



Product Specification

Customer Name: Shenzhen Yingshi Weide Technology Co., Ltd.

Project Name: 2.4G 3.5DBi Black rubber rod antenna

Product Spec: ZK-2.4G-RP.SMA.J-J136.5

Version: V1.0

Date: 2024.02.28

drawing	check	approved
Huangyongjun	wangyumei	jiangzhenhua

Customer Approve

check	approved	approval

Manufacturer: Shenzhen zhongke wireless technology Co.Ltd

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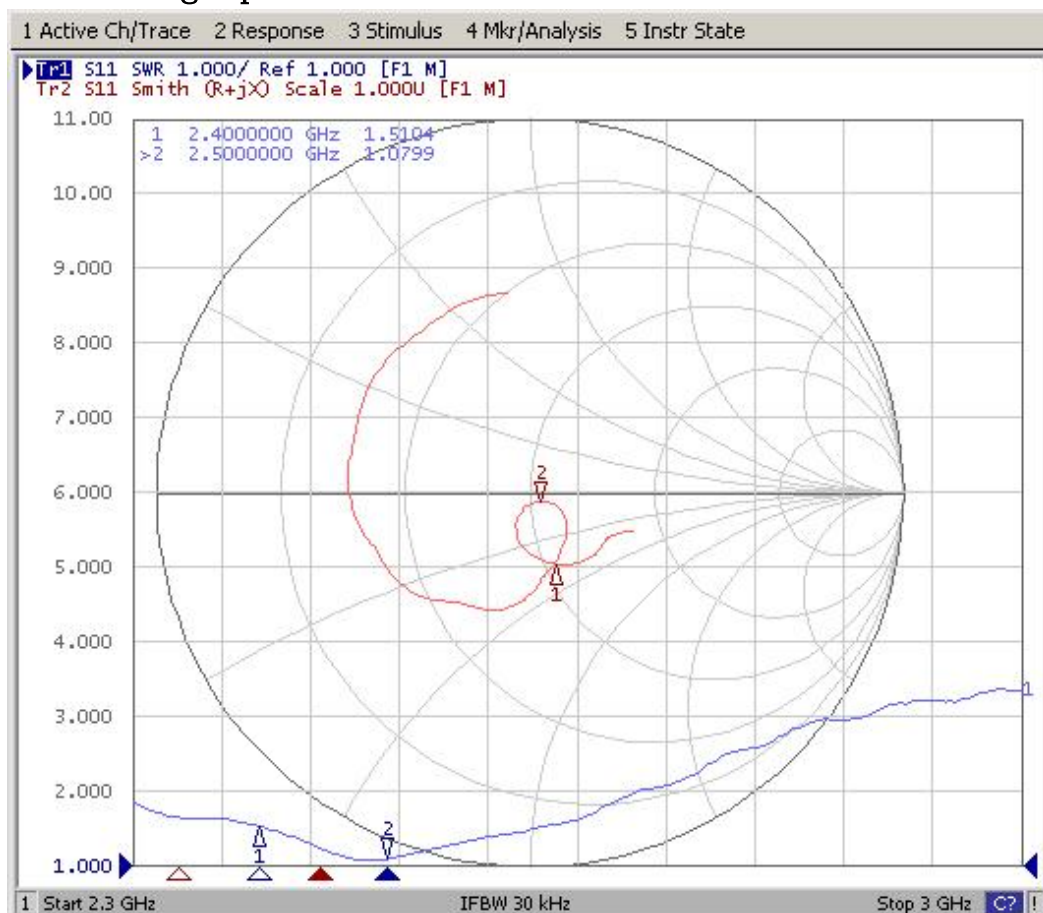


Electrical Performance Index

Electrical Specifications	
2400-2500MHZ	
VSWR	≤ 2.0
GAIN	$\leq 3.8\text{DBI}$
Radiation	OMNI
Polarizatin	LINEAR
Input Impedance	50 Ω
Mechanical Specifications	
Input connector	SMAJ
Antenna materia	PCB+Hardware
Working Temperature	-30°C~+80°C
Working Humidity	40~85%

