

規格承認書  
Approval Sheet

客戶名稱

Customer Name: Comtrend

產品名稱

Product description: Ant-1

泓淋料號

Hong Lin P/N: 290-50009

客戶料號

Customer P/N: 502219-239


實際之生產地

Production: 中國 江蘇 常熟

版別

日期

Version: X4 Date: 2013/11/14

客戶承認簽印 CUSTOMER APPROVED BY	供應商承認簽印 VENDER APPROVED BY
	
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Approval By:	Approval By:

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## 1 Specification

### 1.1 Electrical Properties

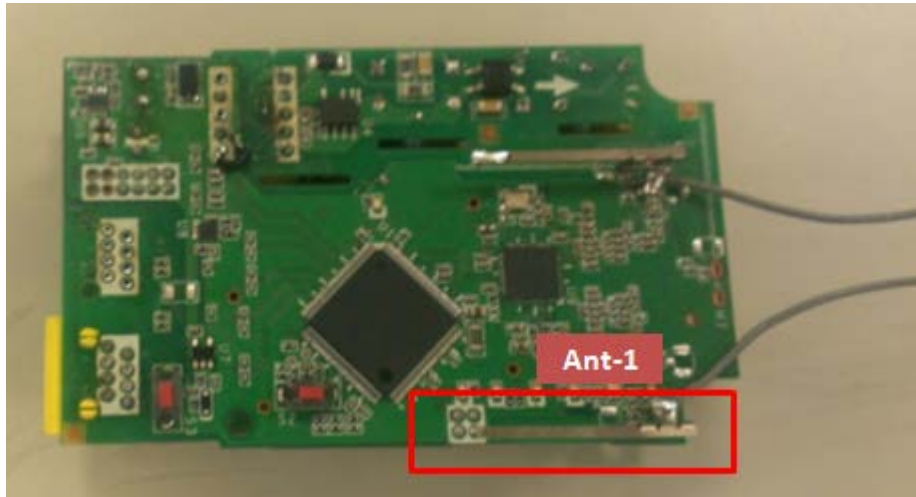
1.1.1 Frequency Range-----	2.4GHz~2.5GHz
1.1.2 Impedance-----	50Ω
1.1.3 VSWR-----	≤1.92:1 (With Housing)
1.1.4 Return Loss-----	-10dB (With Housing)
1.1.5 Peak Gain-----	1.76 dBi
1.1.6 Admitted Power-----	1W
1.1.7 Antenna type-----	PIFA type
1.1.8 Polarization-----	Vertical, Horizontal

### 1.2 Physical Properties

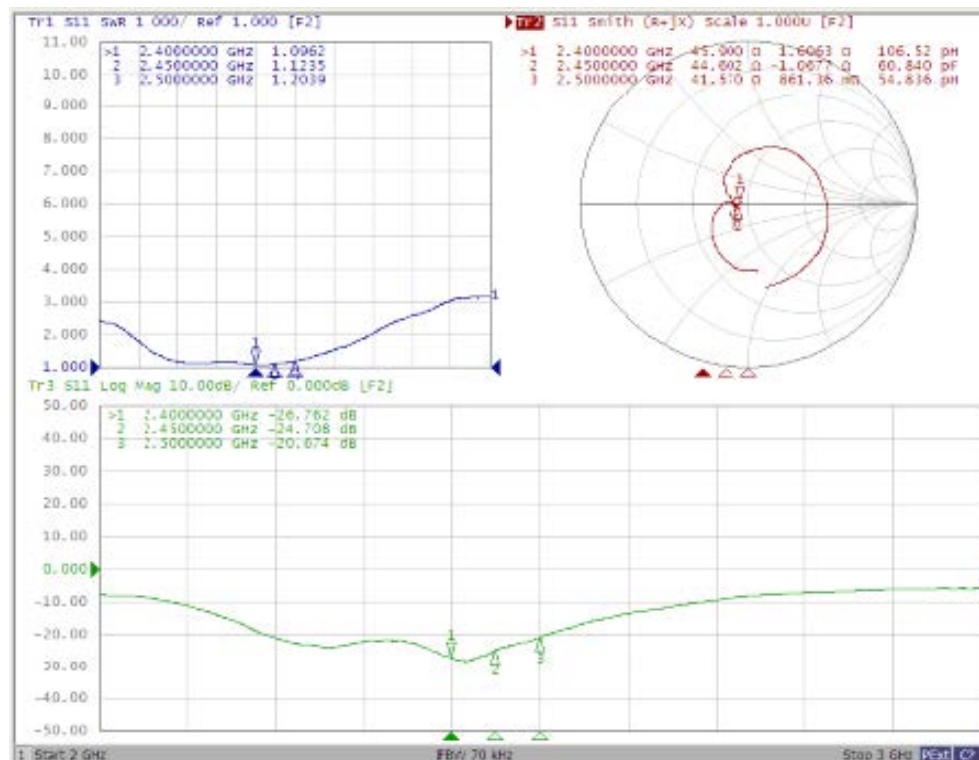
1.2.1 Antenna Body-----	SUS430 Plated Ni(不鏽鋼預鍍鎳)
1.2.2 Color-----	Silver
1.2.3 Operating Temp-----	-10°C~+60°C
1.2.4 Storage Temp-----	-10°C~+70°C

