

Testing Report

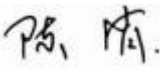
Customer Name: SHENZHEN SHIXINZHONGXIN TECHNOLOGY.CO.,LTD

Product Name: BT Antenna

Sample Model: BM2020

Reference Standard: *GB/T9410-2008; ANSI/IEEE Std 149-1979*

Issue Date: 2023.07.28

Engineer:		Date: 2023.07.28
Auditor:		Date: 2023.07.28
Approver:		Date: 2023.07.28

1. General Information

1.1 General Information of testing institutions

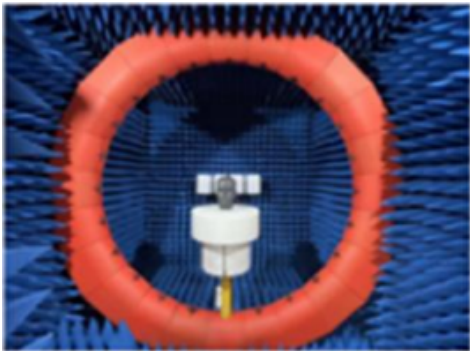
Name	Shenzhen Hetuo Technology Co.,Ltd.
Address	Room 1202B, Building C6, Hengfeng Industrial City, Xixiang, Baoan District, Shenzhen
Tel	18665849001
E-mail	18665849001@163.com
Equipment	Agilent 5071C

1.2 Testing principle

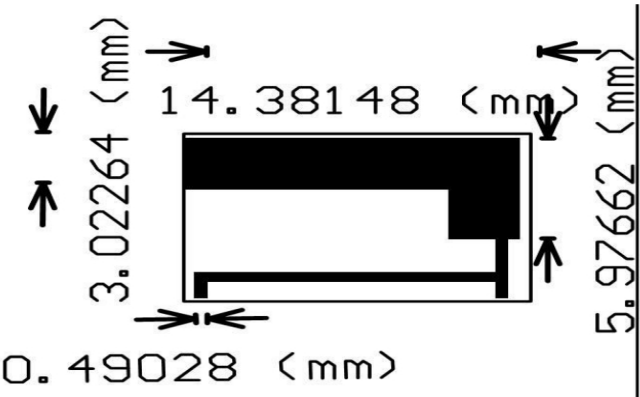
2. Test System

Multi-probe OTA Measurement System

Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C
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Antenna Photo & Length(mm)



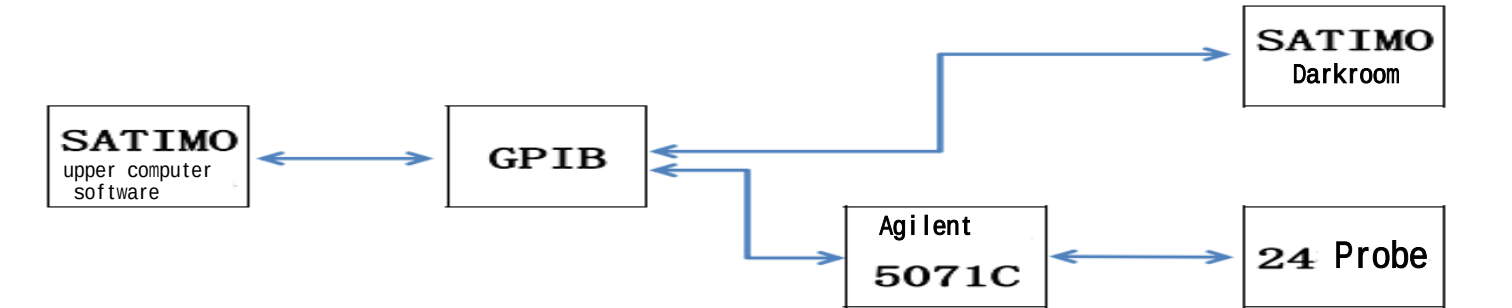
1.3 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
24 probe microwave chamber	4*3*3	NA	SATIMO	2023.06.29	2023.09.30
Network Analyzer	5071C	NA	Agilent	2023.06.29	2023.09.30

1.4 Test environment

Temperature	24 C ± 1.5 C
Humidity	45%RH
Pressure	101kPa

1.5 Brief summary of Procedure



1. SATIMO turn on the Upper Computer Software, Name: VeryView99.exe, Version No.: V1.10;
2. VeryView99 via GPIB (General Purpose Interface Bus) to control the shielding room (darkroom)'s SATIMO;
3. Meanwhiel, GPIB control the Agilent 5071C to read the Antenna data by 24 Probe;
4. Agilent 5071C will analyse the data and generate the result;
5. Agilent 5071C will feedback to VeryView99 software to generate the test report.

