

Sapphire Antenna Regulatory Information

Description : Triple-band Antenna(Main+Aux)
Inventec Crop. P/N: 6036A0004601
6036A0004701
Wistron NeWeb P/N: 81.CA813.001
81.CA813.002

Wistron NeWeb Corporation

No. 10-1,Li-hsin Road I,
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Fax: 886-3-6667711

Provided by Wistron NeWeb Corp.	Reviewed by Wistron NeWeb Corp.
<i>David Tau</i>	<i>Eric Fang</i>

I. Antenna Type

Position	Main Antenna (Left-side Antenna)	Aux Antenna (Right-side Antenna)
Antenna Type	PIFA	PIFA
Material	Metal sheet	Metal sheet

II. Peak Gain and Average Gain

Antenna Gain		2G4 ISM (2.400 GHz - 2.4835 GHz)			U-NII (5.150 GHz - 5.350 GHz)			HyperLAN (5.470 GHz - 5.825 GHz)		
		2.40 GHz	2.45 GHz	2.50GHz	5.15 GHz	5.25 GHz	5.35 GHz	5.47 GHz	5.6475 GHz	5.825 GHz
MAIN	Peak dBi	-1.40	-0.65	-0.77	3.30	3.59	3.79	1.07	1.82	1.90
	Avg dBi	-3.69	-2.95	-2.78	-0.78	-0.23	-0.44	-1.66	-0.86	-1.55
AUX	Peak dBi	-0.77	0.35	0.20	2.62	2.69	2.25	2.32	2.33	2.91
	Avg dBi	-3.49	-2.65	-2.33	-1.04	-0.90	-1.36	-1.48	-0.92	-0.76

III. Antenna Model Number

Model number: CA8-I

IV. Manufacturing Info

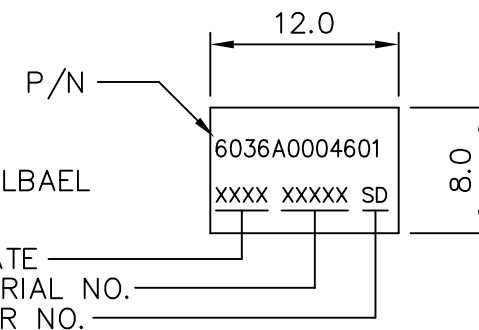
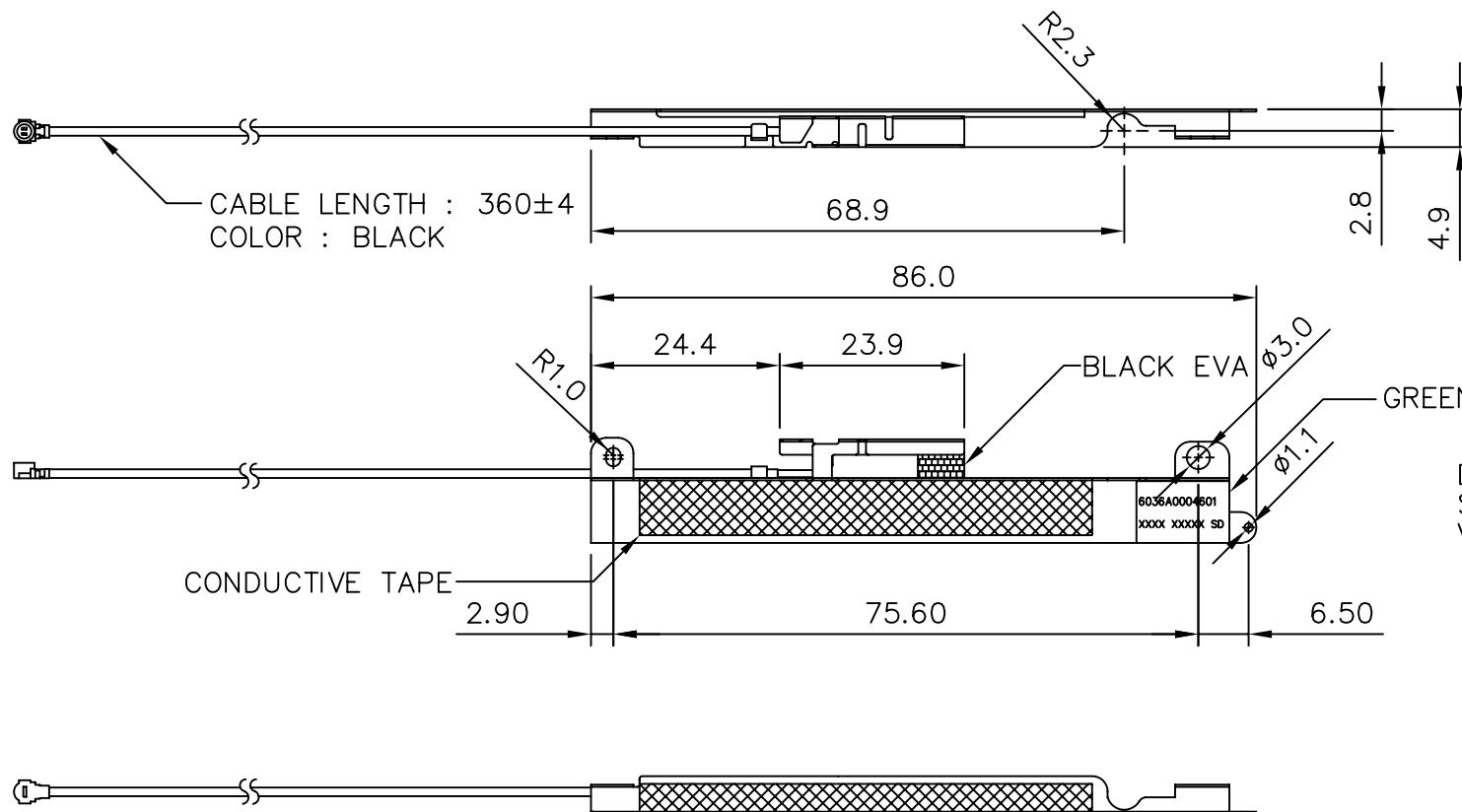
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Hsinchu 300,Taiwan, R.O.C.

