



S21WFI0071A

G54 ANTENNA SPEC FOR CERTIFICATION

Date: March-30-2023

Outline

- 1. Antenna Vendor \ Part Number**
- 2. Measurement Description**
- 3. Antenna Peak Gain**
- 4. Antenna 2D Radiation Pattern**
- 5. Vendor Profile**



Antenna Vendor \ Part Number	
Vendor	Part Number
Wanshih	S21WFI0071A

	Part Number
Ant. 1	WPB866
Ant. 2	WPB867
Ant. 3	WPB868
Ant. 4	WPB869
Ant. 5	WPB870
Ant. 6	WPB871
Ant. 7	WPB872
Ant. 8	WPB873



Test Method Reference Basis (Measurement setup info. & Test method , Test Procedure)

- 1 、 Measured according to the method defined by CTIA ◦

Test site information(like Chamber) 、 Measuring instrument 、 Instrument Calibration Data

- 1 、 OTA Chamber: OTA 800;8m(L)x4m(W)x4m(H) ◦
- 2 、 Network Analyzer : Agilent E5071C



Peak Calculation formula & Process

- 1 、 peak Gain The value is actually measured in the OTA chamber , non-calculated ◦

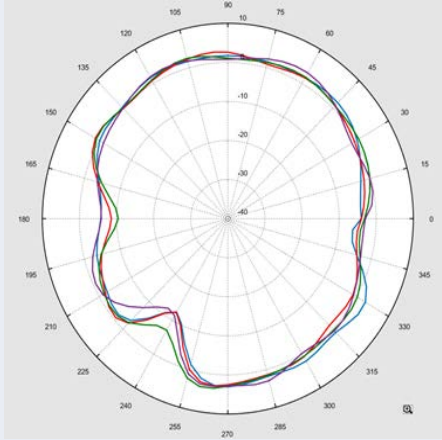
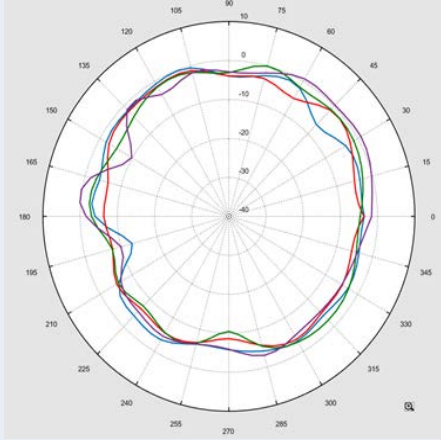
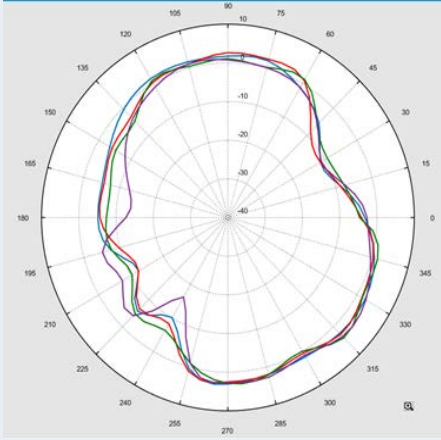
Antenna Peak Gain

	2400 - 2500 MHz		5150 - 5850 MHz		5925 - 7125 MHz	
	Value	Angle	Value	Angle	Value	Angle
Ant. 1			4.92 dBi	Theta : 45 Phi : 300		
Ant. 2	4.14 dBi	Theta : 90 Phi : 165	4.75 dBi	Theta : 120 Phi : 195		
Ant. 3			4.78 dBi	Theta : 105 Phi : 195		
Ant. 4	2.64 dBi	Theta : 90 Phi : 30	4.60 dBi	Theta : 120 Phi : 30		
Ant. 5					4.94 dBi	Theta : 90 Phi : 285
Ant. 6					5.86 dBi	Theta : 90 Phi : 120
Ant. 7					4.77 dBi	Theta : 135 Phi : 330
Ant. 8					5.83 dBi	Theta : 90 Phi : 270



