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Product Number: DS2400-0215WNM

Product Name: Antenna



1. Revision History

Revision	Date	Change Notification	Description
1.0	2016.09.13	初版	

Product Number: DS2400-0215WNM

Product Name: Antenna



2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Antenna Gain	7.0 \pm 0.7 dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	Body: ABS
Cable Type	RG-178
Connector Type	N Male
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

Product Number: DS2400-0215WNM

Product Name: Antenna



3. Characteristics and Reliability Test

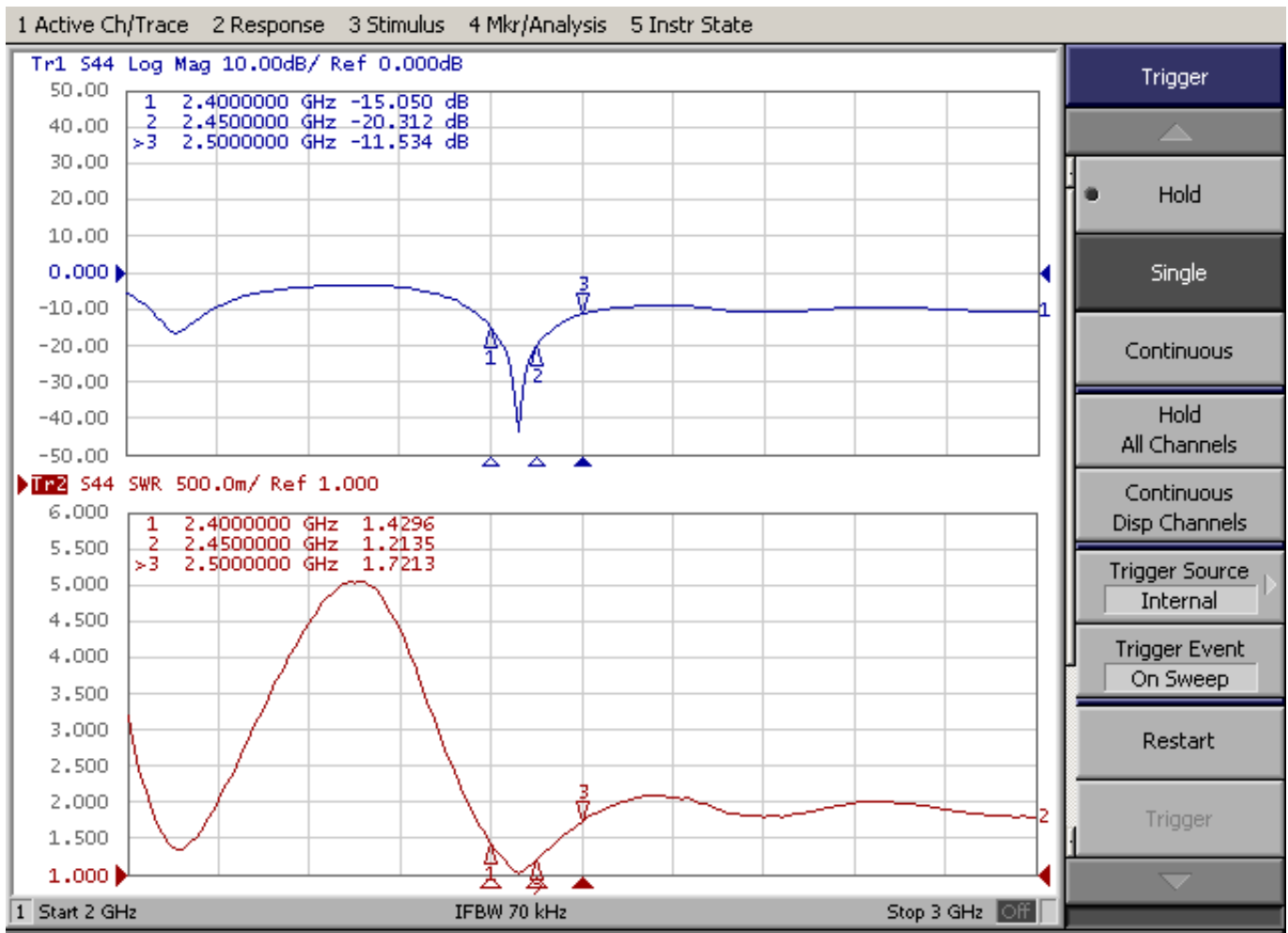
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 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

