

LITE-ON TECHNOLOGY CORPORATION

A World-Class Company Striving for Excellence

Soundvision AP6
Antenna passive measurement
Report for certificate

2023.02.24

Agenda

- **AP6 antenna info.**
 - Antenna model
 - Antenna manufacture name
INPAQ TECHNOLOGY CO., LTD
 - Antenna manufacture address
326103 No. 566-1 Gaoshi Road, Yangmei District, Taoyuan City
 - Antenna Specification
 - S Parameter
 - radiation pattern
 - Efficiency & Peak gain table

Antenna model

	Antenna model
ANT1_Dual band 1	3010001439GD
ANT2_Dual band 2	3010001437GD
ANT3_BT	3010001440GD

Specification

Requirements of Antenna Design

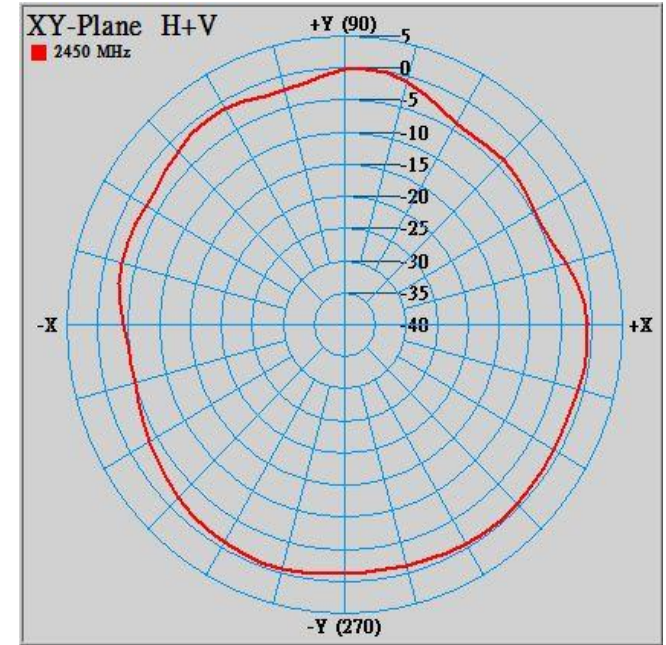
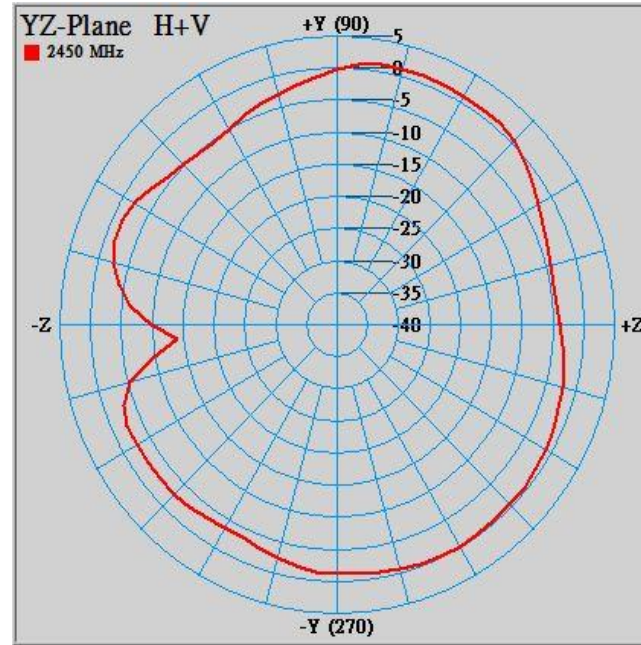
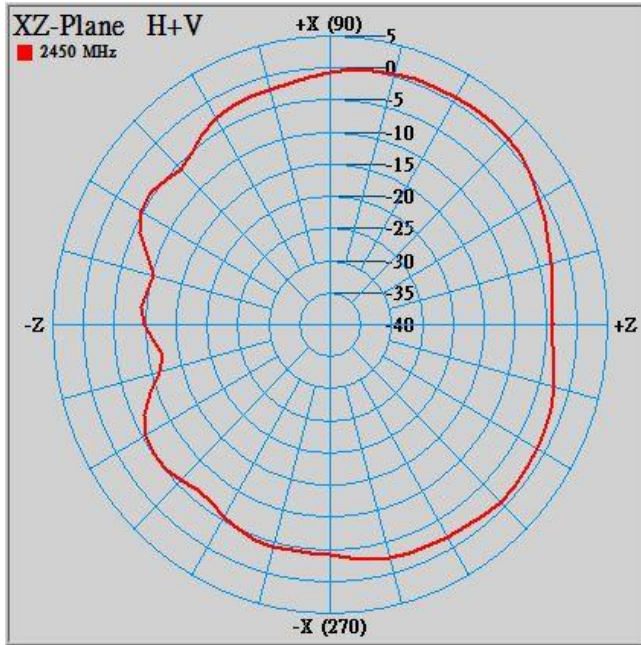
RF Function	Frequency Band
ANT1	2400~2500 MHz/5150~5850 MHz
ANT2	2400~2500 MHz/5150~5850 MHz
ANT3	2400~2500 MHz

