

TEST REPORT

Product Name: 4G Panel Antenna

Product Model: ANT704

Note: 700-960/1710-2700MHz Gain: 7/8 dBi Connector: N-Female

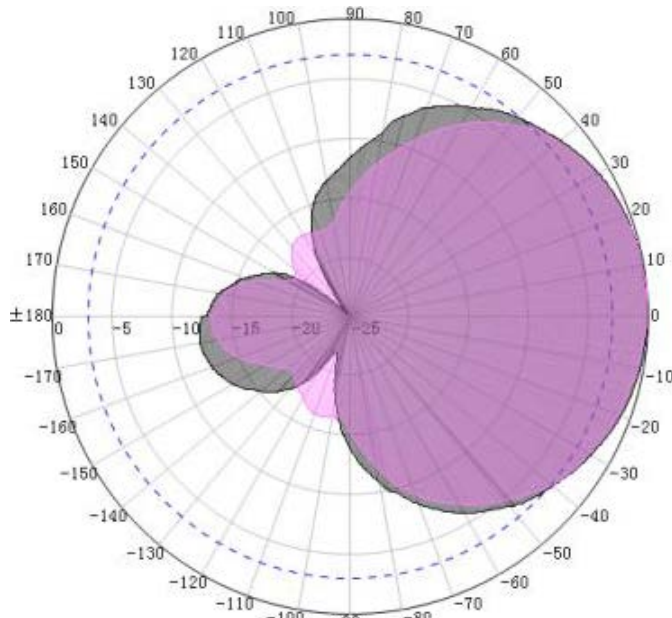
1. PRODUCT PICTURE



2. PRODUCT TECHNICAL SPECIFICATION

Electrical Specifications	
Frequency Range	700-960/1710-2700MHz
Gain	7/ 8dBi
VSWR	≤2.0
Input Impedance	50Ω
Polarization	Vertical or Horizontal
Horizontal Half Power Angle	85±10° / 75±10°
Vertical Half Power Angle	68±2° / 55±2°
Front To Back Ratio	≥12 / ≥15 dB
Max Input Power	50 W
Mechanical Specifications	
Working Temperature	-40°C~65°C
Connector Type	N-K or customized
Cable Length	0.3m LMR200 or customized
Antenna Weight	550g
Size	210x180x45mm
Pole Diameter	Φ38~55mm
Rated Wind Velocity	210km/h
Antenna Cover Material	ABS
Color	White

3. ANTENNA PATTERN

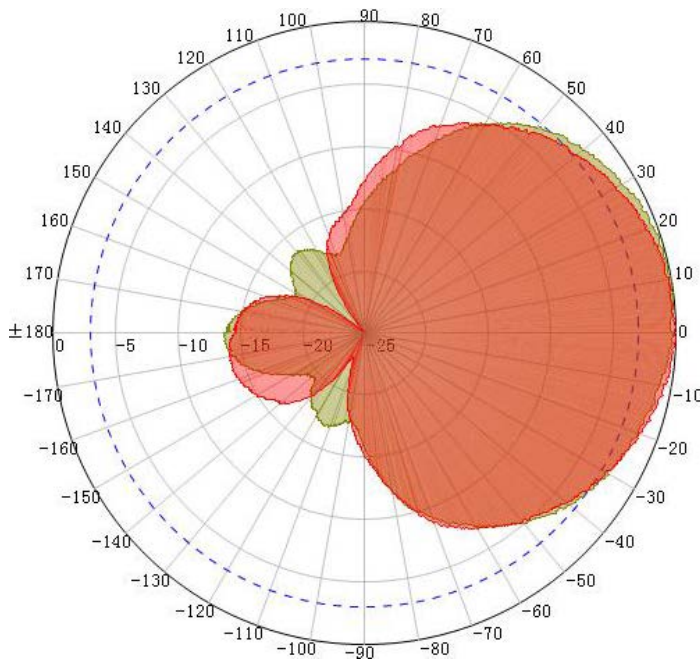


Test Frequency	700MHz
Test Plane	Vertical plane
Polarisation	Horizontal
Peak Level	-24.52dB
3dB Beamwidth	90.43
F/B Ratio	12.19dB

Test Frequency	700MHz
Test Plane	Horizontal plane
Polarisation	Vertical
Peak Level	-25.26dB
3dB Beamwidth	86.07
F/B Ratio	13.21dB