V. Antenna Dimensions (Mechanical drawings)

(See Next 2 Pages)

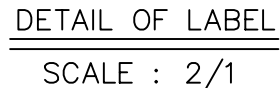
PART NUMBER BLOCK	
PART NUMBER	REV

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:				wistron 啟碁科技股份有限公司 <i>Wistron NeWeb Corp.</i> No. 10-1, Li-hsin Road I, Science-based Industrial Park, Hsinchu 300, Taiwan, R.O.C. Tel: 886-3-6667799 Fax: 886-3-6667711			
		INTEGRAL DIMENSIONS 1 PLACE DECIMAL ± 0.2 2 PLACE DECIMALS ± 0.1 ± 0.05		ANGULAR DIMENSIONS ± 1° HOLES UNDER Ø5.00 ± 0.05					
		MATERIAL: NA				DWG TITLE 81.CA813.001			
		FINISH: NA							
	CA8-I	THIRD ANGLE PROJECTION	DRAWN			SIZE	DWG NO.		REV
NEXT ASSY	USED ON		ENGR			A4			OA
APPLICATION			APVD			SCALE	1/1	SHEET	1 OF 1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE: INTEGRAL DIMENSIONS ± 0.2 1 PLACE DECIMAL ± 0.1 ANGULAR DIMENSIONS ± 1° 2 PLACE DECIMALS ± 0.05 HOLES UNDER Ø5.00 ± 0.05				wistron <i>Wistron NeWeb Corp.</i> 啟碁科技股份有限公司 No. 10-1, Li-hsin Road I, Science-based Industrial Park, Hsinchu 300, Taiwan, R.O.C. Tel: 886-3-6667799 Fax: 886-3-6667711			
		MATERIAL: NA				DWG TITLE 81.CA813.002			
		FINISH: NA							
		THIRD ANGLE PROJECTION	DRAWN			SIZE	DWG NO.		REV
NEXT ASSY			ENGR			A4			0A
USED ON			APVD						
APPLICATION						SCALE	1/1	SHEET	1 OF 1

VI. Pictures of Antennas

Main Antenna	Aux Antenna
	

VII. Cable Length

Left-side antenna: 360mm Φ 1.13mm

Right-side antenna: 475mm Φ 1.13mm

(From the center of connector to the end of cable)

VIII. Cable Loss (including connector)

Unit: dB	2G4 band	U-NII band	HyperLAN band
360mm	1.40	2.10	2.17
475mm	1.76	2.64	2.71

