

Antenna Specification for Approval

Product Name: 2.4/5G antenna

Manufacturer Name: Acer India PVT Limited

Part NO. : PCB ANT

Write By: Mr. zhou

Issued Date: 2022-12-13

customer :

R&D Dept	Business Dept	Approved By

Supplier

R&D Dept	Engineer Dept	Approval

Product Specification

A. Electrical Characteristics

Frequency 2400MHz ~2500MHz 5150MHz ~5850MHz

VSWR <1.0

Efficiency >36.69%

Impedance 50 Ohm

Polarization Line

B. Material & Mechanical Characteristics

Material of Radiator Cu

Cable Type : NO

Connector Type : NO

Antenna type: PCB

Dimension

C. Environmental

Operation Temperature - 30 ° C ~ + 80 ° C

Storage Temperature - 30 ° C ~ + 85 ° C

Test Equipment & Conditions

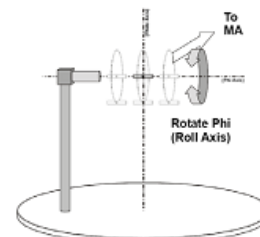
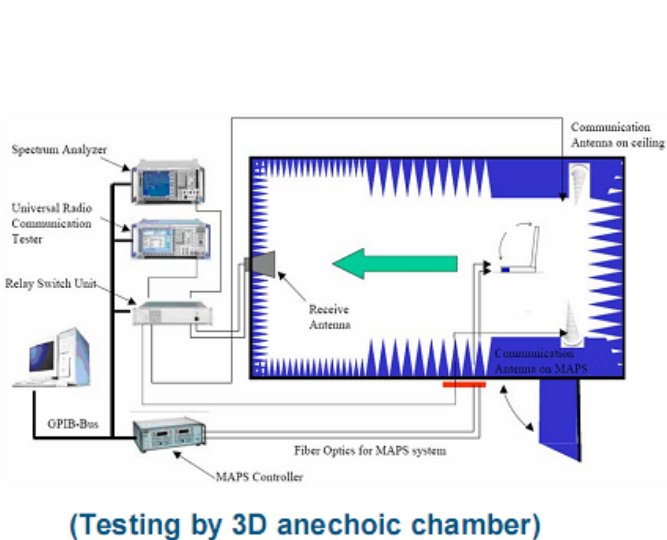
1. Network Analyzers :

Agilent 8753D 5071B

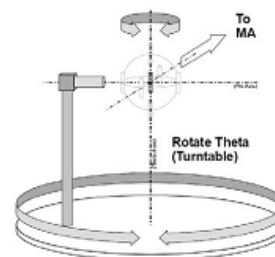
2. Communications Test Set:

Agilent E5515C

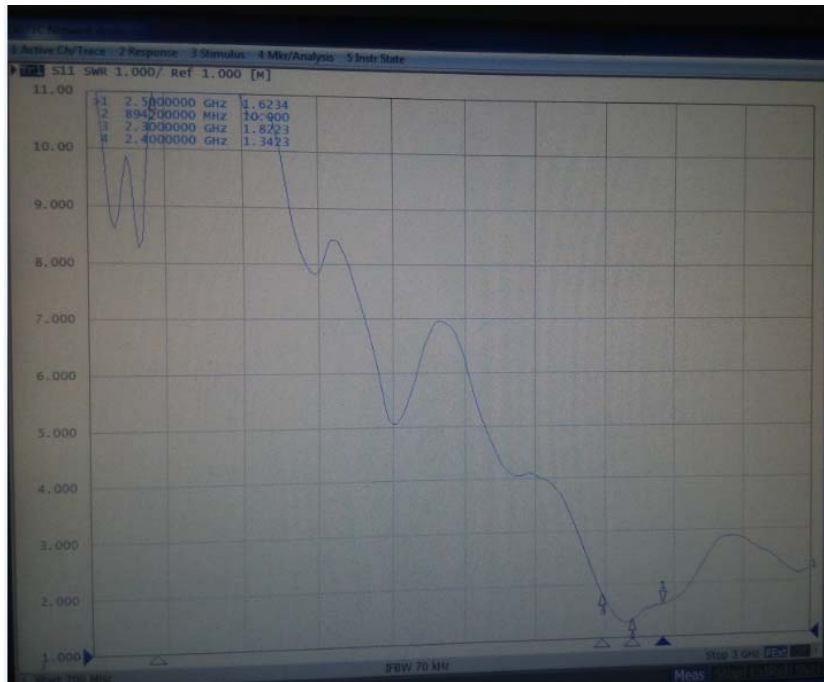
3. 3D Chamber Test System



Phi axis test



Theta axis test



Antenna



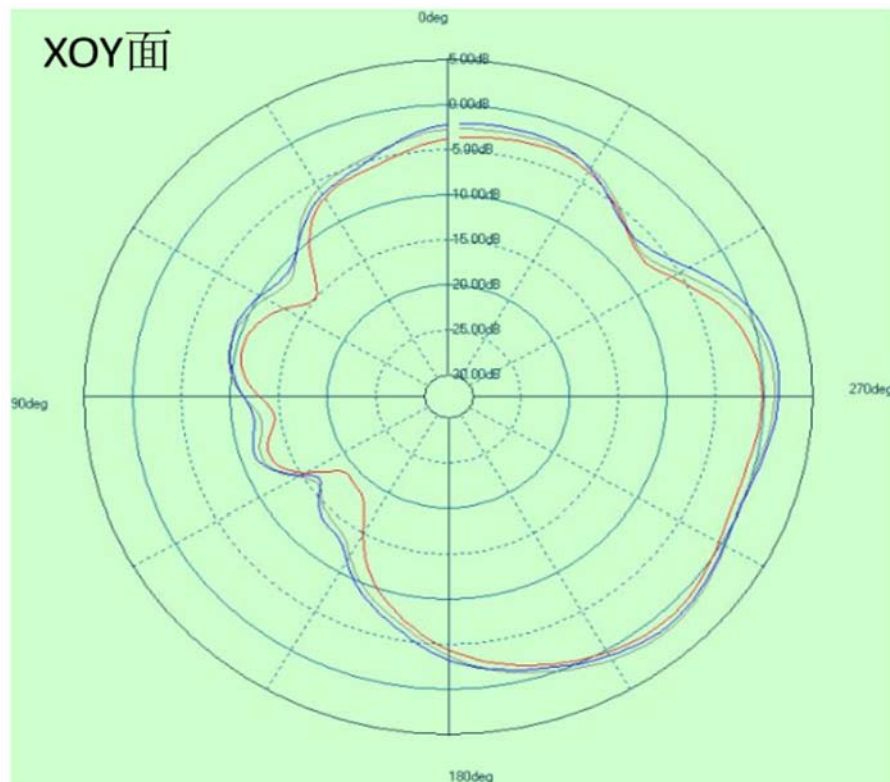
Radiation Pattern:

Gain&Efficiency			Gain&Efficiency		
frequency	gain	efficiency	frequency	gain	efficiency
(MHz)	(dBi)		(MHz)	(dBi)	
2400	1.81	19.51%	5150	2.85	39.54%
2410	2.00	19.35%	5200	3.72	39.42%
2420	2.02	21.88%	5250	3.11	41.25%
2430	2.18	20.46%	5350	2.98	40.41%
2440	2.59	19.70%	5450	2.77	39.42%
2450	2.93	22.82%	5550	2.63	42.12%
2460	2.51	21.32%	5650	2.82	36.45%
2470	2.18	20.87%	5750	2.74	40.88%
2480	2.08	22.99%	5800	3.00	39.91%
2490	1.81	18.62%	5850	2.88	38.71%
2500	1.85	21.02%	-	-	-

