

**KBT****2400-250MHz Fiberglass Omni Antenna**

TQJ-2400TG6

**Applications**

2400-2500MHz Band Communications/ Wireless Data transmission System/ Wireless Paging System.

**Electrical Specifications**

Frequency Range (MHz)	2400~2500
Bandwidth(MHz)	100
Polarization	Vertical
Gain (dBi)	6.24
Horizontal Beam Width(°)	360
Vertical Beam Width(°)	25
Horizontal unroundness(dB)	±1.5
Impedance (Ω)	50
VSWR	≤1.8
Maximum Input Power (W)	50

**Mechanical Specifications**

Connector Type	N Male
Connector Position	Bottom
Antenna Size (mm)	φ 29* (420±5)
Antenna Weight (Kg)	0.3±0.05
Radome material	Fiberglass
Radome color	Gray@Fiberglass
Operating Temperature (°C)	-40~+70
Relative Humidity(%)	5~95
Rated Wind Velocity (m/s)	55
Salt Spray Resistance	96Hour Neutral (GB/T 2423.17-2008)
waterproofing grade	IP65
Applications	Outdoor
Mounting	M110N Magnetic or mounting with piggyback device

Add: No.30 Dongyang 3rd Road, Danzao Town, Nanhai District, Foshan City, Guangdong, China 528216