Product Number: DS2400-0215WNM

Product Name: Antenna



4. Antenna - S Parameter Test Data



Product Number: DS2400-0215WNM

Product Name: Antenna



5. Antenna - Radiation Pattern Test Data

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

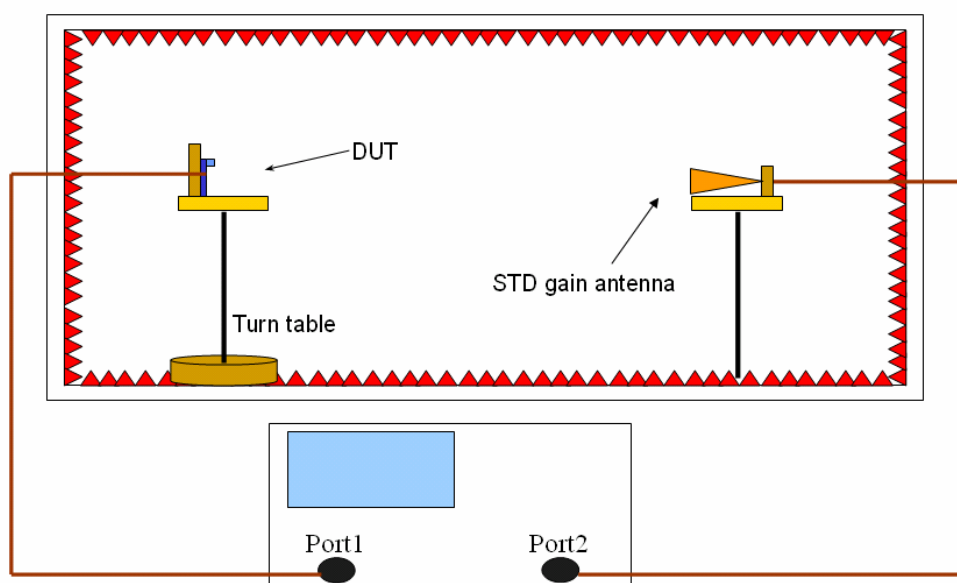
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna



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 : 2.4G Antenna
Remark : H-Plane /V-Pol
Tested by :CORTEC Antenna 3D Lab

