

WPP-350 Antenna Report

1. Bluetooth Antenna

1.1 Specifications

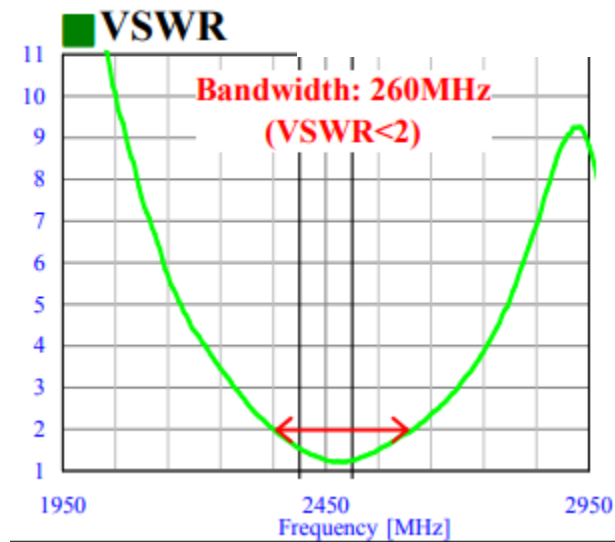
Specifications	
Central Frequency	2450MHz
Transmitting frequency	2400.0MHz-2500.0MHz
Receiver frequency	2400.0MHz-2500.0MHz
Bandwidth	100MHz
Impedance	50 Ohm
Antenna type	Ceramic
Antenna gain	+0.9 dBi

			2402MHz	2450MHz	2480MHz
Efficiency [dB]			-1.9 (64%)	-1.8 (66%)	-1.7 (68%)
Peak gain [dBi]			0.9	0.9	0.9
Average gain [dBi]	XY-plane	TX-H	-4.1	-4.0	-3.9
		TX-V	-9.8	-9.4	-8.7
	YZ-plane	TX-H	-3.0	-3.0	-2.9
		TX-V	-35.7	-35.1	-34.9
	ZX-plane	TX-H	-10.1	-9.8	-9.3
		TX-V	-1.0	-0.9	-0.9

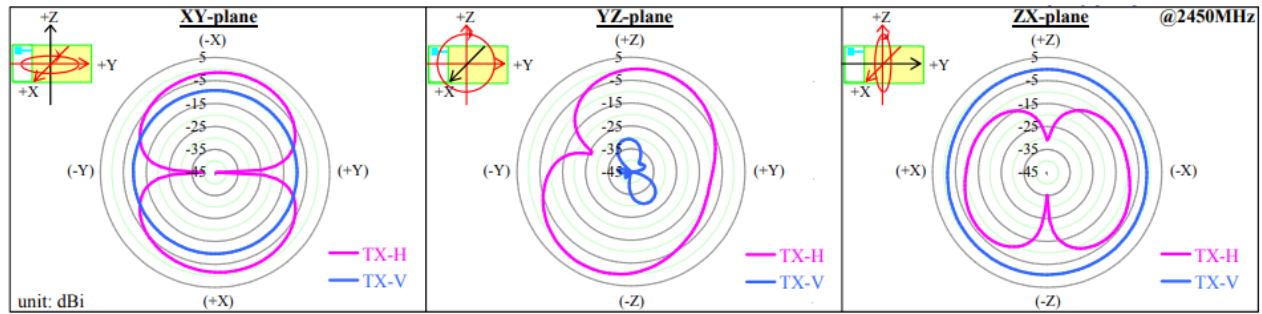
1.2 Dimensions (Unit: mm)

