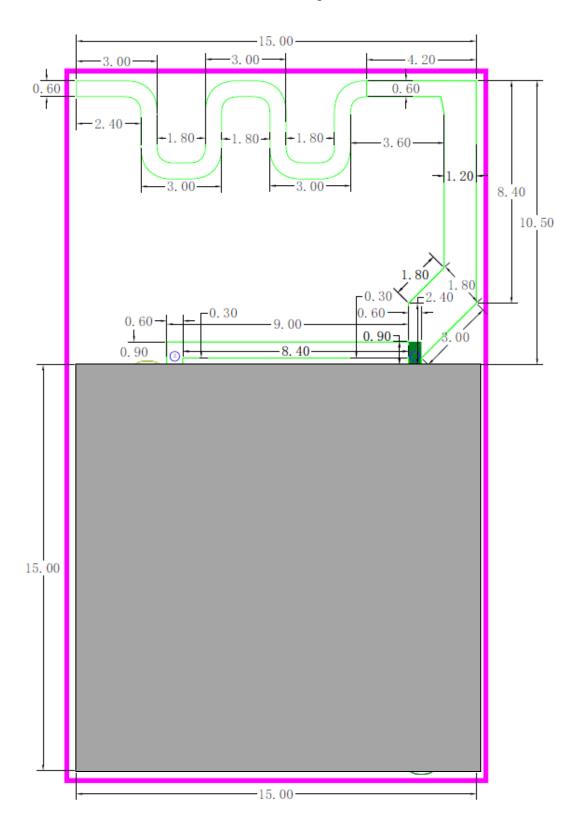
ZigBee/BT antenna specification

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



2. Antenna Gain and Efficiency

Frequency (MHz)	Efficiency(%)	Gain(dBi)
2400	30	1.8
2410	29	1.8
2420	31	2.0
2430	32	3.3
2440	33	3.3
2450	34	3.2
2460	30	1.9
2470	29	2.0
2480	31	2.0
2490	26	1

3. S11: <-10dB

4. Impedance: 50 ohm5. Radiation Pattern

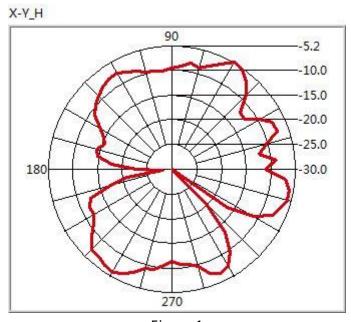


Figure 1

Max = -5.192 dBi @ 60 Degree Min = -29.987 dBi @ 320 Degree



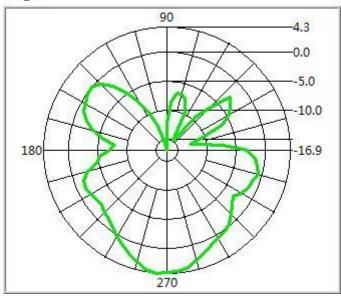


Figure 2

Max = 3.32 dBi @ 265 Degree
Min = -16.866 dBi @ 100 Degree

Y-Z_H

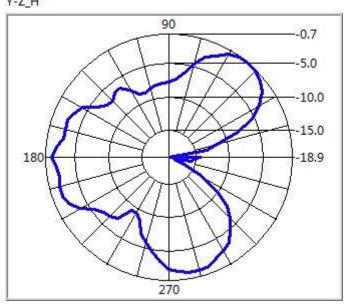


Figure 3

Max = -0.654 dBi @ 50 Degree Min = -18.941 dBi @ 5 Degree

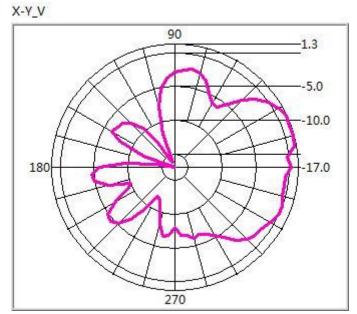


Figure 4

Max = 1.301 dBi @ 25 Degree Min = -16.994 dBi @ 165 Degree

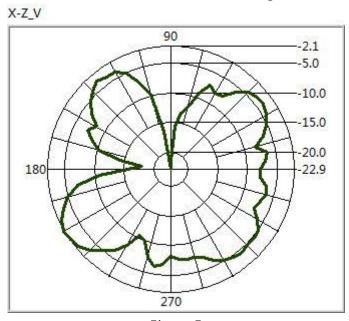
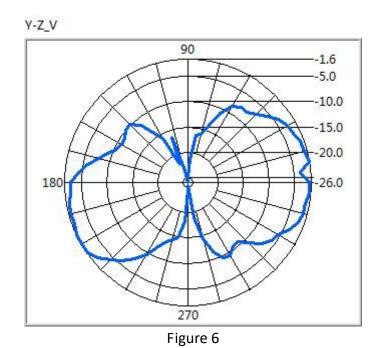


Figure 5

Max = -2.082 dBi @ 210 Degree Min = -22.922 dBi @ 95 Degree



Max = -1.571 dBi @ 205 Degree Min = -26.030 dBi @ 100 Degree