



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.

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Modification History:

REV.	Date	Content
00	2016/5/4	



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REV	ZONE	DESCRIPTION		ENG	APPROVED	DATE	

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A

200±3

2.4GHz

RP SMA PLUG

Ø7

Ø13

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

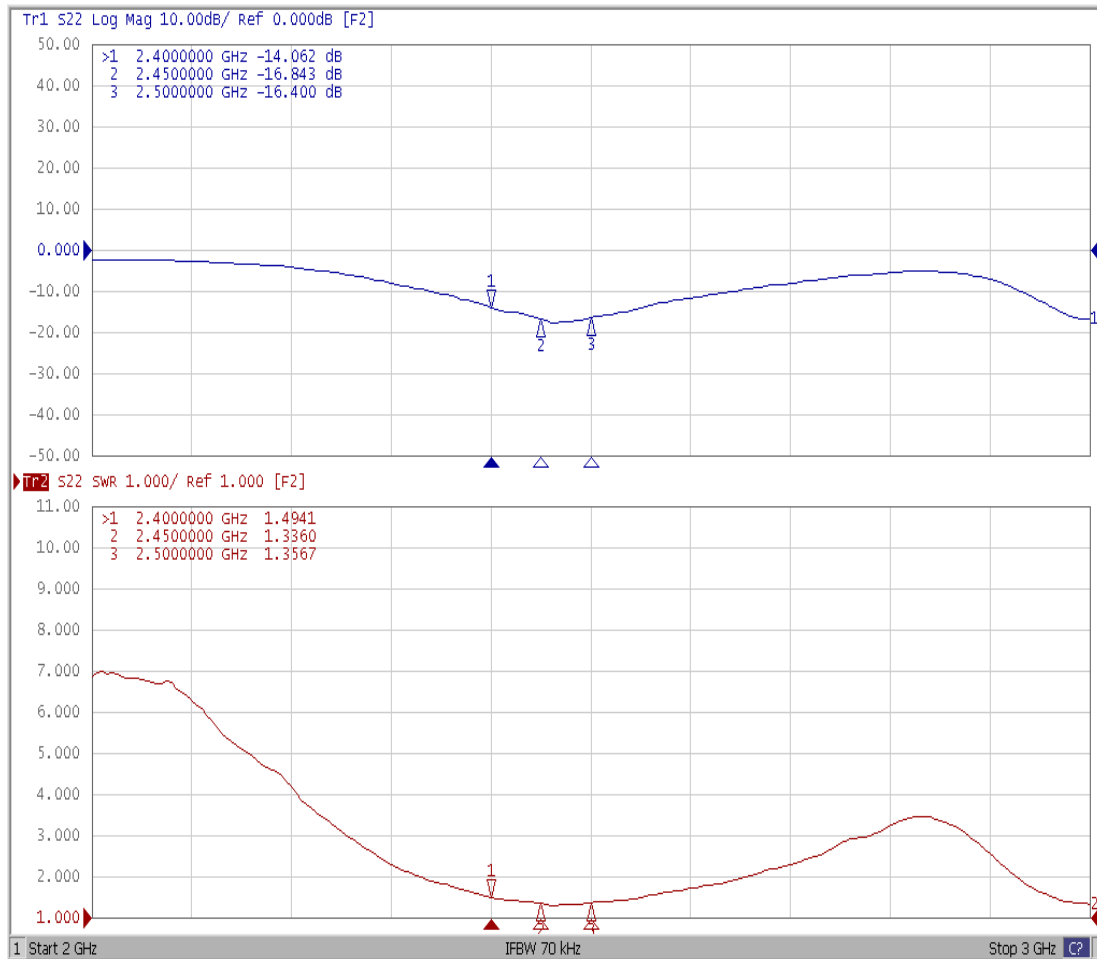
UNLESS OTHERWISE SPECIFIED TOLERANCES ON : ±0.5	DATE: 2016/5/4	MAT'L:	Master Wave Technology CO.,LTD		
	UNIT: mm	FINISH: White			
	THIRD ANGLE PROJECTION	SCALE: 1/1	TITLE : 8143 Replacement Antenna		
APPROVED BY:	CHECKED BY:	DESIGNED BY: Daniel	DRAWN BY: Mango	MODEL NO. : 98143MRSX000	REV
PART NO. :					00

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MASTER WAVE AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

