

## Wireless Notices

**This device is intended for OEM integrators only.  
This device cannot be co-located with any other transmitter.**

### Information for the OEM Integrators:

In some environments, the use of wireless devices may be restricted. Such restrictions may apply aboard airplanes, in hospitals, near explosives, in hazardous locations, etc. If you are uncertain of the policy that applies to the use of this device, please ask for authorization to use it prior to turning it on.

### U.S. Regulatory Wireless Notice

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.

The FCC requires the user to be notified that any changes or modifications made to device that are not expressly approved by the Hewlett-Packard Company may void the user's authority to operate the equipment.

This product emits radio frequency energy, but the radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact with the antenna during normal operation is minimized.



### **Warning: Exposure to Radio Frequency Radiation**

The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact during normal operation is minimized. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna should not be less than 20cm (8 inches) during normal operation.

### **This device is intended only for OEM integrators under the following conditions:**

- 1) **The antenna must be installed such that 20 cm is maintained between the antenna and users.** For laptop installations, the antenna must be installed to ensure that the proper spacing is maintained in the event the users places the device in their lap during use (i.e. positioning of antennas must be placed in the upper portion of the LCD panel only to **ensure 20 cm will be maintained** if the user places the device in their lap for use) and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

### **End Product Labeling**

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example access points, routers, wireless ASDL modems, certain laptop configurations, and similar equipment).

The final end product must be labeled in a visible area with the following: " FCC ID: XXXXXXXXXXXXXXXX," where XXXXXXXXXXXXXXXX is replaced by the FCC ID on the module being integrated.

## Additional Information That Must be Provided to OEM Integrators

The end user should NOT be provided any instructions on how to remove or install the device.

### **USA Radio Frequency Interference Requirements**

#### **FCC Regulations Part 15 Declaration of Conformity (DoC)**

Ambit Microsystems Corporation declares that the equipment described in this document is within the requirements of the Code of Federal Regulations listed below:

Title 47 Part 15, Subpart B, Class B for a digital device.

This declaration is based upon the compliance of the Wireless LAN Mini PCI Adapters to the above standards. Ambit has determined that the models listed have been shown to comply with the applicable technical standards if no unauthorized change is made in the equipment and if the equipment is properly maintained and operated.

These units are identical to the units tested and found acceptable with the applicable standards. Records maintained by Ambit continue to reflect that units being produced under this Declaration of Conformity, within the variation that can be expected due to quantity production and tested on a statistical basis, continue to comply with the applicable technical standards.

## Canadian Regulatory Wireless Notice

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## U.S. and Canada Safety Requirement and Notice

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.

**Warning:** To comply with the FCC and ANSI C95.1 RF exposure limits, it is recommended for Wireless LAN Mini PCI Adapters installed in a desktop or portable computer, that the antenna for this device be installed so as to provide a separation distance of at least **20 cm (8 inches)** from all persons and that the antenna must not be co-located or operating in conjunction with any other antenna or radio transmitter. It is recommended that the user limit exposure time if the antenna is positioned closer than **20 cm (8 inches)**.

### **Use On Aircraft Caution**

**Caution:** Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.

## European Union Notice



Products bearing the CE marking comply with the R&TTE Directive (1999/5/EC), EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

- EN 55022 (CISPR 22) – Electromagnetic Interference
- EN55024 (IEC61000-4-2, 3, 4, 5, 6, 8, 11) – Electromagnetic Immunity
- EN61000-3-2 (IEC61000-3-2) – Power Line Harmonics
- EN61000-3-3 (IEC61000-3-3) – Power Line Flicker
- EN 60950 (IEC 60950) – Product Safety
- EN 300 328-2 – Technical requirements for radio equipment
- EN 301 489-1, -17 – General EMC requirements for radio equipment

This product may be used in the following EU and EFTA countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and United Kingdom. **Products not marked with “Not for use in France” may be used in France.**

## Japanese Regulatory Wireless Notice

この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか工場の製造ライン等で使用されている移動体識別用の構内無線局（免許を要する無線局）及び特定小電力無線局（免許を要しない無線局）が運用されています。

- 1 この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局が運用されていないことを確認して下さい。
- 2 万一、この機器から移動体識別用の構内無線局に対して電波干渉の事例が発生した場合には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混信回避のための処置等（例えば、パーティションの設置など）についてご相談して下さい。
- 3 その他、この機器から移動体識別用の特定小電力無線局に対して電波干渉の事例が発生した場合など何かお困りのことが起きたときは、次の連絡先へお問い合わせ下さい。

連絡先：コンバックコンピュータ株式会社 TEL：0120-101589

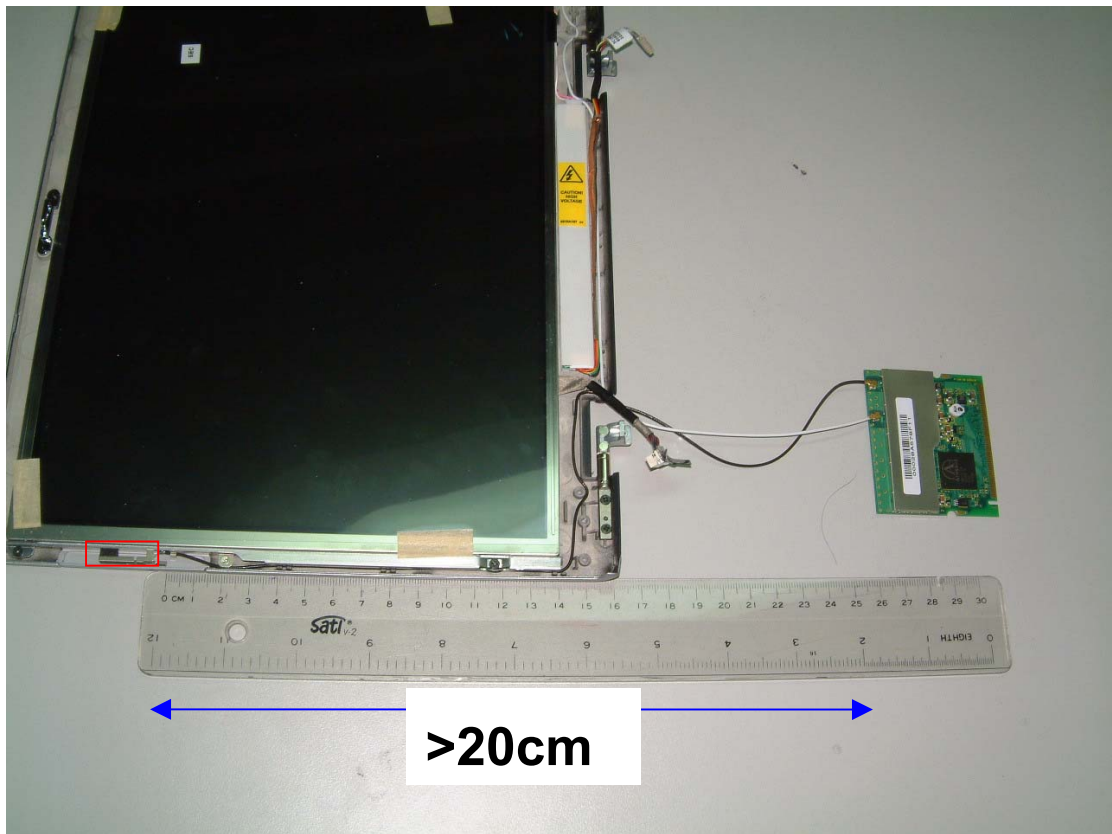
2.4DS4

2.4OF4

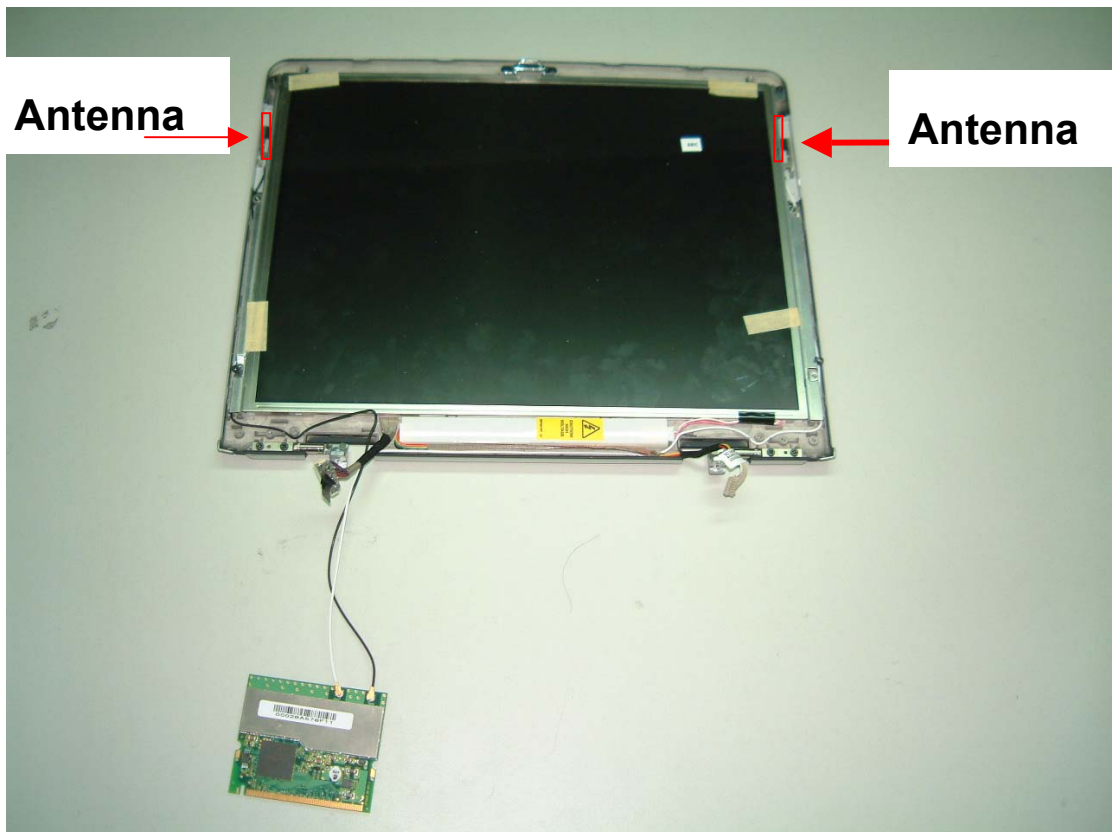
Note: In Japan 5GHz is for indoor use only

## Brazilian Regulatory Wireless Notice

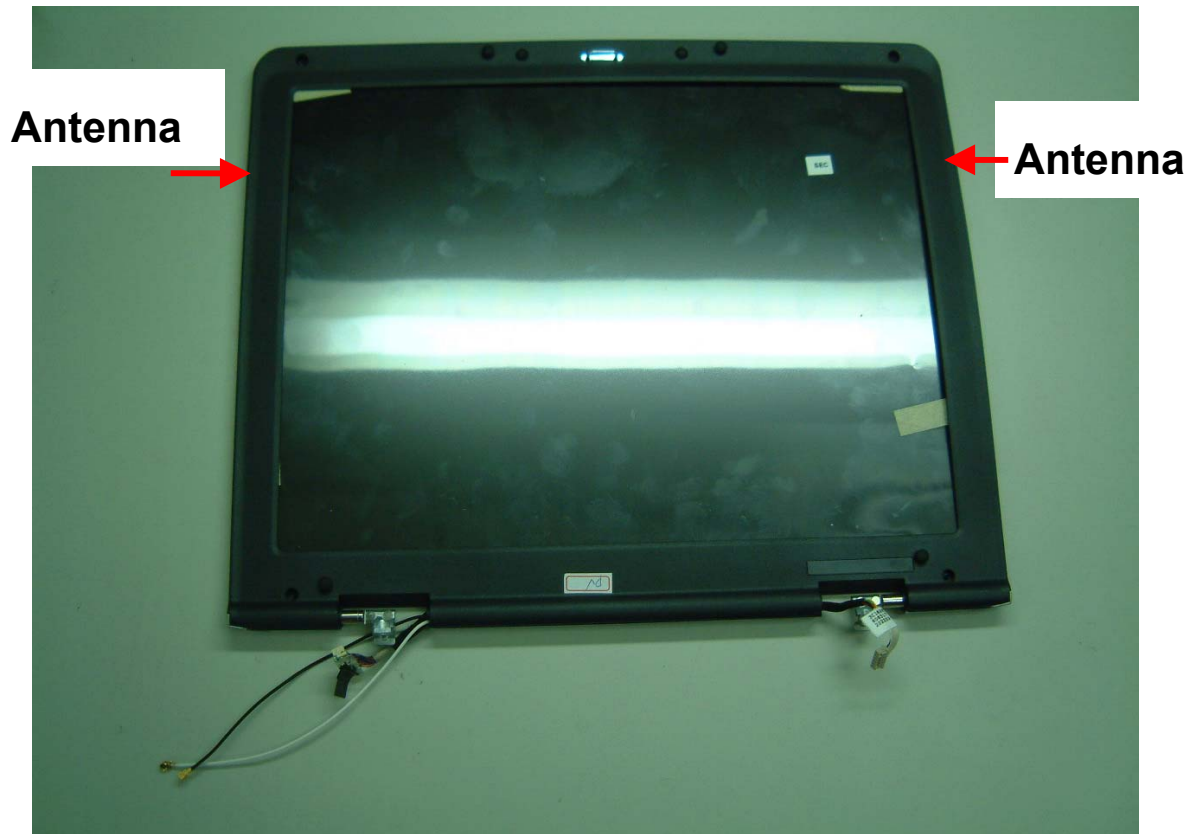
Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.



