

# Dongguan Lixinwei Electronics Co., Ltd

## Antenna Specification for Approval

Customer Name: Guangdong Meijiixin Innovation  
Technology Co., Ltd

Address: Xingye South Road, Laimei Industrial Park,  
Chenghai District

Product Name: 2.4G antenna

Part NO.: C81-30-3

Write By: Zhou Min

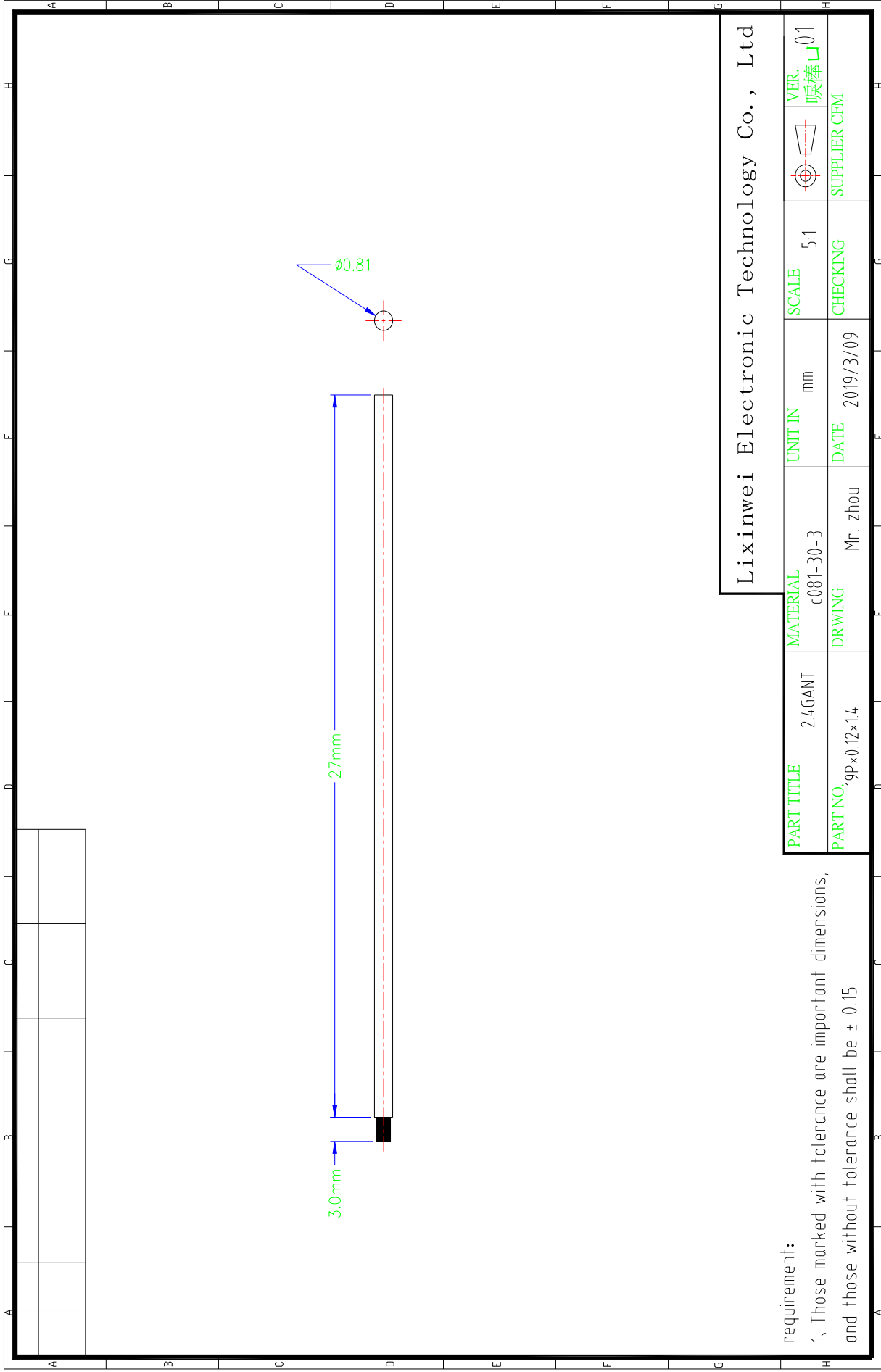
Issued Date: 2022-6-25

### Customer:

R&D Dept	Business Dept	Approved By

### Supplier

R&D Dept	Engineer Dept	Approval
Ni Sheng	<b>Zhang Ming</b>	xiong



requirement:

- Those marked with tolerance are important dimensions, and those without tolerance shall be  $\pm 0.15$ .

