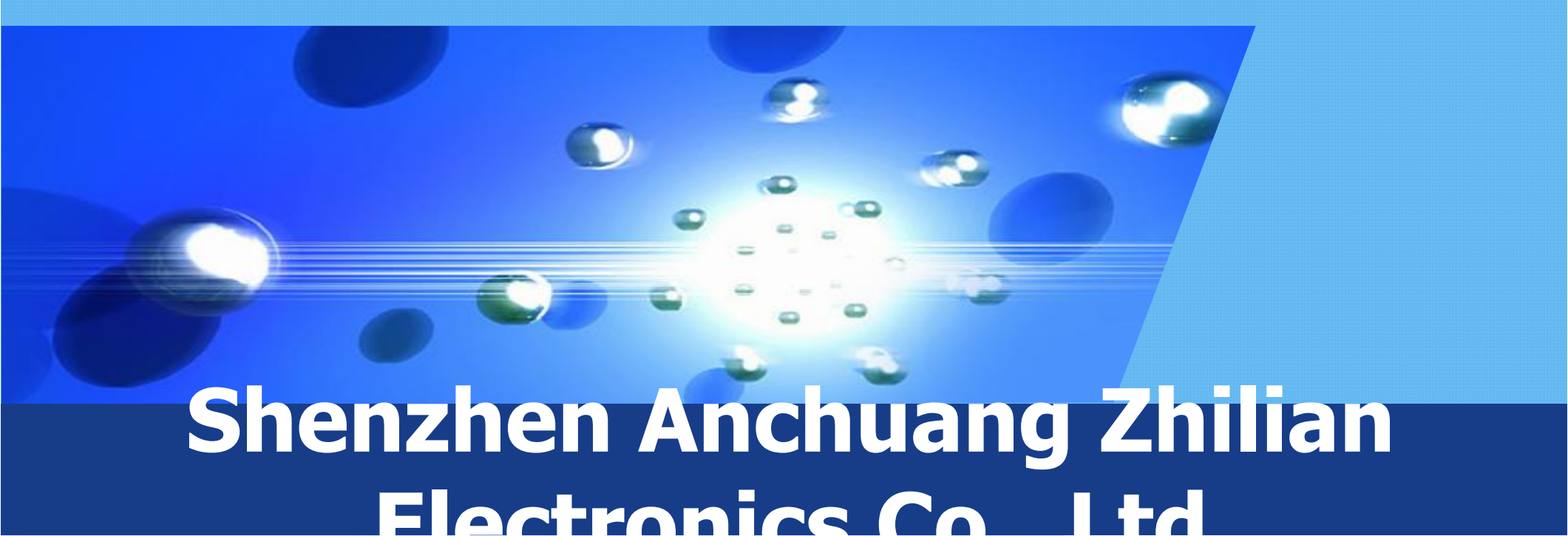




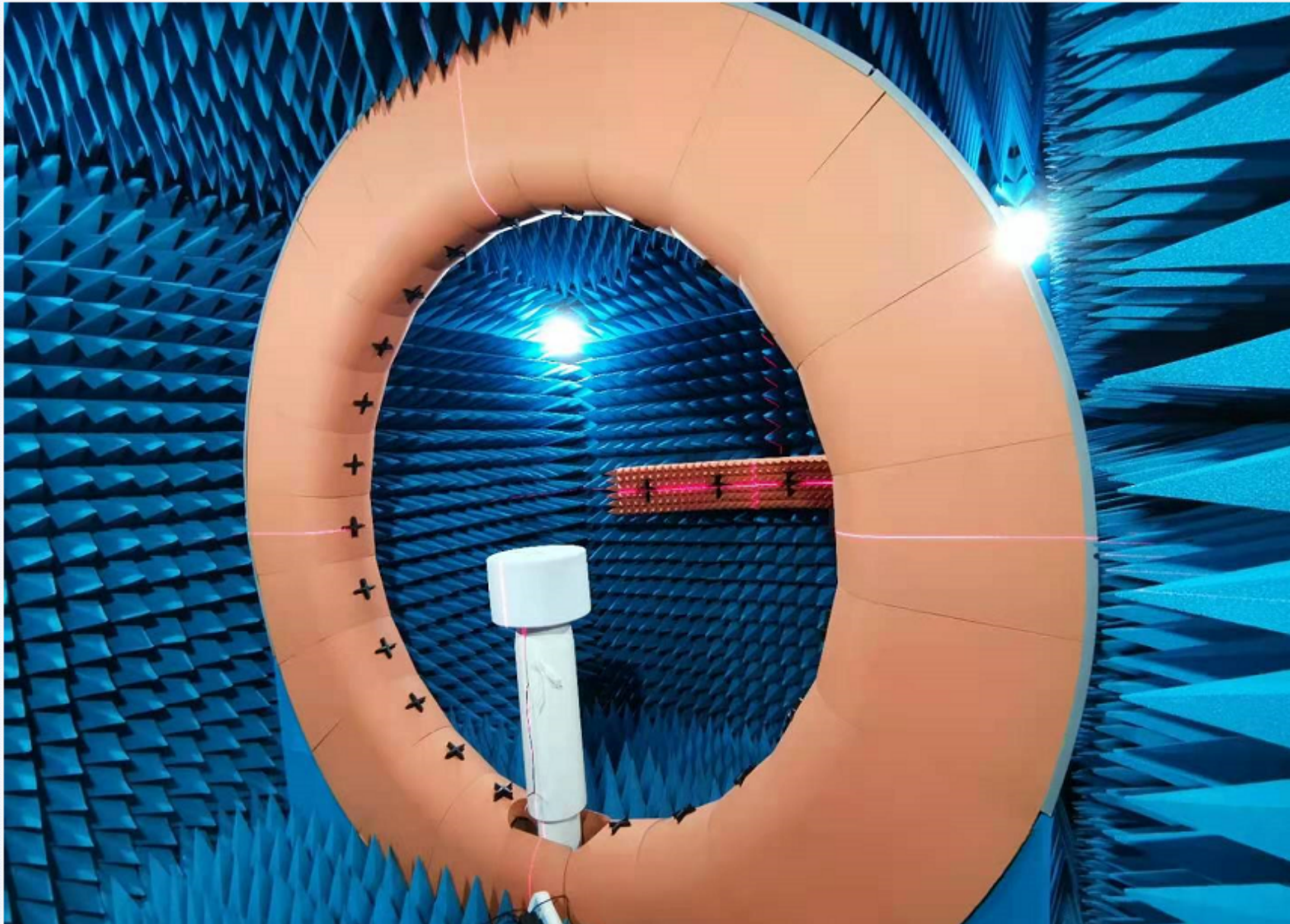
Shenzhen Anchuang Zhilian Electronics Co., Ltd

