SPECIFICATION APPLICATION FOR APPROVAL					
Antenna Type: Model Number:	PIFA antenna B112				
Release : Full release					
Customer	Customer Approval				
Program Manager	R & D director				
Peter Solymos	Peter Solymos				
Supplier	Supplier Approval				
Program Manager	R & D director				
郝井强(Jingqiang Hao)	孙高鹤(Gaohe Sun)				

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Company:Tianjin Yingshun Communication Technology Co., Ltd Address: Room 805, Building 2, Fubao Industrial Park, Zhangjiawo Town, Xiqing District, Tianjin

#### REVISION

REV.NO.	DATE	DESCRIPTION
0	2024/02/01	APPROVAL

## 1. ELECTRICAL SPECIFICATIONS

## 1-1 FREQUENCY BAND

Freq. Band	Freq.(MHz)			
2.4G	2400-2490MHz			

#### 1-2 IMPEDANCE

Nominal Impedance(including matching circuit) : 50 ohms

# 1-3 MATCHING REQUIREMENTS

The matching circuit on the PCB of the handset is according to Figure PCB. Optimum matching circuit is highly dependent on the handset and thus. Final matching circuit layout and values will be defined when handset is available

#### **2.ENVIRONMENTAL CHARACTERISTICS**

Customer No: NSV International Corp	File: 2024/02/01		
Test Condition: FREE SPACE	Note: Gain/ Efficiency		
Confirmation: Jing Qiang Hao	Engineer: GaoHe Sun		

NO.	ITEM	TEST CONDITION		
		1.Temperature: 24.3±1℃		
1	1 Normal condition	2. Humidity: 35%±2%		
		3. Pressure: 101.2KPa		

#### 3. Test equipment

Equipment	Model No	Manufactory	Series No
ENA vector analyzer	E5071C	Keysight	MY46900684
OTA chamber	FT-0024	FEITU	FS20200302

#### 5. PACKAGING

Antenna is PIFA antenna, packaging with PCB board.

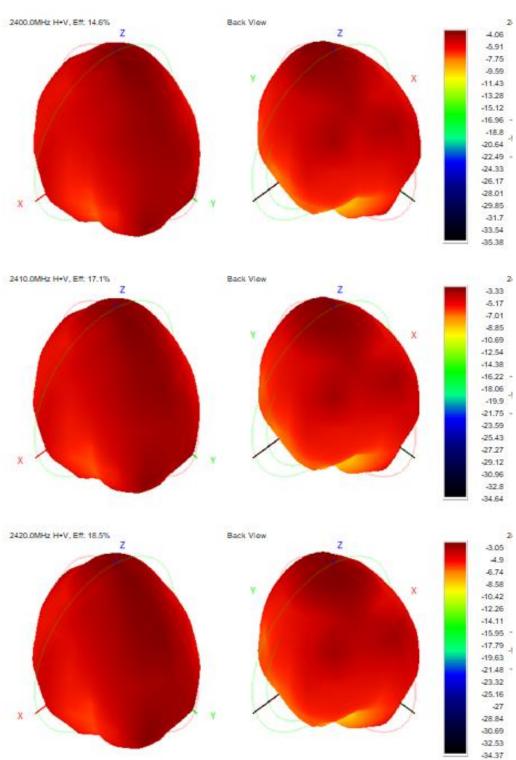
#### 6. <u>APPENDIX</u>

All of the specifications are shown as the attached files.

