

深圳得辉达智能科技有限公司

Shenzhen Dehuida Intelligent Technology Co., Ltd

**Model of prototype: SM2201E**

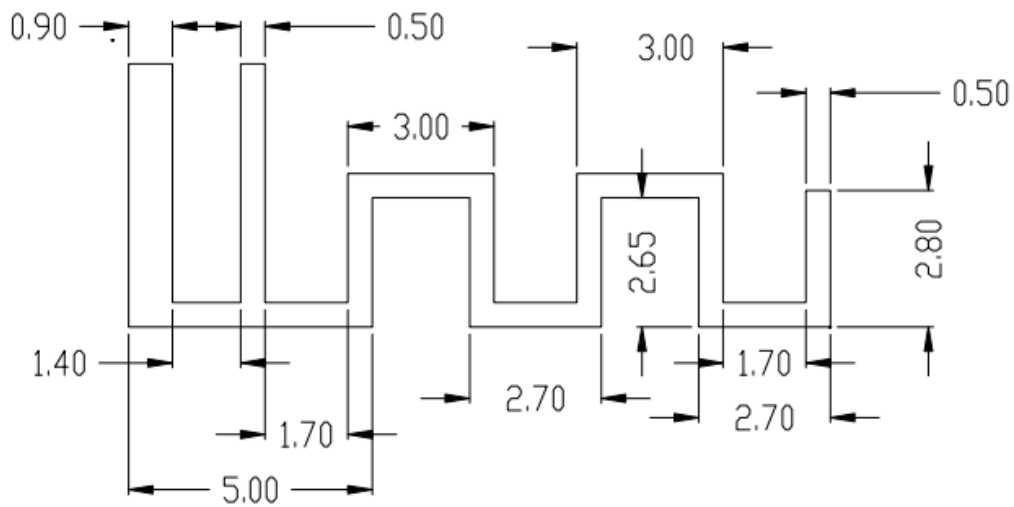
Supplierspecifications: 2.4G BT antenna

Supplier model: MDZ-34-DB-A1

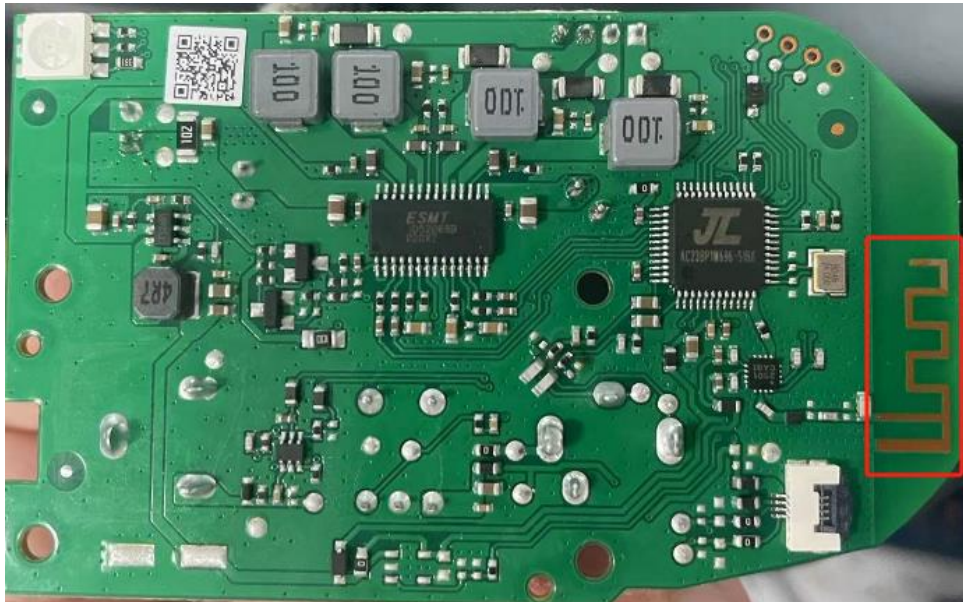
**Antenna type: PCB Antenna**

### 1. Antenna specifications and model

Antenna specifications

