

698-960/1710-2700MHz Omni Ceiling Mount Antenna

Model: QX-698/2700-3A



Electrical Specifications				
Frequency Range	698-806 MHz	806-960 MHz	1710-2500 MHz	2500-2700 MHz
Polarization	Vertical			
VSWR	≤1.8	≤1.5	≤1.5	≤1.5
Gain	2.5/5 dBi			
3dB Beamwidth	H:360° E:60°			
Input Impedance	50Ω			
Max.Power	50W			
Lightning Protection	DC Ground			
Mechanical Specifications				
Connector	N-female			
Pigtail Cable	RG58U			
Mount Type	Ceiling Mount			
Dimensions	Ø186×86 mm			
Packing Size	72x31x34cm/ 20pcs			
Antenna weight	260g			
Reflector material	Aluminum			
Radome material	ABS			
Radome color	White			
Operating temperature	-40°C to +60 °C (40°F to +140 °F)			
Relative Humidity	Up to 100%			

824-960MHz 12dBi Yagi Antenna
Model: BM-800/900-12-9



Electrical Specifications	
Frequency Range	824-960MHz
Polarization	Vertical
VSWR	≤1.5
Gain	12 dBi
3dB Beamwidth	H:38° E:35°
F/B Ratio	≥15dB
Input Impedance	50Ω
Max.Power	50W
Lightning Protection	DC Ground
Mechanical Specifications	
Connector	N-female
Pigtail Length	30cm RG58/U (Black)
Mount Type	Pole Mount
Length	900mm
Antenna weight	0.9kg
Reflector material	Aluminum
Rated Wind Velocity	210 km/h
Operating temperature	-40°C to +70 °C

1850-1990MHz 14dBi Yagi Antenna

Model: BM-1900-14-14



Electrical Specifications	
Frequency Range	1850-1990MHz
Polarization	Vertical
VSWR	≤1.5
Gain	14 dBi
3dB Beamwidth	H:31° E:29°
F/B Ratio	≥16dB
Input Impedance	50Ω
Max.Power	50W
Lightning Protection	DC Ground
Mechanical Specifications	
Connector	N-female
Cable Length	30cm RG58/U (Black)
Mount Type	Mast Mount
Length	730mm
Antenna weight	0.5kg
Reflector material	Aluminum

Rated Wind Velocity	210 km/h
Operating temperature	-40°C to +70 °C

1850-1990MHz 12dBi 65° Sector Antenna

Model: DB-1900-12-65



Electrical Specifications	
Frequency Range	1850-1990MHz
Polarization	Vertical
VSWR	≤1.5
Gain	12 dBi
F/B Ratio	≥23dB
Input Impedance	50Ω
3dB Beamwidth	H:65° E:33°
Max.Power	200W
Lightning Protection	DC Ground
Mechanical Specifications	
Connector	N-female
Mount Type	Mast Mount
Dimensions	350×180×90mm
Antenna weight	2.6KG
Reflector material	Aluminum
Radome material	UV-ABS

Radome color	Gray
Wind Speed, maximum	216.0 km/h
Operating temperature	-40°C to +65 °C
Mounting pole	Ø38-Ø52mm

1850-1990MHz 14dBi 90° Sector Antenna

Model: DB-1900-14-90



Electrical Specifications	
Frequency Range	1850-1990MHz
Polarization	Vertical
VSWR	≤1.5
Gain	14 dBi
F/B Ratio	≥25dB
Input Impedance	50Ω
3dB Beamwidth	H:90° E:16°
Max.Power	200W
Lightning Protection	DC Ground
Mechanical Specifications	
Connector	N-female
Mount Type	Mast Mount
Dimensions	650×180×90mm
Antenna weight	3.2KG
Reflector material	Aluminum
Radome material	UV-ABS
Radome color	Gray

Wind Speed, maximum	216.0 km/h
Operating temperature	-40°C to +65 °C
Mounting pole	Ø38-Ø52mm

824-960MHz 13dBi 65° Sector Antenna

Model: DB-800/900-13-65



Electrical Specifications	
Frequency Range	824-960MHz
Polarization	Vertical
VSWR	≤1.5
Gain	13 dBi
F/B Ratio	≥23dB
Input Impedance	50Ω
3dB Beamwidth	H:65° E:34°
Max.Power	200W
Lightning Protection	DC Ground
Mechanical Specifications	
Connector	N-female
Mount Type	Mast Mount
Dimensions	650×288×130mm
Antenna weight	4.5KG
Reflector material	Aluminum
Radome material	UV-ABS
Radome color	Gray



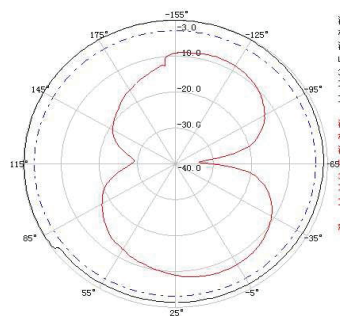
Model: QX-700/2700S-3

Electrical Specifications					
Frequency Range	698-800 MHz	800-960 MHz	1710-2700 MHz	1710-1880 MHz	1880-2700 MHz
Polarization	Vertical			Horizontal	
VSWR	≤1.8	≤1.5	≤1.5	≤1.8	≤1.5
Gain	≥1.5 dBi		≥3.5 dBi	≥4 dBi	
Input Impedance	50Ω				
3dB Beamwidth	H:360°		E: 85° / 55°		H:360° E: 55° / 45°
Isolation	≥26dB				
PIM	-140dBc@2*33dBm				
Impedence	50 Ohms				
Max.Power	50W				
Lightning Protection	DC Ground				
Mechanical Specifications					
Connector	2xN-female or customized				
Connector Position	With pigtail				
Dimensions	Ø203×113 mm / Ø8.0”x4.45”				
Package size	900×375×395 mm (20PCS/CTN)				

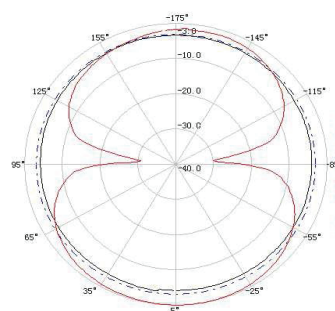
Antenna weight	0.37KG
Radome material	ABS
Radome color	White
Operating temperature	-40°C to +55 °C
Relative humidity	Up to 95%

Pattern for **V-Pol.** @ 698-960/1710-2700MHz

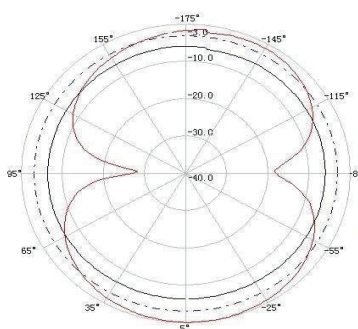
698MHz



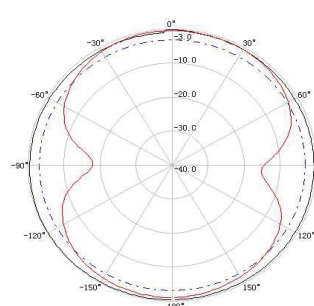
915MHz



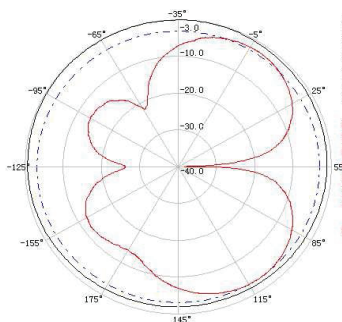
860MHz



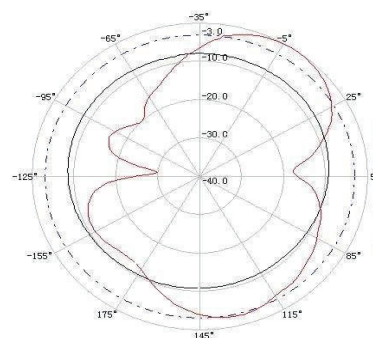
960MHz



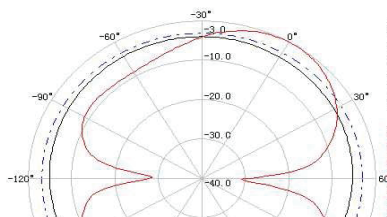
1710MHz



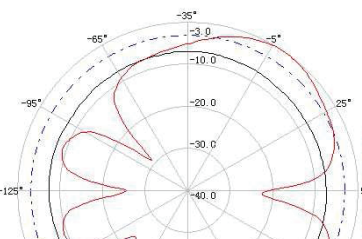
2170MHz



1880MHz



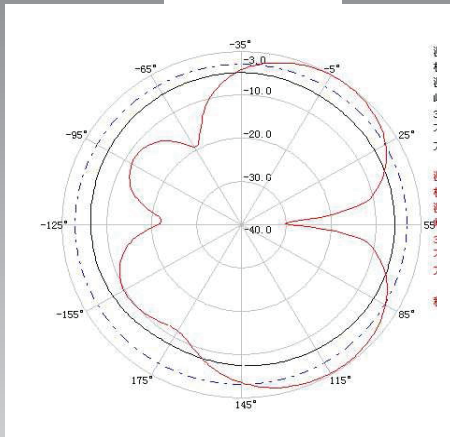
2700MHz



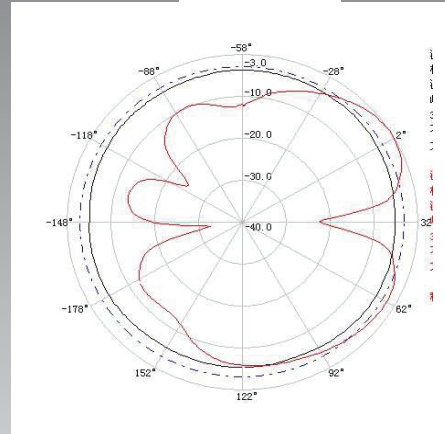
tra-ltd.com

Pattern for **H-Pol.** @ 1710-1880/1880-2700MHz

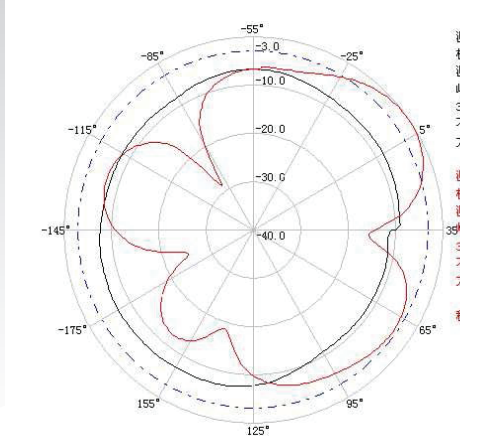
1710MHz



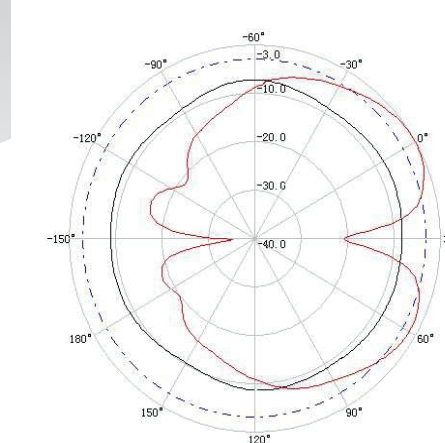
2170MHz



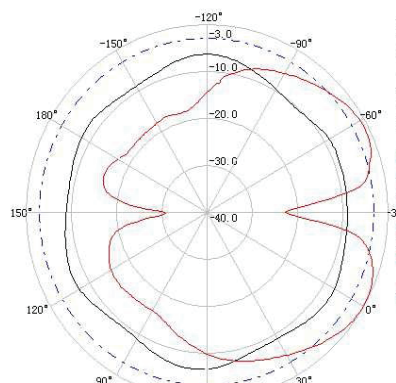
1880MHz



2500MHz



2700MHz



LTE MIMO Panel Antenna

Model: DB-698/2700S-7-65-2



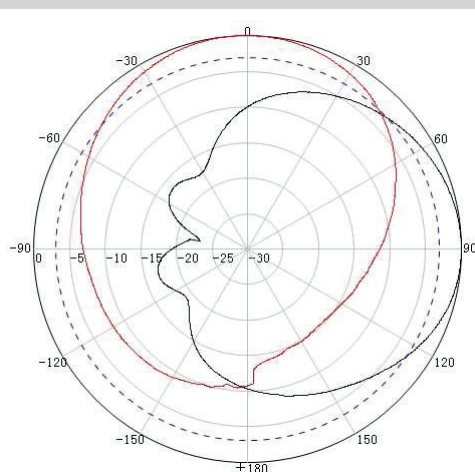
Electrical Specifications		
Frequency Range	698-960MHz	1710-2700MHz
Polarization	Vertical	$\pm 45^\circ$
VSWR	≤ 2.0	≤ 1.5
Gain	$\geq 6\text{dBi}$	$\geq 8\text{dBi}$
3dB Beamwidth	H:65° E:55°	H:65° E:55°
F/B Ratio	$\geq 10\text{dB}$	$\geq 15\text{dB}$
Isolation	$\geq 26\text{dB}$	
PIM, C(2x33dBm, 2W)	$\leq -140\text{dBc}$	
Input Impedance	50 Ω	
Max.Power	50W	
Lightning Protection	DC Ground	

Mechanical Specifications

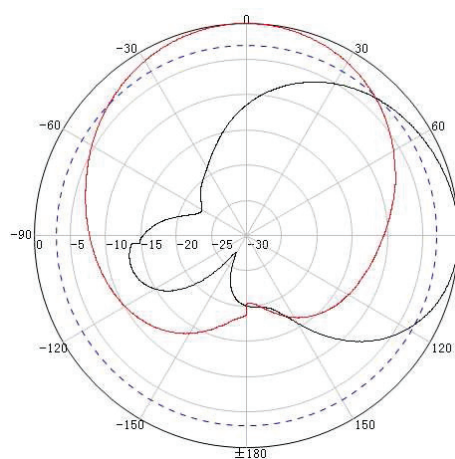
Connector	N-female
Pigtail length	30cm
Mount Type	Mast / Wall Mount
Dimensions	260 × 167 × 60mm
Antenna weight	0.75KG
Reflector material	Aluminum
Radome material	ABS
Radome color	White
Operating temperature	-40°C to +65 °C
Relative Humidity	Up to 100%

