SPECIFICATION FOR APPROVAL

CUST OMER: Shenzhen Ai-Thinker Technology Co., Ltd

CUS PART NO: LoRa Module

PART NAME: 433MHz Antenna

Edition: 1.0

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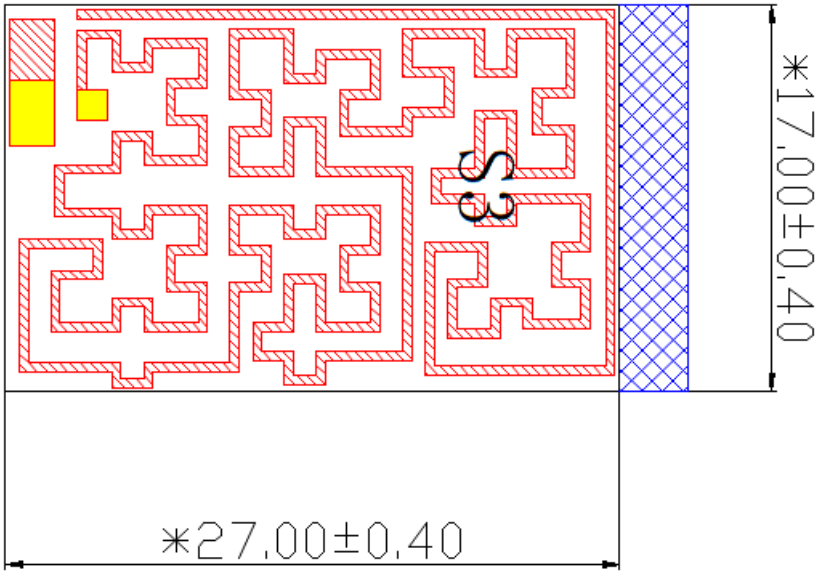
Directory