Test report

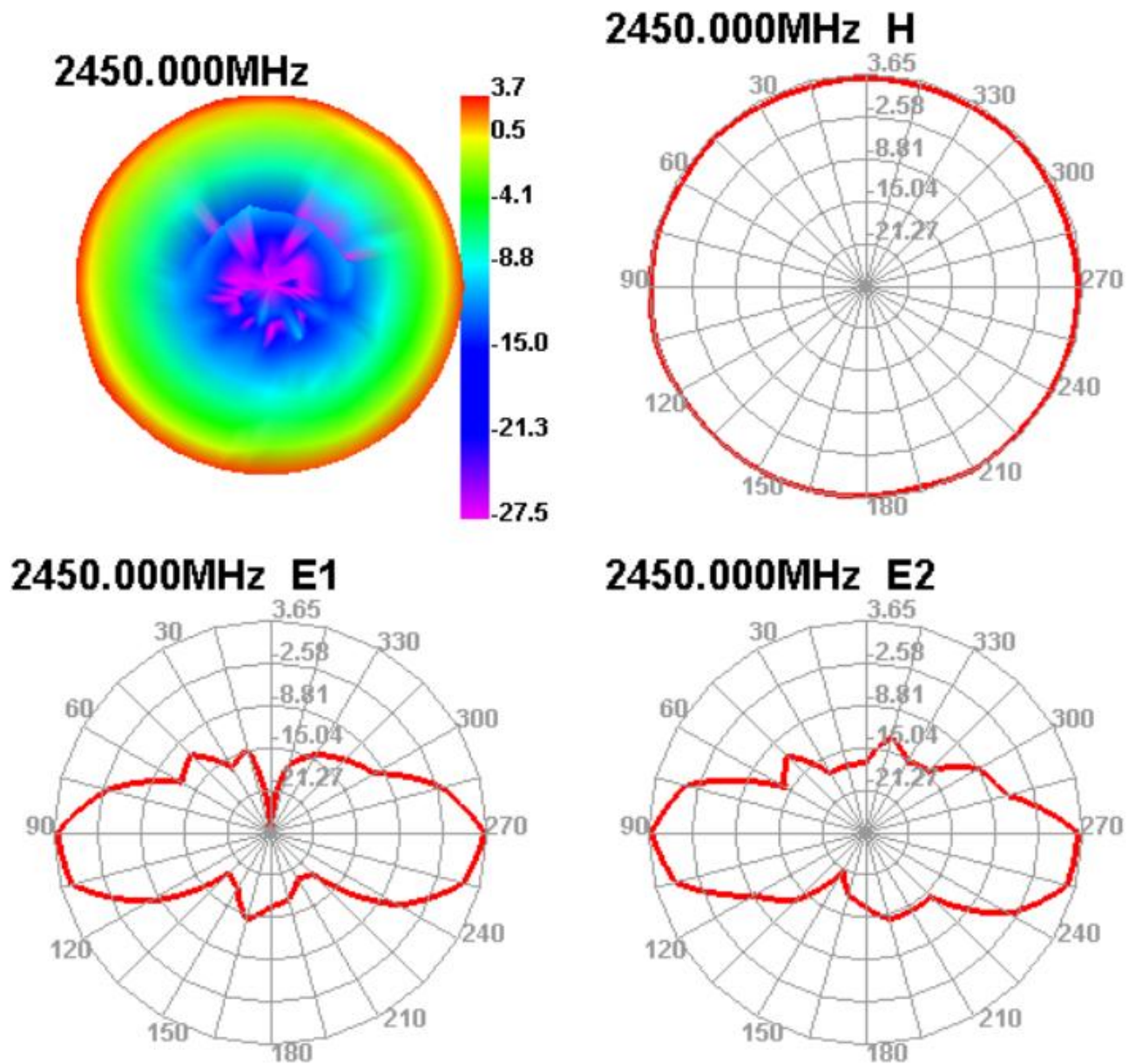
1. Antenna VSWR graph



2. Antenna efficiency

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)
2400	74.04	-1.31	3.52	1.37	30.601	43.441
2405	71.54	-1.45	3.44	1.29	29.182	42.354
2410	70.76	-1.5	3.5	1.35	28.361	42.399
2415	68.33	-1.65	3.29	1.14	27.001	41.328
2420	65.86	-1.81	3.28	1.13	25.573	40.291
2425	68.36	-1.65	3.16	1.01	26.452	41.905
2430	66.06	-1.8	3.03	0.88	25.166	40.889
2435	66.22	-1.79	3	0.85	25.328	40.891
2440	65.59	-1.83	3.87	1.72	25.174	40.415
2445	64.84	-1.88	3.75	1.6	24.623	40.222
2450	62.89	-2.01	3.59	1.44	23.797	39.098
2455	64.33	-1.92	3.52	1.37	24.437	39.895
