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Product Number: AN2400-5901RS

Product Name: Antenna



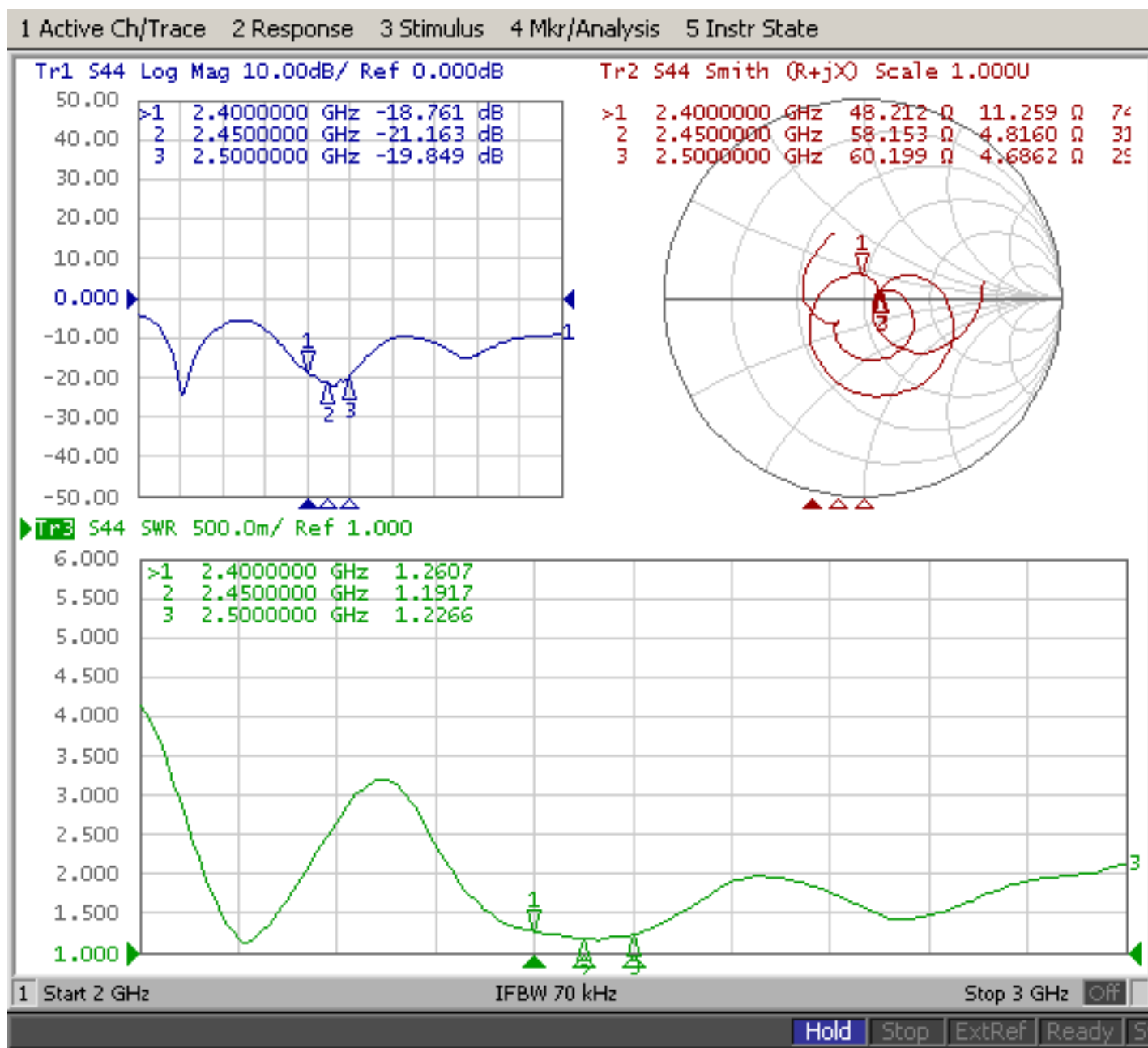
1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Antenna Gain	$9.0 \pm 0.7\text{dBi}$
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	Body: ABS Holder: PA+ABS
Cable Type	RG-178
Connector Type	SMA Male Reverse
Connector Pull Test	$\geq 3\text{ Kg}$
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2011/65/EU
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

