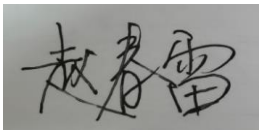
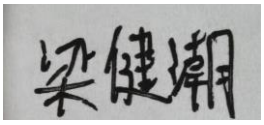
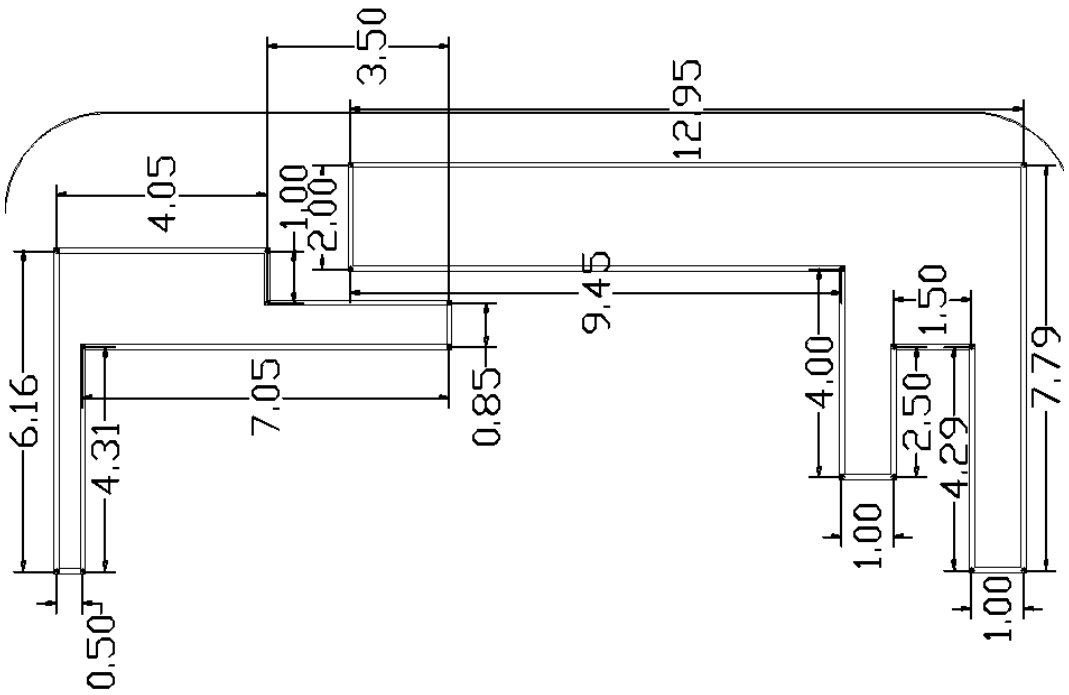
Sony YY7856E Antenna report

Applicant	Tonly Technology Co., Ltd.
Address	Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, 516006 China

Manufacturer or Supplier	Tonly Technology Co., Ltd.
Address	Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, 516006 China
Product	IFA
Brand Name	sony
Model	YY7856E ANT
Max. Peak Gain	1.9dBi
Date of tests	2022-10-26
Tested by chunlei zhao	Approved by Jianchao Liang
	

