Index:

1. Revision History

Revision	Date	Change Notification	Description
1.0			

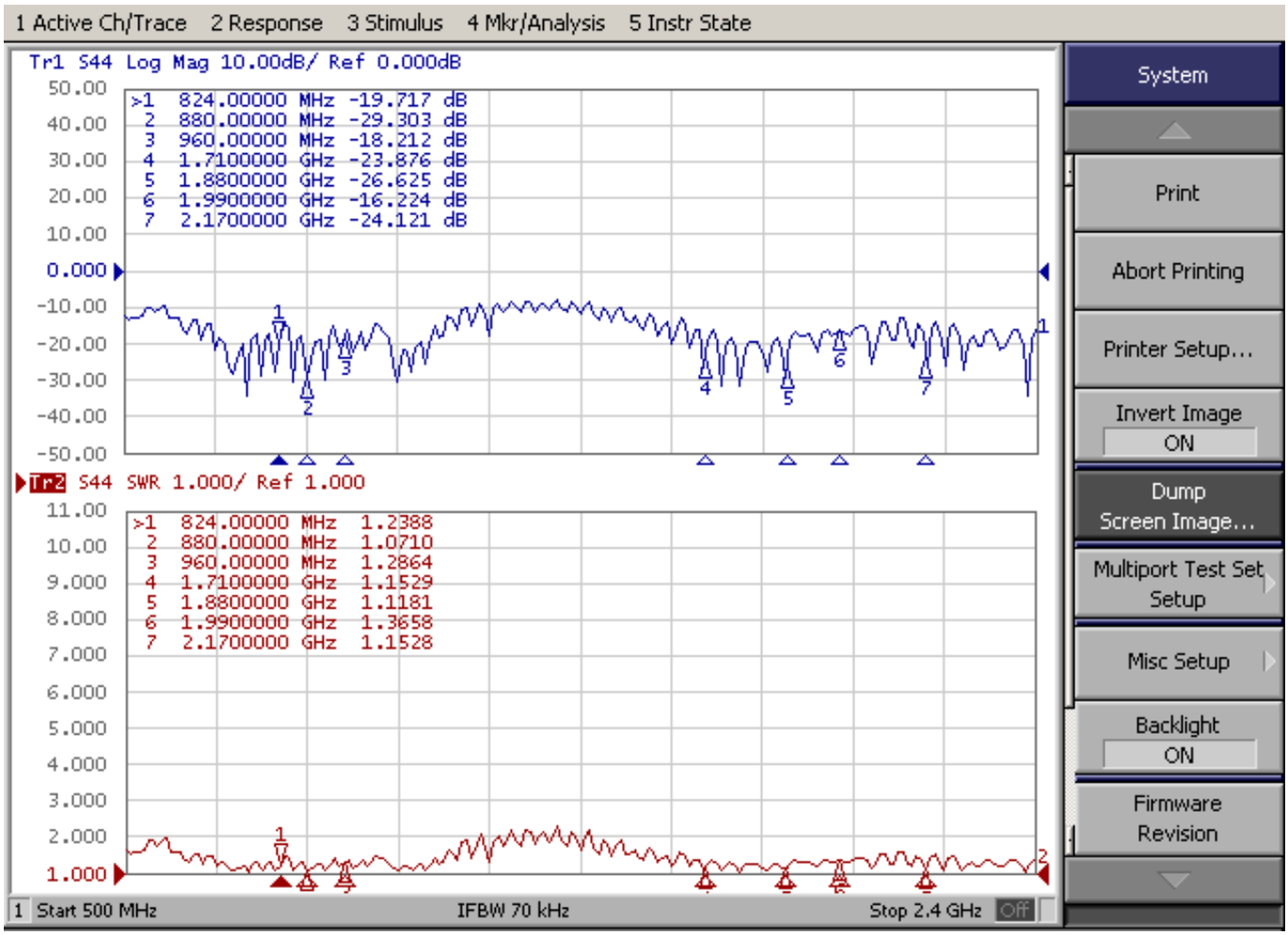
2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	824~ 960 MHz 1710~2170MHz
S.W.R.	<= 2.0@824~ 960 MHz <= 2.0@1710~2170MHz
Antenna Gain	-1.0±0.7dBi@ 824~ 960 MHz -2.0±0.7dBi@1710~2170MHz
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	PCB
Material of Plastic	Body: ABS
Cable Type	RG-174（L=3000mm Black）
Connector Type	SMA Male
Connector Pull Test	>= 3 Kg
C. Environmental	
Operation Temperature	- 40 ˚C ~ + 65 ˚C
Storage Temperature	- 40 ˚C ~ + 80 ˚C

3. 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

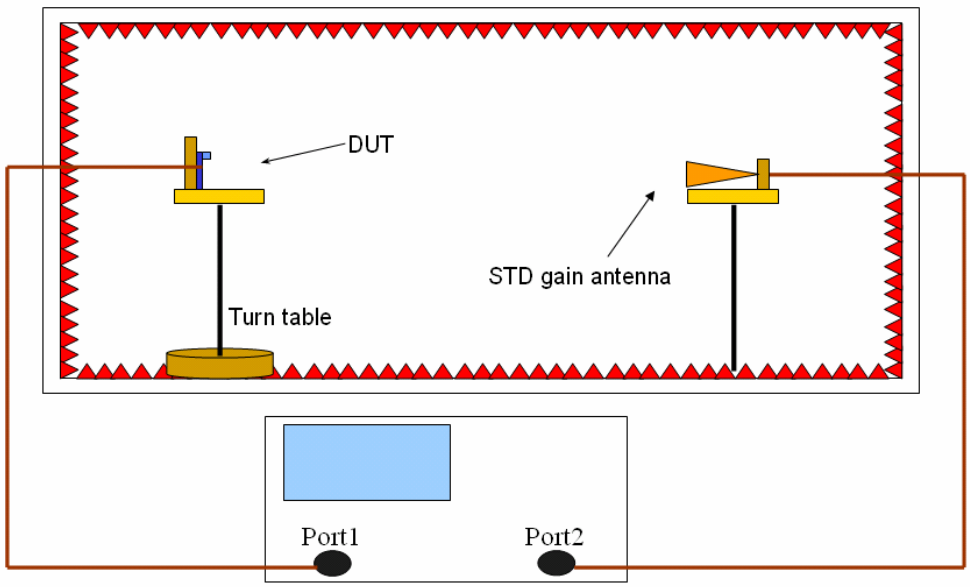
4. Antenna - S Parameter Test Data



5. Antenna - Radiation Pattern Test Data

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m
Quite 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



