



Antenna Part Specification

Project name:	C66 Guten Tag
Antenna name:	WIFI/BT antenna
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china
Version:	V2.0
Date:	2025.10.30



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Change record			
Compile / change date	Reason for change	Changed content	Version
2025.8.5	First edition	First edition	V1.0
2025.10.30	Antenna update	Data modification	V2.0



I: The report of passive data



Angilent E5071C

antenna S11 parameter:



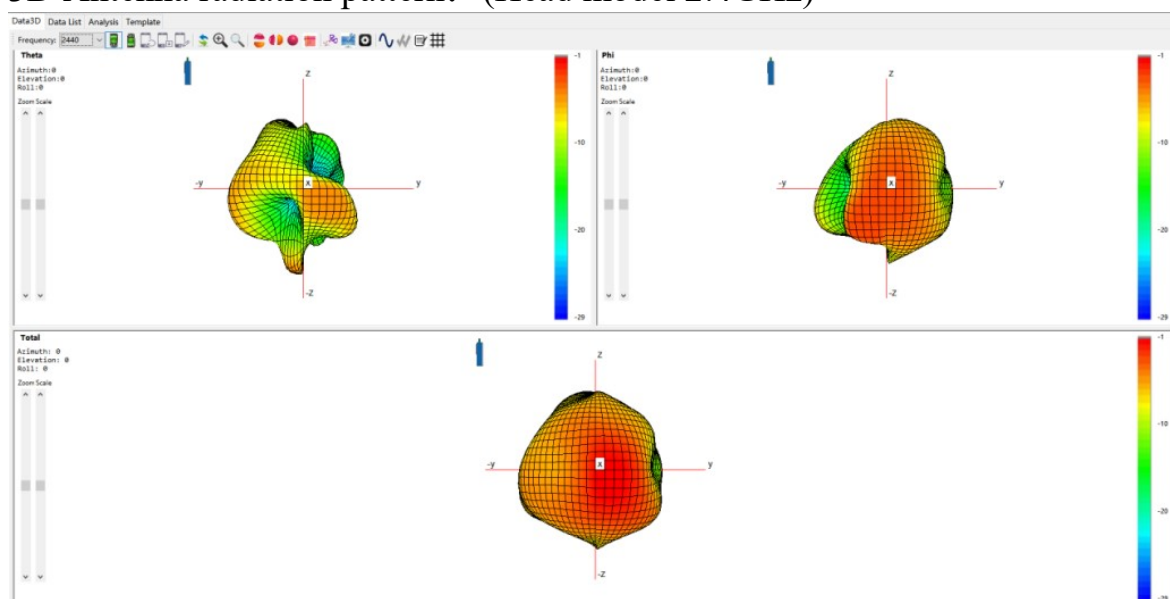


Antenna efficiency and gain:

Free											
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)	Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)	Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
2400	37.90%	-4.21	0.85	5150	37.90%	-4.21	0.74	5525	37.80%	-4.22	1.00
2410	39.20%	-4.07	1.12	5175	37.10%	-4.30	0.63	5550	41.30%	-3.84	1.20
2420	40.00%	-3.98	1.31	5200	37.30%	-4.28	0.71	5575	41.20%	-3.85	1.05
2430	40.40%	-3.93	1.39	5225	37.50%	-4.27	0.81	5600	43.10%	-3.66	1.30
2440	40.70%	-3.90	1.38	5250	35.60%	-4.48	0.63	5625	43.50%	-3.62	1.44
2450	39.90%	-3.99	1.22	5275	35.00%	-4.56	0.50	5650	44.10%	-3.56	1.75
2460	38.90%	-4.10	0.93	5300	34.80%	-4.58	0.46	5675	44.50%	-3.51	1.94
2470	37.80%	-4.23	0.66	5325	36.80%	-4.34	0.62	5700	43.10%	-3.66	1.96
2480	36.30%	-4.40	0.32	5350	36.50%	-4.38	0.45	5725	42.90%	-3.68	2.07
				5375	39.80%	-4.00	0.82	5750	42.40%	-3.73	2.09
				5400	39.00%	-4.09	0.73	5775	42.50%	-3.71	2.17
				5425	40.20%	-3.96	1.00	5800	43.80%	-3.58	2.44
				5450	37.90%	-4.21	0.96	5825	46.20%	-3.35	2.80
				5475	37.30%	-4.29	1.00	5850	46.70%	-3.31	2.94
				5500	38.30%	-4.17	1.15				

