

## DRAFT SPECIFICATION

Part No. : FXP76B.07.0105C.et

Product Name : 2.4GHz Flex PCB Antenna with 105mm  
1.37 coaxial cable, IPEX MHFI(U.FL)

Features : Flexible PCB  
High Efficiency  
48.1mm x 8.6mm  
105mm length of 1.37 coaxial cable  
IPEX MHFI connector  
RoHS Compliant

## 1. Introduction

FXP76B is a WiFi 2.4GHz internal antenna made of flexible PCB. This antenna can be used for WiFi, Bluetooth, Zigbee and other applications in these bands. It is designed in such a narrow rectangular form factor to cover most of the current applications on the market. Taoglas FXP series are conformal flexible antennas and can fit irregular housings.

The antenna has 70% efficiency and 3.8dBi peak gain at 2.4~2.5GHz, with a 1.37 coaxial cable and IPEX MHFI connector.

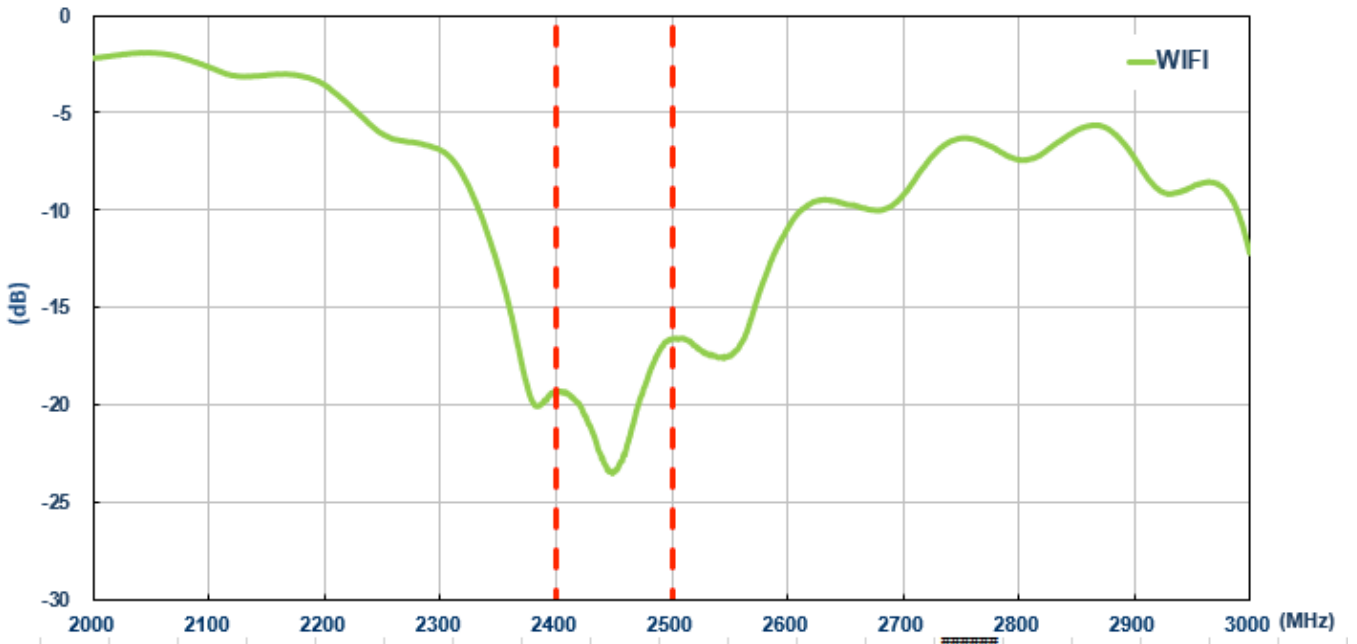
## 2. Specification

ELECTRICAL	
Frequency	2.4 ~ 2.5GHz
Return Loss (dB)	<-10
Peak Gain (on plastic*)	3.83dBi
Average Gain (on plastic)	-1.57dBi
Efficiency (on plastic)	69.72%
Polarization	Linear
Impedance	50 Ohms
Radiation Pattern	Omni
Input Power	2W max.
MECHANICAL	
Dimensions	48.1mm x 78.6m
Antenna Body Material	Polymer
Cable	105mm 1.37 Coaxial Cable
Connector	IPEX MHFI
ENVIRONMENTAL	
Temperature Range	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

