DRA2G5G5D-A-B

5.0dBi 2400-2500MHz & 5150-5850MHzDual Band Dipole Antenna

Feature

- 2400-2500MHz&5150-5850MHz of frequency
- SMA Plug Male PIN
- Plastic rod of Black
- ROHS compliance

Application

- 2.4/5.8GHz Wireless Communication
- WLAN device, WLAN Router, e.g., AP, PIC Wireless Card

Description

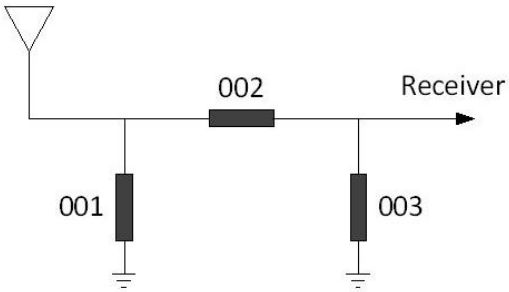
The antenna was specially designed by Wallystech, for Dual Band Dipole Antenna applications . It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

General Data

Product Name	DRA2G5G5D-A-B
Part NO.	Dual Band Dipole Antenna
Frequency	2400-2500MHz & 5150-5850MHz
V.S.W.R	≤2.0
Peak Gain（dBi）	5.0dBi(Max)
Polarization	Vertical
Storage Temp	-25℃~+70℃
Operating Temperature	-25℃~+60℃
Antenna Type	N-TYPE PLUG Stright
Impedance with Matching	50 Ω
Dimension	L212 (mm)

Typical Electrical Characteristics

- Recommend Matching Circuit



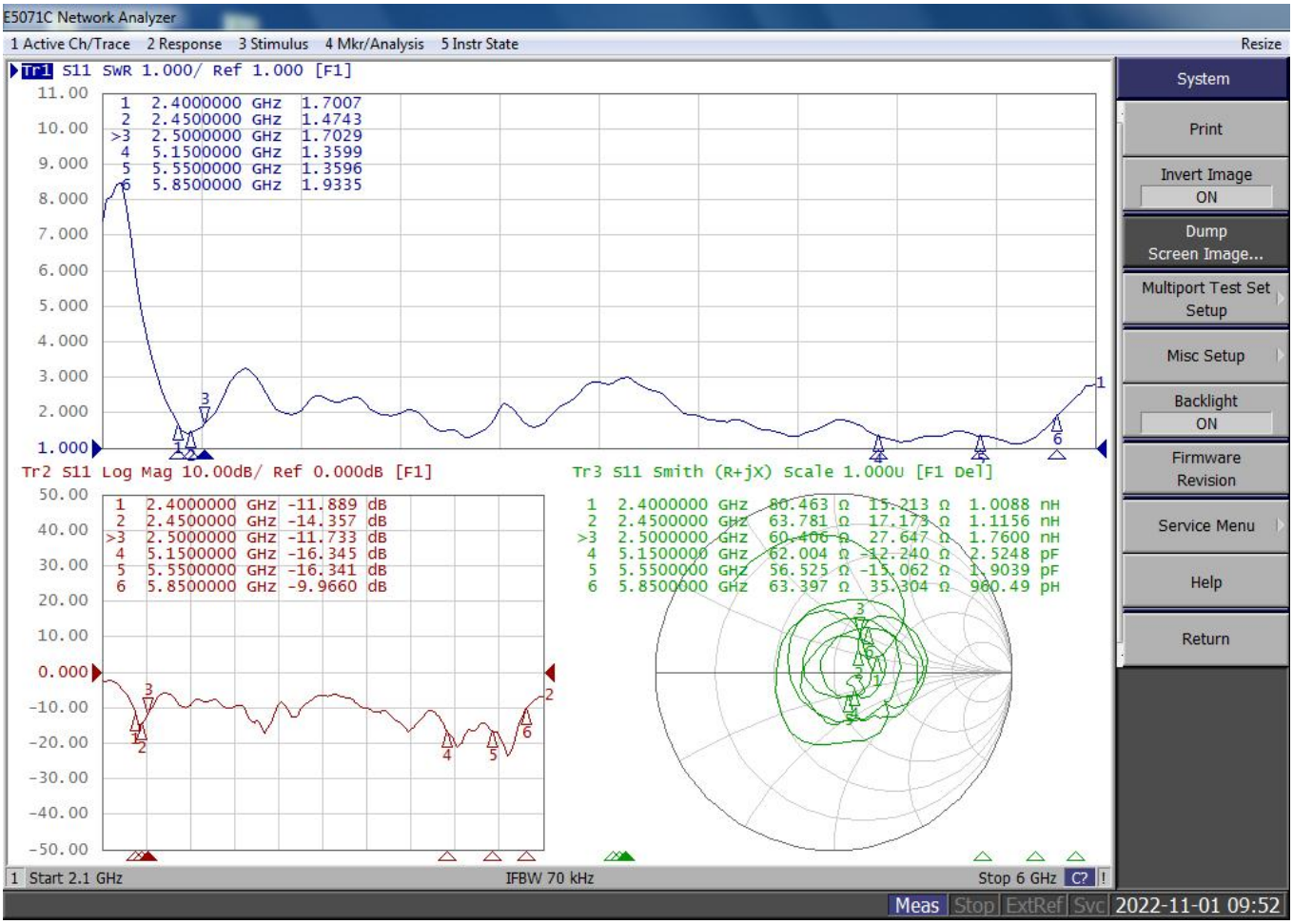
Reference:

001=(N/A)

002=0Ω

003=(N/A)

