

承 認 書
SPECIFICATION FOR APPROVAL

客 戶
CUSTOMER

泰鉅科技股份有限公司

日 期
DATE

2007/12/11

品 名
DESCRIPTION

WSS017 2.4GHz Monopole Antenna
With RP-SMA (M)(白)

客 戶 料 號
CUSTOMER P/N

成 品 編 號
Part NO.

WFW2145A1



萬旭電業股份有限公司

WANSHIH ELECTRONIC CO., LTD.

台北縣五股鄉五工六路 72 號 3 樓

3F 72 WU KONG 6TH RD., WU KU INDUSTRIAL DISTRICT

TAIPEI HSIEN, TAIWAN, R.O.C.

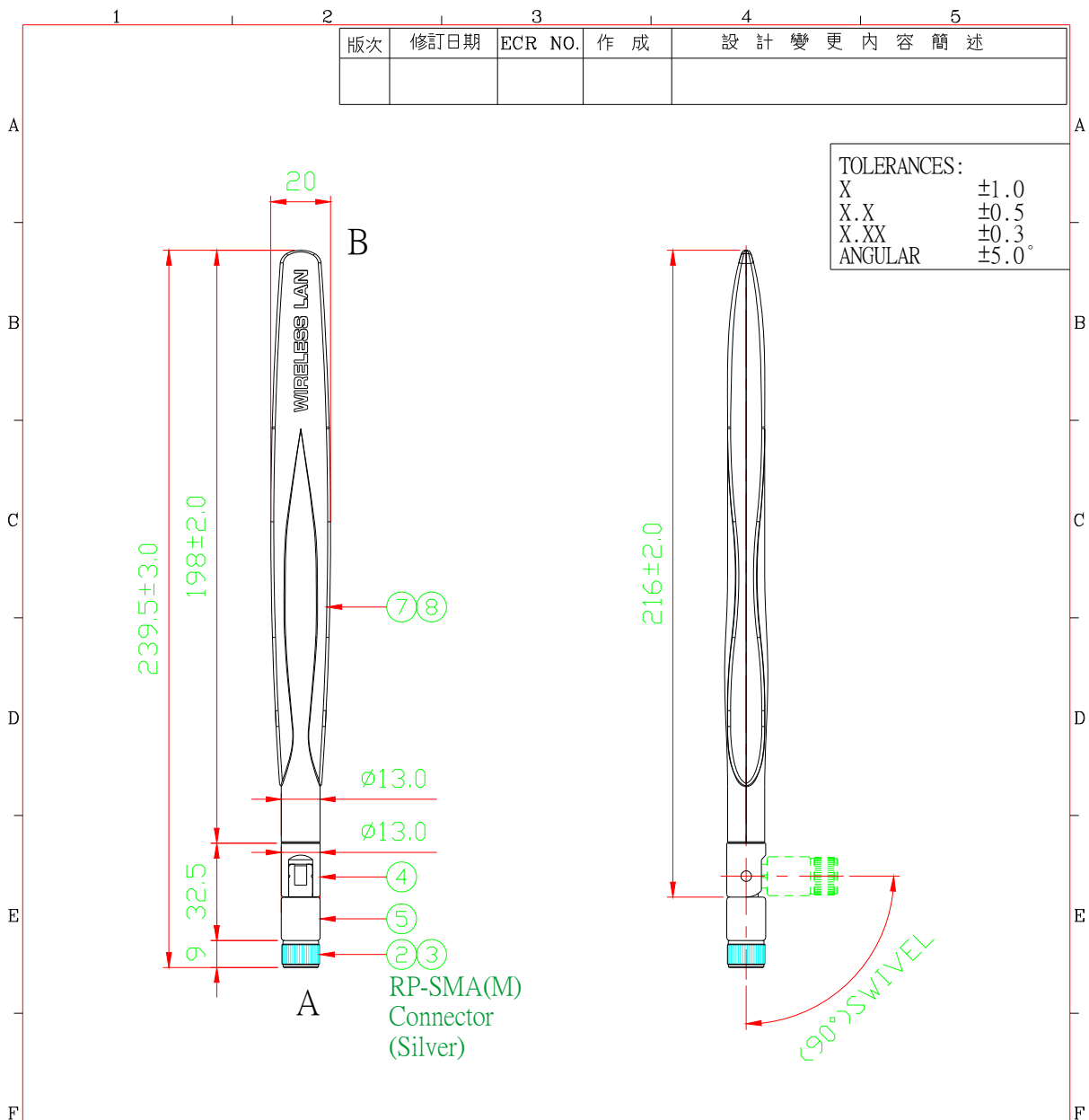
TEL : (02) 22988066 (5 LINE) FAX : (02)22981102