# Test Equipment & Conditions

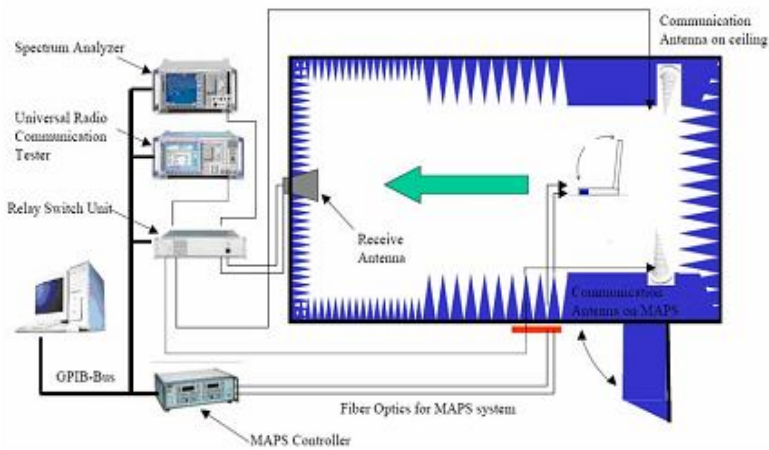
## 1. Network Analyzers :

Agilent 8753D 5071B

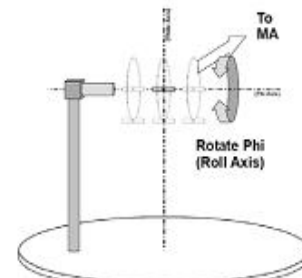
## 2. Communications Test Set:

Agilent E5515C

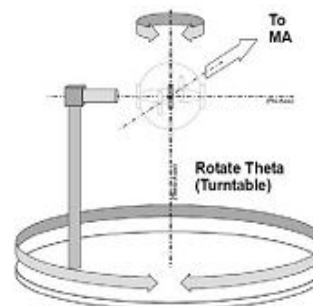
## 3. 3D Chamber Test System



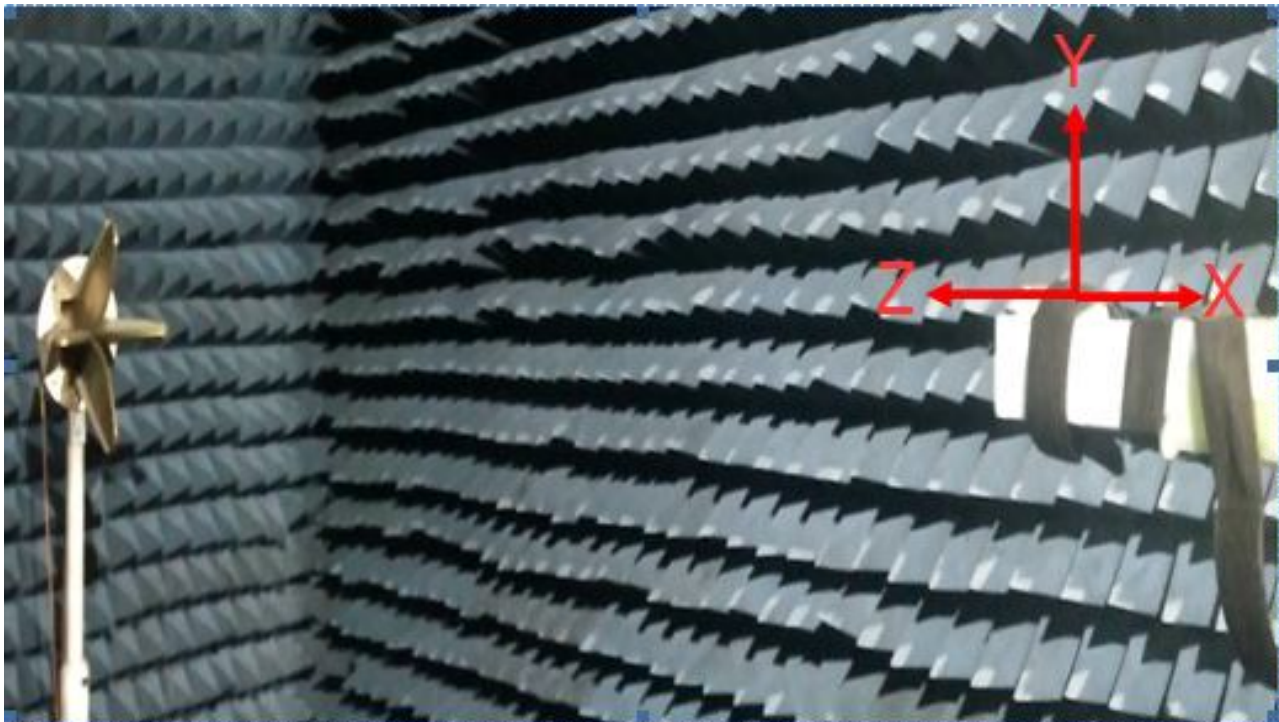
(Testing by 3D anechoic chamber)