Antenna debugging report

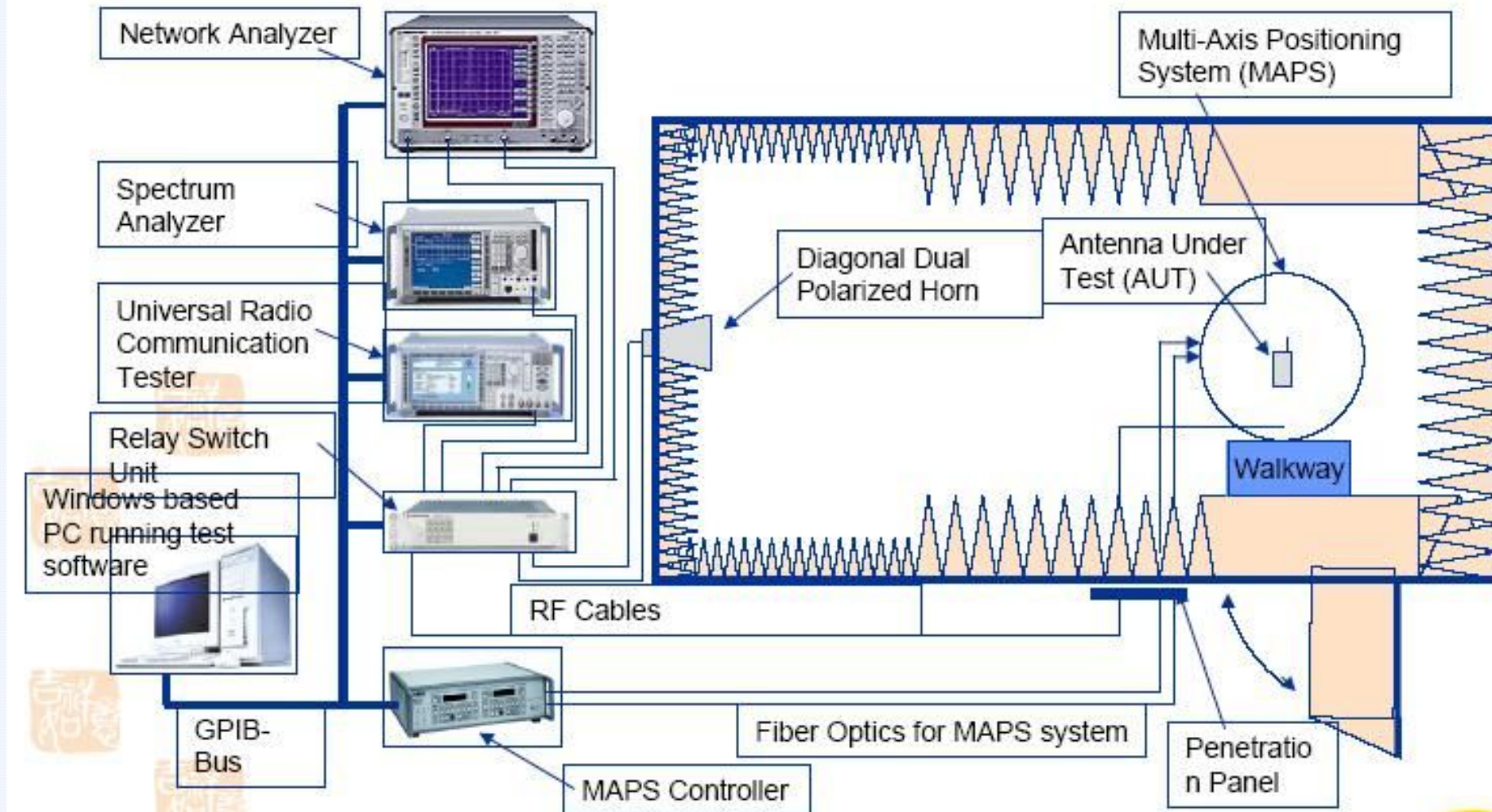
project information

custom:	Strange feeling	Project – Motherboard	R44A	date	2024. 9. 27
Frequency band	2400–2500 5100–5800				
Antenna Structure	FPC+1.13 first generation terminal+55mm black wire terminal facing downwards				
