

STDPA551420MBA433 Specification

433MHz Dipole Antenna

1. Feature

- * 433MHz Dipole Antenna
- * 433MHz of frequency
- * LMR100 Black Cable
- * ROHS compliance

2. Application

- * 433MHz Wireless Communication
- * WLAN device, WLAN Router, e.g., AP, PIC Wireless Card

3. Description

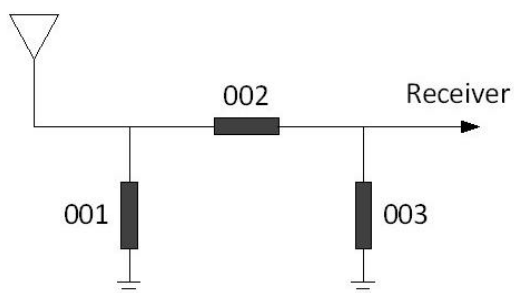
The antenna was specially designed by Shanghai Zhenyi Communication Technology Co. , Ltd, for 433MHz Antenna applications . It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

4. General Data

Product Name	433MHz Dipole Antenna
Part No.	STDPA551420MBA433
Frequency	433MHz
V.S.W.R	≤2.0
Gain (dBi)	-2.0dBi
Polarization	Vertical
Storage Temp	-30℃~+70℃
Operating Temperature	-30℃~+70℃
Impedance with Matching	50 Ω
Dimension	54* Φ 14 (mm)

5. Typical Electrical Characteristics

➤ Recommend Matching Circuit



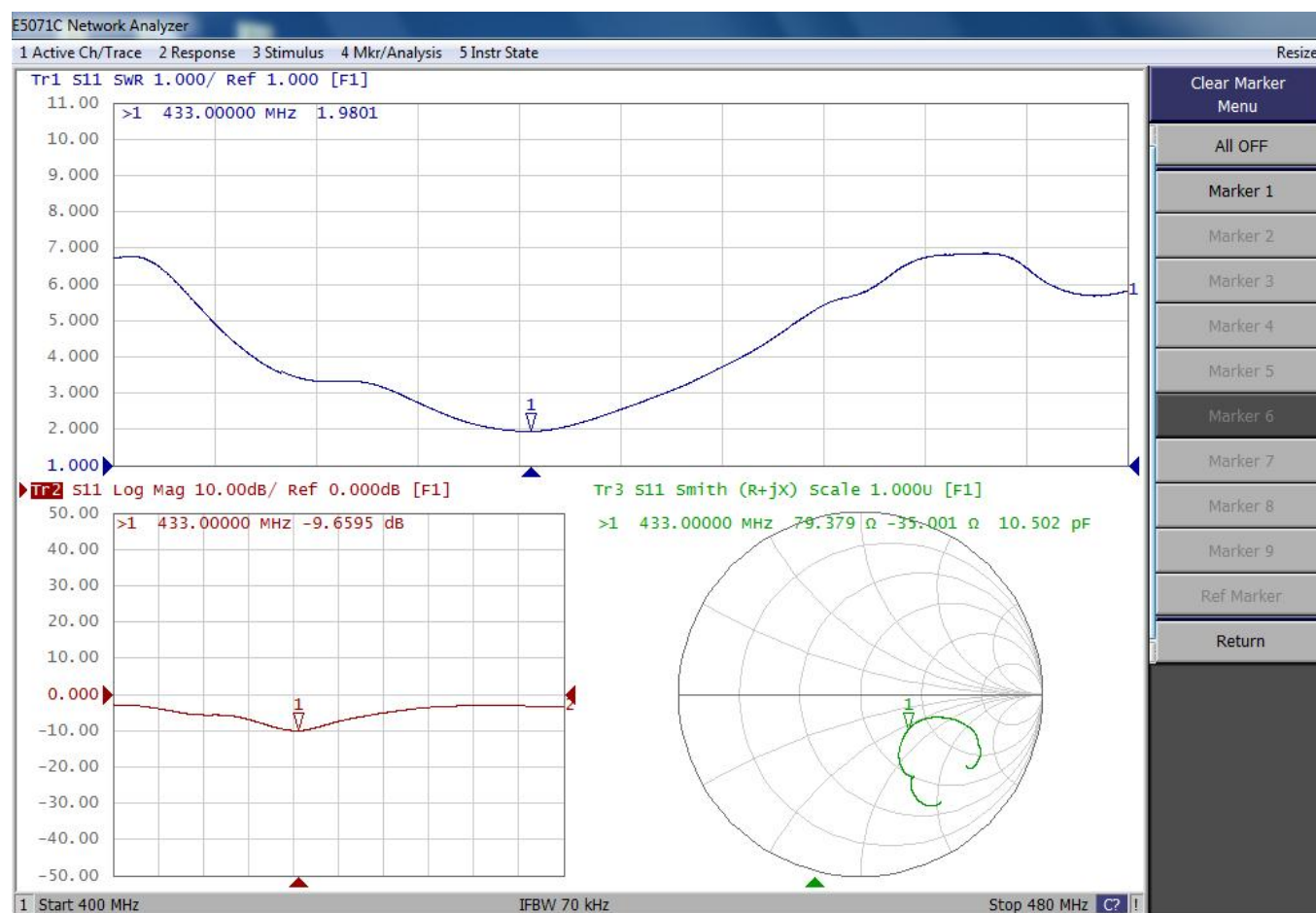
Reference:

001=(N/A)

002=0 Ω

003=(N/A)

