Feature

- External type dipole antenna
- 5.8GHz of frequency
- N-YPTE Plug Stright interface
- Plastic rod of black
- IP67
- RoHS compliance

Application

- 5.8GHz Wireless Communication
- WLAN device, WLAN Router, e.g., AP, PIC Wireless Card

Description

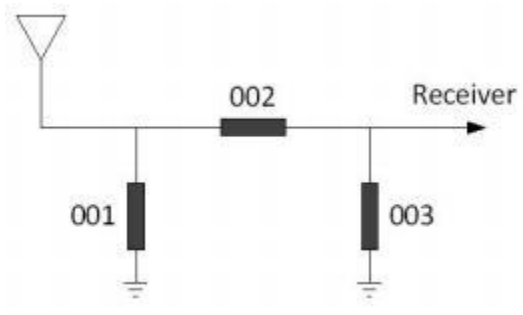
This miniature antenna is designed for 5.8GHz applications and can be easily built-in portable devices with N-TYPE processes. It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

General Data

Product Name	DRA5G7D-N
Part NO.	7dBi 5.8G Dipole Antenna
Frequency	5.15~5.85GHz
V.S.W.R	≤2.0
Peak Gain（dBi）	5.55GHz@7.0dBi
Polarization	Linear,Vertical
Storage Temp	-10℃~+70℃
Operating Temperature	-10℃~+60℃
Antenna Type	N-TYPE PLUG Stright
Impedance with Matching	50 Ω
Dimension	L318X φ 21(mm)

Typical Electrical Characteristics

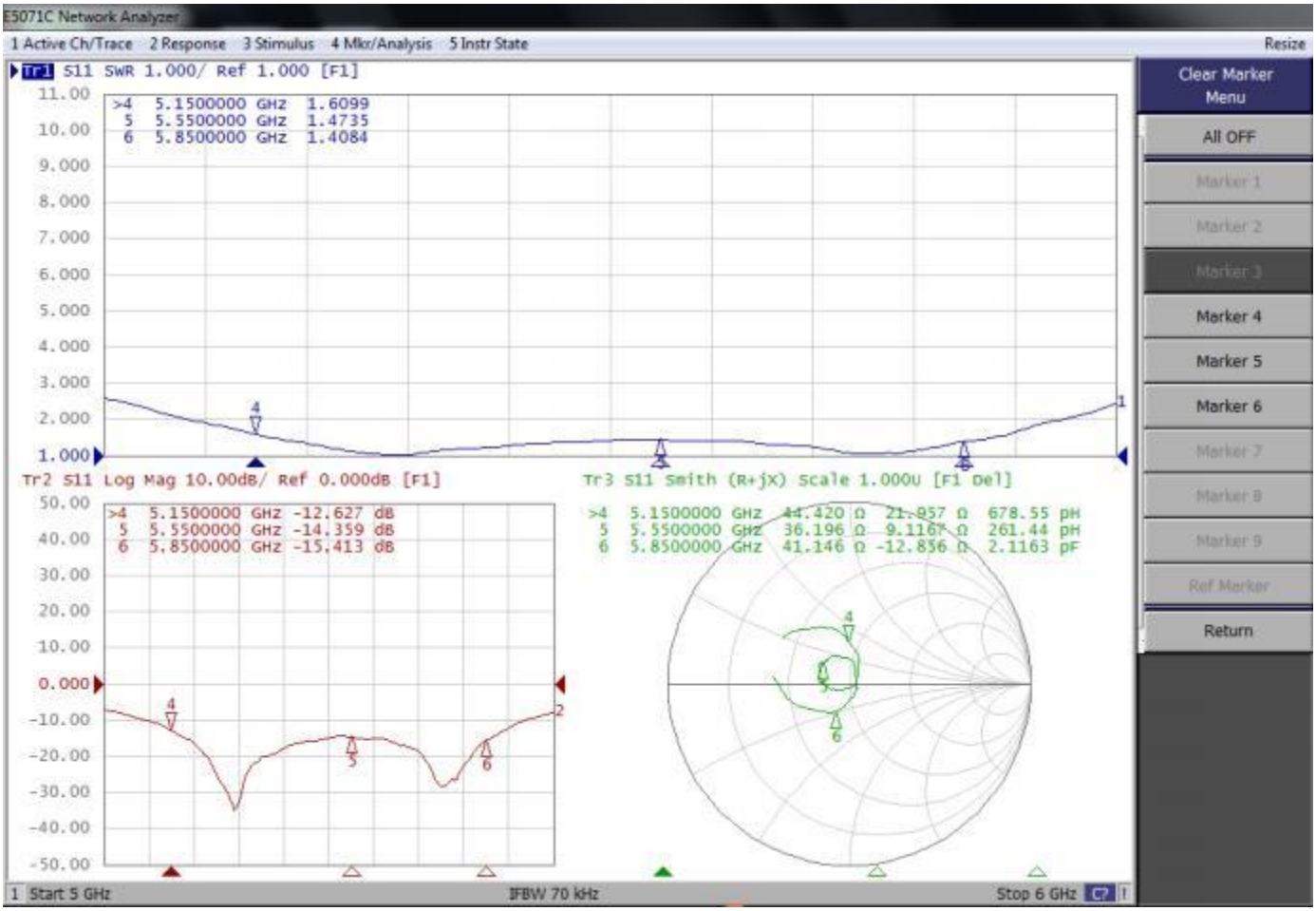
- Recommend Matching Circuit



Reference:

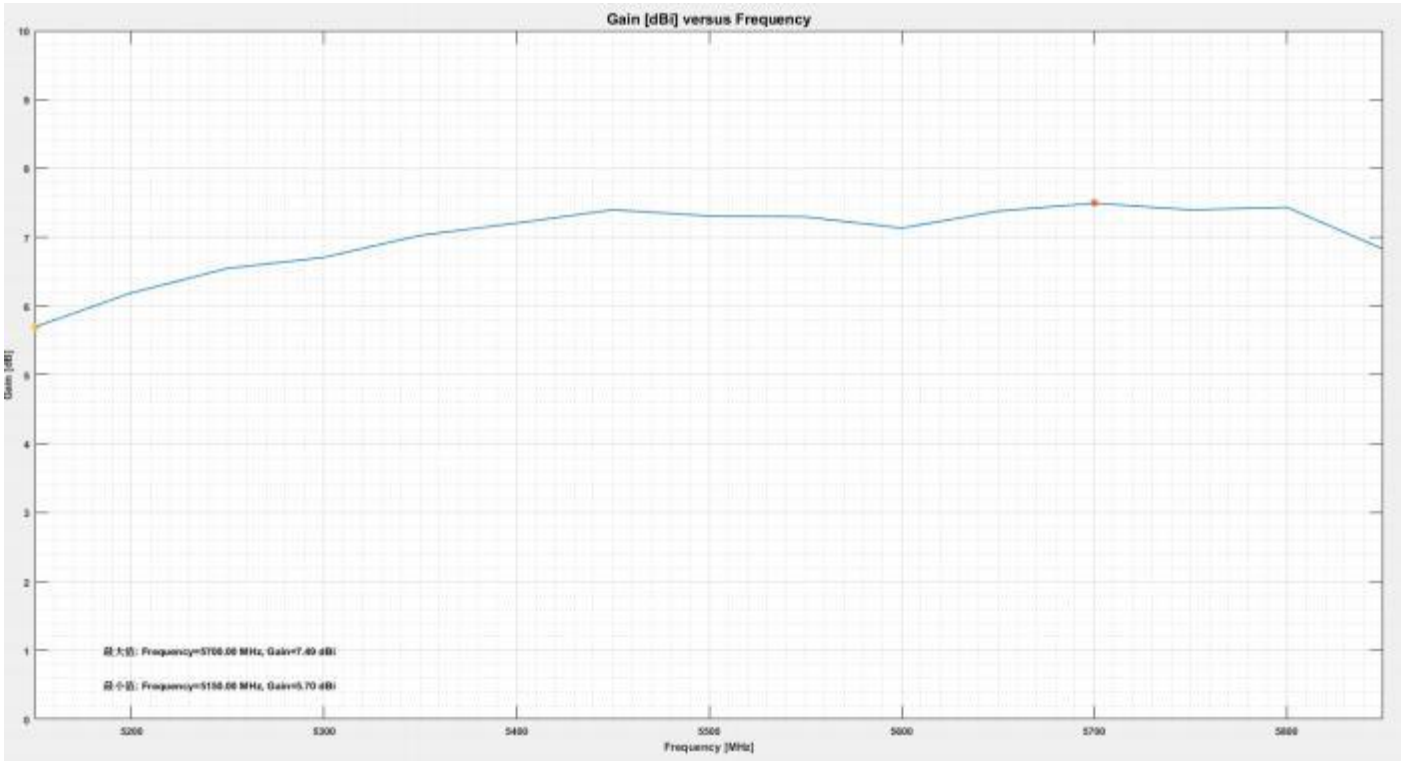
001=(N/A)
002=0Ω
003=(N/A)

