



# Word Easy Electronics Co.,Ltd.

## SPECIFICATION FOR APPROVAL

Date 2020/12/08

File No 20120802

Revision 1.0

CUSTOMER: \_\_\_\_\_

CUSTOMER NO: TX00000306(X933)

PART NAME: WIFI Antenna L=55mm MHF

SUPPLIER NO: WE007N.F0083.V01

Date: \_\_\_\_\_ Q “TY: \_\_\_\_\_

CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
Hunter	Zhou Hongtao	Liang



WE-RD-F01-A



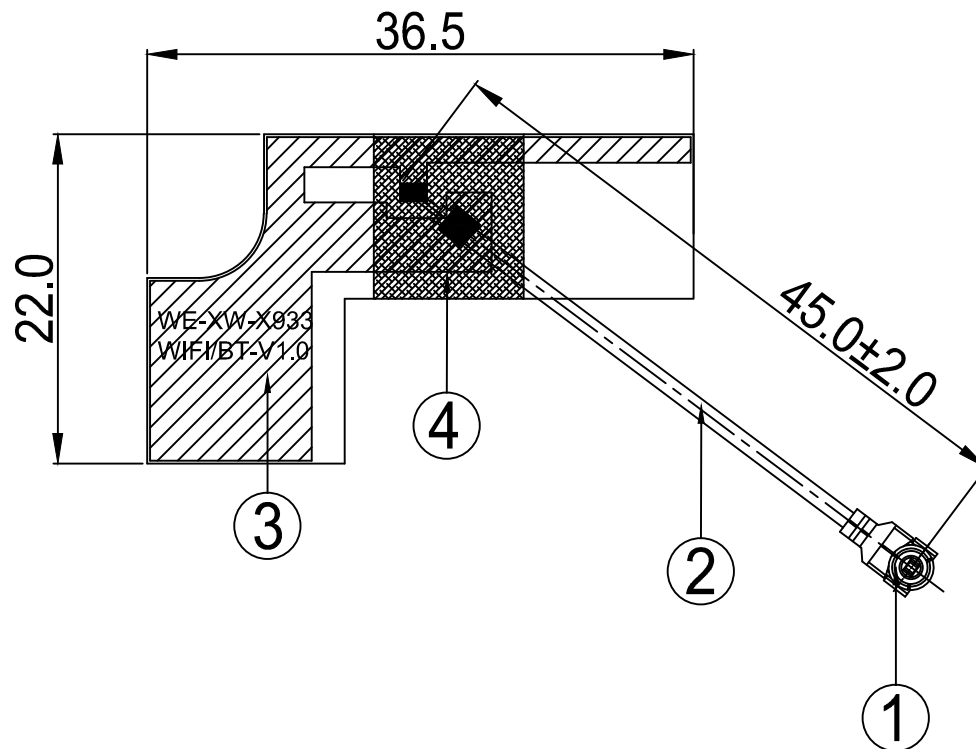
# Spec Item

NO.	Contents	Number of Page	Page Code
1	Spec Cover	1	1
2	Spec Item	1	2
3	Drawing	1	3
4	Antenna Specification	1	4
5	S Parameter	1	5
6	Passive Test	1	6
7	Active Test	1	7
8	Antenna Profile	2	8 ~ 9
9	RoHS Test Report	**	**
10	N/A	N/A	N/A
11	-	-	-
12	-	-	-
13	-	-	-


**RoHS**

Compatible

REV.	DESCRIPTION	DATE
△	First issue	2020.12.08



4	Acetate Cloth	10.0*10.0MM	Acetate Cloth	FAB0001.V01	1
3	FPCB	36.5*22.0*MM	FPCB	FPC0197.V01	1
2	Coaxial Cable	O.D.1.13 Gray	O.D.1.13	CAB0113.V02	1
1	Mini Connector	Au Plated 1代	Cu	MET0XD1.V01	1
NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY

 **World Easy Electronics Co.,Ltd.**

PART NAME: WIFI Antenna L=45mm MHF			DATE: 2020-12-08	
PART NO.: WE007N.F0083.V01				
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
		周红涛	UNITS: mm	X.X ±0.50
			SCALE: 1/1	X.XX±0.15
			REVISION: A	X° ±3°