6. Mechanical Drawing

See attached files

7. Material Description and RoHS Test Report

See attached files

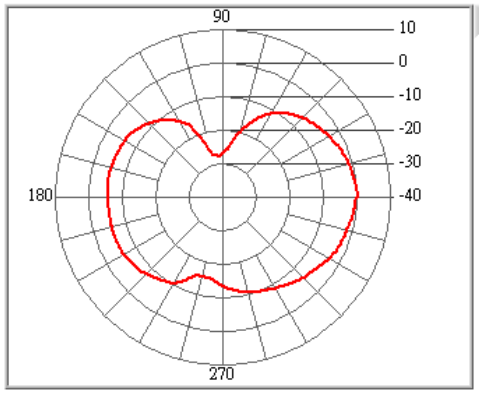
Cortec Technology Inc.

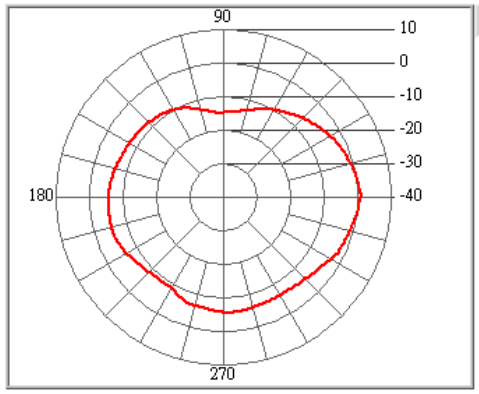
广东省东莞市长安镇振安路沙头段咸西工业区

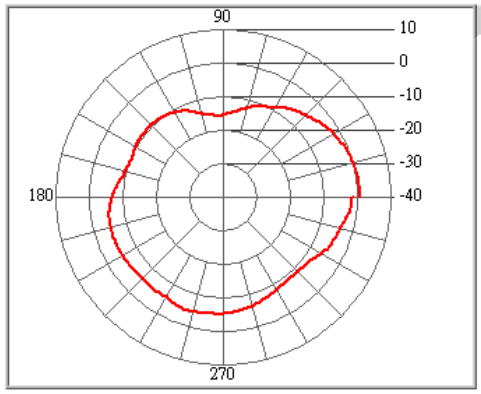
Antenna : 3G
Remark : H-Plane // V-Pol
Tested by :CORTEC Antenna 3D Lab

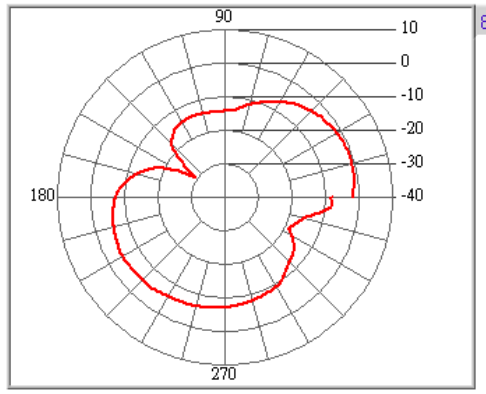
Location: **Chamber**
Temperatuer (℃): **25.00**
Date: **2011/11/25**
Humidity (%): **65.00**
Time: **下午 02:46:21**
Approved by:

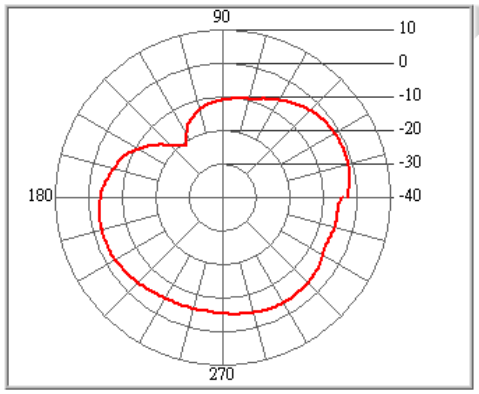
Freq. (MHz)	800	824	840	860	880	894	910	915	930	940	950	960
Peak Gain (dBi)	0.38	1.06	0.92	-0.67	-1.05	-0.58	-2.34	-1.98	-1.77	-1.9	-2.65	-1.38
Peak Degree	1	1	1	20	20	20	178	177	177	167	20	21
AV Gain (dBi)	-6.03	-5.2	-5.49	-6.78	-4.96	-4.26	-5.33	-5.41	-6.07	-6.41	-6.64	-6.64