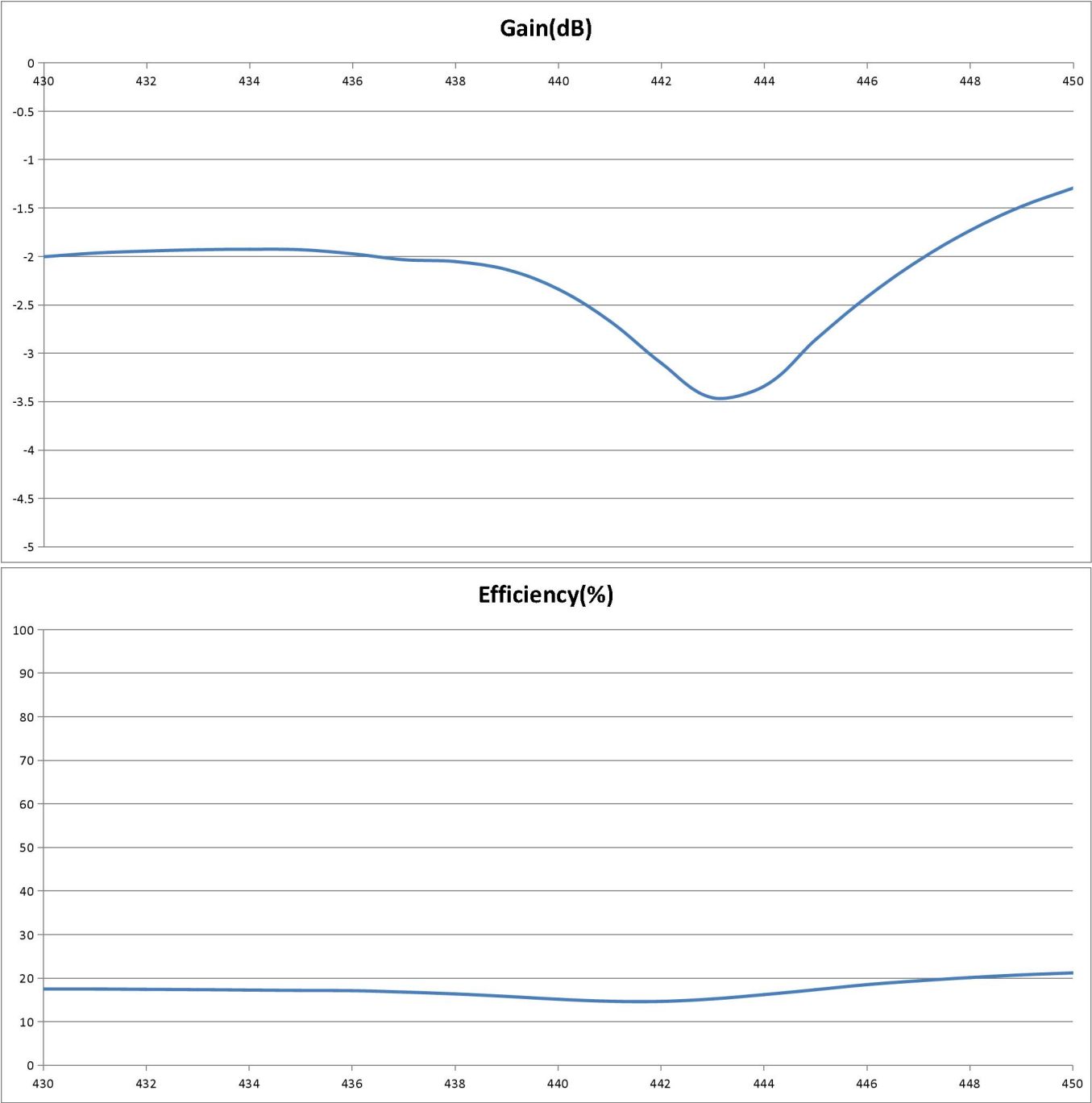
Return loss、VSWR& Smith chart



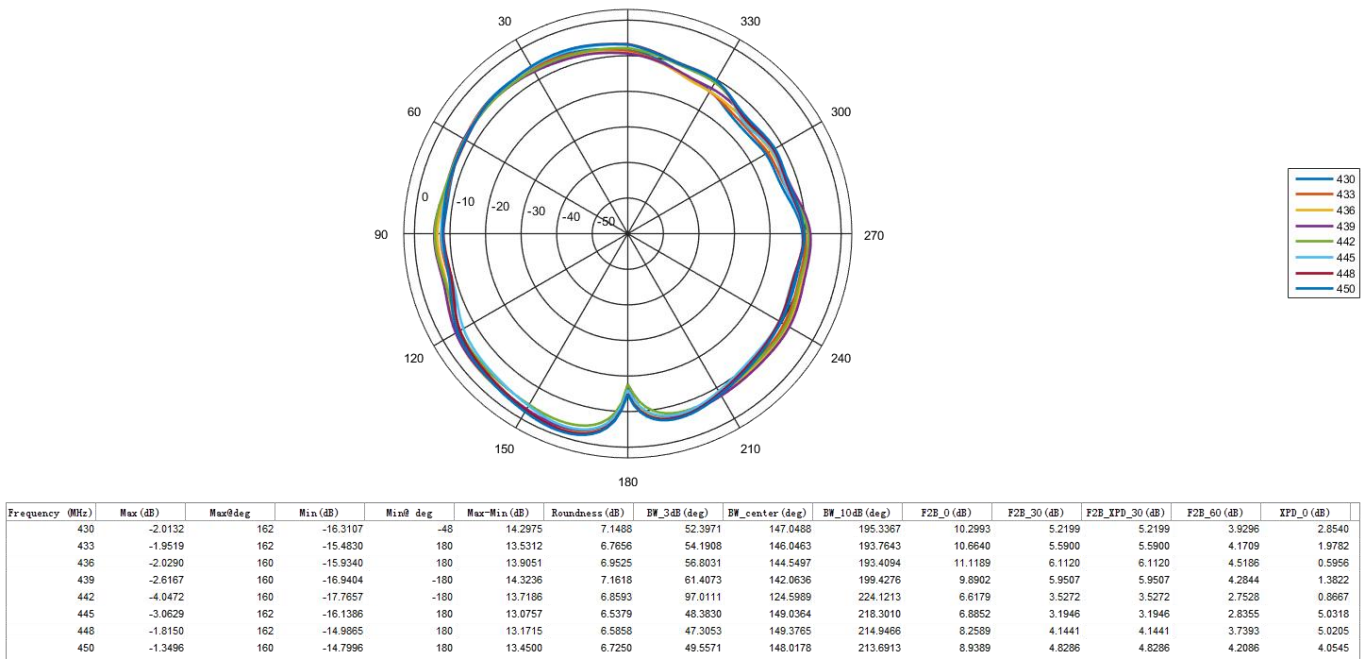
Frequency Total Data

Frequency (MHz)	Directivity (dB)	Gain (dB)	Efficiency (dB)	Efficiency (%)
430	5.5621	-2.0022	-7.5643	17.5216
431	5.6032	-1.9642	-7.5675	17.5086
432	5.6416	-1.9441	-7.5857	17.4354
433	5.6722	-2.0000	-7.6021	17.3697
434	5.6999	-1.925	-7.6249	17.2785
435	5.7177	-1.9301	-7.6478	17.1879
436	5.6897	-1.9721	-7.6618	17.1326
437	5.7102	-2.0333	-7.7435	16.8132
