

Datasheet

SPEC: 2.4G and 5G/L=200MM/The first generation of IPEX

DATE: 2023/05/05

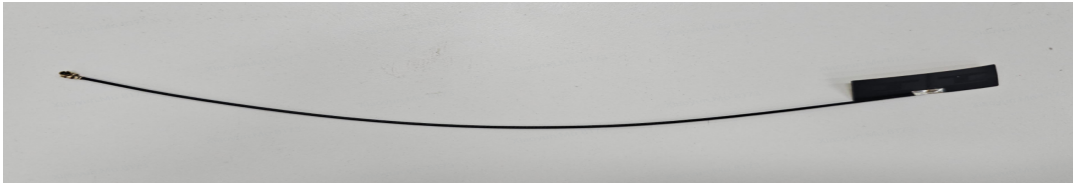
Factory confirmed:

sector	review	approve
RF	Jingxiong.Liu	bin.Li
SD	Dong.Xie	bin.Li
DQE	Fei.Wang	bin.Li

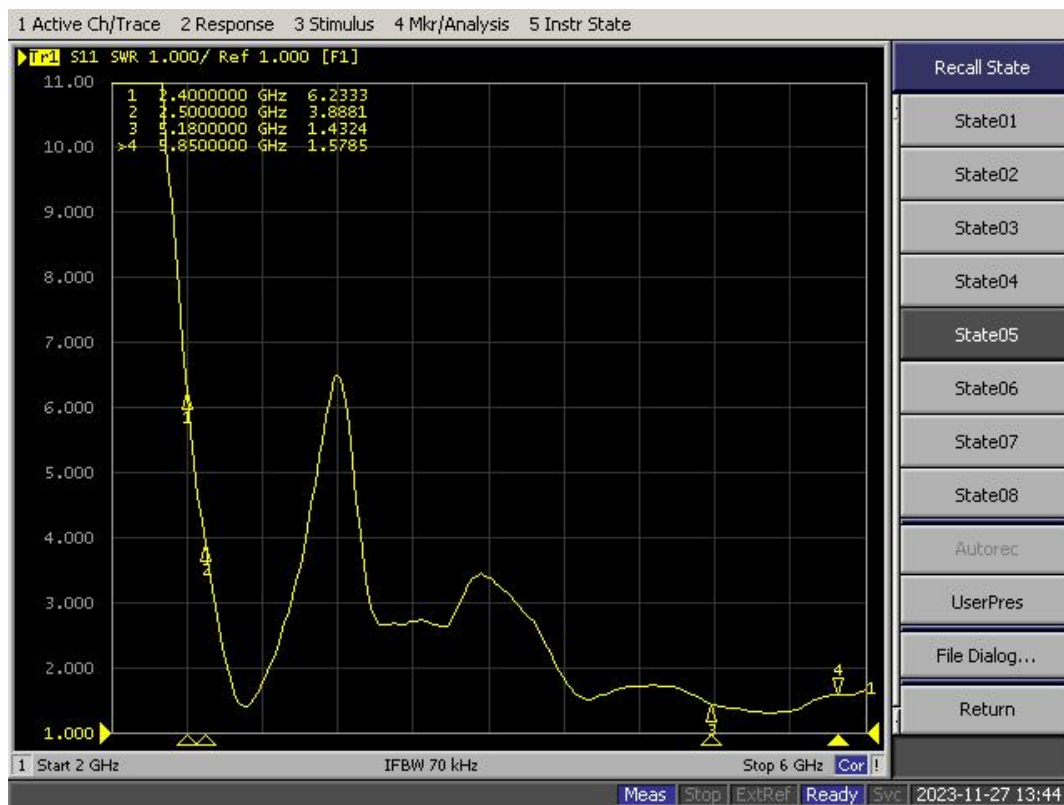
Customer confirmed:

check	review	approve
Xue.Li	Xin.Zhang	Heng.Wang

1. Product images:



2. Electrical performance test report: **VSWR:**



3.Product performance parameters:

Electrical Specifications	
Frequency Range (MHz)	2400-2500/5150-5850
Input Impedence (Ω)	50
V.S.W.R	≤ 2.0
Gain (dBi)	3.0 ± 0.5
Polarization Type	Vertical
Maximum power(W)	10W
Vertical lobe Angle (E)	$45 \sim 60^\circ$
Water plane lobe Angle (H)	360°
Mechanical Specifications	
Material	FPC
Connect Type	IPEX(First generation)
Size	FPC: 35*11mm*0.25mm
Operating Temp	$-25 \sim +75^\circ\text{C}$