**View With Cable and Module**



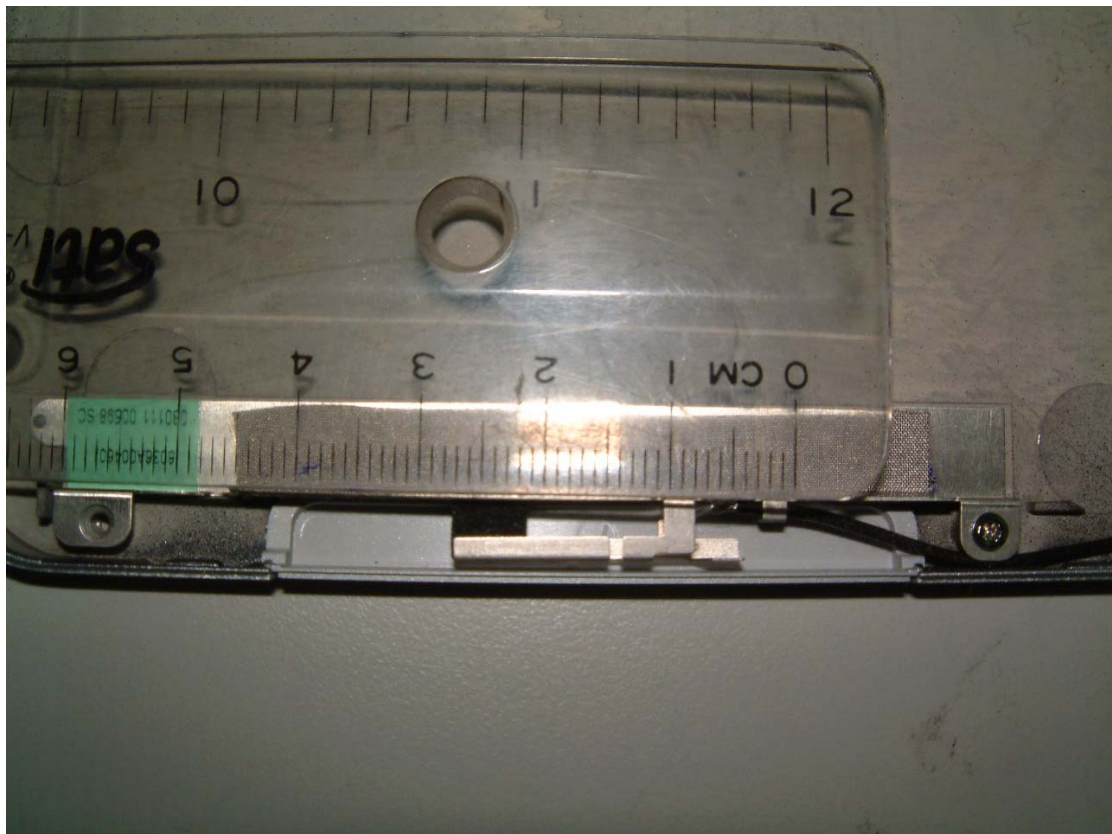
**View With Cable and Module**



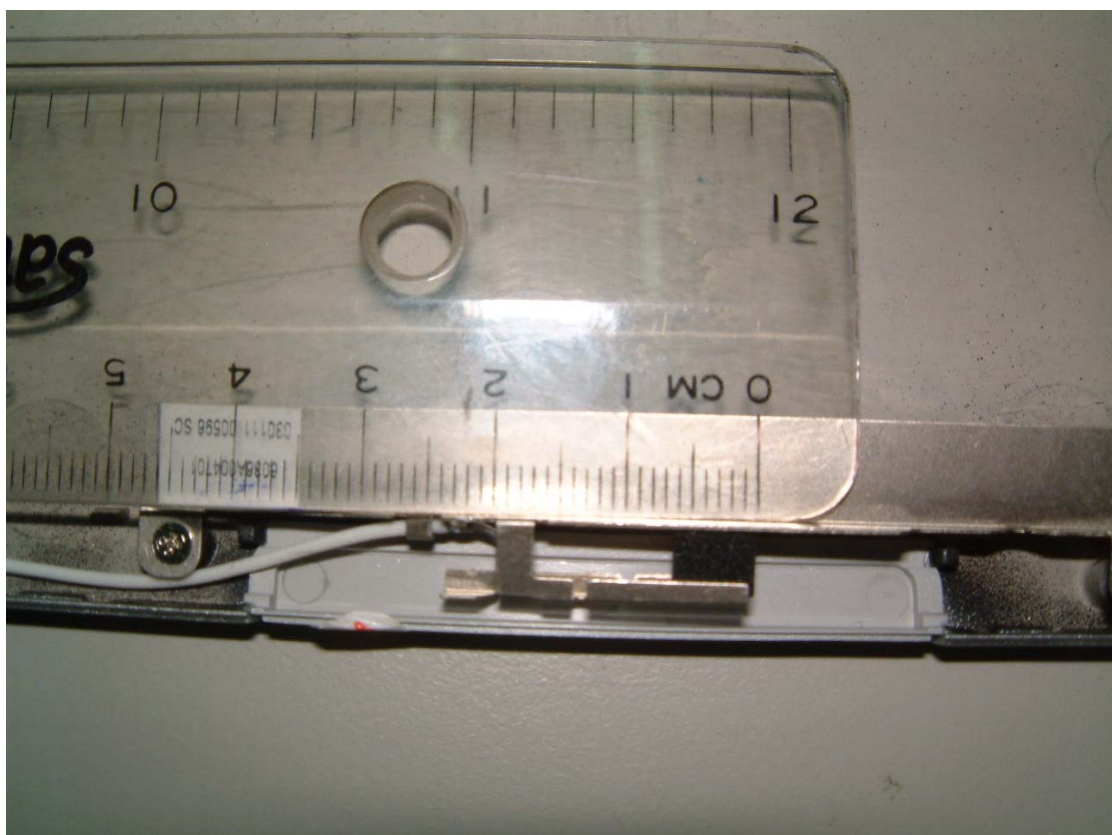
**View With Antenna installed in the Panel**



**View with Loaded Plane**



**Right Antenna Close View**



**Left Antenna Close View**



Wistron NeWeb Corporation

# DATA SHEET

<b>Customer Name</b>	<b>Wistron Corporation</b>		
<b>Date</b>	10/23/2002		
<b>Customer P/N</b>			
<b>WNC P/N</b>	81.CA813.001 for Main antenna		
<b>Description</b>	Antenna for Sapphire system		
<b>Version</b>	SD	<b>Doc. Version</b>	0



Wistron NeWeb Corporation  
No.10-1, Li-hsin Road I,  
Science-based Industrial Park,  
Hsinchu 300, Taiwan, R.O.C.  
Telephone: 886-3-666-7799  
Facsimile: 886-3-666-7711  
<http://www.wneweb.com>

啓碁科技股份有限公司  
新竹市 300 科學園區力行一路 10-1 號  
電話：(03)666-7799  
傳真：(03)666-7711

## Quick-Sliver Triple- BAND ANTENNA

Prepare by David Ws Tau  
/Wistron NeWeb Corp.

### Purpose :

For Sapphire platform side mount antenna ,the antenna including triple –band 802.11b,a &h used.

### I. Antenna material SPEC.

#### U structure

#### A. Main antenna

1. Application: LCD Left side
2. Cable length: 365mm  
(IPEX cable with  $\Phi$  1.13mm)
3. PIFA by metal

#### B. AUX antenna

1. Application: LCD Right side
2. Cable length: 480mm  
(IPEX cable with  $\Phi$  1.13mm)
3. PIFA antenna by metal

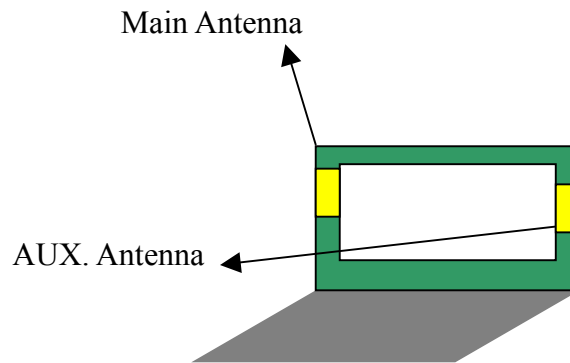


Fig.1

#### C. Main antenna BOM

Parts Number	Description	Quantity
3A.CA845.111	ANTENNA iron sheet, LEFT, CA8-I	1
25.90066.001	ANTENNA IPEX cable 365 MM CA8-I	1
3B.CA880.111	EVA BUFFER	1
	Conductive Cloth	1

#### D.Aux. antenna BOM

Parts Number	Description	Quantity
3A.CA845.112	ANTENNA iron sheet, RIGHT, CA8-I	1
25.90065.001	ANTENNA IPEX cable 480 MM CA8-I	1
3B.CA880.111	EVA BUFFER	1

## II. Performance

### A.VSWR:

Criteria: VSWR<sub>c</sub><2 for 2.4GHz~2.5GHz&5.15~5.35GHz&5.47~5.825GHz



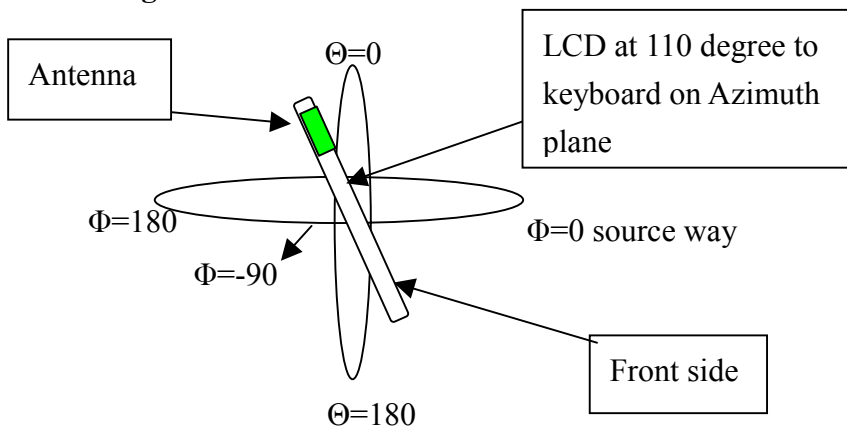
	802.11b			802.11a			Pass or Fail
	2.4GHz	2.45GHz	2.497GHz	5.15GHz	5.25GHz	5.35GHz	
Main	1.83	1.64	1.41	1.7	1.85	1.61	Pass

	Hyper Lan			Pass or Fail
	5.47GHz	5.6475GHz	5.825GHz	
Main	1.31	1.21	1.72	Pass

	802.11b			802.11a			Pass or Fail
	2.4GHz	2.45GHz	2.497GHz	5.15GHz	5.25GHz	5.35GHz	
AUX.	1.48	1.18	1.45	1.34	1.24	1.25	Pass

	Hyper Lan			Pass or Fail
	5.47GHz	5.6475GHz	5.825GHz	
AUX	1.1	1.4	1.71	Pass

## B. Radiation Measure figure



## C. PEAK GAIN AND AVERAGE GAIN (for 802.11b,a& H).

Criteria : Peak Gain < 6 dBi for 2.4~2.5,5.15~5.35&5.47~5.825GHz

Average Receive(diversity) Gain > 2 dBi for 2.4~2.5,5.15~5.35&5.47~5.825GHz

Average Transmit(main antenna) Gain > 0 dBi for 2.4~2.5,5.15~5.35&5.47~5.825GHz

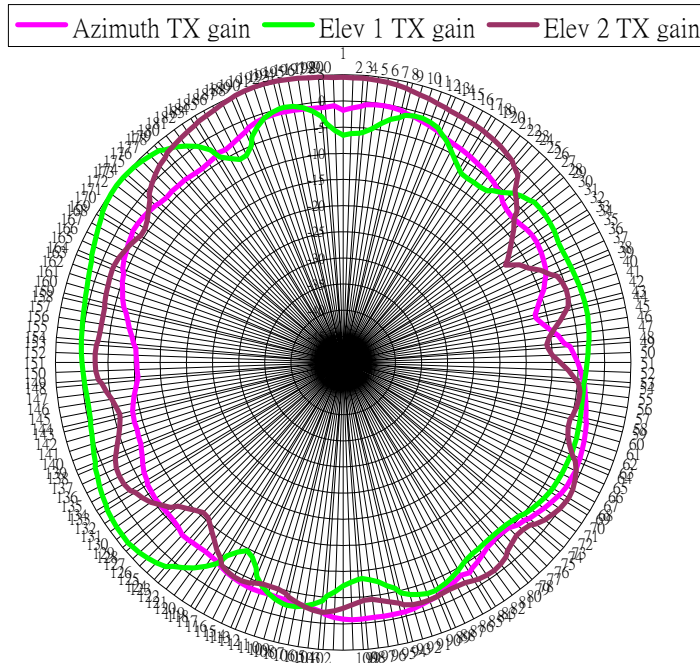
		Peak gain			Average gain			Peak gain			Average gain			Peak gain		Average gain			
		2.4GHz	2.45GHz	2.5GHz	2.4GHz	2.45GHz	2.5GHz	5.15GHz	5.25GHz	5.35GHz	5.15GHz	5.25GHz	5.35GHz	5.47GHz	5.825GHz	5.47GHz	5.647GHz	5.825GHz	
Main	plane ( $\Theta = 90^\circ, \Phi = 0 \sim 360^\circ$ )	0.20	-0.32	0.76	-3.94	-3.62	-3.12	2.25	2.42	2.77	-1.45	-1.43	-1.06	2.09	2.91	1.96	-1.80	-1.35	-2.73
	Elevation plane 1 ( $\Phi = 0^\circ, \Theta = 0 \sim 360^\circ$ )	4.90	4.97	4.96	-0.79	-0.87	-0.41	0.71	0.83	1.52	-1.86	-1.89	-1.37	2.12	2.81	1.47	-1.09	-0.92	-2.16
	Elevation plane 2 ( $\Phi = 90^\circ, \Theta = 0 \sim 360^\circ$ )	5.03	5.35	4.61	-0.90	-0.61	-0.78	1.23	1.38	2.11	-2.07	-2.00	-1.47	1.66	2.45	0.89	-1.78	-1.73	-2.92
AUX.	plane ( $\Theta = 90^\circ, \Phi = 0 \sim 360^\circ$ )	-1.61	-1.84	-0.58	-3.82	-3.61	-3.76	1.84	1.72	2.00	-2.00	-1.89	-1.51	2.80	2.29	1.50	-1.16	-1.50	-2.27
	Elevation plane 1 ( $\Phi = 0^\circ, \Theta = 0 \sim 360^\circ$ )	3.82	4.12	4.04	-2.97	-2.34	-1.62	1.05	0.87	1.22	-3.22	-2.75	-2.24	1.88	1.25	1.52	-1.84	-2.82	-2.37
	Elevation plane 2 ( $\Phi = 90^\circ, \Theta = 0 \sim 360^\circ$ )	3.75	3.86	2.75	-2.05	-1.63	-1.99	-0.86	-0.72	1.55	-4.28	-3.70	-2.44	0.77	1.01	2.36	-2.95	-2.66	-1.35



