

470-510MHz Right-angle Rod Antenna

FEATURES & BENEFITS



- Lightweight, low profile and rugged design
- The right-angle design allows it to be mounted flush against the device housing or installation surface (such as a wall or metal cabinet), while the antenna body remains vertically upright. This significantly saves radial space and avoids potential issues caused by horizontal protrusion, such as collision, obstruction, or aesthetic concerns. It is highly suitable for integration both inside and outside compact devices

APPLICATIONS

Various IoT applications, including,

- IoT and Industrial Applications
- Wireless Communication and Data Acquisition
- Network Access and Hotspot Coverage
- Consumer and Security Electronics.
- Smart City and Outdoor Applications



ORDER INFORMATION

Product Name	470-510MHz Right-angle Rod Antenna
Part Number	AELW012
Dimensions	106.5x18.5mm
Weight	9.2 g
Color	Black
Mounting	SMA Male Connectors

REFERENCE GUIDE

Technical Features (MHz)	470-510
Max VSWR	3.2:1
Max Efficiency	41.46%
Peak Gain	-1.08dBi
Radiation Pattern	Omnidirectional
Polarization	Linear
Input Impedance	50 Ω
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	10 to 70%
Material Substance Compliance	RoHS Compliant
Dimensions (L x W x H)	106.5x18.5mm

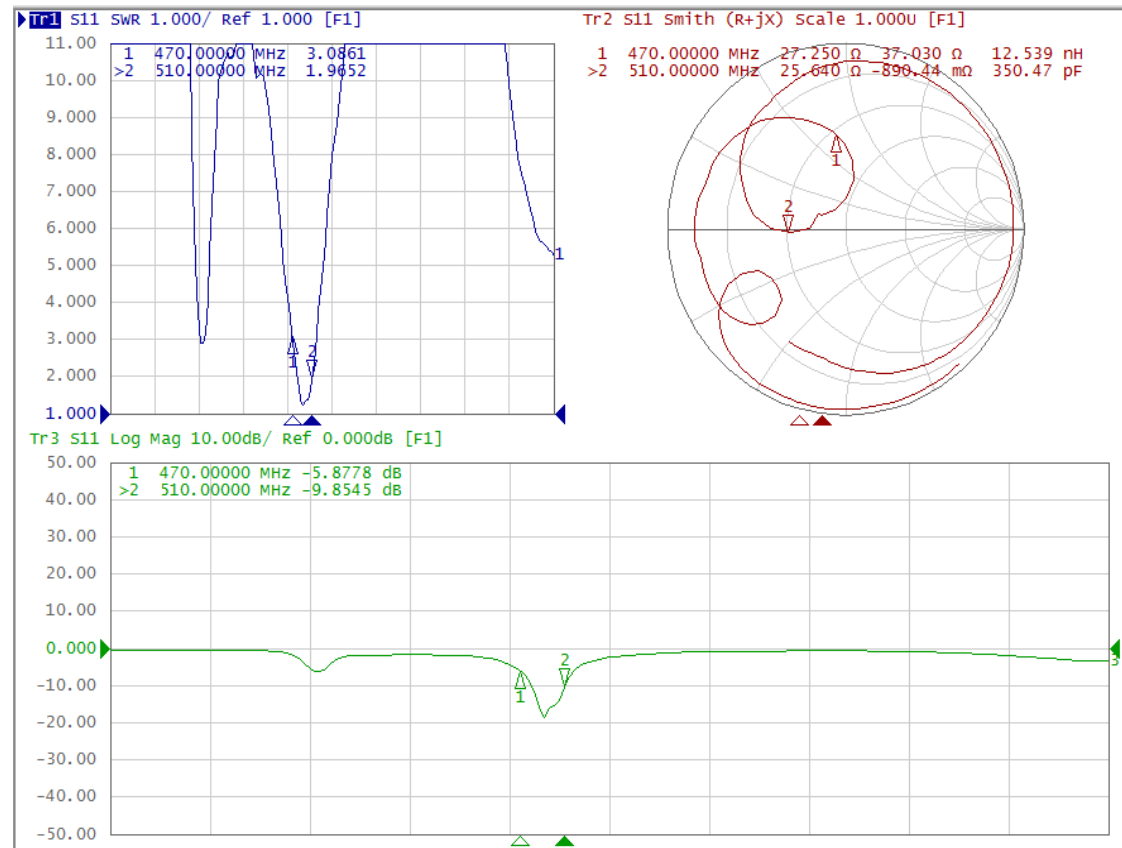
MyAntenna RF Technology Co., Ltd

ADD: No. RM 410, Country Garden Phoenix Wisdom Valley, No. 50 Tiezai Road, Baoan District, Shenzhen, P.R.China.