1.Antenna Size（mm）



2.Antenna photo （Please refer to Antena photos document）

3.Test setup photo（Please refer to Antena photos document）

4.Test standard

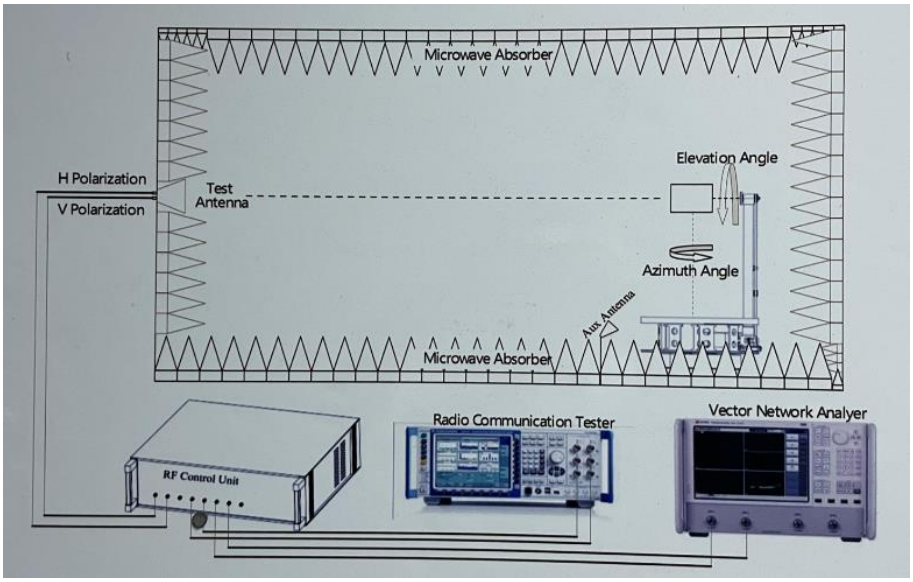
Name	Parameter	Method	Standard no.
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979

5.Equipment list

Equipment	Manufacturer	Model No	Serial No.	Last Cal.	Due Date
Network Aanlyzer	Agilent	E5071C	MY46630767	2022.4.28	2023.4.27
Microwave chamber	GTS	GTS Maxsign-Dart7000		2022.4.28	2023.4.27
Turn table	GTS	Dart-700 turn table		2022.4.28	2023.4.27

turn table controller	GTS	Dart-700 turn table controller		2022.4.28	2023.4.27
Broad-Band Horn Antenna	GTS	AT-6000	MA-D0460	2022.4.28	2023.4.27
Test Software	GTS	Libra Version-3.0.3.1		2022.4.28	2023.4.27

6.Test configuration diagram



Test step flow:

1) Maintain the test ambient temperature of 23±2 C, the instrument is powered on and preheated for more than 30 minutes;

2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;

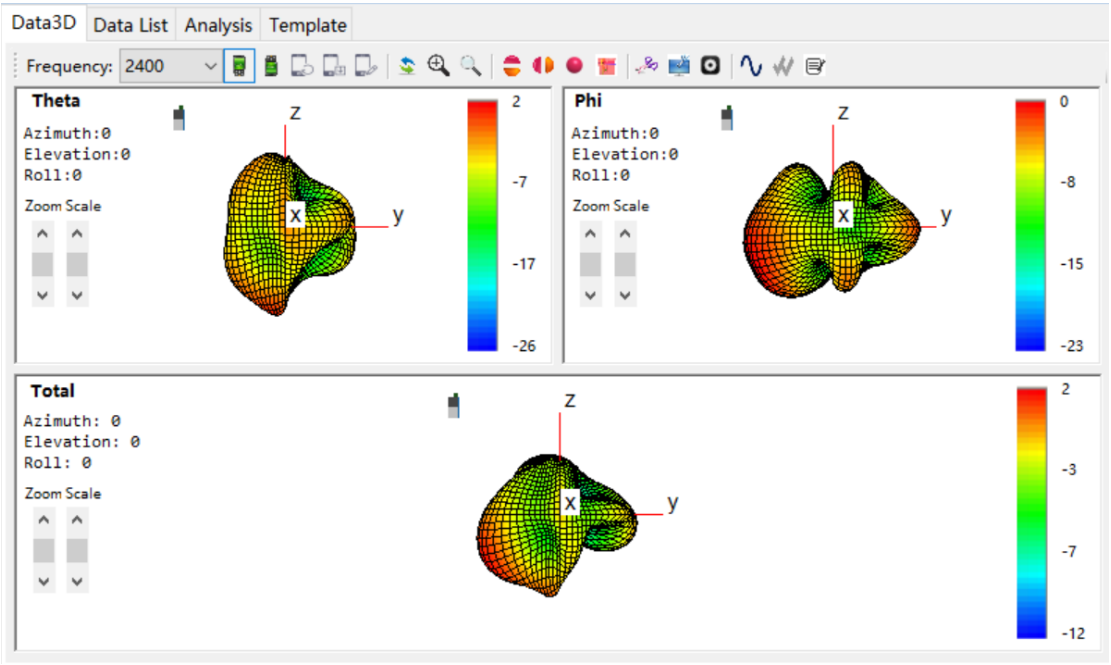
3) Outline sets the test content objectives and conducts calibration tests;

4) Run the software, when the test is completed, export the corresponding test diagram and test data, and save to the corresponding directory.