438	5.803	-2.0524	-7.8554	16.3857
439	5.8714	-2.1359	-8.0073	15.8224
440	5.8526	-2.3387	-8.1913	15.166
441	5.6561	-2.6689	-8.3251	14.7059
442	5.2329	-3.1034	-8.3363	14.668
443	4.7118	-3.46	-8.1717	15.2344
444	4.5611	-3.3369	-7.898	16.2255
445	4.7528	-2.8547	-7.6075	17.3482
446	4.9106	-2.4139	-7.3245	18.5159
447	5.0841	-2.0391	-7.1232	19.3946
448	5.2308	-1.7294	-6.9602	20.1363
449	5.3481	-1.4811	-6.8292	20.753
450	5.4428	-1.2922	-6.735	21.2082

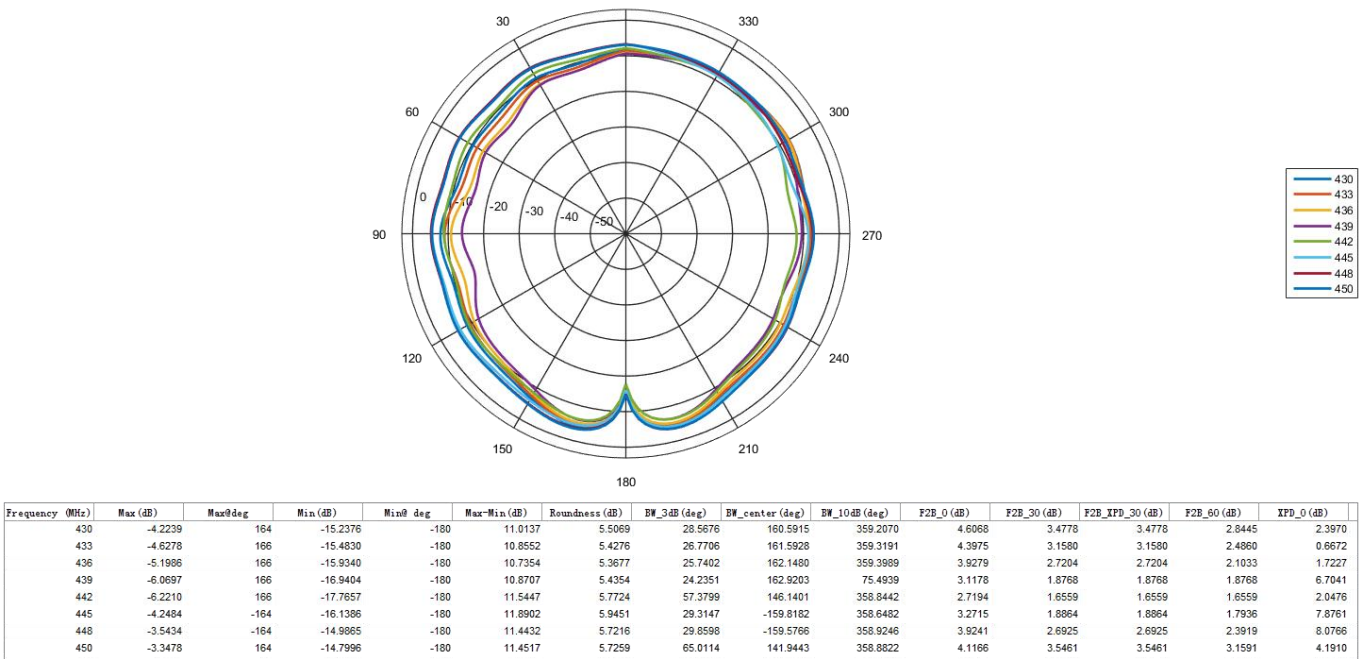
Gain(dB)&Efficiency(%)