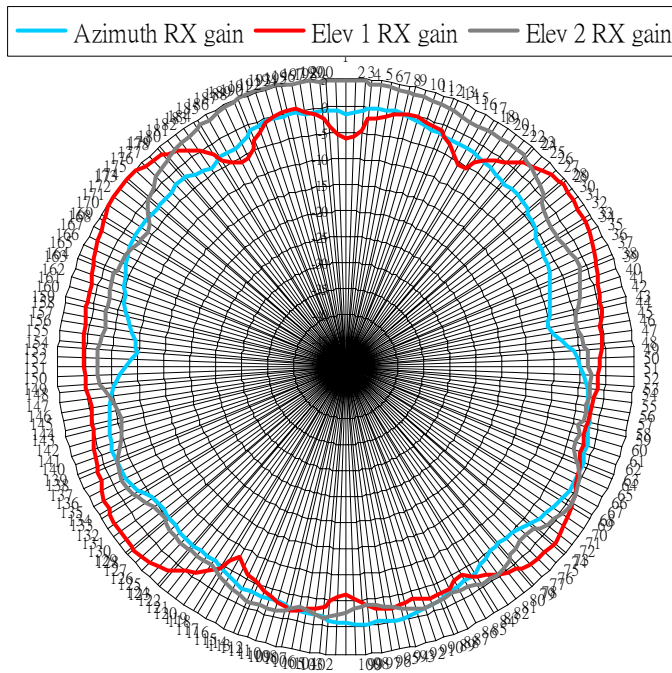
## III. Radiation Pattern

### 1. Rx(diversity) and TX(main ant.) gain Pattern

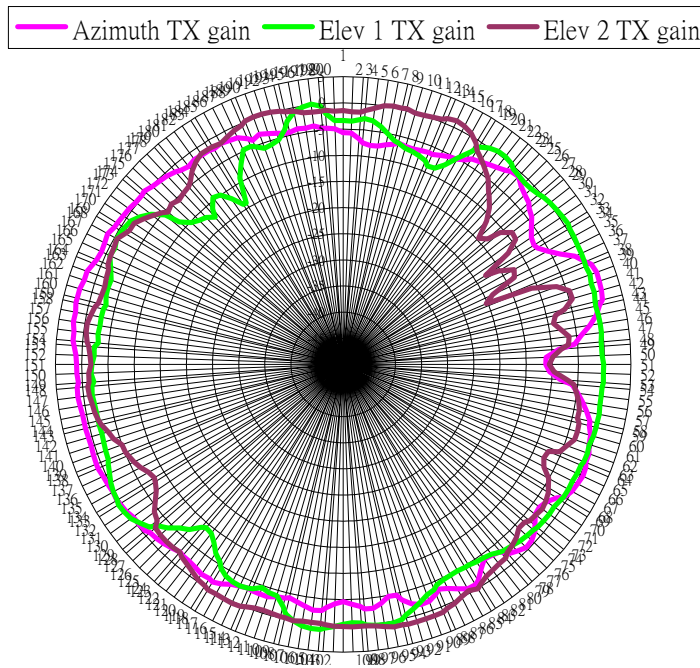
TX(Main) Gain on Tri-orthogonal Plane-@2.45GHz



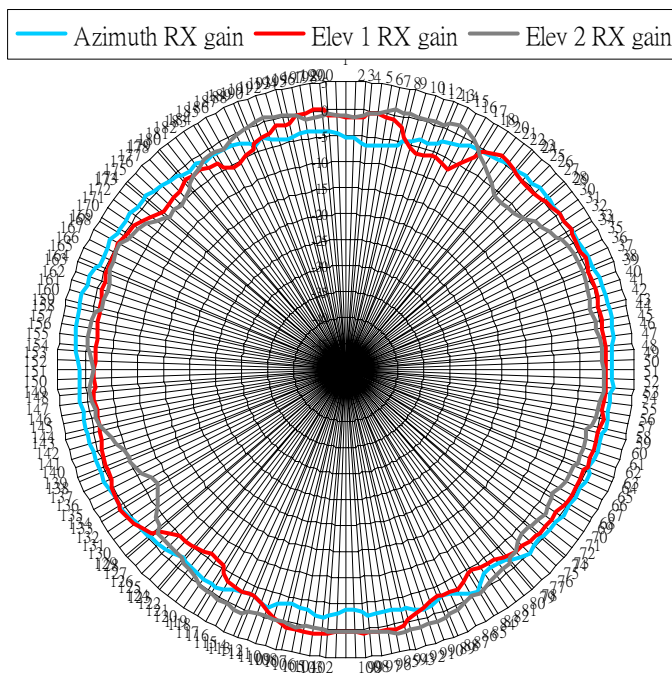
RX Gain on Azimuth Plane-@2.45GHz



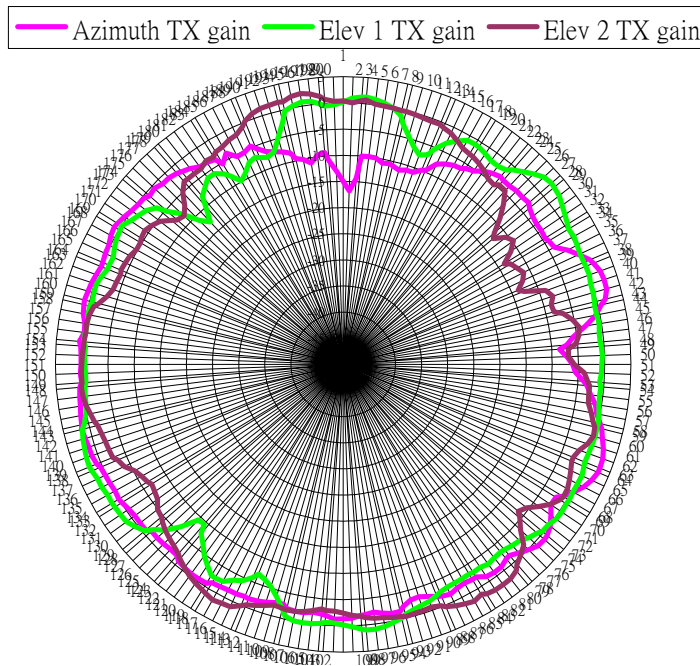
## TX(main) Gain on Tri-orthogonal Plane-@5.25GHz



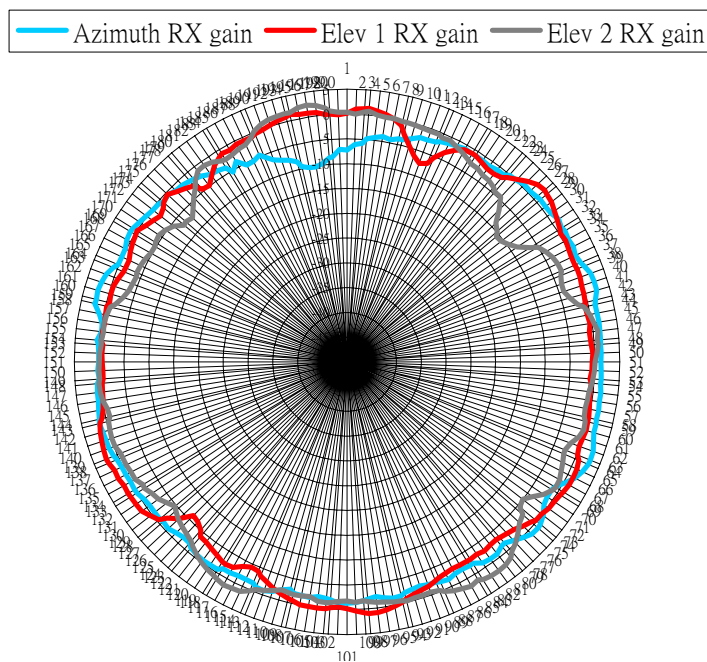
## RX Gain on Azimuth Plane-@5.25 GHz



TX(main) Gain on Tri-orthogonal Plane-@5.6475 GHz

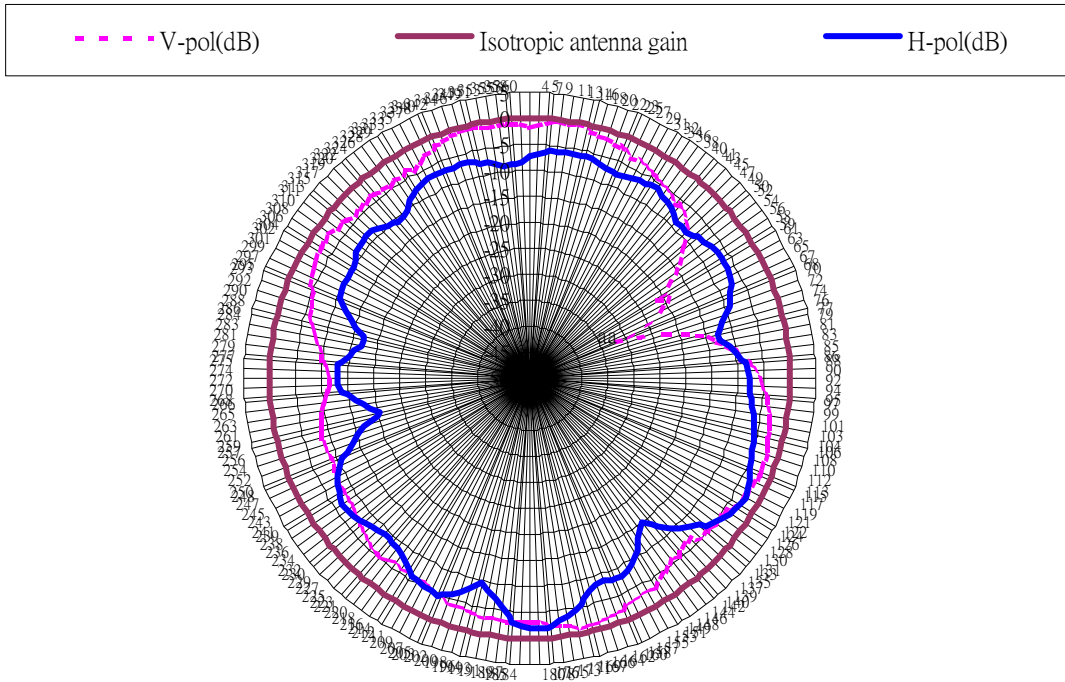


RX Gain on Azimuth Plane-@5.6475 GHz

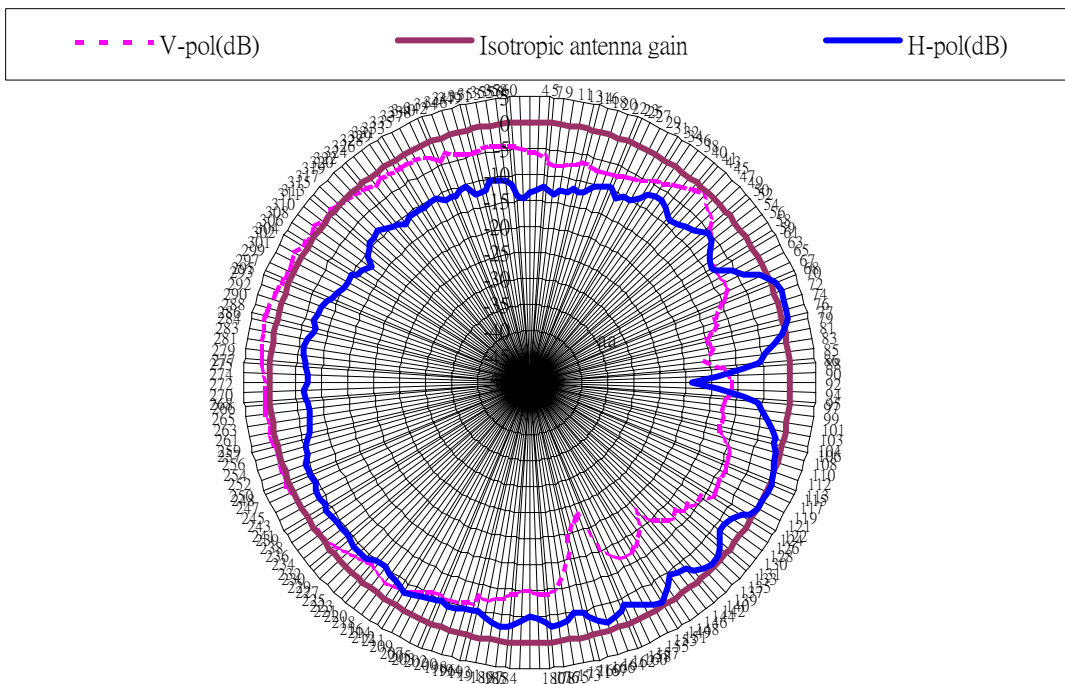


## 2. Main Antenna Pattern

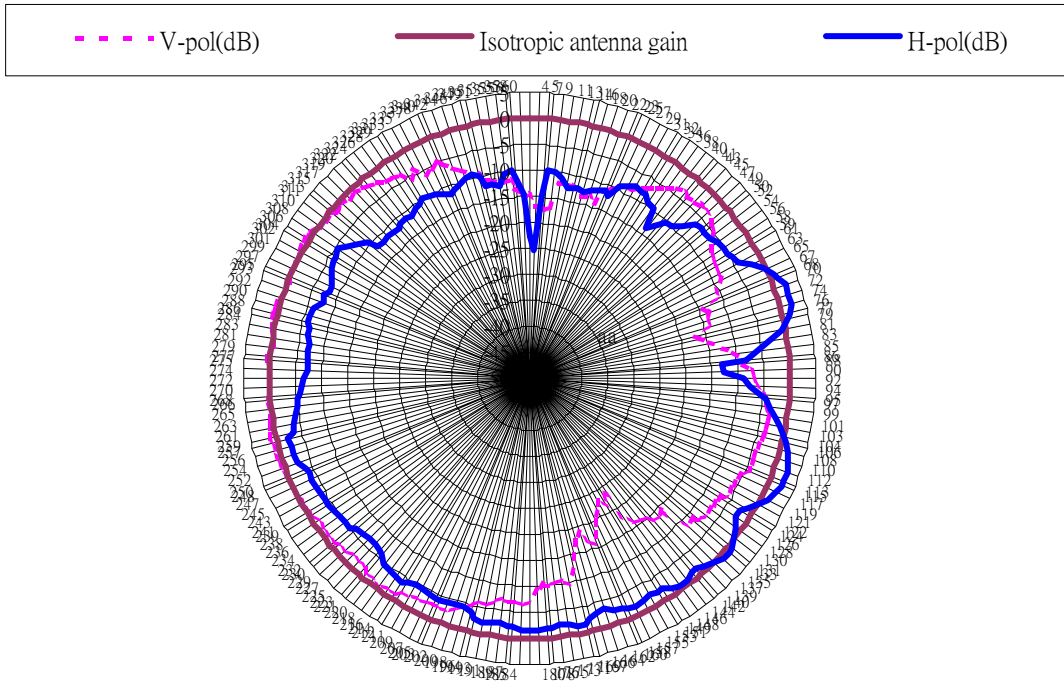
## Main antenna on Azimuth plane -@2.45GHz