Ant. 1

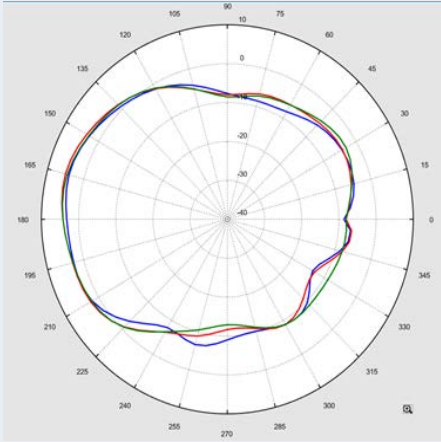
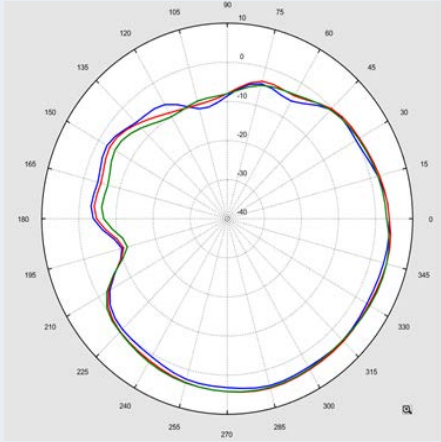
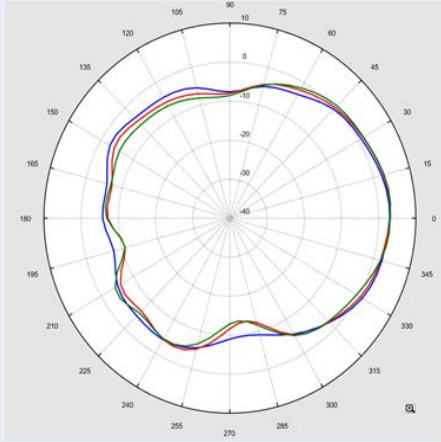
Antenna 2D Radiation Pattern

Frequency	5150 - 5850 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 2

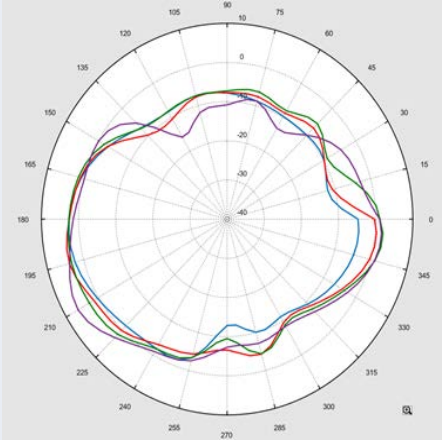
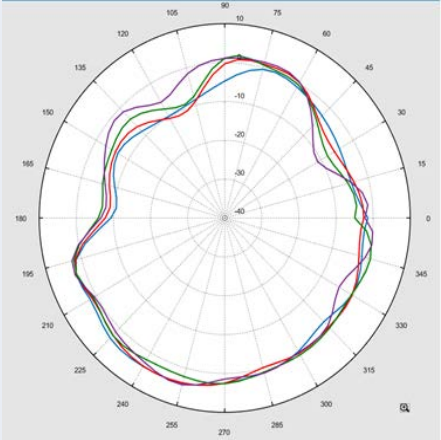
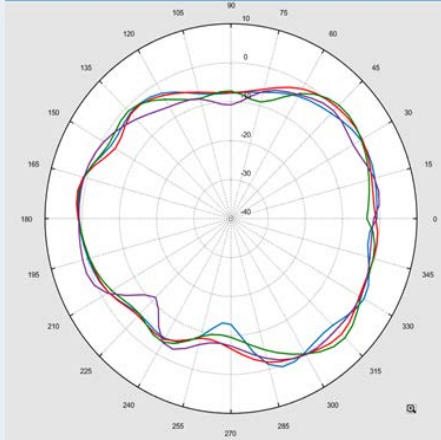
Antenna 2D Radiation Pattern