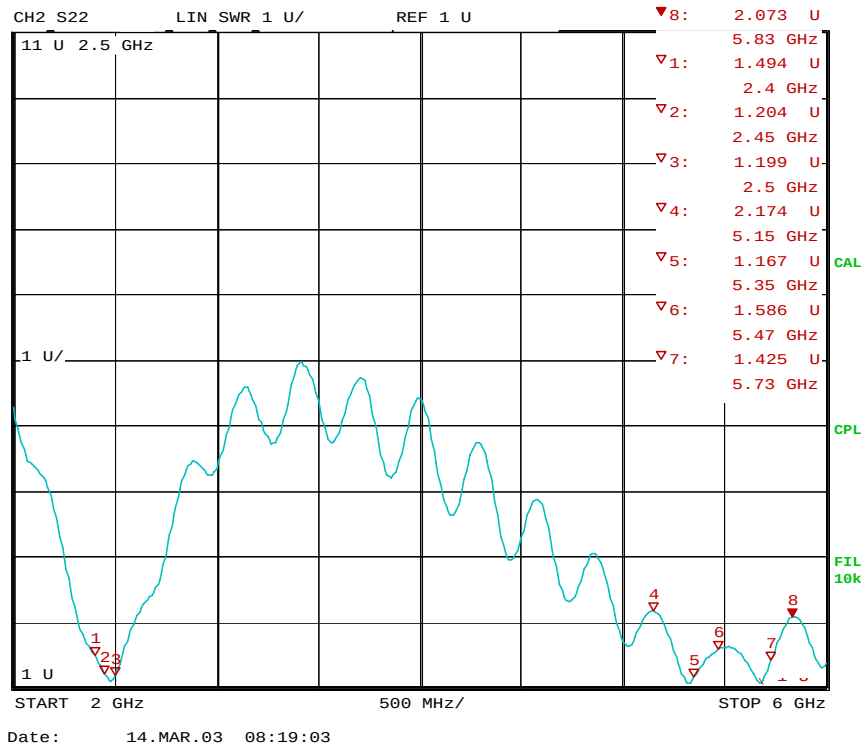
IX. Antenna Material

Main antenna	Aux antenna
1. Stamped metal 2. Junkosha cable and IPEX connector (Nissei cable and HRS connector) 3. Sponge 4. Label 5. Conductive Tape	1. Stamped metal 2. Junkosha cable and IPEX connector (Nissei cable and HRS connector) 3. Sponge 4. Label

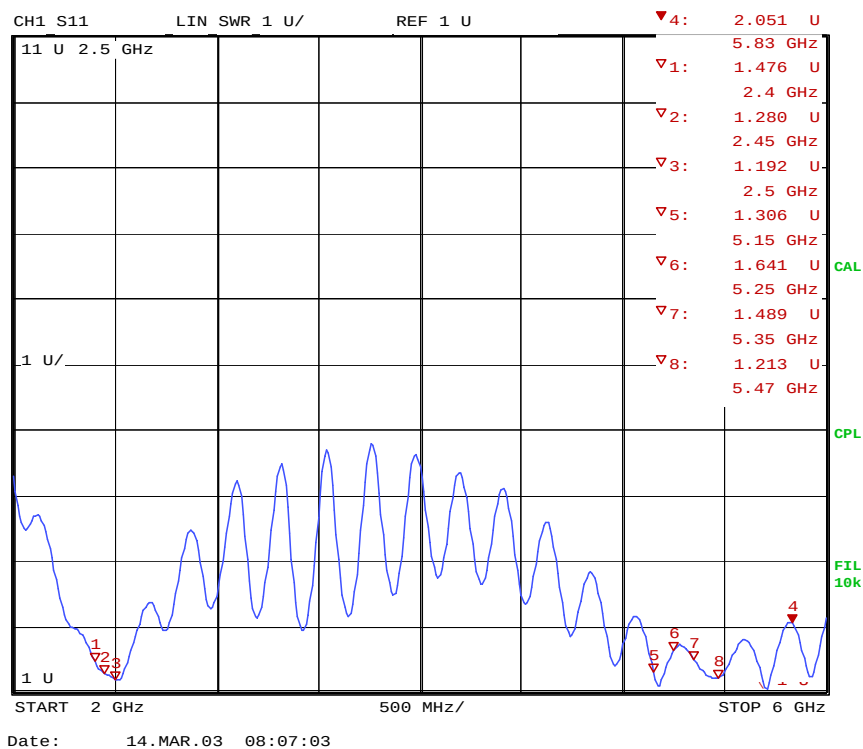
XI. Connector Info (general description)