3. Antenna - S Parameter Test Data



Product Number: AN2400-5901RS

Product Name: Antenna



4. Antenna - Radiation Pattern Test Data

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

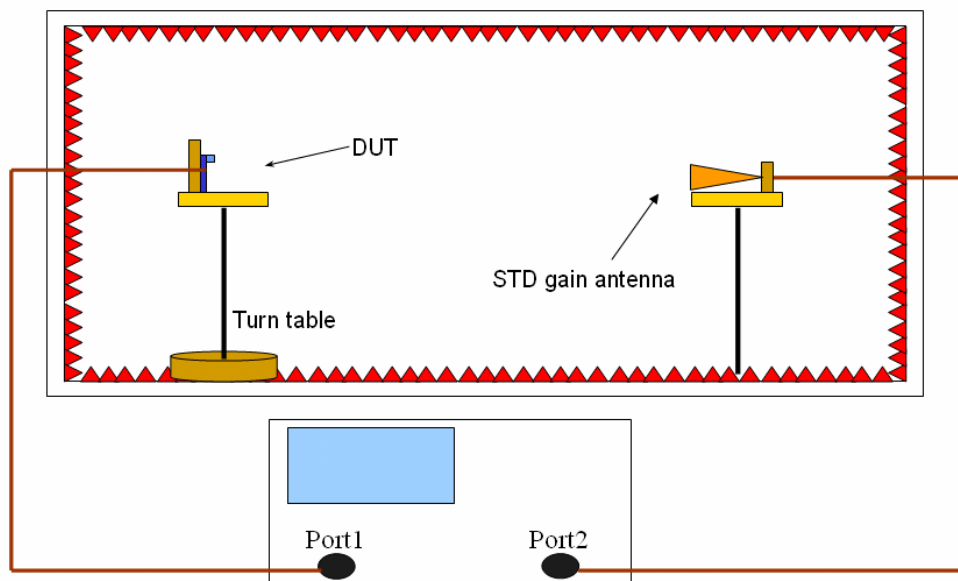
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna



5. Mechanical Drawing

See attached files

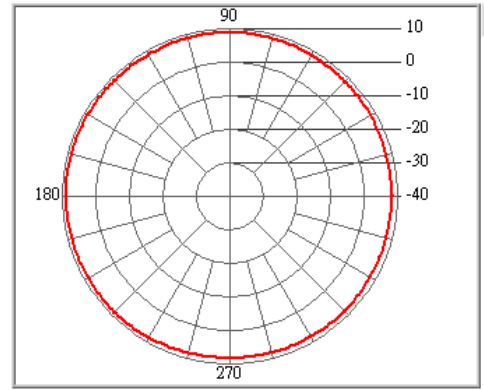
6. Material Description and RoHS Test Report

See attached files

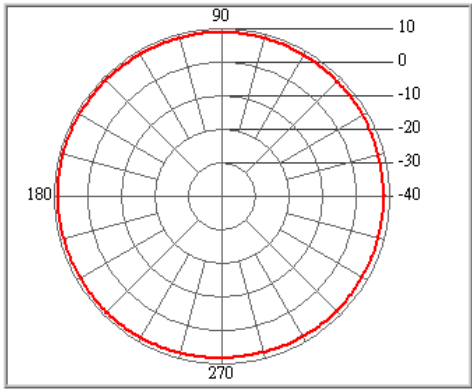
Model : AP Antenna
 Remark : H-Plane // Vertical Polarization
 Tested by : CORTEC Antenna 3D Lab // Zhao Yao Rong

Location: **Chamber** Date: **2008/1/15** Time: **下午 02:26:08**
 Temperatur (°C): **22.00** Humidity (%): **55.00** Approved by:

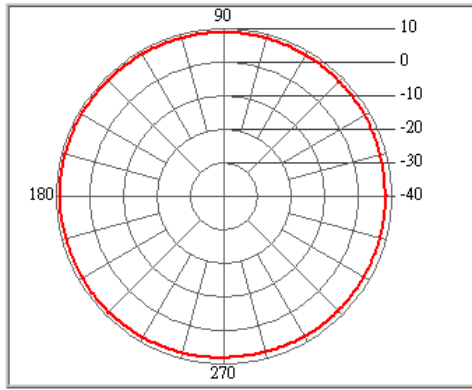
Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	8.93	9.04	9	9.01	8.99	8.92	8.85	8.86	8.87	8.8	8.68	8.67
Peak Degree	172	166	154	123	123	117	99	130	135	129	129	123
AV Gain (dBi)	8.59	8.63	8.57	8.54	8.45	8.32	8.21	8.15	8.05	7.86	7.68	7.63