Location: **Chamber**

Date: **2011/7/4**

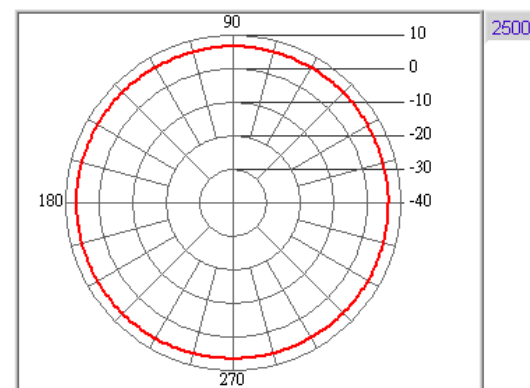
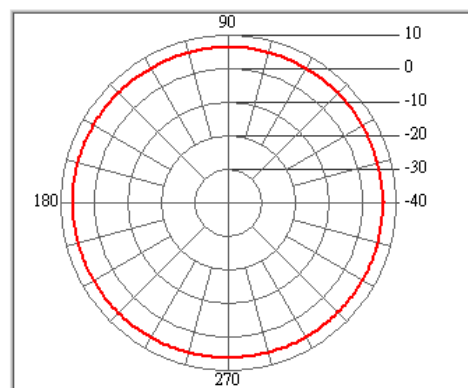
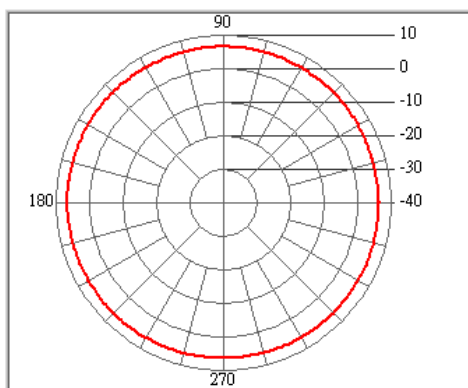
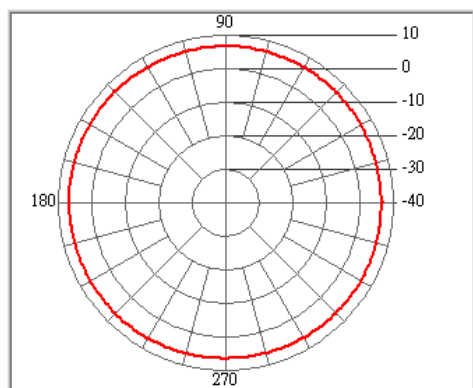
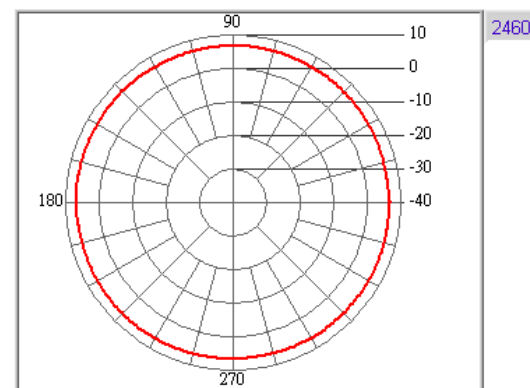
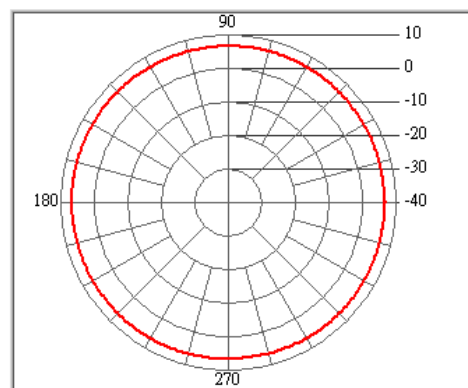