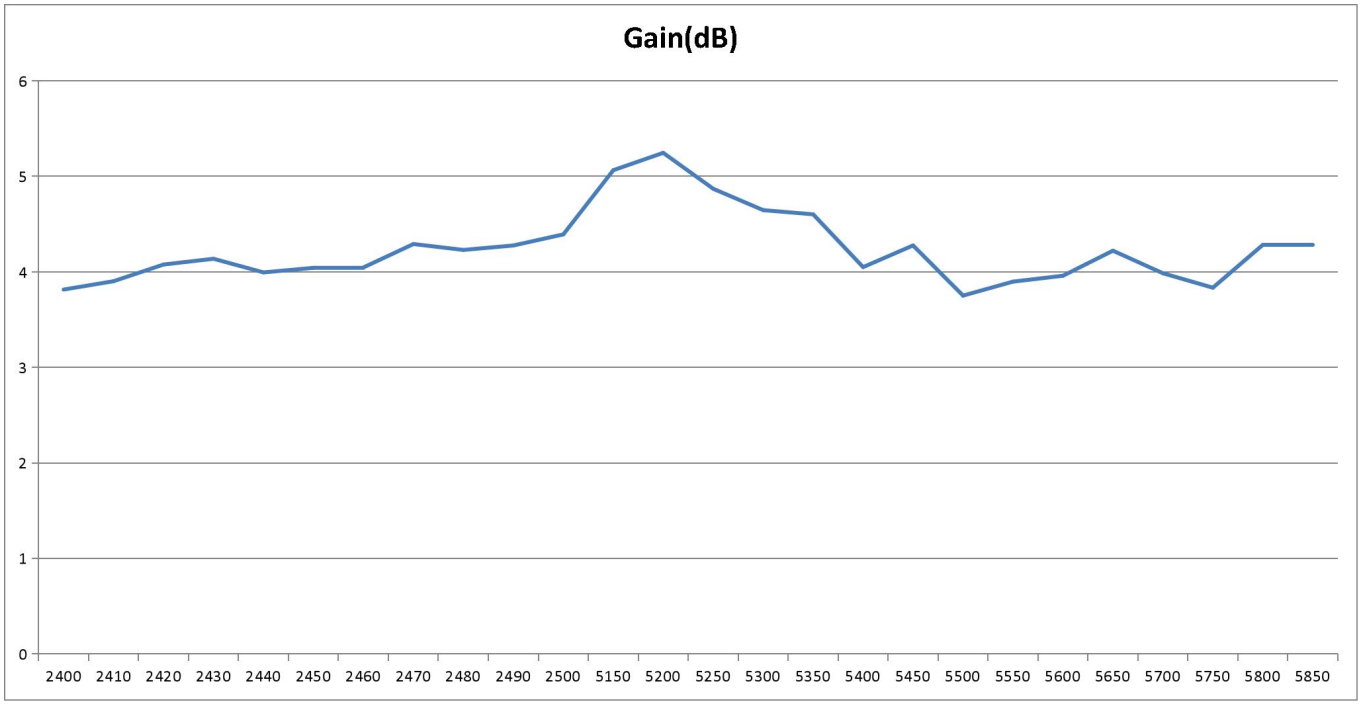
Return loss、VSWR& Smith chart

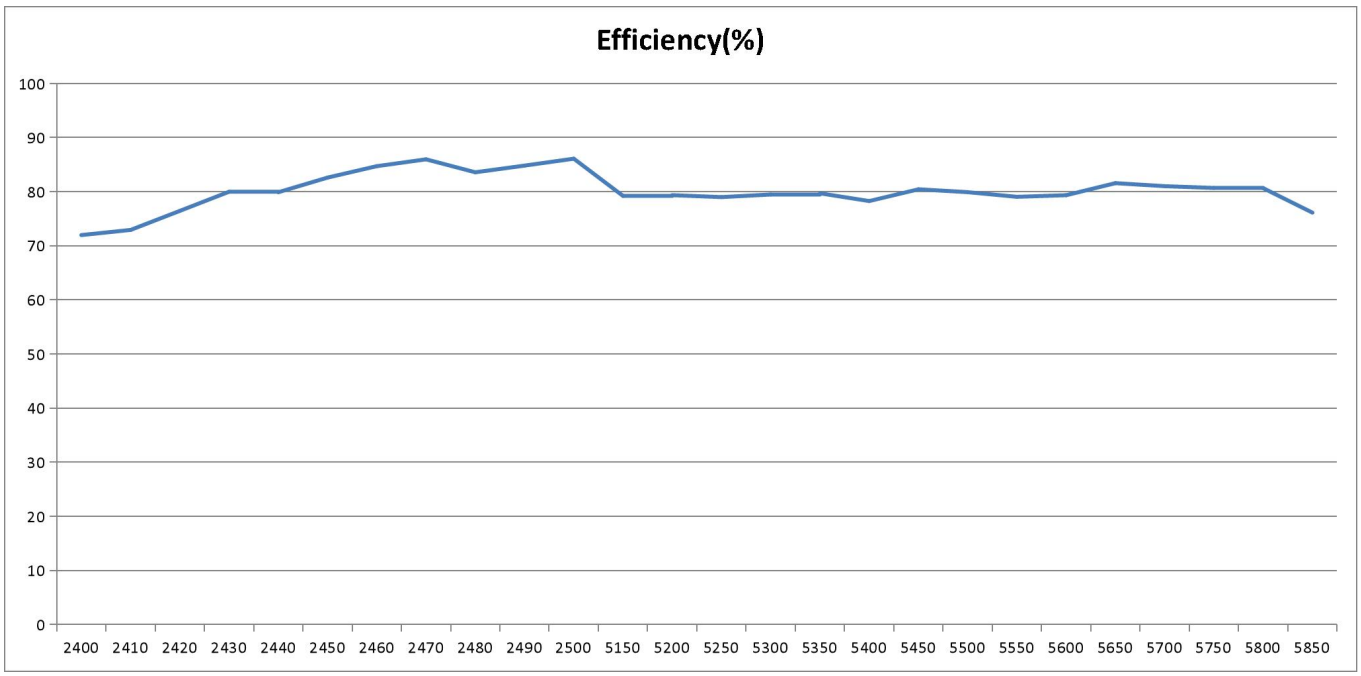


Frequency Total Data

Frequency (MHz)	Directivity(dB)	Gain(dB)	Efficiency(dB)	Efficiency(%)
2400	5.2433	3.8156	-1.4277	71.983
2410	5.2745	3.9033	-1.3712	72.926
2420	5.2441	4.0777	-1.1665	76.446
2430	5.108	4.138	-0.97	79.9832
2440	4.9698	3.9952	-0.9746	79.8985
2450	4.8734	4.0431	-0.8302	82.5993
2460	4.7678	4.0472	-0.7206	84.7108
2470	4.9485	4.2922	-0.6562	85.976
2480	5.0093	4.2305	-0.7788	83.5835
2490	4.9924	4.2771	-0.7152	84.8159
2500	5.0434	4.393	-0.6504	86.092
5150	6.0772	5.0653	-1.0119	79.2154
5200	6.2514	5.247	-1.0043	79.3535
5250	5.8948	4.8709	-1.0239	78.9969
5300	5.6448	4.6471	-0.9977	79.4754
5350	5.5889	4.6033	-0.9856	79.6962
5400	5.115	4.0508	-1.0642	78.2668
5450	5.223	4.2776	-0.9453	80.4391
5500	4.7263	3.7524	-0.9739	79.9113
5550	4.9195	3.8987	-1.0208	79.0531
5600	4.9647	3.9602	-1.0045	79.3499
5650	5.1071	4.2226	-0.8845	81.5741
5700	4.9005	3.9863	-0.9142	81.0175
5750	4.7671	3.8352	-0.932	80.6869
5800	5.2177	4.2836	-0.9341	80.647
5850	5.4719	4.2874	-1.1846	76.128

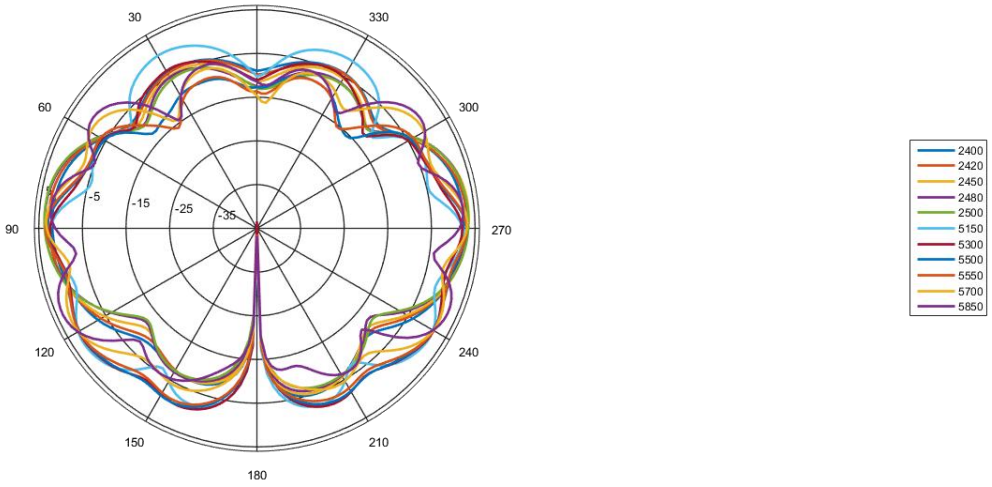
Gain(dB)&Efficiency(%)





