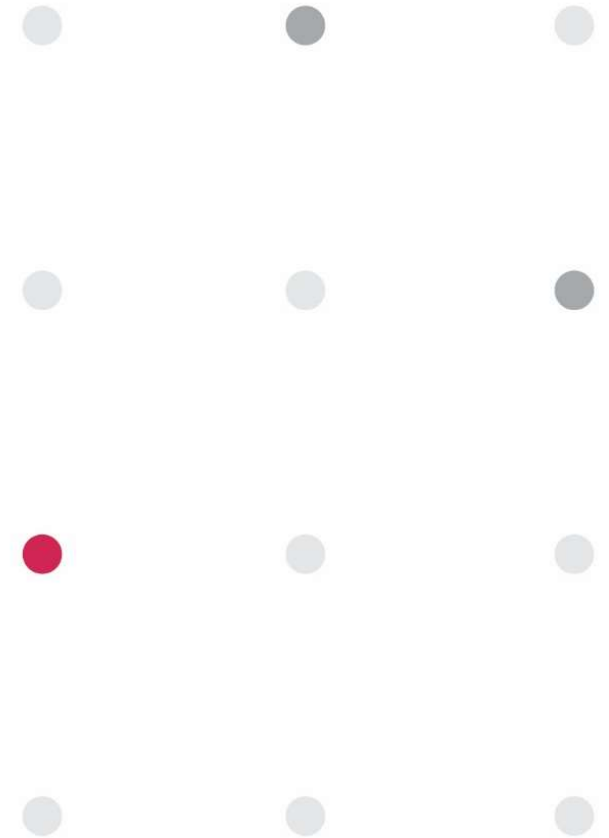


PSA

PASSIVE SYSTEM ALLIANCE
INPAQ TECHNOLOGY CO., LTD.



Antenna Passive Report

Presented by :陳彥吉 Ian Chen, RF R&D Dept.

INPAQ Technology Co., Ltd.

公司地址:苗栗縣竹南鎮公義里11鄰科義街90號

Location: No. 90, Keyi St., 11th Neighborhood, Gongyi Vil., Zhunan Township, Miaoli County 350402, Taiwan (R.O.C.)

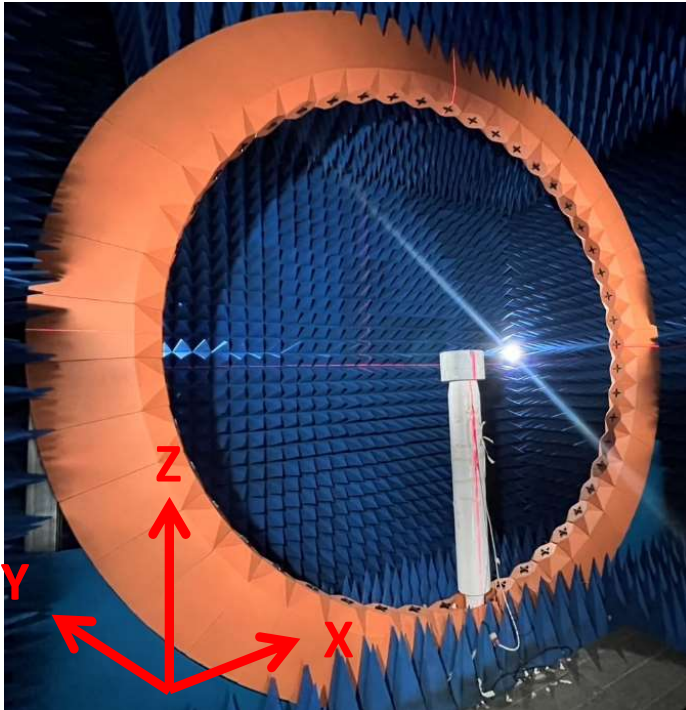
Last updated in Oct, 15, 2024

Contents

- **Test Environment**
- **Matching circuit**
- **Results**
 - Return Loss
 - Efficiency & Peak Gain
 - 2D&3D Radiation Pattern