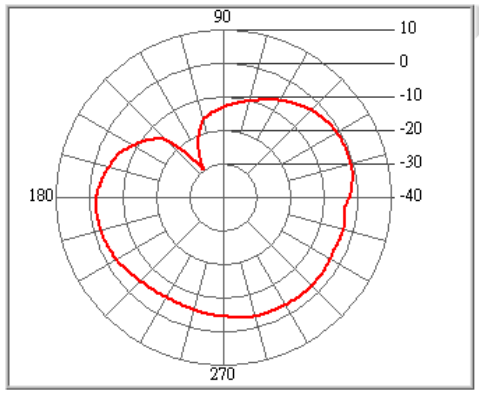


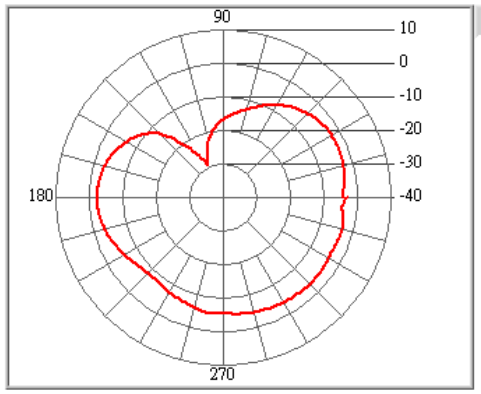


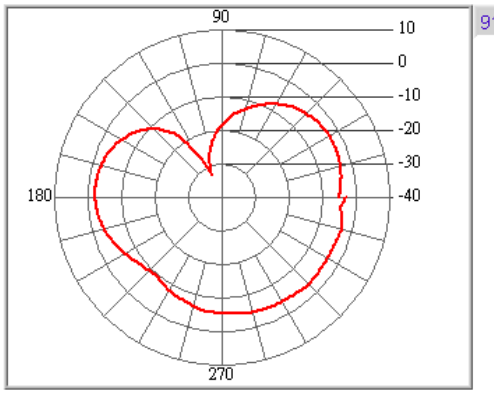


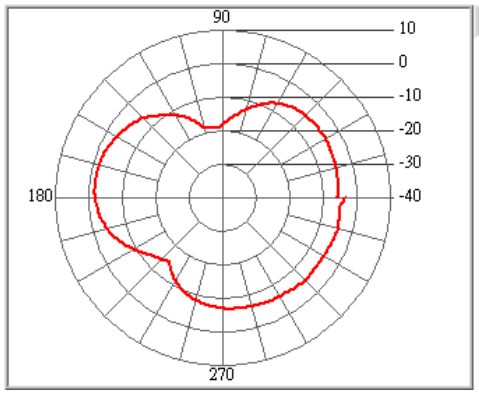


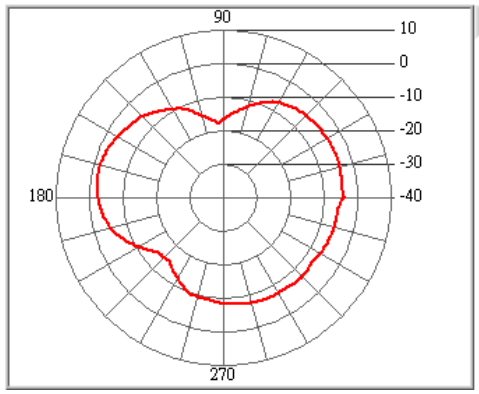


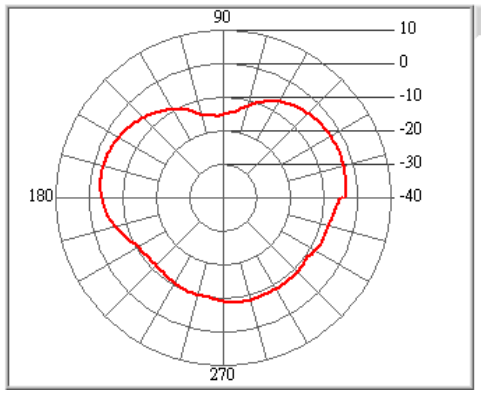


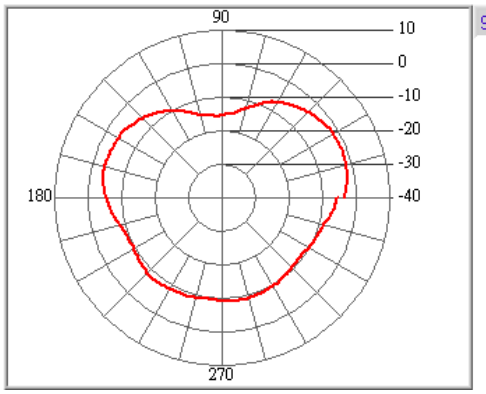












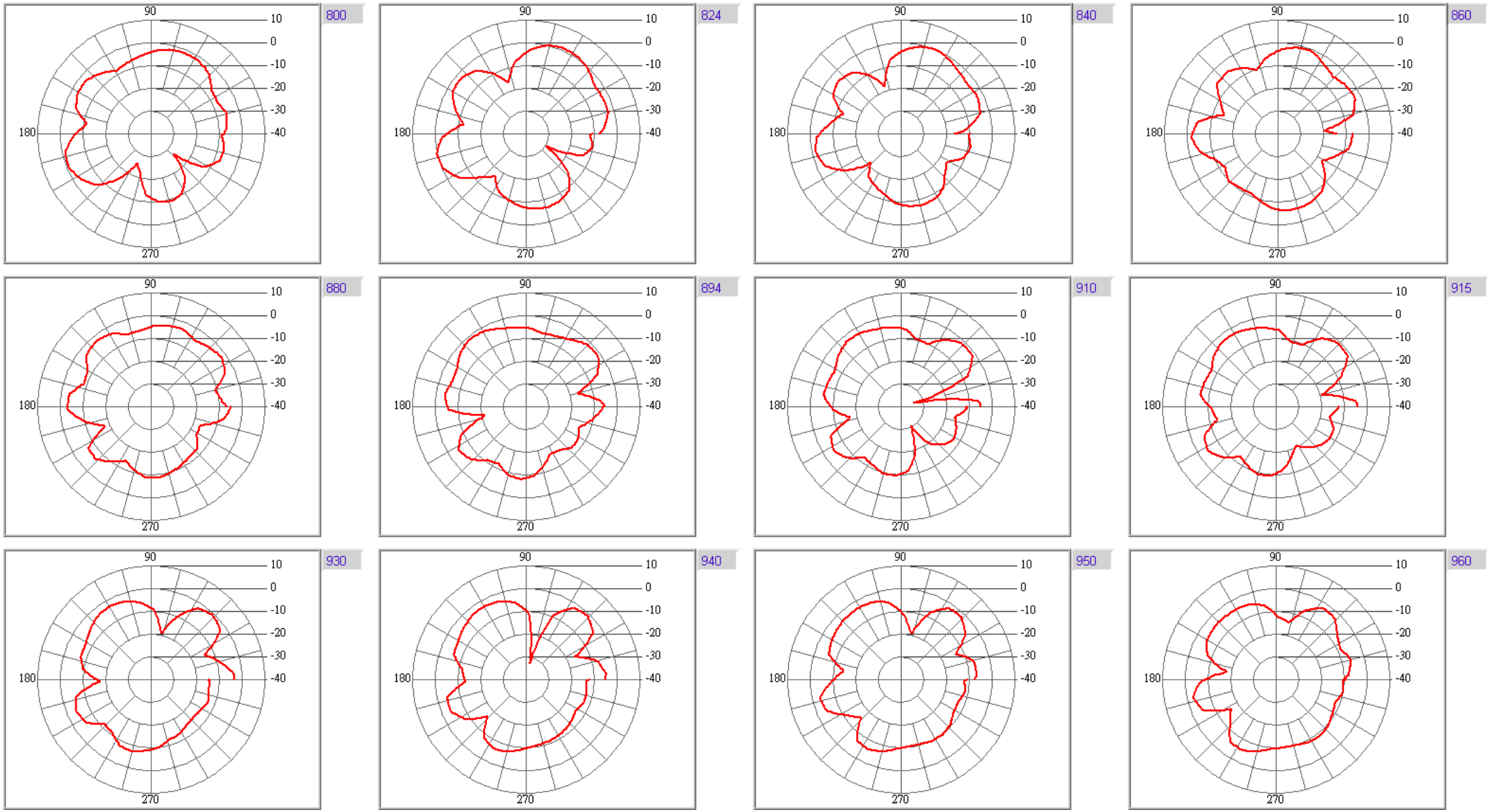
Cortec Technology Inc.

