

SPECIFICATION

Shenzhen Guandetong Electronic Limited

**Shenzhen Guandetong Electronics Co., Ltd.***Shenzhen Guandetong Electronic Co., Ltd.*

2.4G/5.8G White Rubber Rod Antenna; 1.13 Black Output Cable; 240mm (riveted);Product Specification Sheet

Client	Shenzhen Xiankailike	Frequency range	2400MHz-2500MHz 5150MHz-5800MHz
Wire Name		Edition	A1
Customer Part Number		Guandetong Material Code	
Guandetong Number			
RF design	Xiao Bin	RF Manager	Liu Liang
Architectural design	Wang Dong	Structural Manager	Wang Hua
Technical Director	ANDY	Date	2026-6-15

Customer Confirmation:

Does the assembly comply with your company's requirements?: ☐ OK ☐ NG

Confidentiality Requirements

Our company possesses materials derived from proprietary technology; such proprietary materials shall be kept strictly confidential, and may not be disclosed to any third party or other entity without the prior written consent of Shenzhen Guande Tong Electronics Co., Ltd.

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I. Product Images



II. Product Specifications

Product Test Parameters			
Product Name (Name)	2.4G/5.8G Rubber Rod Antenna	Product Model(Model Type)	
Electrical Performance Specifications(Electrical Specifications)			
Frequency Range	2400MHz-2500MHz 5150MHz-5800MHz	Polarization Method(Polarization)	Perpendicular
Input Impedance	50 Ω	Radiation direction	Omnidirectional
Voltage Standing Wave Ratio (VSWR)	≤ 2.0	Power Capacity (Power)	50W
Gain (Gain)	3.12dBi	Bandwidth	100MHz
Mechanical Specifications			
Dimensions	109.11 $\pm$ 0.5MM	Enclosure Color (Radome Color)	White
Connector Model (Connector)	IPEX Generation 1	Landing length(Cable Length)	240 $\pm$ 5mm
Enclosure Material: Radome Material	ABS	Wire color	1.13 black
Working temperature (Working Temperature)	-40 $^{\circ}$ C--+85 $^{\circ}$ C	Storage temperature (Limit Temperature)	-40 $^{\circ}$ C--+85 $^{\circ}$ C

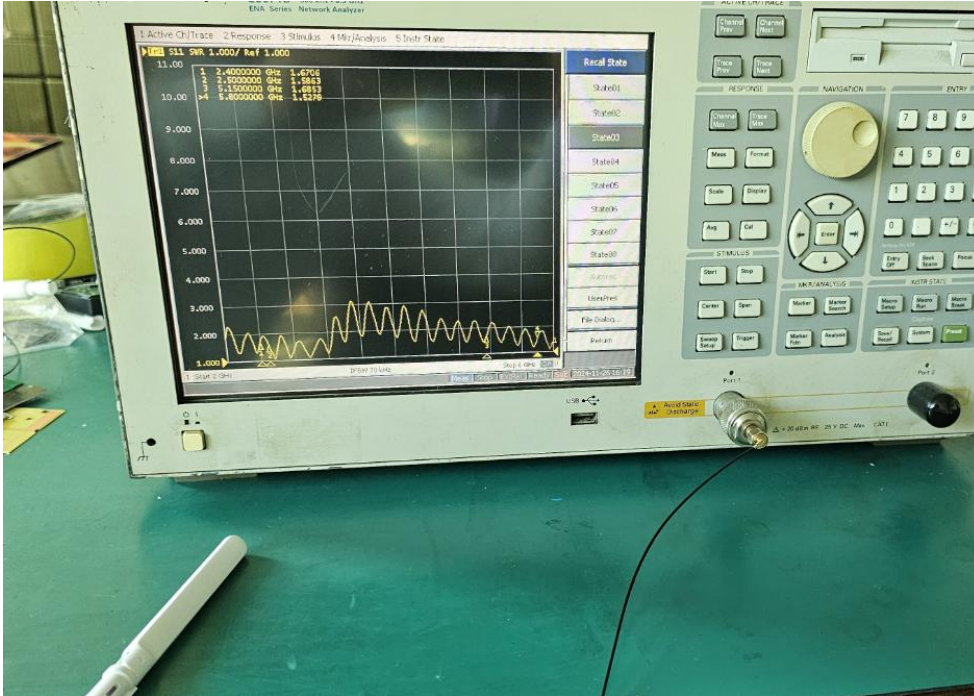
Company Address: 3rd Floor, Building D, Huanguan Nanmaoyuan Industrial Park, Guanhu Street, Longhua District, Shenzhen; Tel: 0755-88298396; Fax: 0755-89733896

