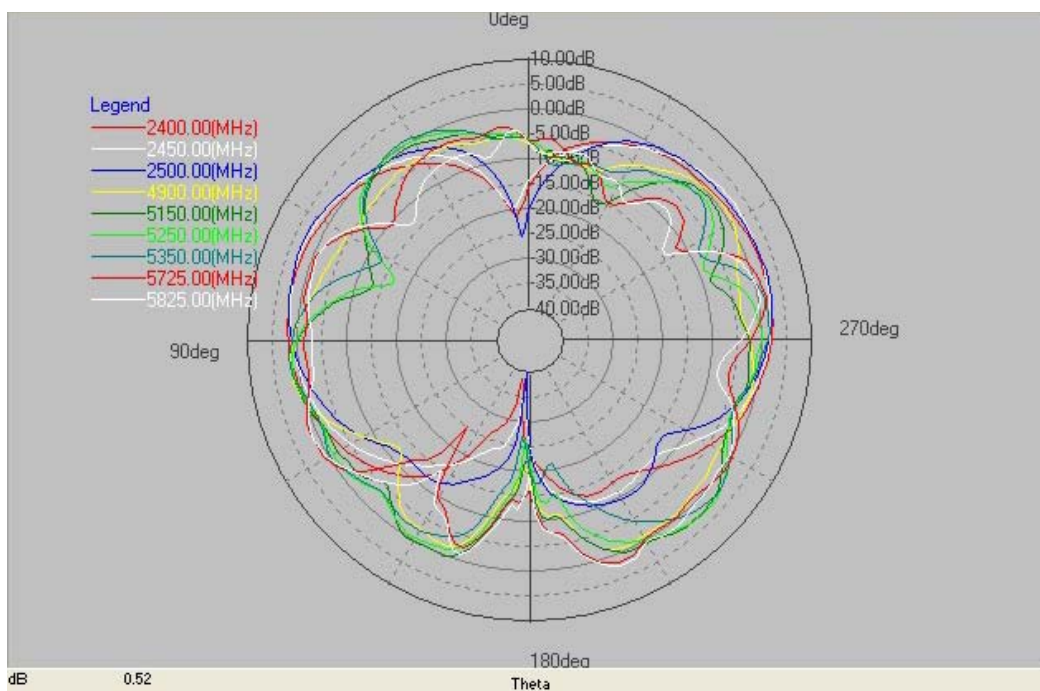


	θ	ϕ
Total angle	175°	360°
How many angle scan one point	5°	5°
Total scan point	36	73

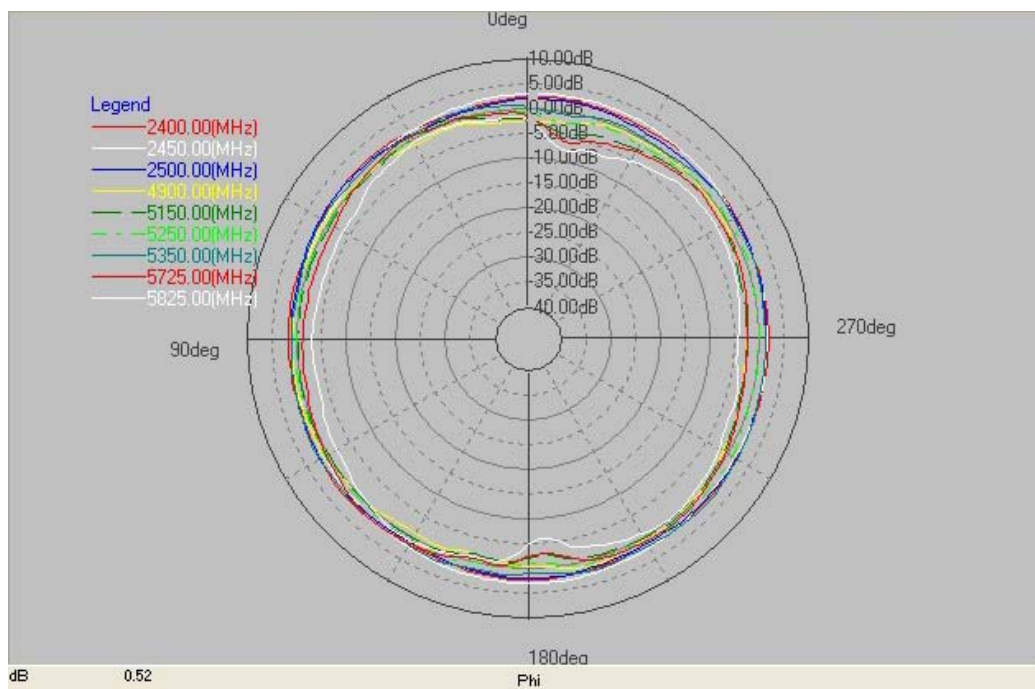
2.2 2D patterns



X-Z Plane (E-total)



Y-Z Plane (E-total)



X-Y Plane (E-total)

3. Summary

3.1 Return Loss

Frequency	Antenna (dB)
2.4GHz	-15.5
2.45GHz	-16.3
2.5GHz	-16.9
4.9GHz	-16.2
5.15GHz	-20.2
5.35GHz	-17.9
5.725GHz	-14.0
5.825GHz	-12.2

3.2 3D total Peak Gain & Efficiency

Frequency	Antenna	
	Peak Gain(dBi)	Efficiency (%)
2.4GHz	2.77	73
2.45GHz	3.33	75
2.5GHz	3.35	76
4.9GHz	2.70	70
5.15GHz	4.25	72
5.25GHz	4.38	73
5.35GHz	4.04	73
5.725GHz	4.19	70
5.825GHz	3.22	65



Master Wave

權億科技股份有限公司

Master Wave Technology Co., Ltd.

