

Bluetooth Antenna Specification

1: Antenna Description

Antenna Type	Microstrip Antenna
Antenna peak gain	0.2dBi
Frequency range	2.402GHz~2.480GHz
Connect type	Simulation

2: Antenna picture on the PCB board



3: Antenna radiation of 3D polar

Solution frequency at 2.453G

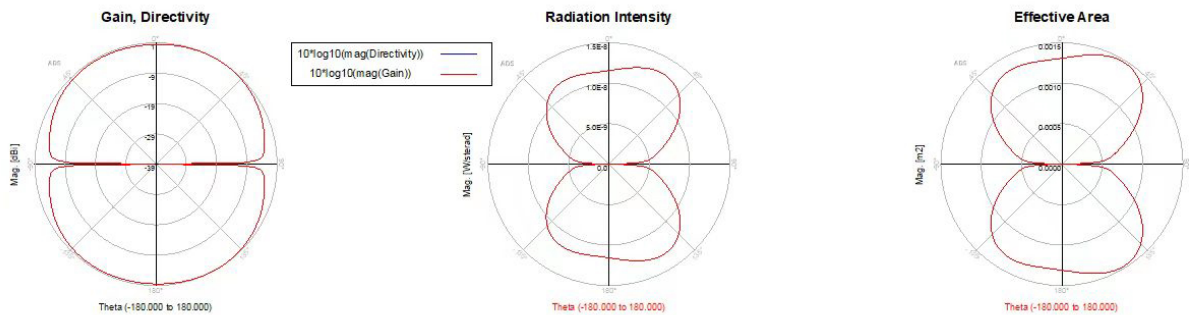
Frequency (GHz)	2.45333
Input power (Watts)	1.32106e-07
Radiated power (Watts)	1.32106e-07
Directivity(dBi)	0.20723
Gain (dBi)	0.20723
Radiation efficiency (%)	100
Maximum intensity (Watts/Steradian)	1.38815e-08
Effective angle (Steradians)	9.5167
Angle of U Max (theta, phi)	115 306
E(theta) max (mag, phase)	0.00084968 25.3337
E(phi) max (mag, phase)	0.00312045 -149.4
E(x) max (mag, phase)	0.00273475 -149.806
E(y) max (mag, phase)	0.0015451 -148.411
E(z) max (mag, phase)	0.000770072 -154.666

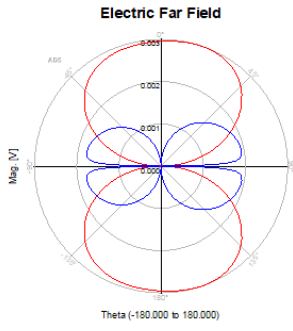


3: Antenne radiation pattern

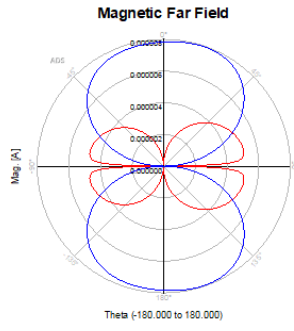
Dataset: emFar - Sep 21, 2022

Frequency	E_max	Theta_max	Phi_max	Directivity_max	Gain_max	RadiatedPower	InputPower	Efficiency	CutType	CutAngle
2.453E9	0.003	115.000	306.000	0.207	0.207	1.321E-7	1.321E-7	1.000	Phi	0.000

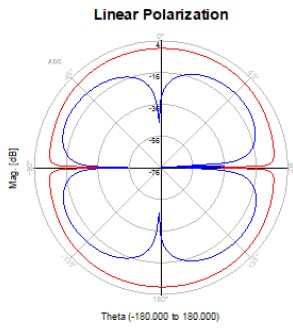
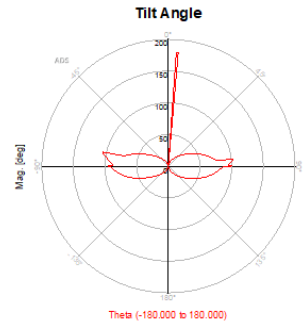




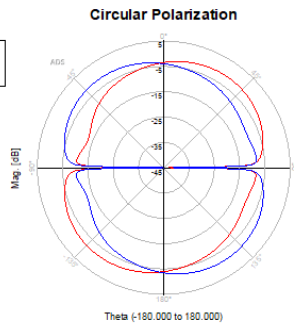
mag(Etheta) — red
mag(Ephi) — blue



mag(Htheta) — red
mag(Hphi) — blue



dB(Eco/E_max) — red
dB(Ecross/E_max) — blue



dB(Ehpr/E_max) — red
dB(Erhp/E_max) — blue