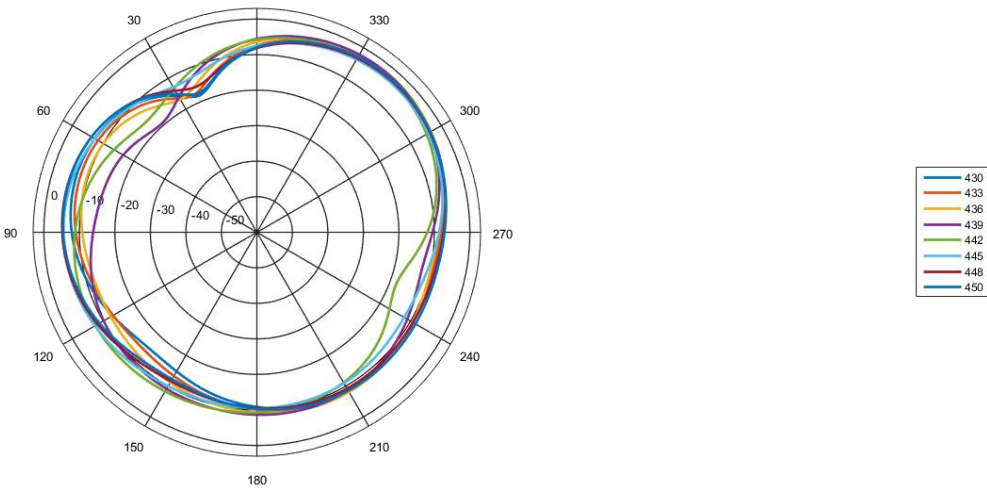
Phi=0°



Phi=90°



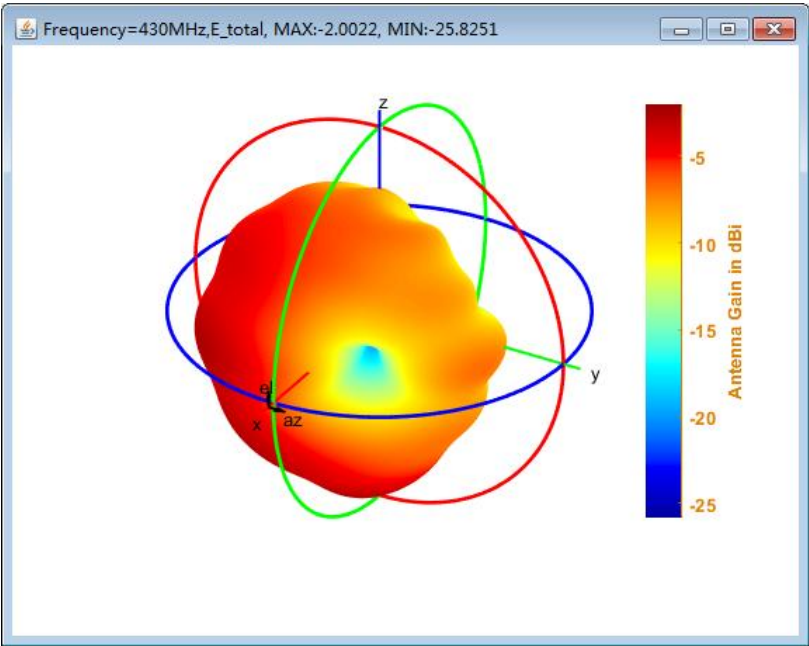
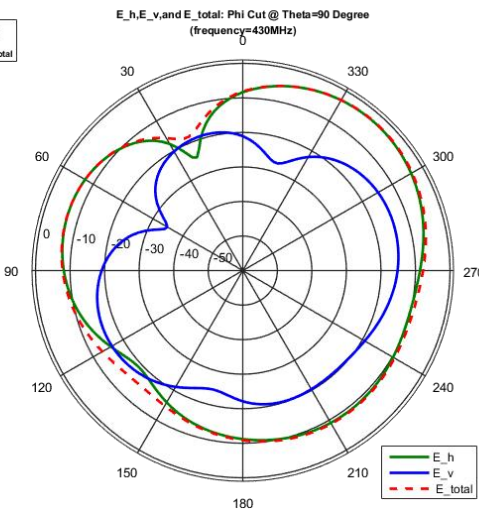
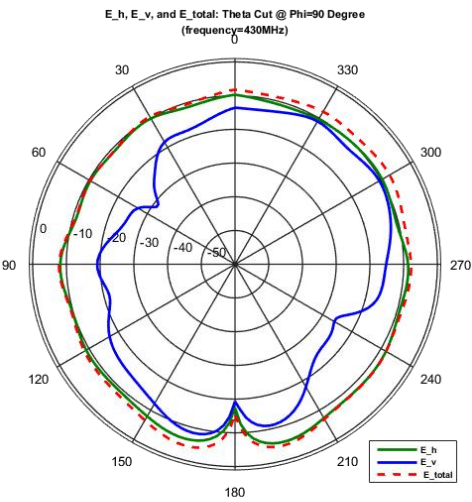
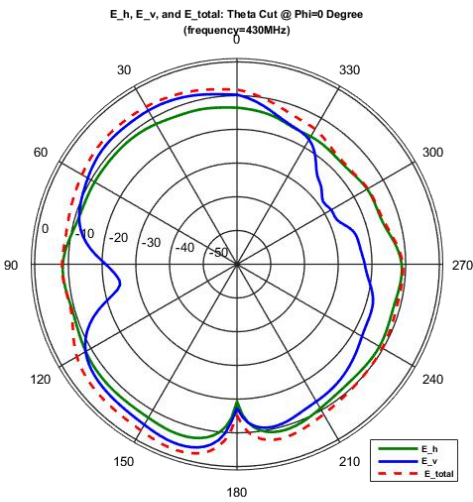
Theta=90°