Requirements of Measurement

Test Item	Specification
Return loss	<-10 dB
Isolation	< -20 dB
Efficiency	> 60 %

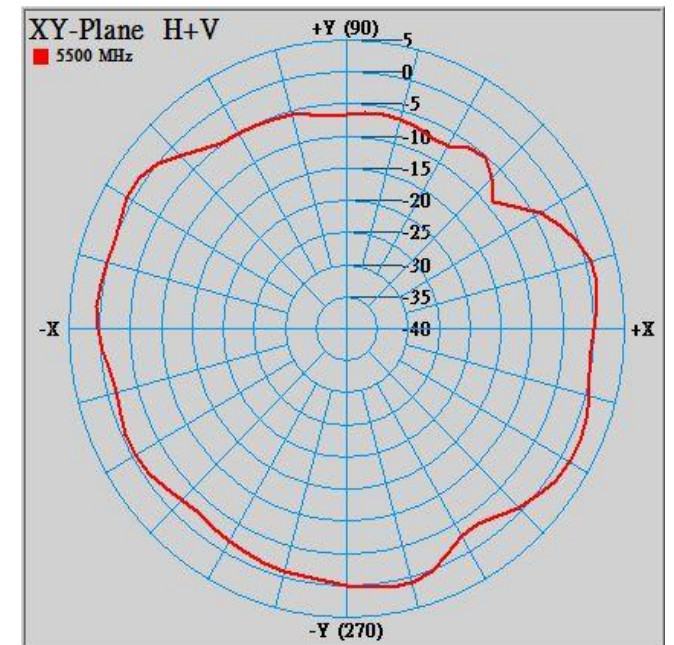
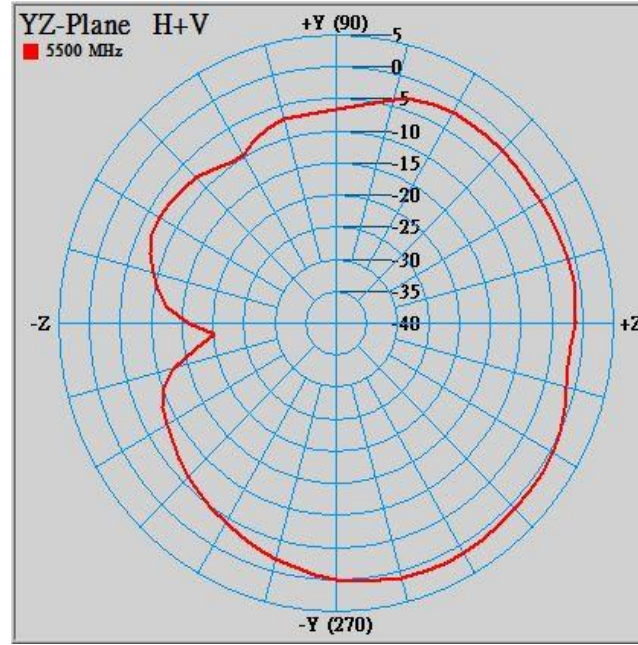
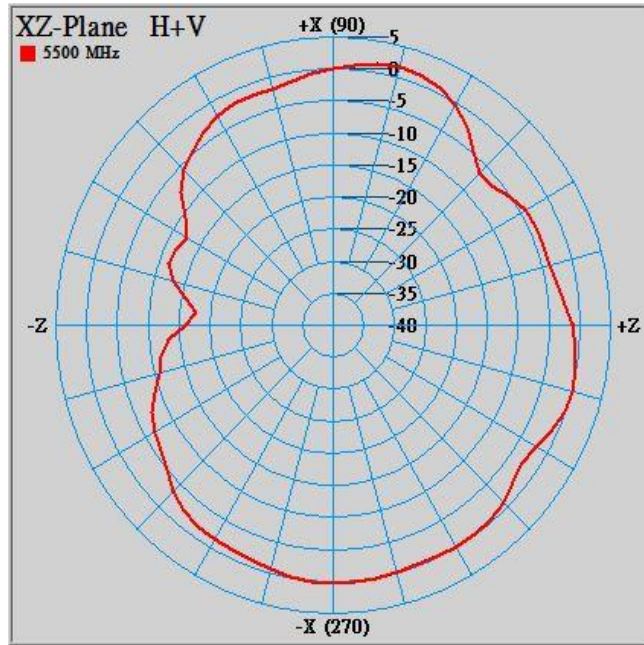
2D Radiation Pattern Results