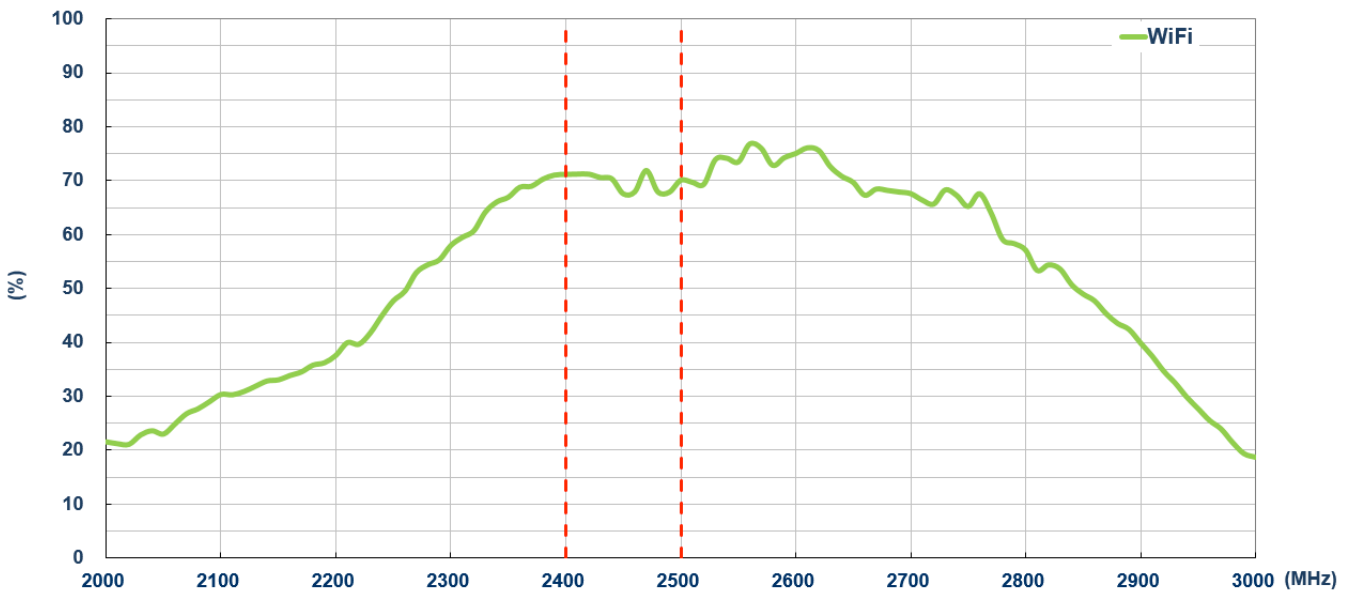
\* FXP76B is likely to be mounted on plastic in many applications so we provide the antenna measurement on a 2mm thickness ABS plastic.