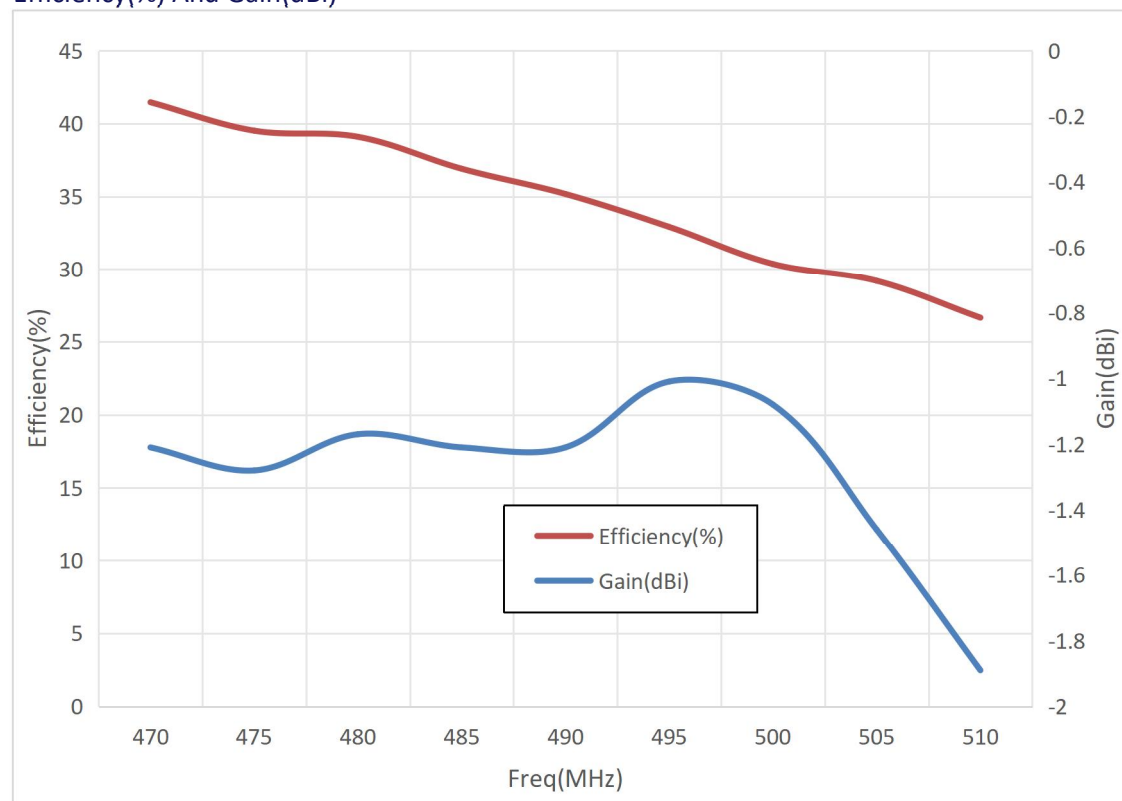
TEL: +86-0755-86503881 FAX: +86-0755-27801677 E-mail: nfc@imyantenna.com

