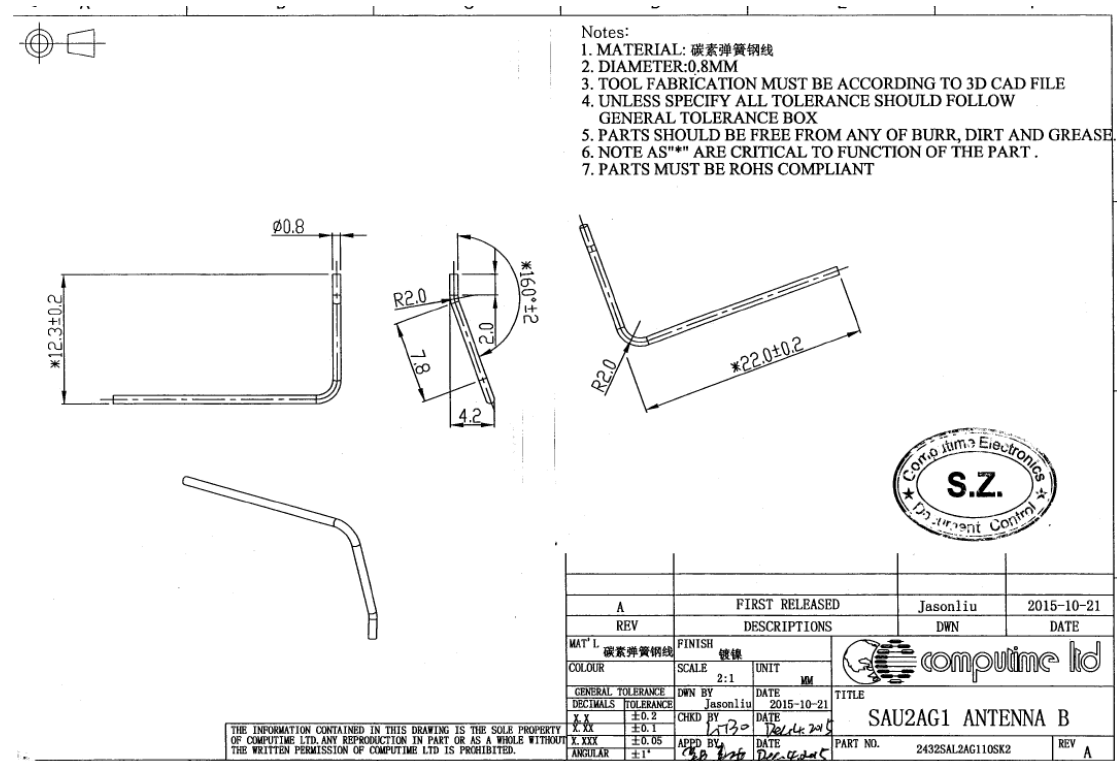


ZigBee/BT antenna specification

1. This is PCB trace antenna, Dimension drawing is show below



2. Antenna Gain and Efficiency

Frequency (MHz)	Efficiency(%)	Gain(dBi)
2400	46	2.5
2410	44	2.4
2420	48	3.0
2430	50	3.3
2440	49	3.2
2450	45	2.8
2460	47	2.9
2470	45	2.4
2480	49	2.9
2490	38	1