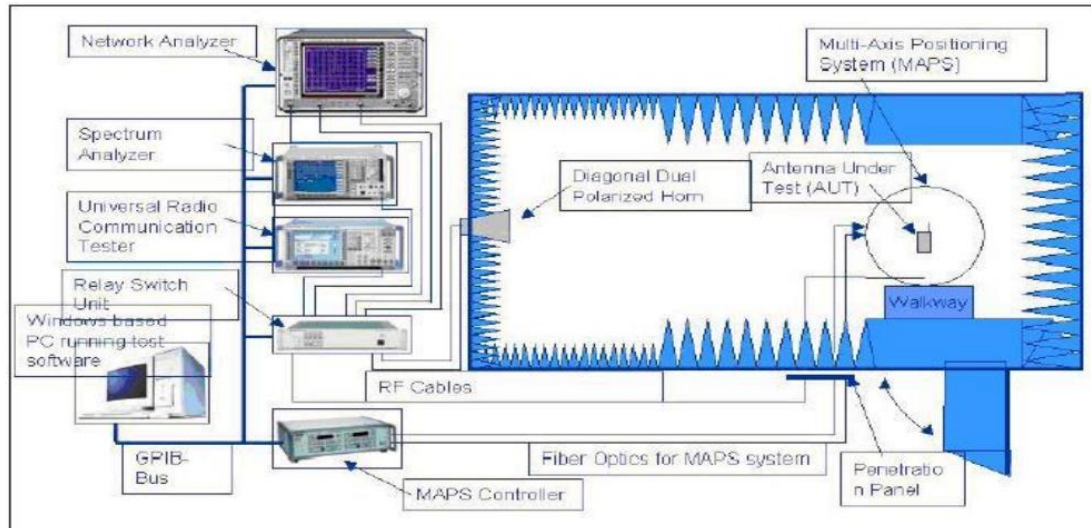


Supplier model

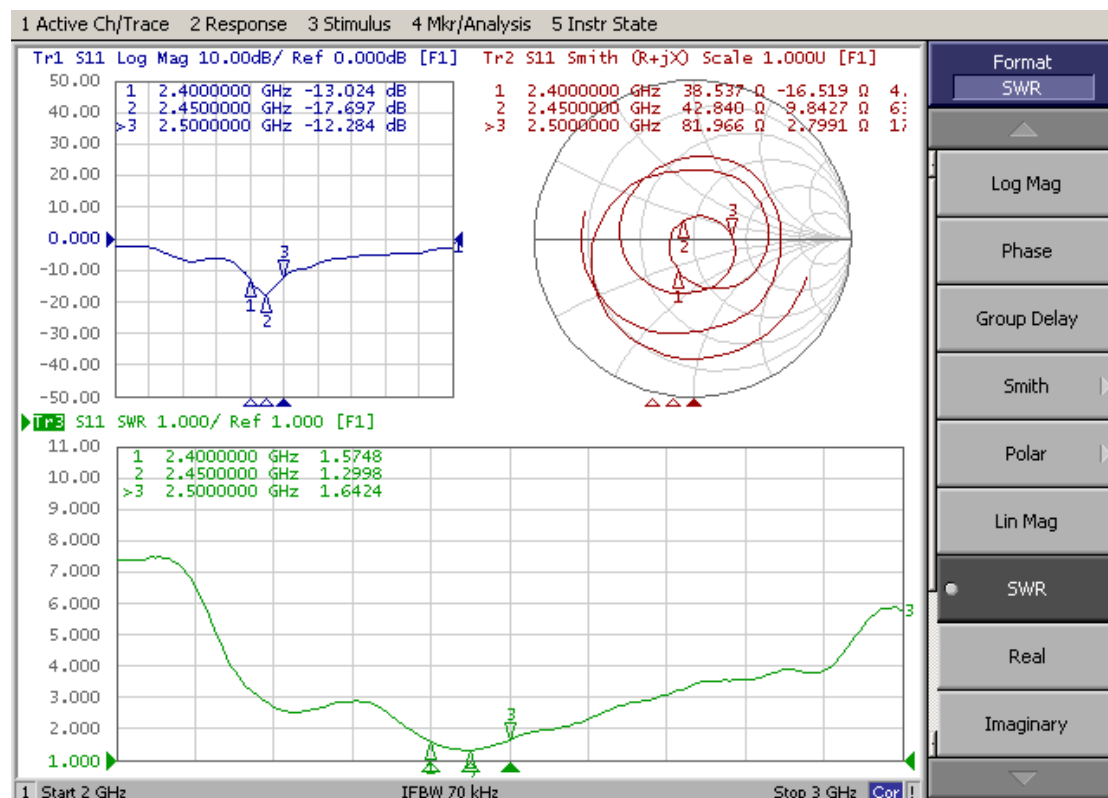


## 2. OTA test macro

1. Test instrument and environment: CTIA 743 darkroom, 8960 / 5515c, the mobile phone is placed back to the turntable 4 meters away from the standard horn antenna:



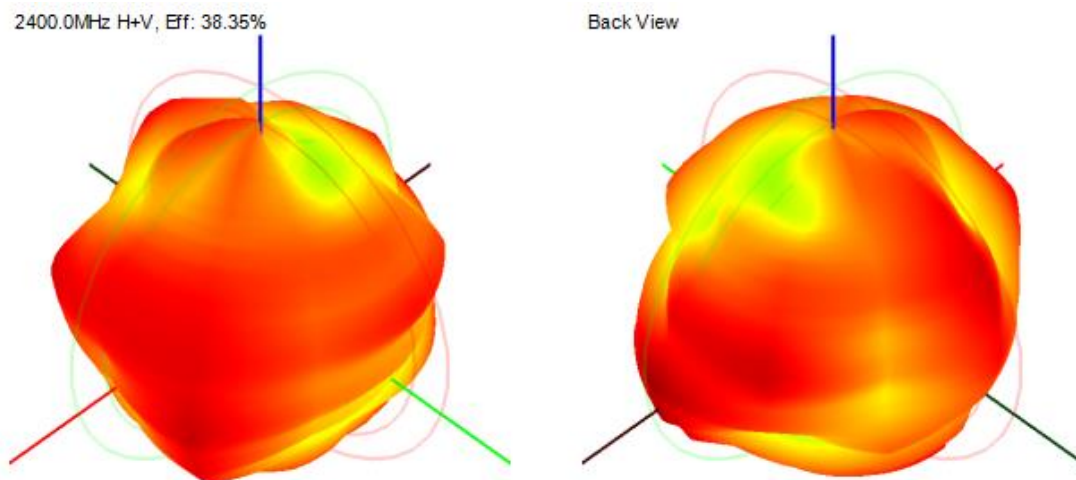
## 3. Antenna passive data S11, ReturnLoss, Smith



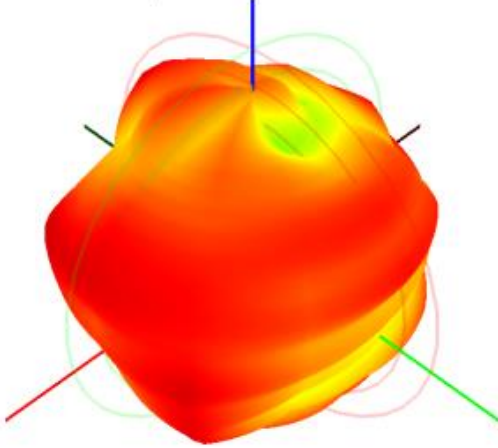
#### 4. Gain of efficiency:

SM2201E 无源 OTA PCB 天线	Frequency (MHz)	Efficiency (%)	Efficiency (dBi)	Gain (dBi)
	2400	38.35%	-4.2	1.5
	2410	35.19%	-4.5	1.0
	2420	37.15%	-4.3	1.3
	2430	33.45%	-5.0	1.0
	2440	35.11%	-5.4	1.1
	2450	34.52%	-4.6	1.0
	2460	37.05%	-4.3	1.3
	2470	38.82%	-4.2	1.3
	2480	39.79%	-4.1	1.4
	2490	40.49%	-4.6	1.5
	2500	40.82%	-4.3	1.4

