# 1. Antenna Information

Antenna Manufacturer	Etheta Communication Technology (shenzhen) coLtd						
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) coLtd						
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

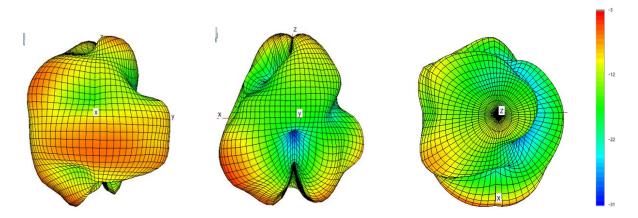




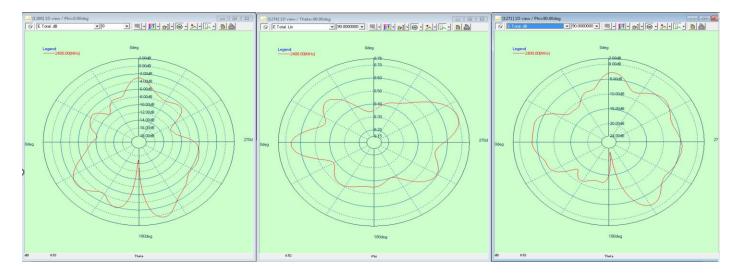
## 4. Antenna Gain

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%

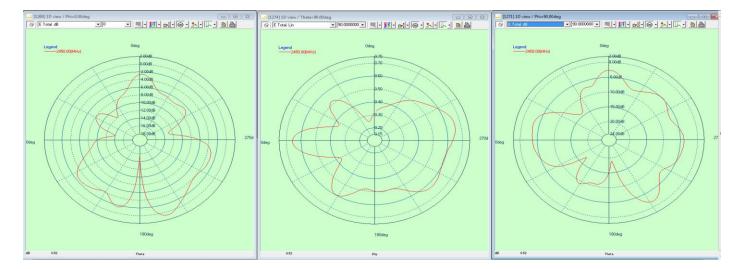
## 5. Antenna Radiation Pattern



### 2400 MHz



### 2450 MHz



### 2450 MHz