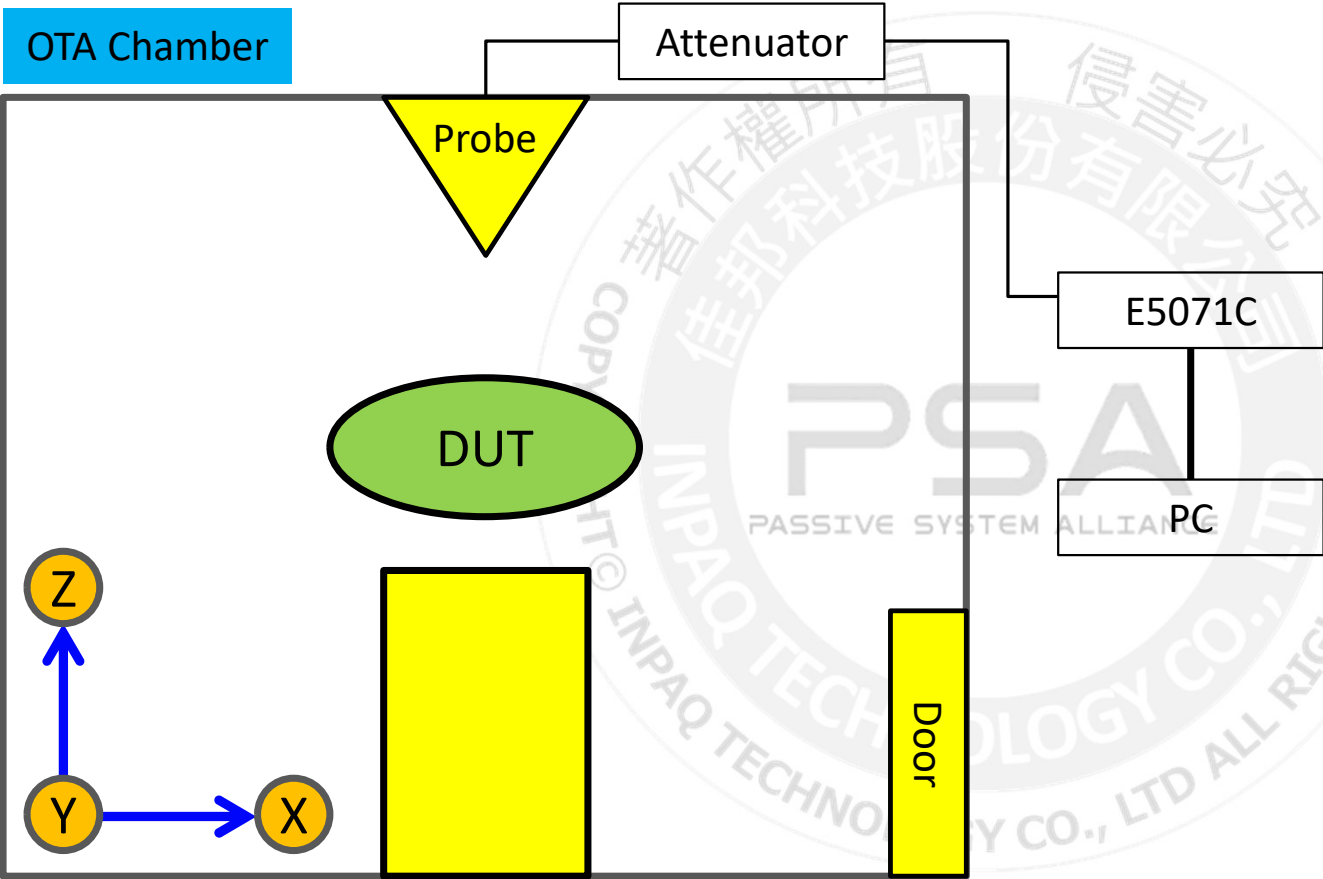
Test Environment (1/2)