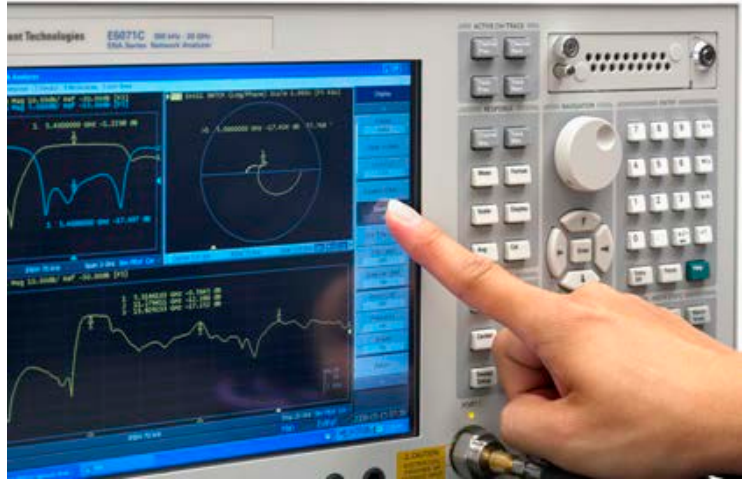
# Antenna Specification

<b>Electrical Properties</b>	
Frequency	2400-2500MHz
Impedance	50 Ohm Nominal
V.S.W.R	≤1.5
Return Loss	≤-13
Radiation	Omni-directional
Gain (Peak)	≤1.9dB
Polarization	Linear
Connector	I-PEX
<b>Physical Properties</b>	
Antenna Material	FPC
Cable Type	O.D.1.13//L=55mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	Gray

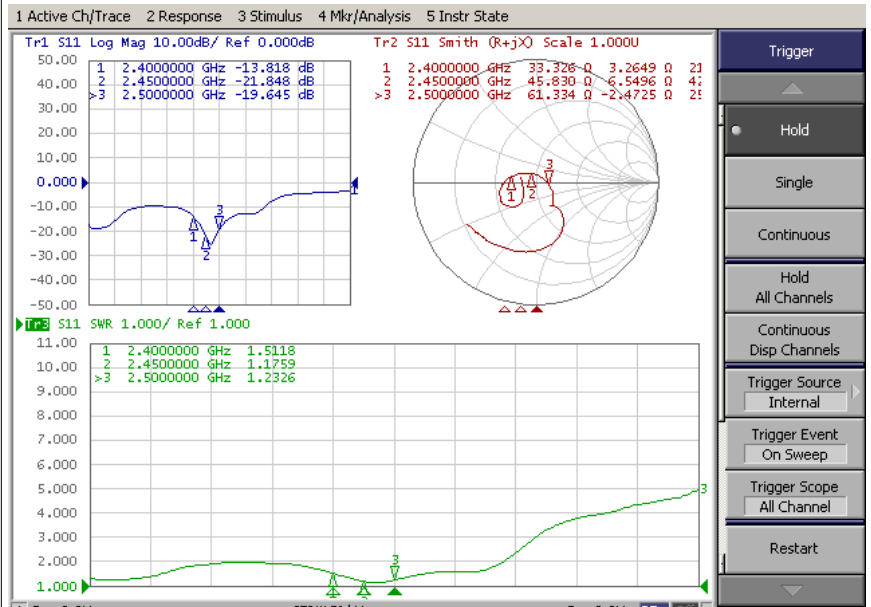


# Antenna Performance Test

**Agilent  
E5071C**



**S  
Parameter  
Test //  
WIFI**





# *Antenna Passive Test*

## Passive Test For WIFI

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	47.9	-3.2	1.1
2410	48.2	-3.2	1.5
2420	45.0	-3.3	1.2
2430	51.5	-2.9	1.6
2440	50.2	-3.0	1.6
2450	53.0	-2.8	1.8
2460	50.9	-2.9	1.5
2470	53.6	-2.7	1.5
2480	60.3	-2.2	1.9
2490	54.0	-2.7	1.4
2500	51.6	-2.9	1.3



