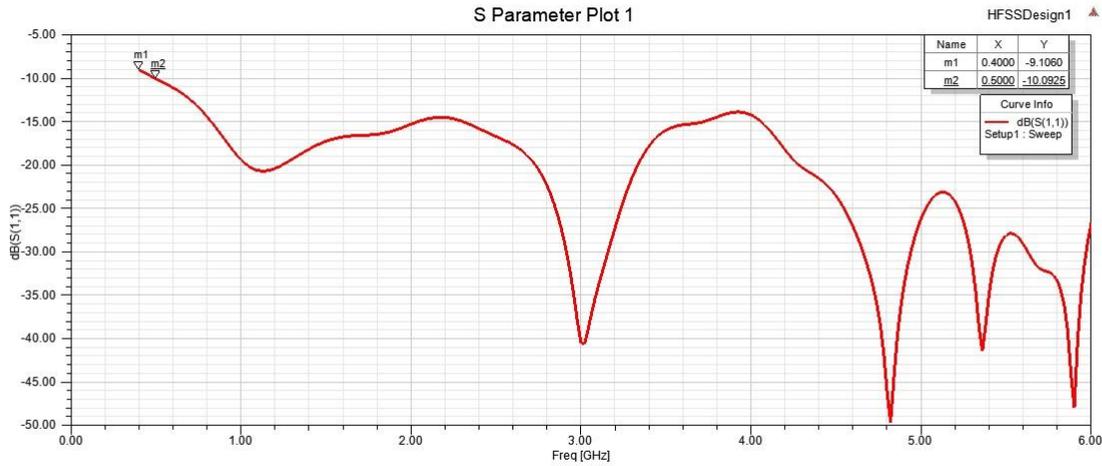


## 0.4GHz-6GHz Directional Antenna

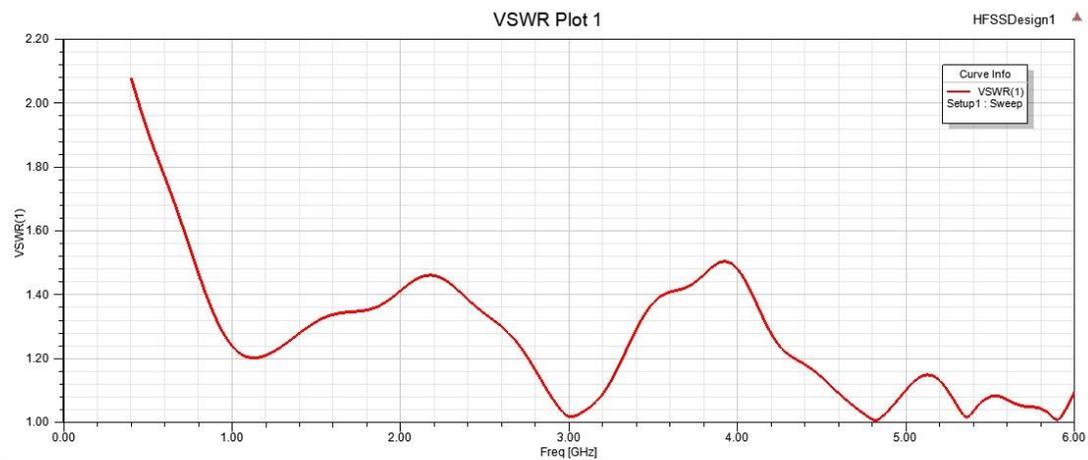
Sl. No.	Parameter	Description
1	Frequency	0.4GHz-6GHz
2	Model	TE-VIV-0400-6000-10-25
2	Gain	-5dBi @0.4GHz >1.5dBi@1GHz >6.5dBi@2GHz >9.0dBi@3GHz >10.0dBi @4GHz >9.16dBi@5GHz >8.2dBi@6GHz
3	Beam width (Az x EI)	175 deg (Az) x 65 deg (EI) @ 0.4 GHz 150 deg (Az) x 60 deg(EI) @ 1 GHz 101 deg (Az) x 52 deg (EI) @ 2 GHz 62 deg (Az) x 38 deg (EI) @ 3 GHz 40 deg (Az) X 45 deg (EI) @4 GHz 36 deg (Az) x 40 deg (EI) @ 5 GHz 28 deg (Az) x 30 deg (EI)@6 GHz
4	VSWR	<2:1
4	Size	220mm x300mmx10 mm
5	Polarization	Vertical
6	Connector (Optional)	SMA / N Type (F) (Mil Grade)
7	Impedance	50 Ohm
8	Radiation	<b>ENDFIRE</b>
9	Antenna Type	<b>Antipodal Vivaldi</b>
10	Power handling	<b>&gt;100 W</b>
11	Antenna Substrate	RT duroid 4350B