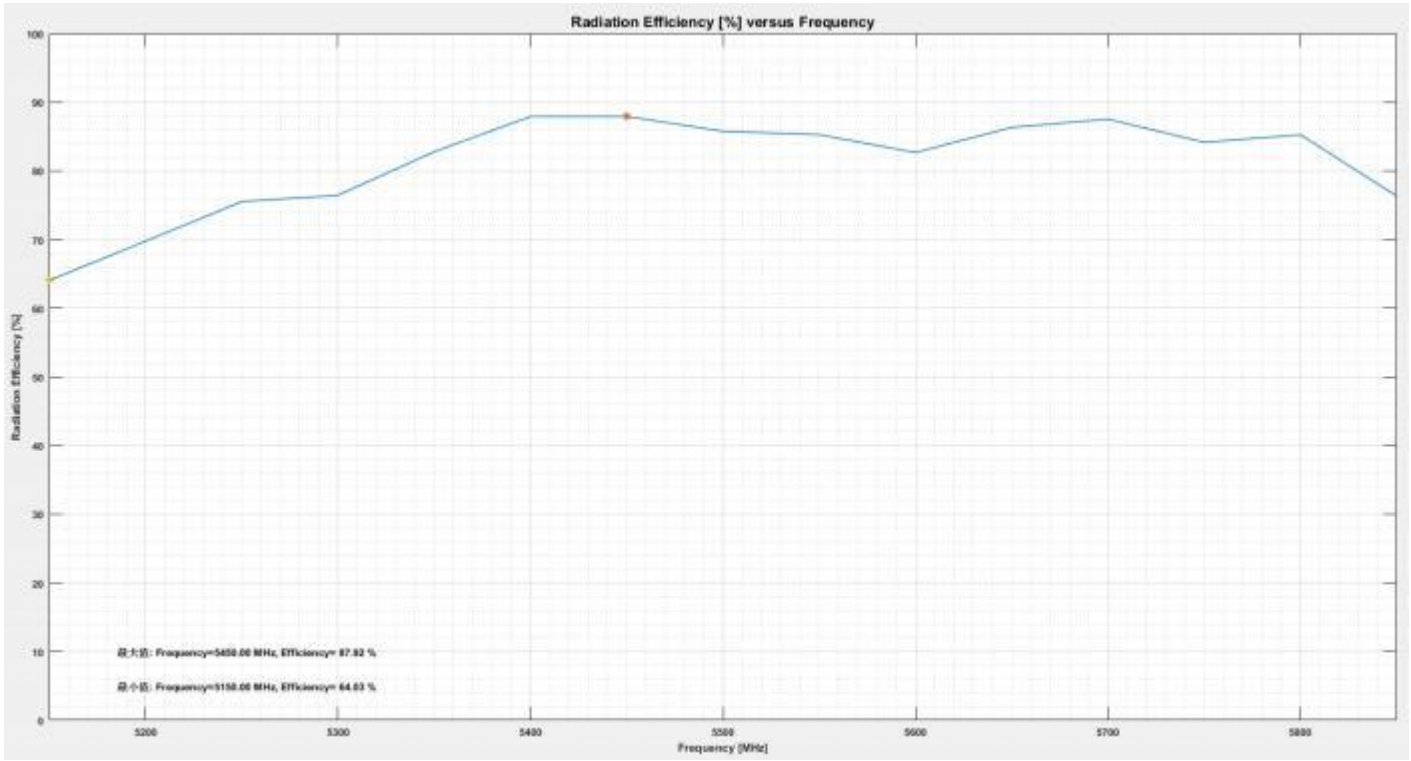
- **Return loss、VSWR& Smith chart**



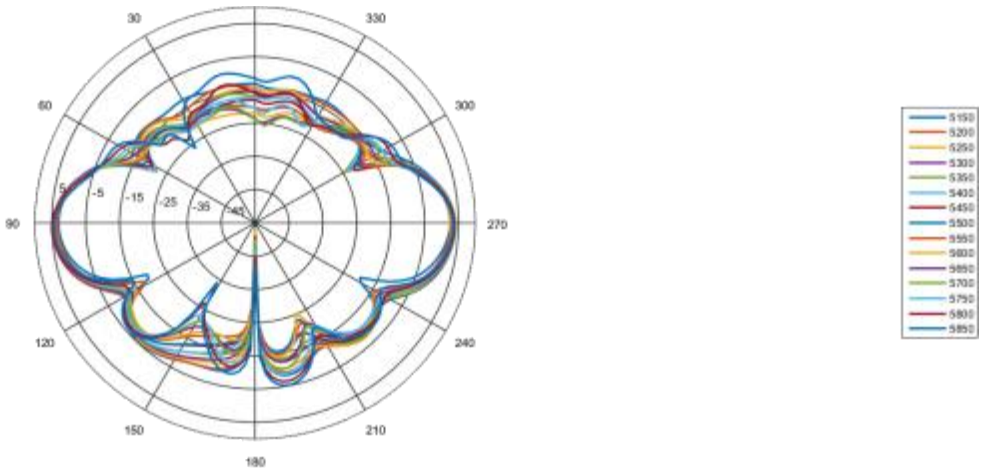
- **Efficiency (%)&Gain（dBi）**

Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Directivity(dB)	7.6325	7.7562	7.7672	7.8742	7.8478	7.7643	7.9576	7.9764	7.9888	7.9598	8.0178	8.0723	8.1473	8.1286	8.0015
Gain(dB)	5.6963	6.1912	6.5475	6.7071	7.0268	7.2045	7.3983	7.3097	7.2966	7.1328	7.3793	7.494	7.3981	7.4358	6.8281
Efficiency(dB)	-1.9363	-1.565	-1.2198	-1.1672	-0.8209	-0.5598	-0.5593	-0.6667	-0.6922	-0.8269	-0.6385	-0.5783	-0.7492	-0.6928	-1.1734
Efficiency(%)	64.0285	69.743	75.5136	76.4333	82.7764	87.9057	87.9169	85.7699	85.2665	82.662	86.3276	87.5324	84.1554	85.2555	76.3242