RF Engineering	Yi Longhui				
Structural engineering	Hu Gong				
Report version	V1.0				

SATIMOdarkroom



test system

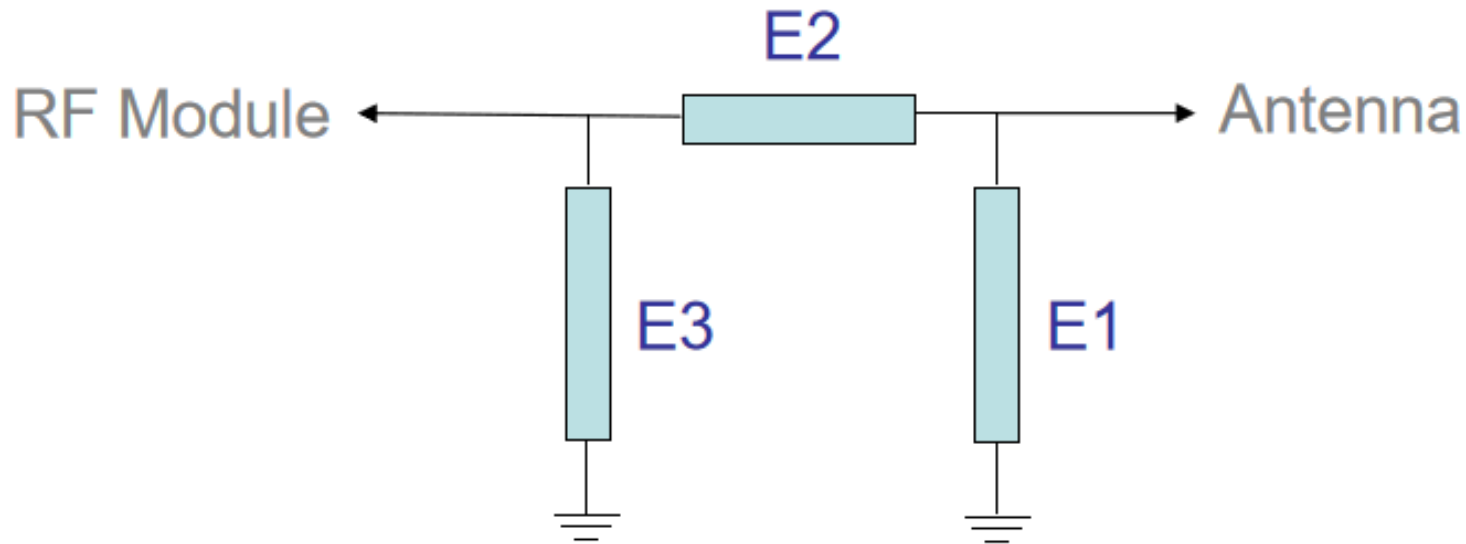


testing environment	
testing environment	XH-IOE MPS2440 Test System
ambient temperature	23°C
ambient humidity	52%
Ambient air pressure	101KPa