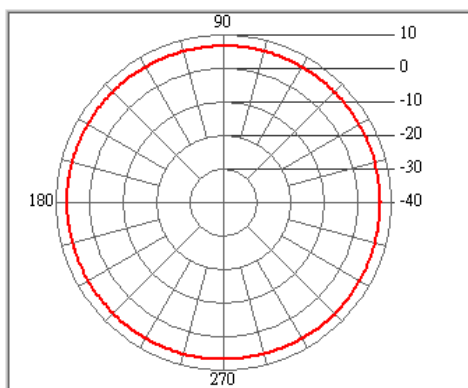
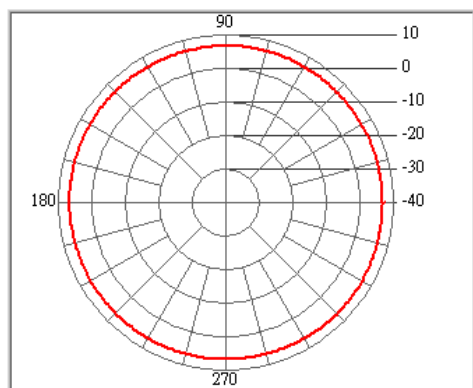
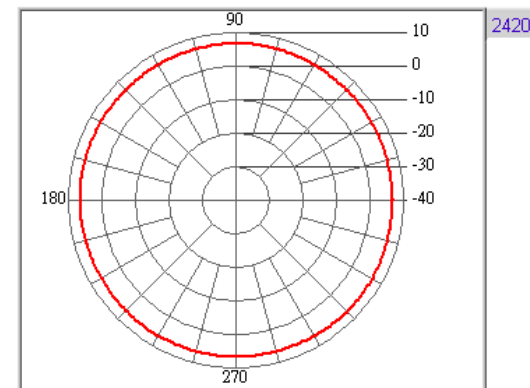
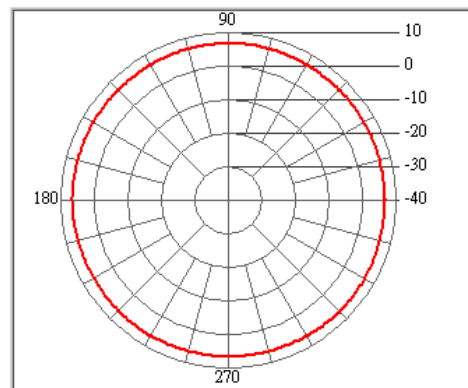
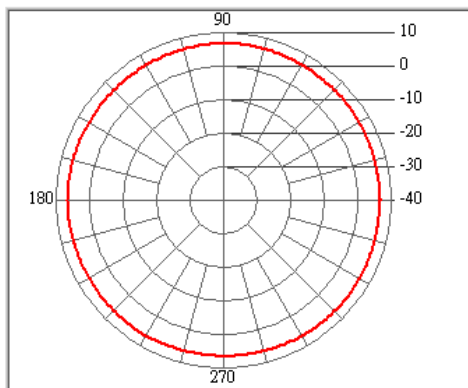
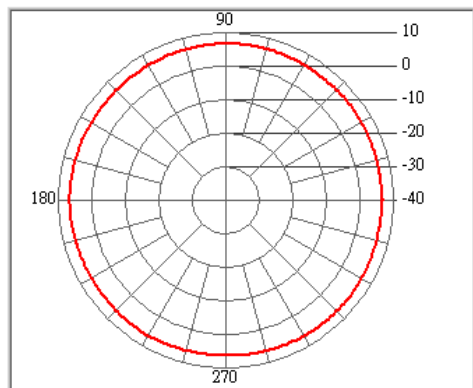
Time: **上午 09:43:49**

