

# EMI Test Receiver



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» Multi Standards »

» Network Measurement »

## Features

### **EMI Receiver Mode**

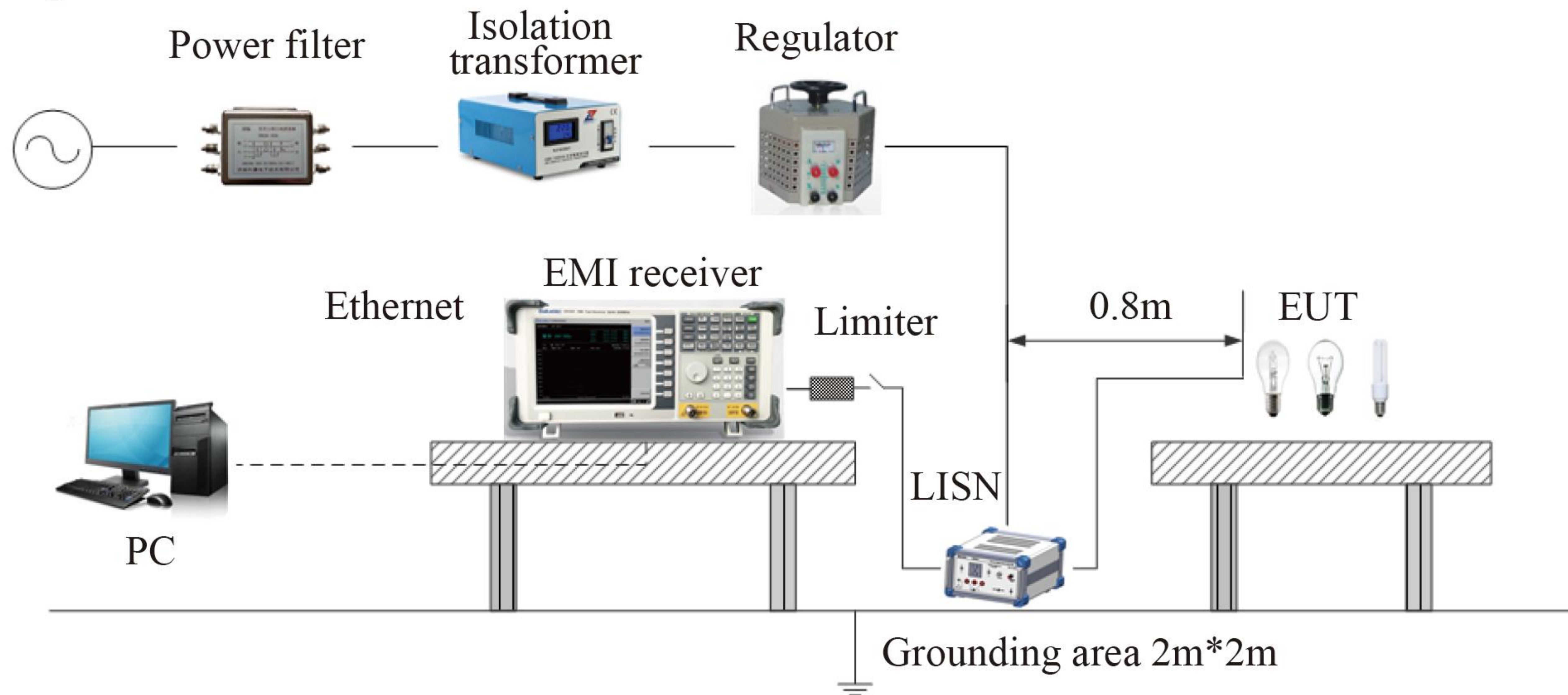
- ▶ Frequency range: 1kHz-300MHz/2GHz/3.6GHz
- ▶ Compliant with CISPR16-1-1 standards, featuring CISPR-AVG, CISPR-RMS, and QPK detectors
- ▶ Dual system mode: A combination of EMI receiver and spectrum analyzer
- ▶ Fully digital detectors, ensuring reliability and stability
- ▶ Multi Standards(GJB/GB/EN/FCC) meets both civilian and military EMC measurement standards
- ▶ Built-in pre-amplifier providing enhanced sensitivity
- ▶ Integrated network parameters measurement (tracking source)
- ▶ Configurable EMC measurement software to set up test systems, generating standard test reports
- ▶ A variety of test accessories for different applications and measurements
- ▶ Compact all-metal construction, offering superior shielding and EMC performance