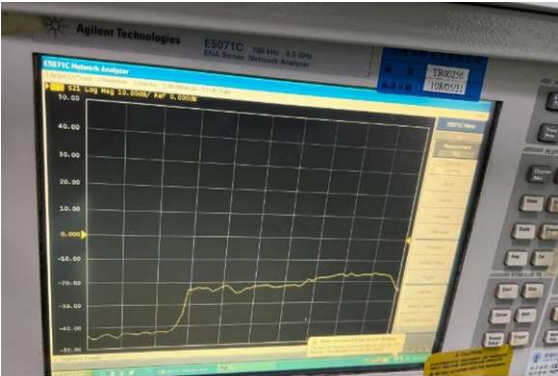
OTA chamber MPS4842 system (Multi-Probe)

1. Antenna passive test 700MHz~6000MHz
2. Long Term Evolution (LTE SISO) OTA Test
3. GSM/GPRS/EDGE on 850/900/1800/1900 OTA Test
4. WCDMA/HSDPA/HSUPA on FDD I~IX OTA Test
5. CDMA2000/1xEV-DO on 850/1900/AWS OTA Test
6. ECC
7. GPS Performance
8. Active Measurement: TRP, EIRP, EIS, TIS, Non-Signaling
9. Chamber Dimension: L*W*H= 4.3m*4.3m*4.2m

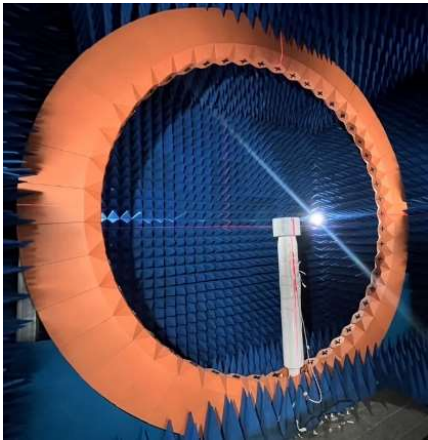
Test Environment (2/2)