2. Sample Information

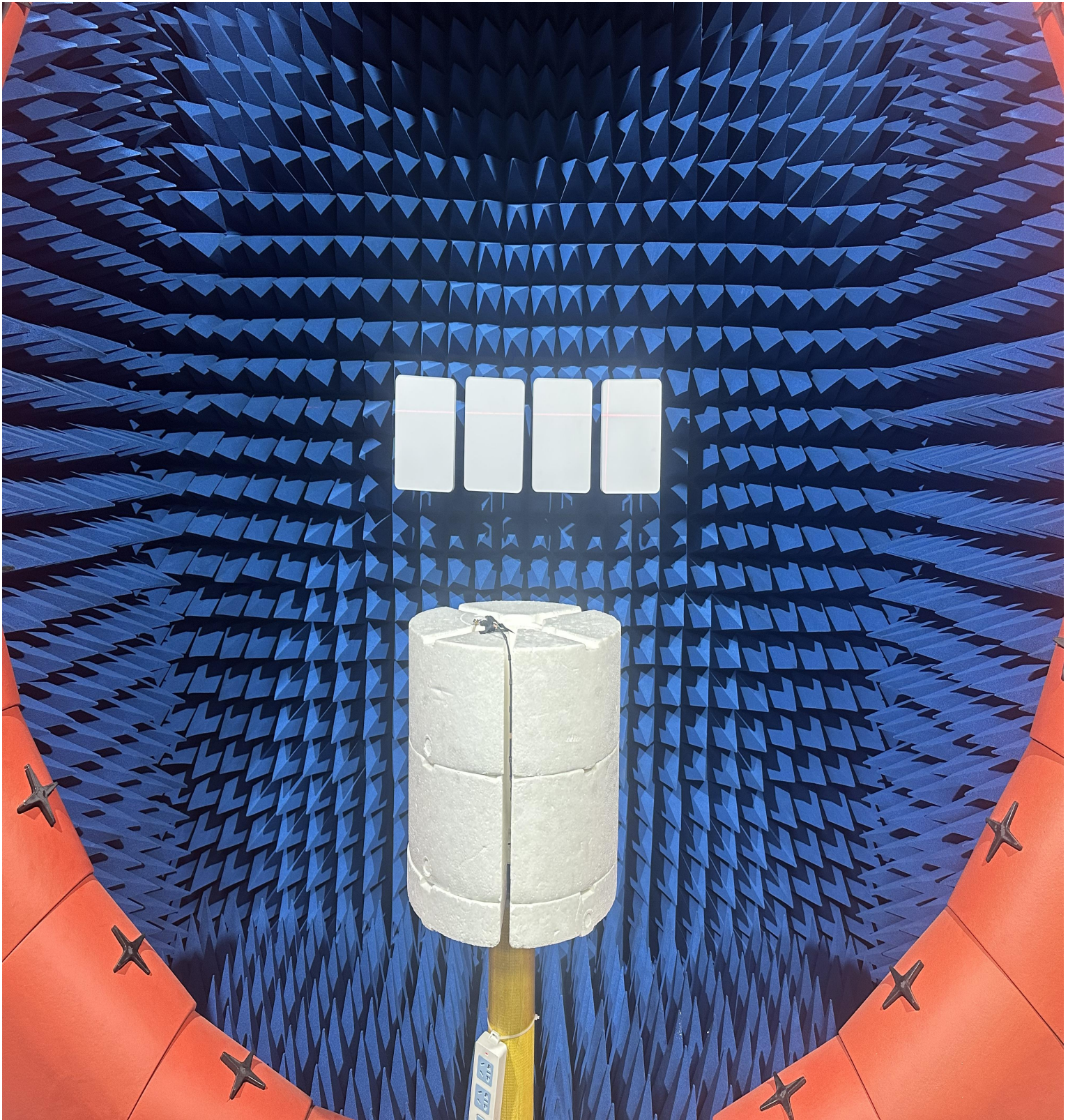
2.1 Client information

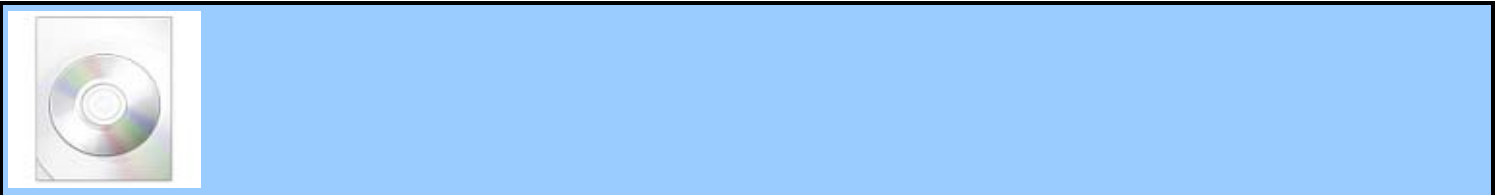
Name	SHENZHENSHIXINZHONGXIN TECHNOLOGY .CO .,LTD
Address	A1 , Shajing Donghuan Industrial Zone , Bao 'an District , Shenzhen
Contacts	Ma Chao
Tel	18218809918
E-mail	machao@c-chip.com.cn

2.2 Description of EUT(S)

Product Name	BT Antenna
Sample Model	BM2020
Antenna Size	5.97662*14.38148mm
Antenna Type	PCB antenna
Serial No.	/
Test Item	Antenna Gain,Radiation pattern
Frequency Range	2400-2500MHz
Received Date	2023.07.28
Test Date	2023.07. 28
Remark	The length of the RF cable is 50mm

The test photos





Efficiency (dBi)	-8.39	-8.02	-7.74	-7.50	-7.10	-6.88	-6.74	-6.51	-6.30	-6.05	-5.80
Gain (dBi)	-0.94	-0.67	-0.41	-0.47	-0.23	-0.05	0.12	0.52	0.95	1.28	1.51
Efficiency (%)	14.50	15.77	16.83	17.78	19.52	20.53	21.17	22.36	23.45	24.82	26.31

E1(XZ)	96.00	96.00	39.00	97.00	93.00	90.00	81.00	91.00	88.00	94.00	92.00
E1(XZ)₁	1.82	2.68	3.84	2.95	3.34	3.32	2.90	1.42	1.91	1.25	1.37
E2(YZ)	35.00	33.00	37.00	36.00	37.00	59.00	74.00	37.00	36.00	35.00	35.00
E2(YZ)₁	11.67	10.91	10.61	10.06	8.46	8.23	7.64	6.92	7.33	7.08	7.05
(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
(P)₁	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Hc(XY)	42.00	54.00	39.00	52.00	55.00	56.00	64.00	59.00	61.00	69.00	70.00

[illegible]