广东省东莞市长安镇振安路沙头段咸西工业区

Antenna : 3G
Remark : E-Plane // H-Pol
Tested by :CORTEC Antenna 3D Lab

Location: **Chamber**
Temperatuer (℃): **25.00**
Date: **2011/11/25**
Humidity (%): **65.00**
Time: **下午 02:41:16**
Approved by:

Freq. (MHz)	800	824	840	860	880	894	910	915	930	940	950	960
Peak Gain (dBi)	-1.03	0.98	0.01	-0.86	-2.07	-1.2	-1.43	-0.98	-0.81	-1.08	-1.82	-2.48
Peak Degree	202	67	67	67	35	36	46	46	46	46	46	56
AV Gain (dBi)	-5.84	-4.51	-5.82	-6.13	-6.47	-6.24	-7.17	-7.1	-7.09	-7.02	-7	-7.1



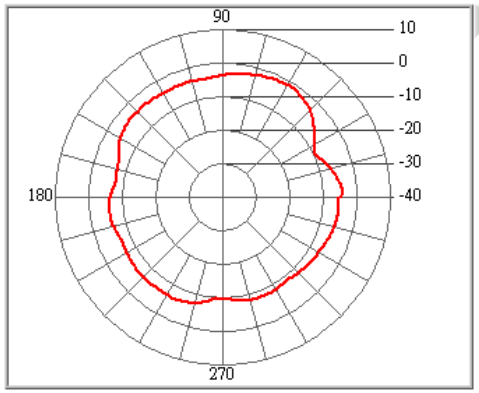
Cortec Technology Inc.

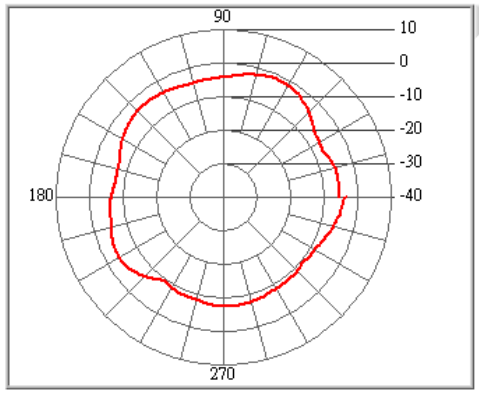
广东省东莞市长安镇振安路沙头段咸西工业区

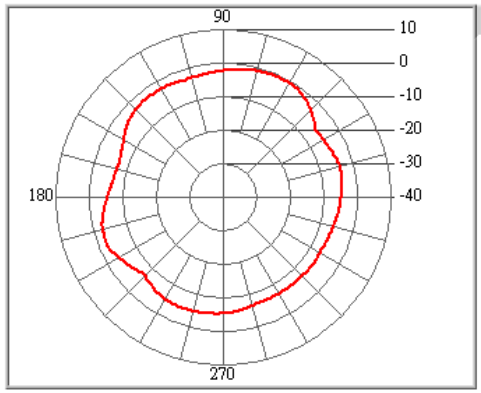
Antenna : 3G
Remark : H-Plane // V-Pol
Tested by :CORTEC Antenna 3D Lab

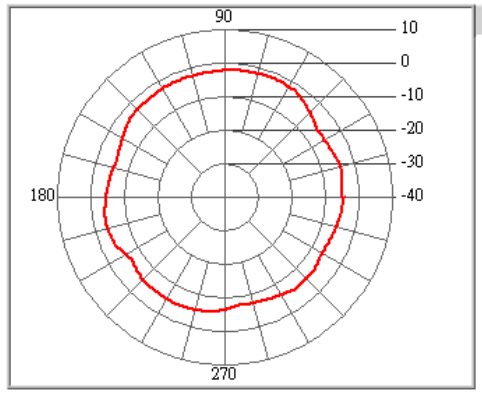
Location: **Chamber**
Date: **2011/11/25**
Time: **下午 02:44:48**
Temperatuer (℃): **25.00**
Humidity (%): **65.00**
Approved by:

