



Shenzhen Shuodian Electronic Technology Co.,Ltd
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SPECIFICATION

for

IllumusANT1 Antenna

Customer No.

Product No.

KEWT-Illumus-ANT1-Spring

Author: XiaofengZeng Review: Liming

Release Date: 2023.12.23

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Shenzhen Shuodian Electronic Technology Co.,Ltd



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1. Bilateral Confirmation page

1.1 Customer signature

Customer: Woan Technology (Shenzhen) Co., Ltd

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		



2. General

2.1 Scope of application

This specification is only applicable to ILLumus-ANT1 2.4G spring antenna

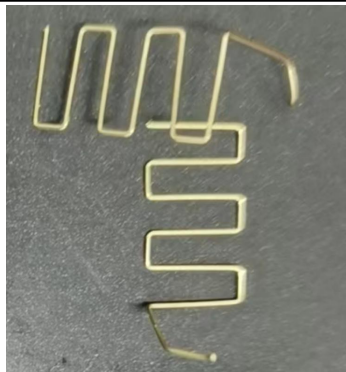
2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	ILLumus-ANT1
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.5
4	Gain	0dBi
5	Impedance	50 Ω
6	Antenna Type	Monopole Antenna
7	Antenna composition	spring
8	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

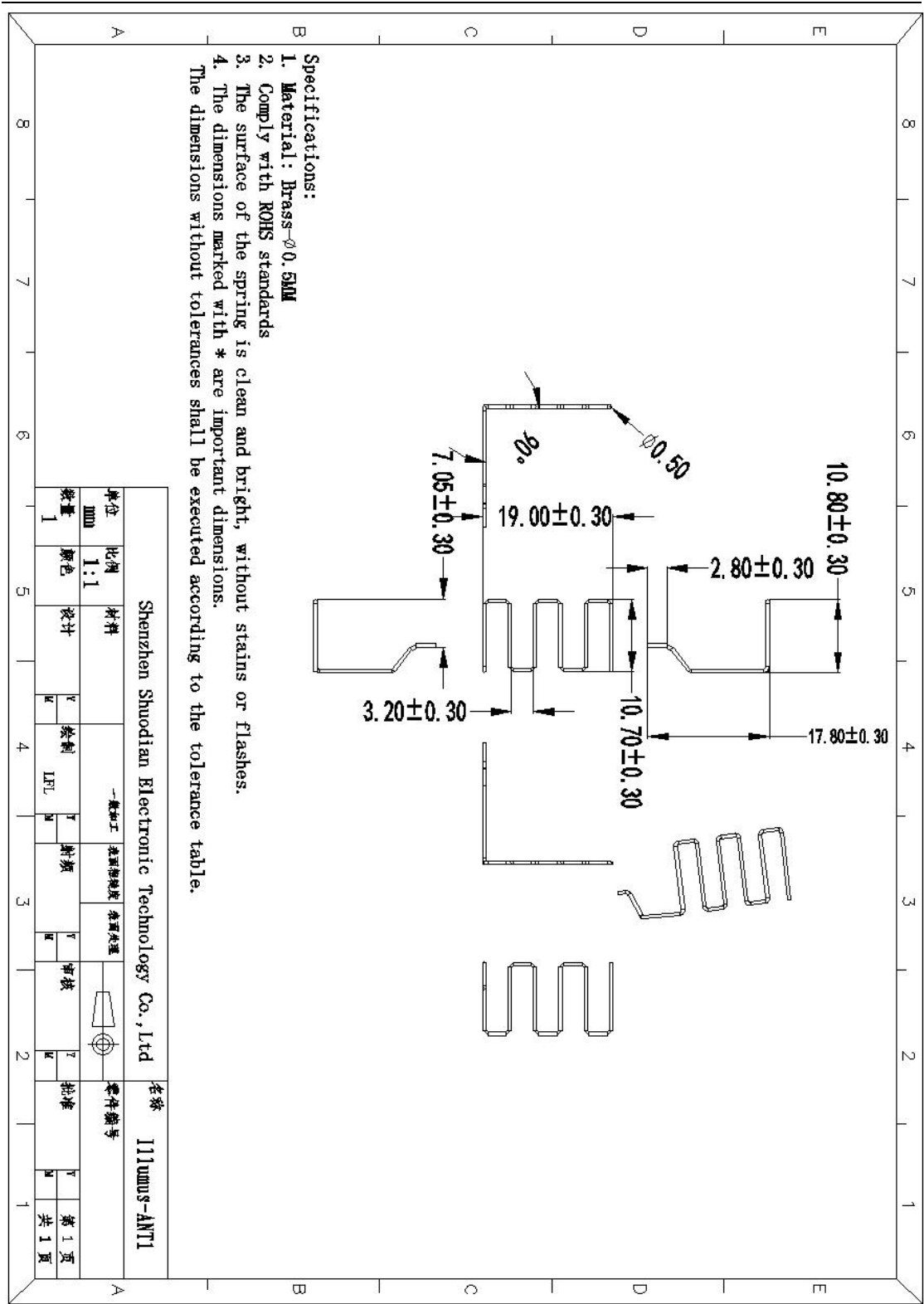
No.	Material	Size (MM)
1	spring	19*10.7*17.8 ϕ 0.5

