

1. Antenna Information

Antenna Manufacturer	Etheta Communication Technology (shenzhen) co..Ltd
Manufacturer Address	Block B and D, 3rd Floor, Building 1, Baisha Science and Technology Industrial Park, 3011 Shahe West Road, Nanshan District, Shenzhen
Antenna Type	FPC
Antenna Model	HDT559
Antenna Frequency Range	2400 - 2500 MHz
Antenna Gain	1.99 dBi
Antenna Polarity	Linear polarization
Antenna Size	51.38 mm (L) x 12.62 mm (W) x 0.25 mm (H)
Test Laboratory	Etheta Communication Technology (shenzhen) co..Ltd
Laboratory Address	Block B and D, 3rd Floor, Building 1, Baisha Science and Technology Industrial Park, 3011 Shahe West Road, Nanshan District, Shenzhen

3. Test Equipment & Conditions

3.1 Test instrument

VSWR is tested using Agilent E5071C connected to a hand mechanism, and the status is free space.

3.2 Test environment and methods

Dark room specifications: GTS1800/SATIMO SG24

SCDMA test equipment: CMW500

LTE-TDD/FDD-SCDMA test equipment: CMW500

WCDMA/GSM/CDMA test equipment: CMW500

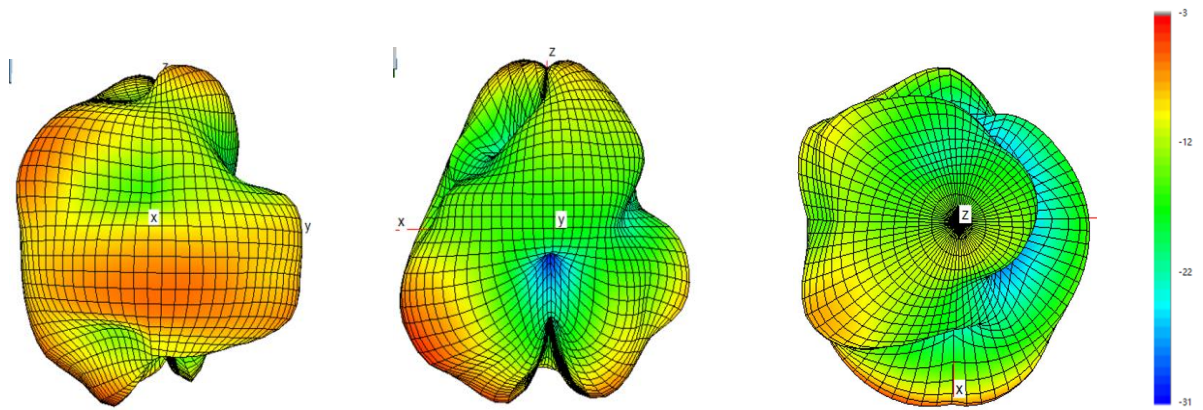
Passive efficiency testing equipment: Agilent E5071C