Frequency	2400 - 2500 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 2

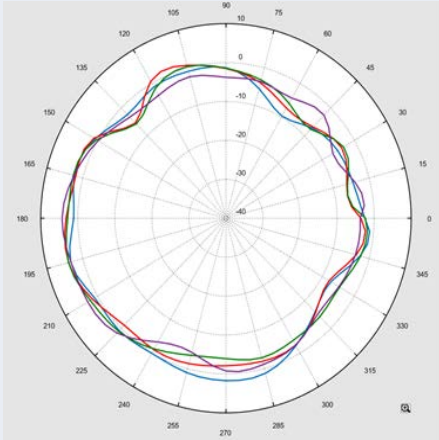
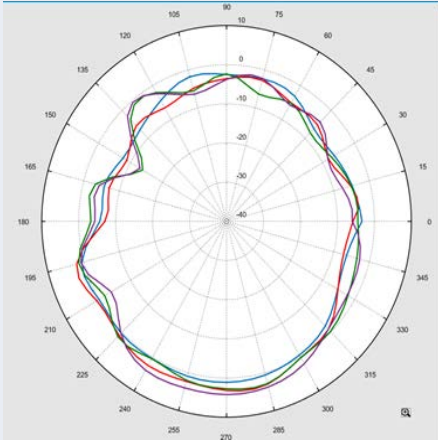
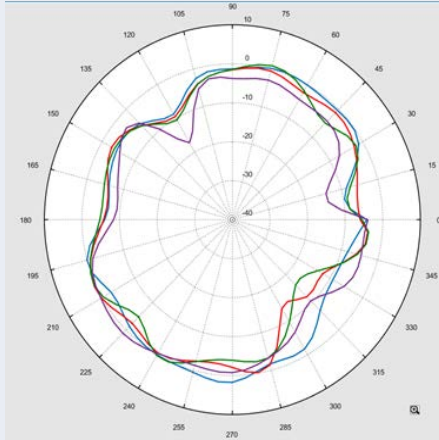
Antenna 2D Radiation Pattern

Frequency	5150 - 5850 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 3

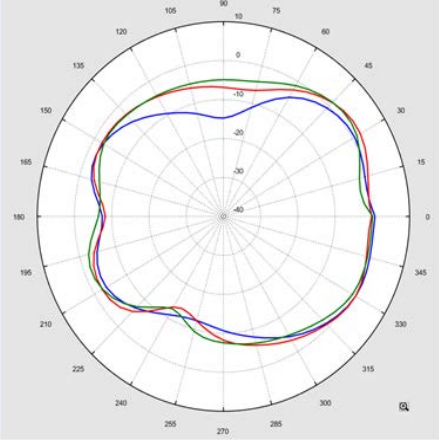
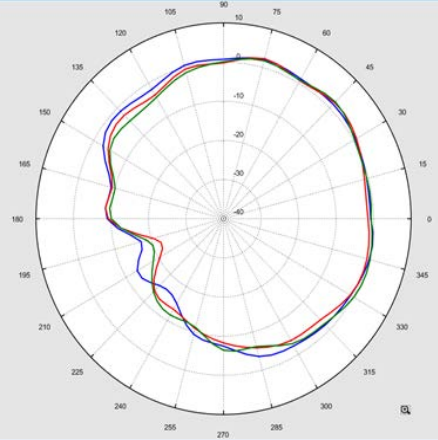
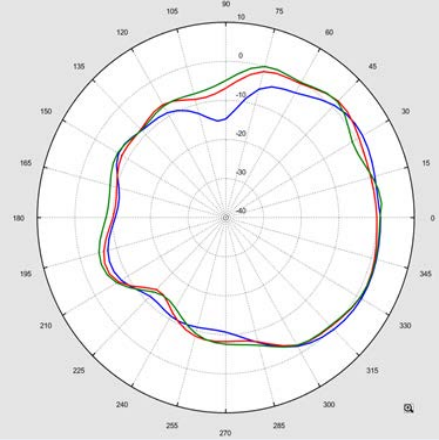
Antenna 2D Radiation Pattern