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SPECIFICATION

- | | |
|-------------------------------|---|
| 1. Description | : WSS017 Monopole Antenna
With RP-SMA(M) |
| 2. Customer | : 泰鉅科技股份有限公司 |
| 3. Model No. | : WSS017 |
| 4. Part No. | : WFW2145A1 |
| 5. Standard | : IEEE 802.11b/g Wireless LAN |
| 6. Antenna Profile | : 239.5 mm (see Drawing) |
| 7. Color | : 白 |
| 8. Electrical Characteristics | |
| Operating Frequency | : 2.4~2.5GHz |
| Antenna Type | : Monopole |
| Polarization Type | : Linear |
| Type of Radiation | : Toroidal |
| Antenna Gain | : 5.0 dBi Typical |
| Impedance | : 50 Ohm nominal |
| V.S.W.R. | : 2.0:1 Max. |
| 9. Mechanical Characteristics | |
| Swivel | : 90 degrees |
| Connector | : RP-SMA(M) |
| Core | : N/A |
| 10. Raw Material | |
| Coaxial Cable | : RG-178 |
| Housing | : PC+ABS |
| Hinge | : PC+ALLOY |

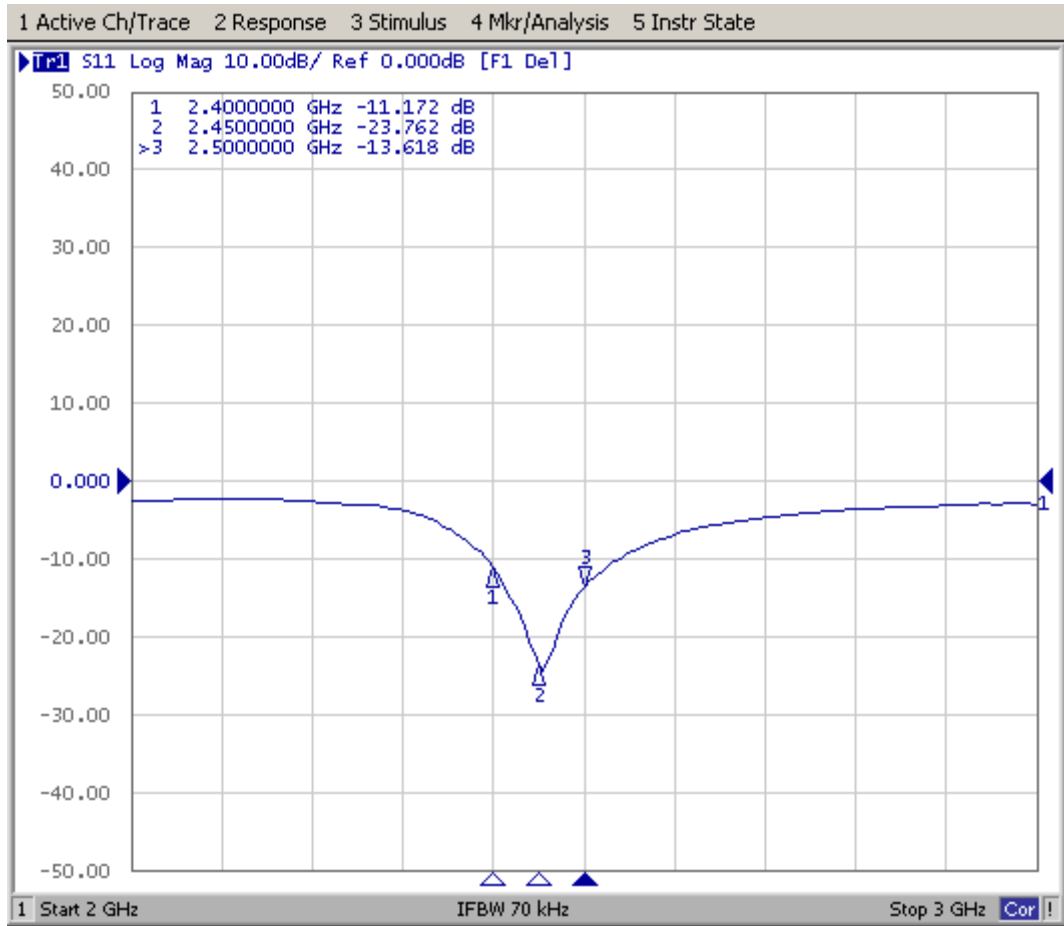


12	外套 UP-1	√	@WSS017 13 φ*198L UP-1 <白>	白	1	或同級品
11	外套 LOW-1	√	@WSS017 13 φ*198L LOW-1 <白>	白	1	或同級品
10	膠帶 KAPTON	√	@90014-N KAPTON膠帶 W=15mm L=21mm <收捲>	黃	1	或同級品
9	熱縮套管	√	@F34 6.0 黑 L=37mm	黑	1	或同級品
8	彈簧	√	@彈簧<F>天線用	金	1	或同級品
7	銅管 28.5L	√	@5.2 φ*28.5L*0.2T 銅管<平頭>	銀	1	或同級品
6	固定鉚釘	√	@4.80*1.95 φ 固定鉚釘(大)(鍍)	銀	2	或同級品
5	下座 L25.5	√	@下座13*25.5L 白 <天線用>	白	1	或同級品
4	上座 L28	√	@上座13*28L 白 <天線用>	白	1	或同級品
3	RP-SMA φ 12.5 連接軸	√	@0249A-B Connector RP-SMA(M) φ 12.5	銀	1	或同級品
2	RP-SMA φ 12.5 本體	√	@Body RP-SMA(M) φ 12.5 Connector	銀	1	或同級品
1	RG-178 Coaxial Cable	√	@RG-178 CABLE 105SV(萬泰)	橙	77	或同級品
NO	材料名稱	環材	零件規格	顏色	切斷尺寸	用量 備註

修訂日期:		制訂日期: 2007/12/11		承認圖號		WSS017 2.4GHz Monopole Antenna with RP-SMA(M)(白)	
頁數: 1/1	核准	審查	作成	品名			
單位: mm	Jason	李金昭	郭雅珍	成品編號			
比例: FREE				WF2145	REV A	VERSION 1	