Pattern for V-Pol @ 698-960MHz

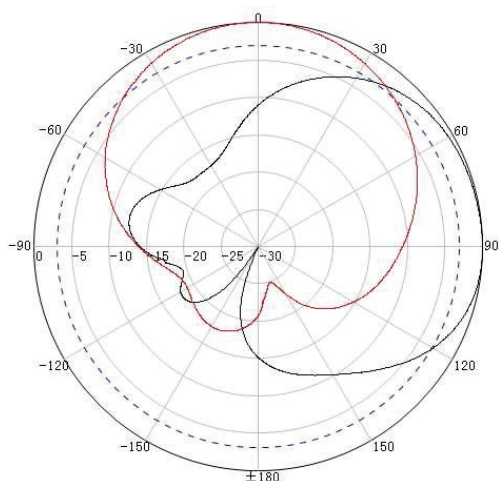
698MHz



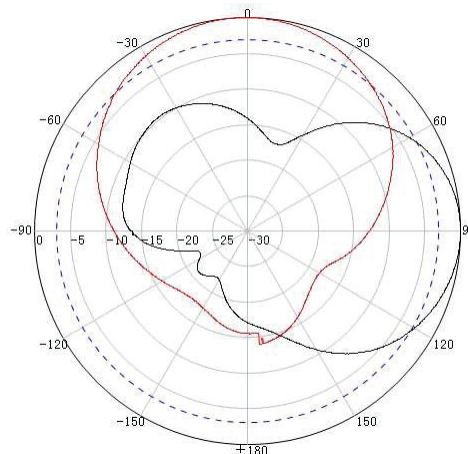
760MHz



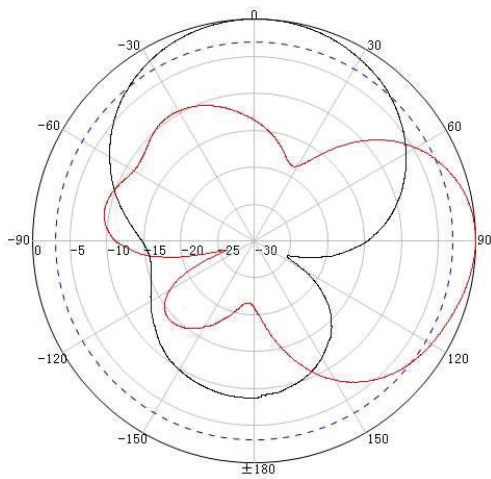
806MHz



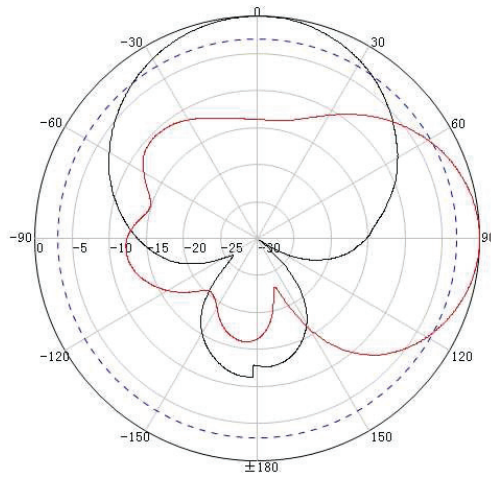
896MHz



915MHz

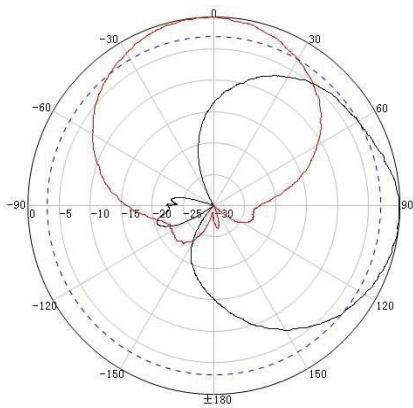


960MHz

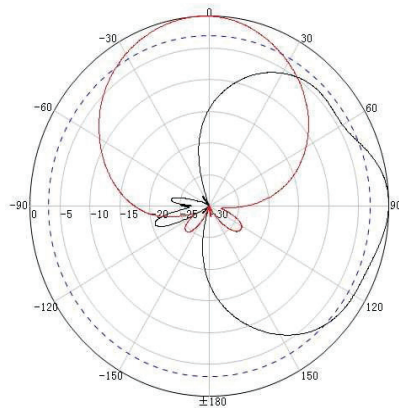


Pattern for +45°- Pol @1710-2700MHz

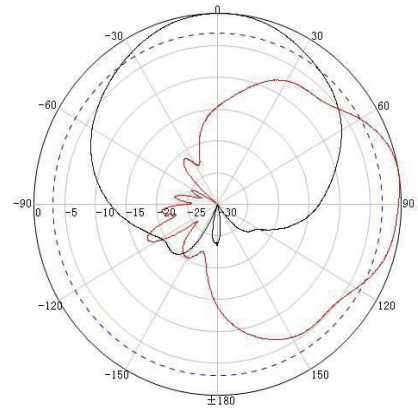
1710MHz



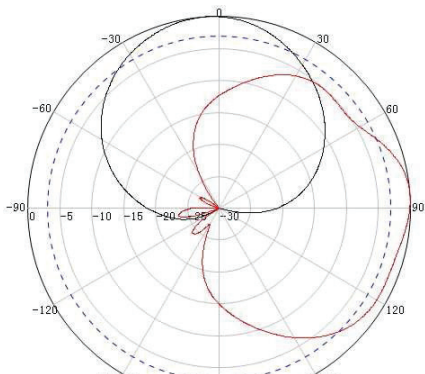
1990MHz



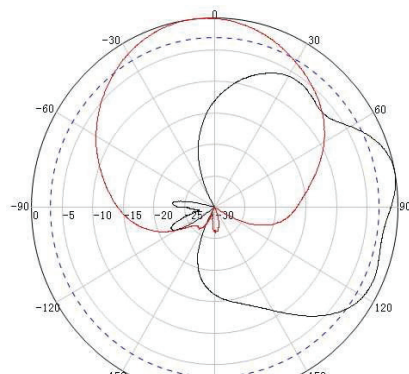
2400MHz



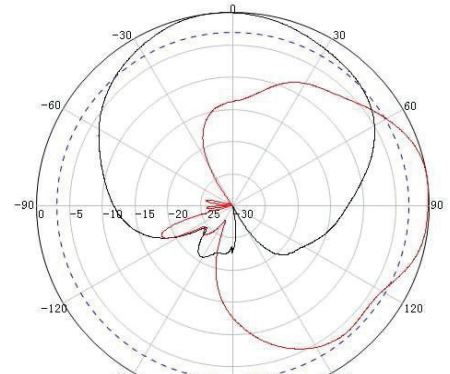
1880MHz



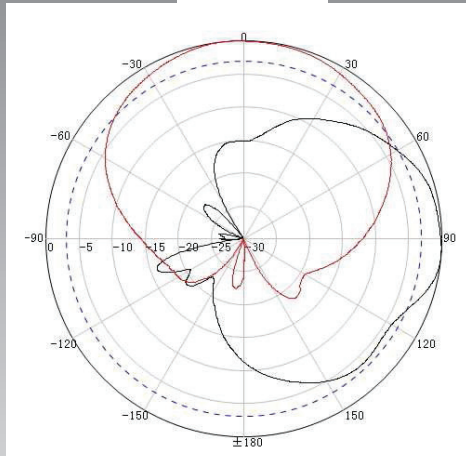
2170MHz



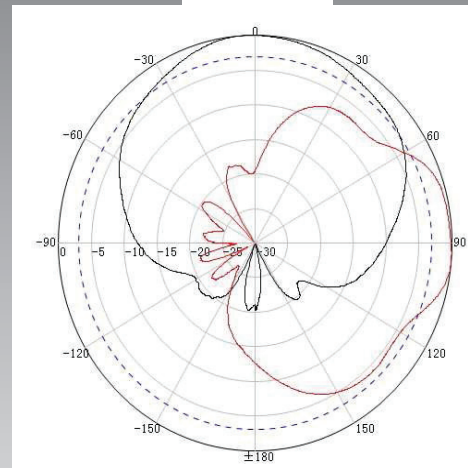
2500MHz



2600MHz

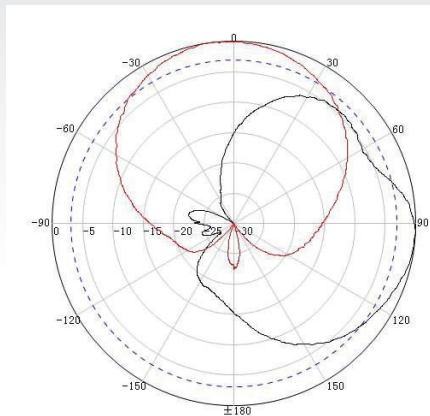


2700MHz

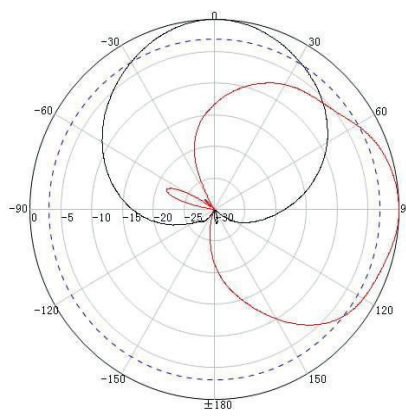


Pattern for -45°- Pol @1710-2700MHz

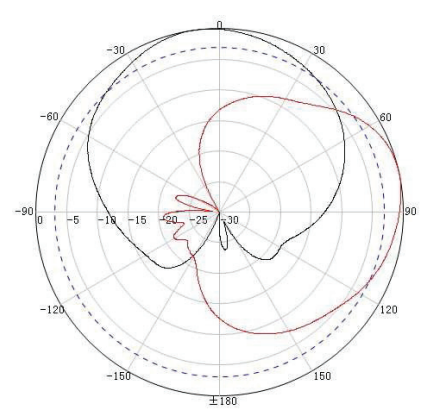
1710MHz



1990MHz



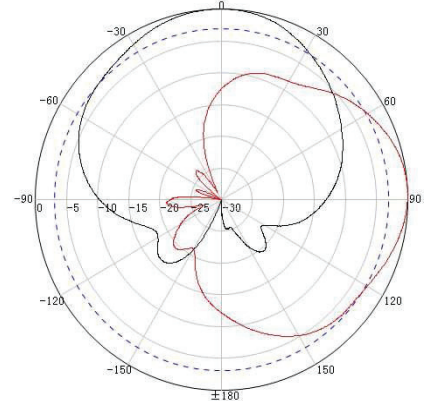
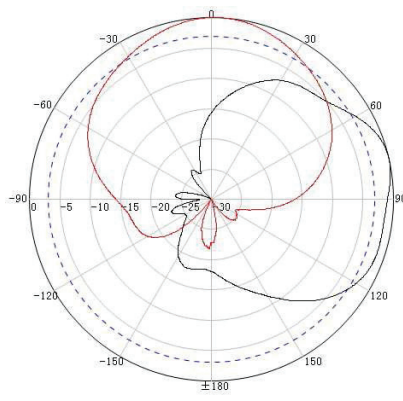
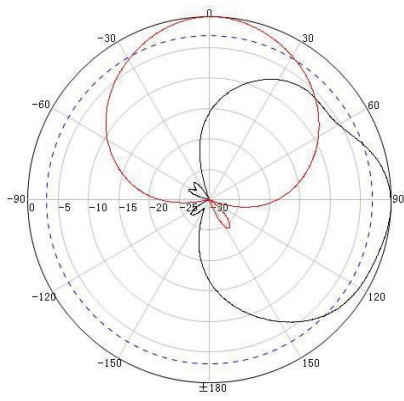
2400MHz



1880MHz

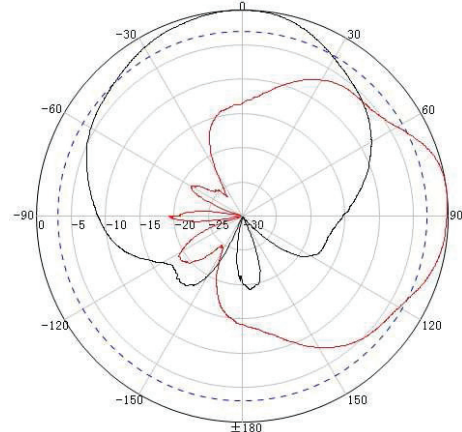
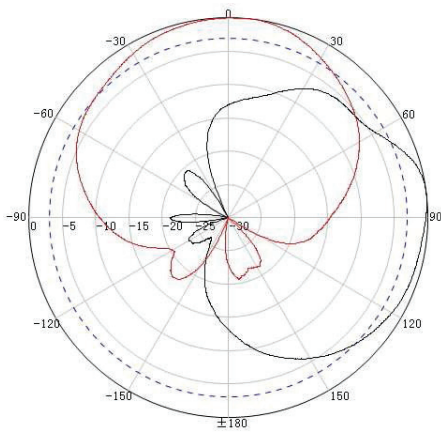
2170MHz

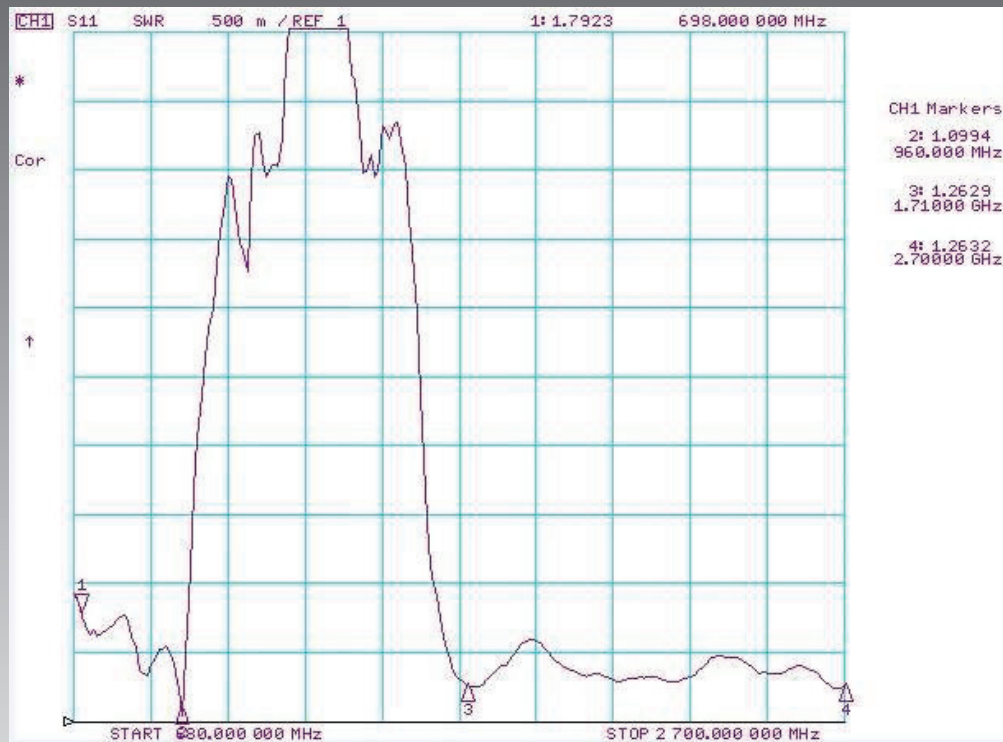
2500MHz



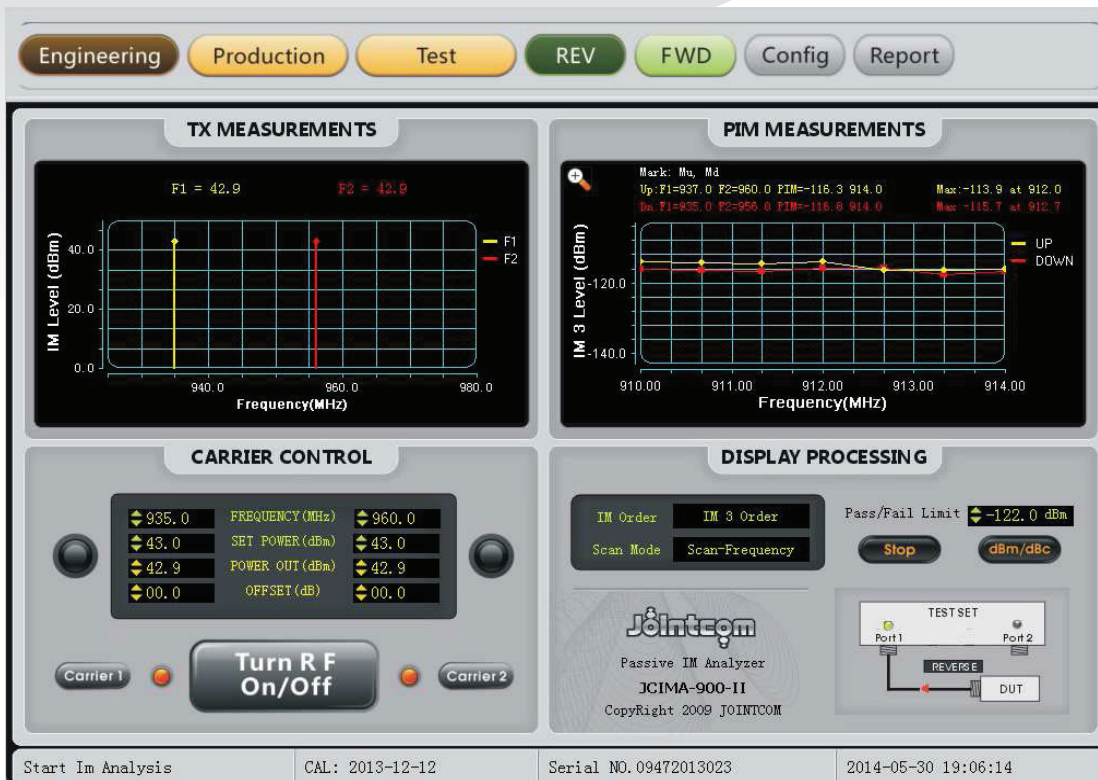
2600MHz

2700MHz





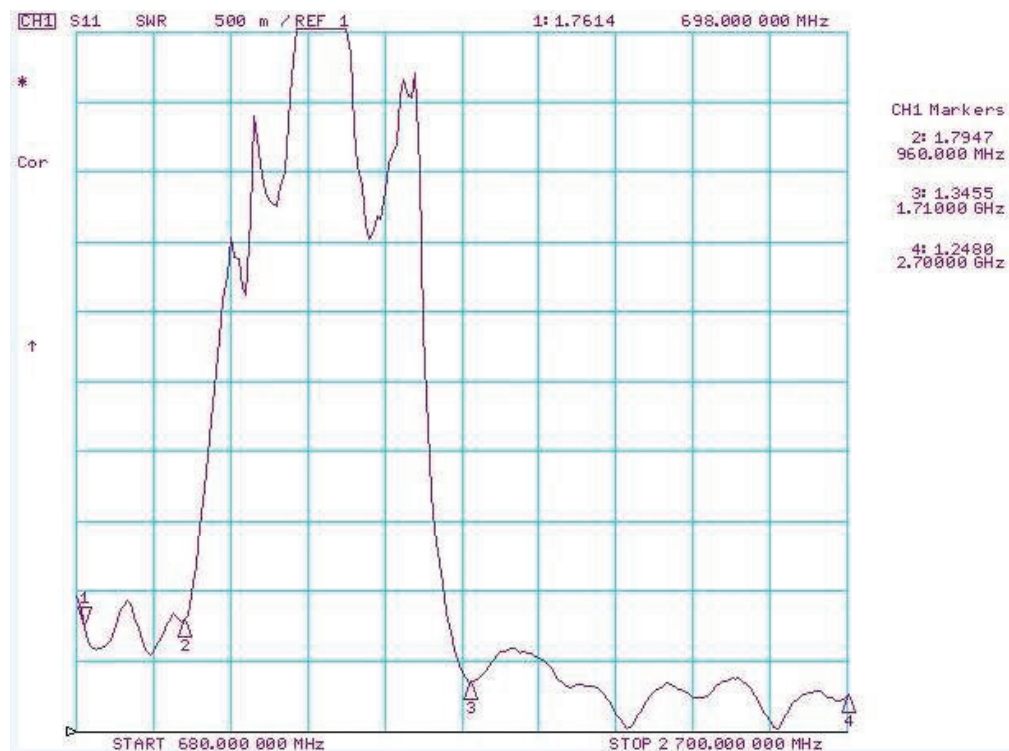
2. PIM, 3rd Order, 2 x 20 W,
Port 1:

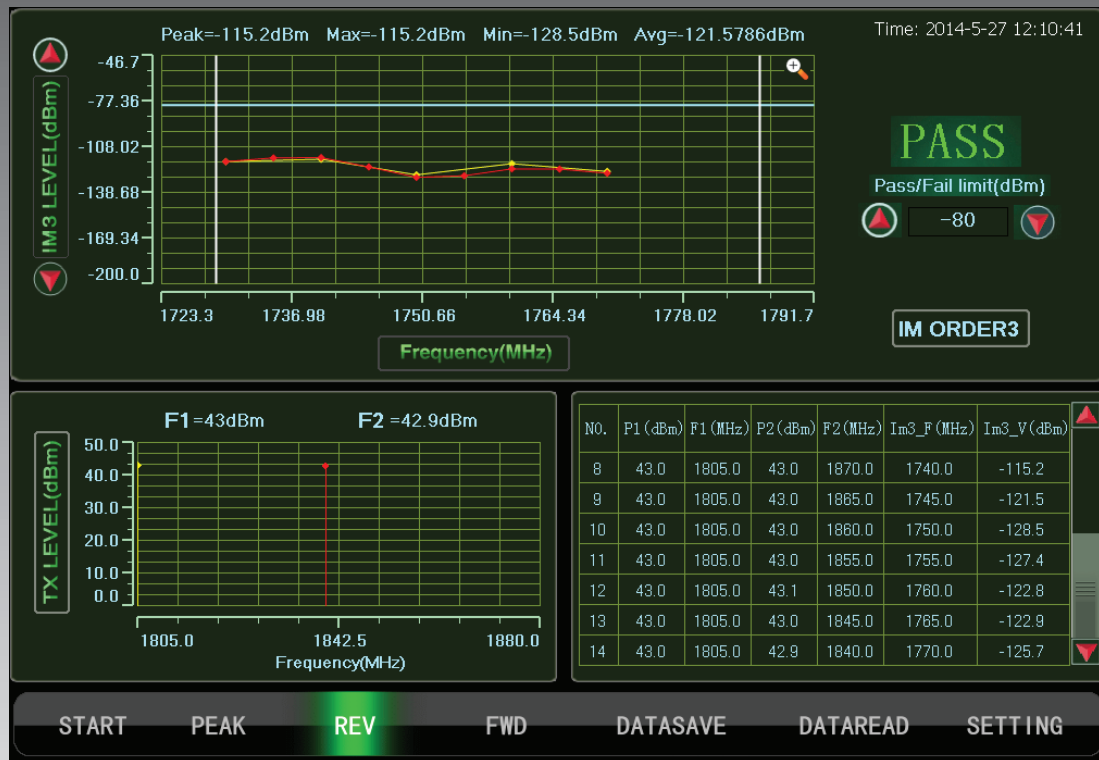


	(in)	
Weight, without Mounting Kit	kg (lb)	0.7(1.5)
Radome Material and Color		ABS, White, RAL7035
Mounting Type		Ceiling Mount
Connector Type		N-Female×2
Operational Temperature	oC	-55 to +60
Shipping Dimensions, HxWxD	mm (in)	335x175x90 (13.2x6.9x3.5)
Shipping Weight	kg (lb)	0.7 (1.5)

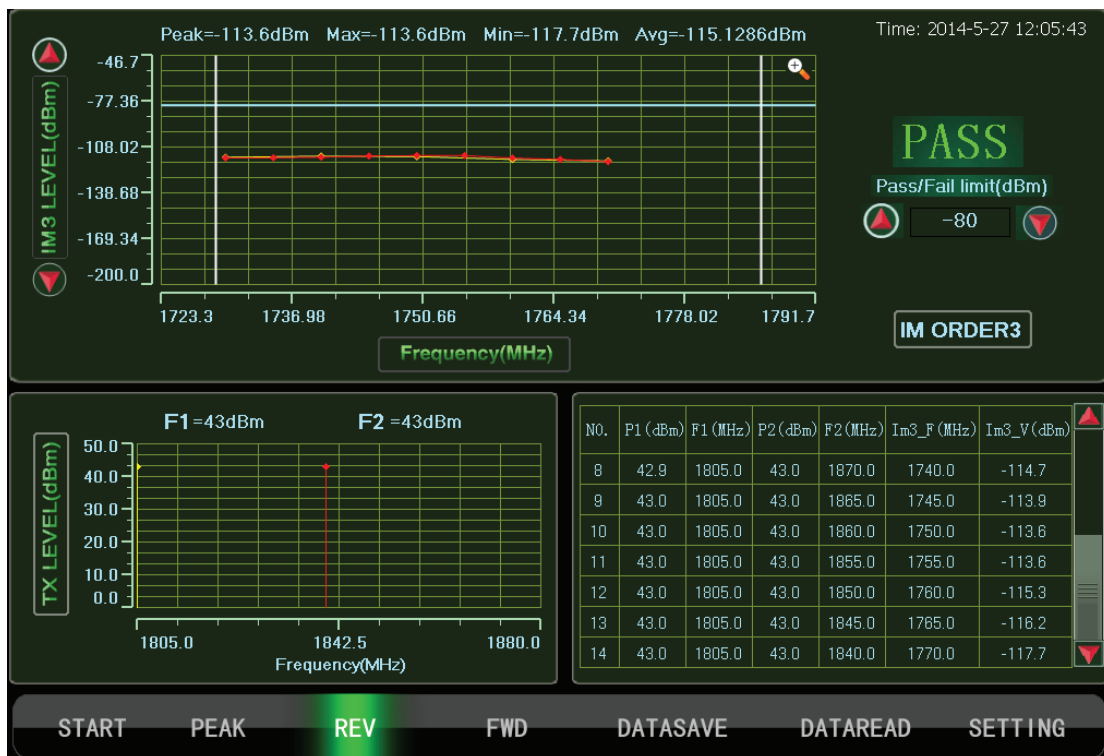
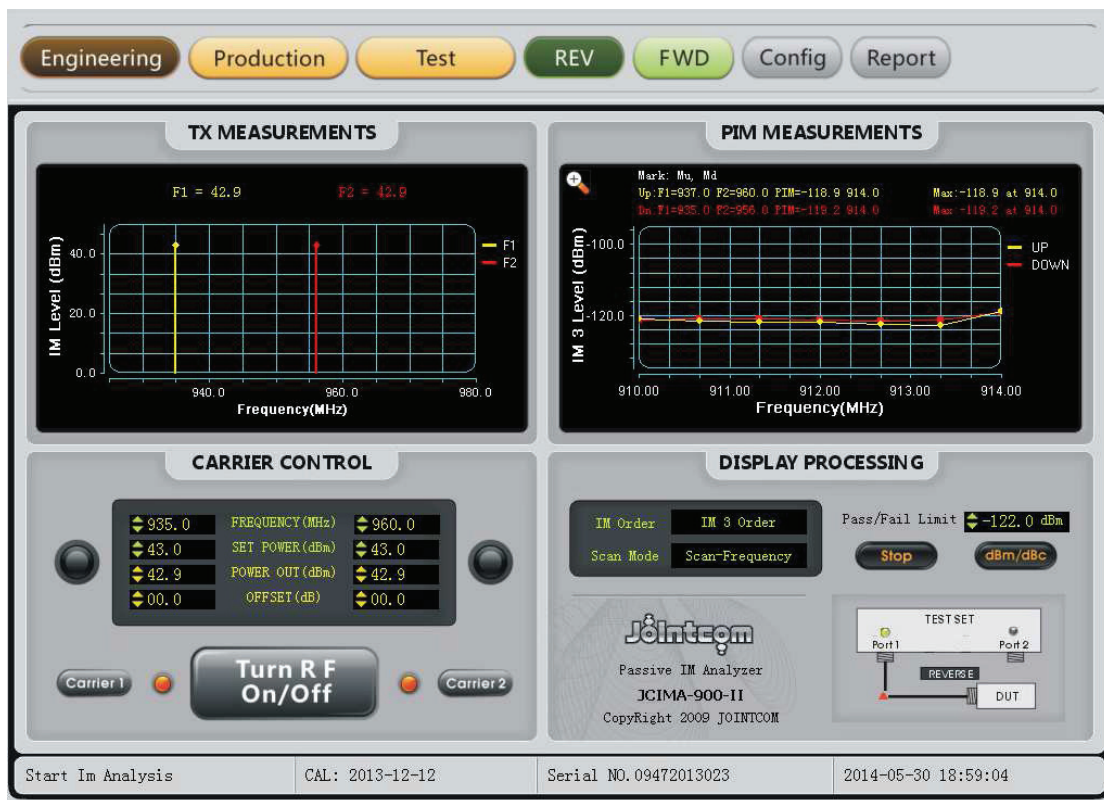
1. VSWR

Port 1:



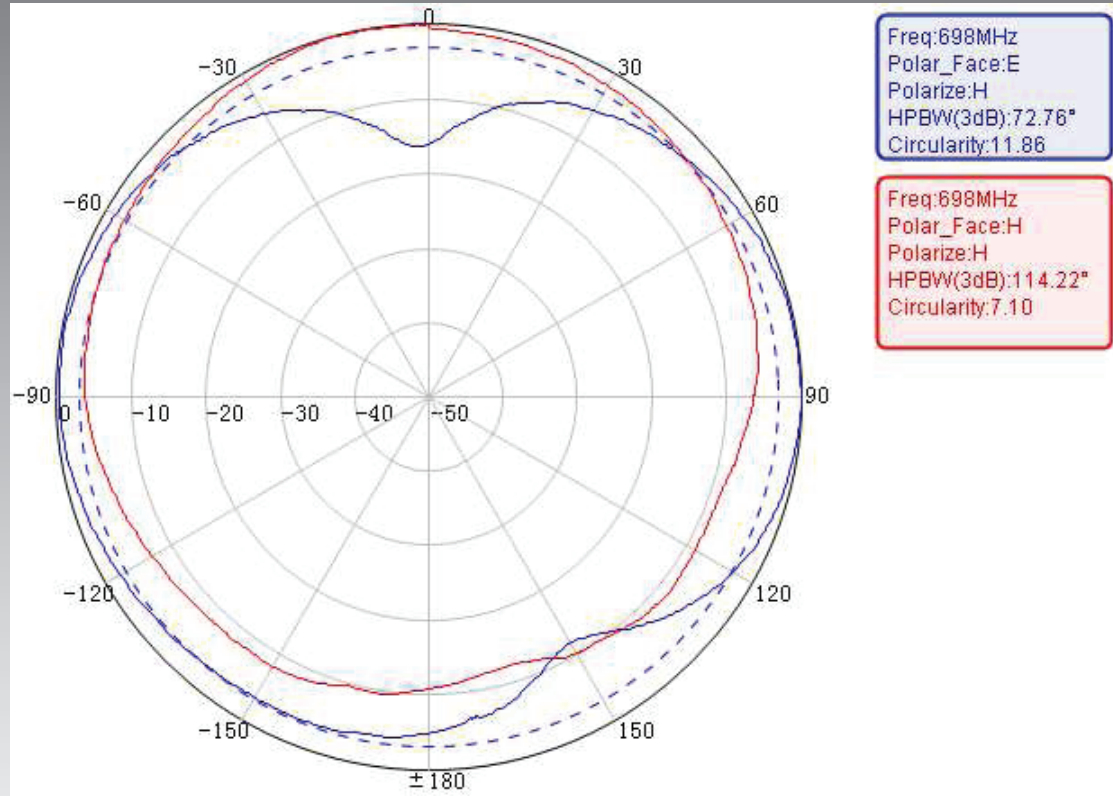


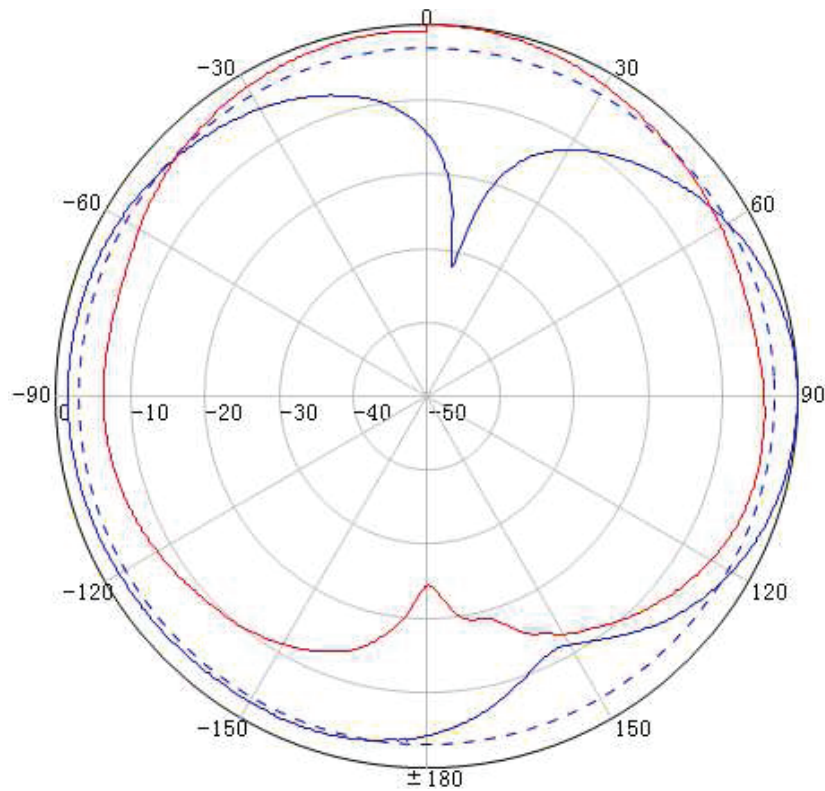
Port 2:



3. Radiation Patterns

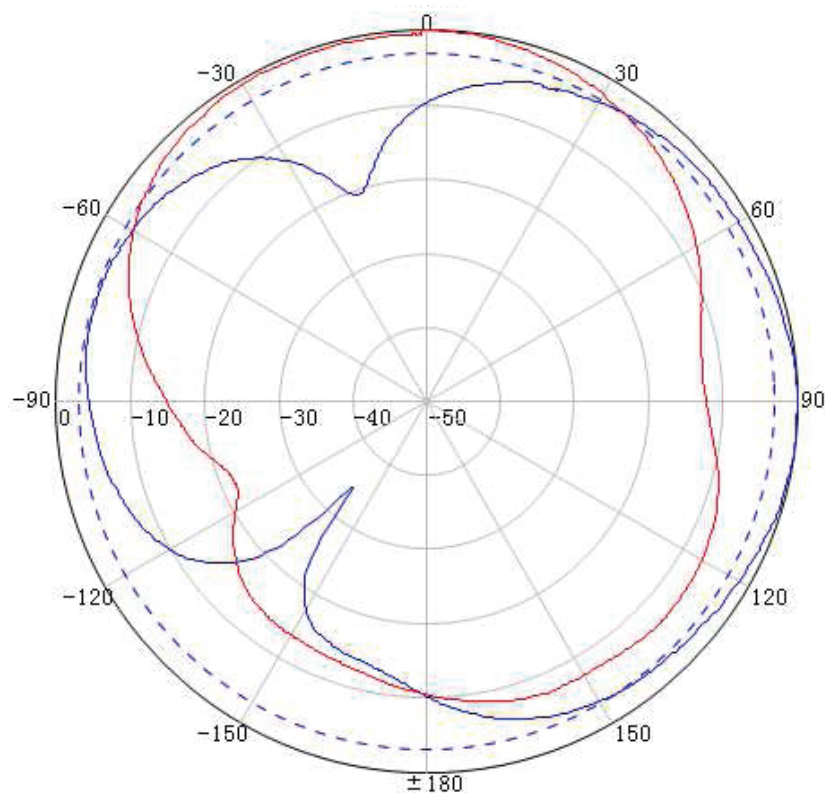
Port 1:





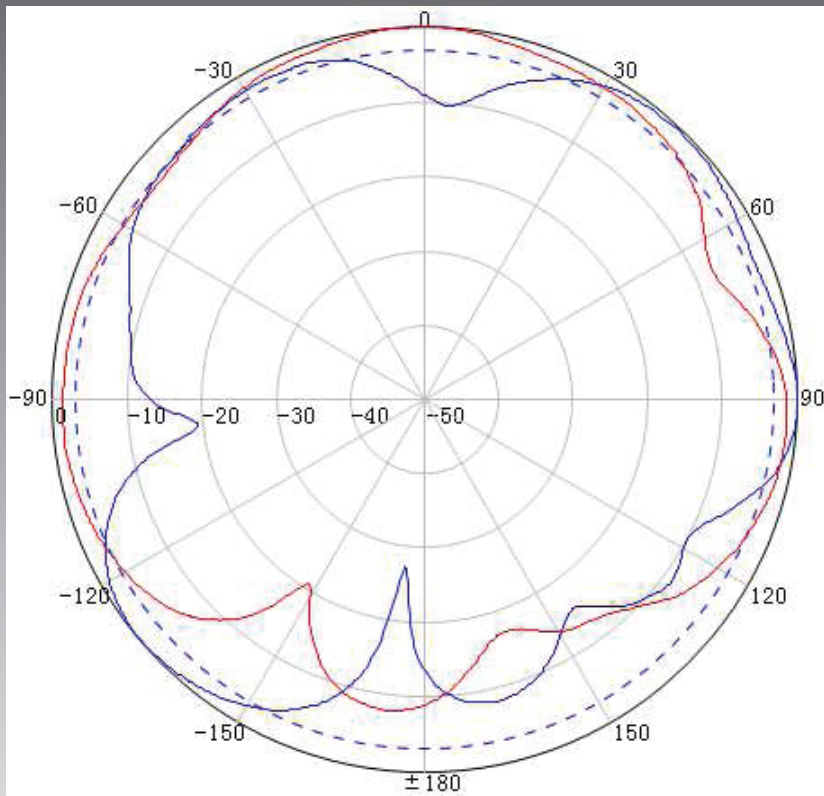
Freq:806MHz
Polar_Face:E
Polarize:H
HPBW(3dB):60.90°
Circularity:26.80