Frequency	5150 - 5850 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 4

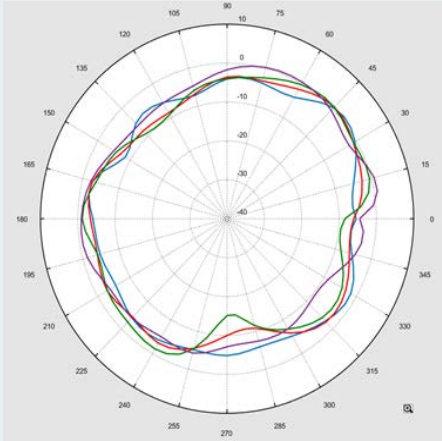
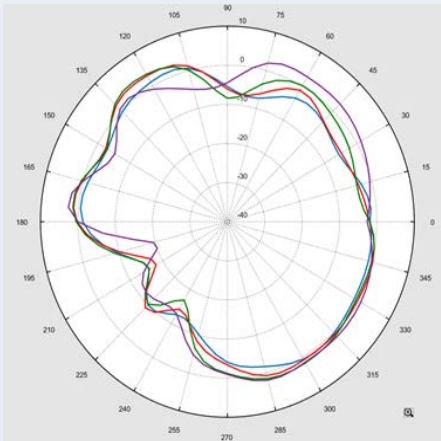
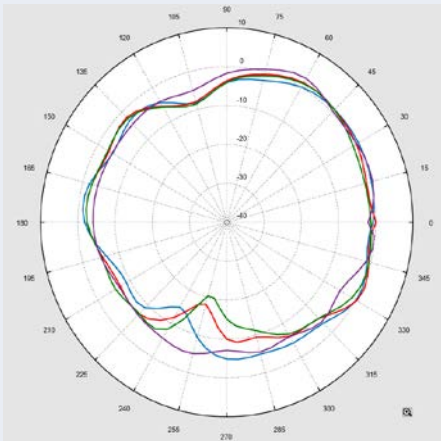
Antenna 2D Radiation Pattern

Frequency	2400 - 2500 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 4

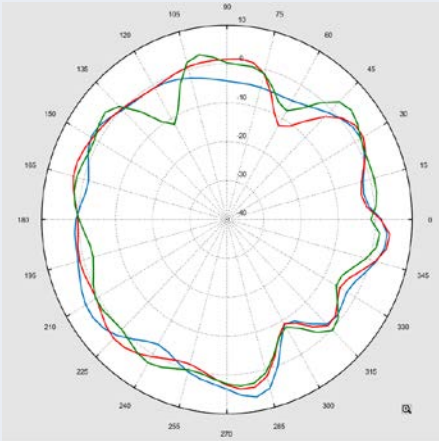
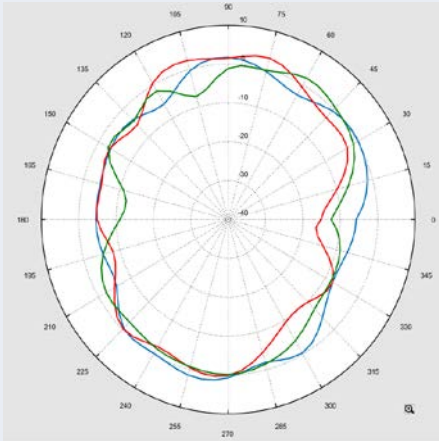
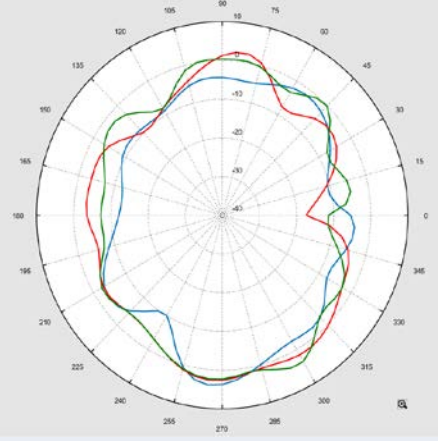
Antenna 2D Radiation Pattern

