Cicent 思讯通信

Antenna Part Specification

Project name：	EB1010
Material category：	WIFI antenna
Version：	V1.0
Date：	2023.03.21

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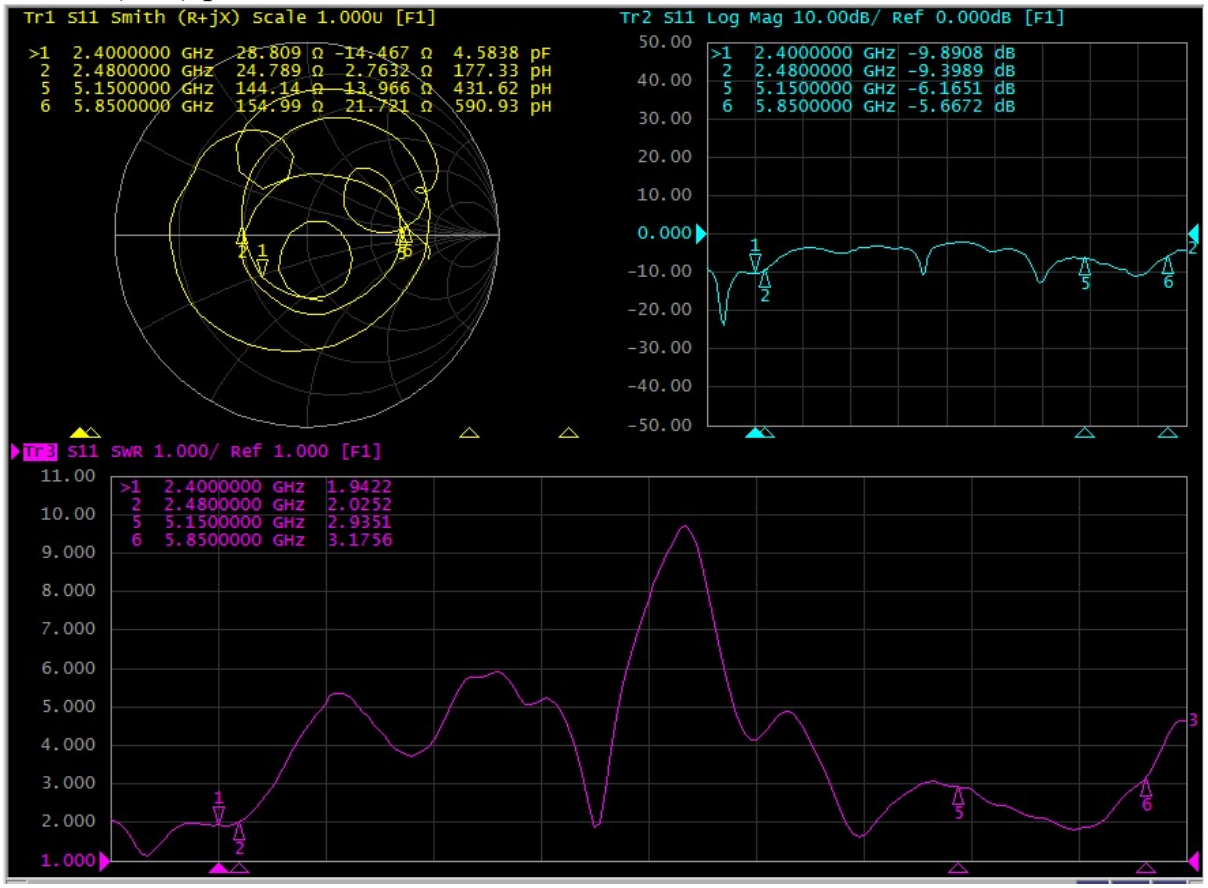
Change record			
Compile / change date	Reason for change	Changed content	Version
2023.03.21	First edition	First edition	V1.0

