



權億科技股份有限公司
Master Wave Technology Co., Ltd.

承認書

APPROVAL SHEET

Customers: 神準科技股份有限公司

Customer Model No.: 7102A0413000

Master Wave Model No. 98143MRSX000

Product Description: 8143 Replacement Ant.

Issue Date: 2016/5/4

REV.: 00

客戶承認用印		權億承認用印	
			
核准 Approve	主管 Chief	承辦 Responsible	
Hero	Matt	Mango	

MASTER WAVE TECHNOLOGY CO., LTD.

權億科技股份有限公司

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Table of Contents

Item

1. Antenna Specifications

-Drawing

2. Test Report

-Electrical test
-Antenna Efficiency
-Pattern test

3. Material Certifications

-Connector
-Cable

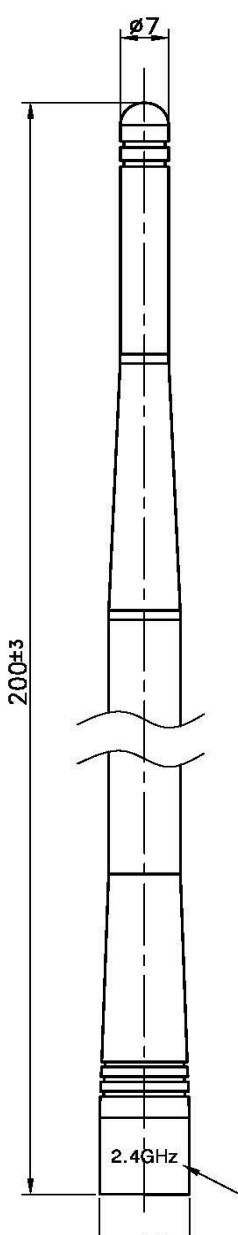
4. Packing

-PE Bag
-Carton

Modification History:

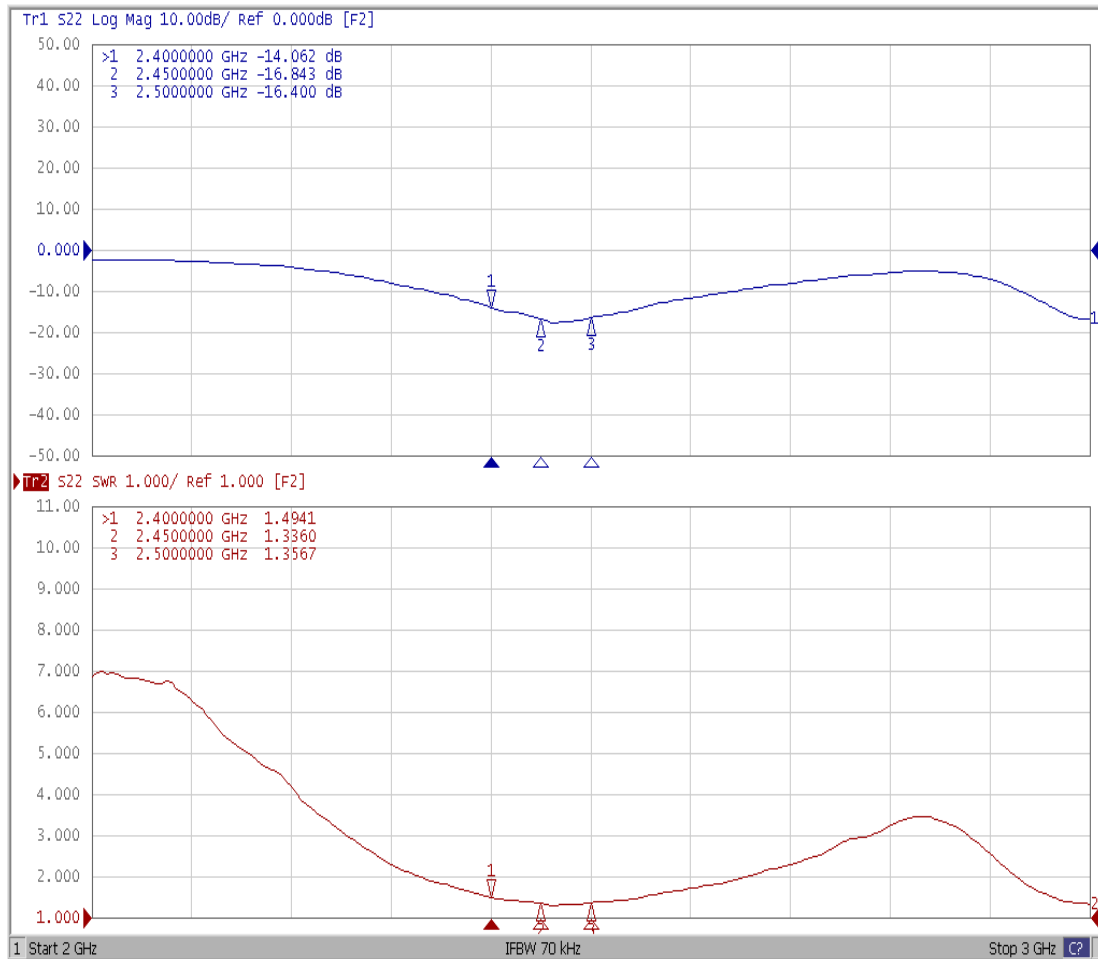
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REV		ZONE		DESCRIPTION		ENG		APPROVED		DATE																									
																																			
