

Product Specification

Manufacturer: GUANGZHOU RANTION TECHNOLOGY CO., LTD.

Add: Room 7002 and 7003, 7th Floor, Digital Entertainment Industrial Park, Greater Bay Area, No. 28 Huangpu Park West Road, Huangpu District, Guangzhou, China.

Model: XLIVE-IFA

Quick Reference Data

	Antenna module on the system board	
Frequency Range	2400 ~ 2500MHz	
Ant. Port Input Pwr. (dBm)	0 (Typ. BT class 1 output power)	
Tot. Rad. Pwr. (dBm)	-1.2 (Input pwr - loss pwr)	
Peak EIRP(dBm)	1.2	
Directivity (dBi)	1 (all direction antenna)	
Efficiency (dB)	60.2%	
Gain (dBi)	1.67(Avg Gain XY-plane)	
Maximum Power (dBm)	1.7 (XY-plane)	
Minimum Power (dBm)	-4(XY-plane)	
Avg. Power (dBm)	-0.5(XY-plane)	
Input Impedance(ohm)	50	
Polarization Type	Vertical & Horizontal	
V.S.W.R	< 1.4	

All the technical data and information contained herein are subject to change without prior notice

Antenna Layout & module on the system board

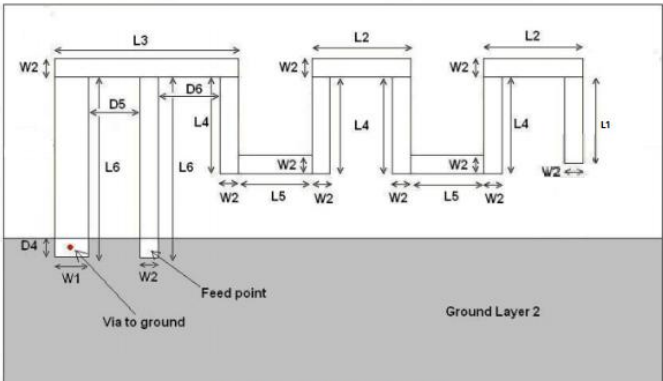


Figure 3: Antenna Dimensions

L1	2.28 mm
L2	2.70 mm
L3	5.00 mm
L4	2.64 mm
L5	2.00 mm
L6	4.90 mm
W1	0.90 mm
W2	0.50 mm
D4	0.50 mm
D5	1.40 mm
D6	1.70 mm