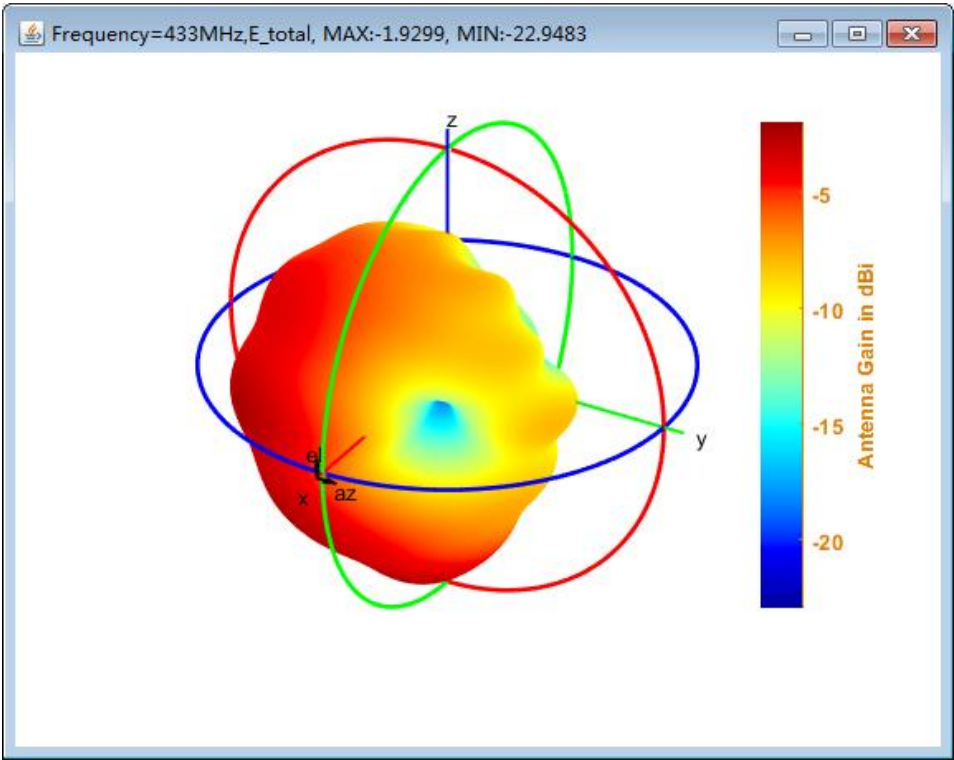
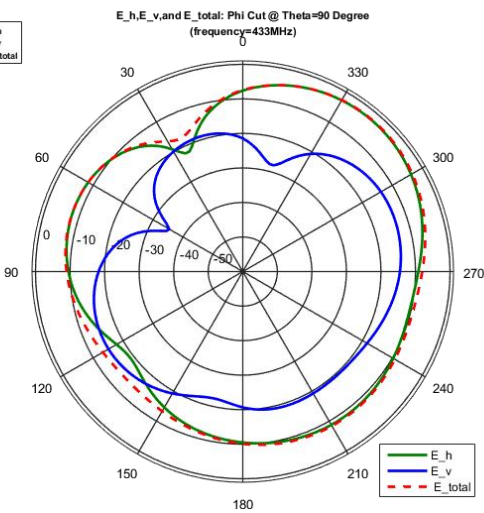
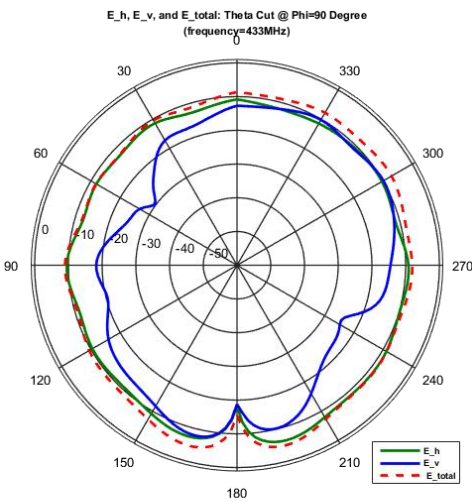
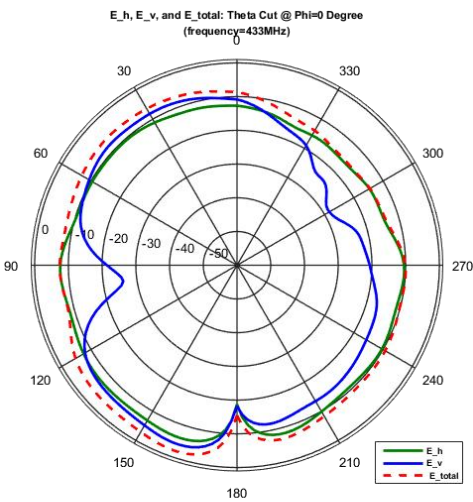
Frequency (MHz)	Max (dB)	Maxθdeg	Min(dB)	Minθ deg	Max-Min(dB)	Roundness (dB)	Avg_Gain(dB)	BW_3dB(deg)	BW_center(deg)	BW_10dB(deg)	F2B_0 (dB)	F2B_30 (dB)	F2B_XP0_30 (dB)	F2B_60 (dB)
430	-2.4526	-42	-18.2324	22	15.7398	7.8699	-7.6351	64.5765	-43.5308	203.8128	12.9273	8.5656	8.5656	4.4114
433	-2.2878	-42	-17.4771	26.0000	15.1893	7.5947	-7.5869	64.3642	-41.6355	212.9790	11.7862	9.0765	9.0765	5.7124
436	-2.0493	-40	-16.8537	30	14.8044	7.4022	-7.4962	64.3026	-38.8556	241.6709	9.7198	7.8113	7.8113	6.1813
439	-2.1469	-36	-19.3766	42	17.2297	8.6149	-7.7356	65.0146	-34.9150	120.8730	7.0887	6.6388	6.6388	6.2936
442	-3.1046	-36	-18.1452	-112	15.0406	7.5203	-8.0036	70.0800	-32.9274	122.4814	4.9775	4.3696	4.3696	4.3696
445	-3.4834	-42	-12.9633	26.0000	9.4798	4.7399	-7.5343	70.6914	-41.9401	NaN	5.6560	2.9604	2.9604	2.0443
448	-2.9477	-44	-15.6221	22	12.6744	6.3372	-7.1004	69.2658	-44.5863	340.4941	7.5642	3.4435	3.4435	2.0539
450	-2.6357	-42	-17.5815	22	14.9458	7.4729	-8.9715	68.3165	-43.6954	336.3777	8.9298	4.7140	4.7140	2.5333