head model											
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)	Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)	Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
2400	20.00%	-6.99	-2.05	5150	21.60%	-6.66	-0.58	5525	24.60%	-6.10	0.24
2410	22.00%	-6.58	-1.56	5175	21.30%	-6.72	-0.62	5550	25.80%	-5.89	0.50
2420	23.10%	-6.37	-1.32	5200	21.60%	-6.66	-0.52	5575	25.80%	-5.89	0.43
2430	23.70%	-6.26	-1.11	5225	21.70%	-6.63	-0.45	5600	25.80%	-5.88	0.63
2440	23.50%	-6.28	-1.12	5250	21.00%	-6.78	-0.55	5625	26.30%	-5.81	0.63
2450	23.00%	-6.38	-1.18	5275	21.40%	-6.70	-0.43	5650	26.00%	-5.85	0.79
2460	21.80%	-6.61	-1.38	5300	21.80%	-6.62	-0.43	5675	26.50%	-5.76	0.84
2470	20.60%	-6.86	-1.64	5325	23.20%	-6.35	-0.06	5700	27.00%	-5.69	0.85
2480	19.20%	-7.17	-1.90	5350	22.90%	-6.39	-0.08	5725	27.10%	-5.67	0.82
				5375	24.80%	-6.05	0.32	5750	27.10%	-5.67	0.94
				5400	24.10%	-6.18	0.18	5775	27.60%	-5.59	1.06
				5425	24.80%	-6.05	0.37	5800	27.70%	-5.58	1.16
				5450	23.80%	-6.23	0.28	5825	28.00%	-5.53	1.55
				5475	23.90%	-6.21	0.24	5850	27.80%	-5.56	1.56
				5500	24.80%	-6.06	0.36				

3D Antenna radiation pattern: (Head model 2.4GHz)

