Product Number: AN2450-4902BRS
Product Name: Antenna

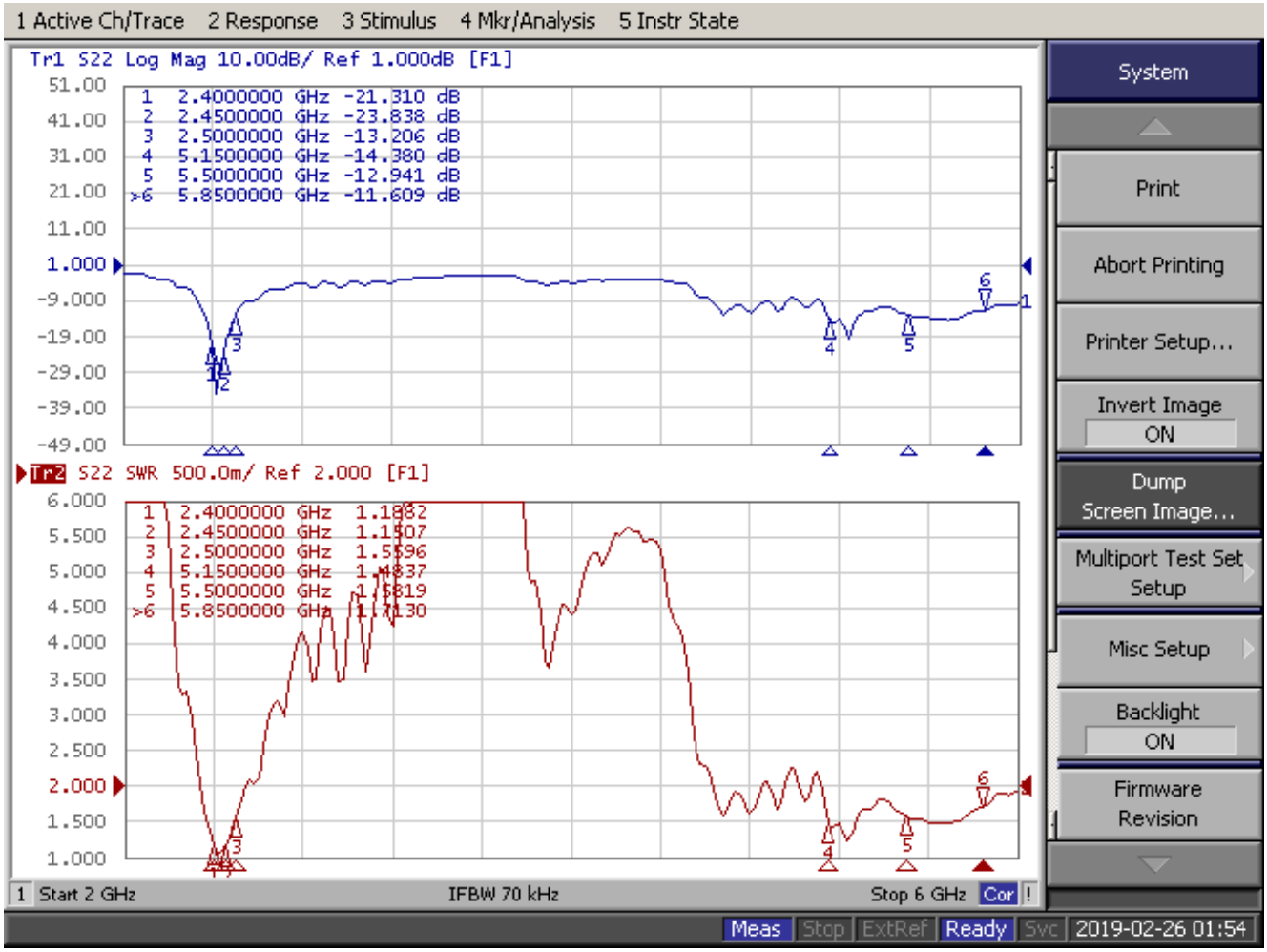
1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	**2400 ~ 2500 MHz** **5150 ~ 5850 MHz**
V.S.W.R.	**<= 2.0 @ 2400 ~ 2500 MHz** **<= 2.0 @ 5150 ~ 5850 MHz** **The data is tested with 1M cable**
Peak Gain	**2.92 dBi @ 2400 ~ 2500 MHz** **4.67 dBi @ 5150 ~ 5850 MHz**
Efficiency	**68 % @ 2400 ~ 2500 MHz** **50 % @ 5150 ~ 5850 MHz**
Polarization	**Dipole**
Impedance	**50 Ohm**
B. Material & Mechanical Characteristics	
Material of Radiator	**PCB**
Material of Plastic	**ABS / POM**
Cable Type	**RG-178U-03**
Connector Type	**SMA Male Reverse**
C. Environmental	
Operation Temperature	**- 40 ˚C ~ + 65 ˚C**
Storage Temperature	**- 40 ˚C ~ + 80 ˚C**
Antenna Color Storage life	**< 2** year