Gain	7.38dBi
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Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	XPD (0)	XPD (3dB)	Gain
700MHz	Vertical plane	Horizontal	-24.52	90.43	12.19			
700MHz	Horizontal plane	Vertical	-25.26	86.07	13.21			7.38

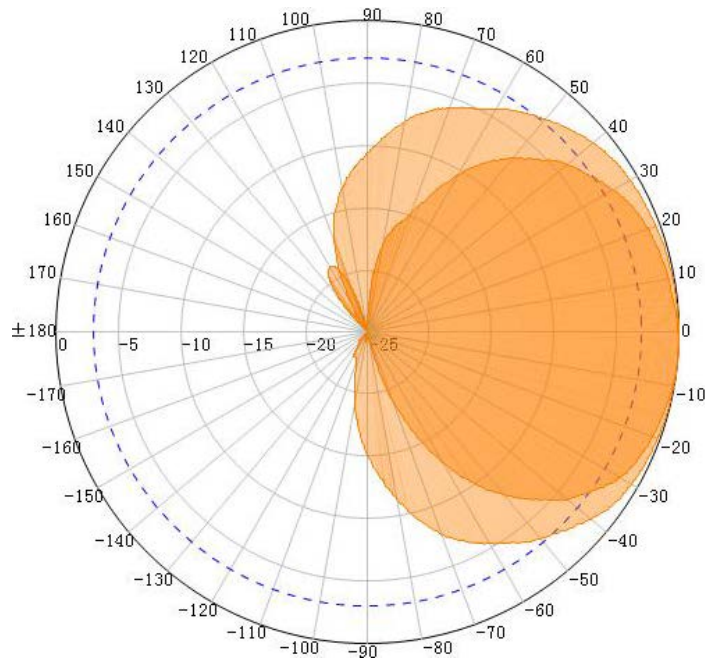


Test Frequency	820MHz
Test Plane	Vertical plane
Polarisation	Horizontal
Peak Level	-27.81dB
3dB Beamwidth	82.05
F/B Ratio	13.69dB

Test Frequency	820MHz
Test Plane	Horizontal plane
Polarisation	Vertical
Peak Level	-27.6dB
3dB Beamwidth	74.49
F/B Ratio	13.99dB

Gain	7.84dBi
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Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	XPD (0)	XPD (3dB)	Gain
820MHz	Vertical plane	Horizontal	-27.81	82.05	13.69			
820MHz	Horizontal plane	Vertical	-27.6	74.49	13.99			7.84

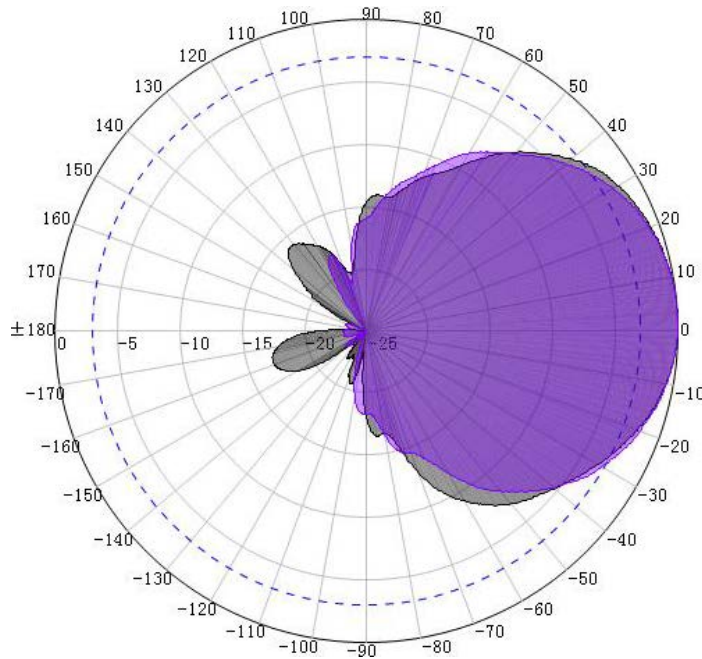


Test Frequency	960MHz
Test Plane	Vertical plane
Polarisation	Horizontal
Peak Level	-23.43dB
3dB Beamwidth	69.73
F/B Ratio	26.29dB

Test Frequency	960MHz
Test Plane	Horizontal plane
Polarisation	Vertical
Peak Level	-23.95dB
3dB Beamwidth	99.01
F/B Ratio	26.9dB

Gain	8.07dBi
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Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	XPD (0)	XPD (3dB)	Gain
960MHz	Vertical plane	Horizontal	-23.43	69.73	26.29			
960MHz	Horizontal plane	Vertical	-23.95	99.01	26.9			8.07