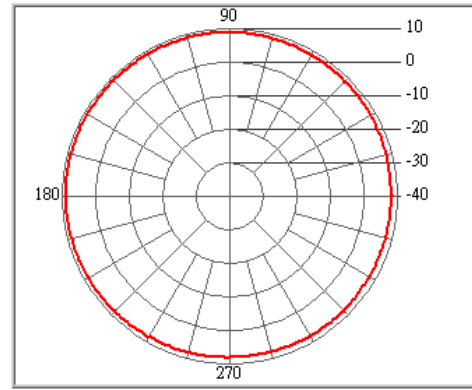
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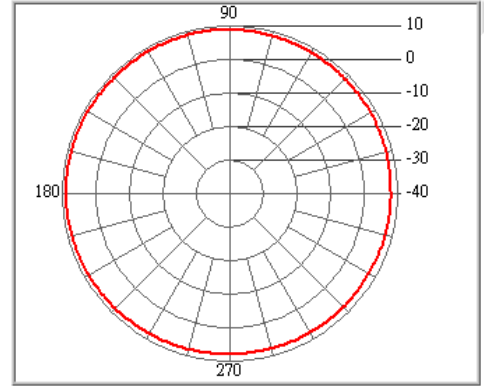
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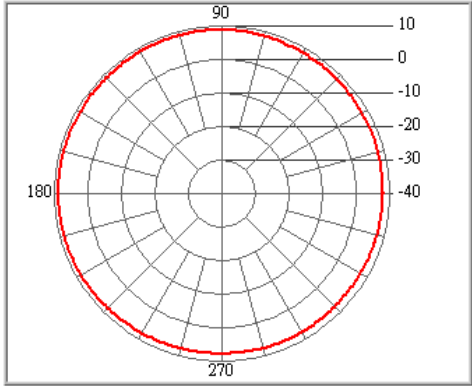
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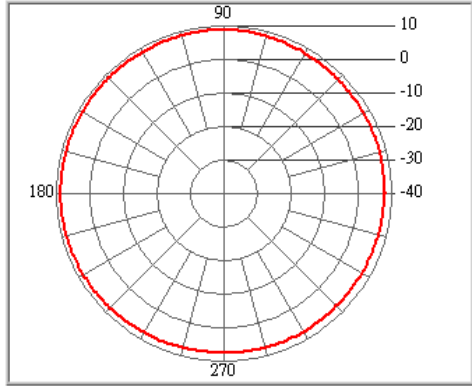
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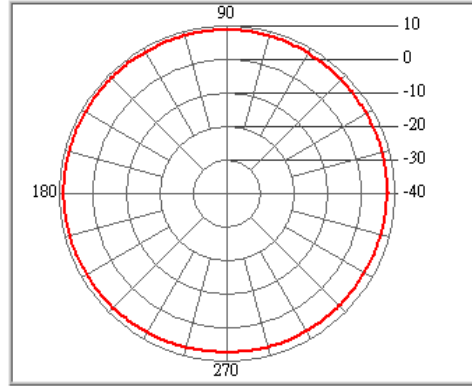
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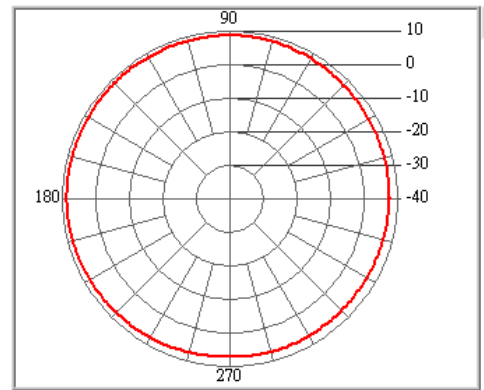
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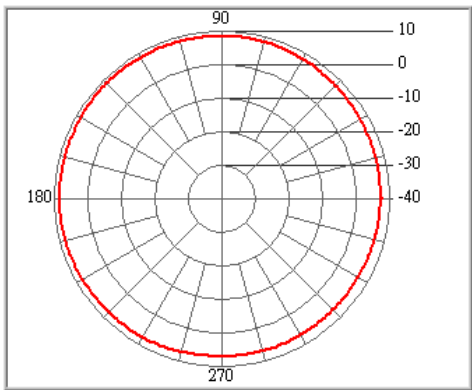
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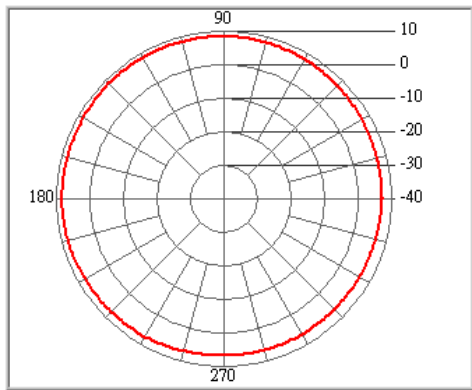
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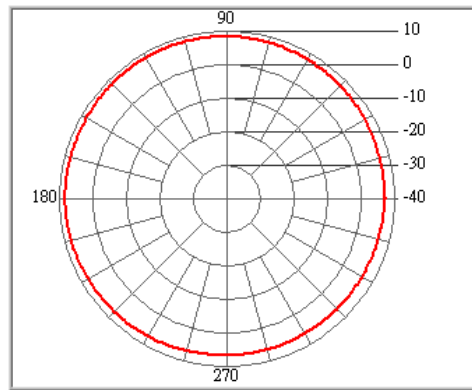
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2480