2460	64.92	-1.88	3.54	1.39	24.685	40.235
2465	63.61	-1.96	3.44	1.29	24.63	38.979
2470	64.42	-1.91	3.69	1.54	24.568	39.853
2475	66.8	-1.75	3.92	1.77	25.548	41.255
2480	67.99	-1.68	3.96	1.81	26.022	41.97
2485	68.21	-1.66	3.87	1.72	26.378	41.835
2490	67.04	-1.74	3.85	1.7	25.858	41.182
2495	65.03	-1.87	3.57	1.42	25.075	39.953
2500	60.88	-2.16	3.27	1.12	23.557	37.318

3. Antenna radiation pattern



Testing Equipment and Principle

1. Network Analyzers :

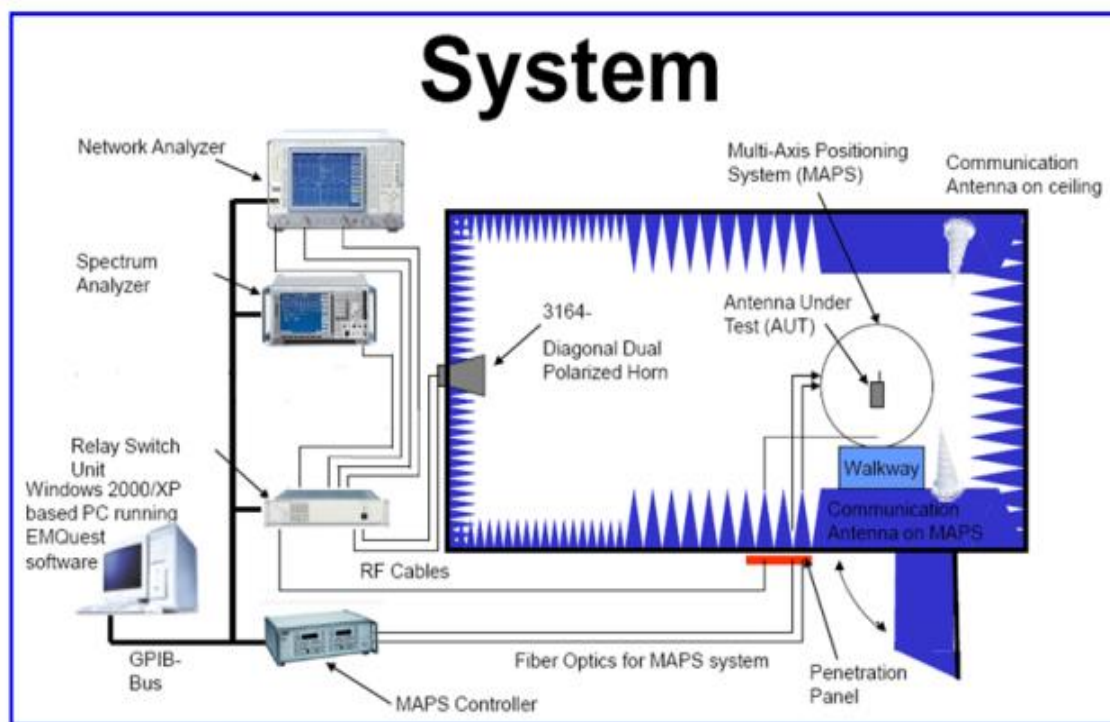
Agilent 8753D 5071B

2. Communications Test Set:

Agilent E5515C

3. 3D Chamber Test System:

1. Testing principle:



Product Drawing