ELECTRICAL DATA

Return Loss

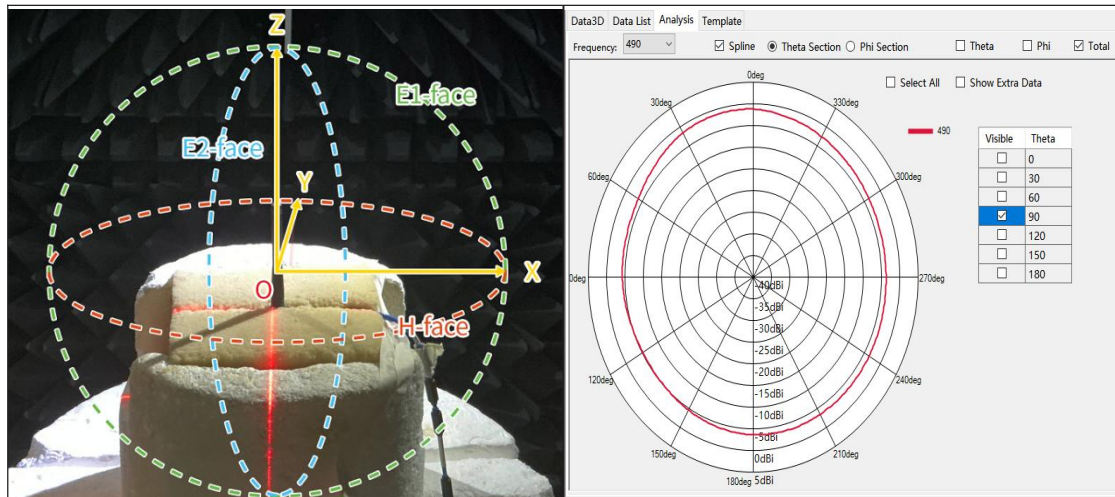


Efficiency(%) And Gain(dBi)



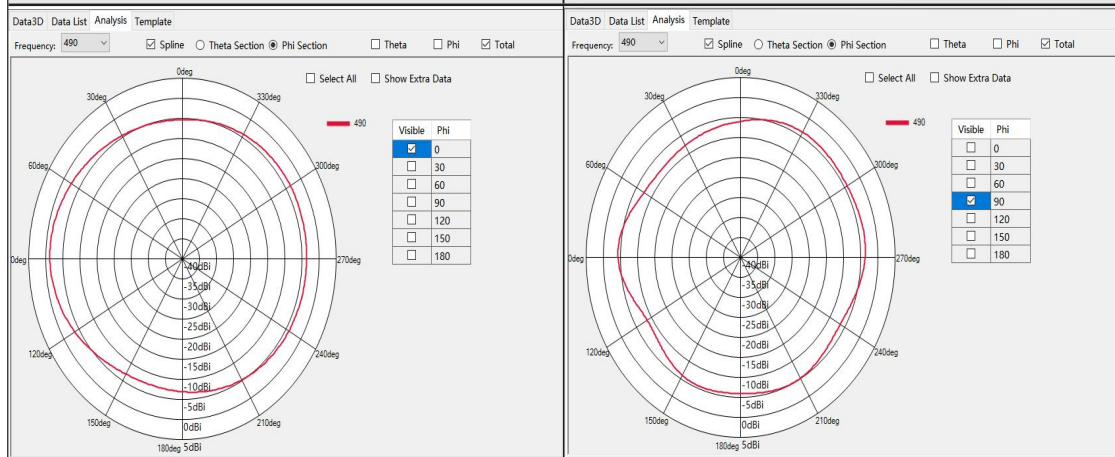
Freq(MHz)	Gain(dBi)	Efficiency(%)
470	-1.21	41.46
475	-1.28	39.51
480	-1.17	39.09
485	-1.21	36.90
490	-1.21	35.17
495	-1.01	32.91
500	-1.08	30.36
505	-1.46	29.17
510	-1.89	26.64

RADIATION PATTERNS



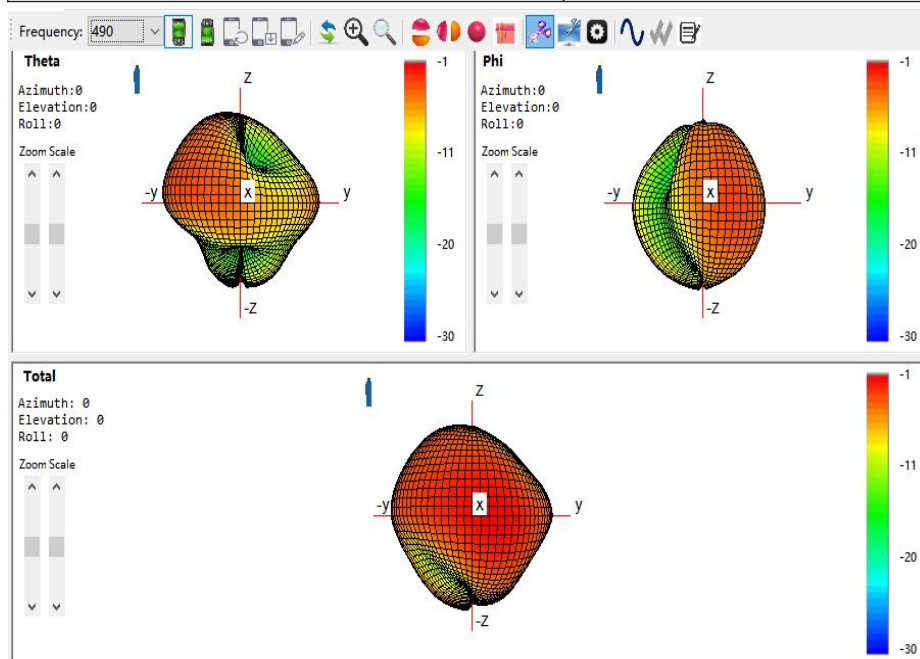
The Antenna in MyAntenna's Anechoic Chamber