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Electrical Test



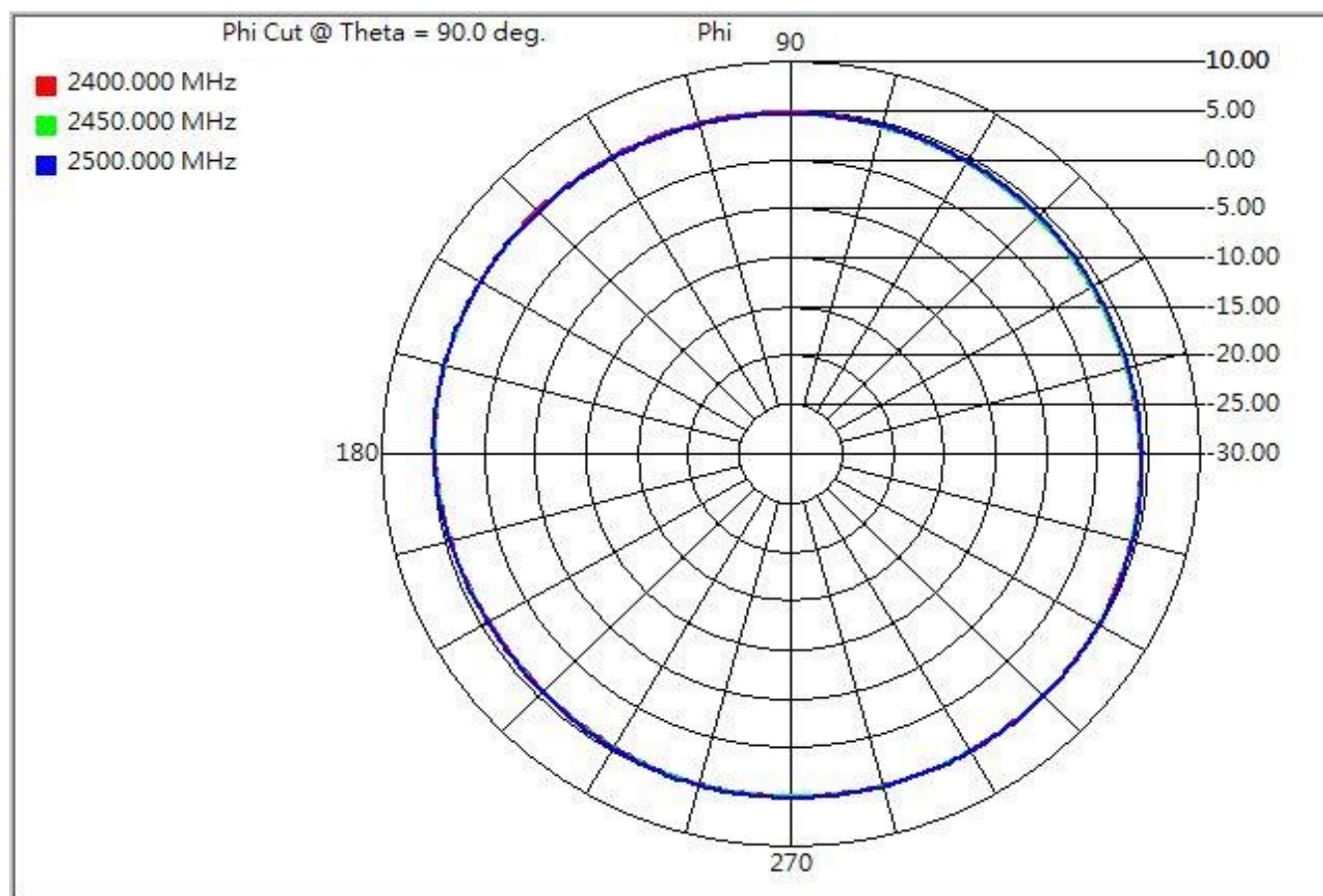


Antenna Efficiency

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

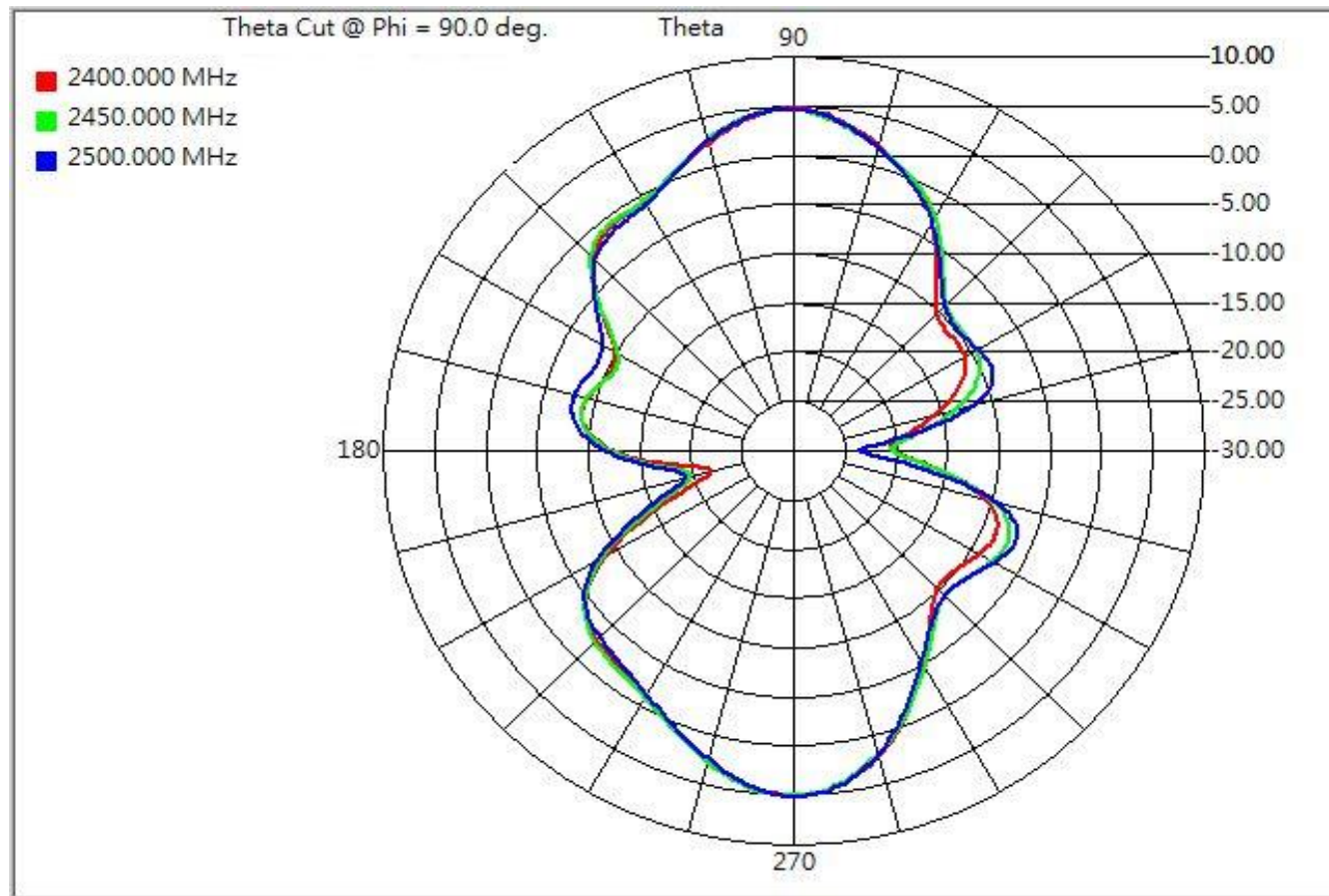


2D Radiation Pattern H-Plan





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

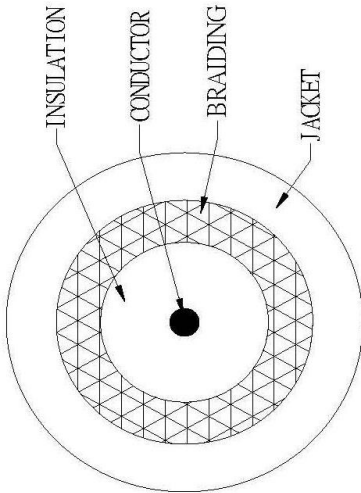
Operating Temperature	-65°C ~ +165°C
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Material Specifications	Material Data	Material
	Body	Brass
	Center Contact	Brass
	Insulator	Teflon



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				