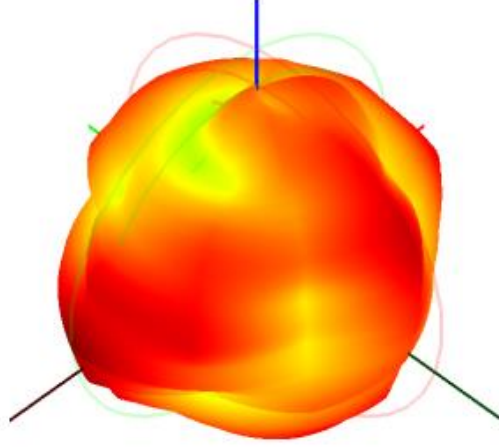
#### 5. 3D antenna diagram



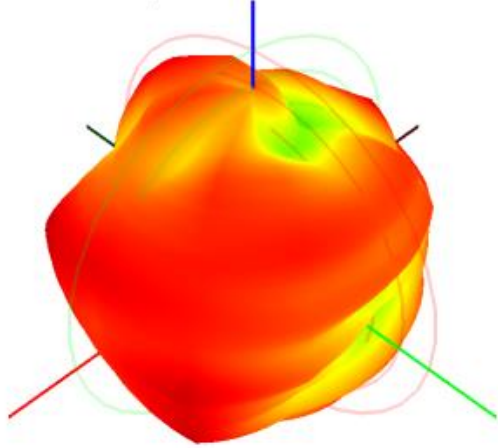
2440.0MHz H+V, Eff: 35.11%



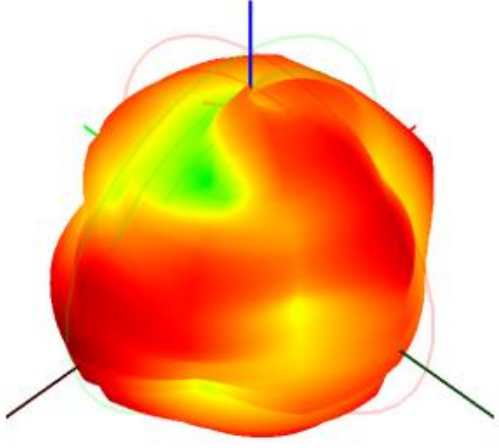
Back View



2480.0MHz H+V, Eff: 39.79%

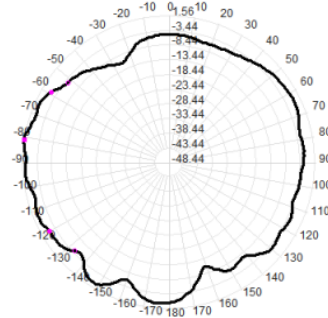


Back View

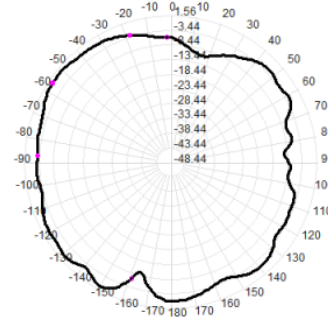


## 6. 2D antenna diagram

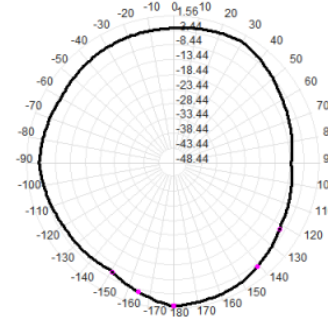
2400.0MHz Total(E1), Max= 1.50dBi

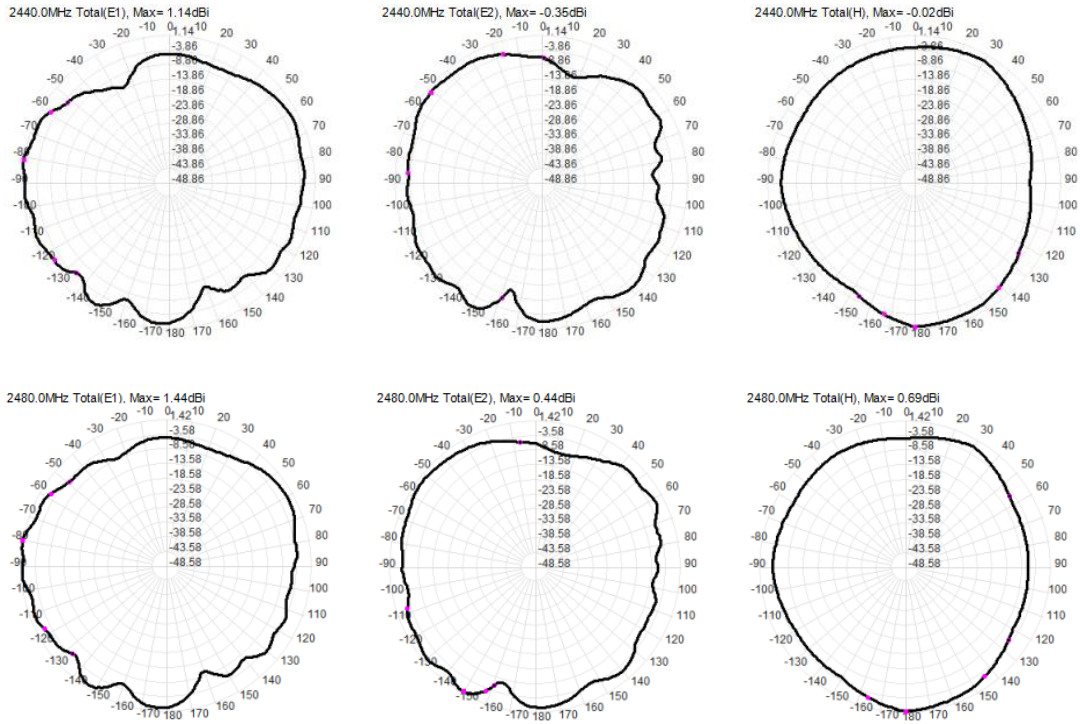


2400.0MHz Total(E2), Max= 0.20dBi




2400.0MHz Total(H), Max= 0.35dBi





7. Antenna drawing:

 <b>赣州得辉达科技有限公司</b> GANZHOU DEHUIDA ELECTRONICS CO., LTD.	机型: SM2201E	A 4	单位: mm	材 质:	绘 图: 向小鹏
	编号: MDZ-34-DB-A1			表面处理:	审 核:
	品名: 天线尺寸	A 4	单位: mm	比 例: 1	生效日期: 2024-07-30
	版本: 1.0			页 数: 1	