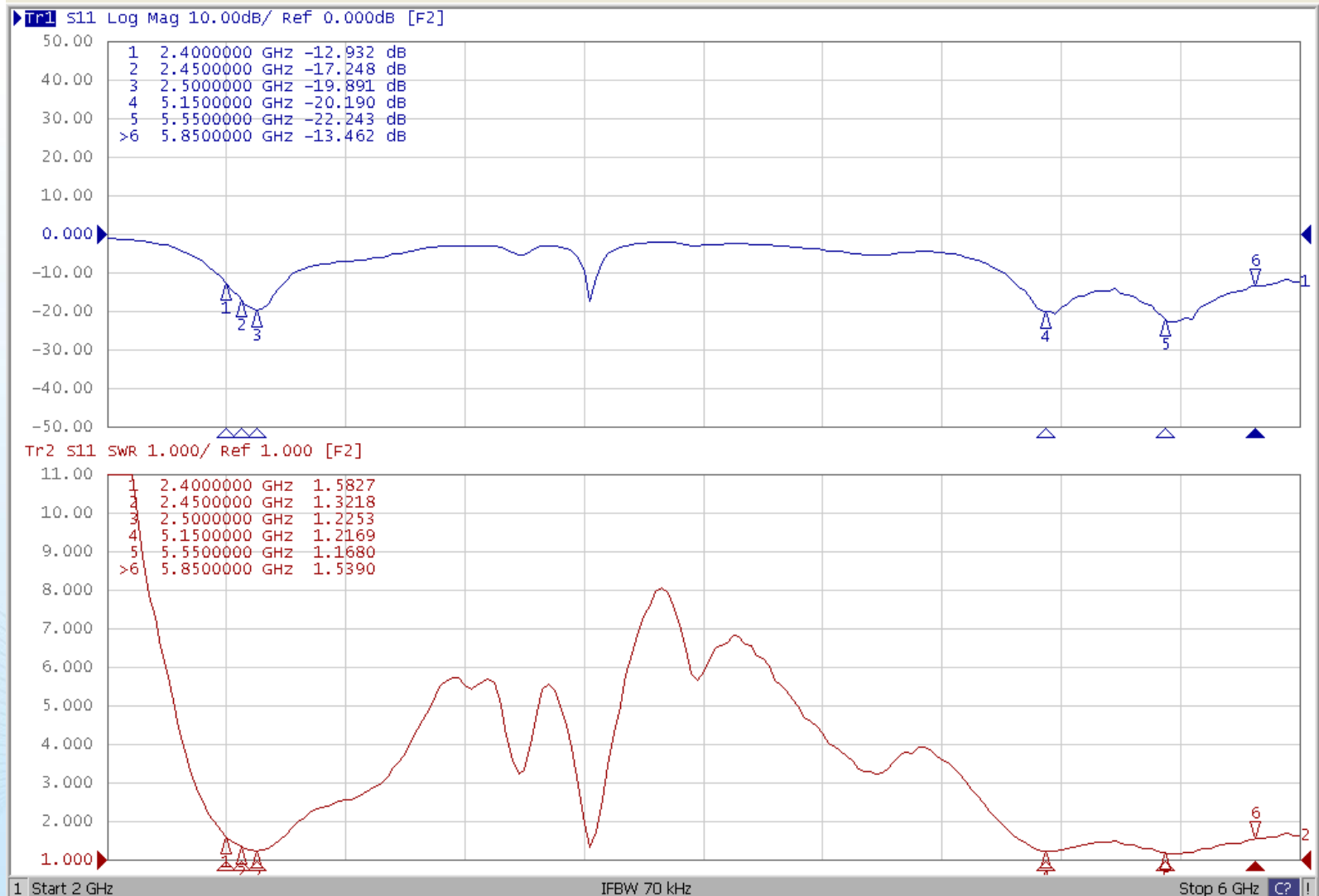
SSP 13950 2.4+5GHz Test Report

Measurement environment



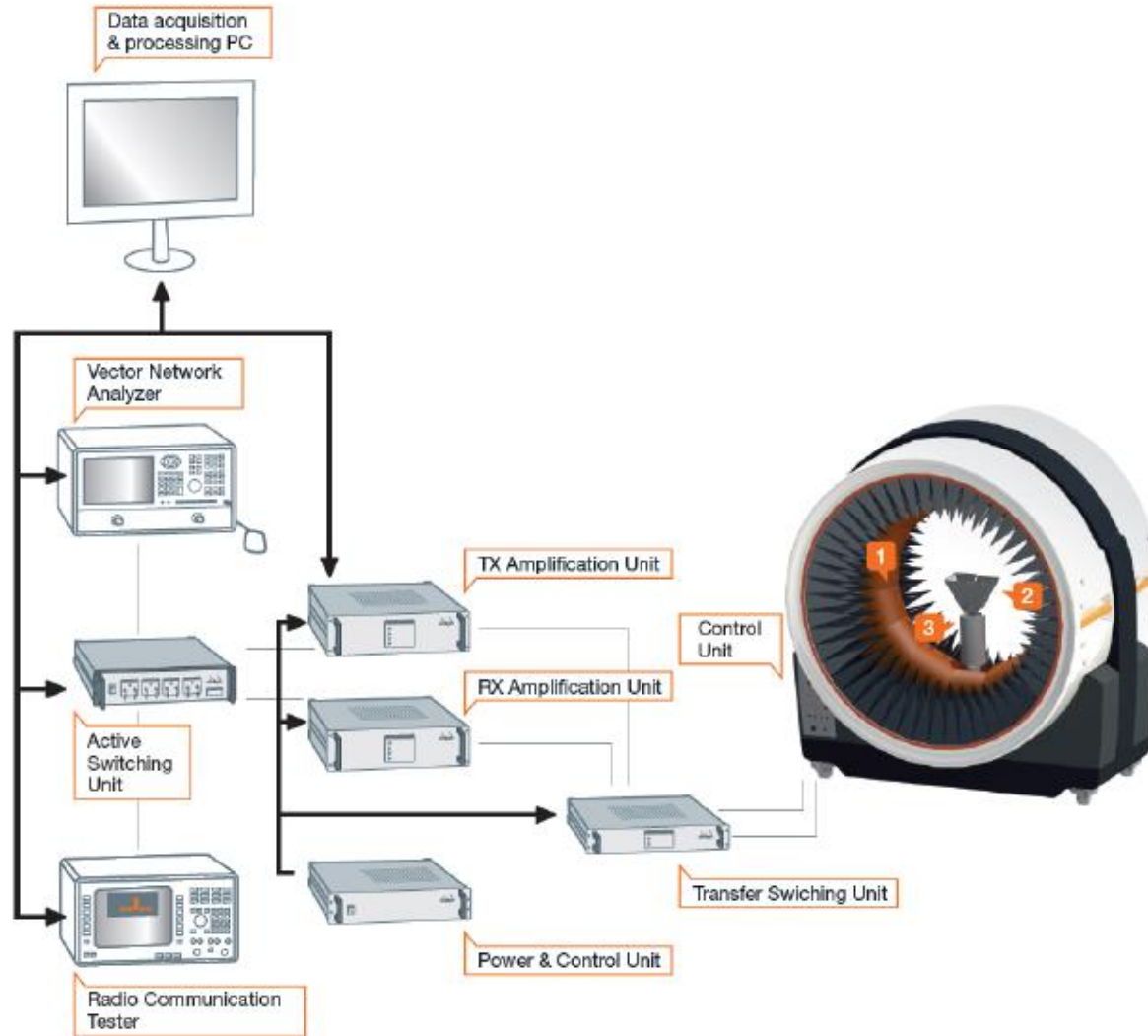


Impedance matching

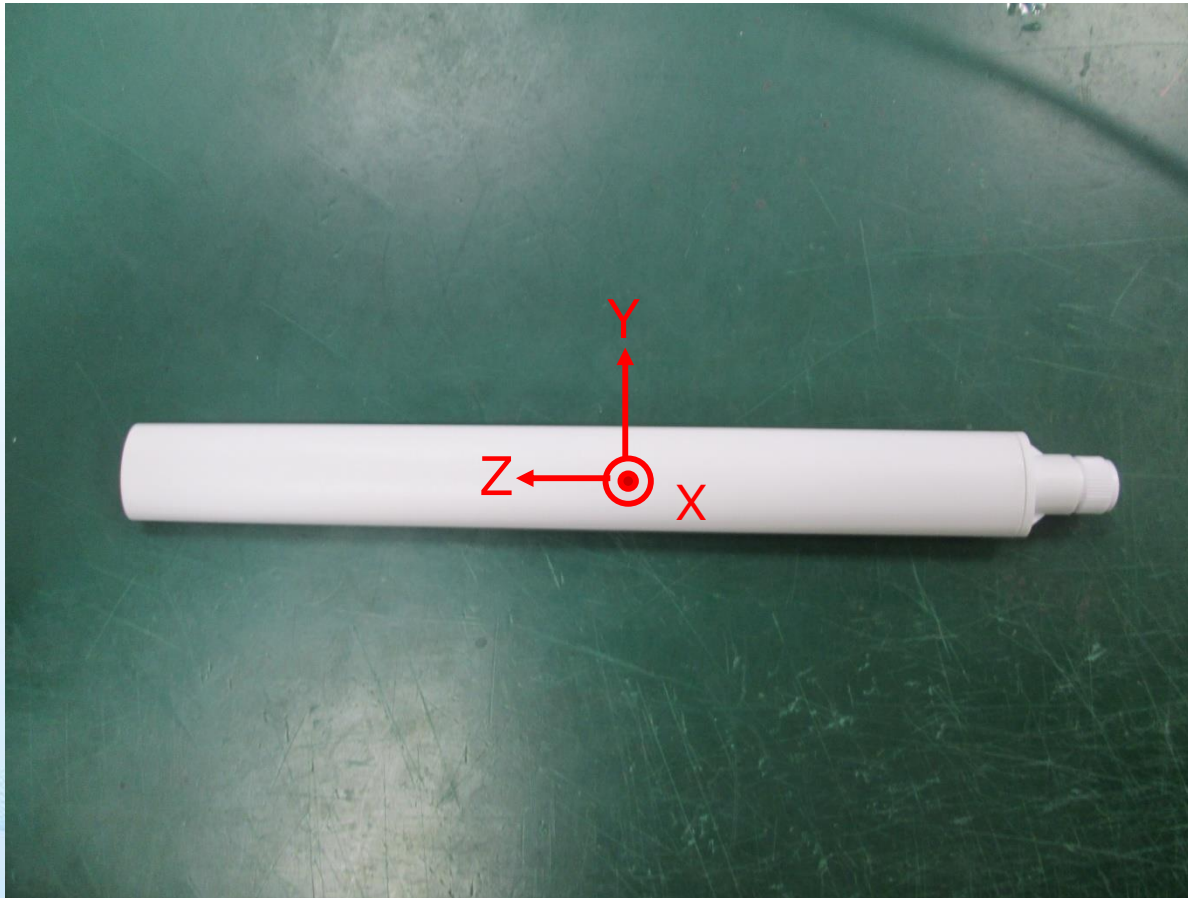




Satimo STARLAB Test Setup



Antenna Configuration





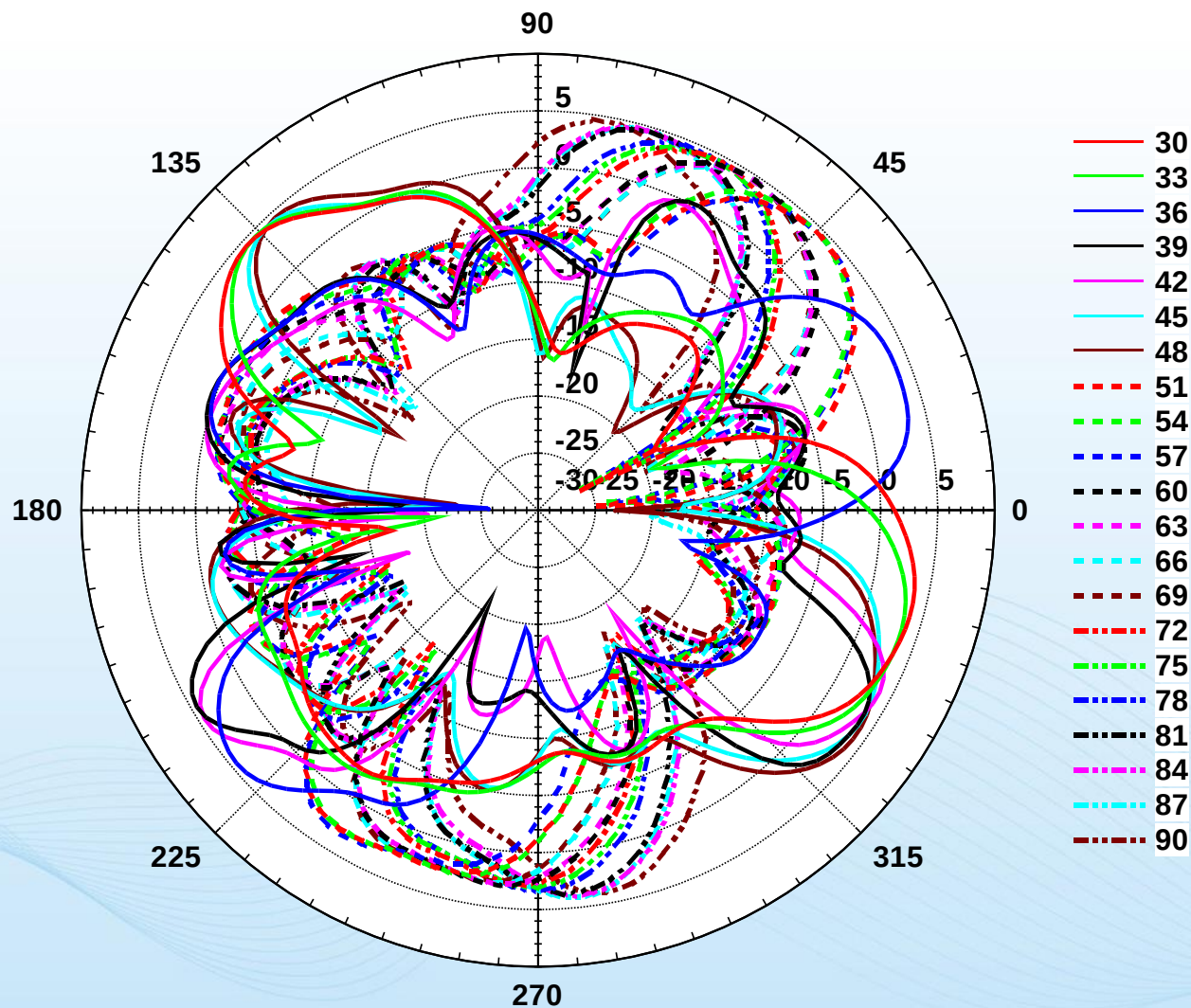
Peak Gain Table – 2412MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	140	4.47
33	6	4.48
36	10	4.49
39	2	4.50
42	178	4.47
45	178	4.35
48	178	4.46
51	38	4.42
54	36	4.48
57	28	4.45
60	44	4.50
63	42	4.46
66	34	4.49
69	26	4.46
72	26	4.39
75	32	4.31
78	30	4.45
81	40	4.39
84	48	4.51
87	24	4.50
90	74	4.54

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	74	4.54
93	16	4.48
96	176	4.42
99	30	4.46
102	32	4.37
105	40	4.45
108	28	4.52
111	24	4.46
114	152	4.48
117	26	4.46
120	42	4.44
123	46	4.47
126	42	4.46
129	44	4.41
132	4	4.42
135	176	4.49
138	176	4.42
141	30	4.26
144	36	4.34
147	32	4.41
150	42	4.48