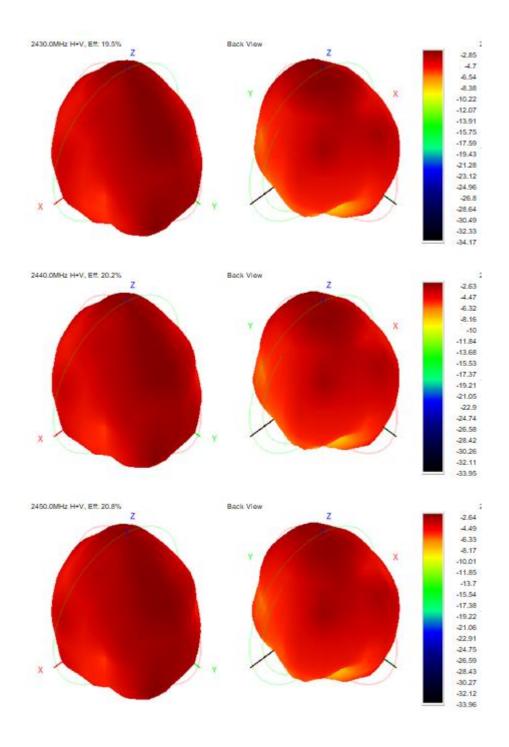
# **Antenna Test Date**

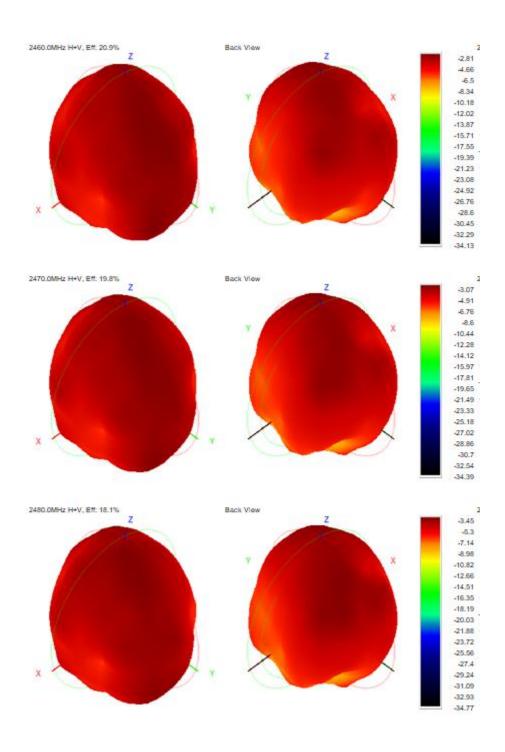
#### -: Antenna Efficiency&PeakGain

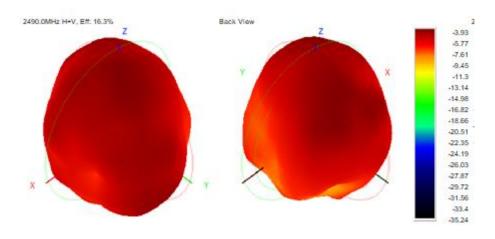
Frequency ID	1	2	3	4	5	6	7	8	9	10
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0
Efficiency (dBi)	-8.34	-7.67	-7.32	-7.10	-6.94	-6.83	-6.80	-7.03	-7.42	-7.89
Gain (dBi)	-4.06	-3.33	-3.05	-2.85	-2.63	-2.64	-2.81	-3.07	-3.45	-3.93
Efficiency (%)	14.64	17.10	18.53	19.51	20.25	20.75	20.89	19.82	18.11	16.27
Directivity (dB)	4.28	4.35	4.27	4.24	4.30	4.19	3.99	3.96	3.97	3.96
Peak Gain Position (Theta)	0.00	0.00	0.00	45.00	45.00	45.00	30.00	30.00	15.00	15.00
Peak Gain Position (Phi)	120.00	120.00	90.00	75.00	75.00	75.00	60.00	60.00	45.00	45.00
Efficiency ThetaPol (%)	5.38	6.32	6.92	7.37	7.79	8.08	8.19	7.79	7.11	6.36
Efficiency PhiPol (%)	9.26	10.78	11.61	12.14	12.46	12.67	12.69	12.04	11.00	9.90
Upper Hem. Efficiency (%)	9.05	10.64	11.55	12.18	12.66	12.95	13.08	12.44	11.36	10.21
Lower Hem. Efficiency (%)	5.59	6.46	6.99	7.33	7.59	7.81	7.81	7.38	6.75	6.06



#### 三: Antenna 3D (2400MHz-2490MHz)







四: Test Pic