Table 1: Antenna Dimensions

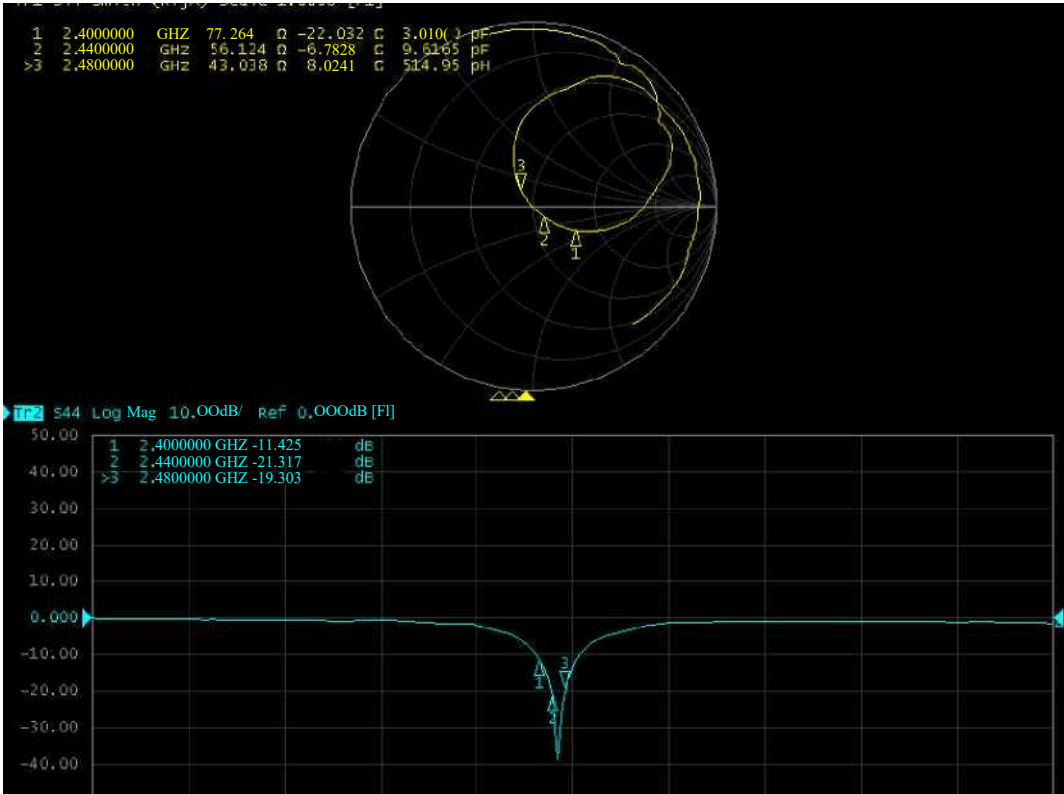
Antenna Gain

Gain Table

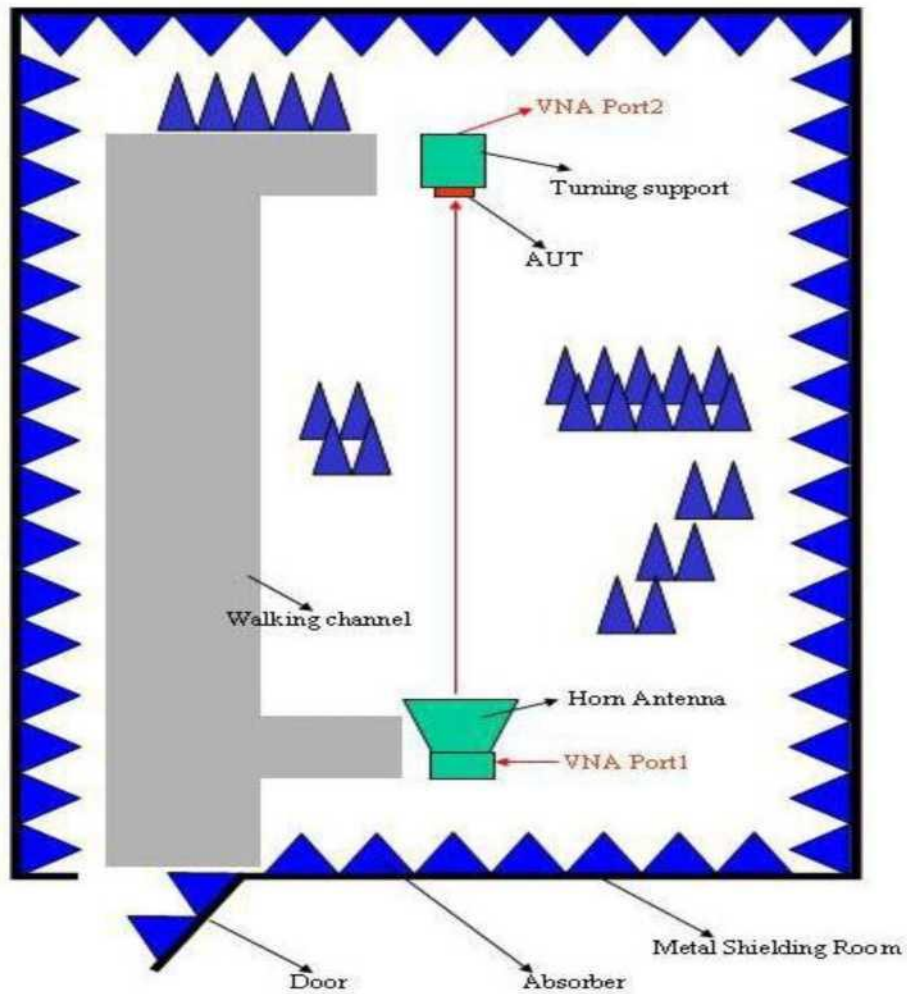
Unit in dBi @2.44GHz	XY-plane		XZ-plane		YZ-plane		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	1.67	-0.5	0.99	-3.6	1.1	-3.0	60.2%

Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain/dBi	0.99	1.67	1.05	1.01	0.89	0.64	0.61	0.59	0.26	0.01	-0.10
Efficiency/%	47.53	44.38	41.66	41.11	39.92	37.98	38.25	38.38	35.67	33.68	31.80

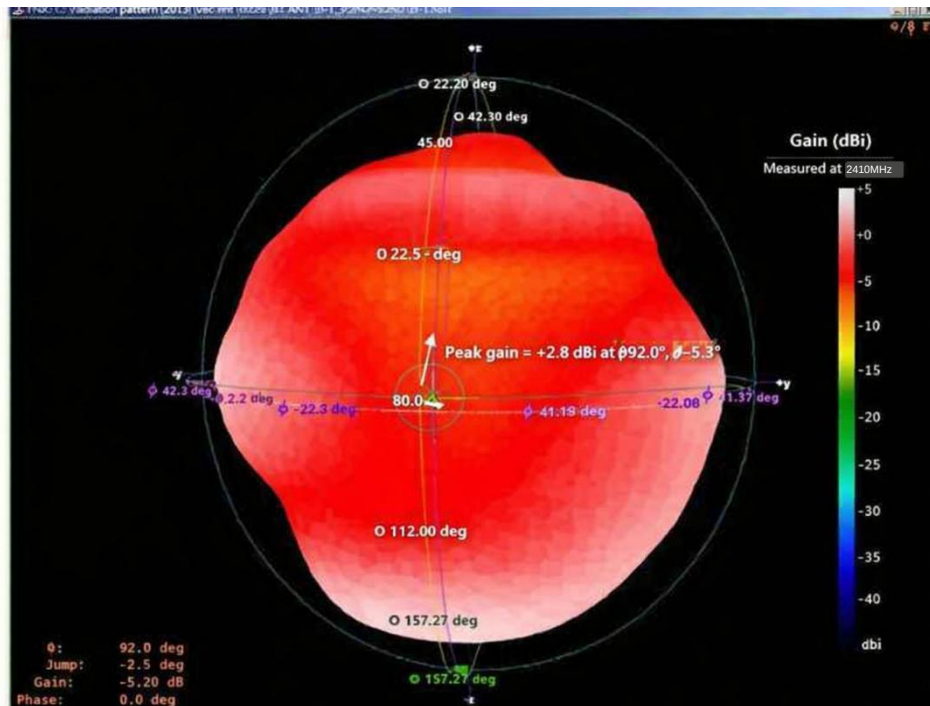
Return Loss



The Environment of Antenna Radiation Pattern



3D radiation pattern diagram