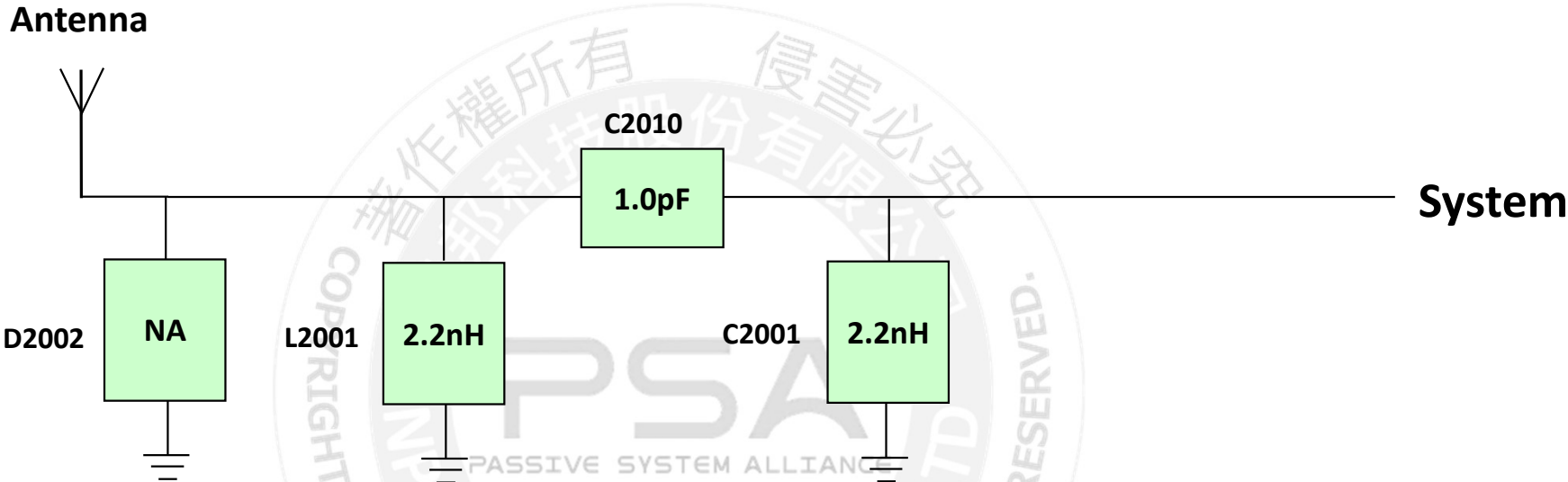
Agilent E5071C



Satimo TEM24



Matching circuit

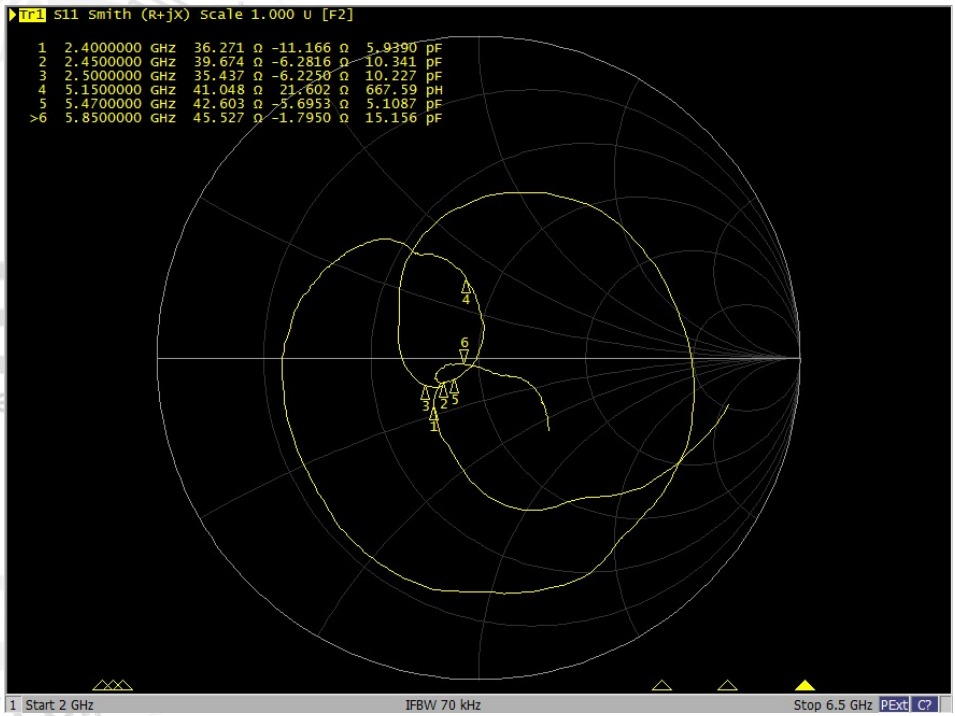
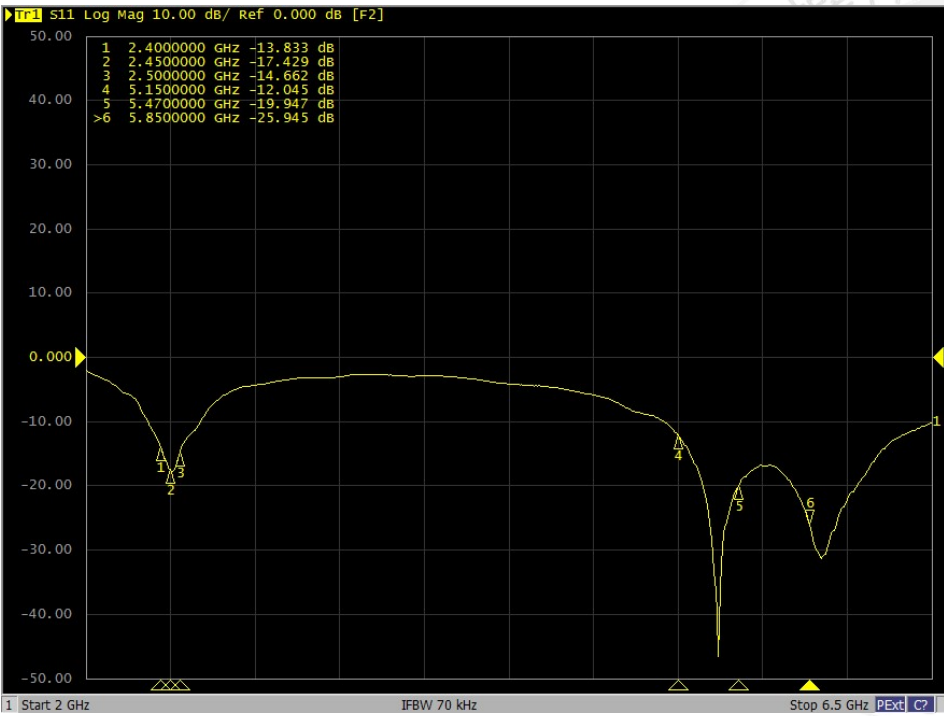