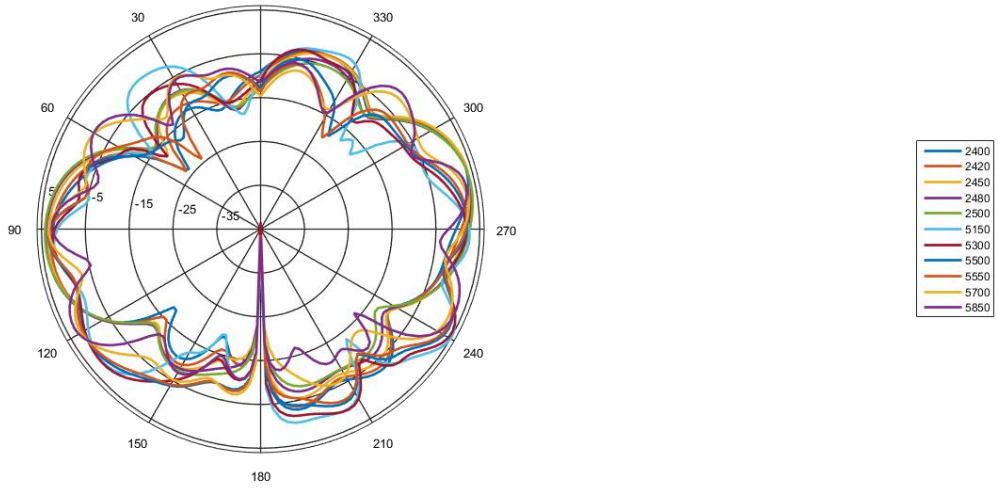
2D&3D test pattern

Phi=0°



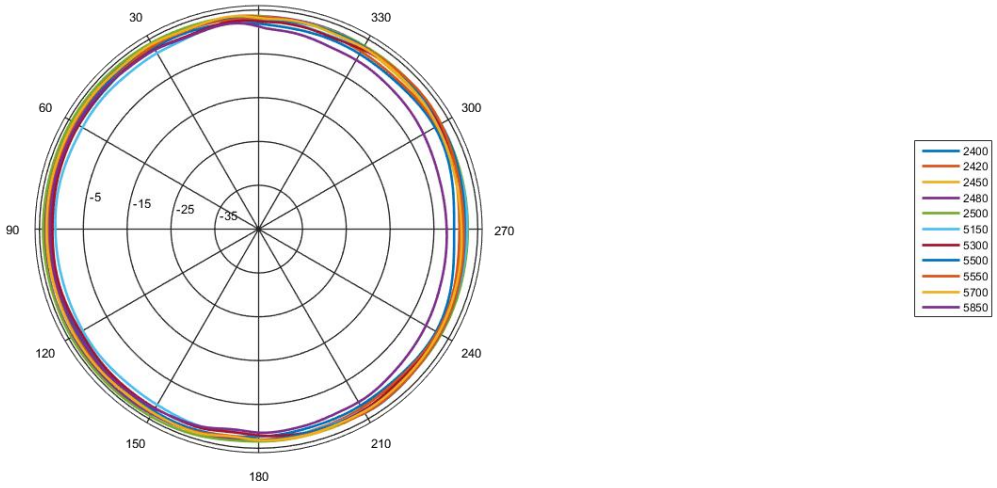
Frequency (MHz)	Max (dB)	Max@deg	Min (dB)	Min@ deg	Max-Min (dB)	Roundness (dB)	BW_3dB (deg)	BW_center (deg)	BW_10dB (deg)	F2B_0 (dB)	F2B_30 (dB)	F2B_XPD_30 (dB)	F2B_60 (dB)	XPD_0 (dB)
2400	2.4055	-88	-38.5012	180	40.9067	20.4534	43.8030	-89.4728	74.9282	0.6174	0.4357	0.4357	0.4357	7.5722
2420	3.1497	-88	-40.8572	-180	44.0068	22.0034	39.3205	-88.5673	69.2334	0.5113	0.3101	0.3101	0.3101	9.1607
2450	3.7548	86	-41.5623	180	45.3171	22.6585	37.4589	87.1755	67.6561	0.6834	0.0936	0.0936	0.0936	10.9584
2480	3.7310	86	-42.8354	-180	46.5664	23.2832	36.7449	86.8353	64.6203	0.8503	0.3218	0.3218	0.3218	13.4487
2500	3.7802	86	-42.7167	-180	46.4968	23.2484	37.4344	86.8723	63.8775	0.6554	0.2308	0.2308	0.2308	15.1611
5150	2.6000	124	-39.2271	-180	41.8271	20.9136	24.2243	124.3002	118.9417	10.0389	2.0180	2.0180	0.2464	17.4006
5300	2.4144	90	-46.5541	-180	48.9685	24.4842	56.8316	109.7038	119.3583	0.3452	0.3452	0.3452	0.3452	11.8675
5500	3.1603	90	-42.0525	180	45.2127	22.6064	54.5881	53.9285	115.4492	0.0790	0.0790	0.0790	0.0790	18.1857
5550	3.4264	90	-43.5769	-180	47.0033	23.5017	21.0886	45.4240	117.2258	0.3597	0.3597	0.3597	0.3597	20.6193
5700	3.3661	88	-41.4475	-180	44.8136	22.4068	19.0831	43.6199	118.4300	0.6124	0.1184	0.1184	0.1184	24.0459
5850	3.6645	114	-43.2371	-180	46.9017	23.4508	19.5651	56.7233	88.4799	7.8962	1.2459	1.2459	0.8107	31.5099

Phi=90°



Frequency (MHz)	Max (dB)	Max@deg	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_XPD_30 (dB)	F2B_60 (dB)	XPD_0 (dB)
2400	3.8156	-74	-38.5013	-180	42.3169	21.1585	26.2614	-73.6698	64.8644	1.5926	0.8118	0.8118	0.8118	30.9002
2420	4.0776	-74	-40.8572	-180	44.9348	22.4674	28.4307	-74.9009	64.9482	1.9906	1.0914	1.0914	1.0914	27.8840
2450	4.0431	-74	-41.5625	180	45.6056	22.8028	32.7845	-76.5587	66.6415	1.6099	0.4074	0.4074	0.4074	31.1424
2480	4.0967	94	-42.8355	180	46.9322	23.4661	36.1900	93.1533	60.7726	1.0758	0.1016	0.1016	0.1016	28.6392
2500	4.2361	92	-42.7168	180	46.9529	23.4765	36.0475	92.4680	60.1799	1.1640	0.1783	0.1783	0.1783	28.6526
5150	5.0604	-120	-39.2270	-180	44.2874	22.1437	15.1881	-119.7092	65.0880	14.9501	3.6811	3.6811	2.8273	25.8160
5300	4.6241	-118.0000	-46.5539	180	51.1781	25.5890	15.6039	-118.2518	71.5921	13.2676	2.1423	2.1423	2.0490	23.6701
5500	3.5484	-118.0000	-42.0525	-180	45.6009	22.8004	17.0402	-58.6318	77.0986	13.1046	0.1402	0.1402	0.1402	23.0513
5550	3.2933	92	-43.5769	180	46.8702	23.4351	16.7239	46.6460	95.7619	1.2197	0.1233	0.1233	0.1233	27.8246
5700	3.3647	90	-41.4474	180	44.8122	22.4061	15.5884	45.3092	105.3330	2.0828	0.6410	0.6410	0.6410	31.3838
5850	3.2674	-114	-43.2371	180	46.5044	23.2522	20.7157	-56.0207	63.3987	6.0671	0.6891	0.6891	0.1282	27.1865