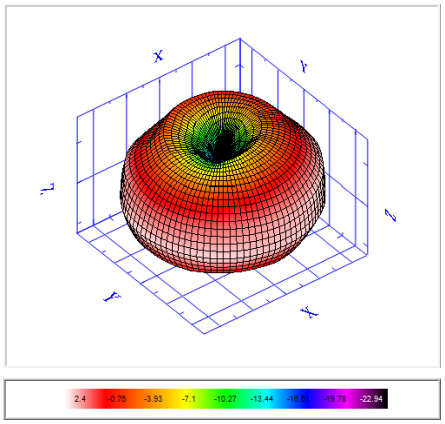
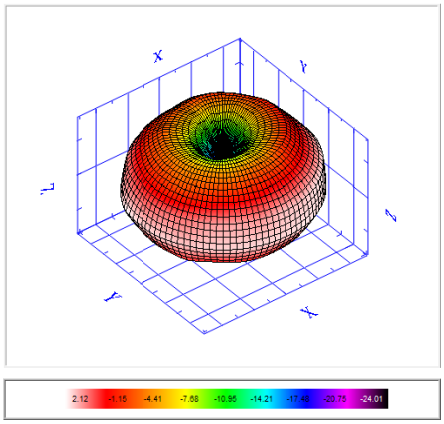
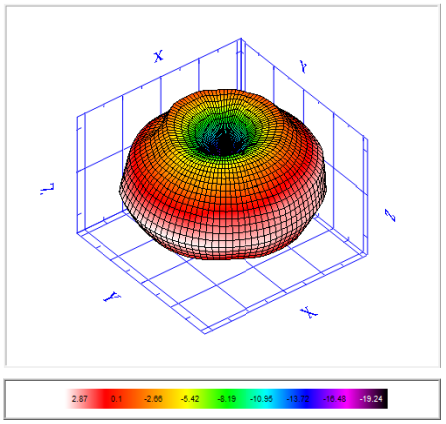
2. Characteristics and Reliability Test

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%
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 2015/863/EU
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2015/863/EU

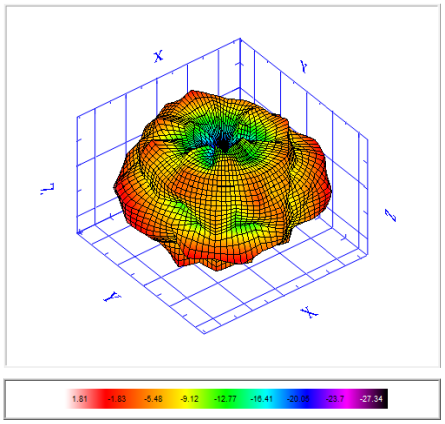
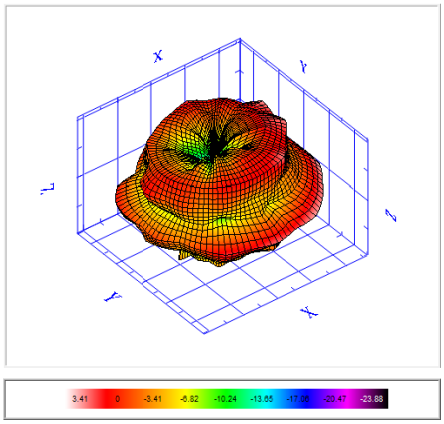
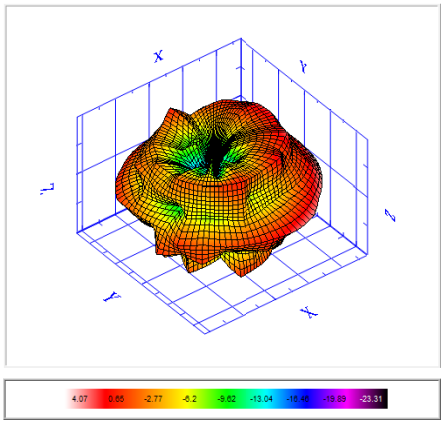
3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

2400 MHz	2450 MHz	2500 MHz
		

Frequency	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
E-Total Peak Gain (dBi)	2.4	2.29	2.58	2.36	2.45	2.12	1.98	2.41	2.92	2.77	2.87
Efficiency (%)	65.74	65.55	69.86	68.03	67.93	63	64.21	68.72	76.29	72.32	74.74
Average Gain (dB)	-1.82	-1.83	-1.56	-1.67	-1.68	-2.01	-1.92	-1.63	-1.18	-1.41	-1.26