2490

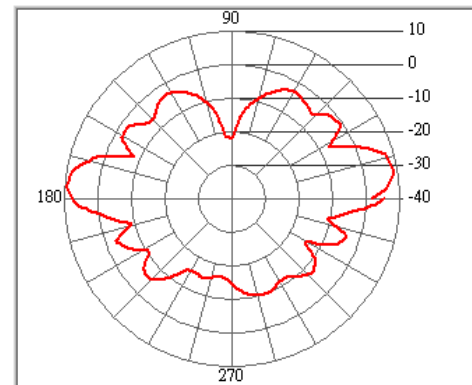
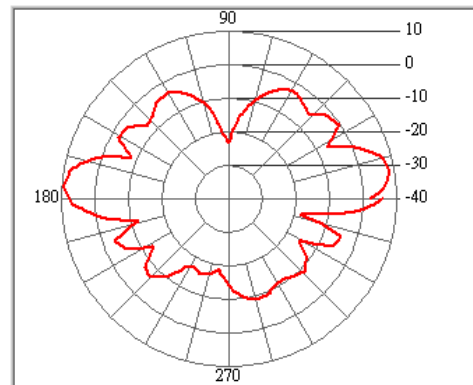
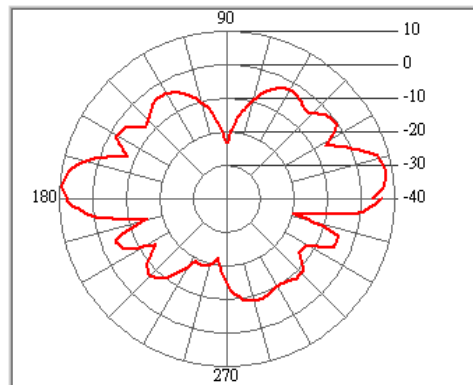
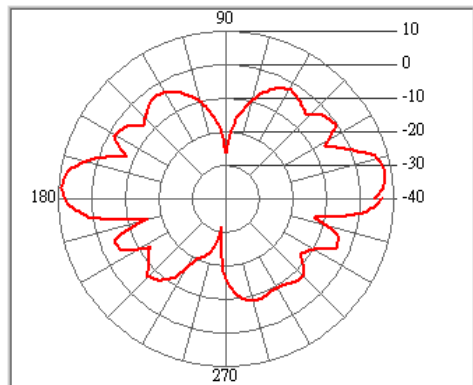
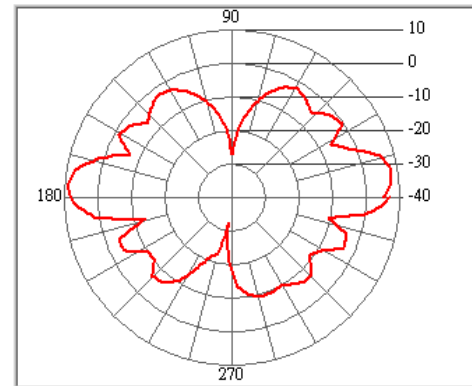
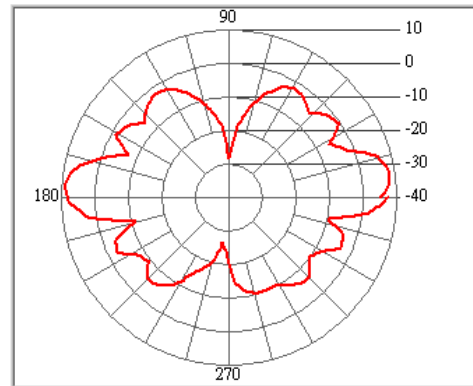