<http://www.szgdtrf.com>

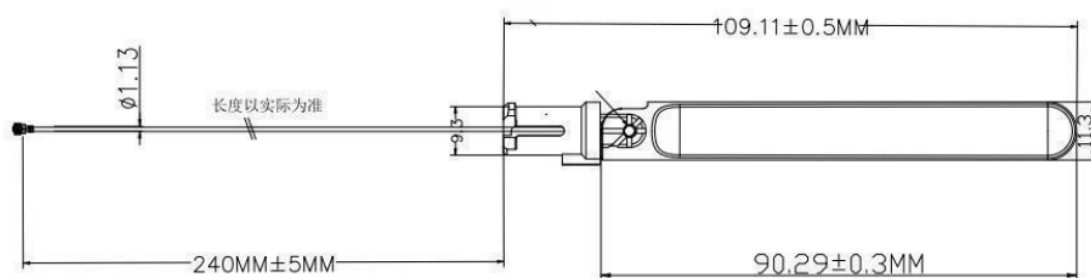
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III.VSWR, Return Loss, Smith Data



IV.Product Structure Diagram



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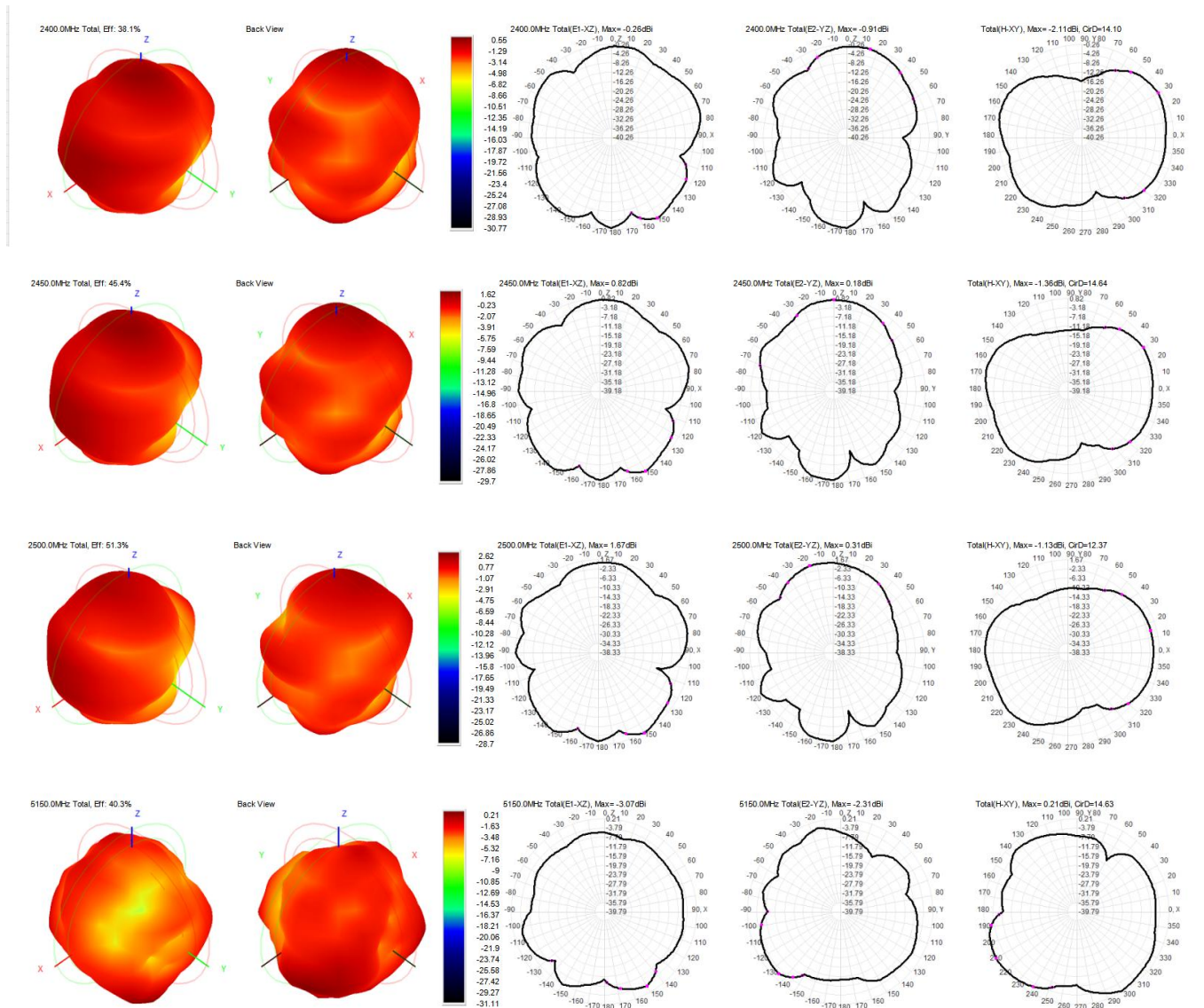
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V. Antenna Gain & Efficiency & 3D Diagram