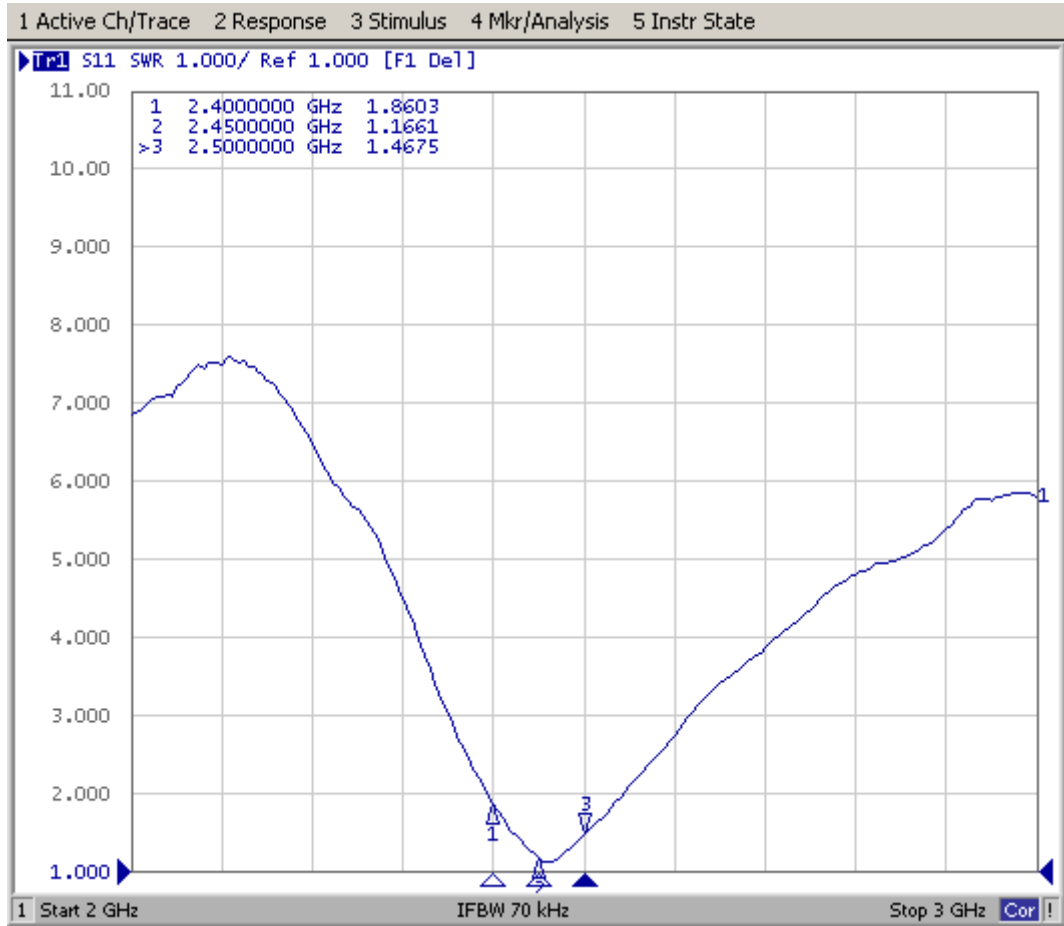
Electrical Properties

Return Loss



Electrical Properties

V.S.W.R



Electrical Properties

Radiation Pattern – H Plane

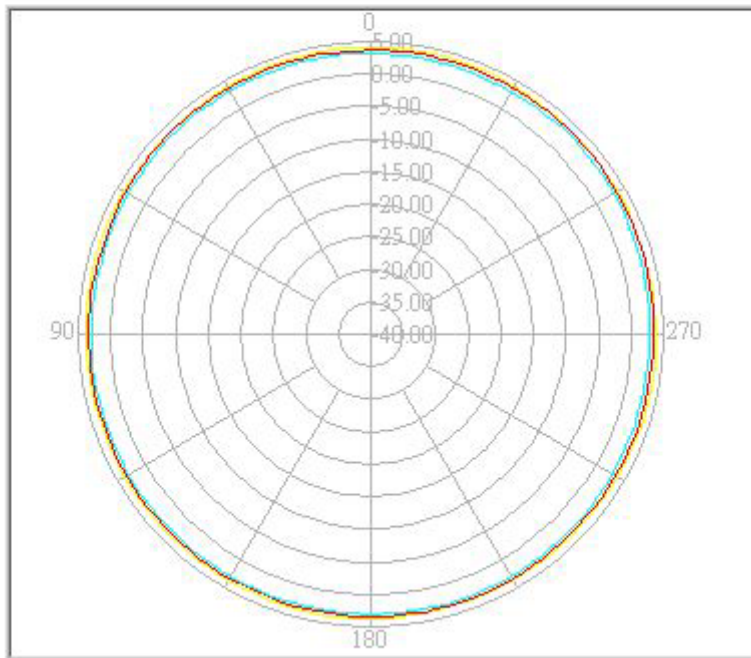


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Model No: 1111

Antenna Position: Vertical

Test Mode: H



Freq(MHz)	peak(dBi)	Angle(o)	Avg(dBi)
2400.00	4.21	16.91	3.85
2450.00	3.77	326.17	3.54
2500.00	3.23	318.93	3.05