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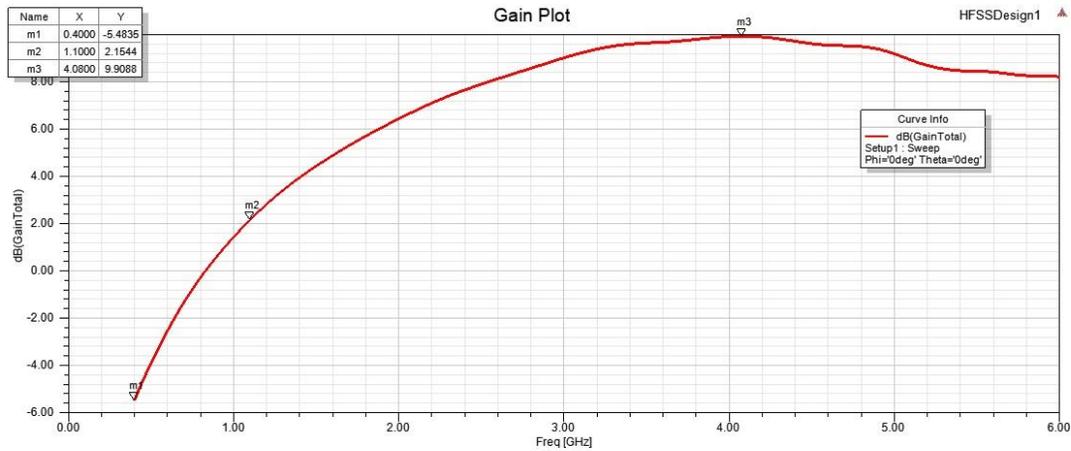
**Fig1. Simulated return loss of the antenna**



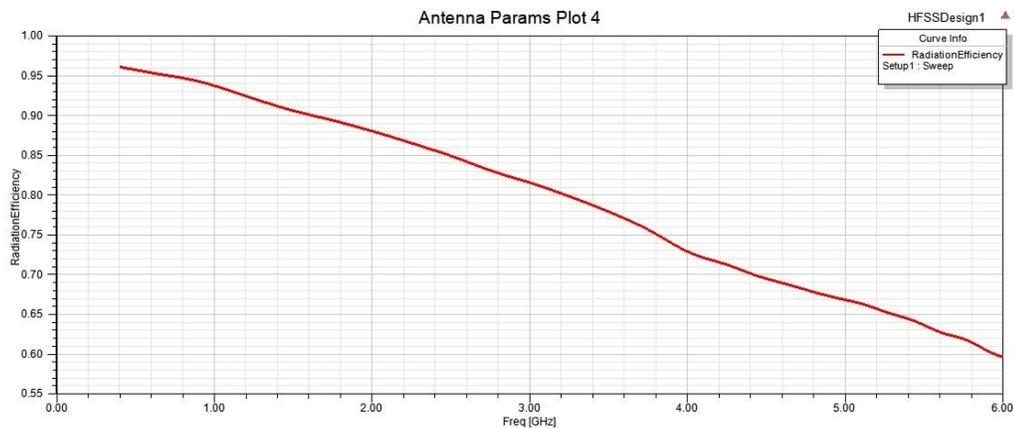
**Fig2. Simulated VSWR of the antenna**

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**Fig3. Simulated Gain plot of the antenna**