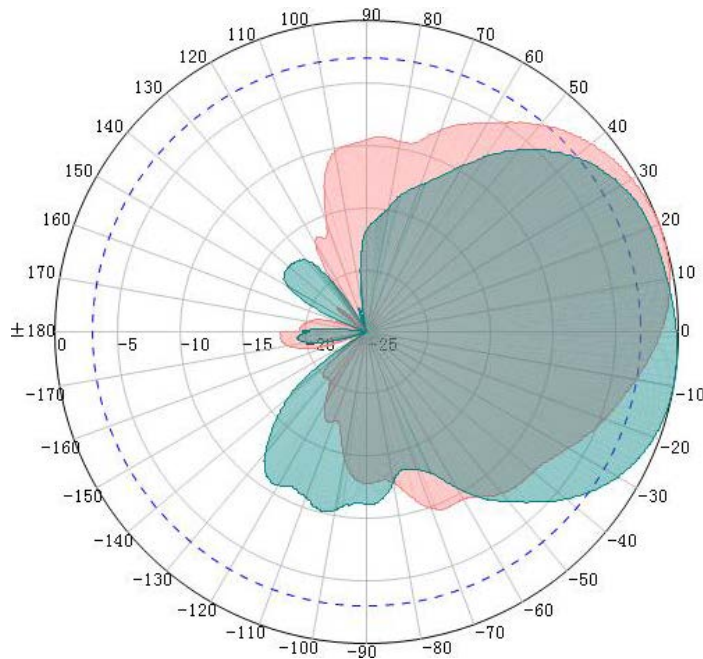


Test Frequency	1710MHz
Test Plane	Vertical plane
Polarisation	Horizontal
Peak Level	-35.98dB
3dB Beamwidth	64.56
F/B Ratio	17.1dB

Test Frequency	1710MHz
Test Plane	Horizontal plane
Polarisation	Vertical
Peak Level	-33.25dB
3dB Beamwidth	63.58
F/B Ratio	23.05dB

Gain	9.37dBi
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Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	XPD (0)	XPD (3dB)	Gain
1710MHz	Vertical plane	Horizontal	-35.98	64.56	17.1			
1710MHz	Horizontal plane	Vertical	-33.25	63.58	23.05			9.37

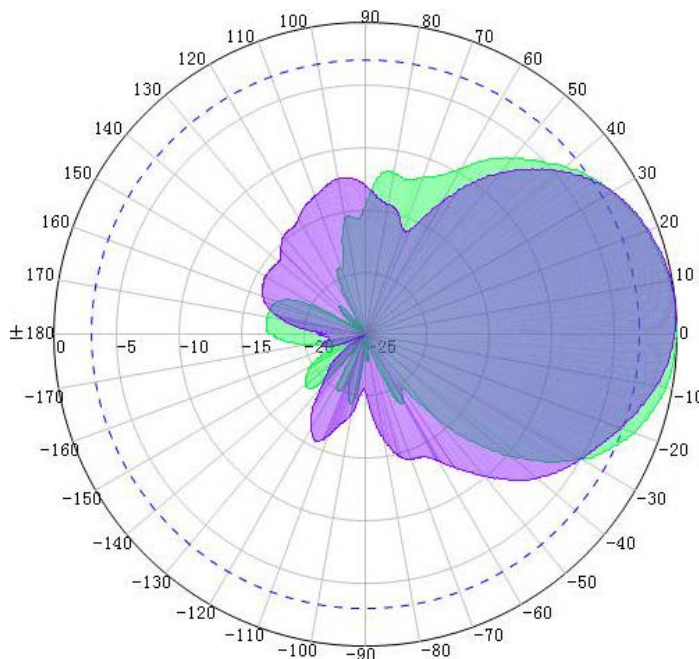


Test Frequency 1920MHz
Test Plane Vertical plane
Polarisation Horizontal
Peak Level -38.06dB
3dB Beamwidth 58.45
F/B Ratio 18.07dB

Test Frequency 1920MHz
Test Plane Horizontal plane
Polarisation Vertical
Peak Level -37.23dB
3dB Beamwidth 75.16
F/B Ratio 17.85dB

Gain 8.54dBi

Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	Gain
1920MHz	Vertical plane	Horizontal	-38.06	58.45	18.07	
1920MHz	Horizontal plane	Vertical	-37.23	75.16	17.85	8.54