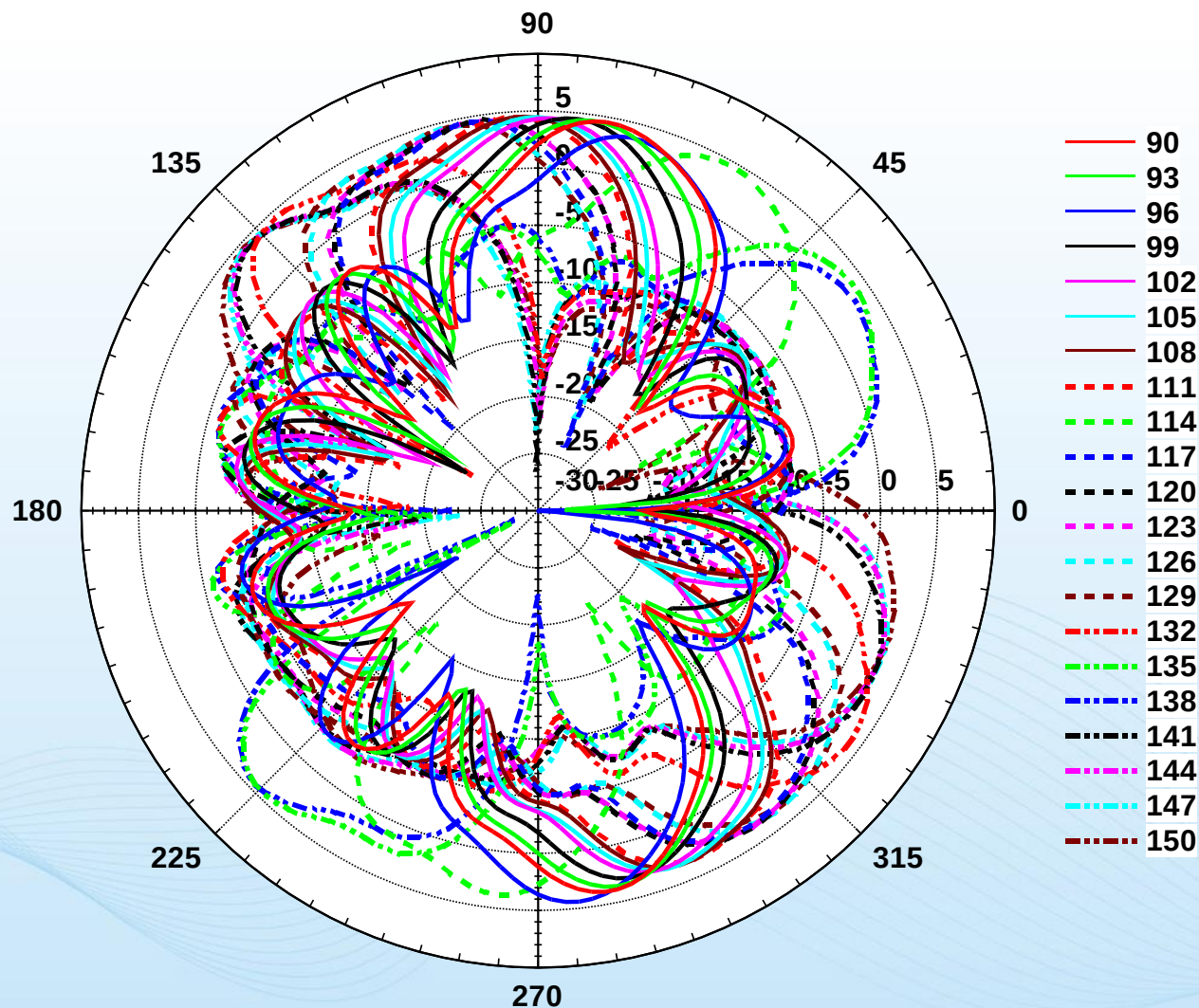


E-Plane Pattern 30deg to 90deg – 2412MHz





E-Plane Pattern 90deg to 150deg – 2412MHz





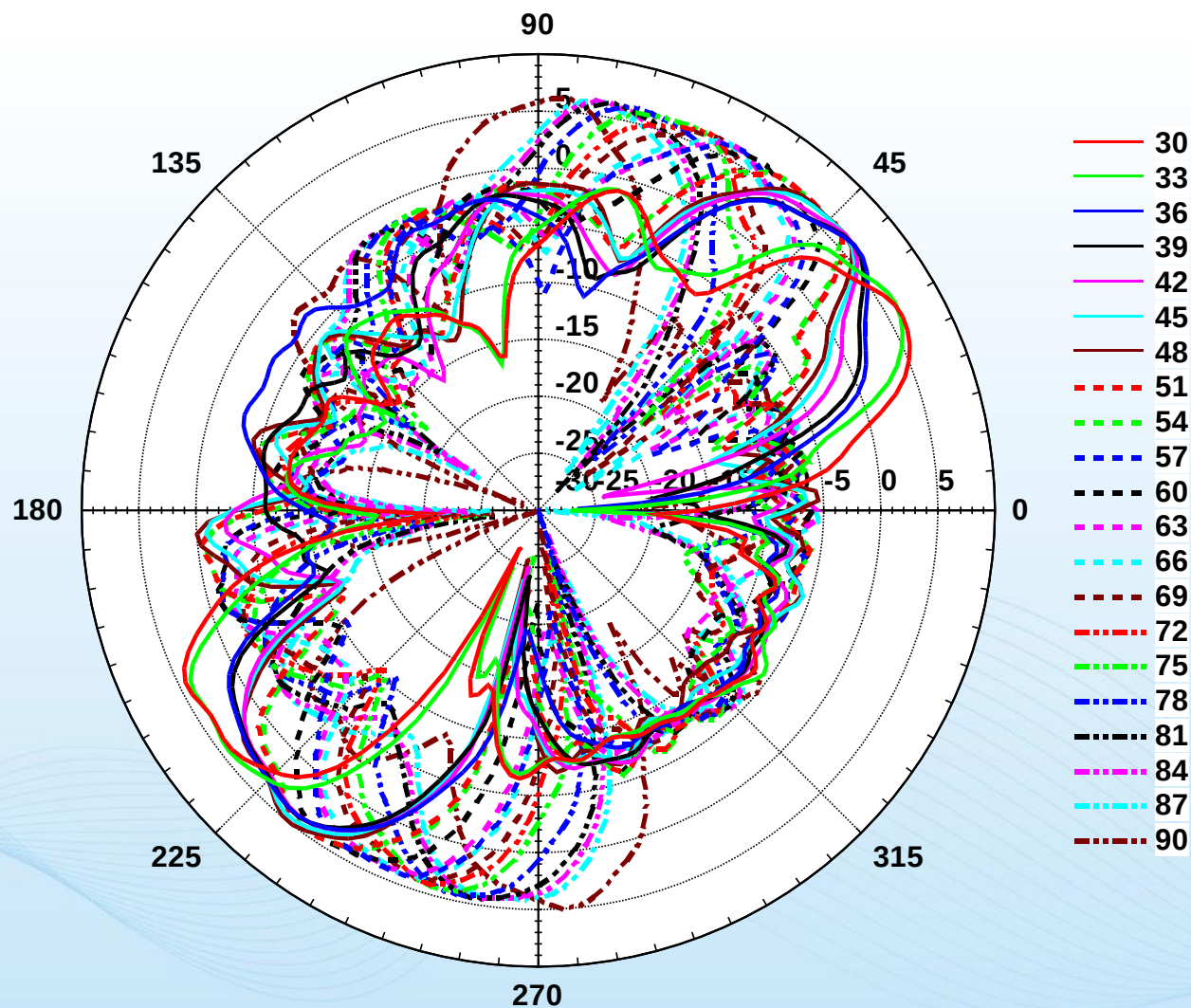
Peak Gain Table – 5180MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	26	6.16
33	24	6.18
36	46	6.16
39	38	6.16
42	34	6.18
45	20	6.15
48	16	6.16
51	16	6.17
54	16	6.16
57	36	6.16
60	14	6.16
63	18	6.16
66	18	6.15
69	14	6.15
72	16	6.15
75	16	6.15
78	20	6.14
81	20	6.15
84	16	6.13
87	16	6.13
90	20	6.15

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	20	6.15
93	26	6.13
96	20	6.14
99	22	6.12
102	18	6.14
105	16	6.15
108	16	6.14
111	16	6.17
114	12	6.15