2D&3D test pattern

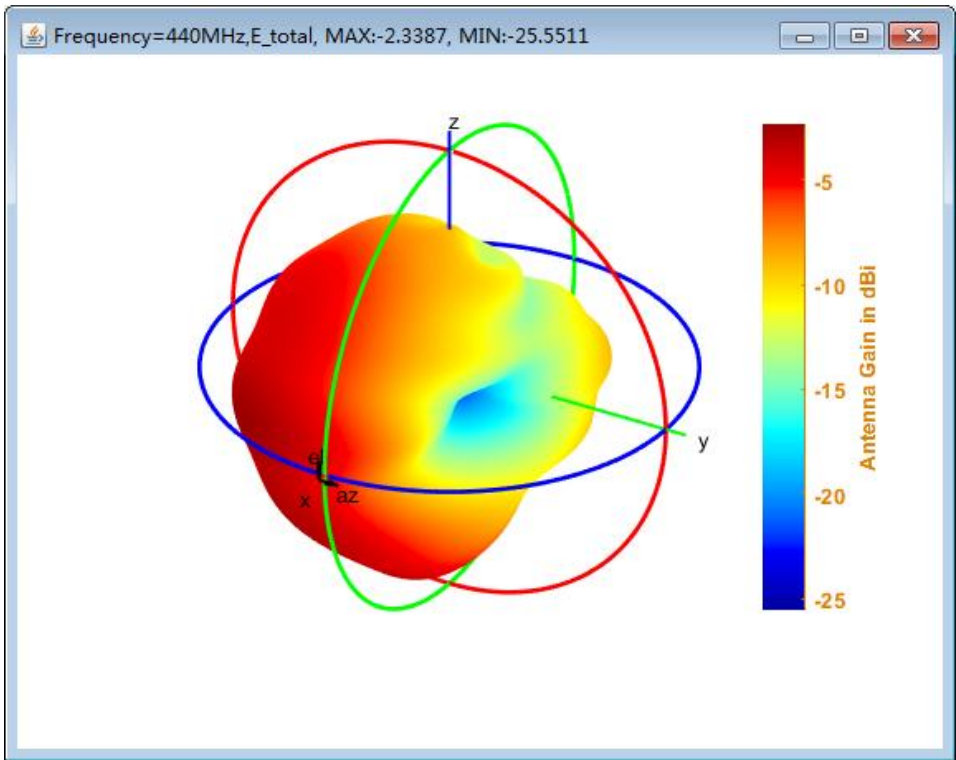
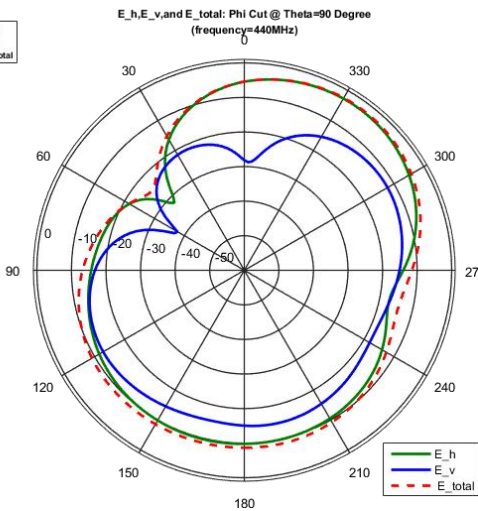
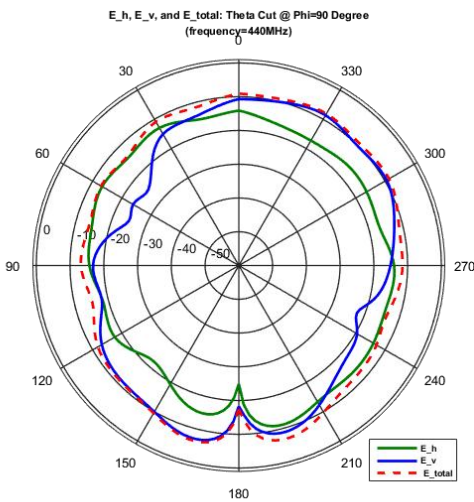
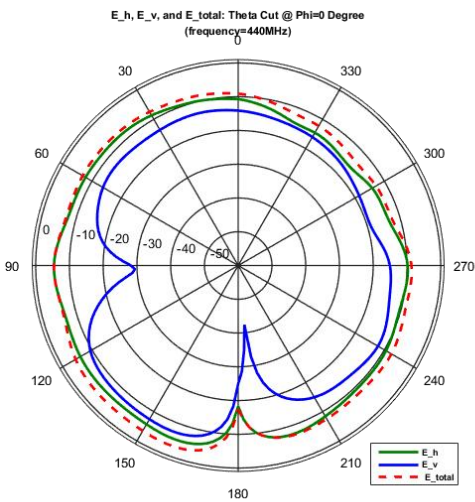
Frequency=430MHz