Phi axis test



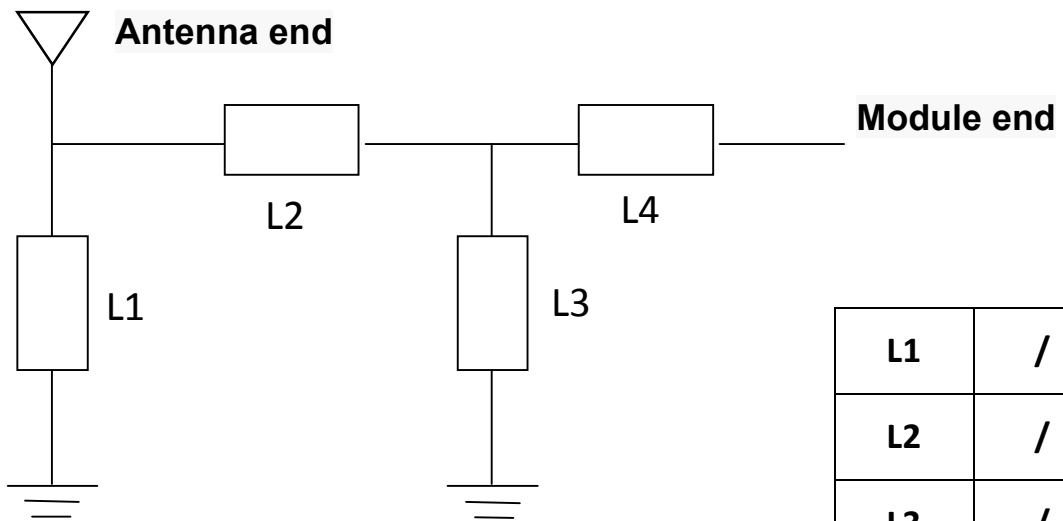
Theta axis test



## Specification Overview

electrical characteristics	
frequency	2400MHz ~2500MHz
Return loss	<-10dB
productiveness	>27%
gain	0.59 dbi
impedance	50 ohm
Polarization mode	linear polarization
Material and mechanical properties	
material	/
Wire type	Wire diameter 0.81 mm
Terminal type	/
Drawing size	See drawing for details
silk-screen printing	/
Environmental characteristics	
Storage temperature	- 30 °C ~ + 85 °C
FPCwelding temperature	/
RF wire welding temperature	320±5°C    2-3 s