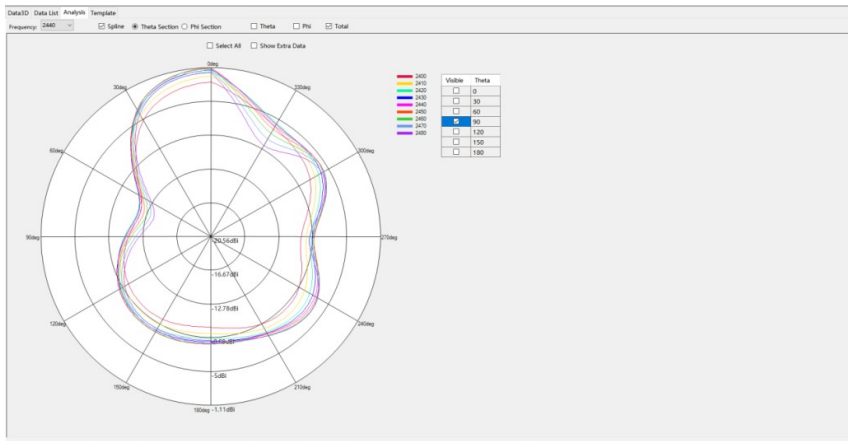


CC-JL-RD-36V1.0

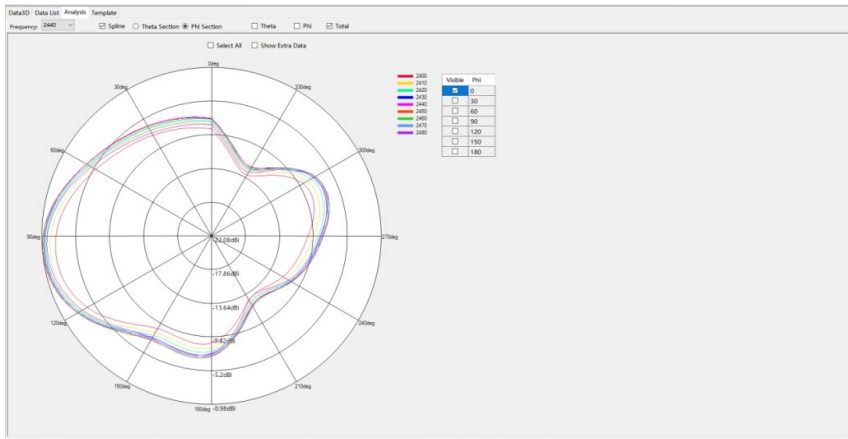


2D Antenna radiation pattern: (Head model 2.4GHz)