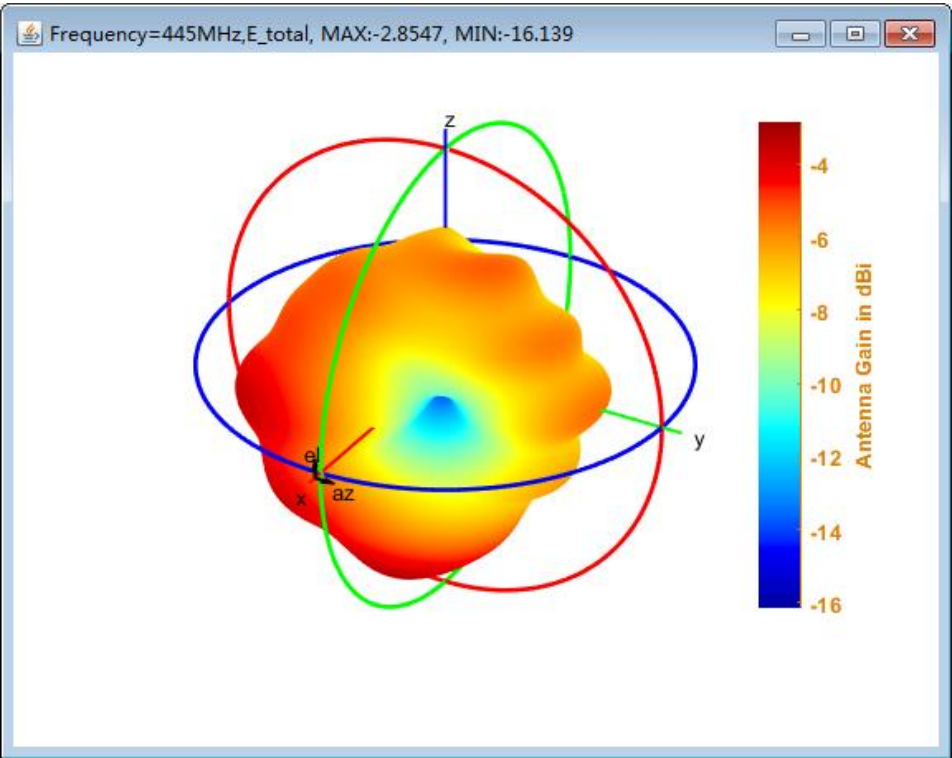
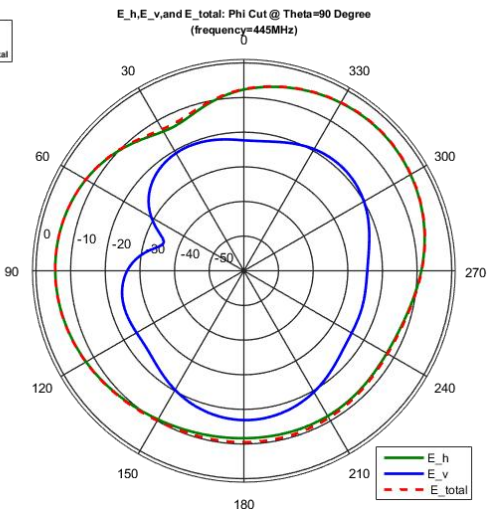
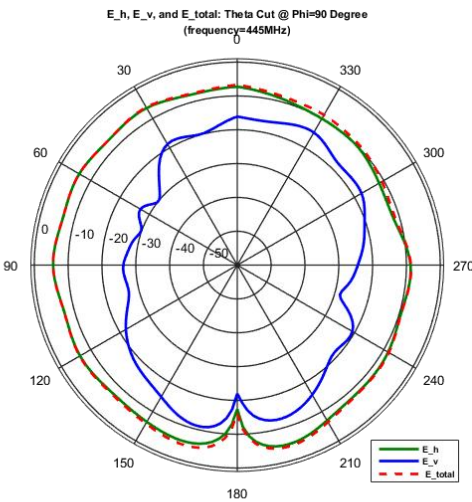
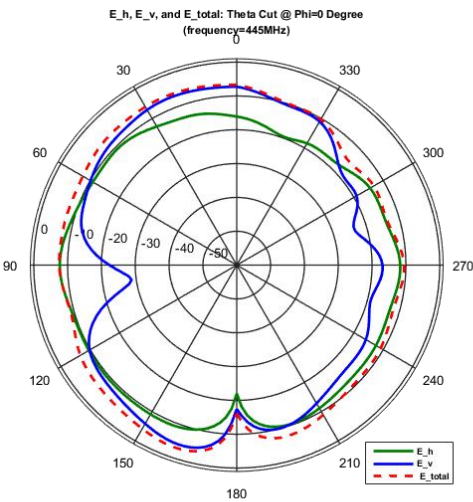
Frequency=433MHz