117	10	6.15
120	20	6.16
123	18	6.14
126	18	6.15
129	20	6.12
132	18	6.13
135	16	6.13
138	20	6.13
141	24	6.17
144	134	6.14
147	26	6.16
150	30	6.16

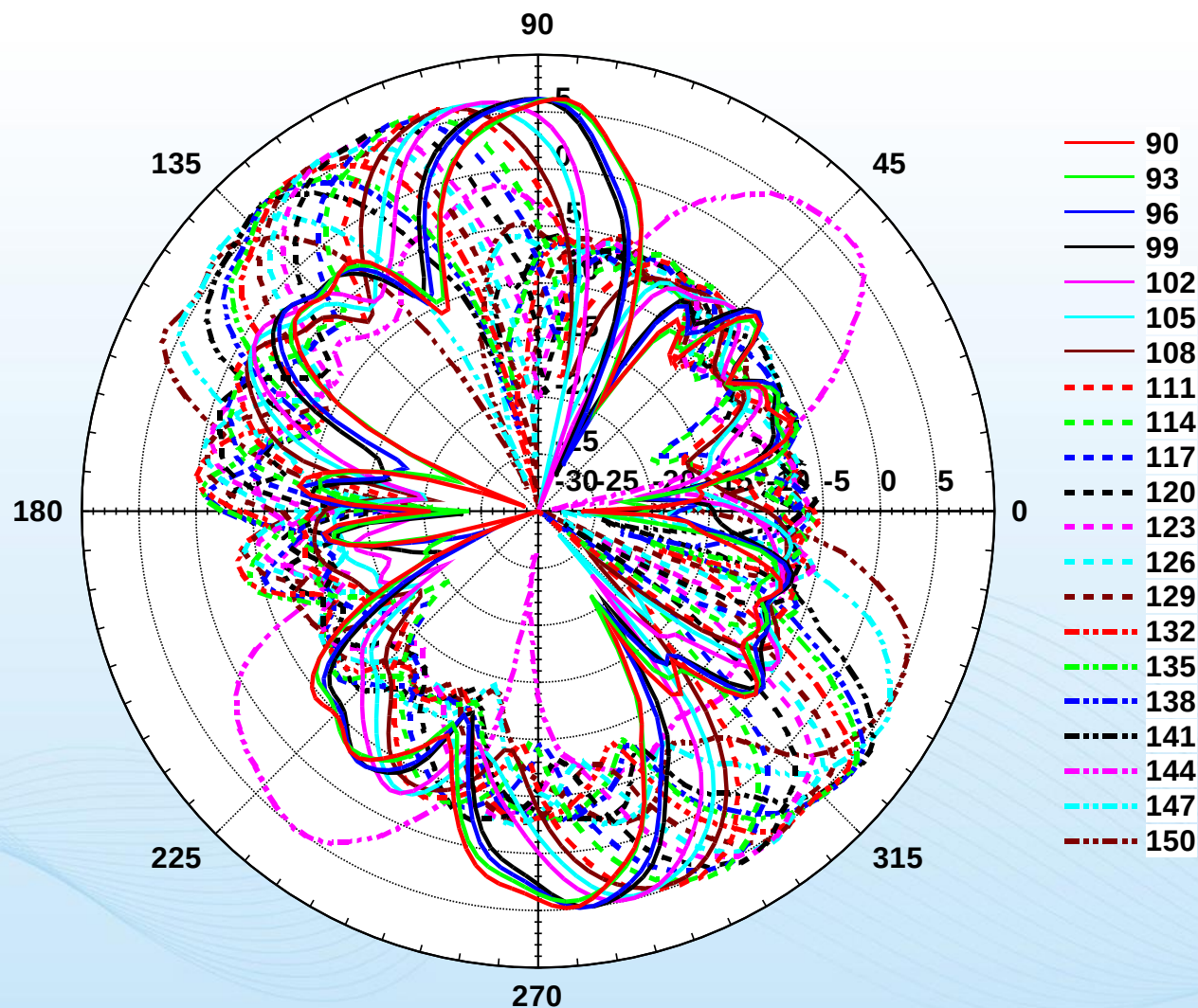


E-Plane Pattern 30deg to 90deg – 5180MHz





E-Plane Pattern 90deg to 150deg – 5180MHz





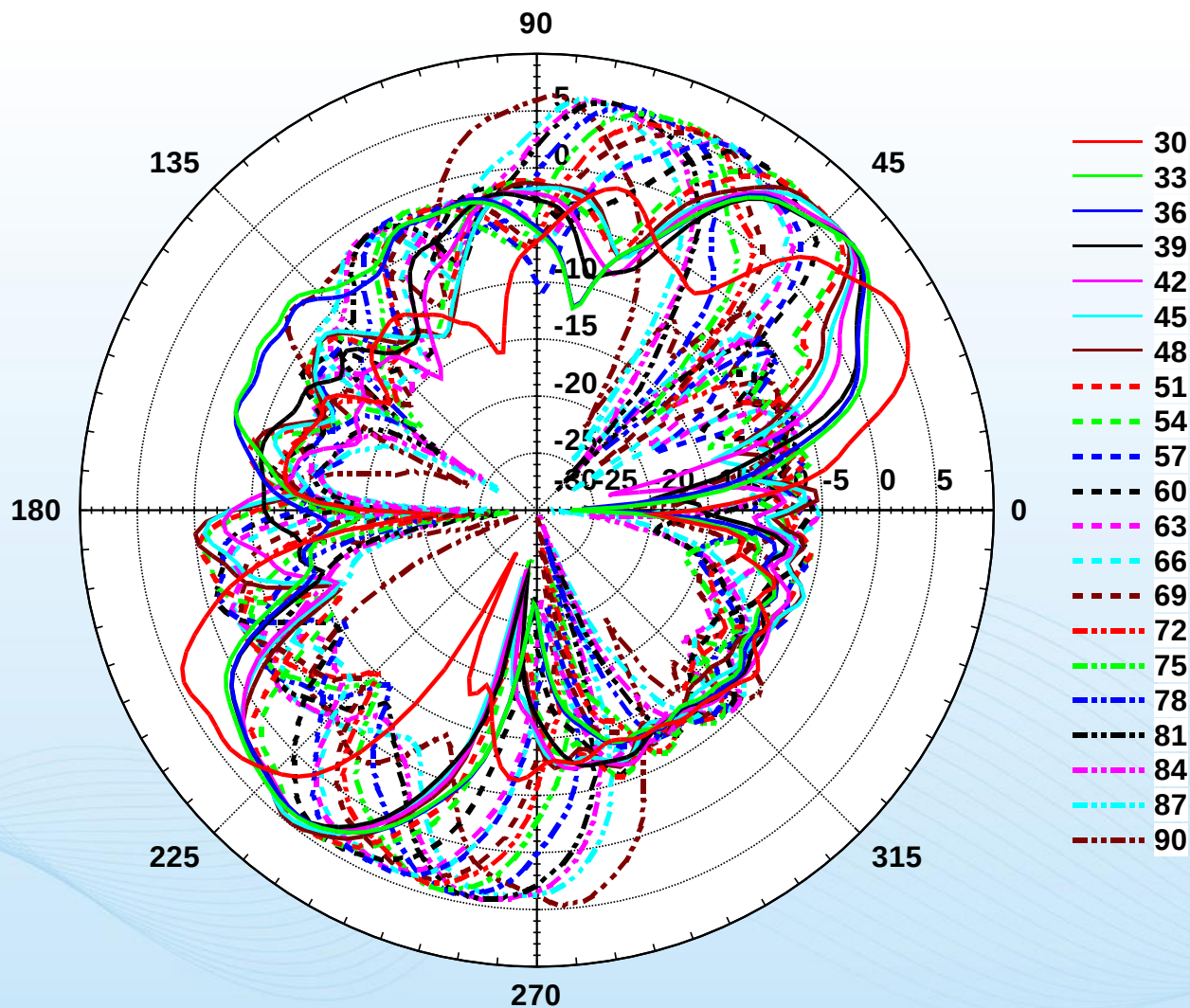
Peak Gain Table – 5190MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	26	6.15
33	50	6.13
36	46	6.15
39	38	6.15
42	34	6.16
45	20	6.15
48	16	6.15
51	12	6.16
54	16	6.15
57	36	6.15
60	14	6.15
63	18	6.16
66	18	6.16
69	14	6.13
72	16	6.12
75	16	6.17
78	20	6.14
81	20	6.15
84	18	6.13
87	20	6.12
90	20	6.14