### 3. Antenna Characteristics

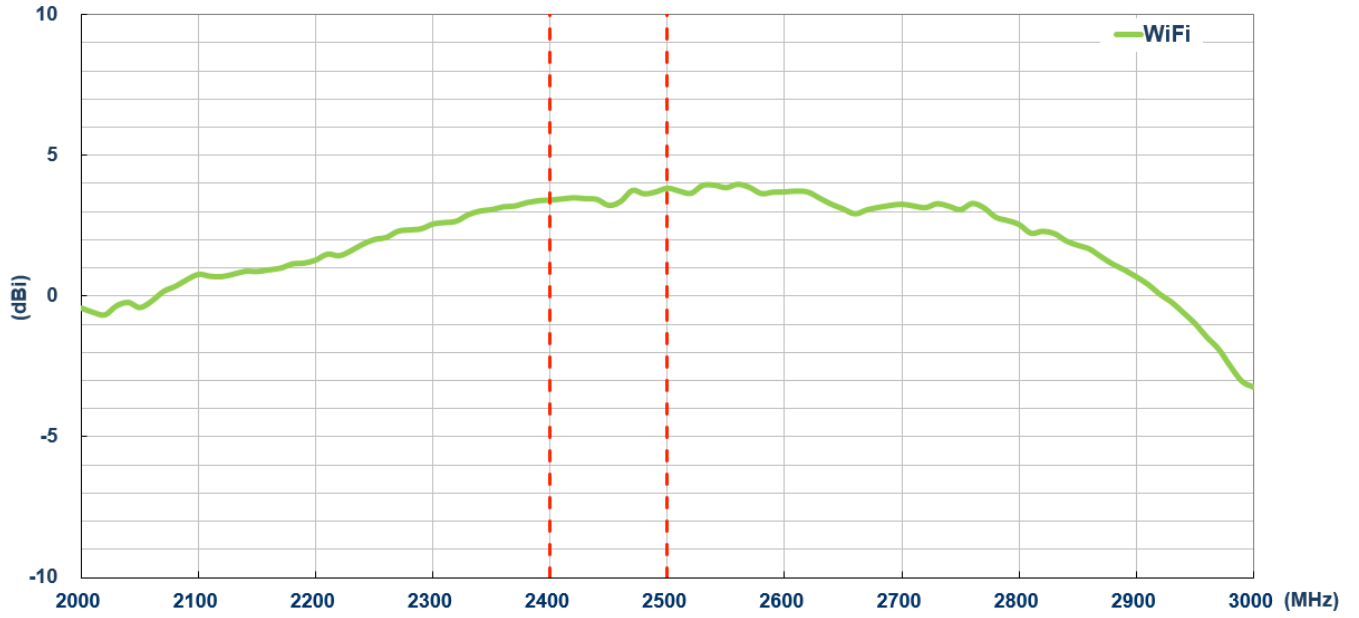
#### 3.1. Return Loss



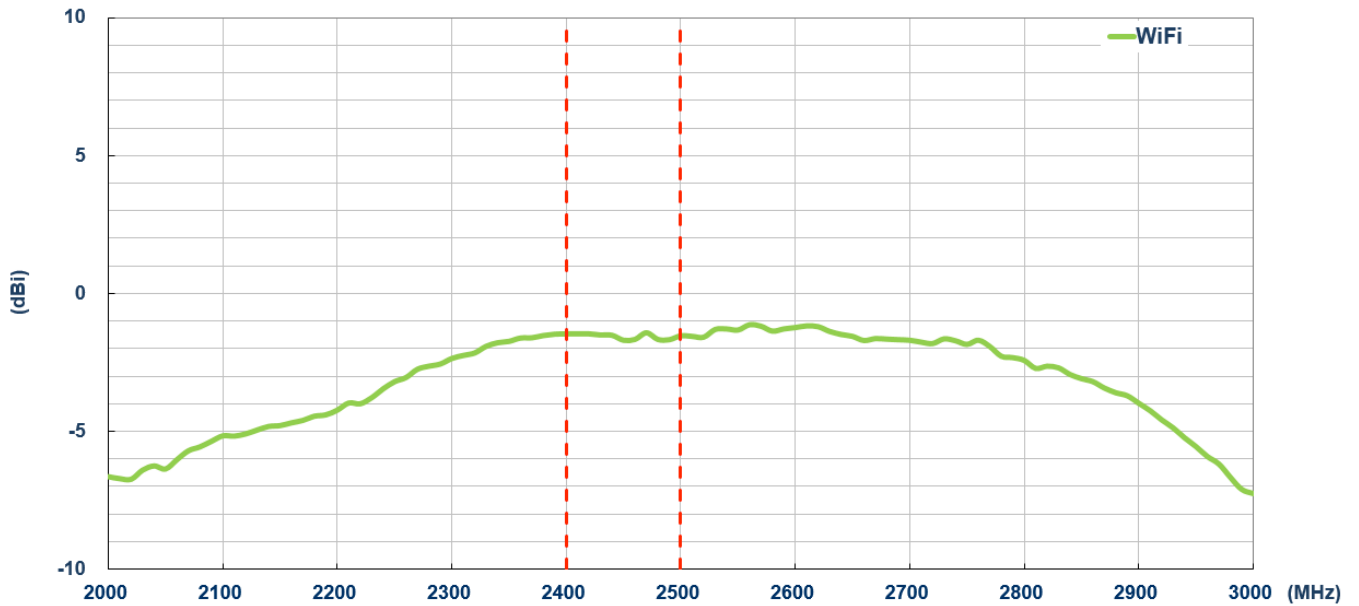
#### 3.2. Efficiency



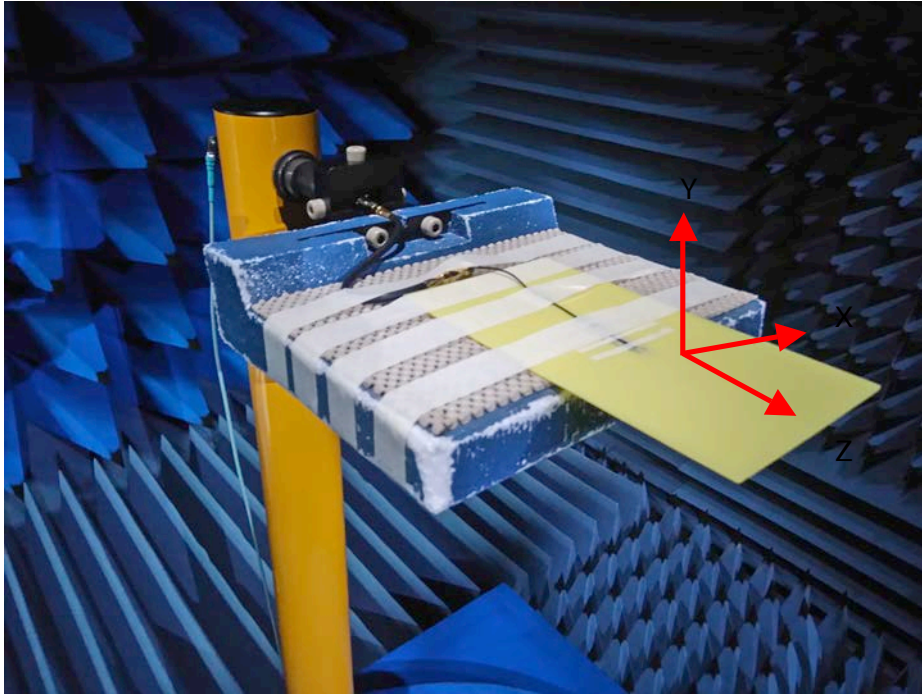