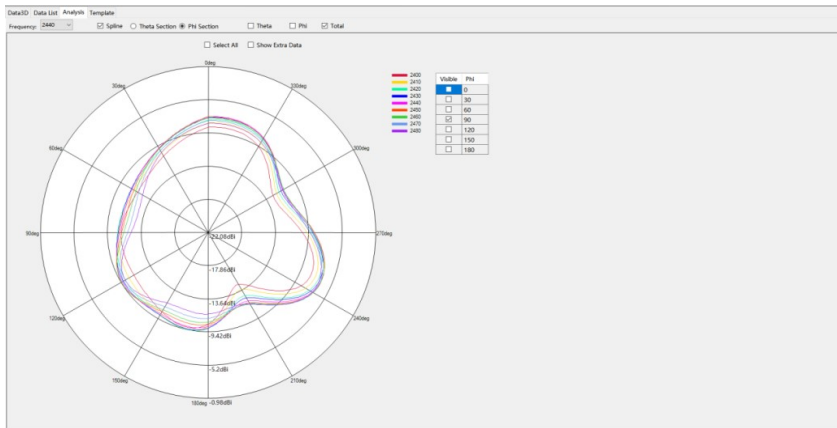
Theta=90°



Phi=0°

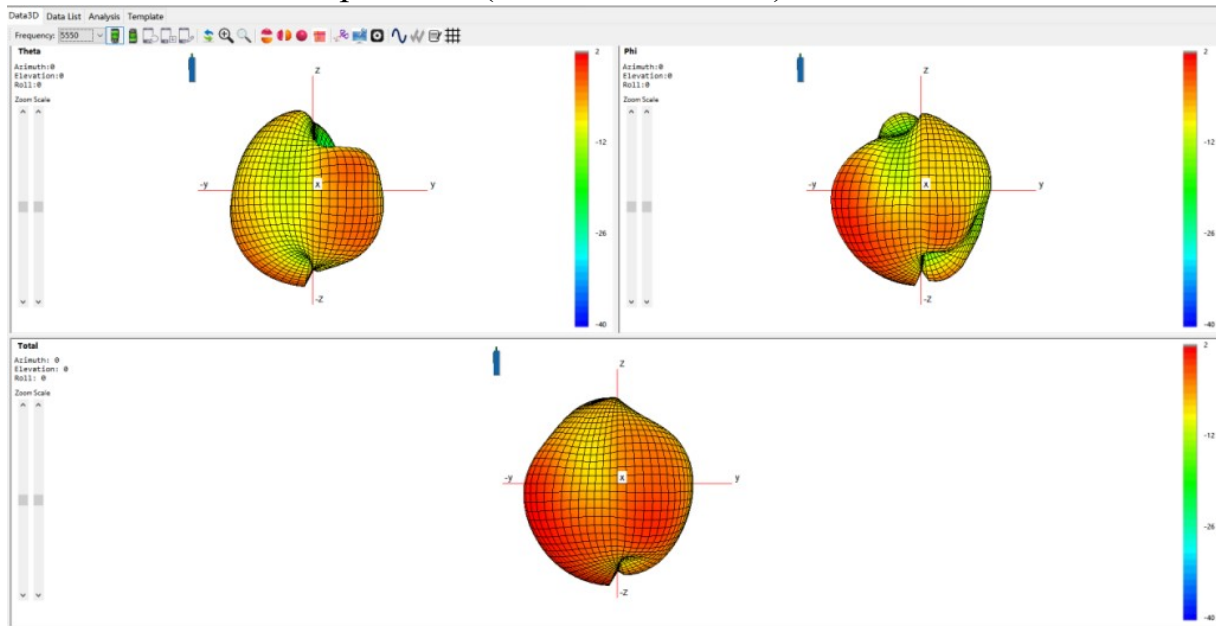


Phi=90°



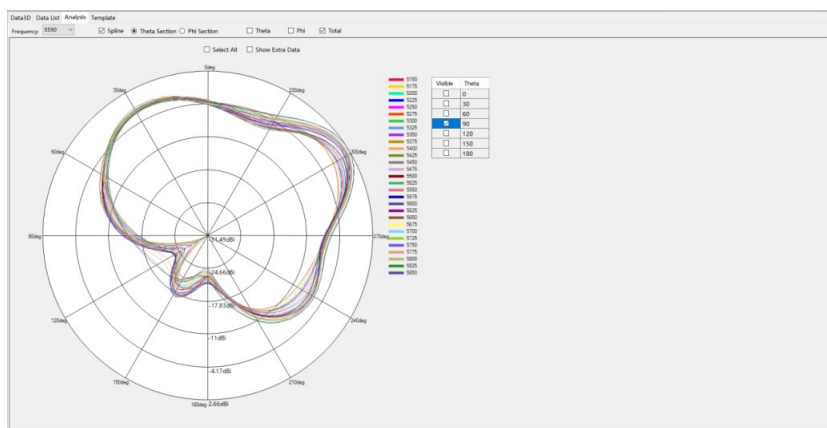


3D Antenna radiation pattern: (Head model 5GHz)

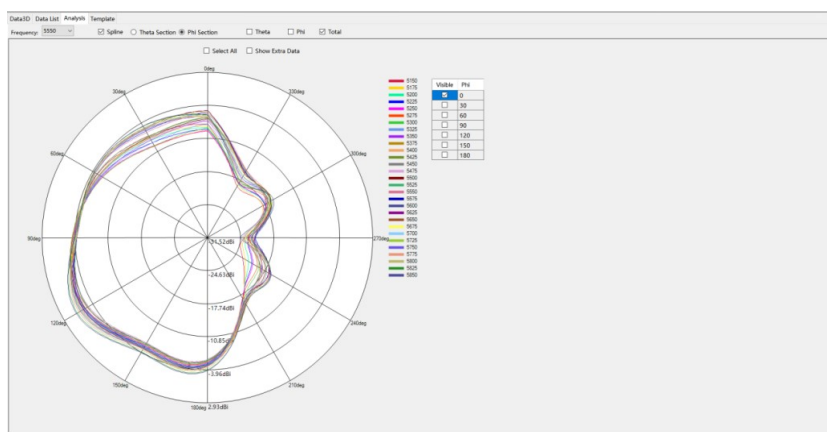


2D Antenna radiation pattern: (Head model 5GHz)