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	20	6.14
93	26	6.12
96	22	6.15
99	22	6.14
102	18	6.15
105	16	6.13
108	16	6.15
111	16	6.15
114	12	6.15
117	10	6.17
120	20	6.14
123	16	6.14
126	20	6.16
129	20	6.12
132	18	6.13
135	16	6.15
138	16	6.14
141	24	6.14
144	136	6.15
147	26	6.15
150	30	6.14

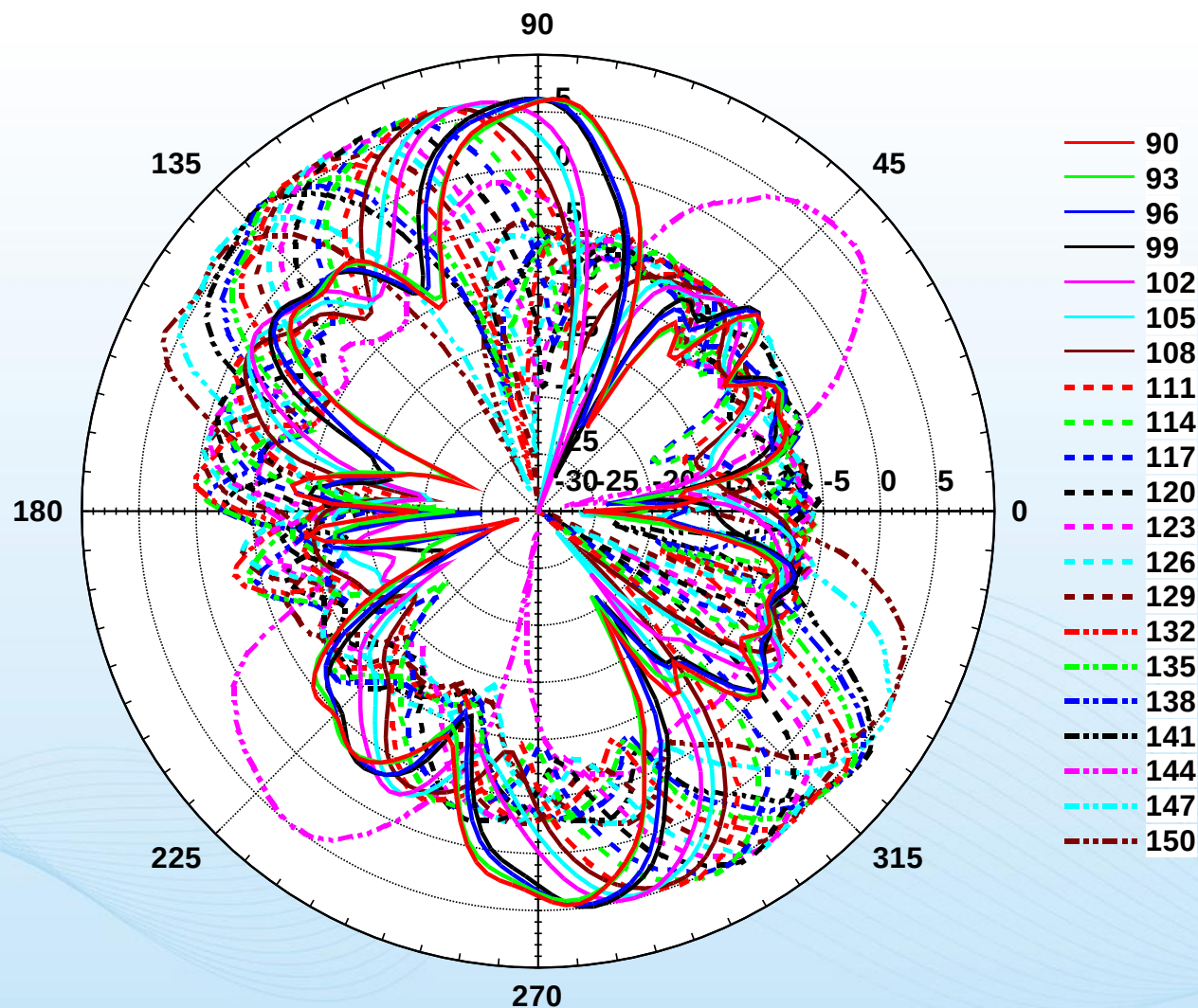


E-Plane Pattern 30deg to 90deg – 5190MHz





E-Plane Pattern 90deg to 150deg – 5190MHz





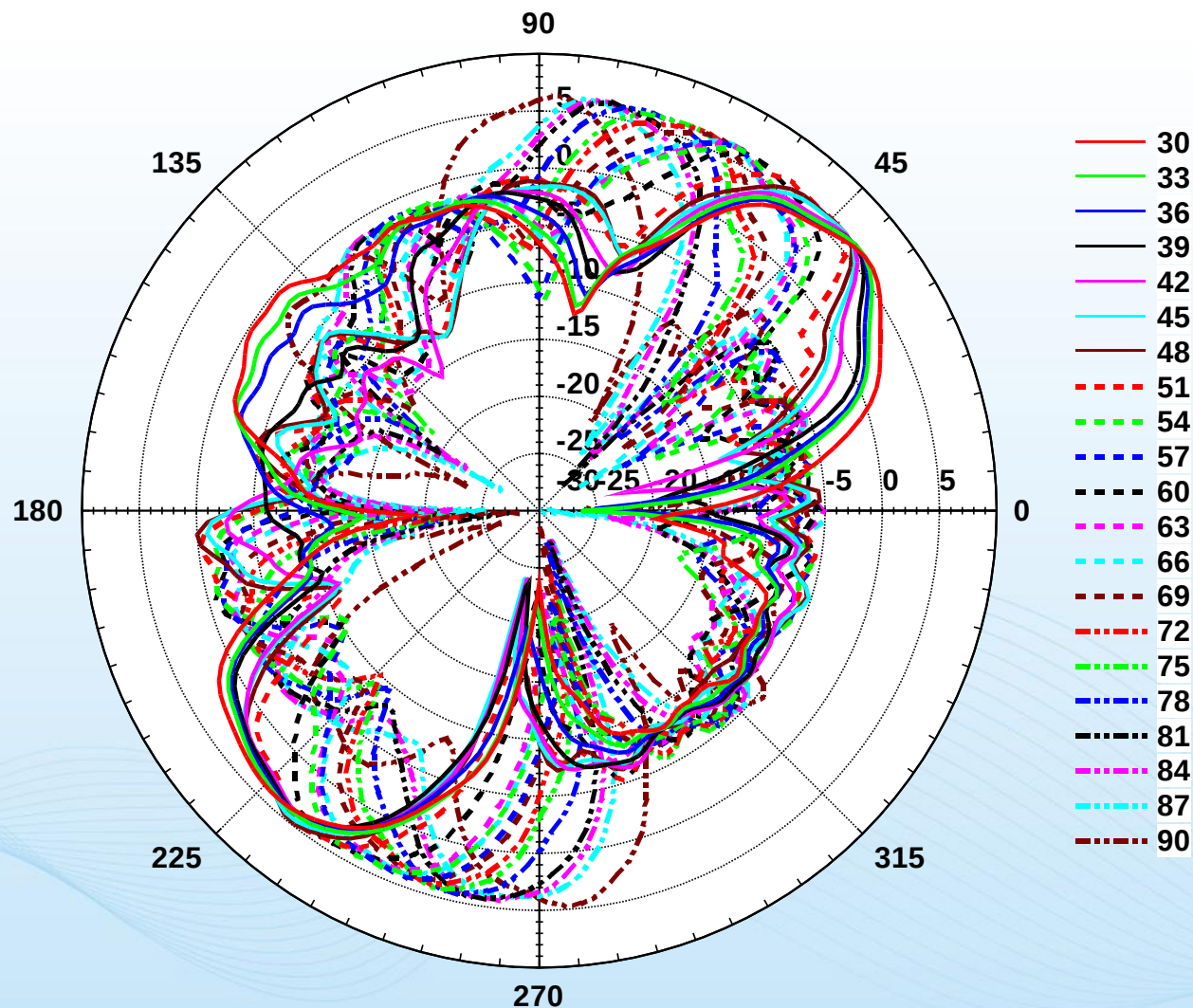
Peak Gain Table – 5200MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.13
33	50	6.17
36	46	6.16
39	36	6.13
42	34	6.12
45	20	6.15
48	14	6.15
51	12	6.17
54	42	6.14
57	36	6.17
60	12	6.18
63	18	6.15
66	18	6.14
69	14	6.14
72	16	6.14
75	16	6.14
78	18	6.15
81	20	6.14
84	16	6.14
87	20	6.14
90	22	6.13