3. S11: <-10dB
4. Impedance: 50 ohm
5. Radiation Pattern

X-Y_H

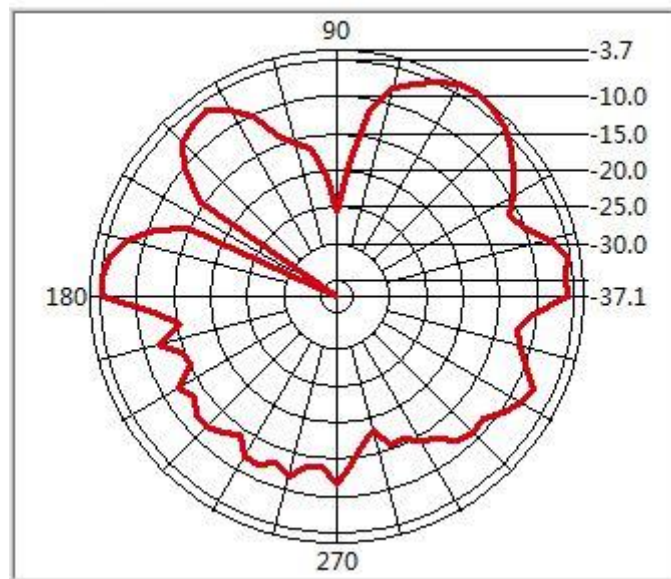


Figure 1

Max = -3.734 dBi @ 55 Degree
Min = -37.065 dBi @ 150 Degree

X-Z_H

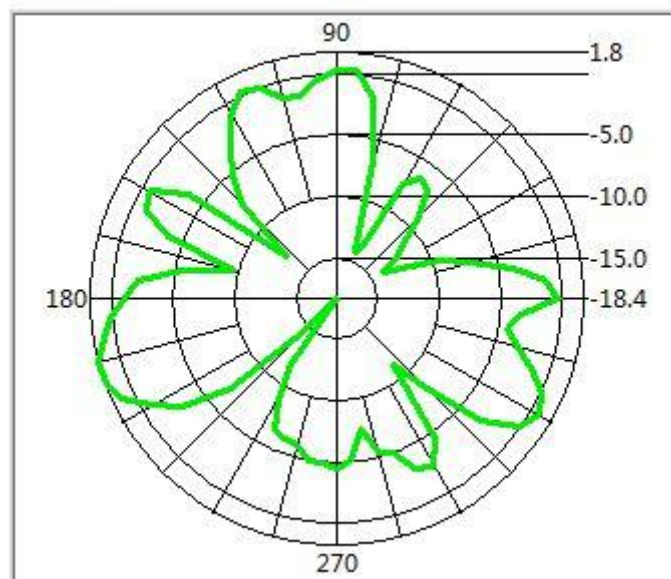


Figure 2

Max = 1.763 dBi @ 195 Degree
Min = -18.351 dBi @ 230 Degree

Y-Z_H

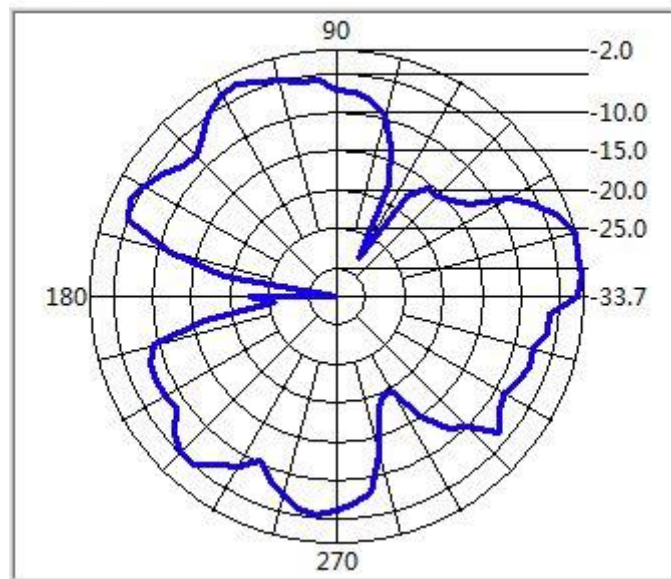


Figure 3

Max = -2.015 dBi @ 15 Degree