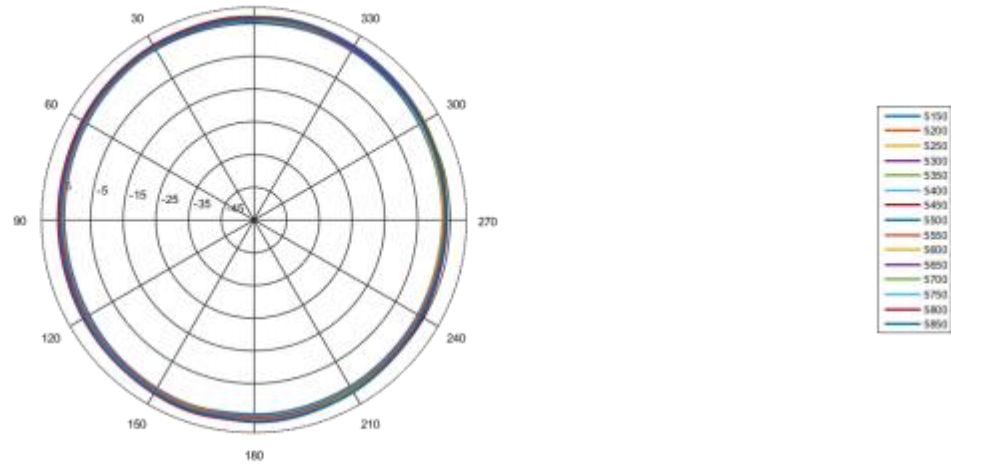


phi90°



Frequency (MHz)	Max (dB)	Num Nulls	Min (dB)	Min@ deg	Max-Min (dB)	Roundness (dB)	BW_3dB (deg)	BW_center (deg)	BW_10dB (deg)	F2B_0 (dB)	F2B_30 (dB)	F2B_EP0_30 (dB)	F2B_60 (dB)	EP0_0 (dB)
5150	3.8299	90	-47.9764	-180	51.8063	25.5031	23.8464	90.0519	41.9666	0.3426	0.3426	0.3426	0.3426	34.0194
5200	3.3450	92	-48.7446	180	52.0862	26.0451	24.4456	91.1474	42.7724	0.8399	0.8939	0.8939	0.8939	29.4260
5250	3.8885	92	-48.1656	180	51.9741	25.9678	24.4859	91.9312	42.7837	1.0990	0.8539	0.8539	0.8539	28.6524
5300	4.8241	92	-51.6890	180	56.7239	27.9615	24.5138	92.1361	42.8514	1.9953	0.8104	0.8104	0.8104	28.2814
5350	4.3583	92	-51.6693	-180	56.0186	28.0093	24.1832	92.4583	42.7612	1.3363	1.0183	1.0183	1.0183	28.5215
5400	4.5835	92	-51.5864	180	56.0698	28.0349	24.4177	92.4901	43.1217	0.8129	0.3854	0.3854	0.3854	27.3180
5450	4.7490	92	-51.1912	180	55.9403	27.9701	24.0265	92.4038	42.7702	1.2473	0.9553	0.9553	0.9553	26.5869
5500	4.5604	92	-54.8632	180	59.4236	29.7118	23.9448	46.2099	42.9783	1.2121	0.9316	0.9316	0.9316	26.2623
5550	4.6857	92	-51.5147	180	56.1883	28.0982	23.8456	46.1822	42.8056	1.8802	0.8191	0.8191	0.8191	25.2871
5600	4.4876	92	-53.6851	180	58.1727	29.0864	23.2281	46.1589	42.2453	1.2894	0.9659	0.9659	0.9659	24.7715
5650	4.6107	92	-51.0928	180	55.7035	27.8517	23.6345	46.1387	42.6192	0.9800	0.7110	0.7110	0.7110	23.4490
5700	4.8534	92	-49.9524	180	54.8058	27.4029	22.2588	46.0764	41.8503	1.8279	0.7870	0.7870	0.7870	22.3132
5750	4.6960	92	-47.1580	180	51.8475	25.9238	22.2323	46.0742	41.9646	1.2137	0.9397	0.9397	0.9397	21.8317
5800	4.9939	92	-45.2147	180	50.2086	25.1043	21.2577	46.1162	39.8578	1.3794	1.1318	1.1318	1.1318	20.1939
5850	4.2165	92	-42.3318	180	46.5483	23.2741	20.8047	46.1459	39.9021	1.9476	0.7499	0.7499	0.7499	18.7545