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	20	6.13
93	28	6.12
96	22	6.16
99	22	6.18
102	18	6.16
105	16	6.14
108	16	6.16
111	16	6.15
114	10	6.12
117	10	6.16
120	20	6.14
123	18	6.13
126	20	6.16
129	20	6.15
132	16	6.15
135	16	6.15
138	16	6.15
141	22	6.12
144	136	6.15
147	26	6.13
150	32	6.14

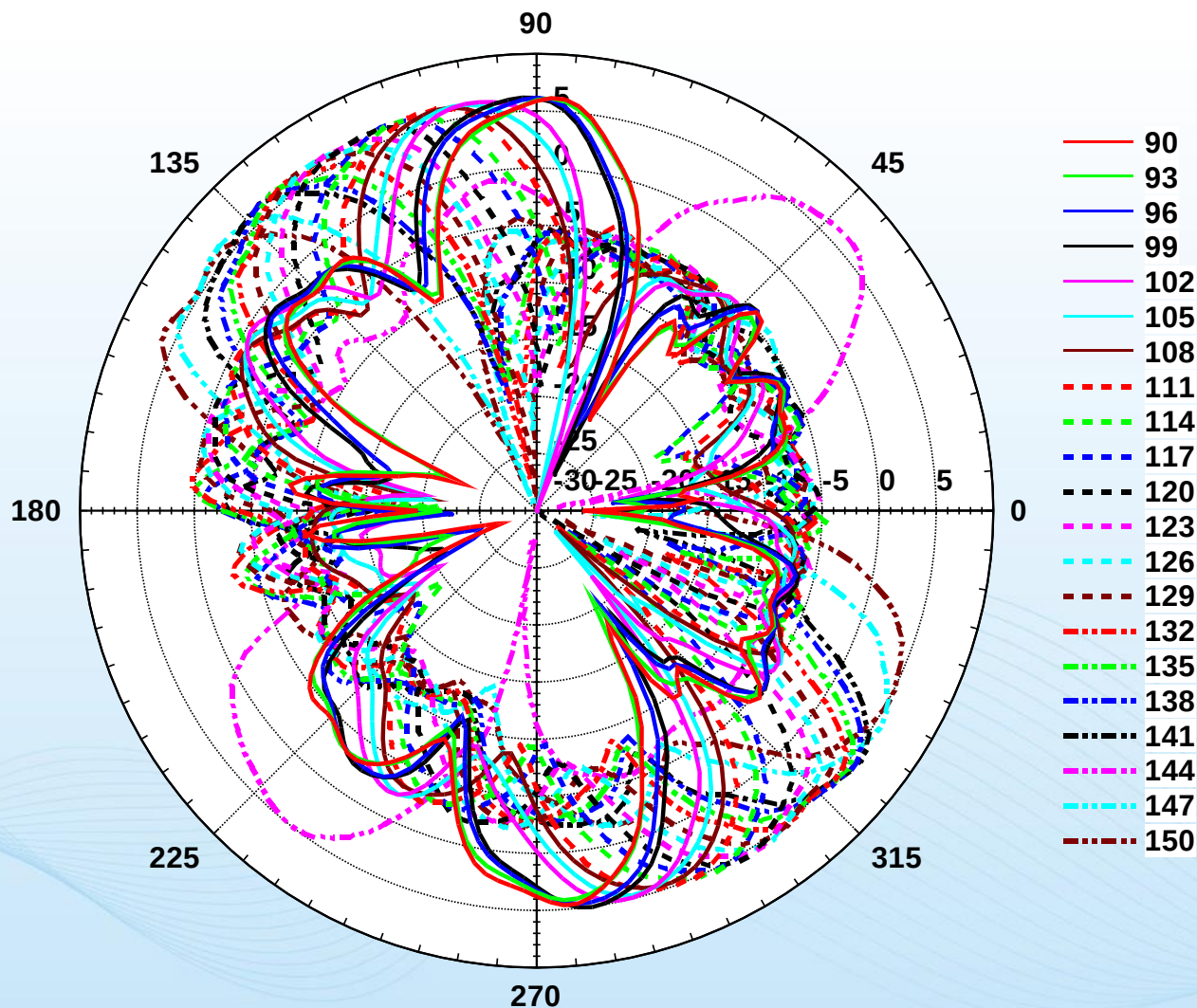


E-Plane Pattern 30deg to 90deg – 5200MHz





E-Plane Pattern 90deg to 150deg – 5200MHz





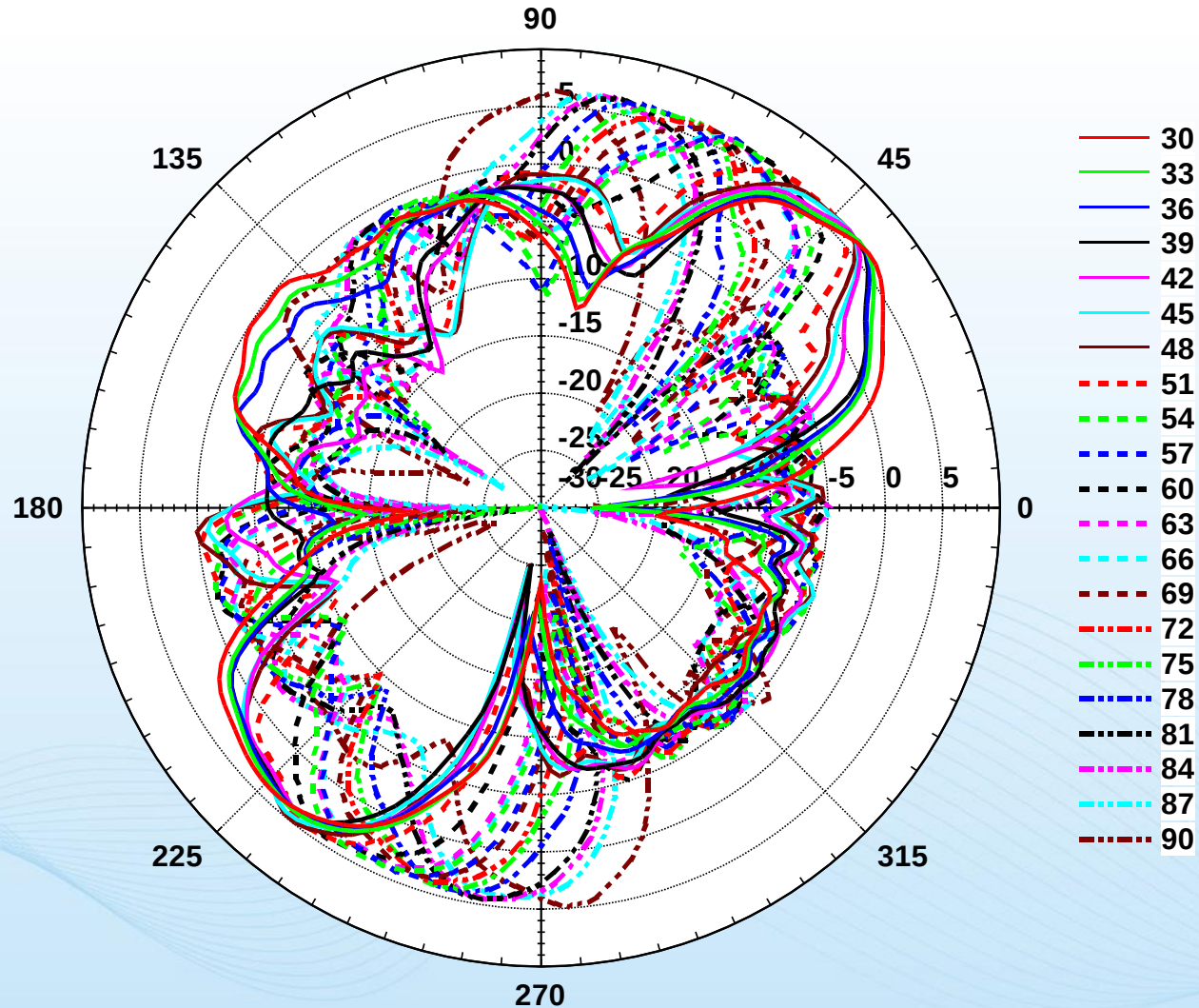
Peak Gain Table – 5210MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.17
33	50	6.17
36	46	6.16
39	36	6.12
42	34	6.17
45	20	6.17
48	14	6.17
51	12	6.14
54	42	6.17
57	36	6.17
60	12	6.16
63	16	6.14
66	16	6.15
69	12	6.13
72	16	6.17
75	16	6.13
78	18	6.15
81	20	6.14
84	22	6.13
87	20	6.16
90	22	6.15