Temperatuer (°C): **25.00**

Humidity (%): **65.00**

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	6.81	6.87	6.95	6.94	6.99	6.91	6.82	6.94	6.86	6.72	6.5	6.71
Peak Degree	323	323	323	328	328	328	137	132	132	138	138	225
AV Gain (dBi)	6.55	6.58	6.64	6.66	6.74	6.73	6.69	6.7	6.59	6.46	6.31	6.55





Cortec Technology Inc.

广东省东莞市长安镇振安路沙头段咸西工业区

Antenna : 2.4G Antenna
Remark : E-Plane //H-Pol
Tested by :CORTEC Antenna 3D Lab

Location: **Chamber**

Date: **2011/7/4**

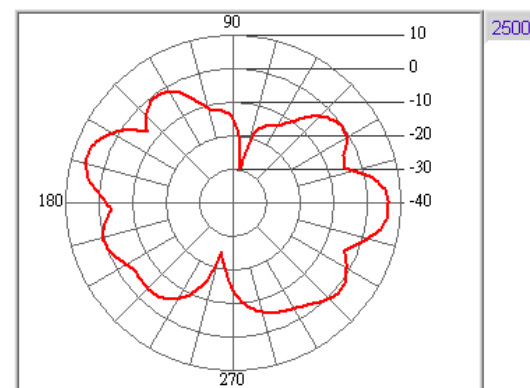
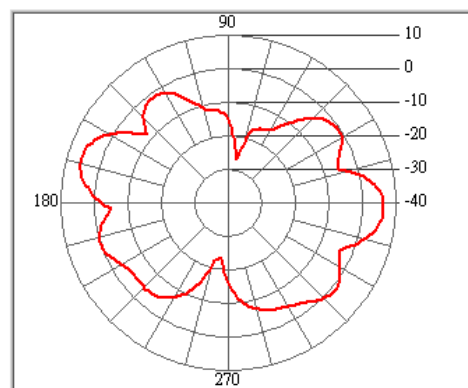
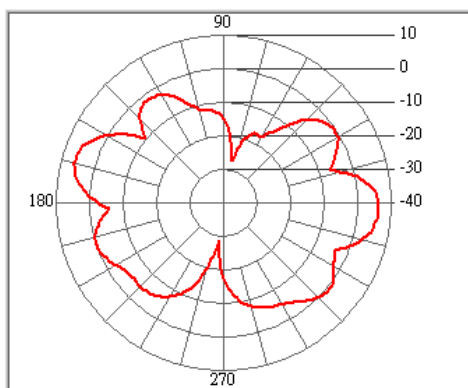
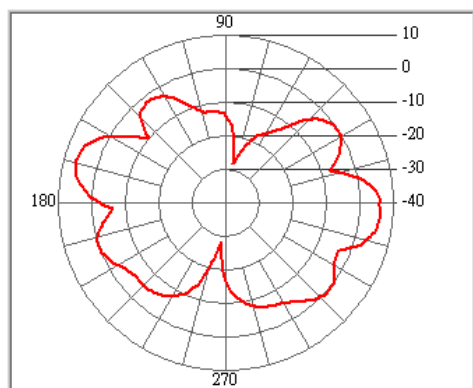
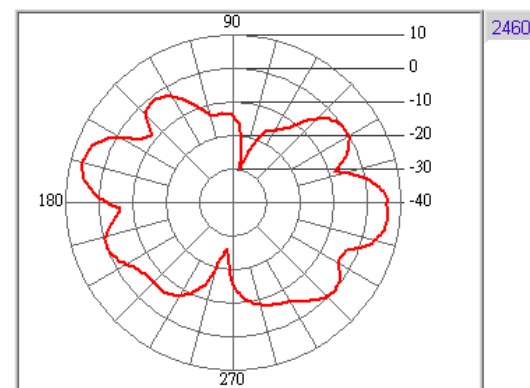
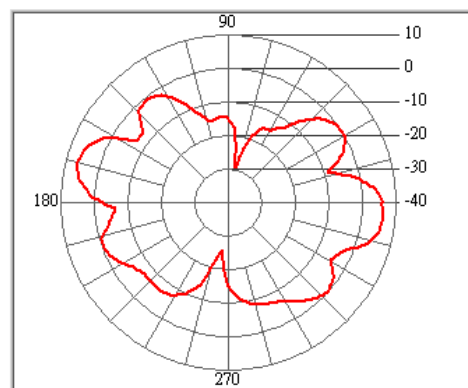
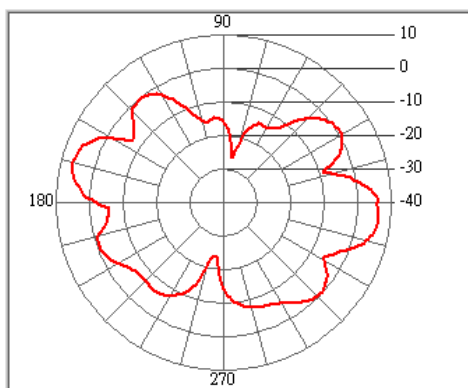
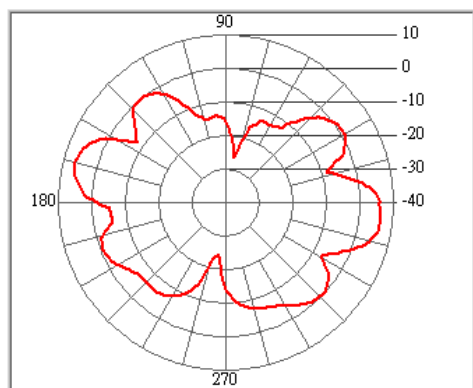
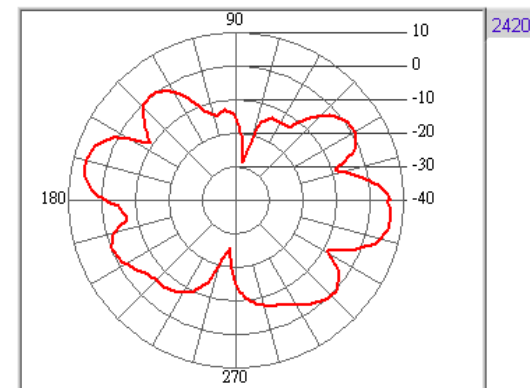
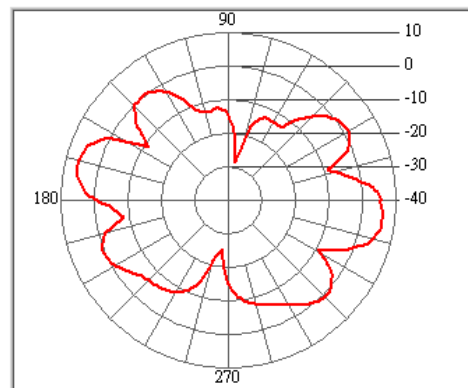
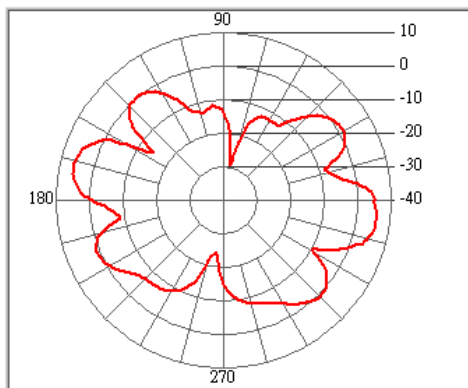
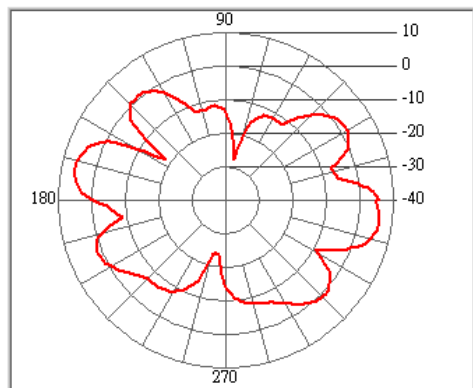
Time: **上午 09:48:32**