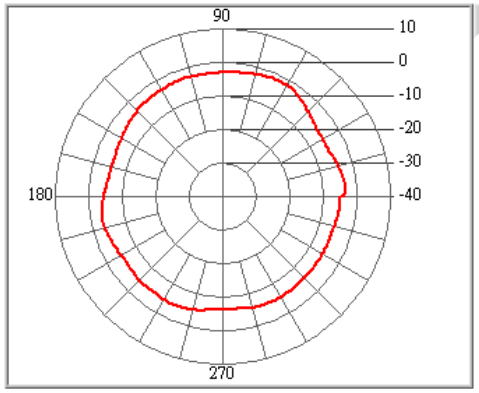
Freq. (MHz)	1710	1750	1790	1820	1860	1880	1920	1950	1990	2050	2100	2170
Peak Gain (dBi)	-1.27	-1.43	-0.63	-1.64	-1.71	-2.19	-2.51	-1.89	-2.47	-2.34	-1.8	-2.73
Peak Degree	57	67	67	67	67	67	57	67	67	67	67	68
AV Gain (dBi)	-5.4	-5.38	-4.16	-4.34	-4.32	-4.71	-4.78	-4.69	-5.32	-4.89	-4.92	-6

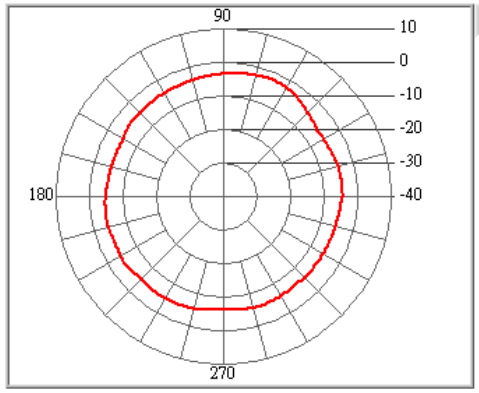


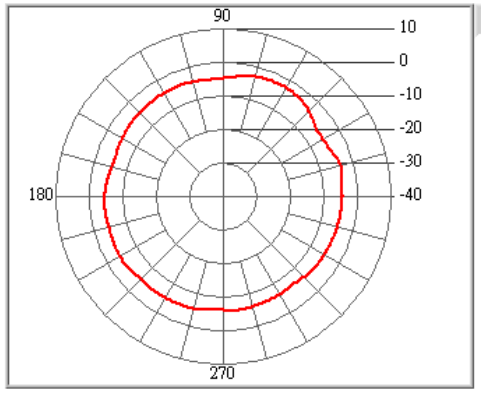


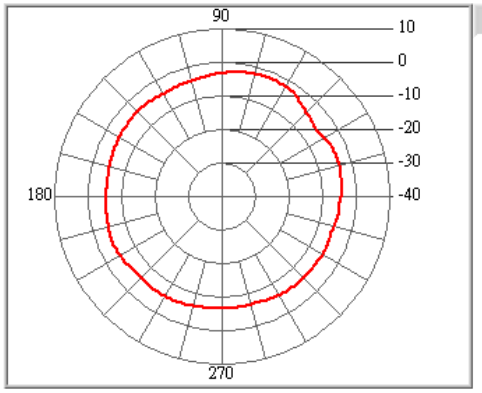


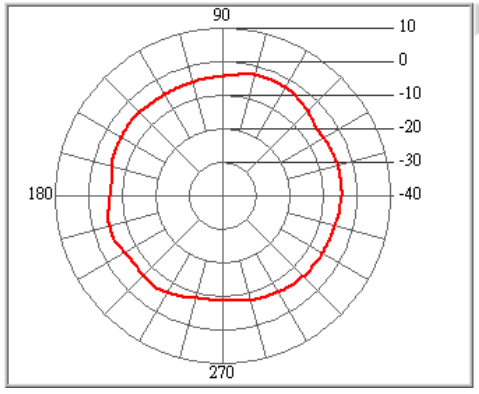


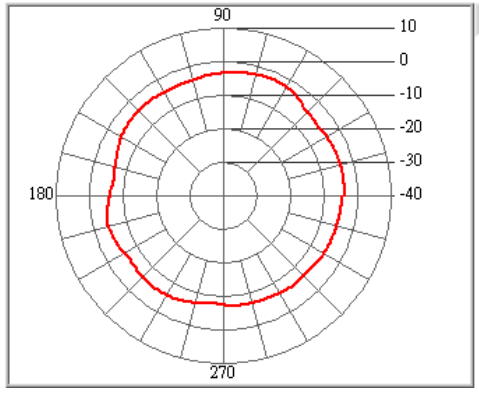


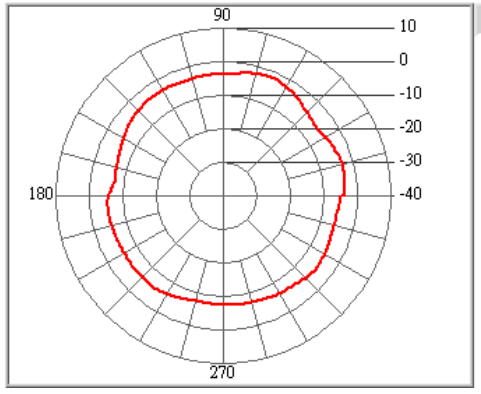


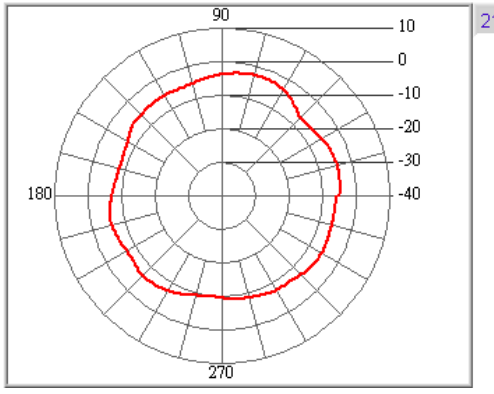












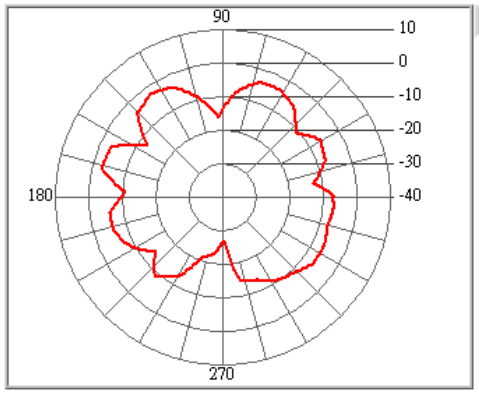
Cortec Technology Inc.