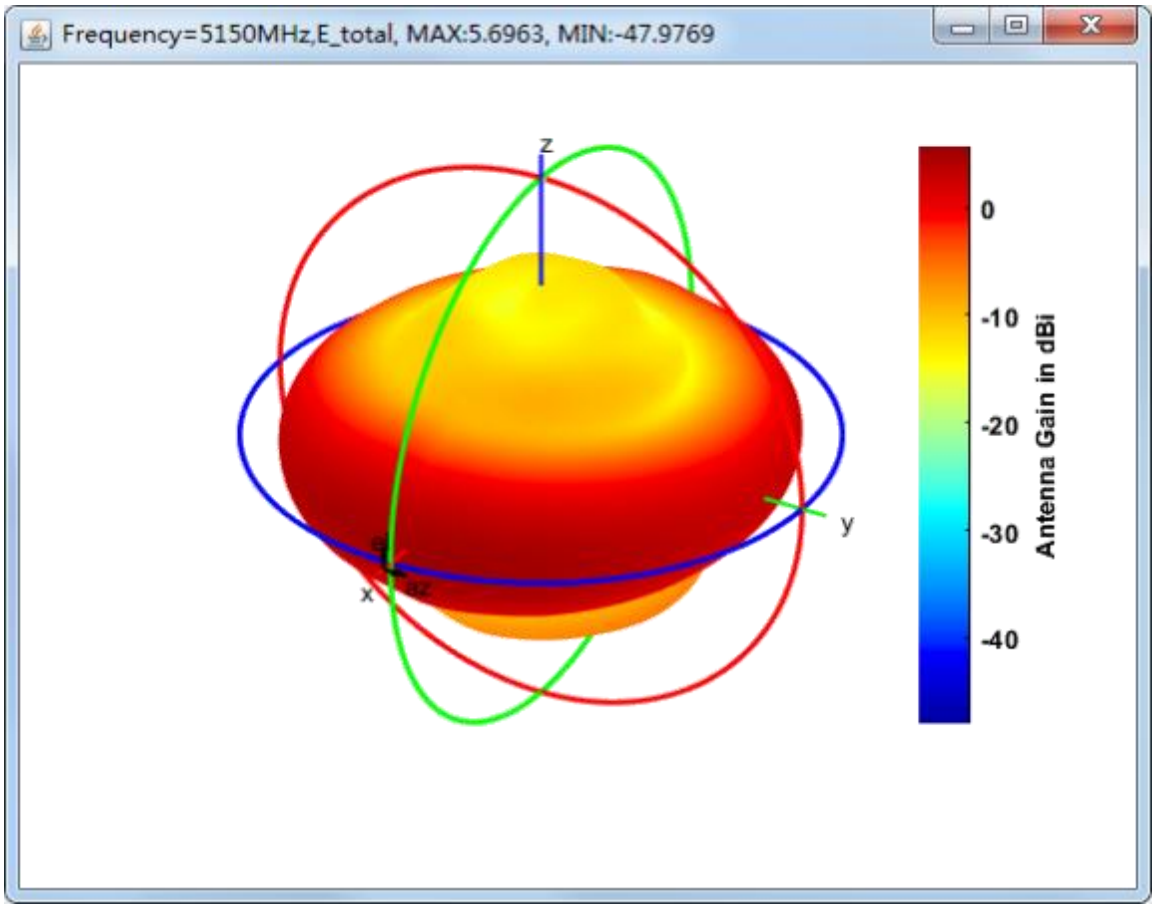
theta90°

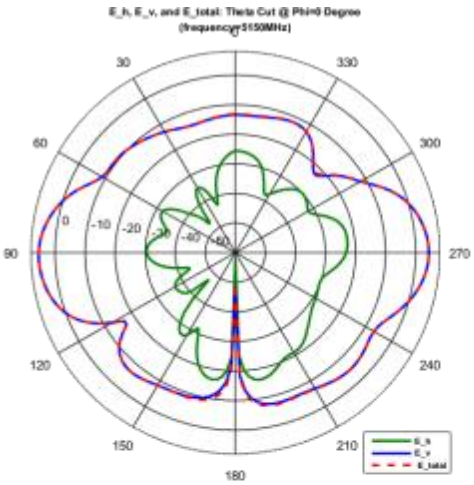


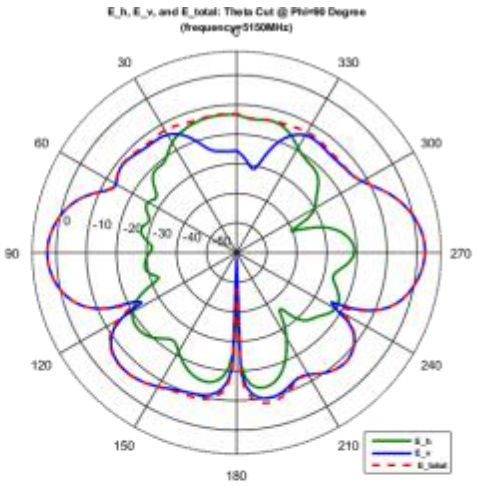
Frequency (MHz)	Max (dB)	Num Nulls	Min (dB)	Min@ deg	Max-Min (dB)	Roundness (dB)	Avg_Gain (dB)	BW_3dB (deg)	BW_center (deg)	BW_10dB (deg)	F2B_0 (dB)	F2B_30 (dB)	F2B_EP0_30 (dB)	F2B_60 (dB)
5150	5.6983	6	2.5289	-104.0000	3.1673	1.5837	4.9186	335.4870	78.3927	NaN	1.3376	0.9759	0.9759	0.9759
5200	6.1285	6	2.4969	-102	3.6296	1.8148	4.3884	311.1734	82.3928	NaN	1.8719	1.0587	1.0587	1.0587
5250	6.4225	6	2.8191	-100	3.6033	1.8017	4.7147	307.8867	85.1473	NaN	1.3283	0.9747	0.9747	0.9747
5300	6.5671	6	3.0486	-102	3.5185	1.7592	4.8367	312.8824	89.4967	NaN	1.1638	0.9831	0.9831	0.9831
5350	6.6382	6	3.2095	-98.0000	3.4288	1.8104	5.1885	306.8580	83.5727	NaN	0.9437	0.8872	0.8872	0.8872
5400	6.9939	6	4.0295	-100	2.9644	1.4822	5.4938	NaN	NaN	NaN	0.8627	0.7456	0.7456	0.7456
5450	7.1710	6	3.6867	-102	3.5642	1.7821	5.5338	310.1906	79.5090	NaN	0.7868	0.7834	0.7834	0.7834
5500	7.0789	6	3.5687	-96	3.5101	1.7591	5.4089	306.0380	87.7426	NaN	0.8545	0.7989	0.7989	0.7989
5550	7.0385	6	3.6925	-102	3.3440	1.6720	5.4582	321.4944	81.5166	NaN	0.8591	0.7543	0.7543	0.7543
5600	6.8895	6	3.2917	-98.0000	3.4978	1.7489	5.3494	312.5898	84.4765	NaN	0.9125	0.5842	0.5842	0.5842
5650	7.1679	6	3.7668	-100	3.3411	1.6706	5.5632	319.6835	83.7196	NaN	0.7102	0.6636	0.6636	0.6636
5700	7.2529	-8	3.9648	-102	3.3482	1.6741	5.7029	322.7828	78.9114	NaN	1.0295	0.4912	0.4912	0.4912
5750	7.0515	6	3.6988	-96	3.3517	1.6858	5.5887	314.0697	85.2166	NaN	0.4755	0.4634	0.4634	0.4634
5800	7.0944	6	3.8195	-96	3.2749	1.6375	5.6952	324.5550	86.3368	NaN	0.3068	0.2739	0.2739	0.2739
5850	6.6965	-12	3.3984	-98.0000	3.3081	1.6539	5.2059	321.6871	85.2538	NaN	0.7374	0.1987	0.1987	0.1987