L=2.0mm/W=1.25mm/T=0.85mm

1.3 VSWR



1.4 Radiation pattern



Bluetooth module manufacturer (include antenna) – Taiyo Yuden

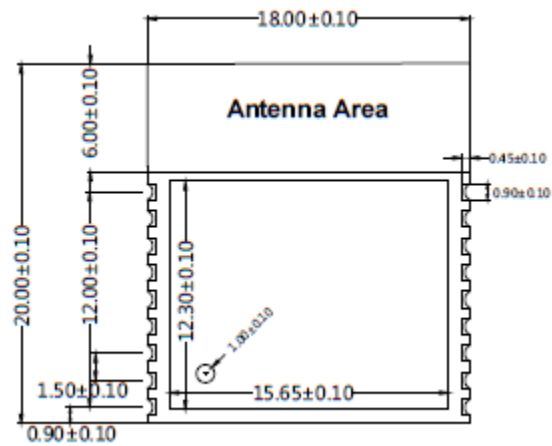
WPP-350 Antenna Report

2. WiFi Antenna

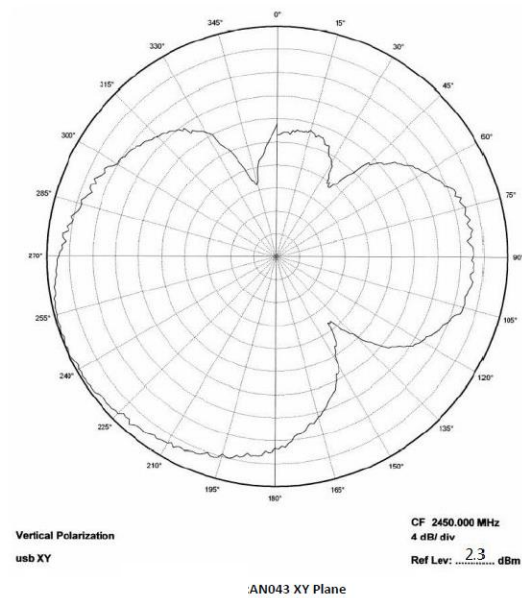
2.1 Specifications

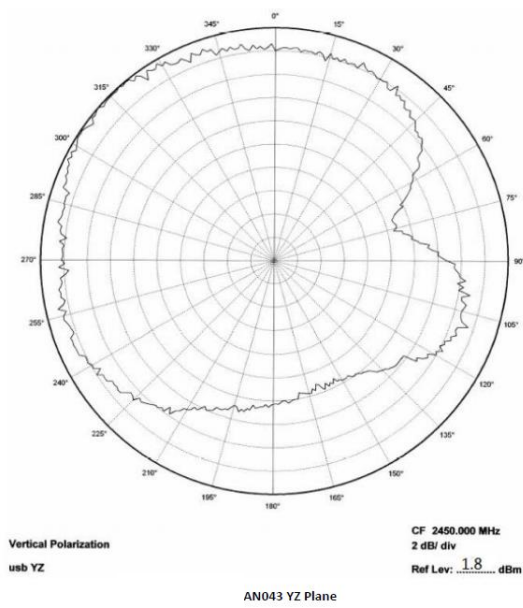
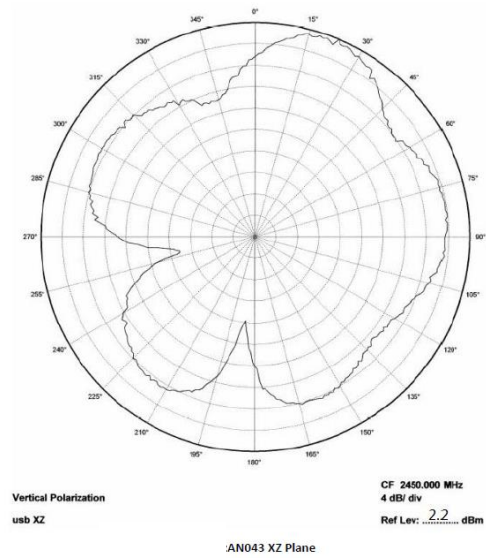
Specifications	
Central Frequency	2450MHz
Transmitting frequency	2400.0MHz-2500.0MHz
Receiver frequency	2400.0MHz-2500.0MHz
Impedance	50 Ohm
Antenna type	PCB
Antenna gain	+2.3 dBi

2.2 Dimensions (Unit: mm)



2.3 Directional pattern





2.4 Gain

Gain in XY plane	2.3 dBi
Gain in XZ plane	2.2 dBi
Gain in YZ plane	1.8 dBi
Gain in average	2.0 dBi
LOS range	240 m
Antenna size	15.2 x 5.7 mm

WiFi module manufacturer (include antenna) – Espressif Systems