序号	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
频率(MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
效率(dB)	-4.19	-4.17	-4.00	-4.32	-3.62	-3.43	-3.52	-3.27	-3.16	-2.93	-2.90	-3.94	-5.64	-5.45	-4.83	-4.22	-3.25	-3.09	-3.65	-3.82	-5.01	-4.26	-3.45	-3.19	-3.19	-3.25
增益(dB)	0.55	0.63	0.95	0.77	1.44	1.62	1.55	1.82	2.04	2.42	2.62	0.21	-1.85	-1.23	-0.18	1.04	1.88	1.82	1.53	1.64	0.44	1.50	2.55	2.93	3.12	2.79
效率(%)	38.06	38.29	39.77	37.01	43.41	45.42	44.45	47.04	48.29	50.97	51.29	40.33	27.30	28.49	32.88	37.83	47.37	49.05	43.15	41.52	31.57	37.53	45.13	47.98	47.95	47.28
方位角(dB)	4.74	4.89	4.96	5.08	5.07	5.04	5.07	5.09	5.28	5.35	5.52	4.15	3.79	4.22	4.65	5.26	5.12	4.91	5.18	5.46	5.45	5.79	6.09	6.12	6.31	6.05
最大增益位置(Phi)	135.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	90.00	135.00	135.00	105.00	105.00	105.00	105.00	105.00	90.00	90.00	105.00	105.00	105.00	105.00	105.00
最大增益位置(Theta)	210.00	345.00	345.00	345.00	345.00	345.00	345.00	345.00	345.00	345.00	345.00	210.00	255.00	255.00	195.00	195.00	195.00	195.00	225.00	225.00	225.00	240.00	240.00	240.00	240.00	240.00
水平极化效率(%)	12.74	12.73	13.19	12.16	14.11	14.58	14.16	14.97	15.29	16.02	16.04	15.90	10.27	10.53	11.97	14.11	17.56	18.33	16.08	15.52	12.58	15.17	18.72	18.21	16.58	14.92
垂直极化效率(%)	25.32	25.57	26.58	24.85	29.30	30.84	30.29	32.07	33.00	34.94	35.25	24.42	17.03	17.96	20.91	23.72	29.80	30.72	27.07	26.01	18.99	22.36	28.42	29.76	31.37	32.36
上半球效率(%)	20.89	21.08	22.04	20.64	24.38	25.67	25.22	26.76	27.47	28.90	28.98	15.81	10.56	10.93	12.89	14.64	18.82	20.15	17.99	17.42	13.13	15.85	19.13	20.89	21.20	21.45
下半球效率(%)	17.26	17.21	17.73	16.37	19.02	19.75	19.23	20.28	20.82	22.07	22.32	24.52	16.74	17.56	20.19	23.19	28.55	28.80	25.16	24.10	18.43	21.68	26.01	27.98	26.74	25.83