I：The report of passive data

Angilent E5071C

VSWR(S11) parameter：

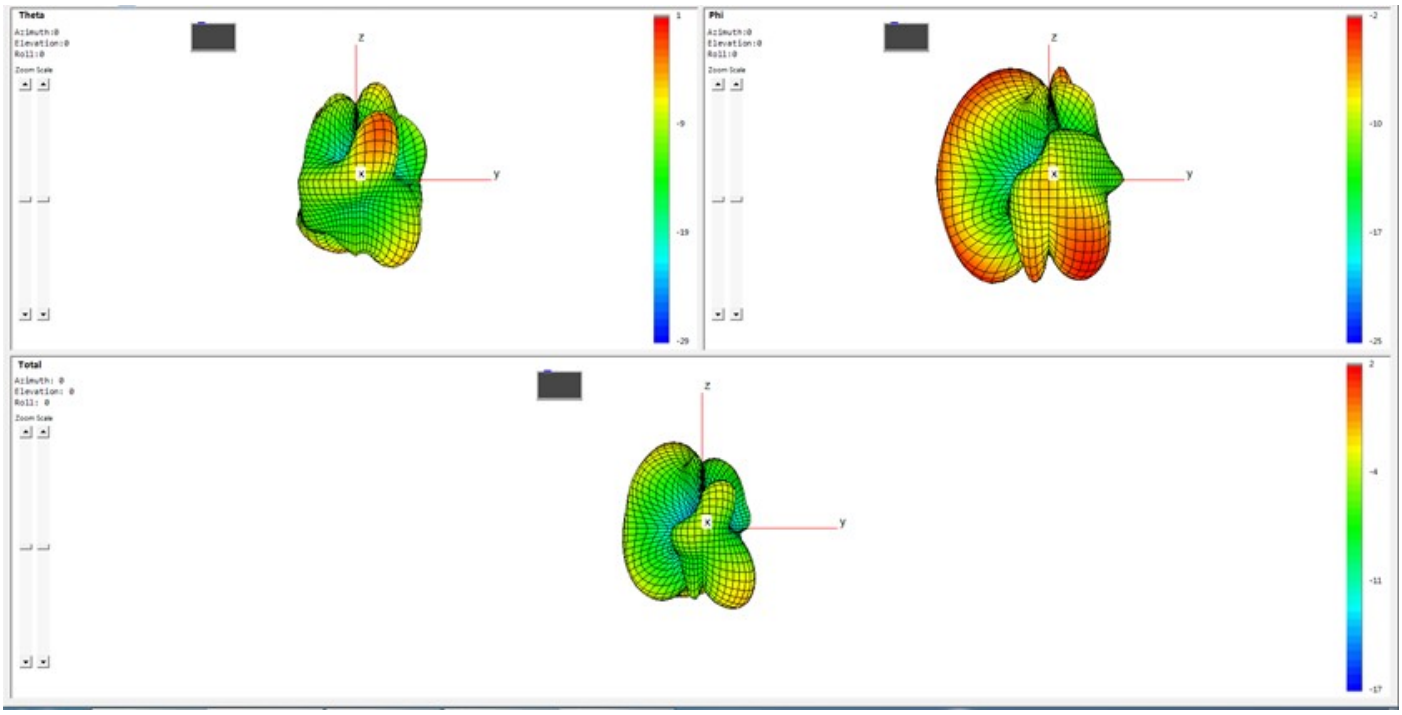


Efficiency：

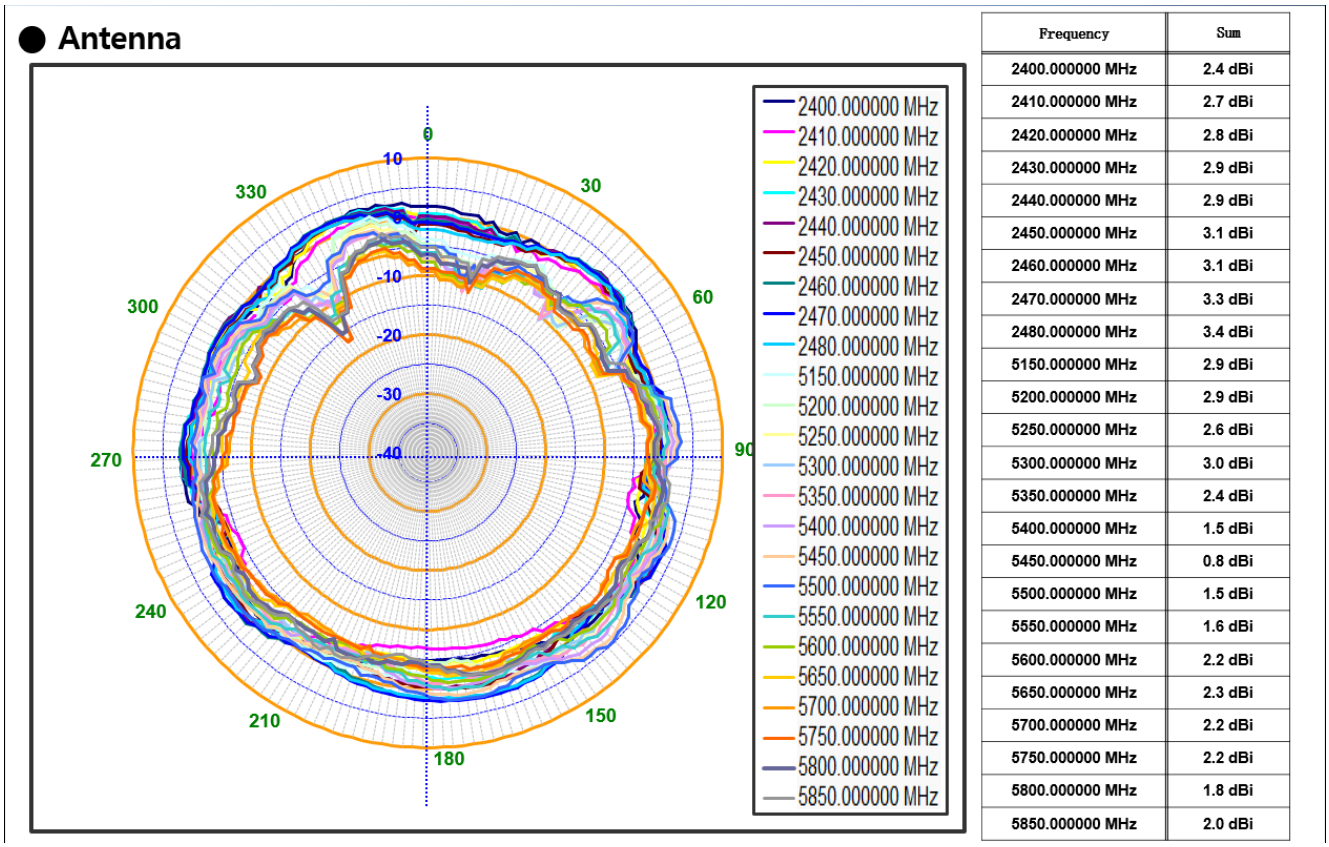
2400-2480MHZ			
Frequency（MHz）	Efficiency	Efficiency (dB)	Gain (dBi)
2400	30.4%	-5.2	2.4
2410	30.6%	-5.1	2.7
2420	30.8%	-5.1	2.8
2430	29.8%	-5.3	2.9
2440	28.8%	-5.4	2.9
2450	29.1%	-5.4	3.1
2460	28.4%	-5.5	3.1
2470	29.9%	-5.2	3.3
2480	30.6%	-5.1	3.4
Average value	29.8%	-5.3	2.9

5150-5850MHZ			
Frequency（MHz）	Efficiency	Efficiency (dB)	Gain (dBi)
5150	40.5%	-3.9	2.9
5200	40.8%	-3.9	2.9
5250	39.8%	-4.0	2.6
5300	40.2%	-4.0	3.0
5350	34.5%	-4.6	2.4
5400	31.0%	-5.1	1.5
5450	28.8%	-5.4	0.8
5500	31.3%	-5.0	1.5
5550	30.8%	-5.1	1.6
5600	30.3%	-5.2	2.2
5650	30.3%	-5.2	2.3
5700	32.9%	-4.8	2.2
5750	38.3%	-4.2	2.2
5800	36.2%	-4.4	1.8
5850	38.0%	-4.2	2.0
Average value	34.9%	-4.6	2.1

3D Antenna radiation pattern:



Antenna radiation pattern:
Theta=90.00deg



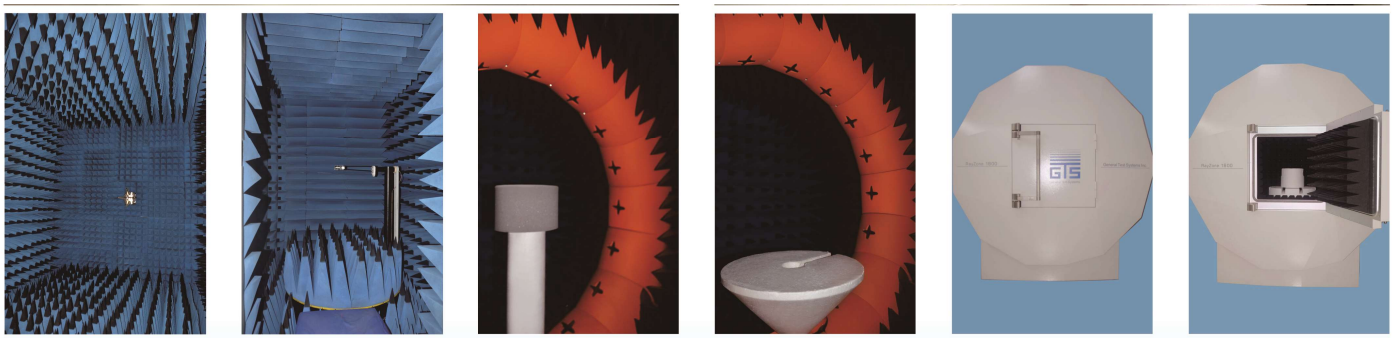
Frequency	Sum
2400.000000 MHz	2.4 dBi
2410.000000 MHz	2.7 dBi
2420.000000 MHz	2.8 dBi
2430.000000 MHz	2.9 dBi
2440.000000 MHz	2.9 dBi
2450.000000 MHz	3.1 dBi
2460.000000 MHz	3.1 dBi
2470.000000 MHz	3.3 dBi
2480.000000 MHz	3.4 dBi
5150.000000 MHz	2.9 dBi
5200.000000 MHz	2.9 dBi
5250.000000 MHz	2.6 dBi
5300.000000 MHz	3.0 dBi
5350.000000 MHz	2.4 dBi
5400.000000 MHz	1.5 dBi
5450.000000 MHz	0.8 dBi
5500.000000 MHz	1.5 dBi
5550.000000 MHz	1.6 dBi
5600.000000 MHz	2.2 dBi
5650.000000 MHz	2.3 dBi
5700.000000 MHz	2.2 dBi
5750.000000 MHz	2.2 dBi
5800.000000 MHz	1.8 dBi
5850.000000 MHz	2.0 dBi

II：3D Active test report of antenna

11M	Channel	TRP (dBm)	TIS (dBm)
WIFI B	CH 1	12.1	-80.0
	CH 6	12.9	-79.7
	CH 11	12.5	-80.2

54M	Channel	TRP (dBm)	TIS (dBm)
WIFI A	CH 36	7.1	-67.4
	CH 48	7.4	-66.5
	CH 165	9.2	-68.6