- 1、 product drawing
- 2、 matching circuit
- 3、 test data

product drawing

matching circuit



Element	Value
E1(0402)	
E2(0402)	
E3(0402)	
No changes made to the original match	

Active test data

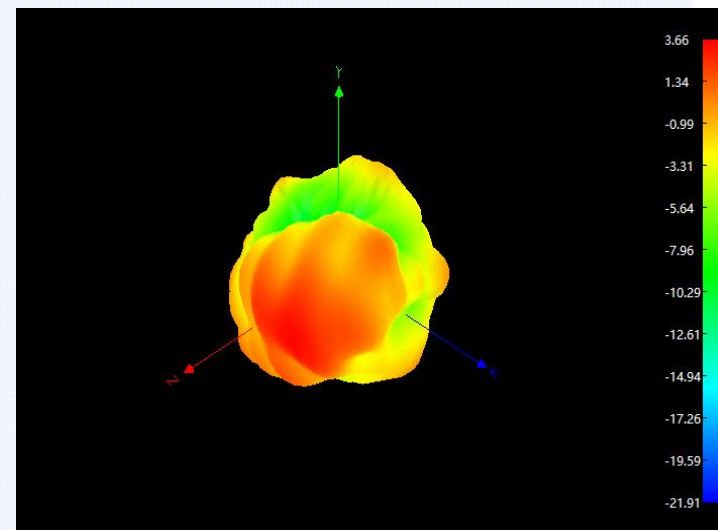
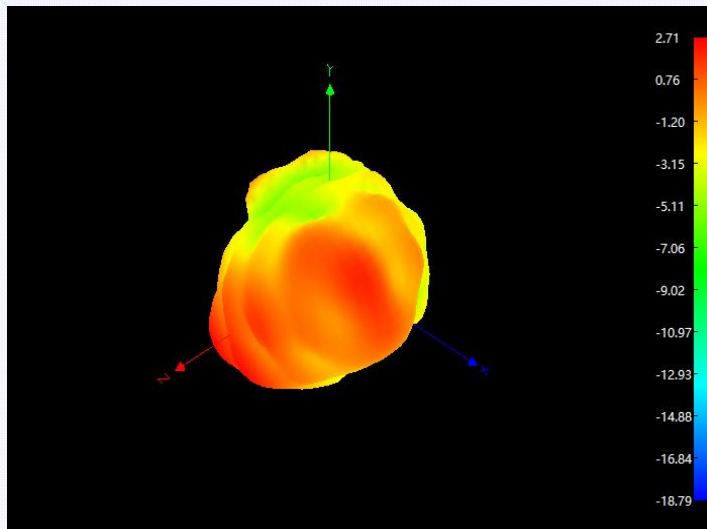
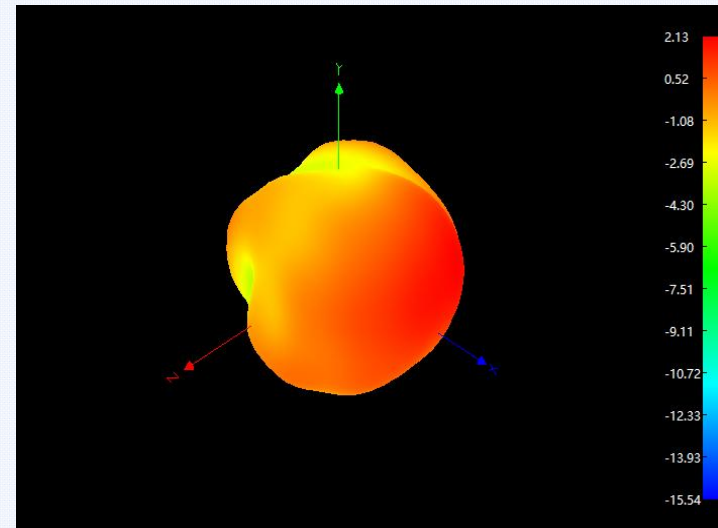
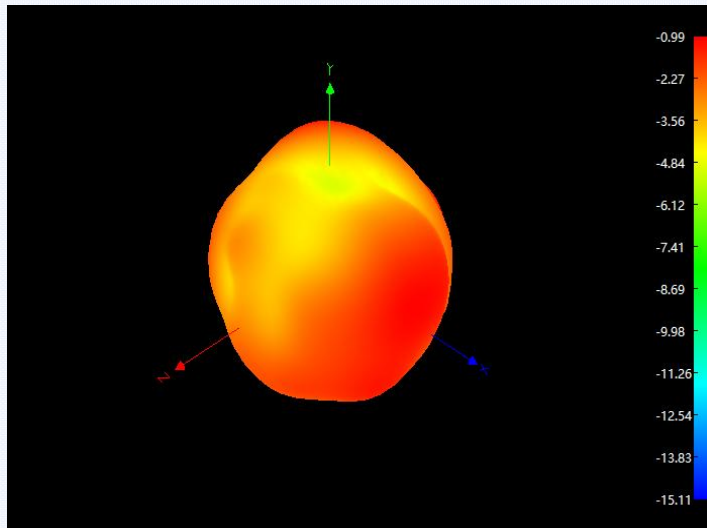
Band	channel	TRP (dBm)	TIS (dBm)
WIFI-B	1	18.5	
	6	18.3	
	11	19.6	-81.5
WIFI-G	1	16.5	
	6	15.5	
	11	15.4	-70.1
WIFI-A	36	17.5	
	100	16.3	
	165	16.6	-70.5