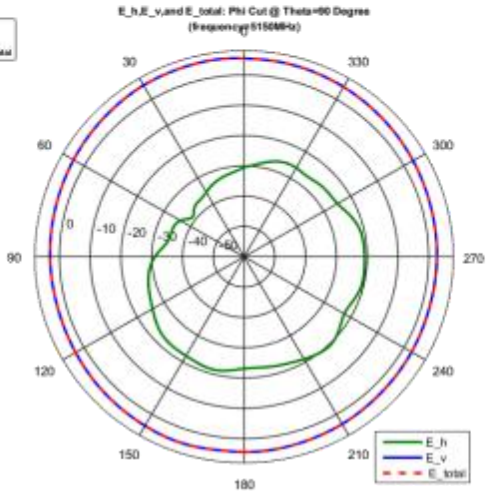
- **Gain（dBi）**

Frequency = 5150 MHz



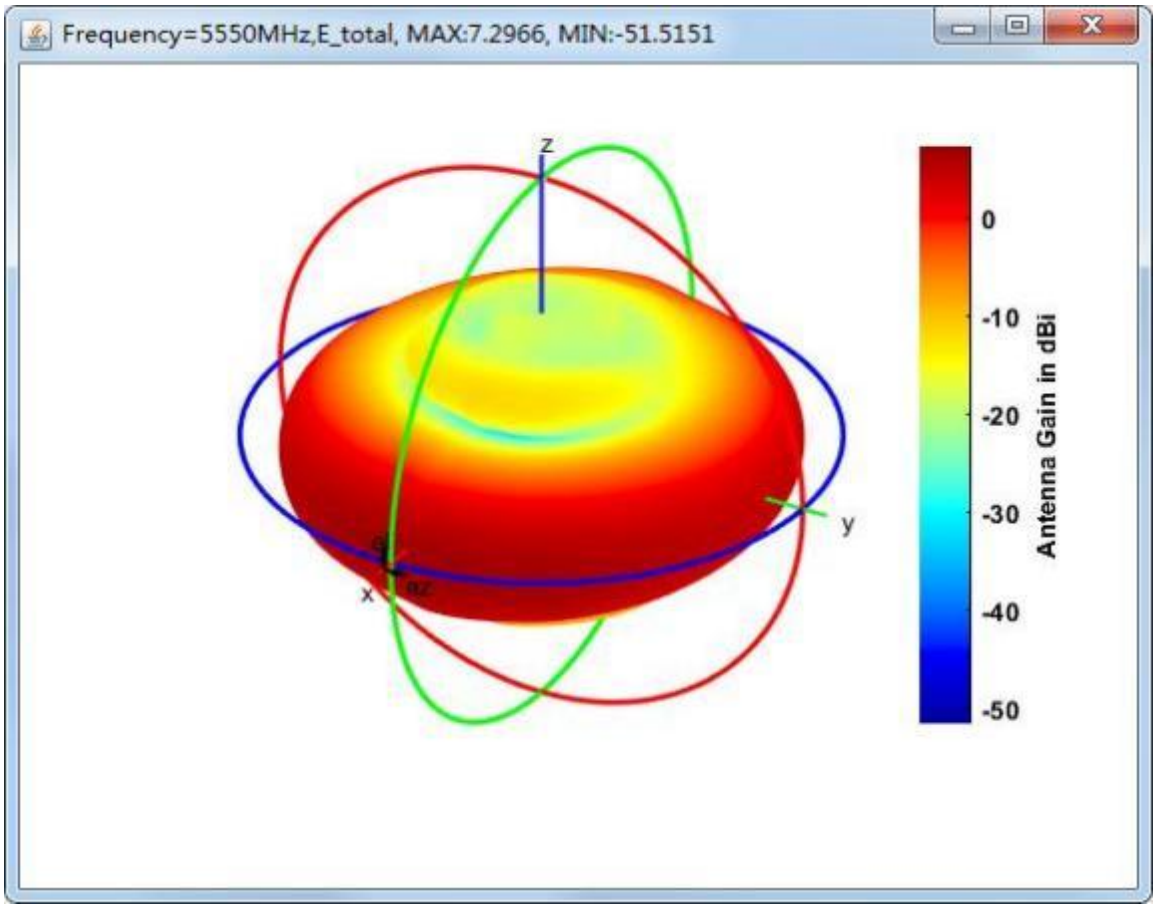


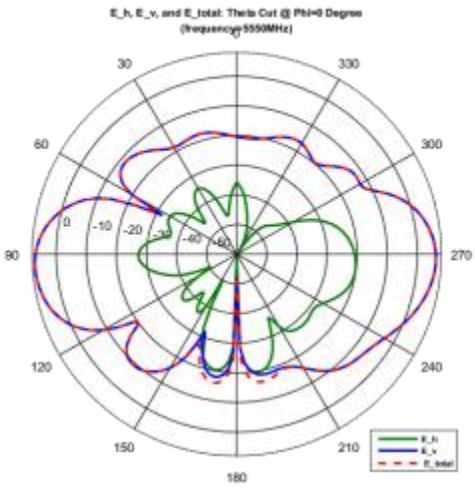


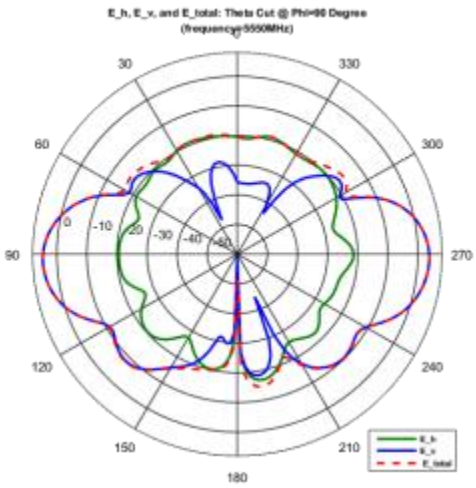


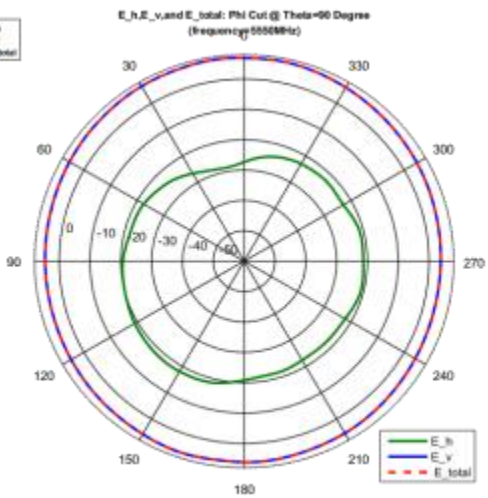
- **Gain（dBi）**

Frequency = 5550 MHz