Theta=90°

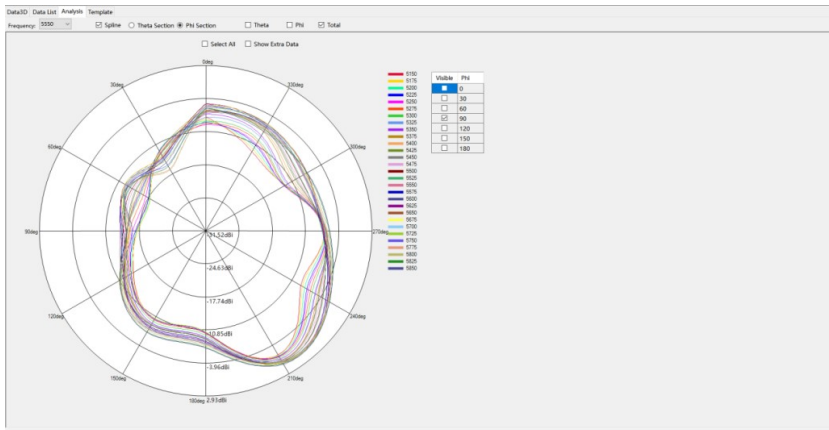


Phi=0°

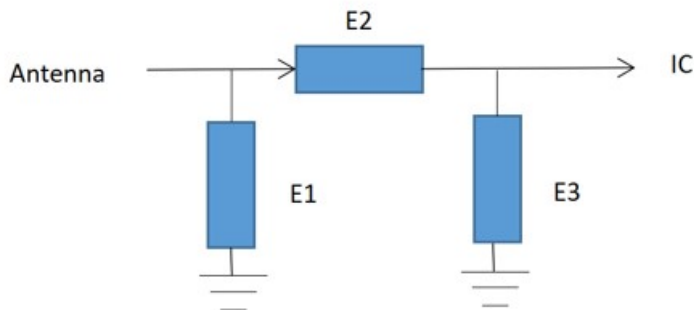




$\Phi=90^\circ$



II: Antenna matching



Element	Value
E1(0201)	4.7nH
E2(0201)	0Ω
E3(0201)	N/A

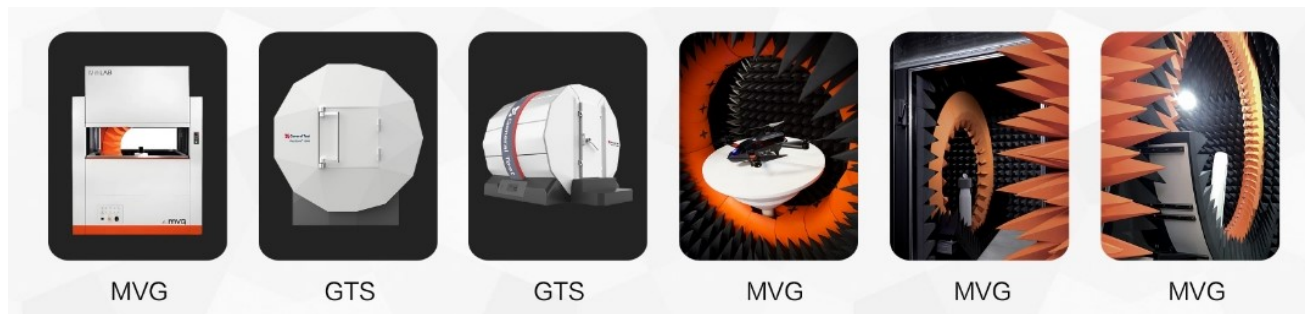


III: 3D Active test report of antenna

		Free		Head model	
	Channel	TRP	TIS	TRP	TIS
BT	CH 0	11.7	-93.6	7.9	-90.8
	CH 39	12.1	-94.3	8.2	-91.1
	CH 78	11.5	-94.5	7.6	-91.3

		Free		Head model	
11M	Channel	TRP	TIS	TRP	TIS
WIFI B	CH 1	10.1	-86.2	6.5	-83.6
	CH 6	10.2	-86.5	6.3	-83.6
	CH 11	9.7	-86.4	6.2	-83.7

		Free		Head model	
54M	Channel	TRP	TIS	TRP	TIS
WIFI A	CH 36	11.4	-70.5	9.9	-68.6
	CH 100	11.5	-70.5	10.6	-69.5
	CH 165	11.1	-70.8	10.1	-69.6



OTA Standard Chamber



IV: Antenna structure diagram file