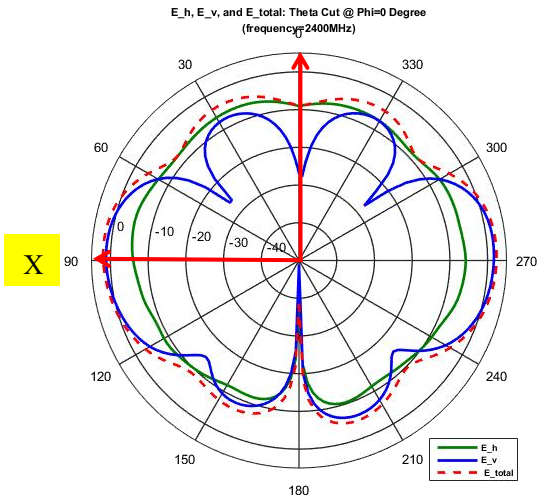
Theta=90°



Frequency (MHz)	Max(dB)	Max@deg	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_XPD_30(dB)	F2B_60(dB)
2400	3.0068	158	-0.3935	-90	3.4003	1.7002	1.9399	343.1403	90.1586	NaN	1.7171	0.5733	0.5733	0.2159
2420	3.5363	160	0.8026	-90	2.7337	1.3668	2.4572	NaN	NaN	NaN	1.4667	0.2862	0.2862	0.2166
2450	3.8519	8	1.6522	-90	2.1997	1.0998	3.0923	NaN	NaN	NaN	0.4173	0.2138	0.2138	0.2138
2480	4.1054	116.0000	2.2396	-88	1.8658	0.9329	3.4051	NaN	NaN	NaN	1.4897	0.9780	0.9780	0.6074
2500	4.3532	136	2.7261	-90	1.6271	0.8135	3.6503	NaN	NaN	NaN	1.1434	1.0747	1.0747	0.4918
5150	2.7446	-38.0000	1.1677	140	1.5769	0.7884	2.0577	NaN	NaN	NaN	1.5745	0.8655	0.8655	0.1014
5300	3.1574	-46	1.7014	174	1.4561	0.7280	2.3377	NaN	NaN	NaN	1.0057	0.8721	0.8721	0.3927
5500	3.7524	8	2.0311	-90	1.7213	0.8607	3.0493	NaN	NaN	NaN	0.8193	0.1826	0.1826	0.1826
5550	3.8987	8	1.8002	-88	2.0985	1.0493	3.1012	NaN	NaN	NaN	0.7251	0.4149	0.4149	0.4149
5700	3.9252	8	1.2108	-84	2.7144	1.3572	3.0125	NaN	NaN	NaN	0.6532	0.3580	0.3580	0.3580
5850	2.8032	72	-2.2240	-78.0000	5.0273	2.5136	1.1981	243.8660	102.6646	NaN	4.3474	2.8401	2.8401	1.6843

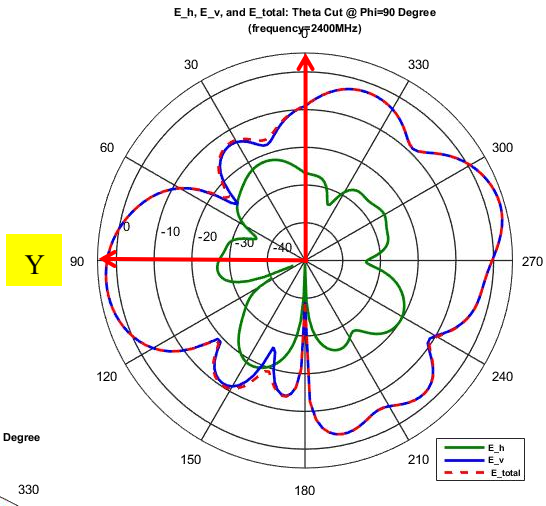
2400MHz

Z



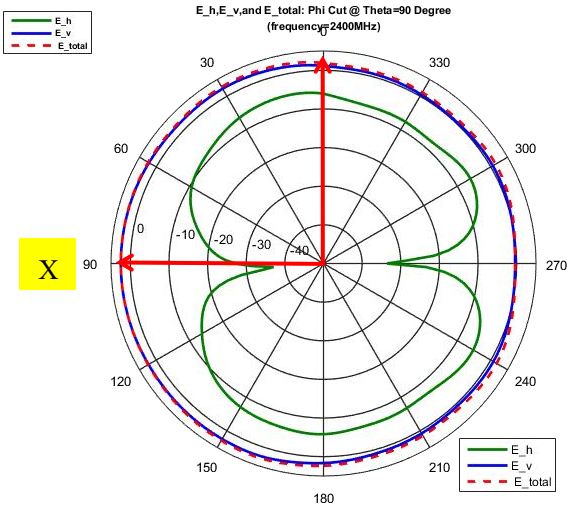
X

Z



Y

Y



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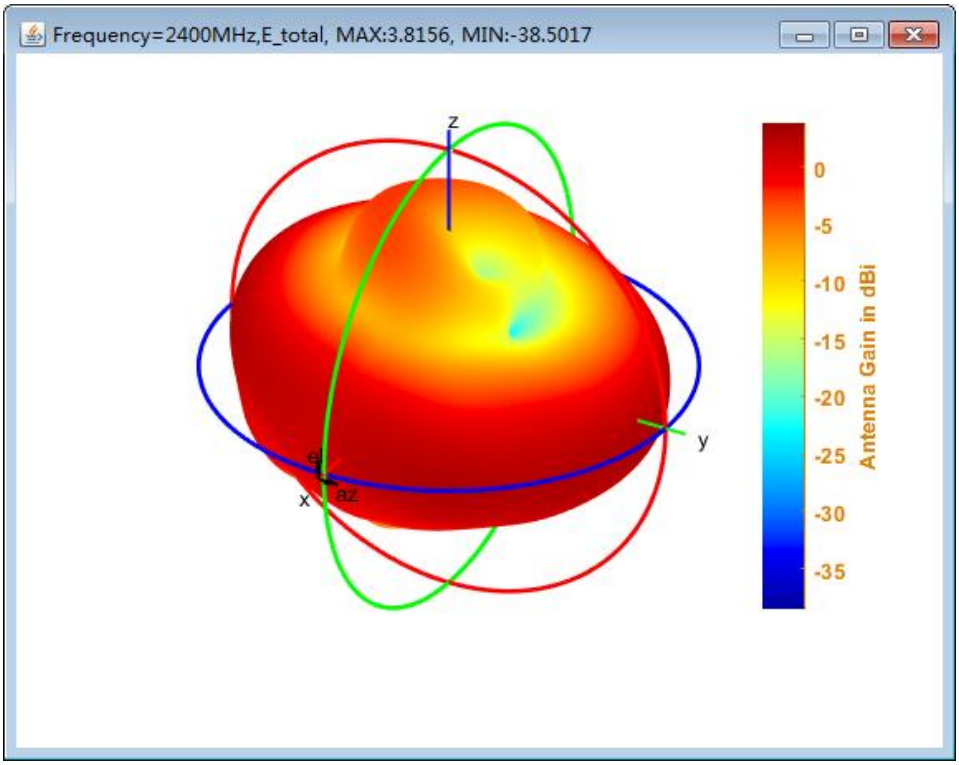
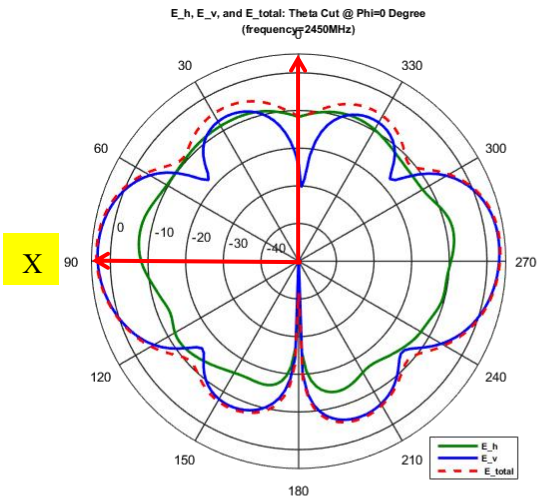