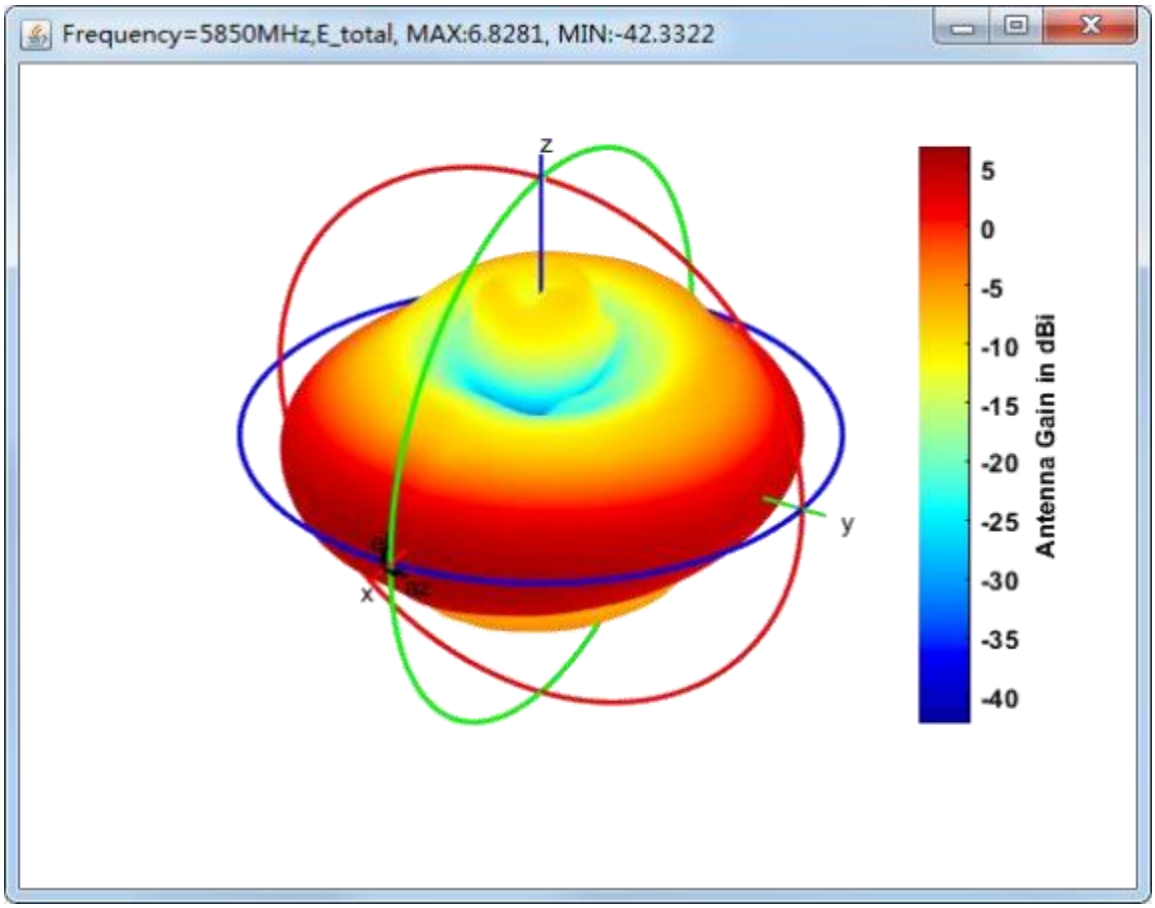


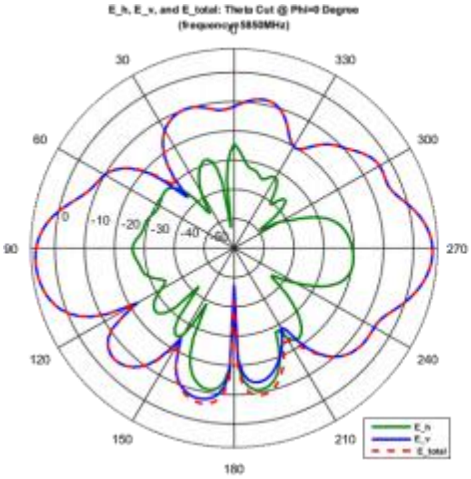


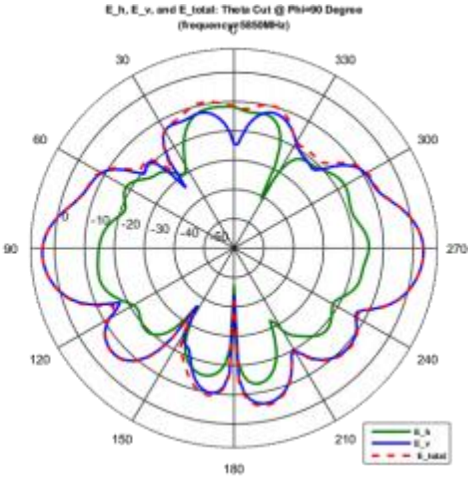


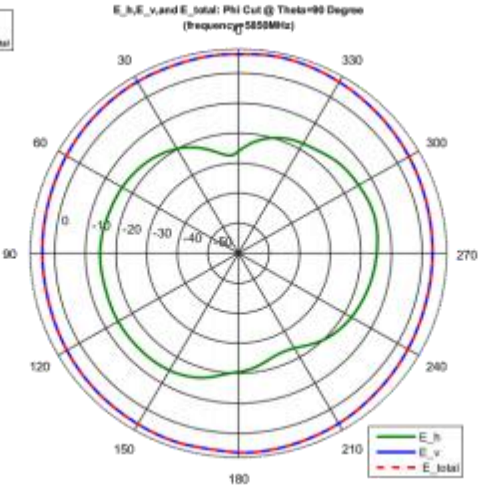
- **Gain（dBi）**

Frequency = 5850 MHz

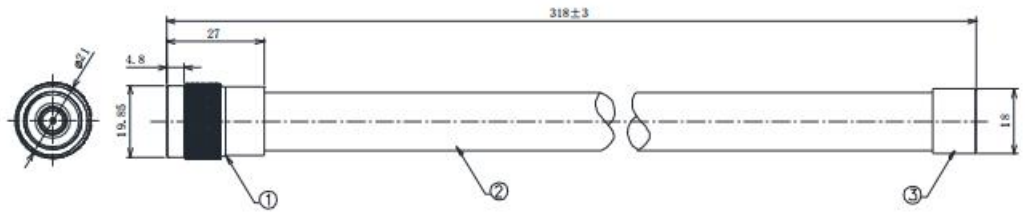


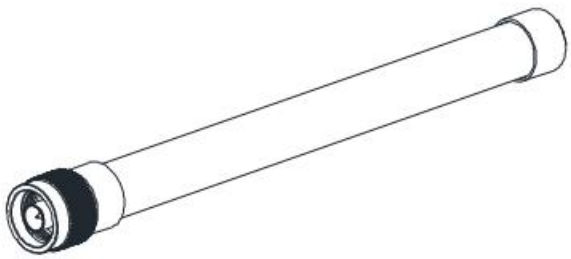






Dimension





SPECIFICATION
1.Frequency Range: 5.15~5.85GHz
2.Impendance: 50Ω
3.VSWR: ≤2.0
4.Polanization: Vertical
5.Radiation: Omni
6.Gain: 7dBi

NO	PARTNAME	DESCRIPTION	Q'TY	Part P/NO
③	CAP	Aluminium: H8*ø18mm	1PCS	
②	Fiberglass tube	L150*ø16mm: White	1PCS	
①	CONNECTOR	N-TYPE PLUG,FOR ANTENNA	1PCS	