

Shenzhen Yuanchuangxing Electronics Co., Ltd.

Yuanchuangxing electronics (Shenzhen)CO.,LTD.

client's name: Generals

Client Type: _____

Customer Part Number: _____

Customer Specifications: _____

Source Star Material Number: YCX08W-W704-SMA

Yuanchuangxing Specification Description: White Blade 2.4G 5DBI SMA Male Female Antenna

Specifications

Confirm signature and seal					
Source Star confirmed			client confirmation		
Sample preparation review	Approval		Verification	Review	Approval
Zou Yangchen	Wang Chunjiang				
Yuanchuangxing signed cover			Customer signature and stamp		
Date	2023-2-13		Date	2023-2-13	

3. Directory

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4. Product drawings

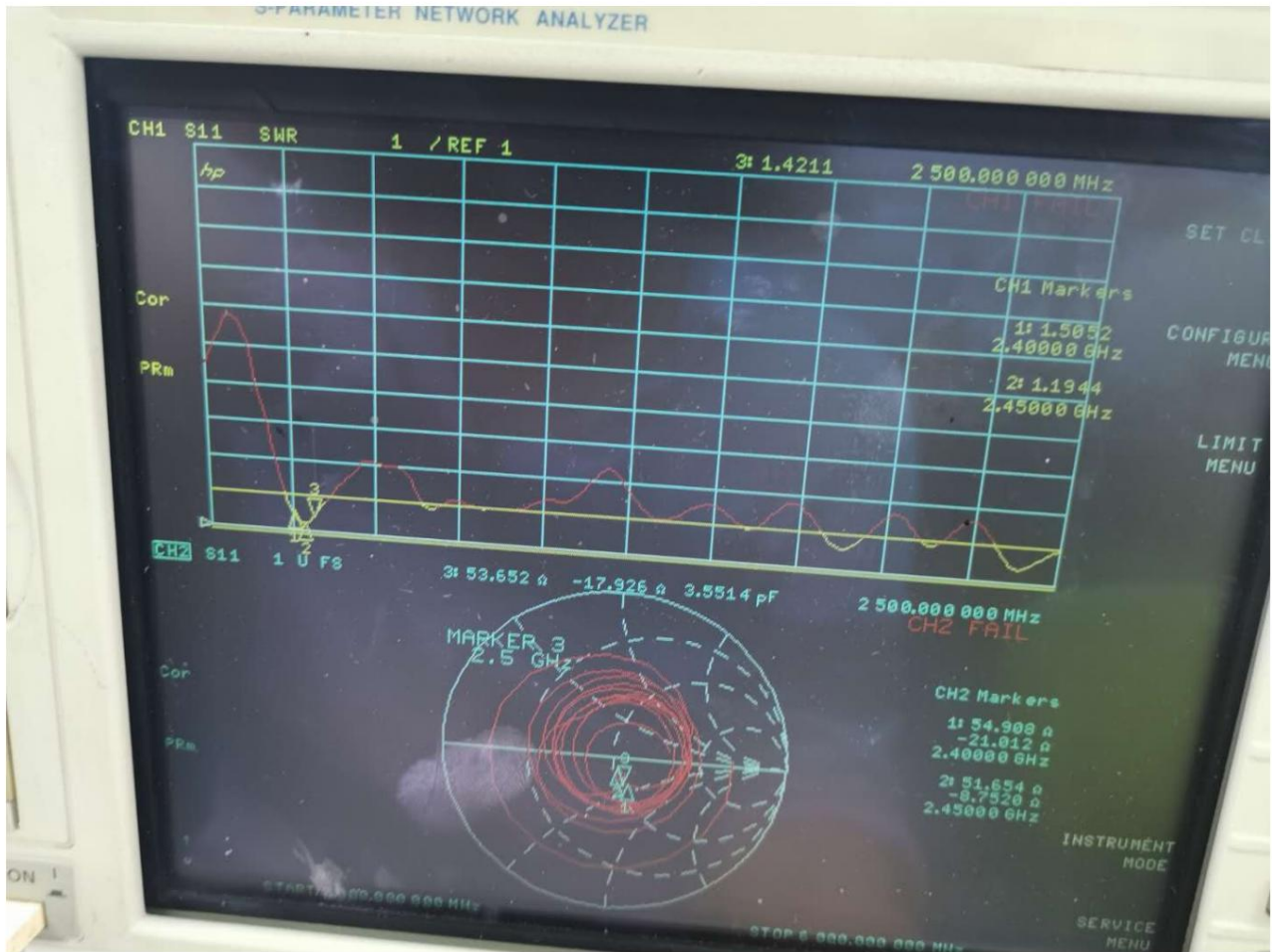
www.yuanchuangxing.cn		7	6	5	4	3	2	1																																				
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								<p>Technical requirements: 1. Electrical parameters: 1.1 Impedance : 50Ω 1.2 Frequency : 2400-2500MHz 1.3 VSWR : < 2.0 1.4 Peak Gain : 5dBi 1.5 Polarization : Linear 1.6 Radiation Patten: Omni directional 2. Mechanical properties:</p> <p>2.1 Storage Temperature Range: -40 TO +85$^{\circ}$C 2.2 Operating Temperature Range: -40 TO +85$^{\circ}$C 3. All material must meet ROHS request 4. Mark() as the key control dimensions</p>																																				
								<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">TOLERANCE</th> </tr> <tr> <td>.XXX.XX</td> <td>±0.05</td> </tr> <tr> <td>.X</td> <td>±0.1</td> </tr> <tr> <td>X.</td> <td>±0.2</td> </tr> <tr> <td>XX.</td> <td>±0.25</td> </tr> <tr> <td>XXX.</td> <td>±1</td> </tr> <tr> <td></td> <td>±2</td> </tr> <tr> <td>UNIT</td> <td>mm</td> </tr> </table>	TOLERANCE		.XXX.XX	±0.05	.X	±0.1	X.	±0.2	XX.	±0.25	XXX.	±1		±2	UNIT	mm																				
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5. Passive performance test parameters