## Main antenna on Azimuth Plane-@5.25GHz

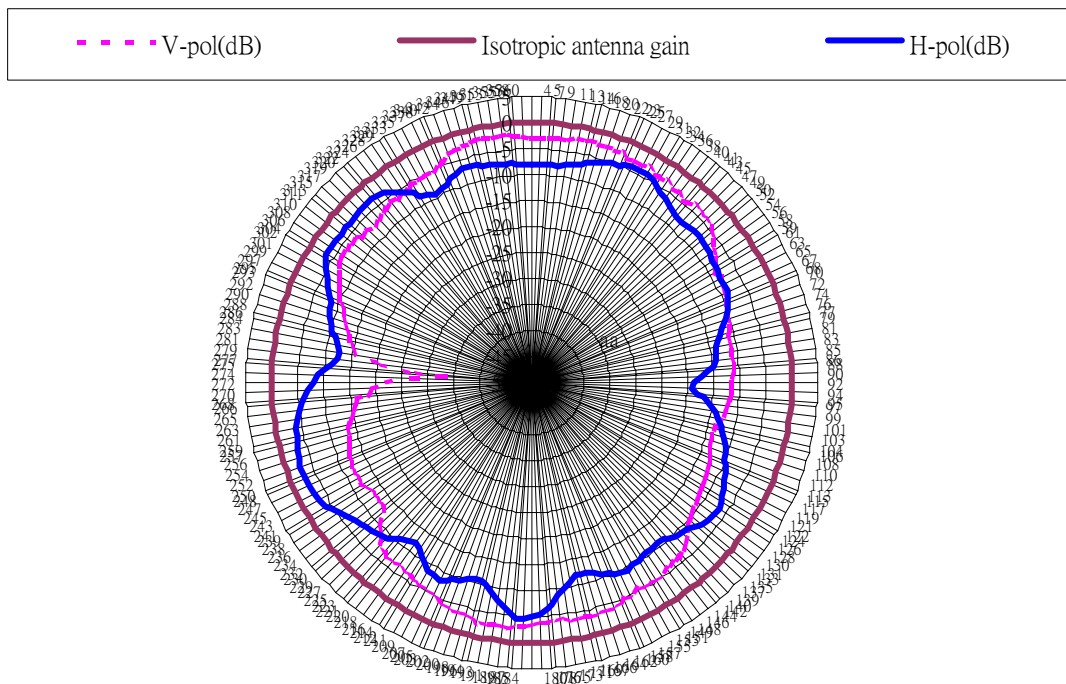


## Main antenna on Azimuth Plane-@5.6475GHz



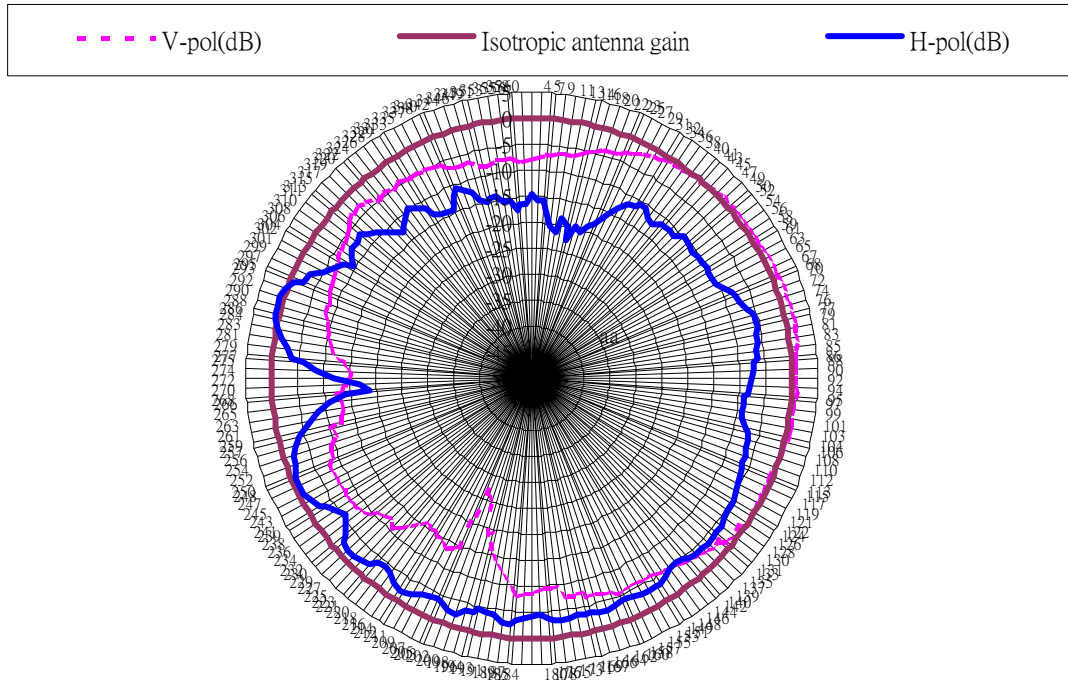
### 3. AUX. Antenna Pattern

#### AUX. Antenna on Azimuth plane -@2.45GHz

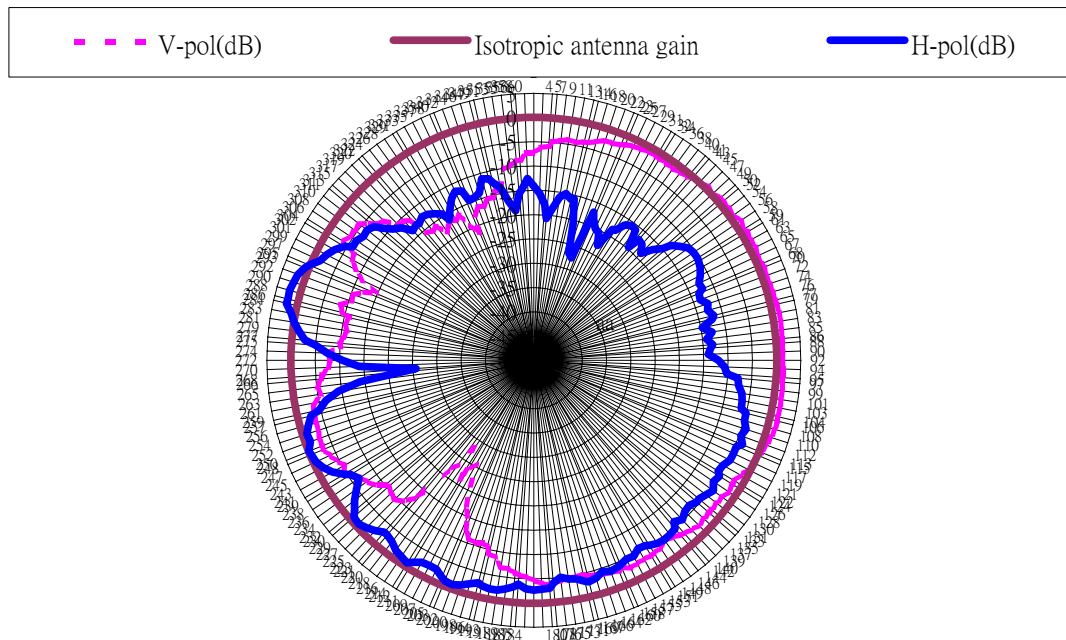




## AUX. Antenna on Azimuth plane -@5.25GHz

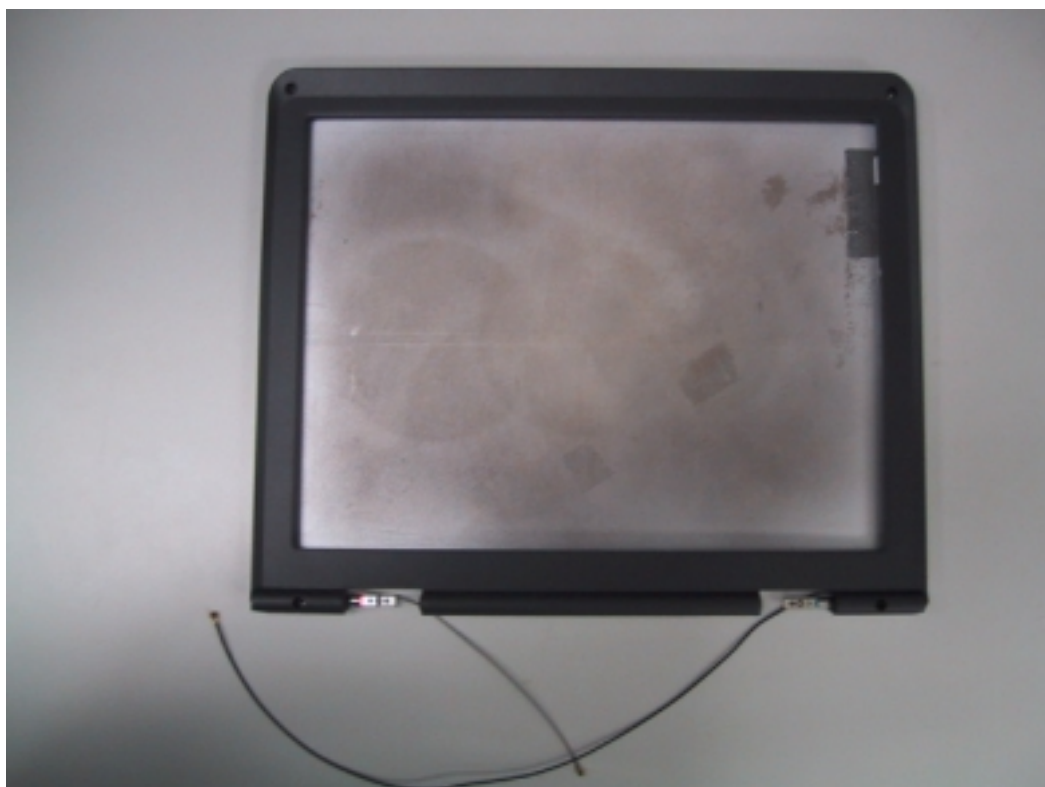


## AUX. Antenna on Azimuth plane -@5.6475GHz

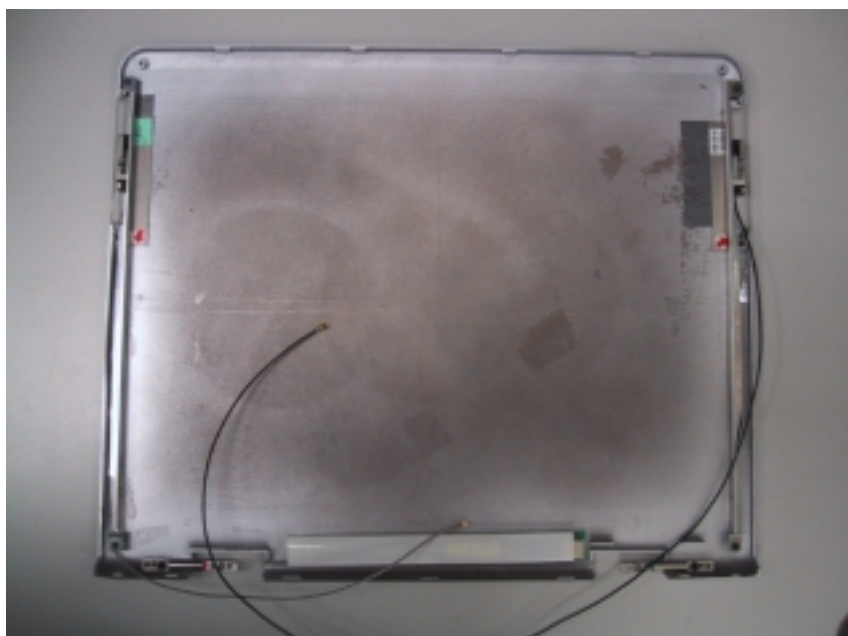


## IV.Photo & antenna drawing

Current antenna circumstance as picture



**Antenna position**



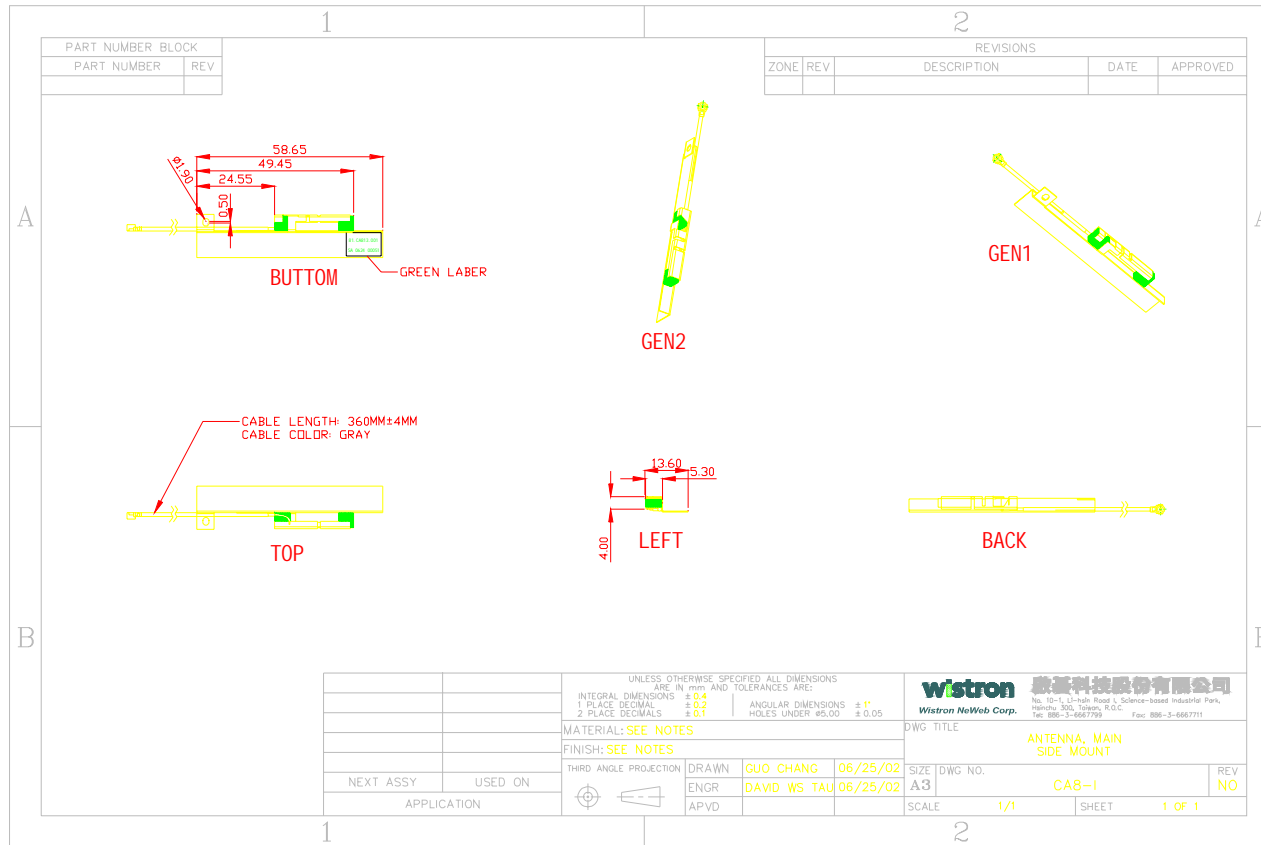
**Main antenna side view**



**Aux. Antenna side view**



## Main antenna drawing



## Cable data sheet

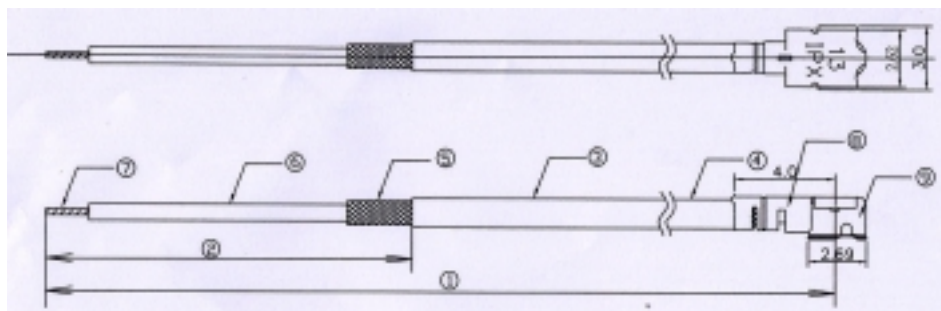
as follow drawing:

# 成品檢查承認表

2002年 10 月 21 日

客戶:	Wistron NeWeb Corp.	品名	Antenna cable for blue tooth	檢查日期:	2002.10.21	承認	確認	檢查
數量:	3 PCS	規格	365mm	顏色	GRAY			

樣品:  
1:  
2:  
3:



WN-S-1.13G-365mm-(2-4-1)

No	檢查項目	公差	1	2	3	4	5	判定
1	寸法檢查	電纜線長度	365± 4 mm	365	364.5	365		OK
2		剝皮長度	2-4-1mm ±0.1	2-4.1-1	1.9-4-1	2-4-1		OK
3	外觀檢查	電纜線外觀	無破損、無異物附著...等現象	OK	OK	OK		OK
4		被覆顏色	無顏色脫落、無顏色錯誤...等現象	OK	OK	OK		OK
5		編織網	網子無切斷偏出、錫鏽起...等現象	OK	OK	OK		OK
6		鐵氟龍(透明膠管)	無傷痕、無變薄、無異物覆蓋...等現象	OK	OK	OK		OK
7	連接器	中心導體	無斷線、無錫尖、無線散亂、無損傷...等現象	OK	OK	OK		OK
8		外觀	無破損、變型、脫落...等	OK	OK	OK		OK
9		連接器內中心導體	是否按規定定位于連接器內	OK	OK	OK		OK
10		嵌入、拔取母座	嵌入拔取母座是否正常	OK	OK	OK		OK
11		與電纜線的拉力測試	↑2N	↑2N	↑2N	↑2N		OK
12		與母座嵌合的拉力	↑2N	↑2N	↑2N	↑2N		OK
13	電氣檢查	導通	使用測試器	OK	OK	OK		OK
14		絕緣	使用測試器	OK	OK	OK		OK
15		瞬斷	使用測試器	OK	OK	OK		OK
16		耐壓	使用測試器	OK	OK	OK		OK
17	其它	包裝	包裝方法和標籤內容填定是否正確	OK	OK	OK		OK
18		數量檢查	數量是否正確	OK	OK	OK		OK

※1. 不良品發現時, 全數再檢查.

※2. IPX 連接器的使用溫度範圍是: -40°C 至 90°C

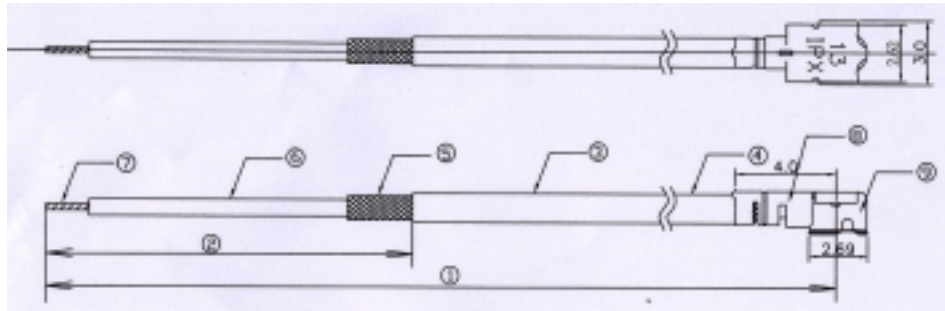
※3. 極細同軸電纜線的耐溫度為-200°C~250°C

注意: 1. 此記錄需保存3年. 2. 請遵照指示用適當的量度治具及工具去量度. 3. 檢查方法請遵照出貨檢查規格.	最終判斷 <div style="display: flex; justify-content: space-around; align-items: center;"> <span style="border: 1px solid black; border-radius: 50%; padding: 5px;">ok</span> <span>NG</span> </div>
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2002年 10 月 21 日

客戶:	Wistron NeWeb Corp.	品名	Antenna cable for blue tooth	檢查日期:	2002.10.21	承認	確認	檢查
數量:	3 PCS	規格	365mm	顏色	GRAY			

樣品:  
1:  
2:  
3:



WN-S-1.13G-365mm-(2-4-1)

No	檢查項目	公差	1	2	3	4	5	判定
1	寸法檢查	電纜線長度	365±4 mm	365	365	365		OK
2		剝皮長度	2-4-1m ±0.1	2-4-1.1	2-4-1-1	2-4-1.1		OK
3	外觀檢查	電纜線外觀	無破損、無異物附著...等現象	OK	OK	OK		OK
4		被覆顏色	無顏色脫落、無顏色錯誤...等現象	OK	OK	OK		OK