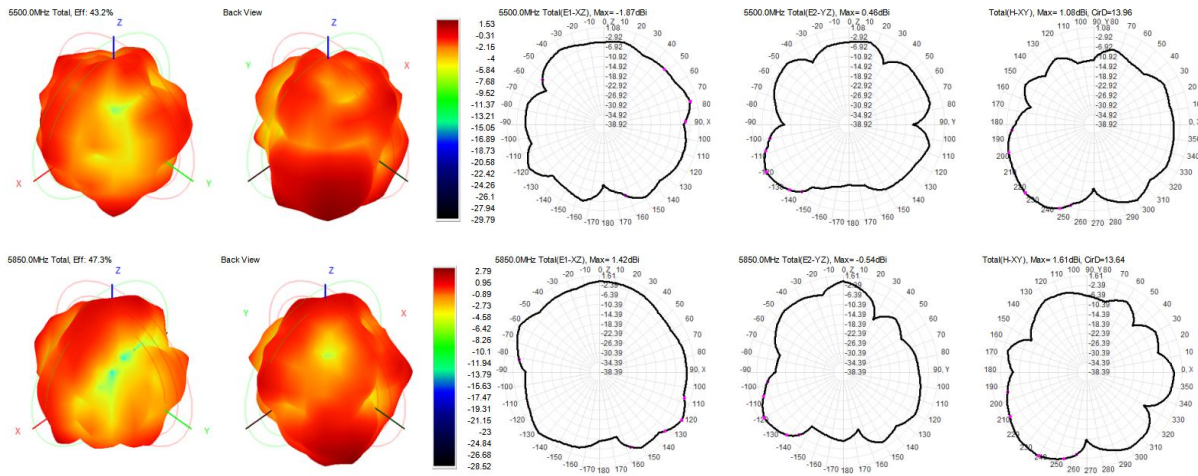
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VI. Environmental Performance Testing:

Project	Test condition	Specifications
Storage Environment	When no specific specifications are provided, the test temperature, humidity, and air pressure are as follows: 1. Temperature range: -30°C to +80°C 2. Relative humidity: 45%–85% 3. Air pressure: 86 kPa–106 kPa	Electrical and mechanical performance is normal.
Thermocycling	Perform 5 cycles between 70 °C and 40 °C, followed by a 1–2-hour period under normal conditions to inspect the appearance quality.	The dimensions shall comply with the specified requirements and shall satisfy both mechanical and electrical performance criteria.
Constant humidity and heat test	Relative humidity: 95 ± 3%; test temperature: 40 °C. After a 2-hour exposure period, the electrical properties of the specimen shall be measured within 5 minutes after removal from the test environment; under normal conditions, the specimen shall be inspected for its appearance quality for 1–2 hours.	The dimensions shall comply with the specified requirements and shall satisfy both mechanical and electrical performance criteria.
Vibration test	Frequency range: 10–55 Hz; displacement amplitude: 0.35 mm; acceleration amplitude: 50.0 m/s, sweep frequency cycle count: 30 cycles	Electrical and mechanical performance is normal.
Fall-down test	Subject the 1m height object to three free-fall tests along mutually perpendicular axes.	Electrical and mechanical performance is normal.