<table border="1"><thead><tr><th colspan="2">Electrical Properties</th></tr></thead><tbody><tr><td>Frequency Range</td><td>2.4~2.5 GHz</td></tr><tr><td>Impedance</td><td>50Ω</td></tr><tr><td>V.S.W.R.</td><td>≤2.0</td></tr><tr><td>Radiation</td><td>Omni</td></tr><tr><td>Gain</td><td>5 dBi</td></tr><tr><td>Polarization</td><td>Vertical</td></tr></tbody></table> <table border="1"><thead><tr><th colspan="2">Mechanical Properties</th></tr></thead><tbody><tr><td>Whip</td><td>TPE</td></tr><tr><td>Connector</td><td>Brass</td></tr><tr><td>Weight</td><td>-</td></tr><tr><td>Operating Temp</td><td>-20°C~+65°C</td></tr></tbody></table>												Electrical Properties		Frequency Range	2.4~2.5 GHz	Impedance	50Ω	V.S.W.R.	≤2.0	Radiation	Omni	Gain	5 dBi	Polarization	Vertical	Mechanical Properties		Whip	TPE	Connector	Brass	Weight	-	Operating Temp	-20°C~+65°C
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UNLESS OTHERWISE SPECIFIED TOLERANCES ON : ±0.5		DATE: 2016/5/4		MAT'L:		Master Wave Technology CO.,LTD																													
UNIT: mm		THIRD ANGLE PROJECTION		FINISH: White		SCALE: 1/1		TITLE : 8143 Replacement Antenna																											
APPROVED BY:		CHECKED BY:		DESIGNED BY: Daniel		DRAWN BY: Mango		MODEL NO. : 98143MRSX000																											
								PART NO. : 00																											
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MASTER WAVE AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.																																			