4.12 Apperance

Good appearance without scars 、 dirts、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Product drawings:





4.2 Electric Performance

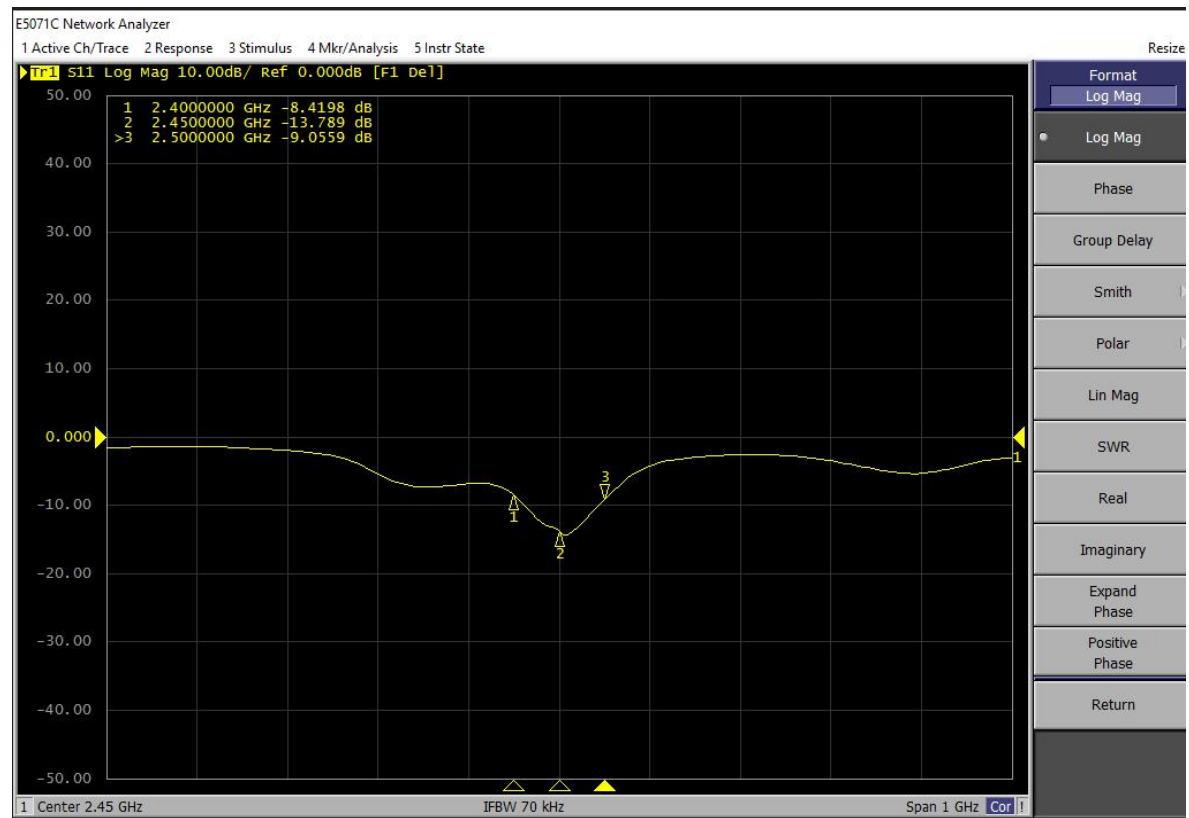
4.21 Test condition

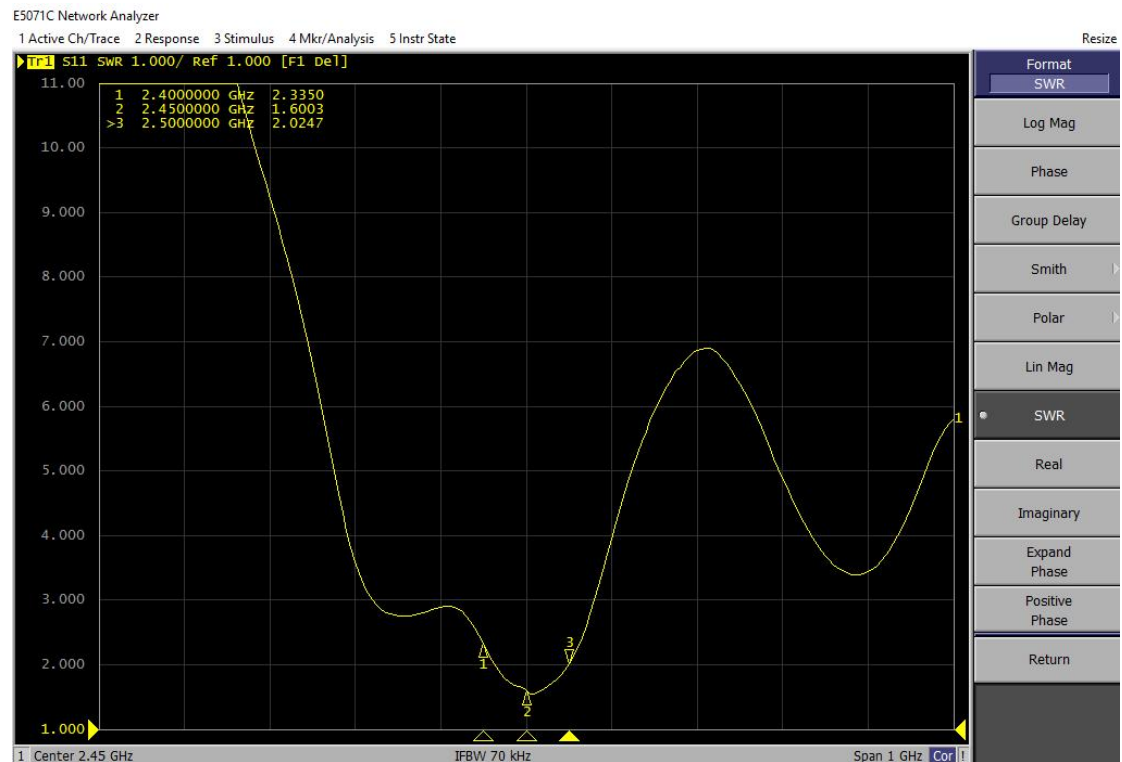
Environment:	Equipment:
Temperature: 10℃——+30℃	NetworkAnalyzer: KEYSIGHT E5071C
Humidity: ≤80% (+40℃)	Anechior Chamber: ETS
Atmospher: 750mmkg±30mmkg	

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-8.41	-13.78	-9.05
VSWR	2.33	1.60	2.02



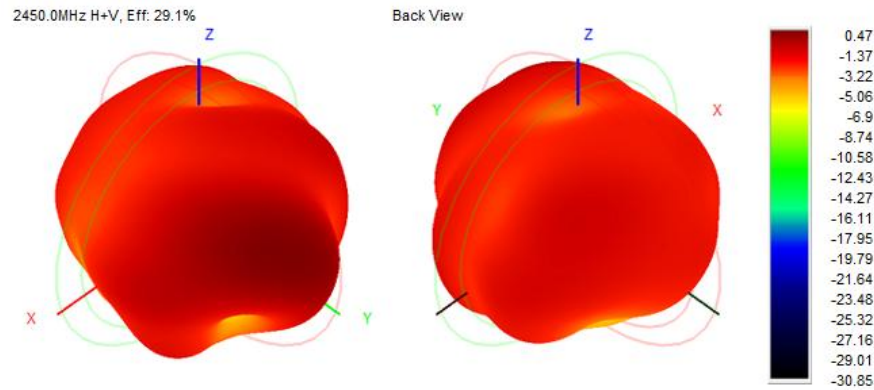


4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

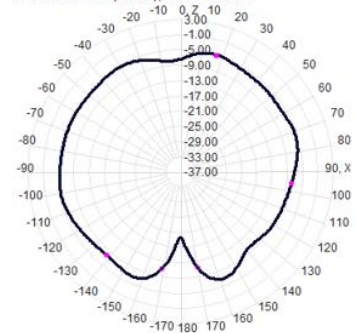