### **Spectrum Analyzer Mode**

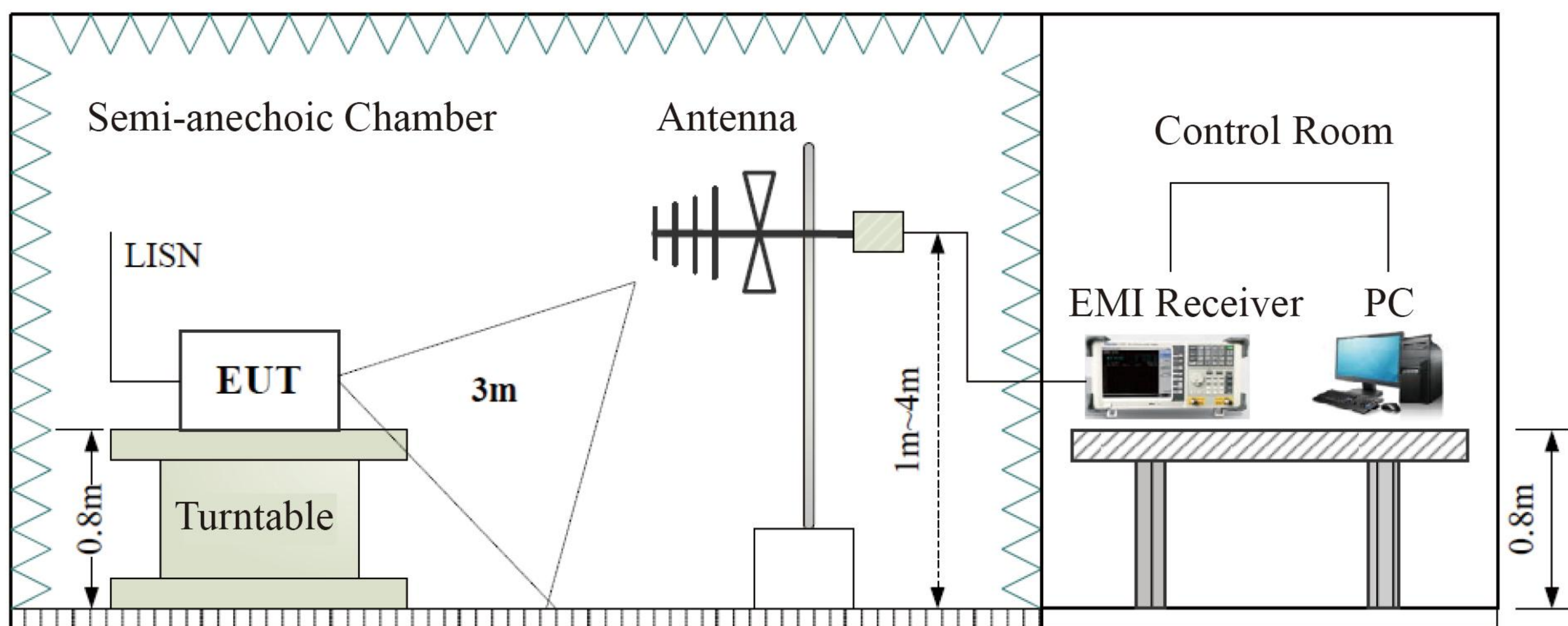
- ▶ Frequency range: 1kHz-3.6GHz
- ▶ RBW: 1Hz-3MHz
- ▶ Noise Level: < -160dbm
- ▶ Spectrogram, Frequency Counting, AM/FM Demodulation
- ▶ Network parameters measurement (tracking source)

