

Measurement of Antenna for A33 Project

Manufacture: SHENZHEN TENDA TECHNOLOGY CO., LTD.

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Shenzhen, China. 518052

Model: A33 Antenna

1. Antenna Appearance:

Antenna1



Antenna2



2. Electrical performance test results at normal temperature

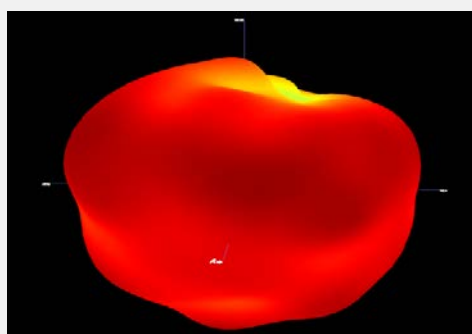
a) Antenna1

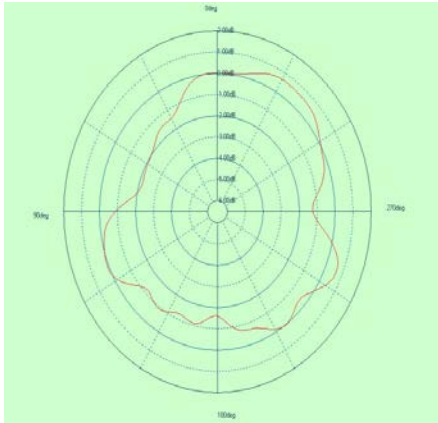
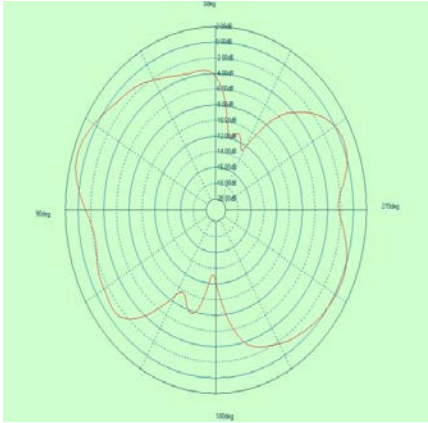
No	Test Item	Unit	Demand Performance	Test Result		Judgement
1	Frequency Range	MHz	2400-2500/5150-5850	2400-2500/5150-5850		OK
2	Gain	dBi	/	2410	2.18	OK
				2450	2.35	OK
				2480	2.20	OK
				5150	4.46	OK
				5500	4.31	OK
				5850	4.83	OK
3	Return loss	dB	≤ -10	2410	-14	OK
				2450	-14	OK
				2480	-13	OK
				5150	-14	OK
				5500	-15	OK
				5850	-13	OK

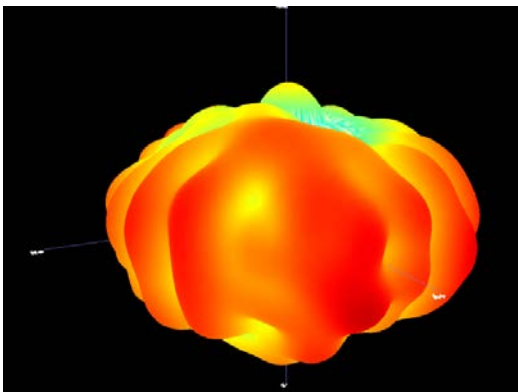
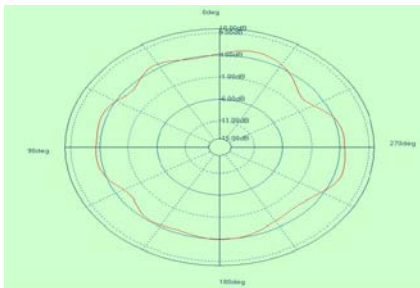
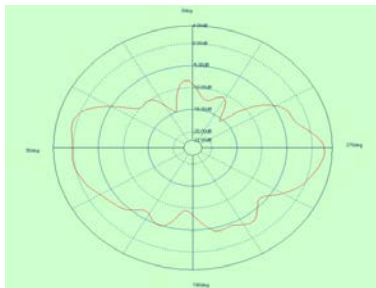
Directional diagram

Frequency	Gain (dBi)	Efficiency
2400MHz	2.32	79%
2410MHz	2.18	78%
2420MHz	2.14	78%
2430MHz	2.24	80%
2440MHz	2.34	79%
2450MHz	2.35	82%
2460MHz	2.36	76%
2470MHz	2.34	80%
2480MHz	2.20	80%
2490MHz	2.27	76%
2500MHz	2.38	77%

2.4GHz 3D Radiation patterns



	H PLANE	V PLANE
2.4GHz 2D Radiation patterns (2410MHz)		
Frequency	Gain (dBi)	Efficiency()
5150MHz	4.46	71%
5200MHz	4.38	72%
5250MHz	4.37	73%
5300MHz	4.47	74%
5350MHz	4.44	72%
5400MHz	4.54	72%
5450MHz	4.38	73%
5500MHz	4.31	71%
5550MHz	4.11	71%
5600MHz	4.57	70%
5650MHz	4.25	71%