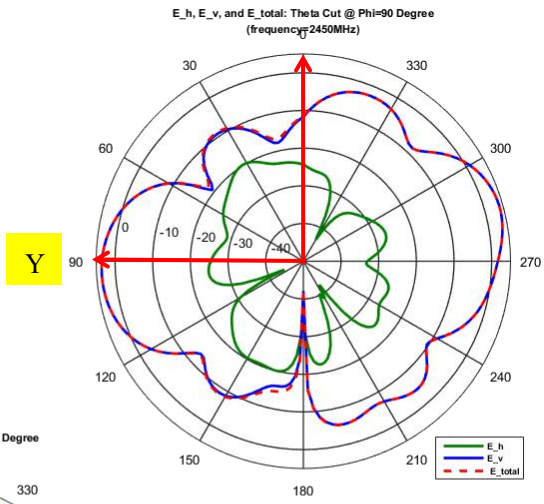
2450MHz

Z



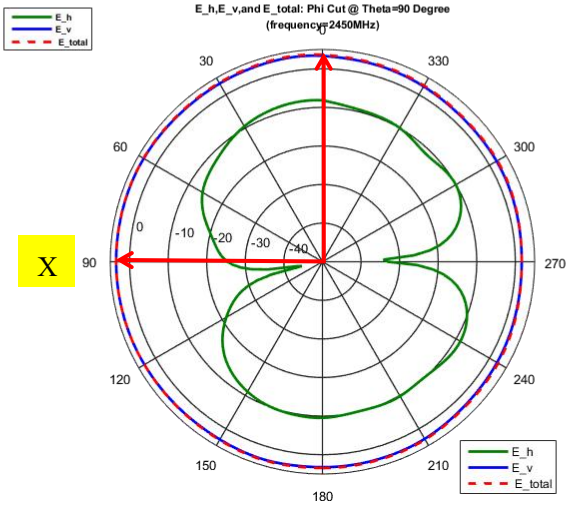
X

Z



Y

Y



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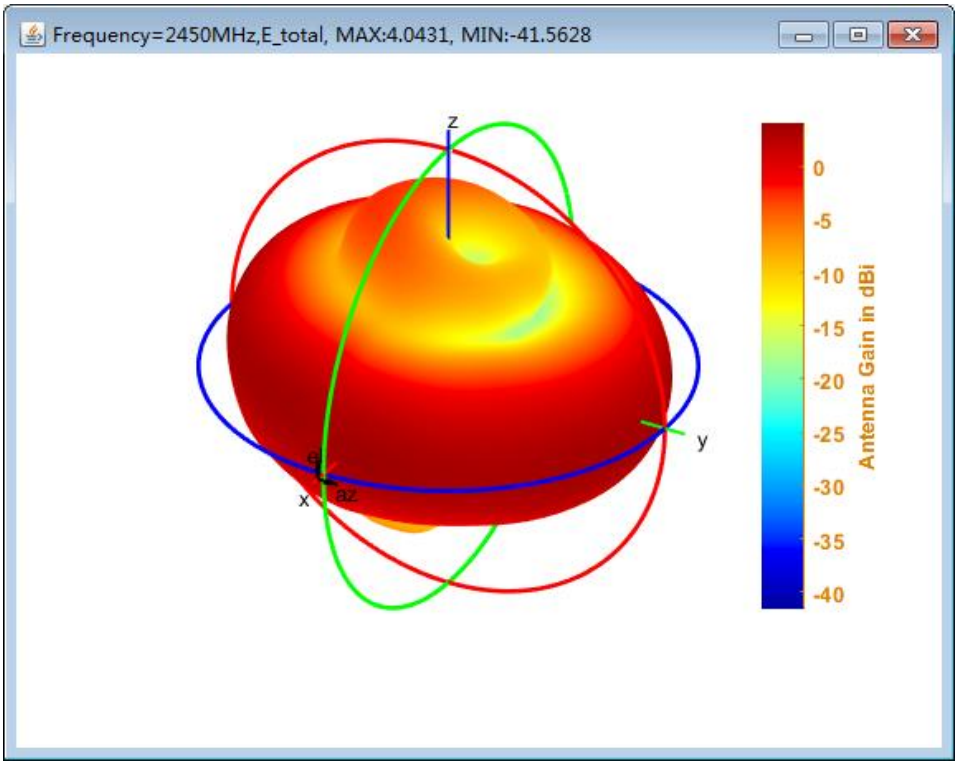
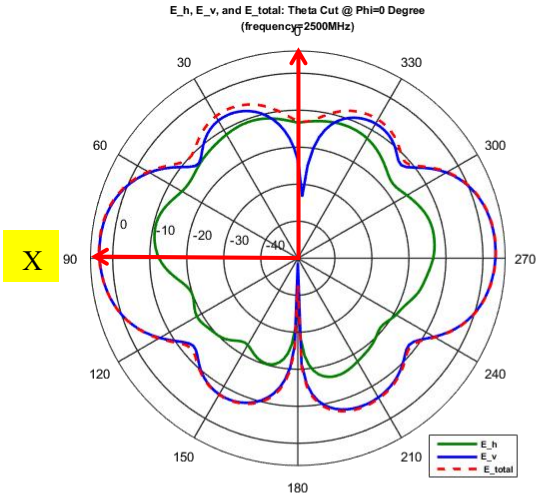