Description (Cable)	Inner Conductor: AWG#32(7/0.8), Silver plating annealed copper wire or its performance equivalent Dielectric core: D0.68mm Outer conductor: 16/4/0.05 D0.93mm, Silver plating annealed copper wire or its performance equivalent Jacket: D1.13mm		
Requirements	Characteristic impedance: 50(+2,-2)ohm Nominal capacitance: 97pF/m Conductor resistance of inner conductor at 293K(20°C): 520ohm/km MAX Insulation resistance: 1500mega-ohm.km MIN Dielectric withstand voltage: no breakdown at AC1000V for 1min.		
Ratings	Rated voltage: AC60Vrms Nominal characteristics impedance: 50ohm VSWR: 1.3MAX DC~3GHz, 1.7MAX 3~6GHz		
Electric characteristics	Contact resistance	10mA MAX(DC or 1000Hz)	Center contact 74mohm MAX. Outer contact 27mohm MAX.
	Insulation resistance	100V DC	500Mohm MIN
	Voltage proof	200V AC for 1 min. Current leakage 2mA MAX	No flashover or breakdown

XII. VSWR & Radiation Pattern**a. Main antenna VSWR**



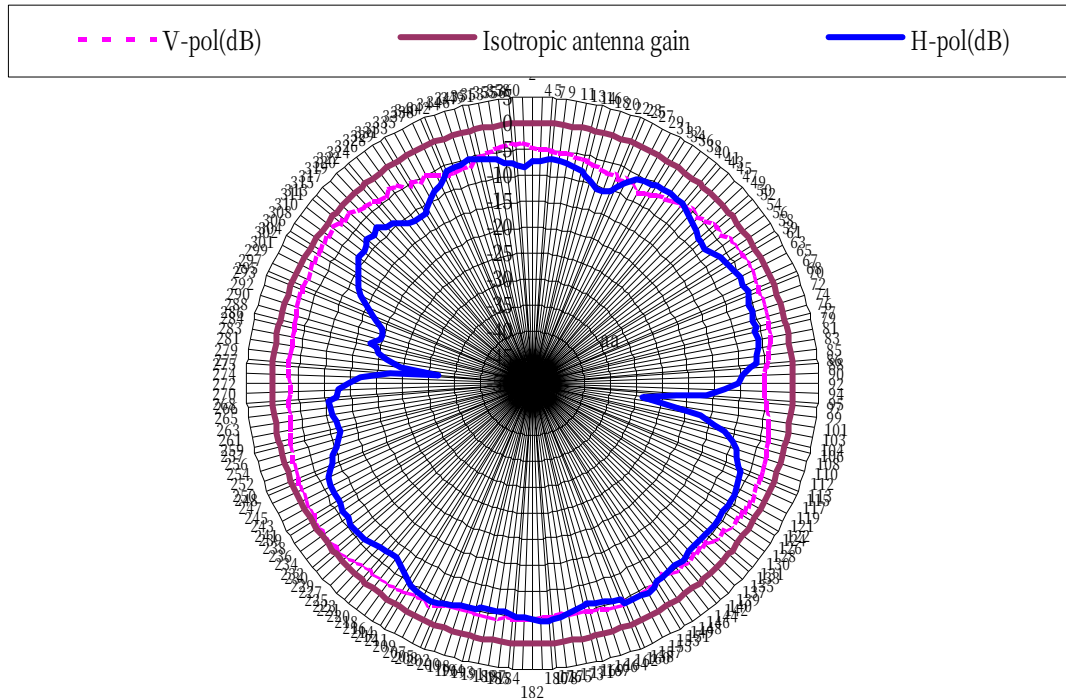