5		編織網	網子無切斷偏出、錫鏽起...等現象	OK	OK	OK		OK
6		鐵氟龍(透明膠管)	無傷痕、無變薄、無異物覆蓋...等現象	OK	OK	OK		OK
7		中心導體	無斷線、無錫尖、無線散亂、無損傷...等現象	OK	OK	OK		OK
8	連接器	外觀	無破損、變型、脫落...等	OK	OK	OK		OK
9		連接器內中心導體	是否按規定定位於連接器內	OK	OK	OK		OK
10		嵌入、拔取母座	嵌入拔取母座是否正常	OK	OK	OK		OK
11		與電纜線的拉力測試	↑2N	↑2N	↑2N	↑2N		OK
12		與母座嵌合的拉力	↑2N	↑2N	↑2N		OK	
13	電氣檢查	導通	使用測試器	OK	OK	OK		OK
14		絕緣	使用測試器	OK	OK	OK		OK
15		瞬斷	使用測試器	OK	OK	OK		OK
16		耐壓	使用測試器	OK	OK	OK		OK
17	其它	包裝	包裝方法和標籤內容填定是否正確	OK	OK	OK		OK
18		數量檢查	數量是否正確	OK	OK	OK		OK

※1. 不良品發現時, 全數再檢查.

※2. IPX 連接器的使用溫度範圍是: -40°C 至90°C

※3. 極細同軸電纜線的耐溫度為-200°C~250°C

注意: 1. 此記錄需保存3年. 2. 請遵照指示用適當的度量治具及工具去量度. 3. 檢查方法請遵照出貨檢查規格.	最終判斷	
	ok	NG



Wistron NeWeb Corporation

# DATA SHEET

<b>Customer Name</b>	<b>Wistron Corporation</b>		
<b>Date</b>	10/23/2002		
<b>Customer P/N</b>			
<b>WNC P/N</b>	81.CA813.002 for AUX antenna		
<b>Description</b>	Antenna for Sapphire system		
<b>Version</b>	SD	<b>Doc. Version</b>	0



Wistron NeWeb Corporation  
No.10-1, Li-hsin Road I,  
Science-based Industrial Park,  
Hsinchu 300, Taiwan, R.O.C.  
Telephone: 886-3-666-7799  
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<http://www.wneweb.com>

啓碁科技股份有限公司  
新竹市 300 科學園區力行一路 10-1 號  
電話：(03)666-7799  
傳真：(03)666-7711

## Quick-Sliver Triple- BAND ANTENNA

Prepare by David Ws Tau  
/Wistron NeWeb Corp.

### Purpose :

For Sapphire platform side mount antenna ,the antenna including triple –band 802.11b,a &h used.

### I. Antenna material SPEC.

#### U structure

#### A. Main antenna

1. Application: LCD Left side
2. Cable length: 365mm  
(IPEX cable with  $\Phi$  1.13mm)
3. PIFA by metal

#### B. AUX antenna

1. Application: LCD Right side
2. Cable length: 480mm  
(IPEX cable with  $\Phi$  1.13mm)
3. PIFA antenna by metal

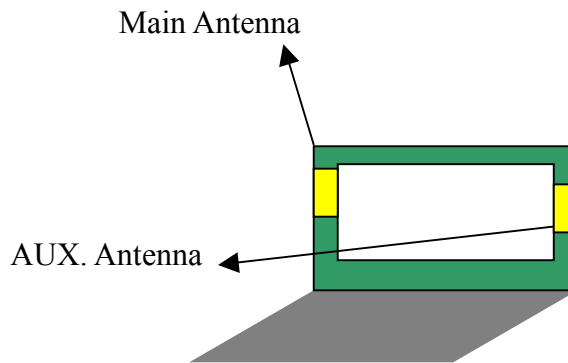


Fig.1

#### C. Main antenna BOM

Parts Number	Description	Quantity
3A.CA845.111	ANTENNA iron sheet, LEFT, CA8-I	1
25.90066.001	ANTENNA IPEX cable 365 MM CA8-I	1
3B.CA880.111	EVA BUFFER	1
	Conductive Cloth	1

#### D.Aux. antenna BOM

Parts Number	Description	Quantity
3A.CA845.112	ANTENNA iron sheet, RIGHT, CA8-I	1
25.90065.001	ANTENNA IPEX cable 480 MM CA8-I	1
3B.CA880.111	EVA BUFFER	1

## II. Performance

### A.VSWR:

Criteria: VSWRc<2 for 2.4GHz~2.5GHz&5.15~5.35GHz&5.47~5.825GHz



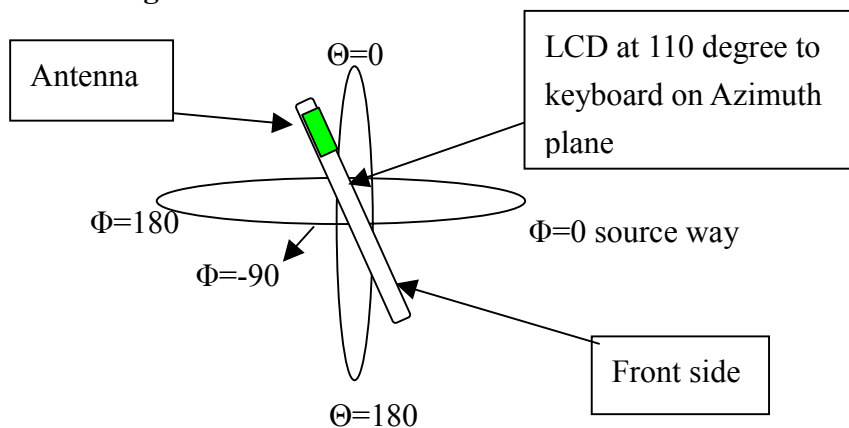
	802.11b			802.11a			Pass or Fail
	2.4GHz	2.45GHz	2.497GHz	5.15GHz	5.25GHz	5.35GHz	
Main	1.83	1.64	1.41	1.7	1.85	1.61	Pass