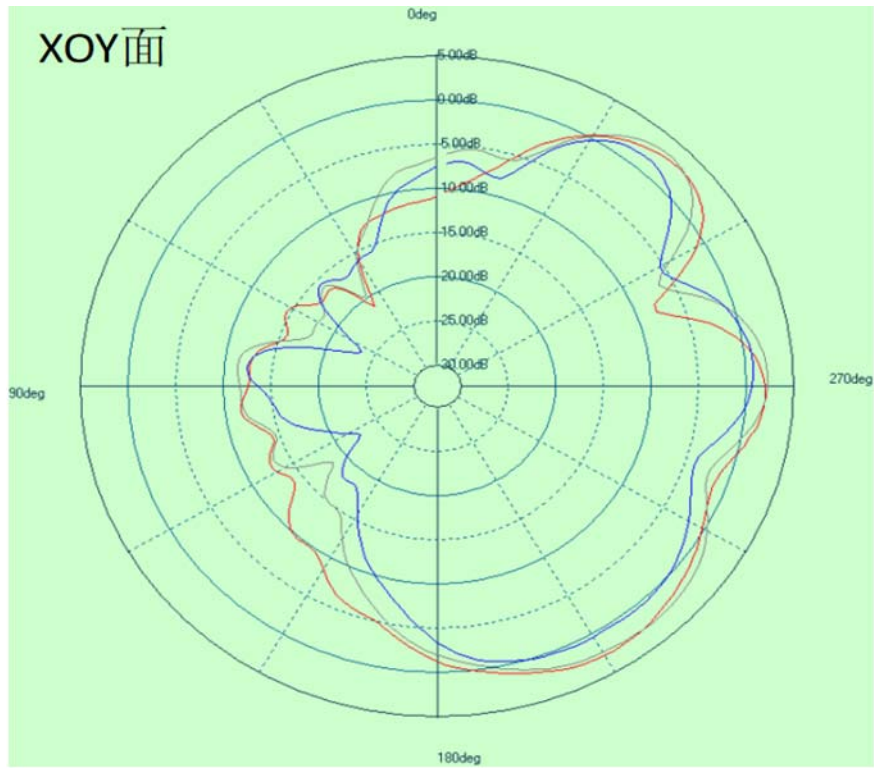
ANT0

Frequency 2450MHz

Maximum Value(dbi) 2.93

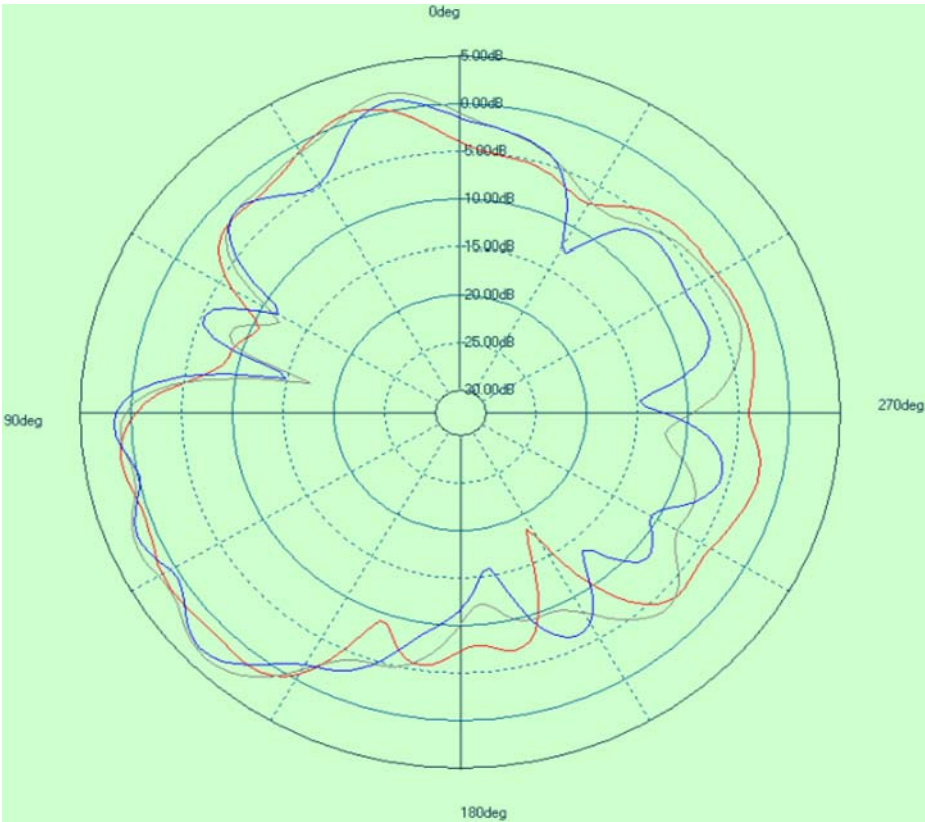


Frequency 5200MHz
Maximum Value(dbi) 3.72



Frequency 5800MHz

Maximum Value(dbi) 3

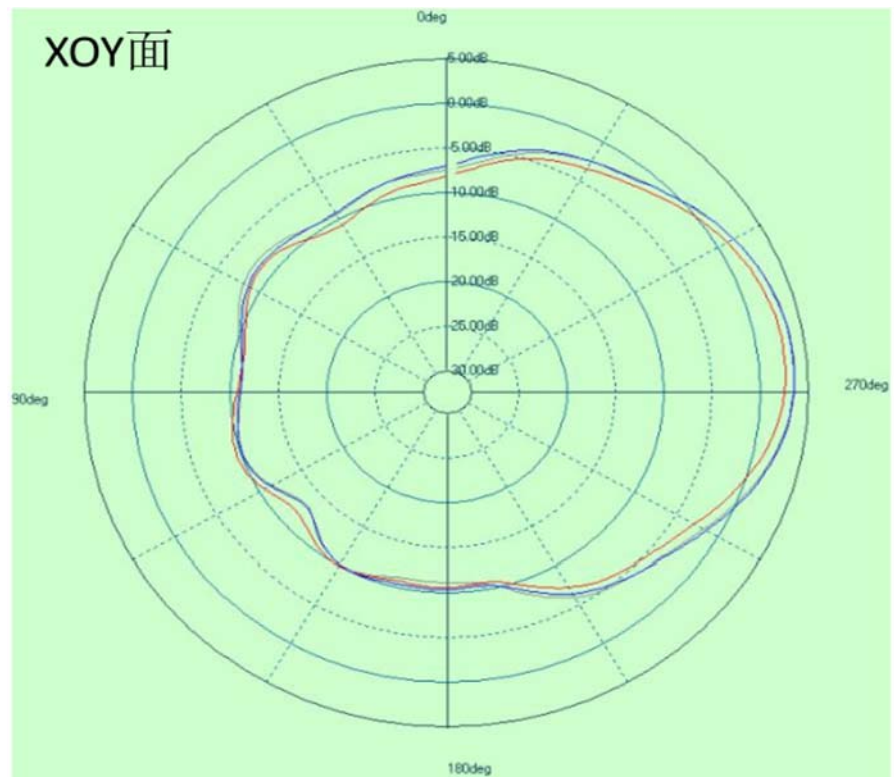


ANT1

Gain&Efficiency			Gain&Efficiency		
frequency	gain	efficiency	frequency	gain	efficiency
(MHz)	(dBi)		(MHz)	(dBi)	
2400	2.71	20.42%	5150	3.28	38.75%
2410	2.83	19.53%	5200	3.86	39.61%
2420	2.82	22.84%	5250	3.62	40.36%
2430	3.10	20.53%	5350	3.71	40.45%
2440	3.11	19.44%	5450	3.07	39.36%
2450	3.27	21.85%	5550	3.33	41.45%
2460	2.69	21.63%	5650	2.87	37.48%
2470	2.74	20.51%	5750	2.92	41.56%
2480	2.68	21.42%	5800	3.00	38.97%
2490	2.51	18.37%	5850	2.65	39.81%
2500	2.45	20.07%	-	-	-