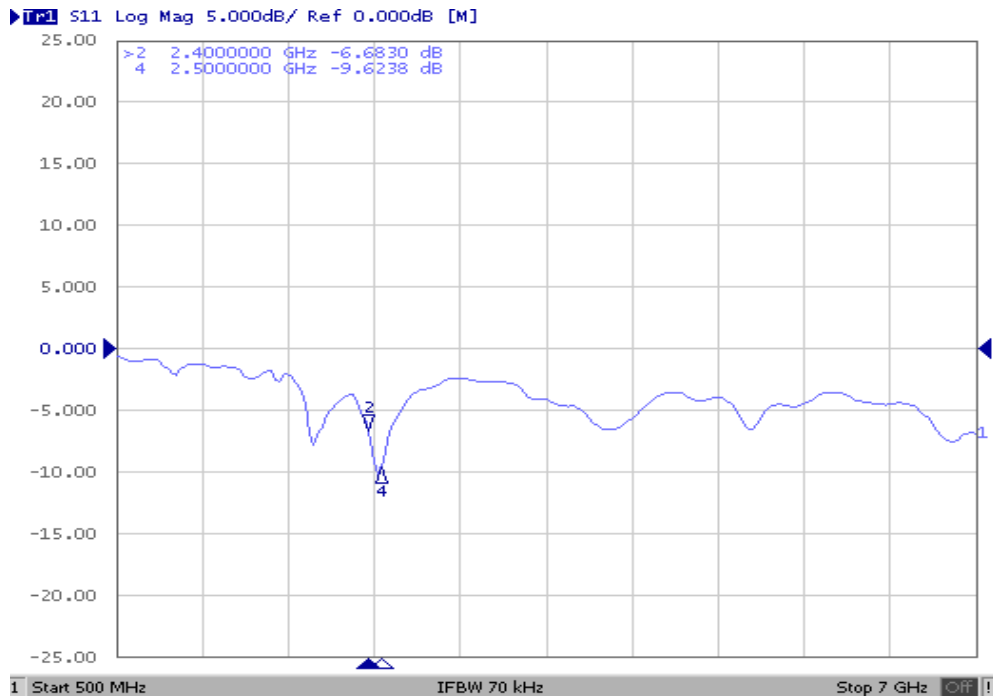
## Matching circuit



L1	/
L2	/
L3	/
L4	/

The matching circuit of the original main board

## Return Loss

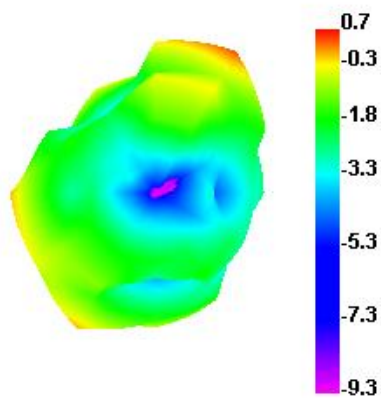


## Efficiency & Gain

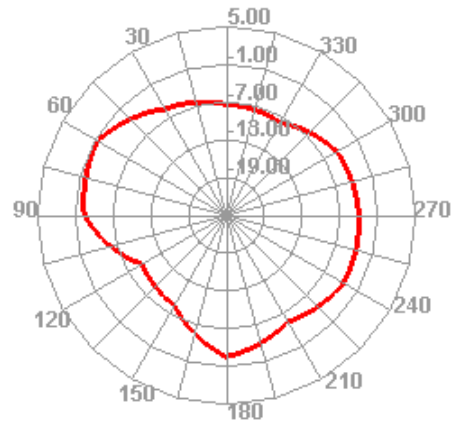
Freq (MHz)	Effi (%)	Gain (dBi)
2400	23.66	0.47
2410	23.19	0.38
2420	23.03	0.49
2430	22.41	0.42
2440	21.67	0.45
2450	20.24	0.52
2460	20.61	0.51
2470	21.41	0.59
2480	23.89	0.56
2490	26.46	0.53
2500	25.73	0.46