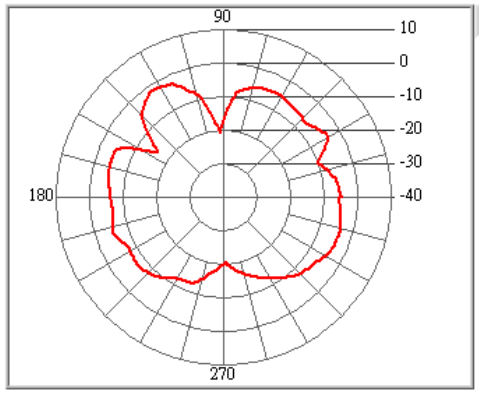
广东省东莞市长安镇振安路沙头段咸西工业区

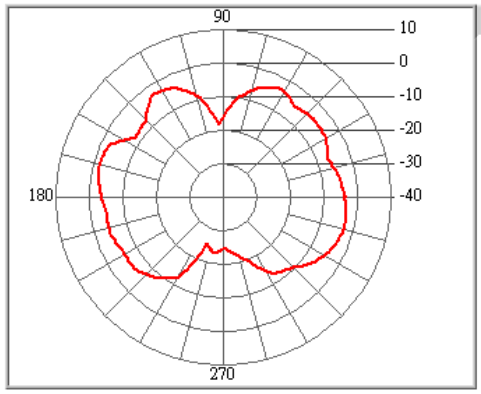
Antenna : 3G
Remark : E-Plane // H-Pol
Tested by :CORTEC Antenna 3D Lab

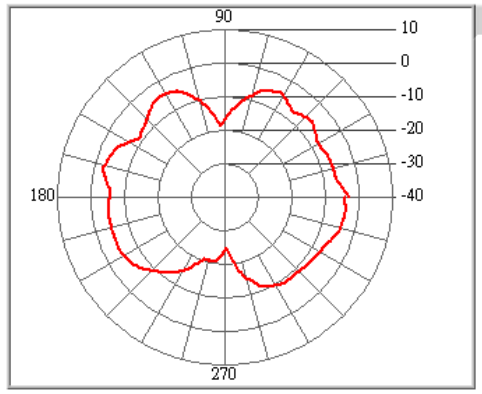
Location: **Chamber**
Temperatuer (℃): **25.00**
Date: **2011/11/25**
Humidity (%): **65.00**
Time: **下午 02:42:50**
Approved by:

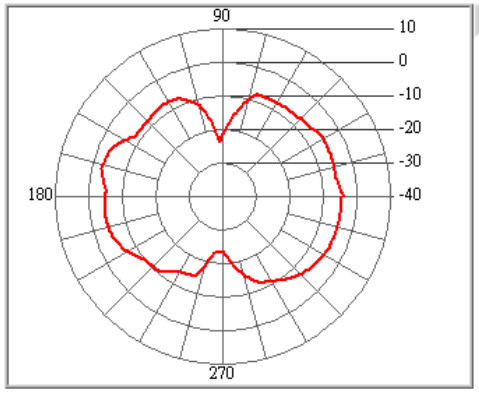
Freq. (MHz)	1710	1750	1790	1820	1860	1880	1920	1950	1990	2050	2100	2170
Peak Gain (dBi)	-2.58	-1.61	-1.78	-2.8	-2.93	-4.06	-3.53	-3.36	-4.25	-3.52	-3.08	-3.59
Peak Degree	124	124	166	167	166	167	355	167	167	167	166	125
AV Gain (dBi)	-7.58	-6.92	-6.07	-7.05	-7.32	-7.98	-7.55	-7.91	-8.58	-8.25	-8.06	-8.84