## 2 Test data

### 2.1 Antenna location

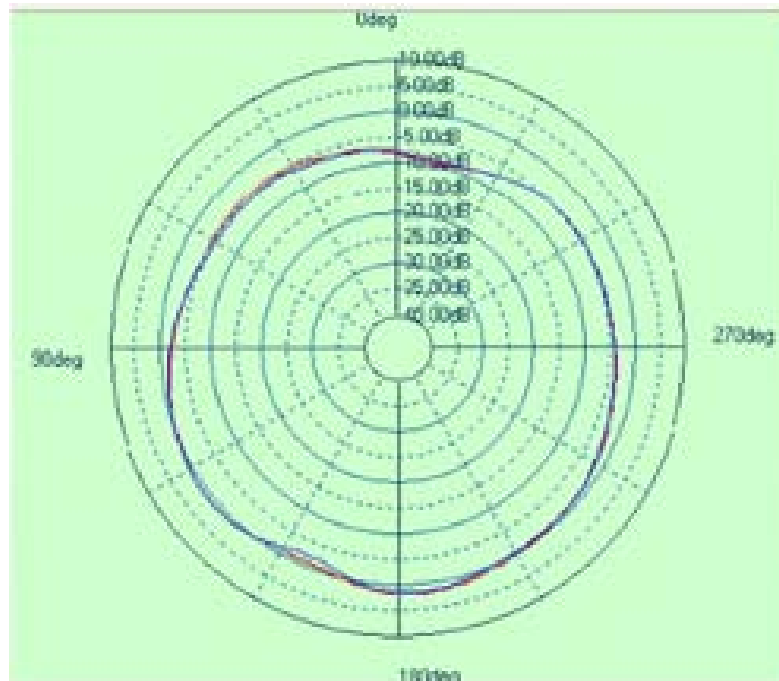


### 2.2 Return Loss and VSWR

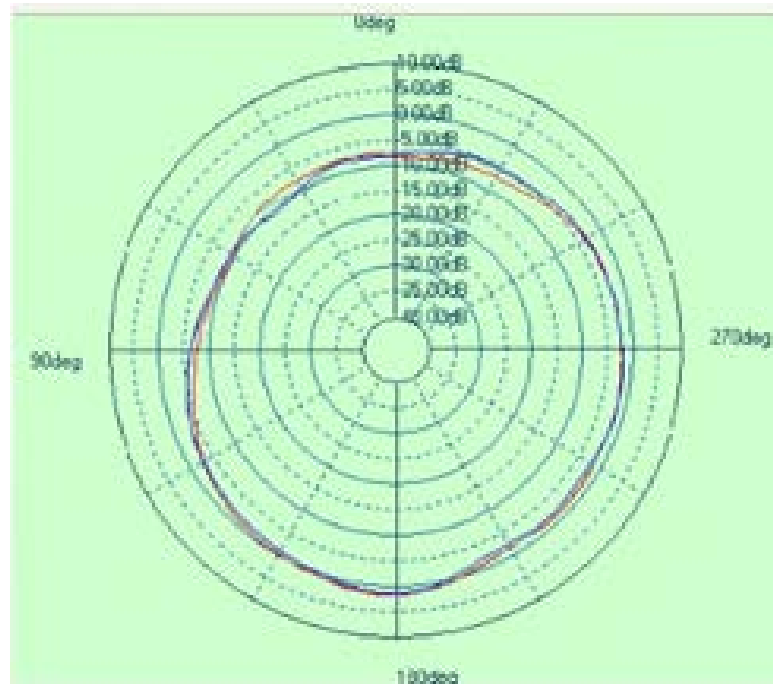


## 2.3 Radiation Pattern

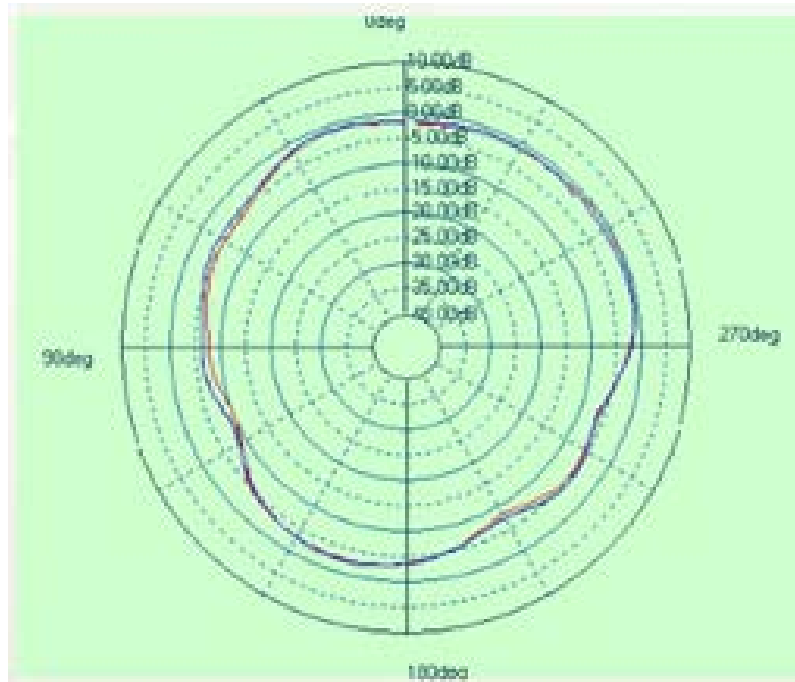
### 2.3.1 X-Z plane



### 2.3.2 Y-Z plane



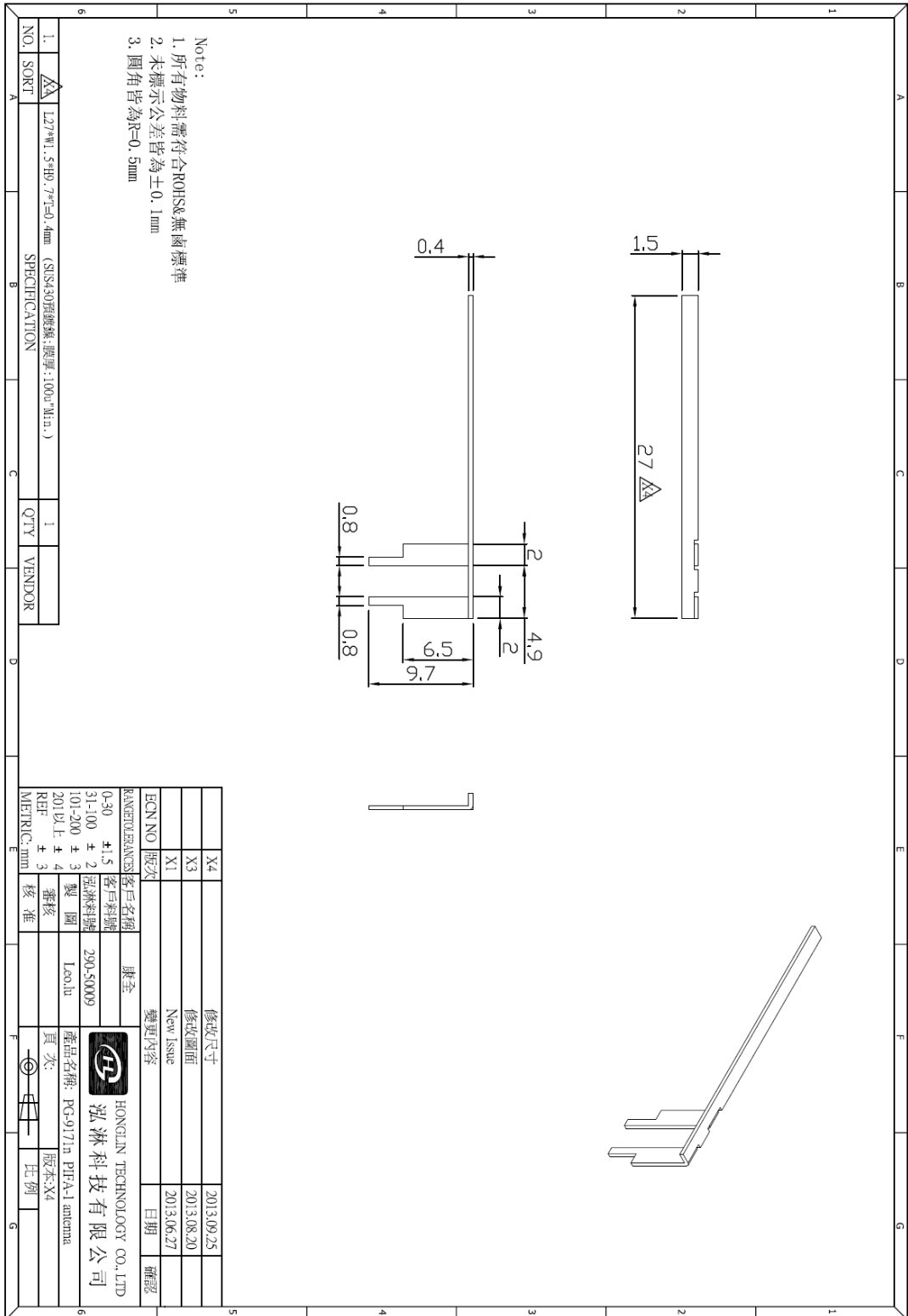
### 2.3.3 X-Y plane



### 2.4 Gain Table

Frequency (MHz)	X-Z plane Phi=0		Y-Z plane Phi=90		X-Y plane theta=90		E-total (dBi)	Efficiency (%)