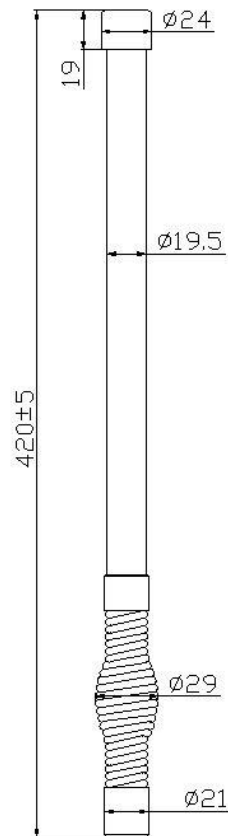
Tel: +86-757-88022860

Email: kbt@kenbotong.com

Web: <http://www.kenbotong.com>



## Installation Sketch

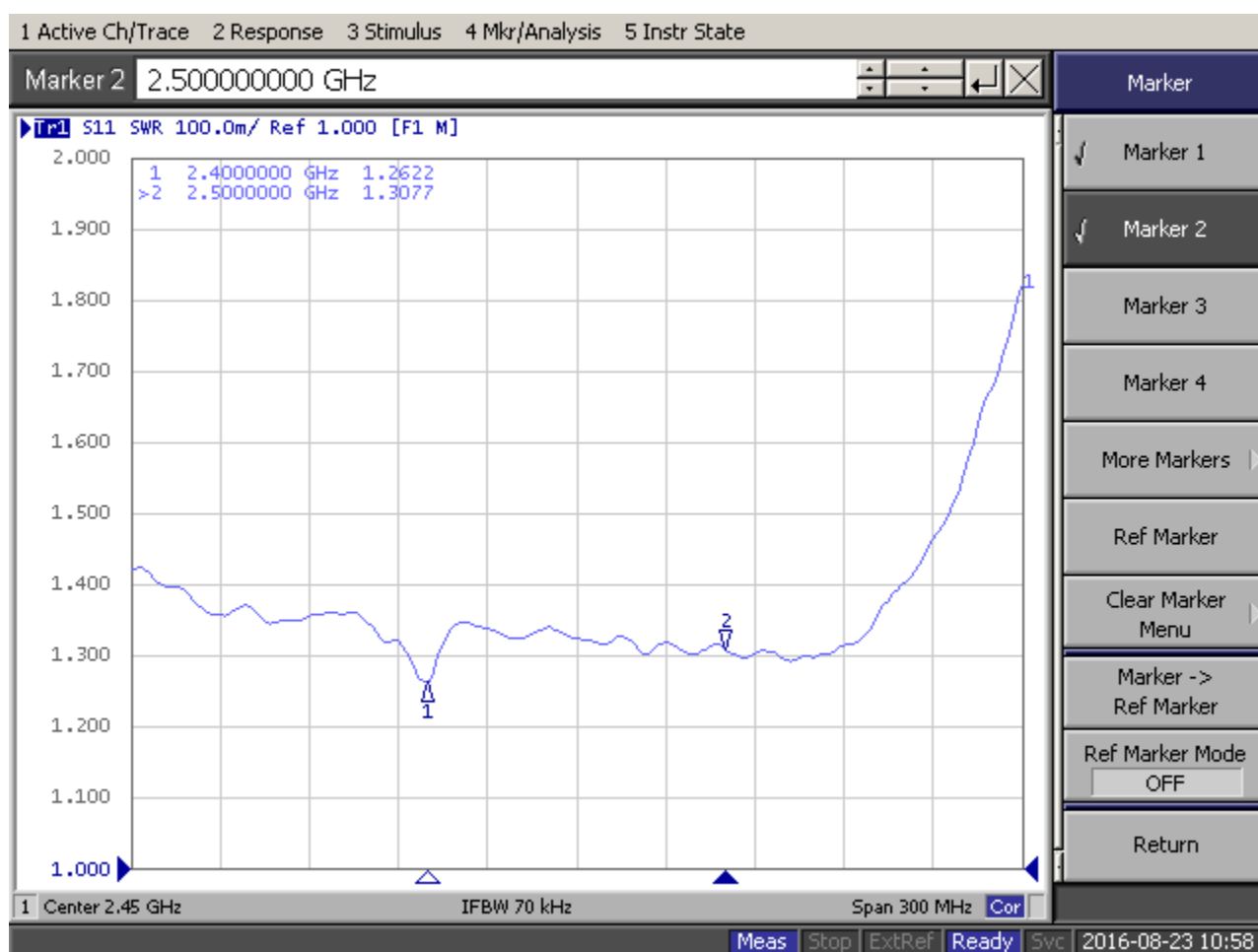


### Test results

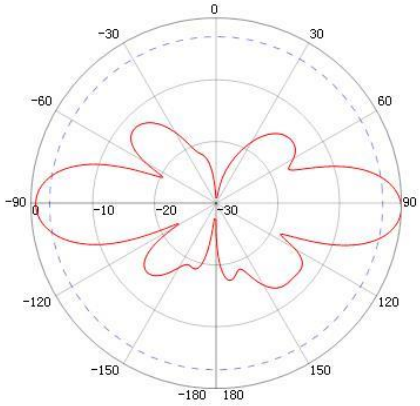
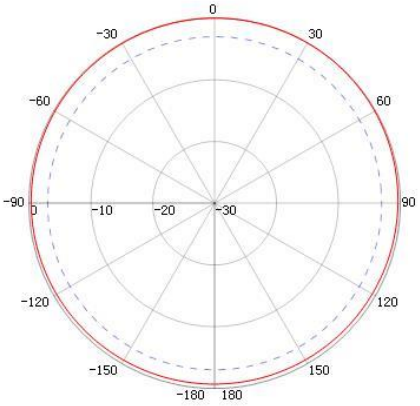
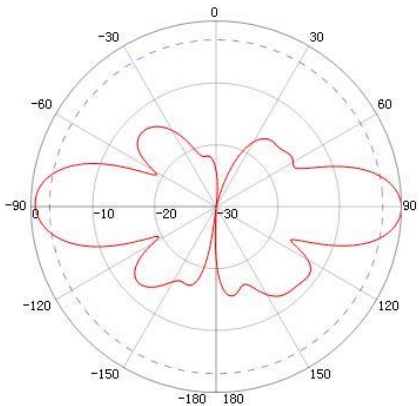
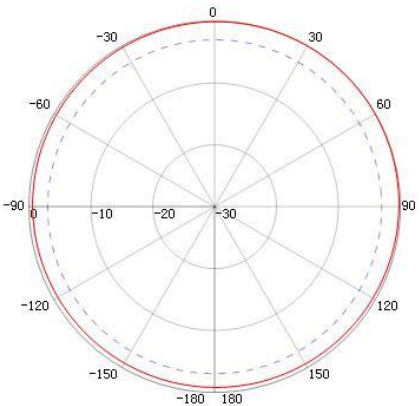
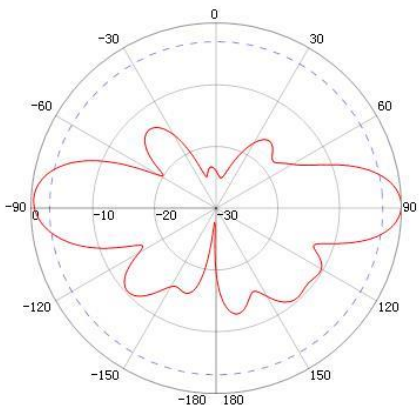
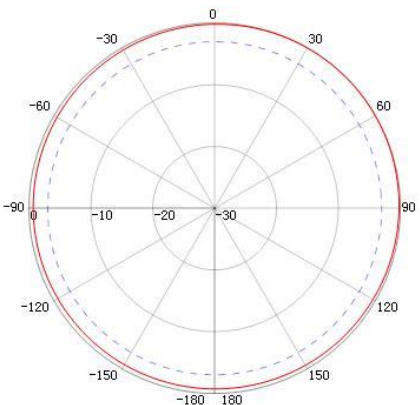
Test items	technical requirement	Unit	Test results			Det
frequency range	2400-2500	MHz	2400-2500			PASS
Gain	$6 \pm 1$	dBi	2400 MHz	6.23		PASS
			2450 MHz	6.24		
			2500 MHz	6.14		
Horizontal beamwidth	360	°	2400 MHz	360		PASS
			2450 MHz	360		
			2500 MHz	360		
Vertical Beamwidth	25	°	2400 MHz	23.04		PASS
			2450 MHz	24.16		
			2500 MHz	23.15		
Horizontal out of roundness	$\pm 1.5$	dB	2400 MHz	0.36		PASS
			2450 MHz	0.42		
			2500 MHz	0.38		
Voltage standing wave ratio	$\leq 1.8$	/	1.26	1.33	1.31	PASS