Electrical Test



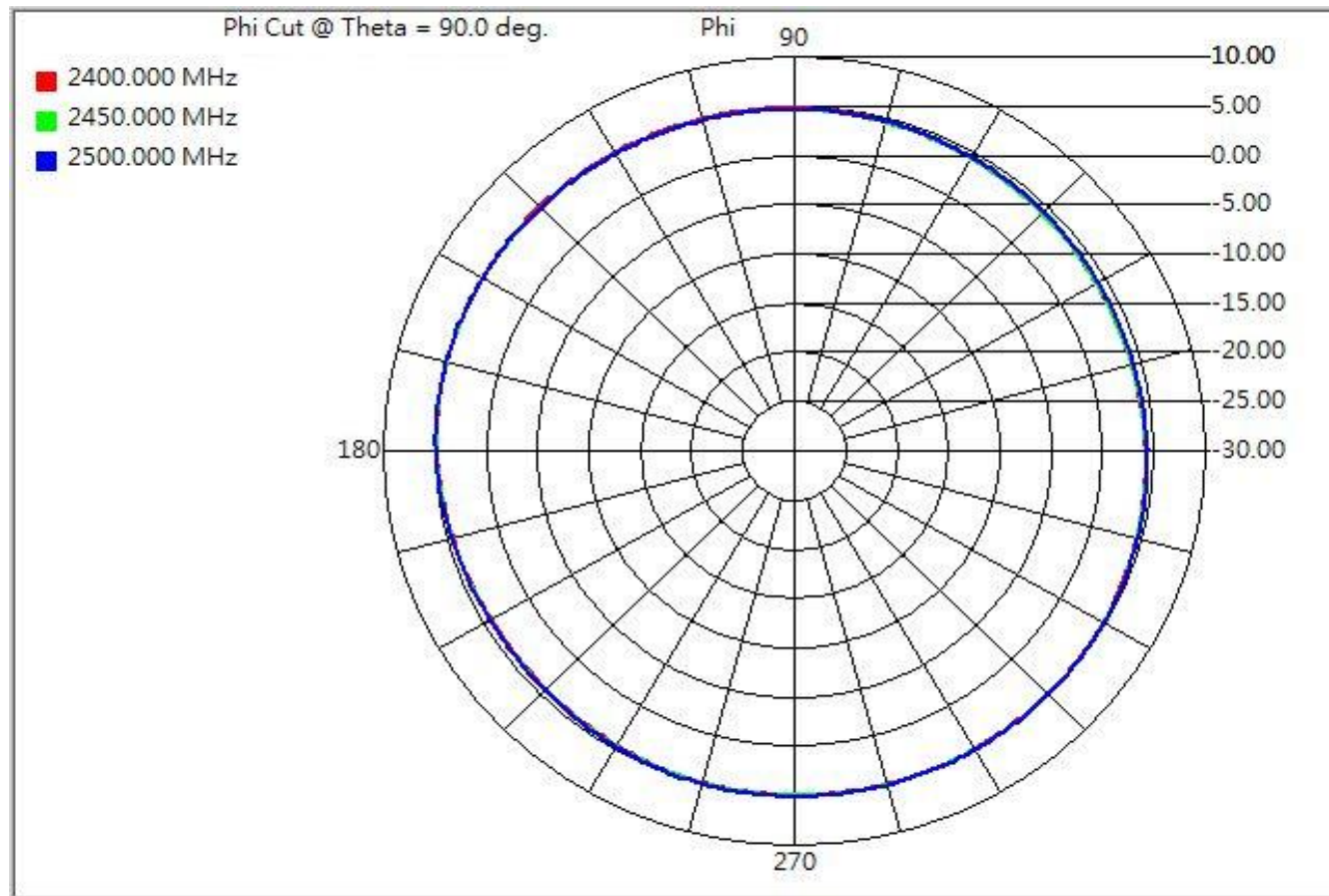


Antenna Efficiency

Frequency (MHz)	2400	2450	2500
Peak Gain (dBi)	5.08	5.13	5.17
Directivity (dBi)	6.54	6.53	6.57
Efficiency (dB)	-1.46	-1.40	-1.40
Efficiency (%)	71.41	72.32	72.28