Freq:806MHz
Polar_Face:H
Polarize:H
HPBW(3dB):86.21°
Circularity:17.77



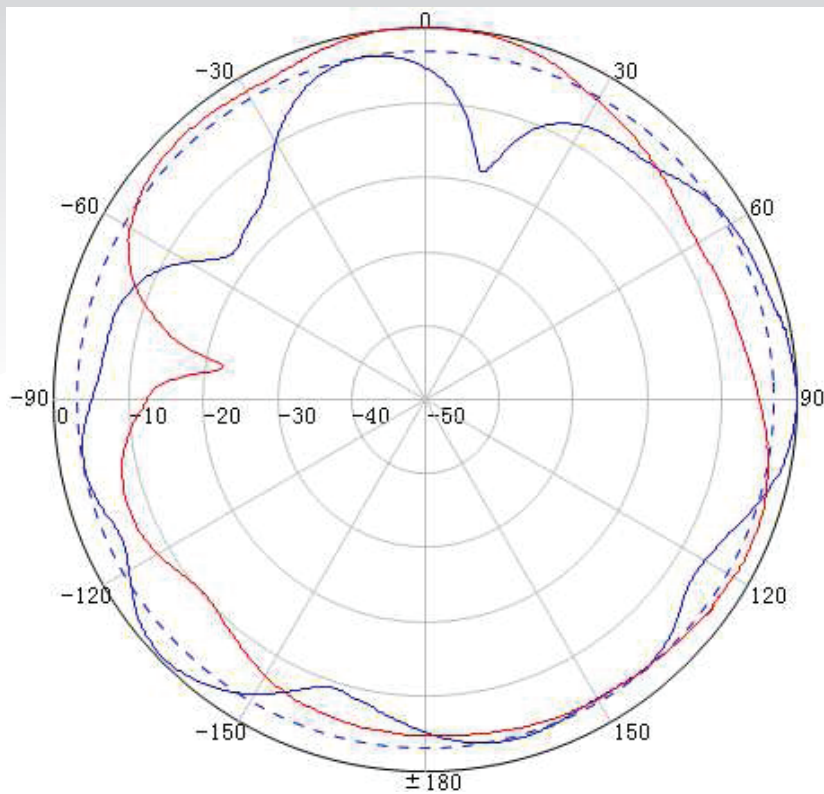
Freq:960MHz
Polar_Face:E
Polarize:H
HPBW(3dB):112.05°
Circularity:27.60

Freq:960MHz
Polar_Face:H
Polarize:H
HPBW(3dB):88.11°
Circularity:13.88



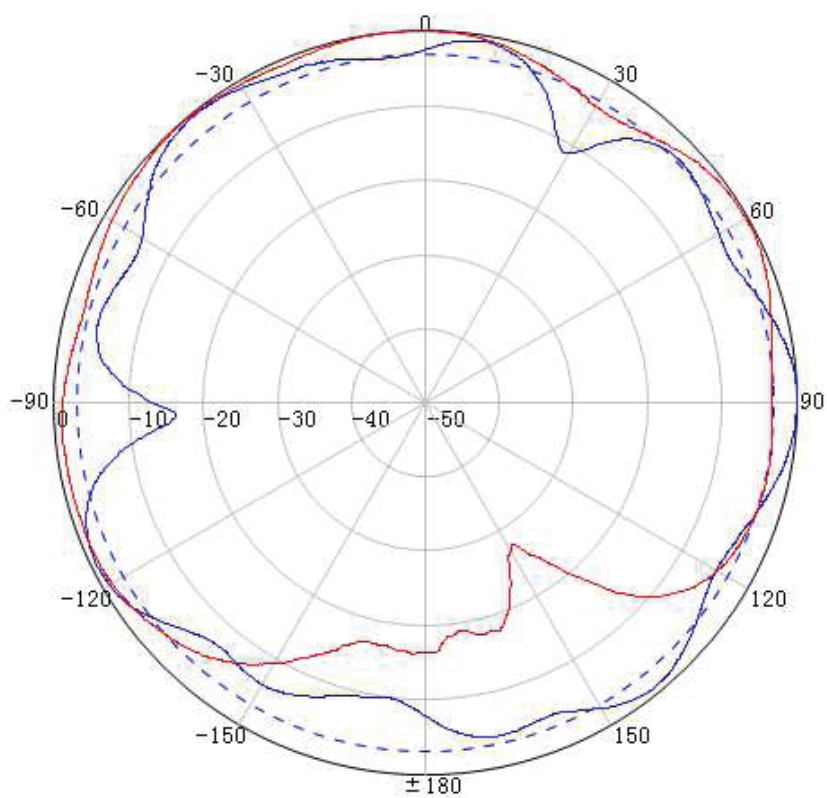
Freq:1710MHz
Polar_Face:E
Polarize:H
HPBW(3dB):79.90°
Circularity:21.53

Freq:1710MHz
Polar_Face:H
Polarize:H
HPBW(3dB):86.00°
Circularity:15.45



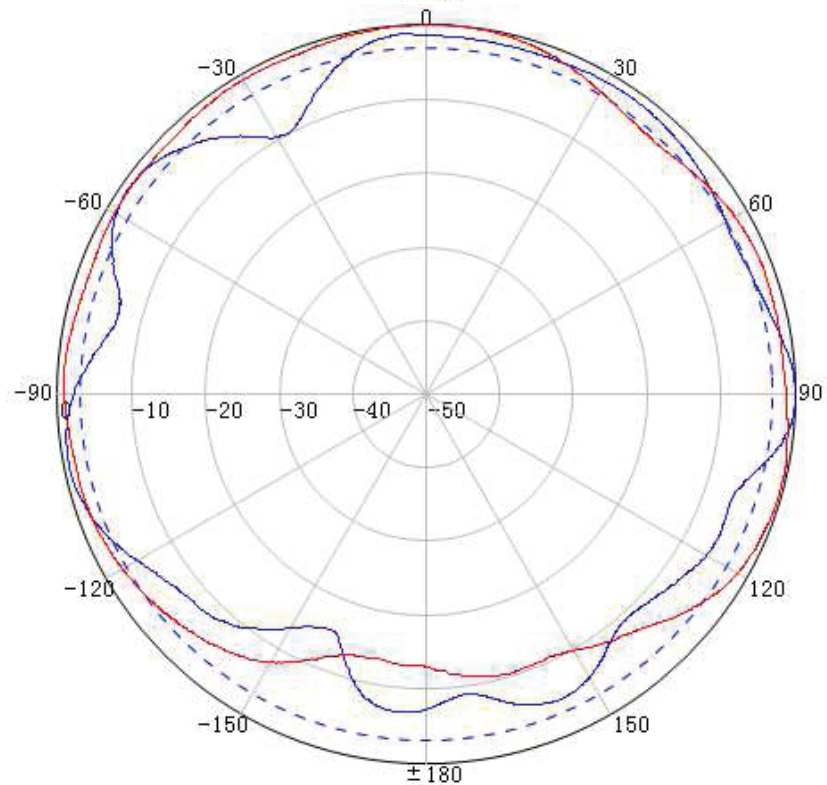
Freq:1880MHz
Polar_Face:E
Polarize:H
HPBW(3dB):50.35°
Circularity:12.77

Freq:1880MHz
Polar_Face:H
Polarize:H
HPBW(3dB):82.10°
Circularity:17.26



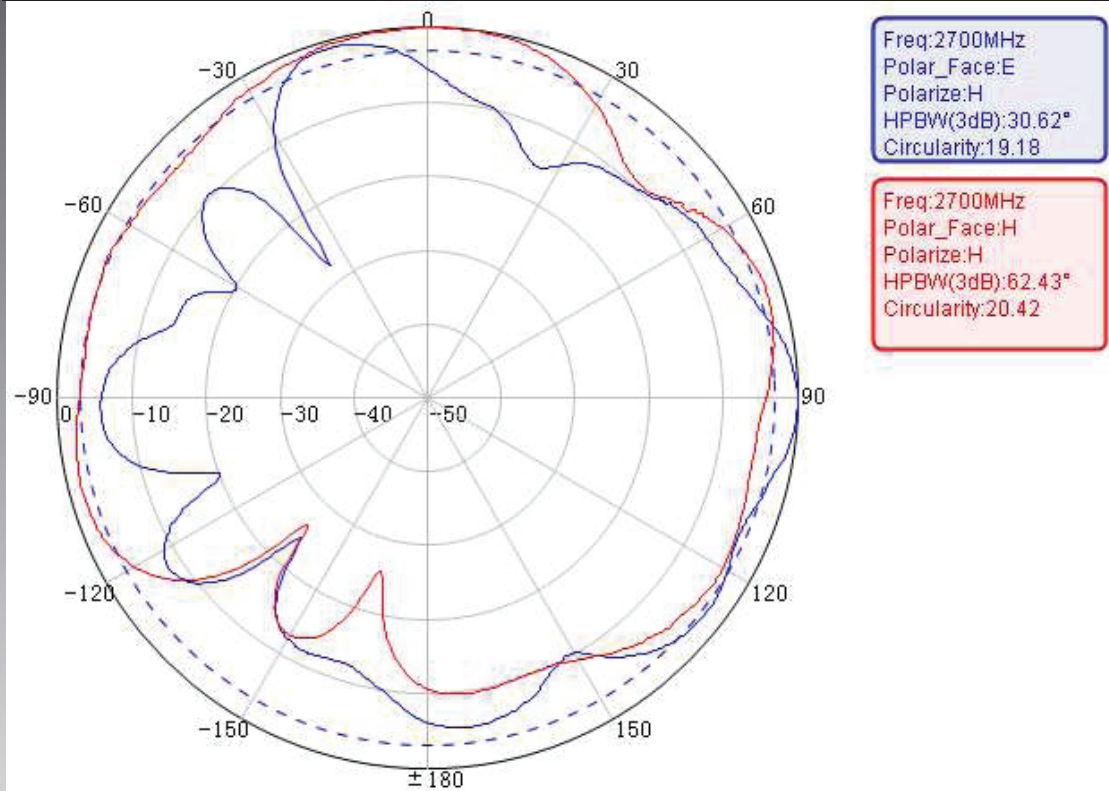
Freq:2170MHz
Polar_Face:E
Polarize:H
HPBW(3dB):35.54°
Circularity:12.33

Freq:2170MHz
Polar_Face:H
Polarize:H
HPBW(3dB):154.89°
Circularity:22.17

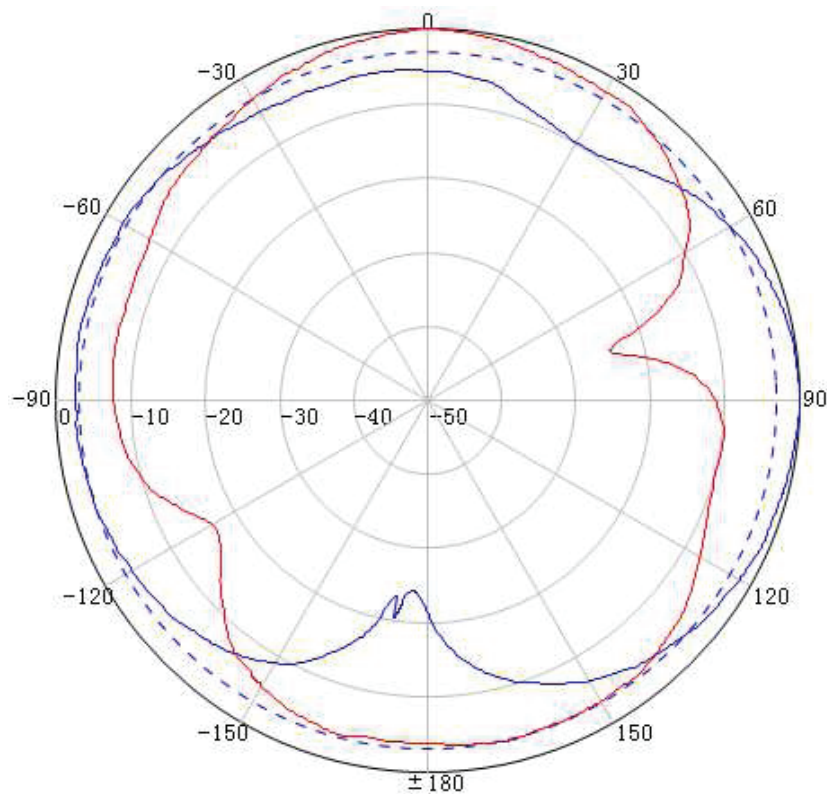


Freq:2300MHz
Polar_Face:E
Polarize:H
HPBW(3dB):30.19°
Circularity:10.61

Freq:2300MHz
Polar_Face:H
Polarize:H
HPBW(3dB):155.32°
Circularity:9.87

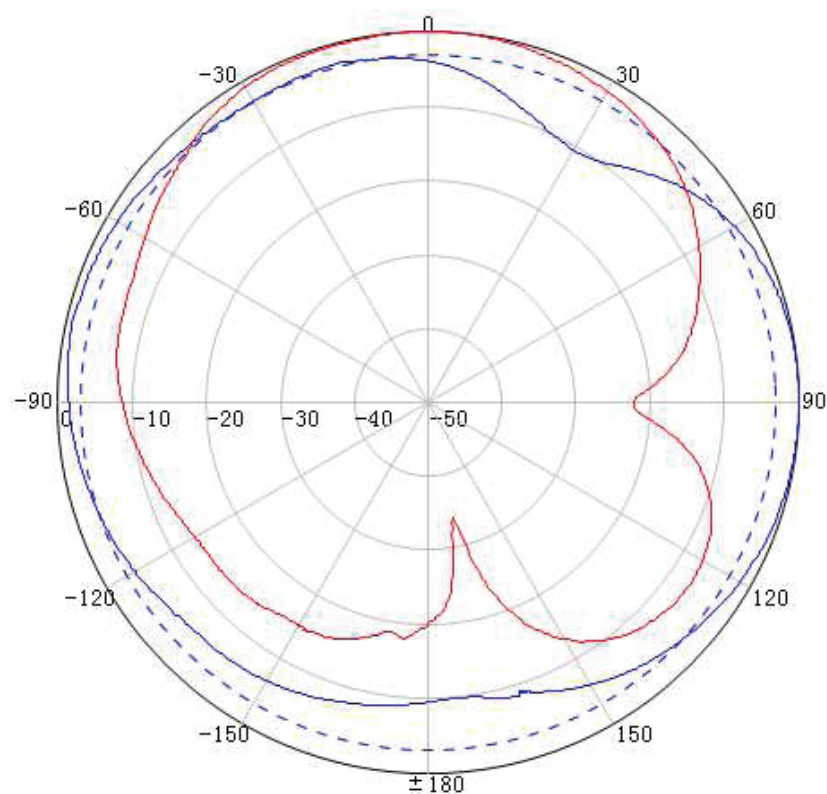


Port 2:



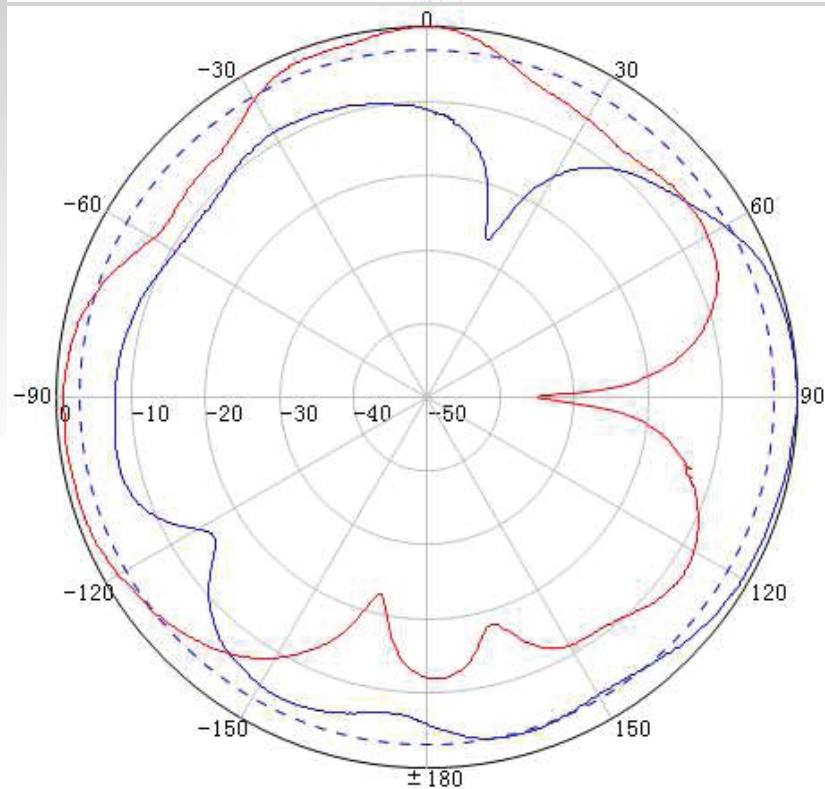
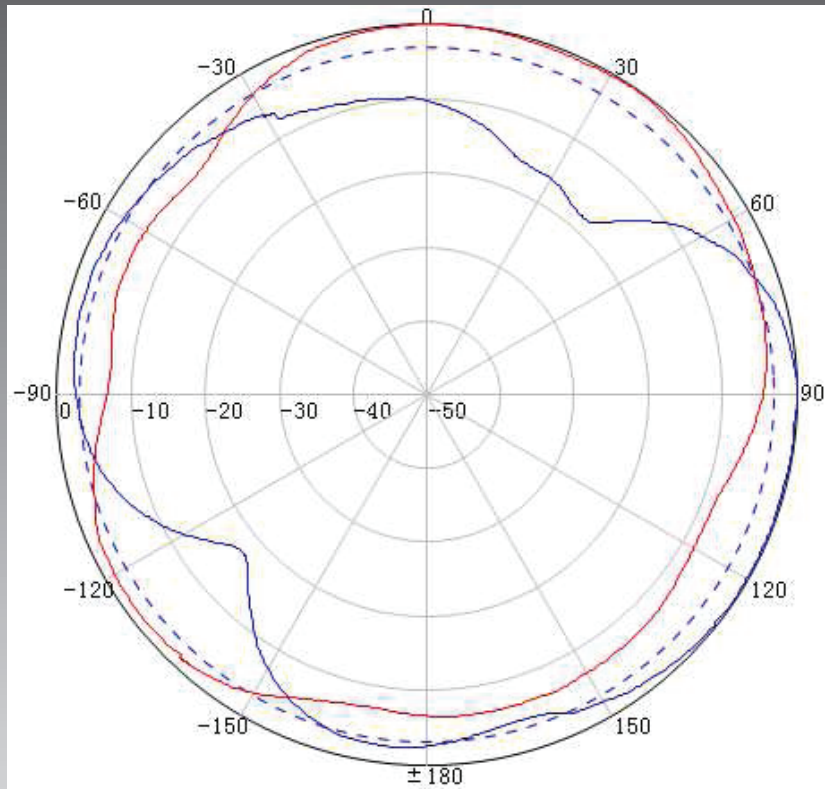
Freq:698MHz
Polar_Face:E
Polarize:E
HPBW(3dB):70.99°
Circularity:17.88

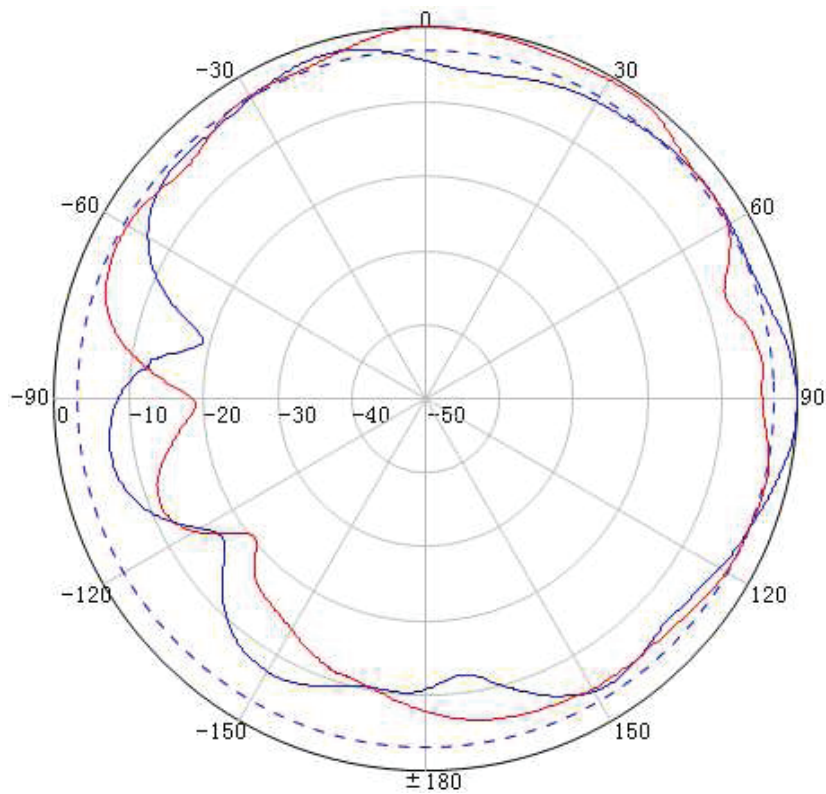
Freq:698MHz
Polar_Face:H
Polarize:E
HPBW(3dB):67.38°
Circularity:18.04



Freq:806MHz
Polar_Face:E
Polarize:E
HPBW(3dB):74.48°
Circularity:6.36

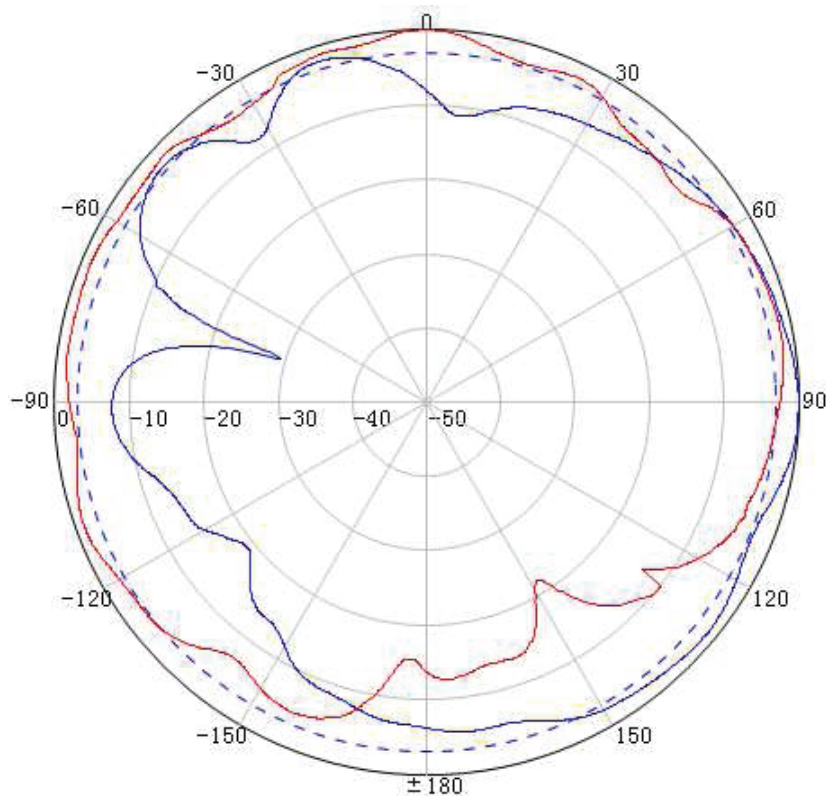
Freq:806MHz
Polar_Face:H
Polarize:E
HPBW(3dB):84.24°
Circularity:24.14





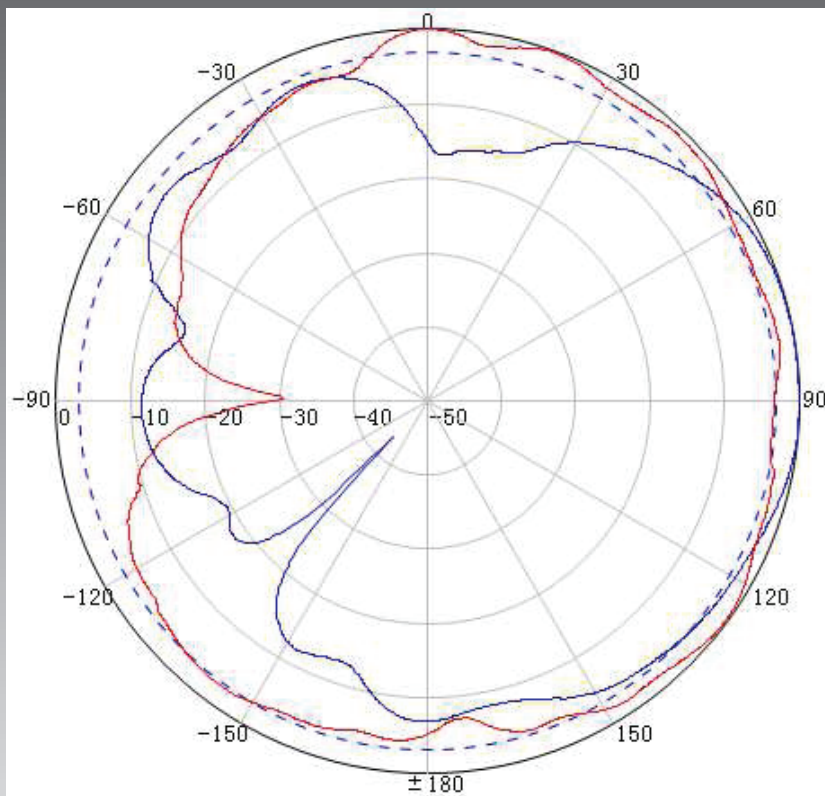
Freq:1880MHz
Polar_Face:E
Polarize:E
HPBW(3dB):68.31°
Circularity:12.44

Freq:1880MHz
Polar_Face:H
Polarize:E
HPBW(3dB):91.55°
Circularity:13.80



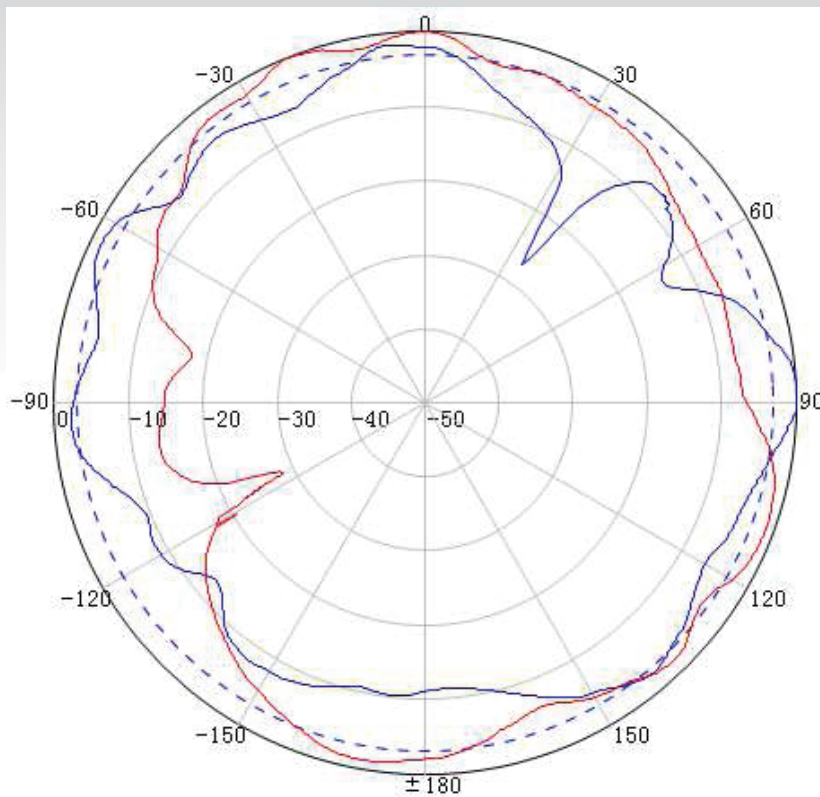
Freq:2170MHz
Polar_Face:E
Polarize:E
HPBW(3dB):97.69°
Circularity:22.65

Freq:2170MHz
Polar_Face:H
Polarize:E
HPBW(3dB):56.85°
Circularity:16.43



Freq:2300MHz
Polar_Face:E
Polarize:E
HPBW(3dB):79.50°
Circularity:34.61

Freq:2300MHz
Polar_Face:H
Polarize:E
HPBW(3dB):96.21°
Circularity:25.31



Freq:2700MHz
Polar_Face:E
Polarize:E
HPBW(3dB):21.00°
Circularity:20.35

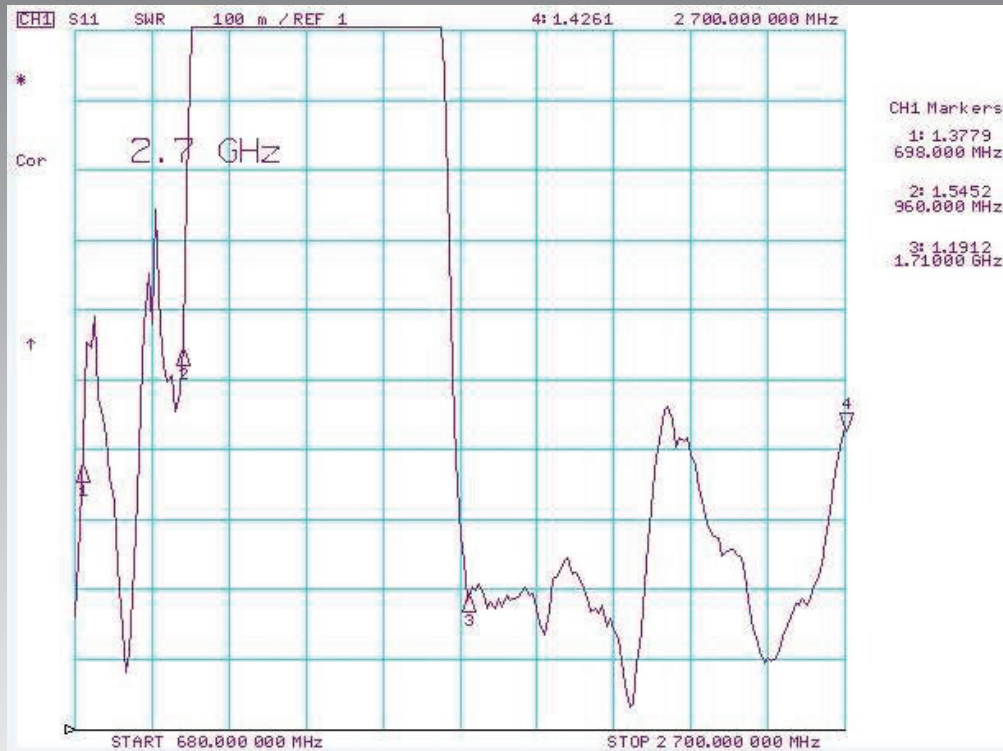
Freq:2700MHz
Polar_Face:H
Polarize:E
HPBW(3dB):51.28°
Circularity:21.62



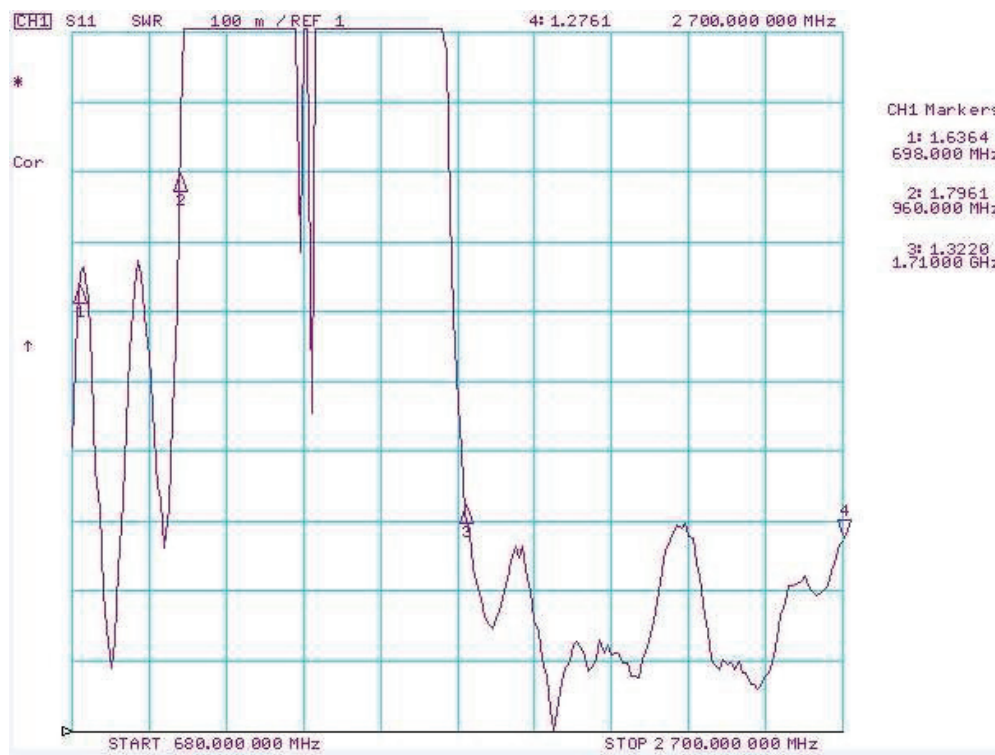
Electrical Specifications					
Model		STP072706S			
Frequency Range		MHz	698-806	806-960	1710-2700
Gain		dBi	6.5	7.0	7.5
Polarization		±45°			
Beam width	Horizontal	deg	78	73	73
	Vertical		68	60	65
Front-To-Back Ratio		dB	15	15	25
VSWR			≤2.0		≤1.5
Isolation		dB	>20		>23
PIM, 3rd Order, 2 x 20 W,		dBc	-150		
Input Power per Port, maximum		watts	100		
Impedance		ohm	50		
Mechanical Specifications					
Dimensions, HxWxD		mm (in)	305x186x63(12.0x7.3x2.4)		
Weight, without Mounting Kit		kg (lb)	0.7(1.5)		
Radome Material and Color			ABS, White, RAL7035		
Mounting Type			Wall Mount		
Connector Type and Location			N-Female×2		
Operational Temperature		℃	-55 to +60		
Operational Humidity		%	< 95		
Shipping Dimensions, HxWxD		mm (in)	360x210x90 (14.2x8.3x3.5)		
Shipping Weight		kg (lb)	0.7 (1.5)		