Radiation pattern	/	/	See attached image	PASS
Polarization mode	Vertical	/	Vertical	PASS
PASS				

## Voltage standing wave ratio



2D

频率	E 面	H 面
2400MHz	 <p>The E-plane radiation pattern at 2400MHz shows a four-lobed structure. The main lobes are oriented along the horizontal axis (0° and 180°), with secondary lobes along the vertical axis (90° and 270°). The radiation is centered at a gain of -30 dB. The plot includes a grid with radial lines every 30 degrees and concentric dashed circles representing gain levels at -10, -20, and -30 dB.</p>	 <p>The H-plane radiation pattern at 2400MHz shows a nearly circular, omnidirectional distribution. The radiation is centered at a gain of -30 dB. The plot includes a grid with radial lines every 30 degrees and concentric dashed circles representing gain levels at -10, -20, and -30 dB.</p>
2450MHz	 <p>The E-plane radiation pattern at 2450MHz shows a four-lobed structure similar to the 2400MHz case, but with slightly more pronounced side lobes. The main lobes are oriented along the horizontal axis. The radiation is centered at a gain of -30 dB. The plot includes a grid with radial lines every 30 degrees and concentric dashed circles representing gain levels at -10, -20, and -30 dB.</p>	 <p>The H-plane radiation pattern at 2450MHz shows a nearly circular, omnidirectional distribution similar to the 2400MHz case. The radiation is centered at a gain of -30 dB. The plot includes a grid with radial lines every 30 degrees and concentric dashed circles representing gain levels at -10, -20, and -30 dB.</p>
2500MHz	 <p>The E-plane radiation pattern at 2500MHz shows a four-lobed structure with significant side lobes. The main lobes are oriented along the horizontal axis. The radiation is centered at a gain of -30 dB. The plot includes a grid with radial lines every 30 degrees and concentric dashed circles representing gain levels at -10, -20, and -30 dB.</p>	 <p>The H-plane radiation pattern at 2500MHz shows a nearly circular, omnidirectional distribution similar to the other frequencies. The radiation is centered at a gain of -30 dB. The plot includes a grid with radial lines every 30 degrees and concentric dashed circles representing gain levels at -10, -20, and -30 dB.</p>