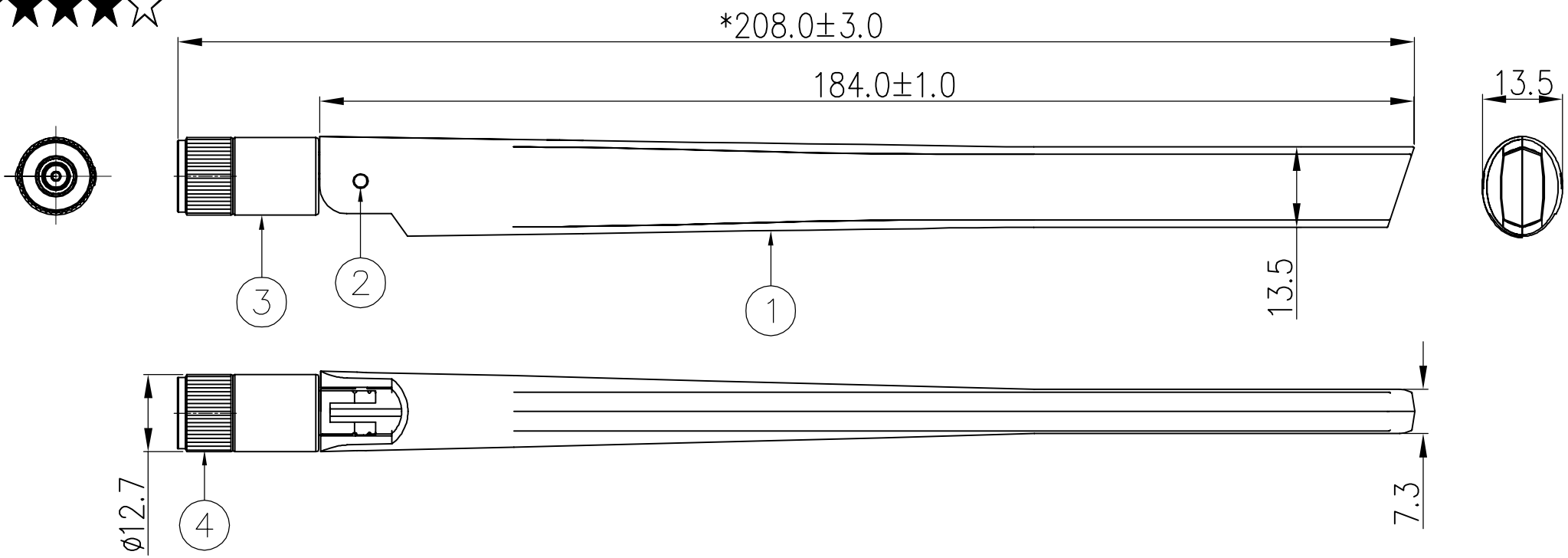
5150 MHz	5500 MHz	5850 MHz
		

Frequency	5150	5200	5250	5350	5470	5500	5600	5700	5725	5785	5800	5850
E-Total Peak Gain (dBi)	1.81	0.93	2.4	2.31	2.87	3.41	3.68	2.61	2.78	4.61	4.67	4.07
Efficiency (%)	37.34	39.81	45.04	42.49	55.14	52.55	54.96	55.34	55.9	62.94	61.33	59.87
Average Gain (dB)	-4.28	-4	-3.46	-3.72	-2.59	-2.79	-2.6	-2.57	-2.53	-2.01	-2.12	-2.23

RoHS Compatible

★★★★☆

SIGN	DATE	DESCRIPTION	APPROVER
B			
C			
D			



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	Description	Material	Finished	Q'ty
4	SMA306-CCR5AN92-Z	SMA Male RP	Cu	Black	1
3	AN0304-T06B	Connectorin	ABS	Black	1
2	AN03-514PB	Pin	POM	Black	2
1	BODY-AN49-01B	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: Antenna

PART NO.: AN2450-4902BRS CUSTOMER P/N: /

APP BY	CHK BY	RF BY	DES BY	
Grant 2019.03.05	Kenny 2019.03.05	YJF 2019.03.05	LJF 2019.03.05	UNITS: mm SCALE: 1/1 REVISION: A

Tolerance

X.X ±0.3
X.XX ±0.1
X° ±1

Invax System Group.