# Antenna Active Test

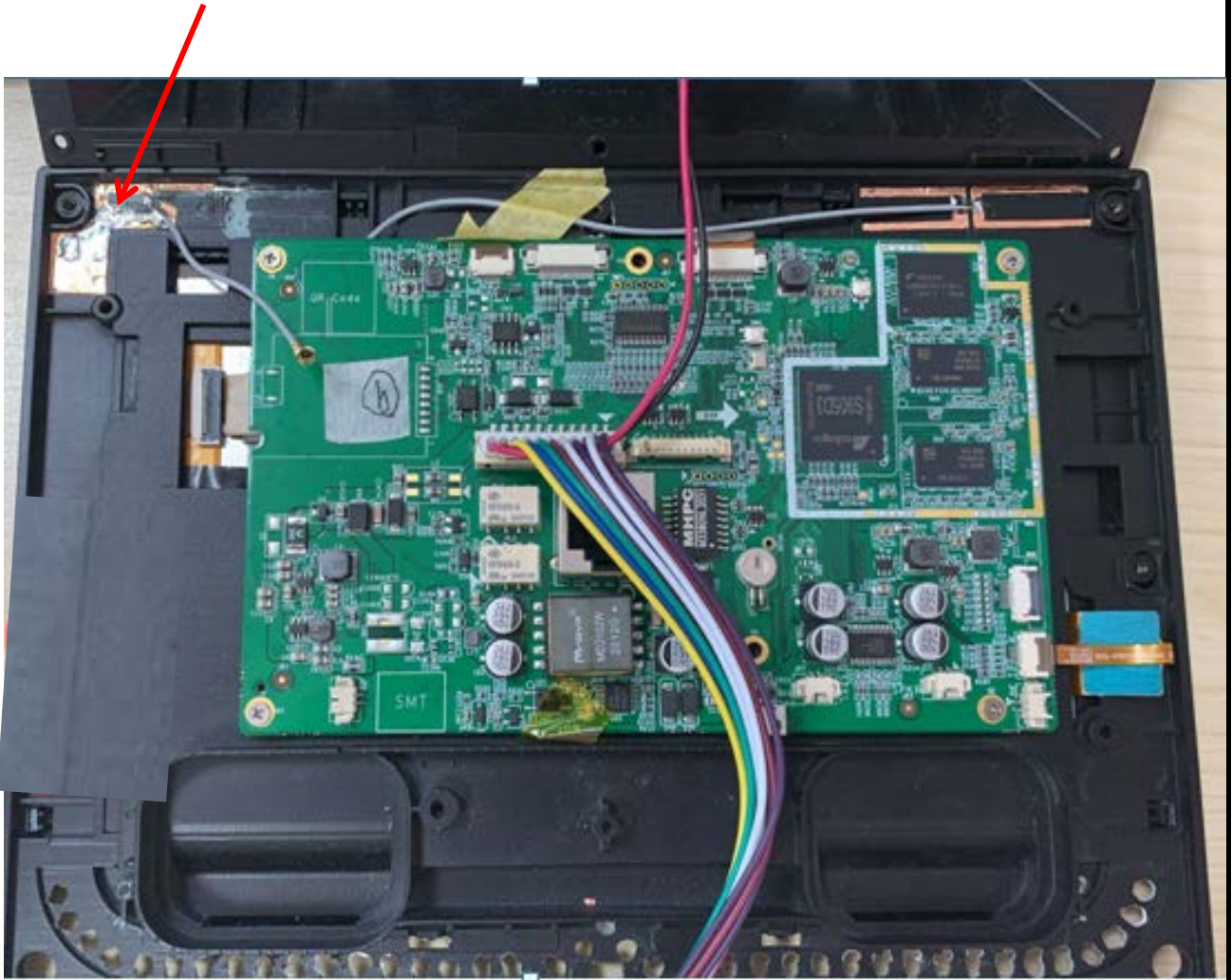
## Active Test For WIFI

Band	Channel	Data Rate	TRP	EIRP	Data Rate	TIS	EIS
WIFI 2.4G 802.11b	1	11Mbps	14.2	17.8	11Mbps	-81.7	-84.9
	6		13.2	17.0		-81.0	-84.7
	13		13.3	17.5		-80.1	-83.9
WIFI 2.4G 802.11g	1	6Mbps	13.8	17.5	54Mbps	-65.6	-68.9
	6		13.2	17.2		-65.8	-69.5
	13		13.8	17.8		-65.0	-68.5
WIFI 2.4G 802.11n	1	MCS7	14.0	17.8	MCS7	-81.2	-84.6
	6		13.2	17.1		-82.2	-85.8
	13		13.7	17.8		-80.8	-84.5



# *Assembly Drawing*

**WIFI Antenna**







Screen wiring is shielded with  
conductive cloth and grounded.