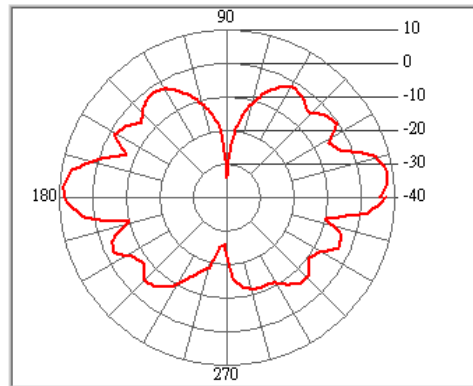
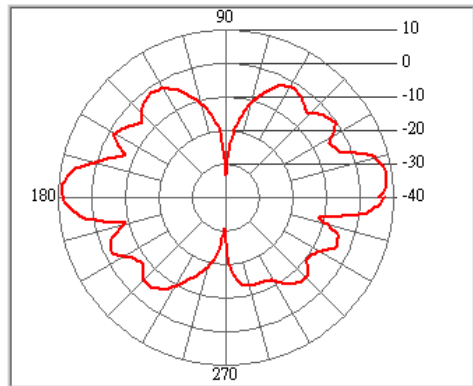
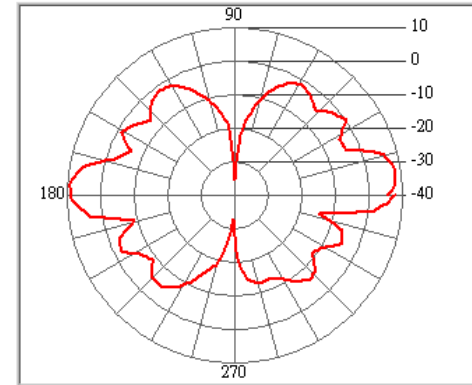
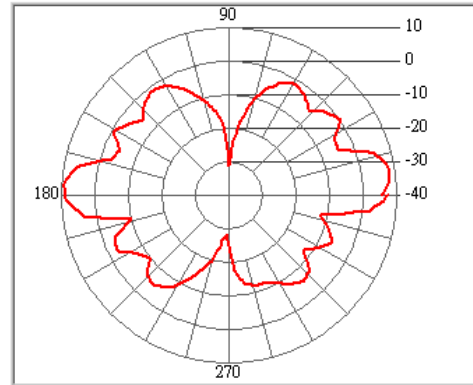
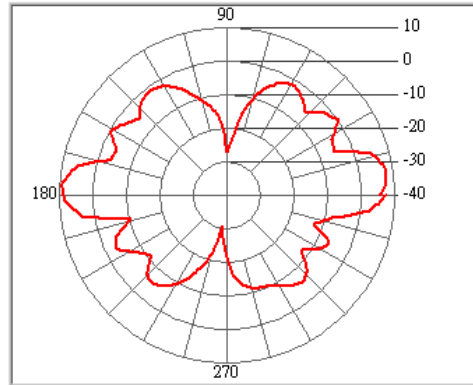
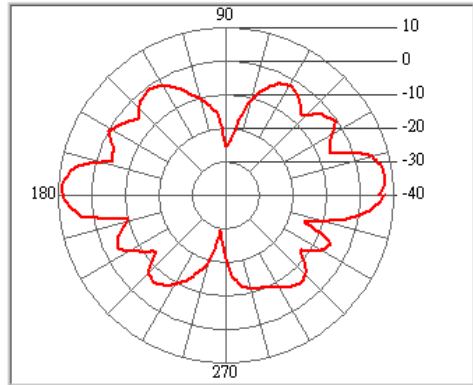