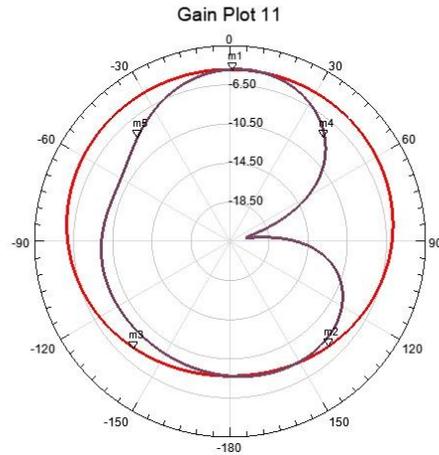


**Fig4. Simulated Radiation Efficiency of the antenna**

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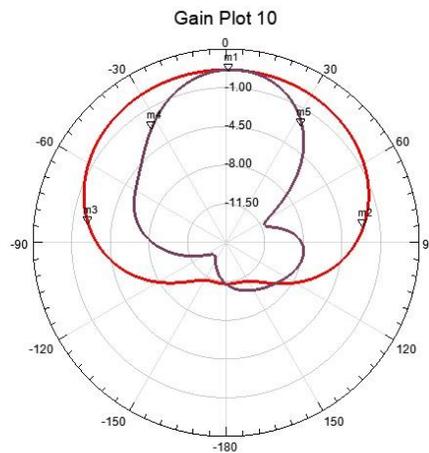
Name	Theta	Ang	Mag
m1	1.0000	1.0000	-4.9084
m2	136.0000	136.0000	-7.7580
m3	-138.0000	-138.0000	-7.8302
m4	42.0000	42.0000	-8.0476
m5	-41.0000	-41.0000	-8.2130



HFSSDesign1	
Curve Info	
dB(GainTotal)	
Setup1: Sweep1	
Freq=0.433GHz' Phi=0deg'	
dB(GainTotal)	
Setup1: Sweep1	
Freq=0.433GHz' Phi=90deg'	

**Fig5. Simulated Radiation pattern of the antenna @0.433GHz**

Name	Theta	Ang	Mag
m1	1.0000	1.0000	0.6370
m2	83.0000	83.0000	-2.4372
m3	-82.0000	-82.0000	-2.3738
m4	-33.0000	-33.0000	-2.6379
m5	33.0000	33.0000	-2.3687



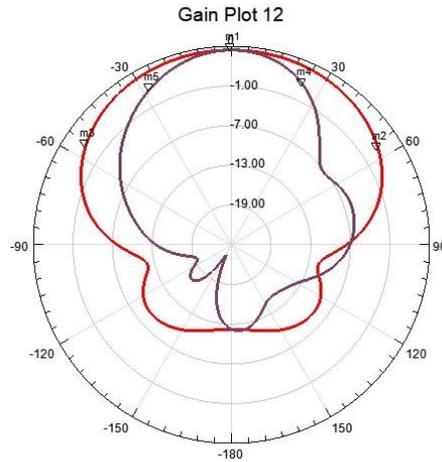
HFSSDesign1	
Curve Info	
dB(GainTotal)	
Setup1: Sweep	
Freq=0.9GHz' Phi=0deg'	
dB(GainTotal)	
Setup1: Sweep	
Freq=0.9GHz' Phi=90deg'	

**Fig6. Simulated Radiation pattern of the antenna @0.9 GHz**

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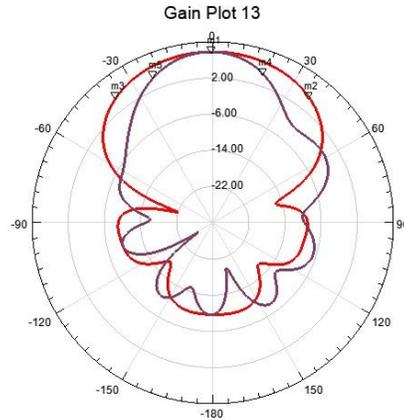
Name	Theta	Ang	Mag
m1	0.0000	0.0000	4.4258
m2	57.0000	57.0000	1.5022
m3	-56.0000	-56.0000	1.6361
m4	24.0000	24.0000	1.5161
m5	-28.0000	-28.0000	1.5136