# Applications

## Voltage method



Conducted Emission Test System



Conducted Emission Test System

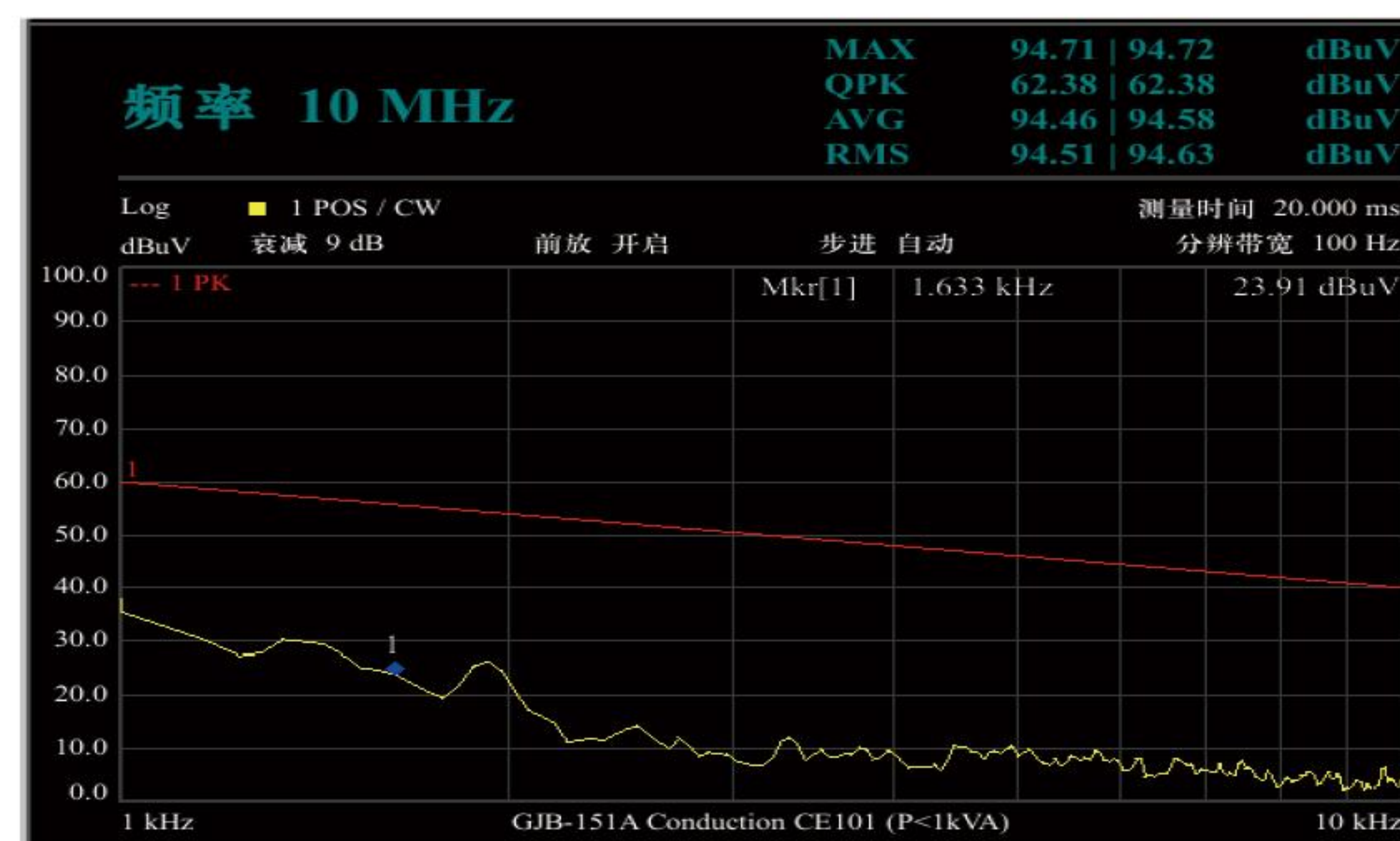
# Applications

## Efficient UI



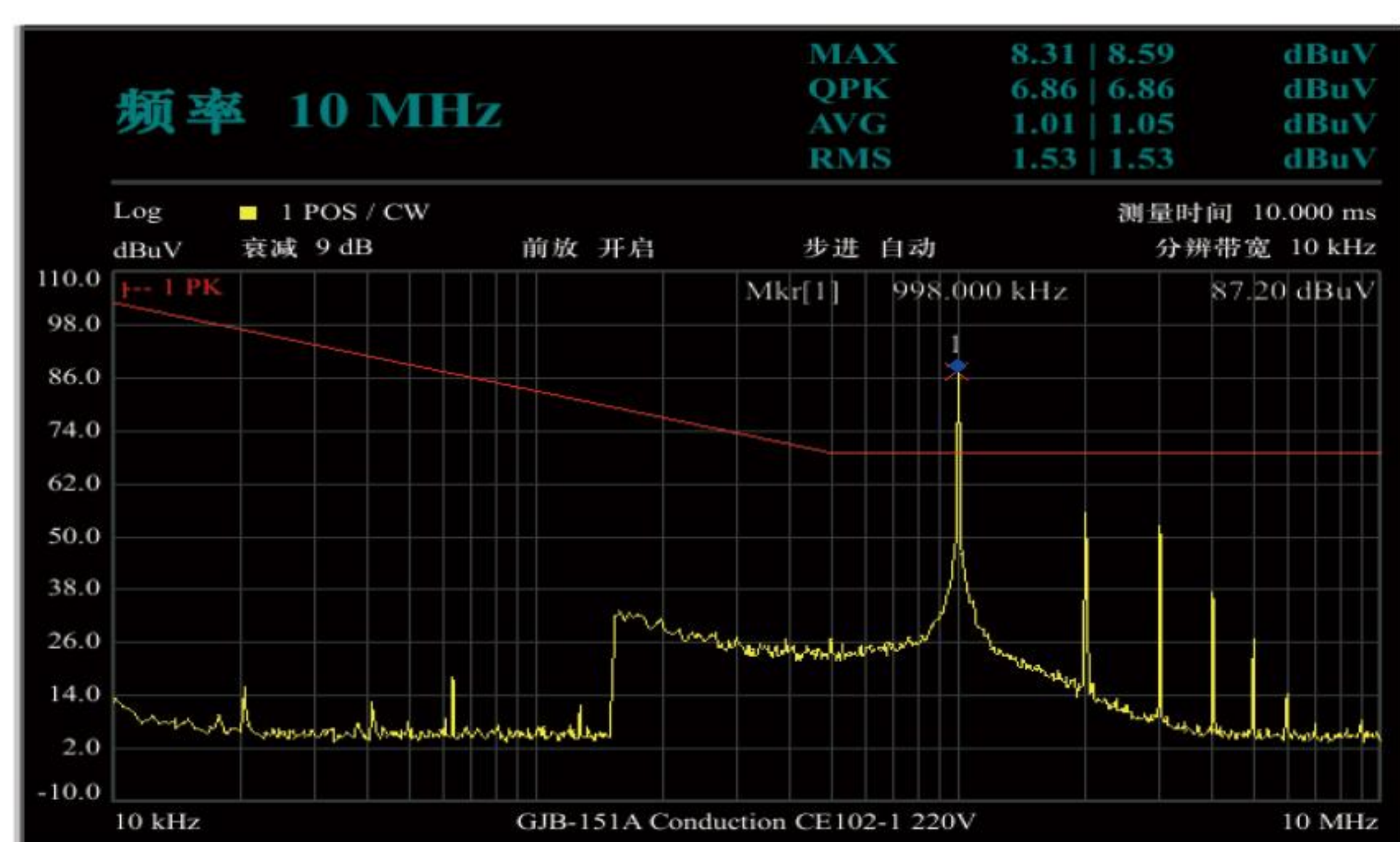
The display interface is simple and clear; it uses a grid layout to present measurement contents and parameters. The grid can be turned off to highlight traces and frequency markers, etc.