Frequency	5150 - 5850 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 5

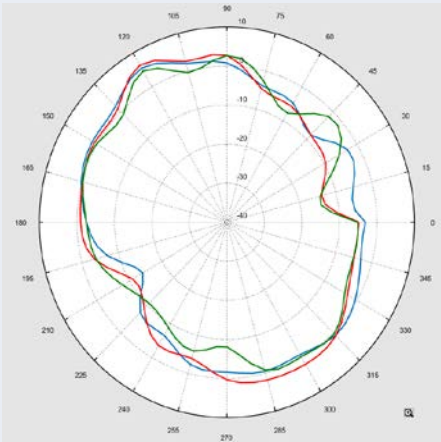
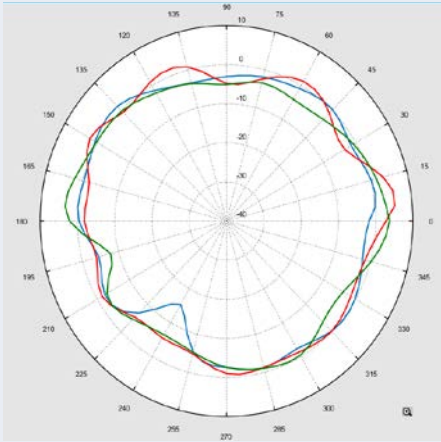
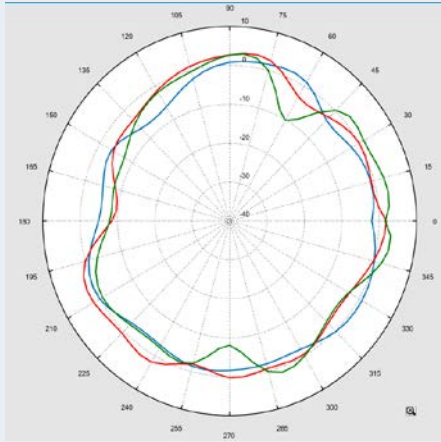
Antenna 2D Radiation Pattern

Frequency	5925 - 7125 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 6

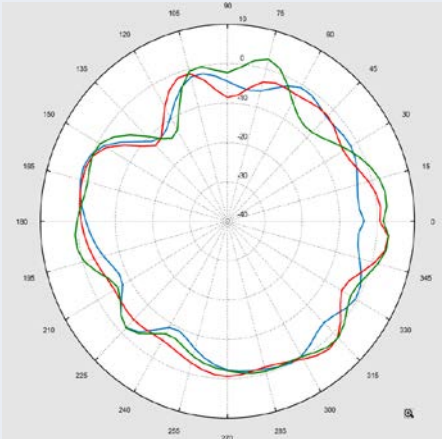
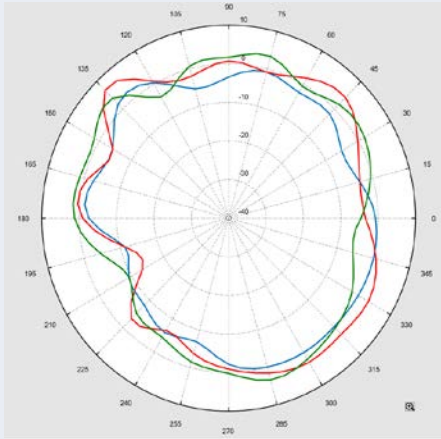
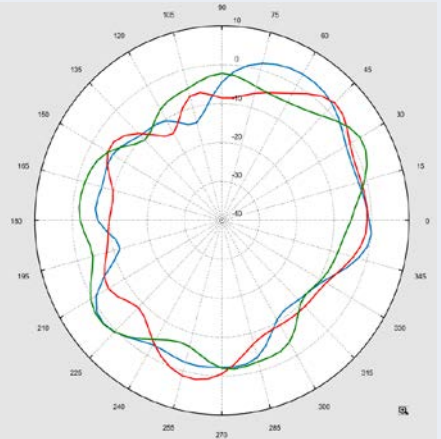
Antenna 2D Radiation Pattern

Frequency	5925 - 7125 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 7

Antenna 2D Radiation Pattern

Frequency	5925 - 7125 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Ant. 8

Antenna 2D Radiation Pattern

Frequency	5925 - 7125 MHz		
Plane	XY	XZ	YZ
Radiation Pattern			



Antenna Vendor Profile

Vendor Name	Adress
WANSHIH ELECTRONIC CO.,LTD.	3-5F 72 Wu Kong 6th Rd., WUGU DIST., NEW TAIPEI INDUSTRIAL PARK, NEW TAIPEI CITY 24891, TAIWAN (R.O.C.)