Passive test data

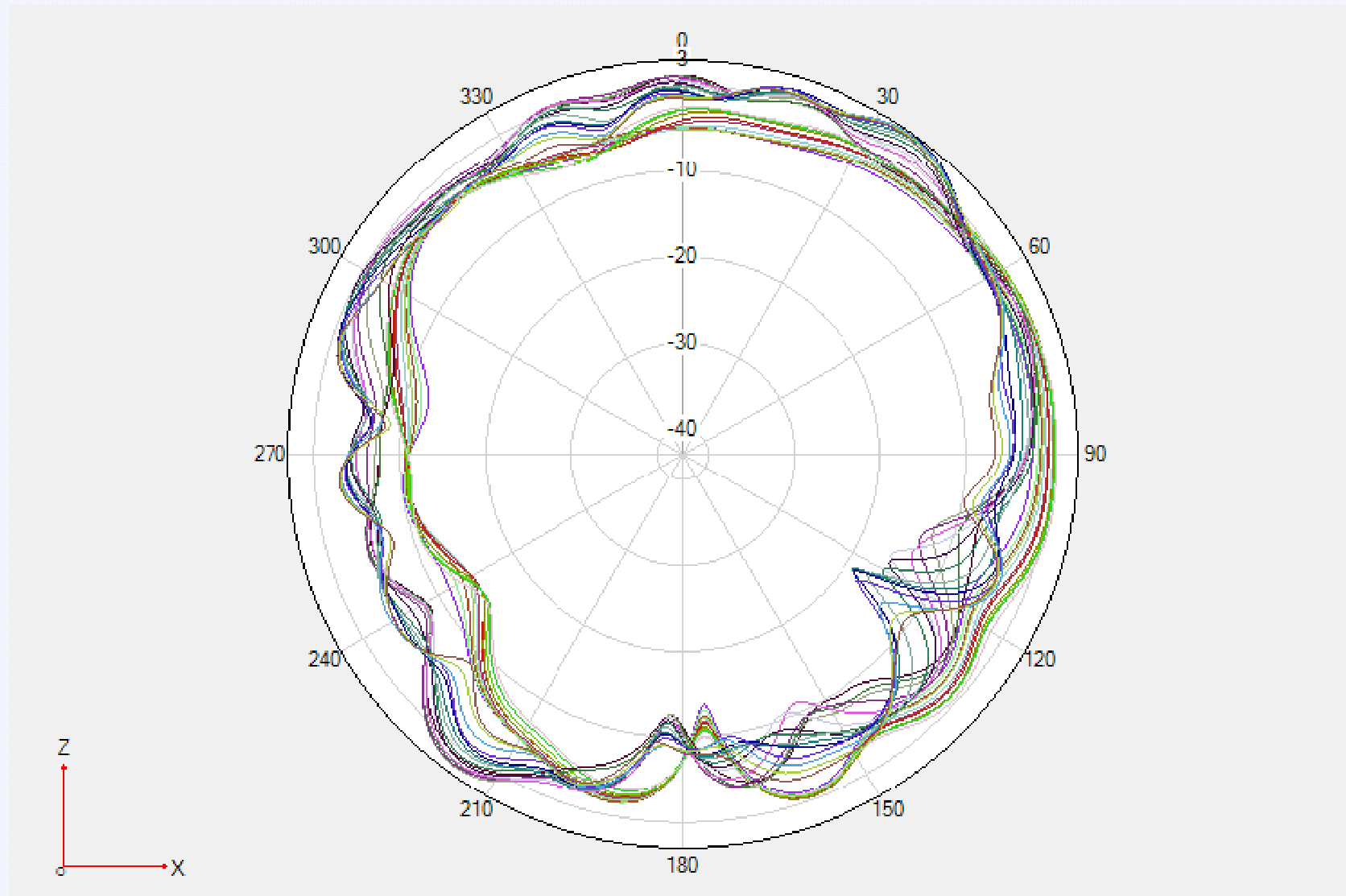
Frequency	Efficiency	Efficiency	Gain/ dBi
2400	-4.61	34.59	-0.99
2410	-4.44	35.97	-0.35
2420	-4.17	38.28	0.02
2430	-4.26	37.5	0.25
2440	-3.95	40.27	0.56
2450	-3.76	42.07	0.98
2460	-3.67	42.95	0.98
2470	-3.47	44.98	1.57
2480	-3.39	45.81	1.78
2490	-3.65	43.15	1.84
2500	-3.35	46.24	2.13