# Radiation Pattern

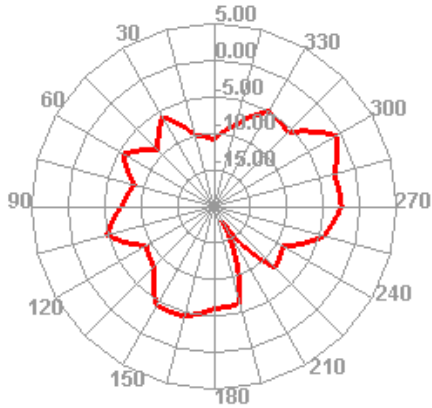
2400.000MHz



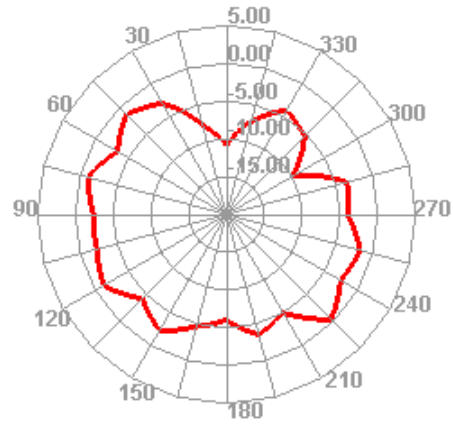
2400.000MHz H



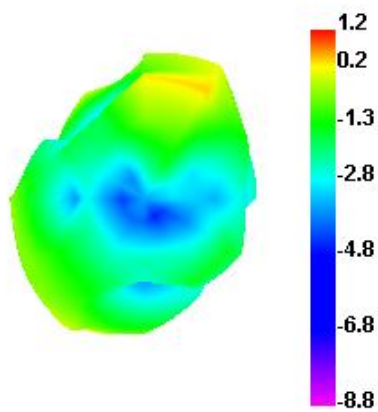
2400.000MHz E1



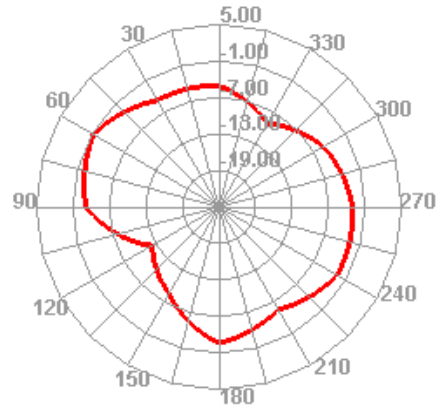
2400.000MHz E2



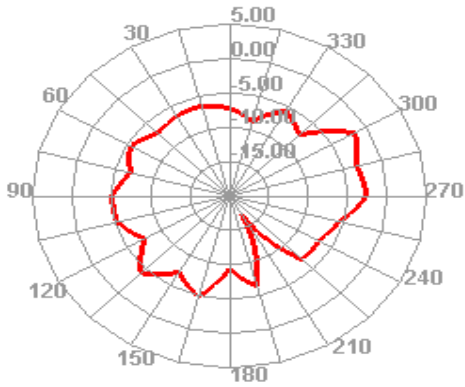
2450.000MHz



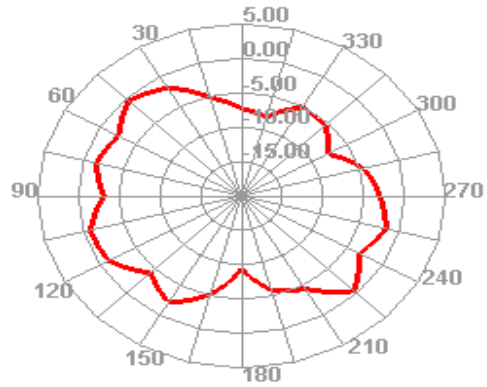
2450.000MHz H



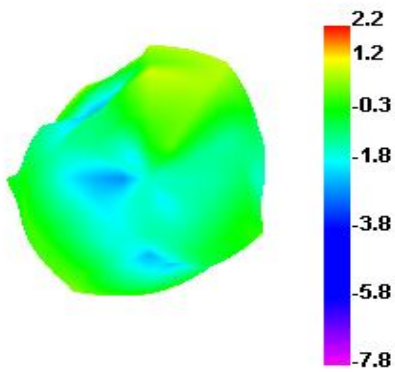
**2450.000MHz E1**



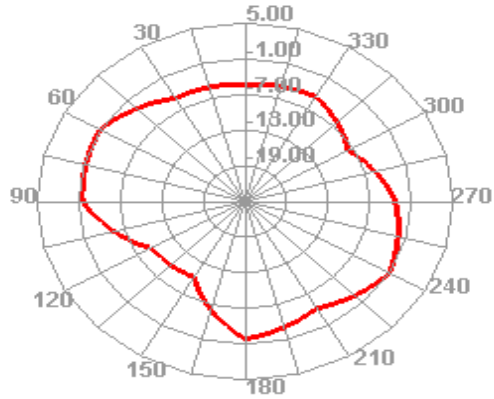
**2450.000MHz E2**



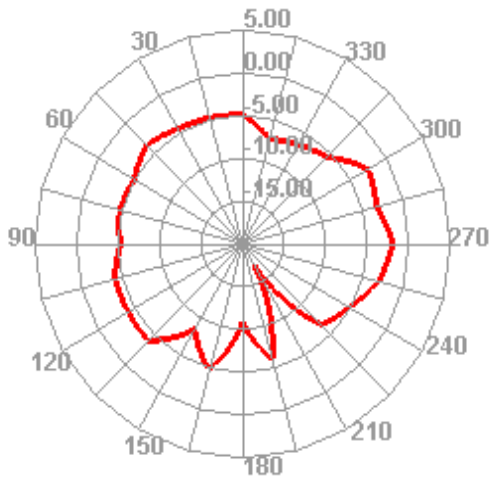
**2500.000MHz**



**2500.000MHz H**



**2500.000MHz E1**



**2500.000MHz E2**