	Hyper Lan			Pass or Fail
	5.47GHz	5.6475GHz	5.825GHz	
Main	1.31	1.21	1.72	Pass

	802.11b			802.11a			Pass or Fail
	2.4GHz	2.45GHz	2.497GHz	5.15GHz	5.25GHz	5.35GHz	
AUX.	1.48	1.18	1.45	1.34	1.24	1.25	Pass

	Hyper Lan			Pass or Fail
	5.47GHz	5.6475GHz	5.825GHz	
AUX	1.1	1.4	1.71	Pass

## B. Radiation Measure figure



## C. PEAK GAIN AND AVERAGE GAIN (for 802.11b,a& H).

Criteria : Peak Gain < 6 dBi for 2.4~2.5,5.15~5.35&5.47~5.825GHz

Average Receive(diversity) Gain > 2 dBi for 2.4~2.5,5.15~5.35&5.47~5.825GHz

Average Transmit(main antenna) Gain > 0 dBi for 2.4~2.5,5.15~5.35&5.47~5.825GHz

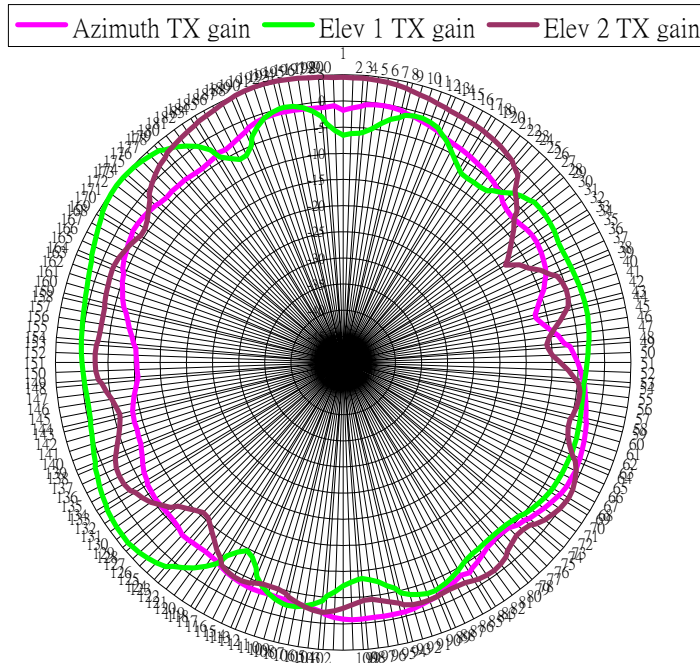
		Peak gain			Average gain			Peak gain			Average gain			Peak gain		Average gain			
		2.4GHz	2.45GHz	2.5GHz	2.4GHz	2.45GHz	2.5GHz	5.15GHz	5.25GHz	5.35GHz	5.15GHz	5.25GHz	5.35GHz	5.47GHz	5.825GHz	5.47GHz	5.647GHz	5.825GHz	
Main	plane ( $\Theta = 90^\circ, \Phi = 0 \sim 360^\circ$ )	0.20	-0.32	0.76	-3.94	-3.62	-3.12	2.25	2.42	2.77	-1.45	-1.43	-1.06	2.09	2.91	1.96	-1.80	-1.35	-2.73
	Elevation plane 1 ( $\Phi = 0^\circ, \Theta = 0 \sim 360^\circ$ )	4.90	4.97	4.96	-0.79	-0.87	-0.41	0.71	0.83	1.52	-1.86	-1.89	-1.37	2.12	2.81	1.47	-1.09	-0.92	-2.16
	Elevation plane 2 ( $\Phi = 90^\circ, \Theta = 0 \sim 360^\circ$ )	5.03	5.35	4.61	-0.90	-0.61	-0.78	1.23	1.38	2.11	-2.07	-2.00	-1.47	1.66	2.45	0.89	-1.78	-1.73	-2.92
AUX.	plane ( $\Theta = 90^\circ, \Phi = 0 \sim 360^\circ$ )	-1.61	-1.84	-0.58	-3.82	-3.61	-3.76	1.84	1.72	2.00	-2.00	-1.89	-1.51	2.80	2.29	1.50	-1.16	-1.50	-2.27
	Elevation plane 1 ( $\Phi = 0^\circ, \Theta = 0 \sim 360^\circ$ )	3.82	4.12	4.04	-2.97	-2.34	-1.62	1.05	0.87	1.22	-3.22	-2.75	-2.24	1.88	1.25	1.52	-1.84	-2.82	-2.37
	Elevation plane 2 ( $\Phi = 90^\circ, \Theta = 0 \sim 360^\circ$ )	3.75	3.86	2.75	-2.05	-1.63	-1.99	-0.86	-0.72	1.55	-4.28	-3.70	-2.44	0.77	1.01	2.36	-2.95	-2.66	-1.35



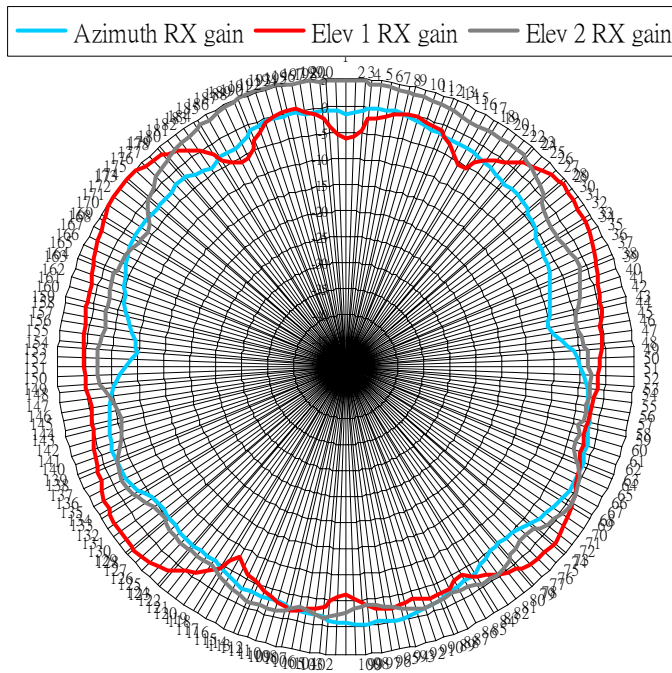
## III. Radiation Pattern

### 1. Rx(diversity) and TX(main ant.) gain Pattern

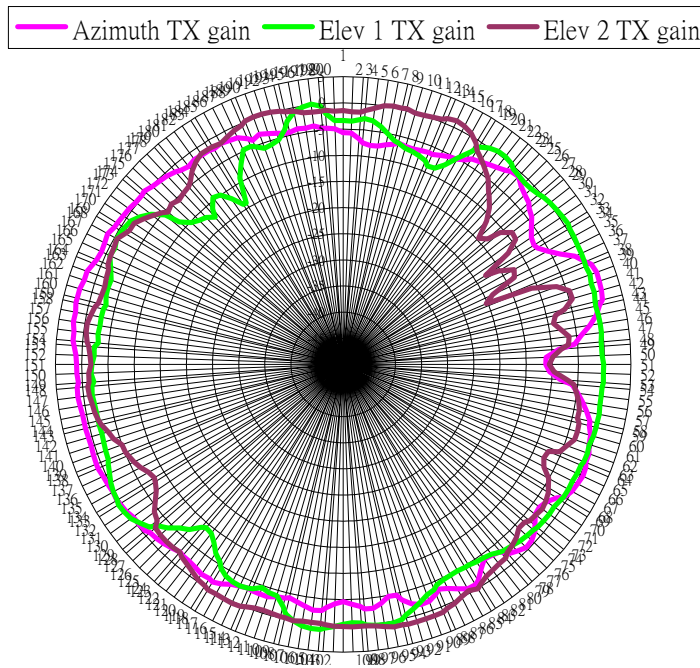
TX(Main) Gain on Tri-orthogonal Plane-@2.45GHz



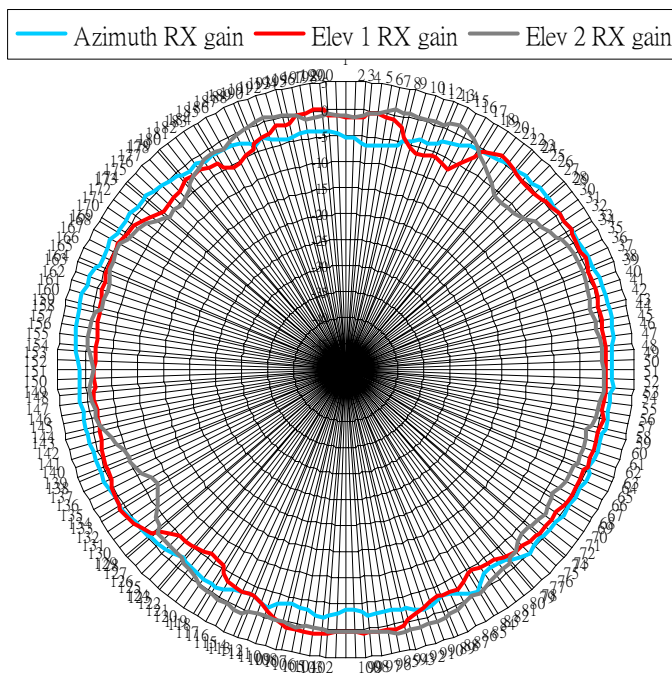
RX Gain on Azimuth Plane-@2.45GHz



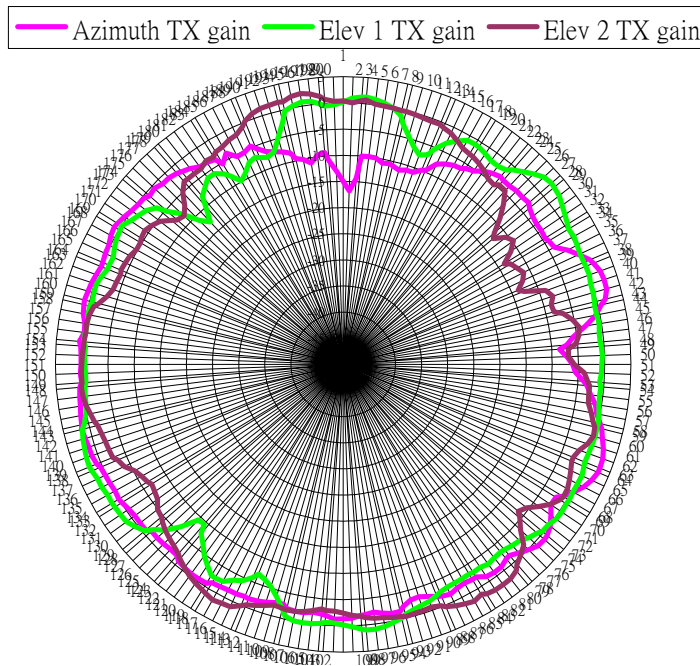
## TX(main) Gain on Tri-orthogonal Plane-@5.25GHz