2500

Model : AP Antenna
 Remark : E-Plane // Horizontal Polarization
 Tested by : CORTEC Antenna 3D Lab // Zhao Yao Rong

Location: **Chamber** Date: **2008/1/15** Time: **下午 02:30:16**
 Temperatur (°C): **22.00** Humidity (%): **55.00** Approved by:

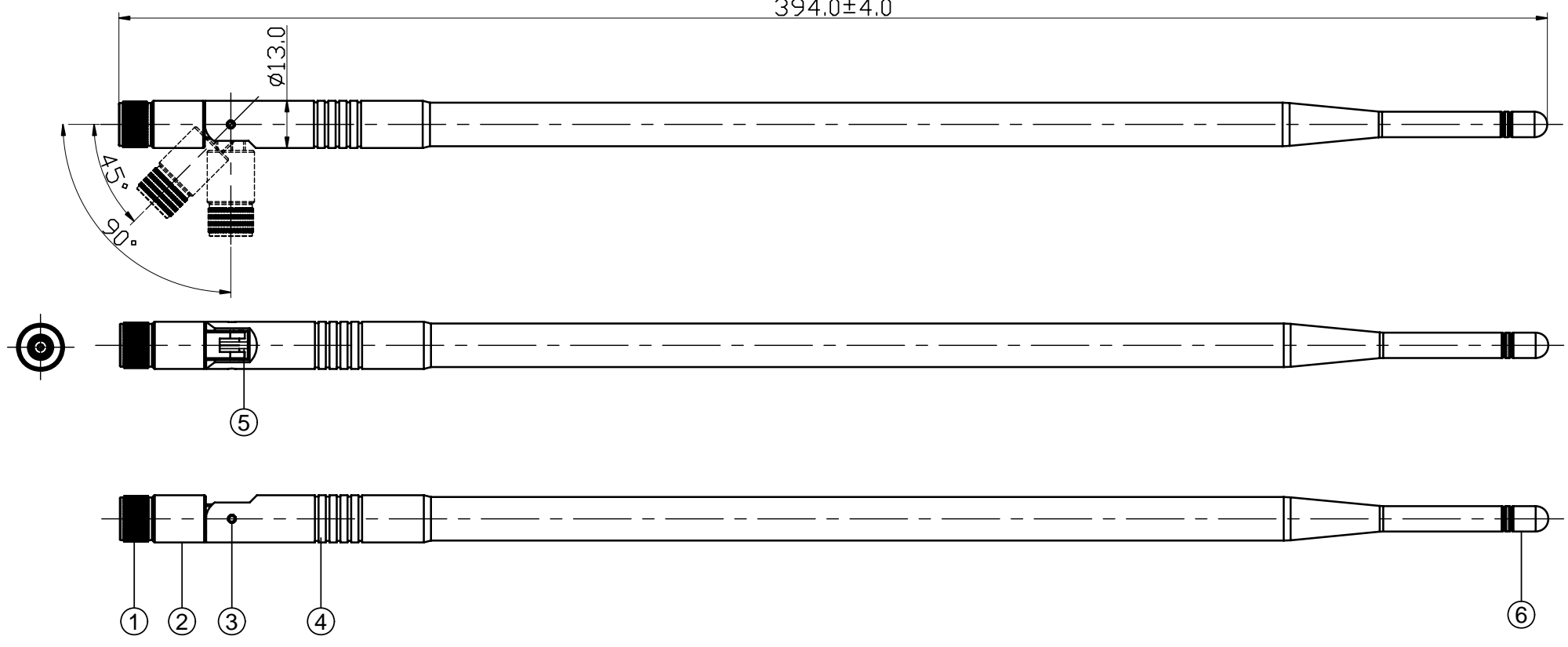
Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	8.98	9.17	9.25	9.19	9.01	8.91	8.93	9.05	9.16	9.24	9.22	9.25
Peak Degree	176	176	176	176	176	176	176	176	176	176	176	176
AV Gain (dBi)	-0.71	-0.56	-0.47	-0.42	-0.44	-0.5	-0.57	-0.63	-0.69	-0.8	-0.85	-0.66