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	20	6.15
93	28	6.14
96	22	6.16
99	22	6.16
102	18	6.15
105	16	6.15
108	16	6.16
111	16	6.14
114	10	6.15
117	10	6.13
120	20	6.15
123	18	6.13
126	20	6.12
129	20	6.17
132	16	6.16
135	16	6.15
138	18	6.14
141	22	6.11
144	136	6.16
147	26	6.15
150	32	6.15

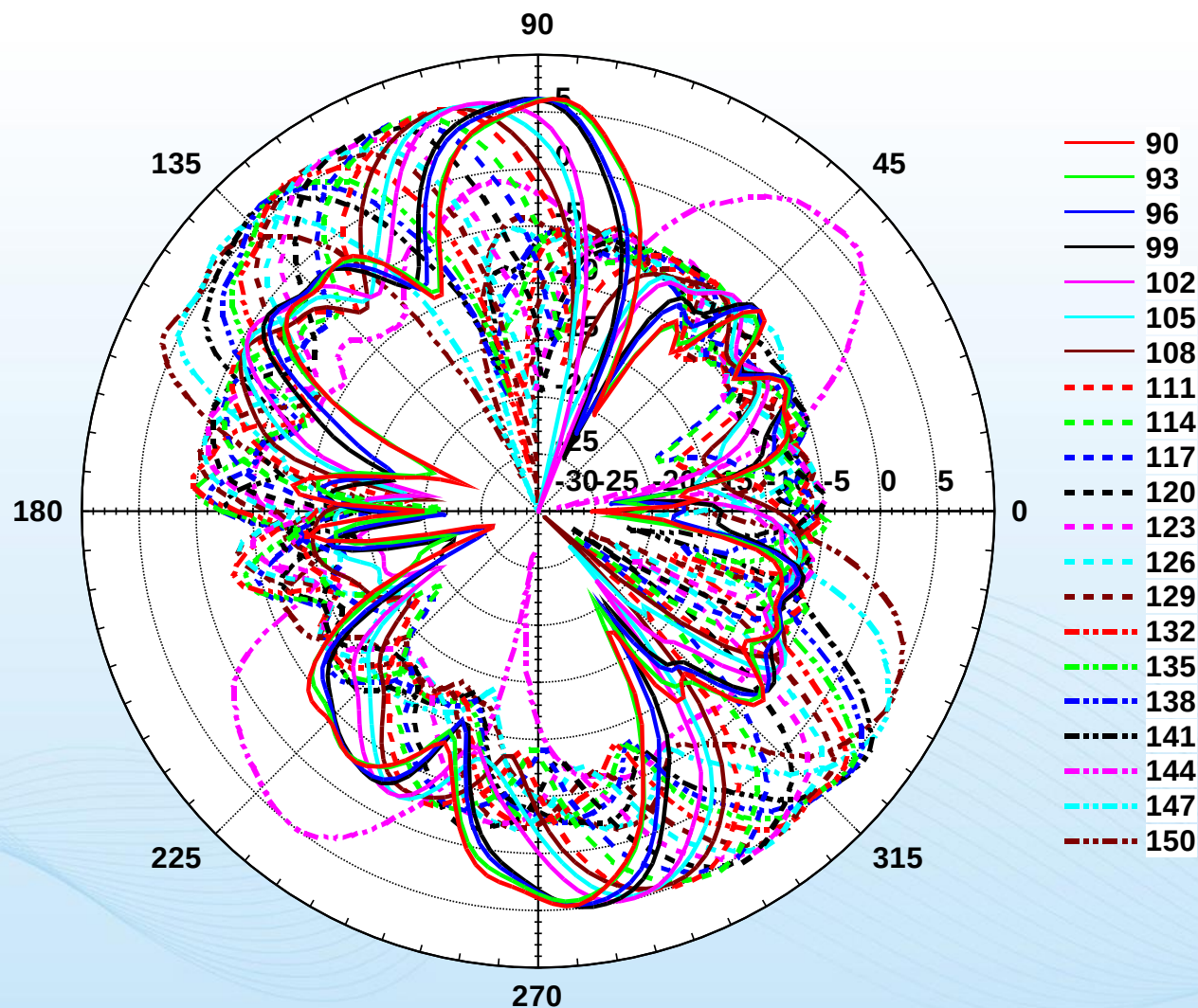


E-Plane Pattern 30deg to 90deg – 5210MHz





E-Plane Pattern 90deg to 150deg – 5210MHz





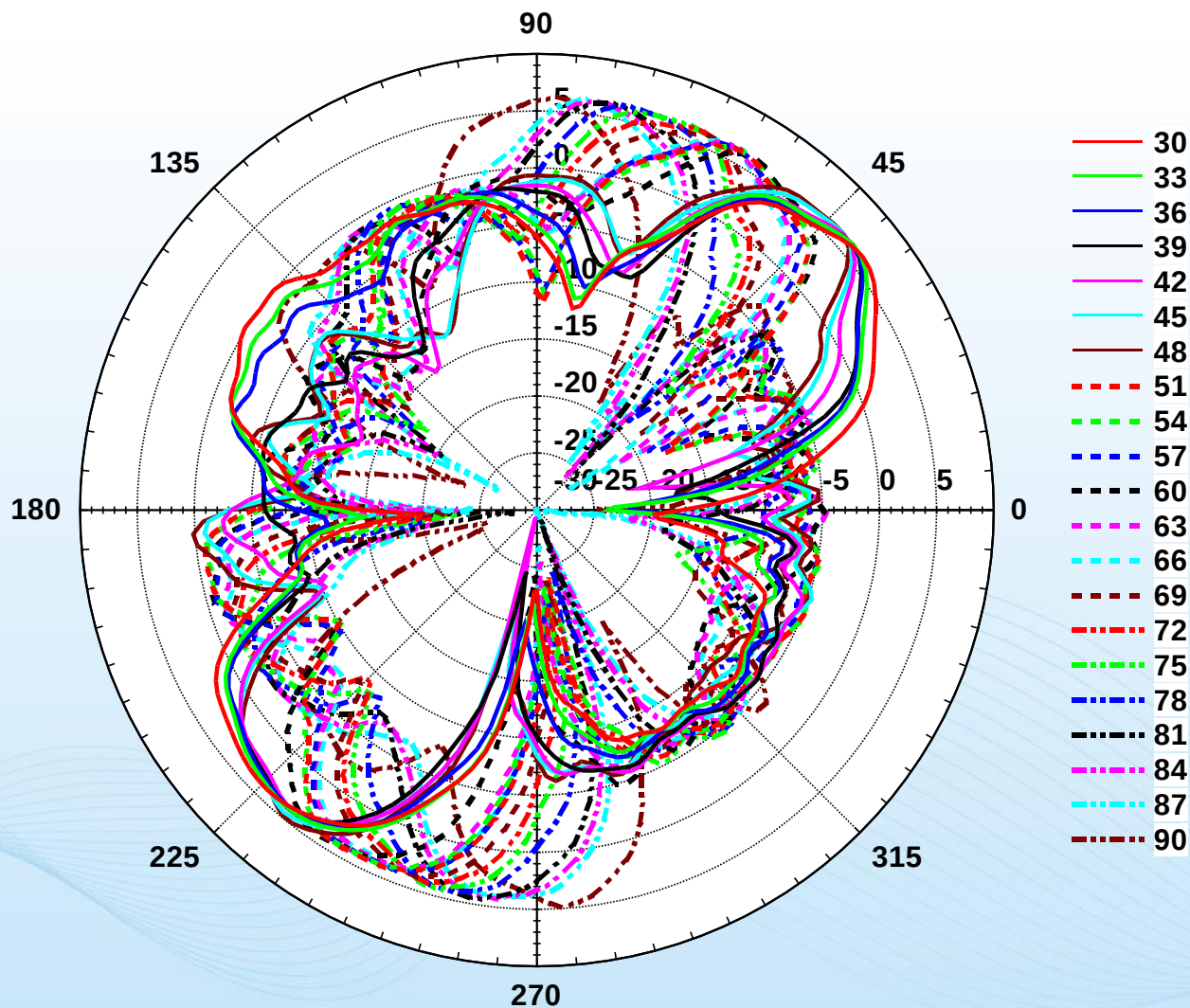
Peak Gain Table – 5230MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.16
33	50	6.17
36	46	6.16
39	36	6.16
42	32	6.14
45	18	6.17
48	14	6.16
51	42	6.17
54	40	6.16
57	36	6.17
60	12	6.14
63	16	6.15
66	16	6.16
69	12	6.14
72	16	6.16
75	16	6.17
78	18	6.16
81	20	6.13
84	22	6.11
87	22	6.15
90	20	6.12