	Peak Gain	Average Gain	Peak Gain	Average Gain	Peak Gain	Average Gain		
2400	1.55	-2.59	1.4	-3.56	-0.37	-3.86	1.74	55%
2450	1.37	-2.56	1.23	-3.42	-0.33	-3.59	1.76	57%
2500	1.25	-2.87	1.14	-3.68	-0.94	-3.62	1.27	56%

### 3 Antenna Assembly (成品圖)



## 测试报告

No. SHAMPLP1303306401

日期: 2013年03月13日

第1页,共4页

昆山志竟成金属制品有限公司  
江苏省昆山市玉山镇玉城南路18号

以下测试之样品是由申请者所提供及确认: SUS430 不锈钢

SGS工作编号: SC130301163 - SH  
材质牌号: SUS430  
样品接收日期: 2013年03月08日  
测试周期: 2013年03月08日 - 2013年03月13日  
测试要求: 根据客户要求测试  
测试方法: 请参见下一页  
测试结果: 请参见下一页

通标标准技术服务有限公司  
授权签名



JJ Fan 范晶捷  
批准签署人

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## 测试报告

No. SHAMPLP1303306401

日期: 2013年03月13日

第2页,共4页

测试结果:

### 测试样品描述:

样品编号	SGS样品ID	描述
1	SHA13-033064.001	银色金属片

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

### RoHS指令2011/65/EU

测试方法:

参考IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用点测试法/紫外-可见分光光度计比色法测定六价铬的含量.