RoHS
Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

394.0±4.0



6	R-AN60-01B	Aerial cap	PVC	Black	1
5	R-RG-178U	Cable	RG178	L=62.7mm	1
4	R-AN6011-01A	Body	ABS	Black L=370	1
3	R-AN03-514CZ	Pin	Cu	Black Zn Plated	2
2	R-AN03-T01	Body1	PA+ABS	Black	1
1	R-SMA336-CC8MRANT	SMA Male Reverse	Cu	Eletrodeposition	1
No.	Part Number	Description	Material	Finish	Q'ty

Invax System Group.
Cortec

Cortec Technology Inc.
[Http://www.invaxsystem.com](http://www.invaxsystem.com)
 E-mail: info@invax.com.tw
 Tel: 886-2-27885218
 Fax: 886-2-27831658

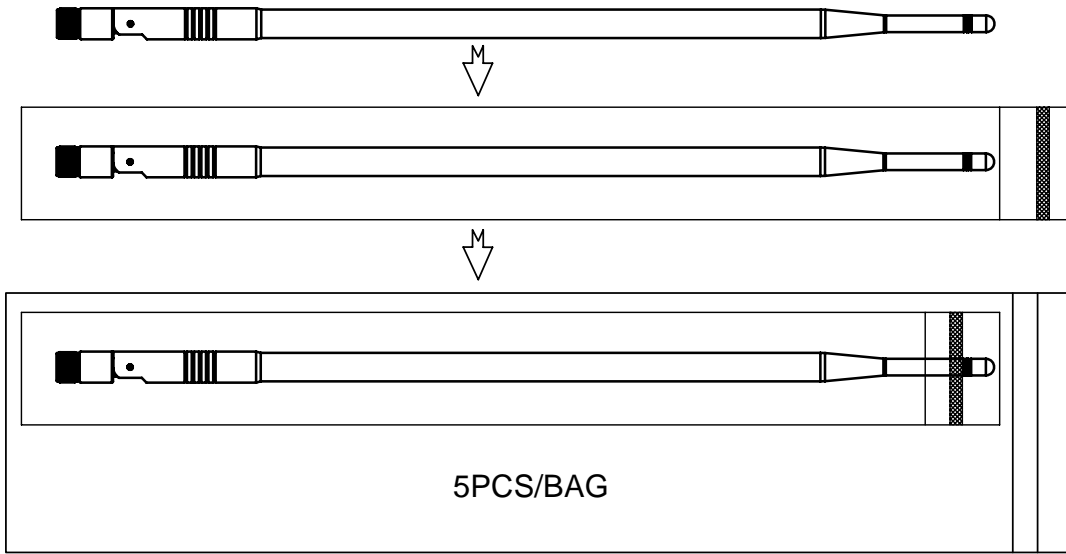
TITLE: 2.4 GHz 9dBi Antenna

PART NO.: AN2400-5901RS DWG NAME: AN2400-5901RS.dwg

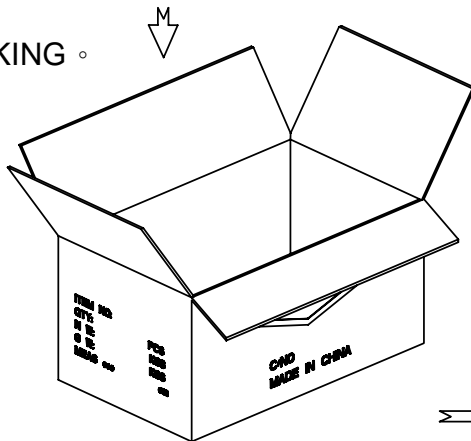
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
Grant 2008/04/01	Liu Kui 2008/04/01	Zhang yue xin 2008/04/01		X.X ±0.2 X.XX ±0.05 X° ±1°
			UNITS: mm	
			SCALE: 1/1	
			REVISION: A	

Part Number : AN2400-5901RS	Revision : A
Name: 2.4GHz Antenna	Customer : ALL

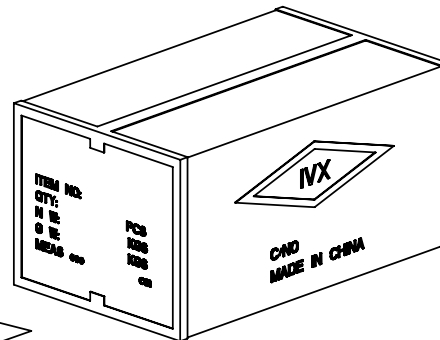
1 . Enter PE bag .



2.PACKING .