4. VSWR

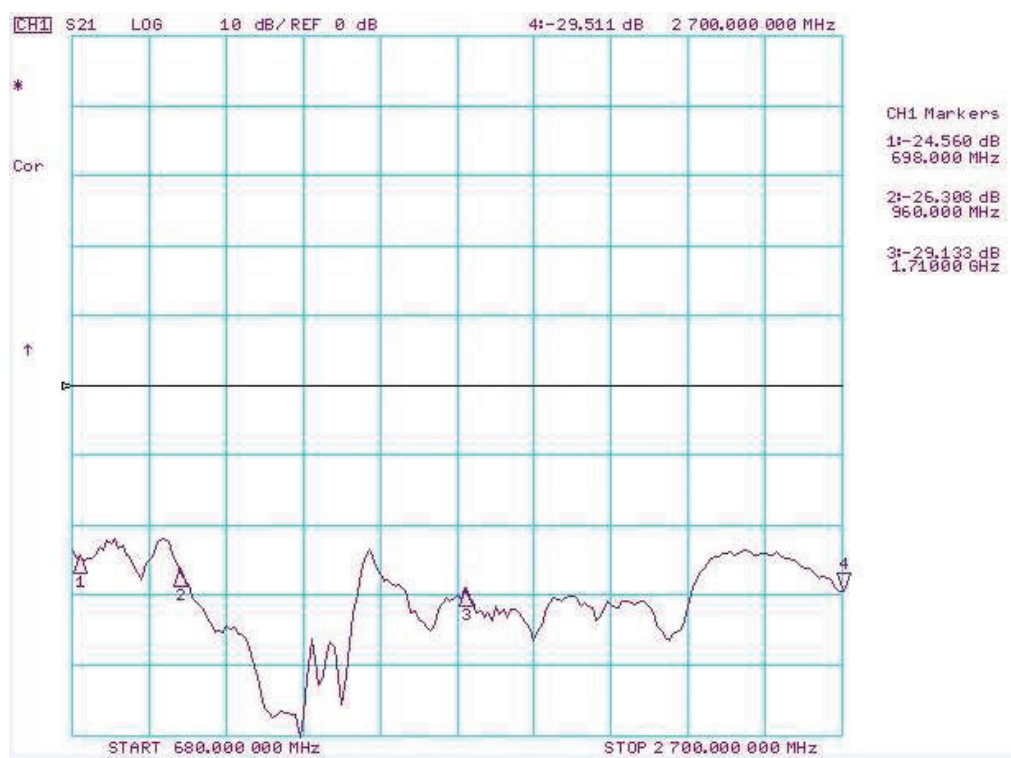
+45° Polarization Port :



-45° Polarization Port :

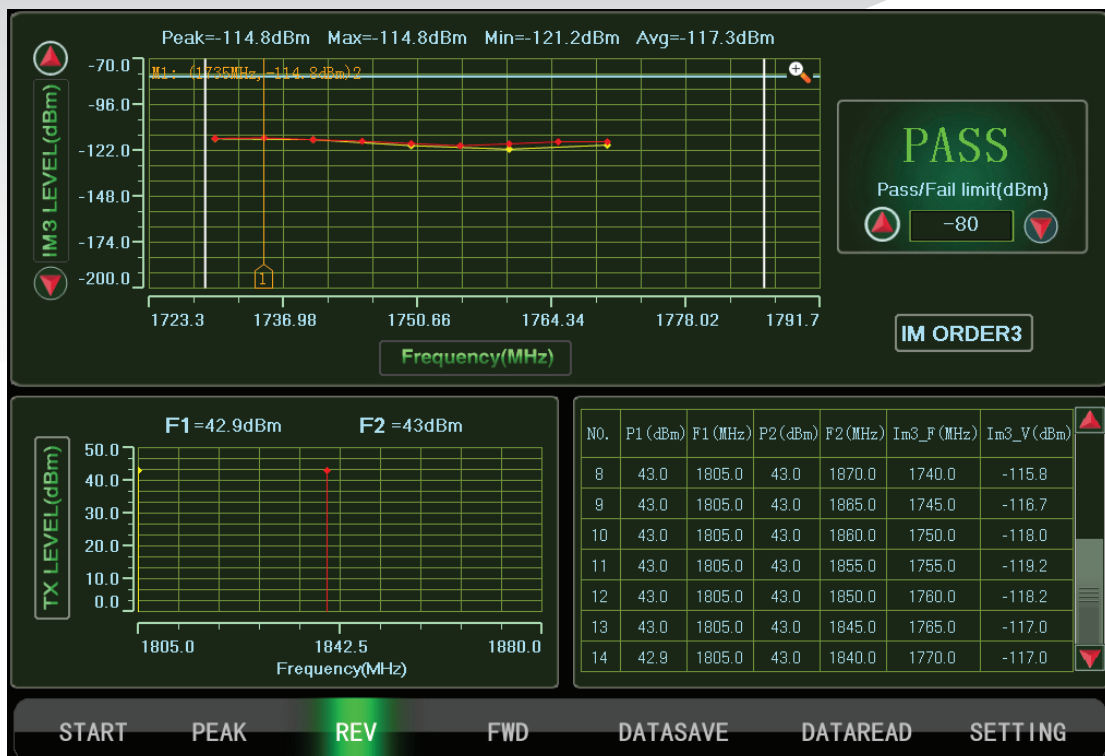
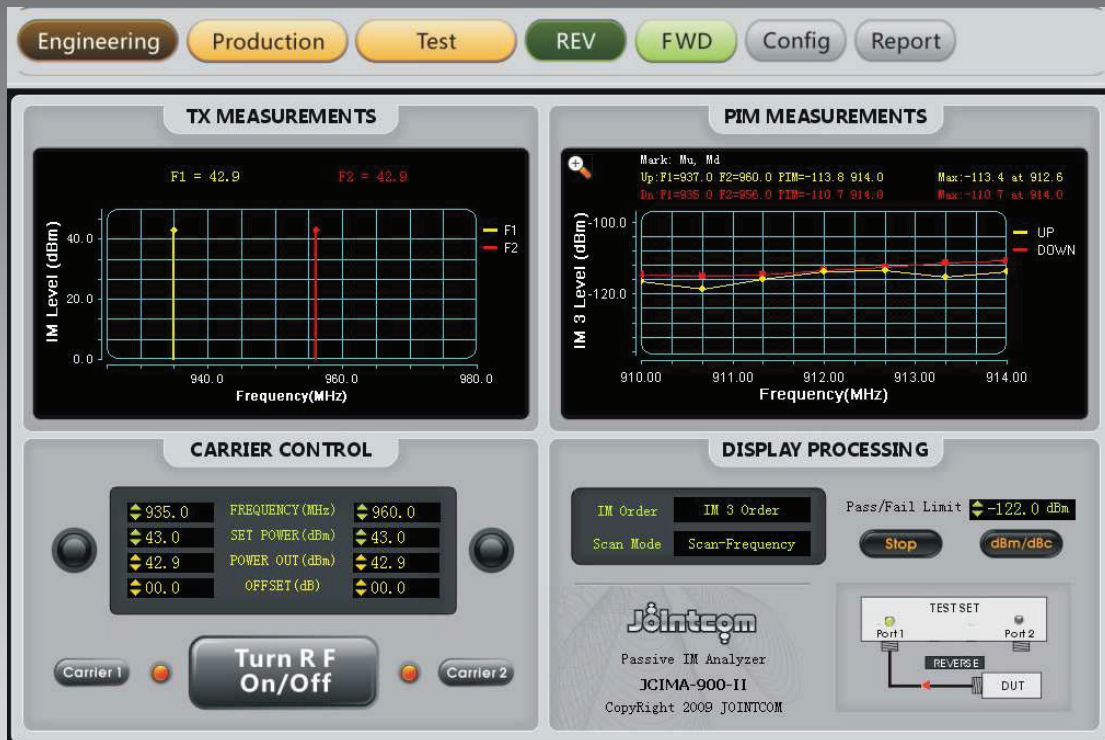


5. Isolation

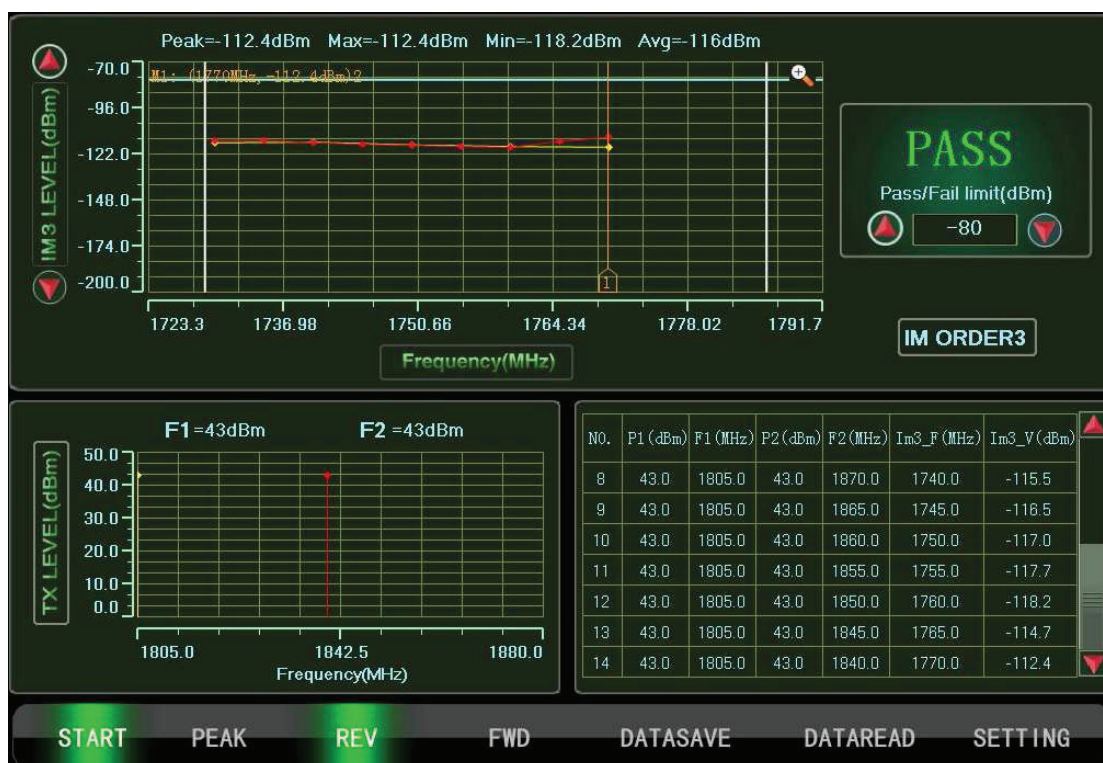
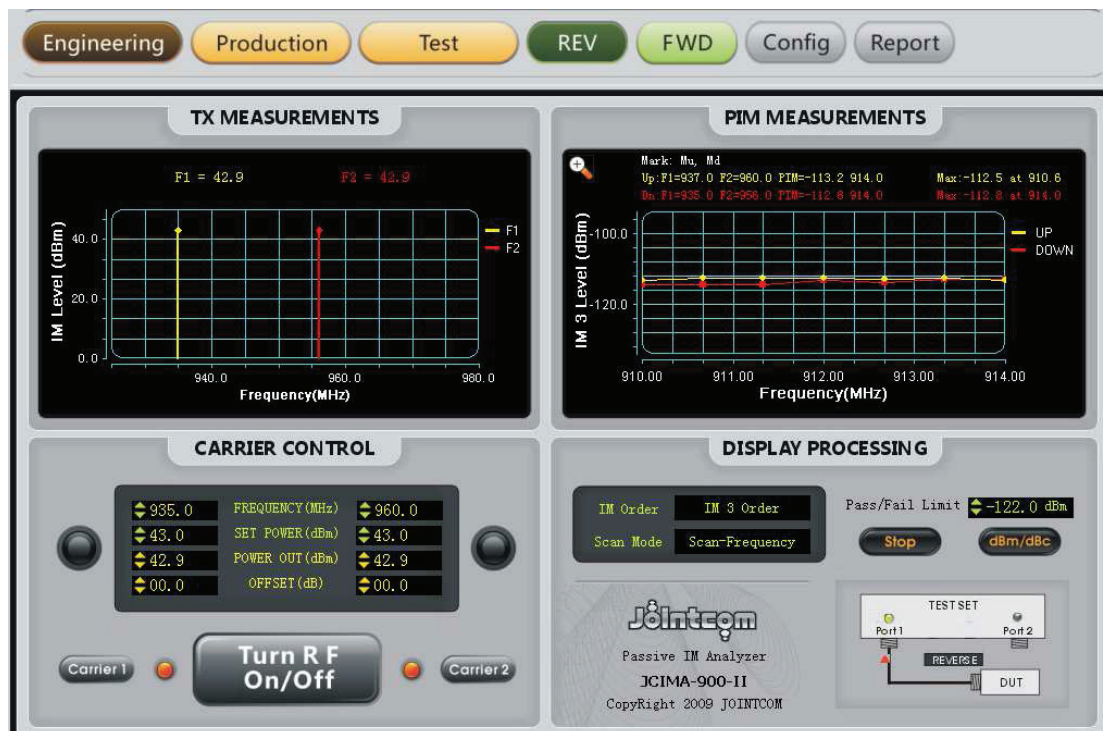


6. PIM, 3rd Order, 2 x 20 W,

+45° Polarization Port :

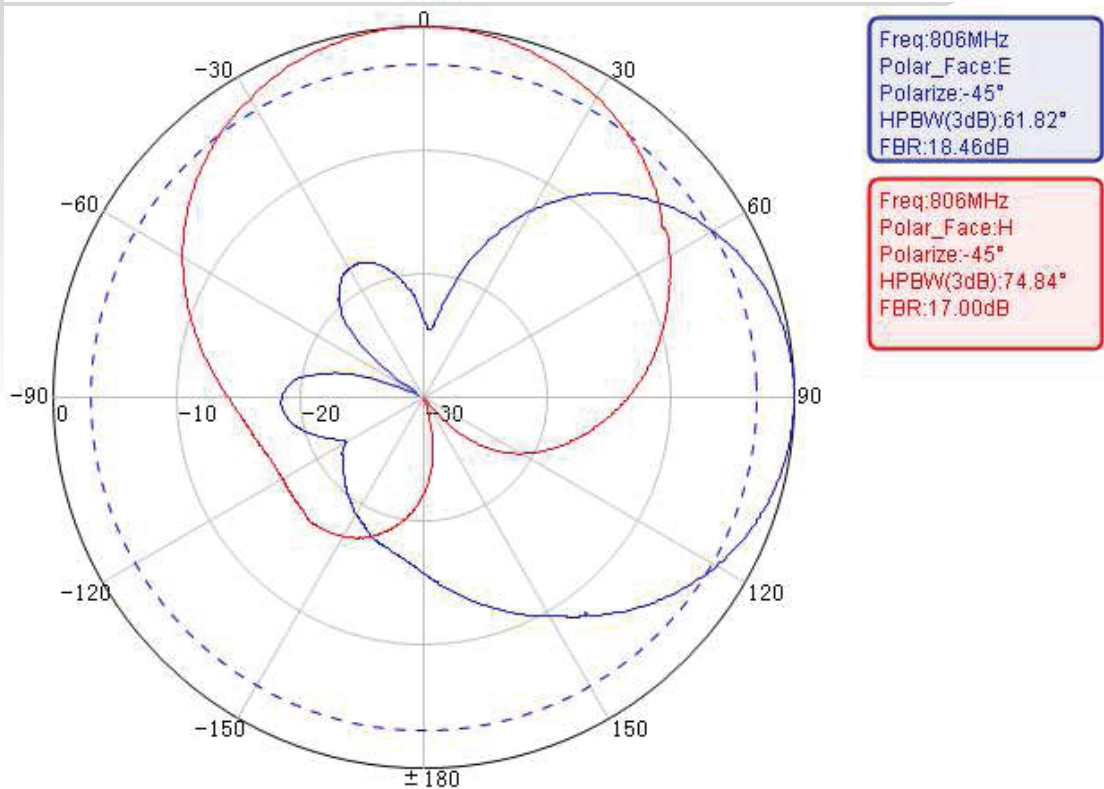
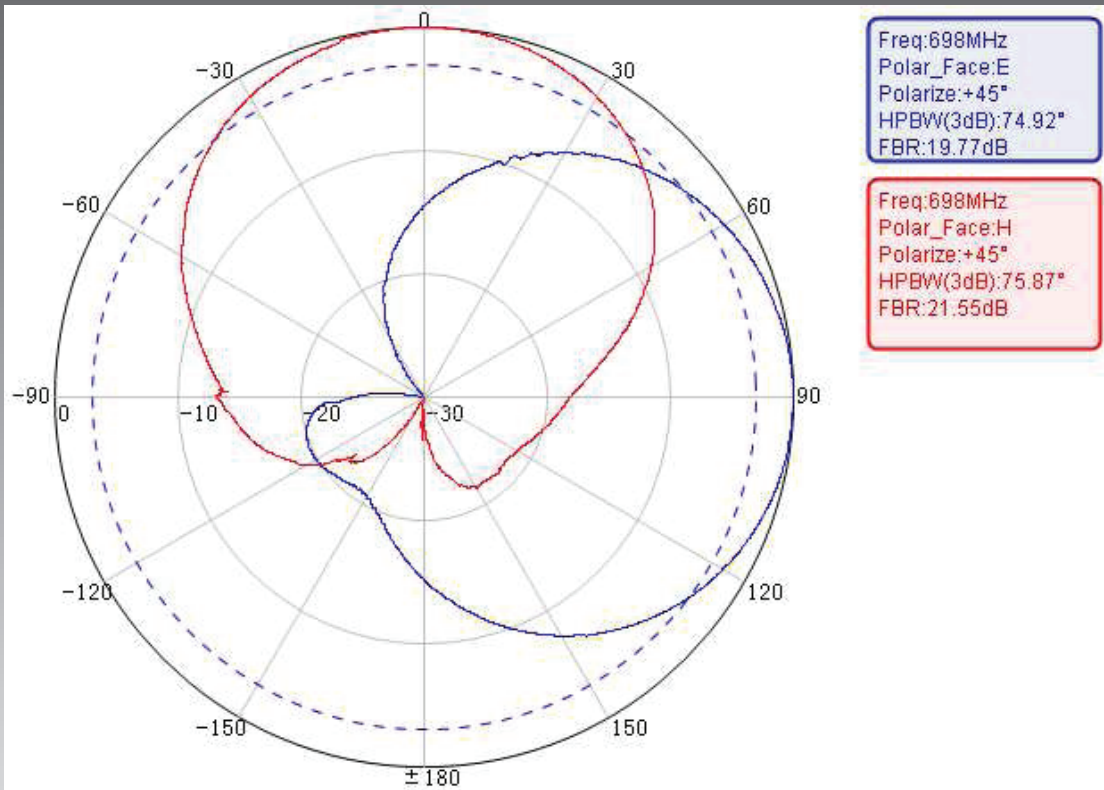