	NOM.O.D	0.88±0.03				
BRAIDING	MATERIAL	Silver-coated annealed copper wire				
	Composition	16*3/0.1;Coverage ≥ 90%				
	MATERIAL	FEP(*color)				
JACKET	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
DRAWING			01		REV	



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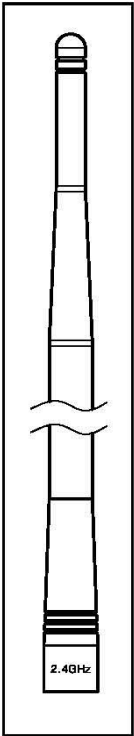
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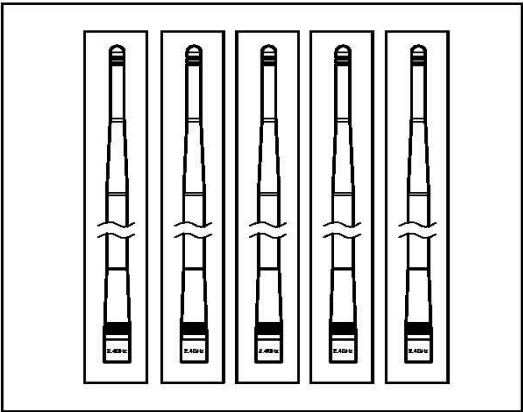
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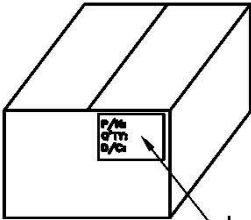
A



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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