HFSSDesign1	
Curve Info	
—	dB(GainTotal)
Setup1: Sweep2	Freq=1.5GHz' Phi=0deg'
—	dB(GainTotal)
Setup1: Sweep2	Freq=1.5GHz' Phi=90deg'

**Fig7. Simulated Radiation pattern of the antenna @1.5 GHz**

Name	Theta	Ang	Mag
m1	0.0000	0.0000	7.7662
m2	38.0000	38.0000	4.8580
m3	-38.0000	-38.0000	4.8735
m4	19.0000	19.0000	4.6109
m5	-22.0000	-22.0000	4.7053



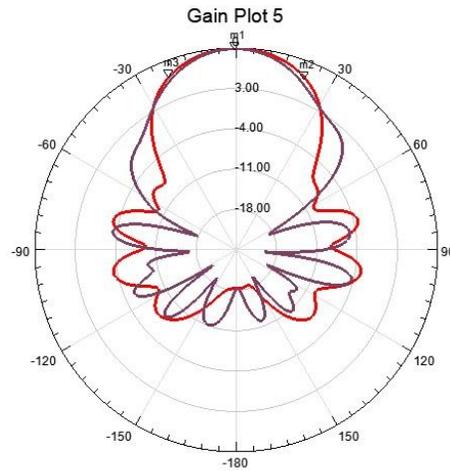
HFSSDesign1	
Curve Info	
—	dB(GainTotal)
Setup1: Sweep3	Freq=2.45GHz' Phi=0deg'
—	dB(GainTotal)
Setup1: Sweep3	Freq=2.45GHz' Phi=90deg'

**Fig8. Simulated Radiation pattern of the antenna @2.45GHz**

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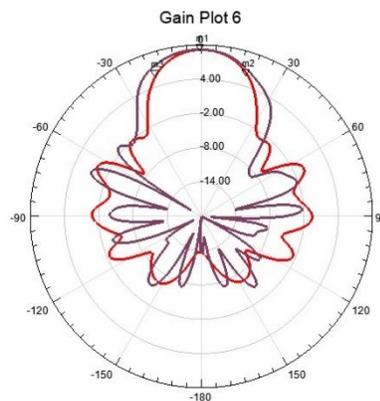
Name	Theta	Ang	Mag
m1	0.0000	0.0000	9.8959
m2	22.0000	22.0000	7.0370
m3	-21.0000	-21.0000	7.2715



HFSSDesign1	
Curve Info	
—	dB(GainTotal)
Setup1: Sweep	Freq=4GHz Phi=0deg
—	dB(GainTotal)
Setup1: Sweep	Freq=4GHz Phi=90deg

**Fig9. Simulated Radiation pattern of the antenna @4.0GHz**

Name	Theta	Ang	Mag
m1	0.0000	0.0000	9.1646
m2	18.0000	18.0000	6.0402
m3	-18.0000	-18.0000	5.8411



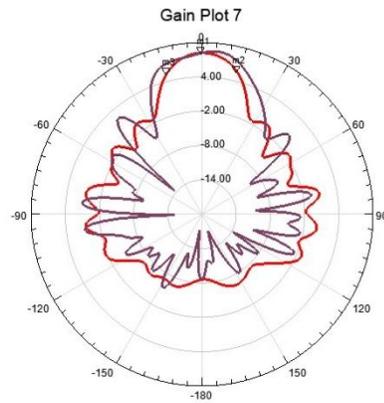
HFSSDesign1	
Curve Info	
—	dB(GainTotal)
Setup1: Sweep	Freq=5GHz Phi=0deg
—	dB(GainTotal)
Setup1: Sweep	Freq=5GHz Phi=90deg

**Fig10. Simulated Radiation pattern of the antenna @5.0GHz**

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Name	Theta	Ang	Mag
m1	0.0000	0.0000	8.2012
m2	14.0000	14.0000	5.5998
m3	-14.0000	-14.0000	5.3931



HFSSDesign1	
Curve Info	
—	dB(GainTotal)
Setup1: Sweep	Freq=6GHz Phi=0deg
—	dB(GainTotal)
Setup1: Sweep	Freq=6GHz Phi=90deg

**Fig11. Simulated Radiation pattern of the antenna @6.0GHz**

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