Frequency(GHz)	2.4	2.45	2.5
VSWR	1.58	1.19	1.42



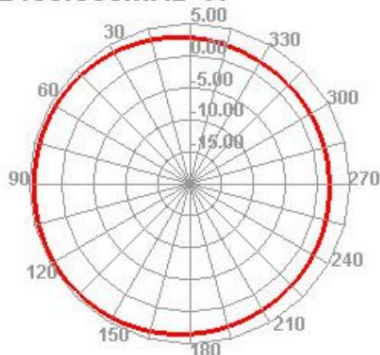
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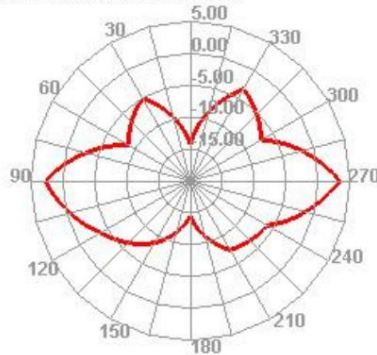
6. 2D and 3D performance graphs

Passive Test For WiFi2.4G				
Freq (MHz)	Effi (%)	Gain (dBi)		
2400	80	4.61		
2450	80	4.34		
2500	78	4.60		

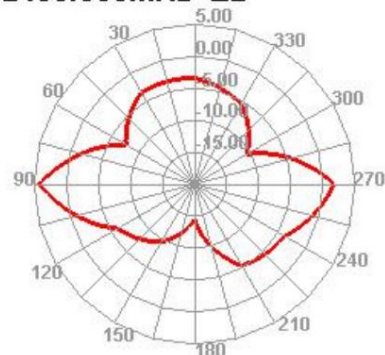
2400.000MHz H



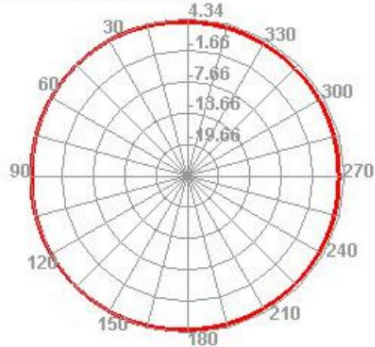
2400.000MHz E1



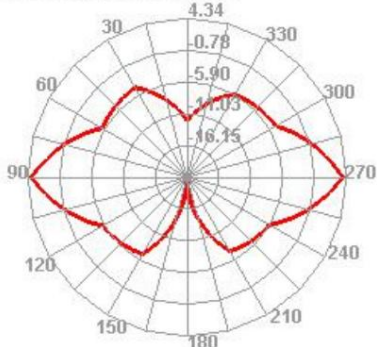
2400.000MHz E2



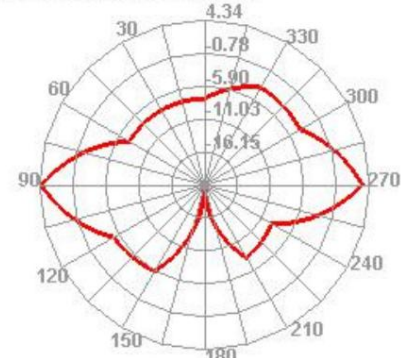
2450.000MHz H



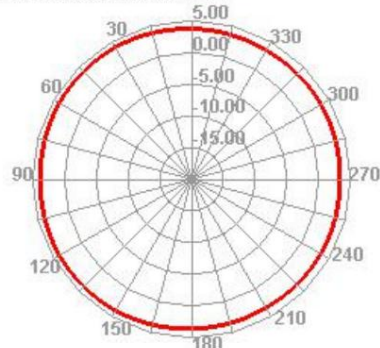
2450.000MHz E1



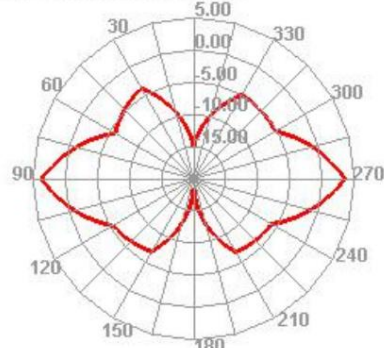
2450.000MHz E2



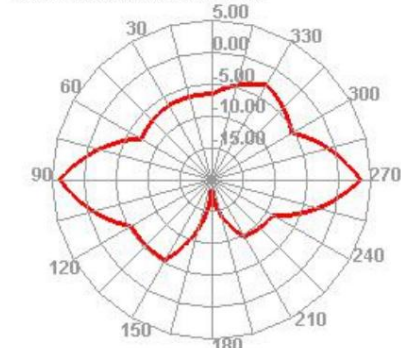
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