Freq (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	-0.88	-0.72	-0.30	-0.13	-0.01	0.47	0.15	-0.09	-0.02	-0.71	-0.87
Efficiency (%)	25.1	26.4	28.5	28.7	29.1	29.1	29.7	32.5	35.6	34.2	34.9



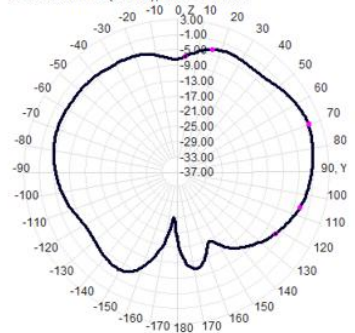
Radiation Pattern@2450MHz



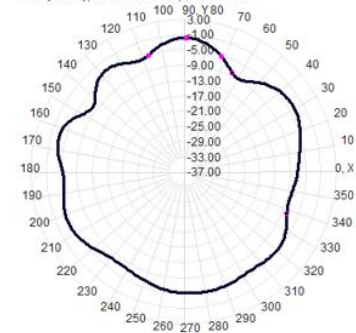
2450.0MHz Total(E1-XZ), Max=-4.94dBi



2450.0MHz Total(E2-YZ), Max=-0.56dBi



Total(H-XY), Max=-1.86dBi, CirD=6.89



5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.



6. Document Resume

Document No.	
Release Date	2023/12/23
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2023/12/23	1.00	New Project