Ant1_ dual band 2G



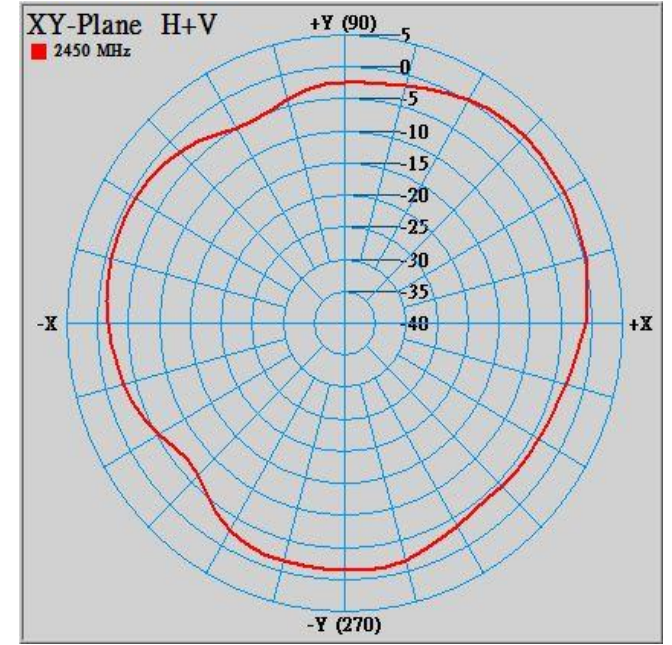
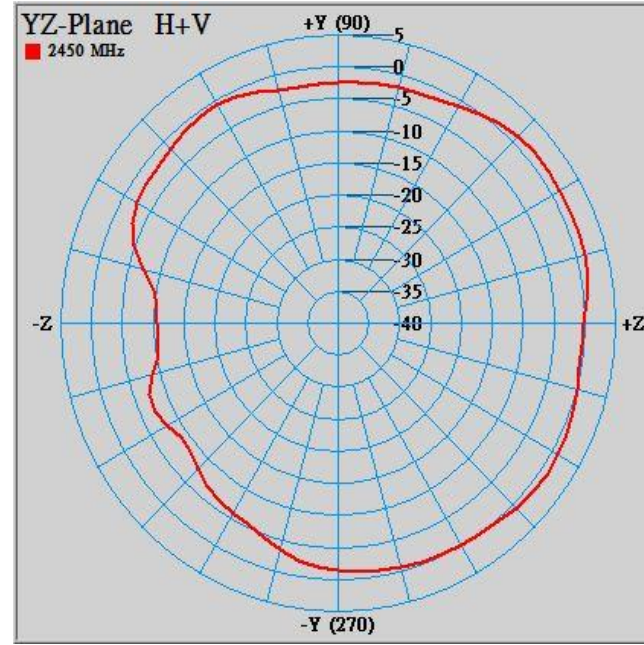
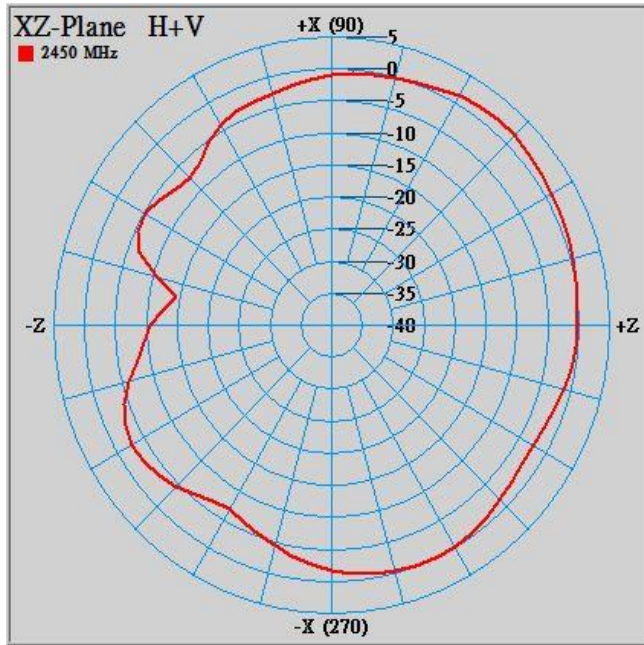
2D Radiation Pattern Results