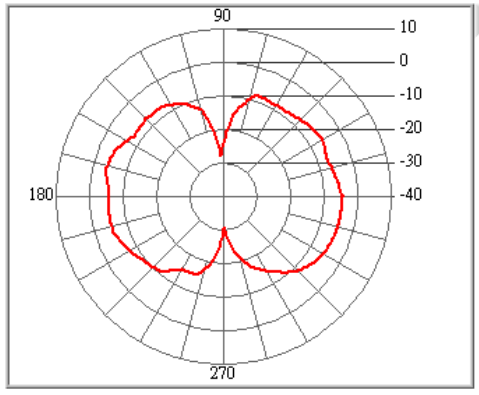


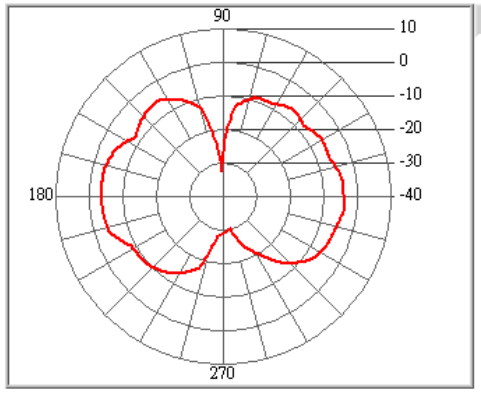


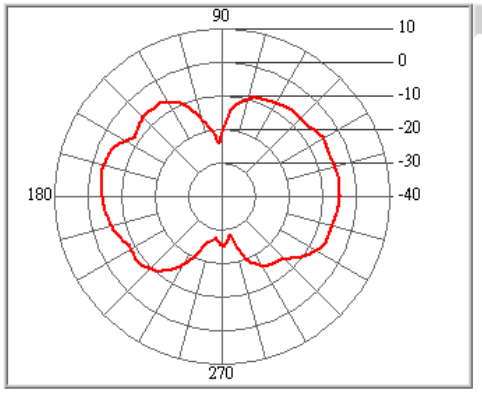


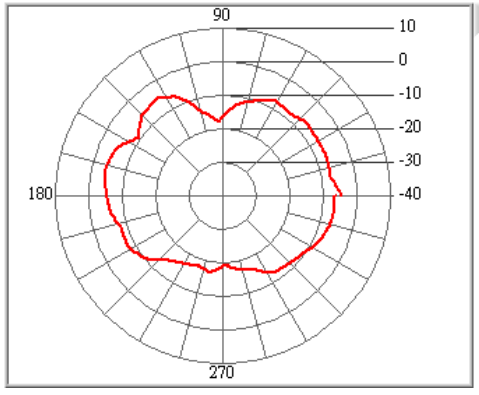


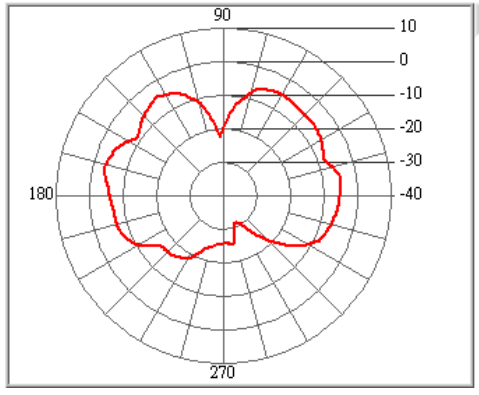


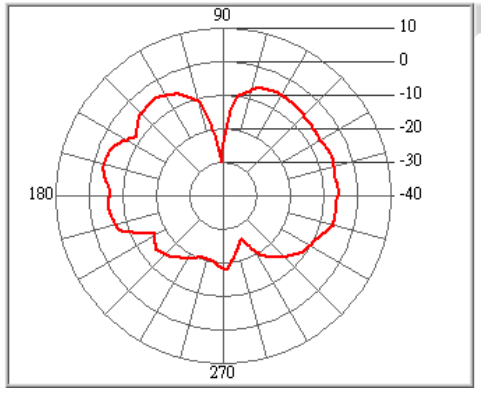


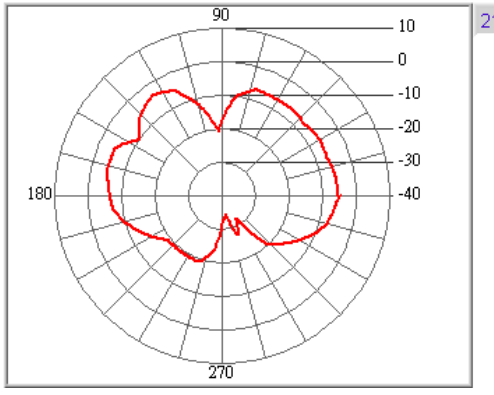








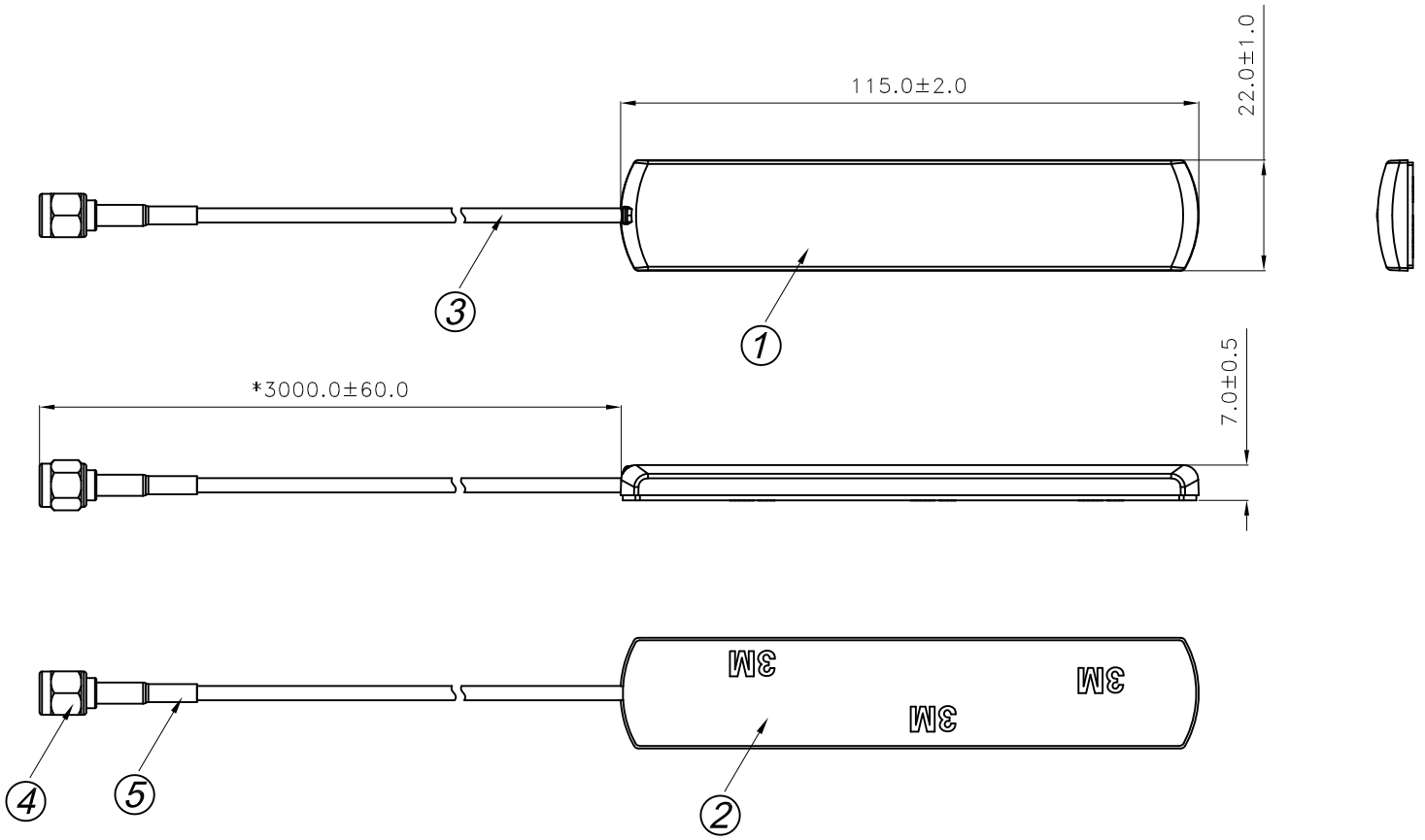




RoHS Compatible

★★★★☆

SIGN	DATE	DESCRIPTION	APPROVER
A			
B			
C			



No.	Part Number	Description	Material	Finished	Q'ty
5	R-HSTUBE-004T	HST	Bronze	Gold plated	1
4	SMA010-CGT574-A	SMA Male	Bronze	Gold plated	1
3	R-RG-174/U	Cable	RG-174	L=126mmBlack	1
2	AB77-03	3M Adhesive	EVA(Red)	105.0*20.0*0.8mm	1
1	AB77-01	Antenna Body	ABS	Black	1

Invax System Group.
Cortec

Cortec Technology Inc.

Http://www.Invaxsystem.com Tel :886-2-27885218
E-mail:Info@Invax.com.tw Fax:886-2-27831658

TITLE: AB77 Type Antenna

PART NO.: AB0821S-7719SM CUSTOMER P/N: /

APP BY	CHK BY	RF BY	DES BY		Tolerance
Grant 2013/09/04	Jack 2013/09/04	SIFEI 2013/09/04	LJHUA 2013/09/04	UNITS: mm SCALE: 2/3 REVISION: A	X.X ±0.5 X.XX ±0.2 X° ±1

Invax System Group.

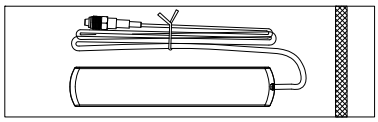
Cortec

產品包裝規範
PACKING CRITERION

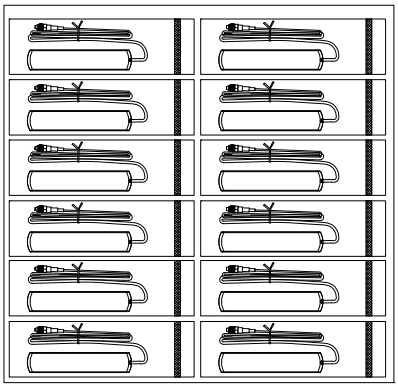
Date: 13.09.04

Part Number : AB0821S-7719SM	Revision : A
Name: AB77 Type Antenna	Customer :

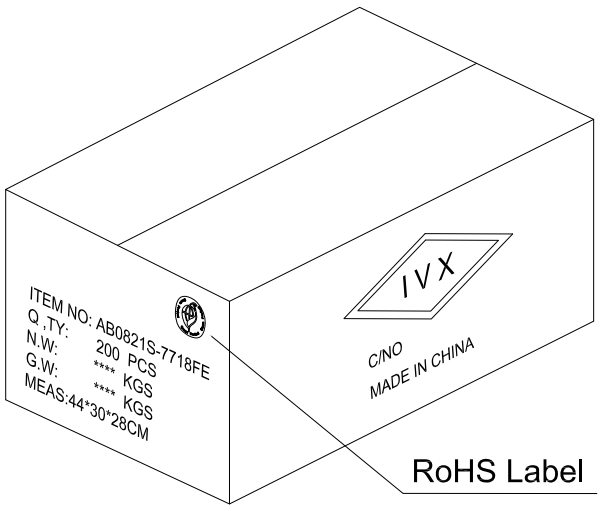