### 3.3. Peak Gain



### 3.4. Average Gain

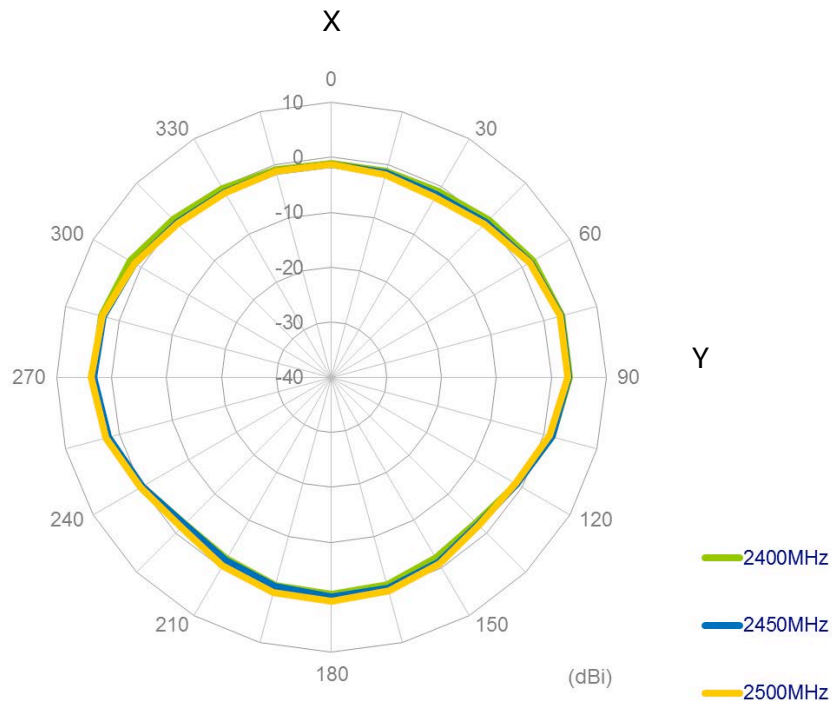


### 3.5. Antenna test setup

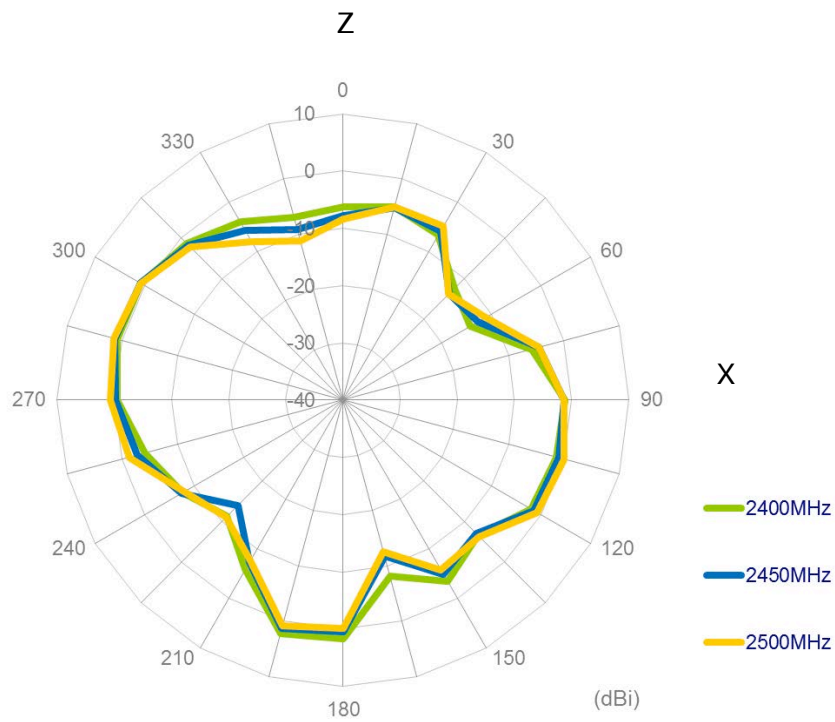


## 2D Radiation Pattern

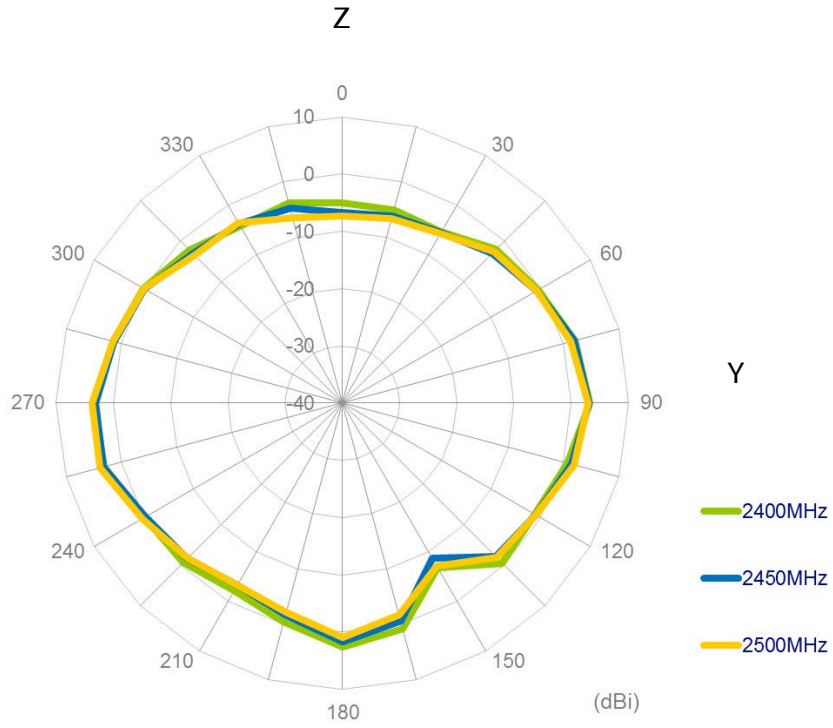