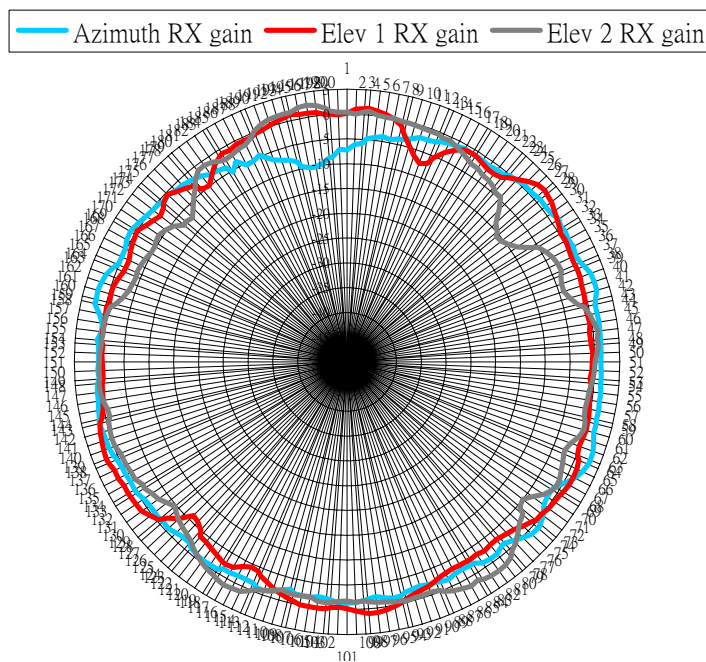
## RX Gain on Azimuth Plane-@5.25 GHz



TX(main) Gain on Tri-orthogonal Plane-@5.6475 GHz

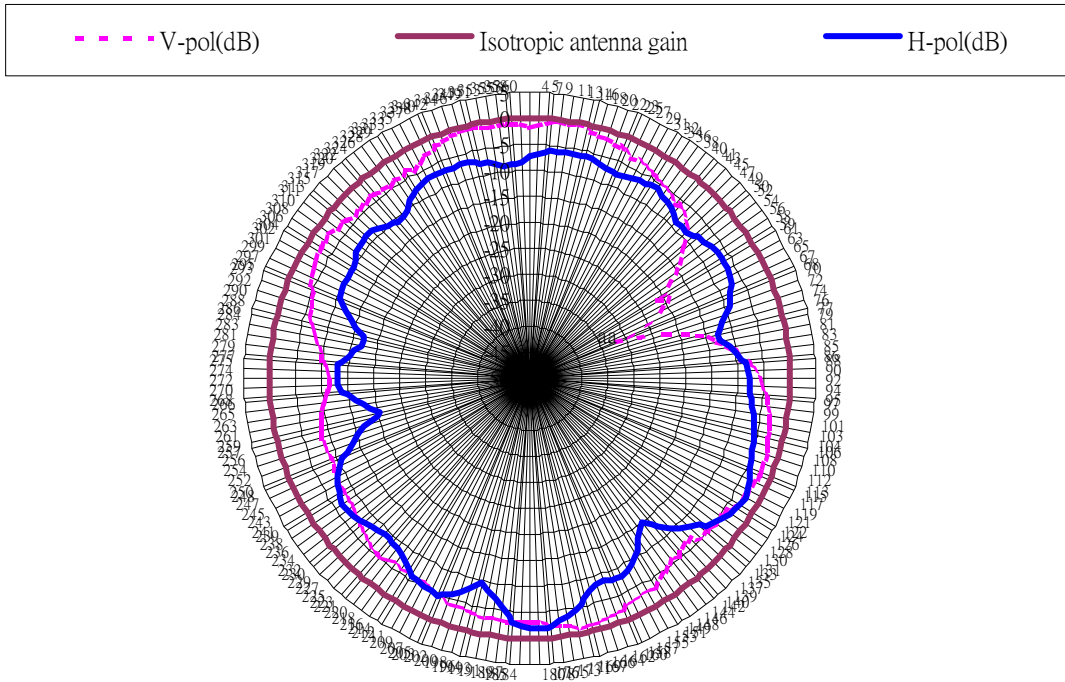


RX Gain on Azimuth Plane-@5.6475 GHz

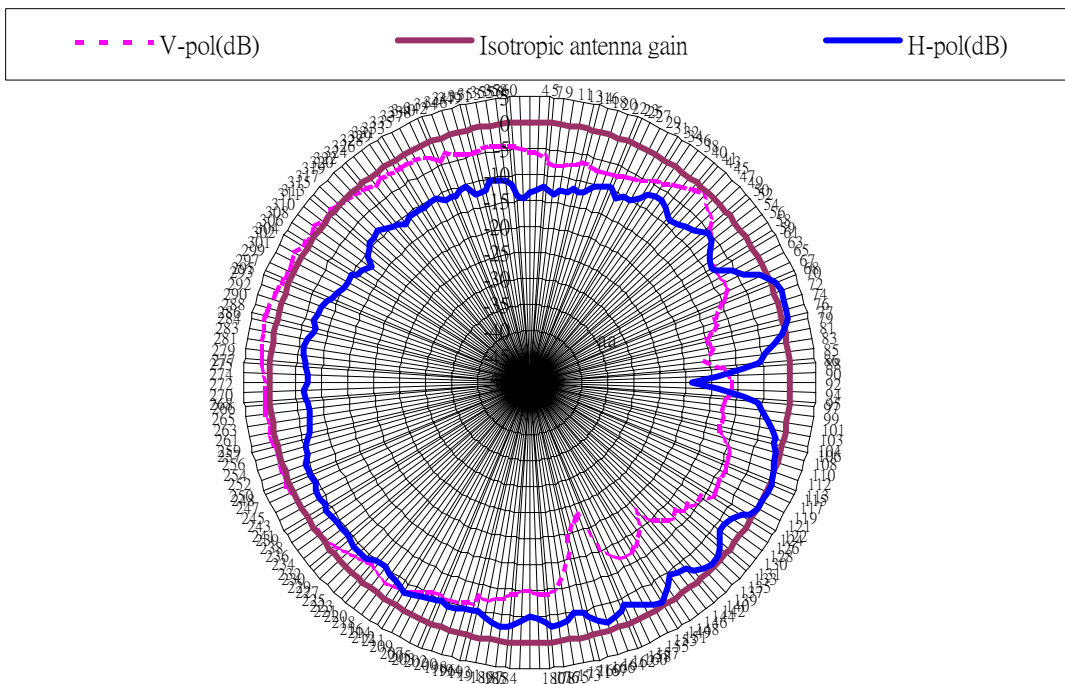


## 2. Main Antenna Pattern

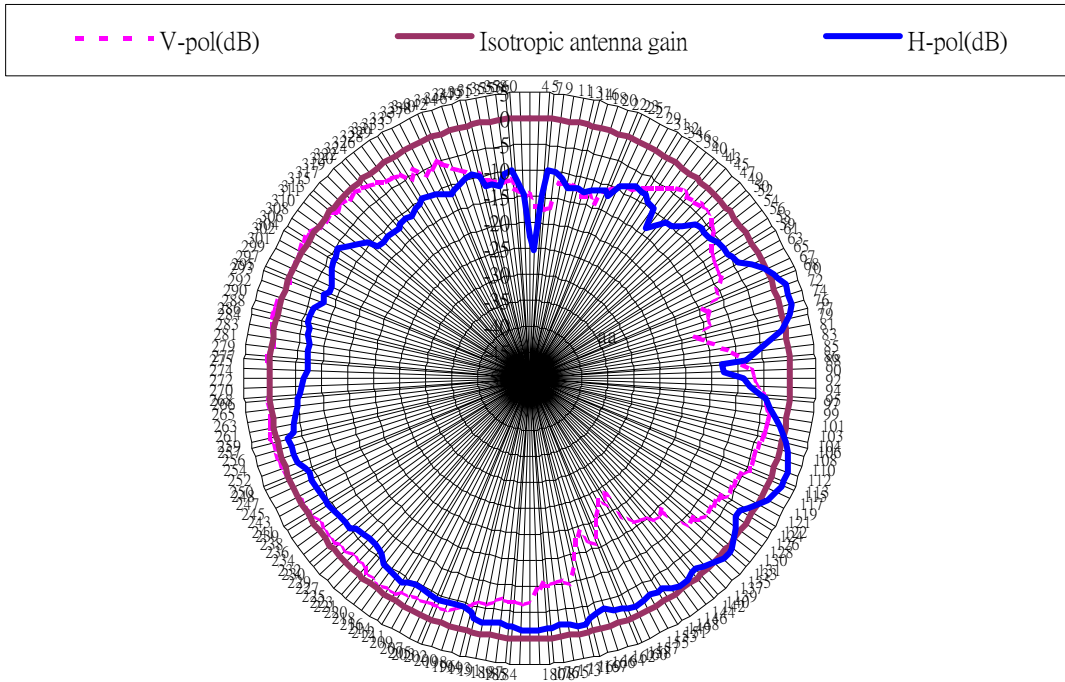
## Main antenna on Azimuth plane -@2.45GHz