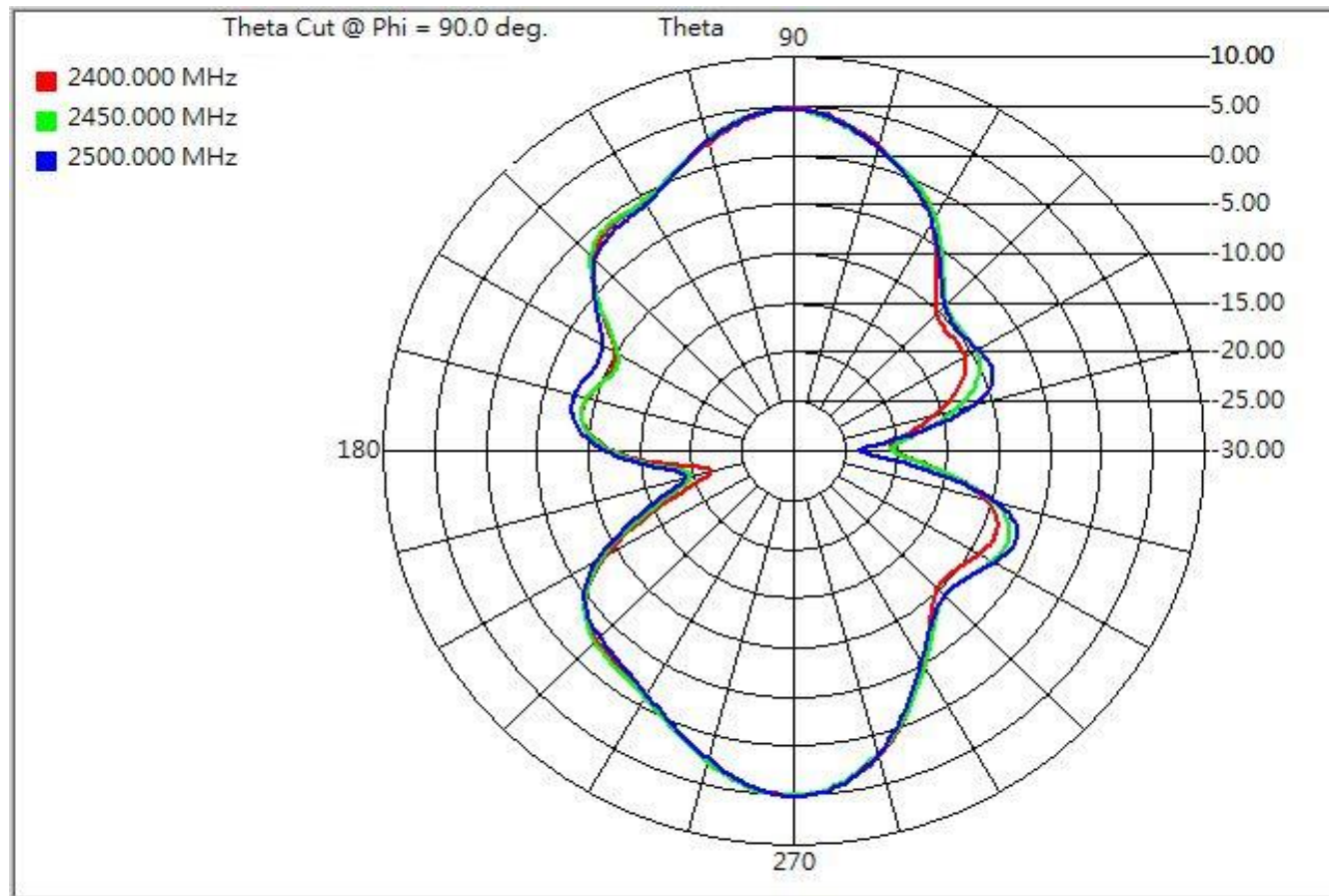


2D Radiation Pattern H-Plan





2D Radiation Pattern E-Plan





Connector

SMA

Electrical Properties	Impedance	50 ohm
	Frequency Range	0~6 GHz
	V.S.W.R	≤ 1.5
	Working Voltage	$\leq 170\text{Vrms}$
	Dielectric Withstanding	$\leq 500\text{ Vrms}$
	Voltage Insulation Resistance	$\geq 2000\text{ Megohms}$
	Contact Resistance	Center contact: 3.0 Milliohms (Max.) Outer contact: 2.0 Milliohms (Max.)
	Recommended coupling nut torque	4.0 in. lbs. ~ 8.8in. lbs.
	Coupling nut retention force	$\geq 60\text{ lbs.}$
	Contact captivation axial	$\geq 6\text{ lbs.}$
	Coupling Proof Torque	15 in-1bs.min