## CE101 Test



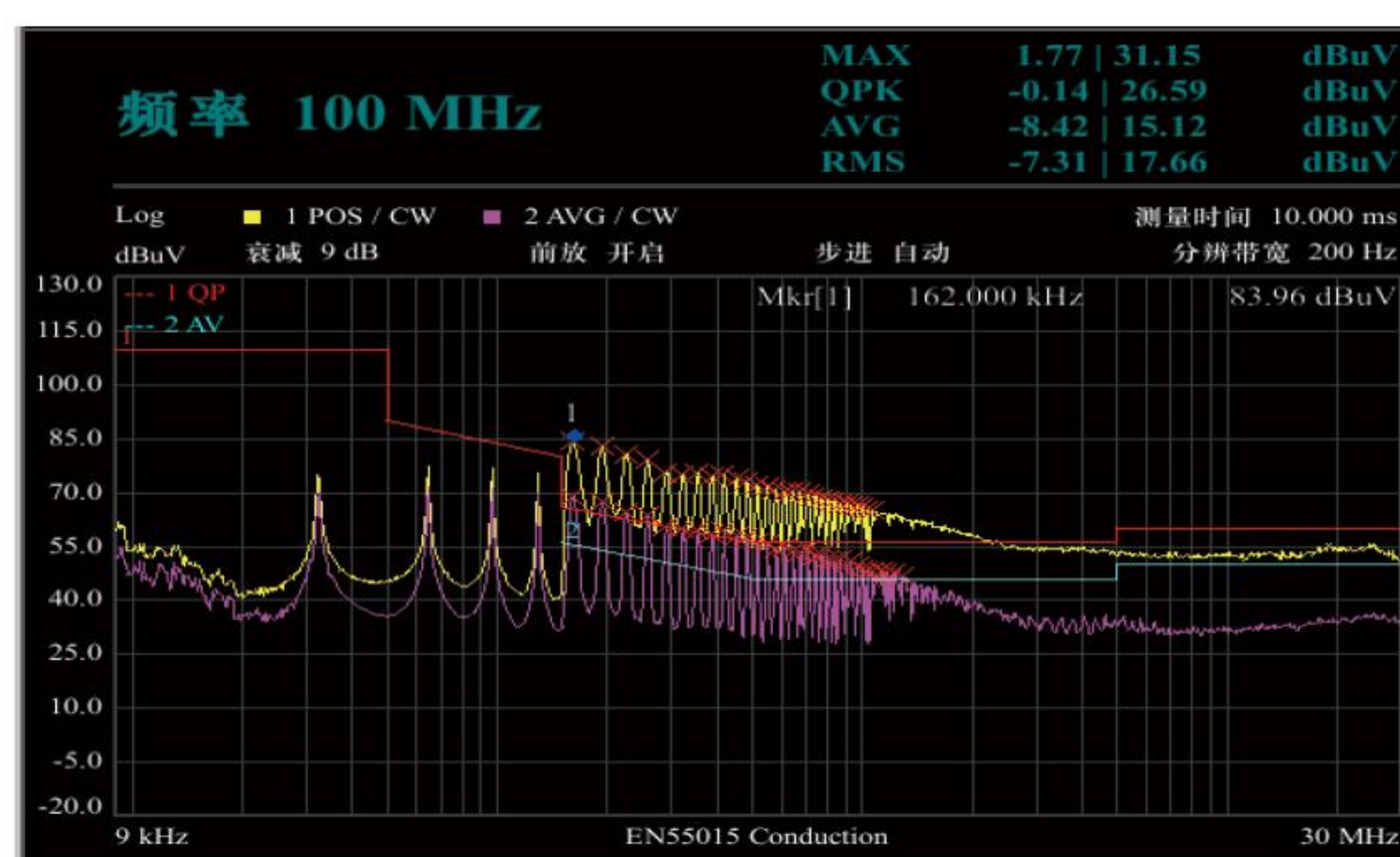
Applicable for testing power supply lines of equipment, including return lines. Testing comply with the CE101 test and calibration requirements

### CE102 Test



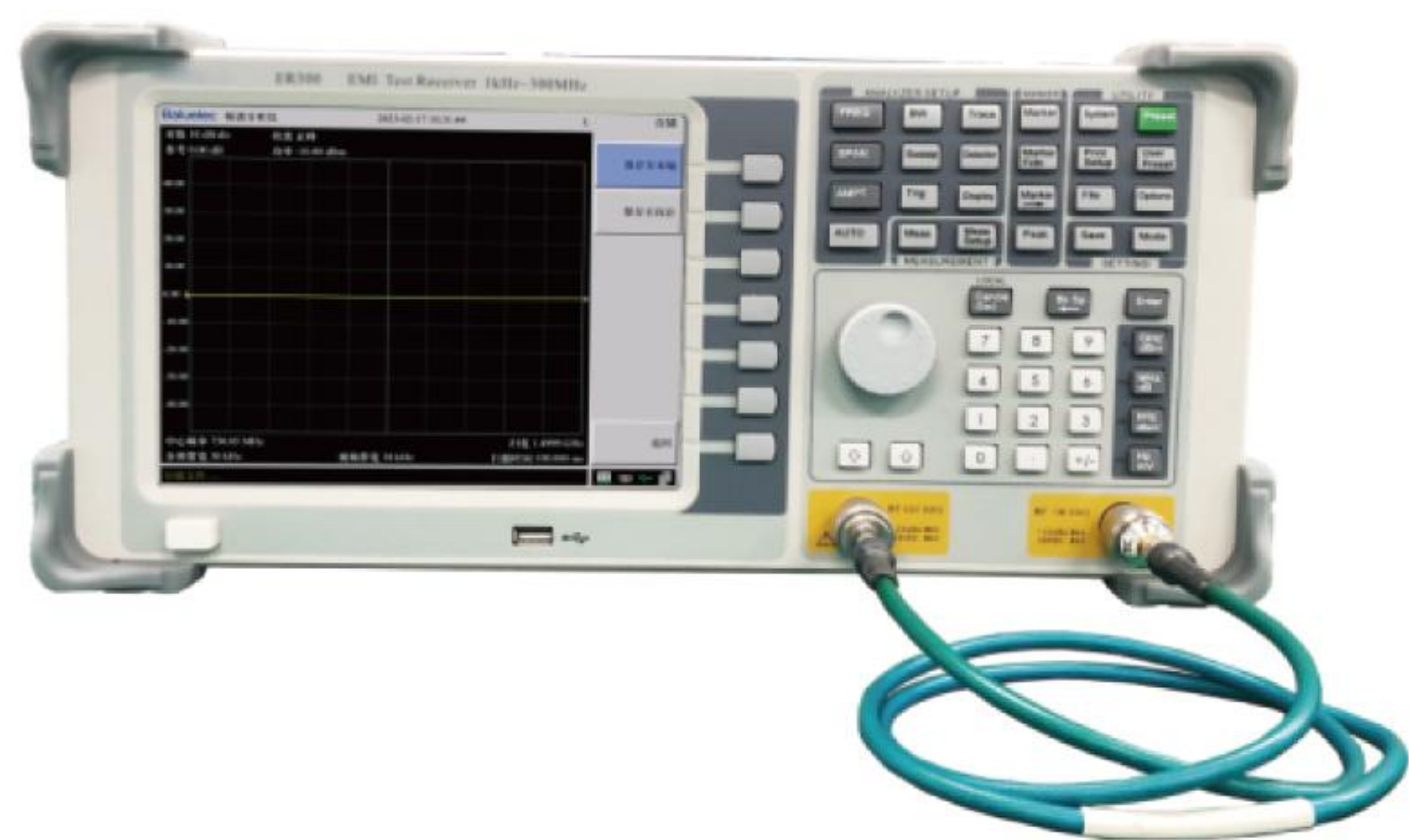
Applicable for testing power supply lines of equipment, including return lines. Testing comply with the CE102 test and calibration requirements.