Electrical Properties

Radiation Pattern – E Plane

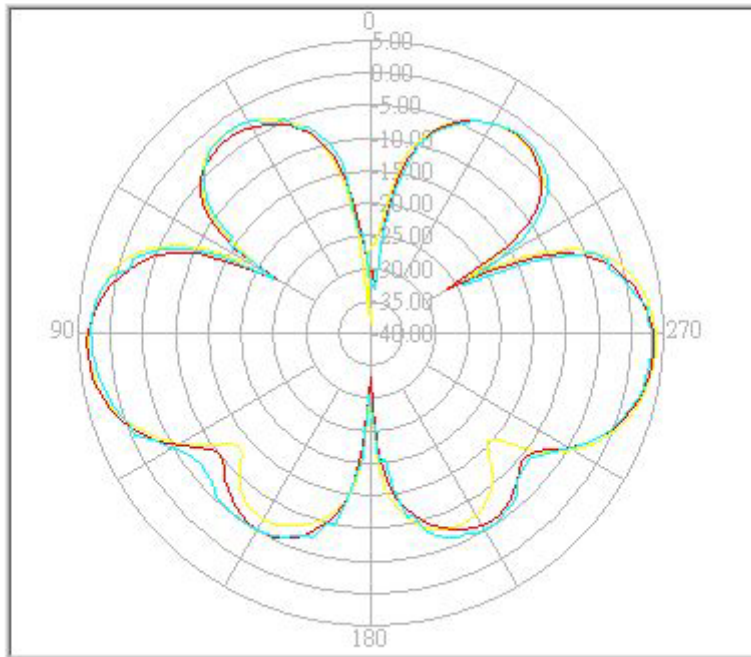


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Model No: 1111

Antenna Position: Horizontal

Test Mode: E



Freq(MHz)	peak(dBi)	Angle(o)	Avg(dBi)
2400.00	3.81	91.81	-2.50
2450.00	3.65	265.77	-2.70
2500.00	3.30	91.81	-2.67

Coaxial Cable Data Sheet
RG-178

SPECIFICATION FOR APPROVAL

DOCUMENT: A30178B001

STYLE : 105°C 30V
RG-178B/U

SIZE: 7/0.102 SCCS

RECOGNIZED: UL 1979



WONDERFUL HI-TECH CO.,LTD

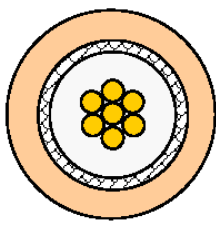
OFFICE : 72WU KONG 6TH ROAD,
WU KU IND. DISTRICT
TAIPEI HSIEN, TAIWAN

TEL : (02)22988033
FAX : (02)22988031-2

FACTORY : 17 PEI YUAN ROAD,
CHUNG-LI IND. PARK
TAIWAN, R.O.C.