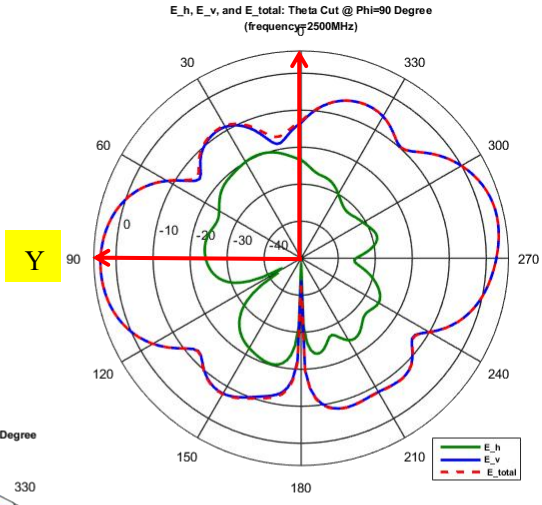
2500MHz

Z



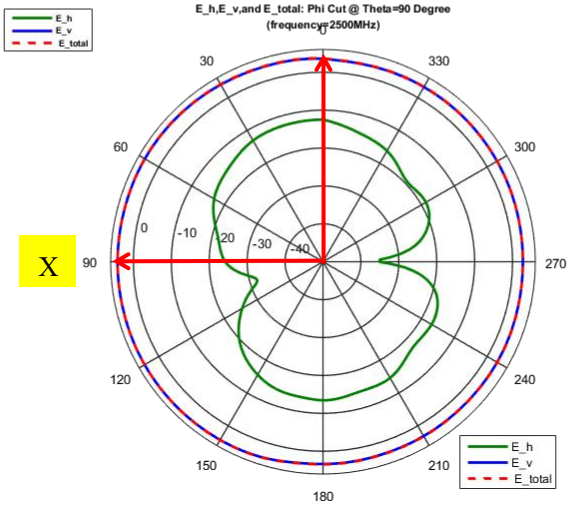
X

Z



Y

Y



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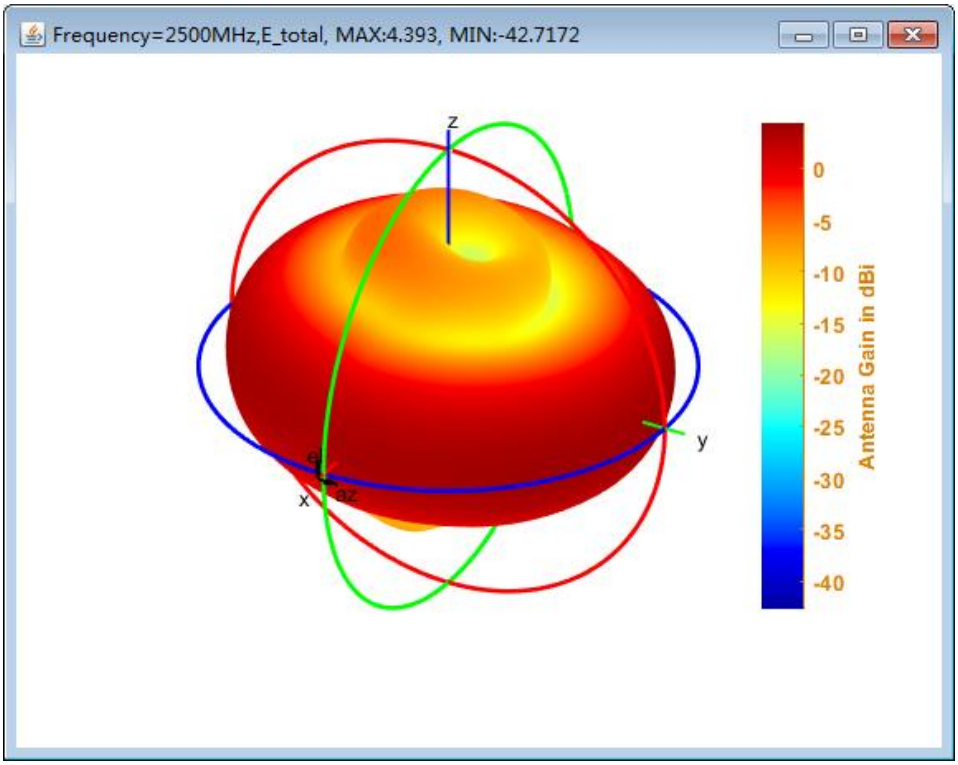
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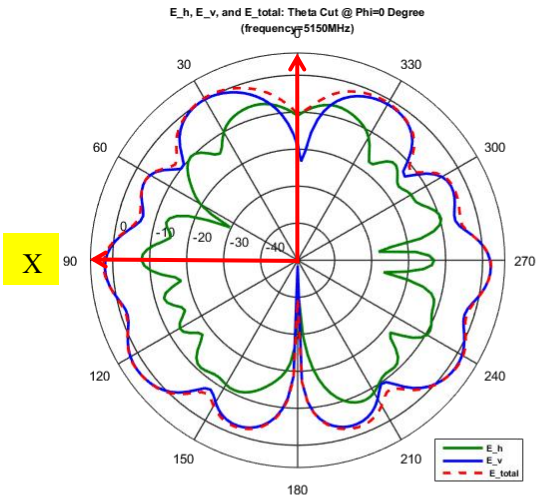
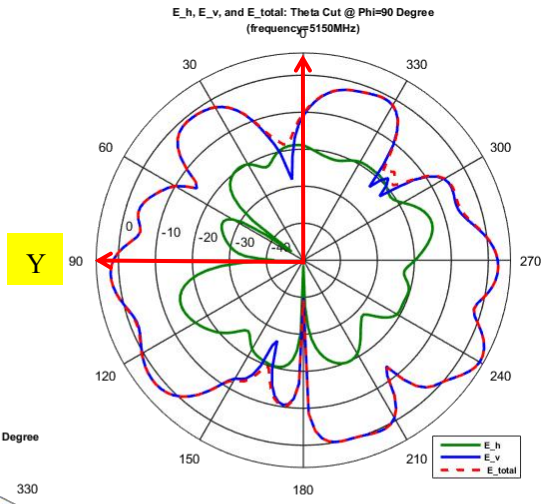
Z
y
x
0
-5
-10
-15
-20
-25
-30
-35
-40
Antenna Gain in dBi