### EN55015 Conducted Emission Test



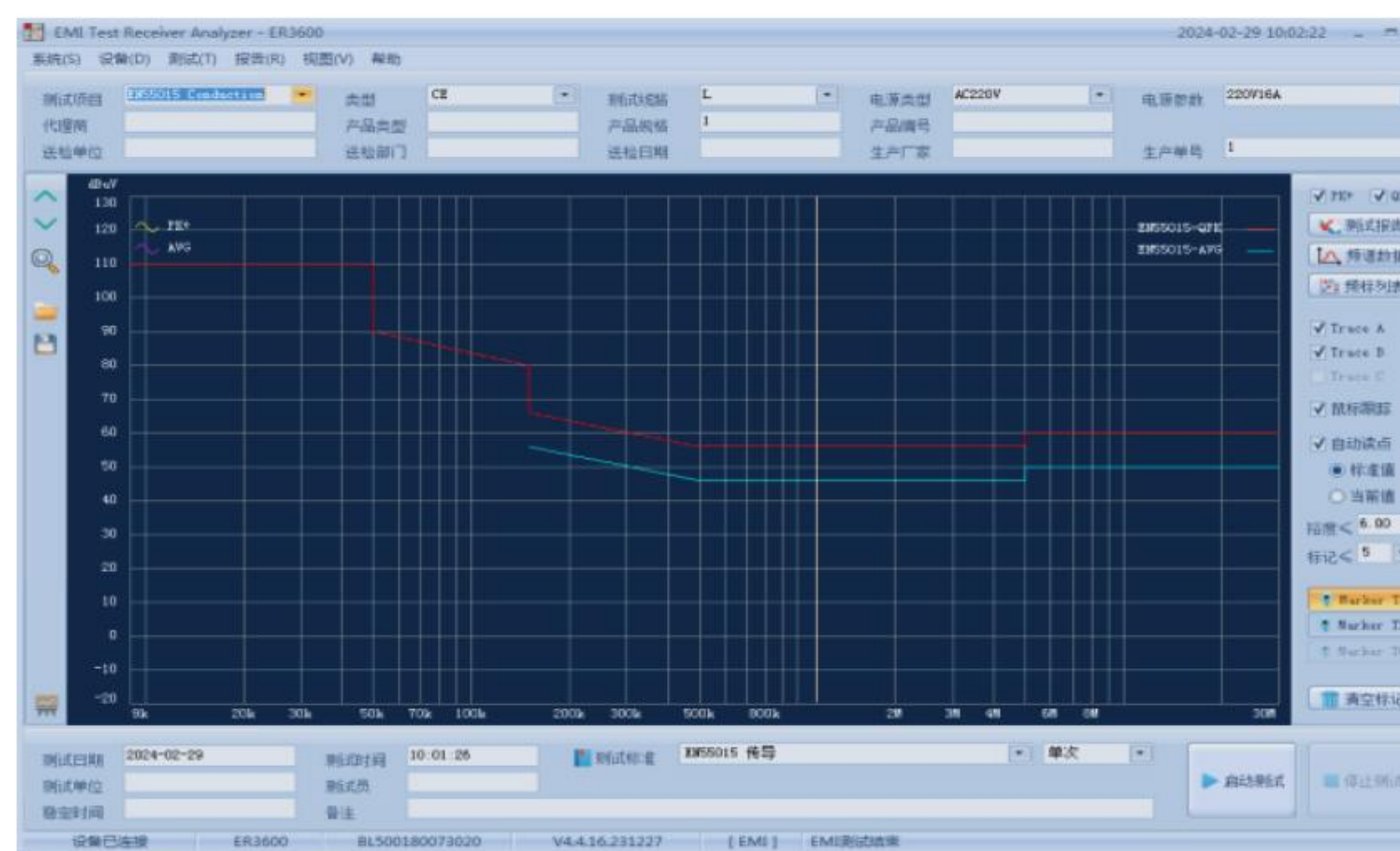
Applicable for testing electronic lighting devices to ensure that their conducted emissions comply with specified limits.