Ant1_ dual band 5G



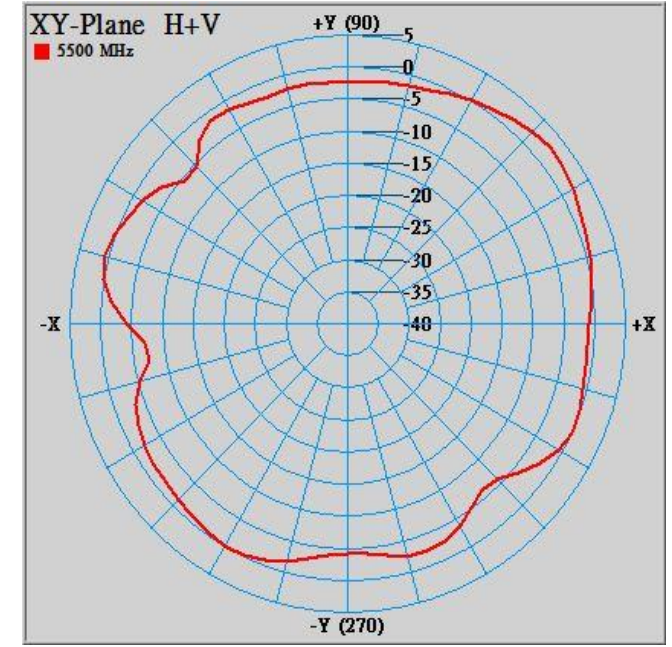
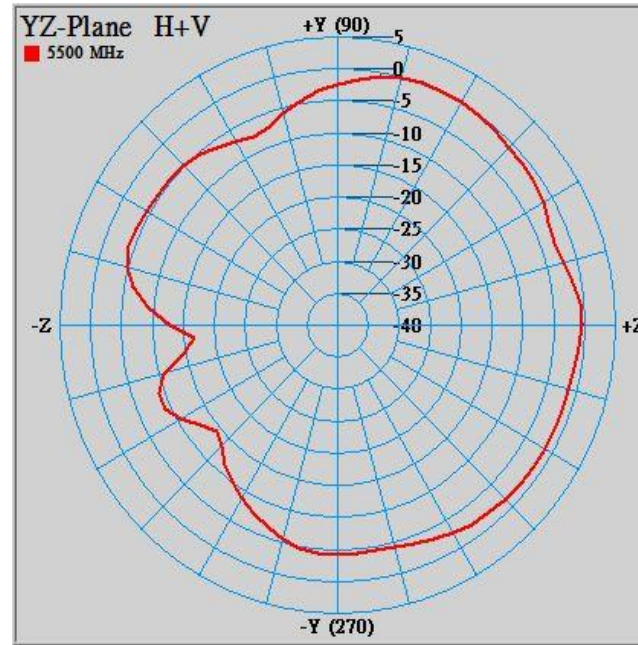
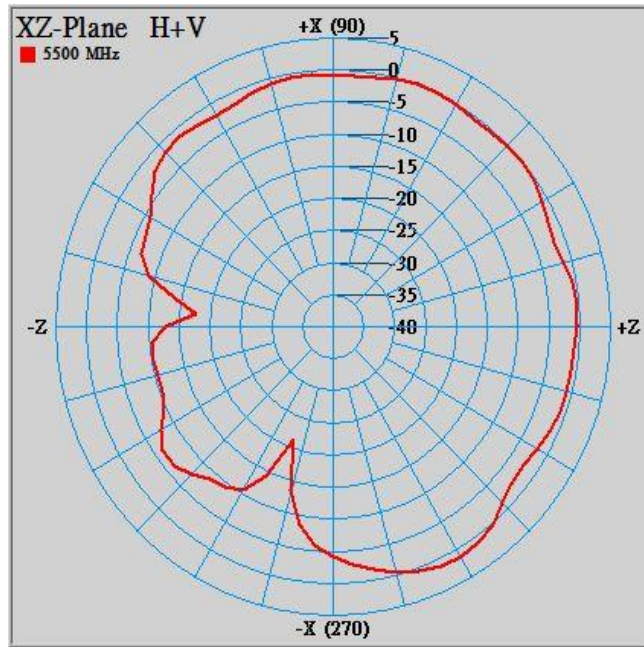
2D Radiation Pattern Results