5150MHz

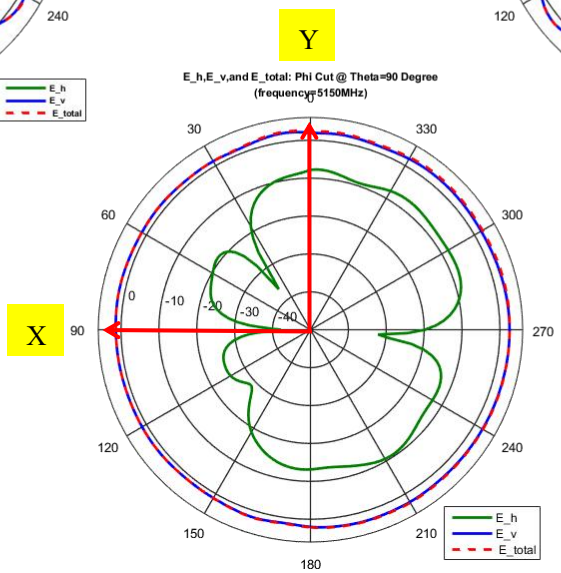
Z

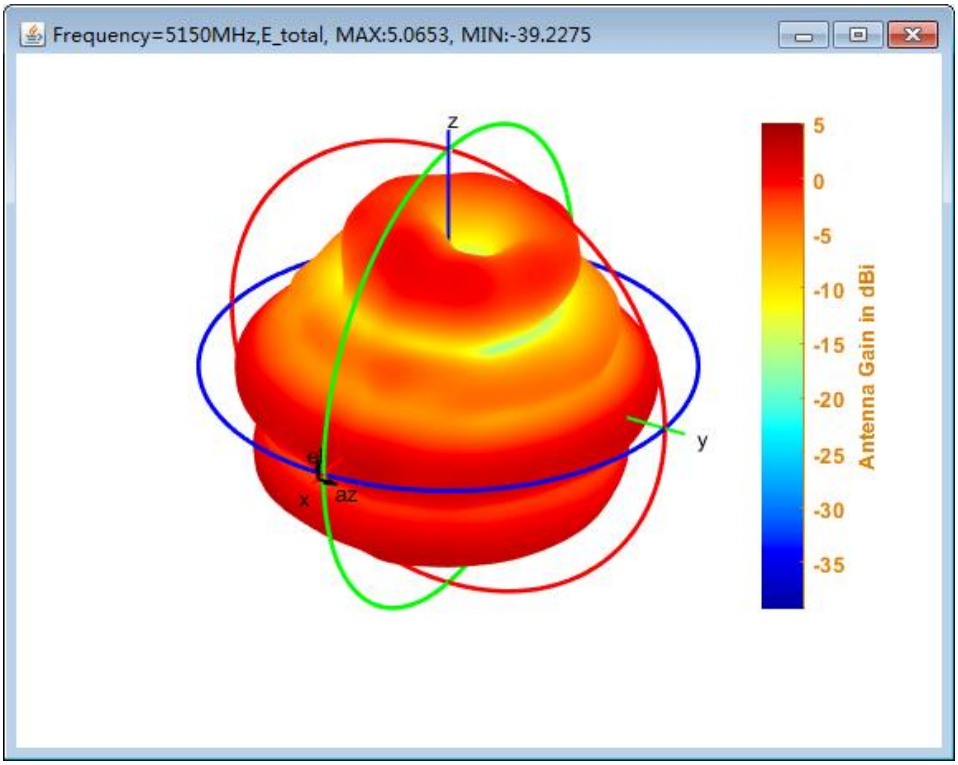

E_h, E_v, and E_total: Theta Cut @ Phi=0 Degree
(frequency=5150MHz)
X
90
0
30
60
120
150
180
210
240
270
300
330
-10
-20
-30
-40
E_h
E_v
E_total

Z


E_h, E_v, and E_total: Theta Cut @ Phi=90 Degree
(frequency=5150MHz)
Y
90
0
30
60
120
150
180
210
240
270
300
330
-10
-20
-30
-40
E_h
E_v
E_total

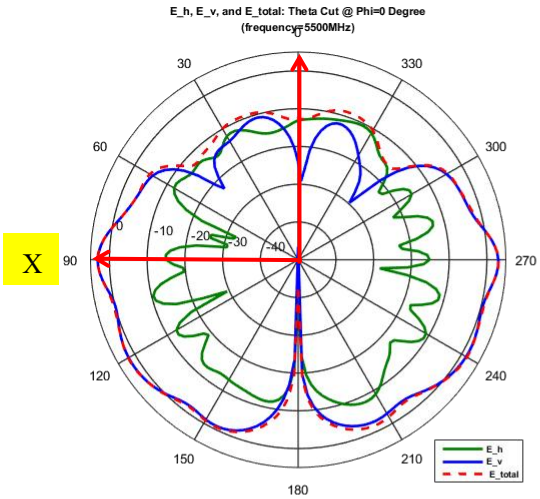
Y


E_h,E_v,and E_total: Phi Cut @ Theta=90 Degree
(frequency=5150MHz)
X
90
0
30
60
120
150
180
210
240
270
300
330
-10
-20
-30
-40
E_h
E_v
E_total



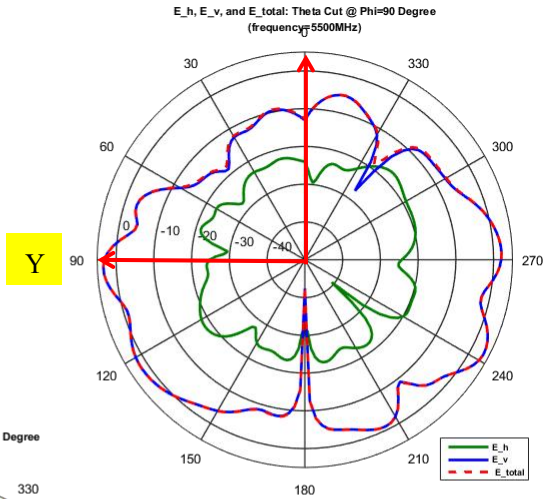
5500MHz

Z



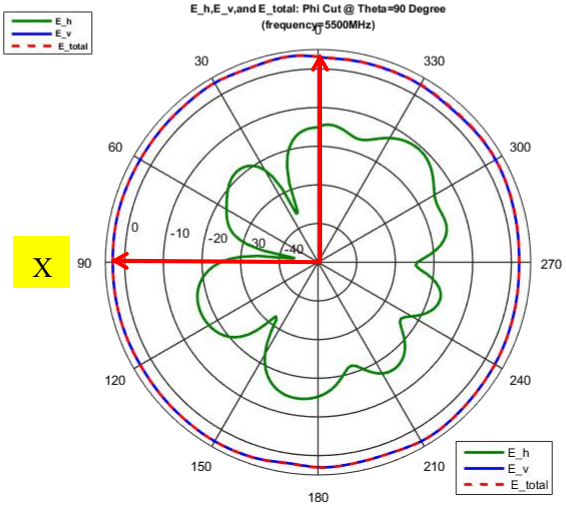
X

Z



Y

Y



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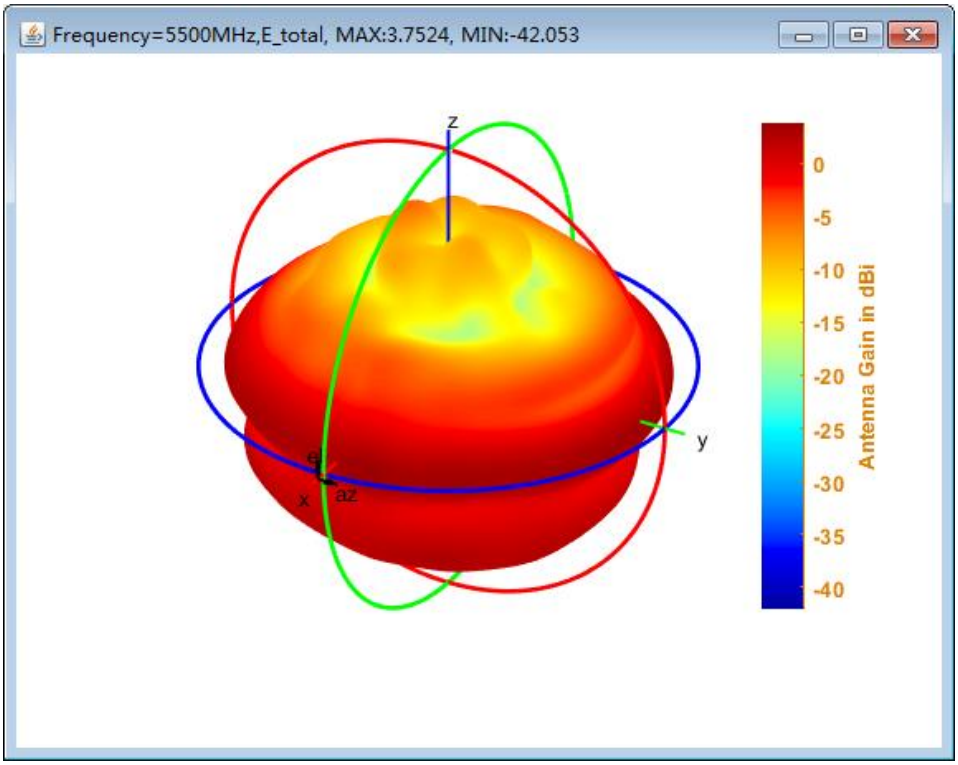
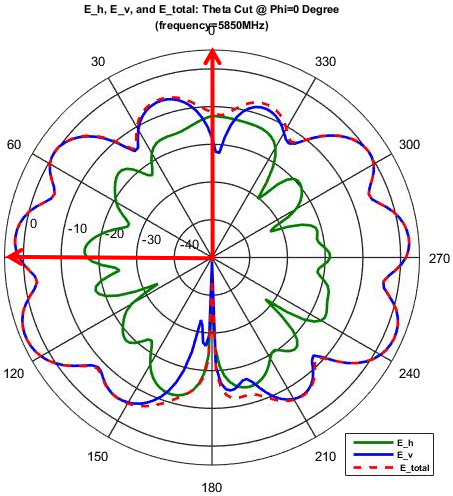