4. Product Size:

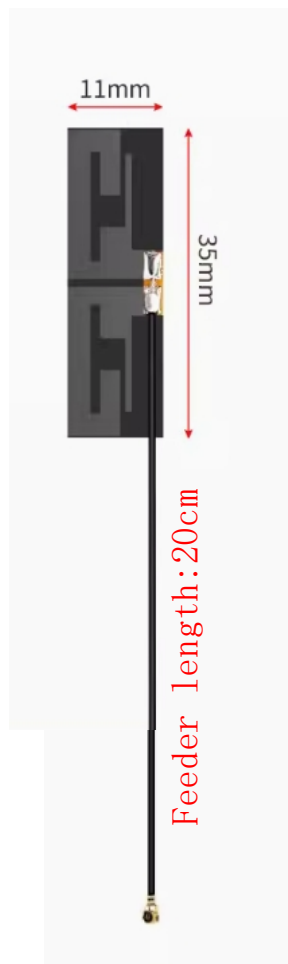
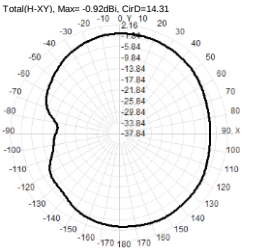
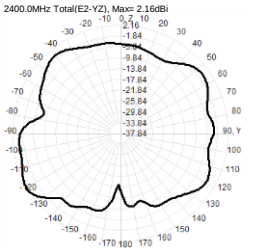
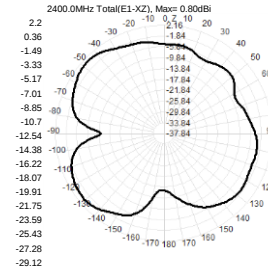
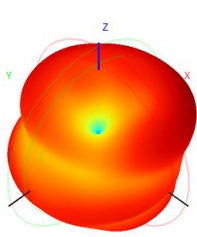
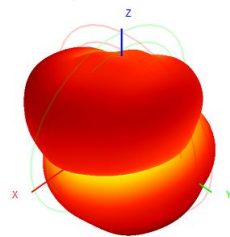


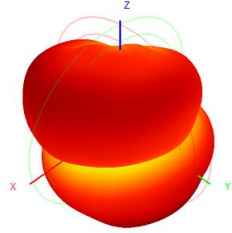


Figure 10 consists of three subplots comparing the proposed algorithm with other algorithms. The x-axis for all plots is Frequency (MHz), ranging from 2400.0 to 2500.0.

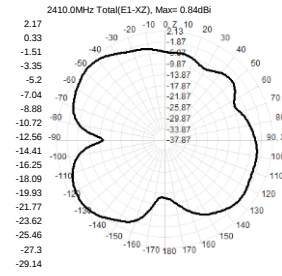
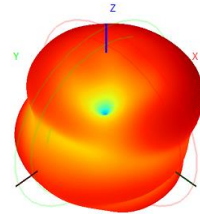
- Left Subplot:** Efficiency (Max-Min) and Gain (dBi). The y-axis ranges from 0.00 to 100.00. Efficiency (Max-Min) is shown as red circles, and Gain (dBi) is shown as purple circles. Efficiency (Max-Min) starts at approximately 50.00 and increases to about 60.00. Gain (dBi) starts at approximately 2.00 and increases to about 3.00.
- Middle Subplot:** Lower Hem. Efficiency (%). The y-axis ranges from 0.00 to 100.00. The plot shows two data series: Lower Hem. Efficiency (%) (blue circles) and Efficiency (%) (red circles). Both series are relatively flat, with Lower Hem. Efficiency (%) around 30.00 and Efficiency (%) around 25.00.
- Right Subplot:** Efficiency ThetaPol (%) and Efficiency PhiPol (%). The y-axis ranges from 0.00 to 100.00. The plot shows two data series: Efficiency ThetaPol (%) (red circles) and Efficiency PhiPol (%) (blue circles). Efficiency ThetaPol (%) starts at approximately 35.00 and increases to about 45.00. Efficiency PhiPol (%) starts at approximately 15.00 and increases to about 18.00.



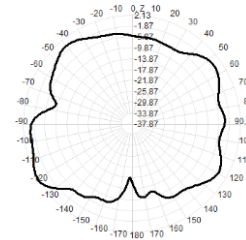
2410.0MHz H+V, Eff: 50.6%



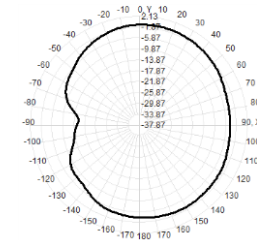
Back View



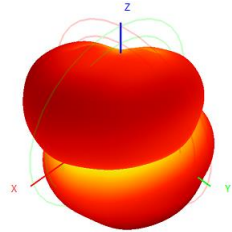
2410.0MHz Total(E2-YZ), Max= 2.13dBi



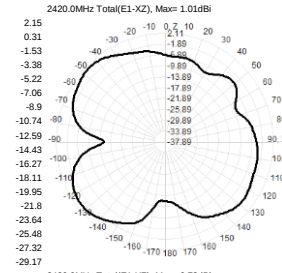
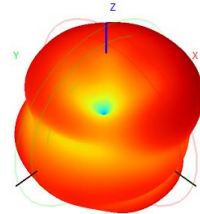
Total(H+XY), Max= -0.97dBi, CirD=14.62