Min = -33.690 dBi @ 175 Degree

X-Y_V

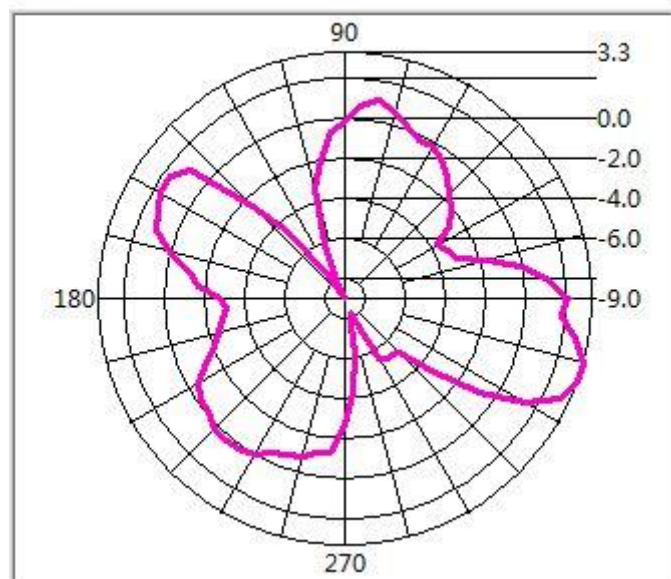


Figure 4

Max = 3.347 dBi @ 340 Degree
Min = -9.034 dBi @ 120 Degree

X-Z_V

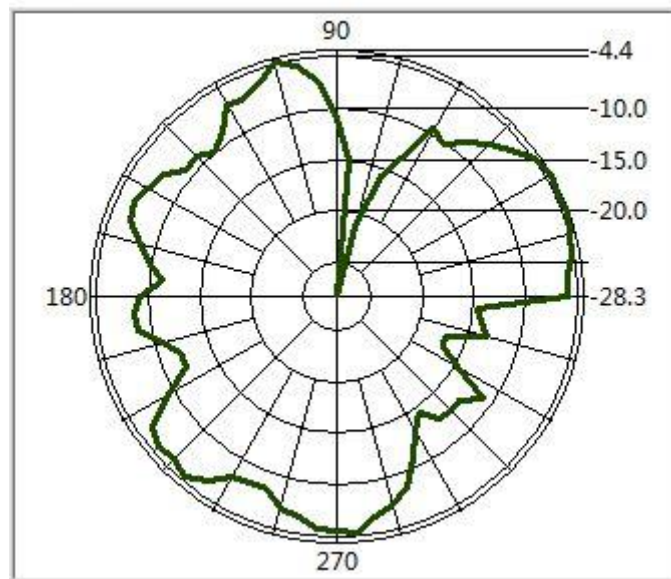


Figure 5

Max = -4.350 dBi @ 30 Degree
 Min = -28.271 dBi @ 80 Degree

Y-Z_V

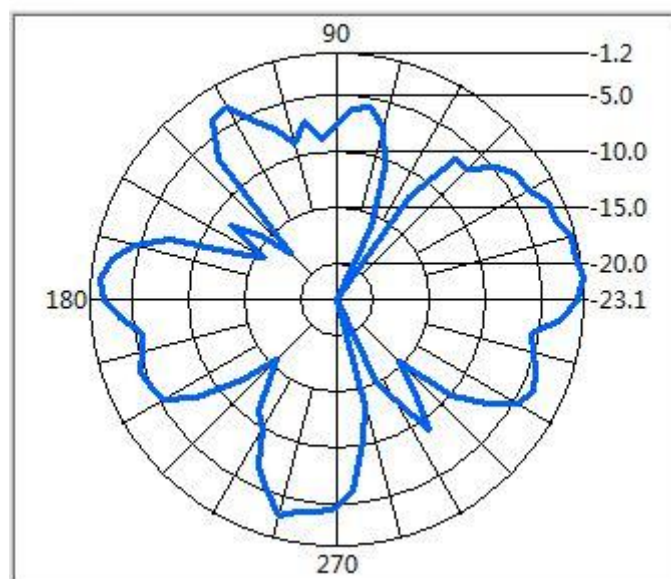


Figure 6

Max = -1.243 dBi @ 5 Degree
 Min = -23.137 dBi @ 290 Degree