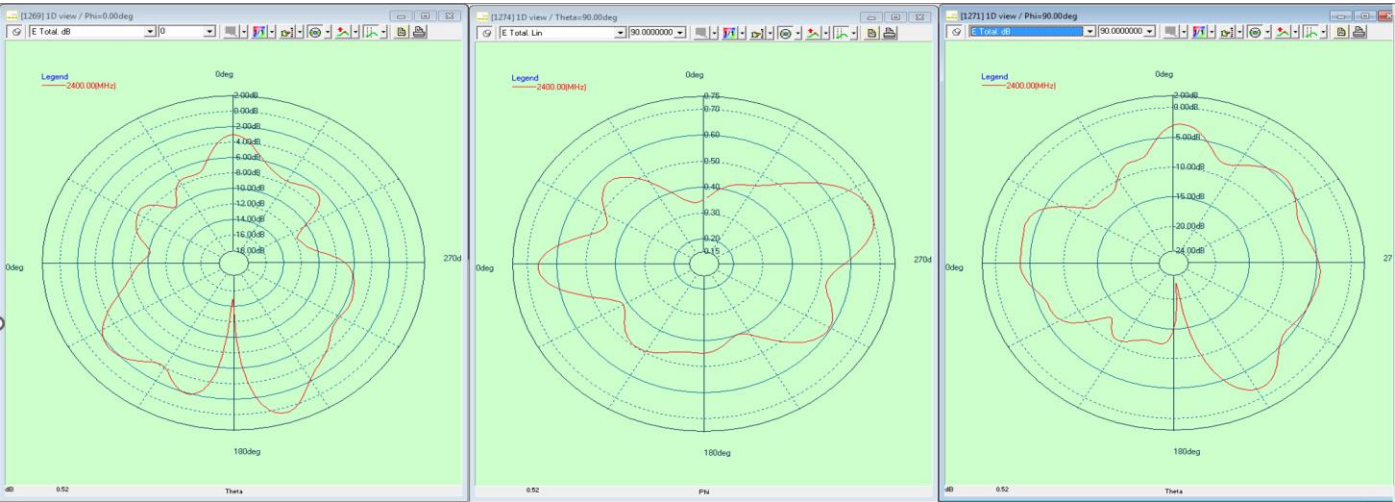
4. Antenna Gain

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.04	1.29	1.35	1.62	1.44	1.99	1.82	1.75	0.49	0.49	0.63
Efficiency (dB)	-5.06	-4.88	-4.74	-4.67	-4.53	-4.44	-4.60	-4.79	-5.05	-5.15	-5.05
Efficiency (%)	31%	33%	34%	34%	35%	36%	35%	33%	31%	31%	31%

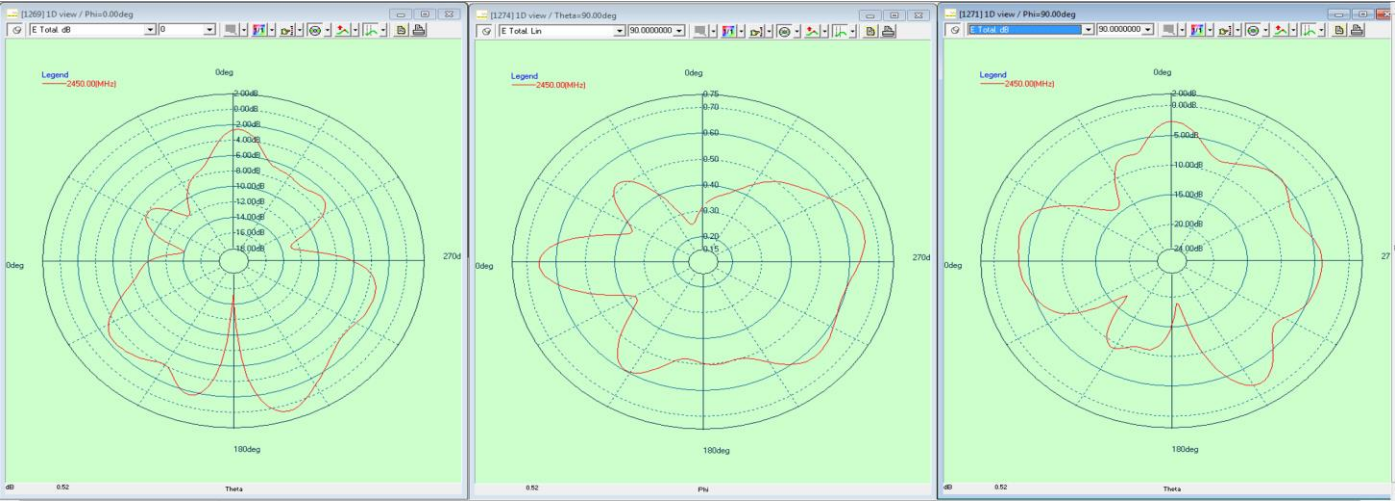
5. Antenna Radiation Pattern



2400 MHz



2450 MHz



2450 MHz