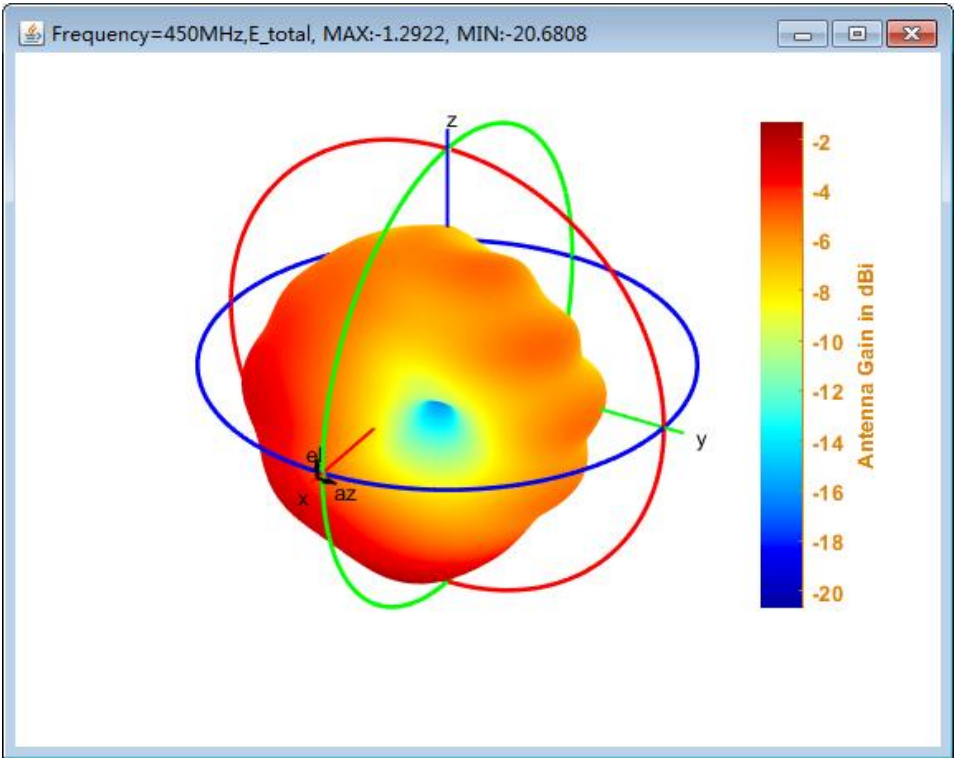
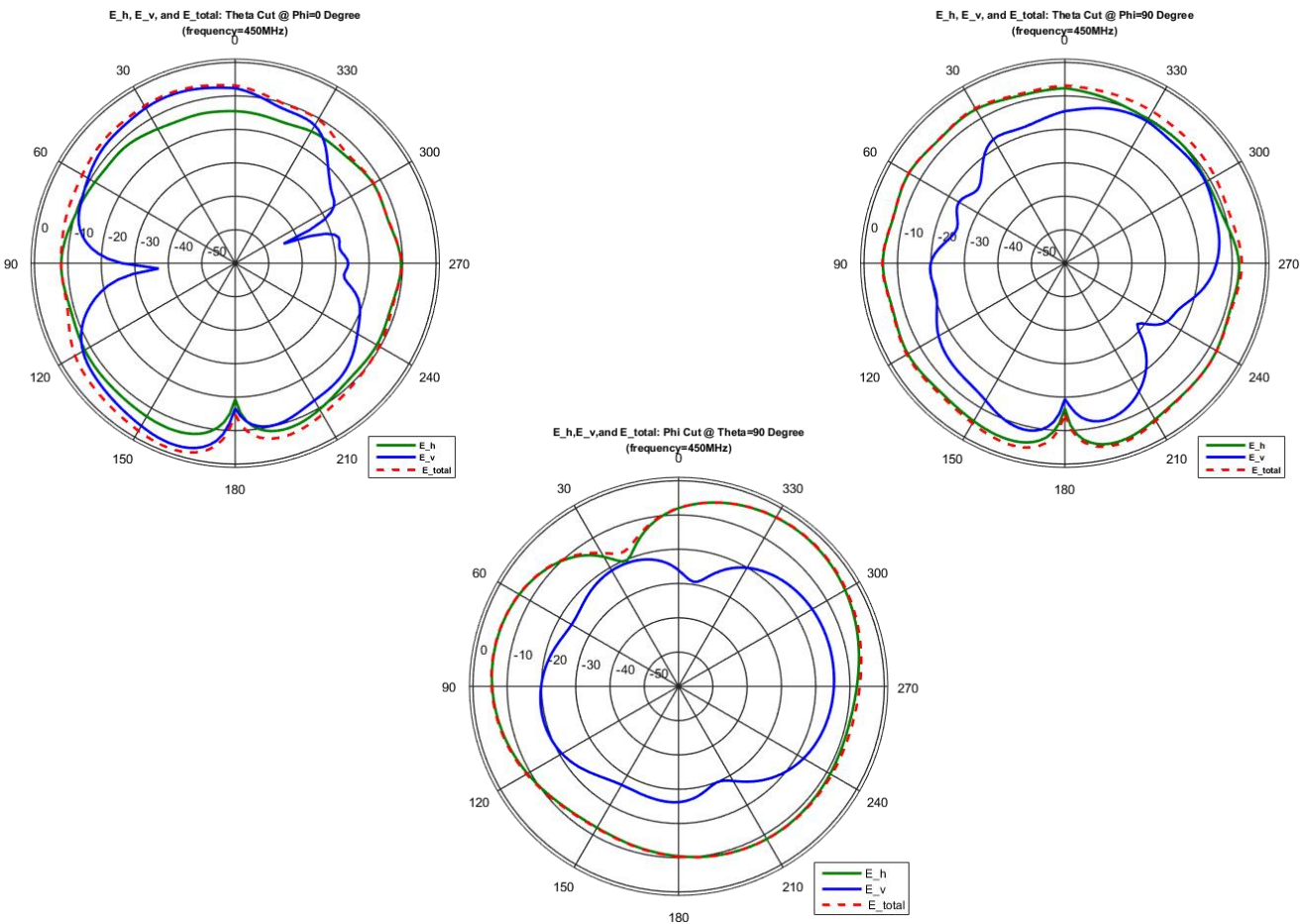
Frequency=440MHz



Frequency=445MHz



Frequency=450MHz



6. Dimension