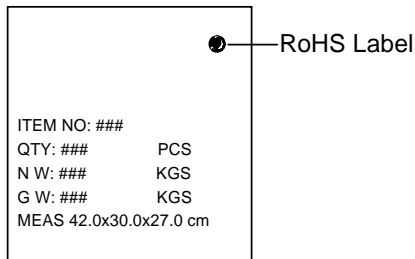


3. SEALING

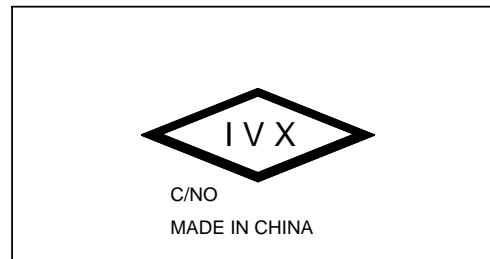


Size:42.0x30.0x27.0cm
300PCS/BOX

SIDE



FRONT



SGS 台灣網站 → http://twap.sgs.com/sgsrsts/chn/cheres_tw.asp
 SGS 大陸網站 → http://rsts.cn.sgs.com/chn/cheres_cn.asp
 SGS 韓國網站 → http://rohs.kr.sgs.com/sgsrsts/en/cheres_en.asp



請輸入以下報告正確資料及檢查碼以便查核

1. 報告編號
2. 報告日期 (YYYY/MM/DD)
3. 產品名稱 (輸入前 10 個字不含空白)
4. 圖示檢查碼 (依指示畫面)

康捷電子有限公司	
填表：	時麗
部門：	研發部
職務：	文員

物料中HSF對象物質含量調查表

物料名稱：AN2400-5901RS

序號	物料型號	物料各構成名稱	各構成物料的材料	測試報告裡RoHS對應物質測試結果						檢測報告編號	測試日期	測試名稱	測試機構名稱
				Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs				
1	AN5903-01B	Body	ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	KA/2011/C1889	2012.01.02	ACRYLONITRILE	SGS
2	R-AN03-T01	Body1	PA+ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1003336701	2012.08.09	PA/ABS	SGS
3	R-SMA336-CC8MRANT	SMA Male Revesre	銅	51	28156	N.D.	Negative			CANEC1112556702	2012.01.04	BRASS(IN CH)	SGS
4	AN03-515CZ	Pin	銅	51	28156	N.D.	Negative			CANEC1112556702	2012.01.04	BRASS(IN CH)	SGS
5	R-AN5225013-Z	Tube	鋅合金	N.D.	13	N.D.	Negative	N.D.	N.D.	A001C11122704902-1	2011.12.30	鋅合金	AVO
6	R-AN223010P	Plug	PTFE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1202323001	2012.03.21	PTFE ROD	SGS
7	R-RG-178U	Cable (RG178)	FEP	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	RLSHE001125120002C	2012.08.21	电线电缆料	CTI
8			PTFE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	RLSHE001125120001C	2012.08.21	电线电缆料	CTI
9			鍍銀銅	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	RLSHE001125120003C	2012.08.21	电线电缆料	CTI
10	R-AN60-06 R-AN60-08	Spring	銅	51	28156	N.D.	Negative			CANEC1112556702	2012.01.04	BRASS(IN CH)	SGS
11	R-AN60-01B	Hat	PVC	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	RLSZE001267710001	2012.05.07	環保PVC塑膠粒黑	CTI
12	R-AN527515 R-AN1901-05	Hat Tube	銅	51	28156	N.D.	Negative			CANEC1112556702	2012.01.04	BRASS(IN CH)	SGS
13	R-AN123009 R-TUBE-221513	Tube	銅	51	28156	N.D.	Negative			CANEC1112556702	2012.01.04	BRASS(IN CH)	SGS
14	R-GS-SP2001001	EVA	EVA+背膠	N.D.	22	N.D.	N.D.	N.D.	N.D.	CANEC1202131405	2012.03.06	EVA+Adhesive	SGS

根據測試報告如實填寫鉛、鎘、汞、六價鉻、PBBs和PBDEs六項禁用物質的含量

包裝材料中鉛、鎘、汞、六價鉻總含量不超過100ppm，鎘的允許濃度為5ppm

歐盟ROHS指令豁免條款2009/95/BC、鋼中合金元素中的鉛含量達0.35%、鉛含量達0.4%、銅合金中的鉛含量達4%