### Network parameters measurement(Tracking Source)



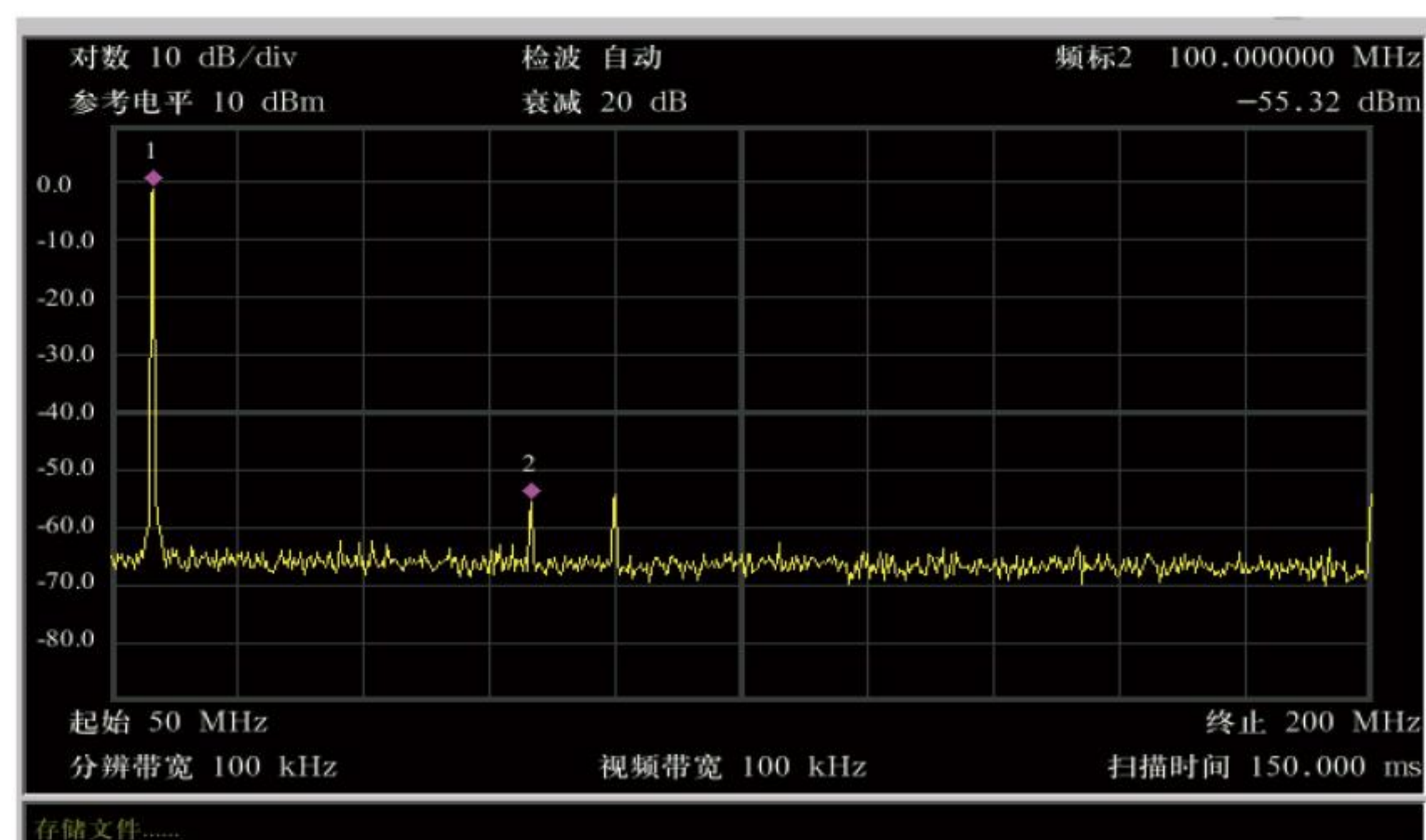
Measures insertion loss, isolation, and gain of amplifiers, for passive networks such as filters, attenuators, and cable lines.