b.Aux antenna VSWR



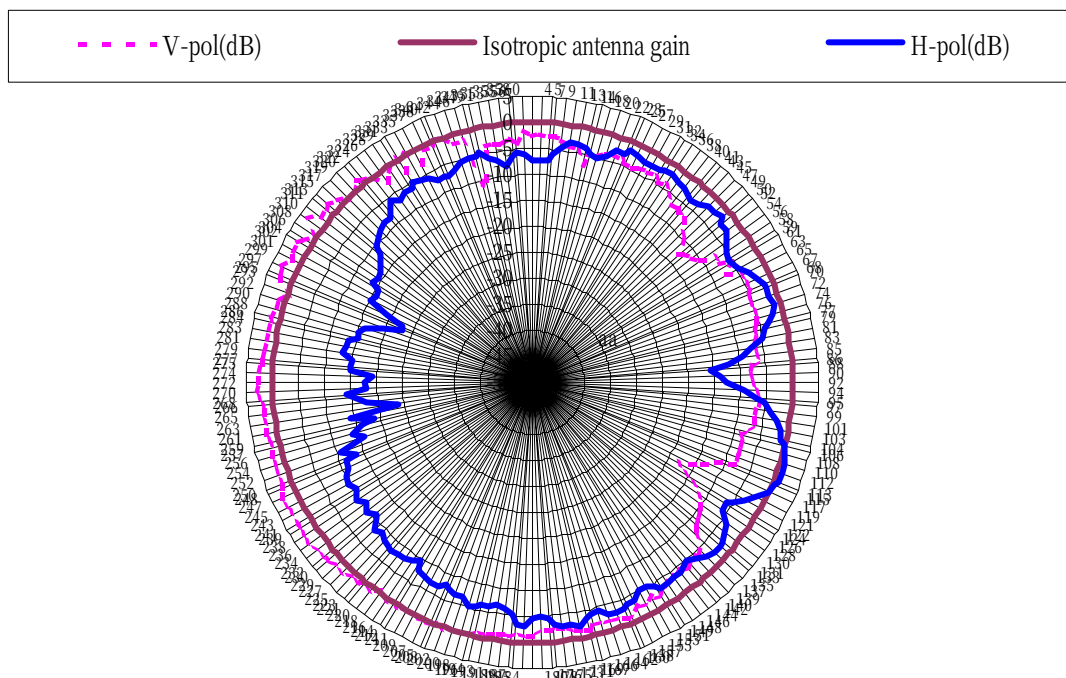
C. Radiation Pattern

1. Main antenna Pattern(Small window size)

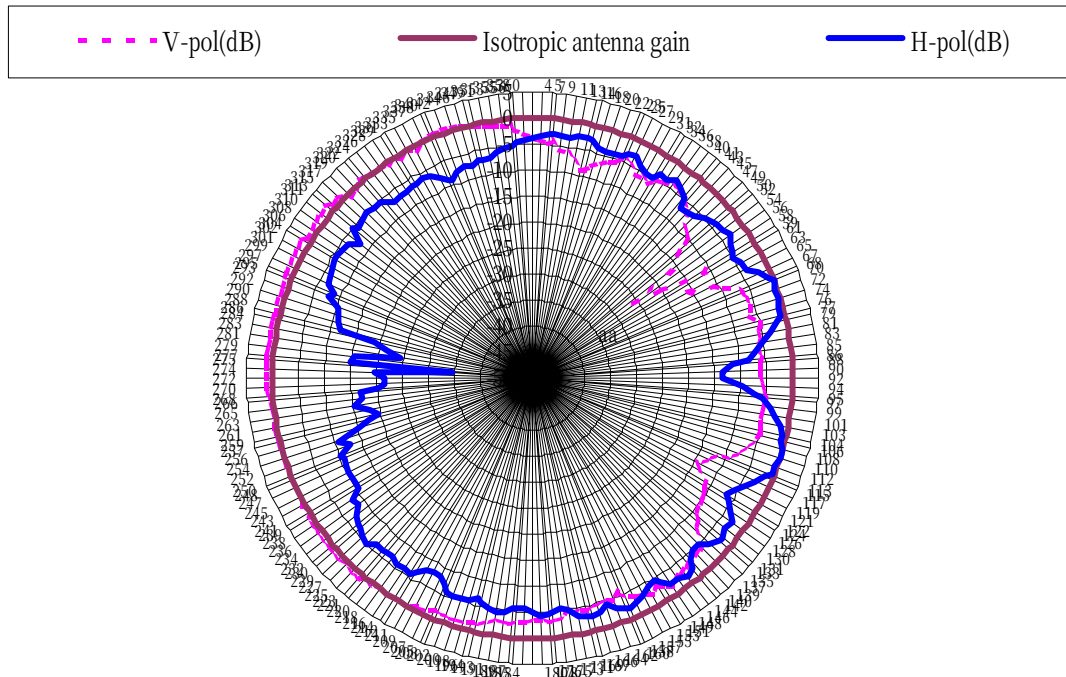
Main antenna -@2.45GHz



Main antenna -@5.25GHz

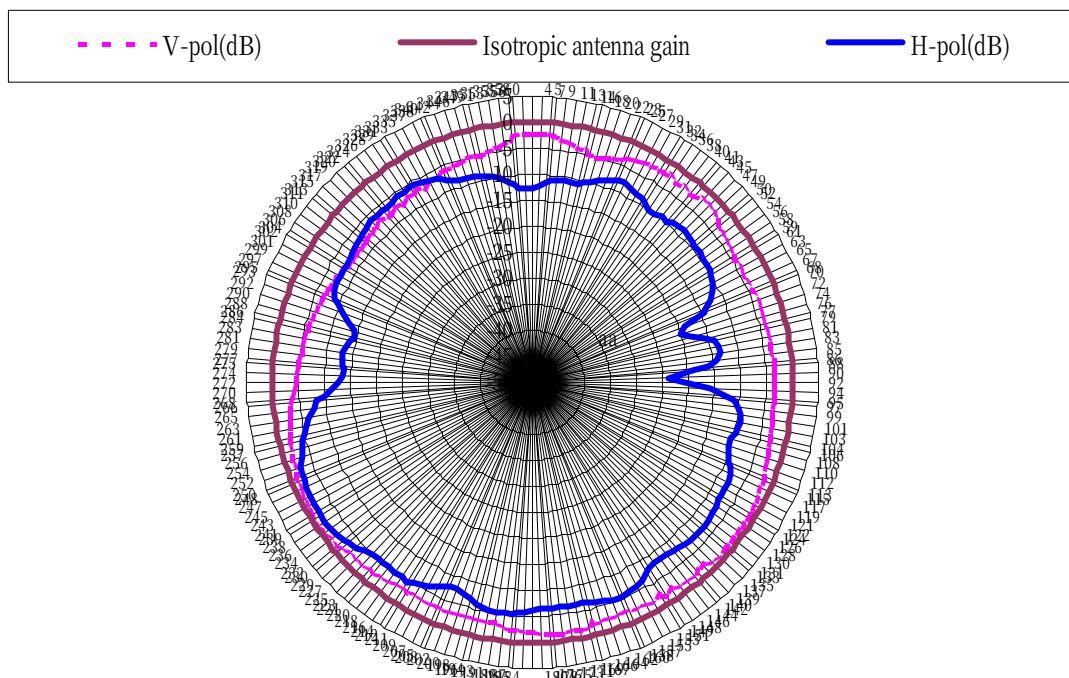


Main antenna -@5.6475GHz

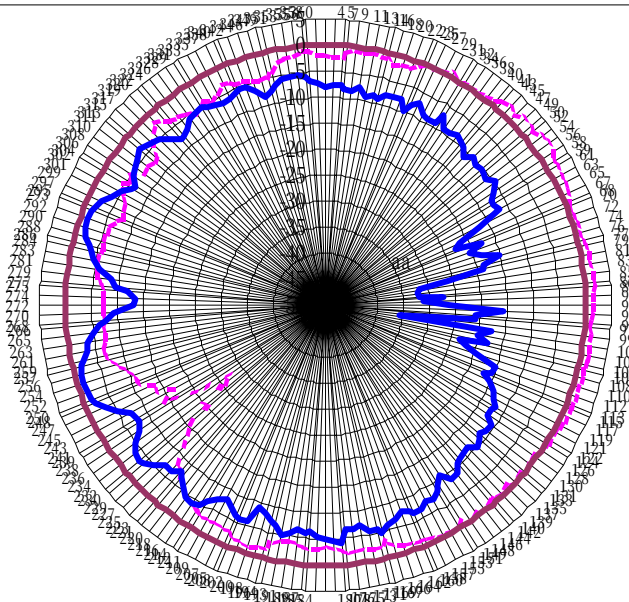
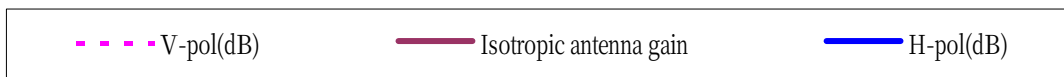


2. AUX. antenna Pattern(Small window size)

AUX. Antenna -@2.45GHz



AUX. Antenna -@5.25GHz



AUX. Antenna -@5.6475GHz