5100	-3.05	49.55	2.71
5150	-2.85	51.88	2.7
5200	-2.89	51.4	2.77
5250	-2.71	53.58	3.31
5300	-2.74	53.21	3.01
5350	-2.89	51.4	2.83
5400	-2.61	54.83	3.24
5450	-2.56	55.46	3.12
5500	-2.54	55.72	3.57
5550	-2.48	56.49	3.95
5600	-2.51	56.1	3.98
5650	-2.39	57.68	3.98
5700	-2.34	58.34	4.16
5750	-2.43	57.15	3.84
5800	-2.52	55.98	3.66

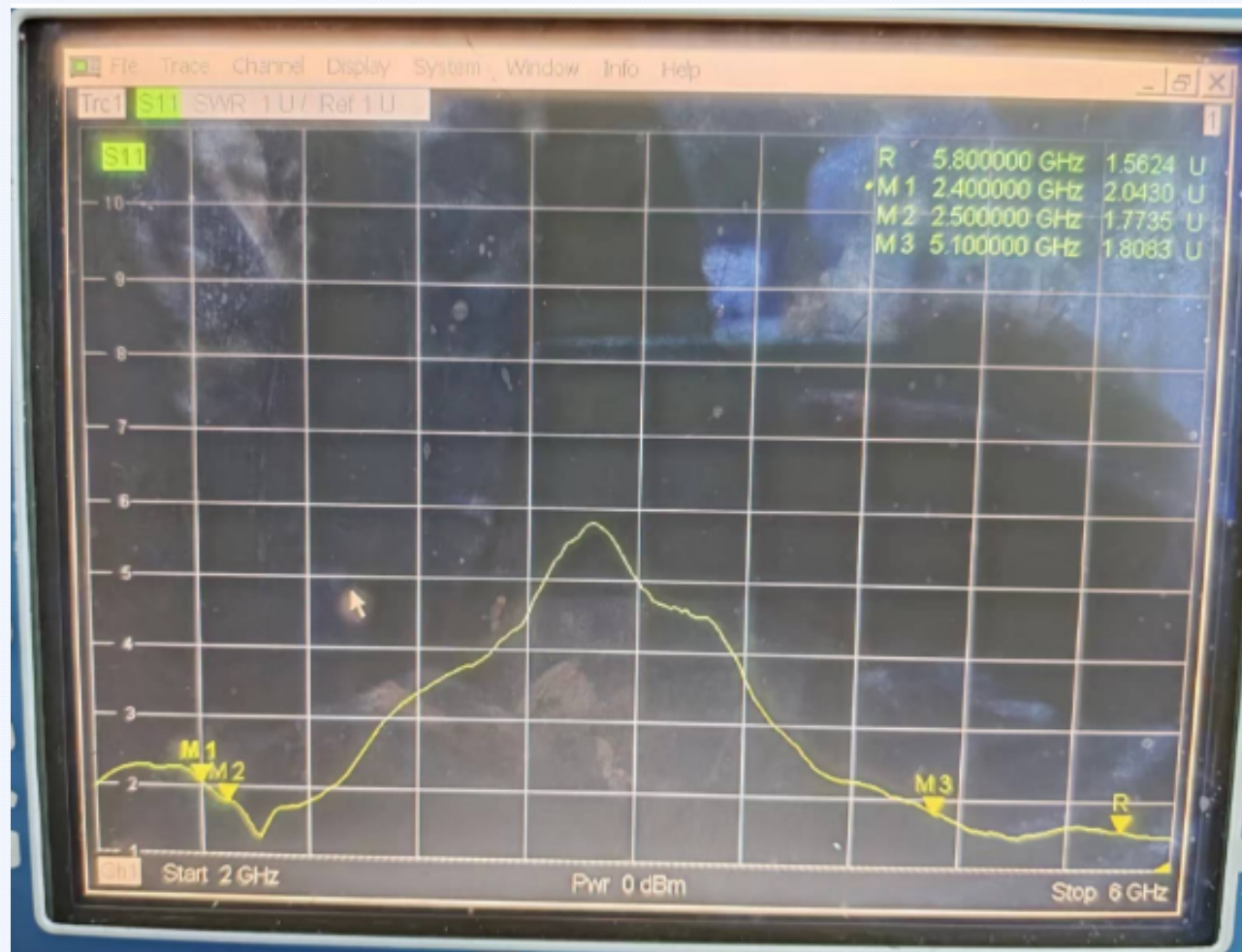
Direction diagram