Product specification

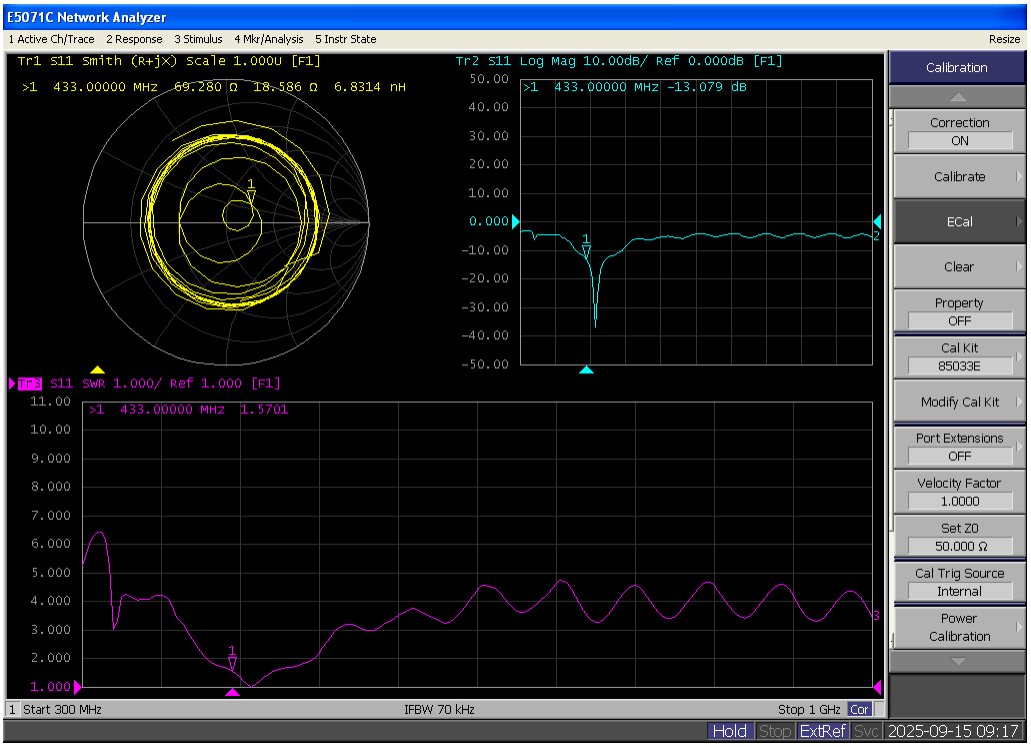
1. Antenna shape

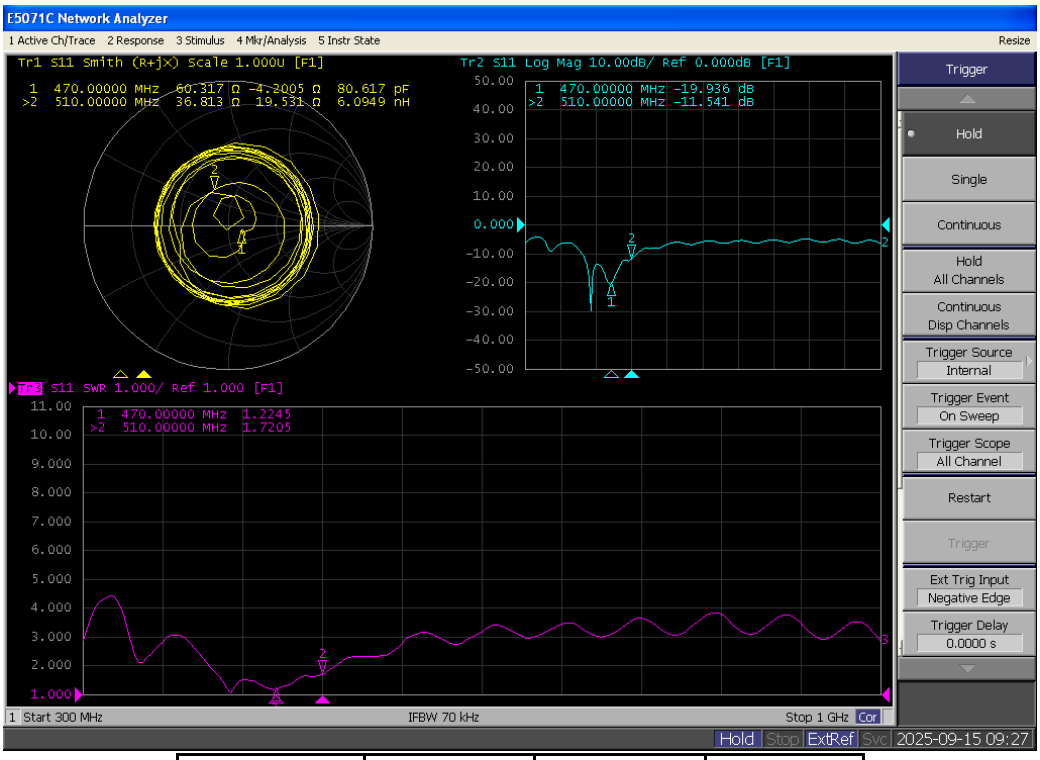


2. Performance parameter

Name	433MHz LoRa Antenna
Model Type	PCB Print Antenna
ELECTRICAL SPECTFICATIONS	
Frenquency Range	410-525MHz
Band Width	115MHz
Impedance	50Ω
VSWR	< 2.0
Polarization	Vertical
Radiation	Omnidirectional
Power	10 W

3. VSWR





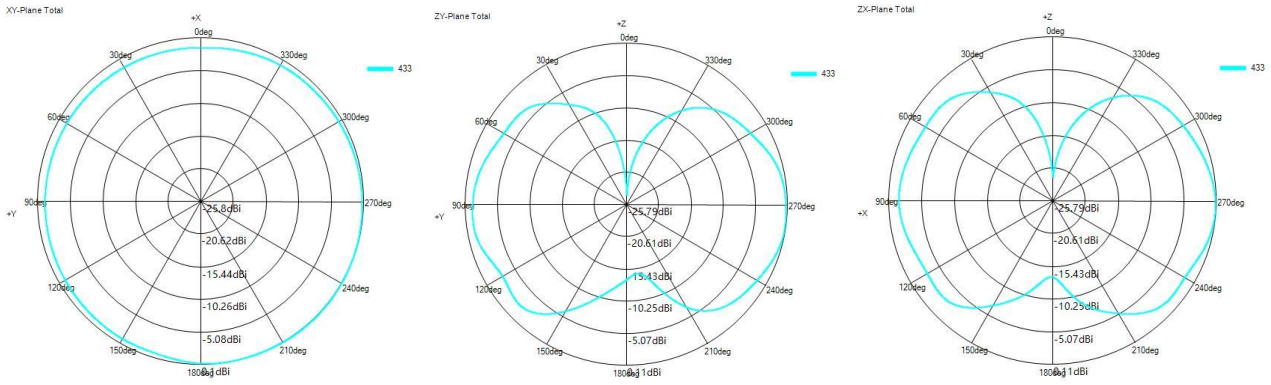
Freq/MHz	433MHz	470MHz	510MHz
VSWR	1.57	1.22	1.72

4. Passive test data:

Freq(MHz)	Gain(dBi)	Efficiency(%)
428	0.18	59.38
429	0.25	59.17
430	0.17	58.91
431	0.13	58.34
432	0.11	57.91
433	0.10	57.41
434	-0.01	56.92
435	0.03	56.15
436	0.02	55.13
437	-0.05	54.35
438	0.00	53.64
Freq(MHz)	Gain(dBi)	Efficiency(%)
470	-1.82	42.54
475	-1.80	41.14
480	-2.04	38.95
485	-2.18	38.15
490	-2.50	36.21
495	-3.01	33.56
500	-3.26	32.23
505	-3.20	31.60
510	-3.07	31.01

5. Radiation pattern

(1) 433MHz



(2) 470MHz/490MHz/510MHz