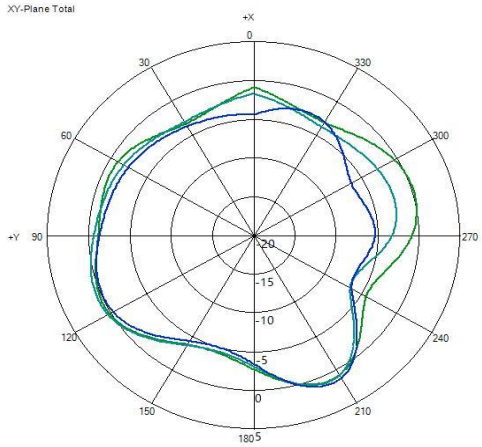
7.Antenna gain

Freq(MHz)	Gain(dB)	Efficiency(dB)	Efficiency(%)
2400	1.891467853	-2.434753868	57.08534277
2410	1.747365293	-2.500119707	56.23258253
2420	1.52938049	-2.53214299	55.81946902
2430	1.249508733	-2.600159851	54.95206473
2440	1.332477943	-2.647525396	54.3559963
2450	1.491878411	-2.706569745	53.62200212

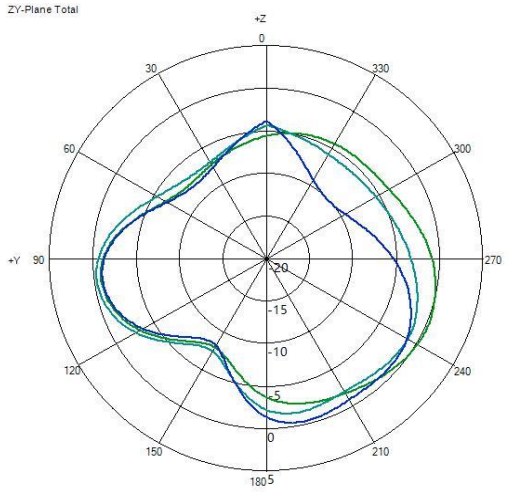
2460	1.693199732	-2.772389199	52.81546163
2470	1.718479838	-2.750180605	53.08623675
2480	1.685995836	-2.834534552	52.06508057
2490	1.659216828	-2.91860486	51.06690224
2500	1.546523942	-2.968909333	50.47880518



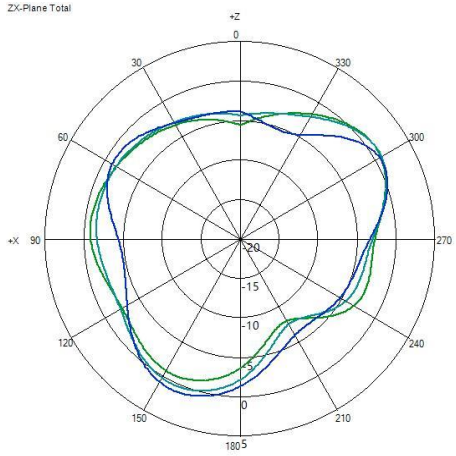
8. Antenna test data



Channel (MHz)	Max. (dB)	Ave. (dB)
2400	0.716551	-1.414
2440	0.727997	-1.98709
2480	1.176315	-2.68677



Channel(MHz)	Max. (dB)	Ave. (dB)
2400	0.100284483	-3.246667542
2440	-0.565732738	-3.590256986
2480	-0.91685488	-4.120555127



Channel(MHz)	Max. (dB)	Ave. (dB)
2400	0.835599387	-2.333799406
2440	0.933548964	-2.221957277
2480	0.857439468	-2.522495324