### XY-plane



### XZ-plane

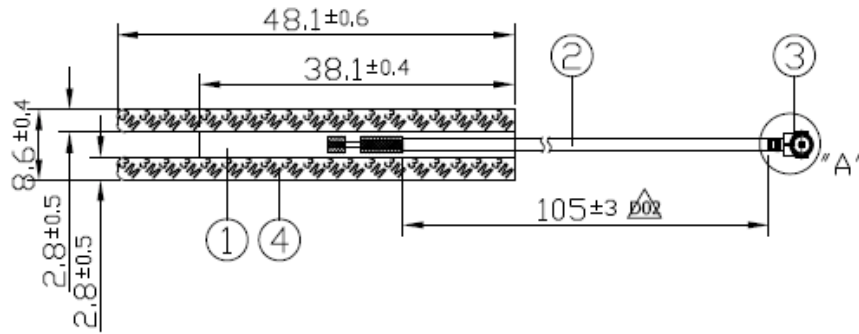


**YZ-plane**



## 4. Antenna Drawing

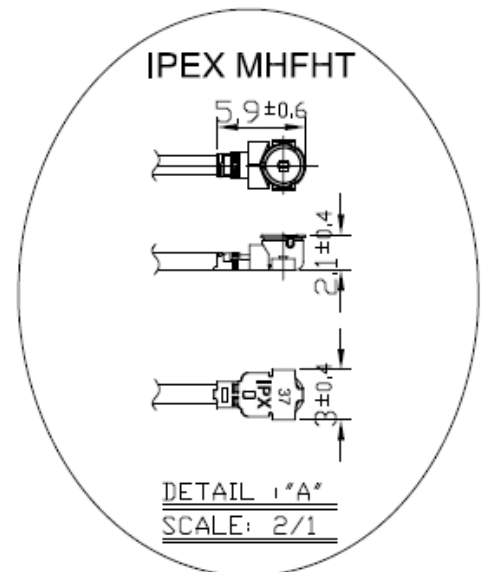
Top View



Side View



Bottom View



	Name	P/N	Material	Finish	QTY
1	FXP76B FPCB	100114F010011A	FPCB 0,15t	Black	1
2	1.37 Coaxial Cable	300513A000013A	FEP	Black	1
3	IPEX.MHFHT.137	204511G000013A	Brass	Gold	1
4	Double Adheslve	100114F010011A	3M 467	Brown Llner	1





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