测试项目	限值	单位	MDL	001
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
六价铬(CrVI)	-	-	◇	阴性

备注:

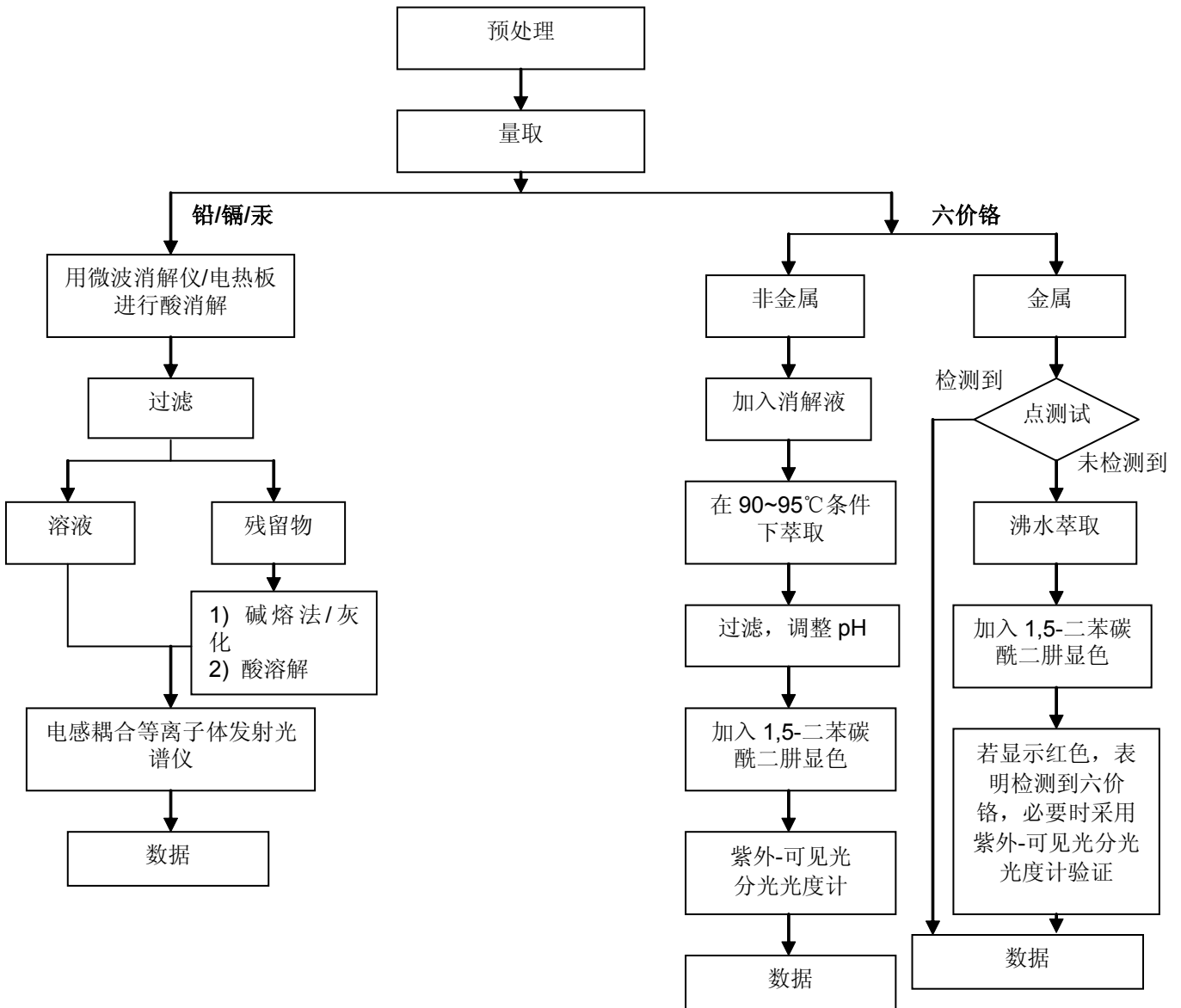
- (1) 最大允许极限值引用自指令2011/65/EU 附录II.
- (2) ◇点测试法:  
阴性= 未检测到六价铬,阳性 = 检测到六价铬;  
(当点测试结果为阴性或无法确定时,将采用沸水萃取法作进一步的结果验证.)  
◇沸水萃取法:  
阴性= 未检测到六价铬  
阳性= 检测到六价铬; 表明50 cm<sup>2</sup>表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于0.02 mg/kg  
由于未获知样品的存储条件和生产日期, 样品的六价铬测试结果仅能代表测试时样品含六价铬的状态.

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附件

## RoHS 测试流程图

- 1) 分析人员: 施青/王彦青/肖飞
- 2) 项目负责人: 张春华/徐亮
- 3) 样品按照下述流程被完全消解 (六价铬测试除外)



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