

FCC Requirements for antenna gain reporting

Data sheet provided by antenna manufacturer



Antenna manufacturer: Guangzhou Shikun Electronics Co., Ltd / NO.6 Liankun Road
Huangpu District, Guangzhou, China
Model: SKI.WB822CU.5 WIFI Antenna
Antenna type: PCB

Antenna parameters measured in the laboratory



1 Test sample photos



2 Test setup photo



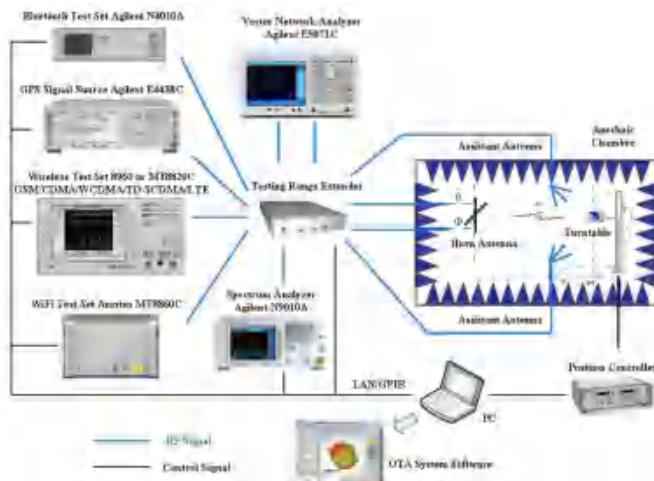
3 Test procedure

Name	Parameter	Method	Standard no.
Mobile communication antenna	VSWR	Generic specification for antennas used in the mobile communications	GB/T 9410-2008
	Antenna gain		
	Radiation pattern		
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979

4 Equipment list

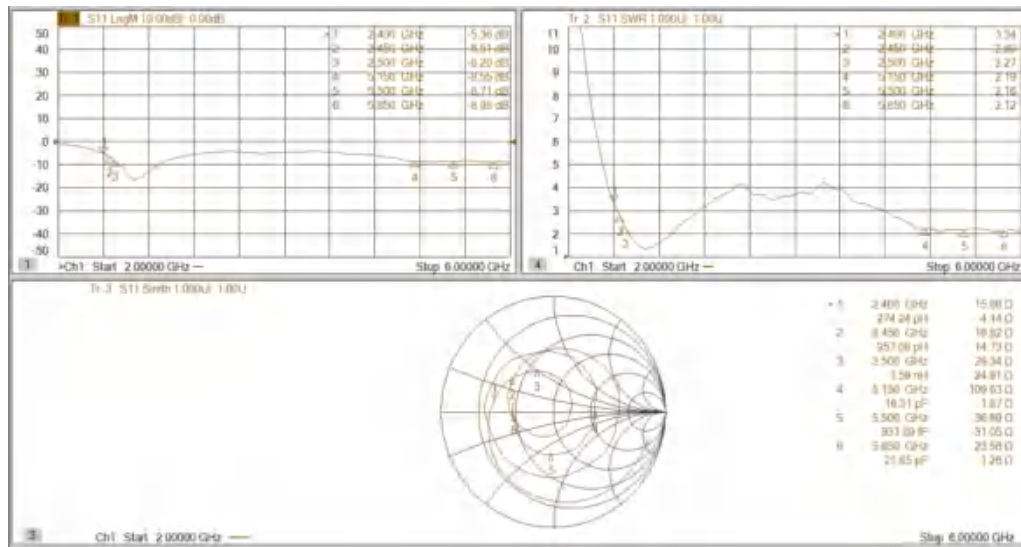
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Network Analyzer	KEYSIGHT	P5002A	DZZ-YQ-043	2023.11.03	2024.11.02
Antenna					
Chamber					
XXXXX					
XXXXX					