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7. Electrical performance parameters

Electrical parameters	
Frequency Range	2.4GHz-2.5GHz
input resistance	50 Ω
VSWR	<2.0 Control sample test pattern
Gain	2.4G-2.5G
	5.15G-5.85G
Polarization mode: vertical polarization	
Radiation direction: omnidirectional	
Connection methodSMA	
Mechanical parameters	
See line length	
Sustainability	
Coaxial cable RG178 Brown	
Salt spray test 24H	
Environmental parameters	
Operating temperature	-40~85 ^\circ

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8. Reliability test report

8.1. Constant temperature and humidity test

Test/Test Item Constant temperature and humidity test	Inspection order number
Product Name/Specifications 2.4G-5dBi White SMA Antenna	Test quantity: 5PCS
Inspection date: 2023-2-10	Completion date: 2023-2-11
Test/inspection equipment: 1. Programmable constant temperature and humidity test chamber 2.8753ES Network Analyzer	
Test/inspection conditions: 1. Test at -40℃ for 12 hours 2. +85℃65%RH test for 12 hours, a total of 24 hours;	
test results	
judgement standard: 1. There should be no cracks, wrinkles, separation, etc. on the metal surface; the non-metallic part should not have discoloration, cracking, deformation, degumming, etc.; 2. The electrical test meets the standard requirements; the voltage standing wave ratio test is qualified	
Test/inspection judgment: <input checked="" type="checkbox"/> Qualified <input type="checkbox"/> Unqualified <input type="checkbox"/> No judgment	
Test: Li Chunqiang Reviewer: Wang Chunjiang	

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8.2 High and low temperature thermal shock

Test/Test Items High and low temperature thermal shock	Inspection order number	
Product Name/Specifications 2.4G- 5dBi White SMA Antenna	Test quantity: 5PCS	
Inspection date: 2023-2-10	Completion date: 2023-2-11	
Test/inspection equipment: 1. High and low temperature alternating humidity chamber 2.8753ES Network Analyzer		
Test/inspection conditions: -30y (2H) --- 80y (2H) interval, 6 cycles, 24 hours in total;		
test results		
judgement standard: 3. The metal surface coating should not peel off, crack, wrinkle, separate, etc.; the non-metallic part should not change color, crack, deform, debond, etc. good; 4. The electrical test meets the standards; the voltage standing wave ratio test is qualified.		
Test/inspection judgment: yQualified	yUnqualified	yNo judgment
Test: Li Chunqiang	Reviewer: Wang Chunjiang	

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Structural parts sample inspection			
specification Structural parts sample inspection results should include the following:			
Category	Specifications 1.	Category	Specifications
Appearance & Specification Inspection	Check the surface for water marks, air marks, shrinkage, whitening, scratches, bruises, material spots, oil marks, etc.	Reliability performance test	1. Storage temperature range
	2. Check the edges, corners, glue columns, limiters, holes, window panes, slots, etc. for peaks, uneven glue flow, broken columns, edge collapse, flat nozzles, brittle materials, etc.		2. Operating temperature range
			3. Smoldering
	3. After driving the corresponding screws, there should be no whitening, cracking or slipping.		4. Drop test
	4. Check the surface treatment (spraying, silk screen printing, hot stamping color, silk screen content, treatment effect: Silk screen hot stamping parts--whether there are incomplete, toothed, fat oil, double images, uneven thickness and missing; Spraying hot stamping parts--whether the oil color is uniform, yin and yang colors, grains, scratches, variegated colors, burning and impurities, etc., whether the silk screen and hot stamping positions are out of place, skewed, or misaligned		5. 3M tape/white grid/eraser/alcohol (75%~80% concentration) test (4 items in total, for silk screen printing and spraying materials)
	Test result: qualified		Test result: qualified
	Note 1.		Note 1:
Size & Mechanical Properties	Graphic dimension inspection (according to the tolerance range, focus on the dimensions with CPK marks or instructions)	Material & Packaging, etc.	Confirmation of material composition report
	2. Flatness test and confirmation of tightness of fit with other accessories 3.		2. Packaging method and other precautions:
	Transmission test and confirmation of lenses and light guides		
	Test result: qualified		Test result: qualified
	Remark		Remark
Sample test results: qualified		Person in charge of inspection: Zheng Yunxia	