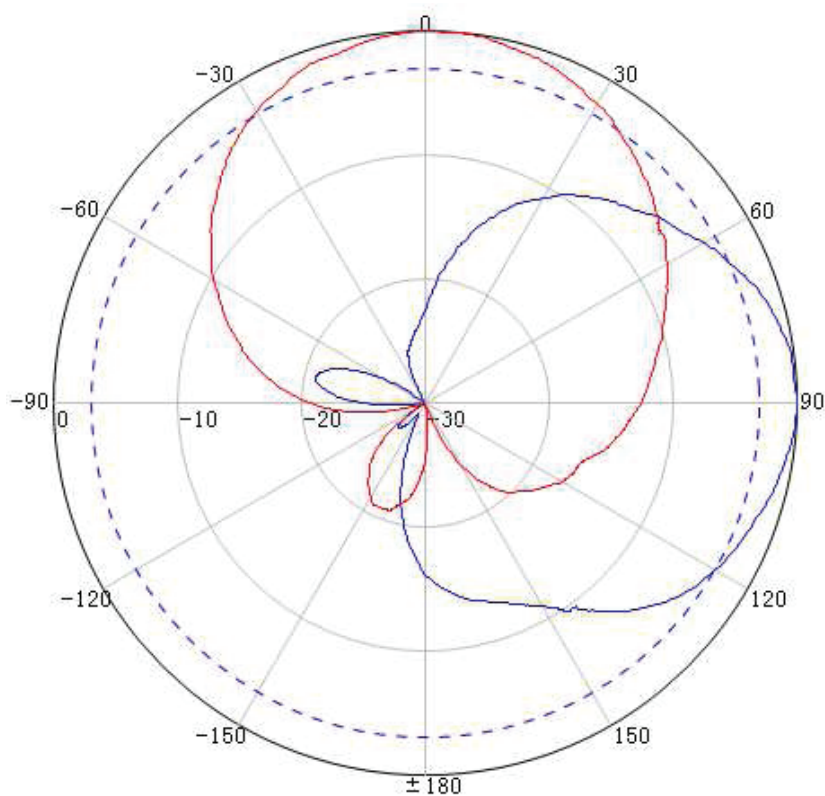
-45° Polarization Port :



7. Radiation Patterns

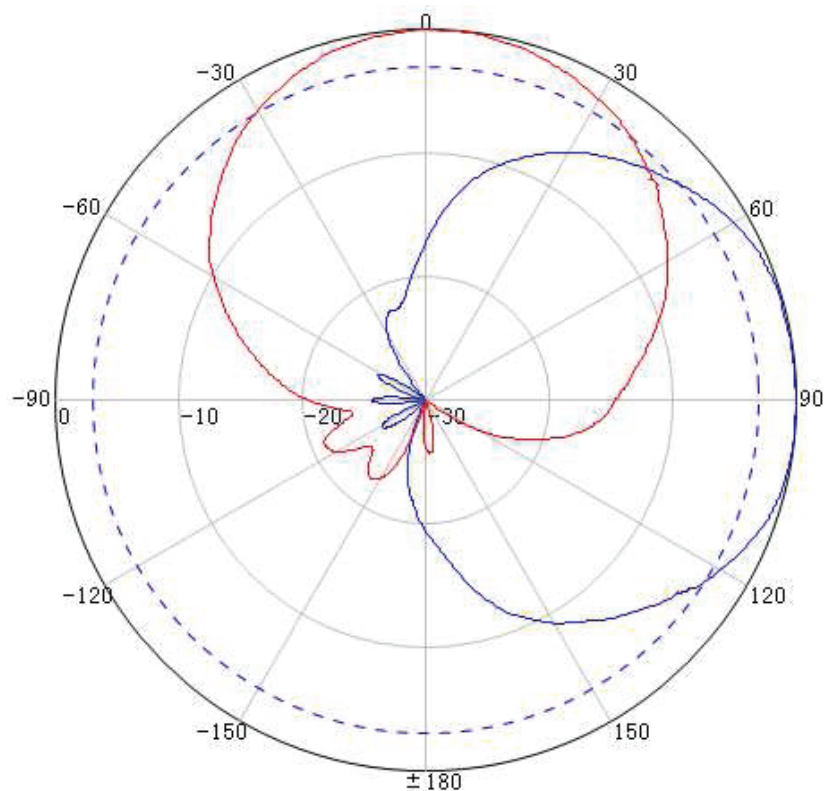
+45° Polarization Port :





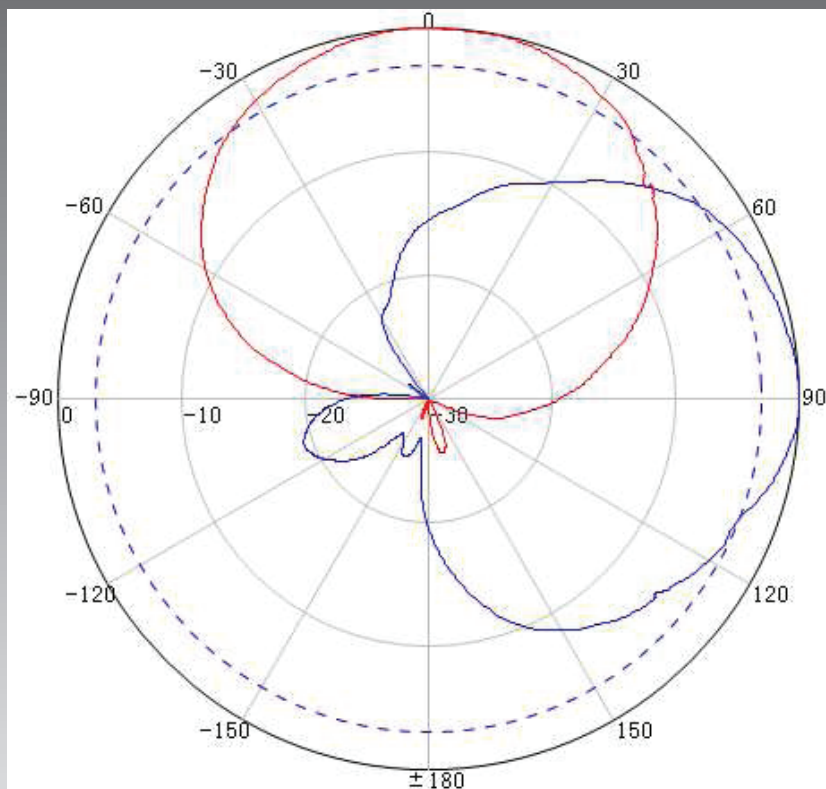
Freq:960MHz
Polar_Face:E
Polarize:-45°
HPBW(3dB):54.63°
FBR:20.95dB

Freq:960MHz
Polar_Face:H
Polarize:-45°
HPBW(3dB):65.96°
FBR:20.80dB



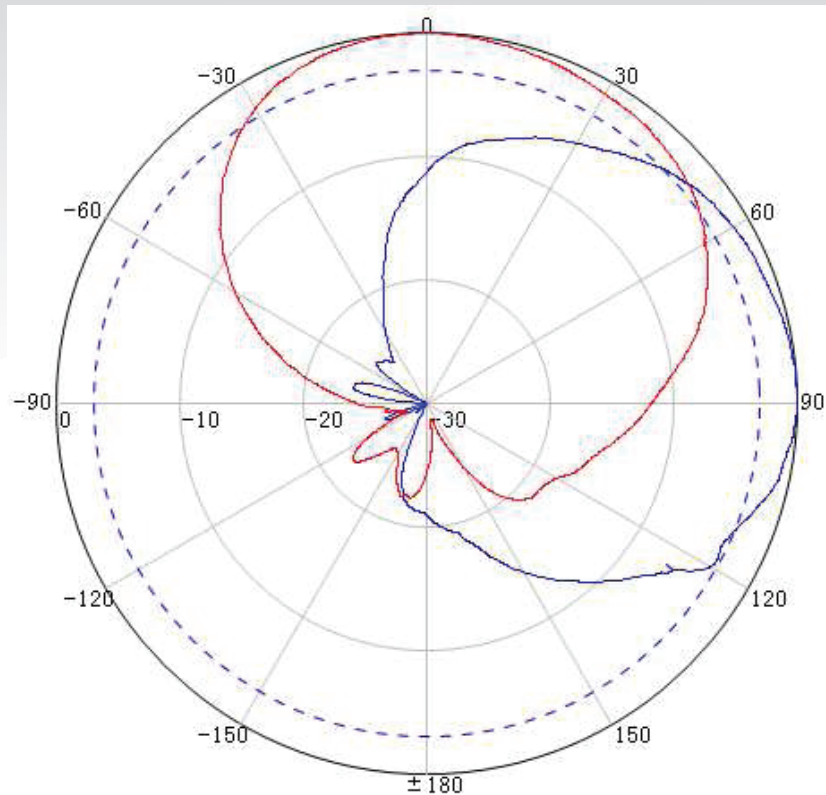
Freq:1710MHz
Polar_Face:E
Polarize:-45°
HPBW(3dB):73.02°
FBR:25.67dB

Freq:1710MHz
Polar_Face:H
Polarize:-45°
HPBW(3dB):68.68°
FBR:22.71dB



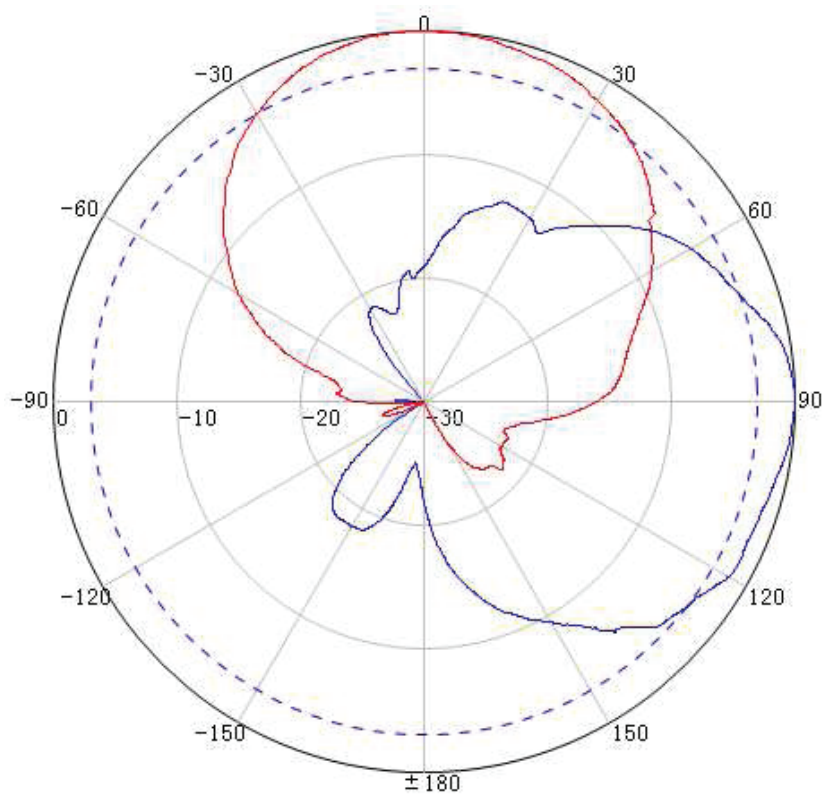
Freq:1880MHz
Polar_Face:E
Polarize:-45°
HPBW(3dB):56.01°
FBR:19.28dB

Freq:1880MHz
Polar_Face:H
Polarize:-45°
HPBW(3dB):73.79°
FBR:25.46dB



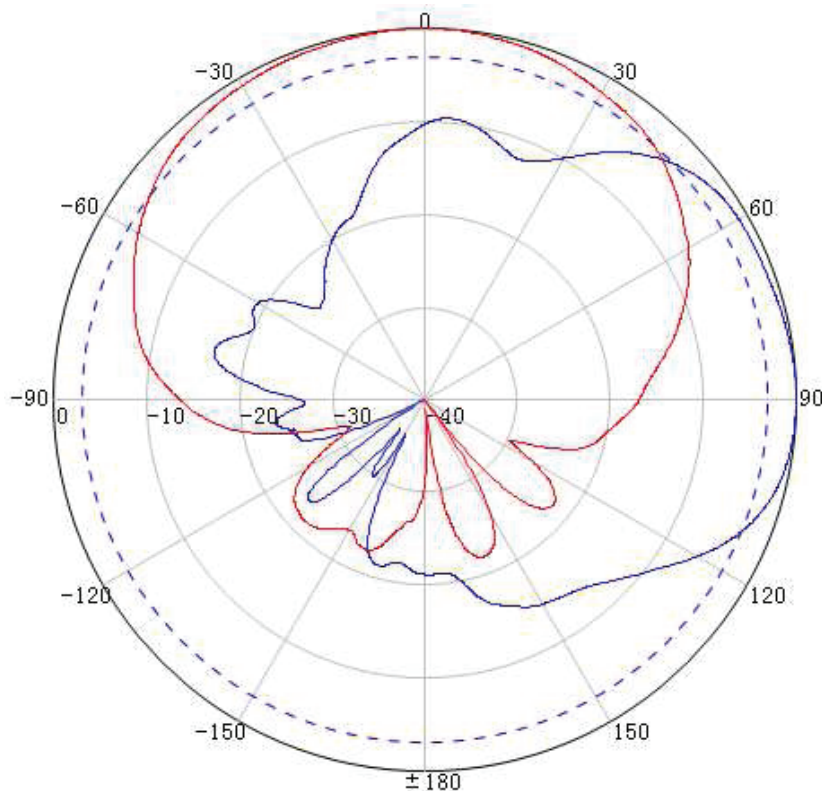
Freq:2170MHz
Polar_Face:E
Polarize:-45°
HPBW(3dB):66.71°
FBR:23.96dB