### ETR Measurement Software

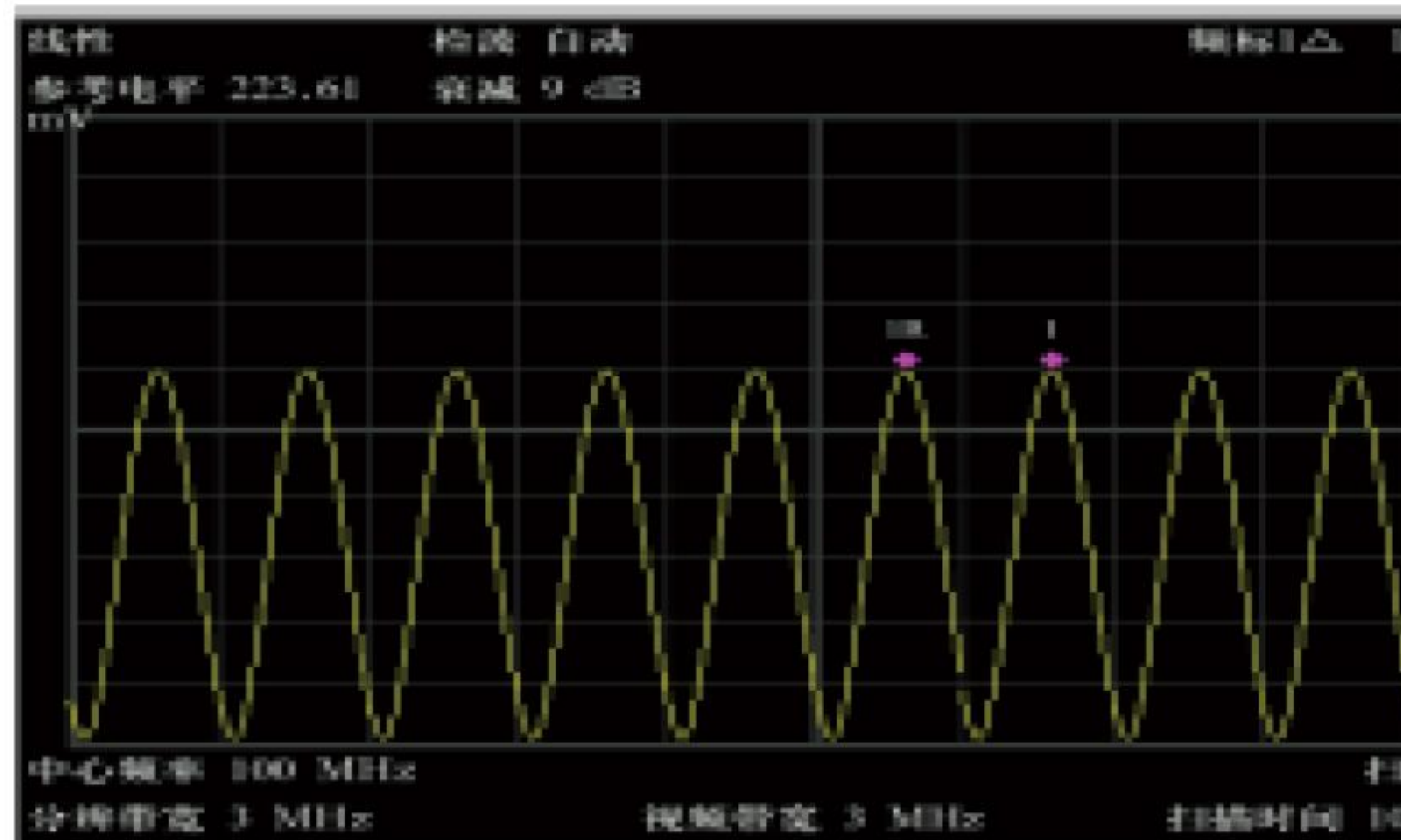


Capable of setting up a standard EMC automated testing system, generating standardized test reports in Word/PDF format.

### Spectrum Analysis



### Audio Demodulation (Broadcast Monitoring)





# Specifications

EMI Receiving Mode				
Frequency range	ER300	1kHz~300MHz		
	ER2000	1kHz~2GHz		
	ER3600	1kHz~3.6GHz		
Frequency readout accuracy	(Frequency standard reading × Frequency reference accuracy + Half of the last display unit)			
Amplitude measurement uncertainty (20°C~30°C)	Comprehensive amplitude accuracy (90%)	±2.0dB		
Resolution bandwidth (-6dB)	Resolution bandwidth range	200Hz/9kHz/120kHz/1MHz		
	Resolution bandwidth accuracy	<10%		
Attenuator	Attenuator range	0~39dB, 3dBstep		
	Attenuator uncertainty	±1.0dB		
Detector	Positive peak, Negative peak, Quasi-peak, Average, RMS			
Sweep time	100us~100s			
Sweep points	601~1001			
Trace number	3 (Parallel detection)			
Frequency band list	10			
Frequency response	±2.0dB			
Input port standing wave	50MHz~1GHz	≤2.0		
Spectrum Analysis Mode				
Frequency range	1kHz~3.6GHz			
Reading accuracy	±(Frequency standard reading × Frequency reference accuracy + 1% × Width + 10% × RBW + 0.5 × [Width / (scanning point - 1)] + 1Hz)			
Internal reference (10MHz)	Aging rate	1ppm/ year		
	Temperature drift	<0.5ppm(15°C~35°C)		
SSB phase noise (f=500MHz)	Frequency offset 30kHz	-90dBc/Hz		
	Frequency offset 1MHz	-110dBc/Hz		
Internal reference (10MHz)	Channel	Frequency	Preamp off	Preamp on
	Frequency conversion channel	100kHz~1MHz	≤-100dBm-30* (f/100kHz)dB	≤-120dBm-30* (f/100kHz)dB
		1MHz~10MHz	≤-130dBm	≤-150dBm
		10MHz~1GHz	≤-135dBm	≤-155dBm
		1GHz~3.6GHz	≤-140dBm	≤-148dBm
	Low frequency channel	5kHz~10kHz		≤-110dBm
10kHz~10MHz			≤-125dBm	
Amplitude measurement uncertainty (20°C~30°C)	Comprehensive amplitude accuracy (90%)	±1.8dB		
Resolution bandwidth (-3dB)	Resolution bandwidth range	1Hz~3MHz, Continuous step		
	Uncertainty of resolution bandwidth conversion	1Hz≤RBW≤500kHz	±0.6dB	
		RBW>500kHz	±1.0dB	
Resolution bandwidth accuracy	<10%			
Frequency response	5kHz~200kHz	±1.8dB		
	200kHz~3.6GHz	±1.5dB		
Tracking source	Frequency range	100kHz~1.5GHz		
	Output rating	-30dBm~0dBm		
	Output flatness	±3dB		
General Parameters				
Display	TFT-LCD, 8.4 inches, 800×600			
Communication interface	LAN			
Working temperature	0°C~40°C			
Storage temperature	-30°C~+70°C			
Weight	7.5kg			
Dimensions	400mm×280mm×190mm			