$\theta = 90^\circ$ Plane XY at 490 MHz, Gain -1.21 dBi

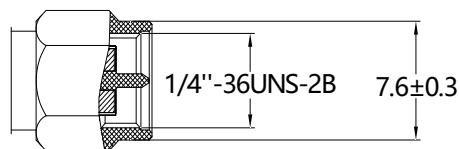
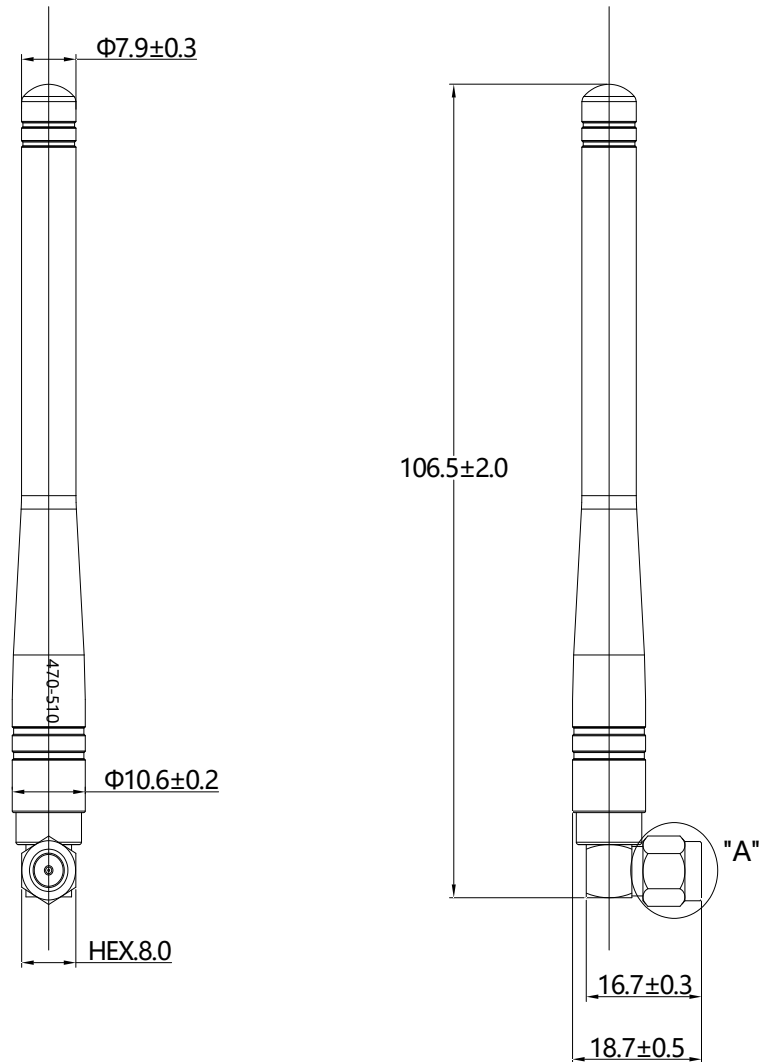


$\phi = 0^\circ$ Plane XZ at 490 MHz, Gain -1.21 dBi

$\phi = 90^\circ$ Plane YZ at 490 MHz, Gain -1.21 dBi



HOUSING CONFIGURATIONS



DETAIL A
SCALE 2:1