Freq:2170MHz
Polar_Face:H
Polarize:-45°
HPBW(3dB):87.75°
FBR:22.13dB



Freq:2300MHz
Polar_Face:E
Polarize:-45°
HPBW(3dB):56.19°
FBR:27.62dB

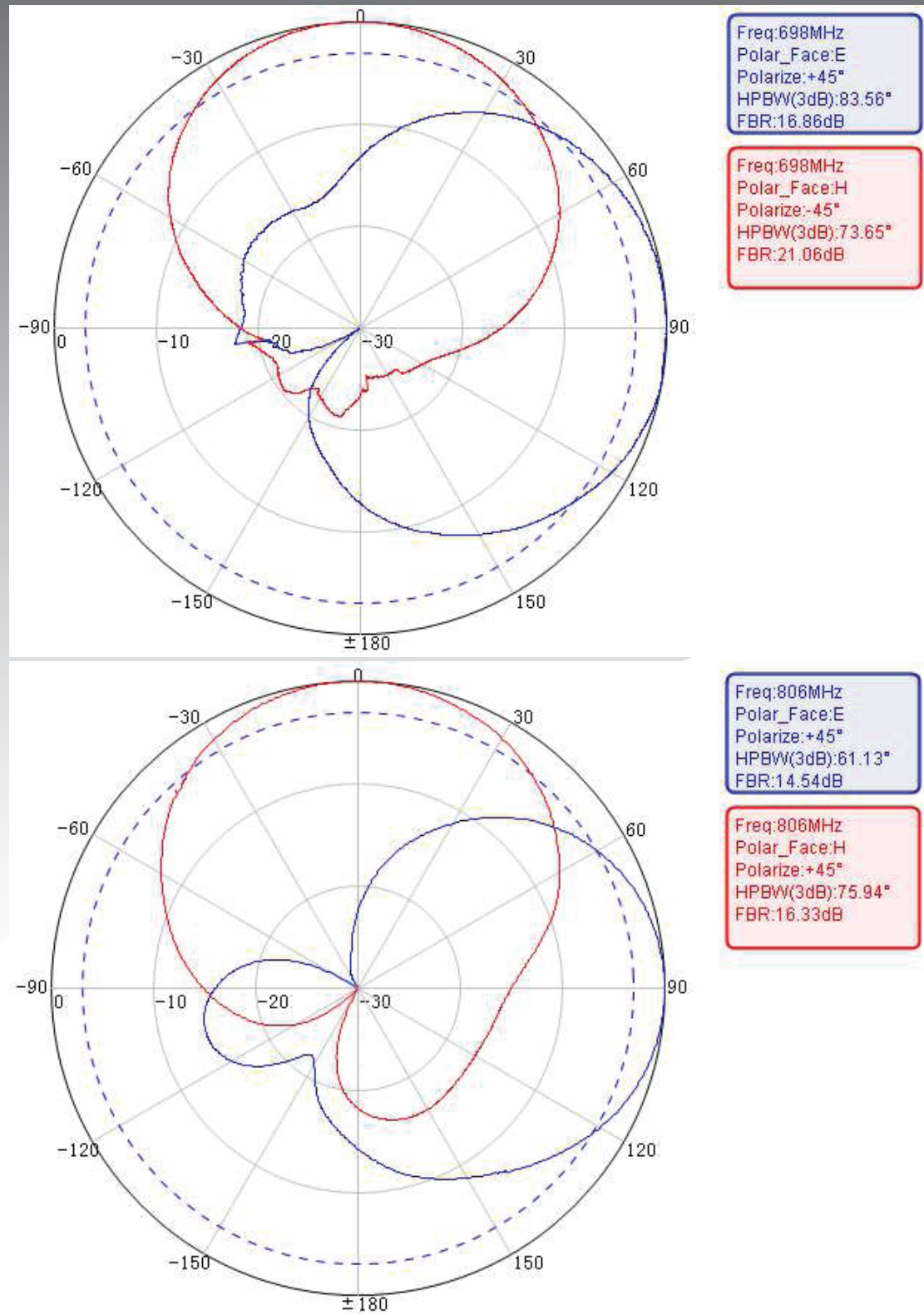
Freq:2300MHz
Polar_Face:H
Polarize:-45°
HPBW(3dB):67.80°
FBR:25.88dB

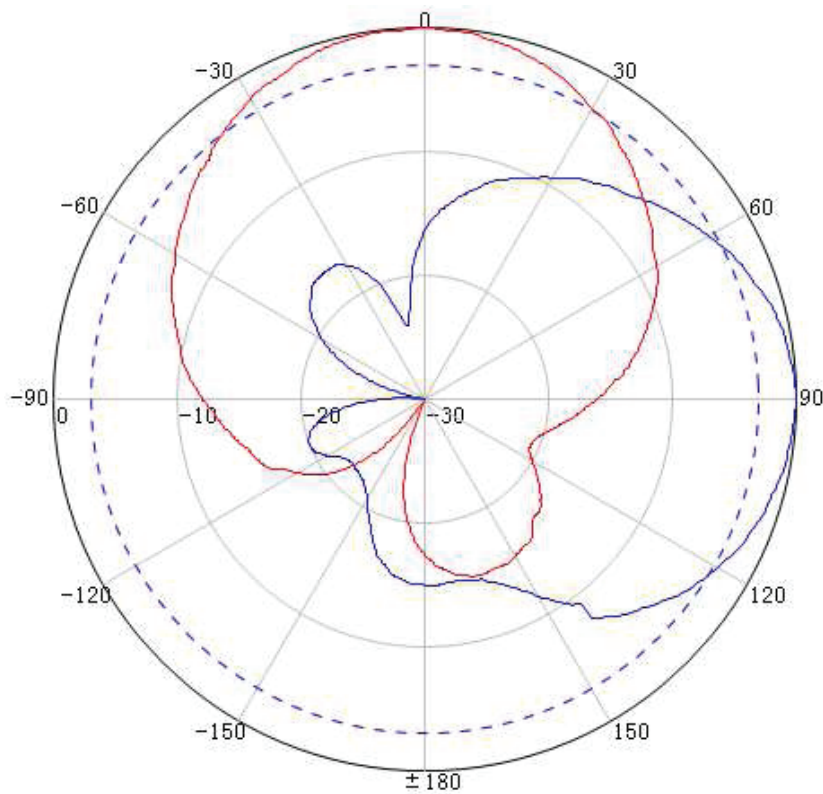


Freq:2700MHz
Polar_Face:E
Polarize:+45°
HPBW(3dB):65.64°
FBR:16.77dB

Freq:2700MHz
Polar_Face:H
Polarize:+45°
HPBW(3dB):93.79°
FBR:21.91dB

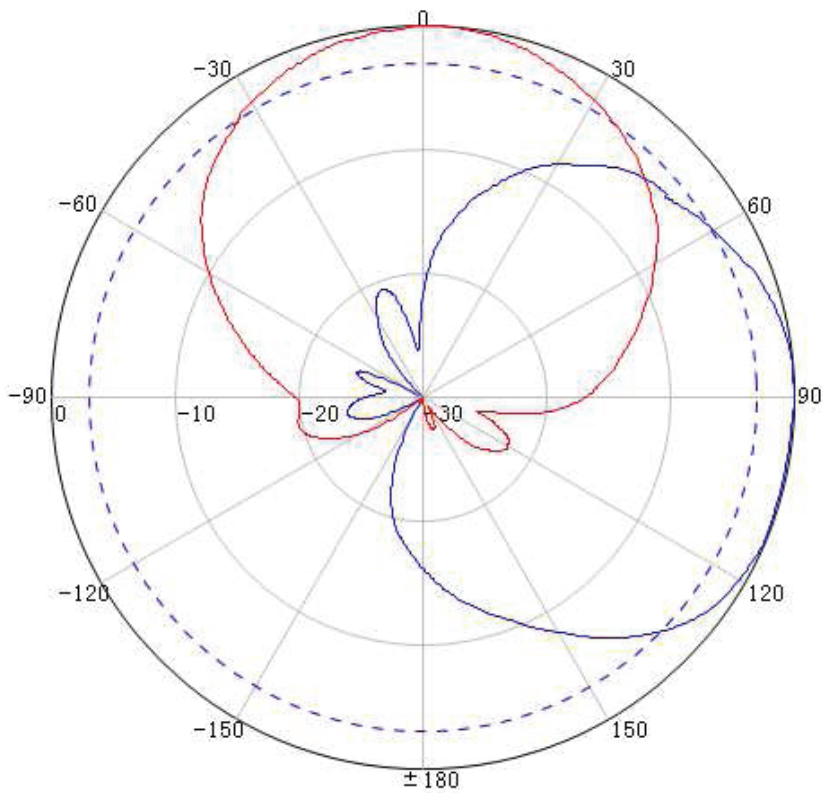
-45° Polarization Port :





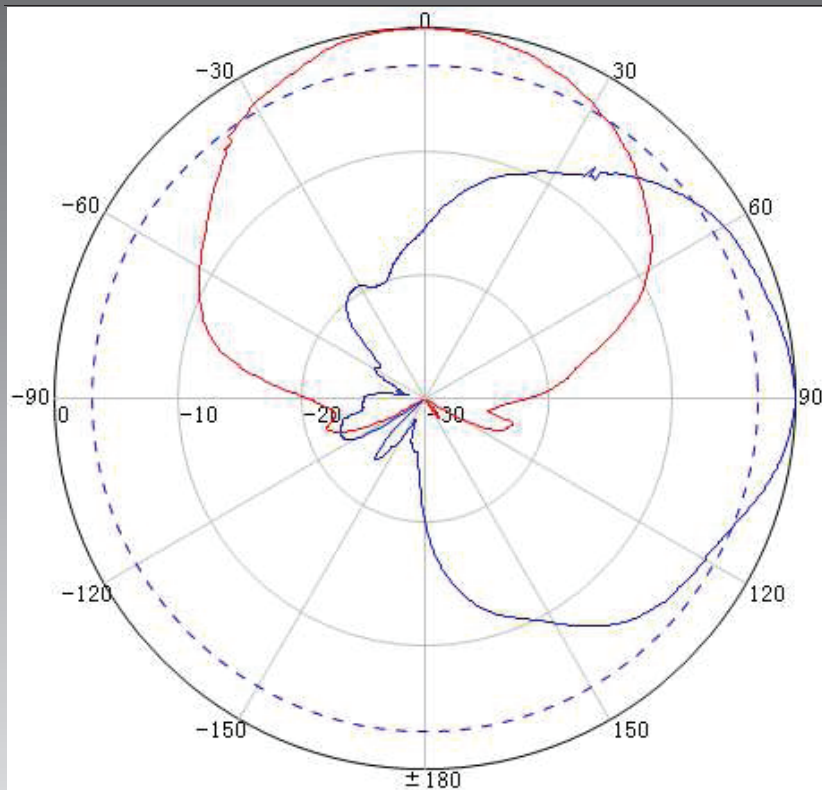
Freq:960MHz
Polar_Face:E
Polarize:+45°
HPBW(3dB):58.58°
FBR:20.00dB

Freq:960MHz
Polar_Face:H
Polarize:+45°
HPBW(3dB):67.66°
FBR:15.11dB



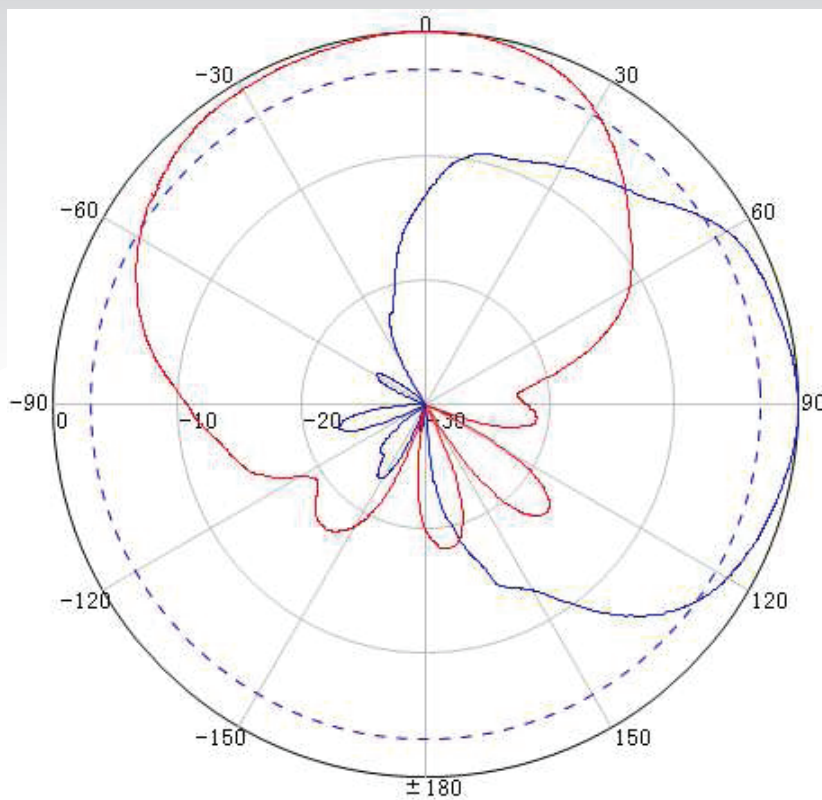
Freq:1710MHz
Polar_Face:E
Polarize:+45°
HPBW(3dB):74.74°
FBR:23.71dB

Freq:1710MHz
Polar_Face:H
Polarize:+45°
HPBW(3dB):88.26°
FBR:27.28dB



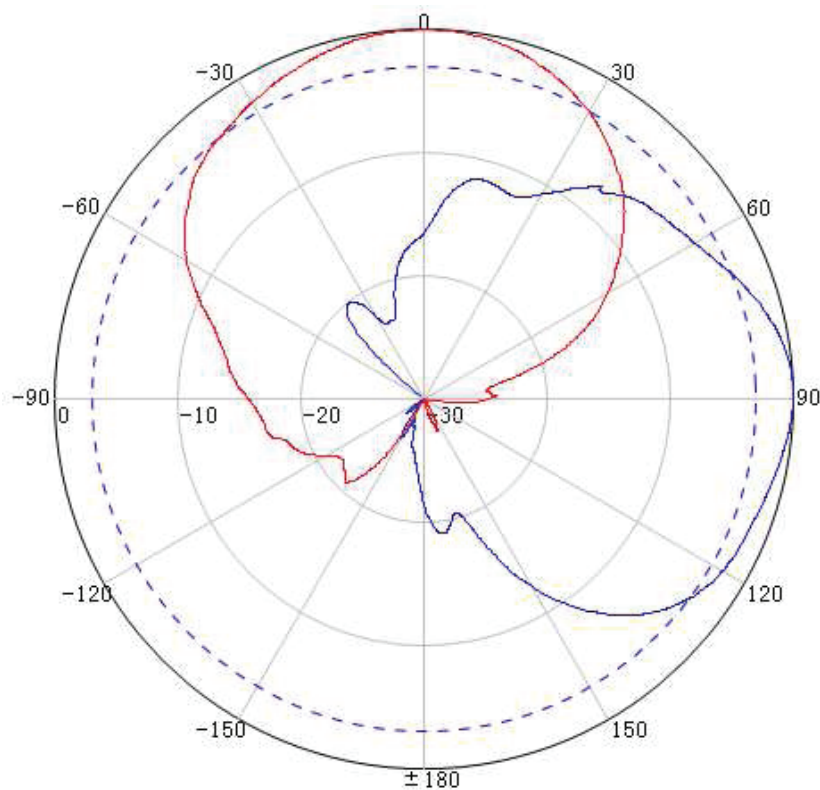
Freq:1880MHz
Polar_Face:E
Polarize:+45°
HPBW(3dB):58.82°
FBR:22.57dB

Freq:1880MHz
Polar_Face:H
Polarize:+45°
HPBW(3dB):65.98°
FBR:30.11dB



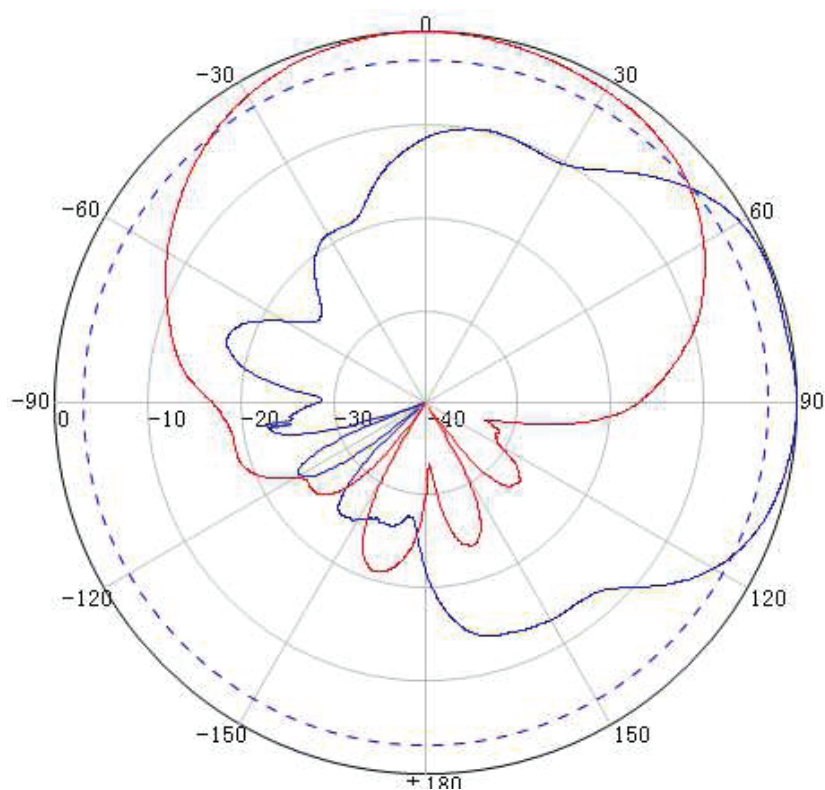
Freq:2170MHz
Polar_Face:E
Polarize:+45°
HPBW(3dB):69.70°
FBR:22.74dB

Freq:2170MHz
Polar_Face:H
Polarize:+45°
HPBW(3dB):88.97°
FBR:18.24dB



Freq:2300MHz
Polar_Face:E
Polarize:+45°
HPBW(3dB):58.76°
FBR:30.28dB

Freq:2300MHz
Polar_Face:H
Polarize:+45°
HPBW(3dB):66.30°
FBR:27.20dB



Freq:2700MHz
Polar_Face:E
Polarize:-45°
HPBW(3dB):64.58°
FBR:17.54dB

Freq:2700MHz
Polar_Face:H
Polarize:-45°
HPBW(3dB):87.33°
FBR:21.00dB