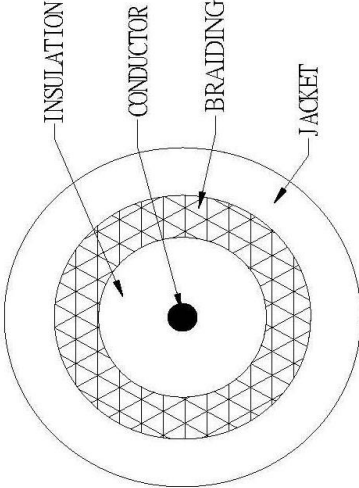
Operating Temperature	-65°C ~ +165°C
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Material Specifications	Material Data	Material
	Body	Brass
	Center Contact	Brass
	Insulator	Teflon



線材規格

CABLE SPECIFICATION

SPECIFICATION: RG178 CABLE			CONSTRUCTION D.W.G				
ITEM		SPECIFICATION					
CONDUCTOR	MATERIAL	Silverplated Copper coated steel Wire					
	Composition(No./mm)	7/0.102					
	NOM.O.D	0.306±0.03					
INSULATION	Material	FEP(Natural)/PTFE					
	Nom.Thick.(mm)	0.275					
BRAIDING	NOM.O.D	0.88±0.03					
	MATERIAL	Silver-coated annealed copper wire					
	Composition	16*3/0.1;Coverage ≥ 90%					
JACKET	MATERIAL	FEP(*color)					
	Nom.Thick(mm)	0.25					
	Nom.O.D(mm)	1.78±0.05					
	Color	Brown					
Electrical Properties(at 20 °C)							
Item	Unit	Details	Characteristic Impedance	Ω		50±2.0	
Conductor Resistance	Ω/km	Max.800	Attenuation	dB/m		1GHz	1.70
Insulation Resistance	MΩ.km	Min.500				2GHz	2.42
Dielectric Strength	V(AC)/min	1000			3GHz	3.08	
					4GHz	3.63	
					5GHz	4.15	
Capacitance	pF/m	105(1kHz)	6GHz	4.80			
REMARK			Temperature range	℃	-55~150		
			Standing wave(0-6GHz)	/	≤ 1.35		
MASTER WAVE TECHNOLOGY CO., LTD.							
CHECKED			Charlene		DATE	2013/8/8	
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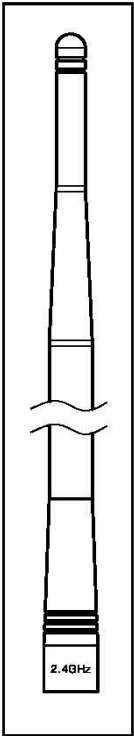
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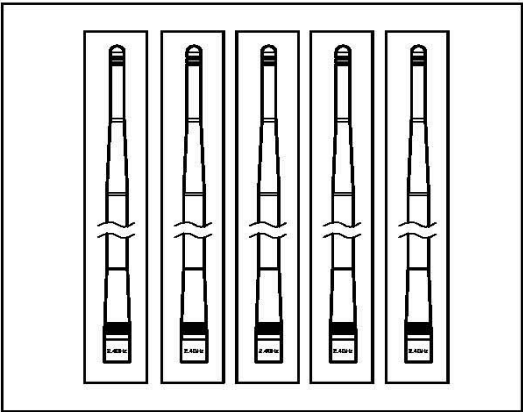
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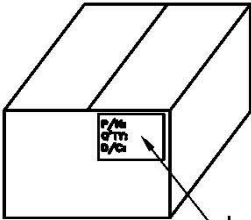


2.4GHz

1PCS ANTENNA OF A BAG



50PCS ANTENNA OF A BIG BAG



Label
標籤Label貼於外箱側邊

DATE:		MAT'L:		Master Wave Technology CO.,LTD			
UNIT: mm		FINISH:					
THIRD ANGLE PROJECTION		SCALE: -		TITLE : 8143 Replacement Antenna Packing			
APPROVED BY:	CHECKED BY:	DESIGNED BY:	DRAWN BY:	MODEL NO. :		REV	
				PART NO. :		00	

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