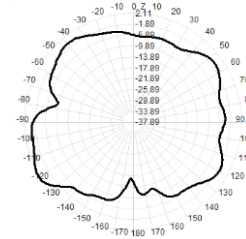
2420.0MHz H+V, Eff: 51.3%



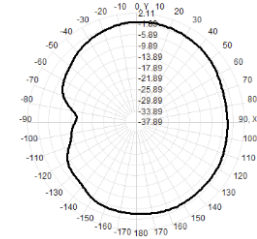
Back View



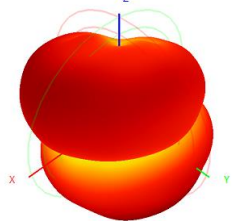
2420.0MHz Total(E2-YZ), Max= 2.11dBi



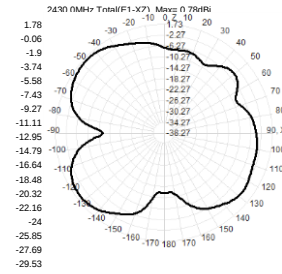
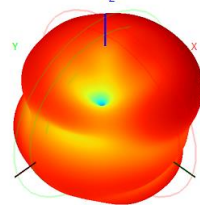
Total(H+XY), Max= -1.06dBi, CirD=15.02



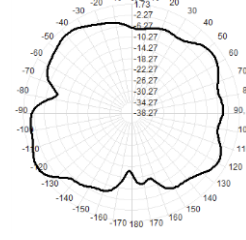
2430.0MHz H+V, Eff: 48.6%



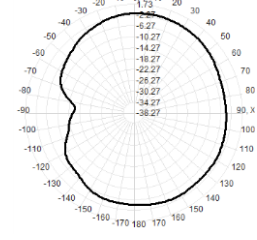
Back View



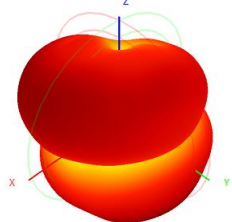
2430.0MHz Total(E2-YZ), Max= 1.73dBi



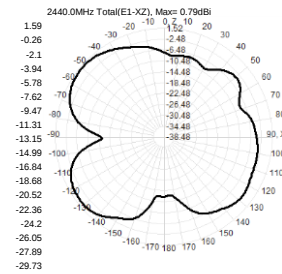
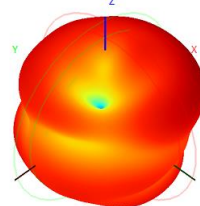
Total(H+XY), Max= -1.65dBi, CirD=15.03



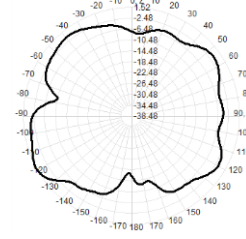
2440.0MHz H+V, Eff: 48.5%



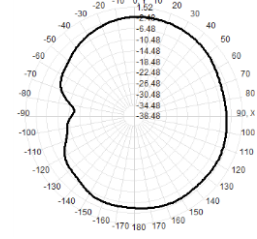
Back View



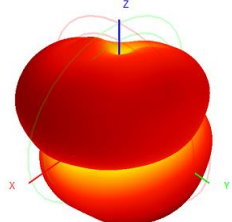
2440.0MHz Total(E2-YZ), Max= 1.52dBi



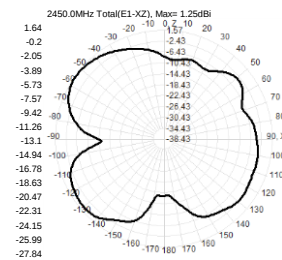
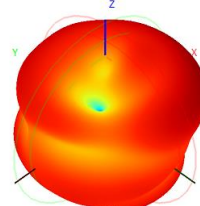
Total(H+XY), Max= -1.99dBi, CirD=14.42



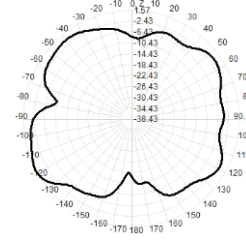
2450.0MHz H+V, Eff: 51.2%



Back View



2450.0MHz Total(E2-YZ), Max= 1.57dBi



Total(H+XY), Max= -2.24dBi, CirD=13.49