Ant2_dual band_2G



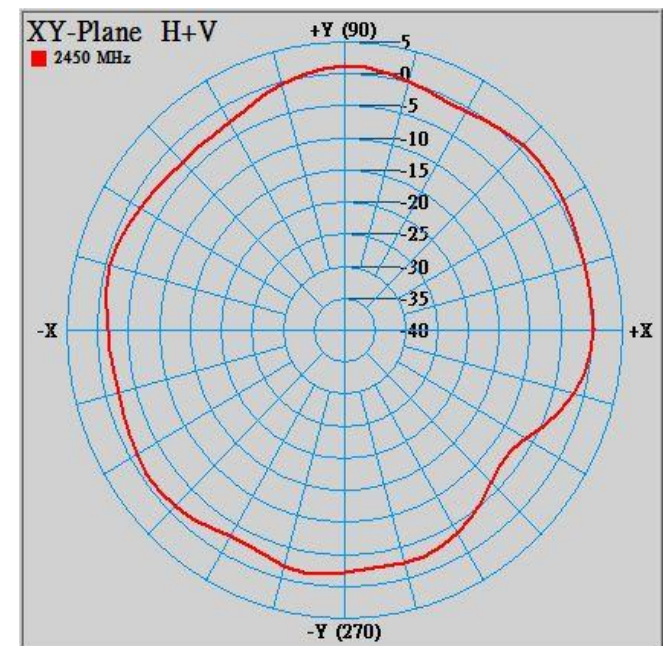
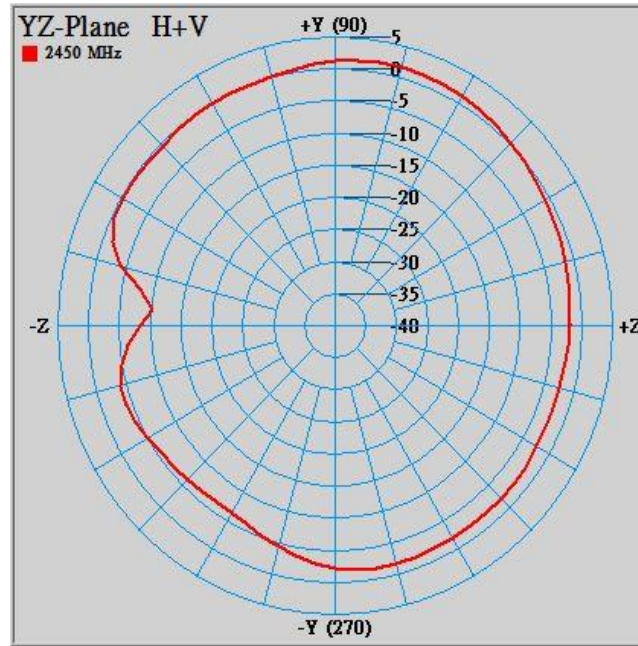
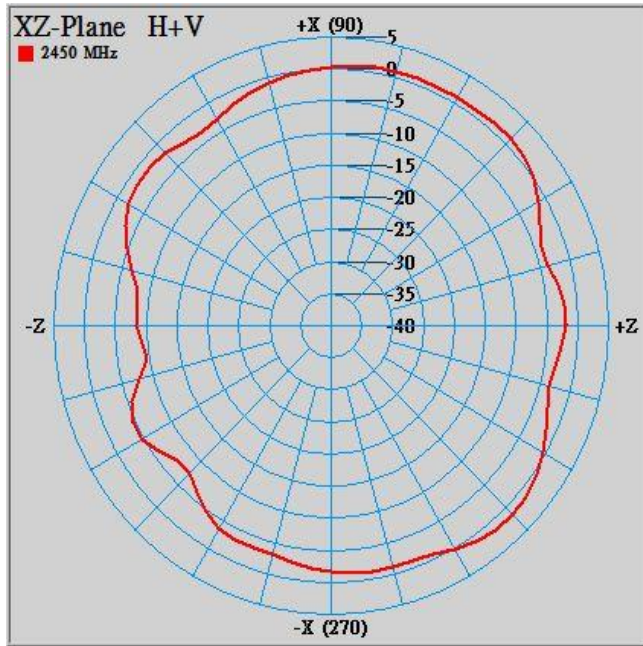
2D Radiation Pattern Results

Ant2_dual band_5G



2D Radiation Pattern Results

Ant3_ single band_BT



Efficiency & Peak gain table

Antenna #	Ant 1							Ant 2							Ant 3		
Frequency (MHz)	2400	2450	2480	5150	5350	5500	5850	2400	2450	2480	5150	5350	5500	5850	2400	2450	2480
Peak Gain (dBi)	3.0	3.2	3.4	4.2	4	4.3	4.2	3.1	3.2	3.2	4.3	4.2	4.1	4.0	2.7	2.5	2.4
Eff.(%)	60	61	63	62	65	64	66	60	65	61	62	65	68	64	65	66	63

- **Antenna peak gain**
2.4 GHz > 2.4 dBi ; 5 GHz > 4 dBi
- **Antenna efficiency**
2.4 GHz band :around 60% ; 5 GHz band : around 60%
- **Antenna isolation**
2.4 GHz band < -20 dB ; 5 GHz band < -20 dB
- **Antenna return loss**
2.4 GHz band < -10 dB ; 5 GHz band < -10 dB ;

A landscape featuring a rolling green hill under a clear blue sky. A single, full-canopied tree stands on the right side of the hill. The overall scene is bright and open.

LITEON

Best Partner in Networking,
Eco-Friendly and Intelligent Technologies.

Thank You