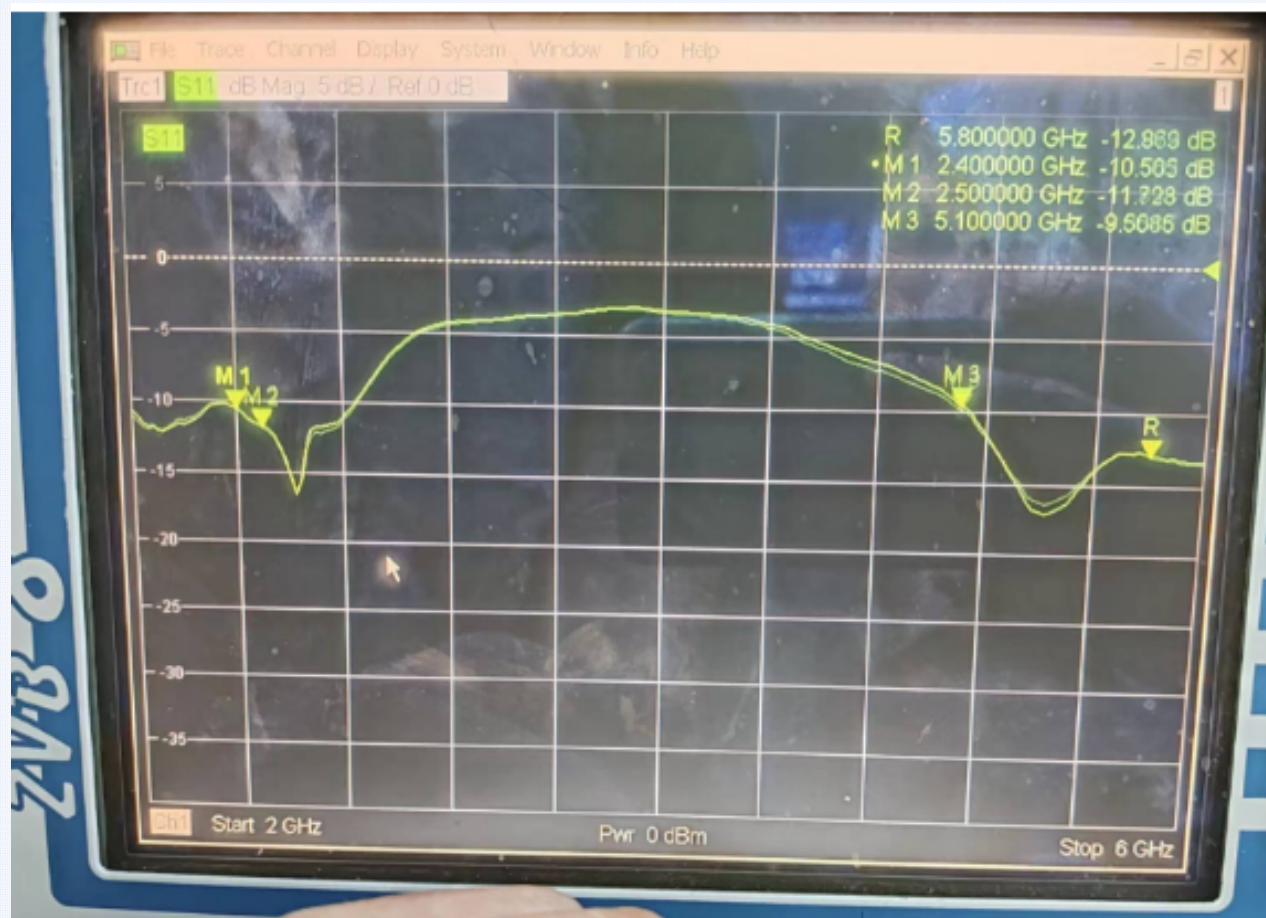
2D chart



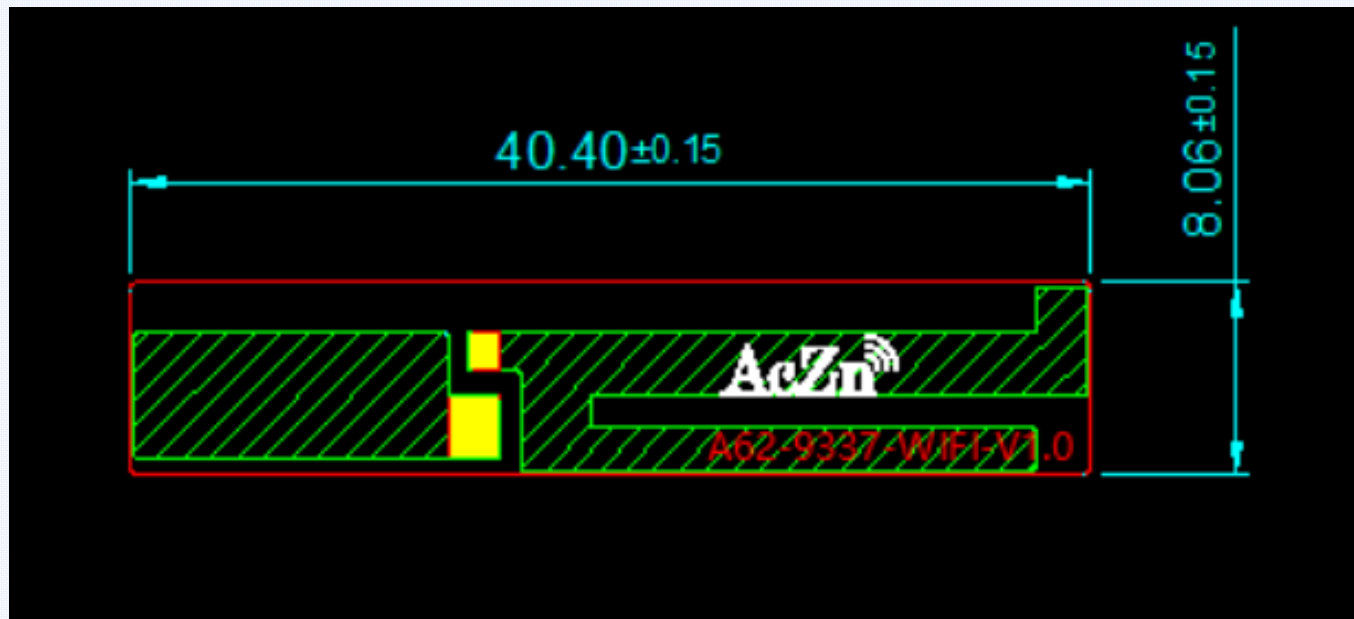
S11

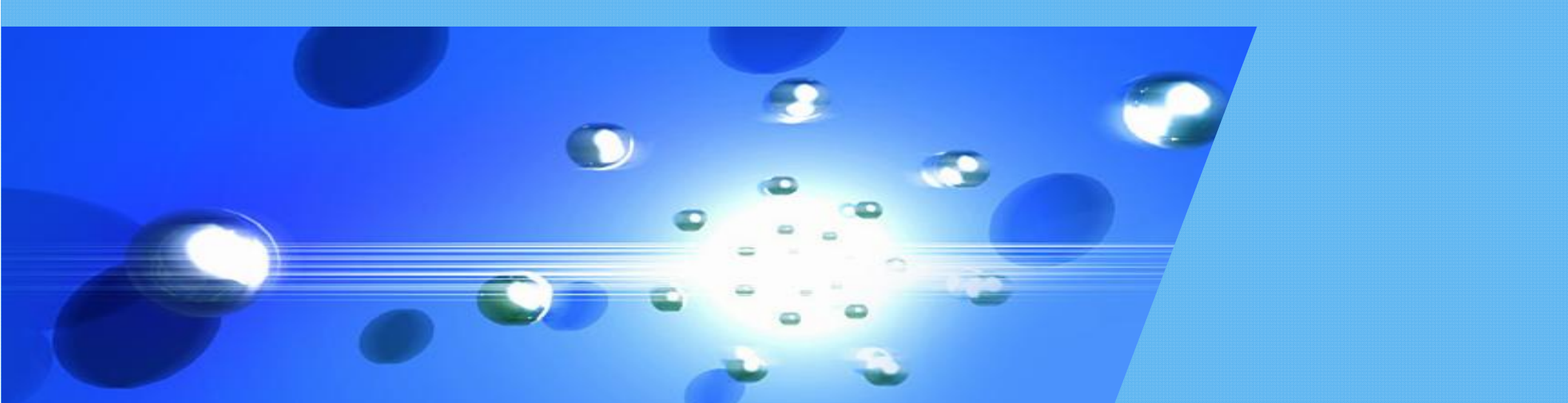


S11



Antenna diagram





Thank You !