## Main antenna on Azimuth Plane-@5.25GHz

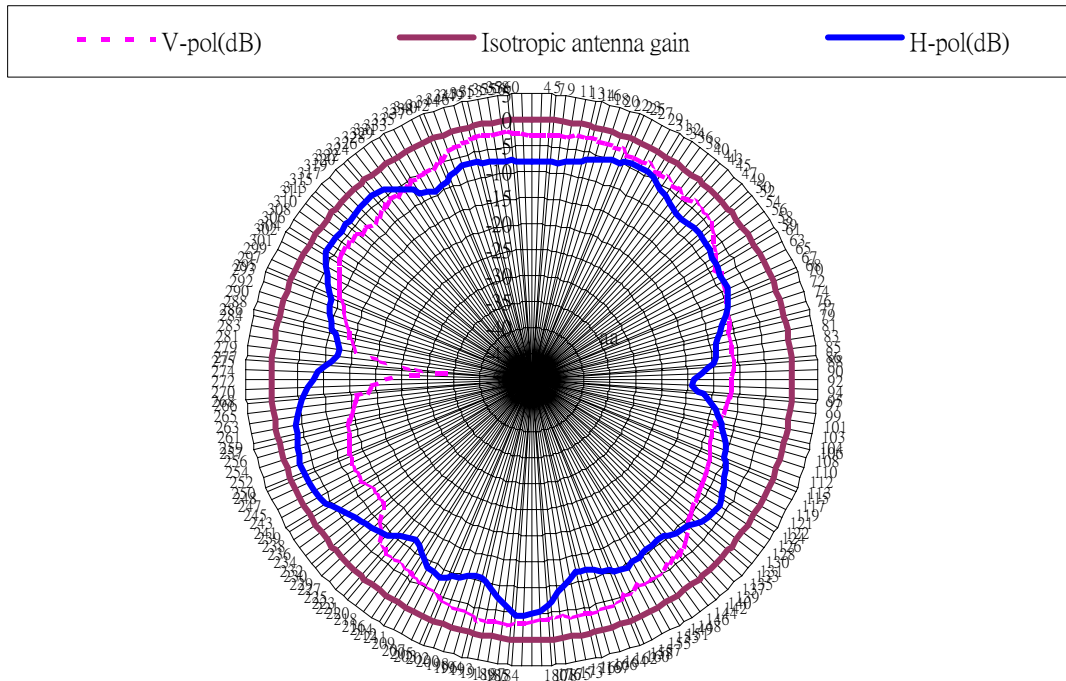


## Main antenna on Azimuth Plane-@5.6475GHz



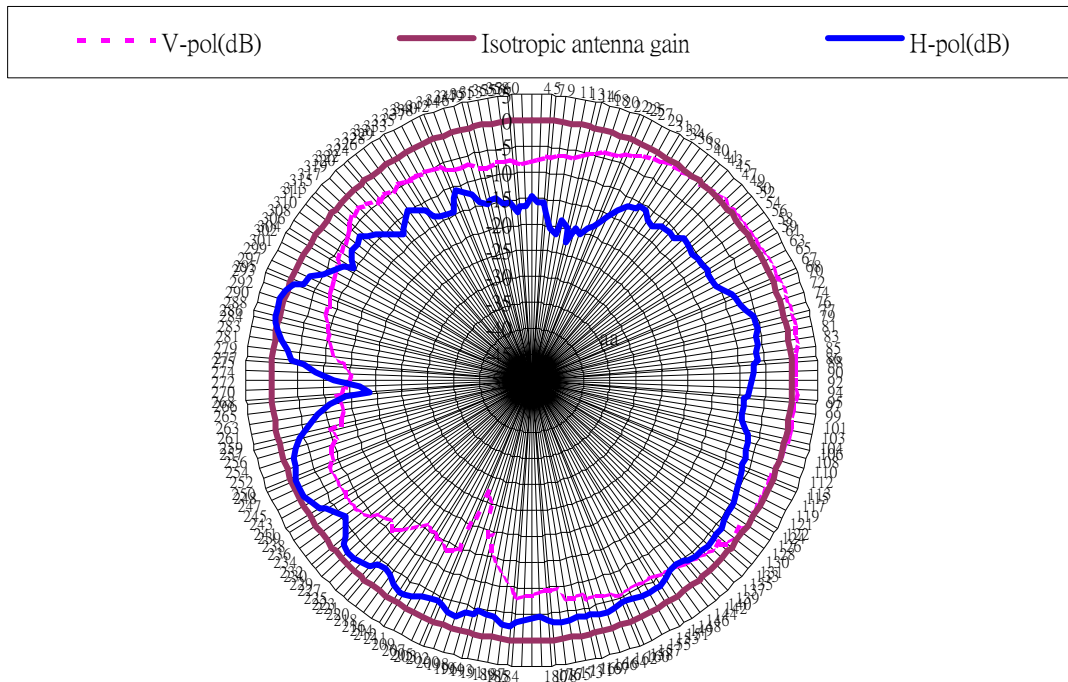
### 3. AUX. Antenna Pattern

#### AUX. Antenna on Azimuth plane -@2.45GHz

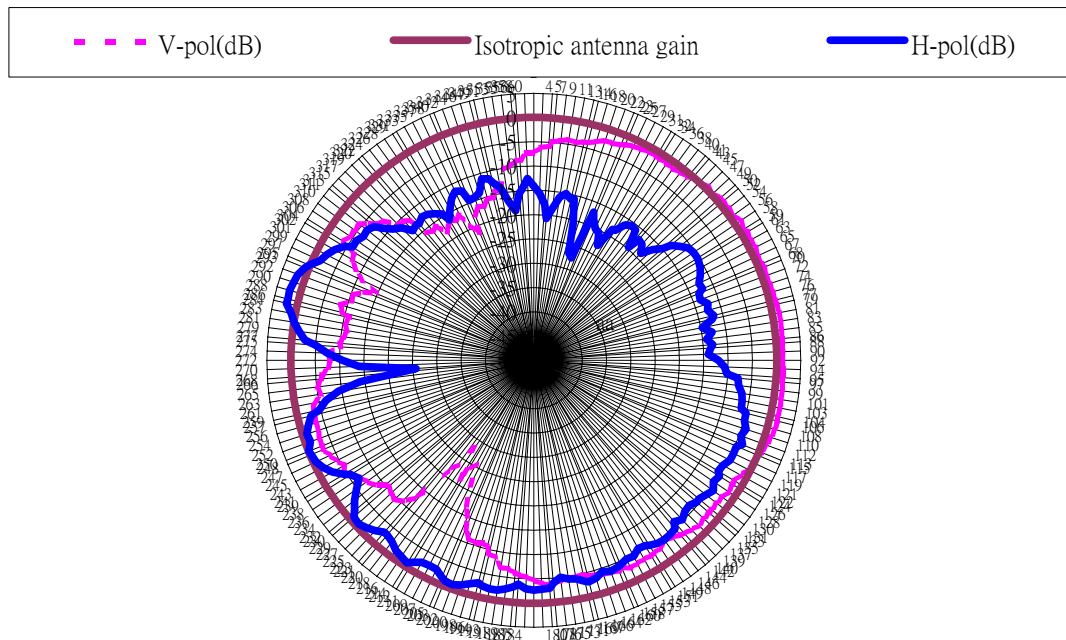




## AUX. Antenna on Azimuth plane -@5.25GHz

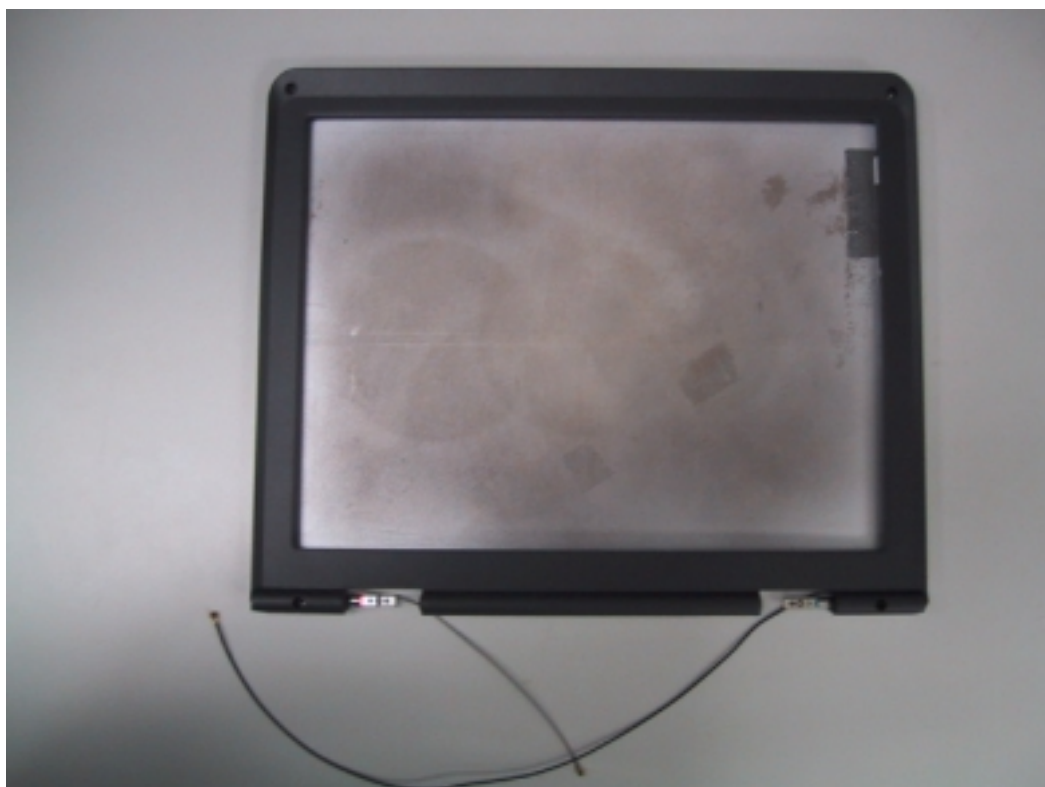


## AUX. Antenna on Azimuth plane -@5.6475GHz

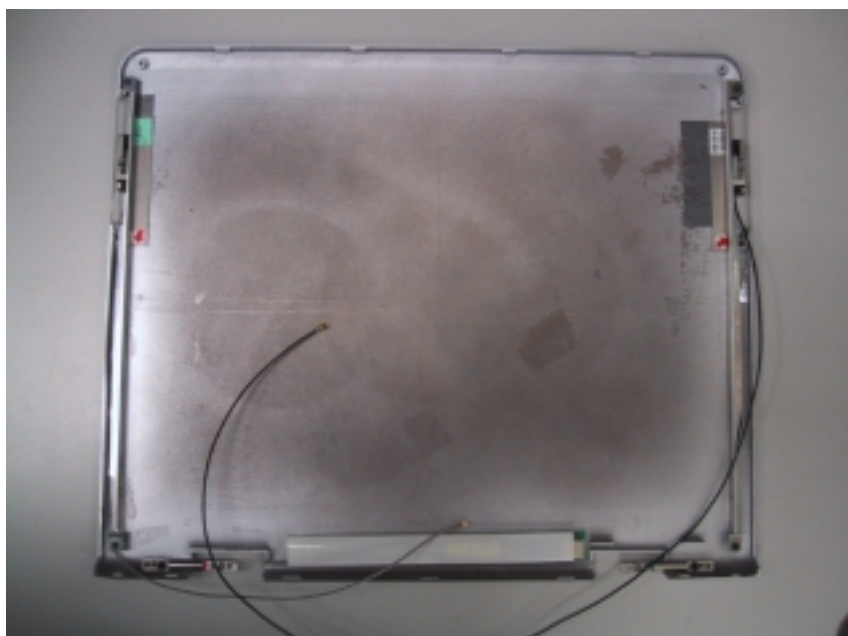


## IV.Photo & antenna drawing

Current antenna circumstance as picture



**Antenna position**



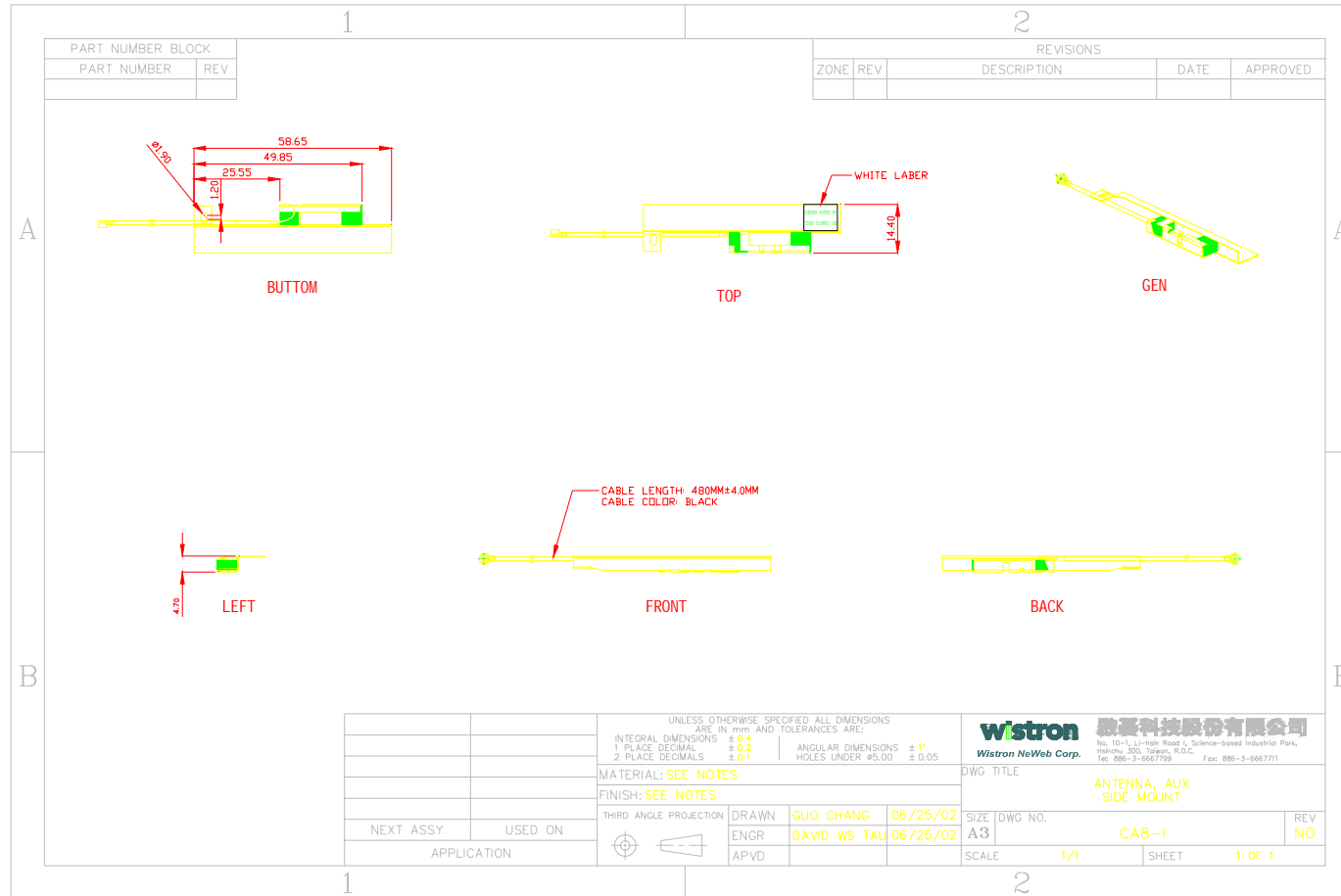
**Main antenna side view**



**Aux. Antenna side view**



## Aux antenna drawing



## Cable data sheet

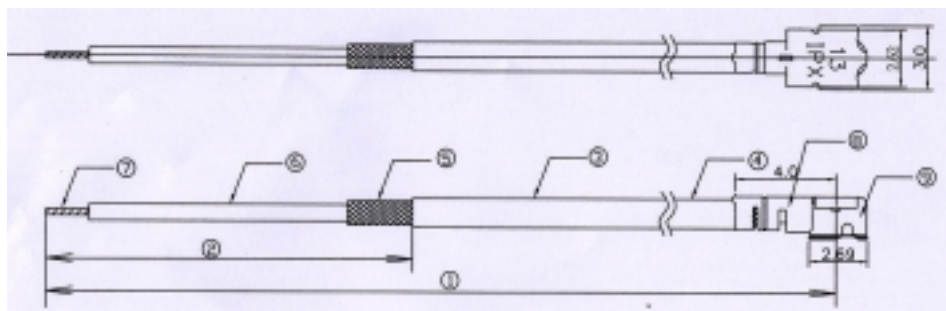
as follow drawing:

# 成品檢查承認表

2002年 10 月 21 日

客戶:	Wistron NeWeb Corp.	品名	Antenna cable for blue tooth	檢查日期:	2002.10.21	承認	確認	檢查
數量:	3 PCS	規格	480 mm	顏色	BLACK			

樣品:  
1:  
2:  
3:



WN-S-1.13B-480mm-(2-4-1)

No	檢查項目	公差	1	2	3	4	5	判定
1	寸法檢查	電纜線長度	480± 4 mm	480	480	480		OK
2		剝皮長度	2-4-1mm ±0.1	1.9-4.1-1	2-3.9-1.1	2-4-1		OK
3	外觀檢查	電纜線外觀	無破損、無異物附著...等現象	OK	OK	OK		OK
4		被覆顏色	無顏色脫落、無顏色錯誤...等現象	OK	OK	OK		OK
5		編織網	網子無切斷偏出、錫糞起...等現象	OK	OK	OK		OK
6		鐵氟龍(透明膠管)	無傷痕、無變薄、無異物覆蓋...等現象	OK	OK	OK		OK
7		中心導體	無斷線、無錫尖、無線散亂、無損傷...等現象	OK	OK	OK		OK
8	連接器	外觀	無破損、變型、脫落...等	OK	OK	OK		OK
9		連接器內中心導體	是否按規定定位于連接器內	OK	OK	OK		OK
10		嵌入、拔取母座	嵌入拔取母座是否正常	OK	OK	OK		OK
11		與電纜線的拉力測試	↑2N	↑2N	↑2N	↑2N		OK
12		與母座嵌合的拉力	↑2N	↑2N	↑2N		OK	
13	電氣檢查	導通	使用測試器	OK	OK	OK		OK
14		絕緣	使用測試器	OK	OK	OK		OK
15		瞬斷	使用測試器	OK	OK	OK		OK
16		耐壓	使用測試器	OK	OK	OK		OK
17	其它	包裝	包裝方法和標籤內容填定是否正確	OK	OK	OK		OK
18		數量檢查	數量是否正確	OK	OK	OK		OK

※1. 不良品發現時, 全數再檢查.

※2. IPX 連接器的使用溫度範圍是: -40°C 至 90°C

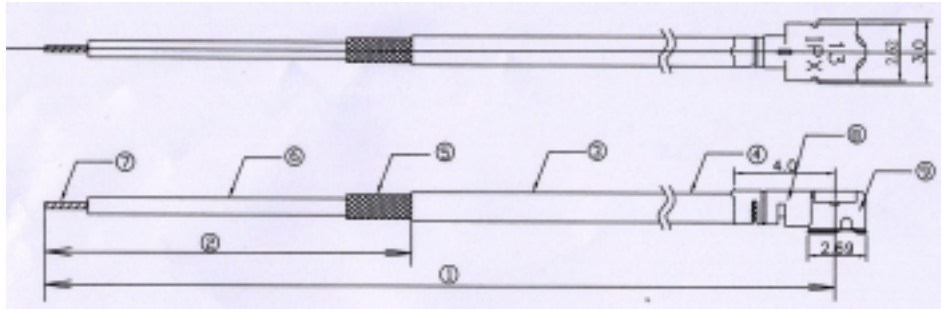
※3. 極細同軸電纜線的耐溫度為-200°C~250°C

注意: 1. 此記錄需保存3年. 2. 請遵照指示用適當的量度治具及工具去量度. 3. 檢查方法請遵照出貨檢查規格.	最終判斷	
	ok	NG

2002年 10 月 21 日

客戶:	Wistron NeWeb Corp.	品名	Antenna cable for blue tooth	檢查日期:	2002.10.21	承認	確認	檢查
數量:	3 PCS	規格	480 mm	顏色	BLACK			

樣品:  
1:  
2:  
3:



WN-S-1.13B-480mm-(2-4-1)

No	檢查項目		公差	1	2	3	4	5	判定
1	寸法 檢查	電纜線長度	480± 4 mm	480	480	480			OK
2		剝皮長度	2-4-1m ±0.1	2-4-1	1.9-4.1-1	2-4-1.1			OK
3	外觀 檢查	電纜線外觀	無破損、無異物附著...等現象	OK	OK	OK			OK
4		被覆顏色	無顏色脫落、無顏色錯誤...等現象	OK	OK	OK			OK
5		編織網	網子無切斷偏出、錫糞起...等現象	OK	OK	OK			OK
6		鐵氟龍(透明膠管)	無傷痕、無變薄、無異物覆蓋...等現象	OK	OK	OK			OK
7		中心導體	無斷線、無錫尖、無線散亂、無損傷...等現象	OK	OK	OK			OK
8	連接 器	外觀	無破損、變型、脫落...等	OK	OK	OK			OK
9		連接器內中心導體	是否按規定定位於連接器內	OK	OK	OK			OK
10		嵌入、拔取母座	嵌入拔取母座是否正常	OK	OK	OK			OK
11		與電纜線的拉力測試	↑2N	↑2N	↑2N	↑2N			OK
12		與母座嵌合的拉力	↑2N	↑2N	↑2N			OK	
13	電氣 檢查	導通	使用測試器	OK	OK	OK			OK
14		絕緣	使用測試器	OK	OK	OK			OK
15		瞬斷	使用測試器	OK	OK	OK			OK
16		耐壓	使用測試器	OK	OK	OK			OK
17	其它	包裝	包裝方法和標籤內容填定是否正確	OK	OK	OK			OK
18		數量檢查	數量是否正確	OK	OK	OK			OK

※1. 不良品發現時, 全數再檢查.

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※3. 極細同軸電纜線的耐溫度為-200℃~250℃

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	ok	NG