Temperature (°C): **25.00**

Humidity (%): **65.00**

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	6.25	6.07	6.4	6.52	6.59	6.62	6.48	6.52	6.42	6.32	6.39	6.47
Peak Degree	350	350	355	355	355	355	355	355	355	0	0	0
AV Gain (dBi)	-1.08	-1.26	-1.02	-1.05	-1.03	-1.08	-1.26	-1.13	-1.1	-1.17	-1.09	-0.93

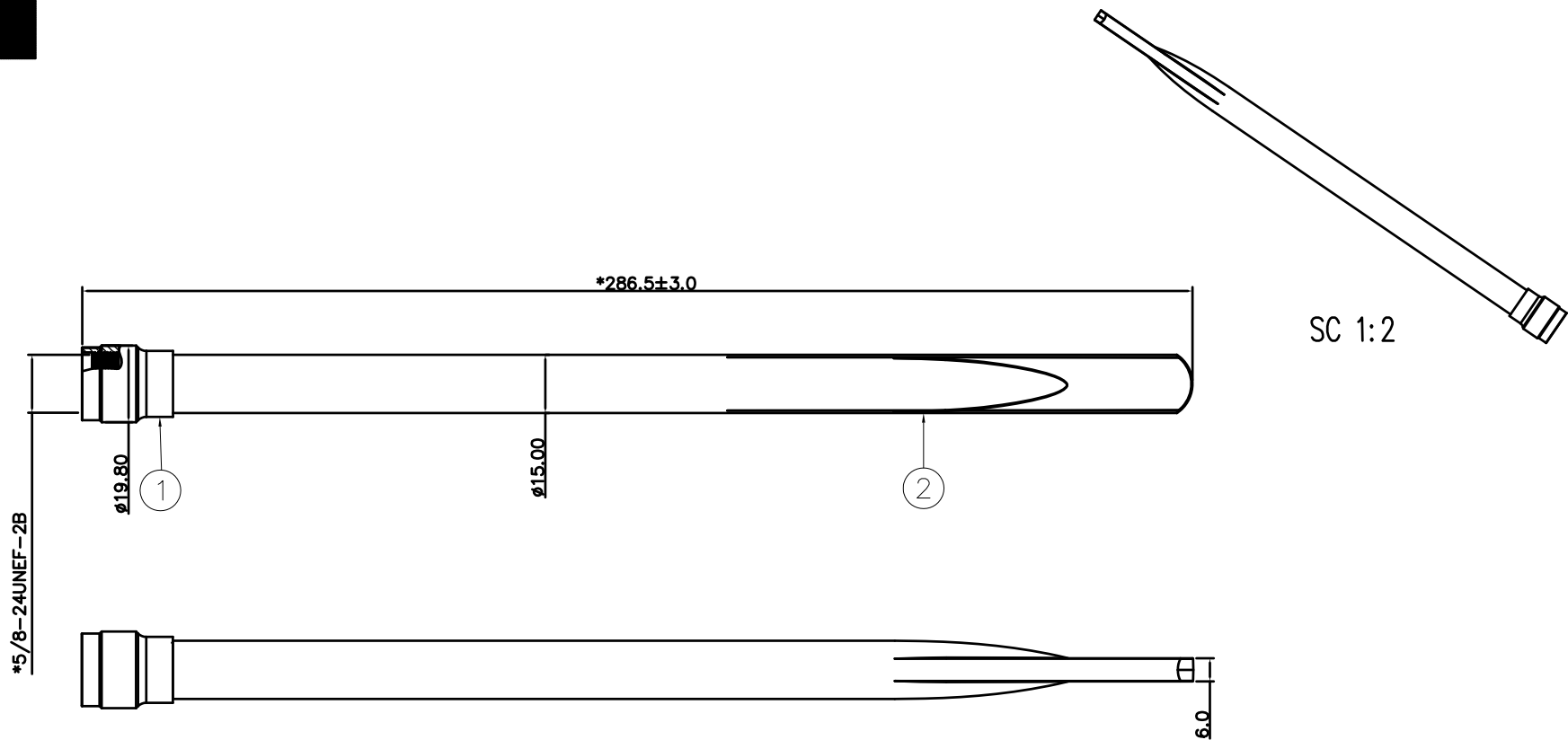


RoHS

Compatible



SIGN	DATE	DESCRIPTION	APPROVER
△	14.06.26	本体改为螺纹结构, 加螺纹密封胶防水, 取代AB防水胶, 包装规范改为100PCS每箱	HC
△			
△			



Note:

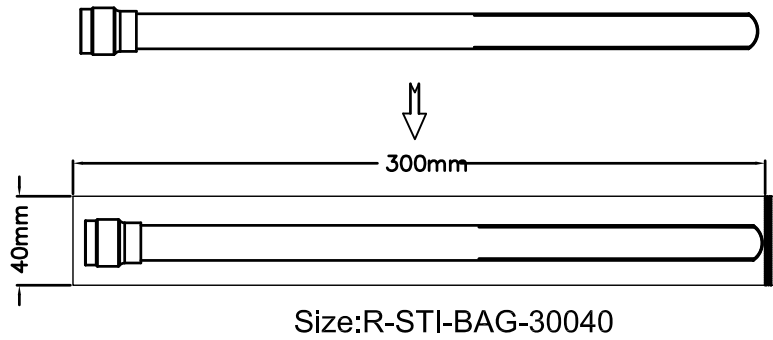
1. Mark * is important dimension; "CpK "Identify for process control(CpK ≥ 1.33).
2. Tolerance: Unmarked tolerance refer to the standard tolerance please.

No.	Part Number	Name	Material	Finish	Q'ty
2	DS02A-01W-SC	Body1	ABS	White	1
1	00N155-AYT578-C	N Male	Al-Alloy	Anode	1