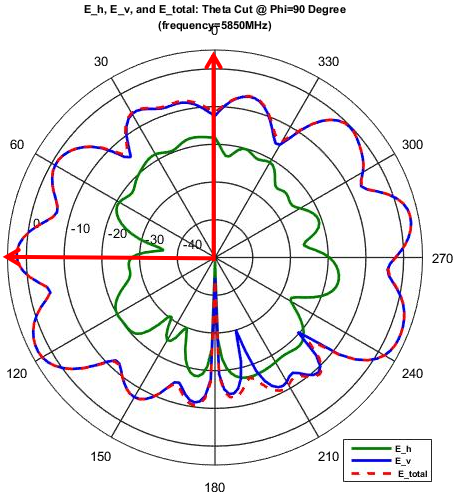
5850MHz

Z



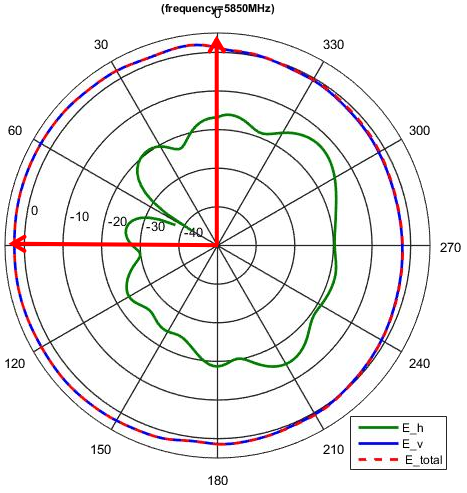
X

Z



Y

Y



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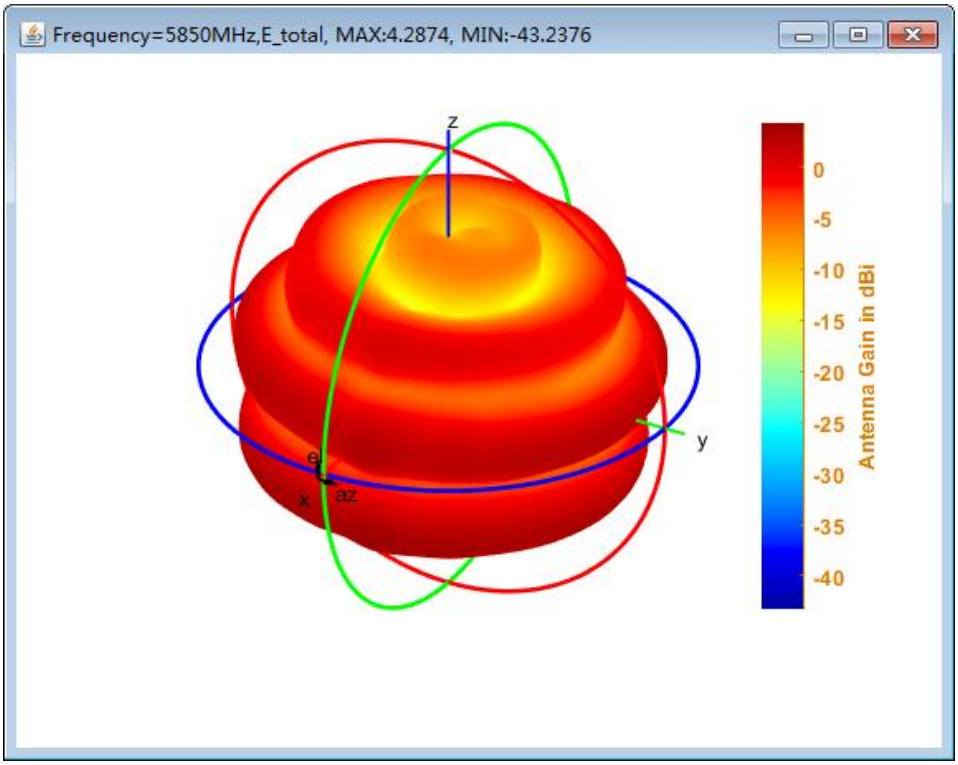
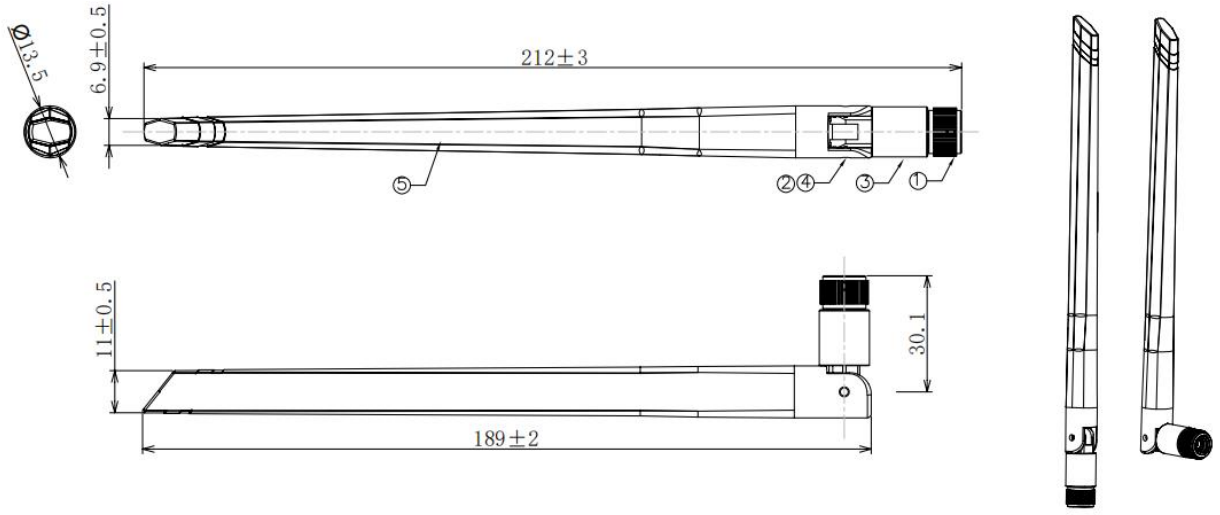


Dimension



SPECIFICATION
1.Frequency Range: 2.4~2.5GHz&5.15~5.85GHz
2.Impendance: 50Ω
3.VSWR: ≤2.0
4.Polanization: Vertical
5.Radlation: Omni
6.Gain: 5dBi

NO	PARTNAME	DESCRIPTION	Q'TY	Part P/NO
⑤	ANTENNA CAP	TPEE BLACK	1PCS	
④	RIVET	POM,BLACK	2PCS	
③	ANTENNA BASE	PBT,COLOR: BLACK	1PCS	
②	CABLE	RG-178CABLE, BROWN,50Ω	1PCS	
①	CONNECTOR	SMA PLUG （公针）	1PCS	