# Order Information

Product	Description	Order Number
EMI receiver	EMI measurement receiver (1kHz ~300MHz)	ER300
	EMI measurement receiver (1kHz ~2GHz)	ER2000
	EMI measurement receiver (1kHz ~3.6GHz)	ER3600
Accessories	CD (user manual, programming manual)	
	Power cord (220VAC)	
	N/SMA-JK interface	
	N/BNC-JK interface	
	Built-in tracking source (100kHz ~1.5GHz)	
Options	Line impedance stabilization network	LSN016
	Coupling decoupling network -M3	CDNE016
	Broadband Amplifier,100k-500MHz	LNA010
	Pulse limiter,50k-1GHz	PLA030
	Radio frequency switch	RFS003
	Test Toolkit (including Cable Accessories)	EMC-KIT
	Isolation Transformer	GBK-1000VA
	Current injection probe	PRBI-400
	Current detection probe	PRB330
	Probe calibration fixture	CLA001
	Universal Near-Field Probe	ANT01
	EMC test software (Win7/8)	BL.EMC.ETR

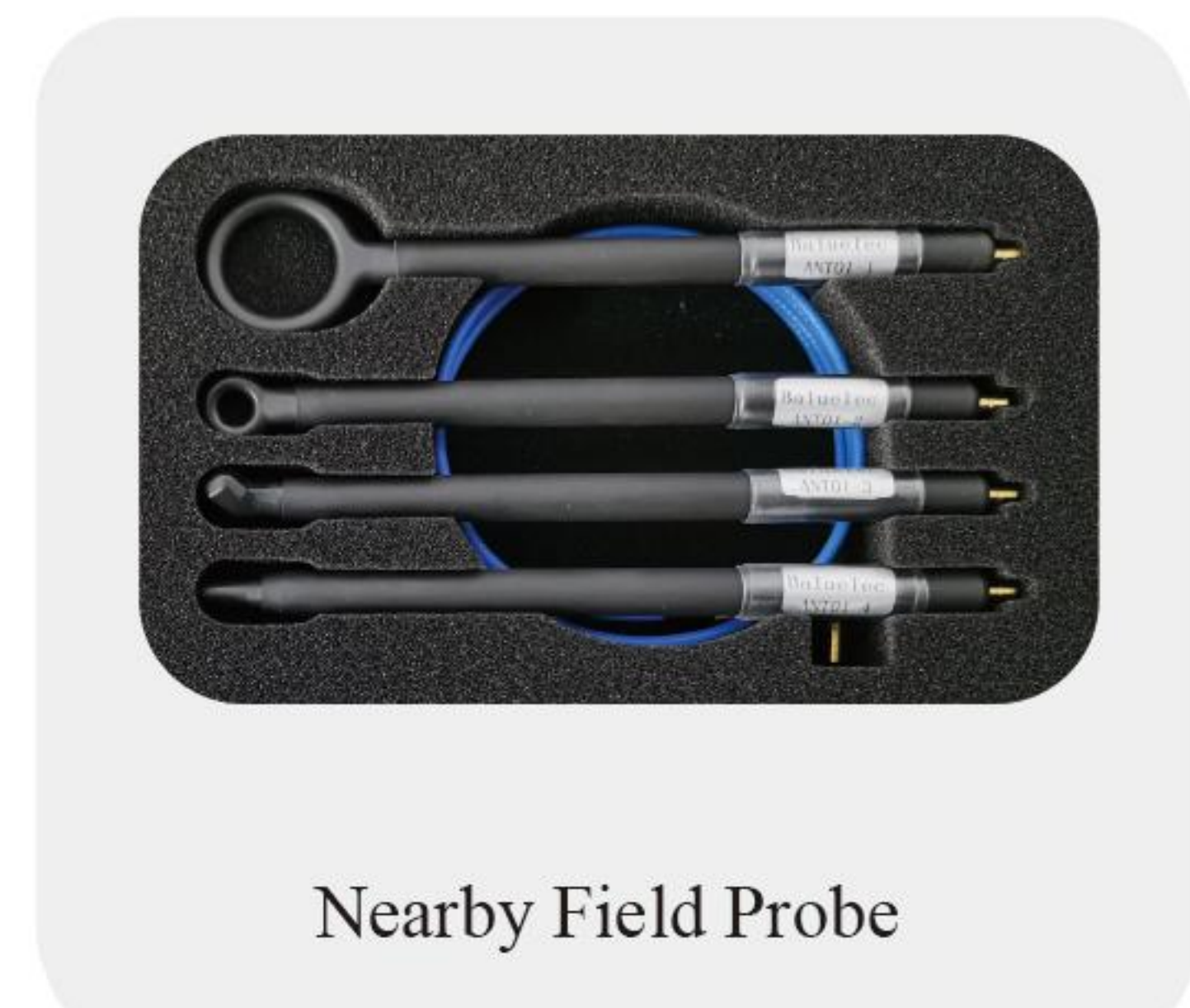
# EMC Test Accessories



CDN



Current Probe



Nearby Field Probe



LISN



Broadband Amplifier



Pulse Limiter



RF Switch



Current Injection Probe