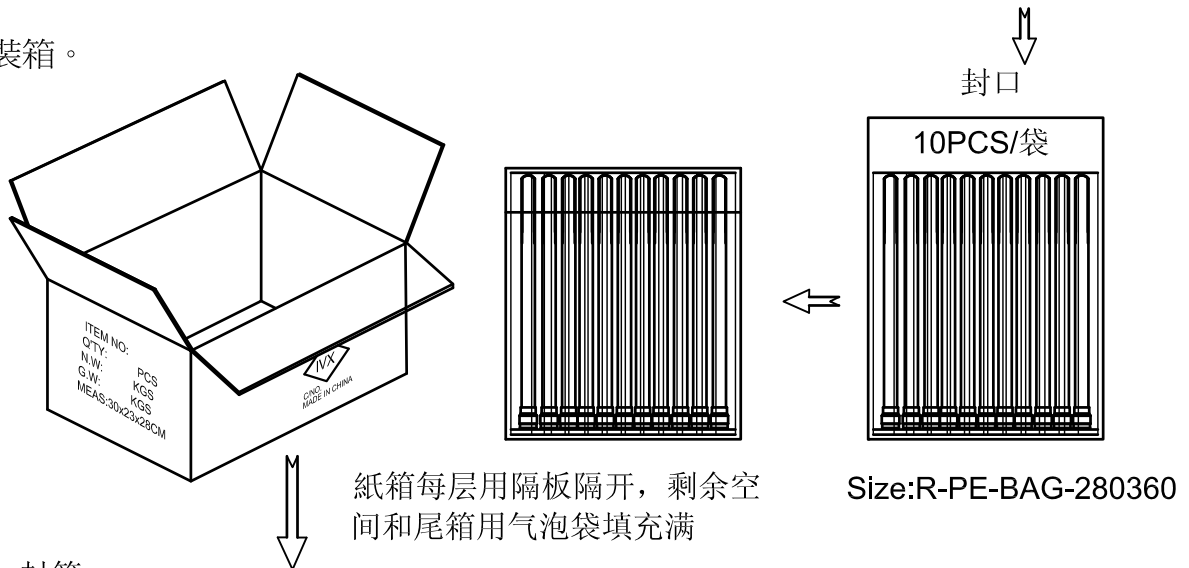
Invax System Group.				Cortec		Cortec Technology Inc.	
				Http://www.invaxsystem.com		Tel :886-2-27885218	
				E-mail:info@invax.com.tw		Fax:886-2-27831658	
TITLE: Antenna							
PART NO.: DS2400-0215WNNM				CUSTOMER P/N: /			
APP BY	CHK BY	RF BY	DES BY			Tolerance	
Grant	Jack	SF	HC			UNITS: mm	X.X
2016/09/13	2016/09/13	2016/09/13	2016/09/13	SCALE: 1/1		X.XX	±0.2
				REVISION: B		X°	±1

Part Number : DS2400-0215WNM	Revision : A
Name: Antenna	Customer : ALL

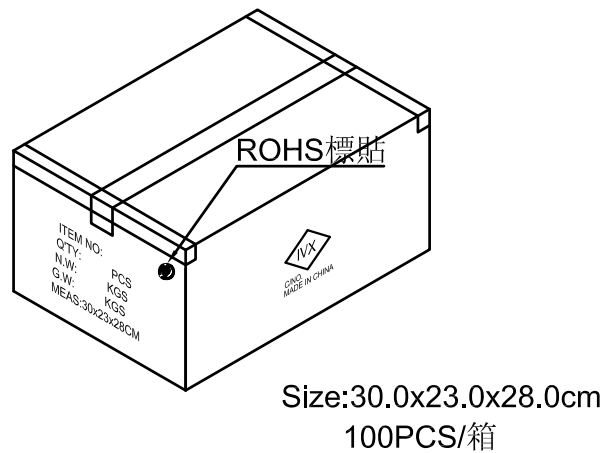
1. 產品入PE袋。



2. 裝箱。



3. 封箱。



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

COR/F-G-47a

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)



物料中HSF對象物質含量調查表

康捷電子有限公司	
填表：	時麗
部門：	研發部
職務：	文員

物料名稱：DS2400-0215WNM

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	DS02A-01W-SC	Body1	ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0114044541d5 001	2015.12.14	PA-757	TuvRheinland
2	00N155-AYT578-C	N Male	鋁	N.D.	N.D.	N.D.	N.D.			CANML1521730901	2015.12.17	6063Aluminium	SGS
3	ANT-PT-221115	Insulator	PTFE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANML1601149201	2016.01.22	聚四氟乙烯棒.	SGS
4	R-AN5225013-Z	Tube	鋅合金	7	20	N.D.	N.D.	N.D.	N.D.	SHAEC1601201806	2016.01.22	Castings zinc alloy	SGS
5	AN20-39	EVA	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1606242203	2016.04.19	spongia+gum	SGS
6	AN92-11 R-AN123009 R-AN60-06	Tube Spring	銅	N.D.	12	N.D.	Negative			CANEC1517453501	2015.10.15	C2700(H65).	SGS
7	R-RG-178U	Cable RG178	FEP	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	SHAEC1600886303	2016.01.19	PERFLUORINATED	SGS
8			PTFE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	NGBML1505119902	2016.01.08	聚四氟乙烯分散樹脂	SGS
9			鍍銀銅	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	SHAEC1607788405	2016.04.27	SILVER-COATED	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%、鋁含量達0.4%、銅合金中的鉛含量達4%