5 Test configuration diagram



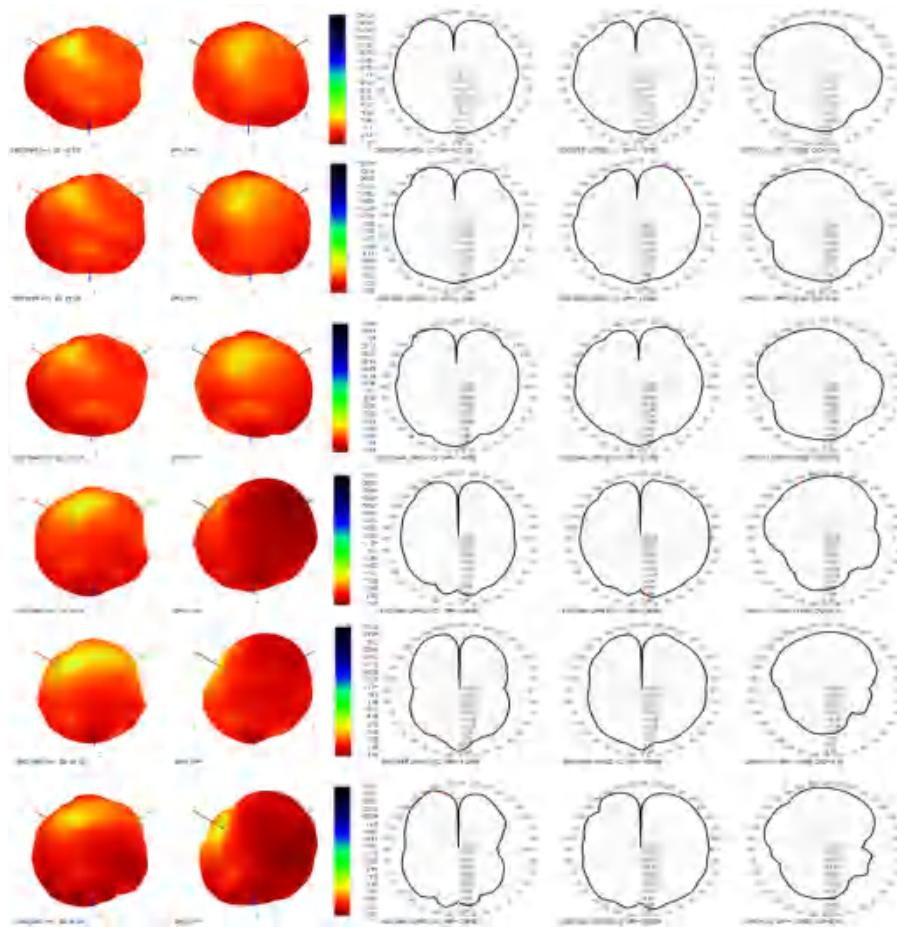
6 Antenna gain test chart and data

ANT1-S11



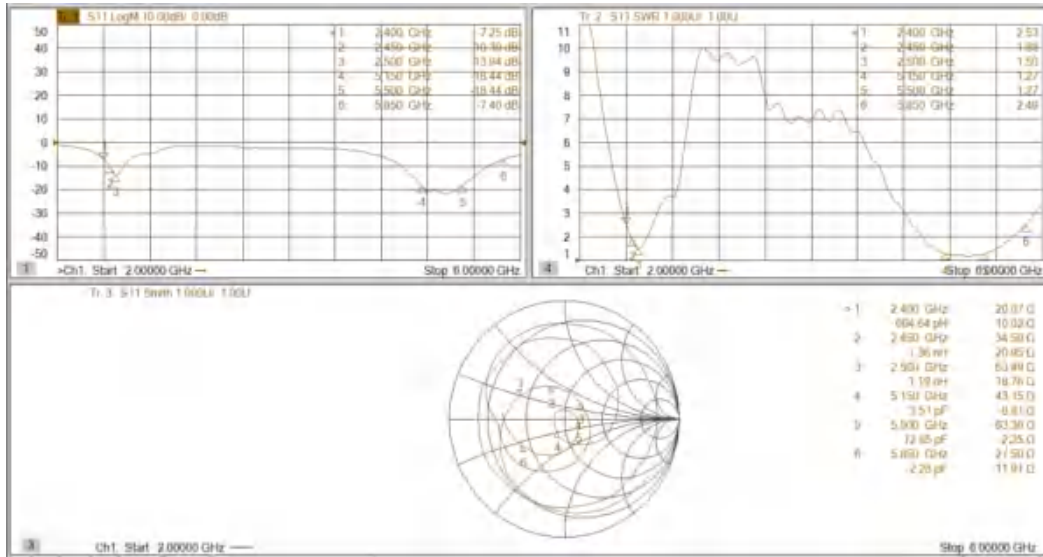
ANT1 Gain test chart and data

Frequency (MHz)	2400.0	2450.0	2500.0	2550.0	2600.0	2650.0	2700.0	2750.0	2800.0	2850.0	2900.0	2950.0	3000.0
Gain (dBi)	2.28	2.00	2.72	2.10	2.05	2.08	3.46	2.84	2.09	2.71	3.44	2.82	2.82
Efficiency (%)	88.82	81.25	91.25	81.25	80.82	84.34	88.34	83.25	82.82	88.25	91.25	88.25	88.25
Frequency (MHz)	2400.0	2450.0	2500.0	2550.0	2600.0	2650.0	2700.0	2750.0	2800.0	2850.0	2900.0	2950.0	3000.0
Gain (dBi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Efficiency (%)	100	100	100	100	100	100	100	100	100	100	100	100	100



6 Antenna Gain test chart and data

ANT2-S11



ANT2 Gain test chart and data

Frequency (GHz)	2.400	2.450	2.500	2.550	2.600	2.650	2.700	2.750	2.800	2.850	2.900
Gain (dBi)	2.27	3.08	3.27	3.24	3.22	2.94	2.74	2.68	2.71	2.82	2.65
Efficiency (%)	88.80	95.25	93.40	93.30	93.74	87.85	84.44	83.32	83.33	85.13	82.17
Gain (mm)	11.00	12.80	12.50	12.50	12.50	11.10	10.40	10.00	10.00	10.50	10.00
Gain (mm)	1.00	1.00	1.00	1.11	1.10	1.11	1.02	1.00	1.00	1.00	1.00
Efficiency (%)	11.10	14.80	14.10	14.10	14.10	12.80	12.10	11.90	11.90	12.50	11.90