一. 一个PE袋包装一个产品，并热封。



二. 50 个产品放一个大PE袋, 并热封.



三. 一个外箱放200个产品



APPROVED BY： Grant　　CHECKED BY： Liu Kui　　DESIGNED BY： LJHUA

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)

COR/F-G-47a

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：AB0821S-7719SM

序號	物料型號	物料各構成名稱	各構成物料的材質	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	AB77-01	Body3	ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	KA/2012/C1575	2013.01.02	ACRYLONITRILE	SGS
2	AB77-02	PCB	FR4	N.D.	13	N.D.	N.D.	N.D.	N.D.	CANEC1311142512 A01	2013.08.06	KB-6160	SGS
3	AB77-03	3M Adhesive	3M	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	SHAEC1301982801	2013.02.06	3M 9448A	SGS
4	R-RG-174U	Cable RG174	PVC	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1304137802	2013.04.03	PVC GRAIN	SGS
			PE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	RHS01F007187001	2013.07.12	HDPE/XLPE/FPE	CTI
			Bare Copper	N.D.	9	N.D.	Negative	N.D.	N.D.	CANEC1304043401	2013.04.02	BA	SGS
			TINNED COPPER	N.D.	20	N.D.	Negative	N.D.	N.D.	CANEC1304043402	2013.04.02	TA	SGS
5	SMA010-CNT574-A	SMA Male	銅	66	31000	N.D.	Negative			CE201314616	2013.01.28	FREECUTTINGBRASSBAR	SGS
			鍍金	N.D.	N.D.	N.D.	Negative			RLSZE001484960001	2012.11.16	金镀层	CTI

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，鎘的允許濃度爲5ppm

歐盟ROHS指令豁免條款2009/95/BC、钢中合金元素中的铅含量达0.35%、铝含量达0.4%、铜合金中的铅含量达4%