TEL : (03)4527777
FAX : (03)4517214

 **WONDERFUL HI-TECH CO., LTD**
SPECIFICATION

STYLE	105°C 30V UL1979	DOCUMENT NO : A30178B001	
SIZE	RG-178B/U	ESTABLISHED DATE: 2004/03/22	
STANDARD : MIL-C-17			
Conductor	Size	AWG	30
	Material	----	Silver-Coated Copper Clad Steel
	Conductors No.	----	7
	Conductors Size	mm	0.102
	O.D.	mm	0.30
Insulation	Average Thickness	mm	0.28
	Diameter	mm	0.86 ±0.03
	Material	----	FEP
	Color	----	Clear
Braid	Material	----	Silver-Coated Copper
	Construction	mm	16 / 3 / 0.10
	Coverage	%	95
Jacket	Average Thickness	mm	0.25
	Diameter	mm	1.80 ±0.05
	Material	----	FEP
	Color	----	Brown
Marking			
Drawing			

 **WONDERFUL HI-TECH CO., LTD.**
SPECIFICATION

Electrical & Physical Properties						
Item		RG-178B/U				
Rating Temp Voltage		105°C 30V				
Conductor Resistance		838 OHM/KM/20°C MAX.				
Insulation Resistance		3000 MEGA OHM/KM MIN.				
Dielectric Strength		AC 500V/Minute				
Spark Test		2.5 KV				
Insulation	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / m m ²)			
		Elongation	200% MIN.			
	Aged	Tensile Strength	UNAGED MIN 75%(168HRS×232°C)			
		Elongation	UNAGED MIN 75%(168HRS×232°C)			
Jacket	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / m m ²)			
		Elongation	200% MIN.			
	Aged	Tensile Strength	UNAGED MIN.75%(168HRS×232°C)			
		Elongation	UNAGED MIN.75%(168HRS×232°C)			
Nom. Impedance		50 Ohms				
Nom. Capacitance		95.8 pF/m				
Nom. Vel. of Prop.		69.5%				
VSWR (0 – 6 GHZ)		UNDER 1.3				
Attenuation (dB/100m)	100MHz	1GHz	1.8GHz	2.4GHz	5.2GHz	6GHz
	46	155	295	340	505	550

AK001/210X297/1.0

PAGE : 2

EDITION : 1.2

MAKER : C.Y.CHEN

CONFIRM : S.N.WONG

APPROVAL : W.J.WANG

Housing Material Data Sheet

- Hinge (Base/Holder) – PC+ALLOY

SHINBLEND [®] ALLOY ENGINEERING PLASTIC DIVISION	SHINKONG SYNTHETIC FIBERS CORPORATION 新光合成纖維股份有限公司 8th Fl., 123, Sec.2, Nanjing East Road, Taipei, Taiwan Tel: 886-2-2507-0131, 886-2-2507-1233 (40 Lines), 886-3-4932131-1730 Fax: 886-2-2506-8047, 886-3-491-5763
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Technical Data

SHINBLEND [®] A724NA High Impact Grade / 超韌級 AD4011
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		Unit	Test Method	Values
Mechanical properties		機械性質		
Izod Impact(Notched) 23°C	衝擊強度	Kg-cm/cm	ASTM D256	85
-20°C	衝擊強度	Kg-cm/cm	ASTM D256	70
-40°C	衝擊強度	Kg-cm/cm	ASTM D256	65
Tensile Strength	拉伸強度	Kg/cm ²	ASTM D638	540
Elongation	拉伸率	%	ASTM D638	100
Flexural Strength	彎曲強度	Kg/cm ²	ASTM D790	800
Flexural Modulus	彎曲模數	Kg/cm ²	ASTM D790	20000
Thermal properties		熱性質		
Heat Deflection Temperature	熱變形溫度		ASTM D648	
66psi		°C		-
264psi		°C		100
Flammability	防火性	-	UL94	-
Melting Point	熔點	°C	DSC	223
Electrical properties		電氣性質		
Dielectric Strength	介電強度	KV/MM	ASTM D149	-
Dielectric Constant	介電常數	...	ASTM D150	-
Volume Resistivity	體積電阻	Ω-CM	ASTM D257	-
Other properties		其它性質		
Specific Gravity	比重	-	ASTM D792	1.19
Water Absorption	吸水率	%	ASTM D570	0.14
Mold Shrinkage	成形收縮率		ASTM D955	
Flow	流動方向	%		0.4~0.6
Cross Flow	垂直方向	%		0.5~0.7

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