Component	D2002	L2001	C2010	C2001
Vendor	NA	Murata	Murata	Murata
MPN	NA	LQP03TN2N2B02D	GJM0335C1E1R0 WB01D	LQP03TN2N2B02D
Value	NA	2.2nH	1.0pF	2.2nH

Results

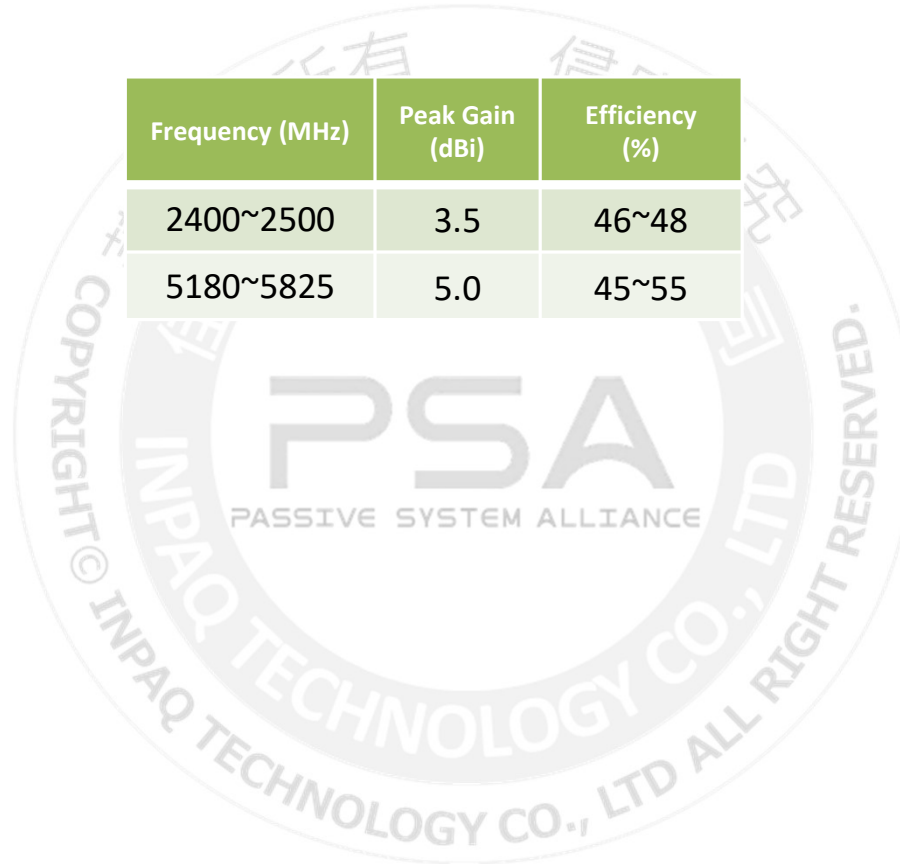


Return Loss