Cortec

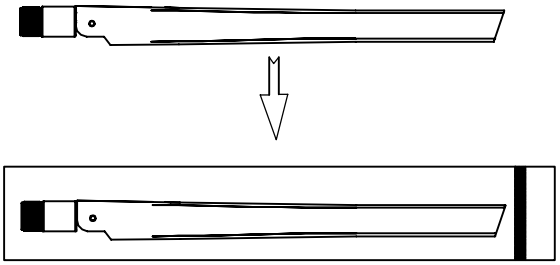
產品包裝規範
PACKING CRITERION

★★★★☆

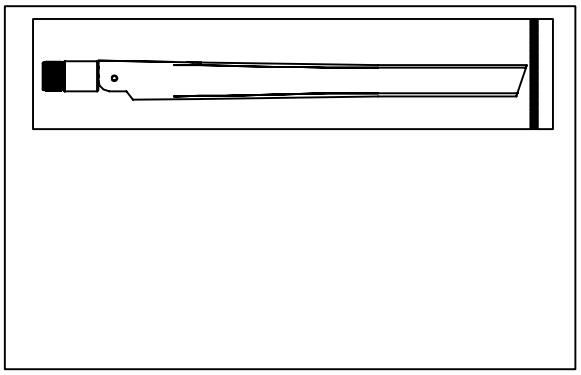
Date: 2019/03/05

Part Number : AN2450-4902BRS	Revision : A
Name: Antenna	Customer : ALL

一.自粘袋。



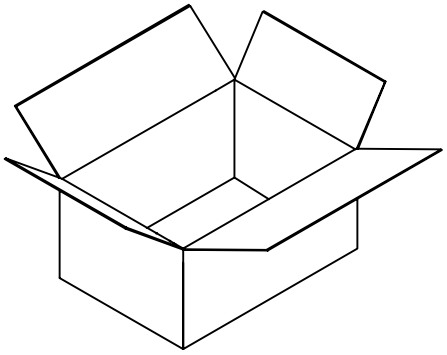
R-STI-BAG-25040
1PCS裝一自粘袋



R-PE-BAG-310290
20PCS/PE袋

二.裝箱。

R-FL-2821 上下各放1PCS隔板

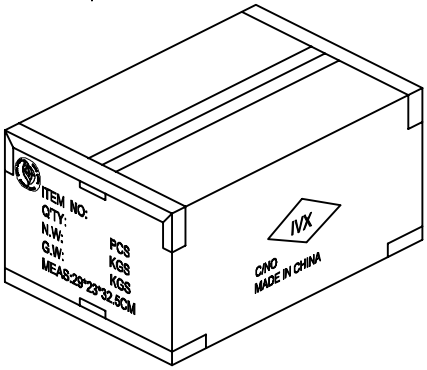


規格:R-0TT-C-2923325 300PCS/箱
多余空间用气泡袋填满

三. 封箱

側麥

正麥



外箱側麥右上角貼一張ROHS標簽。
須填寫產品品號/數量/淨重/毛重。
或以實際重量填寫。

APPROVED BY : Grant	CHECKED BY : Kenny	DESIGNED BY : LJF

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)

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：AN2450-4902BRS

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RoHS2.0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	DBP	BBP	DIBP	DEHP				
1	BODY-AN49-01B	Body-1	ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0114084381d5001	2018.11.29	POLYLAC® PA-757	TuvRheinland
2	AN0304-T06B	Body-2	ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0114084381d5001	2018.11.29	POLYLAC® PA-757	TuvRheinland
3	AN03-514PB	Hinge Pin	POM	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANML1808483301	2018.05.10	聚甲醛	SGS
4	SMA309-CPR5ANT-C	SMA Male Reverse	銅	35	31411	N.D.	N.D.							CANEC1809381105	2018.05.23	Brass Rod.	SGS
5			POM	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANML1808483301	2018.05.10	聚甲醛	SGS
6	PB-AN49-2450FB2	PCB	FR4	N.D.	9	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	SHAEC1828205502	2018.12.26	FR-4.0环氧玻纤板	SGS
7	R-GS-SP2001001	EVA	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	SZC18050491291-7	2018.05.09	EVA+gum	HCT
8	R-RG-178U-03	Cable (RG178)	FEP	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	NGBML1900152502	2019.01.16	聚全氟乙丙烯树脂	SGS
			PTFE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	NGBML1900158602	2019.01.16	聚四氟乙烯分散树脂	SGS
			镀银铜	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	SHAEC1901381806	2019.01.29	镀银圆铜线.	SGS
			鍍錫銅	N.D.	11	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	A2180042511101001C	2018.04.10	镀锡圆铜线	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，鎘的允許濃度為5ppm
歐盟ROHS指令豁免條款2015/863/EU、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%