XY-plane

Ear-field Power I)istribution(V) on X-Y Plane

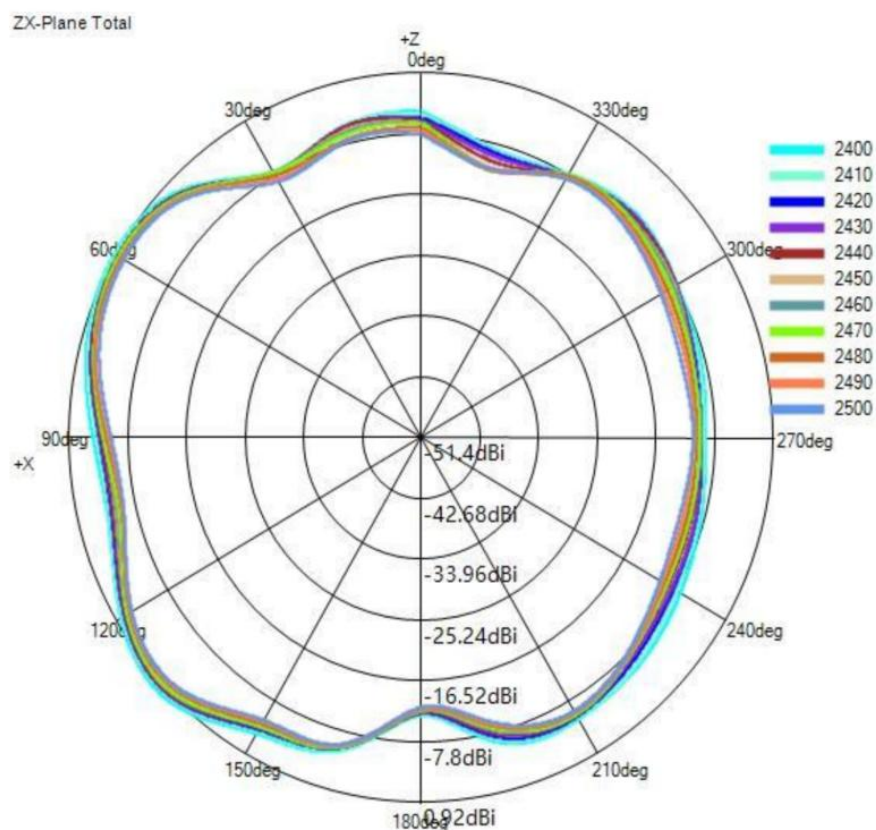
XZ-plane

Far-field Power Distribution (H+V) on X-Z Plane

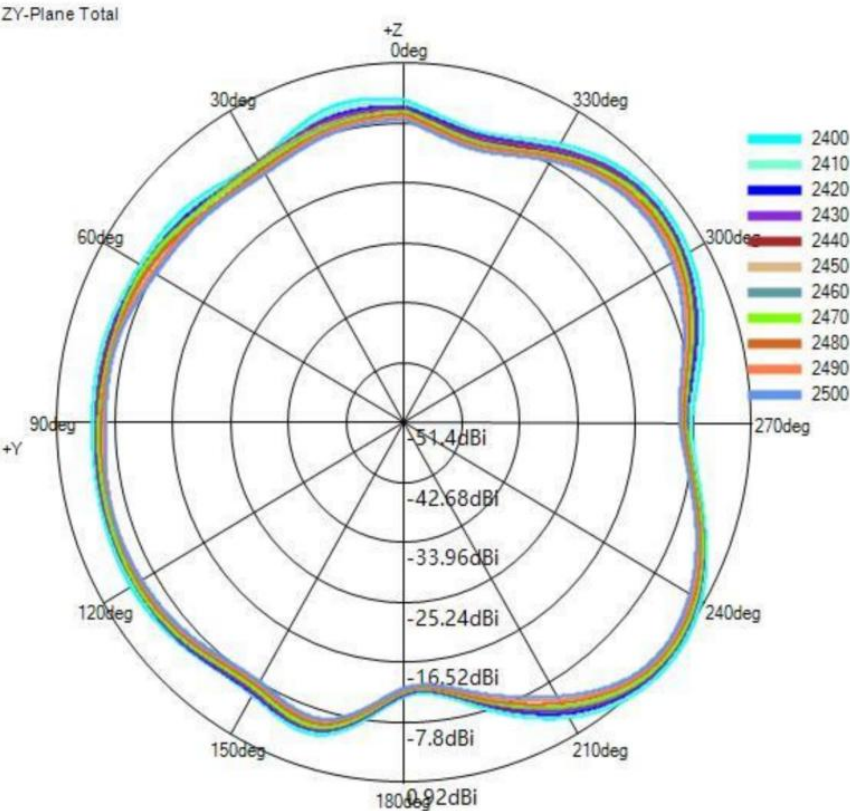
YZ-plane

Far-Field Power Distribution (H+V) on Y-Z Plane

(1) X-Z Plane(unit:dBi):



(2) Y-Z Plane(unit:dBi):



(3) X-Y Plane(unit:dBi):