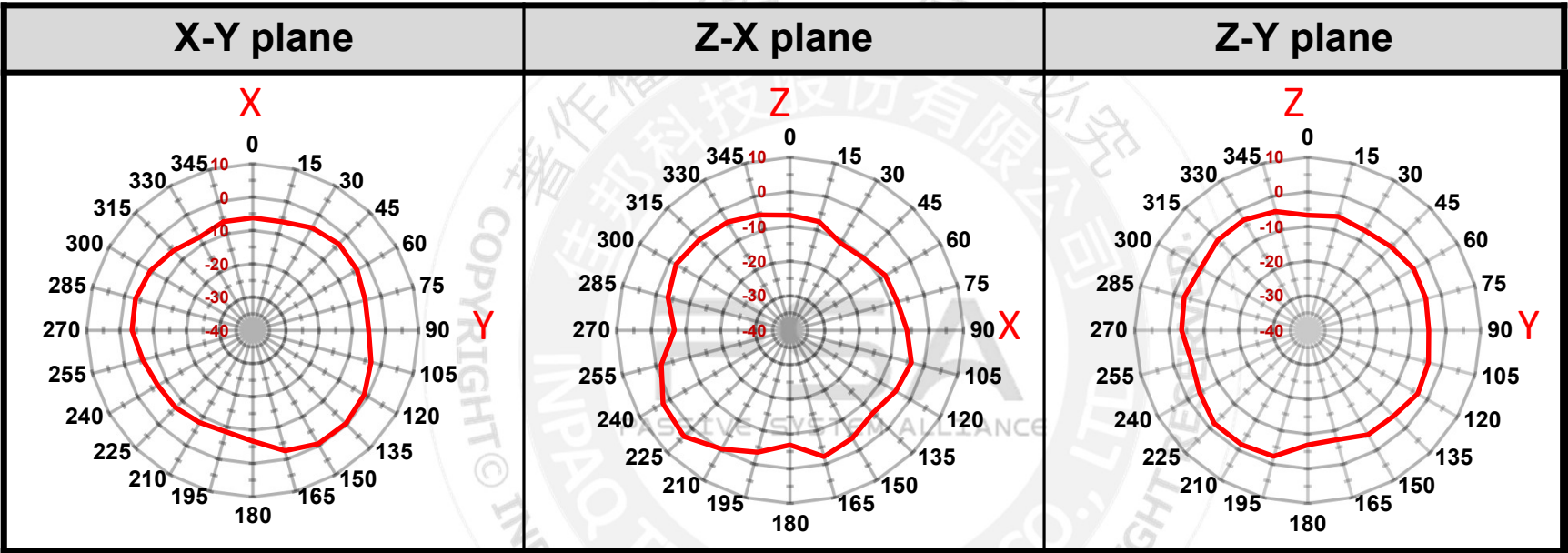
Efficiency and Peak Gain

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400~2500	3.5	46~48
5180~5825	5.0	45~55



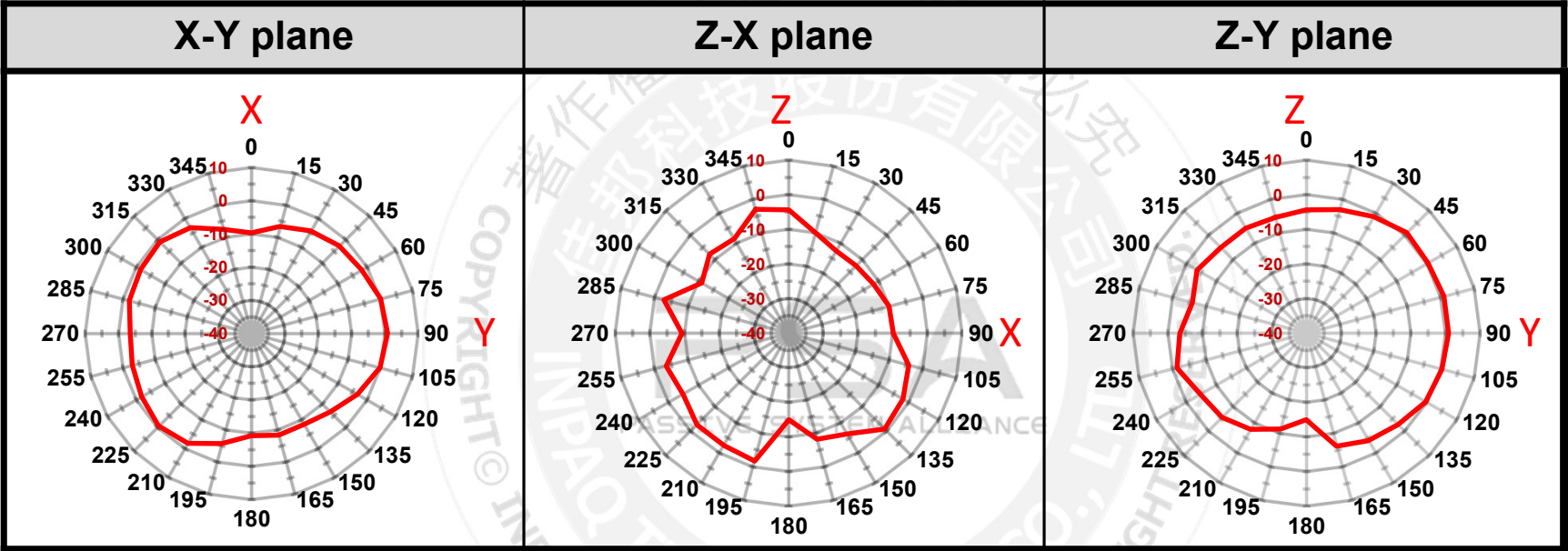
2D Radiation Pattern Results (1/2)