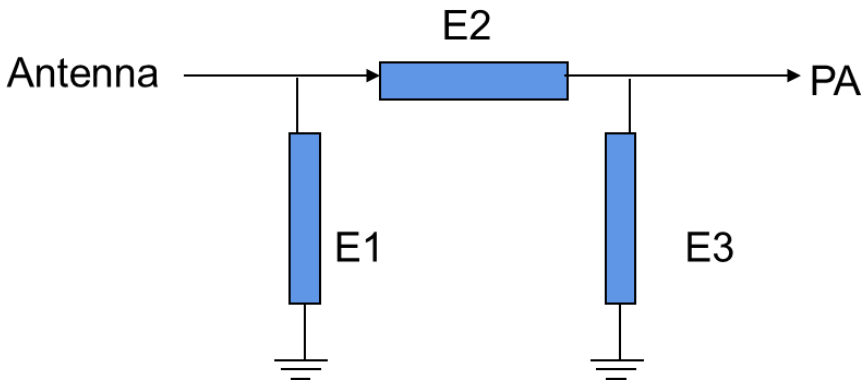
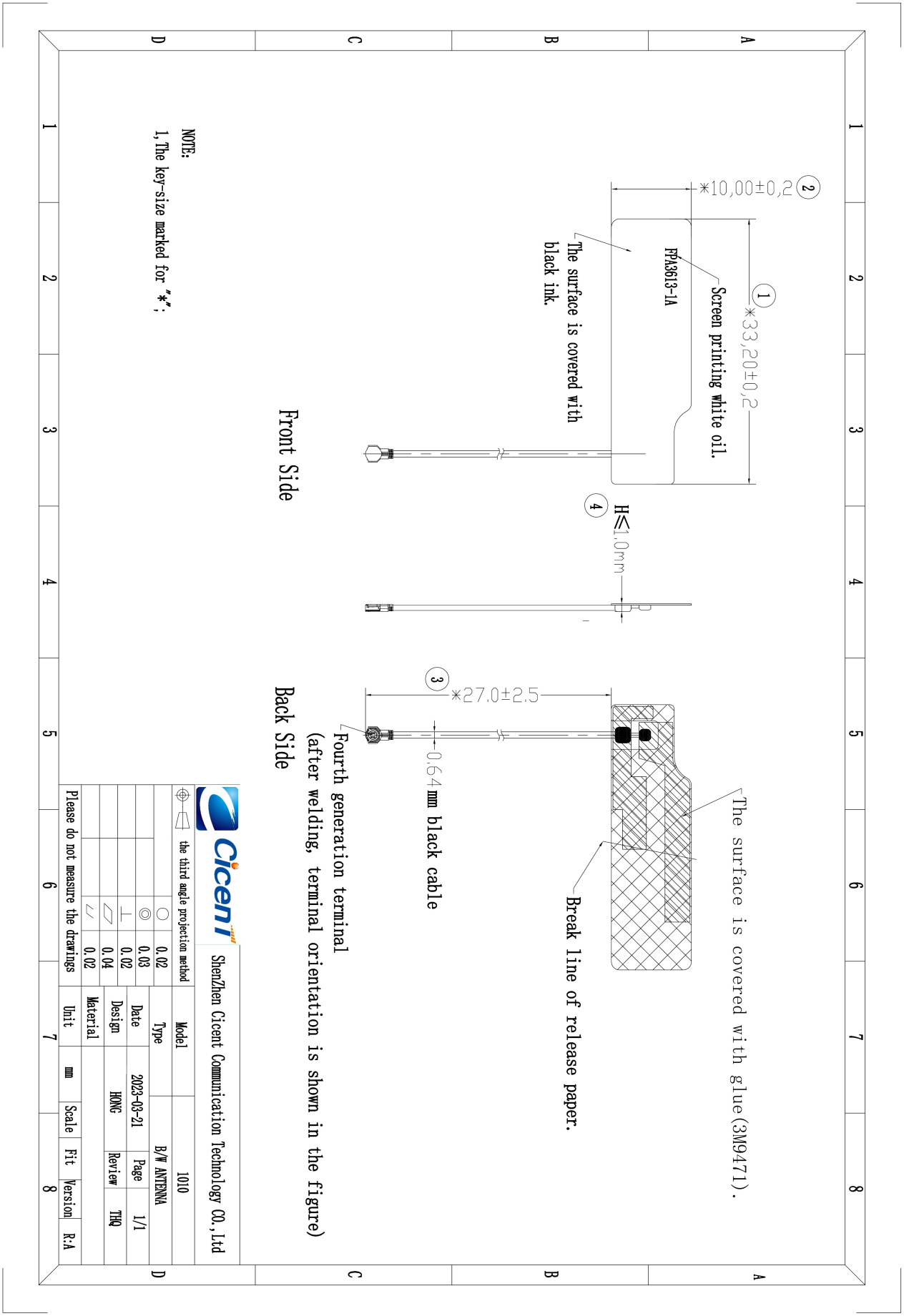
54M	Channel	TRP (dBm)	TIS (dBm)
WIFI G	CH 1	13.0	-70.7
	CH 6	12.8	-69.5
	CH 11	12.7	-70.1



OTA Standard Chamber

III：Matching circuit

Element	Value
E1	N/A
E2	0Ω
E3	N/A



IV：Structure file