5700MHz	4.28	72%
5750MHz	4.41	70%
5800MHz	4.55	70%
5850MHz	4.83	69%
5GHz 3D Radiation patterns		
	H PLANE	V PLANE
5GHz 2D Radiation patterns (5150MHz)		

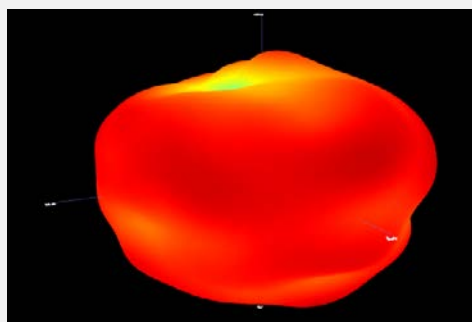
b) Antenna2

No	Test Item	Unit	Demand Performance	Test Result		Judgement
1	Frequency Range	MHz	2400-2500/5150-5850	2400-2500/5150-5850		OK
2	Gain	dBi	/	2410	3.38	OK
				2450	3.56	OK
				2480	3.23	OK
				5150	4.11	OK
				5500	4.44	OK
				5850	4.65	OK
3	Return loss	dB	≤ -10	2410	-13	OK
				2450	-12	OK
				2480	-12	OK
				5150	-12	OK
				5500	-15	OK
				5850	-14	OK

Directional diagram

Frequency	Gain (dBi)	Efficiency
2400MHz	3.33	76%
2410MHz	3.38	76%
2420MHz	3.42	76%
2430MHz	3.53	77%
2440MHz	3.56	79%
2450MHz	3.56	79%
2460MHz	3.55	80%
2470MHz	3.45	80%
2480MHz	3.23	80%
2490MHz	2.96	79%
2500MHz	2.85	80%

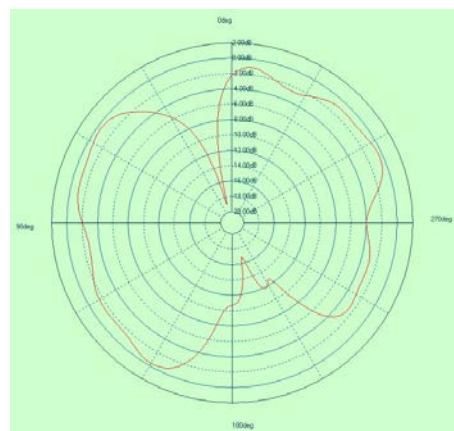
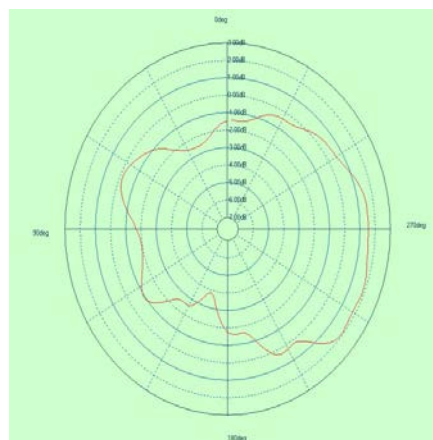
2.4GHz 3D Radiation patterns



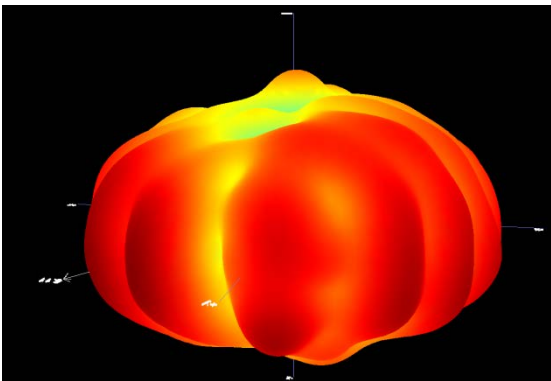
H PLANE

V PLANE

2.4GHz 2D Radiation patterns (2410MHz)



Frequency	Gain (dBi)	Efficiency()
5150MHz	4.11	73%
5200MHz	4.00	74%
5250MHz	4.59	74%
5300MHz	4.04	74%
5350MHz	4.73	71%
5400MHz	4.69	72%
5450MHz	4.50	75%
5500MHz	4.44	73%
5550MHz	4.42	73%
5600MHz	4.36	71%
5650MHz	4.47	69%
5700MHz	4.18	72%

5750MHz	5.11	69%
5800MHz	4.04	70%
5850MHz	4.65	69%
5GHz 3D Radiation patte		
	H PLANE	V PLANE
5GHz 2D Radiation patterns (5750MHz)	