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	20	6.12
93	28	6.16
96	22	6.13
99	22	6.17
102	18	6.17
105	16	6.17
108	16	6.15
111	14	6.14
114	10	6.13
117	10	6.15
120	18	6.13
123	18	6.15
126	18	6.16
129	18	6.14
132	16	6.15
135	18	6.16
138	20	6.13
141	24	6.16
144	136	6.14
147	26	6.12
150	34	6.14

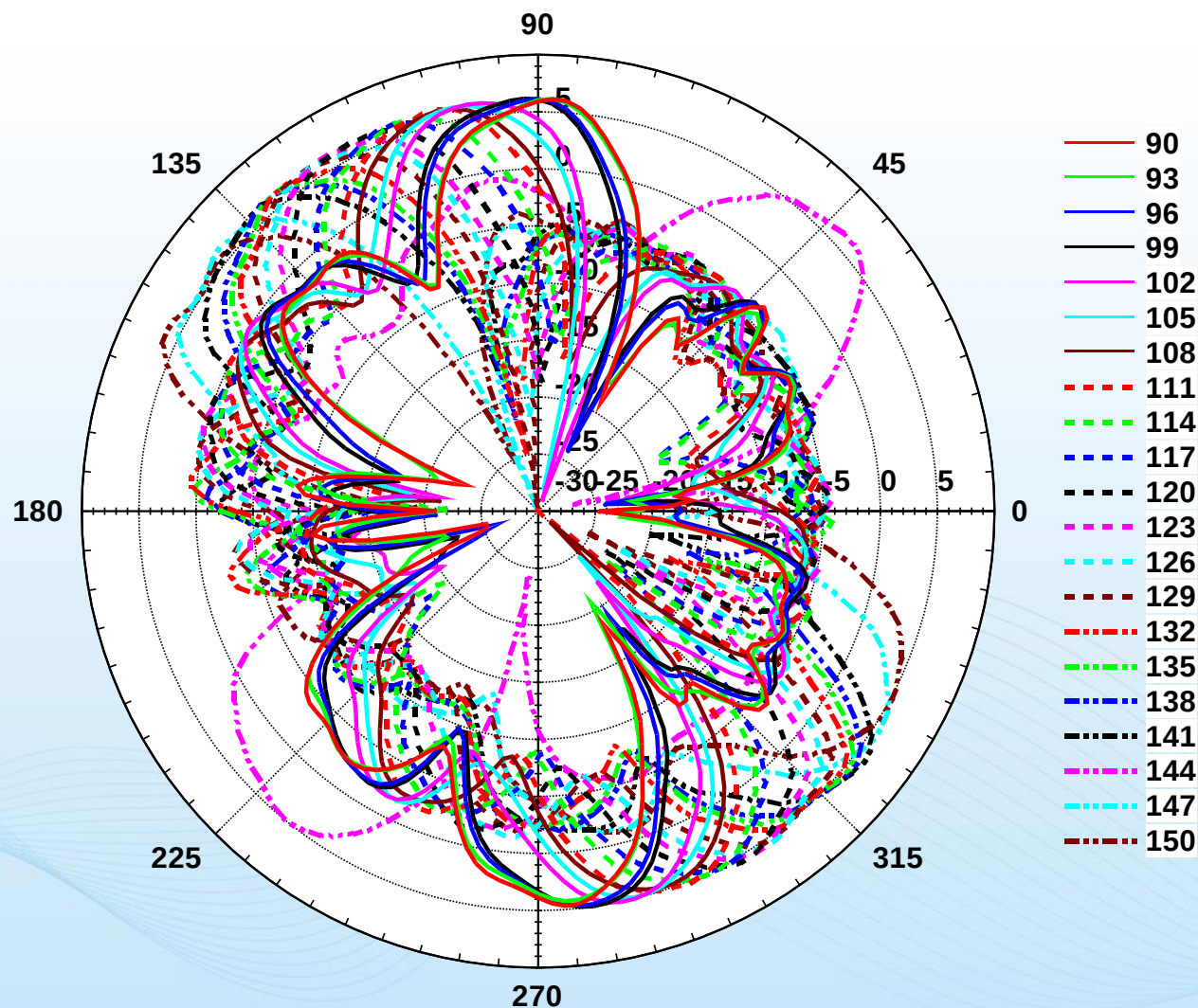


E-Plane Pattern 30deg to 90deg – 5230MHz





E-Plane Pattern 90deg to 150deg – 5230MHz





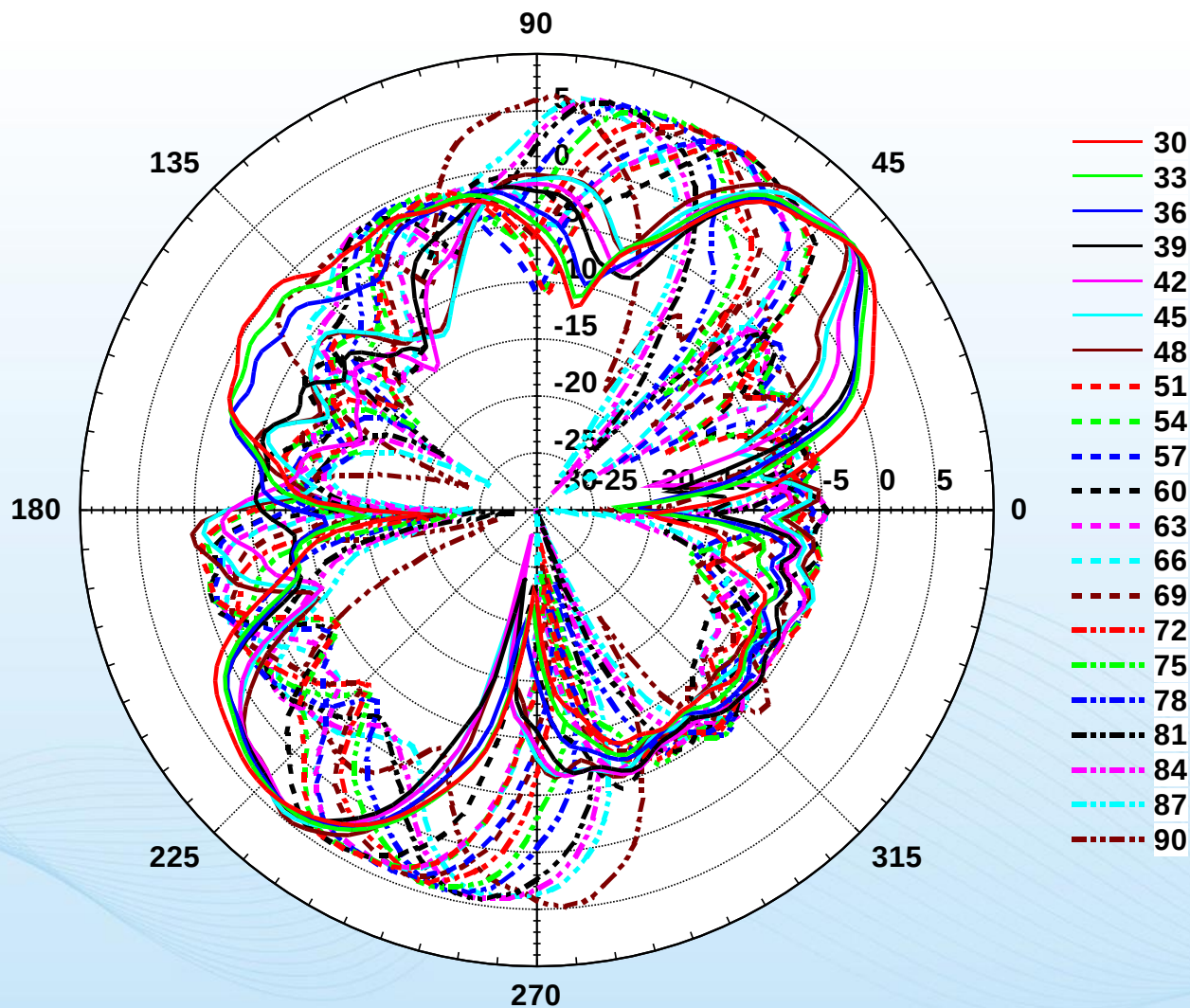
Peak Gain Table – 5240MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.16
33	50	6.16
36	46	6.17
39	36	6.15
42	32	6.16
45	18	6.17
48	16	6.15
51	40	6.16
54	40	6.16
57	34	6.16
60	12	6.16
63	16	6.13
66	16	6.15
69	12	6.15
72	16	6.16
75	16	6.15
78	18	6.16
81	20	6.17
84	20	6.16
87	22	6.15
90	20	6.16

Deg.	Phi Cut Deg.	Peak Gain (dBi)
90	20	6.16
93	26	6.16
96	20	6.16
99	20	6.15
102	18	6.16
105	16	6.15
108	16	6.14
111	14	6.13
114	10	6.14
117	10	6.11
120	18	6.17
123	18	6.17
126	18	6.16
129	18	6.16
132	18	6.15
135	18	6.15
138	20	6.13
141	24	6.14
144	136	6.16
147	26	6.16
150	34	6.13



E-Plane Pattern 30deg to 90deg – 5240MHz





E-Plane Pattern 90deg to 150deg – 5240MHz