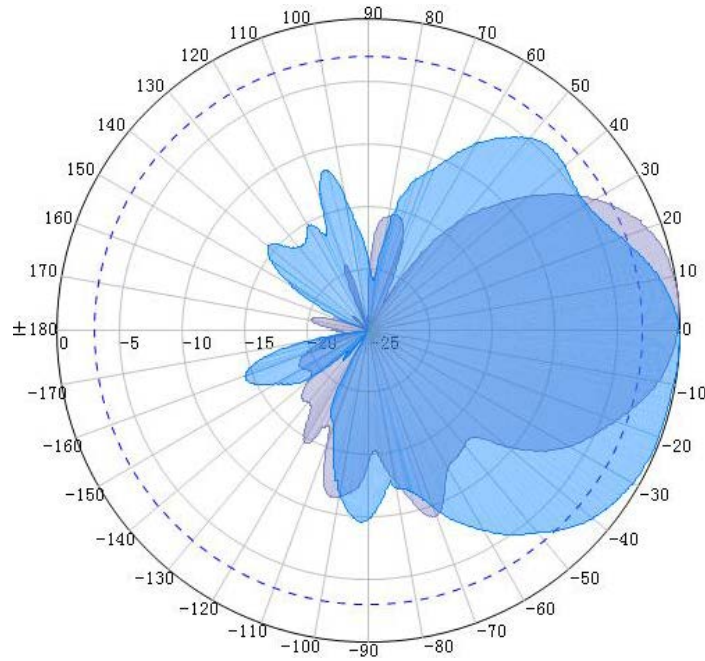


Test Frequency 2400MHz
Test Plane Vertical plane
Polarisation Horizontal
Peak Level -39.4dB
3dB Beamwidth 58.94
F/B Ratio 16.99dB

Test Frequency 2400MHz
Test Plane Horizontal plane
Polarisation Vertical
Peak Level -40.37dB
3dB Beamwidth 53.29
F/B Ratio 15.76dB

Gain 10.3dBi

Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	Gain
2400MHz	Vertical plane	Horizontal	-39.4	58.94	16.99	
2400MHz	Horizontal plane	Vertical	-40.37	53.29	15.76	10.3



Test Frequency	2700MHz
Test Plane	Vertical plane
Polarisation	Horizontal
Peak Level	-44.09dB
3dB Beamwidth	43.8
F/B Ratio	18.76dB

Test Frequency	2700MHz
Test Plane	Horizontal plane
Polarisation	Vertical
Peak Level	-44.64dB
3dB Beamwidth	65.13
F/B Ratio	14.39dB

Gain	9.64dBi
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Frequency	Test	Polarisation	Peak Level	3dB Beamwidth	F/B Ratio	Gain
2700MHz	Vertical plane	Horizontal	-44.09	43.8	18.76	
2700MHz	Horizontal plane	Vertical	-44.64	65.13	14.39	9.64

4. MECHANICAL CHARACTERISTICS

1	BENDING TEST	Put away from the connector of line on 30 CM and bear 120g, fixed the connector and then test the Swing, swing Angle around each 60 degrees, swing 1000 times for test characteristics.	After 1000 times Swing have no any electrical properties damaged
2	SRRENGTH TEST	15 pounds of static load on the wire bottom lasted one minutes	Have no any revealed mechanical and electrical damaged
3	PULL TEST	Between the Connector and Wire for the Pull Test	Bear 7Kg Stuff have no any revealed mechanical and electrical damaged
4	VIBRATION TEST	With 1.10 mm and amplitude 33.30 Hz/SEC vibration frequency to the X axis vibration 120 minutes, Y axis vibration 120 minutes, Z axis vibration 240 minutes.	have no any revealed mechanical and electrical damaged

5. DURABILITY TEST

1	SAIT SPRAY TEST	<p>Salt spray test : Refer to GB1266-86 standard Distilled water : Once Distilled PH6.5~7 SPRAY : 1.4me80cm²/h Compressed air pressure : 1Kgf/ cm² relative degrees : 98° Temperature : 45°~47° Pressure temperature : 35° Test time : 96hr</p>	<p>All characteristic range is 30% of the initial value</p>
2	HEAT TEST	<p>85+2°C for 96 hours, after keep in normal condition for 30mim the to test.</p>	
3	HUMIDITY TEST	<p>40+2°C 90-95%RH for 96hours, after keep in normal condition for 30mim the to test.</p>	
4	COLD TEST	<p>-40+2°C for 96hours, after keep in normal condition for 30mim the to test.</p>	