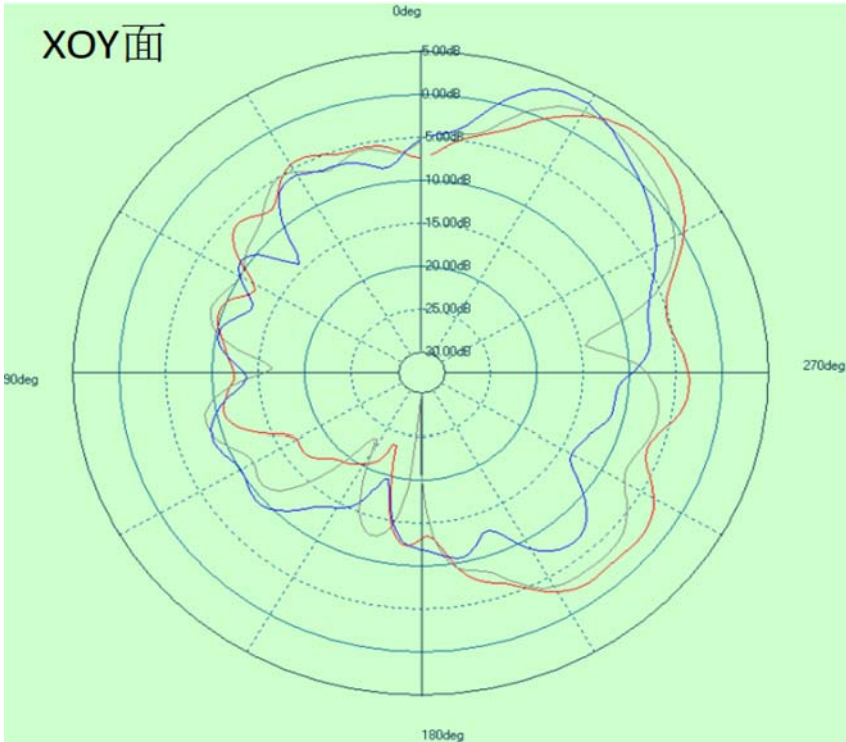
Frequency 2450MHz

Maximum Value(dbi) 3.27



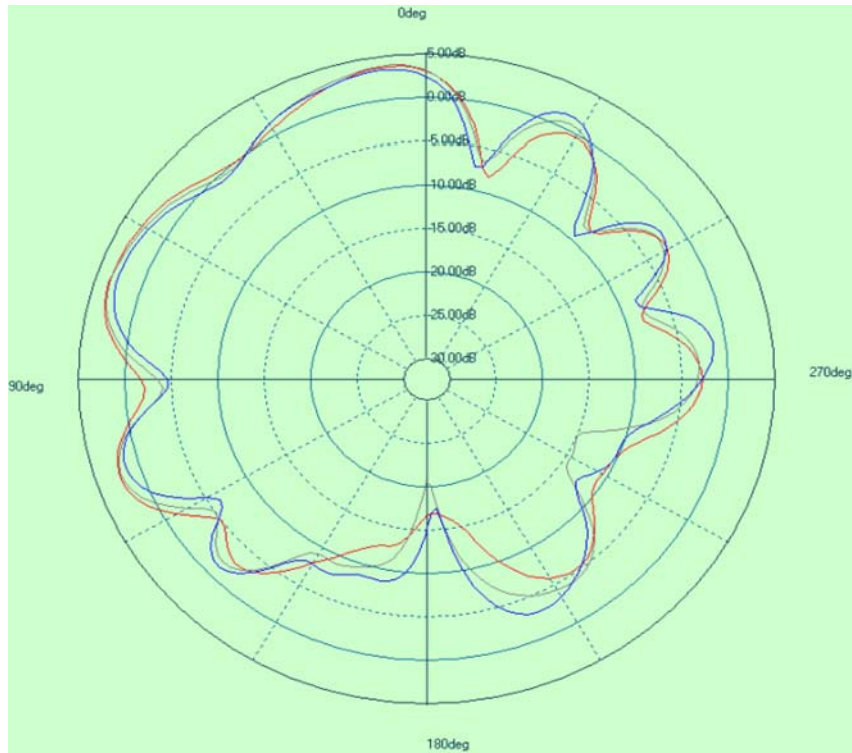
Frequency 5200MHz

Maximum Value(dbi) 3.86



Frequency 5800MHz

Maximum Value(dbi) 3



ANTBT

Gain&Efficiency		
frequency (MHz)	gain (dBi)	efficiency
2400	1.01	20.75%
2410	1.36	19.53%
2420	1.55	21.63%
2430	1.73	21.43%
2440	1.81	20.71%
2450	1.77	19.63%
2460	1.63	20.75%
2470	1.76	19.57%
2480	2.00	20.51%
2490	1.58	19.39%
2500	1.43	21.27%

Frequency 2480MHz
 Maximum Value(dbi) 2