2450MHz



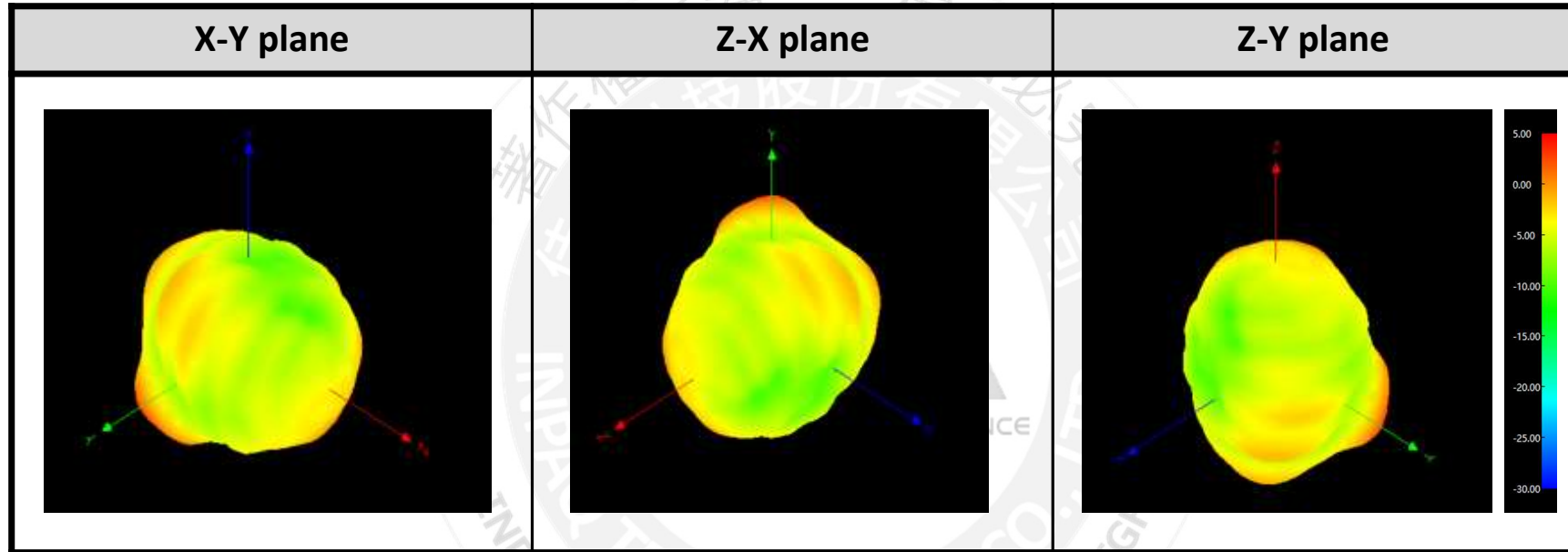
2D Radiation Pattern Results (2/2)

5500MHz



3D Radiation Pattern Results (1/2)

2450MHz



3D Radiation Pattern Results (2/2)

5500MHz

